APPENDIX L
Functional Requirements

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
AAMVA Driver and Vehicle Verification Systems	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	1	The center shall collect data from centers.	Planned	No
AAMVA Driver and Vehicle Verification Systems	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	2	The center shall collect data catalogs from one or more data sources. A catalog describes the data contained in the collection of archived data and may include descriptions of the schema or structure of the data, a description of the contents of the data; e.g., time range of entries, number of entries; or a sample of the data (e. g. a thumbnail).	Planned	No
AAMVA Driver and Vehicle Verification Systems	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	3	The center shall store collected data in an information repository.	Planned	No

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AAMVA Driver and Vehicle Verification Systems	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	4	The center shall perform quality checks on collected data.	Planned	No
AAMVA Driver and Vehicle Verification Systems	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	5	The center shall notify the system operator of errors related to data collection, analysis and archival.	Planned	No
AAMVA Driver and Vehicle Verification Systems	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	6	The center shall include capabilities for archive to archive coordination.	Planned	No

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AAMVA Driver and Vehicle Verification Systems	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	7	The center shall provide the capability to execute methods on the incoming data such as cleansing, summarizations, aggregations, or transformations applied to the data before it is stored in the archive.	Planned	No
AAMVA Driver and Vehicle Verification Systems	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	8	The center shall collect data from data distribution systems and other data sources.	Planned	No
AAMVA Driver and Vehicle Verification Systems	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	9	The center shall respond to requests from the administrator interface function to manage center-sourced data collection.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
AAMVA Driver and Vehicle Verification Systems	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	10	The center shall respond to requests from the administrator interface function to manage the archive data.	Planned	No
AAMVA Driver and Vehicle Verification Systems	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	11	The center shall respond to requests for archive data from archive data users (centers, field devices).	Planned	No
AAMVA Driver and Vehicle Verification Systems	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	12	The center shall provide a mechanism for archive data users to request archive data by meta-data range.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
AAMVA Driver and Vehicle Verification Systems	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	1	The center shall provide archive data to federal, state, and local government reporting systems.	Planned	No
AAMVA Driver and Vehicle Verification Systems	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	2	The center shall respond to requests for government report data.	Planned	No
AAMVA Driver and Vehicle Verification Systems	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	3	The center shall provide the capability to format data suitable for input into government reports.	Planned	No
AAMVA Driver and Vehicle Verification Systems	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	4	The center shall provide the applicable meta-data for any ITS archived data to satisfy government reporting system requests. Meta-data may include attributes that describe the source and quality of the data and the conditions surrounding the collection of the data.	Planned	No
AAMVA Driver and Vehicle Verification Systems	Archived Data System	Archive On-Line Analysis and Mining	Archive On-Line Analysis and Mining' provides advanced data analysis, summarization, and mining features that facilitate discovery of information, patterns, and correlations in large data sets. Multidimensional analysis, selective summarization and expansion of data details, and many other advanced analysis services may be offered. Complex performance measures that are derived from multiple data sources may also be produced.	No	1	The center shall respond to requests for archive data from center users.	Planned	No
AAMVA Driver and Vehicle Verification Systems	Archived Data System	Archive On-Line Analysis and Mining	Archive On-Line Analysis and Mining' provides advanced data analysis, summarization, and mining features that facilitate discovery of information, patterns, and correlations in large data sets. Multidimensional analysis, selective summarization and expansion of data details, and many other advanced analysis services may be offered. Complex performance measures that are derived from multiple data sources may also be produced.	No	2	The center shall provide the capability to perform activities such as data mining, data fusion, summarizations, aggregations, and recreation from archive data. This may include multidimensional analysis, selective summarization and expansion of data details, and many other advanced analysis services.	Planned	No

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AAMVA Driver and Vehicle Verification Systems	Archived Data System	Archive On-Line Analysis and Mining	Archive On-Line Analysis and Mining' provides advanced data analysis, summarization, and mining features that facilitate discovery of information, patterns, and correlations in large data sets. Multidimensional analysis, selective summarization and expansion of data details, and many other advanced analysis services may be offered. Complex performance measures that are derived from multiple data sources may also be produced.	No	3	The center shall collect regional data from data distribution centers.	Planned	No
AAMVA Driver and Vehicle Verification Systems	Archived Data System	Archive Situation Data Archival	Archive Situation Data Archival' collects and archives traffic, roadway, and environmental information for use in off-line planning, research, and analysis. It controls and collects information directly from equipment at the roadside, reflecting the deployment of traffic detectors that are used primarily for traffic monitoring and planning purposes, rather than for traffic management. It also collects situation data from connected vehicles. The data collected, quality checks performed, and aggregation strategies are defined to support transportation system performance monitoring and management.	No	1	The center shall collect data from roadside devices.	Planned	No
AAMVA Driver and Vehicle Verification Systems	Archived Data System	Archive Situation Data Archival	Archive Situation Data Archival' collects and archives traffic, roadway, and environmental information for use in off-line planning, research, and analysis. It controls and collects information directly from equipment at the roadside, reflecting the deployment of traffic detectors that are used primarily for traffic monitoring and planning purposes, rather than for traffic management. It also collects situation data from connected vehicles. The data collected, quality checks performed, and aggregation strategies are defined to support transportation system performance monitoring and management.	No	2	The center shall respond to requests from the administrator interface function to manage field-sourced data collection.	Planned	No
AAMVA Driver and Vehicle Verification Systems	Commercial Vehicle Administration Center			No				No
AAMVA IRP Clearinghouse	Commercial Vehicle Administration Center	CVAC Data Collection	CVAC Data Collection' collects and stores commercial vehicle information that is collected in the course of Commercial Vehicle Administration Center operations. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	1	The center shall receive operational data from the roadside check systems as well as administration and credentials data.	Planned	No
AAMVA IRP Clearinghouse	Commercial Vehicle Administration Center	CVAC Data Collection	CVAC Data Collection' collects and stores commercial vehicle information that is collected in the course of Commercial Vehicle Administration Center operations. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	2	The center shall assign quality control metrics and meta-data to be stored along with the data. Meta-data may include attributes that describe the source and quality of the data and the conditions surrounding the collection of the data.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
AAMVA IRP Clearinghouse	Commercial Vehicle Administration Center	CVAC Data Collection	CVAC Data Collection' collects and stores commercial vehicle information that is collected in the course of Commercial Vehicle Administration Center operations. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	3	The center shall receive and respond to requests from ITS Archives for either a catalog of the commercial vehicle operations data or for the data itself.	Planned	No
AAMVA IRP Clearinghouse	Commercial Vehicle Administration Center	CVAC Data Collection	CVAC Data Collection' collects and stores commercial vehicle information that is collected in the course of Commercial Vehicle Administration Center operations. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	4	The center shall be able to produce sample products of the data available.	Planned	No
AAMVA IRP Clearinghouse	Freight Distribution and Logistics Center			No				No
AAMVA IRP Clearinghouse	Other Authorizing Centers			No				No
AAMVA IRP Clearinghouse	Other Payment Administration Centers			No				No
ADEQ Arizona Emissions Management	Emissions Management Center	Emissions Data Collection	Emissions Data Collection' collects and stores air quality and emissions management information that is collected in the course of Emissions Management Center operations. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	1	The center shall collect air quality and emissions management data from various sources, including emissions sensors distributed along the roadside and wide-area sensors detecting pollution over a larger geographical area.	Existing	No
ADEQ Arizona Emissions Management	Emissions Management Center	Emissions Data Collection	Emissions Data Collection' collects and stores air quality and emissions management information that is collected in the course of Emissions Management Center operations. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	2	The center shall assign quality control metrics and meta-data to be stored along with the data. Meta-data may include attributes that describe the source and quality of the data and the conditions surrounding the collection of the data.	Existing	No
ADEQ Arizona Emissions Management	Emissions Management Center	Emissions Data Collection	Emissions Data Collection' collects and stores air quality and emissions management information that is collected in the course of Emissions Management Center operations. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	3	The center shall receive and respond to requests from ITS Archives for either a catalog of the emissions management data or for the data itself.	Planned	No
ADEQ Arizona Emissions Management	Emissions Management Center	Emissions Data Collection	Emissions Data Collection' collects and stores air quality and emissions management information that is collected in the course of Emissions Management Center operations. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	4	The center shall be able to produce sample products of the data available.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT 511 IVR	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No				No
ADOT 511 IVR	Transportation Information Center	TIC Emergency Traveler Information	TIC Emergency Traveler Information' provides emergency information to the public, including wide-area alerts and evacuation information. It provides emergency alerts, information on evacuation zones and evacuation requirements, evacuation destinations and shelter information, available transportation modes, and traffic and road conditions at the origin, destination, and along the evacuation routes. In addition to general evacuation information, personalized information including tailored evacuation routes, service information, and estimated travel times is also provided based on traveler specified origin, destination, and route parameters. Updated information is provided throughout the evacuation and subsequent reentry as status changes and plans are adapted.	No				No
ADOT 511 IVR	Transportation Information Center	TIC Interactive Traveler Information	TIC Interactive Traveler Information' disseminates personalized traveler information including traffic and road conditions, transit information, maintenance and construction information, multimodal information, event information, and weather information. Tailored information is provided based on the traveler's request in this interactive service.	No				No
ADOT 511 IVR	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT 511 IVR	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No	1	The center shall provide the capability to process voice-formatted requests for traveler information from a traveler telephone information system, and return the information in the requested format.	Existing	No
ADOT 511 IVR	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No	2	The center shall provide the capability to process dual-tone multifrequency (DTMF)-based requests (touch-tone) for traveler information from a traveler telephone information system.	Existing	No
ADOT 511 IVR	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No	3	The center shall provide the capability to process traveler information requests from a traveler telephone information system.	Existing	No
ADOT 511 IVR	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No	4	The center shall provide information on traffic conditions in the requested voice format and for the requested location.	Existing	No

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ADOT 511 IVR	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No	5	The center shall provide work zone and roadway maintenance information in the requested voice format and for the requested location.	Planned	No
ADOT 511 IVR	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No	6	The center shall provide roadway environment conditions information in the requested voice format and for the requested location.	Existing	No
ADOT 511 IVR	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No	7	The center shall provide weather and event information in the requested voice format and for the requested location.	Existing	No
ADOT 511 IVR	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No	8	The center shall provide transit service information in the requested voice format and for the requested location.	Existing	No

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ADOT 511 IVR	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No	10	The center shall provide the capability to support both specific caller requests as well as bulk upload of regional traveler information.	Existing	No
ADOT 511 IVR	Traveler Information Voice System			No				No
ADOT 511 Website	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	1	The center shall collect, process, and store traffic and highway condition information, including incident information, detours and road closures, event information, recommended routes, and current speeds on specific routes.	Existing	No
ADOT 511 Website	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	3	The center shall collect, process, and store maintenance and construction information, including scheduled maintenance and construction work activities and work zone activities.	Existing	No

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ADOT 511 Website	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	7	The center shall collect, process, and store current and forecast road conditions and surface weather conditions.	Existing	No
ADOT 511 Website	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	8	The center shall collect, process, and store event information.	Existing	No
ADOT 511 Website	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	9	The center shall collect, process, and store air quality information.	Existing	No

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ADOT 511 Website	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	11	The center shall collect, process, and store border crossing information.	Planned	No
ADOT 511 Website	Transportation Information Center	TIC Emergency Traveler Information	TIC Emergency Traveler Information' provides emergency information to the public, including wide-area alerts and evacuation information. It provides emergency alerts, information on evacuation zones and evacuation requirements, evacuation destinations and shelter information, available transportation modes, and traffic and road conditions at the origin, destination, and along the evacuation routes. In addition to general evacuation information, personalized information including tailored evacuation routes, service information, and estimated travel times is also provided based on traveler specified origin, destination, and route parameters. Updated information is provided throughout the evacuation and subsequent reentry as status changes and plans are adapted.	No				No
ADOT 511 Website	Transportation Information Center	TIC Operations Data Collection	TIC Operations Data Collection' collects and stores information that is collected about the transportation information service including data on the number of clients serviced and the services that were provided. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No				No
ADOT 511 Website	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	1	The center shall disseminate traffic and highway condition information to travelers, including incident information, detours and road closures, event information, recommended routes, and current speeds on specific routes.	Existing	No

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ADOT 511 Website	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	2	The center shall disseminate maintenance and construction information to travelers, including scheduled maintenance and construction work activities and work zone activities.	Existing	No
ADOT 511 Website	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	6	The center shall disseminate weather information to travelers.	Existing	No
ADOT 511 Website	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	7	The center shall disseminate event information to travelers.	Planned	No
ADOT 511 Website	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	8	The center shall disseminate air quality information to travelers.	Existing	No
ADOT 511 Website	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	9	The center shall provide traffic and incident data to the media.	Planned	No
ADOT 511 Website	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	10	The center shall provide the capability for a system operator to control the type and update frequency of broadcast traveler information.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT 511 Website	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No				No
ADOT 511 Website	Transportation Information Center	TIC Trip Planning	TIC Trip Planning' provides pre-trip and en-route trip planning services for travelers. It receives origin, destination, constraints, and preferences and returns trip plan(s) that meet the supplied criteria. Trip plans may be based on current traffic and road conditions, transit schedule information, and other real-time traveler information. Candidate trip plans are multimodal and may include vehicle, transit, and alternate mode segments (e.g., rail, ferry, bicycle routes, and walkways) based on traveler preferences. It also confirms the trip plan for the traveler and supports reservations and advanced payment for portions of the trip. The trip plan includes specific routing information and instructions for each segment of the trip and may also include information and reservations for additional services (e.g., parking) along the route.	No				No
ADOT Alerts App	Media			No				No
ADOT ALISS Crash Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	2	The center shall collect data catalogs from one or more data sources. A catalog describes the data contained in the collection of archived data and may include descriptions of the schema or structure of the data, a description of the contents of the data; e.g., time range of entries, number of entries; or a sample of the data (e. g. a thumbnail).	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT ALISS Crash Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	3	The center shall store collected data in an information repository.	Planned	No
ADOT ALISS Crash Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	4	The center shall perform quality checks on collected data.	Planned	No
ADOT ALISS Crash Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	5	The center shall notify the system operator of errors related to data collection, analysis and archival.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT ALISS Crash Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	6	The center shall include capabilities for archive to archive coordination.	Planned	No
ADOT ALISS Crash Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	9	The center shall respond to requests from the administrator interface function to manage center-sourced data collection.	Planned	No
ADOT ALISS Crash Data Archive	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	1	The center shall provide archive data to federal, state, and local government reporting systems.	Planned	No
ADOT ALISS Crash Data Archive	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	2	The center shall respond to requests for government report data.	Planned	No
ADOT ALISS Crash Data Archive	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	3	The center shall provide the capability to format data suitable for input into government reports.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT ALISS Crash Data Archive	Archived Data System	Archive Situation Data Archival	Archive Situation Data Archival' collects and archives traffic, roadway, and environmental information for use in off-line planning, research, and analysis. It controls and collects information directly from equipment at the roadside, reflecting the deployment of traffic detectors that are used primarily for traffic monitoring and planning purposes, rather than for traffic management. It also collects situation data from connected vehicles. The data collected, quality checks performed, and aggregation strategies are defined to support transportation system performance monitoring and management.	No	1	The center shall collect data from roadside devices.	Planned	No
ADOT ALISS Crash Data Archive	Archived Data System	Archive Situation Data Archival	Archive Situation Data Archival' collects and archives traffic, roadway, and environmental information for use in off-line planning, research, and analysis. It controls and collects information directly from equipment at the roadside, reflecting the deployment of traffic detectors that are used primarily for traffic monitoring and planning purposes, rather than for traffic management. It also collects situation data from connected vehicles. The data collected, quality checks performed, and aggregation strategies are defined to support transportation system performance monitoring and management.	No	2	The center shall respond to requests from the administrator interface function to manage field-sourced data collection.	Planned	No
ADOT ALISS Crash Data Archive	Archived Data System	Archive Situation Data Archival	Archive Situation Data Archival' collects and archives traffic, roadway, and environmental information for use in off-line planning, research, and analysis. It controls and collects information directly from equipment at the roadside, reflecting the deployment of traffic detectors that are used primarily for traffic monitoring and planning purposes, rather than for traffic management. It also collects situation data from connected vehicles. The data collected, quality checks performed, and aggregation strategies are defined to support transportation system performance monitoring and management.	No	3	The center shall provide the capability to adjust the collection of field-sourced data based on the statistical measures.	Planned	No
ADOT ALISS Crash Data Archive	Archived Data System	Archive Situation Data Archival	Archive Situation Data Archival' collects and archives traffic, roadway, and environmental information for use in off-line planning, research, and analysis. It controls and collects information directly from equipment at the roadside, reflecting the deployment of traffic detectors that are used primarily for traffic monitoring and planning purposes, rather than for traffic management. It also collects situation data from connected vehicles. The data collected, quality checks performed, and aggregation strategies are defined to support transportation system performance monitoring and management.	No	6	The center shall provide the capability to execute methods on the incoming field data such as aggregation and statistical measures before the data is stored in the archive.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Asset Management Systems	Asset Management System			No				No
ADOT AZ Crash Information System	Archived Data User System			No				No
ADOT Construction Vehicles	Basic Maint and Constr Vehicle			No				No
ADOT Construction Vehicles	Maint and Constr Vehicle OBE	MCV Vehicle Location Tracking	MCV Vehicle Location Tracking' monitors vehicle location and reports the position and timestamp information to the dispatch center.	No	1	The maintenance and construction vehicle shall track its current location.	Existing	No
ADOT Construction Vehicles	Maint and Constr Vehicle OBE	MCV Vehicle Location Tracking	MCV Vehicle Location Tracking' monitors vehicle location and reports the position and timestamp information to the dispatch center.	No	2	The maintenance and construction vehicle shall send the time stamped vehicle location to the controlling center.	Existing	No
ADOT CV Roadside Equipment	Connected Vehicle Roadside Equipment			No				No
ADOT Data Distribution System	Data Distribution System			No				No
ADOT DEOC-Dept EM Ops Center	Center			No				No
ADOT DEOC-Dept EM Ops Center	Emergency Management Center	Emergency Data Collection	Emergency Data Collection' collects and stores emergency information that is collected in the course of operations by the Emergency Management Center. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No				No
ADOT DEOC-Dept EM Ops Center	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No				No
ADOT DEOC-Dept EM Ops Center	Emergency Management Center	Emergency Environmental Monitoring	Emergency Environmental Monitoring' collects current and forecast road conditions and surface weather information from a variety of sources. The collected environmental information is monitored and presented to the operator and used to more effectively manage incidents.	No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT DEOC-Dept EM Ops Center	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	1	The center shall manage inter-agency coordination of evacuation operations, from initial planning through the evacuation process and reentry.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT DEOC-Dept EM Ops Center	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT DEOC-Dept EM Ops Center	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	3	The center shall provide an interface to the emergency system operator to enter evacuation plans and procedures and present the operator with other agencies' plans.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT DEOC-Dept EM Ops Center	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	7	The center shall request traffic management agencies to implement special traffic control strategies and to control evacuation traffic, including traffic on local streets and arterials as well as the major evacuation routes.	Existing	No
ADOT DEOC-Dept EM Ops Center	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT DEOC-Dept EM Ops Center	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Existing	No
ADOT DEOC-Dept EM Ops Center	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	5	The center shall track the availability of resources and coordinate resource sharing with allied agency centers including traffic, maintenance, or other emergency centers.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT DEOC-Dept EM Ops Center	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	6	The center shall allocate the appropriate emergency services, resources, and vehicle (s) to respond to incidents, and shall provide the capability to override the current allocation to suit the special needs of a current incident.	Existing	No
ADOT DEOC-Dept EM Ops Center	Emergency Management Center	Emergency Secure Area Sensor Management	Emergency Secure Area Sensor Management' manages sensors that monitor secure areas in the transportation system, processes the collected data, performs threat analysis in which data is correlated with other sensor, surveillance, and advisory inputs, and then disseminates resultant threat information to emergency personnel and other agencies. In response to identified threats, the operator may request activation of barrier and safeguard systems to preclude an incident, control access during and after an incident or mitigate impact of an incident. The sensors may be in secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. The types of sensors include acoustic, threat (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors), infrastructure condition and integrity, motion and object sensors.	No	1	The center shall remotely monitor and control security sensor data collected in secure areas including facilities (e.g. transit yards) and transportation infrastructure (e.g. bridges, tunnels, interchanges, roadway infrastructure, and transit railways or guideways). The types of security sensor data include environmental threat (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors), infrastructure condition and integrity, intrusion and motion, and object detection sensors. The data may be raw or pre-processed in the field.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT DEOC-Dept EM Ops Center	Emergency Management Center	Emergency Secure Area Surveillance	Emergency Secure Area Surveillance' monitors surveillance inputs from secure areas in the transportation system. The surveillance may be of secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. It provides both video and audio surveillance information to emergency personnel and automatically alerts emergency personnel of potential incidents.	No				No
ADOT DEOC-Dept EM Ops Center	Traffic Management Center	TMC Service Patrol Management	TMC Service Patrol Management' supports dispatch and communication with service patrol vehicles that monitor roads to aid motorists, offering rapid response to minor incidents.	No				No
ADOT District TOCs	Archived Data User System			No				No
ADOT District TOCs	Traffic Management Center	TMC Basic Surveillance	TMC Basic Surveillance' remotely monitors and controls traffic sensor systems and surveillance (e.g., CCTV) equipment, and collects, processes and stores the collected traffic data. Current traffic information and other real-time transportation information is also collected from other centers. The collected information is provided to traffic operations personnel and made available to other centers.	No				No
ADOT District TOCs	Traffic Management Center	TMC Data Collection	TMC Data Collection' collects and stores information that is created in the course of traffic operations performed by the Traffic Management Center. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No				No
ADOT District TOCs	Traffic Management Center	TMC Environmental Monitoring	TMC Environmental Monitoring' assimilates current and forecast road conditions and surface weather information using a combination of weather service provider information, information collected by other centers such as the Maintenance and Construction Management Center, data collected from environmental sensors deployed on and about the roadway, and information collected from connected vehicles. The collected environmental information is monitored and presented to the operator. This information can be used to issue general traveler advisories and support location specific warnings to drivers.	No	1	The center shall remotely control environmental sensors that measure road surface conditions including temperature, moisture, icing, salinity, and other measures.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT District TOCs	Traffic Management Center	TMC Environmental Monitoring	TMC Environmental Monitoring' assimilates current and forecast road conditions and surface weather information using a combination of weather service provider information, information collected by other centers such as the Maintenance and Construction Management Center, data collected from environmental sensors deployed on and about the roadway, and information collected from connected vehicles. The collected environmental information is monitored and presented to the operator. This information can be used to issue general traveler advisories and support location specific warnings to drivers.	No	2	The center shall remotely control environmental sensors that measure weather conditions including temperature, wind, humidity, precipitation, and visibility.	Planned	No
ADOT District TOCs	Traffic Management Center	TMC Environmental Monitoring	TMC Environmental Monitoring' assimilates current and forecast road conditions and surface weather information using a combination of weather service provider information, information collected by other centers such as the Maintenance and Construction Management Center, data collected from environmental sensors deployed on and about the roadway, and information collected from connected vehicles. The collected environmental information is monitored and presented to the operator. This information can be used to issue general traveler advisories and support location specific warnings to drivers.	No	3	The center shall assimilate current and forecast road conditions and surface weather information using a combination of weather service provider information (such as the National Weather Service and value-added sector specific meteorological services), data from roadway maintenance operations, and environmental data collected from sensors deployed on and about the roadway.	Planned	No
ADOT District TOCs	Traffic Management Center	TMC Evacuation Support	TMC Evacuation Support' supports development, coordination, and execution of special traffic management strategies during evacuation and subsequent reentry of a population in the vicinity of a disaster or major emergency. A traffic management strategy is developed based on anticipated demand, the capacity of the road network including access to and from the evacuation routes, and existing and forecast conditions. The strategy supports efficient evacuation and also protects and optimizes movement of response vehicles and other resources that are responding to the emergency.	No	1	The center shall coordinate planning for evacuation with emergency management centers - including pre-planning activities such as establishing routes, areas to be evacuated, timing, etc.	Existing	No
ADOT District TOCs	Traffic Management Center	TMC Evacuation Support	TMC Evacuation Support' supports development, coordination, and execution of special traffic management strategies during evacuation and subsequent reentry of a population in the vicinity of a disaster or major emergency. A traffic management strategy is developed based on anticipated demand, the capacity of the road network including access to and from the evacuation routes, and existing and forecast conditions. The strategy supports efficient evacuation and also protects and optimizes movement of response vehicles and other resources that are responding to the emergency.	No	3	The center shall coordinate evacuation information and controls with other traffic management centers.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT District TOCs	Traffic Management Center	TMC Evacuation Support	TMC Evacuation Support' supports development, coordination, and execution of special traffic management strategies during evacuation and subsequent reentry of a population in the vicinity of a disaster or major emergency. A traffic management strategy is developed based on anticipated demand, the capacity of the road network including access to and from the evacuation routes, and existing and forecast conditions. The strategy supports efficient evacuation and also protects and optimizes movement of response vehicles and other resources that are responding to the emergency.	No	4	The center shall coordinate execution of evacuation strategies with emergency management centers - including activities such as setting closures and detours, establishing routes, updating areas to be evacuated, timing the process, etc.	Planned	No
ADOT District TOCs	Traffic Management Center	TMC Incident Detection	TMC Incident Detection' identifies and reports incidents to Traffic Operations Personnel. It remotely monitors and controls traffic sensor and surveillance systems that support incident detection and verification. It analyzes and reduces the collected sensor and surveillance data, external alerting and advisory and incident reporting systems, anticipated demand information from intermodal freight depots, border crossings, special event information, and identifies and reports incidents and hazardous conditions	No				No
ADOT District TOCs	Traffic Management Center	TMC Incident Dispatch Coordination	TMC Incident Dispatch Coordination' formulates and manages an incident response that takes into account the incident potential, incident impacts, and resources required for incident management. It provides information to support dispatch and routing of emergency response and service vehicles as well as coordination with other cooperating agencies. It provides access to traffic management resources that provide surveillance of the incident, traffic control in the surrounding area, and support for the incident response. It monitors the incident response and collects performance measures such as incident response and clearance times.	No	1	The center shall exchange alert information and status with emergency management centers. The information includes notification of a major emergency such as a natural or man-made disaster, civil emergency, or child abduction for distribution to the public. The information may include the alert originator, the nature of the emergency, the geographic area affected by the emergency, the effective time period, and information and instructions necessary for the public to respond to the alert. This may also identify specific information that should not be released to the public.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT District TOCs	Traffic Management Center	TMC Incident Dispatch Coordination	TMC Incident Dispatch Coordination' formulates and manages an incident response that takes into account the incident potential, incident impacts, and resources required for incident management. It provides information to support dispatch and routing of emergency response and service vehicles as well as coordination with other cooperating agencies. It provides access to traffic management resources that provide surveillance of the incident, traffic control in the surrounding area, and support for the incident response. It monitors the incident response and collects performance measures such as incident response and clearance times.	No	9	The center shall exchange road network status assessment information with emergency management and maintenance centers including an assessment of damage sustained by the road network including location and extent of the damage, estimate of remaining capacity, required closures, alternate routes, necessary restrictions, and time frame for repair and recovery.	Planned	No
ADOT District TOCs	Traffic Management Center	TMC Regional Traffic Management	TMC Regional Traffic Management' supports coordination between Traffic Management Centers in order to share traffic information between centers as well as control of traffic management field equipment. This coordination supports wide area optimization and regional coordination that spans jurisdictional boundaries; for example, coordinated signal control in a metropolitan area or coordination between freeway operations and arterial signal control within a corridor.	No				No
ADOT District TOCs	Traffic Management Center	TMC Roadway Equipment Monitoring	TMC Roadway Equipment Monitoring' monitors the operational status of field equipment and detects failures. It presents field equipment status to Traffic Operations Personnel and reports failures to the Maintenance and Construction Management Center. It tracks the repair or replacement of the failed equipment. The entire range of ITS field equipment may be monitored including sensors (traffic, infrastructure, environmental, security, speed, etc.) and devices (highway advisory radio, dynamic message signs, automated roadway treatment systems, barrier and safeguard systems, cameras, traffic signals and override equipment, ramp meters, beacons, security surveillance equipment, etc.).	No				No
ADOT District TOCs	Traffic Management Center	TMC Roadway Warning	TMC Roadway Warning' remotely monitors and controls the systems used to warn drivers approaching hazards on a roadway. It monitors data on roadway conditions from sensors in the field and generates warnings in response to roadway weather conditions, road surface conditions, traffic conditions including queues, obstacles or animals in the roadway, and any other transient events that can be sensed.	No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT District TOCs	Traffic Management Center	TMC Signal Control	TMC Signal Control' provides the capability for traffic managers to monitor and manage the traffic flow at signalized intersections. This capability includes analyzing and reducing the collected data from traffic surveillance equipment and developing and implementing control plans for signalized intersections. Control plans may be developed and implemented that coordinate signals at many intersections under the domain of a single Traffic Management Center and are responsive to traffic conditions and adapt to support incidents, preemption and priority requests, pedestrian crossing calls, etc.	No				No
ADOT District TOCs	Traffic Management Center	TMC Traffic Information Dissemination	TMC Traffic Information Dissemination' disseminates traffic and road conditions, closure and detour information, incident information, driver advisories, and other traffic-related data to other centers, the media, and driver information systems. It monitors and controls driver information system field equipment including dynamic message signs and highway advisory radio, managing dissemination of driver information through these systems.	No	1	The center shall remotely control dynamic messages signs for dissemination of traffic and other information to drivers.	Existing	No
ADOT District TOCs	Traffic Management Center	TMC Traffic Information Dissemination	TMC Traffic Information Dissemination' disseminates traffic and road conditions, closure and detour information, incident information, driver advisories, and other traffic-related data to other centers, the media, and driver information systems. It monitors and controls driver information system field equipment including dynamic message signs and highway advisory radio, managing dissemination of driver information through these systems.	No	4	The center shall collect fault data for the driver information systems equipment (DMS, HAR, etc.) for repair.	Existing	No
ADOT District TOCs	Traffic Management Center	TMC Traffic Metering	TMC Traffic Metering' provides center monitoring and control of traffic metering systems including on ramps, through interchanges, and on the mainline roadway. All types of metering are covered including pre-timed/fixed time, time-based, dynamic and adaptive metering strategies and special bypasses. Metering rates can be calculated based upon historical data or current conditions including traffic, air quality, etc.	No				No
ADOT District TOCs	Traffic Management Center	TMC Work Zone Traffic Management	TMC Work Zone Traffic Management' coordinates work plans with maintenance systems so that work zones are established that have minimum traffic impact. Traffic control strategies are implemented to further mitigate traffic impacts associated with work zones that are established, providing work zone information to driver information systems such as dynamic message signs.	No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT DUST System	ITS Roadway Equipment	Roadway Basic Surveillance	Roadway Basic Surveillance' monitors traffic conditions using fixed equipment such as loop detectors and CCTV cameras.	No	2	The field element shall collect, process, and send traffic images to the center for further analysis and distribution.	Planned	No
ADOT DUST System	ITS Roadway Equipment	Roadway Basic Surveillance	Roadway Basic Surveillance' monitors traffic conditions using fixed equipment such as loop detectors and CCTV cameras.	No	4	The field element shall return sensor and CCTV system operational status to the controlling center.	Planned	No
ADOT DUST System	ITS Roadway Equipment	Roadway Basic Surveillance	Roadway Basic Surveillance' monitors traffic conditions using fixed equipment such as loop detectors and CCTV cameras.	No	5	The field element shall return sensor and CCTV system fault data to the controlling center for repair.	Planned	No
ADOT DUST System	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	1	The field element shall include surface and sub-surface environmental sensors that measure road surface temperature, moisture, icing, salinity, and other measures.	Existing	No
ADOT DUST System	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	2	The field element shall include environmental sensors that measure weather conditions including temperature, wind, humidity, precipitation, and visibility.	Existing	No
ADOT DUST System	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	3	The field element's environmental sensors shall be remotely controlled by a maintenance center.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT DUST System	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	4	The field element's environmental sensors shall be remotely controlled by a traffic management center.	Planned	No
ADOT DUST System	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	5	The field element's environmental sensors shall be remotely controlled by weather service providers such as the National Weather Service or value-added sector specific meteorological services.	Planned	No
ADOT DUST System	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	6	The field element's environmental sensors shall be remotely controlled by a maintenance and construction vehicle.	Planned	No
ADOT DUST System	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	7	The field element shall provide environmental sensor equipment operational status to the controlling center or maintenance vehicle.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT DUST System	ITS Roadway Equipment	Roadway Field Device Support	Roadway Field Device Support' monitors the operational status of field devices and detects and reports fault conditions. Consolidated operational status (device status, configuration, and fault information) are reported for resolution and repair. A local interface is provided to field personnel for local monitoring and diagnostics, supporting field maintenance, upgrade, repair, and replacement of field devices.	No	1	The field element shall monitor the operational status of field devices and detects and reports fault conditions.	Planned	No
ADOT DUST System	ITS Roadway Equipment	Roadway Field Device Support	Roadway Field Device Support' monitors the operational status of field devices and detects and reports fault conditions. Consolidated operational status (device status, configuration, and fault information) are reported for resolution and repair. A local interface is provided to field personnel for local monitoring and diagnostics, supporting field maintenance, upgrade, repair, and replacement of field devices.	No	2	The field element shall detect and report any fault conditions with the equipment being monitored back to its controlling center.	Planned	No
ADOT DUST System	ITS Roadway Equipment	Roadway Traffic Information Dissemination	Roadway Traffic Information Dissemination' includes field elements that provide information to drivers, including dynamic message signs and highway advisory radios.	No	1	The field element shall include dynamic message signs for dissemination of traffic and other information to drivers, under center control; the DMS may be either those that display variable text messages, or those that have fixed format display(s) (e.g. vehicle restrictions, or lane open/close).	Existing	No
ADOT DUST System	ITS Roadway Equipment	Roadway Traffic Information Dissemination	Roadway Traffic Information Dissemination' includes field elements that provide information to drivers, including dynamic message signs and highway advisory radios.	No	2	The field element shall include driver information systems that communicate directly from a center to the vehicle radio (such as Highway Advisory Radios) for dissemination of traffic and other information to drivers, under center control.	Existing	No
ADOT DUST System	ITS Roadway Equipment	Roadway Traffic Information Dissemination	Roadway Traffic Information Dissemination' includes field elements that provide information to drivers, including dynamic message signs and highway advisory radios.	No	3	The field element shall provide operational status for the driver information systems equipment (DMS, HAR, etc.) to the center.	Planned	No
ADOT DUST System	ITS Roadway Equipment	Roadway Traffic Information Dissemination	Roadway Traffic Information Dissemination' includes field elements that provide information to drivers, including dynamic message signs and highway advisory radios.	No	4	The field element shall provide fault data for the driver information systems equipment (DMS, HAR, etc.) to the center for repair.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT DUST System	ITS Roadway Equipment	Roadway Warning	Roadway Warning' includes the field equipment used to warn drivers approaching hazards on a roadway. Warnings may be generated in response to roadway weather conditions, road surface conditions, traffic conditions including queues, obstacles or animals in the roadway, and any other transient events that can be sensed. The equipment monitors traffic and roadway conditions and may send data to a Traffic Management Center for processing or may process it to determine when a warning should be issued. When it is determined that a warning should be issued, the equipment is used to alert approaching drivers via dynamic warning signs, flashing lights, in-vehicle messages, etc.	No	1	The field element shall monitor for hazardous traffic conditions, including queues.	Planned	No
ADOT DUST System	ITS Roadway Equipment	Roadway Warning	Roadway Warning' includes the field equipment used to warn drivers approaching hazards on a roadway. Warnings may be generated in response to roadway weather conditions, road surface conditions, traffic conditions including queues, obstacles or animals in the roadway, and any other transient events that can be sensed. The equipment monitors traffic and roadway conditions and may send data to a Traffic Management Center for processing or may process it to determine when a warning should be issued. When it is determined that a warning should be issued, the equipment is used to alert approaching drivers via dynamic warning signs, flashing lights, in-vehicle messages, etc.	No	2	The field element shall monitor for hazardous road surface and local weather conditions.	Existing	No
ADOT DUST System	ITS Roadway Equipment	Roadway Warning	Roadway Warning' includes the field equipment used to warn drivers approaching hazards on a roadway. Warnings may be generated in response to roadway weather conditions, road surface conditions, traffic conditions including queues, obstacles or animals in the roadway, and any other transient events that can be sensed. The equipment monitors traffic and roadway conditions and may send data to a Traffic Management Center for processing or may process it to determine when a warning should be issued. When it is determined that a warning should be issued, the equipment is used to alert approaching drivers via dynamic warning signs, flashing lights, in-vehicle messages, etc.	No	5	The field element shall autonomously identify potentially hazardous conditions and activate warning signs to approaching motorists.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT DUST System	ITS Roadway Equipment	Roadway Warning	Roadway Warning' includes the field equipment used to warn drivers approaching hazards on a roadway. Warnings may be generated in response to roadway weather conditions, road surface conditions, traffic conditions including queues, obstacles or animals in the roadway, and any other transient events that can be sensed. The equipment monitors traffic and roadway conditions and may send data to a Traffic Management Center for processing or may process it to determine when a warning should be issued. When it is determined that a warning should be issued, the equipment is used to alert approaching drivers via dynamic warning signs, flashing lights, in-vehicle messages, etc.	No	6	The field element shall receive commands from the controlling center that activate warning signs to approaching motorists.	Planned	No
ADOT DUST System	ITS Roadway Equipment	Roadway Warning	Roadway Warning' includes the field equipment used to warn drivers approaching hazards on a roadway. Warnings may be generated in response to roadway weather conditions, road surface conditions, traffic conditions including queues, obstacles or animals in the roadway, and any other transient events that can be sensed. The equipment monitors traffic and roadway conditions and may send data to a Traffic Management Center for processing or may process it to determine when a warning should be issued. When it is determined that a warning should be issued, the equipment is used to alert approaching drivers via dynamic warning signs, flashing lights, in-vehicle messages, etc.	No	7	The field element shall collect operational status of the warning system field equipment and report the operational status to the controlling center.	Planned	No
ADOT DUST System	ITS Roadway Equipment	Roadway Warning	Roadway Warning' includes the field equipment used to warn drivers approaching hazards on a roadway. Warnings may be generated in response to roadway weather conditions, road surface conditions, traffic conditions including queues, obstacles or animals in the roadway, and any other transient events that can be sensed. The equipment monitors traffic and roadway conditions and may send data to a Traffic Management Center for processing or may process it to determine when a warning should be issued. When it is determined that a warning should be issued, the equipment is used to alert approaching drivers via dynamic warning signs, flashing lights, in-vehicle messages, etc.	No	8	The field element shall monitor and report faults to the controlling center.	Planned	No
ADOT DUST System	Other ITS Roadway Equipment			No				No
ADOT ECD CVO Administration Center	Border Inspection Administration Center			No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT ECD CVO Administration Center	Commercial Vehicle Administration Center			No				No
ADOT ECD CVO Administration Center	CVO Information Requestor Center			No				No
ADOT ECD Dispatch	Center			No				No
ADOT ECD Dispatch	Emergency Management Center	Emergency Commercial Vehicle Response	Emergency Commercial Vehicle Response' identifies and initiates a response to commercial vehicle and freight equipment related emergencies. These emergencies may include incidents involving hazardous materials as well as the detection of non-permitted transport of security sensitive hazmat. It identifies the location of the vehicle, the nature of the incident, the route information, and information concerning the freight itself. The information supports the determination of the response and identifies the responding agencies to notify.	No	2	The center shall receive emergency notification information from commercial vehicles, commercial vehicle check stations, or commercial fleet operators and present the possible incident information to the emergency system operator. This may include detection of non-permitted transport of security sensitive hazmat, hazardous cargo spills, etc.	Planned	No
ADOT ECD Dispatch	Emergency Management Center	Emergency Commercial Vehicle Response	Emergency Commercial Vehicle Response' identifies and initiates a response to commercial vehicle and freight equipment related emergencies. These emergencies may include incidents involving hazardous materials as well as the detection of non-permitted transport of security sensitive hazmat. It identifies the location of the vehicle, the nature of the incident, the route information, and information concerning the freight itself. The information supports the determination of the response and identifies the responding agencies to notify.	No	3	The center shall receive details of the cargo being carried by commercial vehicles from their commercial fleet manager for incidents involving potential hazardous materials.	Planned	No
ADOT ECD Dispatch	Emergency Management Center	Emergency Commercial Vehicle Response	Emergency Commercial Vehicle Response' identifies and initiates a response to commercial vehicle and freight equipment related emergencies. These emergencies may include incidents involving hazardous materials as well as the detection of non-permitted transport of security sensitive hazmat. It identifies the location of the vehicle, the nature of the incident, the route information, and information concerning the freight itself. The information supports the determination of the response and identifies the responding agencies to notify.	No	4	The center shall forward the verified emergency information to the responding agency based on the location and nature of the emergency.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT ECD Dispatch	Emergency Management Center	Emergency Commercial Vehicle Response	Emergency Commercial Vehicle Response' identifies and initiates a response to commercial vehicle and freight equipment related emergencies. These emergencies may include incidents involving hazardous materials as well as the detection of non-permitted transport of security sensitive hazmat. It identifies the location of the vehicle, the nature of the incident, the route information, and information concerning the freight itself. The information supports the determination of the response and identifies the responding agencies to notify.	No	5	The center shall provide the capability to request Fleet and Freight Management to disable a specific vehicle in their fleet.	Planned	No
ADOT ECD Dispatch	Emergency Management Center	Emergency Data Collection	Emergency Data Collection' collects and stores emergency information that is collected in the course of operations by the Emergency Management Center. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No				No
ADOT ECD Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Planned	No
ADOT ECD Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	5	The center shall provide the capability to correlate alerts and advisories, incident information, and security sensor and surveillance data.	Planned	No
ADOT ECD Dispatch	Emergency Management Center	Emergency Environmental Monitoring	Emergency Environmental Monitoring' collects current and forecast road conditions and surface weather information from a variety of sources. The collected environmental information is monitored and presented to the operator and used to more effectively manage incidents.	No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT ECD Dispatch	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No				No
ADOT ECD Dispatch	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	4	The center shall share incident command information with other public safety agencies including resource deployment status, hazardous material information, rail incident information, evacuation advice as well as traffic, road, and weather conditions.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT ECD Dispatch	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	5	The center shall assess the status of responding emergency vehicles as part of an incident command.	Planned	No
ADOT ECD Dispatch	Emergency Management Center	Emergency Notification Support	Emergency Notification Support' receives emergency notification messages from vehicles or personal handheld devices, determines an appropriate response, and either uses internal resources or contacts a local agency to provide that response. The nature of the emergency is determined based on the information in the received message as well as other inputs. This object effectively serves as an interface between automated collision notification systems and the local public safety answering point for messages that require a public safety response. This capability depends on an up-to-date registry of public safety answering points/response agencies by coverage area, the type of emergency, and hours of service.	No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT ECD Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Planned	No
ADOT ECD Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT ECD Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Planned	No
ADOT ECD Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT ECD Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	5	The center shall track the availability of resources and coordinate resource sharing with allied agency centers including traffic, maintenance, or other emergency centers.	Planned	No
ADOT ECD Dispatch	Emergency Management Center	Emergency Secure Area Sensor Management	Emergency Secure Area Sensor Management' manages sensors that monitor secure areas in the transportation system, processes the collected data, performs threat analysis in which data is correlated with other sensor, surveillance, and advisory inputs, and then disseminates resultant threat information to emergency personnel and other agencies. In response to identified threats, the operator may request activation of barrier and safeguard systems to preclude an incident, control access during and after an incident or mitigate impact of an incident. The sensors may be in secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. The types of sensors include acoustic, threat (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors), infrastructure condition and integrity, motion and object sensors.	No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT ECD Dispatch	Emergency Management Center	Emergency Secure Area Surveillance	Emergency Secure Area Surveillance' monitors surveillance inputs from secure areas in the transportation system. The surveillance may be of secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. It provides both video and audio surveillance information to emergency personnel and automatically alerts emergency personnel of potential incidents.	No				No
ADOT ECD Vehicles	Emergency Vehicle OBE			No				No
ADOT Electronic Bypass Stations	Commercial Vehicle Check Equipment	CVCE Citation and Accident Electronic Recording	CVCE Citation and Accident Electronic Recording' documents accidents, citations, and violations identified during roadside safety inspections and forwards the information to the Commercial Vehicle Administration Center for processing. It collects data from the vehicle to help characterize the circumstances surrounding the accident.	No	1	The roadside check facility equipment shall record the results of roadside inspections carried using an inspector's hand held terminal interface.	Planned	No
ADOT Electronic Bypass Stations	Commercial Vehicle Check Equipment	CVCE Citation and Accident Electronic Recording	CVCE Citation and Accident Electronic Recording' documents accidents, citations, and violations identified during roadside safety inspections and forwards the information to the Commercial Vehicle Administration Center for processing. It collects data from the vehicle to help characterize the circumstances surrounding the accident.	No	2	The roadside check facility equipment shall provide an interface for an inspector to add comments to the inspection results.	Planned	No
ADOT Electronic Bypass Stations	Commercial Vehicle Check Equipment	CVCE Citation and Accident Electronic Recording	CVCE Citation and Accident Electronic Recording' documents accidents, citations, and violations identified during roadside safety inspections and forwards the information to the Commercial Vehicle Administration Center for processing. It collects data from the vehicle to help characterize the circumstances surrounding the accident.	No	3	The roadside check facility equipment shall forward results of the roadside inspections to the commercial vehicle administration center either as needed or on a periodic basis. These reports include accident reports, violation notifications, citations, and daily site activity logs.	Planned	No
ADOT Electronic Bypass Stations	Commercial Vehicle Check Equipment	CVCE Citation and Accident Electronic Recording	CVCE Citation and Accident Electronic Recording' documents accidents, citations, and violations identified during roadside safety inspections and forwards the information to the Commercial Vehicle Administration Center for processing. It collects data from the vehicle to help characterize the circumstances surrounding the accident.	No	4	The roadside check facility equipment shall receive driver records from the commercial vehicle administration center to support driver identification and collection of driver credentials and history information.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Electronic Bypass Stations	Commercial Vehicle Check Equipment	CVCE Citation and Accident Electronic Recording	CVCE Citation and Accident Electronic Recording' documents accidents, citations, and violations identified during roadside safety inspections and forwards the information to the Commercial Vehicle Administration Center for processing. It collects data from the vehicle to help characterize the circumstances surrounding the accident.	No	5	The roadside check facility equipment shall collect safety data from the commercial vehicle and its freight equipment to help characterize the circumstances surrounding an accident.	Planned	No
ADOT Electronic Bypass Stations	Commercial Vehicle Check Equipment	CVCE Citation and Accident Electronic Recording	CVCE Citation and Accident Electronic Recording' documents accidents, citations, and violations identified during roadside safety inspections and forwards the information to the Commercial Vehicle Administration Center for processing. It collects data from the vehicle to help characterize the circumstances surrounding the accident.	No	6	The roadside check facility equipment shall read the driver identification card provided by the commercial vehicle driver and support cross-check of the identification data with driver records.	Planned	No
ADOT Electronic Bypass Stations	Commercial Vehicle Check Equipment	CVCE Electronic Screening	CVCE Electronic Screening' supports electronic credentials and safety screening of commercial vehicles at mainline speeds. It processes the data from the commercial vehicles along with accessed database information to determine whether a pull-in message is needed. It may also generate random pull-in messages with provisions for facility operators and enforcement officials to have manual override capabilities.	No	1	The roadside check facility equipment shall detect the presence of commercial vehicles and freight equipment approaching a facility.	Planned	No
ADOT Electronic Bypass Stations	Commercial Vehicle Check Equipment	CVCE Electronic Screening	CVCE Electronic Screening' supports electronic credentials and safety screening of commercial vehicles at mainline speeds. It processes the data from the commercial vehicles along with accessed database information to determine whether a pull-in message is needed. It may also generate random pull-in messages with provisions for facility operators and enforcement officials to have manual override capabilities.	No	3	The roadside check facility equipment shall receive the credential and credentials status information (e.g. snapshots) from the commercial vehicle administration center to maintain an up to date list of which vehicles have been cleared (enrolled) to potentially pass through without stopping.	Planned	No
ADOT Electronic Bypass Stations	Commercial Vehicle Check Equipment	CVCE Electronic Screening	CVCE Electronic Screening' supports electronic credentials and safety screening of commercial vehicles at mainline speeds. It processes the data from the commercial vehicles along with accessed database information to determine whether a pull-in message is needed. It may also generate random pull-in messages with provisions for facility operators and enforcement officials to have manual override capabilities.	No	4	The roadside check facility equipment shall receive commercial vehicle violation records and carriers, vehicles, and drivers of interest from appropriate law enforcement agencies.	Planned	No
ADOT Electronic Bypass Stations	Commercial Vehicle Check Equipment	CVCE Electronic Screening	CVCE Electronic Screening' supports electronic credentials and safety screening of commercial vehicles at mainline speeds. It processes the data from the commercial vehicles along with accessed database information to determine whether a pull-in message is needed. It may also generate random pull-in messages with provisions for facility operators and enforcement officials to have manual override capabilities.	No	5	The roadside check facility equipment shall provide an interface to inspectors in the field to allow them to monitor and if necessary override the pull-in decisions made by the system.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Electronic Bypass Stations	Commercial Vehicle Check Equipment	CVCE Electronic Screening	CVCE Electronic Screening' supports electronic credentials and safety screening of commercial vehicles at mainline speeds. It processes the data from the commercial vehicles along with accessed database information to determine whether a pull-in message is needed. It may also generate random pull-in messages with provisions for facility operators and enforcement officials to have manual override capabilities.	No	7	The roadside check facility equipment shall request and input electronic screening data from the commercial vehicle's electronic tag data.	Planned	No
ADOT Electronic Bypass Stations	Commercial Vehicle Check Equipment	CVCE Electronic Screening	CVCE Electronic Screening' supports electronic credentials and safety screening of commercial vehicles at mainline speeds. It processes the data from the commercial vehicles along with accessed database information to determine whether a pull-in message is needed. It may also generate random pull-in messages with provisions for facility operators and enforcement officials to have manual override capabilities.	No	8	The roadside check facility equipment shall collect safety data from the commercial vehicle and its freight equipment.	Planned	No
ADOT Electronic Bypass Stations	Commercial Vehicle Check Equipment	CVCE Electronic Screening	CVCE Electronic Screening' supports electronic credentials and safety screening of commercial vehicles at mainline speeds. It processes the data from the commercial vehicles along with accessed database information to determine whether a pull-in message is needed. It may also generate random pull-in messages with provisions for facility operators and enforcement officials to have manual override capabilities.	No	9	The roadside check facility equipment shall send a pass/pull-in notification to the commercial vehicle and its driver based on the information received from the vehicle, the administration center, enforcement agencies, and the inspector. The message may be sent to the on-board equipment in the commercial vehicle or transmitted to the driver using equipment such as dynamic message signs, red-green lights, flashing signs, etc.	Planned	No
ADOT Electronic Bypass Stations	Commercial Vehicle Check Equipment	CVCE Electronic Screening	CVCE Electronic Screening' supports electronic credentials and safety screening of commercial vehicles at mainline speeds. It processes the data from the commercial vehicles along with accessed database information to determine whether a pull-in message is needed. It may also generate random pull-in messages with provisions for facility operators and enforcement officials to have manual override capabilities.	No	10	The roadside check facility equipment shall verify that pull-in requests are heeded by drivers, notifying the facility operator if a vehicle fails to pull in as requested.	Planned	No
ADOT Electronic Bypass Stations	Commercial Vehicle Check Equipment	CVCE Electronic Screening	CVCE Electronic Screening' supports electronic credentials and safety screening of commercial vehicles at mainline speeds. It processes the data from the commercial vehicles along with accessed database information to determine whether a pull-in message is needed. It may also generate random pull-in messages with provisions for facility operators and enforcement officials to have manual override capabilities.	No	11	The roadside check facility equipment shall send a record of daily activities at the facility including summaries of screening events and inspections to the commercial vehicle administration center.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Electronic Bypass Stations	Commercial Vehicle Check Equipment	CVCE HAZMAT Detection	CVCE HAZMAT Detection' detects and identifies commercial vehicles carrying security sensitive hazardous materials. It assesses the likelihood of the presence of security sensitive HAZMAT materials based on remote sensed data as well as other physical information acquired about the commercial vehicle. It then determines if any detected HAZMAT is authorized. If unauthorized HAZMAT material is detected, a pull-in message is generated. It may also issue a message to the Emergency Management Center (Police Dispatch) that includes: location of the incident, current location of the commercial vehicle, timestamp, Vehicle ID, Carrier ID, Driver ID, CV Credentials information, HAZMAT material or category detected, and cargo manifest (if known).	No	1	The roadside check facility equipment shall detect the presence of commercial vehicles and freight equipment approaching a facility. Sensors can differentiate between different types of vehicles and determine the number of axles, gross vehicle weight, presence of security sensitive hazardous materials, and the identification of the vehicle and its cargo.	Planned	No
ADOT Electronic Bypass Stations	Commercial Vehicle Check Equipment	CVCE HAZMAT Detection	CVCE HAZMAT Detection' detects and identifies commercial vehicles carrying security sensitive hazardous materials. It assesses the likelihood of the presence of security sensitive HAZMAT materials based on remote sensed data as well as other physical information acquired about the commercial vehicle. It then determines if any detected HAZMAT is authorized. If unauthorized HAZMAT material is detected, a pull-in message is generated. It may also issue a message to the Emergency Management Center (Police Dispatch) that includes: location of the incident, current location of the commercial vehicle, timestamp, Vehicle ID, Carrier ID, Driver ID, CV Credentials information, HAZMAT material or category detected, and cargo manifest (if known).	No	2	The roadside check facility equipment shall detect the presence of security sensitive substances, e.g. detection of radiation or ammonia compounds, carried on-board commercial vehicles and freight equipment approaching a facility. This data is acquired by roadside sensors from the freight equipment electronically, optically, or manually.	Existing	No
ADOT Electronic Bypass Stations	Commercial Vehicle Check Equipment	CVCE HAZMAT Detection	CVCE HAZMAT Detection' detects and identifies commercial vehicles carrying security sensitive hazardous materials. It assesses the likelihood of the presence of security sensitive HAZMAT materials based on remote sensed data as well as other physical information acquired about the commercial vehicle. It then determines if any detected HAZMAT is authorized. If unauthorized HAZMAT material is detected, a pull-in message is generated. It may also issue a message to the Emergency Management Center (Police Dispatch) that includes: location of the incident, current location of the commercial vehicle, timestamp, Vehicle ID, Carrier ID, Driver ID, CV Credentials information, HAZMAT material or category detected, and cargo manifest (if known).	No	3	The roadside check facility equipment shall receive the credential information (e.g. snapshots) from the commercial vehicle administration center to maintain an up to date list of which vehicles with hazardous materials shipments have been cleared (enrolled).	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Electronic Bypass Stations	Commercial Vehicle Check Equipment	CVCE HAZMAT Detection	CVCE HAZMAT Detection' detects and identifies commercial vehicles carrying security sensitive hazardous materials. It assesses the likelihood of the presence of security sensitive HAZMAT materials based on remote sensed data as well as other physical information acquired about the commercial vehicle. It then determines if any detected HAZMAT is authorized. If unauthorized HAZMAT material is detected, a pull-in message is generated. It may also issue a message to the Emergency Management Center (Police Dispatch) that includes: location of the incident, current location of the commercial vehicle, timestamp, Vehicle ID, Carrier ID, Driver ID, CV Credentials information, HAZMAT material or category detected, and cargo manifest (if known).	No	4	The roadside check facility equipment shall send a pass/pull-in notification to the commercial vehicle and its driver based on the hazmat information received from the vehicle, the freight equipment, or the administration center. The message may be sent to the on-board equipment in the commercial vehicle via nearby connected vehicle roadside equipment or transmitted to the driver using equipment such as dynamic message signs, red-green lights, flashing signs, etc.	Planned	No
ADOT Electronic Bypass Stations	Commercial Vehicle Check Equipment	CVCE Weigh-In-Motion	CVCE Weigh-In-Motion' measures and records axle weights and gross vehicle weight without requiring the vehicle to come to a stop. Both permanent and portable installations are supported and may be performed in conjunction with electronic clearance or as a separate application.	No	1	The roadside check facility equipment shall detect the presence of commercial vehicles and freight equipment approaching a facility.	Existing	No
ADOT Electronic Bypass Stations	Commercial Vehicle Check Equipment	CVCE Weigh-In-Motion	CVCE Weigh-In-Motion' measures and records axle weights and gross vehicle weight without requiring the vehicle to come to a stop. Both permanent and portable installations are supported and may be performed in conjunction with electronic clearance or as a separate application.	No	2	The roadside check facility equipment shall request and input electronic screening data from the commercial vehicle's electronic tag data.	Planned	No
ADOT Electronic Bypass Stations	Commercial Vehicle Check Equipment	CVCE Weigh-In-Motion	CVCE Weigh-In-Motion' measures and records axle weights and gross vehicle weight without requiring the vehicle to come to a stop. Both permanent and portable installations are supported and may be performed in conjunction with electronic clearance or as a separate application.	No	3	The roadside check facility equipment shall send a pass/pull-in notification to the commercial vehicle and its driver based on the information received from the vehicle and the measurements taken. The message may be sent to the on-board equipment in the commercial vehicle or transmitted to the driver using equipment such as dynamic message signs, red-green lights, flashing signs, etc.	Planned	No
ADOT Fiber Backbone	Data Distribution System			No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT HazMat Response Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	1	The center shall collect data from centers.	Planned	No
ADOT HazMat Response Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	3	The center shall store collected data in an information repository.	Planned	No
ADOT HazMat Response Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	11	The center shall respond to requests for archive data from archive data users (centers, field devices).	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT HazMat Response Data Archive	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No				No
ADOT HazMat Response Data Archive	Archived Data System	Archive Situation Data Archival	Archive Situation Data Archival' collects and archives traffic, roadway, and environmental information for use in off-line planning, research, and analysis. It controls and collects information directly from equipment at the roadside, reflecting the deployment of traffic detectors that are used primarily for traffic monitoring and planning purposes, rather than for traffic management. It also collects situation data from connected vehicles. The data collected, quality checks performed, and aggregation strategies are defined to support transportation system performance monitoring and management.	No	1	The center shall collect data from roadside devices.	Planned	No
ADOT HazMat Response Data Archive	Archived Data System	Archive Situation Data Archival	Archive Situation Data Archival' collects and archives traffic, roadway, and environmental information for use in off-line planning, research, and analysis. It controls and collects information directly from equipment at the roadside, reflecting the deployment of traffic detectors that are used primarily for traffic monitoring and planning purposes, rather than for traffic management. It also collects situation data from connected vehicles. The data collected, quality checks performed, and aggregation strategies are defined to support transportation system performance monitoring and management.	No	2	The center shall respond to requests from the administrator interface function to manage field-sourced data collection.	Planned	No
ADOT HCRS Data Archive	Archived Data System			No				No
ADOT HCRS Data Archive	Other Data Sources			No				No
ADOT HCRS Data User Systems	Archived Data User System			No				No
ADOT HCRS Data User Systems	Other Maint and Constr Mgmt Centers			No				No
ADOT HCRS Data User Systems	Transportation Information Center			No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT HCRS Traveler Information	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	1	The center shall collect data from centers.	Planned	No
ADOT HCRS Traveler Information	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	2	The center shall collect data catalogs from one or more data sources. A catalog describes the data contained in the collection of archived data and may include descriptions of the schema or structure of the data, a description of the contents of the data; e.g., time range of entries, number of entries; or a sample of the data (e. g. a thumbnail).	Planned	No
ADOT HCRS Traveler Information	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	3	The center shall store collected data in an information repository.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT HCRS Traveler Information	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	5	The center shall notify the system operator of errors related to data collection, analysis and archival.	Planned	No
ADOT HCRS Traveler Information	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	6	The center shall include capabilities for archive to archive coordination.	Planned	No
ADOT HCRS Traveler Information	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	9	The center shall respond to requests from the administrator interface function to manage center-sourced data collection.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT HCRS Traveler Information	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	2	The center shall respond to requests for government report data.	Planned	No
ADOT HCRS Traveler Information	Archived Data System	Archive Situation Data Archival	Archive Situation Data Archival' collects and archives traffic, roadway, and environmental information for use in off-line planning, research, and analysis. It controls and collects information directly from equipment at the roadside, reflecting the deployment of traffic detectors that are used primarily for traffic monitoring and planning purposes, rather than for traffic management. It also collects situation data from connected vehicles. The data collected, quality checks performed, and aggregation strategies are defined to support transportation system performance monitoring and management.	No	1	The center shall collect data from roadside devices.	Planned	No
ADOT HCRS Traveler Information	Archived Data System	Archive Situation Data Archival	Archive Situation Data Archival' collects and archives traffic, roadway, and environmental information for use in off-line planning, research, and analysis. It controls and collects information directly from equipment at the roadside, reflecting the deployment of traffic detectors that are used primarily for traffic monitoring and planning purposes, rather than for traffic management. It also collects situation data from connected vehicles. The data collected, quality checks performed, and aggregation strategies are defined to support transportation system performance monitoring and management.	No	2	The center shall respond to requests from the administrator interface function to manage field-sourced data collection.	Planned	No
ADOT HCRS Traveler Information	Archived Data System	Archive Situation Data Archival	Archive Situation Data Archival' collects and archives traffic, roadway, and environmental information for use in off-line planning, research, and analysis. It controls and collects information directly from equipment at the roadside, reflecting the deployment of traffic detectors that are used primarily for traffic monitoring and planning purposes, rather than for traffic management. It also collects situation data from connected vehicles. The data collected, quality checks performed, and aggregation strategies are defined to support transportation system performance monitoring and management.	No	3	The center shall provide the capability to adjust the collection of field-sourced data based on the statistical measures.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT HCRS Traveler Information	Archived Data System	Archive Situation Data Archival	Archive Situation Data Archival' collects and archives traffic, roadway, and environmental information for use in off-line planning, research, and analysis. It controls and collects information directly from equipment at the roadside, reflecting the deployment of traffic detectors that are used primarily for traffic monitoring and planning purposes, rather than for traffic management. It also collects situation data from connected vehicles. The data collected, quality checks performed, and aggregation strategies are defined to support transportation system performance monitoring and management.	No	6	The center shall provide the capability to execute methods on the incoming field data such as aggregation and statistical measures before the data is stored in the archive.	Planned	No
ADOT HCRS Traveler Information	Data Distribution System	DDS Data Access Management	DDS Data Access Management' defines the access mechanisms, structures and restrictions for inbound (from providers) and outbound (to consumers) data.	No				No
ADOT HCRS Traveler Information	Data Distribution System	DDS Data Collection and Aggregation	DDS Data Collection and Aggregation' collects data 'deposits' from producers including meta data such as the generation location and time. It authenticates and validates the data deposits and logs all associated meta data. Authenticated, valid data is bundled based on information type and location and made available as data products to consumers who are interested in the data. It establishes delivery parameters for data consumers that subscribe based on parameters including content type and geographic region of interest and delivers data to consumers based on these parameters.	No				No
ADOT HCRS Traveler Information	Transportation Information Center	TIC Connected Vehicle Traveler Info Distribution	In support of connected vehicle applications, 'TIC Connected Vehicle Traveler Info Distribution' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. Location-specific or situation-relevant traveler information is sent to short range communications transceivers at the roadside.	No				No
ADOT HCRS Traveler Information	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT HCRS Traveler Information	Transportation Information Center	TIC Emergency Traveler Information	TIC Emergency Traveler Information' provides emergency information to the public, including wide-area alerts and evacuation information. It provides emergency alerts, information on evacuation zones and evacuation requirements, evacuation destinations and shelter information, available transportation modes, and traffic and road conditions at the origin, destination, and along the evacuation routes. In addition to general evacuation information, personalized information including tailored evacuation routes, service information, and estimated travel times is also provided based on traveler specified origin, destination, and route parameters. Updated information is provided throughout the evacuation and subsequent reentry as status changes and plans are adapted.	No				No
ADOT HCRS Traveler Information	Transportation Information Center	TIC Interactive Traveler Information	TIC Interactive Traveler Information' disseminates personalized traveler information including traffic and road conditions, transit information, maintenance and construction information, multimodal information, event information, and weather information. Tailored information is provided based on the traveler's request in this interactive service.	No				No
ADOT HCRS Traveler Information	Transportation Information Center	TIC Operations Data Collection	TIC Operations Data Collection' collects and stores information that is collected about the transportation information service including data on the number of clients serviced and the services that were provided. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	1	The center shall collect traveler information data, such as parking lot data, rideshare data, road network use data, vehicle probe data, and other data from traveler information system operations.	Planned	No
ADOT HCRS Traveler Information	Transportation Information Center	TIC Situation Data Management	TIC Situation Data Management' manages connected vehicle situation data collection, quality controls, filtering, aggregation, and storage. Through this process, raw data reported by connected vehicles are transformed into information products that can be accessed and used to support transportation operations and traveler information. The distribution of the connected vehicle-derived information products is handled by other functional objects.	No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT HCRS Traveler Information	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No				No
ADOT HPMS Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	1	The center shall collect data from centers.	Planned	No
ADOT HPMS Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	2	The center shall collect data catalogs from one or more data sources. A catalog describes the data contained in the collection of archived data and may include descriptions of the schema or structure of the data, a description of the contents of the data; e.g., time range of entries, number of entries; or a sample of the data (e. g. a thumbnail).	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT HPMS Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	3	The center shall store collected data in an information repository.	Planned	No
ADOT HPMS Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	4	The center shall perform quality checks on collected data.	Planned	No
ADOT HPMS Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	5	The center shall notify the system operator of errors related to data collection, analysis and archival.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT HPMS Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	6	The center shall include capabilities for archive to archive coordination.	Planned	No
ADOT HPMS Data Archive	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	1	The center shall provide archive data to federal, state, and local government reporting systems.	Planned	No
ADOT HPMS Data Archive	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	2	The center shall respond to requests for government report data.	Planned	No
ADOT HPMS Data Archive	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	3	The center shall provide the capability to format data suitable for input into government reports.	Planned	No
ADOT HPMS Data Archive	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	4	The center shall provide the applicable meta-data for any ITS archived data to satisfy government reporting system requests. Meta-data may include attributes that describe the source and quality of the data and the conditions surrounding the collection of the data.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT HPMS Data Archive	Archived Data System	Archive Situation Data Archival	Archive Situation Data Archival' collects and archives traffic, roadway, and environmental information for use in off-line planning, research, and analysis. It controls and collects information directly from equipment at the roadside, reflecting the deployment of traffic detectors that are used primarily for traffic monitoring and planning purposes, rather than for traffic management. It also collects situation data from connected vehicles. The data collected, quality checks performed, and aggregation strategies are defined to support transportation system performance monitoring and management.	No	1	The center shall collect data from roadside devices.	Planned	No
ADOT HPMS Data Archive	Archived Data System	Archive Situation Data Archival	Archive Situation Data Archival' collects and archives traffic, roadway, and environmental information for use in off-line planning, research, and analysis. It controls and collects information directly from equipment at the roadside, reflecting the deployment of traffic detectors that are used primarily for traffic monitoring and planning purposes, rather than for traffic management. It also collects situation data from connected vehicles. The data collected, quality checks performed, and aggregation strategies are defined to support transportation system performance monitoring and management.	No	2	The center shall respond to requests from the administrator interface function to manage field-sourced data collection.	Planned	No
ADOT HPMS Data Archive	Archived Data System	Archive Situation Data Archival	Archive Situation Data Archival' collects and archives traffic, roadway, and environmental information for use in off-line planning, research, and analysis. It controls and collects information directly from equipment at the roadside, reflecting the deployment of traffic detectors that are used primarily for traffic monitoring and planning purposes, rather than for traffic management. It also collects situation data from connected vehicles. The data collected, quality checks performed, and aggregation strategies are defined to support transportation system performance monitoring and management.	No	3	The center shall provide the capability to adjust the collection of field-sourced data based on the statistical measures.	Planned	No
ADOT HPMS Data Archive	Archived Data System	Archive Situation Data Archival	Archive Situation Data Archival' collects and archives traffic, roadway, and environmental information for use in off-line planning, research, and analysis. It controls and collects information directly from equipment at the roadside, reflecting the deployment of traffic detectors that are used primarily for traffic monitoring and planning purposes, rather than for traffic management. It also collects situation data from connected vehicles. The data collected, quality checks performed, and aggregation strategies are defined to support transportation system performance monitoring and management.	No	6	The center shall provide the capability to execute methods on the incoming field data such as aggregation and statistical measures before the data is stored in the archive.	Planned	No
ADOT HPMS Data Archive	Other Data Sources			No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT HPMS Data User System	Archived Data User System			No				No
ADOT ITS Field Equipment	ITS Roadway Equipment	Roadway Barrier System Control	Roadway Barrier System Control' includes the field equipment that controls barrier systems used to control access to transportation facilities and infrastructure. Barrier systems include automatic or remotely controlled gates, barriers and other access control systems.	No				No
ADOT ITS Field Equipment	ITS Roadway Equipment	Roadway Basic Surveillance	Roadway Basic Surveillance' monitors traffic conditions using fixed equipment such as loop detectors and CCTV cameras.	No	2	The field element shall collect, process, and send traffic images to the center for further analysis and distribution.	Existing	No
ADOT ITS Field Equipment	ITS Roadway Equipment	Roadway Basic Surveillance	Roadway Basic Surveillance' monitors traffic conditions using fixed equipment such as loop detectors and CCTV cameras.	No	4	The field element shall return sensor and CCTV system operational status to the controlling center.	Existing	No
ADOT ITS Field Equipment	ITS Roadway Equipment	Roadway Basic Surveillance	Roadway Basic Surveillance' monitors traffic conditions using fixed equipment such as loop detectors and CCTV cameras.	No	5	The field element shall return sensor and CCTV system fault data to the controlling center for repair.	Existing	No
ADOT ITS Field Equipment	ITS Roadway Equipment	Roadway Data Collection	Roadway Data Collection' collects traffic, road, and environmental conditions information for use in transportation planning, research, and other off-line applications where data quality and completeness take precedence over real-time performance. It includes the sensors, supporting roadside infrastructure, and communications equipment that collects and transfers information to a center for archival.	No				No
ADOT ITS Field Equipment	ITS Roadway Equipment	Roadway Field Device Support	Roadway Field Device Support' monitors the operational status of field devices and detects and reports fault conditions. Consolidated operational status (device status, configuration, and fault information) are reported for resolution and repair. A local interface is provided to field personnel for local monitoring and diagnostics, supporting field maintenance, upgrade, repair, and replacement of field devices.	No	1	The field element shall monitor the operational status of field devices and detects and reports fault conditions.	Existing	No
ADOT ITS Field Equipment	ITS Roadway Equipment	Roadway Field Device Support	Roadway Field Device Support' monitors the operational status of field devices and detects and reports fault conditions. Consolidated operational status (device status, configuration, and fault information) are reported for resolution and repair. A local interface is provided to field personnel for local monitoring and diagnostics, supporting field maintenance, upgrade, repair, and replacement of field devices.	No	2	The field element shall detect and report any fault conditions with the equipment being monitored back to its controlling center.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT ITS Field Equipment	ITS Roadway Equipment	Roadway Field Device Support	Roadway Field Device Support' monitors the operational status of field devices and detects and reports fault conditions. Consolidated operational status (device status, configuration, and fault information) are reported for resolution and repair. A local interface is provided to field personnel for local monitoring and diagnostics, supporting field maintenance, upgrade, repair, and replacement of field devices.	No	4	The field element shall support an interface with field support equipment to accept installation of updates or configuration of field operations.	Existing	No
ADOT ITS Field Equipment	ITS Roadway Equipment	Roadway Incident Detection	Roadway Incident Detection' provides incident detection using traffic detectors and surveillance equipment. It monitors for unusual traffic conditions that may indicate an incident or processes surveillance images, watching for potential incidents. It provides potential incident information as well as traffic flow and images to the center for processing and presentation to traffic operations personnel.	No	1	The field element shall collect, process, and send traffic images to the center for further analysis and distribution.	Existing	No
ADOT ITS Field Equipment	ITS Roadway Equipment	Roadway Incident Detection	Roadway Incident Detection' provides incident detection using traffic detectors and surveillance equipment. It monitors for unusual traffic conditions that may indicate an incident or processes surveillance images, watching for potential incidents. It provides potential incident information as well as traffic flow and images to the center for processing and presentation to traffic operations personnel.	No	2	The field element shall remotely process video data and provide an indication of potential incidents to the traffic management center.	Existing	No
ADOT ITS Field Equipment	ITS Roadway Equipment	Roadway Incident Detection	Roadway Incident Detection' provides incident detection using traffic detectors and surveillance equipment. It monitors for unusual traffic conditions that may indicate an incident or processes surveillance images, watching for potential incidents. It provides potential incident information as well as traffic flow and images to the center for processing and presentation to traffic operations personnel.	No	3	The field element's video devices shall be remotely controlled by a traffic management center.	Existing	No
ADOT ITS Field Equipment	ITS Roadway Equipment	Roadway Incident Detection	Roadway Incident Detection' provides incident detection using traffic detectors and surveillance equipment. It monitors for unusual traffic conditions that may indicate an incident or processes surveillance images, watching for potential incidents. It provides potential incident information as well as traffic flow and images to the center for processing and presentation to traffic operations personnel.	No	4	The field element shall provide operational status and fault data for the incident detection devices to the traffic management center.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT ITS Field Equipment	ITS Roadway Equipment	Roadway Passive Monitoring	Roadway Passive Monitoring' monitors passing vehicles for a signature that can be used to recognize the same vehicle at different points in the network and measure travel times. Depending on the implementation and the penetration rate of the technology that is monitored, other point traffic measures may also be inferred by monitoring the number of vehicles within range over time. Today this approach is implemented most commonly using a Bluetooth receiver that passively monitors Bluetooth devices on-board passing vehicles and license plate readers that record the vehicle license plate number, but any widely deployed vehicle communications technology or feature that can be passively monitored to uniquely identify a vehicle could be used.	No				No
ADOT ITS Field Equipment	ITS Roadway Equipment	Roadway Safeguard System Control	Roadway Safeguard System Control' includes field equipment that controls safeguard systems for transportation facilities and infrastructure. Safeguard systems include blast shields, exhaust systems and other automatic or remotely controlled systems intended to mitigate the impact of an incident.	No				No
ADOT ITS Field Equipment	ITS Roadway Equipment	Roadway Traffic Information Dissemination	Roadway Traffic Information Dissemination' includes field elements that provide information to drivers, including dynamic message signs and highway advisory radios.	No				No
ADOT ITS Field Equipment	ITS Roadway Equipment	Roadway Variable Speed Limits	Roadway Variable Speed Limits' includes the field equipment, physical overhead lane signs and associated control electronics that are used to manage and control variable speed limits systems. This equipment monitors traffic and environmental conditions along the roadway. The system can be centrally monitored and controlled by a Traffic Management Center or it can be autonomous, calculating and setting suitable speed limits, usually by lane. This application displays the speed limits and additional information such as basic safety rules and current traffic information to drivers.	No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT ITS Field Equipment	ITS Roadway Equipment	Roadway Warning	Roadway Warning' includes the field equipment used to warn drivers approaching hazards on a roadway. Warnings may be generated in response to roadway weather conditions, road surface conditions, traffic conditions including queues, obstacles or animals in the roadway, and any other transient events that can be sensed. The equipment monitors traffic and roadway conditions and may send data to a Traffic Management Center for processing or may process it to determine when a warning should be issued. When it is determined that a warning should be issued, the equipment is used to alert approaching drivers via dynamic warning signs, flashing lights, in-vehicle messages, etc.	No				No
ADOT ITS Field Equipment	Other ITS Roadway Equipment			No				No
ADOT Mainline Detection	Connected Vehicle Roadside Equipment	RSE Situation Monitoring	RSE Situation Monitoring' is a general functional object that supports collection of traffic, environmental, and emissions data from passing vehicles. The data is collected, filtered, and forwarded based on parameters provided by the back office. Parameters are provided to passing vehicles that are equipped to collect and send situation data to the infrastructure in snapshots. In addition, this object collects current status information from local field devices including intersection status, sensor data, and signage data, providing complete, configurable monitoring of the situation for the local transportation system in the vicinity of the RSE.	No				No
ADOT Mainline Detection	Connected Vehicle Roadside Equipment	RSE Traffic Monitoring	RSE Traffic Monitoring' monitors the basic safety messages that are shared between connected vehicles and distills this data into traffic flow measures that can be used to manage the network in combination with or in lieu of traffic data collected by infrastructure-based sensors. As connected vehicle penetration rates increase, the measures provided by this application can expand beyond vehicle speeds that are directly reported by vehicles to include estimated volume, occupancy, and other measures. This object also supports incident detection by monitoring for changes in speed and vehicle control events that indicate a potential incident.	No				No
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Basic Surveillance	Roadway Basic Surveillance' monitors traffic conditions using fixed equipment such as loop detectors and CCTV cameras.	No	1	The field element shall collect, process, digitize, and send traffic sensor data (speed, volume, and occupancy) to the center for further analysis and storage, under center control.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Basic Surveillance	Roadway Basic Surveillance' monitors traffic conditions using fixed equipment such as loop detectors and CCTV cameras.	No	2	The field element shall collect, process, and send traffic images to the center for further analysis and distribution.	Planned	No
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Basic Surveillance	Roadway Basic Surveillance' monitors traffic conditions using fixed equipment such as loop detectors and CCTV cameras.	No	3	The field element shall collect, digitize, and send multimodal crossing and high occupancy vehicle (HOV), and high occupancy toll (HOT) lane sensor data to the center for further analysis and storage.	Planned	No
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Basic Surveillance	Roadway Basic Surveillance' monitors traffic conditions using fixed equipment such as loop detectors and CCTV cameras.	No	4	The field element shall return sensor and CCTV system operational status to the controlling center.	Planned	No
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Basic Surveillance	Roadway Basic Surveillance' monitors traffic conditions using fixed equipment such as loop detectors and CCTV cameras.	No	5	The field element shall return sensor and CCTV system fault data to the controlling center for repair.	Planned	No
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Data Collection	Roadway Data Collection' collects traffic, road, and environmental conditions information for use in transportation planning, research, and other off-line applications where data quality and completeness take precedence over real-time performance. It includes the sensors, supporting roadside infrastructure, and communications equipment that collects and transfers information to a center for archival.	No				No
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	1	The field element shall include surface and sub-surface environmental sensors that measure road surface temperature, moisture, icing, salinity, and other measures.	Planned	No
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	2	The field element shall include environmental sensors that measure weather conditions including temperature, wind, humidity, precipitation, and visibility.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	3	The field element's environmental sensors shall be remotely controlled by a maintenance center.	Planned	No
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	4	The field element's environmental sensors shall be remotely controlled by a traffic management center.	Planned	No
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	5	The field element's environmental sensors shall be remotely controlled by weather service providers such as the National Weather Service or value-added sector specific meteorological services.	Planned	No
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	6	The field element's environmental sensors shall be remotely controlled by a maintenance and construction vehicle.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	7	The field element shall provide environmental sensor equipment operational status to the controlling center or maintenance vehicle.	Planned	No
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	8	The field element shall provide environmental sensor equipment fault indication to the controlling center or maintenance vehicle.	Planned	No
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	9	The field element shall remotely aggregate environmental sensor data with environmental data collected from maintenance and construction vehicles.	Planned	No
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	10	The field element shall provide weather and road surface condition data to centers.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	11	The field element shall provide weather and road surface condition data to maintenance and construction vehicles.	Planned	No
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Field Device Support	Roadway Field Device Support' monitors the operational status of field devices and detects and reports fault conditions. Consolidated operational status (device status, configuration, and fault information) are reported for resolution and repair. A local interface is provided to field personnel for local monitoring and diagnostics, supporting field maintenance, upgrade, repair, and replacement of field devices.	No	1	The field element shall monitor the operational status of field devices and detects and reports fault conditions.	Planned	No
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Field Device Support	Roadway Field Device Support' monitors the operational status of field devices and detects and reports fault conditions. Consolidated operational status (device status, configuration, and fault information) are reported for resolution and repair. A local interface is provided to field personnel for local monitoring and diagnostics, supporting field maintenance, upgrade, repair, and replacement of field devices.	No	2	The field element shall detect and report any fault conditions with the equipment being monitored back to its controlling center.	Planned	No
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Field Device Support	Roadway Field Device Support' monitors the operational status of field devices and detects and reports fault conditions. Consolidated operational status (device status, configuration, and fault information) are reported for resolution and repair. A local interface is provided to field personnel for local monitoring and diagnostics, supporting field maintenance, upgrade, repair, and replacement of field devices.	No	3	The field element shall provide the capability for field personnel to locally control and configure this equipment.	Planned	No
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Field Device Support	Roadway Field Device Support' monitors the operational status of field devices and detects and reports fault conditions. Consolidated operational status (device status, configuration, and fault information) are reported for resolution and repair. A local interface is provided to field personnel for local monitoring and diagnostics, supporting field maintenance, upgrade, repair, and replacement of field devices.	No	4	The field element shall support an interface with field support equipment to accept installation of updates or configuration of field operations.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Incident Detection	Roadway Incident Detection' provides incident detection using traffic detectors and surveillance equipment. It monitors for unusual traffic conditions that may indicate an incident or processes surveillance images, watching for potential incidents. It provides potential incident information as well as traffic flow and images to the center for processing and presentation to traffic operations personnel.	No	1	The field element shall collect, process, and send traffic images to the center for further analysis and distribution.	Planned	No
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Incident Detection	Roadway Incident Detection' provides incident detection using traffic detectors and surveillance equipment. It monitors for unusual traffic conditions that may indicate an incident or processes surveillance images, watching for potential incidents. It provides potential incident information as well as traffic flow and images to the center for processing and presentation to traffic operations personnel.	No	2	The field element shall remotely process video data and provide an indication of potential incidents to the traffic management center.	Planned	No
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Incident Detection	Roadway Incident Detection' provides incident detection using traffic detectors and surveillance equipment. It monitors for unusual traffic conditions that may indicate an incident or processes surveillance images, watching for potential incidents. It provides potential incident information as well as traffic flow and images to the center for processing and presentation to traffic operations personnel.	No	3	The field element's video devices shall be remotely controlled by a traffic management center.	Planned	No
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Incident Detection	Roadway Incident Detection' provides incident detection using traffic detectors and surveillance equipment. It monitors for unusual traffic conditions that may indicate an incident or processes surveillance images, watching for potential incidents. It provides potential incident information as well as traffic flow and images to the center for processing and presentation to traffic operations personnel.	No	4	The field element shall provide operational status and fault data for the incident detection devices to the traffic management center.	Planned	No
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Passive Monitoring	Roadway Passive Monitoring' monitors passing vehicles for a signature that can be used to recognize the same vehicle at different points in the network and measure travel times. Depending on the implementation and the penetration rate of the technology that is monitored, other point traffic measures may also be inferred by monitoring the number of vehicles within range over time. Today this approach is implemented most commonly using a Bluetooth receiver that passively monitors Bluetooth devices on-board passing vehicles and license plate readers that record the vehicle license plate number, but any widely deployed vehicle communications technology or feature that can be passively monitored to uniquely identify a vehicle could be used.	No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Standard Rail Crossing	Roadway Standard Rail Crossing' manages highway traffic at highway-rail intersections (HRIs) where operational requirements do not dictate advanced features (e.g., where rail operational speeds are less than 80 miles per hour). Either passive (e.g., the crossbuck sign) or active warning systems (e.g., flashing lights and gates) are supported depending on the specific requirements for each intersection. These traditional HRI warning systems may also be augmented with other standard traffic management devices. The warning systems are activated on notification of an approaching train by interfaced wayside equipment. The equipment at the HRI may also be interconnected with adjacent signalized intersections so that local control can be adapted to highway-rail intersection activities. Health monitoring of the HRI equipment and interfaces is performed; detected abnormalities are reported through interfaces to the wayside interface equipment and the Traffic Management Center.	No	1	The field element shall collect and process, traffic sensor data in the vicinity of a highway-rail intersection (HRI).	Existing	No
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Standard Rail Crossing	Roadway Standard Rail Crossing' manages highway traffic at highway-rail intersections (HRIs) where operational requirements do not dictate advanced features (e.g., where rail operational speeds are less than 80 miles per hour). Either passive (e.g., the crossbuck sign) or active warning systems (e.g., flashing lights and gates) are supported depending on the specific requirements for each intersection. These traditional HRI warning systems may also be augmented with other standard traffic management devices. The warning systems are activated on notification of an approaching train by interfaced wayside equipment. The equipment at the HRI may also be interconnected with adjacent signalized intersections so that local control can be adapted to highway-rail intersection activities. Health monitoring of the HRI equipment and interfaces is performed; detected abnormalities are reported through interfaces to the wayside interface equipment and the Traffic Management Center.	No	2	The field element shall monitor the status of the highway-rail intersection (HRI) equipment, including both the current state and mode of operation and the current equipment condition, to be forwarded on to the traffic management center.	Planned	No
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Traffic Information Dissemination	Roadway Traffic Information Dissemination' includes field elements that provide information to drivers, including dynamic message signs and highway advisory radios.	No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Traffic Metering	Roadway Traffic Metering' includes the field equipment used to meter traffic on ramps, through interchanges, and on the mainline roadway. The equipment includes dynamic messages signs to provide guidance and information to drivers at and approaching a meter, including information for any special bypass lanes.	No				No
ADOT Mainline Detection	ITS Roadway Equipment	Roadway Variable Speed Limits	Roadway Variable Speed Limits' includes the field equipment, physical overhead lane signs and associated control electronics that are used to manage and control variable speed limits systems. This equipment monitors traffic and environmental conditions along the roadway. The system can be centrally monitored and controlled by a Traffic Management Center or it can be autonomous, calculating and setting suitable speed limits, usually by lane. This application displays the speed limits and additional information such as basic safety rules and current traffic information to drivers.	No				No
ADOT Maintenance Work Zone Field Equipment	Connected Vehicle Roadside Equipment	RSE Device Management	RSE Device Management' provides executive control and monitoring of the RSE hardware and installed software applications. It monitors the operational status of the hardware and other attached field devices and detects and reports fault conditions. A back office interface supports application installation, upgrade, and configuration as well as remote control of the operating mode and hardware configuration settings and initiation of remote diagnostics. A local interface is provided to field personnel for local monitoring and diagnostics, supporting field maintenance, repair, and replacement.	No	2	The field element shall send operational status of connected field equipment to the maintenance center.	Planned	No
ADOT Maintenance Work Zone Field Equipment	Connected Vehicle Roadside Equipment	RSE Device Management	RSE Device Management' provides executive control and monitoring of the RSE hardware and installed software applications. It monitors the operational status of the hardware and other attached field devices and detects and reports fault conditions. A back office interface supports application installation, upgrade, and configuration as well as remote control of the operating mode and hardware configuration settings and initiation of remote diagnostics. A local interface is provided to field personnel for local monitoring and diagnostics, supporting field maintenance, repair, and replacement.	No	3	The field element shall send collected fault data to the maintenance center for repair.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Maintenance Work Zone Field Equipment	Connected Vehicle Roadside Equipment	RSE Emissions Monitoring	RSE Emissions Monitoring' collects emissions data from passing vehicles that are equipped with short range communications capability and have the capability to collect and report emissions data. The collected data includes current emissions as measured or calculated by on-board equipment. The functional object collects the provided data, aggregates and filters the data based on provided configuration parameters, and sends the collected information back to a center for processing and distribution.	No				No
ADOT Maintenance Work Zone Field Equipment	Connected Vehicle Roadside Equipment	RSE Environmental Monitoring	RSE Environmental Monitoring' collects environmental situation (probe) data from passing vehicles that are equipped with short range communications capability. The collected data includes current environmental conditions as measured by on-board sensors (e.g., ambient temperature and precipitation measures), current status of vehicle systems that can be used to infer environmental conditions (e.g., status of lights, wipers, ABS, and traction control systems), and emissions measures reported by the vehicle. The functional object collects the provided data, aggregates and filters the data based on provided configuration parameters, and sends the collected information back to a center for processing and distribution. This functional object may also process the collected data locally and issue short-term road weather advisories for the road segment using short range communications.	No				No
ADOT Maintenance Work Zone Field Equipment	Connected Vehicle Roadside Equipment	RSE Situation Monitoring	RSE Situation Monitoring' is a general functional object that supports collection of traffic, environmental, and emissions data from passing vehicles. The data is collected, filtered, and forwarded based on parameters provided by the back office. Parameters are provided to passing vehicles that are equipped to collect and send situation data to the infrastructure in snapshots. In addition, this object collects current status information from local field devices including intersection status, sensor data, and signage data, providing complete, configurable monitoring of the situation for the local transportation system in the vicinity of the RSE.	No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Maintenance Work Zone Field Equipment	Connected Vehicle Roadside Equipment	RSE Traffic Monitoring	RSE Traffic Monitoring' monitors the basic safety messages that are shared between connected vehicles and distills this data into traffic flow measures that can be used to manage the network in combination with or in lieu of traffic data collected by infrastructure-based sensors. As connected vehicle penetration rates increase, the measures provided by this application can expand beyond vehicle speeds that are directly reported by vehicles to include estimated volume, occupancy, and other measures. This object also supports incident detection by monitoring for changes in speed and vehicle control events that indicate a potential incident.	No	1	The field element shall communicate with on-board equipment on passing vehicles to collect current vehicle position, speed, and heading and a record of previous events (e.g., starts and stops, link travel times) that can be used to determine current traffic conditions.	Planned	No
ADOT Maintenance Work Zone Field Equipment	Connected Vehicle Roadside Equipment	RSE Traffic Monitoring	RSE Traffic Monitoring' monitors the basic safety messages that are shared between connected vehicles and distills this data into traffic flow measures that can be used to manage the network in combination with or in lieu of traffic data collected by infrastructure-based sensors. As connected vehicle penetration rates increase, the measures provided by this application can expand beyond vehicle speeds that are directly reported by vehicles to include estimated volume, occupancy, and other measures. This object also supports incident detection by monitoring for changes in speed and vehicle control events that indicate a potential incident.	No	2	The field element shall aggregate and forward collected probe information to the center.	Planned	No
ADOT Maintenance Work Zone Field Equipment	Field Maintenance Equipment			No				No
ADOT Maintenance Work Zone Field Equipment	ITS Roadway Equipment	Roadway Data Collection	Roadway Data Collection' collects traffic, road, and environmental conditions information for use in transportation planning, research, and other off-line applications where data quality and completeness take precedence over real-time performance. It includes the sensors, supporting roadside infrastructure, and communications equipment that collects and transfers information to a center for archival.	No	1	The field element shall collect traffic, road, and environmental conditions information.	Planned	No
ADOT Maintenance Work Zone Field Equipment	ITS Roadway Equipment	Roadway Data Collection	Roadway Data Collection' collects traffic, road, and environmental conditions information for use in transportation planning, research, and other off-line applications where data quality and completeness take precedence over real-time performance. It includes the sensors, supporting roadside infrastructure, and communications equipment that collects and transfers information to a center for archival.	No	2	The field element shall include the sensors and supporting roadside devices that sense, collect, and send traffic, road, and environmental conditions information to a center for archival.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Maintenance Work Zone Field Equipment	ITS Roadway Equipment	Roadway Data Collection	Roadway Data Collection' collects traffic, road, and environmental conditions information for use in transportation planning, research, and other off-line applications where data quality and completeness take precedence over real-time performance. It includes the sensors, supporting roadside infrastructure, and communications equipment that collects and transfers information to a center for archival.	No	3	The field element shall collect sensor status and sensor faults from roadside equipment and send it along with the recorded data to a center for archival.	Planned	No
ADOT Maintenance Work Zone Field Equipment	ITS Roadway Equipment	Roadway Field Device Support	Roadway Field Device Support' monitors the operational status of field devices and detects and reports fault conditions. Consolidated operational status (device status, configuration, and fault information) are reported for resolution and repair. A local interface is provided to field personnel for local monitoring and diagnostics, supporting field maintenance, upgrade, repair, and replacement of field devices.	No	1	The field element shall monitor the operational status of field devices and detects and reports fault conditions.	Planned	No
ADOT Maintenance Work Zone Field Equipment	ITS Roadway Equipment	Roadway Field Device Support	Roadway Field Device Support' monitors the operational status of field devices and detects and reports fault conditions. Consolidated operational status (device status, configuration, and fault information) are reported for resolution and repair. A local interface is provided to field personnel for local monitoring and diagnostics, supporting field maintenance, upgrade, repair, and replacement of field devices.	No	2	The field element shall detect and report any fault conditions with the equipment being monitored back to its controlling center.	Planned	No
ADOT Maintenance Work Zone Field Equipment	ITS Roadway Equipment	Roadway Field Device Support	Roadway Field Device Support' monitors the operational status of field devices and detects and reports fault conditions. Consolidated operational status (device status, configuration, and fault information) are reported for resolution and repair. A local interface is provided to field personnel for local monitoring and diagnostics, supporting field maintenance, upgrade, repair, and replacement of field devices.	No	3	The field element shall provide the capability for field personnel to locally control and configure this equipment.	Planned	No
ADOT Maintenance Work Zone Field Equipment	ITS Roadway Equipment	Roadway Field Device Support	Roadway Field Device Support' monitors the operational status of field devices and detects and reports fault conditions. Consolidated operational status (device status, configuration, and fault information) are reported for resolution and repair. A local interface is provided to field personnel for local monitoring and diagnostics, supporting field maintenance, upgrade, repair, and replacement of field devices.	No	4	The field element shall support an interface with field support equipment to accept installation of updates or configuration of field operations.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Maintenance Work Zone Field Equipment	ITS Roadway Equipment	Roadway Incident Detection	Roadway Incident Detection' provides incident detection using traffic detectors and surveillance equipment. It monitors for unusual traffic conditions that may indicate an incident or processes surveillance images, watching for potential incidents. It provides potential incident information as well as traffic flow and images to the center for processing and presentation to traffic operations personnel.	No				No
ADOT Maintenance Work Zone Field Equipment	ITS Roadway Equipment	Roadway Lighting System Control	Roadway Lighting System Control' includes field equipment that controls lighting systems for transportation facilities and infrastructure. It includes the sensors, lighting controllers, and supporting field equipment that monitors and controls lighting systems. The equipment supports control based on sensed local conditions, stored timing plans, and remote commands from a center. It monitors lighting system status and reports status to the controlling center.	No	1	The field element shall control lighting systems along the roadside under center control.	Planned	No
ADOT Maintenance Work Zone Field Equipment	ITS Roadway Equipment	Roadway Lighting System Control	Roadway Lighting System Control' includes field equipment that controls lighting systems for transportation facilities and infrastructure. It includes the sensors, lighting controllers, and supporting field equipment that monitors and controls lighting systems. The equipment supports control based on sensed local conditions, stored timing plans, and remote commands from a center. It monitors lighting system status and reports status to the controlling center.	No	2	The field element shall return operational status for the lighting system equipment to the center.	Planned	No
ADOT Maintenance Work Zone Field Equipment	ITS Roadway Equipment	Roadway Lighting System Control	Roadway Lighting System Control' includes field equipment that controls lighting systems for transportation facilities and infrastructure. It includes the sensors, lighting controllers, and supporting field equipment that monitors and controls lighting systems. The equipment supports control based on sensed local conditions, stored timing plans, and remote commands from a center. It monitors lighting system status and reports status to the controlling center.	No	3	The field element shall return lighting system equipment fault data to the center for repair.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Maintenance Work Zone Field Equipment	ITS Roadway Equipment	Roadway Passive Monitoring	Roadway Passive Monitoring' monitors passing vehicles for a signature that can be used to recognize the same vehicle at different points in the network and measure travel times. Depending on the implementation and the penetration rate of the technology that is monitored, other point traffic measures may also be inferred by monitoring the number of vehicles within range over time. Today this approach is implemented most commonly using a Bluetooth receiver that passively monitors Bluetooth devices on-board passing vehicles and license plate readers that record the vehicle license plate number, but any widely deployed vehicle communications technology or feature that can be passively monitored to uniquely identify a vehicle could be used.	No				No
ADOT Maintenance Work Zone Field Equipment	ITS Roadway Equipment	Roadway Traffic Information Dissemination	Roadway Traffic Information Dissemination' includes field elements that provide information to drivers, including dynamic message signs and highway advisory radios.	No	1	The field element shall include dynamic message signs for dissemination of traffic and other information to drivers, under center control; the DMS may be either those that display variable text messages, or those that have fixed format display(s) (e.g. vehicle restrictions, or lane open/close).	Planned	No
ADOT Maintenance Work Zone Field Equipment	ITS Roadway Equipment	Roadway Traffic Information Dissemination	Roadway Traffic Information Dissemination' includes field elements that provide information to drivers, including dynamic message signs and highway advisory radios.	No	2	The field element shall include driver information systems that communicate directly from a center to the vehicle radio (such as Highway Advisory Radios) for dissemination of traffic and other information to drivers, under center control.	Planned	No
ADOT Maintenance Work Zone Field Equipment	ITS Roadway Equipment	Roadway Traffic Information Dissemination	Roadway Traffic Information Dissemination' includes field elements that provide information to drivers, including dynamic message signs and highway advisory radios.	No	3	The field element shall provide operational status for the driver information systems equipment (DMS, HAR, etc.) to the center.	Planned	No
ADOT Maintenance Work Zone Field Equipment	ITS Roadway Equipment	Roadway Traffic Information Dissemination	Roadway Traffic Information Dissemination' includes field elements that provide information to drivers, including dynamic message signs and highway advisory radios.	No	4	The field element shall provide fault data for the driver information systems equipment (DMS, HAR, etc.) to the center for repair.	Planned	No
ADOT Maintenance Work Zone Field Equipment	ITS Roadway Equipment	Roadway Work Zone Traffic Control	Roadway Work Zone Traffic Control' controls traffic in areas of the roadway where maintenance and construction activities are underway, monitoring and controlling traffic using field equipment such as CCTV cameras, dynamic messages signs, and gates/barriers. Work zone speeds and delays are provided to the motorist prior to the work zones.	No	1	The field element shall collect, process, and send work zone images to the center for further analysis and distribution, under center control.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Maintenance Work Zone Field Equipment	ITS Roadway Equipment	Roadway Work Zone Traffic Control	Roadway Work Zone Traffic Control' controls traffic in areas of the roadway where maintenance and construction activities are underway, monitoring and controlling traffic using field equipment such as CCTV cameras, dynamic messages signs, and gates/barriers. Work zone speeds and delays are provided to the motorist prior to the work zones.	No	2	Under traffic and maintenance center control, the field element shall include driver information systems (such as dynamic messages signs and highway advisory radios) that advise drivers of activity around the work zone through which they are currently passing.	Planned	No
ADOT Maintenance Work Zone Field Equipment	ITS Roadway Equipment	Roadway Work Zone Traffic Control	Roadway Work Zone Traffic Control' controls traffic in areas of the roadway where maintenance and construction activities are underway, monitoring and controlling traffic using field equipment such as CCTV cameras, dynamic messages signs, and gates/barriers. Work zone speeds and delays are provided to the motorist prior to the work zones.	No	3	Under the control of field personnel within maintenance vehicles, the field element shall include driver information systems (such as dynamic messages signs and highway advisory radios) that advise drivers of activity around a work zone through which they are currently passing.	Planned	No
ADOT Maintenance Work Zone Field Equipment	ITS Roadway Equipment	Roadway Work Zone Traffic Control	Roadway Work Zone Traffic Control' controls traffic in areas of the roadway where maintenance and construction activities are underway, monitoring and controlling traffic using field equipment such as CCTV cameras, dynamic messages signs, and gates/barriers. Work zone speeds and delays are provided to the motorist prior to the work zones.	No	4	The field element shall control access to the work zone using automated gate or barrier systems. This includes automated flagger assistance devices that include automated gate arms and other automated gate/barrier systems.	Planned	No
ADOT Maintenance Work Zone Field Equipment	ITS Roadway Equipment	Roadway Work Zone Traffic Control	Roadway Work Zone Traffic Control' controls traffic in areas of the roadway where maintenance and construction activities are underway, monitoring and controlling traffic using field equipment such as CCTV cameras, dynamic messages signs, and gates/barriers. Work zone speeds and delays are provided to the motorist prior to the work zones.	No	5	The field element shall provide operational status for the surveillance (e.g. CCTV), driver information systems, and gates/barriers in work zones to the maintenance center.	Planned	No
ADOT Maintenance Work Zone Field Equipment	ITS Roadway Equipment	Roadway Work Zone Traffic Control	Roadway Work Zone Traffic Control' controls traffic in areas of the roadway where maintenance and construction activities are underway, monitoring and controlling traffic using field equipment such as CCTV cameras, dynamic messages signs, and gates/barriers. Work zone speeds and delays are provided to the motorist prior to the work zones.	No	6	The field element shall provide fault data for the surveillance (e.g. CCTV), driver information systems, and gates/barriers in work zones to the maintenance center for repair.	Planned	No
ADOT MCO Districts	Maint and Constr Management Center			No				No
ADOT Mobile EM Center	Emergency Management Center			No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Mobile EM Center	Emergency Vehicle OBE	EV On-Board En Route Support	EV On-Board En Route Support' provides communications functions to responding emergency vehicles that reduce response times and improve safety of responding public safety personnel and the general public. It supports traffic signal preemption via short range communication directly with signal control equipment and sends alert messages to surrounding vehicles.	No	1	The emergency vehicle, including roadway service patrols, shall track its current location.	Planned	No
ADOT Mobile EM Center	Emergency Vehicle OBE	EV On-Board En Route Support	EV On-Board En Route Support' provides communications functions to responding emergency vehicles that reduce response times and improve safety of responding public safety personnel and the general public. It supports traffic signal preemption via short range communication directly with signal control equipment and sends alert messages to surrounding vehicles.	No	2	The emergency vehicle, including roadway service patrols, shall send the vehicle's location and operational data to the center for emergency management and dispatch.	Planned	No
ADOT Mobile EM Center	Emergency Vehicle OBE	EV On-Board En Route Support	EV On-Board En Route Support' provides communications functions to responding emergency vehicles that reduce response times and improve safety of responding public safety personnel and the general public. It supports traffic signal preemption via short range communication directly with signal control equipment and sends alert messages to surrounding vehicles.	No	3	The emergency vehicle, including roadway service patrols, shall receive incident details and a suggested route when dispatched to a scene.	Planned	No
ADOT Mobile EM Center	Emergency Vehicle OBE	EV On-Board En Route Support	EV On-Board En Route Support' provides communications functions to responding emergency vehicles that reduce response times and improve safety of responding public safety personnel and the general public. It supports traffic signal preemption via short range communication directly with signal control equipment and sends alert messages to surrounding vehicles.	No	4	The emergency vehicle shall send the current en route status (including estimated time of arrival) and requests for emergency dispatch updates.	Planned	No
ADOT Mobile EM Center	Emergency Vehicle OBE	EV On-Board En Route Support	EV On-Board En Route Support' provides communications functions to responding emergency vehicles that reduce response times and improve safety of responding public safety personnel and the general public. It supports traffic signal preemption via short range communication directly with signal control equipment and sends alert messages to surrounding vehicles.	No	5	The emergency vehicle shall send requests to traffic signal control equipment at the roadside to preempt the signal.	Planned	No
ADOT Mobile EM Center	Emergency Vehicle OBE	EV On-Board En Route Support	EV On-Board En Route Support' provides communications functions to responding emergency vehicles that reduce response times and improve safety of responding public safety personnel and the general public. It supports traffic signal preemption via short range communication directly with signal control equipment and sends alert messages to surrounding vehicles.	No	6	The emergency vehicle shall provide the personnel on-board with dispatch information, including incident type and location, and forward an acknowledgment from personnel to the center that the vehicle is on its way to the incident scene.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Mobile EM Center	Emergency Vehicle OBE	EV On-Board En Route Support	EV On-Board En Route Support' provides communications functions to responding emergency vehicles that reduce response times and improve safety of responding public safety personnel and the general public. It supports traffic signal preemption via short range communication directly with signal control equipment and sends alert messages to surrounding vehicles.	No	7	The emergency vehicle shall send patient status information to the care facility along with a request for further information.	Planned	No
ADOT Mobile EM Center	Emergency Vehicle OBE	EV On-Board En Route Support	EV On-Board En Route Support' provides communications functions to responding emergency vehicles that reduce response times and improve safety of responding public safety personnel and the general public. It supports traffic signal preemption via short range communication directly with signal control equipment and sends alert messages to surrounding vehicles.	No	9	The emergency vehicle shall send the vehicle's location, speed and direction to other vehicles in the area.	Planned	No
ADOT Mobile EM Center	Emergency Vehicle OBE	EV Service Patrol Vehicle Operations	EV Service Patrol Vehicle Operations' provides on-board processing and communications to service patrol vehicles that reduce response times and improve safety of responding personnel. It supports service patrol vehicle dispatch and provides incident information back to the dispatching center.	No				No
ADOT Motor Vehicle Division (MVD) Database	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	1	The center shall collect data from centers.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Motor Vehicle Division (MVD) Database	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	2	The center shall collect data catalogs from one or more data sources. A catalog describes the data contained in the collection of archived data and may include descriptions of the schema or structure of the data, a description of the contents of the data; e.g., time range of entries, number of entries; or a sample of the data (e. g. a thumbnail).	Existing	No
ADOT Motor Vehicle Division (MVD) Database	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	3	The center shall store collected data in an information repository.	Planned	No
ADOT Motor Vehicle Division (MVD) Database	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	4	The center shall perform quality checks on collected data.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Motor Vehicle Division (MVD) Database	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	5	The center shall notify the system operator of errors related to data collection, analysis and archival.	Planned	No
ADOT Motor Vehicle Division (MVD) Database	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	6	The center shall include capabilities for archive to archive coordination.	Planned	No
ADOT Motor Vehicle Division (MVD) Database	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	7	The center shall provide the capability to execute methods on the incoming data such as cleansing, summarizations, aggregations, or transformations applied to the data before it is stored in the archive.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Motor Vehicle Division (MVD) Database	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	8	The center shall collect data from data distribution systems and other data sources.	Planned	No
ADOT Motor Vehicle Division (MVD) Database	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	9	The center shall respond to requests from the administrator interface function to manage center-sourced data collection.	Planned	No
ADOT Motor Vehicle Division (MVD) Database	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	10	The center shall respond to requests from the administrator interface function to manage the archive data.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Motor Vehicle Division (MVD) Database	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	11	The center shall respond to requests for archive data from archive data users (centers, field devices).	Planned	No
ADOT Motor Vehicle Division (MVD) Database	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	12	The center shall provide a mechanism for archive data users to request archive data by meta-data range.	Planned	No
ADOT Motor Vehicle Division (MVD) Database	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	1	The center shall provide archive data to federal, state, and local government reporting systems.	Existing	No
ADOT Motor Vehicle Division (MVD) Database	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	2	The center shall respond to requests for government report data.	Existing	No
ADOT Motor Vehicle Division (MVD) Database	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	3	The center shall provide the capability to format data suitable for input into government reports.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Motor Vehicle Division (MVD) Database	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	4	The center shall provide the applicable meta-data for any ITS archived data to satisfy government reporting system requests. Meta-data may include attributes that describe the source and quality of the data and the conditions surrounding the collection of the data.	Planned	No
ADOT Motor Vehicle Division (MVD) Database	Archived Data System	Archive On-Line Analysis and Mining	Archive On-Line Analysis and Mining' provides advanced data analysis, summarization, and mining features that facilitate discovery of information, patterns, and correlations in large data sets. Multidimensional analysis, selective summarization and expansion of data details, and many other advanced analysis services may be offered. Complex performance measures that are derived from multiple data sources may also be produced.	No	1	The center shall respond to requests for archive data from center users.	Existing	No
ADOT Motor Vehicle Division (MVD) Database	Archived Data System	Archive On-Line Analysis and Mining	Archive On-Line Analysis and Mining' provides advanced data analysis, summarization, and mining features that facilitate discovery of information, patterns, and correlations in large data sets. Multidimensional analysis, selective summarization and expansion of data details, and many other advanced analysis services may be offered. Complex performance measures that are derived from multiple data sources may also be produced.	No	2	The center shall provide the capability to perform activities such as data mining, data fusion, summarizations, aggregations, and recreation from archive data. This may include multidimensional analysis, selective summarization and expansion of data details, and many other advanced analysis services.	Existing	No
ADOT Motor Vehicle Division (MVD) Database	Archived Data System	Archive On-Line Analysis and Mining	Archive On-Line Analysis and Mining' provides advanced data analysis, summarization, and mining features that facilitate discovery of information, patterns, and correlations in large data sets. Multidimensional analysis, selective summarization and expansion of data details, and many other advanced analysis services may be offered. Complex performance measures that are derived from multiple data sources may also be produced.	No	3	The center shall collect regional data from data distribution centers.	Planned	No
ADOT Motor Vehicle Division (MVD) Database	Archived Data System	Archive On-Line Analysis and Mining	Archive On-Line Analysis and Mining' provides advanced data analysis, summarization, and mining features that facilitate discovery of information, patterns, and correlations in large data sets. Multidimensional analysis, selective summarization and expansion of data details, and many other advanced analysis services may be offered. Complex performance measures that are derived from multiple data sources may also be produced.	No	4	The center shall respond to users systems requests for a catalog of the archived data analysis products available.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Motor Vehicle Division (MVD) Database	Archived Data System	Archive Situation Data Archival	Archive Situation Data Archival' collects and archives traffic, roadway, and environmental information for use in off-line planning, research, and analysis. It controls and collects information directly from equipment at the roadside, reflecting the deployment of traffic detectors that are used primarily for traffic monitoring and planning purposes, rather than for traffic management. It also collects situation data from connected vehicles. The data collected, quality checks performed, and aggregation strategies are defined to support transportation system performance monitoring and management.	No	1	The center shall collect data from roadside devices.	Existing	No
ADOT Motor Vehicle Division (MVD) Database	Archived Data System	Archive Situation Data Archival	Archive Situation Data Archival' collects and archives traffic, roadway, and environmental information for use in off-line planning, research, and analysis. It controls and collects information directly from equipment at the roadside, reflecting the deployment of traffic detectors that are used primarily for traffic monitoring and planning purposes, rather than for traffic management. It also collects situation data from connected vehicles. The data collected, quality checks performed, and aggregation strategies are defined to support transportation system performance monitoring and management.	No	2	The center shall respond to requests from the administrator interface function to manage field-sourced data collection.	Planned	No
ADOT Motor Vehicle Division (MVD) Database	Archived Data System	Archive Situation Data Archival	Archive Situation Data Archival' collects and archives traffic, roadway, and environmental information for use in off-line planning, research, and analysis. It controls and collects information directly from equipment at the roadside, reflecting the deployment of traffic detectors that are used primarily for traffic monitoring and planning purposes, rather than for traffic management. It also collects situation data from connected vehicles. The data collected, quality checks performed, and aggregation strategies are defined to support transportation system performance monitoring and management.	No	3	The center shall provide the capability to adjust the collection of field-sourced data based on the statistical measures.	Planned	No
ADOT Motor Vehicle Division (MVD) Database	Archived Data System	Archive Situation Data Archival	Archive Situation Data Archival' collects and archives traffic, roadway, and environmental information for use in off-line planning, research, and analysis. It controls and collects information directly from equipment at the roadside, reflecting the deployment of traffic detectors that are used primarily for traffic monitoring and planning purposes, rather than for traffic management. It also collects situation data from connected vehicles. The data collected, quality checks performed, and aggregation strategies are defined to support transportation system performance monitoring and management.	No	6	The center shall provide the capability to execute methods on the incoming field data such as aggregation and statistical measures before the data is stored in the archive.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Motor Vehicle Division (MVD) Database	DMV			No				No
ADOT MVD Commercial Vehicle Administration	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	1	The center shall manage electronic credentials filing and processing for commercial vehicles.	Existing	No
ADOT MVD Commercial Vehicle Administration	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	2	The center shall manage the filing of appropriate taxes for the operation of commercial vehicles.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT MVD Commercial Vehicle Administration	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	3	The center shall process requests for payments of electronic credentials and tax filing, maintaining an interface to a Financial Institution as necessary.	Existing	No
ADOT MVD Commercial Vehicle Administration	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	4	The center shall exchange credentials and tax information with other commercial vehicle administration centers, either other states or the federal government.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT MVD Commercial Vehicle Administration	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	5	The center shall provide route restrictions information, including hazmat restrictions, to other centers and agencies for distribution to commercial vehicle operators. These centers and agencies may include commercial fleet and freight management operators, traveler information centers, digital map update providers, and other commercial vehicle administration centers.	Planned	No
ADOT MVD Commercial Vehicle Administration	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	6	The center shall use information on asset restrictions received from maintenance centers to develop the commercial vehicle route restrictions and process credentials applications.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT MVD Commercial Vehicle Administration	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	7	The center shall provide an interface with commercial vehicle fleet and freight management centers to exchange audit and compliance review reports.	Planned	No
ADOT MVD Commercial Vehicle Administration	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	8	The center shall provide credentials information about commercial vehicle operators and carriers to authorized requestors, including roadside check stations that determine when a vehicle should be pulled-in based on their credentials and their actual load/freight contents.	Existing	No

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ADOT MVD Commercial Vehicle Administration	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	9	The center shall receive and store information on commercial vehicle violations from enforcement agencies as part of the processing of credentials applications.	Planned	No
ADOT MVD Commercial Vehicle Administration	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	10	The center shall manage driver licensing for commercial vehicle drivers.	Planned	No

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ADOT MVD Commercial Vehicle Administration	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	11	The center shall enroll carriers in commercial vehicle programs and support user account management.	Planned	No
ADOT MVD Commercial Vehicle Administration	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	12	The center shall process requests for review of carrier and driver status.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT MVD Commercial Vehicle Administration	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	13	The center shall issue special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities.	Planned	No
ADOT MVD Commercial Vehicle Administration	Commercial Vehicle Administration Center	CVAC Data Collection	CVAC Data Collection' collects and stores commercial vehicle information that is collected in the course of Commercial Vehicle Administration Center operations. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	1	The center shall receive operational data from the roadside check systems as well as administration and credentials data.	Planned	No
ADOT MVD Commercial Vehicle Administration	Commercial Vehicle Administration Center	CVAC Data Collection	CVAC Data Collection' collects and stores commercial vehicle information that is collected in the course of Commercial Vehicle Administration Center operations. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	2	The center shall assign quality control metrics and meta-data to be stored along with the data. Meta-data may include attributes that describe the source and quality of the data and the conditions surrounding the collection of the data.	Planned	No
ADOT MVD Commercial Vehicle Administration	Commercial Vehicle Administration Center	CVAC Data Collection	CVAC Data Collection' collects and stores commercial vehicle information that is collected in the course of Commercial Vehicle Administration Center operations. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	3	The center shall receive and respond to requests from ITS Archives for either a catalog of the commercial vehicle operations data or for the data itself.	Planned	No
ADOT MVD Commercial Vehicle Administration	Commercial Vehicle Administration Center	CVAC Data Collection	CVAC Data Collection' collects and stores commercial vehicle information that is collected in the course of Commercial Vehicle Administration Center operations. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	4	The center shall be able to produce sample products of the data available.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT MVD Commercial Vehicle Administration	Commercial Vehicle Administration Center	CVAC Information Exchange	CVAC Information Exchange' supports the exchange of safety, credentials, permit data, and other data concerning the operation of commercial vehicles among jurisdictions. The object also supports the exchange of safety, credentials, permit, and operations data between systems (for example, an administrative center and the roadside check facilities) within a single jurisdiction. Data are collected from multiple authoritative sources and packaged into snapshots (top-level summary and critical status information) and profiles (detailed and historical data). Data is made available to fleet operators and other information requestors on request or based on subscriptions established by the requestor.	No	1	The center shall exchange information with roadside check facilities, including credentials and credentials status information, safety status information, daily site activity data, driver records, and citations.	Planned	No
ADOT MVD Commercial Vehicle Administration	Commercial Vehicle Administration Center	CVAC Information Exchange	CVAC Information Exchange' supports the exchange of safety, credentials, permit data, and other data concerning the operation of commercial vehicles among jurisdictions. The object also supports the exchange of safety, credentials, permit, and operations data between systems (for example, an administrative center and the roadside check facilities) within a single jurisdiction. Data are collected from multiple authoritative sources and packaged into snapshots (top-level summary and critical status information) and profiles (detailed and historical data). Data is made available to fleet operators and other information requestors on request or based on subscriptions established by the requestor.	No	2	The center shall exchange safety and credentials data among other commercial vehicle administration centers, including border clearance status, credentials information, credentials status information, driver records, accident reports, permit information, and safety status information.	Planned	No
ADOT MVD Commercial Vehicle Administration	Commercial Vehicle Administration Center	CVAC Information Exchange	CVAC Information Exchange' supports the exchange of safety, credentials, permit data, and other data concerning the operation of commercial vehicles among jurisdictions. The object also supports the exchange of safety, credentials, permit, and operations data between systems (for example, an administrative center and the roadside check facilities) within a single jurisdiction. Data are collected from multiple authoritative sources and packaged into snapshots (top-level summary and critical status information) and profiles (detailed and historical data). Data is made available to fleet operators and other information requestors on request or based on subscriptions established by the requestor.	No	3	The center shall package data concerning commercial vehicle safety and credentials into snapshots (top-level summary and critical status information).	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT MVD Commercial Vehicle Administration	Commercial Vehicle Administration Center	CVAC International Administration	CVAC International Administration' generates and processes the entry documentation necessary to obtain release of vehicle, cargo, and driver across an international border, report the results of the crossing event, and handle duty fee processing. It interfaces with the systems used by customs and border protection, immigration, carriers, and service providers (e.g., brokers) to generate, process, and store entry documentation.	No	1	The center shall receive domestic transportation and declaration information from Border Inspection Administration Agencies such as U.S. Bureau of Immigration and Customs Enforcement (ICE), the U.S. Bureau of Customs and Border Protection (CBP), and their counterparts in Canada and Mexico.	Planned	No
ADOT MVD Commercial Vehicle Administration	Commercial Vehicle Administration Center	CVAC International Administration	CVAC International Administration' generates and processes the entry documentation necessary to obtain release of vehicle, cargo, and driver across an international border, report the results of the crossing event, and handle duty fee processing. It interfaces with the systems used by customs and border protection, immigration, carriers, and service providers (e.g., brokers) to generate, process, and store entry documentation.	No	2	The center shall provide an assessment regarding a commercial vehicle and driver at a border crossing. The assessment or clearance data will be forwarded on to the appropriate regulatory agencies and roadside check facilities operating at the border crossing.	Planned	No
ADOT MVD Commercial Vehicle Administration	Commercial Vehicle Administration Center	CVAC International Administration	CVAC International Administration' generates and processes the entry documentation necessary to obtain release of vehicle, cargo, and driver across an international border, report the results of the crossing event, and handle duty fee processing. It interfaces with the systems used by customs and border protection, immigration, carriers, and service providers (e.g., brokers) to generate, process, and store entry documentation.	No	3	The center shall provide border clearance status concerning commercial vehicles and their shipments to the roadside check facilities, the commercial vehicle fleet and freight management centers, intermodal freight shippers, other commercial vehicle administration centers, and border inspection administration centers.	Planned	No
ADOT MVD Commercial Vehicle Administration	Commercial Vehicle Administration Center	CVAC International Administration	CVAC International Administration' generates and processes the entry documentation necessary to obtain release of vehicle, cargo, and driver across an international border, report the results of the crossing event, and handle duty fee processing. It interfaces with the systems used by customs and border protection, immigration, carriers, and service providers (e.g., brokers) to generate, process, and store entry documentation.	No	4	The center shall receive and store border clearance event data from the roadside check facilities that are located near border crossings.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT MVD Commercial Vehicle Administration	Commercial Vehicle Administration Center	CVAC Safety and Security Administration	CVAC Safety and Security Administration' provides commercial vehicle safety and security criteria to roadside check facilities, collects and reviews safety and security data from the field and distributes safety and security information to other centers, carriers, and enforcement agencies. It also supports wireless roadside inspections, including carrier enrollment, managing and distributing information about trigger areas where wireless inspections may occur, and monitoring the condition of the commercial vehicle and driver using wireless communications at identified trigger areas. It supports the collection and review of carrier and driver safety and security data and supports determination of the carrier and driver safety and security ratings. It clears the out-of-service status when the responsible carrier or driver reports that deficiencies flagged during inspections have been corrected.	No	1	The center shall provide commercial vehicle safety and security data to roadside check facilities.	Planned	No
ADOT MVD Commercial Vehicle Administration	Commercial Vehicle Administration Center	CVAC Safety and Security Administration	CVAC Safety and Security Administration' provides commercial vehicle safety and security criteria to roadside check facilities, collects and reviews safety and security data from the field and distributes safety and security information to other centers, carriers, and enforcement agencies. It also supports wireless roadside inspections, including carrier enrollment, managing and distributing information about trigger areas where wireless inspections may occur, and monitoring the condition of the commercial vehicle and driver using wireless communications at identified trigger areas. It supports the collection and review of carrier and driver safety and security data and supports determination of the carrier and driver safety and security ratings. It clears the out-of-service status when the responsible carrier or driver reports that deficiencies flagged during inspections have been corrected.	No	2	The center shall collect and review safety inspection reports and violations from the roadside check facilities and pass on appropriate portions to other commercial vehicle administrative centers and commercial vehicle fleet operators.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT MVD Commercial Vehicle Administration	Commercial Vehicle Administration Center	CVAC Safety and Security Administration	CVAC Safety and Security Administration' provides commercial vehicle safety and security criteria to roadside check facilities, collects and reviews safety and security data from the field and distributes safety and security information to other centers, carriers, and enforcement agencies. It also supports wireless roadside inspections, including carrier enrollment, managing and distributing information about trigger areas where wireless inspections may occur, and monitoring the condition of the commercial vehicle and driver using wireless communications at identified trigger areas. It supports the collection and review of carrier and driver safety and security data and supports determination of the carrier and driver safety and security ratings. It clears the out-of-service status when the responsible carrier or driver reports that deficiencies flagged during inspections have been corrected.	No	3	The center shall notify enforcement agencies of commercial vehicle safety violations by individual commercial vehicles, drivers, or carriers.	Planned	No
ADOT Regional Traffic Operations	Maint and Constr Management Center	MCM Environmental Information Processing	MCM Environmental Information Processing' processes current and forecast weather data, road condition information, local environmental data, and uses internal models to develop specialized detailed forecasts of local weather and surface conditions. The processed environmental information products are presented to center personnel and disseminated to other centers.	No				No
ADOT Regional Traffic Operations	Maint and Constr Management Center	MCM Incident Management	MCM Incident Management' supports maintenance and construction participation in coordinated incident response. Incident notifications are shared, incident response resources are managed, and the overall incident situation and incident response status is coordinated among allied response organizations.	No				No
ADOT Regional Traffic Operations	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	1	The center shall maintain an interface with asset management systems to track the inventory, restrictions, repair needs and status updates of transportation assets (pavement, bridges, signs, etc.) including location, installation and materials information, vendor/contractor, current maintenance status, standard height, width, and weight restrictions.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Regional Traffic Operations	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	2	The center shall respond to requests from emergency management and traffic management centers for hazard removal, field equipment repair, and other roadway maintenance.	Planned	No
ADOT Regional Traffic Operations	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	3	The center shall exchange information with administrative systems to support the planning and scheduling of maintenance activities. This information includes: equipment and consumables resupply purchase request status, personnel qualifications including training and special certifications, environmental regulations and rules that may impact maintenance activities, and requests and project requirements from contract administration.	Planned	No
ADOT Regional Traffic Operations	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	4	The center shall provide emergency management and traffic management centers with information about scheduled maintenance and construction work activities including anticipated closures and impact to the roadway, alternate routes, anticipated delays, closure times, and durations.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Regional Traffic Operations	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	5	The center shall collect the status and fault data from roadside equipment, such as traffic, infrastructure, and environmental sensors, highway advisory radio and dynamic message signs, automated roadway treatment systems, barrier and safeguard systems, cameras, traffic signals and override equipment, ramp meters, short range communications equipment, security sensors and surveillance equipment, etc., and provide a cohesive view of equipment repair needs.	Planned	No
ADOT Regional Traffic Operations	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	6	The center shall collect the status and fault data from the centers that operate the equipment, including data for traffic, infrastructure, and environmental sensors, highway advisory radio and dynamic message signs, automated roadway treatment systems, barrier and safeguard systems, cameras, traffic signals and override equipment, ramp meters, short range communications equipment, security sensors and surveillance equipment, etc., and provide a cohesive view of equipment repair needs.	Planned	No
ADOT Regional Traffic Operations	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	7	The center shall receive equipment availability and materials storage status information from storage facilities to support the scheduling of roadway maintenance and construction activities.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Regional Traffic Operations	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	8	The center shall collect current and forecast traffic and weather information from traffic management centers and weather service providers (such as the National Weather Service and value-added sector specific meteorological services).	Planned	No
ADOT Regional Traffic Operations	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	9	The center shall dispatch and route maintenance and construction vehicle drivers and support them with route-specific environmental, incident, advisory, threat, alert, and traffic congestion information.	Planned	No
ADOT Regional Traffic Operations	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	10	The center shall manage an interface with center personnel to accept vehicle systems control information and remotely control maintenance and construction vehicle on-board equipment.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Regional Traffic Operations	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	11	The center shall track the status of roadway maintenance and construction activities by monitoring collected data from the dispatched vehicles and equipment.	Planned	No
ADOT Regional Traffic Operations	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	12	The center shall report the status of field equipment maintenance activities to the centers that operate the equipment.	Planned	No
ADOT Regional Traffic Operations	Maint and Constr Management Center	MCM Vehicle Tracking	MCM Vehicle Tracking' tracks the location of maintenance and construction vehicles and other equipment. Vehicle/equipment location and associated information is presented to the operator.	No				No
ADOT Regional Traffic Operations	Maint and Constr Management Center	MCM Work Activity Coordination	MCM Work Activity Coordination' disseminates work activity schedules and current asset restrictions to other agencies. Work schedules are coordinated with operating agencies, factoring in the needs and activities of other agencies and adjacent jurisdictions. Work schedules are also distributed to Transportation Information Centers for dissemination to the traveling public.	No	1	The center shall provide work zone activities affecting the road network including the nature of the maintenance or construction activity, location, impact to the roadway, expected time(s) and duration of impact, anticipated delays, alternate routes, and suggested speed limits. This information may be augmented with images that provide a visual indication of current work zone status and traffic impacts.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Regional Traffic Operations	Maint and Constr Management Center	MCM Work Activity Coordination	MCM Work Activity Coordination' disseminates work activity schedules and current asset restrictions to other agencies. Work schedules are coordinated with operating agencies, factoring in the needs and activities of other agencies and adjacent jurisdictions. Work schedules are also distributed to Transportation Information Centers for dissemination to the traveling public.	No	2	The center shall provide status information about scheduled maintenance and construction activities including anticipated closures and impact to the roadway, alternate routes, anticipated delays, closure times, and durations. The information is provided to other management centers such as traffic, emergency, transit, traveler information providers, other maintenance centers, multimodal transportation providers, rail operations, and the media.	Planned	No
ADOT Regional Traffic Operations	Maint and Constr Management Center	MCM Work Activity Coordination	MCM Work Activity Coordination' disseminates work activity schedules and current asset restrictions to other agencies. Work schedules are coordinated with operating agencies, factoring in the needs and activities of other agencies and adjacent jurisdictions. Work schedules are also distributed to Transportation Information Centers for dissemination to the traveling public.	No	3	The center shall collect and respond to feedback concerning scheduled maintenance and construction activities with other management centers such as traffic, emergency, transit, and rail operations.	Planned	No
ADOT Regional Traffic Operations	Maint and Constr Management Center	MCM Work Activity Coordination	MCM Work Activity Coordination' disseminates work activity schedules and current asset restrictions to other agencies. Work schedules are coordinated with operating agencies, factoring in the needs and activities of other agencies and adjacent jurisdictions. Work schedules are also distributed to Transportation Information Centers for dissemination to the traveling public.	No	4	The center shall collect and disseminate asset restriction information levied on transportation asset usage based on infrastructure design, surveys, tests, or analyses. This includes standard facility design height, width, and weight restrictions, special restrictions such as spring weight restrictions, and temporary facility restrictions that are imposed during maintenance and construction.	Planned	No
ADOT Regional Traffic Operations	Maint and Constr Management Center	MCM Work Activity Coordination	MCM Work Activity Coordination' disseminates work activity schedules and current asset restrictions to other agencies. Work schedules are coordinated with operating agencies, factoring in the needs and activities of other agencies and adjacent jurisdictions. Work schedules are also distributed to Transportation Information Centers for dissemination to the traveling public.	No	6	The center shall exchange information with administrative systems to support the planning and scheduling of maintenance and construction activities. This information includes: equipment and consumables resupply purchase request status, personnel qualifications including training and special certifications, environmental regulations and rules that may impact maintenance activities, and requests and project requirements from contract administration.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Regional Traffic Operations	Maint and Constr Management Center	MCM Work Activity Coordination	MCM Work Activity Coordination' disseminates work activity schedules and current asset restrictions to other agencies. Work schedules are coordinated with operating agencies, factoring in the needs and activities of other agencies and adjacent jurisdictions. Work schedules are also distributed to Transportation Information Centers for dissemination to the traveling public.	No	7	The center shall exchange rail schedules and work plans with rail operations centers.	Planned	No
ADOT Regional Traffic Operations	Traffic Management Center	TMC Basic Surveillance	TMC Basic Surveillance' remotely monitors and controls traffic sensor systems and surveillance (e.g., CCTV) equipment, and collects, processes and stores the collected traffic data. Current traffic information and other real-time transportation information is also collected from other centers. The collected information is provided to traffic operations personnel and made available to other centers.	No				No
ADOT Regional Traffic Operations	Traffic Management Center	TMC Environmental Monitoring	TMC Environmental Monitoring' assimilates current and forecast road conditions and surface weather information using a combination of weather service provider information, information collected by other centers such as the Maintenance and Construction Management Center, data collected from environmental sensors deployed on and about the roadway, and information collected from connected vehicles. The collected environmental information is monitored and presented to the operator. This information can be used to issue general traveler advisories and support location specific warnings to drivers.	No				No
ADOT Regional Traffic Operations	Traffic Management Center	TMC Evacuation Support	TMC Evacuation Support' supports development, coordination, and execution of special traffic management strategies during evacuation and subsequent reentry of a population in the vicinity of a disaster or major emergency. A traffic management strategy is developed based on anticipated demand, the capacity of the road network including access to and from the evacuation routes, and existing and forecast conditions. The strategy supports efficient evacuation and also protects and optimizes movement of response vehicles and other resources that are responding to the emergency.	No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Regional Traffic Operations	Traffic Management Center	TMC Incident Detection	TMC Incident Detection' identifies and reports incidents to Traffic Operations Personnel. It remotely monitors and controls traffic sensor and surveillance systems that support incident detection and verification. It analyzes and reduces the collected sensor and surveillance data, external alerting and advisory and incident reporting systems, anticipated demand information from intermodal freight depots, border crossings, special event information, and identifies and reports incidents and hazardous conditions	No				No
ADOT Regional Traffic Operations	Traffic Management Center	TMC Incident Dispatch Coordination	TMC Incident Dispatch Coordination' formulates and manages an incident response that takes into account the incident potential, incident impacts, and resources required for incident management. It provides information to support dispatch and routing of emergency response and service vehicles as well as coordination with other cooperating agencies. It provides access to traffic management resources that provide surveillance of the incident, traffic control in the surrounding area, and support for the incident response. It monitors the incident response and collects performance measures such as incident response and clearance times.	No				No
ADOT Regional Traffic Operations	Traffic Management Center	TMC Roadway Equipment Monitoring	TMC Roadway Equipment Monitoring' monitors the operational status of field equipment and detects failures. It presents field equipment status to Traffic Operations Personnel and reports failures to the Maintenance and Construction Management Center. It tracks the repair or replacement of the failed equipment. The entire range of ITS field equipment may be monitored including sensors (traffic, infrastructure, environmental, security, speed, etc.) and devices (highway advisory radio, dynamic message signs, automated roadway treatment systems, barrier and safeguard systems, cameras, traffic signals and override equipment, ramp meters, beacons, security surveillance equipment, etc.).	No				No
ADOT Regional Traffic Operations	Traffic Management Center	TMC Signal Control	TMC Signal Control' provides the capability for traffic managers to monitor and manage the traffic flow at signalized intersections. This capability includes analyzing and reducing the collected data from traffic surveillance equipment and developing and implementing control plans for signalized intersections. Control plans may be developed and implemented that coordinate signals at many intersections under the domain of a single Traffic Management Center and are responsive to traffic conditions and adapt to support incidents, preemption and priority requests, pedestrian crossing calls, etc.	No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Regional Traffic Operations	Traffic Management Center	TMC Traffic Information Dissemination	TMC Traffic Information Dissemination' disseminates traffic and road conditions, closure and detour information, incident information, driver advisories, and other traffic-related data to other centers, the media, and driver information systems. It monitors and controls driver information system field equipment including dynamic message signs and highway advisory radio, managing dissemination of driver information through these systems.	No				No
ADOT Regional Traffic Operations	Traffic Management Center	TMC Work Zone Traffic Management	TMC Work Zone Traffic Management' coordinates work plans with maintenance systems so that work zones are established that have minimum traffic impact. Traffic control strategies are implemented to further mitigate traffic impacts associated with work zones that are established, providing work zone information to driver information systems such as dynamic message signs.	No				No
ADOT Regional Traffic Ops Vehicles	Basic Maint and Constr Vehicle			No				No
ADOT Regional Traffic Ops Vehicles	Maint and Constr Vehicle OBE			No				No
ADOT Right of Way Parking	Parking Management System			No				No
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Barrier System Control	Roadway Barrier System Control' includes the field equipment that controls barrier systems used to control access to transportation facilities and infrastructure. Barrier systems include automatic or remotely controlled gates, barriers and other access control systems.	No				No
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	1	The field element shall include surface and sub-surface environmental sensors that measure road surface temperature, moisture, icing, salinity, and other measures.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	2	The field element shall include environmental sensors that measure weather conditions including temperature, wind, humidity, precipitation, and visibility.	Existing	No
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	3	The field element's environmental sensors shall be remotely controlled by a maintenance center.	Existing	No
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	4	The field element's environmental sensors shall be remotely controlled by a traffic management center.	Planned	No
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	5	The field element's environmental sensors shall be remotely controlled by weather service providers such as the National Weather Service or value-added sector specific meteorological services.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	6	The field element's environmental sensors shall be remotely controlled by a maintenance and construction vehicle.	Planned	No
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	7	The field element shall provide environmental sensor equipment operational status to the controlling center or maintenance vehicle.	Planned	No
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	8	The field element shall provide environmental sensor equipment fault indication to the controlling center or maintenance vehicle.	Planned	No
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	9	The field element shall remotely aggregate environmental sensor data with environmental data collected from maintenance and construction vehicles.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	10	The field element shall provide weather and road surface condition data to centers.	Planned	No
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	11	The field element shall provide weather and road surface condition data to maintenance and construction vehicles.	Planned	No
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Field Device Support	Roadway Field Device Support' monitors the operational status of field devices and detects and reports fault conditions. Consolidated operational status (device status, configuration, and fault information) are reported for resolution and repair. A local interface is provided to field personnel for local monitoring and diagnostics, supporting field maintenance, upgrade, repair, and replacement of field devices.	No	1	The field element shall monitor the operational status of field devices and detects and reports fault conditions.	Planned	No
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Field Device Support	Roadway Field Device Support' monitors the operational status of field devices and detects and reports fault conditions. Consolidated operational status (device status, configuration, and fault information) are reported for resolution and repair. A local interface is provided to field personnel for local monitoring and diagnostics, supporting field maintenance, upgrade, repair, and replacement of field devices.	No	2	The field element shall detect and report any fault conditions with the equipment being monitored back to its controlling center.	Planned	No
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Field Device Support	Roadway Field Device Support' monitors the operational status of field devices and detects and reports fault conditions. Consolidated operational status (device status, configuration, and fault information) are reported for resolution and repair. A local interface is provided to field personnel for local monitoring and diagnostics, supporting field maintenance, upgrade, repair, and replacement of field devices.	No	3	The field element shall provide the capability for field personnel to locally control and configure this equipment.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Field Device Support	Roadway Field Device Support' monitors the operational status of field devices and detects and reports fault conditions. Consolidated operational status (device status, configuration, and fault information) are reported for resolution and repair. A local interface is provided to field personnel for local monitoring and diagnostics, supporting field maintenance, upgrade, repair, and replacement of field devices.	No	4	The field element shall support an interface with field support equipment to accept installation of updates or configuration of field operations.	Planned	No
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Incident Detection	Roadway Incident Detection' provides incident detection using traffic detectors and surveillance equipment. It monitors for unusual traffic conditions that may indicate an incident or processes surveillance images, watching for potential incidents. It provides potential incident information as well as traffic flow and images to the center for processing and presentation to traffic operations personnel.	No	1	The field element shall collect, process, and send traffic images to the center for further analysis and distribution.	Existing	No
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Incident Detection	Roadway Incident Detection' provides incident detection using traffic detectors and surveillance equipment. It monitors for unusual traffic conditions that may indicate an incident or processes surveillance images, watching for potential incidents. It provides potential incident information as well as traffic flow and images to the center for processing and presentation to traffic operations personnel.	No	2	The field element shall remotely process video data and provide an indication of potential incidents to the traffic management center.	Existing	No
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Incident Detection	Roadway Incident Detection' provides incident detection using traffic detectors and surveillance equipment. It monitors for unusual traffic conditions that may indicate an incident or processes surveillance images, watching for potential incidents. It provides potential incident information as well as traffic flow and images to the center for processing and presentation to traffic operations personnel.	No	3	The field element's video devices shall be remotely controlled by a traffic management center.	Existing	No
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Incident Detection	Roadway Incident Detection' provides incident detection using traffic detectors and surveillance equipment. It monitors for unusual traffic conditions that may indicate an incident or processes surveillance images, watching for potential incidents. It provides potential incident information as well as traffic flow and images to the center for processing and presentation to traffic operations personnel.	No	4	The field element shall provide operational status and fault data for the incident detection devices to the traffic management center.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Lighting System Control	Roadway Lighting System Control' includes field equipment that controls lighting systems for transportation facilities and infrastructure. It includes the sensors, lighting controllers, and supporting field equipment that monitors and controls lighting systems. The equipment supports control based on sensed local conditions, stored timing plans, and remote commands from a center. It monitors lighting system status and reports status to the controlling center.	No	1	The field element shall control lighting systems along the roadside under center control.	Planned	No
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Lighting System Control	Roadway Lighting System Control' includes field equipment that controls lighting systems for transportation facilities and infrastructure. It includes the sensors, lighting controllers, and supporting field equipment that monitors and controls lighting systems. The equipment supports control based on sensed local conditions, stored timing plans, and remote commands from a center. It monitors lighting system status and reports status to the controlling center.	No	2	The field element shall return operational status for the lighting system equipment to the center.	Planned	No
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Lighting System Control	Roadway Lighting System Control' includes field equipment that controls lighting systems for transportation facilities and infrastructure. It includes the sensors, lighting controllers, and supporting field equipment that monitors and controls lighting systems. The equipment supports control based on sensed local conditions, stored timing plans, and remote commands from a center. It monitors lighting system status and reports status to the controlling center.	No	3	The field element shall return lighting system equipment fault data to the center for repair.	Planned	No
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Safeguard System Control	Roadway Safeguard System Control' includes field equipment that controls safeguard systems for transportation facilities and infrastructure. Safeguard systems include blast shields, exhaust systems and other automatic or remotely controlled systems intended to mitigate the impact of an incident.	No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Standard Rail Crossing	Roadway Standard Rail Crossing' manages highway traffic at highway-rail intersections (HRIs) where operational requirements do not dictate advanced features (e.g., where rail operational speeds are less than 80 miles per hour). Either passive (e.g., the crossbuck sign) or active warning systems (e.g., flashing lights and gates) are supported depending on the specific requirements for each intersection. These traditional HRI warning systems may also be augmented with other standard traffic management devices. The warning systems are activated on notification of an approaching train by interfaced wayside equipment. The equipment at the HRI may also be interconnected with adjacent signalized intersections so that local control can be adapted to highway-rail intersection activities. Health monitoring of the HRI equipment and interfaces is performed; detected abnormalities are reported through interfaces to the wayside interface equipment and the Traffic Management Center.	No	1	The field element shall collect and process, traffic sensor data in the vicinity of a highway-rail intersection (HRI).	Existing	No
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Standard Rail Crossing	Roadway Standard Rail Crossing' manages highway traffic at highway-rail intersections (HRIs) where operational requirements do not dictate advanced features (e.g., where rail operational speeds are less than 80 miles per hour). Either passive (e.g., the crossbuck sign) or active warning systems (e.g., flashing lights and gates) are supported depending on the specific requirements for each intersection. These traditional HRI warning systems may also be augmented with other standard traffic management devices. The warning systems are activated on notification of an approaching train by interfaced wayside equipment. The equipment at the HRI may also be interconnected with adjacent signalized intersections so that local control can be adapted to highway-rail intersection activities. Health monitoring of the HRI equipment and interfaces is performed; detected abnormalities are reported through interfaces to the wayside interface equipment and the Traffic Management Center.	No	2	The field element shall monitor the status of the highway-rail intersection (HRI) equipment, including both the current state and mode of operation and the current equipment condition, to be forwarded on to the traffic management center.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Standard Rail Crossing	Roadway Standard Rail Crossing' manages highway traffic at highway-rail intersections (HRIs) where operational requirements do not dictate advanced features (e.g., where rail operational speeds are less than 80 miles per hour). Either passive (e.g., the crossbuck sign) or active warning systems (e.g., flashing lights and gates) are supported depending on the specific requirements for each intersection. These traditional HRI warning systems may also be augmented with other standard traffic management devices. The warning systems are activated on notification of an approaching train by interfaced wayside equipment. The equipment at the HRI may also be interconnected with adjacent signalized intersections so that local control can be adapted to highway-rail intersection activities. Health monitoring of the HRI equipment and interfaces is performed; detected abnormalities are reported through interfaces to the wayside interface equipment and the Traffic Management Center.	No	3	The field element shall monitor the status of the highway-rail intersection (HRI) equipment, including both the current state and mode of operation and the current equipment condition, to be forwarded on to the rail wayside equipment.	Planned	No
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Standard Rail Crossing	Roadway Standard Rail Crossing' manages highway traffic at highway-rail intersections (HRIs) where operational requirements do not dictate advanced features (e.g., where rail operational speeds are less than 80 miles per hour). Either passive (e.g., the crossbuck sign) or active warning systems (e.g., flashing lights and gates) are supported depending on the specific requirements for each intersection. These traditional HRI warning systems may also be augmented with other standard traffic management devices. The warning systems are activated on notification of an approaching train by interfaced wayside equipment. The equipment at the HRI may also be interconnected with adjacent signalized intersections so that local control can be adapted to highway-rail intersection activities. Health monitoring of the HRI equipment and interfaces is performed; detected abnormalities are reported through interfaces to the wayside interface equipment and the Traffic Management Center.	No	4	The field element shall receive track status from the rail wayside equipment that can be passed on to the traffic management center. This may include the current status of the tracks and whether a train is approaching.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Standard Rail Crossing	Roadway Standard Rail Crossing' manages highway traffic at highway-rail intersections (HRIs) where operational requirements do not dictate advanced features (e.g., where rail operational speeds are less than 80 miles per hour). Either passive (e.g., the crossbuck sign) or active warning systems (e.g., flashing lights and gates) are supported depending on the specific requirements for each intersection. These traditional HRI warning systems may also be augmented with other standard traffic management devices. The warning systems are activated on notification of an approaching train by interfaced wayside equipment. The equipment at the HRI may also be interconnected with adjacent signalized intersections so that local control can be adapted to highway-rail intersection activities. Health monitoring of the HRI equipment and interfaces is performed; detected abnormalities are reported through interfaces to the wayside interface equipment and the Traffic Management Center.	No	5	The field element shall collect pedestrian images and pedestrian sensor data, and respond to pedestrian crossing requests via display, audio signal, or other manner.	Planned	No
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Standard Rail Crossing	Roadway Standard Rail Crossing' manages highway traffic at highway-rail intersections (HRIs) where operational requirements do not dictate advanced features (e.g., where rail operational speeds are less than 80 miles per hour). Either passive (e.g., the crossbuck sign) or active warning systems (e.g., flashing lights and gates) are supported depending on the specific requirements for each intersection. These traditional HRI warning systems may also be augmented with other standard traffic management devices. The warning systems are activated on notification of an approaching train by interfaced wayside equipment. The equipment at the HRI may also be interconnected with adjacent signalized intersections so that local control can be adapted to highway-rail intersection activities. Health monitoring of the HRI equipment and interfaces is performed; detected abnormalities are reported through interfaces to the wayside interface equipment and the Traffic Management Center.	No	6	The field element shall control the dynamic message signs (DMS) in the vicinity of a highway-rail intersection (HRI) to advise drivers, cyclists, and pedestrians of approaching trains.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Standard Rail Crossing	Roadway Standard Rail Crossing' manages highway traffic at highway-rail intersections (HRIs) where operational requirements do not dictate advanced features (e.g., where rail operational speeds are less than 80 miles per hour). Either passive (e.g., the crossbuck sign) or active warning systems (e.g., flashing lights and gates) are supported depending on the specific requirements for each intersection. These traditional HRI warning systems may also be augmented with other standard traffic management devices. The warning systems are activated on notification of an approaching train by interfaced wayside equipment. The equipment at the HRI may also be interconnected with adjacent signalized intersections so that local control can be adapted to highway-rail intersection activities. Health monitoring of the HRI equipment and interfaces is performed; detected abnormalities are reported through interfaces to the wayside interface equipment and the Traffic Management Center.	No	7	The field element shall close the highway-rail intersection (HRI) when a train is approaching using gates, lights/signs, barriers, and traffic control signals.	Planned	No
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Standard Rail Crossing	Roadway Standard Rail Crossing' manages highway traffic at highway-rail intersections (HRIs) where operational requirements do not dictate advanced features (e.g., where rail operational speeds are less than 80 miles per hour). Either passive (e.g., the crossbuck sign) or active warning systems (e.g., flashing lights and gates) are supported depending on the specific requirements for each intersection. These traditional HRI warning systems may also be augmented with other standard traffic management devices. The warning systems are activated on notification of an approaching train by interfaced wayside equipment. The equipment at the HRI may also be interconnected with adjacent signalized intersections so that local control can be adapted to highway-rail intersection activities. Health monitoring of the HRI equipment and interfaces is performed; detected abnormalities are reported through interfaces to the wayside interface equipment and the Traffic Management Center.	No	8	The field element shall support the integrated control of adjacent traffic signals to clear an area in advance of an approaching train and to manage traffic around the intersection.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Standard Rail Crossing	Roadway Standard Rail Crossing' manages highway traffic at highway-rail intersections (HRIs) where operational requirements do not dictate advanced features (e.g., where rail operational speeds are less than 80 miles per hour). Either passive (e.g., the crossbuck sign) or active warning systems (e.g., flashing lights and gates) are supported depending on the specific requirements for each intersection. These traditional HRI warning systems may also be augmented with other standard traffic management devices. The warning systems are activated on notification of an approaching train by interfaced wayside equipment. The equipment at the HRI may also be interconnected with adjacent signalized intersections so that local control can be adapted to highway-rail intersection activities. Health monitoring of the HRI equipment and interfaces is performed; detected abnormalities are reported through interfaces to the wayside interface equipment and the Traffic Management Center.	No	9	The field element shall forward rail traffic advisories received from the Wayside Equipment to the traffic management center.	Planned	No
ADOT Roadside Comm Equipment	ITS Roadway Equipment	Roadway Traffic Information Dissemination	Roadway Traffic Information Dissemination' includes field elements that provide information to drivers, including dynamic message signs and highway advisory radios.	No				No
ADOT Roadside Comm Equipment	Wayside Equipment			No				No
ADOT RWIS	ITS Roadway Equipment	Roadway Barrier System Control	Roadway Barrier System Control' includes the field equipment that controls barrier systems used to control access to transportation facilities and infrastructure. Barrier systems include automatic or remotely controlled gates, barriers and other access control systems.	No				No
ADOT RWIS	ITS Roadway Equipment	Roadway Basic Surveillance	Roadway Basic Surveillance' monitors traffic conditions using fixed equipment such as loop detectors and CCTV cameras.	No	1	The field element shall collect, process, digitize, and send traffic sensor data (speed, volume, and occupancy) to the center for further analysis and storage, under center control.	Planned	No
ADOT RWIS	ITS Roadway Equipment	Roadway Basic Surveillance	Roadway Basic Surveillance' monitors traffic conditions using fixed equipment such as loop detectors and CCTV cameras.	No	2	The field element shall collect, process, and send traffic images to the center for further analysis and distribution.	Planned	No
ADOT RWIS	ITS Roadway Equipment	Roadway Basic Surveillance	Roadway Basic Surveillance' monitors traffic conditions using fixed equipment such as loop detectors and CCTV cameras.	No	3	The field element shall collect, digitize, and send multimodal crossing and high occupancy vehicle (HOV), and high occupancy toll (HOT) lane sensor data to the center for further analysis and storage.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT RWIS	ITS Roadway Equipment	Roadway Basic Surveillance	Roadway Basic Surveillance' monitors traffic conditions using fixed equipment such as loop detectors and CCTV cameras.	No	4	The field element shall return sensor and CCTV system operational status to the controlling center.	Planned	No
ADOT RWIS	ITS Roadway Equipment	Roadway Basic Surveillance	Roadway Basic Surveillance' monitors traffic conditions using fixed equipment such as loop detectors and CCTV cameras.	No	5	The field element shall return sensor and CCTV system fault data to the controlling center for repair.	Planned	No
ADOT RWIS	ITS Roadway Equipment	Roadway Data Collection	Roadway Data Collection' collects traffic, road, and environmental conditions information for use in transportation planning, research, and other off-line applications where data quality and completeness take precedence over real-time performance. It includes the sensors, supporting roadside infrastructure, and communications equipment that collects and transfers information to a center for archival.	No	1	The field element shall collect traffic, road, and environmental conditions information.	Planned	No
ADOT RWIS	ITS Roadway Equipment	Roadway Data Collection	Roadway Data Collection' collects traffic, road, and environmental conditions information for use in transportation planning, research, and other off-line applications where data quality and completeness take precedence over real-time performance. It includes the sensors, supporting roadside infrastructure, and communications equipment that collects and transfers information to a center for archival.	No	2	The field element shall include the sensors and supporting roadside devices that sense, collect, and send traffic, road, and environmental conditions information to a center for archival.	Planned	No
ADOT RWIS	ITS Roadway Equipment	Roadway Data Collection	Roadway Data Collection' collects traffic, road, and environmental conditions information for use in transportation planning, research, and other off-line applications where data quality and completeness take precedence over real-time performance. It includes the sensors, supporting roadside infrastructure, and communications equipment that collects and transfers information to a center for archival.	No	3	The field element shall collect sensor status and sensor faults from roadside equipment and send it along with the recorded data to a center for archival.	Planned	No
ADOT RWIS	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	1	The field element shall include surface and sub-surface environmental sensors that measure road surface temperature, moisture, icing, salinity, and other measures.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT RWIS	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	2	The field element shall include environmental sensors that measure weather conditions including temperature, wind, humidity, precipitation, and visibility.	Planned	No
ADOT RWIS	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	3	The field element's environmental sensors shall be remotely controlled by a maintenance center.	Planned	No
ADOT RWIS	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	4	The field element's environmental sensors shall be remotely controlled by a traffic management center.	Planned	No
ADOT RWIS	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	5	The field element's environmental sensors shall be remotely controlled by weather service providers such as the National Weather Service or value-added sector specific meteorological services.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT RWIS	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	6	The field element's environmental sensors shall be remotely controlled by a maintenance and construction vehicle.	Planned	No
ADOT RWIS	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	7	The field element shall provide environmental sensor equipment operational status to the controlling center or maintenance vehicle.	Planned	No
ADOT RWIS	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	8	The field element shall provide environmental sensor equipment fault indication to the controlling center or maintenance vehicle.	Planned	No
ADOT RWIS	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	9	The field element shall remotely aggregate environmental sensor data with environmental data collected from maintenance and construction vehicles.	Planned	No

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ADOT RWIS	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	10	The field element shall provide weather and road surface condition data to centers.	Planned	No
ADOT RWIS	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	11	The field element shall provide weather and road surface condition data to maintenance and construction vehicles.	Planned	No
ADOT RWIS	ITS Roadway Equipment	Roadway Field Device Support	Roadway Field Device Support' monitors the operational status of field devices and detects and reports fault conditions. Consolidated operational status (device status, configuration, and fault information) are reported for resolution and repair. A local interface is provided to field personnel for local monitoring and diagnostics, supporting field maintenance, upgrade, repair, and replacement of field devices.	No	1	The field element shall monitor the operational status of field devices and detects and reports fault conditions.	Planned	No
ADOT RWIS	ITS Roadway Equipment	Roadway Field Device Support	Roadway Field Device Support' monitors the operational status of field devices and detects and reports fault conditions. Consolidated operational status (device status, configuration, and fault information) are reported for resolution and repair. A local interface is provided to field personnel for local monitoring and diagnostics, supporting field maintenance, upgrade, repair, and replacement of field devices.	No	2	The field element shall detect and report any fault conditions with the equipment being monitored back to its controlling center.	Planned	No
ADOT RWIS	ITS Roadway Equipment	Roadway Field Device Support	Roadway Field Device Support' monitors the operational status of field devices and detects and reports fault conditions. Consolidated operational status (device status, configuration, and fault information) are reported for resolution and repair. A local interface is provided to field personnel for local monitoring and diagnostics, supporting field maintenance, upgrade, repair, and replacement of field devices.	No	3	The field element shall provide the capability for field personnel to locally control and configure this equipment.	Planned	No

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ADOT RWIS	ITS Roadway Equipment	Roadway Field Device Support	Roadway Field Device Support' monitors the operational status of field devices and detects and reports fault conditions. Consolidated operational status (device status, configuration, and fault information) are reported for resolution and repair. A local interface is provided to field personnel for local monitoring and diagnostics, supporting field maintenance, upgrade, repair, and replacement of field devices.	No	4	The field element shall support an interface with field support equipment to accept installation of updates or configuration of field operations.	Planned	No
ADOT RWIS	ITS Roadway Equipment	Roadway Passive Monitoring	Roadway Passive Monitoring' monitors passing vehicles for a signature that can be used to recognize the same vehicle at different points in the network and measure travel times. Depending on the implementation and the penetration rate of the technology that is monitored, other point traffic measures may also be inferred by monitoring the number of vehicles within range over time. Today this approach is implemented most commonly using a Bluetooth receiver that passively monitors Bluetooth devices on-board passing vehicles and license plate readers that record the vehicle license plate number, but any widely deployed vehicle communications technology or feature that can be passively monitored to uniquely identify a vehicle could be used.	No				No
ADOT RWIS	ITS Roadway Equipment	Roadway Safeguard System Control	Roadway Safeguard System Control' includes field equipment that controls safeguard systems for transportation facilities and infrastructure. Safeguard systems include blast shields, exhaust systems and other automatic or remotely controlled systems intended to mitigate the impact of an incident.	No	1	The field element shall activate safeguard systems, equipment used to mitigate the impact of incidents on transportation infrastructure (e.g., blast shields, tunnel exhaust systems, etc.) under center control.	Planned	No
ADOT RWIS	ITS Roadway Equipment	Roadway Safeguard System Control	Roadway Safeguard System Control' includes field equipment that controls safeguard systems for transportation facilities and infrastructure. Safeguard systems include blast shields, exhaust systems and other automatic or remotely controlled systems intended to mitigate the impact of an incident.	No	2	The field element shall return safeguard system operational status to the controlling center.	Planned	No
ADOT RWIS	ITS Roadway Equipment	Roadway Safeguard System Control	Roadway Safeguard System Control' includes field equipment that controls safeguard systems for transportation facilities and infrastructure. Safeguard systems include blast shields, exhaust systems and other automatic or remotely controlled systems intended to mitigate the impact of an incident.	No	3	The field element shall return safeguard system fault data to the maintenance center for repair.	Planned	No

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ADOT RWIS	ITS Roadway Equipment	Roadway Traffic Information Dissemination	Roadway Traffic Information Dissemination' includes field elements that provide information to drivers, including dynamic message signs and highway advisory radios.	No	1	The field element shall include dynamic message signs for dissemination of traffic and other information to drivers, under center control; the DMS may be either those that display variable text messages, or those that have fixed format display(s) (e.g. vehicle restrictions, or lane open/close).	Planned	No
ADOT RWIS	ITS Roadway Equipment	Roadway Traffic Information Dissemination	Roadway Traffic Information Dissemination' includes field elements that provide information to drivers, including dynamic message signs and highway advisory radios.	No	2	The field element shall include driver information systems that communicate directly from a center to the vehicle radio (such as Highway Advisory Radios) for dissemination of traffic and other information to drivers, under center control.	Planned	No
ADOT RWIS	ITS Roadway Equipment	Roadway Traffic Information Dissemination	Roadway Traffic Information Dissemination' includes field elements that provide information to drivers, including dynamic message signs and highway advisory radios.	No	3	The field element shall provide operational status for the driver information systems equipment (DMS, HAR, etc.) to the center.	Planned	No
ADOT RWIS	ITS Roadway Equipment	Roadway Traffic Information Dissemination	Roadway Traffic Information Dissemination' includes field elements that provide information to drivers, including dynamic message signs and highway advisory radios.	No	4	The field element shall provide fault data for the driver information systems equipment (DMS, HAR, etc.) to the center for repair.	Planned	No
ADOT RWIS	ITS Roadway Equipment	Roadway Warning	Roadway Warning' includes the field equipment used to warn drivers approaching hazards on a roadway. Warnings may be generated in response to roadway weather conditions, road surface conditions, traffic conditions including queues, obstacles or animals in the roadway, and any other transient events that can be sensed. The equipment monitors traffic and roadway conditions and may send data to a Traffic Management Center for processing or may process it to determine when a warning should be issued. When it is determined that a warning should be issued, the equipment is used to alert approaching drivers via dynamic warning signs, flashing lights, in-vehicle messages, etc.	No	1	The field element shall monitor for hazardous traffic conditions, including queues.	Planned	No

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ADOT RWIS	ITS Roadway Equipment	Roadway Warning	Roadway Warning' includes the field equipment used to warn drivers approaching hazards on a roadway. Warnings may be generated in response to roadway weather conditions, road surface conditions, traffic conditions including queues, obstacles or animals in the roadway, and any other transient events that can be sensed. The equipment monitors traffic and roadway conditions and may send data to a Traffic Management Center for processing or may process it to determine when a warning should be issued. When it is determined that a warning should be issued, the equipment is used to alert approaching drivers via dynamic warning signs, flashing lights, in-vehicle messages, etc.	No	2	The field element shall monitor for hazardous road surface and local weather conditions.	Planned	No
ADOT RWIS	ITS Roadway Equipment	Roadway Warning	Roadway Warning' includes the field equipment used to warn drivers approaching hazards on a roadway. Warnings may be generated in response to roadway weather conditions, road surface conditions, traffic conditions including queues, obstacles or animals in the roadway, and any other transient events that can be sensed. The equipment monitors traffic and roadway conditions and may send data to a Traffic Management Center for processing or may process it to determine when a warning should be issued. When it is determined that a warning should be issued, the equipment is used to alert approaching drivers via dynamic warning signs, flashing lights, in-vehicle messages, etc.	No	3	The field element shall monitor for debris, animals, or other objects in the travel lanes.	Planned	No
ADOT RWIS	ITS Roadway Equipment	Roadway Warning	Roadway Warning' includes the field equipment used to warn drivers approaching hazards on a roadway. Warnings may be generated in response to roadway weather conditions, road surface conditions, traffic conditions including queues, obstacles or animals in the roadway, and any other transient events that can be sensed. The equipment monitors traffic and roadway conditions and may send data to a Traffic Management Center for processing or may process it to determine when a warning should be issued. When it is determined that a warning should be issued, the equipment is used to alert approaching drivers via dynamic warning signs, flashing lights, in-vehicle messages, etc.	No	4	The field element shall provide collected sensor data to the controlling center.	Planned	No

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ADOT RWIS	ITS Roadway Equipment	Roadway Warning	Roadway Warning' includes the field equipment used to warn drivers approaching hazards on a roadway. Warnings may be generated in response to roadway weather conditions, road surface conditions, traffic conditions including queues, obstacles or animals in the roadway, and any other transient events that can be sensed. The equipment monitors traffic and roadway conditions and may send data to a Traffic Management Center for processing or may process it to determine when a warning should be issued. When it is determined that a warning should be issued, the equipment is used to alert approaching drivers via dynamic warning signs, flashing lights, in-vehicle messages, etc.	No	5	The field element shall autonomously identify potentially hazardous conditions and activate warning signs to approaching motorists.	Planned	No
ADOT RWIS	ITS Roadway Equipment	Roadway Warning	Roadway Warning' includes the field equipment used to warn drivers approaching hazards on a roadway. Warnings may be generated in response to roadway weather conditions, road surface conditions, traffic conditions including queues, obstacles or animals in the roadway, and any other transient events that can be sensed. The equipment monitors traffic and roadway conditions and may send data to a Traffic Management Center for processing or may process it to determine when a warning should be issued. When it is determined that a warning should be issued, the equipment is used to alert approaching drivers via dynamic warning signs, flashing lights, in-vehicle messages, etc.	No	6	The field element shall receive commands from the controlling center that activate warning signs to approaching motorists.	Planned	No
ADOT RWIS	ITS Roadway Equipment	Roadway Warning	Roadway Warning' includes the field equipment used to warn drivers approaching hazards on a roadway. Warnings may be generated in response to roadway weather conditions, road surface conditions, traffic conditions including queues, obstacles or animals in the roadway, and any other transient events that can be sensed. The equipment monitors traffic and roadway conditions and may send data to a Traffic Management Center for processing or may process it to determine when a warning should be issued. When it is determined that a warning should be issued, the equipment is used to alert approaching drivers via dynamic warning signs, flashing lights, in-vehicle messages, etc.	No	7	The field element shall collect operational status of the warning system field equipment and report the operational status to the controlling center.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT RWIS	ITS Roadway Equipment	Roadway Warning	Roadway Warning' includes the field equipment used to warn drivers approaching hazards on a roadway. Warnings may be generated in response to roadway weather conditions, road surface conditions, traffic conditions including queues, obstacles or animals in the roadway, and any other transient events that can be sensed. The equipment monitors traffic and roadway conditions and may send data to a Traffic Management Center for processing or may process it to determine when a warning should be issued. When it is determined that a warning should be issued, the equipment is used to alert approaching drivers via dynamic warning signs, flashing lights, in-vehicle messages, etc.	No	8	The field element shall monitor and report faults to the controlling center.	Planned	No
ADOT RWIS	Other ITS Roadway Equipment			No				No
ADOT Service Monitor System for Connected Vehicle	Service Monitor System			No				No
ADOT Systems Maintenance	Maint and Constr Management Center	MCM Data Collection	MCM Data Collection' collects and stores maintenance and construction information that is collected in the course of operations by the Maintenance and Construction Management Center. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	1	The center shall collect maintenance and construction data (such as field equipment status, infrastructure status, maintenance and construction activity data) gathered from roadway, traffic, and other maintenance and construction sources.	Planned	No
ADOT Systems Maintenance	Maint and Constr Management Center	MCM Data Collection	MCM Data Collection' collects and stores maintenance and construction information that is collected in the course of operations by the Maintenance and Construction Management Center. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	2	The center shall assign quality control metrics and meta-data to be stored along with the data. Meta-data may include attributes that describe the source and quality of the data and the conditions surrounding the collection of the data.	Planned	No
ADOT Systems Maintenance	Maint and Constr Management Center	MCM Data Collection	MCM Data Collection' collects and stores maintenance and construction information that is collected in the course of operations by the Maintenance and Construction Management Center. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	3	The center shall receive and respond to requests from ITS Archives for either a catalog of the maintenance and construction data or for the data itself.	Planned	No
ADOT Systems Maintenance	Maint and Constr Management Center	MCM Data Collection	MCM Data Collection' collects and stores maintenance and construction information that is collected in the course of operations by the Maintenance and Construction Management Center. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	4	The center shall be able to produce sample products of the data available.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Systems Maintenance	Maint and Constr Management Center	MCM Environmental Information Collection	MCM Environmental Information Collection' collects current road and weather conditions using data collected from environmental sensors deployed on and about the roadway. In addition to fixed sensor stations at the roadside, this functional object also collects environmental information from sensor systems located on Maintenance and Construction Vehicles. It also collects current and forecast environmental conditions information that is made available by other systems. The functional object aggregates the sensor system data and provides it, along with data attributes to other applications.	No	1	The center shall remotely control environmental sensors that measure road surface temperature, moisture, icing, salinity, and other measures.	Planned	No
ADOT Systems Maintenance	Maint and Constr Management Center	MCM Environmental Information Collection	MCM Environmental Information Collection' collects current road and weather conditions using data collected from environmental sensors deployed on and about the roadway. In addition to fixed sensor stations at the roadside, this functional object also collects environmental information from sensor systems located on Maintenance and Construction Vehicles. It also collects current and forecast environmental conditions information that is made available by other systems. The functional object aggregates the sensor system data and provides it, along with data attributes to other applications.	No	2	The center shall remotely control environmental sensors that measure weather conditions including temperature, wind, humidity, precipitation, and visibility.	Planned	No
ADOT Systems Maintenance	Maint and Constr Management Center	MCM Environmental Information Collection	MCM Environmental Information Collection' collects current road and weather conditions using data collected from environmental sensors deployed on and about the roadway. In addition to fixed sensor stations at the roadside, this functional object also collects environmental information from sensor systems located on Maintenance and Construction Vehicles. It also collects current and forecast environmental conditions information that is made available by other systems. The functional object aggregates the sensor system data and provides it, along with data attributes to other applications.	No	3	The center shall remotely control environmental sensors on-board maintenance and construction vehicles that measure road and weather conditions including air and surface temperatures, wind speed, humidity, precipitation, visibility and other measures.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Systems Maintenance	Maint and Constr Management Center	MCM Environmental Information Collection	MCM Environmental Information Collection' collects current road and weather conditions using data collected from environmental sensors deployed on and about the roadway. In addition to fixed sensor stations at the roadside, this functional object also collects environmental information from sensor systems located on Maintenance and Construction Vehicles. It also collects current and forecast environmental conditions information that is made available by other systems. The functional object aggregates the sensor system data and provides it, along with data attributes to other applications.	No	4	The center shall collect environmental probe data (air temperature, exterior light status, wiper status, traction control status, etc.) from short range communications equipment that communicates with appropriately equipped probe vehicles.	Planned	No
ADOT Systems Maintenance	Maint and Constr Management Center	MCM Environmental Information Collection	MCM Environmental Information Collection' collects current road and weather conditions using data collected from environmental sensors deployed on and about the roadway. In addition to fixed sensor stations at the roadside, this functional object also collects environmental information from sensor systems located on Maintenance and Construction Vehicles. It also collects current and forecast environmental conditions information that is made available by other systems. The functional object aggregates the sensor system data and provides it, along with data attributes to other applications.	No	5	The center shall assimilate current and forecast road conditions and surface weather information using a combination of weather service provider information (such as the National Weather Service and value-added sector specific meteorological services), data from traffic and traveler information providers, and environmental data collected from sensors deployed on and about the roadway as well as the fleet of maintenance and construction vehicles and the broader population of vehicle probes.	Planned	No
ADOT Systems Maintenance	Maint and Constr Management Center	MCM Environmental Information Collection	MCM Environmental Information Collection' collects current road and weather conditions using data collected from environmental sensors deployed on and about the roadway. In addition to fixed sensor stations at the roadside, this functional object also collects environmental information from sensor systems located on Maintenance and Construction Vehicles. It also collects current and forecast environmental conditions information that is made available by other systems. The functional object aggregates the sensor system data and provides it, along with data attributes to other applications.	No	6	The center shall provide weather and road condition information to weather service providers and center personnel.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Systems Maintenance	Maint and Constr Management Center	MCM Environmental Information Collection	MCM Environmental Information Collection' collects current road and weather conditions using data collected from environmental sensors deployed on and about the roadway. In addition to fixed sensor stations at the roadside, this functional object also collects environmental information from sensor systems located on Maintenance and Construction Vehicles. It also collects current and forecast environmental conditions information that is made available by other systems. The functional object aggregates the sensor system data and provides it, along with data attributes to other applications.	No	7	The center shall respond to control data from center personnel regarding environmental sensor control and weather data collection and processing.	Planned	No
ADOT Systems Maintenance	Maint and Constr Management Center	MCM Environmental Information Collection	MCM Environmental Information Collection' collects current road and weather conditions using data collected from environmental sensors deployed on and about the roadway. In addition to fixed sensor stations at the roadside, this functional object also collects environmental information from sensor systems located on Maintenance and Construction Vehicles. It also collects current and forecast environmental conditions information that is made available by other systems. The functional object aggregates the sensor system data and provides it, along with data attributes to other applications.	No	8	The center shall collect operational status for the roadside and vehicle-based environmental sensor equipment.	Planned	No
ADOT Systems Maintenance	Maint and Constr Management Center	MCM Environmental Information Collection	MCM Environmental Information Collection' collects current road and weather conditions using data collected from environmental sensors deployed on and about the roadway. In addition to fixed sensor stations at the roadside, this functional object also collects environmental information from sensor systems located on Maintenance and Construction Vehicles. It also collects current and forecast environmental conditions information that is made available by other systems. The functional object aggregates the sensor system data and provides it, along with data attributes to other applications.	No	9	The center shall collect fault data for the roadside and vehicle-based environmental sensor equipment for repair.	Planned	No
ADOT Systems Maintenance	Maint and Constr Management Center	MCM Environmental Information Processing	MCM Environmental Information Processing' processes current and forecast weather data, road condition information, local environmental data, and uses internal models to develop specialized detailed forecasts of local weather and surface conditions. The processed environmental information products are presented to center personnel and disseminated to other centers.	No	1	The center shall respond to control data from center personnel regarding environmental sensor control and weather data collection and processing.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Systems Maintenance	Maint and Constr Management Center	MCM Environmental Information Processing	MCM Environmental Information Processing' processes current and forecast weather data, road condition information, local environmental data, and uses internal models to develop specialized detailed forecasts of local weather and surface conditions. The processed environmental information products are presented to center personnel and disseminated to other centers.	No	2	The center shall assimilate current and forecast road conditions and surface weather information using a combination of weather service provider information (such as the National Weather Service and value-added sector specific meteorological services) and local environmental sensor data.	Planned	No
ADOT Systems Maintenance	Maint and Constr Management Center	MCM Environmental Information Processing	MCM Environmental Information Processing' processes current and forecast weather data, road condition information, local environmental data, and uses internal models to develop specialized detailed forecasts of local weather and surface conditions. The processed environmental information products are presented to center personnel and disseminated to other centers.	No	3	The center shall use the various data inputs of environmental sensors and road weather data to develop a view of current and predicted road weather and road conditions.	Planned	No
ADOT Systems Maintenance	Maint and Constr Management Center	MCM Environmental Information Processing	MCM Environmental Information Processing' processes current and forecast weather data, road condition information, local environmental data, and uses internal models to develop specialized detailed forecasts of local weather and surface conditions. The processed environmental information products are presented to center personnel and disseminated to other centers.	No	4	The center shall disseminate current and forecasted road weather and road condition information to weather service providers (such as the National Weather Service and value-added sector specific meteorological services) as well as other agencies including traffic, emergency, and transit management, traveler information providers, rail operations centers, media, and other maintenance management centers.	Planned	No
ADOT Systems Maintenance	Maint and Constr Management Center	MCM Incident Management	MCM Incident Management' supports maintenance and construction participation in coordinated incident response. Incident notifications are shared, incident response resources are managed, and the overall incident situation and incident response status is coordinated among allied response organizations.	No	1	The center shall receive inputs from the Alerting and Advisory System concerning the possibility or occurrence of severe weather, terrorist activity, or other major emergency, including information provided by the Emergency Alert System.	Planned	No
ADOT Systems Maintenance	Maint and Constr Management Center	MCM Incident Management	MCM Incident Management' supports maintenance and construction participation in coordinated incident response. Incident notifications are shared, incident response resources are managed, and the overall incident situation and incident response status is coordinated among allied response organizations.	No	2	The center shall exchange alert information and status with emergency management centers. The information includes notification of a major emergency such as a natural or man-made disaster, civil emergency, or child abduction. The information may include the alert originator, the nature of the emergency, the geographic area affected by the emergency, the effective time period, etc.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Systems Maintenance	Maint and Constr Management Center	MCM Incident Management	MCM Incident Management' supports maintenance and construction participation in coordinated incident response. Incident notifications are shared, incident response resources are managed, and the overall incident situation and incident response status is coordinated among allied response organizations.	No	3	The center shall exchange incident and threat information with emergency management centers as well as traffic management centers; including notification of existence of incident and expected severity, location, time and nature of incident.	Planned	No
ADOT Systems Maintenance	Maint and Constr Management Center	MCM Incident Management	MCM Incident Management' supports maintenance and construction participation in coordinated incident response. Incident notifications are shared, incident response resources are managed, and the overall incident situation and incident response status is coordinated among allied response organizations.	No	6	The center shall exchange road network status assessment information with emergency management and traffic management centers including an assessment of damage sustained by the road network including location and extent of the damage, estimate of remaining capacity, required closures, alternate routes, necessary restrictions, and time frame for repair and recovery.	Planned	No
ADOT Systems Maintenance	Maint and Constr Management Center	MCM Maintenance Decision Support	MCM Maintenance Decision Support' recommends maintenance courses of action based on current and forecast environmental and road conditions and additional application specific information. Decisions are supported through understandable presentation of filtered and fused environmental and road condition information for specific time horizons as well as specific maintenance recommendations that are generated by the system based on this integrated information. The recommended courses of action are supported by information on the anticipated consequences of action or inaction, when available.	No	1	The center shall provide the center personnel with tailored external information, including weather or road condition observations, forecasted weather information or road conditions, current usage of treatments and materials, available resources, equipment and vehicle availability, road network information, and source reliability information.	Planned	No
ADOT Systems Maintenance	Maint and Constr Management Center	MCM Maintenance Decision Support	MCM Maintenance Decision Support' recommends maintenance courses of action based on current and forecast environmental and road conditions and additional application specific information. Decisions are supported through understandable presentation of filtered and fused environmental and road condition information for specific time horizons as well as specific maintenance recommendations that are generated by the system based on this integrated information. The recommended courses of action are supported by information on the anticipated consequences of action or inaction, when available.	No	2	The center shall tailor the decision support information to include filtering (selection from a large amount of external information), error reduction ('smoothing' the information), fusion (combination of disparate information to match the decision needs), and analysis (creating the decision).	Planned	No

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ADOT Systems Maintenance	Maint and Constr Management Center	MCM Maintenance Decision Support	MCM Maintenance Decision Support' recommends maintenance courses of action based on current and forecast environmental and road conditions and additional application specific information. Decisions are supported through understandable presentation of filtered and fused environmental and road condition information for specific time horizons as well as specific maintenance recommendations that are generated by the system based on this integrated information. The recommended courses of action are supported by information on the anticipated consequences of action or inaction, when available.	No	3	The center shall provide an interface to the center personnel to input control parameters for the decision support process and receive decisions or information presentation.	Planned	No
ADOT Systems Maintenance	Maint and Constr Management Center	MCM Maintenance Decision Support	MCM Maintenance Decision Support' recommends maintenance courses of action based on current and forecast environmental and road conditions and additional application specific information. Decisions are supported through understandable presentation of filtered and fused environmental and road condition information for specific time horizons as well as specific maintenance recommendations that are generated by the system based on this integrated information. The recommended courses of action are supported by information on the anticipated consequences of action or inaction, when available.	No	4	The center shall provide dispatch information to maintenance and construction vehicles based on the outputs of the decision support system, including recommended roadway treatment actions.	Planned	No
ADOT Systems Maintenance	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	1	The center shall maintain an interface with asset management systems to track the inventory, restrictions, repair needs and status updates of transportation assets (pavement, bridges, signs, etc.) including location, installation and materials information, vendor/contractor, current maintenance status, standard height, width, and weight restrictions.	Planned	No

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ADOT Systems Maintenance	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	2	The center shall respond to requests from emergency management and traffic management centers for hazard removal, field equipment repair, and other roadway maintenance.	Planned	No
ADOT Systems Maintenance	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	3	The center shall exchange information with administrative systems to support the planning and scheduling of maintenance activities. This information includes: equipment and consumables resupply purchase request status, personnel qualifications including training and special certifications, environmental regulations and rules that may impact maintenance activities, and requests and project requirements from contract administration.	Planned	No
ADOT Systems Maintenance	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	4	The center shall provide emergency management and traffic management centers with information about scheduled maintenance and construction work activities including anticipated closures and impact to the roadway, alternate routes, anticipated delays, closure times, and durations.	Planned	No

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ADOT Systems Maintenance	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	5	The center shall collect the status and fault data from roadside equipment, such as traffic, infrastructure, and environmental sensors, highway advisory radio and dynamic message signs, automated roadway treatment systems, barrier and safeguard systems, cameras, traffic signals and override equipment, ramp meters, short range communications equipment, security sensors and surveillance equipment, etc., and provide a cohesive view of equipment repair needs.	Planned	No
ADOT Systems Maintenance	Maint and Constr Management Center	MCM Vehicle Tracking	MCM Vehicle Tracking' tracks the location of maintenance and construction vehicles and other equipment. Vehicle/equipment location and associated information is presented to the operator.	No				No
ADOT Systems Maintenance	Maint and Constr Management Center	MCM Work Zone Management	MCM Work Zone Management' remotely monitors and supports work zone activities, controlling traffic through dynamic message signs (DMS), Highway Advisory Radio (HAR), gates and barriers, and informing other groups of activity (e.g., traveler information, traffic management, other maintenance and construction centers) for better coordination management. Work zone speeds, and delays, and closures are provided to the motorist prior to the work zones. This application provides control of field equipment in all maintenance areas, including fixed and portable field equipment supporting both stationary and mobile work zones.	No				No
ADOT Systems Maintenance Vehicles	Basic Maint and Constr Vehicle			No				No
ADOT Systems Maintenance Vehicles	Maint and Constr Vehicle OBE	MCV Barrier System Control	MCV Barrier System Control' provides local control of automatic or remotely controlled gates and other barrier systems from a maintenance and construction vehicle. This allows maintenance and construction field personnel (e.g., snow plow operators) to open and close gates and other barrier systems without leaving the vehicle, using V2I Communications to control the barriers.	No				No
ADOT Systems Maintenance Vehicles	Maint and Constr Vehicle OBE	MCV Environmental Monitoring	MCV Environmental Monitoring' collects current road and surface weather conditions from sensors on-board the maintenance and construction vehicle or by querying fixed sensors on or near the roadway. Environmental information including road surface temperature, air temperature, and wind speed is measured and spatially located and time stamped, and reported back to a center.	No	1	The maintenance and construction vehicle shall collect environmental data from on-board sensors, including air temperature, wind speed, surface temperature, traction conditions, etc.	Planned	No

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ADOT Systems Maintenance Vehicles	Maint and Constr Vehicle OBE	MCV Environmental Monitoring	MCV Environmental Monitoring' collects current road and surface weather conditions from sensors on-board the maintenance and construction vehicle or by querying fixed sensors on or near the roadway. Environmental information including road surface temperature, air temperature, and wind speed is measured and spatially located and time stamped, and reported back to a center.	No	3	The maintenance and construction vehicle shall provide environmental sensor equipment operational status to the center.	Planned	No
ADOT Systems Maintenance Vehicles	Maint and Constr Vehicle OBE	MCV Environmental Monitoring	MCV Environmental Monitoring' collects current road and surface weather conditions from sensors on-board the maintenance and construction vehicle or by querying fixed sensors on or near the roadway. Environmental information including road surface temperature, air temperature, and wind speed is measured and spatially located and time stamped, and reported back to a center.	No	4	The maintenance and construction vehicle shall provide environmental sensor equipment fault indication to the center for repair.	Planned	No
ADOT Systems Maintenance Vehicles	Maint and Constr Vehicle OBE	MCV Environmental Monitoring	MCV Environmental Monitoring' collects current road and surface weather conditions from sensors on-board the maintenance and construction vehicle or by querying fixed sensors on or near the roadway. Environmental information including road surface temperature, air temperature, and wind speed is measured and spatially located and time stamped, and reported back to a center.	No	5	The maintenance and construction vehicle shall collect environmental data from sensors located at the roadway but are monitored on-board a maintenance and construction vehicle.	Planned	No
ADOT Systems Maintenance Vehicles	Maint and Constr Vehicle OBE	MCV Environmental Monitoring	MCV Environmental Monitoring' collects current road and surface weather conditions from sensors on-board the maintenance and construction vehicle or by querying fixed sensors on or near the roadway. Environmental information including road surface temperature, air temperature, and wind speed is measured and spatially located and time stamped, and reported back to a center.	No	7	The maintenance and construction vehicle shall provide control signals to environmental sensors located at the roadway.	Planned	No
ADOT Systems Maintenance Vehicles	Maint and Constr Vehicle OBE	MCV Environmental Monitoring	MCV Environmental Monitoring' collects current road and surface weather conditions from sensors on-board the maintenance and construction vehicle or by querying fixed sensors on or near the roadway. Environmental information including road surface temperature, air temperature, and wind speed is measured and spatially located and time stamped, and reported back to a center.	No	8	The maintenance and construction vehicle shall transmit environmental sensor data to roadside equipment. The sensor data includes location and timestamp information.	Planned	No
ADOT Systems Maintenance Vehicles	Maint and Constr Vehicle OBE	MCV Roadway Maintenance and Construction	MCV Roadway Maintenance and Construction' includes the on-board systems that support routine non-winter maintenance on a roadway system or right-of-way. Routine maintenance includes landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of both ITS and non-ITS equipment on the roadway (e.g., signs, traffic controllers, traffic detectors, dynamic message signs, traffic signals, etc.).	No	1	The maintenance and construction vehicle shall track the location and status of safety systems on-board the vehicle.	Planned	No

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ADOT Systems Maintenance Vehicles	Maint and Constr Vehicle OBE	MCV Roadway Maintenance and Construction	MCV Roadway Maintenance and Construction' includes the on-board systems that support routine non-winter maintenance on a roadway system or right-of-way. Routine maintenance includes landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of both ITS and non-ITS equipment on the roadway (e.g., signs, traffic controllers, traffic detectors, dynamic message signs, traffic signals, etc.).	No	2	The maintenance and construction vehicle shall respond to control information from the center to allow remote operation of the on-board vehicle systems. These systems include routine maintenance equipment for cutting, repairs, hazard removal, etc.	Planned	No
ADOT Systems Maintenance Vehicles	Maint and Constr Vehicle OBE	MCV Roadway Maintenance and Construction	MCV Roadway Maintenance and Construction' includes the on-board systems that support routine non-winter maintenance on a roadway system or right-of-way. Routine maintenance includes landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of both ITS and non-ITS equipment on the roadway (e.g., signs, traffic controllers, traffic detectors, dynamic message signs, traffic signals, etc.).	No	3	The maintenance and construction vehicle shall monitor materials information including remaining quantity and current application rate of materials on the vehicle.	Planned	No
ADOT Systems Maintenance Vehicles	Maint and Constr Vehicle OBE	MCV Roadway Maintenance and Construction	MCV Roadway Maintenance and Construction' includes the on-board systems that support routine non-winter maintenance on a roadway system or right-of-way. Routine maintenance includes landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of both ITS and non-ITS equipment on the roadway (e.g., signs, traffic controllers, traffic detectors, dynamic message signs, traffic signals, etc.).	No	4	The maintenance and construction vehicle shall respond to dispatch information from the center, presented to the vehicle operator for acknowledgement and returning status.	Planned	No
ADOT Systems Maintenance Vehicles	Maint and Constr Vehicle OBE	MCV Roadway Maintenance and Construction	MCV Roadway Maintenance and Construction' includes the on-board systems that support routine non-winter maintenance on a roadway system or right-of-way. Routine maintenance includes landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of both ITS and non-ITS equipment on the roadway (e.g., signs, traffic controllers, traffic detectors, dynamic message signs, traffic signals, etc.).	No	5	The maintenance and construction vehicle shall send operational data to the center including the operational state of the maintenance equipment (e.g., blade up/down, spreader pattern), types and quantities of materials used for construction and maintenance activities, and a record of the actual work performed.	Planned	No
ADOT Systems Maintenance Vehicles	Maint and Constr Vehicle OBE	MCV Vehicle Location Tracking	MCV Vehicle Location Tracking' monitors vehicle location and reports the position and timestamp information to the dispatch center.	No	1	The maintenance and construction vehicle shall track its current location.	Planned	No
ADOT Systems Maintenance Vehicles	Maint and Constr Vehicle OBE	MCV Vehicle Location Tracking	MCV Vehicle Location Tracking' monitors vehicle location and reports the position and timestamp information to the dispatch center.	No	2	The maintenance and construction vehicle shall send the time stamped vehicle location to the controlling center.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Systems Maintenance Vehicles	Maint and Constr Vehicle OBE	MCV Work Zone Support	MCV Work Zone Support' provides communications and support for local management of a work zone. It supports communications between field personnel and the managing center to keep the center appraised of current work zone status. It controls vehicle-mounted driver information systems (e.g., dynamic message signs) and uses short range communications to monitor and control other fixed or portable driver information systems in the work zone.	No	1	The maintenance and construction vehicle shall monitor, operate, and control work zone devices located at or alongside the roadway. The devices operated on board the vehicle include driver information devices (e.g. dynamic message signs) and work zone intrusion detection and alert devices.	Planned	No
ADOT Systems Maintenance Vehicles	Maint and Constr Vehicle OBE	MCV Work Zone Support	MCV Work Zone Support' provides communications and support for local management of a work zone. It supports communications between field personnel and the managing center to keep the center appraised of current work zone status. It controls vehicle-mounted driver information systems (e.g., dynamic message signs) and uses short range communications to monitor and control other fixed or portable driver information systems in the work zone.	No	2	The maintenance and construction vehicle shall provide an interface for field personnel to input status of their work zone activities.	Planned	No
ADOT Systems Maintenance Vehicles	Maint and Constr Vehicle OBE	MCV Work Zone Support	MCV Work Zone Support' provides communications and support for local management of a work zone. It supports communications between field personnel and the managing center to keep the center appraised of current work zone status. It controls vehicle-mounted driver information systems (e.g., dynamic message signs) and uses short range communications to monitor and control other fixed or portable driver information systems in the work zone.	No	3	The maintenance and construction vehicle shall collect inputs from field personnel and from work zone devices on-board the maintenance and construction vehicle and send them to the controlling center.	Planned	No
ADOT TOC and EMC	Center	Center Data Collection	Center Data Collection' collects and stores information that is created in the course of center operations. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	1	The center shall collect transportation data such as traffic operational data, transit data, vehicle data, weather data, freight data, event logs, etc. and make it available for ITS Archives upon request.	Planned	No
ADOT TOC and EMC	Center	Center Data Collection	Center Data Collection' collects and stores information that is created in the course of center operations. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	3	The center shall receive and respond to requests from ITS Archives for either a catalog of the traffic data or for the data itself.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT TOC and EMC	Center	Center Data Subscription Management	Center Data Subscription Management' manages data subscriptions for an end user. It provides access to a catalog of available data, manages the necessary user information and rules that govern the data subscriptions, supports communications with data providers to collect data per the subscription rules, and makes the data available to the end user. It provides the local user interface through which a user can specify and manage subscriptions. It supports different mechansims for collecting subscribed data for the end-user including one-time query-response as well as publish-subscribe services.	No				No
ADOT TOC and EMC	Emergency Management Center	Emergency Commercial Vehicle Response	Emergency Commercial Vehicle Response' identifies and initiates a response to commercial vehicle and freight equipment related emergencies. These emergencies may include incidents involving hazardous materials as well as the detection of non-permitted transport of security sensitive hazmat. It identifies the location of the vehicle, the nature of the incident, the route information, and information concerning the freight itself. The information supports the determination of the response and identifies the responding agencies to notify.	No				No
ADOT TOC and EMC	Emergency Management Center	Emergency Data Collection	Emergency Data Collection' collects and stores emergency information that is collected in the course of operations by the Emergency Management Center. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No				No
ADOT TOC and EMC	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	2	The center shall receive incident information from other transportation management centers to support the early warning system.	Planned	No
ADOT TOC and EMC	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	5	The center shall provide the capability to correlate alerts and advisories, incident information, and security sensor and surveillance data.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT TOC and EMC	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	6	The center shall broadcast wide-area alerts and advisories to traffic management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing	No
ADOT TOC and EMC	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	7	The center shall broadcast wide-area alerts and advisories to transit management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing	No
ADOT TOC and EMC	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	8	The center shall broadcast wide-area alerts and advisories to toll administration centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing	No
ADOT TOC and EMC	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	9	The center shall broadcast wide-area alerts and advisories to traveler information service providers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned	No
ADOT TOC and EMC	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	10	The center shall broadcast wide-area alerts and advisories to maintenance centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned	No

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ADOT TOC and EMC	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	11	The center shall broadcast wide-area alerts and advisories to other emergency management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned	No
ADOT TOC and EMC	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	12	The center shall broadcast wide-area alerts and advisories to commercial vehicle administration centers and roadside check facilities for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned	No
ADOT TOC and EMC	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	13	The center shall process status information from each of the centers that have been sent the wide-area alert.	Planned	No
ADOT TOC and EMC	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	14	The center shall coordinate the broadcast of wide-area alerts and advisories with other emergency management centers.	Planned	No
ADOT TOC and EMC	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	15	The center shall present the alert and advisory information and the status of the actions taken in response to the alert by the other centers to the emergency system operator as received from other system inputs.	Planned	No
ADOT TOC and EMC	Emergency Management Center	Emergency Environmental Monitoring	Emergency Environmental Monitoring' collects current and forecast road conditions and surface weather information from a variety of sources. The collected environmental information is monitored and presented to the operator and used to more effectively manage incidents.	No	1	The center shall collect current and forecast road and weather information from weather service providers (such as the National Weather Service and value-added sector specific meteorological services).	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT TOC and EMC	Emergency Management Center	Emergency Environmental Monitoring	Emergency Environmental Monitoring' collects current and forecast road conditions and surface weather information from a variety of sources. The collected environmental information is monitored and presented to the operator and used to more effectively manage incidents.	No	4	The center shall assimilate current and forecast road conditions and surface weather information to support incident management.	Existing	No
ADOT TOC and EMC	Emergency Management Center	Emergency Environmental Monitoring	Emergency Environmental Monitoring' collects current and forecast road conditions and surface weather information from a variety of sources. The collected environmental information is monitored and presented to the operator and used to more effectively manage incidents.	No	5	The center shall provide the road and weather warning and advisories to the emergency responders.	Existing	No
ADOT TOC and EMC	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	1	The center shall manage inter-agency coordination of evacuation operations, from initial planning through the evacuation process and reentry.	Planned	No

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ADOT TOC and EMC	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Planned	No

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ADOT TOC and EMC	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	3	The center shall provide an interface to the emergency system operator to enter evacuation plans and procedures and present the operator with other agencies' plans.	Planned	No

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ADOT TOC and EMC	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	5	The center shall provide evacuation information to traffic, transit, maintenance and construction, rail operations, and other emergency management centers as needed.	Existing	No

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ADOT TOC and EMC	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	7	The center shall request traffic management agencies to implement special traffic control strategies and to control evacuation traffic, including traffic on local streets and arterials as well as the major evacuation routes.	Existing	No

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ADOT TOC and EMC	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	8	The center shall provide traveler information systems with evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary and when it is safe to return.	Existing	No
ADOT TOC and EMC	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No				No

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ADOT TOC and EMC	Emergency Management Center	Emergency Notification Support	Emergency Notification Support' receives emergency notification messages from vehicles or personal handheld devices, determines an appropriate response, and either uses internal resources or contacts a local agency to provide that response. The nature of the emergency is determined based on the information in the received message as well as other inputs. This object effectively serves as an interface between automated collision notification systems and the local public safety answering point for messages that require a public safety response. This capability depends on an up-to-date registry of public safety answering points/response agencies by coverage area, the type of emergency, and hours of service.	No				No
ADOT TOC and EMC	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT TOC and EMC	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Planned	No
ADOT TOC and EMC	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Planned	No

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ADOT TOC and EMC	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Planned	No
ADOT TOC and EMC	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	5	The center shall track the availability of resources and coordinate resource sharing with allied agency centers including traffic, maintenance, or other emergency centers.	Planned	No

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ADOT TOC and EMC	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	6	The center shall allocate the appropriate emergency services, resources, and vehicle (s) to respond to incidents, and shall provide the capability to override the current allocation to suit the special needs of a current incident.	Planned	No
ADOT TOC and EMC	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	7	The center shall receive event scheduling information from Event Promoters.	Planned	No

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ADOT TOC and EMC	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	8	The center shall support remote control of field equipment normally under control of the traffic management center including traffic signals, dynamic message signs, gates, and barriers.	Planned	No
ADOT TOC and EMC	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	9	The center shall provide the capability to remotely control and monitor CCTV systems normally operated by a traffic management center.	Planned	No

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ADOT TOC and EMC	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	10	The center shall provide the capability to request transit resource availability from transit centers for use during disaster and evacuation operations.	Planned	No
ADOT TOC and EMC	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	11	The center shall assimilate the damage assessment of the transit, traffic, rail, maintenance, and other emergency center services and systems to create an overall transportation system status, and disseminate to each of these centers and the traveling public via traveler information providers.	Planned	No

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ADOT TOC and EMC	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	12	The center shall provide information to the media concerning the status of an emergency response.	Planned	No
ADOT TOC and EMC	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	13	The center shall provide the capability for center personnel to provide inputs to the management of incidents, disasters and evacuations.	Planned	No

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ADOT TOC and EMC	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	14	The center shall collect information about the status of the recovery efforts for the infrastructure during disasters.	Planned	No
ADOT TOC and EMC	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	15	The center shall provide the overall status of infrastructure recovery efforts to traveler information providers and media.	Planned	No

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ADOT TOC and EMC	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	16	The center shall provide the capability to communicate information about emergency situations to local population through the Emergency Telecommunications System.	Planned	No
ADOT TOC and EMC	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	17	The center shall provide the capability to identify neighborhoods and businesses that should be informed of an emergency situation based on information collected about incidents including their severity, impacted locations, and recovery schedule.	Planned	No

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ADOT TOC and EMC	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	18	The center shall retrieve information from public health systems to increase preparedness for, and implement a response to biological, chemical, radiation, and other public health emergencies.	Planned	No
ADOT TOC and EMC	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	19	The center shall manage coordinated inter-agency responses to incidents at an international border.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT TOC and EMC	Emergency Management Center	Emergency Secure Area Sensor Management	Emergency Secure Area Sensor Management' manages sensors that monitor secure areas in the transportation system, processes the collected data, performs threat analysis in which data is correlated with other sensor, surveillance, and advisory inputs, and then disseminates resultant threat information to emergency personnel and other agencies. In response to identified threats, the operator may request activation of barrier and safeguard systems to preclude an incident, control access during and after an incident or mitigate impact of an incident. The sensors may be in secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. The types of sensors include acoustic, threat (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors), infrastructure condition and integrity, motion and object sensors.	No	1	The center shall remotely monitor and control security sensor data collected in secure areas including facilities (e.g. transit yards) and transportation infrastructure (e.g. bridges, tunnels, interchanges, roadway infrastructure, and transit railways or guideways). The types of security sensor data include environmental threat (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors), infrastructure condition and integrity, intrusion and motion, and object detection sensors. The data may be raw or pre-processed in the field.	Planned	No
ADOT TOC and EMC	Emergency Management Center	Emergency Secure Area Sensor Management	Emergency Secure Area Sensor Management' manages sensors that monitor secure areas in the transportation system, processes the collected data, performs threat analysis in which data is correlated with other sensor, surveillance, and advisory inputs, and then disseminates resultant threat information to emergency personnel and other agencies. In response to identified threats, the operator may request activation of barrier and safeguard systems to preclude an incident, control access during and after an incident or mitigate impact of an incident. The sensors may be in secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. The types of sensors include acoustic, threat (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors), infrastructure condition and integrity, motion and object sensors.	No	2	The center shall remotely monitor and control security sensor data collected in traveler secure areas, which include transit stations, transit stops, rest areas, park and ride lots, and other fixed sites along travel routes (e.g., emergency pull-off areas and travel information centers). The types of security sensor data include environmental threat (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors), intrusion and motion, and object detection sensors. The data may be raw or pre-processed in the field.	Planned	No

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ADOT TOC and EMC	Emergency Management Center	Emergency Secure Area Sensor Management	Emergency Secure Area Sensor Management' manages sensors that monitor secure areas in the transportation system, processes the collected data, performs threat analysis in which data is correlated with other sensor, surveillance, and advisory inputs, and then disseminates resultant threat information to emergency personnel and other agencies. In response to identified threats, the operator may request activation of barrier and safeguard systems to preclude an incident, control access during and after an incident or mitigate impact of an incident. The sensors may be in secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. The types of sensors include acoustic, threat (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors), infrastructure condition and integrity, motion and object sensors.	No	5	The center shall identify potential security threats based on collected security sensor data.	Planned	No
ADOT TOC and EMC	Emergency Management Center	Emergency Secure Area Sensor Management	Emergency Secure Area Sensor Management' manages sensors that monitor secure areas in the transportation system, processes the collected data, performs threat analysis in which data is correlated with other sensor, surveillance, and advisory inputs, and then disseminates resultant threat information to emergency personnel and other agencies. In response to identified threats, the operator may request activation of barrier and safeguard systems to preclude an incident, control access during and after an incident or mitigate impact of an incident. The sensors may be in secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. The types of sensors include acoustic, threat (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors), infrastructure condition and integrity, motion and object sensors.	No	6	The center shall verify potential security threats by correlating security sensor data from multiple sources.	Planned	No

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ADOT TOC and EMC	Emergency Management Center	Emergency Secure Area Sensor Management	Emergency Secure Area Sensor Management' manages sensors that monitor secure areas in the transportation system, processes the collected data, performs threat analysis in which data is correlated with other sensor, surveillance, and advisory inputs, and then disseminates resultant threat information to emergency personnel and other agencies. In response to identified threats, the operator may request activation of barrier and safeguard systems to preclude an incident, control access during and after an incident or mitigate impact of an incident. The sensors may be in secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. The types of sensors include acoustic, threat (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors), infrastructure condition and integrity, motion and object sensors.	No	8	The center shall exchange threat analysis data with Alerting and Advisory Systems and use that data in local threat analysis processing.	Planned	No
ADOT TOC and EMC	Emergency Management Center	Emergency Secure Area Surveillance	Emergency Secure Area Surveillance' monitors surveillance inputs from secure areas in the transportation system. The surveillance may be of secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. It provides both video and audio surveillance information to emergency personnel and automatically alerts emergency personnel of potential incidents.	No	1	The center shall remotely monitor video images and audio surveillance data collected in secure areas including facilities (e.g. transit yards) and transportation infrastructure (e.g. bridges, tunnels, interchanges, roadway infrastructure, and transit railways or guideways). The data may be raw or pre-processed in the field.	Existing	No
ADOT TOC and EMC	Emergency Management Center	Emergency Secure Area Surveillance	Emergency Secure Area Surveillance' monitors surveillance inputs from secure areas in the transportation system. The surveillance may be of secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. It provides both video and audio surveillance information to emergency personnel and automatically alerts emergency personnel of potential incidents.	No	2	The center shall remotely monitor video images and audio surveillance data collected in traveler secure areas, which include transit stations, transit stops, rest areas, park and ride lots, and other fixed sites along travel routes (e.g., emergency pull-off areas and travel information centers). The data may be raw or pre-processed in the field.	Existing	No

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ADOT TOC and EMC	Emergency Management Center	Emergency Secure Area Surveillance	Emergency Secure Area Surveillance' monitors surveillance inputs from secure areas in the transportation system. The surveillance may be of secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. It provides both video and audio surveillance information to emergency personnel and automatically alerts emergency personnel of potential incidents.	No	6	The center shall verify potential security threats by correlating security surveillance data from multiple sources.	Planned	No
ADOT TOC and EMC	Emergency Management Center	Emergency Secure Area Surveillance	Emergency Secure Area Surveillance' monitors surveillance inputs from secure areas in the transportation system. The surveillance may be of secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. It provides both video and audio surveillance information to emergency personnel and automatically alerts emergency personnel of potential incidents.	No	7	The center shall remotely control security surveillance devices in secure areas including facilities (e.g. transit yards) and transportation infrastructure (e.g. bridges, tunnels, interchanges, roadway infrastructure, and transit railways or guideways).	Planned	No
ADOT TOC and EMC	Emergency Management Center	Emergency Secure Area Surveillance	Emergency Secure Area Surveillance' monitors surveillance inputs from secure areas in the transportation system. The surveillance may be of secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. It provides both video and audio surveillance information to emergency personnel and automatically alerts emergency personnel of potential incidents.	No	8	The center shall remotely control security surveillance devices in traveler secure areas, which include transit stations, transit stops, rest areas, park and ride lots, and other fixed sites along travel routes (e.g., emergency pull-off areas and travel information centers).	Planned	No
ADOT TOC and EMC	Emergency Management Center	Emergency Secure Area Surveillance	Emergency Secure Area Surveillance' monitors surveillance inputs from secure areas in the transportation system. The surveillance may be of secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. It provides both video and audio surveillance information to emergency personnel and automatically alerts emergency personnel of potential incidents.	No	9	The center shall remotely control security surveillance devices on-board transit vehicles.	Planned	No

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ADOT TOC and EMC	Emergency Management Center	Emergency Secure Area Surveillance	Emergency Secure Area Surveillance' monitors surveillance inputs from secure areas in the transportation system. The surveillance may be of secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. It provides both video and audio surveillance information to emergency personnel and automatically alerts emergency personnel of potential incidents.	No	10	The center shall match traveler video images against a database from the Alerting and Advisory Systems of known images that may represent criminals and terrorists.	Planned	No
ADOT TOC and EMC	Emergency Management Center	Emergency Secure Area Surveillance	Emergency Secure Area Surveillance' monitors surveillance inputs from secure areas in the transportation system. The surveillance may be of secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. It provides both video and audio surveillance information to emergency personnel and automatically alerts emergency personnel of potential incidents.	No	11	The center shall exchange traveler images with other emergency management centers to support traveler image matching.	Planned	No
ADOT TOC and EMC	Emergency Management Center	Emergency Secure Area Surveillance	Emergency Secure Area Surveillance' monitors surveillance inputs from secure areas in the transportation system. The surveillance may be of secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. It provides both video and audio surveillance information to emergency personnel and automatically alerts emergency personnel of potential incidents.	No	12	The center shall respond to control data from center personnel regarding security surveillance data collection, processing, threat detection, and image matching.	Planned	No
ADOT TOC and EMC	Emergency Management Center	Emergency Secure Area Surveillance	Emergency Secure Area Surveillance' monitors surveillance inputs from secure areas in the transportation system. The surveillance may be of secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. It provides both video and audio surveillance information to emergency personnel and automatically alerts emergency personnel of potential incidents.	No	13	The center shall monitor maintenance status of the security sensor field equipment.	Planned	No

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ADOT TOC and EMC	Traffic Management Center	TMC Advanced Rail Crossing Management	TMC Advanced Rail Crossing Management' monitors and controls rail crossing traffic control equipment at advanced crossings that provide additional information on approaching trains, detect and report obstructions on the grade crossing, and communicate directly with equipped vehicles approaching the crossing. It remotely monitors and reports the status of the rail crossing equipment and sends control plan updates to the equipment. It also provides enhanced coordination between rail operations and traffic management centers that supports forecast of closure times and durations that may be applied to advanced traffic control strategies or delivered as enhanced traveler information.	No	1	The center shall remotely control highway-rail intersection (HRI) equipment located in the field.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Advanced Rail Crossing Management	TMC Advanced Rail Crossing Management' monitors and controls rail crossing traffic control equipment at advanced crossings that provide additional information on approaching trains, detect and report obstructions on the grade crossing, and communicate directly with equipped vehicles approaching the crossing. It remotely monitors and reports the status of the rail crossing equipment and sends control plan updates to the equipment. It also provides enhanced coordination between rail operations and traffic management centers that supports forecast of closure times and durations that may be applied to advanced traffic control strategies or delivered as enhanced traveler information.	No	2	The center shall accept collect highway-rail intersection (HRI) advisory or alert data from rail operations centers.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Advanced Rail Crossing Management	TMC Advanced Rail Crossing Management' monitors and controls rail crossing traffic control equipment at advanced crossings that provide additional information on approaching trains, detect and report obstructions on the grade crossing, and communicate directly with equipped vehicles approaching the crossing. It remotely monitors and reports the status of the rail crossing equipment and sends control plan updates to the equipment. It also provides enhanced coordination between rail operations and traffic management centers that supports forecast of closure times and durations that may be applied to advanced traffic control strategies or delivered as enhanced traveler information.	No	3	The center shall collect highway-rail intersection (HRI) equipment operational status and compare against the control information sent by the center.	Planned	No

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ADOT TOC and EMC	Traffic Management Center	TMC Advanced Rail Crossing Management	TMC Advanced Rail Crossing Management' monitors and controls rail crossing traffic control equipment at advanced crossings that provide additional information on approaching trains, detect and report obstructions on the grade crossing, and communicate directly with equipped vehicles approaching the crossing. It remotely monitors and reports the status of the rail crossing equipment and sends control plan updates to the equipment. It also provides enhanced coordination between rail operations and traffic management centers that supports forecast of closure times and durations that may be applied to advanced traffic control strategies or delivered as enhanced traveler information.	No	4	The center shall provide the highway-rail intersection (HRI) equipment operational status to rail operations centers.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Advanced Rail Crossing Management	TMC Advanced Rail Crossing Management' monitors and controls rail crossing traffic control equipment at advanced crossings that provide additional information on approaching trains, detect and report obstructions on the grade crossing, and communicate directly with equipped vehicles approaching the crossing. It remotely monitors and reports the status of the rail crossing equipment and sends control plan updates to the equipment. It also provides enhanced coordination between rail operations and traffic management centers that supports forecast of closure times and durations that may be applied to advanced traffic control strategies or delivered as enhanced traveler information.	No	5	The center shall collect incident information related to a highway-rail intersection (HRI), such as intersection blockages or crashes or equipment malfunctions.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Advanced Rail Crossing Management	TMC Advanced Rail Crossing Management' monitors and controls rail crossing traffic control equipment at advanced crossings that provide additional information on approaching trains, detect and report obstructions on the grade crossing, and communicate directly with equipped vehicles approaching the crossing. It remotely monitors and reports the status of the rail crossing equipment and sends control plan updates to the equipment. It also provides enhanced coordination between rail operations and traffic management centers that supports forecast of closure times and durations that may be applied to advanced traffic control strategies or delivered as enhanced traveler information.	No	6	The center shall implement control plans to coordinate signalized intersections around highway-rail intersections (HRI), under control of center personnel, based on data from sensors and surveillance monitoring traffic conditions, incidents, equipment faults, pedestrian crossings, etc.	Planned	No

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ADOT TOC and EMC	Traffic Management Center	TMC Barrier System Management	TMC Barrier System Management' remotely monitors and controls barrier systems for transportation facilities and infrastructure under control of center personnel. Barrier systems include automatic or remotely controlled gates, barriers and other access control systems. It also provides an interface to other centers to allow monitoring and control of the barriers from other centers (e.g., public safety or emergency operations centers).	No	1	The center shall remotely control barrier systems for transportation facilities and infrastructure. Barrier systems include automated or remotely controlled gates, barriers and other systems that manage entry to roadways.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Barrier System Management	TMC Barrier System Management' remotely monitors and controls barrier systems for transportation facilities and infrastructure under control of center personnel. Barrier systems include automatic or remotely controlled gates, barriers and other access control systems. It also provides an interface to other centers to allow monitoring and control of the barriers from other centers (e.g., public safety or emergency operations centers).	No	2	The center shall accept requests for barrier system activation from other centers and from center personnel to support emergency response and detours.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Barrier System Management	TMC Barrier System Management' remotely monitors and controls barrier systems for transportation facilities and infrastructure under control of center personnel. Barrier systems include automatic or remotely controlled gates, barriers and other access control systems. It also provides an interface to other centers to allow monitoring and control of the barriers from other centers (e.g., public safety or emergency operations centers).	No	3	The center shall collect barrier system operational status.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Barrier System Management	TMC Barrier System Management' remotely monitors and controls barrier systems for transportation facilities and infrastructure under control of center personnel. Barrier systems include automatic or remotely controlled gates, barriers and other access control systems. It also provides an interface to other centers to allow monitoring and control of the barriers from other centers (e.g., public safety or emergency operations centers).	No	4	The center shall collect barrier system fault data and send to the maintenance center for repair.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Basic Surveillance	TMC Basic Surveillance' remotely monitors and controls traffic sensor systems and surveillance (e.g., CCTV) equipment, and collects, processes and stores the collected traffic data. Current traffic information and other real-time transportation information is also collected from other centers. The collected information is provided to traffic operations personnel and made available to other centers.	No	1	The center shall monitor, analyze, and store traffic sensor data (speed, volume, occupancy) collected from field elements under remote control of the center.	Planned	No

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ADOT TOC and EMC	Traffic Management Center	TMC Basic Surveillance	TMC Basic Surveillance' remotely monitors and controls traffic sensor systems and surveillance (e.g., CCTV) equipment, and collects, processes and stores the collected traffic data. Current traffic information and other real-time transportation information is also collected from other centers. The collected information is provided to traffic operations personnel and made available to other centers.	No	2	The center shall monitor, analyze, and distribute traffic images from CCTV systems under remote control of the center.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Basic Surveillance	TMC Basic Surveillance' remotely monitors and controls traffic sensor systems and surveillance (e.g., CCTV) equipment, and collects, processes and stores the collected traffic data. Current traffic information and other real-time transportation information is also collected from other centers. The collected information is provided to traffic operations personnel and made available to other centers.	No	3	The center shall monitor, analyze, and store multimodal crossing, high occupancy vehicle (HOV) and high occupancy toll (HOT) lane sensor data under remote control of the center.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Basic Surveillance	TMC Basic Surveillance' remotely monitors and controls traffic sensor systems and surveillance (e.g., CCTV) equipment, and collects, processes and stores the collected traffic data. Current traffic information and other real-time transportation information is also collected from other centers. The collected information is provided to traffic operations personnel and made available to other centers.	No	4	The center shall distribute road network conditions data (raw or processed) based on collected and analyzed traffic sensor and surveillance data to other centers.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Basic Surveillance	TMC Basic Surveillance' remotely monitors and controls traffic sensor systems and surveillance (e.g., CCTV) equipment, and collects, processes and stores the collected traffic data. Current traffic information and other real-time transportation information is also collected from other centers. The collected information is provided to traffic operations personnel and made available to other centers.	No	5	The center shall respond to control data from center personnel regarding sensor and surveillance data collection, analysis, storage, and distribution.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Basic Surveillance	TMC Basic Surveillance' remotely monitors and controls traffic sensor systems and surveillance (e.g., CCTV) equipment, and collects, processes and stores the collected traffic data. Current traffic information and other real-time transportation information is also collected from other centers. The collected information is provided to traffic operations personnel and made available to other centers.	No	6	The center shall maintain a database of surveillance equipment and sensors and associated data (including the roadway on which they are located, the type of data collected, and the ownership of each)	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Data Collection	TMC Data Collection' collects and stores information that is created in the course of traffic operations performed by the Traffic Management Center. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT TOC and EMC	Traffic Management Center	TMC Environmental Monitoring	TMC Environmental Monitoring' assimilates current and forecast road conditions and surface weather information using a combination of weather service provider information, information collected by other centers such as the Maintenance and Construction Management Center, data collected from environmental sensors deployed on and about the roadway, and information collected from connected vehicles. The collected environmental information is monitored and presented to the operator. This information can be used to issue general traveler advisories and support location specific warnings to drivers.	No	1	The center shall remotely control environmental sensors that measure road surface conditions including temperature, moisture, icing, salinity, and other measures.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Environmental Monitoring	TMC Environmental Monitoring' assimilates current and forecast road conditions and surface weather information using a combination of weather service provider information, information collected by other centers such as the Maintenance and Construction Management Center, data collected from environmental sensors deployed on and about the roadway, and information collected from connected vehicles. The collected environmental information is monitored and presented to the operator. This information can be used to issue general traveler advisories and support location specific warnings to drivers.	No	2	The center shall remotely control environmental sensors that measure weather conditions including temperature, wind, humidity, precipitation, and visibility.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Environmental Monitoring	TMC Environmental Monitoring' assimilates current and forecast road conditions and surface weather information using a combination of weather service provider information, information collected by other centers such as the Maintenance and Construction Management Center, data collected from environmental sensors deployed on and about the roadway, and information collected from connected vehicles. The collected environmental information is monitored and presented to the operator. This information can be used to issue general traveler advisories and support location specific warnings to drivers.	No	3	The center shall assimilate current and forecast road conditions and surface weather information using a combination of weather service provider information (such as the National Weather Service and value-added sector specific meteorological services), data from roadway maintenance operations, and environmental data collected from sensors deployed on and about the roadway.	Planned	No

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ADOT TOC and EMC	Traffic Management Center	TMC Environmental Monitoring	TMC Environmental Monitoring' assimilates current and forecast road conditions and surface weather information using a combination of weather service provider information, information collected by other centers such as the Maintenance and Construction Management Center, data collected from environmental sensors deployed on and about the roadway, and information collected from connected vehicles. The collected environmental information is monitored and presented to the operator. This information can be used to issue general traveler advisories and support location specific warnings to drivers.	No	4	The center shall be able to receive road condition information from weather service providers.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Evacuation Support	TMC Evacuation Support' supports development, coordination, and execution of special traffic management strategies during evacuation and subsequent reentry of a population in the vicinity of a disaster or major emergency. A traffic management strategy is developed based on anticipated demand, the capacity of the road network including access to and from the evacuation routes, and existing and forecast conditions. The strategy supports efficient evacuation and also protects and optimizes movement of response vehicles and other resources that are responding to the emergency.	No	1	The center shall coordinate planning for evacuation with emergency management centers - including pre-planning activities such as establishing routes, areas to be evacuated, timing, etc.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Evacuation Support	TMC Evacuation Support' supports development, coordination, and execution of special traffic management strategies during evacuation and subsequent reentry of a population in the vicinity of a disaster or major emergency. A traffic management strategy is developed based on anticipated demand, the capacity of the road network including access to and from the evacuation routes, and existing and forecast conditions. The strategy supports efficient evacuation and also protects and optimizes movement of response vehicles and other resources that are responding to the emergency.	No	2	The center shall support requests from emergency management centers to preempt the current traffic control strategy, activate traffic control and closure systems such as gates and barriers, activate safeguard systems, or use driver information systems to support evacuation traffic control plans.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Evacuation Support	TMC Evacuation Support' supports development, coordination, and execution of special traffic management strategies during evacuation and subsequent reentry of a population in the vicinity of a disaster or major emergency. A traffic management strategy is developed based on anticipated demand, the capacity of the road network including access to and from the evacuation routes, and existing and forecast conditions. The strategy supports efficient evacuation and also protects and optimizes movement of response vehicles and other resources that are responding to the emergency.	No	3	The center shall coordinate evacuation information and controls with other traffic management centers.	Planned	No

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ADOT TOC and EMC	Traffic Management Center	TMC Evacuation Support	TMC Evacuation Support' supports development, coordination, and execution of special traffic management strategies during evacuation and subsequent reentry of a population in the vicinity of a disaster or major emergency. A traffic management strategy is developed based on anticipated demand, the capacity of the road network including access to and from the evacuation routes, and existing and forecast conditions. The strategy supports efficient evacuation and also protects and optimizes movement of response vehicles and other resources that are responding to the emergency.	No	4	The center shall coordinate execution of evacuation strategies with emergency management centers - including activities such as setting closures and detours, establishing routes, updating areas to be evacuated, timing the process, etc.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Incident Detection	TMC Incident Detection' identifies and reports incidents to Traffic Operations Personnel. It remotely monitors and controls traffic sensor and surveillance systems that support incident detection and verification. It analyzes and reduces the collected sensor and surveillance data, external alerting and advisory and incident reporting systems, anticipated demand information from intermodal freight depots, border crossings, special event information, and identifies and reports incidents and hazardous conditions	No	1	The center shall receive inputs from the Alerting and Advisory System concerning the possibility or occurrence of severe weather, terrorist activity, or other major emergency, including information provided by the Emergency Alert System.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Incident Detection	TMC Incident Detection' identifies and reports incidents to Traffic Operations Personnel. It remotely monitors and controls traffic sensor and surveillance systems that support incident detection and verification. It analyzes and reduces the collected sensor and surveillance data, external alerting and advisory and incident reporting systems, anticipated demand information from intermodal freight depots, border crossings, special event information, and identifies and reports incidents and hazardous conditions	No	2	The center shall collect and store traffic flow and image data from the field equipment to detect and verify incidents.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Incident Detection	TMC Incident Detection' identifies and reports incidents to Traffic Operations Personnel. It remotely monitors and controls traffic sensor and surveillance systems that support incident detection and verification. It analyzes and reduces the collected sensor and surveillance data, external alerting and advisory and incident reporting systems, anticipated demand information from intermodal freight depots, border crossings, special event information, and identifies and reports incidents and hazardous conditions	No	3	The center shall receive inputs concerning upcoming events that would effect the traffic network from event promoters and traveler information service providers.	Planned	No

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ADOT TOC and EMC	Traffic Management Center	TMC Incident Detection	TMC Incident Detection' identifies and reports incidents to Traffic Operations Personnel. It remotely monitors and controls traffic sensor and surveillance systems that support incident detection and verification. It analyzes and reduces the collected sensor and surveillance data, external alerting and advisory and incident reporting systems, anticipated demand information from intermodal freight depots, border crossings, special event information, and identifies and reports incidents and hazardous conditions	No	6	The center shall provide road network conditions and traffic images to emergency management centers to support the detection, verification, and classification of incidents.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Incident Detection	TMC Incident Detection' identifies and reports incidents to Traffic Operations Personnel. It remotely monitors and controls traffic sensor and surveillance systems that support incident detection and verification. It analyzes and reduces the collected sensor and surveillance data, external alerting and advisory and incident reporting systems, anticipated demand information from intermodal freight depots, border crossings, special event information, and identifies and reports incidents and hazardous conditions	No	7	The center shall provide video and traffic sensor control commands to the field equipment to detect and verify incidents.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Incident Dispatch Coordination	TMC Incident Dispatch Coordination' formulates and manages an incident response that takes into account the incident potential, incident impacts, and resources required for incident management. It provides information to support dispatch and routing of emergency response and service vehicles as well as coordination with other cooperating agencies. It provides access to traffic management resources that provide surveillance of the incident, traffic control in the surrounding area, and support for the incident response. It monitors the incident response and collects performance measures such as incident response and clearance times.	No	1	The center shall exchange alert information and status with emergency management centers. The information includes notification of a major emergency such as a natural or man-made disaster, civil emergency, or child abduction for distribution to the public. The information may include the alert originator, the nature of the emergency, the geographic area affected by the emergency, the effective time period, and information and instructions necessary for the public to respond to the alert. This may also identify specific information that should not be released to the public.	Planned	No

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ADOT TOC and EMC	Traffic Management Center	TMC Incident Dispatch Coordination	TMC Incident Dispatch Coordination' formulates and manages an incident response that takes into account the incident potential, incident impacts, and resources required for incident management. It provides information to support dispatch and routing of emergency response and service vehicles as well as coordination with other cooperating agencies. It provides access to traffic management resources that provide surveillance of the incident, traffic control in the surrounding area, and support for the incident response. It monitors the incident response and collects performance measures such as incident response and clearance times.	No	2	The center shall coordinate planning for incidents with emergency management centers - including pre-planning activities for disaster response, evacuation, and recovery operations.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Incident Dispatch Coordination	TMC Incident Dispatch Coordination' formulates and manages an incident response that takes into account the incident potential, incident impacts, and resources required for incident management. It provides information to support dispatch and routing of emergency response and service vehicles as well as coordination with other cooperating agencies. It provides access to traffic management resources that provide surveillance of the incident, traffic control in the surrounding area, and support for the incident response. It monitors the incident response and collects performance measures such as incident response and clearance times.	No	3	The center shall support requests from emergency management centers to remotely control sensor and surveillance equipment located in the field, provide special routing for emergency vehicles, and to provide responding emergency vehicles with signal preemption.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Incident Dispatch Coordination	TMC Incident Dispatch Coordination' formulates and manages an incident response that takes into account the incident potential, incident impacts, and resources required for incident management. It provides information to support dispatch and routing of emergency response and service vehicles as well as coordination with other cooperating agencies. It provides access to traffic management resources that provide surveillance of the incident, traffic control in the surrounding area, and support for the incident response. It monitors the incident response and collects performance measures such as incident response and clearance times.	No	9	The center shall exchange road network status assessment information with emergency management and maintenance centers including an assessment of damage sustained by the road network including location and extent of the damage, estimate of remaining capacity, required closures, alternate routes, necessary restrictions, and time frame for repair and recovery.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT TOC and EMC	Traffic Management Center	TMC Incident Dispatch Coordination	TMC Incident Dispatch Coordination' formulates and manages an incident response that takes into account the incident potential, incident impacts, and resources required for incident management. It provides information to support dispatch and routing of emergency response and service vehicles as well as coordination with other cooperating agencies. It provides access to traffic management resources that provide surveillance of the incident, traffic control in the surrounding area, and support for the incident response. It monitors the incident response and collects performance measures such as incident response and clearance times.	No	10	The center shall coordinate information and controls with other traffic management centers.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Incident Dispatch Coordination	TMC Incident Dispatch Coordination' formulates and manages an incident response that takes into account the incident potential, incident impacts, and resources required for incident management. It provides information to support dispatch and routing of emergency response and service vehicles as well as coordination with other cooperating agencies. It provides access to traffic management resources that provide surveillance of the incident, traffic control in the surrounding area, and support for the incident response. It monitors the incident response and collects performance measures such as incident response and clearance times.	No	11	The center shall receive inputs from emergency management and transit management centers to develop an overall status of the transportation system including emergency transit schedules in effect and current status and condition of the transportation infrastructure.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Lighting System Control	TMC Lighting System Control' provides the capability for traffic managers to monitor and manage the electrical lighting systems along the roadside. This capability includes implementing control plans for lighting systems that may be activated by time-of-day plans or by activating changes to the lighting based on traffic or incidents.	No	1	The traffic management center shall remotely control electrical lighting systems.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Lighting System Control	TMC Lighting System Control' provides the capability for traffic managers to monitor and manage the electrical lighting systems along the roadside. This capability includes implementing control plans for lighting systems that may be activated by time-of-day plans or by activating changes to the lighting based on traffic or incidents.	No	2	The traffic management center shall collect lighting system operational status from the field and compare against the control information sent by the center.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Lighting System Control	TMC Lighting System Control' provides the capability for traffic managers to monitor and manage the electrical lighting systems along the roadside. This capability includes implementing control plans for lighting systems that may be activated by time-of-day plans or by activating changes to the lighting based on traffic or incidents.	No	3	The traffic management center shall collect lighting system fault data from the field and send to the maintenance center for repair.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT TOC and EMC	Traffic Management Center	TMC Regional Traffic Management	TMC Regional Traffic Management' supports coordination between Traffic Management Centers in order to share traffic information between centers as well as control of traffic management field equipment. This coordination supports wide area optimization and regional coordination that spans jurisdictional boundaries; for example, coordinated signal control in a metropolitan area or coordination between freeway operations and arterial signal control within a corridor.	No	1	The center shall exchange traffic information with other traffic management centers including incident information, congestion data, traffic data, signal timing plans, and real-time signal control information.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Regional Traffic Management	TMC Regional Traffic Management' supports coordination between Traffic Management Centers in order to share traffic information between centers as well as control of traffic management field equipment. This coordination supports wide area optimization and regional coordination that spans jurisdictional boundaries; for example, coordinated signal control in a metropolitan area or coordination between freeway operations and arterial signal control within a corridor.	No	2	The center shall exchange traffic control information with other traffic management centers to support remote monitoring and control of traffic management devices (e.g. signs, sensors, signals, cameras, etc.).	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Roadway Equipment Monitoring	TMC Roadway Equipment Monitoring' monitors the operational status of field equipment and detects failures. It presents field equipment status to Traffic Operations Personnel and reports failures to the Maintenance and Construction Management Center. It tracks the repair or replacement of the failed equipment. The entire range of ITS field equipment may be monitored including sensors (traffic, infrastructure, environmental, security, speed, etc.) and devices (highway advisory radio, dynamic message signs, automated roadway treatment systems, barrier and safeguard systems, cameras, traffic signals and override equipment, ramp meters, beacons, security surveillance equipment, etc.).	No	1	The center shall collect and store sensor (traffic, pedestrian, multimodal crossing) operational status.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Roadway Equipment Monitoring	TMC Roadway Equipment Monitoring' monitors the operational status of field equipment and detects failures. It presents field equipment status to Traffic Operations Personnel and reports failures to the Maintenance and Construction Management Center. It tracks the repair or replacement of the failed equipment. The entire range of ITS field equipment may be monitored including sensors (traffic, infrastructure, environmental, security, speed, etc.) and devices (highway advisory radio, dynamic message signs, automated roadway treatment systems, barrier and safeguard systems, cameras, traffic signals and override equipment, ramp meters, beacons, security surveillance equipment, etc.).	No	2	The center shall collect and store CCTV surveillance system (traffic, pedestrian) operational status.	Planned	No

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ADOT TOC and EMC	Traffic Management Center	TMC Roadway Equipment Monitoring	TMC Roadway Equipment Monitoring' monitors the operational status of field equipment and detects failures. It presents field equipment status to Traffic Operations Personnel and reports failures to the Maintenance and Construction Management Center. It tracks the repair or replacement of the failed equipment. The entire range of ITS field equipment may be monitored including sensors (traffic, infrastructure, environmental, security, speed, etc.) and devices (highway advisory radio, dynamic message signs, automated roadway treatment systems, barrier and safeguard systems, cameras, traffic signals and override equipment, ramp meters, beacons, security surveillance equipment, etc.).	No	3	The center shall collect and store sensor (traffic, pedestrian, multimodal crossing) fault data and send to the maintenance center for repair.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Roadway Equipment Monitoring	TMC Roadway Equipment Monitoring' monitors the operational status of field equipment and detects failures. It presents field equipment status to Traffic Operations Personnel and reports failures to the Maintenance and Construction Management Center. It tracks the repair or replacement of the failed equipment. The entire range of ITS field equipment may be monitored including sensors (traffic, infrastructure, environmental, security, speed, etc.) and devices (highway advisory radio, dynamic message signs, automated roadway treatment systems, barrier and safeguard systems, cameras, traffic signals and override equipment, ramp meters, beacons, security surveillance equipment, etc.).	No	4	The center shall collect and store CCTV surveillance system (traffic, pedestrian) fault data send to the maintenance center for repair.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Roadway Equipment Monitoring	TMC Roadway Equipment Monitoring' monitors the operational status of field equipment and detects failures. It presents field equipment status to Traffic Operations Personnel and reports failures to the Maintenance and Construction Management Center. It tracks the repair or replacement of the failed equipment. The entire range of ITS field equipment may be monitored including sensors (traffic, infrastructure, environmental, security, speed, etc.) and devices (highway advisory radio, dynamic message signs, automated roadway treatment systems, barrier and safeguard systems, cameras, traffic signals and override equipment, ramp meters, beacons, security surveillance equipment, etc.).	No	5	The center shall collect environmental sensor operational status.	Planned	No

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ADOT TOC and EMC	Traffic Management Center	TMC Roadway Equipment Monitoring	TMC Roadway Equipment Monitoring' monitors the operational status of field equipment and detects failures. It presents field equipment status to Traffic Operations Personnel and reports failures to the Maintenance and Construction Management Center. It tracks the repair or replacement of the failed equipment. The entire range of ITS field equipment may be monitored including sensors (traffic, infrastructure, environmental, security, speed, etc.) and devices (highway advisory radio, dynamic message signs, automated roadway treatment systems, barrier and safeguard systems, cameras, traffic signals and override equipment, ramp meters, beacons, security surveillance equipment, etc.).	No	6	The center shall collect environmental sensor equipment fault data and send to the maintenance center for repair.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Roadway Warning	TMC Roadway Warning' remotely monitors and controls the systems used to warn drivers approaching hazards on a roadway. It monitors data on roadway conditions from sensors in the field and generates warnings in response to roadway weather conditions, road surface conditions, traffic conditions including queues, obstacles or animals in the roadway, and any other transient events that can be sensed.	No	1	The center shall monitor data on traffic, environmental conditions, and other hazards collected from sensors along the roadway.	Existing	No
ADOT TOC and EMC	Traffic Management Center	TMC Roadway Warning	TMC Roadway Warning' remotely monitors and controls the systems used to warn drivers approaching hazards on a roadway. It monitors data on roadway conditions from sensors in the field and generates warnings in response to roadway weather conditions, road surface conditions, traffic conditions including queues, obstacles or animals in the roadway, and any other transient events that can be sensed.	No	2	The center shall identify hazardous road weather and surface conditions.	Existing	No
ADOT TOC and EMC	Traffic Management Center	TMC Roadway Warning	TMC Roadway Warning' remotely monitors and controls the systems used to warn drivers approaching hazards on a roadway. It monitors data on roadway conditions from sensors in the field and generates warnings in response to roadway weather conditions, road surface conditions, traffic conditions including queues, obstacles or animals in the roadway, and any other transient events that can be sensed.	No	3	The center shall identify hazardous traffic conditions including queues.	Existing	No
ADOT TOC and EMC	Traffic Management Center	TMC Roadway Warning	TMC Roadway Warning' remotely monitors and controls the systems used to warn drivers approaching hazards on a roadway. It monitors data on roadway conditions from sensors in the field and generates warnings in response to roadway weather conditions, road surface conditions, traffic conditions including queues, obstacles or animals in the roadway, and any other transient events that can be sensed.	No	4	The center shall identify debris, animals, or other encroachment on the roadway dangerous to approaching motorists.	Planned	No

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ADOT TOC and EMC	Traffic Management Center	TMC Roadway Warning	TMC Roadway Warning' remotely monitors and controls the systems used to warn drivers approaching hazards on a roadway. It monitors data on roadway conditions from sensors in the field and generates warnings in response to roadway weather conditions, road surface conditions, traffic conditions including queues, obstacles or animals in the roadway, and any other transient events that can be sensed.	No	5	The center shall issue control commands to field equipment warning drivers approaching the identified hazardous conditions.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Roadway Warning	TMC Roadway Warning' remotely monitors and controls the systems used to warn drivers approaching hazards on a roadway. It monitors data on roadway conditions from sensors in the field and generates warnings in response to roadway weather conditions, road surface conditions, traffic conditions including queues, obstacles or animals in the roadway, and any other transient events that can be sensed.	No	6	The center shall monitor the operational status of the dynamic warning equipment, including fault reports.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Safeguard System Management	TMC Safeguard System Management' remotely monitors and controls safeguard systems for transportation facilities and infrastructure. Safeguard systems include blast shielding, exhaust systems and other automatic or remotely controlled systems intended to mitigate the impact of an incident. When access to a transportation facility is impacted by the activation of a safeguard system, impacted systems and travelers are notified.	No	1	The center shall remotely control safeguard systems, equipment used to mitigate the impact of incidents on transportation infrastructure (e.g., blast shields, tunnel exhaust systems, etc.)	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Safeguard System Management	TMC Safeguard System Management' remotely monitors and controls safeguard systems for transportation facilities and infrastructure. Safeguard systems include blast shielding, exhaust systems and other automatic or remotely controlled systems intended to mitigate the impact of an incident. When access to a transportation facility is impacted by the activation of a safeguard system, impacted systems and travelers are notified.	No	2	The center shall accept requests for safeguard system activation from other centers and from center personnel to support emergency response.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Safeguard System Management	TMC Safeguard System Management' remotely monitors and controls safeguard systems for transportation facilities and infrastructure. Safeguard systems include blast shielding, exhaust systems and other automatic or remotely controlled systems intended to mitigate the impact of an incident. When access to a transportation facility is impacted by the activation of a safeguard system, impacted systems and travelers are notified.	No	3	The center shall collect safeguard system operational status.	Planned	No

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ADOT TOC and EMC	Traffic Management Center	TMC Safeguard System Management	TMC Safeguard System Management' remotely monitors and controls safeguard systems for transportation facilities and infrastructure. Safeguard systems include blast shielding, exhaust systems and other automatic or remotely controlled systems intended to mitigate the impact of an incident. When access to a transportation facility is impacted by the activation of a safeguard system, impacted systems and travelers are notified.	No	4	The center shall collect safeguard system fault data and send to the maintenance center for repair.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Service Patrol Management	TMC Service Patrol Management' supports dispatch and communication with service patrol vehicles that monitor roads to aid motorists, offering rapid response to minor incidents.	No	1	The center shall dispatch roadway service patrol vehicles to identified incident locations.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Service Patrol Management	TMC Service Patrol Management' supports dispatch and communication with service patrol vehicles that monitor roads to aid motorists, offering rapid response to minor incidents.	No	2	The center shall store the current status of all service patrol vehicles available for dispatch and those that have been dispatched.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Service Patrol Management	TMC Service Patrol Management' supports dispatch and communication with service patrol vehicles that monitor roads to aid motorists, offering rapid response to minor incidents.	No	3	The center shall share incident information collected by the service patrol with traffic, maintenance and construction, and traveler information centers for incident management, incident notification to travelers, and incident cleanup.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Service Patrol Management	TMC Service Patrol Management' supports dispatch and communication with service patrol vehicles that monitor roads to aid motorists, offering rapid response to minor incidents.	No	4	The center shall track the location and status of service patrol vehicles.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Signal Control	TMC Signal Control' provides the capability for traffic managers to monitor and manage the traffic flow at signalized intersections. This capability includes analyzing and reducing the collected data from traffic surveillance equipment and developing and implementing control plans for signalized intersections. Control plans may be developed and implemented that coordinate signals at many intersections under the domain of a single Traffic Management Center and are responsive to traffic conditions and adapt to support incidents, preemption and priority requests, pedestrian crossing calls, etc.	No	1	The center shall remotely control traffic signal controllers.	Existing	No

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ADOT TOC and EMC	Traffic Management Center	TMC Signal Control	TMC Signal Control' provides the capability for traffic managers to monitor and manage the traffic flow at signalized intersections. This capability includes analyzing and reducing the collected data from traffic surveillance equipment and developing and implementing control plans for signalized intersections. Control plans may be developed and implemented that coordinate signals at many intersections under the domain of a single Traffic Management Center and are responsive to traffic conditions and adapt to support incidents, preemption and priority requests, pedestrian crossing calls, etc.	No	2	The center shall accept notifications of pedestrian calls.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Signal Control	TMC Signal Control' provides the capability for traffic managers to monitor and manage the traffic flow at signalized intersections. This capability includes analyzing and reducing the collected data from traffic surveillance equipment and developing and implementing control plans for signalized intersections. Control plans may be developed and implemented that coordinate signals at many intersections under the domain of a single Traffic Management Center and are responsive to traffic conditions and adapt to support incidents, preemption and priority requests, pedestrian crossing calls, etc.	No	3	The center shall collect traffic signal controller operational status and compare against the control information sent by the center.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Signal Control	TMC Signal Control' provides the capability for traffic managers to monitor and manage the traffic flow at signalized intersections. This capability includes analyzing and reducing the collected data from traffic surveillance equipment and developing and implementing control plans for signalized intersections. Control plans may be developed and implemented that coordinate signals at many intersections under the domain of a single Traffic Management Center and are responsive to traffic conditions and adapt to support incidents, preemption and priority requests, pedestrian crossing calls, etc.	No	4	The center shall collect traffic signal controller fault data from the field.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Signal Control	TMC Signal Control' provides the capability for traffic managers to monitor and manage the traffic flow at signalized intersections. This capability includes analyzing and reducing the collected data from traffic surveillance equipment and developing and implementing control plans for signalized intersections. Control plans may be developed and implemented that coordinate signals at many intersections under the domain of a single Traffic Management Center and are responsive to traffic conditions and adapt to support incidents, preemption and priority requests, pedestrian crossing calls, etc.	No	5	The center shall manage (define, store and modify) control plans to coordinate signalized intersections, to be engaged at the direction of center personnel or according to a daily schedule.	Planned	No

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ADOT TOC and EMC	Traffic Management Center	TMC Signal Control	TMC Signal Control' provides the capability for traffic managers to monitor and manage the traffic flow at signalized intersections. This capability includes analyzing and reducing the collected data from traffic surveillance equipment and developing and implementing control plans for signalized intersections. Control plans may be developed and implemented that coordinate signals at many intersections under the domain of a single Traffic Management Center and are responsive to traffic conditions and adapt to support incidents, preemption and priority requests, pedestrian crossing calls, etc.	No	6	The center shall implement control plans to coordinate signalized intersections based on data from sensors.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Signal Control	TMC Signal Control' provides the capability for traffic managers to monitor and manage the traffic flow at signalized intersections. This capability includes analyzing and reducing the collected data from traffic surveillance equipment and developing and implementing control plans for signalized intersections. Control plans may be developed and implemented that coordinate signals at many intersections under the domain of a single Traffic Management Center and are responsive to traffic conditions and adapt to support incidents, preemption and priority requests, pedestrian crossing calls, etc.	No	7	The center shall manage boundaries of the control sections used within the signal system.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Signal Control	TMC Signal Control' provides the capability for traffic managers to monitor and manage the traffic flow at signalized intersections. This capability includes analyzing and reducing the collected data from traffic surveillance equipment and developing and implementing control plans for signalized intersections. Control plans may be developed and implemented that coordinate signals at many intersections under the domain of a single Traffic Management Center and are responsive to traffic conditions and adapt to support incidents, preemption and priority requests, pedestrian crossing calls, etc.	No	8	The center shall maintain traffic signal coordination including synchronizing clocks throughout the system.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Standard Rail Crossing Management	TMC Standard Rail Crossing Management' monitors and controls rail crossing traffic control equipment. This version provides basic support for standard active warning systems at grade crossings. It remotely monitors and reports the status of the rail crossing equipment and sends control plan updates to the equipment.	No				No

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ADOT TOC and EMC	Traffic Management Center	TMC Traffic Information Dissemination	TMC Traffic Information Dissemination' disseminates traffic and road conditions, closure and detour information, incident information, driver advisories, and other traffic-related data to other centers, the media, and driver information systems. It monitors and controls driver information system field equipment including dynamic message signs and highway advisory radio, managing dissemination of driver information through these systems.	No	1	The center shall remotely control dynamic messages signs for dissemination of traffic and other information to drivers.	Existing	No
ADOT TOC and EMC	Traffic Management Center	TMC Traffic Information Dissemination	TMC Traffic Information Dissemination' disseminates traffic and road conditions, closure and detour information, incident information, driver advisories, and other traffic-related data to other centers, the media, and driver information systems. It monitors and controls driver information system field equipment including dynamic message signs and highway advisory radio, managing dissemination of driver information through these systems.	No	2	The center shall remotely control driver information systems that communicate directly from a center to the vehicle radio (such as Highway Advisory Radios) for dissemination of traffic and other information to drivers.	Existing	No
ADOT TOC and EMC	Traffic Management Center	TMC Traffic Information Dissemination	TMC Traffic Information Dissemination' disseminates traffic and road conditions, closure and detour information, incident information, driver advisories, and other traffic-related data to other centers, the media, and driver information systems. It monitors and controls driver information system field equipment including dynamic message signs and highway advisory radio, managing dissemination of driver information through these systems.	No	3	The center shall collect operational status for the driver information systems equipment (DMS, HAR, etc.).	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Traffic Information Dissemination	TMC Traffic Information Dissemination' disseminates traffic and road conditions, closure and detour information, incident information, driver advisories, and other traffic-related data to other centers, the media, and driver information systems. It monitors and controls driver information system field equipment including dynamic message signs and highway advisory radio, managing dissemination of driver information through these systems.	No	4	The center shall collect fault data for the driver information systems equipment (DMS, HAR, etc.) for repair.	Existing	No
ADOT TOC and EMC	Traffic Management Center	TMC Traffic Information Dissemination	TMC Traffic Information Dissemination' disseminates traffic and road conditions, closure and detour information, incident information, driver advisories, and other traffic-related data to other centers, the media, and driver information systems. It monitors and controls driver information system field equipment including dynamic message signs and highway advisory radio, managing dissemination of driver information through these systems.	No	5	The center shall retrieve locally stored traffic information, including current and forecasted traffic information, road and weather conditions, traffic incident information, information on diversions and alternate routes, closures, and special traffic restrictions (lane/shoulder use, weight restrictions, width restrictions, HOV requirements), and the definition of the road network itself.	Existing	No

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ADOT TOC and EMC	Traffic Management Center	TMC Traffic Information Dissemination	TMC Traffic Information Dissemination' disseminates traffic and road conditions, closure and detour information, incident information, driver advisories, and other traffic-related data to other centers, the media, and driver information systems. It monitors and controls driver information system field equipment including dynamic message signs and highway advisory radio, managing dissemination of driver information through these systems.	No	6	The center shall distribute traffic data to maintenance and construction centers, transit centers, emergency management centers, parking facilities, and traveler information providers.	Existing	No
ADOT TOC and EMC	Traffic Management Center	TMC Traffic Information Dissemination	TMC Traffic Information Dissemination' disseminates traffic and road conditions, closure and detour information, incident information, driver advisories, and other traffic-related data to other centers, the media, and driver information systems. It monitors and controls driver information system field equipment including dynamic message signs and highway advisory radio, managing dissemination of driver information through these systems.	No	7	The center shall distribute traffic data to the media.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Traffic Information Dissemination	TMC Traffic Information Dissemination' disseminates traffic and road conditions, closure and detour information, incident information, driver advisories, and other traffic-related data to other centers, the media, and driver information systems. It monitors and controls driver information system field equipment including dynamic message signs and highway advisory radio, managing dissemination of driver information through these systems.	No	8	The center shall provide the capability for center personnel to control the nature of the data that is available to non-traffic operations centers and the media.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Traffic Metering	TMC Traffic Metering' provides center monitoring and control of traffic metering systems including on ramps, through interchanges, and on the mainline roadway. All types of metering are covered including pre-timed/fixed time, time-based, dynamic and adaptive metering strategies and special bypasses. Metering rates can be calculated based upon historical data or current conditions including traffic, air quality, etc.	No	1	The center shall remotely control systems to manage use of the freeways, including ramp, interchange, and mainline metering.	Existing	No
ADOT TOC and EMC	Traffic Management Center	TMC Traffic Metering	TMC Traffic Metering' provides center monitoring and control of traffic metering systems including on ramps, through interchanges, and on the mainline roadway. All types of metering are covered including pre-timed/fixed time, time-based, dynamic and adaptive metering strategies and special bypasses. Metering rates can be calculated based upon historical data or current conditions including traffic, air quality, etc.	No	2	The center shall collect operational status from ramp meters, interchange meters, and mainline meters and compare against the control information sent by the center.	Existing	No

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ADOT TOC and EMC	Traffic Management Center	TMC Traffic Metering	TMC Traffic Metering' provides center monitoring and control of traffic metering systems including on ramps, through interchanges, and on the mainline roadway. All types of metering are covered including pre-timed/fixed time, time-based, dynamic and adaptive metering strategies and special bypasses. Metering rates can be calculated based upon historical data or current conditions including traffic, air quality, etc.	No	3	The center shall collect fault data from ramp meters, interchange meters, and mainline meters.	Existing	No
ADOT TOC and EMC	Traffic Management Center	TMC Traffic Metering	TMC Traffic Metering' provides center monitoring and control of traffic metering systems including on ramps, through interchanges, and on the mainline roadway. All types of metering are covered including pre-timed/fixed time, time-based, dynamic and adaptive metering strategies and special bypasses. Metering rates can be calculated based upon historical data or current conditions including traffic, air quality, etc.	No	4	The center shall implement control strategies, under control of center personnel, on some or all of the freeway network devices (e.g. ramp meters, interchange meters, and mainline meters), based on data from sensors monitoring traffic conditions upstream, downstream, and queue data on the approaches to the meters.	Existing	No
ADOT TOC and EMC	Traffic Management Center	TMC Variable Speed Limits	TMC Variable Speed Limits' provides center monitoring and control of variable speed limits systems. It monitors data on traffic and environmental conditions collected from sensors along the roadway. Based on the measured data, it calculates and sets suitable speed limits usually by lane. It controls equipment that posts the current speed limits and displays additional information such as basic safety rules and current traffic information to drivers.	No	1	The center shall monitor data on traffic and environmental conditions collected from sensors along the roadway.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Variable Speed Limits	TMC Variable Speed Limits' provides center monitoring and control of variable speed limits systems. It monitors data on traffic and environmental conditions collected from sensors along the roadway. Based on the measured data, it calculates and sets suitable speed limits usually by lane. It controls equipment that posts the current speed limits and displays additional information such as basic safety rules and current traffic information to drivers.	No	2	Based on the measured data, the center shall calculate and set suitable speed limits by lane.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Variable Speed Limits	TMC Variable Speed Limits' provides center monitoring and control of variable speed limits systems. It monitors data on traffic and environmental conditions collected from sensors along the roadway. Based on the measured data, it calculates and sets suitable speed limits usually by lane. It controls equipment that posts the current speed limits and displays additional information such as basic safety rules and current traffic information to drivers.	No	3	The center shall control field equipment that posts the current speed limits and displays additional information such as basic safety rules and current traffic information to drivers.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT TOC and EMC	Traffic Management Center	TMC Variable Speed Limits	TMC Variable Speed Limits' provides center monitoring and control of variable speed limits systems. It monitors data on traffic and environmental conditions collected from sensors along the roadway. Based on the measured data, it calculates and sets suitable speed limits usually by lane. It controls equipment that posts the current speed limits and displays additional information such as basic safety rules and current traffic information to drivers.	No	4	The center shall monitor the operational status of the variable speed limit equipment, including fault reports.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Variable Speed Limits	TMC Variable Speed Limits' provides center monitoring and control of variable speed limits systems. It monitors data on traffic and environmental conditions collected from sensors along the roadway. Based on the measured data, it calculates and sets suitable speed limits usually by lane. It controls equipment that posts the current speed limits and displays additional information such as basic safety rules and current traffic information to drivers.	No	5	The center shall provide center personnel current system status and respond to control data from center personnel regarding variable speed limits.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Work Zone Traffic Management	TMC Work Zone Traffic Management' coordinates work plans with maintenance systems so that work zones are established that have minimum traffic impact. Traffic control strategies are implemented to further mitigate traffic impacts associated with work zones that are established, providing work zone information to driver information systems such as dynamic message signs.	No	1	The center shall receive work zone images from a maintenance center.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Work Zone Traffic Management	TMC Work Zone Traffic Management' coordinates work plans with maintenance systems so that work zones are established that have minimum traffic impact. Traffic control strategies are implemented to further mitigate traffic impacts associated with work zones that are established, providing work zone information to driver information systems such as dynamic message signs.	No	2	The center shall analyze work zone images for indications of a possible incident.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Work Zone Traffic Management	TMC Work Zone Traffic Management' coordinates work plans with maintenance systems so that work zones are established that have minimum traffic impact. Traffic control strategies are implemented to further mitigate traffic impacts associated with work zones that are established, providing work zone information to driver information systems such as dynamic message signs.	No	3	The center shall remotely control driver information systems (such as dynamic messages signs, highway advisory radios) to advise drivers of activity around a work zone.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Work Zone Traffic Management	TMC Work Zone Traffic Management' coordinates work plans with maintenance systems so that work zones are established that have minimum traffic impact. Traffic control strategies are implemented to further mitigate traffic impacts associated with work zones that are established, providing work zone information to driver information systems such as dynamic message signs.	No	4	The center shall collect operational status for the driver information systems equipment in work zones.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT TOC and EMC	Traffic Management Center	TMC Work Zone Traffic Management	TMC Work Zone Traffic Management' coordinates work plans with maintenance systems so that work zones are established that have minimum traffic impact. Traffic control strategies are implemented to further mitigate traffic impacts associated with work zones that are established, providing work zone information to driver information systems such as dynamic message signs.	No	5	The center shall collect fault data for the driver information systems equipment in work zones for repair.	Planned	No
ADOT TOC and EMC	Traffic Management Center	TMC Work Zone Traffic Management	TMC Work Zone Traffic Management' coordinates work plans with maintenance systems so that work zones are established that have minimum traffic impact. Traffic control strategies are implemented to further mitigate traffic impacts associated with work zones that are established, providing work zone information to driver information systems such as dynamic message signs.	No	6	The center shall receive proposed maintenance and construction work plans, analyze the activity as a possible incident, and provide work plan feedback to the sending center.	Planned	No
ADOT TOC Data Archive	Archived Data System			No				No
ADOT TOC Data User System	Archived Data User System			No				No
ADOT TOC Traffic Information Center	Transportation Information Center			No				No
ADOT WIM Stations	Commercial Vehicle Check Equipment	CVCE Weigh-In-Motion	CVCE Weigh-In-Motion' measures and records axle weights and gross vehicle weight without requiring the vehicle to come to a stop. Both permanent and portable installations are supported and may be performed in conjunction with electronic clearance or as a separate application.	No	1	The roadside check facility equipment shall detect the presence of commercial vehicles and freight equipment approaching a facility.	Planned	No
ADOT WIM Stations	Commercial Vehicle Check Equipment	CVCE Weigh-In-Motion	CVCE Weigh-In-Motion' measures and records axle weights and gross vehicle weight without requiring the vehicle to come to a stop. Both permanent and portable installations are supported and may be performed in conjunction with electronic clearance or as a separate application.	No	2	The roadside check facility equipment shall request and input electronic screening data from the commercial vehicle's electronic tag data.	Planned	No
ADOT WIM Stations	Commercial Vehicle Check Equipment	CVCE Weigh-In-Motion	CVCE Weigh-In-Motion' measures and records axle weights and gross vehicle weight without requiring the vehicle to come to a stop. Both permanent and portable installations are supported and may be performed in conjunction with electronic clearance or as a separate application.	No	3	The roadside check facility equipment shall send a pass/pull-in notification to the commercial vehicle and its driver based on the information received from the vehicle and the measurements taken. The message may be sent to the on-board equipment in the commercial vehicle or transmitted to the driver using equipment such as dynamic message signs, red-green lights, flashing signs, etc.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
ADOT Wrong-Way Illuminated Signage	Other Connected Vehicle Roadside Equipment			No				No
ADOT Wrong-Way Illuminated Signage	Other ITS Roadway Equipment			No				No
Archive Data Users	Archived Data User System			No				No
ATTP Tribal Coordination Website	Transportation Information Center			No				No
AZTech RADS Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	1	The center shall collect data from centers.	Existing	No
AZTech RADS Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	2	The center shall collect data catalogs from one or more data sources. A catalog describes the data contained in the collection of archived data and may include descriptions of the schema or structure of the data, a description of the contents of the data; e.g., time range of entries, number of entries; or a sample of the data (e. g. a thumbnail).	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
AZTech RADS Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	3	The center shall store collected data in an information repository.	Existing	No
AZTech RADS Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	4	The center shall perform quality checks on collected data.	Planned	No
AZTech RADS Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	5	The center shall notify the system operator of errors related to data collection, analysis and archival.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
AZTech RADS Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	6	The center shall include capabilities for archive to archive coordination.	Planned	No
AZTech RADS Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	7	The center shall provide the capability to execute methods on the incoming data such as cleansing, summarizations, aggregations, or transformations applied to the data before it is stored in the archive.	Planned	No
AZTech RADS Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	8	The center shall collect data from data distribution systems and other data sources.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
AZTech RADS Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	9	The center shall respond to requests from the administrator interface function to manage center-sourced data collection.	Planned	No
AZTech RADS Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	10	The center shall respond to requests from the administrator interface function to manage the archive data.	Planned	No
AZTech RADS Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	11	The center shall respond to requests for archive data from archive data users (centers, field devices).	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
AZTech RADS Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	12	The center shall provide a mechanism for archive data users to request archive data by meta-data range.	Planned	No
AZTech RADS Data Archive	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	1	The center shall provide archive data to federal, state, and local government reporting systems.	Existing	No
AZTech RADS Data Archive	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	2	The center shall respond to requests for government report data.	Existing	No
AZTech RADS Data Archive	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	3	The center shall provide the capability to format data suitable for input into government reports.	Planned	No
AZTech RADS Data Archive	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	4	The center shall provide the applicable meta-data for any ITS archived data to satisfy government reporting system requests. Meta-data may include attributes that describe the source and quality of the data and the conditions surrounding the collection of the data.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
AZTech RADS Data Archive	Archived Data System	Archive Situation Data Archival	Archive Situation Data Archival' collects and archives traffic, roadway, and environmental information for use in off-line planning, research, and analysis. It controls and collects information directly from equipment at the roadside, reflecting the deployment of traffic detectors that are used primarily for traffic monitoring and planning purposes, rather than for traffic management. It also collects situation data from connected vehicles. The data collected, quality checks performed, and aggregation strategies are defined to support transportation system performance monitoring and management.	No	1	The center shall collect data from roadside devices.	Existing	No
AZTech RADS Data Archive	Archived Data System	Archive Situation Data Archival	Archive Situation Data Archival' collects and archives traffic, roadway, and environmental information for use in off-line planning, research, and analysis. It controls and collects information directly from equipment at the roadside, reflecting the deployment of traffic detectors that are used primarily for traffic monitoring and planning purposes, rather than for traffic management. It also collects situation data from connected vehicles. The data collected, quality checks performed, and aggregation strategies are defined to support transportation system performance monitoring and management.	No	2	The center shall respond to requests from the administrator interface function to manage field-sourced data collection.	Existing	No
AZTech RADS Data Archive	Archived Data System	Archive Situation Data Archival	Archive Situation Data Archival' collects and archives traffic, roadway, and environmental information for use in off-line planning, research, and analysis. It controls and collects information directly from equipment at the roadside, reflecting the deployment of traffic detectors that are used primarily for traffic monitoring and planning purposes, rather than for traffic management. It also collects situation data from connected vehicles. The data collected, quality checks performed, and aggregation strategies are defined to support transportation system performance monitoring and management.	No	3	The center shall provide the capability to adjust the collection of field-sourced data based on the statistical measures.	Planned	No
AZTech RADS Data Archive	Archived Data System	Archive Situation Data Archival	Archive Situation Data Archival' collects and archives traffic, roadway, and environmental information for use in off-line planning, research, and analysis. It controls and collects information directly from equipment at the roadside, reflecting the deployment of traffic detectors that are used primarily for traffic monitoring and planning purposes, rather than for traffic management. It also collects situation data from connected vehicles. The data collected, quality checks performed, and aggregation strategies are defined to support transportation system performance monitoring and management.	No	6	The center shall provide the capability to execute methods on the incoming field data such as aggregation and statistical measures before the data is stored in the archive.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
AZTech RADS Data Archive	Center	Center Data Collection	Center Data Collection' collects and stores information that is created in the course of center operations. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	1	The center shall collect transportation data such as traffic operational data, transit data, vehicle data, weather data, freight data, event logs, etc. and make it available for ITS Archives upon request.	Planned	No
AZTech RADS Data Archive	Traffic Management Center	TMC Basic Surveillance	TMC Basic Surveillance' remotely monitors and controls traffic sensor systems and surveillance (e.g., CCTV) equipment, and collects, processes and stores the collected traffic data. Current traffic information and other real-time transportation information is also collected from other centers. The collected information is provided to traffic operations personnel and made available to other centers.	No	1	The center shall monitor, analyze, and store traffic sensor data (speed, volume, occupancy) collected from field elements under remote control of the center.	Existing	No
AZTech RADS Data Archive	Traffic Management Center	TMC Basic Surveillance	TMC Basic Surveillance' remotely monitors and controls traffic sensor systems and surveillance (e.g., CCTV) equipment, and collects, processes and stores the collected traffic data. Current traffic information and other real-time transportation information is also collected from other centers. The collected information is provided to traffic operations personnel and made available to other centers.	No	2	The center shall monitor, analyze, and distribute traffic images from CCTV systems under remote control of the center.	Existing	No
AZTech RADS Data Archive	Traffic Management Center	TMC Basic Surveillance	TMC Basic Surveillance' remotely monitors and controls traffic sensor systems and surveillance (e.g., CCTV) equipment, and collects, processes and stores the collected traffic data. Current traffic information and other real-time transportation information is also collected from other centers. The collected information is provided to traffic operations personnel and made available to other centers.	No	3	The center shall monitor, analyze, and store multimodal crossing, high occupancy vehicle (HOV) and high occupancy toll (HOT) lane sensor data under remote control of the center.	Planned	No
AZTech RADS Data Archive	Traffic Management Center	TMC Basic Surveillance	TMC Basic Surveillance' remotely monitors and controls traffic sensor systems and surveillance (e.g., CCTV) equipment, and collects, processes and stores the collected traffic data. Current traffic information and other real-time transportation information is also collected from other centers. The collected information is provided to traffic operations personnel and made available to other centers.	No	4	The center shall distribute road network conditions data (raw or processed) based on collected and analyzed traffic sensor and surveillance data to other centers.	Planned	No
AZTech RADS Data Archive	Traffic Management Center	TMC Basic Surveillance	TMC Basic Surveillance' remotely monitors and controls traffic sensor systems and surveillance (e.g., CCTV) equipment, and collects, processes and stores the collected traffic data. Current traffic information and other real-time transportation information is also collected from other centers. The collected information is provided to traffic operations personnel and made available to other centers.	No	5	The center shall respond to control data from center personnel regarding sensor and surveillance data collection, analysis, storage, and distribution.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
AZTech RADS Data Archive	Traffic Management Center	TMC Basic Surveillance	TMC Basic Surveillance' remotely monitors and controls traffic sensor systems and surveillance (e.g., CCTV) equipment, and collects, processes and stores the collected traffic data. Current traffic information and other real-time transportation information is also collected from other centers. The collected information is provided to traffic operations personnel and made available to other centers.	No	6	The center shall maintain a database of surveillance equipment and sensors and associated data (including the roadway on which they are located, the type of data collected, and the ownership of each)	Planned	No
AZTech RADS Data Archive	Traffic Management Center	TMC Data Collection	TMC Data Collection' collects and stores information that is created in the course of traffic operations performed by the Traffic Management Center. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No				No
AZTech RADS Data User System	Archived Data User System			No				No
AZTech Regional Info System (ARIS)	Transportation Information Center			No				No
AZTech Traffic Ops Center	Other Traffic Management Centers			No				No
Basic Private Vehicle	Basic Vehicle			No				No
BIA Western Regional Website	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	1	The center shall collect, process, and store traffic and highway condition information, including incident information, detours and road closures, event information, recommended routes, and current speeds on specific routes.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
BIA Western Regional Website	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	3	The center shall collect, process, and store maintenance and construction information, including scheduled maintenance and construction work activities and work zone activities.	Planned	No
BIA Western Regional Website	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	4	The center shall collect, process, and store transit routes and schedules, transit transfer options, transit fares, and real-time schedule adherence information.	Planned	No
BIA Western Regional Website	Transportation Information Center	TIC Emergency Traveler Information	TIC Emergency Traveler Information' provides emergency information to the public, including wide-area alerts and evacuation information. It provides emergency alerts, information on evacuation zones and evacuation requirements, evacuation destinations and shelter information, available transportation modes, and traffic and road conditions at the origin, destination, and along the evacuation routes. In addition to general evacuation information, personalized information including tailored evacuation routes, service information, and estimated travel times is also provided based on traveler specified origin, destination, and route parameters. Updated information is provided throughout the evacuation and subsequent reentry as status changes and plans are adapted.	No	1	The center shall disseminate emergency evacuation information to the traveler interface systems, including evacuation zones, shelter information, available transportation modes, road closures and detours, changes to transit services, and traffic and road conditions at the origin, destination, and along the evacuation routes.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
BIA Western Regional Website	Transportation Information Center	TIC Emergency Traveler Information	TIC Emergency Traveler Information' provides emergency information to the public, including wide-area alerts and evacuation information. It provides emergency alerts, information on evacuation zones and evacuation requirements, evacuation destinations and shelter information, available transportation modes, and traffic and road conditions at the origin, destination, and along the evacuation routes. In addition to general evacuation information, personalized information including tailored evacuation routes, service information, and estimated travel times is also provided based on traveler specified origin, destination, and route parameters. Updated information is provided throughout the evacuation and subsequent reentry as status changes and plans are adapted.	No	2	The center shall provide evacuation information to shelter providers.	Planned	No
BIA Western Regional Website	Transportation Information Center	TIC Emergency Traveler Information	TIC Emergency Traveler Information' provides emergency information to the public, including wide-area alerts and evacuation information. It provides emergency alerts, information on evacuation zones and evacuation requirements, evacuation destinations and shelter information, available transportation modes, and traffic and road conditions at the origin, destination, and along the evacuation routes. In addition to general evacuation information, personalized information including tailored evacuation routes, service information, and estimated travel times is also provided based on traveler specified origin, destination, and route parameters. Updated information is provided throughout the evacuation and subsequent reentry as status changes and plans are adapted.	No	3	The center shall disseminate wide-area alert information to the traveler interface systems, including major emergencies such as a natural or man-made disaster, civil emergency, child abductions, severe weather watches and warnings, military activities, and law enforcement warnings.	Planned	No
BIA Western Regional Website	Transportation Information Center	TIC Emergency Traveler Information	TIC Emergency Traveler Information' provides emergency information to the public, including wide-area alerts and evacuation information. It provides emergency alerts, information on evacuation zones and evacuation requirements, evacuation destinations and shelter information, available transportation modes, and traffic and road conditions at the origin, destination, and along the evacuation routes. In addition to general evacuation information, personalized information including tailored evacuation routes, service information, and estimated travel times is also provided based on traveler specified origin, destination, and route parameters. Updated information is provided throughout the evacuation and subsequent reentry as status changes and plans are adapted.	No	4	The center shall provide the capability for a system operator to control the type and update frequency of emergency and wide-area alert information distributed to travelers.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
BIA Western Regional Website	Transportation Information Center	TIC Operations Data Collection	TIC Operations Data Collection' collects and stores information that is collected about the transportation information service including data on the number of clients serviced and the services that were provided. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	1	The center shall collect traveler information data, such as parking lot data, rideshare data, road network use data, vehicle probe data, and other data from traveler information system operations.	Planned	No
BIA Western Regional Website	Transportation Information Center	TIC Operations Data Collection	TIC Operations Data Collection' collects and stores information that is collected about the transportation information service including data on the number of clients serviced and the services that were provided. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	2	The center shall collect traveler requests, confirmations, and payment transaction data for traveler services provided.	Planned	No
BIA Western Regional Website	Transportation Information Center	TIC Operations Data Collection	TIC Operations Data Collection' collects and stores information that is collected about the transportation information service including data on the number of clients serviced and the services that were provided. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	3	The center shall assign quality control metrics and meta-data to be stored along with the data. Meta-data may include attributes that describe the source and quality of the data and the conditions surrounding the collection of the data.	Planned	No
BIA Western Regional Website	Transportation Information Center	TIC Operations Data Collection	TIC Operations Data Collection' collects and stores information that is collected about the transportation information service including data on the number of clients serviced and the services that were provided. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	4	The center shall receive and respond to requests from ITS Archives for either a catalog of the traveler information data or for the data itself.	Planned	No
BIA Western Regional Website	Transportation Information Center	TIC Operations Data Collection	TIC Operations Data Collection' collects and stores information that is collected about the transportation information service including data on the number of clients serviced and the services that were provided. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	5	The center shall be able to produce sample products of the data available.	Planned	No
BIA Western Regional Website	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	1	The center shall disseminate traffic and highway condition information to travelers, including incident information, detours and road closures, event information, recommended routes, and current speeds on specific routes.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
BIA Western Regional Website	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	2	The center shall disseminate maintenance and construction information to travelers, including scheduled maintenance and construction work activities and work zone activities.	Planned	No
BIA Western Regional Website	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	3	The center shall disseminate transit routes and schedules, transit transfer options, transit fares, and real-time schedule adherence information to travelers.	Planned	No
BIA Western Regional Website	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	4	The center shall disseminate parking information to travelers, including location, availability, and fees.	Planned	No
BIA Western Regional Website	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	5	The center shall disseminate toll fee information to travelers.	Planned	No
BIA Western Regional Website	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	6	The center shall disseminate weather information to travelers.	Planned	No
BIA Western Regional Website	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No	1	The center shall provide the capability to process voice-formatted requests for traveler information from a traveler telephone information system, and return the information in the requested format.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
BIA Western Regional Website	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No	2	The center shall provide the capability to process dual-tone multifrequency (DTMF)-based requests (touch-tone) for traveler information from a traveler telephone information system.	Planned	No
BIA Western Regional Website	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No	3	The center shall provide the capability to process traveler information requests from a traveler telephone information system.	Planned	No
CalTrans TMC	Other Traffic Management Centers			No				No
CBP Website	Transportation Information Center			No				No
CHP Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
CHP Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	3	The center shall support the entry of alert and advisory information directly from the emergency system operator.	Planned	No
CHP Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	5	The center shall provide the capability to correlate alerts and advisories, incident information, and security sensor and surveillance data.	Planned	No
CHP Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	6	The center shall broadcast wide-area alerts and advisories to traffic management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned	No
CHP Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	9	The center shall broadcast wide-area alerts and advisories to traveler information service providers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned	No
CHP Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	10	The center shall broadcast wide-area alerts and advisories to maintenance centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
CHP Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	11	The center shall broadcast wide-area alerts and advisories to other emergency management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned	No
CHP Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	12	The center shall broadcast wide-area alerts and advisories to commercial vehicle administration centers and roadside check facilities for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned	No
CHP Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	15	The center shall present the alert and advisory information and the status of the actions taken in response to the alert by the other centers to the emergency system operator as received from other system inputs.	Planned	No
CHP Dispatch	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
CHP Dispatch	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	5	The center shall assess the status of responding emergency vehicles as part of an incident command.	Planned	No
CHP Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
CHP Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Planned	No
CHP Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
CHP Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Planned	No
CHP Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	5	The center shall track the availability of resources and coordinate resource sharing with allied agency centers including traffic, maintenance, or other emergency centers.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Cities and Towns Data Archive	Archived Data System			No				No
Cities and Towns Data User Systems	Archived Data User System			No				No
Cities and Towns EOC-EMC	Emergency Management Center			No				No
Cities and Towns Fiber Backbone	Data Distribution System			No				No
Cities and Towns ITS Field Equipment	ITS Roadway Equipment			No				No
Cities and Towns ITS Field Equipment	Wayside Equipment			No				No
Cities and Towns MCO Dispatch	Maint and Constr Management Center	MCM Environmental Information Collection	MCM Environmental Information Collection' collects current road and weather conditions using data collected from environmental sensors deployed on and about the roadway. In addition to fixed sensor stations at the roadside, this functional object also collects environmental information from sensor systems located on Maintenance and Construction Vehicles. It also collects current and forecast environmental conditions information that is made available by other systems. The functional object aggregates the sensor system data and provides it, along with data attributes to other applications.	No	1	The center shall remotely control environmental sensors that measure road surface temperature, moisture, icing, salinity, and other measures.	Planned	No
Cities and Towns MCO Dispatch	Maint and Constr Management Center	MCM Environmental Information Collection	MCM Environmental Information Collection' collects current road and weather conditions using data collected from environmental sensors deployed on and about the roadway. In addition to fixed sensor stations at the roadside, this functional object also collects environmental information from sensor systems located on Maintenance and Construction Vehicles. It also collects current and forecast environmental conditions information that is made available by other systems. The functional object aggregates the sensor system data and provides it, along with data attributes to other applications.	No	2	The center shall remotely control environmental sensors that measure weather conditions including temperature, wind, humidity, precipitation, and visibility.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Cities and Towns MCO Dispatch	Maint and Constr Management Center	MCM Environmental Information Collection	MCM Environmental Information Collection' collects current road and weather conditions using data collected from environmental sensors deployed on and about the roadway. In addition to fixed sensor stations at the roadside, this functional object also collects environmental information from sensor systems located on Maintenance and Construction Vehicles. It also collects current and forecast environmental conditions information that is made available by other systems. The functional object aggregates the sensor system data and provides it, along with data attributes to other applications.	No	3	The center shall remotely control environmental sensors on-board maintenance and construction vehicles that measure road and weather conditions including air and surface temperatures, wind speed, humidity, precipitation, visibility and other measures.	Planned	No
Cities and Towns MCO Dispatch	Maint and Constr Management Center	MCM Environmental Information Collection	MCM Environmental Information Collection' collects current road and weather conditions using data collected from environmental sensors deployed on and about the roadway. In addition to fixed sensor stations at the roadside, this functional object also collects environmental information from sensor systems located on Maintenance and Construction Vehicles. It also collects current and forecast environmental conditions information that is made available by other systems. The functional object aggregates the sensor system data and provides it, along with data attributes to other applications.	No	4	The center shall collect environmental probe data (air temperature, exterior light status, wiper status, traction control status, etc.) from short range communications equipment that communicates with appropriately equipped probe vehicles.	Planned	No
Cities and Towns MCO Dispatch	Maint and Constr Management Center	MCM Environmental Information Collection	MCM Environmental Information Collection' collects current road and weather conditions using data collected from environmental sensors deployed on and about the roadway. In addition to fixed sensor stations at the roadside, this functional object also collects environmental information from sensor systems located on Maintenance and Construction Vehicles. It also collects current and forecast environmental conditions information that is made available by other systems. The functional object aggregates the sensor system data and provides it, along with data attributes to other applications.	No	5	The center shall assimilate current and forecast road conditions and surface weather information using a combination of weather service provider information (such as the National Weather Service and value-added sector specific meteorological services), data from traffic and traveler information providers, and environmental data collected from sensors deployed on and about the roadway as well as the fleet of maintenance and construction vehicles and the broader population of vehicle probes.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Cities and Towns MCO Dispatch	Maint and Constr Management Center	MCM Environmental Information Collection	MCM Environmental Information Collection' collects current road and weather conditions using data collected from environmental sensors deployed on and about the roadway. In addition to fixed sensor stations at the roadside, this functional object also collects environmental information from sensor systems located on Maintenance and Construction Vehicles. It also collects current and forecast environmental conditions information that is made available by other systems. The functional object aggregates the sensor system data and provides it, along with data attributes to other applications.	No	6	The center shall provide weather and road condition information to weather service providers and center personnel.	Planned	No
Cities and Towns MCO Dispatch	Maint and Constr Management Center	MCM Environmental Information Collection	MCM Environmental Information Collection' collects current road and weather conditions using data collected from environmental sensors deployed on and about the roadway. In addition to fixed sensor stations at the roadside, this functional object also collects environmental information from sensor systems located on Maintenance and Construction Vehicles. It also collects current and forecast environmental conditions information that is made available by other systems. The functional object aggregates the sensor system data and provides it, along with data attributes to other applications.	No	7	The center shall respond to control data from center personnel regarding environmental sensor control and weather data collection and processing.	Planned	No
Cities and Towns MCO Dispatch	Maint and Constr Management Center	MCM Environmental Information Collection	MCM Environmental Information Collection' collects current road and weather conditions using data collected from environmental sensors deployed on and about the roadway. In addition to fixed sensor stations at the roadside, this functional object also collects environmental information from sensor systems located on Maintenance and Construction Vehicles. It also collects current and forecast environmental conditions information that is made available by other systems. The functional object aggregates the sensor system data and provides it, along with data attributes to other applications.	No	8	The center shall collect operational status for the roadside and vehicle-based environmental sensor equipment.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Cities and Towns MCO Dispatch	Maint and Constr Management Center	MCM Environmental Information Collection	MCM Environmental Information Collection' collects current road and weather conditions using data collected from environmental sensors deployed on and about the roadway. In addition to fixed sensor stations at the roadside, this functional object also collects environmental information from sensor systems located on Maintenance and Construction Vehicles. It also collects current and forecast environmental conditions information that is made available by other systems. The functional object aggregates the sensor system data and provides it, along with data attributes to other applications.	No	9	The center shall collect fault data for the roadside and vehicle-based environmental sensor equipment for repair.	Planned	No
Cities and Towns MCO Dispatch	Maint and Constr Management Center	MCM Incident Management	MCM Incident Management' supports maintenance and construction participation in coordinated incident response. Incident notifications are shared, incident response resources are managed, and the overall incident situation and incident response status is coordinated among allied response organizations.	No	1	The center shall receive inputs from the Alerting and Advisory System concerning the possibility or occurrence of severe weather, terrorist activity, or other major emergency, including information provided by the Emergency Alert System.	Planned	No
Cities and Towns MCO Dispatch	Maint and Constr Management Center	MCM Incident Management	MCM Incident Management' supports maintenance and construction participation in coordinated incident response. Incident notifications are shared, incident response resources are managed, and the overall incident situation and incident response status is coordinated among allied response organizations.	No	2	The center shall exchange alert information and status with emergency management centers. The information includes notification of a major emergency such as a natural or man-made disaster, civil emergency, or child abduction. The information may include the alert originator, the nature of the emergency, the geographic area affected by the emergency, the effective time period, etc.	Planned	No
Cities and Towns MCO Dispatch	Maint and Constr Management Center	MCM Incident Management	MCM Incident Management' supports maintenance and construction participation in coordinated incident response. Incident notifications are shared, incident response resources are managed, and the overall incident situation and incident response status is coordinated among allied response organizations.	No	3	The center shall exchange incident and threat information with emergency management centers as well as traffic management centers; including notification of existence of incident and expected severity, location, time and nature of incident.	Planned	No
Cities and Towns MCO Dispatch	Maint and Constr Management Center	MCM Incident Management	MCM Incident Management' supports maintenance and construction participation in coordinated incident response. Incident notifications are shared, incident response resources are managed, and the overall incident situation and incident response status is coordinated among allied response organizations.	No	4	The center shall coordinate planning for incidents with emergency management centers - including pre-planning activities for disaster response, evacuation, and recovery operations.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Cities and Towns MCO Dispatch	Maint and Constr Management Center	MCM Incident Management	MCM Incident Management' supports maintenance and construction participation in coordinated incident response. Incident notifications are shared, incident response resources are managed, and the overall incident situation and incident response status is coordinated among allied response organizations.	No	5	The center shall respond to requests from emergency management to provide maintenance and construction resources to implement response plans, assist in clean up, verify an incident, etc. This may also involve coordination with traffic management centers and other maintenance centers.	Planned	No
Cities and Towns MCO Dispatch	Maint and Constr Management Center	MCM Incident Management	MCM Incident Management' supports maintenance and construction participation in coordinated incident response. Incident notifications are shared, incident response resources are managed, and the overall incident situation and incident response status is coordinated among allied response organizations.	No	6	The center shall exchange road network status assessment information with emergency management and traffic management centers including an assessment of damage sustained by the road network including location and extent of the damage, estimate of remaining capacity, required closures, alternate routes, necessary restrictions, and time frame for repair and recovery.	Planned	No
Cities and Towns MCO Dispatch	Maint and Constr Management Center	MCM Incident Management	MCM Incident Management' supports maintenance and construction participation in coordinated incident response. Incident notifications are shared, incident response resources are managed, and the overall incident situation and incident response status is coordinated among allied response organizations.	No	7	The center shall provide work zone activities affecting the road network including the nature of the maintenance or construction activity, location, impact to the roadway, expected time(s) and duration of impact, anticipated delays, alternate routes, and suggested speed limits. This information may be augmented with images that provide a visual indication of current work zone status and traffic impacts.	Planned	No
Cities and Towns MCO Dispatch	Maint and Constr Management Center	MCM Incident Management	MCM Incident Management' supports maintenance and construction participation in coordinated incident response. Incident notifications are shared, incident response resources are managed, and the overall incident situation and incident response status is coordinated among allied response organizations.	No	8	The center shall receive information indicating the damage sustained by transportation assets, derived from aerial surveillance, field reports, inspections, tests, and analyses to support incident management.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Cities and Towns MCO Dispatch	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	1	The center shall maintain an interface with asset management systems to track the inventory, restrictions, repair needs and status updates of transportation assets (pavement, bridges, signs, etc.) including location, installation and materials information, vendor/contractor, current maintenance status, standard height, width, and weight restrictions.	Planned	No
Cities and Towns MCO Dispatch	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	2	The center shall respond to requests from emergency management and traffic management centers for hazard removal, field equipment repair, and other roadway maintenance.	Planned	No
Cities and Towns MCO Dispatch	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	3	The center shall exchange information with administrative systems to support the planning and scheduling of maintenance activities. This information includes: equipment and consumables resupply purchase request status, personnel qualifications including training and special certifications, environmental regulations and rules that may impact maintenance activities, and requests and project requirements from contract administration.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Cities and Towns MCO Dispatch	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	4	The center shall provide emergency management and traffic management centers with information about scheduled maintenance and construction work activities including anticipated closures and impact to the roadway, alternate routes, anticipated delays, closure times, and durations.	Planned	No
Cities and Towns MCO Dispatch	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	6	The center shall collect the status and fault data from the centers that operate the equipment, including data for traffic, infrastructure, and environmental sensors, highway advisory radio and dynamic message signs, automated roadway treatment systems, barrier and safeguard systems, cameras, traffic signals and override equipment, ramp meters, short range communications equipment, security sensors and surveillance equipment, etc., and provide a cohesive view of equipment repair needs.	Planned	No
Cities and Towns MCO Dispatch	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	7	The center shall receive equipment availability and materials storage status information from storage facilities to support the scheduling of roadway maintenance and construction activities.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Cities and Towns MCO Dispatch	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	8	The center shall collect current and forecast traffic and weather information from traffic management centers and weather service providers (such as the National Weather Service and value-added sector specific meteorological services).	Planned	No
Cities and Towns MCO Vehicles	Basic Maint and Constr Vehicle			No				No
Cities and Towns MCO Vehicles	Maint and Constr Vehicle OBE			No				No
Cities and Towns Police and Fire Dispatch	Emergency Management Center			No				No
Cities and Towns Police and Fire Vehicles	Emergency Vehicle OBE			No				No
Cities and Towns Public Works	Maint and Constr Management Center			No				No
Cities and Towns Public Works	Surface Transportation Weather Service			No				No
Cities and Towns Public Works Vehicles	Basic Maint and Constr Vehicle			No				No
Cities and Towns Public Works Vehicles	Maint and Constr Vehicle OBE			No				No
Cities and Towns TIC and Website	Transportation Information Center			No				No
Cities and Towns TMC-TOC	Traffic Management Center			No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Cities and Towns Train Wayside Alert	Wayside Equipment			No				No
Cities and Towns Transit Vehicles	Basic Transit Vehicle			No				No
Cities and Towns Transit Vehicles	Transit Vehicle OBE			No				No
Cities and Towns Weather Flood Alerts	ITS Roadway Equipment			No				No
Cities and Towns Wireless Radio	Data Distribution System			No				No
City and Towns Transit Dispatch	Transit Management Center			No				No
Commercial Vehicles	Commercial Vehicle OBE	CV On-Board Electronic Screening Support	CV On-Board Electronic Screening Support' exchanges information with roadside facilities, providing information such as driver, vehicle, and carrier identification to roadside facilities that can be used to support electronic screening. Pass/pull-in messages are received and presented to the commercial vehicle driver and screening events are recorded. Additional information, including trip records (e.g., border clearance information), safety inspection records, cargo information, and driver status information may also be collected, stored, and made available to the roadside facility.	No	1	The commercial vehicle shall receive pass/pull-in messages from the roadside check facilities and present them to the driver in either audible or visual forms.	Planned	No
Commercial Vehicles	Commercial Vehicle OBE	CV On-Board Electronic Screening Support	CV On-Board Electronic Screening Support' exchanges information with roadside facilities, providing information such as driver, vehicle, and carrier identification to roadside facilities that can be used to support electronic screening. Pass/pull-in messages are received and presented to the commercial vehicle driver and screening events are recorded. Additional information, including trip records (e.g., border clearance information), safety inspection records, cargo information, and driver status information may also be collected, stored, and made available to the roadside facility.	No	2	The commercial vehicle shall respond to requests to provide data accumulated on-board the vehicle to roadside check facilities for inspection including driver logs, electronic identifiers, credentials, border clearance data, and other screening data such as cargo status, hazmat identifiers, out of service status, vehicle axle weight, vehicle weight, and time.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Commercial Vehicles	Commercial Vehicle OBE	CV On-Board Electronic Screening Support	CV On-Board Electronic Screening Support' exchanges information with roadside facilities, providing information such as driver, vehicle, and carrier identification to roadside facilities that can be used to support electronic screening. Pass/pull-in messages are received and presented to the commercial vehicle driver and screening events are recorded. Additional information, including trip records (e.g., border clearance information), safety inspection records, cargo information, and driver status information may also be collected, stored, and made available to the roadside facility.	No	3	The commercial vehicle shall respond to requests to provide the identity, status and other information from the electronic cargo lock tag, if so equipped, to roadside check facilities, including border crossings.	Planned	No
Commercial Vehicles	Commercial Vehicle OBE	CV On-Board Electronic Screening Support	CV On-Board Electronic Screening Support' exchanges information with roadside facilities, providing information such as driver, vehicle, and carrier identification to roadside facilities that can be used to support electronic screening. Pass/pull-in messages are received and presented to the commercial vehicle driver and screening events are recorded. Additional information, including trip records (e.g., border clearance information), safety inspection records, cargo information, and driver status information may also be collected, stored, and made available to the roadside facility.	No	4	The commercial vehicle shall support an interface to a commercial vehicle driver that is also acting in the role of a commercial vehicle fleet manager to set up routes, pay necessary taxes, obtain proper credentials, and write the identifiers to the electronic tag for the driver, vehicle, and carrier.	Planned	No
Commercial Vehicles	Commercial Vehicle OBE	CV On-Board Safety and Security	CV On-Board Safety and Security' collects and processes vehicle and driver safety and security information and provides safety and security information to the Fleet and Freight Management Center. It also supplies this information to the roadside facilities both at mainline speeds and while stopped for inspections. Safety information may also be provided at predetermined trigger areas using wireless communications. The capability to alert the commercial vehicle driver whenever there is a critical safety or security problem or potential emergency is also provided. It also supports on-board driver safety log maintenance and checking.	No	1	The commercial vehicle shall receive pass/pull-in messages from the roadside check facilities and present them to the driver in either audible or visual forms.	Planned	No
Commercial Vehicles	Commercial Vehicle OBE	CV On-Board Safety and Security	CV On-Board Safety and Security' collects and processes vehicle and driver safety and security information and provides safety and security information to the Fleet and Freight Management Center. It also supplies this information to the roadside facilities both at mainline speeds and while stopped for inspections. Safety information may also be provided at predetermined trigger areas using wireless communications. The capability to alert the commercial vehicle driver whenever there is a critical safety or security problem or potential emergency is also provided. It also supports on-board driver safety log maintenance and checking.	No	2	The commercial vehicle shall respond to requests to provide on-board safety inspection data to roadside check facilities including vehicle identification, driver logs, and characteristics data for initiating safety and security checking. Results of the inspection are read back into the on-board equipment.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Commercial Vehicles	Commercial Vehicle OBE	CV On-Board Safety and Security	CV On-Board Safety and Security' collects and processes vehicle and driver safety and security information and provides safety and security information to the Fleet and Freight Management Center. It also supplies this information to the roadside facilities both at mainline speeds and while stopped for inspections. Safety information may also be provided at predetermined trigger areas using wireless communications. The capability to alert the commercial vehicle driver whenever there is a critical safety or security problem or potential emergency is also provided. It also supports on-board driver safety log maintenance and checking.	No	3	The commercial vehicle shall monitor on-board systems pertaining to the safety and security of the vehicle, its driver, and its cargo/freight equipment; and provide the information to the driver, roadside check facilities, and commercial fleet management centers.	Planned	No
Commercial Vehicles	Commercial Vehicle OBE	CV On-Board Safety and Security	CV On-Board Safety and Security' collects and processes vehicle and driver safety and security information and provides safety and security information to the Fleet and Freight Management Center. It also supplies this information to the roadside facilities both at mainline speeds and while stopped for inspections. Safety information may also be provided at predetermined trigger areas using wireless communications. The capability to alert the commercial vehicle driver whenever there is a critical safety or security problem or potential emergency is also provided. It also supports on-board driver safety log maintenance and checking.	No	4	The commercial vehicle shall provide information concerning a breach or tamper event on a commercial vehicle or its attached freight equipment to roadside check facilities and to the commercial fleet management center, the information includes identity, type of breach, location, and time.	Planned	No
Commercial Vehicles	Commercial Vehicle OBE	CV On-Board Safety and Security	CV On-Board Safety and Security' collects and processes vehicle and driver safety and security information and provides safety and security information to the Fleet and Freight Management Center. It also supplies this information to the roadside facilities both at mainline speeds and while stopped for inspections. Safety information may also be provided at predetermined trigger areas using wireless communications. The capability to alert the commercial vehicle driver whenever there is a critical safety or security problem or potential emergency is also provided. It also supports on-board driver safety log maintenance and checking.	No	5	The commercial vehicle shall provide expected driver identity characteristics (e.g., PIN codes and biometric data) to roadside check facilities to support safety and security checking.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Commercial Vehicles	Commercial Vehicle OBE	CV On-Board Safety and Security	CV On-Board Safety and Security' collects and processes vehicle and driver safety and security information and provides safety and security information to the Fleet and Freight Management Center. It also supplies this information to the roadside facilities both at mainline speeds and while stopped for inspections. Safety information may also be provided at predetermined trigger areas using wireless communications. The capability to alert the commercial vehicle driver whenever there is a critical safety or security problem or potential emergency is also provided. It also supports on-board driver safety log maintenance and checking.	No	6	The commercial vehicle shall provide information about previous attempts to disable the commercial vehicle to roadside check facilities.	Planned	No
Commercial Vehicles	Commercial Vehicle OBE	CV On-Board Safety and Security	CV On-Board Safety and Security' collects and processes vehicle and driver safety and security information and provides safety and security information to the Fleet and Freight Management Center. It also supplies this information to the roadside facilities both at mainline speeds and while stopped for inspections. Safety information may also be provided at predetermined trigger areas using wireless communications. The capability to alert the commercial vehicle driver whenever there is a critical safety or security problem or potential emergency is also provided. It also supports on-board driver safety log maintenance and checking.	No	7	The commercial vehicle shall provide safety information at predetermined trigger areas using wireless communications.	Planned	No
County 911 PSAPs	Emergency Telecommunications System			No				No
County Data Archive	Archived Data System			No				No
County Data User Systems	Archived Data User System			No				No
County EMC-EOC	Emergency Management Center			No				No
County Flood Warning System	ITS Roadway Equipment			No				No
County ITS Field Equipment	ITS Roadway Equipment			No				No
County Mobile App	Media			No				No
County Public Works	Maint and Constr Management Center			No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
County Public Works Vehicles	Basic Maint and Constr Vehicle			No				No
County Public Works Vehicles	Maint and Constr Vehicle OBE			No				No
County Radio Systems	Data Distribution System			No				No
County Sheriff Dispatch	Emergency Management Center			No				No
County Sheriffs Vehicles	Emergency Vehicle OBE			No				No
County TMC-TOC	Traffic Management Center			No				No
County Transit Kiosks	Traveler Support Equipment	Traveler Fare Management	Traveler Fare Management' provides the capability for the traveler to access and use a common fare medium for transit fares, tolls, and/or parking lot charges using a public device at or near the point of service. It accepts a service request and means of payment, verifies eligibility, calculates the amount due, collects payment, and identifies payment problems. It may be implemented using a card reader/dispenser in a point of sale device that includes a communications interface to the financial infrastructure to support payment collection and reconciliation.	No	1	The public interface for travelers shall accept and process current transit passenger fare collection information.	Planned	No
County Transit Kiosks	Traveler Support Equipment	Traveler Fare Management	Traveler Fare Management' provides the capability for the traveler to access and use a common fare medium for transit fares, tolls, and/or parking lot charges using a public device at or near the point of service. It accepts a service request and means of payment, verifies eligibility, calculates the amount due, collects payment, and identifies payment problems. It may be implemented using a card reader/dispenser in a point of sale device that includes a communications interface to the financial infrastructure to support payment collection and reconciliation.	No	2	The public interface for travelers shall calculate a fare based on the origin and destination provided by the traveler, in conjunction with transit routing, transit fare category, and transit user history.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
County Transit Kiosks	Traveler Support Equipment	Traveler Fare Management	Traveler Fare Management' provides the capability for the traveler to access and use a common fare medium for transit fares, tolls, and/or parking lot charges using a public device at or near the point of service. It accepts a service request and means of payment, verifies eligibility, calculates the amount due, collects payment, and identifies payment problems. It may be implemented using a card reader/dispenser in a point of sale device that includes a communications interface to the financial infrastructure to support payment collection and reconciliation.	No	3	The public interface for travelers shall provide an interface to a transit user traveler card in support of payment for transit fares, tolls, and/or parking lot charges. The stored credit value data from the card shall be collected and updated based on the fare or other charges, or the credit identity shall be collected.	Planned	No
County Transit Kiosks	Traveler Support Equipment	Traveler Fare Management	Traveler Fare Management' provides the capability for the traveler to access and use a common fare medium for transit fares, tolls, and/or parking lot charges using a public device at or near the point of service. It accepts a service request and means of payment, verifies eligibility, calculates the amount due, collects payment, and identifies payment problems. It may be implemented using a card reader/dispenser in a point of sale device that includes a communications interface to the financial infrastructure to support payment collection and reconciliation.	No	4	The public interface for travelers shall provide information to the center for financial authorization and transaction processing.	Planned	No
County Transit Kiosks	Traveler Support Equipment	Traveler Fare Management	Traveler Fare Management' provides the capability for the traveler to access and use a common fare medium for transit fares, tolls, and/or parking lot charges using a public device at or near the point of service. It accepts a service request and means of payment, verifies eligibility, calculates the amount due, collects payment, and identifies payment problems. It may be implemented using a card reader/dispenser in a point of sale device that includes a communications interface to the financial infrastructure to support payment collection and reconciliation.	No	5	The public interface for travelers shall provide an image of all travelers purchasing rides or services to be used for violation processing.	Planned	No
County Transit Kiosks	Traveler Support Equipment	Traveler Fare Management	Traveler Fare Management' provides the capability for the traveler to access and use a common fare medium for transit fares, tolls, and/or parking lot charges using a public device at or near the point of service. It accepts a service request and means of payment, verifies eligibility, calculates the amount due, collects payment, and identifies payment problems. It may be implemented using a card reader/dispenser in a point of sale device that includes a communications interface to the financial infrastructure to support payment collection and reconciliation.	No	6	The public interface for travelers shall determine the routing based on the traveler's destination and the location of the closest transit stop from which a route request is being made.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
County Transit Kiosks	Traveler Support Equipment	Traveler Fare Management	Traveler Fare Management' provides the capability for the traveler to access and use a common fare medium for transit fares, tolls, and/or parking lot charges using a public device at or near the point of service. It accepts a service request and means of payment, verifies eligibility, calculates the amount due, collects payment, and identifies payment problems. It may be implemented using a card reader/dispenser in a point of sale device that includes a communications interface to the financial infrastructure to support payment collection and reconciliation.	No	7	The public interface for travelers shall create fare statistics data based upon data collected at a transit stop.	Planned	No
County Transit Kiosks	Traveler Support Equipment	Traveler Fare Management	Traveler Fare Management' provides the capability for the traveler to access and use a common fare medium for transit fares, tolls, and/or parking lot charges using a public device at or near the point of service. It accepts a service request and means of payment, verifies eligibility, calculates the amount due, collects payment, and identifies payment problems. It may be implemented using a card reader/dispenser in a point of sale device that includes a communications interface to the financial infrastructure to support payment collection and reconciliation.	No	8	The public interface for travelers shall present information to the traveler in a form suitable for travelers with physical disabilities.	Planned	No
County Transit Kiosks	Traveler Support Equipment	Traveler Information Reception	Traveler Information Reception' receives formatted traffic advisories, road conditions, transit information, broadcast alerts, and other general traveler information broadcasts and presents the information to the traveler with a public traveler interface. It includes the receiver and public display device such as a large display monitor or other public display.	No	5	The public interface for travelers shall receive wide-area alerts and present it to the traveler.	Planned	No
County Transit Kiosks	Traveler Support Equipment	Traveler Interactive Information	Traveler Interactive Information' provides traffic information, road conditions, transit information, yellow pages (traveler services) information, special event information, and other traveler information that is specifically tailored based on the traveler's request and/or previously submitted traveler profile information. It also supports interactive services that support enrollment, account management, and payments for transportation services. The interactive traveler information capability is provided by a public traveler interface, such as a kiosk.	No	1	The public interface for travelers shall receive traffic information from a center and present it to the traveler upon request.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
County Transit Kiosks	Traveler Support Equipment	Traveler Interactive Information	Traveler Interactive Information' provides traffic information, road conditions, transit information, yellow pages (traveler services) information, special event information, and other traveler information that is specifically tailored based on the traveler's request and/or previously submitted traveler profile information. It also supports interactive services that support enrollment, account management, and payments for transportation services. The interactive traveler information capability is provided by a public traveler interface, such as a kiosk.	No	2	The public interface for travelers shall receive transit information from a center and present it to the traveler upon request.	Planned	No
County Transit Kiosks	Traveler Support Equipment	Traveler Interactive Information	Traveler Interactive Information' provides traffic information, road conditions, transit information, yellow pages (traveler services) information, special event information, and other traveler information that is specifically tailored based on the traveler's request and/or previously submitted traveler profile information. It also supports interactive services that support enrollment, account management, and payments for transportation services. The interactive traveler information capability is provided by a public traveler interface, such as a kiosk.	No	3	The public interface for travelers shall receive yellow pages information (such as lodging, restaurants, theaters, bicycle facilities, and other tourist activities) from a center and present it to the traveler upon request.	Planned	No
County Transit Kiosks	Traveler Support Equipment	Traveler Interactive Information	Traveler Interactive Information' provides traffic information, road conditions, transit information, yellow pages (traveler services) information, special event information, and other traveler information that is specifically tailored based on the traveler's request and/or previously submitted traveler profile information. It also supports interactive services that support enrollment, account management, and payments for transportation services. The interactive traveler information capability is provided by a public traveler interface, such as a kiosk.	No	4	The public interface for travelers shall receive event information from a center and present it to the traveler upon request.	Planned	No
County Transit Kiosks	Traveler Support Equipment	Traveler Interactive Information	Traveler Interactive Information' provides traffic information, road conditions, transit information, yellow pages (traveler services) information, special event information, and other traveler information that is specifically tailored based on the traveler's request and/or previously submitted traveler profile information. It also supports interactive services that support enrollment, account management, and payments for transportation services. The interactive traveler information capability is provided by a public traveler interface, such as a kiosk.	No	5	The public interface for travelers shall receive evacuation information from a center and present it to the traveler.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
County Transit Kiosks	Traveler Support Equipment	Traveler Interactive Information	Traveler Interactive Information' provides traffic information, road conditions, transit information, yellow pages (traveler services) information, special event information, and other traveler information that is specifically tailored based on the traveler's request and/or previously submitted traveler profile information. It also supports interactive services that support enrollment, account management, and payments for transportation services. The interactive traveler information capability is provided by a public traveler interface, such as a kiosk.	No	6	The public interface for travelers shall accept reservations for confirmed trip plans.	Planned	No
County Transit Kiosks	Traveler Support Equipment	Traveler Interactive Information	Traveler Interactive Information' provides traffic information, road conditions, transit information, yellow pages (traveler services) information, special event information, and other traveler information that is specifically tailored based on the traveler's request and/or previously submitted traveler profile information. It also supports interactive services that support enrollment, account management, and payments for transportation services. The interactive traveler information capability is provided by a public traveler interface, such as a kiosk.	No	7	The public interface for travelers shall support payment for services, such as confirmed trip plans, confirmed traveler services, tolls, transit fares, parking lot charges, and advanced payment for tolls.	Planned	No
County Transit Kiosks	Traveler Support Equipment	Traveler Interactive Information	Traveler Interactive Information' provides traffic information, road conditions, transit information, yellow pages (traveler services) information, special event information, and other traveler information that is specifically tailored based on the traveler's request and/or previously submitted traveler profile information. It also supports interactive services that support enrollment, account management, and payments for transportation services. The interactive traveler information capability is provided by a public traveler interface, such as a kiosk.	No	8	The public interface for travelers shall provide an interface through which credit identities and stored credit values may be collected from tags, traveler cards, or payment instruments used by travelers.	Planned	No
County Website and NIXAL	Other Transit Management Centers			No				No
County Website and NIXAL	Transportation Information Center			No				No
DEMA CRT - HazMat Response Team	Center			No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DEMA CRT - HazMat Response Team	Emergency Management Center	Emergency Call-Taking	Emergency Call-Taking' supports the emergency call-taker, collecting available information about the caller and the reported emergency, and forwarding this information to other objects that formulate and manage the emergency response. It receives 9-1-1, 7-digit local access, and motorist call-box calls and interfaces to other agencies to assist in the verification and assessment of the emergency and to forward the emergency information to the appropriate response agency.	No				No
DEMA CRT - HazMat Response Team	Emergency Management Center	Emergency Commercial Vehicle Response	Emergency Commercial Vehicle Response' identifies and initiates a response to commercial vehicle and freight equipment related emergencies. These emergencies may include incidents involving hazardous materials as well as the detection of non-permitted transport of security sensitive hazmat. It identifies the location of the vehicle, the nature of the incident, the route information, and information concerning the freight itself. The information supports the determination of the response and identifies the responding agencies to notify.	No				No
DEMA CRT - HazMat Response Team	Emergency Management Center	Emergency Data Collection	Emergency Data Collection' collects and stores emergency information that is collected in the course of operations by the Emergency Management Center. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No				No
DEMA CRT - HazMat Response Team	Emergency Management Center	Emergency Dispatch	Emergency Dispatch' tracks the location and status of emergency vehicles and dispatches these vehicles to incidents. Pertinent incident information is gathered from the public and other public safety agencies and relayed to the responding units. Incident status and the status of the responding units is tracked so that additional units can be dispatched and/or unit status can be returned to available when the incident is cleared and closed.	No	1	The center shall dispatch emergency vehicles to respond to verified emergencies under center personnel control.	Existing	No
DEMA CRT - HazMat Response Team	Emergency Management Center	Emergency Dispatch	Emergency Dispatch' tracks the location and status of emergency vehicles and dispatches these vehicles to incidents. Pertinent incident information is gathered from the public and other public safety agencies and relayed to the responding units. Incident status and the status of the responding units is tracked so that additional units can be dispatched and/or unit status can be returned to available when the incident is cleared and closed.	No	2	The center shall store the current status of all emergency vehicles available for dispatch and those that have been dispatched.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DEMA CRT - HazMat Response Team	Emergency Management Center	Emergency Dispatch	Emergency Dispatch' tracks the location and status of emergency vehicles and dispatches these vehicles to incidents. Pertinent incident information is gathered from the public and other public safety agencies and relayed to the responding units. Incident status and the status of the responding units is tracked so that additional units can be dispatched and/or unit status can be returned to available when the incident is cleared and closed.	No	3	The center shall relay location and incident details to the responding vehicles.	Existing	No
DEMA CRT - HazMat Response Team	Emergency Management Center	Emergency Dispatch	Emergency Dispatch' tracks the location and status of emergency vehicles and dispatches these vehicles to incidents. Pertinent incident information is gathered from the public and other public safety agencies and relayed to the responding units. Incident status and the status of the responding units is tracked so that additional units can be dispatched and/or unit status can be returned to available when the incident is cleared and closed.	No	4	The center shall track the location and status of emergency vehicles responding to an emergency based on information from the emergency vehicle.	Existing	No
DEMA CRT - HazMat Response Team	Emergency Management Center	Emergency Dispatch	Emergency Dispatch' tracks the location and status of emergency vehicles and dispatches these vehicles to incidents. Pertinent incident information is gathered from the public and other public safety agencies and relayed to the responding units. Incident status and the status of the responding units is tracked so that additional units can be dispatched and/or unit status can be returned to available when the incident is cleared and closed.	No	5	The center shall store and maintain the emergency service responses in an action log.	Existing	No
DEMA CRT - HazMat Response Team	Emergency Management Center	Emergency Dispatch	Emergency Dispatch' tracks the location and status of emergency vehicles and dispatches these vehicles to incidents. Pertinent incident information is gathered from the public and other public safety agencies and relayed to the responding units. Incident status and the status of the responding units is tracked so that additional units can be dispatched and/or unit status can be returned to available when the incident is cleared and closed.	No	6	The center shall coordinate response to incidents with other Emergency Management centers to ensure appropriate resources are dispatched and utilized.	Existing	No
DEMA CRT - HazMat Response Team	Emergency Management Center	Emergency Dispatch	Emergency Dispatch' tracks the location and status of emergency vehicles and dispatches these vehicles to incidents. Pertinent incident information is gathered from the public and other public safety agencies and relayed to the responding units. Incident status and the status of the responding units is tracked so that additional units can be dispatched and/or unit status can be returned to available when the incident is cleared and closed.	No	7	The center shall receive traffic images to support dispatch of emergency vehicles.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DEMA CRT - HazMat Response Team	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No				No
DEMA CRT - HazMat Response Team	Emergency Management Center	Emergency Environmental Monitoring	Emergency Environmental Monitoring' collects current and forecast road conditions and surface weather information from a variety of sources. The collected environmental information is monitored and presented to the operator and used to more effectively manage incidents.	No				No
DEMA CRT - HazMat Response Team	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DEMA CRT - HazMat Response Team	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	1	The center shall provide tactical decision support, resource coordination, and communications integration for first responders to support local management of an incident.	Existing	No
DEMA CRT - HazMat Response Team	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	4	The center shall share incident command information with other public safety agencies including resource deployment status, hazardous material information, rail incident information, evacuation advice as well as traffic, road, and weather conditions.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DEMA CRT - HazMat Response Team	Emergency Management Center	Emergency Notification Support	Emergency Notification Support' receives emergency notification messages from vehicles or personal handheld devices, determines an appropriate response, and either uses internal resources or contacts a local agency to provide that response. The nature of the emergency is determined based on the information in the received message as well as other inputs. This object effectively serves as an interface between automated collision notification systems and the local public safety answering point for messages that require a public safety response. This capability depends on an up-to-date registry of public safety answering points/response agencies by coverage area, the type of emergency, and hours of service.	No				No
DEMA CRT - HazMat Response Team	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DEMA CRT - HazMat Response Team	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	12	The center shall provide information to the media concerning the status of an emergency response.	Existing	No
DEMA CRT - HazMat Response Team	Emergency Management Center	Emergency Secure Area Sensor Management	Emergency Secure Area Sensor Management' manages sensors that monitor secure areas in the transportation system, processes the collected data, performs threat analysis in which data is correlated with other sensor, surveillance, and advisory inputs, and then disseminates resultant threat information to emergency personnel and other agencies. In response to identified threats, the operator may request activation of barrier and safeguard systems to preclude an incident, control access during and after an incident or mitigate impact of an incident. The sensors may be in secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. The types of sensors include acoustic, threat (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors), infrastructure condition and integrity, motion and object sensors.	No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DEMA CRT - HazMat Response Team	Emergency Management Center	Emergency Secure Area Surveillance	Emergency Secure Area Surveillance' monitors surveillance inputs from secure areas in the transportation system. The surveillance may be of secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. It provides both video and audio surveillance information to emergency personnel and automatically alerts emergency personnel of potential incidents.	No				No
DEMA CRT - HazMat Response Team	Traffic Management Center	TMC Service Patrol Management	TMC Service Patrol Management' supports dispatch and communication with service patrol vehicles that monitor roads to aid motorists, offering rapid response to minor incidents.	No				No
DEMA Data Archive	Archived Data System			No				No
DEMA Data User Systems	Archived Data User System			No				No
DEMA Emergency Alert System	Alerting and Advisory System			No				No
DEMA Enforcement	Enforcement Center			No				No
DEMA Enforcement	Other Emergency Management Centers			No				No
DEMA National Guard Vehicles	Emergency Vehicle OBE			No				No
DEMA SEOC Arizona DEM Military Affairs	Emergency Management Center			No				No
DEMA WebEOC System	Emergency Telecommunications System			No				No
DEMA WebEOC System	Other Emergency Management Centers			No				No
DPS Backhaul Communications System	Data Distribution System			No				No
DPS Backhaul Communications System	Other Data Distribution Systems			No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Central Communications Center	Center	Center Data Collection	Center Data Collection' collects and stores information that is created in the course of center operations. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No				No
DPS Central Communications Center	Center	Center Data Subscription Management	Center Data Subscription Management' manages data subscriptions for an end user. It provides access to a catalog of available data, manages the necessary user information and rules that govern the data subscriptions, supports communications with data providers to collect data per the subscription rules, and makes the data available to the end user. It provides the local user interface through which a user can specify and manage subscriptions. It supports different mechansims for collecting subscribed data for the end-user including one-time query-response as well as publish-subscribe services.	No				No
DPS Central Communications Center	Emergency Management Center	Emergency Call-Taking	Emergency Call-Taking' supports the emergency call-taker, collecting available information about the caller and the reported emergency, and forwarding this information to other objects that formulate and manage the emergency response. It receives 9-1-1, 7-digit local access, and motorist call-box calls and interfaces to other agencies to assist in the verification and assessment of the emergency and to forward the emergency information to the appropriate response agency.	No	1	The center shall support the interface to the Emergency Telecommunications System (e.g. 911 or 7-digit call routing) to receive emergency notification information and provide it to the emergency system operator.	Existing	No
DPS Central Communications Center	Emergency Management Center	Emergency Call-Taking	Emergency Call-Taking' supports the emergency call-taker, collecting available information about the caller and the reported emergency, and forwarding this information to other objects that formulate and manage the emergency response. It receives 9-1-1, 7-digit local access, and motorist call-box calls and interfaces to other agencies to assist in the verification and assessment of the emergency and to forward the emergency information to the appropriate response agency.	No	2	The center shall receive emergency call information from 911 services and present the possible incident information to the emergency system operator.	Existing	No
DPS Central Communications Center	Emergency Management Center	Emergency Call-Taking	Emergency Call-Taking' supports the emergency call-taker, collecting available information about the caller and the reported emergency, and forwarding this information to other objects that formulate and manage the emergency response. It receives 9-1-1, 7-digit local access, and motorist call-box calls and interfaces to other agencies to assist in the verification and assessment of the emergency and to forward the emergency information to the appropriate response agency.	No	3	The center shall receive emergency call information from vehicles and present the possible incident information to the emergency system operator.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Central Communications Center	Emergency Management Center	Emergency Call-Taking	Emergency Call-Taking' supports the emergency call-taker, collecting available information about the caller and the reported emergency, and forwarding this information to other objects that formulate and manage the emergency response. It receives 9-1-1, 7-digit local access, and motorist call-box calls and interfaces to other agencies to assist in the verification and assessment of the emergency and to forward the emergency information to the appropriate response agency.	No	4	The center shall receive emergency call information from other emergency management centers, e.g. mayday service providers, and present the possible incident information to the emergency system operator.	Existing	No
DPS Central Communications Center	Emergency Management Center	Emergency Call-Taking	Emergency Call-Taking' supports the emergency call-taker, collecting available information about the caller and the reported emergency, and forwarding this information to other objects that formulate and manage the emergency response. It receives 9-1-1, 7-digit local access, and motorist call-box calls and interfaces to other agencies to assist in the verification and assessment of the emergency and to forward the emergency information to the appropriate response agency.	No	5	The center shall receive emergency notification information from other public safety agencies and present the possible incident information to the emergency system operator.	Existing	No
DPS Central Communications Center	Emergency Management Center	Emergency Call-Taking	Emergency Call-Taking' supports the emergency call-taker, collecting available information about the caller and the reported emergency, and forwarding this information to other objects that formulate and manage the emergency response. It receives 9-1-1, 7-digit local access, and motorist call-box calls and interfaces to other agencies to assist in the verification and assessment of the emergency and to forward the emergency information to the appropriate response agency.	No	8	The center shall send a request for remote control of Closed-circuit Television (CCTV) systems from a traffic management center in order to verify the reported incident.	Planned	No
DPS Central Communications Center	Emergency Management Center	Emergency Call-Taking	Emergency Call-Taking' supports the emergency call-taker, collecting available information about the caller and the reported emergency, and forwarding this information to other objects that formulate and manage the emergency response. It receives 9-1-1, 7-digit local access, and motorist call-box calls and interfaces to other agencies to assist in the verification and assessment of the emergency and to forward the emergency information to the appropriate response agency.	No	9	The center shall forward the verified emergency information to the responding agency based on the location and nature of the emergency.	Existing	No
DPS Central Communications Center	Emergency Management Center	Emergency Call-Taking	Emergency Call-Taking' supports the emergency call-taker, collecting available information about the caller and the reported emergency, and forwarding this information to other objects that formulate and manage the emergency response. It receives 9-1-1, 7-digit local access, and motorist call-box calls and interfaces to other agencies to assist in the verification and assessment of the emergency and to forward the emergency information to the appropriate response agency.	No	10	The center shall update the incident information log once the emergency system operator has verified the incident.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Central Communications Center	Emergency Management Center	Emergency Commercial Vehicle Response	Emergency Commercial Vehicle Response' identifies and initiates a response to commercial vehicle and freight equipment related emergencies. These emergencies may include incidents involving hazardous materials as well as the detection of non-permitted transport of security sensitive hazmat. It identifies the location of the vehicle, the nature of the incident, the route information, and information concerning the freight itself. The information supports the determination of the response and identifies the responding agencies to notify.	No	2	The center shall receive emergency notification information from commercial vehicles, commercial vehicle check stations, or commercial fleet operators and present the possible incident information to the emergency system operator. This may include detection of non-permitted transport of security sensitive hazmat, hazardous cargo spills, etc.	Existing	No
DPS Central Communications Center	Emergency Management Center	Emergency Commercial Vehicle Response	Emergency Commercial Vehicle Response' identifies and initiates a response to commercial vehicle and freight equipment related emergencies. These emergencies may include incidents involving hazardous materials as well as the detection of non-permitted transport of security sensitive hazmat. It identifies the location of the vehicle, the nature of the incident, the route information, and information concerning the freight itself. The information supports the determination of the response and identifies the responding agencies to notify.	No	3	The center shall receive details of the cargo being carried by commercial vehicles from their commercial fleet manager for incidents involving potential hazardous materials.	Planned	No
DPS Central Communications Center	Emergency Management Center	Emergency Commercial Vehicle Response	Emergency Commercial Vehicle Response' identifies and initiates a response to commercial vehicle and freight equipment related emergencies. These emergencies may include incidents involving hazardous materials as well as the detection of non-permitted transport of security sensitive hazmat. It identifies the location of the vehicle, the nature of the incident, the route information, and information concerning the freight itself. The information supports the determination of the response and identifies the responding agencies to notify.	No	4	The center shall forward the verified emergency information to the responding agency based on the location and nature of the emergency.	Existing	No
DPS Central Communications Center	Emergency Management Center	Emergency Data Collection	Emergency Data Collection' collects and stores emergency information that is collected in the course of operations by the Emergency Management Center. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	1	The center shall collect emergency service data, emergency vehicle management data, emergency vehicle data, sensor and surveillance data, threat data, and incident data.	Planned	No
DPS Central Communications Center	Emergency Management Center	Emergency Data Collection	Emergency Data Collection' collects and stores emergency information that is collected in the course of operations by the Emergency Management Center. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	2	The center shall assign quality control metrics and meta-data to be stored along with the data. Meta-data may include attributes that describe the source and quality of the data and the conditions surrounding the collection of the data.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Central Communications Center	Emergency Management Center	Emergency Dispatch	Emergency Dispatch' tracks the location and status of emergency vehicles and dispatches these vehicles to incidents. Pertinent incident information is gathered from the public and other public safety agencies and relayed to the responding units. Incident status and the status of the responding units is tracked so that additional units can be dispatched and/or unit status can be returned to available when the incident is cleared and closed.	No	1	The center shall dispatch emergency vehicles to respond to verified emergencies under center personnel control.	Existing	No
DPS Central Communications Center	Emergency Management Center	Emergency Dispatch	Emergency Dispatch' tracks the location and status of emergency vehicles and dispatches these vehicles to incidents. Pertinent incident information is gathered from the public and other public safety agencies and relayed to the responding units. Incident status and the status of the responding units is tracked so that additional units can be dispatched and/or unit status can be returned to available when the incident is cleared and closed.	No	2	The center shall store the current status of all emergency vehicles available for dispatch and those that have been dispatched.	Existing	No
DPS Central Communications Center	Emergency Management Center	Emergency Dispatch	Emergency Dispatch' tracks the location and status of emergency vehicles and dispatches these vehicles to incidents. Pertinent incident information is gathered from the public and other public safety agencies and relayed to the responding units. Incident status and the status of the responding units is tracked so that additional units can be dispatched and/or unit status can be returned to available when the incident is cleared and closed.	No	3	The center shall relay location and incident details to the responding vehicles.	Existing	No
DPS Central Communications Center	Emergency Management Center	Emergency Dispatch	Emergency Dispatch' tracks the location and status of emergency vehicles and dispatches these vehicles to incidents. Pertinent incident information is gathered from the public and other public safety agencies and relayed to the responding units. Incident status and the status of the responding units is tracked so that additional units can be dispatched and/or unit status can be returned to available when the incident is cleared and closed.	No	4	The center shall track the location and status of emergency vehicles responding to an emergency based on information from the emergency vehicle.	Existing	No
DPS Central Communications Center	Emergency Management Center	Emergency Dispatch	Emergency Dispatch' tracks the location and status of emergency vehicles and dispatches these vehicles to incidents. Pertinent incident information is gathered from the public and other public safety agencies and relayed to the responding units. Incident status and the status of the responding units is tracked so that additional units can be dispatched and/or unit status can be returned to available when the incident is cleared and closed.	No	5	The center shall store and maintain the emergency service responses in an action log.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Central Communications Center	Emergency Management Center	Emergency Dispatch	Emergency Dispatch' tracks the location and status of emergency vehicles and dispatches these vehicles to incidents. Pertinent incident information is gathered from the public and other public safety agencies and relayed to the responding units. Incident status and the status of the responding units is tracked so that additional units can be dispatched and/or unit status can be returned to available when the incident is cleared and closed.	No	6	The center shall coordinate response to incidents with other Emergency Management centers to ensure appropriate resources are dispatched and utilized.	Existing	No
DPS Central Communications Center	Emergency Management Center	Emergency Dispatch	Emergency Dispatch' tracks the location and status of emergency vehicles and dispatches these vehicles to incidents. Pertinent incident information is gathered from the public and other public safety agencies and relayed to the responding units. Incident status and the status of the responding units is tracked so that additional units can be dispatched and/or unit status can be returned to available when the incident is cleared and closed.	No	7	The center shall receive traffic images to support dispatch of emergency vehicles.	Planned	No
DPS Central Communications Center	Emergency Management Center	Emergency Dispatch	Emergency Dispatch' tracks the location and status of emergency vehicles and dispatches these vehicles to incidents. Pertinent incident information is gathered from the public and other public safety agencies and relayed to the responding units. Incident status and the status of the responding units is tracked so that additional units can be dispatched and/or unit status can be returned to available when the incident is cleared and closed.	No	8	The center shall provide the capability to request remote control of traffic surveillance devices.	Planned	No
DPS Central Communications Center	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Planned	No
DPS Central Communications Center	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	2	The center shall receive incident information from other transportation management centers to support the early warning system.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Central Communications Center	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	3	The center shall support the entry of alert and advisory information directly from the emergency system operator.	Planned	No
DPS Central Communications Center	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	5	The center shall provide the capability to correlate alerts and advisories, incident information, and security sensor and surveillance data.	Planned	No
DPS Central Communications Center	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	6	The center shall broadcast wide-area alerts and advisories to traffic management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned	No
DPS Central Communications Center	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	7	The center shall broadcast wide-area alerts and advisories to transit management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned	No
DPS Central Communications Center	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	8	The center shall broadcast wide-area alerts and advisories to toll administration centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Central Communications Center	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	9	The center shall broadcast wide-area alerts and advisories to traveler information service providers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned	No
DPS Central Communications Center	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	10	The center shall broadcast wide-area alerts and advisories to maintenance centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned	No
DPS Central Communications Center	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	11	The center shall broadcast wide-area alerts and advisories to other emergency management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned	No
DPS Central Communications Center	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	12	The center shall broadcast wide-area alerts and advisories to commercial vehicle administration centers and roadside check facilities for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned	No
DPS Central Communications Center	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	13	The center shall process status information from each of the centers that have been sent the wide-area alert.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Central Communications Center	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	14	The center shall coordinate the broadcast of wide-area alerts and advisories with other emergency management centers.	Planned	No
DPS Central Communications Center	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	15	The center shall present the alert and advisory information and the status of the actions taken in response to the alert by the other centers to the emergency system operator as received from other system inputs.	Planned	No
DPS Central Communications Center	Emergency Management Center	Emergency Environmental Monitoring	Emergency Environmental Monitoring' collects current and forecast road conditions and surface weather information from a variety of sources. The collected environmental information is monitored and presented to the operator and used to more effectively manage incidents.	No				No
DPS Central Communications Center	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	1	The center shall manage inter-agency coordination of evacuation operations, from initial planning through the evacuation process and reentry.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Central Communications Center	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Central Communications Center	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	3	The center shall provide an interface to the emergency system operator to enter evacuation plans and procedures and present the operator with other agencies' plans.	Planned	No

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DPS Central Communications Center	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	4	The center shall coordinate evacuation destinations and shelter needs with shelter providers (e.g., the American Red Cross) in the region.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Central Communications Center	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	5	The center shall provide evacuation information to traffic, transit, maintenance and construction, rail operations, and other emergency management centers as needed.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Central Communications Center	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	6	The center shall request resources from transit agencies as needed to support the evacuation.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Central Communications Center	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	7	The center shall request traffic management agencies to implement special traffic control strategies and to control evacuation traffic, including traffic on local streets and arterials as well as the major evacuation routes.	Planned	No

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DPS Central Communications Center	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	8	The center shall provide traveler information systems with evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary and when it is safe to return.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Central Communications Center	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	9	The center shall monitor the progress or status of the evacuation once it begins and exchange tactical plans, prepared during the incident, with allied agencies.	Planned	No

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DPS Central Communications Center	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	10	The center shall monitor the progress of the reentry process.	Planned	No

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DPS Central Communications Center	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	11	The center shall submit evacuation information to toll administration centers along with requests for changes in the toll services or fee collection during an evacuation.	Planned	No

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DPS Central Communications Center	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	12	The center shall retrieve information from public health systems to plan for and implement evacuations or in-place sheltering for biological, chemical, radiation, and other public health emergencies.	Planned	No
DPS Central Communications Center	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	1	The center shall provide tactical decision support, resource coordination, and communications integration for first responders to support local management of an incident.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Central Communications Center	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Existing	No
DPS Central Communications Center	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	3	The center shall track and maintain resource information and action plans pertaining to the incident command.	Existing	No

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DPS Central Communications Center	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	4	The center shall share incident command information with other public safety agencies including resource deployment status, hazardous material information, rail incident information, evacuation advice as well as traffic, road, and weather conditions.	Existing	No
DPS Central Communications Center	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	5	The center shall assess the status of responding emergency vehicles as part of an incident command.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Central Communications Center	Emergency Management Center	Emergency Notification Support	Emergency Notification Support' receives emergency notification messages from vehicles or personal handheld devices, determines an appropriate response, and either uses internal resources or contacts a local agency to provide that response. The nature of the emergency is determined based on the information in the received message as well as other inputs. This object effectively serves as an interface between automated collision notification systems and the local public safety answering point for messages that require a public safety response. This capability depends on an up-to-date registry of public safety answering points/response agencies by coverage area, the type of emergency, and hours of service.	No				No
DPS Central Communications Center	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Central Communications Center	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Existing	No
DPS Central Communications Center	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Central Communications Center	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Planned	No
DPS Central Communications Center	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	5	The center shall track the availability of resources and coordinate resource sharing with allied agency centers including traffic, maintenance, or other emergency centers.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Central Communications Center	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	6	The center shall allocate the appropriate emergency services, resources, and vehicle (s) to respond to incidents, and shall provide the capability to override the current allocation to suit the special needs of a current incident.	Existing	No
DPS Central Communications Center	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	8	The center shall support remote control of field equipment normally under control of the traffic management center including traffic signals, dynamic message signs, gates, and barriers.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Central Communications Center	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	9	The center shall provide the capability to remotely control and monitor CCTV systems normally operated by a traffic management center.	Planned	No
DPS Central Communications Center	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	10	The center shall provide the capability to request transit resource availability from transit centers for use during disaster and evacuation operations.	Planned	No

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DPS Central Communications Center	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	11	The center shall assimilate the damage assessment of the transit, traffic, rail, maintenance, and other emergency center services and systems to create an overall transportation system status, and disseminate to each of these centers and the traveling public via traveler information providers.	Planned	No
DPS Central Communications Center	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	12	The center shall provide information to the media concerning the status of an emergency response.	Planned	No

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DPS Central Communications Center	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	13	The center shall provide the capability for center personnel to provide inputs to the management of incidents, disasters and evacuations.	Planned	No
DPS Central Communications Center	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	14	The center shall collect information about the status of the recovery efforts for the infrastructure during disasters.	Planned	No

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DPS Central Communications Center	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	15	The center shall provide the overall status of infrastructure recovery efforts to traveler information providers and media.	Planned	No
DPS Central Communications Center	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	16	The center shall provide the capability to communicate information about emergency situations to local population through the Emergency Telecommunications System.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Central Communications Center	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	17	The center shall provide the capability to identify neighborhoods and businesses that should be informed of an emergency situation based on information collected about incidents including their severity, impacted locations, and recovery schedule.	Planned	No
DPS Central Communications Center	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	18	The center shall retrieve information from public health systems to increase preparedness for, and implement a response to biological, chemical, radiation, and other public health emergencies.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Central Communications Center	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	19	The center shall manage coordinated inter-agency responses to incidents at an international border.	Planned	No
DPS Central Communications Center	Emergency Management Center	Emergency Secure Area Alarm Support	Emergency Secure Area Alarm Support' receives traveler or transit vehicle operator alarm messages, notifies the system operator, and provides acknowledgement of alarm receipt back to the originator of the alarm. The alarms received can be generated by silent or audible alarm systems and may originate from public areas (e.g. transit stops, park and ride lots, transit stations, rest areas) or transit vehicles. The nature of the emergency may be determined based on the information in the alarm message as well as other inputs.	No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Central Communications Center	Emergency Management Center	Emergency Secure Area Sensor Management	Emergency Secure Area Sensor Management' manages sensors that monitor secure areas in the transportation system, processes the collected data, performs threat analysis in which data is correlated with other sensor, surveillance, and advisory inputs, and then disseminates resultant threat information to emergency personnel and other agencies. In response to identified threats, the operator may request activation of barrier and safeguard systems to preclude an incident, control access during and after an incident or mitigate impact of an incident. The sensors may be in secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. The types of sensors include acoustic, threat (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors), infrastructure condition and integrity, motion and object sensors.	No				No
DPS Central Communications Center	Emergency Management Center	Emergency Secure Area Surveillance	Emergency Secure Area Surveillance' monitors surveillance inputs from secure areas in the transportation system. The surveillance may be of secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. It provides both video and audio surveillance information to emergency personnel and automatically alerts emergency personnel of potential incidents.	No				No
DPS Central Communications Center	Traffic Management Center	TMC Service Patrol Management	TMC Service Patrol Management' supports dispatch and communication with service patrol vehicles that monitor roads to aid motorists, offering rapid response to minor incidents.	No	1	The center shall dispatch roadway service patrol vehicles to identified incident locations.	Existing	No
DPS Central Communications Center	Traffic Management Center	TMC Service Patrol Management	TMC Service Patrol Management' supports dispatch and communication with service patrol vehicles that monitor roads to aid motorists, offering rapid response to minor incidents.	No	2	The center shall store the current status of all service patrol vehicles available for dispatch and those that have been dispatched.	Existing	No
DPS Central Communications Center	Traffic Management Center	TMC Service Patrol Management	TMC Service Patrol Management' supports dispatch and communication with service patrol vehicles that monitor roads to aid motorists, offering rapid response to minor incidents.	No	3	The center shall share incident information collected by the service patrol with traffic, maintenance and construction, and traveler information centers for incident management, incident notification to travelers, and incident cleanup.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Central Communications Center	Traffic Management Center	TMC Service Patrol Management	TMC Service Patrol Management' supports dispatch and communication with service patrol vehicles that monitor roads to aid motorists, offering rapid response to minor incidents.	No	4	The center shall track the location and status of service patrol vehicles.	Existing	No
DPS Commercial Vehicle Enforcement	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	1	The center shall manage electronic credentials filing and processing for commercial vehicles.	Existing	No
DPS Commercial Vehicle Enforcement	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	2	The center shall manage the filing of appropriate taxes for the operation of commercial vehicles.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Commercial Vehicle Enforcement	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	3	The center shall process requests for payments of electronic credentials and tax filing, maintaining an interface to a Financial Institution as necessary.	Existing	No
DPS Commercial Vehicle Enforcement	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	4	The center shall exchange credentials and tax information with other commercial vehicle administration centers, either other states or the federal government.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Commercial Vehicle Enforcement	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	5	The center shall provide route restrictions information, including hazmat restrictions, to other centers and agencies for distribution to commercial vehicle operators. These centers and agencies may include commercial fleet and freight management operators, traveler information centers, digital map update providers, and other commercial vehicle administration centers.	Planned	No
DPS Commercial Vehicle Enforcement	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	6	The center shall use information on asset restrictions received from maintenance centers to develop the commercial vehicle route restrictions and process credentials applications.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Commercial Vehicle Enforcement	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	7	The center shall provide an interface with commercial vehicle fleet and freight management centers to exchange audit and compliance review reports.	Planned	No
DPS Commercial Vehicle Enforcement	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	8	The center shall provide credentials information about commercial vehicle operators and carriers to authorized requestors, including roadside check stations that determine when a vehicle should be pulled-in based on their credentials and their actual load/freight contents.	Planned	No
DPS Commercial Vehicle Enforcement	Commercial Vehicle Administration Center	CVAC Data Collection	CVAC Data Collection' collects and stores commercial vehicle information that is collected in the course of Commercial Vehicle Administration Center operations. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	1	The center shall receive operational data from the roadside check systems as well as administration and credentials data.	Existing	No
DPS Commercial Vehicle Enforcement	Commercial Vehicle Administration Center	CVAC Data Collection	CVAC Data Collection' collects and stores commercial vehicle information that is collected in the course of Commercial Vehicle Administration Center operations. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	2	The center shall assign quality control metrics and meta-data to be stored along with the data. Meta-data may include attributes that describe the source and quality of the data and the conditions surrounding the collection of the data.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Commercial Vehicle Enforcement	Commercial Vehicle Administration Center	CVAC Data Collection	CVAC Data Collection' collects and stores commercial vehicle information that is collected in the course of Commercial Vehicle Administration Center operations. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	3	The center shall receive and respond to requests from ITS Archives for either a catalog of the commercial vehicle operations data or for the data itself.	Planned	No
DPS Commercial Vehicle Enforcement	Commercial Vehicle Administration Center	CVAC Data Collection	CVAC Data Collection' collects and stores commercial vehicle information that is collected in the course of Commercial Vehicle Administration Center operations. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	4	The center shall be able to produce sample products of the data available.	Planned	No
DPS Commercial Vehicle Enforcement	Commercial Vehicle Administration Center	CVAC Information Exchange	CVAC Information Exchange' supports the exchange of safety, credentials, permit data, and other data concerning the operation of commercial vehicles among jurisdictions. The object also supports the exchange of safety, credentials, permit, and operations data between systems (for example, an administrative center and the roadside check facilities) within a single jurisdiction. Data are collected from multiple authoritative sources and packaged into snapshots (top-level summary and critical status information) and profiles (detailed and historical data). Data is made available to fleet operators and other information requestors on request or based on subscriptions established by the requestor.	No	1	The center shall exchange information with roadside check facilities, including credentials and credentials status information, safety status information, daily site activity data, driver records, and citations.	Planned	No
DPS Commercial Vehicle Enforcement	Commercial Vehicle Administration Center	CVAC Information Exchange	CVAC Information Exchange' supports the exchange of safety, credentials, permit data, and other data concerning the operation of commercial vehicles among jurisdictions. The object also supports the exchange of safety, credentials, permit, and operations data between systems (for example, an administrative center and the roadside check facilities) within a single jurisdiction. Data are collected from multiple authoritative sources and packaged into snapshots (top-level summary and critical status information) and profiles (detailed and historical data). Data is made available to fleet operators and other information requestors on request or based on subscriptions established by the requestor.	No	2	The center shall exchange safety and credentials data among other commercial vehicle administration centers, including border clearance status, credentials information, credentials status information, driver records, accident reports, permit information, and safety status information.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Commercial Vehicle Enforcement	Commercial Vehicle Administration Center	CVAC Information Exchange	CVAC Information Exchange' supports the exchange of safety, credentials, permit data, and other data concerning the operation of commercial vehicles among jurisdictions. The object also supports the exchange of safety, credentials, permit, and operations data between systems (for example, an administrative center and the roadside check facilities) within a single jurisdiction. Data are collected from multiple authoritative sources and packaged into snapshots (top-level summary and critical status information) and profiles (detailed and historical data). Data is made available to fleet operators and other information requestors on request or based on subscriptions established by the requestor.	No	3	The center shall package data concerning commercial vehicle safety and credentials into snapshots (top-level summary and critical status information).	Planned	No
DPS Commercial Vehicle Enforcement	Commercial Vehicle Administration Center	CVAC Information Exchange	CVAC Information Exchange' supports the exchange of safety, credentials, permit data, and other data concerning the operation of commercial vehicles among jurisdictions. The object also supports the exchange of safety, credentials, permit, and operations data between systems (for example, an administrative center and the roadside check facilities) within a single jurisdiction. Data are collected from multiple authoritative sources and packaged into snapshots (top-level summary and critical status information) and profiles (detailed and historical data). Data is made available to fleet operators and other information requestors on request or based on subscriptions established by the requestor.	No	4	The center shall package data concerning commercial vehicle safety and credentials into profiles (detailed and historical data).	Planned	No
DPS Commercial Vehicle Enforcement	Commercial Vehicle Administration Center	CVAC Information Exchange	CVAC Information Exchange' supports the exchange of safety, credentials, permit data, and other data concerning the operation of commercial vehicles among jurisdictions. The object also supports the exchange of safety, credentials, permit, and operations data between systems (for example, an administrative center and the roadside check facilities) within a single jurisdiction. Data are collected from multiple authoritative sources and packaged into snapshots (top-level summary and critical status information) and profiles (detailed and historical data). Data is made available to fleet operators and other information requestors on request or based on subscriptions established by the requestor.	No	5	The center shall provide reports to the commercial vehicle fleet manager regarding fleet activity through roadside facilities including accident reports, citations, credentials status information, driver records, and safety status information.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Commercial Vehicle Enforcement	Commercial Vehicle Administration Center	CVAC International Administration	CVAC International Administration' generates and processes the entry documentation necessary to obtain release of vehicle, cargo, and driver across an international border, report the results of the crossing event, and handle duty fee processing. It interfaces with the systems used by customs and border protection, immigration, carriers, and service providers (e.g., brokers) to generate, process, and store entry documentation.	No	1	The center shall receive domestic transportation and declaration information from Border Inspection Administration Agencies such as U.S. Bureau of Immigration and Customs Enforcement (ICE), the U.S. Bureau of Customs and Border Protection (CBP), and their counterparts in Canada and Mexico.	Planned	No
DPS Commercial Vehicle Enforcement	Commercial Vehicle Administration Center	CVAC International Administration	CVAC International Administration' generates and processes the entry documentation necessary to obtain release of vehicle, cargo, and driver across an international border, report the results of the crossing event, and handle duty fee processing. It interfaces with the systems used by customs and border protection, immigration, carriers, and service providers (e.g., brokers) to generate, process, and store entry documentation.	No	2	The center shall provide an assessment regarding a commercial vehicle and driver at a border crossing. The assessment or clearance data will be forwarded on to the appropriate regulatory agencies and roadside check facilities operating at the border crossing.	Planned	No
DPS Commercial Vehicle Enforcement	Commercial Vehicle Administration Center	CVAC International Administration	CVAC International Administration' generates and processes the entry documentation necessary to obtain release of vehicle, cargo, and driver across an international border, report the results of the crossing event, and handle duty fee processing. It interfaces with the systems used by customs and border protection, immigration, carriers, and service providers (e.g., brokers) to generate, process, and store entry documentation.	No	3	The center shall provide border clearance status concerning commercial vehicles and their shipments to the roadside check facilities, the commercial vehicle fleet and freight management centers, intermodal freight shippers, other commercial vehicle administration centers, and border inspection administration centers.	Planned	No
DPS Commercial Vehicle Enforcement	Commercial Vehicle Administration Center	CVAC International Administration	CVAC International Administration' generates and processes the entry documentation necessary to obtain release of vehicle, cargo, and driver across an international border, report the results of the crossing event, and handle duty fee processing. It interfaces with the systems used by customs and border protection, immigration, carriers, and service providers (e.g., brokers) to generate, process, and store entry documentation.	No	4	The center shall receive and store border clearance event data from the roadside check facilities that are located near border crossings.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Commercial Vehicle Enforcement	Commercial Vehicle Administration Center	CVAC Safety and Security Administration	CVAC Safety and Security Administration' provides commercial vehicle safety and security criteria to roadside check facilities, collects and reviews safety and security data from the field and distributes safety and security information to other centers, carriers, and enforcement agencies. It also supports wireless roadside inspections, including carrier enrollment, managing and distributing information about trigger areas where wireless inspections may occur, and monitoring the condition of the commercial vehicle and driver using wireless communications at identified trigger areas. It supports the collection and review of carrier and driver safety and security data and supports determination of the carrier and driver safety and security ratings. It clears the out-of-service status when the responsible carrier or driver reports that deficiencies flagged during inspections have been corrected.	No	1	The center shall provide commercial vehicle safety and security data to roadside check facilities.	Planned	No
DPS Commercial Vehicle Enforcement	Commercial Vehicle Administration Center	CVAC Safety and Security Administration	CVAC Safety and Security Administration' provides commercial vehicle safety and security criteria to roadside check facilities, collects and reviews safety and security data from the field and distributes safety and security information to other centers, carriers, and enforcement agencies. It also supports wireless roadside inspections, including carrier enrollment, managing and distributing information about trigger areas where wireless inspections may occur, and monitoring the condition of the commercial vehicle and driver using wireless communications at identified trigger areas. It supports the collection and review of carrier and driver safety and security data and supports determination of the carrier and driver safety and security ratings. It clears the out-of-service status when the responsible carrier or driver reports that deficiencies flagged during inspections have been corrected.	No	2	The center shall collect and review safety inspection reports and violations from the roadside check facilities and pass on appropriate portions to other commercial vehicle administrative centers and commercial vehicle fleet operators.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Commercial Vehicle Enforcement	Commercial Vehicle Administration Center	CVAC Safety and Security Administration	CVAC Safety and Security Administration' provides commercial vehicle safety and security criteria to roadside check facilities, collects and reviews safety and security data from the field and distributes safety and security information to other centers, carriers, and enforcement agencies. It also supports wireless roadside inspections, including carrier enrollment, managing and distributing information about trigger areas where wireless inspections may occur, and monitoring the condition of the commercial vehicle and driver using wireless communications at identified trigger areas. It supports the collection and review of carrier and driver safety and security data and supports determination of the carrier and driver safety and security ratings. It clears the out-of-service status when the responsible carrier or driver reports that deficiencies flagged during inspections have been corrected.	No	3	The center shall notify enforcement agencies of commercial vehicle safety violations by individual commercial vehicles, drivers, or carriers.	Planned	No
DPS Commercial Vehicle Enforcement	Commercial Vehicle Administration Center	CVAC Safety and Security Administration	CVAC Safety and Security Administration' provides commercial vehicle safety and security criteria to roadside check facilities, collects and reviews safety and security data from the field and distributes safety and security information to other centers, carriers, and enforcement agencies. It also supports wireless roadside inspections, including carrier enrollment, managing and distributing information about trigger areas where wireless inspections may occur, and monitoring the condition of the commercial vehicle and driver using wireless communications at identified trigger areas. It supports the collection and review of carrier and driver safety and security data and supports determination of the carrier and driver safety and security ratings. It clears the out-of-service status when the responsible carrier or driver reports that deficiencies flagged during inspections have been corrected.	No	10	The center shall monitor the condition of the commercial vehicle and driver using wireless communications at identified trigger areas.	Planned	No
DPS Commercial Vehicle Enforcement	Enforcement Center			No				No
DPS Console Interface (Other LE)	Other Emergency Management Centers			No				No
DPS Data Archive	Archived Data System			No				No
DPS Data User Systems	Archived Data User System			No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Network Operations Center - NOC	Center			No				No
DPS Radio System	Data Distribution System			No				No
DPS Radio System	Other Data Distribution Systems			No				No
DPS RMA Vehicles	Emergency Vehicle OBE	EV On-Board En Route Support	EV On-Board En Route Support' provides communications functions to responding emergency vehicles that reduce response times and improve safety of responding public safety personnel and the general public. It supports traffic signal preemption via short range communication directly with signal control equipment and sends alert messages to surrounding vehicles.	No	1	The emergency vehicle, including roadway service patrols, shall track its current location.	Existing	No
DPS RMA Vehicles	Emergency Vehicle OBE	EV On-Board En Route Support	EV On-Board En Route Support' provides communications functions to responding emergency vehicles that reduce response times and improve safety of responding public safety personnel and the general public. It supports traffic signal preemption via short range communication directly with signal control equipment and sends alert messages to surrounding vehicles.	No	2	The emergency vehicle, including roadway service patrols, shall send the vehicle's location and operational data to the center for emergency management and dispatch.	Existing	No
DPS RMA Vehicles	Emergency Vehicle OBE	EV On-Board En Route Support	EV On-Board En Route Support' provides communications functions to responding emergency vehicles that reduce response times and improve safety of responding public safety personnel and the general public. It supports traffic signal preemption via short range communication directly with signal control equipment and sends alert messages to surrounding vehicles.	No	3	The emergency vehicle, including roadway service patrols, shall receive incident details and a suggested route when dispatched to a scene.	Existing	No
DPS RMA Vehicles	Emergency Vehicle OBE	EV On-Board En Route Support	EV On-Board En Route Support' provides communications functions to responding emergency vehicles that reduce response times and improve safety of responding public safety personnel and the general public. It supports traffic signal preemption via short range communication directly with signal control equipment and sends alert messages to surrounding vehicles.	No	4	The emergency vehicle shall send the current en route status (including estimated time of arrival) and requests for emergency dispatch updates.	Existing	No
DPS RMA Vehicles	Emergency Vehicle OBE	EV On-Board En Route Support	EV On-Board En Route Support' provides communications functions to responding emergency vehicles that reduce response times and improve safety of responding public safety personnel and the general public. It supports traffic signal preemption via short range communication directly with signal control equipment and sends alert messages to surrounding vehicles.	No	5	The emergency vehicle shall send requests to traffic signal control equipment at the roadside to preempt the signal.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS RMA Vehicles	Emergency Vehicle OBE	EV On-Board En Route Support	EV On-Board En Route Support' provides communications functions to responding emergency vehicles that reduce response times and improve safety of responding public safety personnel and the general public. It supports traffic signal preemption via short range communication directly with signal control equipment and sends alert messages to surrounding vehicles.	No	6	The emergency vehicle shall provide the personnel on-board with dispatch information, including incident type and location, and forward an acknowledgment from personnel to the center that the vehicle is on its way to the incident scene.	Planned	No
DPS RMA Vehicles	Emergency Vehicle OBE	EV On-Board En Route Support	EV On-Board En Route Support' provides communications functions to responding emergency vehicles that reduce response times and improve safety of responding public safety personnel and the general public. It supports traffic signal preemption via short range communication directly with signal control equipment and sends alert messages to surrounding vehicles.	No	7	The emergency vehicle shall send patient status information to the care facility along with a request for further information.	Planned	No
DPS RMA Vehicles	Emergency Vehicle OBE	EV On-Board En Route Support	EV On-Board En Route Support' provides communications functions to responding emergency vehicles that reduce response times and improve safety of responding public safety personnel and the general public. It supports traffic signal preemption via short range communication directly with signal control equipment and sends alert messages to surrounding vehicles.	No	8	The emergency vehicle shall forward care facility status information to emergency vehicle personnel, including the location, specialized services, quality of care, waiting time, number of rooms available, and emergency room status of hospitals or emergency care providers.	Planned	No
DPS RMA Vehicles	Emergency Vehicle OBE	EV On-Board En Route Support	EV On-Board En Route Support' provides communications functions to responding emergency vehicles that reduce response times and improve safety of responding public safety personnel and the general public. It supports traffic signal preemption via short range communication directly with signal control equipment and sends alert messages to surrounding vehicles.	No	9	The emergency vehicle shall send the vehicle's location, speed and direction to other vehicles in the area.	Planned	No
DPS RMA Vehicles	Emergency Vehicle OBE	EV On-Board Incident Management Communication	EV On-board Incident Management Communication' provides communications support to first responders. Information about the incident, information on dispatched resources, and ancillary information such as road and weather conditions are provided to emergency personnel. Emergency personnel transmit information about the incident such as identification of vehicles and people involved, the extent of injuries, hazardous material, resources on site, site management strategies in effect, and current clearance status. Emergency personnel may also send in-vehicle signing messages to approaching traffic using short range communications.	No	1	The emergency vehicle shall receive dispatch instructions sufficient to enable emergency personnel in the field to implement an effective incident response. It includes local traffic, road, and weather conditions, hazardous material information, and the current status of resources that have been allocated to an incident.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS RMA Vehicles	Emergency Vehicle OBE	EV On-Board Incident Management Communication	EV On-board Incident Management Communication' provides communications support to first responders. Information about the incident, information on dispatched resources, and ancillary information such as road and weather conditions are provided to emergency personnel. Emergency personnel transmit information about the incident such as identification of vehicles and people involved, the extent of injuries, hazardous material, resources on site, site management strategies in effect, and current clearance status. Emergency personnel may also send in-vehicle signing messages to approaching traffic using short range communications.	No	2	The emergency vehicle shall provide an interface to the center for emergency personnel to transmit information about the incident site such as the extent of injuries, identification of vehicles and people involved, hazardous material, etc.	Existing	No
DPS RMA Vehicles	Emergency Vehicle OBE	EV On-Board Incident Management Communication	EV On-board Incident Management Communication' provides communications support to first responders. Information about the incident, information on dispatched resources, and ancillary information such as road and weather conditions are provided to emergency personnel. Emergency personnel transmit information about the incident such as identification of vehicles and people involved, the extent of injuries, hazardous material, resources on site, site management strategies in effect, and current clearance status. Emergency personnel may also send in-vehicle signing messages to approaching traffic using short range communications.	No	3	The emergency vehicle shall provide an interface to the center for emergency personnel to transmit information about the current incident response status such as the identification of the resources on site, site management strategies in effect, and current clearance status.	Existing	No
DPS RMA Vehicles	Emergency Vehicle OBE	EV On-Board Incident Management Communication	EV On-board Incident Management Communication' provides communications support to first responders. Information about the incident, information on dispatched resources, and ancillary information such as road and weather conditions are provided to emergency personnel. Emergency personnel transmit information about the incident such as identification of vehicles and people involved, the extent of injuries, hazardous material, resources on site, site management strategies in effect, and current clearance status. Emergency personnel may also send in-vehicle signing messages to approaching traffic using short range communications.	No	4	The emergency vehicle shall provide traffic incident information to other emergency vehicles using short range communications.	Planned	No
DPS RMA Vehicles	Emergency Vehicle OBE	EV Service Patrol Vehicle Operations	EV Service Patrol Vehicle Operations' provides on-board processing and communications to service patrol vehicles that reduce response times and improve safety of responding personnel. It supports service patrol vehicle dispatch and provides incident information back to the dispatching center.	No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Roadside Safety Inspection	Commercial Vehicle Check Equipment	CVCE Citation and Accident Electronic Recording	CVCE Citation and Accident Electronic Recording' documents accidents, citations, and violations identified during roadside safety inspections and forwards the information to the Commercial Vehicle Administration Center for processing. It collects data from the vehicle to help characterize the circumstances surrounding the accident.	No	1	The roadside check facility equipment shall record the results of roadside inspections carried using an inspector's hand held terminal interface.	Planned	No
DPS Roadside Safety Inspection	Commercial Vehicle Check Equipment	CVCE Citation and Accident Electronic Recording	CVCE Citation and Accident Electronic Recording' documents accidents, citations, and violations identified during roadside safety inspections and forwards the information to the Commercial Vehicle Administration Center for processing. It collects data from the vehicle to help characterize the circumstances surrounding the accident.	No	2	The roadside check facility equipment shall provide an interface for an inspector to add comments to the inspection results.	Planned	No
DPS Roadside Safety Inspection	Commercial Vehicle Check Equipment	CVCE Citation and Accident Electronic Recording	CVCE Citation and Accident Electronic Recording' documents accidents, citations, and violations identified during roadside safety inspections and forwards the information to the Commercial Vehicle Administration Center for processing. It collects data from the vehicle to help characterize the circumstances surrounding the accident.	No	3	The roadside check facility equipment shall forward results of the roadside inspections to the commercial vehicle administration center either as needed or on a periodic basis. These reports include accident reports, violation notifications, citations, and daily site activity logs.	Planned	No
DPS Roadside Safety Inspection	Commercial Vehicle Check Equipment	CVCE Citation and Accident Electronic Recording	CVCE Citation and Accident Electronic Recording' documents accidents, citations, and violations identified during roadside safety inspections and forwards the information to the Commercial Vehicle Administration Center for processing. It collects data from the vehicle to help characterize the circumstances surrounding the accident.	No	4	The roadside check facility equipment shall receive driver records from the commercial vehicle administration center to support driver identification and collection of driver credentials and history information.	Planned	No
DPS Roadside Safety Inspection	Commercial Vehicle Check Equipment	CVCE Electronic Screening	CVCE Electronic Screening' supports electronic credentials and safety screening of commercial vehicles at mainline speeds. It processes the data from the commercial vehicles along with accessed database information to determine whether a pull-in message is needed. It may also generate random pull-in messages with provisions for facility operators and enforcement officials to have manual override capabilities.	No	1	The roadside check facility equipment shall detect the presence of commercial vehicles and freight equipment approaching a facility.	Existing	No
DPS Roadside Safety Inspection	Commercial Vehicle Check Equipment	CVCE Electronic Screening	CVCE Electronic Screening' supports electronic credentials and safety screening of commercial vehicles at mainline speeds. It processes the data from the commercial vehicles along with accessed database information to determine whether a pull-in message is needed. It may also generate random pull-in messages with provisions for facility operators and enforcement officials to have manual override capabilities.	No	3	The roadside check facility equipment shall receive the credential and credentials status information (e.g. snapshots) from the commercial vehicle administration center to maintain an up to date list of which vehicles have been cleared (enrolled) to potentially pass through without stopping.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Roadside Safety Inspection	Commercial Vehicle Check Equipment	CVCE Electronic Screening	CVCE Electronic Screening' supports electronic credentials and safety screening of commercial vehicles at mainline speeds. It processes the data from the commercial vehicles along with accessed database information to determine whether a pull-in message is needed. It may also generate random pull-in messages with provisions for facility operators and enforcement officials to have manual override capabilities.	No	4	The roadside check facility equipment shall receive commercial vehicle violation records and carriers, vehicles, and drivers of interest from appropriate law enforcement agencies.	Planned	No
DPS Roadside Safety Inspection	Commercial Vehicle Check Equipment	CVCE Electronic Screening	CVCE Electronic Screening' supports electronic credentials and safety screening of commercial vehicles at mainline speeds. It processes the data from the commercial vehicles along with accessed database information to determine whether a pull-in message is needed. It may also generate random pull-in messages with provisions for facility operators and enforcement officials to have manual override capabilities.	No	5	The roadside check facility equipment shall provide an interface to inspectors in the field to allow them to monitor and if necessary override the pull-in decisions made by the system.	Planned	No
DPS Roadside Safety Inspection	Commercial Vehicle Check Equipment	CVCE Electronic Screening	CVCE Electronic Screening' supports electronic credentials and safety screening of commercial vehicles at mainline speeds. It processes the data from the commercial vehicles along with accessed database information to determine whether a pull-in message is needed. It may also generate random pull-in messages with provisions for facility operators and enforcement officials to have manual override capabilities.	No	7	The roadside check facility equipment shall request and input electronic screening data from the commercial vehicle's electronic tag data.	Planned	No
DPS Roadside Safety Inspection	Commercial Vehicle Check Equipment	CVCE Electronic Screening	CVCE Electronic Screening' supports electronic credentials and safety screening of commercial vehicles at mainline speeds. It processes the data from the commercial vehicles along with accessed database information to determine whether a pull-in message is needed. It may also generate random pull-in messages with provisions for facility operators and enforcement officials to have manual override capabilities.	No	8	The roadside check facility equipment shall collect safety data from the commercial vehicle and its freight equipment.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Roadside Safety Inspection	Commercial Vehicle Check Equipment	CVCE Safety and Security Inspection	CVCE Safety and Security Inspection' supports the roadside safety inspection process, including wireless roadside inspections that are conducted remotely. It reads on-board safety data at mainline speeds to rapidly check the vehicle and driver and accesses historical safety data after identifying vehicles at mainline speeds or while stopped at the roadside. The capabilities to process safety data and issue pull-in messages or provide warnings to the driver, carrier, and enforcement agencies are also provided. It includes hand held or automatic devices to rapidly inspect the vehicle and driver. Results of screening and summary safety inspection data are stored and maintained. Since a vehicle may cross jurisdictional boundaries during a trip, it supports the concept of a last clearance event record carried on the vehicle tag. The last clearance event record reflects the results of the roadside verification action. For example, if the vehicle is pulled over in State A and undergoes credential, weight, and safety checks, the results of the clearance process are written to the vehicle s tag. If the vehicle continues the trip and passes a roadside station in State B, the State B station has access to the results of the previous pull-in because it can read the last clearance event record written by the State A roadside station. It associates high-risk cargo with the container/chassis, manifest, carrier, vehicle and driver transporting it.	No	1	The roadside check facility equipment shall receive information concerning commercial vehicles and freight equipment approaching a facility that are being pulled in for safety and security inspections.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Roadside Safety Inspection	Commercial Vehicle Check Equipment	CVCE Safety and Security Inspection	CVCE Safety and Security Inspection' supports the roadside safety inspection process, including wireless roadside inspections that are conducted remotely. It reads on-board safety data at mainline speeds to rapidly check the vehicle and driver and accesses historical safety data after identifying vehicles at mainline speeds or while stopped at the roadside. The capabilities to process safety data and issue pull-in messages or provide warnings to the driver, carrier, and enforcement agencies are also provided. It includes hand held or automatic devices to rapidly inspect the vehicle and driver. Results of screening and summary safety inspection data are stored and maintained. Since a vehicle may cross jurisdictional boundaries during a trip, it supports the concept of a last clearance event record carried on the vehicle tag. The last clearance event record reflects the results of the roadside verification action. For example, if the vehicle is pulled over in State A and undergoes credential, weight, and safety checks, the results of the clearance process are written to the vehicle s tag. If the vehicle continues the trip and passes a roadside station in State B, the State B station has access to the results of the previous pull-in because it can read the last clearance event record written by the State A roadside station. It associates high-risk cargo with the container/chassis, manifest, carrier, vehicle and driver transporting it.	No	2	The roadside check facility equipment shall receive the safety and security inspection and status information from the commercial vehicle administration center to include information such as safety ratings, inspection summaries, and violation summaries.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Roadside Safety Inspection	Commercial Vehicle Check Equipment	CVCE Safety and Security Inspection	CVCE Safety and Security Inspection' supports the roadside safety inspection process, including wireless roadside inspections that are conducted remotely. It reads on-board safety data at mainline speeds to rapidly check the vehicle and driver and accesses historical safety data after identifying vehicles at mainline speeds or while stopped at the roadside. The capabilities to process safety data and issue pull-in messages or provide warnings to the driver, carrier, and enforcement agencies are also provided. It includes hand held or automatic devices to rapidly inspect the vehicle and driver. Results of screening and summary safety inspection data are stored and maintained. Since a vehicle may cross jurisdictional boundaries during a trip, it supports the concept of a last clearance event record carried on the vehicle tag. The last clearance event record reflects the results of the roadside verification action. For example, if the vehicle is pulled over in State A and undergoes credential, weight, and safety checks, the results of the clearance process are written to the vehicle s tag. If the vehicle continues the trip and passes a roadside station in State B, the State B station has access to the results of the previous pull-in because it can read the last clearance event record written by the State A roadside station. It associates high-risk cargo with the container/chassis, manifest, carrier, vehicle and driver transporting it.	No	3	The roadside check facility equipment shall provide an interface to inspectors in the field to update safety inspection data including overrides to the pull-in decisions made by the system.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Roadside Safety Inspection	Commercial Vehicle Check Equipment	CVCE Safety and Security Inspection	CVCE Safety and Security Inspection' supports the roadside safety inspection process, including wireless roadside inspections that are conducted remotely. It reads on-board safety data at mainline speeds to rapidly check the vehicle and driver and accesses historical safety data after identifying vehicles at mainline speeds or while stopped at the roadside. The capabilities to process safety data and issue pull-in messages or provide warnings to the driver, carrier, and enforcement agencies are also provided. It includes hand held or automatic devices to rapidly inspect the vehicle and driver. Results of screening and summary safety inspection data are stored and maintained. Since a vehicle may cross jurisdictional boundaries during a trip, it supports the concept of a last clearance event record carried on the vehicle tag. The last clearance event record reflects the results of the roadside verification action. For example, if the vehicle is pulled over in State A and undergoes credential, weight, and safety checks, the results of the clearance process are written to the vehicle s tag. If the vehicle continues the trip and passes a roadside station in State B, the State B station has access to the results of the previous pull-in because it can read the last clearance event record written by the State A roadside station. It associates high-risk cargo with the container/chassis, manifest, carrier, vehicle and driver transporting it.	No	4	The roadside check facility equipment shall request and input electronic safety data from the commercial vehicle's electronic tag data. This includes identities, driver logs, on-board safety data, safety inspection records, commercial vehicle breach information, as well as freight equipment information.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Roadside Safety Inspection	Commercial Vehicle Check Equipment	CVCE Safety and Security Inspection	CVCE Safety and Security Inspection' supports the roadside safety inspection process, including wireless roadside inspections that are conducted remotely. It reads on-board safety data at mainline speeds to rapidly check the vehicle and driver and accesses historical safety data after identifying vehicles at mainline speeds or while stopped at the roadside. The capabilities to process safety data and issue pull-in messages or provide warnings to the driver, carrier, and enforcement agencies are also provided. It includes hand held or automatic devices to rapidly inspect the vehicle and driver. Results of screening and summary safety inspection data are stored and maintained. Since a vehicle may cross jurisdictional boundaries during a trip, it supports the concept of a last clearance event record carried on the vehicle tag. The last clearance event record reflects the results of the roadside verification action. For example, if the vehicle is pulled over in State A and undergoes credential, weight, and safety checks, the results of the clearance process are written to the vehicle s tag. If the vehicle continues the trip and passes a roadside station in State B, the State B station has access to the results of the previous pull-in because it can read the last clearance event record written by the State A roadside station. It associates high-risk cargo with the container/chassis, manifest, carrier, vehicle and driver transporting it.	No	5	The roadside check facility equipment shall send a pass/pull-in notification to the commercial vehicle and its driver based on the information received from the vehicle, the administration center, and the inspector. The message may be sent to the on-board equipment in the commercial vehicle or transmitted to the driver using equipment such as dynamic message signs, red-green lights, flashing signs, etc.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Roadside Safety Inspection	Commercial Vehicle Check Equipment	CVCE Safety and Security Inspection	CVCE Safety and Security Inspection' supports the roadside safety inspection process, including wireless roadside inspections that are conducted remotely. It reads on-board safety data at mainline speeds to rapidly check the vehicle and driver and accesses historical safety data after identifying vehicles at mainline speeds or while stopped at the roadside. The capabilities to process safety data and issue pull-in messages or provide warnings to the driver, carrier, and enforcement agencies are also provided. It includes hand held or automatic devices to rapidly inspect the vehicle and driver. Results of screening and summary safety inspection data are stored and maintained. Since a vehicle may cross jurisdictional boundaries during a trip, it supports the concept of a last clearance event record carried on the vehicle tag. The last clearance event record reflects the results of the roadside verification action. For example, if the vehicle is pulled over in State A and undergoes credential, weight, and safety checks, the results of the clearance process are written to the vehicle s tag. If the vehicle continues the trip and passes a roadside station in State B, the State B station has access to the results of the previous pull-in because it can read the last clearance event record written by the State A roadside station. It associates high-risk cargo with the container/chassis, manifest, carrier, vehicle and driver transporting it.	No	7	The roadside check facility equipment shall read expected driver identity characteristics (e.g., PIN codes and biometric data) from the commercial vehicle equipment to support safety and security checking.	Planned	No
DPS Roadside Safety Inspection	Commercial Vehicle Check Equipment	CVCE Weigh-In-Motion	CVCE Weigh-In-Motion' measures and records axle weights and gross vehicle weight without requiring the vehicle to come to a stop. Both permanent and portable installations are supported and may be performed in conjunction with electronic clearance or as a separate application.	No	1	The roadside check facility equipment shall detect the presence of commercial vehicles and freight equipment approaching a facility.	Existing	No
DPS Roadside Safety Inspection	Commercial Vehicle Check Equipment	CVCE Weigh-In-Motion	CVCE Weigh-In-Motion' measures and records axle weights and gross vehicle weight without requiring the vehicle to come to a stop. Both permanent and portable installations are supported and may be performed in conjunction with electronic clearance or as a separate application.	No	2	The roadside check facility equipment shall request and input electronic screening data from the commercial vehicle's electronic tag data.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Roadside Safety Inspection	Commercial Vehicle Check Equipment	CVCE Weigh-In-Motion	CVCE Weigh-In-Motion' measures and records axle weights and gross vehicle weight without requiring the vehicle to come to a stop. Both permanent and portable installations are supported and may be performed in conjunction with electronic clearance or as a separate application.	No	3	The roadside check facility equipment shall send a pass/pull-in notification to the commercial vehicle and its driver based on the information received from the vehicle and the measurements taken. The message may be sent to the on-board equipment in the commercial vehicle or transmitted to the driver using equipment such as dynamic message signs, red-green lights, flashing signs, etc.	Planned	No
DPS Roadside Safety Inspection	Enforcement Center			No				No
DPS Vehicles	Emergency Vehicle OBE	EV Barrier System Control	EV Barrier System Control' provides local control of automatic or remotely controlled gates and other barrier systems from an emergency vehicle. Using this capability, emergency personnel can open and close barriers without leaving the vehicle, using V2I Communications to control the barriers.	No				No
DPS Vehicles	Emergency Vehicle OBE	EV On-Board En Route Support	EV On-Board En Route Support' provides communications functions to responding emergency vehicles that reduce response times and improve safety of responding public safety personnel and the general public. It supports traffic signal preemption via short range communication directly with signal control equipment and sends alert messages to surrounding vehicles.	No				No
DPS Vehicles	Emergency Vehicle OBE	EV On-Board Incident Management Communication	EV On-board Incident Management Communication' provides communications support to first responders. Information about the incident, information on dispatched resources, and ancillary information such as road and weather conditions are provided to emergency personnel. Emergency personnel transmit information about the incident such as identification of vehicles and people involved, the extent of injuries, hazardous material, resources on site, site management strategies in effect, and current clearance status. Emergency personnel may also send in-vehicle signing messages to approaching traffic using short range communications.	No	1	The emergency vehicle shall receive dispatch instructions sufficient to enable emergency personnel in the field to implement an effective incident response. It includes local traffic, road, and weather conditions, hazardous material information, and the current status of resources that have been allocated to an incident.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
DPS Vehicles	Emergency Vehicle OBE	EV On-Board Incident Management Communication	EV On-board Incident Management Communication' provides communications support to first responders. Information about the incident, information on dispatched resources, and ancillary information such as road and weather conditions are provided to emergency personnel. Emergency personnel transmit information about the incident such as identification of vehicles and people involved, the extent of injuries, hazardous material, resources on site, site management strategies in effect, and current clearance status. Emergency personnel may also send in-vehicle signing messages to approaching traffic using short range communications.	No	2	The emergency vehicle shall provide an interface to the center for emergency personnel to transmit information about the incident site such as the extent of injuries, identification of vehicles and people involved, hazardous material, etc.	Planned	No
DPS Vehicles	Emergency Vehicle OBE	EV On-Board Incident Management Communication	EV On-board Incident Management Communication' provides communications support to first responders. Information about the incident, information on dispatched resources, and ancillary information such as road and weather conditions are provided to emergency personnel. Emergency personnel transmit information about the incident such as identification of vehicles and people involved, the extent of injuries, hazardous material, resources on site, site management strategies in effect, and current clearance status. Emergency personnel may also send in-vehicle signing messages to approaching traffic using short range communications.	No	3	The emergency vehicle shall provide an interface to the center for emergency personnel to transmit information about the current incident response status such as the identification of the resources on site, site management strategies in effect, and current clearance status.	Planned	No
DPS Vehicles	Emergency Vehicle OBE	EV Service Patrol Vehicle Operations	EV Service Patrol Vehicle Operations' provides on-board processing and communications to service patrol vehicles that reduce response times and improve safety of responding personnel. It supports service patrol vehicle dispatch and provides incident information back to the dispatching center.	No				No
DPS Wireless Systems Bureau	Other Maint and Constr Mgmt Centers			No				No
Driver Identification Card	Driver Identification Card			No				No
Emergency Medical Transport/Ambulances	Emergency Vehicle OBE	EV On-Board En Route Support	EV On-Board En Route Support' provides communications functions to responding emergency vehicles that reduce response times and improve safety of responding public safety personnel and the general public. It supports traffic signal preemption via short range communication directly with signal control equipment and sends alert messages to surrounding vehicles.	No	1	The emergency vehicle, including roadway service patrols, shall track its current location.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Emergency Medical Transport/Ambulances	Emergency Vehicle OBE	EV On-Board En Route Support	EV On-Board En Route Support' provides communications functions to responding emergency vehicles that reduce response times and improve safety of responding public safety personnel and the general public. It supports traffic signal preemption via short range communication directly with signal control equipment and sends alert messages to surrounding vehicles.	No	2	The emergency vehicle, including roadway service patrols, shall send the vehicle's location and operational data to the center for emergency management and dispatch.	Planned	No
Emergency Medical Transport/Ambulances	Emergency Vehicle OBE	EV On-Board En Route Support	EV On-Board En Route Support' provides communications functions to responding emergency vehicles that reduce response times and improve safety of responding public safety personnel and the general public. It supports traffic signal preemption via short range communication directly with signal control equipment and sends alert messages to surrounding vehicles.	No	3	The emergency vehicle, including roadway service patrols, shall receive incident details and a suggested route when dispatched to a scene.	Planned	No
Emergency Medical Transport/Ambulances	Emergency Vehicle OBE	EV On-Board En Route Support	EV On-Board En Route Support' provides communications functions to responding emergency vehicles that reduce response times and improve safety of responding public safety personnel and the general public. It supports traffic signal preemption via short range communication directly with signal control equipment and sends alert messages to surrounding vehicles.	No	4	The emergency vehicle shall send the current en route status (including estimated time of arrival) and requests for emergency dispatch updates.	Planned	No
Emergency Medical Transport/Ambulances	Emergency Vehicle OBE	EV On-Board En Route Support	EV On-Board En Route Support' provides communications functions to responding emergency vehicles that reduce response times and improve safety of responding public safety personnel and the general public. It supports traffic signal preemption via short range communication directly with signal control equipment and sends alert messages to surrounding vehicles.	No	5	The emergency vehicle shall send requests to traffic signal control equipment at the roadside to preempt the signal.	Planned	No
Emergency Medical Transport/Ambulances	Emergency Vehicle OBE	EV On-Board Incident Management Communication	EV On-board Incident Management Communication' provides communications support to first responders. Information about the incident, information on dispatched resources, and ancillary information such as road and weather conditions are provided to emergency personnel. Emergency personnel transmit information about the incident such as identification of vehicles and people involved, the extent of injuries, hazardous material, resources on site, site management strategies in effect, and current clearance status. Emergency personnel may also send in-vehicle signing messages to approaching traffic using short range communications.	No	1	The emergency vehicle shall receive dispatch instructions sufficient to enable emergency personnel in the field to implement an effective incident response. It includes local traffic, road, and weather conditions, hazardous material information, and the current status of resources that have been allocated to an incident.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Emergency Medical Transport/Ambulances	Emergency Vehicle OBE	EV On-Board Incident Management Communication	EV On-board Incident Management Communication' provides communications support to first responders. Information about the incident, information on dispatched resources, and ancillary information such as road and weather conditions are provided to emergency personnel. Emergency personnel transmit information about the incident such as identification of vehicles and people involved, the extent of injuries, hazardous material, resources on site, site management strategies in effect, and current clearance status. Emergency personnel may also send in-vehicle signing messages to approaching traffic using short range communications.	No	2	The emergency vehicle shall provide an interface to the center for emergency personnel to transmit information about the incident site such as the extent of injuries, identification of vehicles and people involved, hazardous material, etc.	Planned	No
Emergency Medical Transport/Ambulances	Emergency Vehicle OBE	EV On-Board Incident Management Communication	EV On-board Incident Management Communication' provides communications support to first responders. Information about the incident, information on dispatched resources, and ancillary information such as road and weather conditions are provided to emergency personnel. Emergency personnel transmit information about the incident such as identification of vehicles and people involved, the extent of injuries, hazardous material, resources on site, site management strategies in effect, and current clearance status. Emergency personnel may also send in-vehicle signing messages to approaching traffic using short range communications.	No	3	The emergency vehicle shall provide an interface to the center for emergency personnel to transmit information about the current incident response status such as the identification of the resources on site, site management strategies in effect, and current clearance status.	Planned	No
Emergency Medical Transport/Ambulances	Emergency Vehicle OBE	EV On-Board Incident Management Communication	EV On-board Incident Management Communication' provides communications support to first responders. Information about the incident, information on dispatched resources, and ancillary information such as road and weather conditions are provided to emergency personnel. Emergency personnel transmit information about the incident such as identification of vehicles and people involved, the extent of injuries, hazardous material, resources on site, site management strategies in effect, and current clearance status. Emergency personnel may also send in-vehicle signing messages to approaching traffic using short range communications.	No	4	The emergency vehicle shall provide traffic incident information to other emergency vehicles using short range communications.	Planned	No
Emergency Medical Transport/Ambulances	Emergency Vehicle OBE	EV Service Patrol Vehicle Operations	EV Service Patrol Vehicle Operations' provides on-board processing and communications to service patrol vehicles that reduce response times and improve safety of responding personnel. It supports service patrol vehicle dispatch and provides incident information back to the dispatching center.	No				No
Financial Institution	Financial Center			No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Fleet Management Systems	Fleet and Freight Management Center	Fleet Administration	Fleet Administration' provides vehicle tracking, dispatch, and reporting capabilities to fleet management personnel. It gathers current road conditions and traffic information, prepares vehicle routes, and provides a fleet interface for toll collection. It also provides route plan information for network performance evaluation. As part of the tracking function, it monitors commercial vehicle location, compares it against the known route and notifies the Emergency Management Center and Fleet-Freight Manager of any deviations, including HAZMAT route restriction violations. It supports carrier participation in wireless roadside inspection programs, monitoring geographic trigger areas and providing current safety data on behalf of the commercial vehicles it manages. It supports pre-hiring checks for potential drivers and monitors the performance of each driver who is hired. It also supports ongoing monitoring of the company's safety performance.	No	1	The center shall send data concerning enrollment of commercial vehicles for electronic clearance and tax filing to the appropriate commercial vehicle administration center. The data may include driver and vehicle identification, safety inspections/status, carrier credentials, related citations, and accident information.	Existing	No
Fleet Management Systems	Fleet and Freight Management Center	Fleet Administration	Fleet Administration' provides vehicle tracking, dispatch, and reporting capabilities to fleet management personnel. It gathers current road conditions and traffic information, prepares vehicle routes, and provides a fleet interface for toll collection. It also provides route plan information for network performance evaluation. As part of the tracking function, it monitors commercial vehicle location, compares it against the known route and notifies the Emergency Management Center and Fleet-Freight Manager of any deviations, including HAZMAT route restriction violations. It supports carrier participation in wireless roadside inspection programs, monitoring geographic trigger areas and providing current safety data on behalf of the commercial vehicles it manages. It supports pre-hiring checks for potential drivers and monitors the performance of each driver who is hired. It also supports ongoing monitoring of the company's safety performance.	No	2	The center shall obtain and manage commercial vehicle routes for its fleet of vehicles, taking into account route restrictions, advance payment of tolls, HAZMAT restrictions, current traffic and road conditions, and incident information provided by traveler information systems.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Fleet Management Systems	Fleet and Freight Management Center	Fleet Administration	Fleet Administration' provides vehicle tracking, dispatch, and reporting capabilities to fleet management personnel. It gathers current road conditions and traffic information, prepares vehicle routes, and provides a fleet interface for toll collection. It also provides route plan information for network performance evaluation. As part of the tracking function, it monitors commercial vehicle location, compares it against the known route and notifies the Emergency Management Center and Fleet-Freight Manager of any deviations, including HAZMAT route restriction violations. It supports carrier participation in wireless roadside inspection programs, monitoring geographic trigger areas and providing current safety data on behalf of the commercial vehicles it manages. It supports pre-hiring checks for potential drivers and monitors the performance of each driver who is hired. It also supports ongoing monitoring of the company's safety performance.	No	3	The center shall support an interface with a map update provider, or other appropriate data sources, through which updates of digitized map data can be obtained and used as the background for commercial vehicle fleet administration - includes commercial vehicle specific data such as route or HAZMAT restrictions.	Planned	No
Fleet Management Systems	Fleet and Freight Management Center	Fleet Administration	Fleet Administration' provides vehicle tracking, dispatch, and reporting capabilities to fleet management personnel. It gathers current road conditions and traffic information, prepares vehicle routes, and provides a fleet interface for toll collection. It also provides route plan information for network performance evaluation. As part of the tracking function, it monitors commercial vehicle location, compares it against the known route and notifies the Emergency Management Center and Fleet-Freight Manager of any deviations, including HAZMAT route restriction violations. It supports carrier participation in wireless roadside inspection programs, monitoring geographic trigger areas and providing current safety data on behalf of the commercial vehicles it manages. It supports pre-hiring checks for potential drivers and monitors the performance of each driver who is hired. It also supports ongoing monitoring of the company's safety performance.	No	4	The center shall monitor the locations and progress of commercial vehicles against their planned routes and raise appropriate warnings based on route monitoring parameters.	Planned	No
Fleet Management Systems	Fleet and Freight Management Center	Fleet Credentials and Taxes Management and Reporting	Fleet Credentials and Taxes Management and Reporting' provides the capability to purchase credentials, file taxes and trip reports electronically, apply for permits, and perform electronic enrollment in expedited border crossing programs. It tracks and manages credentials and provides electronic interfaces to appropriate state and federal commercial vehicle administration centers.	No	1	The center shall send data concerning enrollment and purchase of commercial vehicles credentials and tax filing to the appropriate commercial vehicle administration center.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Fleet Management Systems	Fleet and Freight Management Center	Fleet Credentials and Taxes Management and Reporting	Fleet Credentials and Taxes Management and Reporting' provides the capability to purchase credentials, file taxes and trip reports electronically, apply for permits, and perform electronic enrollment in expedited border crossing programs. It tracks and manages credentials and provides electronic interfaces to appropriate state and federal commercial vehicle administration centers.	No	2	The center shall receive compliance review reports from the appropriate commercial vehicle administration centers concerning the operations of the commercial vehicle fleet, including concomitant out-of-service notifications, and carrier warnings/notifications.	Planned	No
Fleet Management Systems	Fleet and Freight Management Center	Fleet Credentials and Taxes Management and Reporting	Fleet Credentials and Taxes Management and Reporting' provides the capability to purchase credentials, file taxes and trip reports electronically, apply for permits, and perform electronic enrollment in expedited border crossing programs. It tracks and manages credentials and provides electronic interfaces to appropriate state and federal commercial vehicle administration centers.	No	3	The center shall provide audit data to the appropriate commercial vehicle administration center to support tax audits.	Planned	No
Fleet Management Systems	Fleet and Freight Management Center	Freight Administration and Management	Freight Administration and Management' manages the movement of freight from source to destination. It interfaces to intermodal customers to setup and schedule transportation and coordinates with intermodal terminals and freight consolidation stations to coordinate the shipment. It coordinates with the appropriate government agencies to expedite the movement of trucks, their drivers, and their cargo across international borders. The application monitors the status of the freight and freight equipment (container, trailer, or chassis) and monitors freight location and compares it against the planned route.	No	1	The center shall collect data from the commercial vehicles carrying freight or from the freight equipment itself. Data includes container, trailer, or chassis information regarding identity, type, location, brake wear data, mileage, seal number/type, door open/close status, chassis bare/covered status, tethered/untethered status, bill of lading, and sensor status.	Planned	No
Fleet Management Systems	Fleet and Freight Management Center	Freight Administration and Management	Freight Administration and Management' manages the movement of freight from source to destination. It interfaces to intermodal customers to setup and schedule transportation and coordinates with intermodal terminals and freight consolidation stations to coordinate the shipment. It coordinates with the appropriate government agencies to expedite the movement of trucks, their drivers, and their cargo across international borders. The application monitors the status of the freight and freight equipment (container, trailer, or chassis) and monitors freight location and compares it against the planned route.	No	2	The center shall provide the interface with intermodal freight shippers to setup transportation for freight equipment. Inputs to this include information about the shipper, consignee, commodities, pick-up and drop-off locations for freight equipment. Outputs include information about the driver and commercial vehicle that will be transporting the freight.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Fleet Management Systems	Fleet and Freight Management Center	Freight Administration and Management	Freight Administration and Management' manages the movement of freight from source to destination. It interfaces to intermodal customers to setup and schedule transportation and coordinates with intermodal terminals and freight consolidation stations to coordinate the shipment. It coordinates with the appropriate government agencies to expedite the movement of trucks, their drivers, and their cargo across international borders. The application monitors the status of the freight and freight equipment (container, trailer, or chassis) and monitors freight location and compares it against the planned route.	No	3	The center shall coordinate the shipment of cargo using freight equipment with intermodal freight depots. Information to be coordinated includes information regarding a freight transportation booking and the assigned driver and vehicle scheduled to transport the freight along with cargo movement logs, routing information, and cargo ID's.	Planned	No
Freight Containers	Freight Equipment			No				No
Freight Shipping System	Intermodal Customer System			No				No
IFTA Clearinghouse	Commercial Vehicle Administration Center	CVAC Data Collection	CVAC Data Collection' collects and stores commercial vehicle information that is collected in the course of Commercial Vehicle Administration Center operations. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	1	The center shall receive operational data from the roadside check systems as well as administration and credentials data.	Planned	No
IFTA Clearinghouse	Commercial Vehicle Administration Center	CVAC Data Collection	CVAC Data Collection' collects and stores commercial vehicle information that is collected in the course of Commercial Vehicle Administration Center operations. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	2	The center shall assign quality control metrics and meta-data to be stored along with the data. Meta-data may include attributes that describe the source and quality of the data and the conditions surrounding the collection of the data.	Planned	No
IFTA Clearinghouse	Commercial Vehicle Administration Center	CVAC Data Collection	CVAC Data Collection' collects and stores commercial vehicle information that is collected in the course of Commercial Vehicle Administration Center operations. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	3	The center shall receive and respond to requests from ITS Archives for either a catalog of the commercial vehicle operations data or for the data itself.	Planned	No
IFTA Clearinghouse	Commercial Vehicle Administration Center	CVAC Data Collection	CVAC Data Collection' collects and stores commercial vehicle information that is collected in the course of Commercial Vehicle Administration Center operations. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	4	The center shall be able to produce sample products of the data available.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
IFTA Clearinghouse	Commercial Vehicle Administration Center	CVAC Information Exchange	CVAC Information Exchange' supports the exchange of safety, credentials, permit data, and other data concerning the operation of commercial vehicles among jurisdictions. The object also supports the exchange of safety, credentials, permit, and operations data between systems (for example, an administrative center and the roadside check facilities) within a single jurisdiction. Data are collected from multiple authoritative sources and packaged into snapshots (top-level summary and critical status information) and profiles (detailed and historical data). Data is made available to fleet operators and other information requestors on request or based on subscriptions established by the requestor.	No	1	The center shall exchange information with roadside check facilities, including credentials and credentials status information, safety status information, daily site activity data, driver records, and citations.	Planned	No
IFTA Clearinghouse	Commercial Vehicle Administration Center	CVAC Information Exchange	CVAC Information Exchange' supports the exchange of safety, credentials, permit data, and other data concerning the operation of commercial vehicles among jurisdictions. The object also supports the exchange of safety, credentials, permit, and operations data between systems (for example, an administrative center and the roadside check facilities) within a single jurisdiction. Data are collected from multiple authoritative sources and packaged into snapshots (top-level summary and critical status information) and profiles (detailed and historical data). Data is made available to fleet operators and other information requestors on request or based on subscriptions established by the requestor.	No	2	The center shall exchange safety and credentials data among other commercial vehicle administration centers, including border clearance status, credentials information, credentials status information, driver records, accident reports, permit information, and safety status information.	Planned	No
IFTA Clearinghouse	Commercial Vehicle Administration Center	CVAC Information Exchange	CVAC Information Exchange' supports the exchange of safety, credentials, permit data, and other data concerning the operation of commercial vehicles among jurisdictions. The object also supports the exchange of safety, credentials, permit, and operations data between systems (for example, an administrative center and the roadside check facilities) within a single jurisdiction. Data are collected from multiple authoritative sources and packaged into snapshots (top-level summary and critical status information) and profiles (detailed and historical data). Data is made available to fleet operators and other information requestors on request or based on subscriptions established by the requestor.	No	3	The center shall package data concerning commercial vehicle safety and credentials into snapshots (top-level summary and critical status information).	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
IFTA Clearinghouse	Commercial Vehicle Administration Center	CVAC Information Exchange	CVAC Information Exchange' supports the exchange of safety, credentials, permit data, and other data concerning the operation of commercial vehicles among jurisdictions. The object also supports the exchange of safety, credentials, permit, and operations data between systems (for example, an administrative center and the roadside check facilities) within a single jurisdiction. Data are collected from multiple authoritative sources and packaged into snapshots (top-level summary and critical status information) and profiles (detailed and historical data). Data is made available to fleet operators and other information requestors on request or based on subscriptions established by the requestor.	No	4	The center shall package data concerning commercial vehicle safety and credentials into profiles (detailed and historical data).	Planned	No
IFTA Clearinghouse	Commercial Vehicle Administration Center	CVAC Safety and Security Administration	CVAC Safety and Security Administration' provides commercial vehicle safety and security criteria to roadside check facilities, collects and reviews safety and security data from the field and distributes safety and security information to other centers, carriers, and enforcement agencies. It also supports wireless roadside inspections, including carrier enrollment, managing and distributing information about trigger areas where wireless inspections may occur, and monitoring the condition of the commercial vehicle and driver using wireless communications at identified trigger areas. It supports the collection and review of carrier and driver safety and security data and supports determination of the carrier and driver safety and security ratings. It clears the out-of-service status when the responsible carrier or driver reports that deficiencies flagged during inspections have been corrected.	No	1	The center shall provide commercial vehicle safety and security data to roadside check facilities.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
IFTA Clearinghouse	Commercial Vehicle Administration Center	CVAC Safety and Security Administration	CVAC Safety and Security Administration' provides commercial vehicle safety and security criteria to roadside check facilities, collects and reviews safety and security data from the field and distributes safety and security information to other centers, carriers, and enforcement agencies. It also supports wireless roadside inspections, including carrier enrollment, managing and distributing information about trigger areas where wireless inspections may occur, and monitoring the condition of the commercial vehicle and driver using wireless communications at identified trigger areas. It supports the collection and review of carrier and driver safety and security data and supports determination of the carrier and driver safety and security ratings. It clears the out-of-service status when the responsible carrier or driver reports that deficiencies flagged during inspections have been corrected.	No	2	The center shall collect and review safety inspection reports and violations from the roadside check facilities and pass on appropriate portions to other commercial vehicle administrative centers and commercial vehicle fleet operators.	Planned	No
IFTA Clearinghouse	Commercial Vehicle Administration Center	CVAC Safety and Security Administration	CVAC Safety and Security Administration' provides commercial vehicle safety and security criteria to roadside check facilities, collects and reviews safety and security data from the field and distributes safety and security information to other centers, carriers, and enforcement agencies. It also supports wireless roadside inspections, including carrier enrollment, managing and distributing information about trigger areas where wireless inspections may occur, and monitoring the condition of the commercial vehicle and driver using wireless communications at identified trigger areas. It supports the collection and review of carrier and driver safety and security data and supports determination of the carrier and driver safety and security ratings. It clears the out-of-service status when the responsible carrier or driver reports that deficiencies flagged during inspections have been corrected.	No	3	The center shall notify enforcement agencies of commercial vehicle safety violations by individual commercial vehicles, drivers, or carriers.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
IFTA Clearinghouse	Commercial Vehicle Administration Center	CVAC Safety and Security Administration	CVAC Safety and Security Administration' provides commercial vehicle safety and security criteria to roadside check facilities, collects and reviews safety and security data from the field and distributes safety and security information to other centers, carriers, and enforcement agencies. It also supports wireless roadside inspections, including carrier enrollment, managing and distributing information about trigger areas where wireless inspections may occur, and monitoring the condition of the commercial vehicle and driver using wireless communications at identified trigger areas. It supports the collection and review of carrier and driver safety and security data and supports determination of the carrier and driver safety and security ratings. It clears the out-of-service status when the responsible carrier or driver reports that deficiencies flagged during inspections have been corrected.	No	4	The center shall provide commercial vehicle accident reports to enforcement agencies and the commercial fleet management center.	Planned	No
IFTA Clearinghouse	Commercial Vehicle Administration Center	CVAC Safety and Security Administration	CVAC Safety and Security Administration' provides commercial vehicle safety and security criteria to roadside check facilities, collects and reviews safety and security data from the field and distributes safety and security information to other centers, carriers, and enforcement agencies. It also supports wireless roadside inspections, including carrier enrollment, managing and distributing information about trigger areas where wireless inspections may occur, and monitoring the condition of the commercial vehicle and driver using wireless communications at identified trigger areas. It supports the collection and review of carrier and driver safety and security data and supports determination of the carrier and driver safety and security ratings. It clears the out-of-service status when the responsible carrier or driver reports that deficiencies flagged during inspections have been corrected.	No	5	The center shall receive citation records from roadside check facilities.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
IFTA Clearinghouse	Commercial Vehicle Administration Center	CVAC Safety and Security Administration	CVAC Safety and Security Administration' provides commercial vehicle safety and security criteria to roadside check facilities, collects and reviews safety and security data from the field and distributes safety and security information to other centers, carriers, and enforcement agencies. It also supports wireless roadside inspections, including carrier enrollment, managing and distributing information about trigger areas where wireless inspections may occur, and monitoring the condition of the commercial vehicle and driver using wireless communications at identified trigger areas. It supports the collection and review of carrier and driver safety and security data and supports determination of the carrier and driver safety and security ratings. It clears the out-of-service status when the responsible carrier or driver reports that deficiencies flagged during inspections have been corrected.	No	6	The center shall manage the citation records and provide the citations to enforcement agencies and the commercial fleet management center.	Planned	No
Independent School District Bus Dispatch	Transit Management Center	Transit Center Fixed-Route Operations	Transit Center Fixed-Route Operations' manages fixed route transit operations. It supports creation of schedules, blocks and runs for fixed and flexible route transit services. It allows fixed-route and flexible-route transit services to disseminate schedules and automatically updates customer service operator systems with the most current schedule information. It also supports automated dispatch of transit vehicles. Current vehicle schedule adherence and optimum scenarios for schedule adjustment are also provided. It also receives and processes transit vehicle loading data.	No	1	The center shall generate transit routes and schedules based on such factors as parameters input by the system operator, road network conditions, incident information, operational data on current routes and schedules, and digitized map data.	Planned	No
Independent School District Bus Dispatch	Transit Management Center	Transit Center Security	Transit Center Security' monitors transit vehicle operator or traveler activated alarms received from on-board a transit vehicle. It supports transit vehicle operator authentication and provides the capability to remotely disable a transit vehicle. It also includes the capability to alert operators and police to potential incidents identified by these security features.	No	1	The center shall monitor transit vehicle operational data to determine if the transit vehicle is off-route and assess whether a security incident is occurring.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Independent School District Bus Dispatch	Transit Management Center	Transit Center Vehicle Assignment	Transit Center Vehicle Assignment' assigns individual transit vehicles to vehicle blocks and downloads this information to the transit vehicle. It also provides an exception handling process for the vehicle assignment function to generate new, supplemental vehicle assignments when required by changes during the operating day. It provides an inventory management function for the transit facility which stores functional attributes about each of the vehicles owned by the transit operator. These attributes permit the planning and assignment functions to match vehicles with routes based on suitability for the types of service required by the particular routes.	No	1	The center shall assign individual transit vehicles to transit blocks.	Planned	No
Independent School District Bus Dispatch	Transit Management Center	Transit Center Vehicle Assignment	Transit Center Vehicle Assignment' assigns individual transit vehicles to vehicle blocks and downloads this information to the transit vehicle. It also provides an exception handling process for the vehicle assignment function to generate new, supplemental vehicle assignments when required by changes during the operating day. It provides an inventory management function for the transit facility which stores functional attributes about each of the vehicles owned by the transit operator. These attributes permit the planning and assignment functions to match vehicles with routes based on suitability for the types of service required by the particular routes.	No	2	The center shall download vehicle assignments to the transit vehicle prior to the start of the day’s operations.	Planned	No
Independent School District Bus Dispatch	Transit Management Center	Transit Center Vehicle Assignment	Transit Center Vehicle Assignment' assigns individual transit vehicles to vehicle blocks and downloads this information to the transit vehicle. It also provides an exception handling process for the vehicle assignment function to generate new, supplemental vehicle assignments when required by changes during the operating day. It provides an inventory management function for the transit facility which stores functional attributes about each of the vehicles owned by the transit operator. These attributes permit the planning and assignment functions to match vehicles with routes based on suitability for the types of service required by the particular routes.	No	3	The center shall provide an exception handling process for the vehicle assignment function. This process shall generate new supplemental vehicle assignments as required due to change events which occur during the operating day.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Independent School District Bus Dispatch	Transit Management Center	Transit Center Vehicle Assignment	Transit Center Vehicle Assignment' assigns individual transit vehicles to vehicle blocks and downloads this information to the transit vehicle. It also provides an exception handling process for the vehicle assignment function to generate new, supplemental vehicle assignments when required by changes during the operating day. It provides an inventory management function for the transit facility which stores functional attributes about each of the vehicles owned by the transit operator. These attributes permit the planning and assignment functions to match vehicles with routes based on suitability for the types of service required by the particular routes.	No	4	The center shall provide an inventory management function for the transit facility that stores functional attributes about each vehicle owned by the transit operator. The functional attributes permit the planning and assignment functions to match vehicles with routes based on suitability for the types of service required by the particular routes.	Planned	No
Independent School District Bus Dispatch	Transit Management Center	Transit Center Vehicle Assignment	Transit Center Vehicle Assignment' assigns individual transit vehicles to vehicle blocks and downloads this information to the transit vehicle. It also provides an exception handling process for the vehicle assignment function to generate new, supplemental vehicle assignments when required by changes during the operating day. It provides an inventory management function for the transit facility which stores functional attributes about each of the vehicles owned by the transit operator. These attributes permit the planning and assignment functions to match vehicles with routes based on suitability for the types of service required by the particular routes.	No	5	The center shall generate transit vehicle availability listings, current and forecast, to support transit vehicle assignment planning.	Planned	No
Independent School District Bus Dispatch	Transit Management Center	Transit Center Vehicle Tracking	Transit Center Vehicle Tracking' monitors transit vehicle location. The location information is collected via a data communication link between the transit vehicles and the transit center. The location information is presented to the transit operator on a digitized map of the transit service area. The location data may be used to determine real time schedule adherence and update the transit system’s schedule in real-time. The real-time schedule information is disseminated to other information providers, which furnish the information to travelers.	No	1	The center shall monitor the locations of all transit vehicles within its network.	Planned	No
Independent School District Bus Dispatch	Transit Management Center	Transit Center Vehicle Tracking	Transit Center Vehicle Tracking' monitors transit vehicle location. The location information is collected via a data communication link between the transit vehicles and the transit center. The location information is presented to the transit operator on a digitized map of the transit service area. The location data may be used to determine real time schedule adherence and update the transit system’s schedule in real-time. The real-time schedule information is disseminated to other information providers, which furnish the information to travelers.	No	2	The center shall determine adherence of transit vehicles to their assigned schedule.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Independent School District Bus Dispatch	Transit Management Center	Transit Evacuation Support	Transit Evacuation Support' manages transit resources to support evacuation and subsequent reentry of a population in the vicinity of a disaster or other emergency. It supports coordination of regional evacuation plans, identifying the transit role in a regional evacuation and identifying transit resources that would be used. During an evacuation, it coordinates the use of transit and school bus fleets, supporting evacuation of those with special needs and the general population. Transit service and fare schedules are adjusted and updated service and fare information is made available through traveler information systems.	No	1	The center shall manage the use of transit resources to support evacuation and subsequent reentry of a population in the vicinity of a disaster or other emergency.	Planned	No
Independent School District Bus Dispatch	Transit Management Center	Transit Evacuation Support	Transit Evacuation Support' manages transit resources to support evacuation and subsequent reentry of a population in the vicinity of a disaster or other emergency. It supports coordination of regional evacuation plans, identifying the transit role in a regional evacuation and identifying transit resources that would be used. During an evacuation, it coordinates the use of transit and school bus fleets, supporting evacuation of those with special needs and the general population. Transit service and fare schedules are adjusted and updated service and fare information is made available through traveler information systems.	No	2	The center shall coordinate regional evacuation plans with Emergency Management - identifying the transit role in an evacuation and the transit resources that would be used.	Planned	No
Independent School District Bus Dispatch	Transit Management Center	Transit Evacuation Support	Transit Evacuation Support' manages transit resources to support evacuation and subsequent reentry of a population in the vicinity of a disaster or other emergency. It supports coordination of regional evacuation plans, identifying the transit role in a regional evacuation and identifying transit resources that would be used. During an evacuation, it coordinates the use of transit and school bus fleets, supporting evacuation of those with special needs and the general population. Transit service and fare schedules are adjusted and updated service and fare information is made available through traveler information systems.	No	4	The center shall adjust and update transit service and fare schedules and provide that information to other agencies as they coordinate evacuations.	Planned	No
Independent School District Bus Dispatch	Transit Management Center	Transit Garage Maintenance	Transit Garage Maintenance' provides advanced maintenance functions for the transit property. It collects operational and maintenance data from transit vehicles, manages vehicle service histories, and monitors operators and vehicles. It collects vehicle mileage data and uses it to automatically generate preventative maintenance schedules for each vehicle by utilizing vehicle tracking data. In addition, it provides information to service personnel to support maintenance activities and records and verifies that maintenance work was performed.	No	1	The center shall collect operational and maintenance data from transit vehicles.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Independent School District Bus Dispatch	Transit Management Center	Transit Garage Maintenance	Transit Garage Maintenance' provides advanced maintenance functions for the transit property. It collects operational and maintenance data from transit vehicles, manages vehicle service histories, and monitors operators and vehicles. It collects vehicle mileage data and uses it to automatically generate preventative maintenance schedules for each vehicle by utilizing vehicle tracking data. In addition, it provides information to service personnel to support maintenance activities and records and verifies that maintenance work was performed.	No	2	The center shall monitor the condition of a transit vehicle to analyze brake, drive train, sensors, fuel, steering, tire, processor, communications equipment, and transit vehicle mileage to identify mileage based maintenance, out-of-specification or imminent failure conditions.	Planned	No
Independent School District Bus Dispatch	Transit Management Center	Transit Garage Maintenance	Transit Garage Maintenance' provides advanced maintenance functions for the transit property. It collects operational and maintenance data from transit vehicles, manages vehicle service histories, and monitors operators and vehicles. It collects vehicle mileage data and uses it to automatically generate preventative maintenance schedules for each vehicle by utilizing vehicle tracking data. In addition, it provides information to service personnel to support maintenance activities and records and verifies that maintenance work was performed.	No	3	The center shall generate transit vehicle maintenance schedules that identify the maintenance or repair to be performed and when the work is to be done.	Planned	No
Independent School District Buses	Basic Transit Vehicle			No				No
Independent School District Buses	Transit Vehicle OBE	Transit Vehicle On-Board Maintenance	Transit Vehicle On-Board Maintenance' collects and processes transit vehicle maintenance data on-board the vehicle, including mileage and vehicle operating conditions. This maintenance information is provided to the management center and used to schedule future vehicle maintenance and repair.	No	1	The transit vehicle shall collect and process vehicle mileage data available to sensors on-board.	Planned	No
Independent School District Buses	Transit Vehicle OBE	Transit Vehicle On-Board Maintenance	Transit Vehicle On-Board Maintenance' collects and processes transit vehicle maintenance data on-board the vehicle, including mileage and vehicle operating conditions. This maintenance information is provided to the management center and used to schedule future vehicle maintenance and repair.	No	2	The transit vehicle shall collect and process the transit vehicle's operating conditions such as engine temperature, oil pressure, brake wear, internal lighting, environmental controls, etc.	Planned	No
Independent School District Buses	Transit Vehicle OBE	Transit Vehicle On-Board Trip Monitoring	Transit Vehicle On-Board Trip Monitoring' tracks vehicle location, monitors fuel usage, collects operational status (doors opened/closed, running times, etc.) and sends the collected, time stamped data to the Transit Management Center.	No	1	The transit vehicle shall track the current location of the transit vehicle.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Independent School District Buses	Transit Vehicle OBE	Transit Vehicle On-Board Trip Monitoring	Transit Vehicle On-Board Trip Monitoring' tracks vehicle location, monitors fuel usage, collects operational status (doors opened/closed, running times, etc.) and sends the collected, time stamped data to the Transit Management Center.	No	2	The transit vehicle shall support the computation of the location of a transit vehicle using on-board sensors to augment the location determination function. This may include proximity to the transit stops or other known reference points as well as recording trip length.	Planned	No
Independent School District Buses	Transit Vehicle OBE	Transit Vehicle Schedule Management	Transit Vehicle Schedule Management' monitors schedule performance and identifies corrective actions when a deviation is detected. It provides two-way communication between the transit vehicle and center, enabling the center to communicate with the vehicle operator and monitor on-board systems.	No	1	The transit vehicle shall receive a vehicle assignment including transit route information, transit service instructions, traffic information, road conditions, and other information for the operator.	Planned	No
Independent School District Buses	Transit Vehicle OBE	Transit Vehicle Schedule Management	Transit Vehicle Schedule Management' monitors schedule performance and identifies corrective actions when a deviation is detected. It provides two-way communication between the transit vehicle and center, enabling the center to communicate with the vehicle operator and monitor on-board systems.	No	2	The transit vehicle shall use the route information and its current location to determine the deviation from the predetermined schedule.	Planned	No
Independent School District Buses	Transit Vehicle OBE	Transit Vehicle Security	Transit Vehicle Security' provides security and safety functions on-board the transit vehicle. It includes surveillance and sensor systems that monitor the on-board environment, silent alarms that can be activated by transit user or vehicle operator, operator authentication, and a remote vehicle disable function. The surveillance equipment includes video (e.g. CCTV cameras), audio systems and/or event recorder systems. The sensor equipment includes threat sensors (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors) and object detection sensors (e.g. metal detectors).	No	1	The transit vehicle shall perform video and audio surveillance inside of transit vehicles and output raw video or audio data for either local monitoring (for processing or direct output to the transit vehicle operator), remote monitoring or for local storage (e.g., in an event recorder).	Planned	No
Independent School District Buses	Transit Vehicle OBE	Transit Vehicle Security	Transit Vehicle Security' provides security and safety functions on-board the transit vehicle. It includes surveillance and sensor systems that monitor the on-board environment, silent alarms that can be activated by transit user or vehicle operator, operator authentication, and a remote vehicle disable function. The surveillance equipment includes video (e.g. CCTV cameras), audio systems and/or event recorder systems. The sensor equipment includes threat sensors (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors) and object detection sensors (e.g. metal detectors).	No	2	The transit vehicle shall perform local monitoring of video or audio surveillance data collected inside of transit vehicles, and identify potential incidents or threats based on received processing parameters.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Local Dial-A-Ride Transit Dispatchers	Transit Management Center	Transit Center Paratransit Operations	Transit Center Paratransit Operations' manages demand responsive transit services, including paratransit services. It supports planning and scheduling of these services, allowing paratransit and other demand response transit services to plan efficient routes and better estimate arrival times. It also supports automated dispatch of paratransit vehicles and tracks passenger pick-ups and drop-offs. Customer service operator systems are updated with the most current schedule information.	No	1	The center shall process trip requests for demand responsive transit services, i.e. paratransit. Sources of the requests may include traveler information service providers.	Planned	No
Local Dial-A-Ride Transit Dispatchers	Transit Management Center	Transit Center Paratransit Operations	Transit Center Paratransit Operations' manages demand responsive transit services, including paratransit services. It supports planning and scheduling of these services, allowing paratransit and other demand response transit services to plan efficient routes and better estimate arrival times. It also supports automated dispatch of paratransit vehicles and tracks passenger pick-ups and drop-offs. Customer service operator systems are updated with the most current schedule information.	No	2	The center shall monitor the operational status of the demand response vehicles including status of passenger pick-up and drop-off.	Planned	No
Local Dial-A-Ride Transit Dispatchers	Transit Management Center	Transit Center Paratransit Operations	Transit Center Paratransit Operations' manages demand responsive transit services, including paratransit services. It supports planning and scheduling of these services, allowing paratransit and other demand response transit services to plan efficient routes and better estimate arrival times. It also supports automated dispatch of paratransit vehicles and tracks passenger pick-ups and drop-offs. Customer service operator systems are updated with the most current schedule information.	No	3	The center shall generate demand response transit (including paratransit) routes and schedules based on such factors as parameters input by the system operator, what other demand responsive transit schedules have been planned, the availability and location of vehicles, the relevance of any fixed transit routes and schedules, road network information, and incident information.	Planned	No
Local Dial-A-Ride Transit Dispatchers	Transit Management Center	Transit Center Security	Transit Center Security' monitors transit vehicle operator or traveler activated alarms received from on-board a transit vehicle. It supports transit vehicle operator authentication and provides the capability to remotely disable a transit vehicle. It also includes the capability to alert operators and police to potential incidents identified by these security features.	No	1	The center shall monitor transit vehicle operational data to determine if the transit vehicle is off-route and assess whether a security incident is occurring.	Planned	No
Local Dial-A-Ride Transit Dispatchers	Transit Management Center	Transit Center Security	Transit Center Security' monitors transit vehicle operator or traveler activated alarms received from on-board a transit vehicle. It supports transit vehicle operator authentication and provides the capability to remotely disable a transit vehicle. It also includes the capability to alert operators and police to potential incidents identified by these security features.	No	2	The center shall receive reports of emergencies on-board transit vehicles entered directly be the transit vehicle operator or from a traveler through interfaces such as panic buttons or alarm switches.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Local Dial-A-Ride Transit Dispatchers	Transit Management Center	Transit Center Security	Transit Center Security' monitors transit vehicle operator or traveler activated alarms received from on-board a transit vehicle. It supports transit vehicle operator authentication and provides the capability to remotely disable a transit vehicle. It also includes the capability to alert operators and police to potential incidents identified by these security features.	No	3	The center shall support the back-office portion of functionality to authenticate transit vehicle operators.	Planned	No
Local Dial-A-Ride Transit Vehicles	Basic Transit Vehicle			No				No
Local Dial-A-Ride Transit Vehicles	Transit Vehicle OBE	Transit Vehicle On-Board Paratransit Operations	Transit Vehicle On-board Paratransit Operations' forwards paratransit and flexible-route dispatch requests to the operator and forwards acknowledgements to the center. It coordinates with, and assists the operator in managing multi-stop runs associated with demand responsive transit services including paratransit. It collects transit vehicle passenger data and makes it available to the center.	No	1	The transit vehicle shall manage data input to sensor(s) on-board a transit vehicle to determine the vehicle's availability for use in demand responsive and flexible-route transit services based on identity, type, and passenger capacity.	Planned	No
Local Dial-A-Ride Transit Vehicles	Transit Vehicle OBE	Transit Vehicle On-Board Paratransit Operations	Transit Vehicle On-board Paratransit Operations' forwards paratransit and flexible-route dispatch requests to the operator and forwards acknowledgements to the center. It coordinates with, and assists the operator in managing multi-stop runs associated with demand responsive transit services including paratransit. It collects transit vehicle passenger data and makes it available to the center.	No	2	The transit vehicle shall receive the status of demand responsive or flexible-route transit schedules and passenger loading from the transit vehicle operator.	Planned	No
Local Dial-A-Ride Transit Vehicles	Transit Vehicle OBE	Transit Vehicle On-Board Paratransit Operations	Transit Vehicle On-board Paratransit Operations' forwards paratransit and flexible-route dispatch requests to the operator and forwards acknowledgements to the center. It coordinates with, and assists the operator in managing multi-stop runs associated with demand responsive transit services including paratransit. It collects transit vehicle passenger data and makes it available to the center.	No	3	The transit vehicle shall provide the transit vehicle operator instructions about the demand responsive or flexible-route transit schedule that has been confirmed from the center.	Planned	No
Local Dial-A-Ride Transit Vehicles	Transit Vehicle OBE	Transit Vehicle On-Board Paratransit Operations	Transit Vehicle On-board Paratransit Operations' forwards paratransit and flexible-route dispatch requests to the operator and forwards acknowledgements to the center. It coordinates with, and assists the operator in managing multi-stop runs associated with demand responsive transit services including paratransit. It collects transit vehicle passenger data and makes it available to the center.	No	4	The transit vehicle shall provide the capability to log passenger boardings and alightings and make passenger use data available to the transit center.	Planned	No
Local Print and Broadcast Media	Media			No				No
MAG Data User Systems	Archived Data User System			No				No
MAG Planning Traffic Database	Archived Data System			No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
MAG Planning Traffic Database	Other Data Sources			No				No
MAG RCN Fiber	Data Distribution System			No				No
Map Update System	Map Update System			No				No
Maricopa County EOC	Emergency Management Center	Emergency Commercial Vehicle Response	Emergency Commercial Vehicle Response' identifies and initiates a response to commercial vehicle and freight equipment related emergencies. These emergencies may include incidents involving hazardous materials as well as the detection of non-permitted transport of security sensitive hazmat. It identifies the location of the vehicle, the nature of the incident, the route information, and information concerning the freight itself. The information supports the determination of the response and identifies the responding agencies to notify.	No	2	The center shall receive emergency notification information from commercial vehicles, commercial vehicle check stations, or commercial fleet operators and present the possible incident information to the emergency system operator. This may include detection of non-permitted transport of security sensitive hazmat, hazardous cargo spills, etc.	Planned	No
Maricopa County EOC	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Planned	No
Maricopa County EOC	Emergency Management Center	Emergency Environmental Monitoring	Emergency Environmental Monitoring' collects current and forecast road conditions and surface weather information from a variety of sources. The collected environmental information is monitored and presented to the operator and used to more effectively manage incidents.	No	1	The center shall collect current and forecast road and weather information from weather service providers (such as the National Weather Service and value-added sector specific meteorological services).	Planned	No
Maricopa County EOC	Emergency Management Center	Emergency Environmental Monitoring	Emergency Environmental Monitoring' collects current and forecast road conditions and surface weather information from a variety of sources. The collected environmental information is monitored and presented to the operator and used to more effectively manage incidents.	No	3	The center shall collect asset restrictions information from roadway maintenance operations.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Maricopa County EOC	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	1	The center shall manage inter-agency coordination of evacuation operations, from initial planning through the evacuation process and reentry.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Maricopa County EOC	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Planned	No
Maricopa County EOC	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	1	The center shall provide tactical decision support, resource coordination, and communications integration for first responders to support local management of an incident.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Maricopa County EOC	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Planned	No
Maricopa County EOC	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	3	The center shall track and maintain resource information and action plans pertaining to the incident command.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Maricopa County EOC	Emergency Management Center	Emergency Notification Support	Emergency Notification Support' receives emergency notification messages from vehicles or personal handheld devices, determines an appropriate response, and either uses internal resources or contacts a local agency to provide that response. The nature of the emergency is determined based on the information in the received message as well as other inputs. This object effectively serves as an interface between automated collision notification systems and the local public safety answering point for messages that require a public safety response. This capability depends on an up-to-date registry of public safety answering points/response agencies by coverage area, the type of emergency, and hours of service.	No	2	The center shall monitor subscribed vehicle data, including changes in velocity, attitude/orientation, position, and air bag status to determine when an emergency situation (crash) has happened.	Planned	No
Maricopa County EOC	Emergency Management Center	Emergency Notification Support	Emergency Notification Support' receives emergency notification messages from vehicles or personal handheld devices, determines an appropriate response, and either uses internal resources or contacts a local agency to provide that response. The nature of the emergency is determined based on the information in the received message as well as other inputs. This object effectively serves as an interface between automated collision notification systems and the local public safety answering point for messages that require a public safety response. This capability depends on an up-to-date registry of public safety answering points/response agencies by coverage area, the type of emergency, and hours of service.	No	3	The center shall collect mayday messages from travelers via personal handheld devices.	Planned	No
Maricopa County EOC	Emergency Management Center	Emergency Notification Support	Emergency Notification Support' receives emergency notification messages from vehicles or personal handheld devices, determines an appropriate response, and either uses internal resources or contacts a local agency to provide that response. The nature of the emergency is determined based on the information in the received message as well as other inputs. This object effectively serves as an interface between automated collision notification systems and the local public safety answering point for messages that require a public safety response. This capability depends on an up-to-date registry of public safety answering points/response agencies by coverage area, the type of emergency, and hours of service.	No	5	The center shall acknowledge the request for emergency assistance, whether originated by the driver, automatically by the vehicle's safety systems, or by a traveler via a personal handheld device.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Maricopa County EOC	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Planned	No
Maricopa County EOC	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Maricopa County EOC	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Planned	No
Maricopa County EOC	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	19	The center shall manage coordinated inter-agency responses to incidents at an international border.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Maricopa County EOC	Emergency Management Center	Emergency Secure Area Sensor Management	Emergency Secure Area Sensor Management' manages sensors that monitor secure areas in the transportation system, processes the collected data, performs threat analysis in which data is correlated with other sensor, surveillance, and advisory inputs, and then disseminates resultant threat information to emergency personnel and other agencies. In response to identified threats, the operator may request activation of barrier and safeguard systems to preclude an incident, control access during and after an incident or mitigate impact of an incident. The sensors may be in secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. The types of sensors include acoustic, threat (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors), infrastructure condition and integrity, motion and object sensors.	No	1	The center shall remotely monitor and control security sensor data collected in secure areas including facilities (e.g. transit yards) and transportation infrastructure (e.g. bridges, tunnels, interchanges, roadway infrastructure, and transit railways or guideways). The types of security sensor data include environmental threat (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors), infrastructure condition and integrity, intrusion and motion, and object detection sensors. The data may be raw or pre-processed in the field.	Planned	No
Maricopa County EOC	Emergency Management Center	Emergency Secure Area Sensor Management	Emergency Secure Area Sensor Management' manages sensors that monitor secure areas in the transportation system, processes the collected data, performs threat analysis in which data is correlated with other sensor, surveillance, and advisory inputs, and then disseminates resultant threat information to emergency personnel and other agencies. In response to identified threats, the operator may request activation of barrier and safeguard systems to preclude an incident, control access during and after an incident or mitigate impact of an incident. The sensors may be in secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. The types of sensors include acoustic, threat (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors), infrastructure condition and integrity, motion and object sensors.	No	2	The center shall remotely monitor and control security sensor data collected in traveler secure areas, which include transit stations, transit stops, rest areas, park and ride lots, and other fixed sites along travel routes (e.g., emergency pull-off areas and travel information centers). The types of security sensor data include environmental threat (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors), intrusion and motion, and object detection sensors. The data may be raw or pre-processed in the field.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Maricopa County EOC	Emergency Management Center	Emergency Secure Area Surveillance	Emergency Secure Area Surveillance' monitors surveillance inputs from secure areas in the transportation system. The surveillance may be of secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. It provides both video and audio surveillance information to emergency personnel and automatically alerts emergency personnel of potential incidents.	No	1	The center shall remotely monitor video images and audio surveillance data collected in secure areas including facilities (e.g. transit yards) and transportation infrastructure (e.g. bridges, tunnels, interchanges, roadway infrastructure, and transit railways or guideways). The data may be raw or pre-processed in the field.	Planned	No
Maricopa County EOC	Emergency Management Center	Emergency Secure Area Surveillance	Emergency Secure Area Surveillance' monitors surveillance inputs from secure areas in the transportation system. The surveillance may be of secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. It provides both video and audio surveillance information to emergency personnel and automatically alerts emergency personnel of potential incidents.	No	2	The center shall remotely monitor video images and audio surveillance data collected in traveler secure areas, which include transit stations, transit stops, rest areas, park and ride lots, and other fixed sites along travel routes (e.g., emergency pull-off areas and travel information centers). The data may be raw or pre-processed in the field.	Planned	No
MCDOT Service Monitoring Sys for Connected Vehicles	Service Monitor System			No				No
Mexico Customs and Border Patrol	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mexico Customs and Border Patrol	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	5	The center shall provide the capability to correlate alerts and advisories, incident information, and security sensor and surveillance data.	Planned	No
Mexico Customs and Border Patrol	Emergency Management Center	Emergency Environmental Monitoring	Emergency Environmental Monitoring' collects current and forecast road conditions and surface weather information from a variety of sources. The collected environmental information is monitored and presented to the operator and used to more effectively manage incidents.	No	1	The center shall collect current and forecast road and weather information from weather service providers (such as the National Weather Service and value-added sector specific meteorological services).	Planned	No
Mexico Customs and Border Patrol	Emergency Management Center	Emergency Environmental Monitoring	Emergency Environmental Monitoring' collects current and forecast road conditions and surface weather information from a variety of sources. The collected environmental information is monitored and presented to the operator and used to more effectively manage incidents.	No	3	The center shall collect asset restrictions information from roadway maintenance operations.	Planned	No
Mexico Customs and Border Patrol	Emergency Management Center	Emergency Environmental Monitoring	Emergency Environmental Monitoring' collects current and forecast road conditions and surface weather information from a variety of sources. The collected environmental information is monitored and presented to the operator and used to more effectively manage incidents.	No	4	The center shall assimilate current and forecast road conditions and surface weather information to support incident management.	Planned	No
Mexico Customs and Border Patrol	Emergency Management Center	Emergency Environmental Monitoring	Emergency Environmental Monitoring' collects current and forecast road conditions and surface weather information from a variety of sources. The collected environmental information is monitored and presented to the operator and used to more effectively manage incidents.	No	5	The center shall provide the road and weather warning and advisories to the emergency responders.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mexico Customs and Border Patrol	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	1	The center shall manage inter-agency coordination of evacuation operations, from initial planning through the evacuation process and reentry.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mexico Customs and Border Patrol	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mexico Customs and Border Patrol	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	3	The center shall provide an interface to the emergency system operator to enter evacuation plans and procedures and present the operator with other agencies' plans.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mexico Customs and Border Patrol	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	4	The center shall coordinate evacuation destinations and shelter needs with shelter providers (e.g., the American Red Cross) in the region.	Planned	No
Mexico Customs and Border Patrol	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	1	The center shall provide tactical decision support, resource coordination, and communications integration for first responders to support local management of an incident.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mexico Customs and Border Patrol	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Planned	No
Mexico Customs and Border Patrol	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	3	The center shall track and maintain resource information and action plans pertaining to the incident command.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mexico Customs and Border Patrol	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Planned	No
Mexico Customs and Border Patrol	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mexico Customs and Border Patrol	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Planned	No
Mexico Customs and Border Patrol	Emergency Management Center	Emergency Secure Area Sensor Management	Emergency Secure Area Sensor Management' manages sensors that monitor secure areas in the transportation system, processes the collected data, performs threat analysis in which data is correlated with other sensor, surveillance, and advisory inputs, and then disseminates resultant threat information to emergency personnel and other agencies. In response to identified threats, the operator may request activation of barrier and safeguard systems to preclude an incident, control access during and after an incident or mitigate impact of an incident. The sensors may be in secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. The types of sensors include acoustic, threat (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors), infrastructure condition and integrity, motion and object sensors.	No	1	The center shall remotely monitor and control security sensor data collected in secure areas including facilities (e.g. transit yards) and transportation infrastructure (e.g. bridges, tunnels, interchanges, roadway infrastructure, and transit railways or guideways). The types of security sensor data include environmental threat (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors), infrastructure condition and integrity, intrusion and motion, and object detection sensors. The data may be raw or pre-processed in the field.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mexico Customs and Border Patrol	Emergency Management Center	Emergency Secure Area Sensor Management	Emergency Secure Area Sensor Management' manages sensors that monitor secure areas in the transportation system, processes the collected data, performs threat analysis in which data is correlated with other sensor, surveillance, and advisory inputs, and then disseminates resultant threat information to emergency personnel and other agencies. In response to identified threats, the operator may request activation of barrier and safeguard systems to preclude an incident, control access during and after an incident or mitigate impact of an incident. The sensors may be in secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. The types of sensors include acoustic, threat (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors), infrastructure condition and integrity, motion and object sensors.	No	2	The center shall remotely monitor and control security sensor data collected in traveler secure areas, which include transit stations, transit stops, rest areas, park and ride lots, and other fixed sites along travel routes (e.g., emergency pull-off areas and travel information centers). The types of security sensor data include environmental threat (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors), intrusion and motion, and object detection sensors. The data may be raw or pre-processed in the field.	Planned	No
Mexico Customs and Border Patrol	Emergency Management Center	Emergency Secure Area Surveillance	Emergency Secure Area Surveillance' monitors surveillance inputs from secure areas in the transportation system. The surveillance may be of secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. It provides both video and audio surveillance information to emergency personnel and automatically alerts emergency personnel of potential incidents.	No	1	The center shall remotely monitor video images and audio surveillance data collected in secure areas including facilities (e.g. transit yards) and transportation infrastructure (e.g. bridges, tunnels, interchanges, roadway infrastructure, and transit railways or guideways). The data may be raw or pre-processed in the field.	Planned	No
Mexico Customs and Border Patrol	Emergency Management Center	Emergency Secure Area Surveillance	Emergency Secure Area Surveillance' monitors surveillance inputs from secure areas in the transportation system. The surveillance may be of secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. It provides both video and audio surveillance information to emergency personnel and automatically alerts emergency personnel of potential incidents.	No	2	The center shall remotely monitor video images and audio surveillance data collected in traveler secure areas, which include transit stations, transit stops, rest areas, park and ride lots, and other fixed sites along travel routes (e.g., emergency pull-off areas and travel information centers). The data may be raw or pre-processed in the field.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mexico Public Safety	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Planned	No
Mexico Public Safety	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	5	The center shall provide the capability to correlate alerts and advisories, incident information, and security sensor and surveillance data.	Planned	No
Mexico Public Safety	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	6	The center shall broadcast wide-area alerts and advisories to traffic management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned	No
Mexico Public Safety	Emergency Management Center	Emergency Environmental Monitoring	Emergency Environmental Monitoring' collects current and forecast road conditions and surface weather information from a variety of sources. The collected environmental information is monitored and presented to the operator and used to more effectively manage incidents.	No	1	The center shall collect current and forecast road and weather information from weather service providers (such as the National Weather Service and value-added sector specific meteorological services).	Planned	No
Mexico Public Safety	Emergency Management Center	Emergency Environmental Monitoring	Emergency Environmental Monitoring' collects current and forecast road conditions and surface weather information from a variety of sources. The collected environmental information is monitored and presented to the operator and used to more effectively manage incidents.	No	3	The center shall collect asset restrictions information from roadway maintenance operations.	Planned	No
Mexico Public Safety	Emergency Management Center	Emergency Environmental Monitoring	Emergency Environmental Monitoring' collects current and forecast road conditions and surface weather information from a variety of sources. The collected environmental information is monitored and presented to the operator and used to more effectively manage incidents.	No	4	The center shall assimilate current and forecast road conditions and surface weather information to support incident management.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mexico Public Safety	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	1	The center shall manage inter-agency coordination of evacuation operations, from initial planning through the evacuation process and reentry.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mexico Public Safety	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mexico Public Safety	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	3	The center shall provide an interface to the emergency system operator to enter evacuation plans and procedures and present the operator with other agencies' plans.	Planned	No

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Mexico Public Safety	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	4	The center shall coordinate evacuation destinations and shelter needs with shelter providers (e.g., the American Red Cross) in the region.	Planned	No
Mexico Public Safety	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	1	The center shall provide tactical decision support, resource coordination, and communications integration for first responders to support local management of an incident.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mexico Public Safety	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Planned	No
Mexico Public Safety	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	3	The center shall track and maintain resource information and action plans pertaining to the incident command.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mexico Public Safety	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	4	The center shall share incident command information with other public safety agencies including resource deployment status, hazardous material information, rail incident information, evacuation advice as well as traffic, road, and weather conditions.	Planned	No
Mexico Public Safety	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	5	The center shall assess the status of responding emergency vehicles as part of an incident command.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mexico Public Safety	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Planned	No
Mexico Public Safety	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mexico Public Safety	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Planned	No
Mexico Public Safety	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mexico Public Safety	Emergency Management Center	Emergency Secure Area Sensor Management	Emergency Secure Area Sensor Management' manages sensors that monitor secure areas in the transportation system, processes the collected data, performs threat analysis in which data is correlated with other sensor, surveillance, and advisory inputs, and then disseminates resultant threat information to emergency personnel and other agencies. In response to identified threats, the operator may request activation of barrier and safeguard systems to preclude an incident, control access during and after an incident or mitigate impact of an incident. The sensors may be in secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. The types of sensors include acoustic, threat (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors), infrastructure condition and integrity, motion and object sensors.	No	1	The center shall remotely monitor and control security sensor data collected in secure areas including facilities (e.g. transit yards) and transportation infrastructure (e.g. bridges, tunnels, interchanges, roadway infrastructure, and transit railways or guideways). The types of security sensor data include environmental threat (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors), infrastructure condition and integrity, intrusion and motion, and object detection sensors. The data may be raw or pre-processed in the field.	Planned	No
Mexico Public Safety	Emergency Management Center	Emergency Secure Area Sensor Management	Emergency Secure Area Sensor Management' manages sensors that monitor secure areas in the transportation system, processes the collected data, performs threat analysis in which data is correlated with other sensor, surveillance, and advisory inputs, and then disseminates resultant threat information to emergency personnel and other agencies. In response to identified threats, the operator may request activation of barrier and safeguard systems to preclude an incident, control access during and after an incident or mitigate impact of an incident. The sensors may be in secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. The types of sensors include acoustic, threat (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors), infrastructure condition and integrity, motion and object sensors.	No	2	The center shall remotely monitor and control security sensor data collected in traveler secure areas, which include transit stations, transit stops, rest areas, park and ride lots, and other fixed sites along travel routes (e.g., emergency pull-off areas and travel information centers). The types of security sensor data include environmental threat (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors), intrusion and motion, and object detection sensors. The data may be raw or pre-processed in the field.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mexico Public Safety	Emergency Management Center	Emergency Secure Area Surveillance	Emergency Secure Area Surveillance' monitors surveillance inputs from secure areas in the transportation system. The surveillance may be of secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. It provides both video and audio surveillance information to emergency personnel and automatically alerts emergency personnel of potential incidents.	No	1	The center shall remotely monitor video images and audio surveillance data collected in secure areas including facilities (e.g. transit yards) and transportation infrastructure (e.g. bridges, tunnels, interchanges, roadway infrastructure, and transit railways or guideways). The data may be raw or pre-processed in the field.	Planned	No
Mexico Public Safety	Emergency Management Center	Emergency Secure Area Surveillance	Emergency Secure Area Surveillance' monitors surveillance inputs from secure areas in the transportation system. The surveillance may be of secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. It provides both video and audio surveillance information to emergency personnel and automatically alerts emergency personnel of potential incidents.	No	2	The center shall remotely monitor video images and audio surveillance data collected in traveler secure areas, which include transit stations, transit stops, rest areas, park and ride lots, and other fixed sites along travel routes (e.g., emergency pull-off areas and travel information centers). The data may be raw or pre-processed in the field.	Planned	No
Mexico Regional Maintenance Section	Maint and Constr Management Center	MCM Incident Management	MCM Incident Management' supports maintenance and construction participation in coordinated incident response. Incident notifications are shared, incident response resources are managed, and the overall incident situation and incident response status is coordinated among allied response organizations.	No	1	The center shall receive inputs from the Alerting and Advisory System concerning the possibility or occurrence of severe weather, terrorist activity, or other major emergency, including information provided by the Emergency Alert System.	Planned	No
Mexico Regional Maintenance Section	Maint and Constr Management Center	MCM Incident Management	MCM Incident Management' supports maintenance and construction participation in coordinated incident response. Incident notifications are shared, incident response resources are managed, and the overall incident situation and incident response status is coordinated among allied response organizations.	No	2	The center shall exchange alert information and status with emergency management centers. The information includes notification of a major emergency such as a natural or man-made disaster, civil emergency, or child abduction. The information may include the alert originator, the nature of the emergency, the geographic area affected by the emergency, the effective time period, etc.	Planned	No
Mexico Regional Maintenance Section	Maint and Constr Management Center	MCM Incident Management	MCM Incident Management' supports maintenance and construction participation in coordinated incident response. Incident notifications are shared, incident response resources are managed, and the overall incident situation and incident response status is coordinated among allied response organizations.	No	4	The center shall coordinate planning for incidents with emergency management centers - including pre-planning activities for disaster response, evacuation, and recovery operations.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mexico Regional Maintenance Section	Maint and Constr Management Center	MCM Incident Management	MCM Incident Management' supports maintenance and construction participation in coordinated incident response. Incident notifications are shared, incident response resources are managed, and the overall incident situation and incident response status is coordinated among allied response organizations.	No	8	The center shall receive information indicating the damage sustained by transportation assets, derived from aerial surveillance, field reports, inspections, tests, and analyses to support incident management.	Planned	No
Mexico Regional Maintenance Section	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	1	The center shall maintain an interface with asset management systems to track the inventory, restrictions, repair needs and status updates of transportation assets (pavement, bridges, signs, etc.) including location, installation and materials information, vendor/contractor, current maintenance status, standard height, width, and weight restrictions.	Planned	No
Mexico Regional Maintenance Section	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	2	The center shall respond to requests from emergency management and traffic management centers for hazard removal, field equipment repair, and other roadway maintenance.	Planned	No
Mexico Regional Maintenance Section	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	3	The center shall exchange information with administrative systems to support the planning and scheduling of maintenance activities. This information includes: equipment and consumables resupply purchase request status, personnel qualifications including training and special certifications, environmental regulations and rules that may impact maintenance activities, and requests and project requirements from contract administration.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mexico Regional Maintenance Section	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	10	The center shall manage an interface with center personnel to accept vehicle systems control information and remotely control maintenance and construction vehicle on-board equipment.	Planned	No
Mexico Regional TMC	Traffic Management Center	TMC Evacuation Support	TMC Evacuation Support' supports development, coordination, and execution of special traffic management strategies during evacuation and subsequent reentry of a population in the vicinity of a disaster or major emergency. A traffic management strategy is developed based on anticipated demand, the capacity of the road network including access to and from the evacuation routes, and existing and forecast conditions. The strategy supports efficient evacuation and also protects and optimizes movement of response vehicles and other resources that are responding to the emergency.	No	1	The center shall coordinate planning for evacuation with emergency management centers - including pre-planning activities such as establishing routes, areas to be evacuated, timing, etc.	Planned	No
Mexico Regional TMC	Traffic Management Center	TMC Evacuation Support	TMC Evacuation Support' supports development, coordination, and execution of special traffic management strategies during evacuation and subsequent reentry of a population in the vicinity of a disaster or major emergency. A traffic management strategy is developed based on anticipated demand, the capacity of the road network including access to and from the evacuation routes, and existing and forecast conditions. The strategy supports efficient evacuation and also protects and optimizes movement of response vehicles and other resources that are responding to the emergency.	No	2	The center shall support requests from emergency management centers to preempt the current traffic control strategy, activate traffic control and closure systems such as gates and barriers, activate safeguard systems, or use driver information systems to support evacuation traffic control plans.	Planned	No
Mexico Regional TMC	Traffic Management Center	TMC Evacuation Support	TMC Evacuation Support' supports development, coordination, and execution of special traffic management strategies during evacuation and subsequent reentry of a population in the vicinity of a disaster or major emergency. A traffic management strategy is developed based on anticipated demand, the capacity of the road network including access to and from the evacuation routes, and existing and forecast conditions. The strategy supports efficient evacuation and also protects and optimizes movement of response vehicles and other resources that are responding to the emergency.	No	3	The center shall coordinate evacuation information and controls with other traffic management centers.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mexico Regional TMC	Traffic Management Center	TMC Evacuation Support	TMC Evacuation Support' supports development, coordination, and execution of special traffic management strategies during evacuation and subsequent reentry of a population in the vicinity of a disaster or major emergency. A traffic management strategy is developed based on anticipated demand, the capacity of the road network including access to and from the evacuation routes, and existing and forecast conditions. The strategy supports efficient evacuation and also protects and optimizes movement of response vehicles and other resources that are responding to the emergency.	No	4	The center shall coordinate execution of evacuation strategies with emergency management centers - including activities such as setting closures and detours, establishing routes, updating areas to be evacuated, timing the process, etc.	Planned	No
Mexico Regional TMC	Traffic Management Center	TMC Incident Detection	TMC Incident Detection' identifies and reports incidents to Traffic Operations Personnel. It remotely monitors and controls traffic sensor and surveillance systems that support incident detection and verification. It analyzes and reduces the collected sensor and surveillance data, external alerting and advisory and incident reporting systems, anticipated demand information from intermodal freight depots, border crossings, special event information, and identifies and reports incidents and hazardous conditions	No	1	The center shall receive inputs from the Alerting and Advisory System concerning the possibility or occurrence of severe weather, terrorist activity, or other major emergency, including information provided by the Emergency Alert System.	Planned	No
Mexico Regional TMC	Traffic Management Center	TMC Incident Detection	TMC Incident Detection' identifies and reports incidents to Traffic Operations Personnel. It remotely monitors and controls traffic sensor and surveillance systems that support incident detection and verification. It analyzes and reduces the collected sensor and surveillance data, external alerting and advisory and incident reporting systems, anticipated demand information from intermodal freight depots, border crossings, special event information, and identifies and reports incidents and hazardous conditions	No	2	The center shall collect and store traffic flow and image data from the field equipment to detect and verify incidents.	Planned	No
Mexico Regional TMC	Traffic Management Center	TMC Incident Detection	TMC Incident Detection' identifies and reports incidents to Traffic Operations Personnel. It remotely monitors and controls traffic sensor and surveillance systems that support incident detection and verification. It analyzes and reduces the collected sensor and surveillance data, external alerting and advisory and incident reporting systems, anticipated demand information from intermodal freight depots, border crossings, special event information, and identifies and reports incidents and hazardous conditions	No	3	The center shall receive inputs concerning upcoming events that would effect the traffic network from event promoters and traveler information service providers.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mexico Regional TMC	Traffic Management Center	TMC Incident Detection	TMC Incident Detection' identifies and reports incidents to Traffic Operations Personnel. It remotely monitors and controls traffic sensor and surveillance systems that support incident detection and verification. It analyzes and reduces the collected sensor and surveillance data, external alerting and advisory and incident reporting systems, anticipated demand information from intermodal freight depots, border crossings, special event information, and identifies and reports incidents and hazardous conditions	No	4	The center shall exchange incident and threat information with emergency management centers as well as maintenance and construction centers; including notification of existence of incident and expected severity, location, time and nature of incident.	Planned	No
Mexico Regional TMC	Traffic Management Center	TMC Incident Detection	TMC Incident Detection' identifies and reports incidents to Traffic Operations Personnel. It remotely monitors and controls traffic sensor and surveillance systems that support incident detection and verification. It analyzes and reduces the collected sensor and surveillance data, external alerting and advisory and incident reporting systems, anticipated demand information from intermodal freight depots, border crossings, special event information, and identifies and reports incidents and hazardous conditions	No	5	The center shall support requests from emergency management centers and border inspection systems to remotely control sensor and surveillance equipment located in the field.	Planned	No
Mexico Regional TMC	Traffic Management Center	TMC Incident Detection	TMC Incident Detection' identifies and reports incidents to Traffic Operations Personnel. It remotely monitors and controls traffic sensor and surveillance systems that support incident detection and verification. It analyzes and reduces the collected sensor and surveillance data, external alerting and advisory and incident reporting systems, anticipated demand information from intermodal freight depots, border crossings, special event information, and identifies and reports incidents and hazardous conditions	No	6	The center shall provide road network conditions and traffic images to emergency management centers to support the detection, verification, and classification of incidents.	Planned	No
Mexico Regional TMC	Traffic Management Center	TMC Incident Detection	TMC Incident Detection' identifies and reports incidents to Traffic Operations Personnel. It remotely monitors and controls traffic sensor and surveillance systems that support incident detection and verification. It analyzes and reduces the collected sensor and surveillance data, external alerting and advisory and incident reporting systems, anticipated demand information from intermodal freight depots, border crossings, special event information, and identifies and reports incidents and hazardous conditions	No	7	The center shall provide video and traffic sensor control commands to the field equipment to detect and verify incidents.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mexico Regional TMC	Traffic Management Center	TMC Incident Dispatch Coordination	TMC Incident Dispatch Coordination' formulates and manages an incident response that takes into account the incident potential, incident impacts, and resources required for incident management. It provides information to support dispatch and routing of emergency response and service vehicles as well as coordination with other cooperating agencies. It provides access to traffic management resources that provide surveillance of the incident, traffic control in the surrounding area, and support for the incident response. It monitors the incident response and collects performance measures such as incident response and clearance times.	No	1	The center shall exchange alert information and status with emergency management centers. The information includes notification of a major emergency such as a natural or man-made disaster, civil emergency, or child abduction for distribution to the public. The information may include the alert originator, the nature of the emergency, the geographic area affected by the emergency, the effective time period, and information and instructions necessary for the public to respond to the alert. This may also identify specific information that should not be released to the public.	Planned	No
Mexico Regional TMC	Traffic Management Center	TMC Incident Dispatch Coordination	TMC Incident Dispatch Coordination' formulates and manages an incident response that takes into account the incident potential, incident impacts, and resources required for incident management. It provides information to support dispatch and routing of emergency response and service vehicles as well as coordination with other cooperating agencies. It provides access to traffic management resources that provide surveillance of the incident, traffic control in the surrounding area, and support for the incident response. It monitors the incident response and collects performance measures such as incident response and clearance times.	No	2	The center shall coordinate planning for incidents with emergency management centers - including pre-planning activities for disaster response, evacuation, and recovery operations.	Planned	No
Mexico Regional TMC	Traffic Management Center	TMC Incident Dispatch Coordination	TMC Incident Dispatch Coordination' formulates and manages an incident response that takes into account the incident potential, incident impacts, and resources required for incident management. It provides information to support dispatch and routing of emergency response and service vehicles as well as coordination with other cooperating agencies. It provides access to traffic management resources that provide surveillance of the incident, traffic control in the surrounding area, and support for the incident response. It monitors the incident response and collects performance measures such as incident response and clearance times.	No	4	The center shall exchange incident information with emergency management centers, maintenance and construction centers, transit centers, information service providers, and the media including description, location, traffic impact, status, expected duration, and response information.	Planned	No

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Mexico Regional TMC	Traffic Management Center	TMC Incident Dispatch Coordination	TMC Incident Dispatch Coordination' formulates and manages an incident response that takes into account the incident potential, incident impacts, and resources required for incident management. It provides information to support dispatch and routing of emergency response and service vehicles as well as coordination with other cooperating agencies. It provides access to traffic management resources that provide surveillance of the incident, traffic control in the surrounding area, and support for the incident response. It monitors the incident response and collects performance measures such as incident response and clearance times.	No	5	The center shall share resources with allied agency centers to implement special traffic control measures, assist in clean up, verify an incident, etc. This may also involve coordination with maintenance centers.	Planned	No
Mexico Regional TMC	Traffic Management Center	TMC Incident Dispatch Coordination	TMC Incident Dispatch Coordination' formulates and manages an incident response that takes into account the incident potential, incident impacts, and resources required for incident management. It provides information to support dispatch and routing of emergency response and service vehicles as well as coordination with other cooperating agencies. It provides access to traffic management resources that provide surveillance of the incident, traffic control in the surrounding area, and support for the incident response. It monitors the incident response and collects performance measures such as incident response and clearance times.	No	6	The center shall receive inputs concerning upcoming events that would effect the traffic network from event promoters, traveler information service providers, media, border crossings, and rail operations centers.	Planned	No
Mexico Regional TMC	Traffic Management Center	TMC Incident Dispatch Coordination	TMC Incident Dispatch Coordination' formulates and manages an incident response that takes into account the incident potential, incident impacts, and resources required for incident management. It provides information to support dispatch and routing of emergency response and service vehicles as well as coordination with other cooperating agencies. It provides access to traffic management resources that provide surveillance of the incident, traffic control in the surrounding area, and support for the incident response. It monitors the incident response and collects performance measures such as incident response and clearance times.	No	7	The center shall provide road network conditions and traffic images to emergency management centers, maintenance and construction centers, and traveler information service providers.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mexico Regional TMC	Traffic Management Center	TMC Incident Dispatch Coordination	TMC Incident Dispatch Coordination' formulates and manages an incident response that takes into account the incident potential, incident impacts, and resources required for incident management. It provides information to support dispatch and routing of emergency response and service vehicles as well as coordination with other cooperating agencies. It provides access to traffic management resources that provide surveillance of the incident, traffic control in the surrounding area, and support for the incident response. It monitors the incident response and collects performance measures such as incident response and clearance times.	No	8	The center shall monitor incident response performance and calculate incident response and clearance times.	Planned	No
Mexico Regional TMC	Traffic Management Center	TMC Incident Dispatch Coordination	TMC Incident Dispatch Coordination' formulates and manages an incident response that takes into account the incident potential, incident impacts, and resources required for incident management. It provides information to support dispatch and routing of emergency response and service vehicles as well as coordination with other cooperating agencies. It provides access to traffic management resources that provide surveillance of the incident, traffic control in the surrounding area, and support for the incident response. It monitors the incident response and collects performance measures such as incident response and clearance times.	No	9	The center shall exchange road network status assessment information with emergency management and maintenance centers including an assessment of damage sustained by the road network including location and extent of the damage, estimate of remaining capacity, required closures, alternate routes, necessary restrictions, and time frame for repair and recovery.	Planned	No
Mexico Regional TMC	Traffic Management Center	TMC Incident Dispatch Coordination	TMC Incident Dispatch Coordination' formulates and manages an incident response that takes into account the incident potential, incident impacts, and resources required for incident management. It provides information to support dispatch and routing of emergency response and service vehicles as well as coordination with other cooperating agencies. It provides access to traffic management resources that provide surveillance of the incident, traffic control in the surrounding area, and support for the incident response. It monitors the incident response and collects performance measures such as incident response and clearance times.	No	10	The center shall coordinate information and controls with other traffic management centers.	Planned	No

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Mexico Regional TMC	Traffic Management Center	TMC Incident Dispatch Coordination	TMC Incident Dispatch Coordination' formulates and manages an incident response that takes into account the incident potential, incident impacts, and resources required for incident management. It provides information to support dispatch and routing of emergency response and service vehicles as well as coordination with other cooperating agencies. It provides access to traffic management resources that provide surveillance of the incident, traffic control in the surrounding area, and support for the incident response. It monitors the incident response and collects performance measures such as incident response and clearance times.	No	11	The center shall receive inputs from emergency management and transit management centers to develop an overall status of the transportation system including emergency transit schedules in effect and current status and condition of the transportation infrastructure.	Planned	No
Mountain Lift Paratransit	Transit Management Center	Transit Center Data Collection	Transit Center Data Collection' collects and stores transit information that is collected in the course of transit operations performed by the Transit Management Center. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No				No
Mountain Lift Paratransit	Transit Management Center	Transit Center Paratransit Operations	Transit Center Paratransit Operations' manages demand responsive transit services, including paratransit services. It supports planning and scheduling of these services, allowing paratransit and other demand response transit services to plan efficient routes and better estimate arrival times. It also supports automated dispatch of paratransit vehicles and tracks passenger pick-ups and drop-offs. Customer service operator systems are updated with the most current schedule information.	No	1	The center shall process trip requests for demand responsive transit services, i.e. paratransit. Sources of the requests may include traveler information service providers.	Planned	No
Mountain Lift Paratransit	Transit Management Center	Transit Center Paratransit Operations	Transit Center Paratransit Operations' manages demand responsive transit services, including paratransit services. It supports planning and scheduling of these services, allowing paratransit and other demand response transit services to plan efficient routes and better estimate arrival times. It also supports automated dispatch of paratransit vehicles and tracks passenger pick-ups and drop-offs. Customer service operator systems are updated with the most current schedule information.	No	2	The center shall monitor the operational status of the demand response vehicles including status of passenger pick-up and drop-off.	Planned	No
Mountain Lift Paratransit	Transit Management Center	Transit Center Paratransit Operations	Transit Center Paratransit Operations' manages demand responsive transit services, including paratransit services. It supports planning and scheduling of these services, allowing paratransit and other demand response transit services to plan efficient routes and better estimate arrival times. It also supports automated dispatch of paratransit vehicles and tracks passenger pick-ups and drop-offs. Customer service operator systems are updated with the most current schedule information.	No	3	The center shall generate demand response transit (including paratransit) routes and schedules based on such factors as parameters input by the system operator, what other demand responsive transit schedules have been planned, the availability and location of vehicles, the relevance of any fixed transit routes and schedules, road network information, and incident information.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mountain Lift Paratransit	Transit Management Center	Transit Center Paratransit Operations	Transit Center Paratransit Operations' manages demand responsive transit services, including paratransit services. It supports planning and scheduling of these services, allowing paratransit and other demand response transit services to plan efficient routes and better estimate arrival times. It also supports automated dispatch of paratransit vehicles and tracks passenger pick-ups and drop-offs. Customer service operator systems are updated with the most current schedule information.	No	4	The center shall dispatch demand response (paratransit) transit vehicles.	Planned	No
Mountain Lift Paratransit	Transit Management Center	Transit Center Paratransit Operations	Transit Center Paratransit Operations' manages demand responsive transit services, including paratransit services. It supports planning and scheduling of these services, allowing paratransit and other demand response transit services to plan efficient routes and better estimate arrival times. It also supports automated dispatch of paratransit vehicles and tracks passenger pick-ups and drop-offs. Customer service operator systems are updated with the most current schedule information.	No	5	The center shall exchange information with Maintenance and Construction Operations concerning work zones, roadway conditions, asset restrictions, work plans, etc.	Planned	No
Mountain Lift Paratransit	Transit Management Center	Transit Center Paratransit Operations	Transit Center Paratransit Operations' manages demand responsive transit services, including paratransit services. It supports planning and scheduling of these services, allowing paratransit and other demand response transit services to plan efficient routes and better estimate arrival times. It also supports automated dispatch of paratransit vehicles and tracks passenger pick-ups and drop-offs. Customer service operator systems are updated with the most current schedule information.	No	6	The center shall disseminate up-to-date schedules and route information to other centers for demand responsive transit services (paratransit).	Planned	No
Mountain Lift Paratransit	Transit Management Center	Transit Center Security	Transit Center Security' monitors transit vehicle operator or traveler activated alarms received from on-board a transit vehicle. It supports transit vehicle operator authentication and provides the capability to remotely disable a transit vehicle. It also includes the capability to alert operators and police to potential incidents identified by these security features.	No				No

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Mountain Lift Paratransit	Transit Management Center	Transit Center Vehicle Assignment	Transit Center Vehicle Assignment' assigns individual transit vehicles to vehicle blocks and downloads this information to the transit vehicle. It also provides an exception handling process for the vehicle assignment function to generate new, supplemental vehicle assignments when required by changes during the operating day. It provides an inventory management function for the transit facility which stores functional attributes about each of the vehicles owned by the transit operator. These attributes permit the planning and assignment functions to match vehicles with routes based on suitability for the types of service required by the particular routes.	No				No
Mountain Lift Paratransit	Transit Management Center	Transit Garage Maintenance	Transit Garage Maintenance' provides advanced maintenance functions for the transit property. It collects operational and maintenance data from transit vehicles, manages vehicle service histories, and monitors operators and vehicles. It collects vehicle mileage data and uses it to automatically generate preventative maintenance schedules for each vehicle by utilizing vehicle tracking data. In addition, it provides information to service personnel to support maintenance activities and records and verifies that maintenance work was performed.	No				No
Mountain Lift Paratransit Vehicles	Basic Transit Vehicle			No				No
Mountain Lift Paratransit Vehicles	Transit Vehicle OBE	Transit Vehicle On-Board Maintenance	Transit Vehicle On-Board Maintenance' collects and processes transit vehicle maintenance data on-board the vehicle, including mileage and vehicle operating conditions. This maintenance information is provided to the management center and used to schedule future vehicle maintenance and repair.	No	1	The transit vehicle shall collect and process vehicle mileage data available to sensors on-board.	Planned	No
Mountain Lift Paratransit Vehicles	Transit Vehicle OBE	Transit Vehicle On-Board Maintenance	Transit Vehicle On-Board Maintenance' collects and processes transit vehicle maintenance data on-board the vehicle, including mileage and vehicle operating conditions. This maintenance information is provided to the management center and used to schedule future vehicle maintenance and repair.	No	2	The transit vehicle shall collect and process the transit vehicle's operating conditions such as engine temperature, oil pressure, brake wear, internal lighting, environmental controls, etc.	Planned	No
Mountain Lift Paratransit Vehicles	Transit Vehicle OBE	Transit Vehicle On-Board Maintenance	Transit Vehicle On-Board Maintenance' collects and processes transit vehicle maintenance data on-board the vehicle, including mileage and vehicle operating conditions. This maintenance information is provided to the management center and used to schedule future vehicle maintenance and repair.	No	3	The transit vehicle shall transmit vehicle maintenance data to the center to be used for scheduling future vehicle maintenance.	Planned	No

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Mountain Lift Paratransit Vehicles	Transit Vehicle OBE	Transit Vehicle On-Board Paratransit Operations	Transit Vehicle On-board Paratransit Operations' forwards paratransit and flexible-route dispatch requests to the operator and forwards acknowledgements to the center. It coordinates with, and assists the operator in managing multi-stop runs associated with demand responsive transit services including paratransit. It collects transit vehicle passenger data and makes it available to the center.	No	1	The transit vehicle shall manage data input to sensor(s) on-board a transit vehicle to determine the vehicle's availability for use in demand responsive and flexible-route transit services based on identity, type, and passenger capacity.	Planned	No
Mountain Lift Paratransit Vehicles	Transit Vehicle OBE	Transit Vehicle On-Board Paratransit Operations	Transit Vehicle On-board Paratransit Operations' forwards paratransit and flexible-route dispatch requests to the operator and forwards acknowledgements to the center. It coordinates with, and assists the operator in managing multi-stop runs associated with demand responsive transit services including paratransit. It collects transit vehicle passenger data and makes it available to the center.	No	2	The transit vehicle shall receive the status of demand responsive or flexible-route transit schedules and passenger loading from the transit vehicle operator.	Planned	No
Mountain Lift Paratransit Vehicles	Transit Vehicle OBE	Transit Vehicle On-Board Paratransit Operations	Transit Vehicle On-board Paratransit Operations' forwards paratransit and flexible-route dispatch requests to the operator and forwards acknowledgements to the center. It coordinates with, and assists the operator in managing multi-stop runs associated with demand responsive transit services including paratransit. It collects transit vehicle passenger data and makes it available to the center.	No	3	The transit vehicle shall provide the transit vehicle operator instructions about the demand responsive or flexible-route transit schedule that has been confirmed from the center.	Planned	No
Mountain Lift Paratransit Vehicles	Transit Vehicle OBE	Transit Vehicle On-Board Paratransit Operations	Transit Vehicle On-board Paratransit Operations' forwards paratransit and flexible-route dispatch requests to the operator and forwards acknowledgements to the center. It coordinates with, and assists the operator in managing multi-stop runs associated with demand responsive transit services including paratransit. It collects transit vehicle passenger data and makes it available to the center.	No	4	The transit vehicle shall provide the capability to log passenger boardings and alightings and make passenger use data available to the transit center.	Planned	No
Mountain Lift Paratransit Vehicles	Transit Vehicle OBE	Transit Vehicle Schedule Management	Transit Vehicle Schedule Management' monitors schedule performance and identifies corrective actions when a deviation is detected. It provides two-way communication between the transit vehicle and center, enabling the center to communicate with the vehicle operator and monitor on-board systems.	No	1	The transit vehicle shall receive a vehicle assignment including transit route information, transit service instructions, traffic information, road conditions, and other information for the operator.	Planned	No
Mountain Lift Paratransit Vehicles	Transit Vehicle OBE	Transit Vehicle Schedule Management	Transit Vehicle Schedule Management' monitors schedule performance and identifies corrective actions when a deviation is detected. It provides two-way communication between the transit vehicle and center, enabling the center to communicate with the vehicle operator and monitor on-board systems.	No	2	The transit vehicle shall use the route information and its current location to determine the deviation from the predetermined schedule.	Planned	No
Mountain Lift Paratransit Vehicles	Transit Vehicle OBE	Transit Vehicle Schedule Management	Transit Vehicle Schedule Management' monitors schedule performance and identifies corrective actions when a deviation is detected. It provides two-way communication between the transit vehicle and center, enabling the center to communicate with the vehicle operator and monitor on-board systems.	No	3	The transit vehicle shall calculate the estimated times of arrival (ETA) at transit stops.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mountain Lift Paratransit Vehicles	Transit Vehicle OBE	Transit Vehicle Schedule Management	Transit Vehicle Schedule Management' monitors schedule performance and identifies corrective actions when a deviation is detected. It provides two-way communication between the transit vehicle and center, enabling the center to communicate with the vehicle operator and monitor on-board systems.	No	4	The transit vehicle shall determine scenarios to correct the schedule deviation.	Planned	No
Mountain Lift Paratransit Vehicles	Transit Vehicle OBE	Transit Vehicle Schedule Management	Transit Vehicle Schedule Management' monitors schedule performance and identifies corrective actions when a deviation is detected. It provides two-way communication between the transit vehicle and center, enabling the center to communicate with the vehicle operator and monitor on-board systems.	No	5	The transit vehicle shall provide the schedule deviations and instructions for schedule corrections to the transit vehicle operator if the deviation is small, or the transit vehicle is operating in an urban area.	Planned	No
Mountain Line Bus Arrival System	Traveler Support Equipment	Transit Stop Information Services	Transit Stop Information Services' furnishes transit users with real-time travel-related information at transit stops, multi-modal transfer points, and other public transportation areas. It provides transit users with information on transit routes, schedules, transfer options, available services, fares, and real-time schedule adherence. In addition to tailored information for individual transit users, it supports general annunciation and/or display of imminent arrival information and other information of general interest to transit users.	No	1	The public interface for travelers shall collect and provide real-time travel-related information at transit stops, multi-modal transfer points, and other public transportation areas.	Planned	No
Mountain Line Bus Arrival System	Traveler Support Equipment	Transit Stop Information Services	Transit Stop Information Services' furnishes transit users with real-time travel-related information at transit stops, multi-modal transfer points, and other public transportation areas. It provides transit users with information on transit routes, schedules, transfer options, available services, fares, and real-time schedule adherence. In addition to tailored information for individual transit users, it supports general annunciation and/or display of imminent arrival information and other information of general interest to transit users.	No	2	The public interface for travelers shall collect and present to the transit traveler information on transit routes, schedules, and real-time schedule adherence.	Planned	No
Mountain Line Bus Arrival System	Traveler Support Equipment	Transit Stop Information Services	Transit Stop Information Services' furnishes transit users with real-time travel-related information at transit stops, multi-modal transfer points, and other public transportation areas. It provides transit users with information on transit routes, schedules, transfer options, available services, fares, and real-time schedule adherence. In addition to tailored information for individual transit users, it supports general annunciation and/or display of imminent arrival information and other information of general interest to transit users.	No	3	The public interface for travelers shall provide support for general annunciation and/or display of imminent arrival information and other information of general interest to transit users.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mountain Line Bus Arrival System	Traveler Support Equipment	Transit Stop Information Services	Transit Stop Information Services' furnishes transit users with real-time travel-related information at transit stops, multi-modal transfer points, and other public transportation areas. It provides transit users with information on transit routes, schedules, transfer options, available services, fares, and real-time schedule adherence. In addition to tailored information for individual transit users, it supports general annunciation and/or display of imminent arrival information and other information of general interest to transit users.	No	4	The public interface for travelers shall present information to the traveler in a form suitable for travelers with physical disabilities including travelers who are visually impaired.	Planned	No
Mountain Line Bus Arrival System	Traveler Support Equipment	Traveler Security	Traveler Security' provides the capability to report an emergency or summon assistance from secure areas such as transit stops, transit stations, modal transfer facilities, rest stops and picnic areas, park-and-ride areas, tourism and travel information areas, and emergency pull off areas. This object includes interfaces that support initiation of an alarm and presentation of the returned alarm acknowledgement as well as a broadcast message to advise or warn the traveler.	No	1	The public interface for travelers shall provide the capability for a traveler to report an emergency and summon assistance from secure areas such as transit stops, transit stations, modal transfer facilities, rest stops, park-and-ride areas, travel information areas, and emergency pull off areas.	Planned	No
Mountain Line Bus Arrival System	Traveler Support Equipment	Traveler Security	Traveler Security' provides the capability to report an emergency or summon assistance from secure areas such as transit stops, transit stations, modal transfer facilities, rest stops and picnic areas, park-and-ride areas, tourism and travel information areas, and emergency pull off areas. This object includes interfaces that support initiation of an alarm and presentation of the returned alarm acknowledgement as well as a broadcast message to advise or warn the traveler.	No	2	When initiated by a traveler, the public interface for travelers shall forward a request for assistance to an emergency management function and acknowledge the request.	Planned	No
Mountain Line Bus Arrival System	Traveler Support Equipment	Traveler Security	Traveler Security' provides the capability to report an emergency or summon assistance from secure areas such as transit stops, transit stations, modal transfer facilities, rest stops and picnic areas, park-and-ride areas, tourism and travel information areas, and emergency pull off areas. This object includes interfaces that support initiation of an alarm and presentation of the returned alarm acknowledgement as well as a broadcast message to advise or warn the traveler.	No	3	The public interface for travelers shall provide the capability to broadcast a message to advise or warn a traveler.	Planned	No
Mountain Line Bus Arrival System	Traveler Support Equipment	Traveler Security	Traveler Security' provides the capability to report an emergency or summon assistance from secure areas such as transit stops, transit stations, modal transfer facilities, rest stops and picnic areas, park-and-ride areas, tourism and travel information areas, and emergency pull off areas. This object includes interfaces that support initiation of an alarm and presentation of the returned alarm acknowledgement as well as a broadcast message to advise or warn the traveler.	No	4	The public interface for travelers shall accept input and provide information to the traveler in a form suitable for travelers with physical disabilities.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mountain Line Transit Buses	Basic Transit Vehicle			No				No
Mountain Line Transit Buses	Transit Vehicle OBE	Transit Vehicle On-Board Fare Management	Transit Vehicle On-board Fare Management' supports fare collection using a standard fare card or other non-monetary fare medium and detects payment violations. Collected fare data are made available to the center.	No	1	The transit vehicle shall read data from the traveler card / payment instrument presented by boarding passengers.	Existing	No
Mountain Line Transit Buses	Transit Vehicle OBE	Transit Vehicle On-Board Fare Management	Transit Vehicle On-board Fare Management' supports fare collection using a standard fare card or other non-monetary fare medium and detects payment violations. Collected fare data are made available to the center.	No	2	The transit vehicle shall provide an image of all travelers which shall be used for violation processing of those who do not have a traveler card / payment instrument or whose transit fare transaction fails.	Planned	No
Mountain Line Transit Buses	Transit Vehicle OBE	Transit Vehicle On-Board Fare Management	Transit Vehicle On-board Fare Management' supports fare collection using a standard fare card or other non-monetary fare medium and detects payment violations. Collected fare data are made available to the center.	No	3	The transit vehicle shall determine the traveler's travel routing based on the transit vehicle's current location and the traveler's destination.	Planned	No
Mountain Line Transit Buses	Transit Vehicle OBE	Transit Vehicle On-Board Fare Management	Transit Vehicle On-board Fare Management' supports fare collection using a standard fare card or other non-monetary fare medium and detects payment violations. Collected fare data are made available to the center.	No	4	The transit vehicle shall calculate the traveler's fare based on the origin and destination provided by the traveler as well as factors such as the transit routing, transit fare category, traveler history, and route-specific information.	Planned	No
Mountain Line Transit Buses	Transit Vehicle OBE	Transit Vehicle On-Board Fare Management	Transit Vehicle On-board Fare Management' supports fare collection using a standard fare card or other non-monetary fare medium and detects payment violations. Collected fare data are made available to the center.	No	5	The transit vehicle shall have access to the complete range of transit services (routes and schedules) that are available to the traveler.	Planned	No
Mountain Line Transit Buses	Transit Vehicle OBE	Transit Vehicle On-Board Fare Management	Transit Vehicle On-board Fare Management' supports fare collection using a standard fare card or other non-monetary fare medium and detects payment violations. Collected fare data are made available to the center.	No	6	The transit vehicle shall provide a transit fare payment interface that is suitable for travelers with physical disabilities.	Planned	No
Mountain Line Transit Buses	Transit Vehicle OBE	Transit Vehicle On-Board Information Services	Transit Vehicle On-board Information Services' furnishes en-route transit users with real-time travel-related information on-board a transit vehicle. Current information that can be provided to transit users includes transit routes, schedules, transfer options, fares, real-time schedule adherence, current incidents, weather conditions, non-motorized transportation services, and special events are provided. In addition to tailored information for individual transit users, it also supports general annunciation and/or display of general schedule information, imminent arrival information, and other information of general interest to transit users.	No	1	The transit vehicle shall enable traffic and travel advisory information to be requested and output to the traveler. Such information may include transit routes, schedules, transfer options, fares, real-time schedule adherence, current incidents, weather conditions, and special events.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mountain Line Transit Buses	Transit Vehicle OBE	Transit Vehicle On-Board Information Services	Transit Vehicle On-board Information Services' furnishes en-route transit users with real-time travel-related information on-board a transit vehicle. Current information that can be provided to transit users includes transit routes, schedules, transfer options, fares, real-time schedule adherence, current incidents, weather conditions, non-motorized transportation services, and special events are provided. In addition to tailored information for individual transit users, it also supports general annunciation and/or display of general schedule information, imminent arrival information, and other information of general interest to transit users.	No	2	The transit vehicle shall broadcast advisories about the imminent arrival of the transit vehicle at the next stop via an on-board automated annunciation system.	Planned	No
Mountain Line Transit Buses	Transit Vehicle OBE	Transit Vehicle On-Board Information Services	Transit Vehicle On-board Information Services' furnishes en-route transit users with real-time travel-related information on-board a transit vehicle. Current information that can be provided to transit users includes transit routes, schedules, transfer options, fares, real-time schedule adherence, current incidents, weather conditions, non-motorized transportation services, and special events are provided. In addition to tailored information for individual transit users, it also supports general annunciation and/or display of general schedule information, imminent arrival information, and other information of general interest to transit users.	No	3	The transit vehicle shall support input and output forms that are suitable for travelers with physical disabilities.	Planned	No
Mountain Line Transit Buses	Transit Vehicle OBE	Transit Vehicle On-Board Information Services	Transit Vehicle On-board Information Services' furnishes en-route transit users with real-time travel-related information on-board a transit vehicle. Current information that can be provided to transit users includes transit routes, schedules, transfer options, fares, real-time schedule adherence, current incidents, weather conditions, non-motorized transportation services, and special events are provided. In addition to tailored information for individual transit users, it also supports general annunciation and/or display of general schedule information, imminent arrival information, and other information of general interest to transit users.	No	4	The transit vehicle shall gather transit advisory data, including alerts and advisories pertaining to major emergencies, or man made disasters.	Planned	No
Mountain Line Transit Buses	Transit Vehicle OBE	Transit Vehicle On-Board Maintenance	Transit Vehicle On-Board Maintenance' collects and processes transit vehicle maintenance data on-board the vehicle, including mileage and vehicle operating conditions. This maintenance information is provided to the management center and used to schedule future vehicle maintenance and repair.	No	1	The transit vehicle shall collect and process vehicle mileage data available to sensors on-board.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mountain Line Transit Buses	Transit Vehicle OBE	Transit Vehicle On-Board Trip Monitoring	Transit Vehicle On-Board Trip Monitoring' tracks vehicle location, monitors fuel usage, collects operational status (doors opened/closed, running times, etc.) and sends the collected, time stamped data to the Transit Management Center.	No	1	The transit vehicle shall track the current location of the transit vehicle.	Planned	No
Mountain Line Transit Buses	Transit Vehicle OBE	Transit Vehicle On-Board Trip Monitoring	Transit Vehicle On-Board Trip Monitoring' tracks vehicle location, monitors fuel usage, collects operational status (doors opened/closed, running times, etc.) and sends the collected, time stamped data to the Transit Management Center.	No	2	The transit vehicle shall support the computation of the location of a transit vehicle using on-board sensors to augment the location determination function. This may include proximity to the transit stops or other known reference points as well as recording trip length.	Planned	No
Mountain Line Transit Buses	Transit Vehicle OBE	Transit Vehicle On-Board Trip Monitoring	Transit Vehicle On-Board Trip Monitoring' tracks vehicle location, monitors fuel usage, collects operational status (doors opened/closed, running times, etc.) and sends the collected, time stamped data to the Transit Management Center.	No	3	The transit vehicle shall record transit trip monitoring data including vehicle mileage and fuel usage.	Planned	No
Mountain Line Transit Buses	Transit Vehicle OBE	Transit Vehicle On-Board Trip Monitoring	Transit Vehicle On-Board Trip Monitoring' tracks vehicle location, monitors fuel usage, collects operational status (doors opened/closed, running times, etc.) and sends the collected, time stamped data to the Transit Management Center.	No	4	The transit vehicle shall record transit trip monitoring data including operational status information such as doors open/closed, running times, etc.	Planned	No
Mountain Line Transit Buses	Transit Vehicle OBE	Transit Vehicle On-Board Trip Monitoring	Transit Vehicle On-Board Trip Monitoring' tracks vehicle location, monitors fuel usage, collects operational status (doors opened/closed, running times, etc.) and sends the collected, time stamped data to the Transit Management Center.	No	5	The transit vehicle shall send the transit vehicle trip monitoring data to center-based trip monitoring functions.	Planned	No
Mountain Line Transit Buses	Transit Vehicle OBE	Transit Vehicle Passenger Counting	Transit Vehicle Passenger Counting' collects transit vehicle loading data and makes it available to the center.	No	1	The transit vehicle shall count passengers boarding and alighting.	Planned	No
Mountain Line Transit Buses	Transit Vehicle OBE	Transit Vehicle Passenger Counting	Transit Vehicle Passenger Counting' collects transit vehicle loading data and makes it available to the center.	No	2	The passenger counts shall be related to location to support association of passenger counts with routes, route segments, or bus stops.	Planned	No
Mountain Line Transit Buses	Transit Vehicle OBE	Transit Vehicle Passenger Counting	Transit Vehicle Passenger Counting' collects transit vehicle loading data and makes it available to the center.	No	3	The passenger counts shall be timestamped so that ridership can be measured by time of day and day of week.	Planned	No
Mountain Line Transit Buses	Transit Vehicle OBE	Transit Vehicle Passenger Counting	Transit Vehicle Passenger Counting' collects transit vehicle loading data and makes it available to the center.	No	4	The transit vehicle shall send the collected passenger count information to the transit center.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mountain Line Transit Buses	Transit Vehicle OBE	Transit Vehicle Schedule Management	Transit Vehicle Schedule Management' monitors schedule performance and identifies corrective actions when a deviation is detected. It provides two-way communication between the transit vehicle and center, enabling the center to communicate with the vehicle operator and monitor on-board systems.	No	1	The transit vehicle shall receive a vehicle assignment including transit route information, transit service instructions, traffic information, road conditions, and other information for the operator.	Planned	No
Mountain Line Transit Buses	Transit Vehicle OBE	Transit Vehicle Schedule Management	Transit Vehicle Schedule Management' monitors schedule performance and identifies corrective actions when a deviation is detected. It provides two-way communication between the transit vehicle and center, enabling the center to communicate with the vehicle operator and monitor on-board systems.	No	2	The transit vehicle shall use the route information and its current location to determine the deviation from the predetermined schedule.	Planned	No
Mountain Line Transit Buses	Transit Vehicle OBE	Transit Vehicle Schedule Management	Transit Vehicle Schedule Management' monitors schedule performance and identifies corrective actions when a deviation is detected. It provides two-way communication between the transit vehicle and center, enabling the center to communicate with the vehicle operator and monitor on-board systems.	No	3	The transit vehicle shall calculate the estimated times of arrival (ETA) at transit stops.	Planned	No
Mountain Line Transit Buses	Transit Vehicle OBE	Transit Vehicle Security	Transit Vehicle Security' provides security and safety functions on-board the transit vehicle. It includes surveillance and sensor systems that monitor the on-board environment, silent alarms that can be activated by transit user or vehicle operator, operator authentication, and a remote vehicle disable function. The surveillance equipment includes video (e.g. CCTV cameras), audio systems and/or event recorder systems. The sensor equipment includes threat sensors (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors) and object detection sensors (e.g. metal detectors).	No				No
Mountain Line Website and FLGRide	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	1	The center shall collect, process, and store traffic and highway condition information, including incident information, detours and road closures, event information, recommended routes, and current speeds on specific routes.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mountain Line Website and FLGRide	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	3	The center shall collect, process, and store maintenance and construction information, including scheduled maintenance and construction work activities and work zone activities.	Planned	No
Mountain Line Website and FLGRide	Transportation Information Center	TIC Operations Data Collection	TIC Operations Data Collection' collects and stores information that is collected about the transportation information service including data on the number of clients serviced and the services that were provided. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	1	The center shall collect traveler information data, such as parking lot data, rideshare data, road network use data, vehicle probe data, and other data from traveler information system operations.	Planned	No
Mountain Line Website and FLGRide	Transportation Information Center	TIC Operations Data Collection	TIC Operations Data Collection' collects and stores information that is collected about the transportation information service including data on the number of clients serviced and the services that were provided. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	2	The center shall collect traveler requests, confirmations, and payment transaction data for traveler services provided.	Planned	No
Mountain Line Website and FLGRide	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	1	The center shall disseminate traffic and highway condition information to travelers, including incident information, detours and road closures, event information, recommended routes, and current speeds on specific routes.	Planned	No
Mountain Line Website and FLGRide	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	2	The center shall disseminate maintenance and construction information to travelers, including scheduled maintenance and construction work activities and work zone activities.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mountain Line Website and FLGRide	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	3	The center shall disseminate transit routes and schedules, transit transfer options, transit fares, and real-time schedule adherence information to travelers.	Planned	No
Mountain Line Website and FLGRide	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	4	The center shall disseminate parking information to travelers, including location, availability, and fees.	Planned	No
Mountain Line Website and FLGRide	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	5	The center shall disseminate toll fee information to travelers.	Planned	No
Mountain Line Website and FLGRide	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	6	The center shall disseminate weather information to travelers.	Planned	No
Mountain Line Website and FLGRide	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	7	The center shall disseminate event information to travelers.	Planned	No
Mountain Line Website and FLGRide	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	8	The center shall disseminate air quality information to travelers.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Mountain Line Website and FLGRide	Transportation Information Center	TIC Trip Planning	TIC Trip Planning' provides pre-trip and en-route trip planning services for travelers. It receives origin, destination, constraints, and preferences and returns trip plan(s) that meet the supplied criteria. Trip plans may be based on current traffic and road conditions, transit schedule information, and other real-time traveler information. Candidate trip plans are multimodal and may include vehicle, transit, and alternate mode segments (e.g., rail, ferry, bicycle routes, and walkways) based on traveler preferences. It also confirms the trip plan for the traveler and supports reservations and advanced payment for portions of the trip. The trip plan includes specific routing information and instructions for each segment of the trip and may also include information and reservations for additional services (e.g., parking) along the route.	No	1	The center shall provide the capability to provide specific pre-trip and en route directions to travelers (and drivers), including costs, arrival times, and transfer points.	Planned	No
Mountain Line Website and FLGRide	Transportation Information Center	TIC Trip Planning	TIC Trip Planning' provides pre-trip and en-route trip planning services for travelers. It receives origin, destination, constraints, and preferences and returns trip plan(s) that meet the supplied criteria. Trip plans may be based on current traffic and road conditions, transit schedule information, and other real-time traveler information. Candidate trip plans are multimodal and may include vehicle, transit, and alternate mode segments (e.g., rail, ferry, bicycle routes, and walkways) based on traveler preferences. It also confirms the trip plan for the traveler and supports reservations and advanced payment for portions of the trip. The trip plan includes specific routing information and instructions for each segment of the trip and may also include information and reservations for additional services (e.g., parking) along the route.	No	2	The center shall include bicycle routes, walkways, skyways, and multi-use trails in the pre-trip and en route directions it provides to travelers.	Planned	No
Mountain Line Website and FLGRide	Transportation Information Center	TIC Trip Planning	TIC Trip Planning' provides pre-trip and en-route trip planning services for travelers. It receives origin, destination, constraints, and preferences and returns trip plan(s) that meet the supplied criteria. Trip plans may be based on current traffic and road conditions, transit schedule information, and other real-time traveler information. Candidate trip plans are multimodal and may include vehicle, transit, and alternate mode segments (e.g., rail, ferry, bicycle routes, and walkways) based on traveler preferences. It also confirms the trip plan for the traveler and supports reservations and advanced payment for portions of the trip. The trip plan includes specific routing information and instructions for each segment of the trip and may also include information and reservations for additional services (e.g., parking) along the route.	No	3	The center shall support on-line route guidance for travelers using personal devices (such as PDAs).	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
MPO-COG Data User Systems	Archived Data User System			No				No
MPO-COG Planning Traffic Database	Archived Data System			No				No
MPO-COG Planning Traffic Database	Other Data Sources			No				No
NAIPTA ITS Field Equipment	ITS Roadway Equipment			No				No
NAIPTA Transit Data Archive	Archived Data System			No				No
NAIPTA Transit Management Center	Archived Data User System			No				No
NAIPTA Transit Management Center	Transit Management Center	Transit Center Data Collection	Transit Center Data Collection' collects and stores transit information that is collected in the course of transit operations performed by the Transit Management Center. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No				No
NAIPTA Transit Management Center	Transit Management Center	Transit Center Fare Management	Transit Center Fare Management' manages fare collection and passenger load management at the transit center. It provides the back office functions that support transit fare collection, supporting payment reconciliation with links to financial institutions and enforcement agencies for fare violations. It collects data required to determine accurate ridership levels, establish fares, and distribute fare information. It loads fare data into the vehicle prior to the beginning of normal operations and unloads fare collection data from the vehicle at the close out of normal operations.	No	1	The center shall manage the actual value of transit fares for each segment of each regular transit route, including the transmission of the information to transit vehicles and transit stops or stations.	Existing	No
NAIPTA Transit Management Center	Transit Management Center	Transit Center Fare Management	Transit Center Fare Management' manages fare collection and passenger load management at the transit center. It provides the back office functions that support transit fare collection, supporting payment reconciliation with links to financial institutions and enforcement agencies for fare violations. It collects data required to determine accurate ridership levels, establish fares, and distribute fare information. It loads fare data into the vehicle prior to the beginning of normal operations and unloads fare collection data from the vehicle at the close out of normal operations.	No	2	The center shall provide the capability for a system operator to manage the transit fares and control the exchange of transit fare information.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
NAIPTA Transit Management Center	Transit Management Center	Transit Center Fare Management	Transit Center Fare Management' manages fare collection and passenger load management at the transit center. It provides the back office functions that support transit fare collection, supporting payment reconciliation with links to financial institutions and enforcement agencies for fare violations. It collects data required to determine accurate ridership levels, establish fares, and distribute fare information. It loads fare data into the vehicle prior to the beginning of normal operations and unloads fare collection data from the vehicle at the close out of normal operations.	No	3	The center shall process the financial requests from the transit vehicles or roadside and manage an interface to a Financial Institution.	Existing	No
NAIPTA Transit Management Center	Transit Management Center	Transit Center Fare Management	Transit Center Fare Management' manages fare collection and passenger load management at the transit center. It provides the back office functions that support transit fare collection, supporting payment reconciliation with links to financial institutions and enforcement agencies for fare violations. It collects data required to determine accurate ridership levels, establish fares, and distribute fare information. It loads fare data into the vehicle prior to the beginning of normal operations and unloads fare collection data from the vehicle at the close out of normal operations.	No	4	The center shall support the payment of transit fare transactions using data provided by the traveler cards / payment instruments.	Planned	No
NAIPTA Transit Management Center	Transit Management Center	Transit Center Fare Management	Transit Center Fare Management' manages fare collection and passenger load management at the transit center. It provides the back office functions that support transit fare collection, supporting payment reconciliation with links to financial institutions and enforcement agencies for fare violations. It collects data required to determine accurate ridership levels, establish fares, and distribute fare information. It loads fare data into the vehicle prior to the beginning of normal operations and unloads fare collection data from the vehicle at the close out of normal operations.	No	5	The center shall collect data on fare payment violations and send the data, including images of the violator, to the appropriate enforcement agency.	Planned	No
NAIPTA Transit Management Center	Transit Management Center	Transit Center Fare Management	Transit Center Fare Management' manages fare collection and passenger load management at the transit center. It provides the back office functions that support transit fare collection, supporting payment reconciliation with links to financial institutions and enforcement agencies for fare violations. It collects data required to determine accurate ridership levels, establish fares, and distribute fare information. It loads fare data into the vehicle prior to the beginning of normal operations and unloads fare collection data from the vehicle at the close out of normal operations.	No	6	The center shall process requests for transit fares to be paid in advance.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
NAIPTA Transit Management Center	Transit Management Center	Transit Center Fare Management	Transit Center Fare Management' manages fare collection and passenger load management at the transit center. It provides the back office functions that support transit fare collection, supporting payment reconciliation with links to financial institutions and enforcement agencies for fare violations. It collects data required to determine accurate ridership levels, establish fares, and distribute fare information. It loads fare data into the vehicle prior to the beginning of normal operations and unloads fare collection data from the vehicle at the close out of normal operations.	No	10	The center shall collect fare statistics data to implement variable and flexible fare structures.	Planned	No
NAIPTA Transit Management Center	Transit Management Center	Transit Center Fare Management	Transit Center Fare Management' manages fare collection and passenger load management at the transit center. It provides the back office functions that support transit fare collection, supporting payment reconciliation with links to financial institutions and enforcement agencies for fare violations. It collects data required to determine accurate ridership levels, establish fares, and distribute fare information. It loads fare data into the vehicle prior to the beginning of normal operations and unloads fare collection data from the vehicle at the close out of normal operations.	No	12	The center shall provide transit fare information to traveler information providers upon request.	Planned	No
NAIPTA Transit Management Center	Transit Management Center	Transit Center Fixed-Route Operations	Transit Center Fixed-Route Operations' manages fixed route transit operations. It supports creation of schedules, blocks and runs for fixed and flexible route transit services. It allows fixed-route and flexible-route transit services to disseminate schedules and automatically updates customer service operator systems with the most current schedule information. It also supports automated dispatch of transit vehicles. Current vehicle schedule adherence and optimum scenarios for schedule adjustment are also provided. It also receives and processes transit vehicle loading data.	No	1	The center shall generate transit routes and schedules based on such factors as parameters input by the system operator, road network conditions, incident information, operational data on current routes and schedules, and digitized map data.	Existing	No
NAIPTA Transit Management Center	Transit Management Center	Transit Center Fixed-Route Operations	Transit Center Fixed-Route Operations' manages fixed route transit operations. It supports creation of schedules, blocks and runs for fixed and flexible route transit services. It allows fixed-route and flexible-route transit services to disseminate schedules and automatically updates customer service operator systems with the most current schedule information. It also supports automated dispatch of transit vehicles. Current vehicle schedule adherence and optimum scenarios for schedule adjustment are also provided. It also receives and processes transit vehicle loading data.	No	2	The center shall provide the interface to the system operator to control the generation of new routes and schedules (transit services) including the ability to review and update the parameters used by the routes and schedules generation processes and to initiate these processes	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
NAIPTA Transit Management Center	Transit Management Center	Transit Center Fixed-Route Operations	Transit Center Fixed-Route Operations' manages fixed route transit operations. It supports creation of schedules, blocks and runs for fixed and flexible route transit services. It allows fixed-route and flexible-route transit services to disseminate schedules and automatically updates customer service operator systems with the most current schedule information. It also supports automated dispatch of transit vehicles. Current vehicle schedule adherence and optimum scenarios for schedule adjustment are also provided. It also receives and processes transit vehicle loading data.	No	3	The center shall be able to generate special routes and schedules to support an incident, disaster, evacuation, or other emergency.	Planned	No
NAIPTA Transit Management Center	Transit Management Center	Transit Center Fixed-Route Operations	Transit Center Fixed-Route Operations' manages fixed route transit operations. It supports creation of schedules, blocks and runs for fixed and flexible route transit services. It allows fixed-route and flexible-route transit services to disseminate schedules and automatically updates customer service operator systems with the most current schedule information. It also supports automated dispatch of transit vehicles. Current vehicle schedule adherence and optimum scenarios for schedule adjustment are also provided. It also receives and processes transit vehicle loading data.	No	4	The center shall dispatch fixed route or flexible route transit vehicles.	Planned	No
NAIPTA Transit Management Center	Transit Management Center	Transit Center Fixed-Route Operations	Transit Center Fixed-Route Operations' manages fixed route transit operations. It supports creation of schedules, blocks and runs for fixed and flexible route transit services. It allows fixed-route and flexible-route transit services to disseminate schedules and automatically updates customer service operator systems with the most current schedule information. It also supports automated dispatch of transit vehicles. Current vehicle schedule adherence and optimum scenarios for schedule adjustment are also provided. It also receives and processes transit vehicle loading data.	No	5	The center shall collect transit operational data for use in the generation of routes and schedules.	Planned	No
NAIPTA Transit Management Center	Transit Management Center	Transit Center Fixed-Route Operations	Transit Center Fixed-Route Operations' manages fixed route transit operations. It supports creation of schedules, blocks and runs for fixed and flexible route transit services. It allows fixed-route and flexible-route transit services to disseminate schedules and automatically updates customer service operator systems with the most current schedule information. It also supports automated dispatch of transit vehicles. Current vehicle schedule adherence and optimum scenarios for schedule adjustment are also provided. It also receives and processes transit vehicle loading data.	No	6	The center shall provide instructions or corrective actions to the transit vehicle operators based upon operational needs.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
NAIPTA Transit Management Center	Transit Management Center	Transit Center Fixed-Route Operations	Transit Center Fixed-Route Operations' manages fixed route transit operations. It supports creation of schedules, blocks and runs for fixed and flexible route transit services. It allows fixed-route and flexible-route transit services to disseminate schedules and automatically updates customer service operator systems with the most current schedule information. It also supports automated dispatch of transit vehicles. Current vehicle schedule adherence and optimum scenarios for schedule adjustment are also provided. It also receives and processes transit vehicle loading data.	No	7	The center shall manage large deviations of individual transit vehicles, deviations in rural areas, and deviations of large numbers of vehicles.	Planned	No
NAIPTA Transit Management Center	Transit Management Center	Transit Center Fixed-Route Operations	Transit Center Fixed-Route Operations' manages fixed route transit operations. It supports creation of schedules, blocks and runs for fixed and flexible route transit services. It allows fixed-route and flexible-route transit services to disseminate schedules and automatically updates customer service operator systems with the most current schedule information. It also supports automated dispatch of transit vehicles. Current vehicle schedule adherence and optimum scenarios for schedule adjustment are also provided. It also receives and processes transit vehicle loading data.	No	8	The center shall generate the necessary corrective actions which may involve more than the vehicles concerned and more far reaching action, such as, the introduction of extra vehicles, wide area signal priority by traffic management, the premature termination of some services, etc.	Planned	No
NAIPTA Transit Management Center	Transit Management Center	Transit Center Fixed-Route Operations	Transit Center Fixed-Route Operations' manages fixed route transit operations. It supports creation of schedules, blocks and runs for fixed and flexible route transit services. It allows fixed-route and flexible-route transit services to disseminate schedules and automatically updates customer service operator systems with the most current schedule information. It also supports automated dispatch of transit vehicles. Current vehicle schedule adherence and optimum scenarios for schedule adjustment are also provided. It also receives and processes transit vehicle loading data.	No	9	The center shall exchange information with Maintenance and Construction Operations concerning work zones, roadway conditions, asset restrictions, work plans, etc.	Planned	No
NAIPTA Transit Management Center	Transit Management Center	Transit Center Fixed-Route Operations	Transit Center Fixed-Route Operations' manages fixed route transit operations. It supports creation of schedules, blocks and runs for fixed and flexible route transit services. It allows fixed-route and flexible-route transit services to disseminate schedules and automatically updates customer service operator systems with the most current schedule information. It also supports automated dispatch of transit vehicles. Current vehicle schedule adherence and optimum scenarios for schedule adjustment are also provided. It also receives and processes transit vehicle loading data.	No	10	The center shall disseminate up-to-date schedules and route information to other centers for fixed and flexible route services.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
NAIPTA Transit Management Center	Transit Management Center	Transit Center Fixed-Route Operations	Transit Center Fixed-Route Operations' manages fixed route transit operations. It supports creation of schedules, blocks and runs for fixed and flexible route transit services. It allows fixed-route and flexible-route transit services to disseminate schedules and automatically updates customer service operator systems with the most current schedule information. It also supports automated dispatch of transit vehicles. Current vehicle schedule adherence and optimum scenarios for schedule adjustment are also provided. It also receives and processes transit vehicle loading data.	No	11	The center shall provide an interface to the archive data repository to enable the operator to retrieve historical operating data for use in planning transit routes and schedules.	Planned	No
NAIPTA Transit Management Center	Transit Management Center	Transit Center Information Services	Transit Center Information Services' collects the latest available information for a transit service and makes it available to transit customers and to Transportation Information Centers for further distribution. Customers are provided information at transit stops and other public transportation areas before they embark and on-board the transit vehicle once they are enroute. Information provided can include the latest available information on transit routes, schedules, transfer options, fares, real-time schedule adherence, current incidents, weather conditions, yellow pages, and special events. In addition to general service information, tailored information (e.g., itineraries) are provided to individual transit users.	No	1	The center shall provide travelers using public transportation with traffic and advisory information upon request. Such information may include transit routes, schedules, transfer options, fares, real-time schedule adherence, current incidents, weather conditions, and special events.	Existing	No
NAIPTA Transit Management Center	Transit Management Center	Transit Center Passenger Counting	Transit Center Passenger Counting' receives and processes transit vehicle loading data using two-way communications from equipped transit vehicles.	No				No
NAIPTA Transit Management Center	Transit Management Center	Transit Center Security	Transit Center Security' monitors transit vehicle operator or traveler activated alarms received from on-board a transit vehicle. It supports transit vehicle operator authentication and provides the capability to remotely disable a transit vehicle. It also includes the capability to alert operators and police to potential incidents identified by these security features.	No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
NAIPTA Transit Management Center	Transit Management Center	Transit Center Vehicle Assignment	Transit Center Vehicle Assignment' assigns individual transit vehicles to vehicle blocks and downloads this information to the transit vehicle. It also provides an exception handling process for the vehicle assignment function to generate new, supplemental vehicle assignments when required by changes during the operating day. It provides an inventory management function for the transit facility which stores functional attributes about each of the vehicles owned by the transit operator. These attributes permit the planning and assignment functions to match vehicles with routes based on suitability for the types of service required by the particular routes.	No	1	The center shall assign individual transit vehicles to transit blocks.	Planned	No
NAIPTA Transit Management Center	Transit Management Center	Transit Center Vehicle Assignment	Transit Center Vehicle Assignment' assigns individual transit vehicles to vehicle blocks and downloads this information to the transit vehicle. It also provides an exception handling process for the vehicle assignment function to generate new, supplemental vehicle assignments when required by changes during the operating day. It provides an inventory management function for the transit facility which stores functional attributes about each of the vehicles owned by the transit operator. These attributes permit the planning and assignment functions to match vehicles with routes based on suitability for the types of service required by the particular routes.	No	2	The center shall download vehicle assignments to the transit vehicle prior to the start of the day’s operations.	Planned	No
NAIPTA Transit Management Center	Transit Management Center	Transit Center Vehicle Assignment	Transit Center Vehicle Assignment' assigns individual transit vehicles to vehicle blocks and downloads this information to the transit vehicle. It also provides an exception handling process for the vehicle assignment function to generate new, supplemental vehicle assignments when required by changes during the operating day. It provides an inventory management function for the transit facility which stores functional attributes about each of the vehicles owned by the transit operator. These attributes permit the planning and assignment functions to match vehicles with routes based on suitability for the types of service required by the particular routes.	No	3	The center shall provide an exception handling process for the vehicle assignment function. This process shall generate new supplemental vehicle assignments as required due to change events which occur during the operating day.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
NAIPTA Transit Management Center	Transit Management Center	Transit Center Vehicle Assignment	Transit Center Vehicle Assignment' assigns individual transit vehicles to vehicle blocks and downloads this information to the transit vehicle. It also provides an exception handling process for the vehicle assignment function to generate new, supplemental vehicle assignments when required by changes during the operating day. It provides an inventory management function for the transit facility which stores functional attributes about each of the vehicles owned by the transit operator. These attributes permit the planning and assignment functions to match vehicles with routes based on suitability for the types of service required by the particular routes.	No	4	The center shall provide an inventory management function for the transit facility that stores functional attributes about each vehicle owned by the transit operator. The functional attributes permit the planning and assignment functions to match vehicles with routes based on suitability for the types of service required by the particular routes.	Planned	No
NAIPTA Transit Management Center	Transit Management Center	Transit Center Vehicle Tracking	Transit Center Vehicle Tracking' monitors transit vehicle location. The location information is collected via a data communication link between the transit vehicles and the transit center. The location information is presented to the transit operator on a digitized map of the transit service area. The location data may be used to determine real time schedule adherence and update the transit system's schedule in real-time. The real-time schedule information is disseminated to other information providers, which furnish the information to travelers.	No				No
NAIPTA Transit Management Center	Transit Management Center	Transit Garage Maintenance	Transit Garage Maintenance' provides advanced maintenance functions for the transit property. It collects operational and maintenance data from transit vehicles, manages vehicle service histories, and monitors operators and vehicles. It collects vehicle mileage data and uses it to automatically generate preventative maintenance schedules for each vehicle by utilizing vehicle tracking data. In addition, it provides information to service personnel to support maintenance activities and records and verifies that maintenance work was performed.	No				No
National Weather Service	Weather Service System			No				No
NDOT ITS Field Equipment	ITS Roadway Equipment			No				No
NDOT TOC - FAST TMC	Other Traffic Management Centers			No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Nevada State Police Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Planned	No
Nevada State Police Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	5	The center shall provide the capability to correlate alerts and advisories, incident information, and security sensor and surveillance data.	Planned	No
Nevada State Police Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	6	The center shall broadcast wide-area alerts and advisories to traffic management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned	No
Nevada State Police Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	7	The center shall broadcast wide-area alerts and advisories to transit management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned	No
Nevada State Police Dispatch	Emergency Management Center	Emergency Environmental Monitoring	Emergency Environmental Monitoring' collects current and forecast road conditions and surface weather information from a variety of sources. The collected environmental information is monitored and presented to the operator and used to more effectively manage incidents.	No	1	The center shall collect current and forecast road and weather information from weather service providers (such as the National Weather Service and value-added sector specific meteorological services).	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Nevada State Police Dispatch	Emergency Management Center	Emergency Environmental Monitoring	Emergency Environmental Monitoring' collects current and forecast road conditions and surface weather information from a variety of sources. The collected environmental information is monitored and presented to the operator and used to more effectively manage incidents.	No	3	The center shall collect asset restrictions information from roadway maintenance operations.	Planned	No
Nevada State Police Dispatch	Emergency Management Center	Emergency Environmental Monitoring	Emergency Environmental Monitoring' collects current and forecast road conditions and surface weather information from a variety of sources. The collected environmental information is monitored and presented to the operator and used to more effectively manage incidents.	No	4	The center shall assimilate current and forecast road conditions and surface weather information to support incident management.	Planned	No
Nevada State Police Dispatch	Emergency Management Center	Emergency Environmental Monitoring	Emergency Environmental Monitoring' collects current and forecast road conditions and surface weather information from a variety of sources. The collected environmental information is monitored and presented to the operator and used to more effectively manage incidents.	No	5	The center shall provide the road and weather warning and advisories to the emergency responders.	Planned	No
Nevada State Police Dispatch	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	1	The center shall manage inter-agency coordination of evacuation operations, from initial planning through the evacuation process and reentry.	Planned	No

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Nevada State Police Dispatch	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Planned	No

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Nevada State Police Dispatch	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	3	The center shall provide an interface to the emergency system operator to enter evacuation plans and procedures and present the operator with other agencies' plans.	Planned	No

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Nevada State Police Dispatch	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	4	The center shall coordinate evacuation destinations and shelter needs with shelter providers (e.g., the American Red Cross) in the region.	Planned	No

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Nevada State Police Dispatch	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	5	The center shall provide evacuation information to traffic, transit, maintenance and construction, rail operations, and other emergency management centers as needed.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Nevada State Police Dispatch	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	6	The center shall request resources from transit agencies as needed to support the evacuation.	Planned	No
Nevada State Police Dispatch	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	1	The center shall provide tactical decision support, resource coordination, and communications integration for first responders to support local management of an incident.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Nevada State Police Dispatch	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Planned	No
Nevada State Police Dispatch	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	3	The center shall track and maintain resource information and action plans pertaining to the incident command.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Nevada State Police Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Existing	No
Nevada State Police Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Nevada State Police Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Planned	No
Nevada State Police Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Nevada State Police Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	5	The center shall track the availability of resources and coordinate resource sharing with allied agency centers including traffic, maintenance, or other emergency centers.	Planned	No
Nevada State Police Dispatch	Emergency Management Center	Emergency Secure Area Sensor Management	Emergency Secure Area Sensor Management' manages sensors that monitor secure areas in the transportation system, processes the collected data, performs threat analysis in which data is correlated with other sensor, surveillance, and advisory inputs, and then disseminates resultant threat information to emergency personnel and other agencies. In response to identified threats, the operator may request activation of barrier and safeguard systems to preclude an incident, control access during and after an incident or mitigate impact of an incident. The sensors may be in secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. The types of sensors include acoustic, threat (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors), infrastructure condition and integrity, motion and object sensors.	No	1	The center shall remotely monitor and control security sensor data collected in secure areas including facilities (e.g. transit yards) and transportation infrastructure (e.g. bridges, tunnels, interchanges, roadway infrastructure, and transit railways or guideways). The types of security sensor data include environmental threat (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors), infrastructure condition and integrity, intrusion and motion, and object detection sensors. The data may be raw or pre-processed in the field.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Nevada State Police Dispatch	Emergency Management Center	Emergency Secure Area Sensor Management	Emergency Secure Area Sensor Management' manages sensors that monitor secure areas in the transportation system, processes the collected data, performs threat analysis in which data is correlated with other sensor, surveillance, and advisory inputs, and then disseminates resultant threat information to emergency personnel and other agencies. In response to identified threats, the operator may request activation of barrier and safeguard systems to preclude an incident, control access during and after an incident or mitigate impact of an incident. The sensors may be in secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. The types of sensors include acoustic, threat (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors), infrastructure condition and integrity, motion and object sensors.	No	2	The center shall remotely monitor and control security sensor data collected in traveler secure areas, which include transit stations, transit stops, rest areas, park and ride lots, and other fixed sites along travel routes (e.g., emergency pull-off areas and travel information centers). The types of security sensor data include environmental threat (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors), intrusion and motion, and object detection sensors. The data may be raw or pre-processed in the field.	Planned	No
Nevada State Police Dispatch	Emergency Management Center	Emergency Secure Area Surveillance	Emergency Secure Area Surveillance' monitors surveillance inputs from secure areas in the transportation system. The surveillance may be of secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. It provides both video and audio surveillance information to emergency personnel and automatically alerts emergency personnel of potential incidents.	No	1	The center shall remotely monitor video images and audio surveillance data collected in secure areas including facilities (e.g. transit yards) and transportation infrastructure (e.g. bridges, tunnels, interchanges, roadway infrastructure, and transit railways or guideways). The data may be raw or pre-processed in the field.	Planned	No
New Mexico State Police Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
New Mexico State Police Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	5	The center shall provide the capability to correlate alerts and advisories, incident information, and security sensor and surveillance data.	Planned	No
New Mexico State Police Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	6	The center shall broadcast wide-area alerts and advisories to traffic management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned	No
New Mexico State Police Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	7	The center shall broadcast wide-area alerts and advisories to transit management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned	No
New Mexico State Police Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	8	The center shall broadcast wide-area alerts and advisories to toll administration centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned	No
New Mexico State Police Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	9	The center shall broadcast wide-area alerts and advisories to traveler information service providers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned	No
New Mexico State Police Dispatch	Emergency Management Center	Emergency Environmental Monitoring	Emergency Environmental Monitoring' collects current and forecast road conditions and surface weather information from a variety of sources. The collected environmental information is monitored and presented to the operator and used to more effectively manage incidents.	No	1	The center shall collect current and forecast road and weather information from weather service providers (such as the National Weather Service and value-added sector specific meteorological services).	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
New Mexico State Police Dispatch	Emergency Management Center	Emergency Environmental Monitoring	Emergency Environmental Monitoring' collects current and forecast road conditions and surface weather information from a variety of sources. The collected environmental information is monitored and presented to the operator and used to more effectively manage incidents.	No	3	The center shall collect asset restrictions information from roadway maintenance operations.	Planned	No
New Mexico State Police Dispatch	Emergency Management Center	Emergency Environmental Monitoring	Emergency Environmental Monitoring' collects current and forecast road conditions and surface weather information from a variety of sources. The collected environmental information is monitored and presented to the operator and used to more effectively manage incidents.	No	4	The center shall assimilate current and forecast road conditions and surface weather information to support incident management.	Planned	No
New Mexico State Police Dispatch	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	1	The center shall manage inter-agency coordination of evacuation operations, from initial planning through the evacuation process and reentry.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
New Mexico State Police Dispatch	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
New Mexico State Police Dispatch	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	3	The center shall provide an interface to the emergency system operator to enter evacuation plans and procedures and present the operator with other agencies' plans.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
New Mexico State Police Dispatch	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	4	The center shall coordinate evacuation destinations and shelter needs with shelter providers (e.g., the American Red Cross) in the region.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
New Mexico State Police Dispatch	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	5	The center shall provide evacuation information to traffic, transit, maintenance and construction, rail operations, and other emergency management centers as needed.	Planned	No
New Mexico State Police Dispatch	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	1	The center shall provide tactical decision support, resource coordination, and communications integration for first responders to support local management of an incident.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
New Mexico State Police Dispatch	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Planned	No
New Mexico State Police Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
New Mexico State Police Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Planned	No
New Mexico State Police Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
New Mexico State Police Dispatch	Emergency Management Center	Emergency Secure Area Sensor Management	Emergency Secure Area Sensor Management' manages sensors that monitor secure areas in the transportation system, processes the collected data, performs threat analysis in which data is correlated with other sensor, surveillance, and advisory inputs, and then disseminates resultant threat information to emergency personnel and other agencies. In response to identified threats, the operator may request activation of barrier and safeguard systems to preclude an incident, control access during and after an incident or mitigate impact of an incident. The sensors may be in secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. The types of sensors include acoustic, threat (e.g. chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors), infrastructure condition and integrity, motion and object sensors.	No				No
New Mexico State Police Dispatch	Emergency Management Center	Emergency Secure Area Surveillance	Emergency Secure Area Surveillance' monitors surveillance inputs from secure areas in the transportation system. The surveillance may be of secure areas frequented by travelers (i.e., transit stops, transit stations, rest areas, park and ride lots, modal interchange facilities, on-board a transit vehicle, etc.) or around transportation infrastructure such as bridges, tunnels and transit railways or guideways. It provides both video and audio surveillance information to emergency personnel and automatically alerts emergency personnel of potential incidents.	No				No
New Mexico Statewide TMC	Other Traffic Management Centers			No				No
PAG Data User Systems	Archived Data User System			No				No
PAG Planning Traffic Database	Archived Data System			No				No
PAG RTDN Communications System	Data Distribution System			No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Personal Information Devices for Travelers	Personal Information Device	Personal Interactive Traveler Information	Personal Interactive Traveler Information' provides traffic information, road conditions, transit information, yellow pages (traveler services) information, special event information, and other traveler information that is specifically tailored based on the traveler's request and/or previously submitted traveler profile information. It also supports interactive services that support enrollment, account management, and payments for transportation services. The interactive traveler information capability is provided by personal devices including personal computers and personal portable devices such as smart phones.	No	1	The personal traveler interface shall receive traffic information from a center and present it to the traveler upon request.	Existing	No
Personal Information Devices for Travelers	Personal Information Device	Personal Interactive Traveler Information	Personal Interactive Traveler Information' provides traffic information, road conditions, transit information, yellow pages (traveler services) information, special event information, and other traveler information that is specifically tailored based on the traveler's request and/or previously submitted traveler profile information. It also supports interactive services that support enrollment, account management, and payments for transportation services. The interactive traveler information capability is provided by personal devices including personal computers and personal portable devices such as smart phones.	No	2	The personal traveler interface shall receive transit information from a center and present it to the traveler upon request.	Planned	No
Personal Information Devices for Travelers	Personal Information Device	Personal Interactive Traveler Information	Personal Interactive Traveler Information' provides traffic information, road conditions, transit information, yellow pages (traveler services) information, special event information, and other traveler information that is specifically tailored based on the traveler's request and/or previously submitted traveler profile information. It also supports interactive services that support enrollment, account management, and payments for transportation services. The interactive traveler information capability is provided by personal devices including personal computers and personal portable devices such as smart phones.	No	3	The personal traveler interface shall receive traveler services information (such as lodging, restaurants, theaters, bicycle facilities, and other tourist activities) from a center and present it to the traveler upon request.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Personal Information Devices for Travelers	Personal Information Device	Personal Interactive Traveler Information	Personal Interactive Traveler Information' provides traffic information, road conditions, transit information, yellow pages (traveler services) information, special event information, and other traveler information that is specifically tailored based on the traveler's request and/or previously submitted traveler profile information. It also supports interactive services that support enrollment, account management, and payments for transportation services. The interactive traveler information capability is provided by personal devices including personal computers and personal portable devices such as smart phones.	No	4	The personal traveler interface shall receive event information from a center and present it to the traveler upon request.	Planned	No
Personal Information Devices for Travelers	Personal Information Device	Personal Interactive Traveler Information	Personal Interactive Traveler Information' provides traffic information, road conditions, transit information, yellow pages (traveler services) information, special event information, and other traveler information that is specifically tailored based on the traveler's request and/or previously submitted traveler profile information. It also supports interactive services that support enrollment, account management, and payments for transportation services. The interactive traveler information capability is provided by personal devices including personal computers and personal portable devices such as smart phones.	No	5	The personal traveler interface shall receive evacuation information from a center and present it to the traveler.	Planned	No
Personal Information Devices for Travelers	Personal Information Device	Personal Interactive Traveler Information	Personal Interactive Traveler Information' provides traffic information, road conditions, transit information, yellow pages (traveler services) information, special event information, and other traveler information that is specifically tailored based on the traveler's request and/or previously submitted traveler profile information. It also supports interactive services that support enrollment, account management, and payments for transportation services. The interactive traveler information capability is provided by personal devices including personal computers and personal portable devices such as smart phones.	No	6	The personal traveler interface shall receive wide-area alerts and present it to the traveler.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Personal Information Devices for Travelers	Personal Information Device	Personal Interactive Traveler Information	Personal Interactive Traveler Information' provides traffic information, road conditions, transit information, yellow pages (traveler services) information, special event information, and other traveler information that is specifically tailored based on the traveler's request and/or previously submitted traveler profile information. It also supports interactive services that support enrollment, account management, and payments for transportation services. The interactive traveler information capability is provided by personal devices including personal computers and personal portable devices such as smart phones.	No	7	The personal traveler interface shall accept reservations for confirmed trip plans.	Planned	No
Personal Information Devices for Travelers	Personal Information Device	Personal Interactive Traveler Information	Personal Interactive Traveler Information' provides traffic information, road conditions, transit information, yellow pages (traveler services) information, special event information, and other traveler information that is specifically tailored based on the traveler's request and/or previously submitted traveler profile information. It also supports interactive services that support enrollment, account management, and payments for transportation services. The interactive traveler information capability is provided by personal devices including personal computers and personal portable devices such as smart phones.	No	8	The personal traveler interface shall support payment for services, such as confirmed trip plans, tolls, transit fares, parking lot charges, map updates, and advanced payment for tolls.	Planned	No
Personal Information Devices for Travelers	Personal Information Device	Personal Interactive Traveler Information	Personal Interactive Traveler Information' provides traffic information, road conditions, transit information, yellow pages (traveler services) information, special event information, and other traveler information that is specifically tailored based on the traveler's request and/or previously submitted traveler profile information. It also supports interactive services that support enrollment, account management, and payments for transportation services. The interactive traveler information capability is provided by personal devices including personal computers and personal portable devices such as smart phones.	No	9	The personal traveler interface shall provide an interface through which credit identity, stored credit value, or traveler information may be collected from a traveler card being used by a traveler with a personal device.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Personal Information Devices for Travelers	Personal Information Device	Personal Interactive Traveler Information	Personal Interactive Traveler Information' provides traffic information, road conditions, transit information, yellow pages (traveler services) information, special event information, and other traveler information that is specifically tailored based on the traveler's request and/or previously submitted traveler profile information. It also supports interactive services that support enrollment, account management, and payments for transportation services. The interactive traveler information capability is provided by personal devices including personal computers and personal portable devices such as smart phones.	No	10	The personal traveler interface shall base requests from the traveler on the traveler's current location or a specific location identified by the traveler, and filter the provided information accordingly.	Planned	No
Personal Information Devices for Travelers	Personal Information Device	Personal Interactive Traveler Information	Personal Interactive Traveler Information' provides traffic information, road conditions, transit information, yellow pages (traveler services) information, special event information, and other traveler information that is specifically tailored based on the traveler's request and/or previously submitted traveler profile information. It also supports interactive services that support enrollment, account management, and payments for transportation services. The interactive traveler information capability is provided by personal devices including personal computers and personal portable devices such as smart phones.	No	11	The personal traveler interface shall support traveler input in audio or manual form.	Planned	No
Personal Information Devices for Travelers	Personal Information Device	Personal Shared Use Planning	Personal Shared Use Planning' provides a personalized connection to shared use mobility including vehicle shared use and arranging person trips. The shared use plan is calculated based on preferences and constraints supplied by the traveler and provided to the traveler for confirmation. Many equipment configurations are possible including systems that provide a basic trip plan to the traveler as well as more sophisticated systems that can provide transition by transition guidance to the traveler along a multi-modal route with transfers. Devices represented by this functional object include desktop computers at home, work, or at major trip generation sites, plus personal devices such as tablets and smart phones.	No				No
Personal Information Devices for Travelers	Personal Information Device	Personal Traveler Information Reception	Personal Traveler Information Reception' receives formatted traffic advisories, road conditions, traffic regulations, transit information, broadcast alerts, and other general traveler information broadcasts and presents the information to the traveler. The traveler information broadcasts are received by personal devices including personal computers and personal portable devices such as smart phones.	No	1	The personal traveler interface shall receive traffic information from a center and present it to the traveler.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Personal Information Devices for Travelers	Personal Information Device	Personal Traveler Information Reception	Personal Traveler Information Reception' receives formatted traffic advisories, road conditions, traffic regulations, transit information, broadcast alerts, and other general traveler information broadcasts and presents the information to the traveler. The traveler information broadcasts are received by personal devices including personal computers and personal portable devices such as smart phones.	No	2	The personal traveler interface shall receive transit information from a center and present it to the traveler.	Existing	No
Personal Information Devices for Travelers	Personal Information Device	Personal Traveler Information Reception	Personal Traveler Information Reception' receives formatted traffic advisories, road conditions, traffic regulations, transit information, broadcast alerts, and other general traveler information broadcasts and presents the information to the traveler. The traveler information broadcasts are received by personal devices including personal computers and personal portable devices such as smart phones.	No	3	The personal traveler interface shall receive event information from a center and present it to the traveler.	Planned	No
Personal Information Devices for Travelers	Personal Information Device	Personal Traveler Information Reception	Personal Traveler Information Reception' receives formatted traffic advisories, road conditions, traffic regulations, transit information, broadcast alerts, and other general traveler information broadcasts and presents the information to the traveler. The traveler information broadcasts are received by personal devices including personal computers and personal portable devices such as smart phones.	No	4	The personal traveler interface shall receive evacuation information from a center and present it to the traveler.	Planned	No
Personal Information Devices for Travelers	Personal Information Device	Personal Traveler Information Reception	Personal Traveler Information Reception' receives formatted traffic advisories, road conditions, traffic regulations, transit information, broadcast alerts, and other general traveler information broadcasts and presents the information to the traveler. The traveler information broadcasts are received by personal devices including personal computers and personal portable devices such as smart phones.	No	5	The personal traveler interface shall receive wide-area alerts and present it to the traveler.	Planned	No
Personal Information Devices for Travelers	Personal Information Device	Personal Traveler Information Reception	Personal Traveler Information Reception' receives formatted traffic advisories, road conditions, traffic regulations, transit information, broadcast alerts, and other general traveler information broadcasts and presents the information to the traveler. The traveler information broadcasts are received by personal devices including personal computers and personal portable devices such as smart phones.	No	6	The personal traveler interface shall support traveler input in audio or manual form.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Personal Information Devices for Travelers	Personal Information Device	Personal Traveler Information Reception	Personal Traveler Information Reception' receives formatted traffic advisories, road conditions, traffic regulations, transit information, broadcast alerts, and other general traveler information broadcasts and presents the information to the traveler. The traveler information broadcasts are received by personal devices including personal computers and personal portable devices such as smart phones.	No	7	The personal traveler interface shall present information to the traveler in audible or visual forms, consistent with a personal device.	Planned	No
POE Administration Center	Border Inspection Administration Center			No				No
POE Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	1	The center shall collect data from centers.	Planned	No
POE Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	2	The center shall collect data catalogs from one or more data sources. A catalog describes the data contained in the collection of archived data and may include descriptions of the schema or structure of the data, a description of the contents of the data; e.g., time range of entries, number of entries; or a sample of the data (e. g. a thumbnail).	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
POE Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	3	The center shall store collected data in an information repository.	Planned	No
POE Data Archive	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	1	The center shall provide archive data to federal, state, and local government reporting systems.	Planned	No
POE Data Archive	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	2	The center shall respond to requests for government report data.	Planned	No
POE Data Archive	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	3	The center shall provide the capability to format data suitable for input into government reports.	Planned	No
POE Data Archive	Archived Data System	Archive Situation Data Archival	Archive Situation Data Archival' collects and archives traffic, roadway, and environmental information for use in off-line planning, research, and analysis. It controls and collects information directly from equipment at the roadside, reflecting the deployment of traffic detectors that are used primarily for traffic monitoring and planning purposes, rather than for traffic management. It also collects situation data from connected vehicles. The data collected, quality checks performed, and aggregation strategies are defined to support transportation system performance monitoring and management.	No	1	The center shall collect data from roadside devices.	Planned	No
POE Data User and ISP Systems	Archived Data User System			No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
POE Data User and ISP Systems	CVO Information Requestor Center			No				No
POE Data User and ISP Systems	Other Transportation Information Centers			No				No
POE Roadway Inspection Systems	Border Inspection System			No				No
POE Roadway Inspection Systems	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	1	The center shall collect, process, and store traffic and highway condition information, including incident information, detours and road closures, event information, recommended routes, and current speeds on specific routes.	Planned	No
POE Roadway Inspection Systems	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	3	The center shall collect, process, and store maintenance and construction information, including scheduled maintenance and construction work activities and work zone activities.	Planned	No
POE Roadway Inspection Systems	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	4	The center shall collect, process, and store transit routes and schedules, transit transfer options, transit fares, and real-time schedule adherence information.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
POE Roadway Inspection Systems	Transportation Information Center	TIC Emergency Traveler Information	TIC Emergency Traveler Information' provides emergency information to the public, including wide-area alerts and evacuation information. It provides emergency alerts, information on evacuation zones and evacuation requirements, evacuation destinations and shelter information, available transportation modes, and traffic and road conditions at the origin, destination, and along the evacuation routes. In addition to general evacuation information, personalized information including tailored evacuation routes, service information, and estimated travel times is also provided based on traveler specified origin, destination, and route parameters. Updated information is provided throughout the evacuation and subsequent reentry as status changes and plans are adapted.	No	1	The center shall disseminate emergency evacuation information to the traveler interface systems, including evacuation zones, shelter information, available transportation modes, road closures and detours, changes to transit services, and traffic and road conditions at the origin, destination, and along the evacuation routes.	Planned	No
POE Roadway Inspection Systems	Transportation Information Center	TIC Emergency Traveler Information	TIC Emergency Traveler Information' provides emergency information to the public, including wide-area alerts and evacuation information. It provides emergency alerts, information on evacuation zones and evacuation requirements, evacuation destinations and shelter information, available transportation modes, and traffic and road conditions at the origin, destination, and along the evacuation routes. In addition to general evacuation information, personalized information including tailored evacuation routes, service information, and estimated travel times is also provided based on traveler specified origin, destination, and route parameters. Updated information is provided throughout the evacuation and subsequent reentry as status changes and plans are adapted.	No	2	The center shall provide evacuation information to shelter providers.	Planned	No
POE Roadway Inspection Systems	Transportation Information Center	TIC Emergency Traveler Information	TIC Emergency Traveler Information' provides emergency information to the public, including wide-area alerts and evacuation information. It provides emergency alerts, information on evacuation zones and evacuation requirements, evacuation destinations and shelter information, available transportation modes, and traffic and road conditions at the origin, destination, and along the evacuation routes. In addition to general evacuation information, personalized information including tailored evacuation routes, service information, and estimated travel times is also provided based on traveler specified origin, destination, and route parameters. Updated information is provided throughout the evacuation and subsequent reentry as status changes and plans are adapted.	No	3	The center shall disseminate wide-area alert information to the traveler interface systems, including major emergencies such as a natural or man-made disaster, civil emergency, child abductions, severe weather watches and warnings, military activities, and law enforcement warnings.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
POE Roadway Inspection Systems	Transportation Information Center	TIC Operations Data Collection	TIC Operations Data Collection' collects and stores information that is collected about the transportation information service including data on the number of clients serviced and the services that were provided. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	1	The center shall collect traveler information data, such as parking lot data, rideshare data, road network use data, vehicle probe data, and other data from traveler information system operations.	Planned	No
POE Roadway Inspection Systems	Transportation Information Center	TIC Operations Data Collection	TIC Operations Data Collection' collects and stores information that is collected about the transportation information service including data on the number of clients serviced and the services that were provided. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	2	The center shall collect traveler requests, confirmations, and payment transaction data for traveler services provided.	Planned	No
POE Roadway Inspection Systems	Transportation Information Center	TIC Operations Data Collection	TIC Operations Data Collection' collects and stores information that is collected about the transportation information service including data on the number of clients serviced and the services that were provided. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	3	The center shall assign quality control metrics and meta-data to be stored along with the data. Meta-data may include attributes that describe the source and quality of the data and the conditions surrounding the collection of the data.	Planned	No
POE Roadway Inspection Systems	Transportation Information Center	TIC Operations Data Collection	TIC Operations Data Collection' collects and stores information that is collected about the transportation information service including data on the number of clients serviced and the services that were provided. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	5	The center shall be able to produce sample products of the data available.	Planned	No
POE Roadway Inspection Systems	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	1	The center shall disseminate traffic and highway condition information to travelers, including incident information, detours and road closures, event information, recommended routes, and current speeds on specific routes.	Planned	No
POE Roadway Inspection Systems	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	2	The center shall disseminate maintenance and construction information to travelers, including scheduled maintenance and construction work activities and work zone activities.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
POE Roadway Inspection Systems	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	3	The center shall disseminate transit routes and schedules, transit transfer options, transit fares, and real-time schedule adherence information to travelers.	Planned	No
POE Roadway Inspection Systems	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	4	The center shall disseminate parking information to travelers, including location, availability, and fees.	Planned	No
POE Roadway Inspection Systems	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	5	The center shall disseminate toll fee information to travelers.	Planned	No
POE Roadway Inspection Systems	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	6	The center shall disseminate weather information to travelers.	Planned	No
POE Roadway Inspection Systems	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	7	The center shall disseminate event information to travelers.	Planned	No
POE Roadway Inspection Systems	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	8	The center shall disseminate air quality information to travelers.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
POE Roadway Inspection Systems	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	9	The center shall provide traffic and incident data to the media.	Planned	No
POE Roadway Inspection Systems	Transportation Information Center	TIC Traveler Information Broadcast	TIC Traveler Information Broadcast' disseminates traveler information including traffic and road conditions, incident information, maintenance and construction information, event information, transit information, parking information, and weather information. The same information is broadcast to all equipped traveler interface systems and vehicles.	No	10	The center shall provide the capability for a system operator to control the type and update frequency of broadcast traveler information.	Planned	No
POE Roadway Inspection Systems	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No	1	The center shall provide the capability to process voice-formatted requests for traveler information from a traveler telephone information system, and return the information in the requested format.	Planned	No
POE Roadway Inspection Systems	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No	2	The center shall provide the capability to process dual-tone multifrequency (DTMF)-based requests (touch-tone) for traveler information from a traveler telephone information system.	Planned	No
POE Roadway Inspection Systems	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No	3	The center shall provide the capability to process traveler information requests from a traveler telephone information system.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Private Transit Routing Service Provider	Personal Information Device	Personal Interactive Traveler Information	Personal Interactive Traveler Information' provides traffic information, road conditions, transit information, yellow pages (traveler services) information, special event information, and other traveler information that is specifically tailored based on the traveler's request and/or previously submitted traveler profile information. It also supports interactive services that support enrollment, account management, and payments for transportation services. The interactive traveler information capability is provided by personal devices including personal computers and personal portable devices such as smart phones.	No	1	The personal traveler interface shall receive traffic information from a center and present it to the traveler upon request.	Planned	No
Private Transit Routing Service Provider	Personal Information Device	Personal Interactive Traveler Information	Personal Interactive Traveler Information' provides traffic information, road conditions, transit information, yellow pages (traveler services) information, special event information, and other traveler information that is specifically tailored based on the traveler's request and/or previously submitted traveler profile information. It also supports interactive services that support enrollment, account management, and payments for transportation services. The interactive traveler information capability is provided by personal devices including personal computers and personal portable devices such as smart phones.	No	2	The personal traveler interface shall receive transit information from a center and present it to the traveler upon request.	Planned	No
Private Transit Routing Service Provider	Personal Information Device	Personal Interactive Traveler Information	Personal Interactive Traveler Information' provides traffic information, road conditions, transit information, yellow pages (traveler services) information, special event information, and other traveler information that is specifically tailored based on the traveler's request and/or previously submitted traveler profile information. It also supports interactive services that support enrollment, account management, and payments for transportation services. The interactive traveler information capability is provided by personal devices including personal computers and personal portable devices such as smart phones.	No	3	The personal traveler interface shall receive traveler services information (such as lodging, restaurants, theaters, bicycle facilities, and other tourist activities) from a center and present it to the traveler upon request.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Private Transit Routing Service Provider	Personal Information Device	Personal Interactive Traveler Information	Personal Interactive Traveler Information' provides traffic information, road conditions, transit information, yellow pages (traveler services) information, special event information, and other traveler information that is specifically tailored based on the traveler's request and/or previously submitted traveler profile information. It also supports interactive services that support enrollment, account management, and payments for transportation services. The interactive traveler information capability is provided by personal devices including personal computers and personal portable devices such as smart phones.	No	4	The personal traveler interface shall receive event information from a center and present it to the traveler upon request.	Planned	No
Private Transit Routing Service Provider	Personal Information Device	Personal Interactive Traveler Information	Personal Interactive Traveler Information' provides traffic information, road conditions, transit information, yellow pages (traveler services) information, special event information, and other traveler information that is specifically tailored based on the traveler's request and/or previously submitted traveler profile information. It also supports interactive services that support enrollment, account management, and payments for transportation services. The interactive traveler information capability is provided by personal devices including personal computers and personal portable devices such as smart phones.	No	5	The personal traveler interface shall receive evacuation information from a center and present it to the traveler.	Planned	No
Private Transit Routing Service Provider	Traveler Support Equipment	Transit Stop Information Services	Transit Stop Information Services' furnishes transit users with real-time travel-related information at transit stops, multi-modal transfer points, and other public transportation areas. It provides transit users with information on transit routes, schedules, transfer options, available services, fares, and real-time schedule adherence. In addition to tailored information for individual transit users, it supports general annunciation and/or display of imminent arrival information and other information of general interest to transit users.	No	1	The public interface for travelers shall collect and provide real-time travel-related information at transit stops, multi-modal transfer points, and other public transportation areas.	Existing	No
Private Transit Routing Service Provider	Traveler Support Equipment	Transit Stop Information Services	Transit Stop Information Services' furnishes transit users with real-time travel-related information at transit stops, multi-modal transfer points, and other public transportation areas. It provides transit users with information on transit routes, schedules, transfer options, available services, fares, and real-time schedule adherence. In addition to tailored information for individual transit users, it supports general annunciation and/or display of imminent arrival information and other information of general interest to transit users.	No	2	The public interface for travelers shall collect and present to the transit traveler information on transit routes, schedules, and real-time schedule adherence.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Private Transit Routing Service Provider	Traveler Support Equipment	Transit Stop Information Services	Transit Stop Information Services' furnishes transit users with real-time travel-related information at transit stops, multi-modal transfer points, and other public transportation areas. It provides transit users with information on transit routes, schedules, transfer options, available services, fares, and real-time schedule adherence. In addition to tailored information for individual transit users, it supports general annunciation and/or display of imminent arrival information and other information of general interest to transit users.	No	3	The public interface for travelers shall provide support for general annunciation and/or display of imminent arrival information and other information of general interest to transit users.	Planned	No
Private Transit Routing Service Provider	Traveler Support Equipment	Transit Stop Information Services	Transit Stop Information Services' furnishes transit users with real-time travel-related information at transit stops, multi-modal transfer points, and other public transportation areas. It provides transit users with information on transit routes, schedules, transfer options, available services, fares, and real-time schedule adherence. In addition to tailored information for individual transit users, it supports general annunciation and/or display of imminent arrival information and other information of general interest to transit users.	No	4	The public interface for travelers shall present information to the traveler in a form suitable for travelers with physical disabilities including travelers who are visually impaired.	Planned	No
Private Transit Routing Service Provider	Traveler Support Equipment	Traveler Fare Management	Traveler Fare Management' provides the capability for the traveler to access and use a common fare medium for transit fares, tolls, and/or parking lot charges using a public device at or near the point of service. It accepts a service request and means of payment, verifies eligibility, calculates the amount due, collects payment, and identifies payment problems. It may be implemented using a card reader/dispenser in a point of sale device that includes a communications interface to the financial infrastructure to support payment collection and reconciliation.	No	1	The public interface for travelers shall accept and process current transit passenger fare collection information.	Existing	No
Private Transit Routing Service Provider	Traveler Support Equipment	Traveler Fare Management	Traveler Fare Management' provides the capability for the traveler to access and use a common fare medium for transit fares, tolls, and/or parking lot charges using a public device at or near the point of service. It accepts a service request and means of payment, verifies eligibility, calculates the amount due, collects payment, and identifies payment problems. It may be implemented using a card reader/dispenser in a point of sale device that includes a communications interface to the financial infrastructure to support payment collection and reconciliation.	No	2	The public interface for travelers shall calculate a fare based on the origin and destination provided by the traveler, in conjunction with transit routing, transit fare category, and transit user history.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Private Transit Routing Service Provider	Traveler Support Equipment	Traveler Fare Management	Traveler Fare Management' provides the capability for the traveler to access and use a common fare medium for transit fares, tolls, and/or parking lot charges using a public device at or near the point of service. It accepts a service request and means of payment, verifies eligibility, calculates the amount due, collects payment, and identifies payment problems. It may be implemented using a card reader/dispenser in a point of sale device that includes a communications interface to the financial infrastructure to support payment collection and reconciliation.	No	3	The public interface for travelers shall provide an interface to a transit user traveler card in support of payment for transit fares, tolls, and/or parking lot charges. The stored credit value data from the card shall be collected and updated based on the fare or other charges, or the credit identity shall be collected.	Planned	No
Private Vehicle OBE	Vehicle OBE	Vehicle Interactive Traveler Information	Vehicle Interactive Traveler Information' provides drivers with personalized traveler information including traffic and road conditions, transit information, maintenance and construction information, multimodal information, event information, and weather information. The provided information is tailored based on driver requests. Both one-time requests for information and on-going information streams based on a submitted traveler profile and preferences are supported.	No	1	The vehicle shall receive formatted traffic and travel advisories from a center and present them to the driver upon request.	Planned	No
Private Vehicle OBE	Vehicle OBE	Vehicle Interactive Traveler Information	Vehicle Interactive Traveler Information' provides drivers with personalized traveler information including traffic and road conditions, transit information, maintenance and construction information, multimodal information, event information, and weather information. The provided information is tailored based on driver requests. Both one-time requests for information and on-going information streams based on a submitted traveler profile and preferences are supported.	No	2	The vehicle shall receive travel alerts from a center and present them to the driver. Relevant alerts are provided based on pre-supplied trip characteristics and preferences.	Planned	No
Private Vehicle OBE	Vehicle OBE	Vehicle Interactive Traveler Information	Vehicle Interactive Traveler Information' provides drivers with personalized traveler information including traffic and road conditions, transit information, maintenance and construction information, multimodal information, event information, and weather information. The provided information is tailored based on driver requests. Both one-time requests for information and on-going information streams based on a submitted traveler profile and preferences are supported.	No	3	The vehicle shall receive yellow pages information (such as lodging, restaurants, theaters, and other tourist activities) from a center and present it to the driver upon request.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Private Vehicle OBE	Vehicle OBE	Vehicle Interactive Traveler Information	Vehicle Interactive Traveler Information' provides drivers with personalized traveler information including traffic and road conditions, transit information, maintenance and construction information, multimodal information, event information, and weather information. The provided information is tailored based on driver requests. Both one-time requests for information and on-going information streams based on a submitted traveler profile and preferences are supported.	No	4	The vehicle shall receive event information from a center and present it to the driver upon request.	Planned	No
Private Vehicle OBE	Vehicle OBE	Vehicle Interactive Traveler Information	Vehicle Interactive Traveler Information' provides drivers with personalized traveler information including traffic and road conditions, transit information, maintenance and construction information, multimodal information, event information, and weather information. The provided information is tailored based on driver requests. Both one-time requests for information and on-going information streams based on a submitted traveler profile and preferences are supported.	No	5	The vehicle shall collect vehicle data and present it to the driver (including vehicle conditions, environmental conditions, safety and position warnings, and enhanced vision images) upon request.	Planned	No
Private Vehicle OBE	Vehicle OBE	Vehicle Interactive Traveler Information	Vehicle Interactive Traveler Information' provides drivers with personalized traveler information including traffic and road conditions, transit information, maintenance and construction information, multimodal information, event information, and weather information. The provided information is tailored based on driver requests. Both one-time requests for information and on-going information streams based on a submitted traveler profile and preferences are supported.	No	6	The vehicle shall provide the capability of translating signage for presentation to the driver, including fixed signage, situational messages, or work zone intrusion messages.	Planned	No
Private Vehicle OBE	Vehicle OBE	Vehicle Interactive Traveler Information	Vehicle Interactive Traveler Information' provides drivers with personalized traveler information including traffic and road conditions, transit information, maintenance and construction information, multimodal information, event information, and weather information. The provided information is tailored based on driver requests. Both one-time requests for information and on-going information streams based on a submitted traveler profile and preferences are supported.	No	7	The vehicle shall accept reservations for yellow pages services, non-motorized transportation information and event information.	Planned	No
Private Vehicle OBE	Vehicle OBE	Vehicle Interactive Traveler Information	Vehicle Interactive Traveler Information' provides drivers with personalized traveler information including traffic and road conditions, transit information, maintenance and construction information, multimodal information, event information, and weather information. The provided information is tailored based on driver requests. Both one-time requests for information and on-going information streams based on a submitted traveler profile and preferences are supported.	No	8	The vehicle shall prioritize safety and warning messages to supersede advisory and broadcast messages.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Private Vehicle OBE	Vehicle OBE	Vehicle Interactive Traveler Information	Vehicle Interactive Traveler Information' provides drivers with personalized traveler information including traffic and road conditions, transit information, maintenance and construction information, multimodal information, event information, and weather information. The provided information is tailored based on driver requests. Both one-time requests for information and on-going information streams based on a submitted traveler profile and preferences are supported.	No	9	The vehicle shall base requests from the driver on the vehicle's current location, and filter the provided information accordingly.	Planned	No
Private Vehicle OBE	Vehicle OBE	Vehicle Interactive Traveler Information	Vehicle Interactive Traveler Information' provides drivers with personalized traveler information including traffic and road conditions, transit information, maintenance and construction information, multimodal information, event information, and weather information. The provided information is tailored based on driver requests. Both one-time requests for information and on-going information streams based on a submitted traveler profile and preferences are supported.	No	10	The vehicle shall accept personal preferences, recurring trip characteristics, and traveler alert subscription information from the driver and send this information to a center to support customized traveler information services.	Planned	No
Private Vehicle OBE	Vehicle OBE	Vehicle Interactive Traveler Information	Vehicle Interactive Traveler Information' provides drivers with personalized traveler information including traffic and road conditions, transit information, maintenance and construction information, multimodal information, event information, and weather information. The provided information is tailored based on driver requests. Both one-time requests for information and on-going information streams based on a submitted traveler profile and preferences are supported.	No	11	The vehicle shall support driver input in audio or manual form.	Planned	No
Private Vehicle OBE	Vehicle OBE	Vehicle Interactive Traveler Information	Vehicle Interactive Traveler Information' provides drivers with personalized traveler information including traffic and road conditions, transit information, maintenance and construction information, multimodal information, event information, and weather information. The provided information is tailored based on driver requests. Both one-time requests for information and on-going information streams based on a submitted traveler profile and preferences are supported.	No	12	The vehicle shall present information to the driver in audible or visual forms without impairing the driver's ability to control the vehicle in a safe manner.	Planned	No
Private Vehicle OBE	Vehicle OBE	Vehicle Location Determination	Vehicle Location Determination' receives current location of the vehicle and provides this information to vehicle applications that use the location information to provide ITS services.	No	1	The vehicle shall provide the vehicle's current location to other in-vehicle functions.	Planned	No
Private Vehicle OBE	Vehicle OBE	Vehicle Location Determination	Vehicle Location Determination' receives current location of the vehicle and provides this information to vehicle applications that use the location information to provide ITS services.	No	2	The vehicle shall calculate the location from one or more data sources including positioning systems such as GPS, sensors that track vehicle movement, and maps used to determine the likely vehicle route.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Private Vehicle OBE	Vehicle OBE	Vehicle Situation Data Monitoring	Vehicle Situation Data Monitoring' is the highest-level representation of the functionality required to collect traffic and environmental situation data by monitoring and storing the experience of the vehicle as it travels through the road network. Collected data is aggregated into snapshots that are reported when communications is available and with flow control based on parameters provided by the infrastructure. Note that this functional object supports collection of data for areas remote from RSEs or other communications infrastructure.	No				No
Private Vehicle OBE	Vehicle OBE	Vehicle Traveler Information Reception	Vehicle Traveler Information Reception' provides the capability for drivers to receive general transportation information including traffic and road conditions, traffic regulations, incident information, maintenance and construction information, event information, transit information, parking information, weather information, and broadcast alerts.	No	1	The vehicle shall receive formatted traffic information from a center and present it to the driver.	Planned	No
Private Vehicle OBE	Vehicle OBE	Vehicle Traveler Information Reception	Vehicle Traveler Information Reception' provides the capability for drivers to receive general transportation information including traffic and road conditions, traffic regulations, incident information, maintenance and construction information, event information, transit information, parking information, weather information, and broadcast alerts.	No	2	The vehicle shall receive transit information from a center and present it to the driver.	Planned	No
Private Vehicle OBE	Vehicle OBE	Vehicle Traveler Information Reception	Vehicle Traveler Information Reception' provides the capability for drivers to receive general transportation information including traffic and road conditions, traffic regulations, incident information, maintenance and construction information, event information, transit information, parking information, weather information, and broadcast alerts.	No	3	The vehicle shall receive event information from a center and present it to the driver.	Planned	No
Private Vehicle OBE	Vehicle OBE	Vehicle Traveler Information Reception	Vehicle Traveler Information Reception' provides the capability for drivers to receive general transportation information including traffic and road conditions, traffic regulations, incident information, maintenance and construction information, event information, transit information, parking information, weather information, and broadcast alerts.	No	4	The vehicle shall receive evacuation information from a center and present it to the driver.	Planned	No
Private Vehicle OBE	Vehicle OBE	Vehicle Traveler Information Reception	Vehicle Traveler Information Reception' provides the capability for drivers to receive general transportation information including traffic and road conditions, traffic regulations, incident information, maintenance and construction information, event information, transit information, parking information, weather information, and broadcast alerts.	No	5	The vehicle shall receive wide-area alerts and present it to the driver.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Private Vehicle OBE	Vehicle OBE	Vehicle Traveler Information Reception	Vehicle Traveler Information Reception' provides the capability for drivers to receive general transportation information including traffic and road conditions, traffic regulations, incident information, maintenance and construction information, event information, transit information, parking information, weather information, and broadcast alerts.	No	6	The vehicle shall provide data from the vehicle itself to the driver. This vehicle data may include vehicle conditions, environmental conditions, safety or position warnings.	Planned	No
Private Vehicle OBE	Vehicle OBE	Vehicle Traveler Information Reception	Vehicle Traveler Information Reception' provides the capability for drivers to receive general transportation information including traffic and road conditions, traffic regulations, incident information, maintenance and construction information, event information, transit information, parking information, weather information, and broadcast alerts.	No	7	The vehicle shall prioritize safety and warning messages to supersede advisory and broadcast messages.	Planned	No
Private Vehicle OBE	Vehicle OBE	Vehicle Traveler Information Reception	Vehicle Traveler Information Reception' provides the capability for drivers to receive general transportation information including traffic and road conditions, traffic regulations, incident information, maintenance and construction information, event information, transit information, parking information, weather information, and broadcast alerts.	No	8	The vehicle shall support driver input in audio or manual form.	Planned	No
Private Vehicle OBE	Vehicle OBE	Vehicle Traveler Information Reception	Vehicle Traveler Information Reception' provides the capability for drivers to receive general transportation information including traffic and road conditions, traffic regulations, incident information, maintenance and construction information, event information, transit information, parking information, weather information, and broadcast alerts.	No	9	The vehicle shall present information to the driver in audible or visual forms without impairing the driver's ability to control the vehicle in a safe manner.	Planned	No
Public Private Traveler Information	Data Distribution System	DDS Data Access Management	DDS Data Access Management' defines the access mechanisms, structures and restrictions for inbound (from providers) and outbound (to consumers) data.	No				No
Public Private Traveler Information	Data Distribution System	DDS Data Collection and Aggregation	DDS Data Collection and Aggregation' collects data 'deposits' from producers including meta data such as the generation location and time. It authenticates and validates the data deposits and logs all associated meta data. Authenticated, valid data is bundled based on information type and location and made available as data products to consumers who are interested in the data. It establishes delivery parameters for data consumers that subscribe based on parameters including content type and geographic region of interest and delivers data to consumers based on these parameters.	No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Public Private Traveler Information	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	1	The center shall collect, process, and store traffic and highway condition information, including incident information, detours and road closures, event information, recommended routes, and current speeds on specific routes.	Existing	No
Public Private Traveler Information	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	3	The center shall collect, process, and store maintenance and construction information, including scheduled maintenance and construction work activities and work zone activities.	Planned	No
Public Private Traveler Information	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	4	The center shall collect, process, and store transit routes and schedules, transit transfer options, transit fares, and real-time schedule adherence information.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Public Private Traveler Information	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	5	The center shall collect, process, and store parking information, including location, availability, and fees.	Planned	No
Public Private Traveler Information	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	6	The center shall collect, process, and store toll fee information.	Planned	No
Public Private Traveler Information	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	7	The center shall collect, process, and store current and forecast road conditions and surface weather conditions.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Public Private Traveler Information	Transportation Information Center	TIC Emergency Traveler Information	TIC Emergency Traveler Information' provides emergency information to the public, including wide-area alerts and evacuation information. It provides emergency alerts, information on evacuation zones and evacuation requirements, evacuation destinations and shelter information, available transportation modes, and traffic and road conditions at the origin, destination, and along the evacuation routes. In addition to general evacuation information, personalized information including tailored evacuation routes, service information, and estimated travel times is also provided based on traveler specified origin, destination, and route parameters. Updated information is provided throughout the evacuation and subsequent reentry as status changes and plans are adapted.	No	1	The center shall disseminate emergency evacuation information to the traveler interface systems, including evacuation zones, shelter information, available transportation modes, road closures and detours, changes to transit services, and traffic and road conditions at the origin, destination, and along the evacuation routes.	Existing	No
Public Private Traveler Information	Transportation Information Center	TIC Emergency Traveler Information	TIC Emergency Traveler Information' provides emergency information to the public, including wide-area alerts and evacuation information. It provides emergency alerts, information on evacuation zones and evacuation requirements, evacuation destinations and shelter information, available transportation modes, and traffic and road conditions at the origin, destination, and along the evacuation routes. In addition to general evacuation information, personalized information including tailored evacuation routes, service information, and estimated travel times is also provided based on traveler specified origin, destination, and route parameters. Updated information is provided throughout the evacuation and subsequent reentry as status changes and plans are adapted.	No	2	The center shall provide evacuation information to shelter providers.	Existing	No
Public Private Traveler Information	Transportation Information Center	TIC Emergency Traveler Information	TIC Emergency Traveler Information' provides emergency information to the public, including wide-area alerts and evacuation information. It provides emergency alerts, information on evacuation zones and evacuation requirements, evacuation destinations and shelter information, available transportation modes, and traffic and road conditions at the origin, destination, and along the evacuation routes. In addition to general evacuation information, personalized information including tailored evacuation routes, service information, and estimated travel times is also provided based on traveler specified origin, destination, and route parameters. Updated information is provided throughout the evacuation and subsequent reentry as status changes and plans are adapted.	No	3	The center shall disseminate wide-area alert information to the traveler interface systems, including major emergencies such as a natural or man-made disaster, civil emergency, child abductions, severe weather watches and warnings, military activities, and law enforcement warnings.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Public Private Traveler Information	Transportation Information Center	TIC Emergency Traveler Information	TIC Emergency Traveler Information' provides emergency information to the public, including wide-area alerts and evacuation information. It provides emergency alerts, information on evacuation zones and evacuation requirements, evacuation destinations and shelter information, available transportation modes, and traffic and road conditions at the origin, destination, and along the evacuation routes. In addition to general evacuation information, personalized information including tailored evacuation routes, service information, and estimated travel times is also provided based on traveler specified origin, destination, and route parameters. Updated information is provided throughout the evacuation and subsequent reentry as status changes and plans are adapted.	No	4	The center shall provide the capability for a system operator to control the type and update frequency of emergency and wide-area alert information distributed to travelers.	Planned	No
Public Private Traveler Information	Transportation Information Center	TIC Interactive Traveler Information	TIC Interactive Traveler Information' disseminates personalized traveler information including traffic and road conditions, transit information, maintenance and construction information, multimodal information, event information, and weather information. Tailored information is provided based on the traveler's request in this interactive service.	No	1	The center shall disseminate customized traffic and highway condition information to travelers, including incident information, detours and road closures, recommended routes, and current speeds on specific routes upon request.	Planned	No
Public Private Traveler Information	Transportation Information Center	TIC Interactive Traveler Information	TIC Interactive Traveler Information' disseminates personalized traveler information including traffic and road conditions, transit information, maintenance and construction information, multimodal information, event information, and weather information. Tailored information is provided based on the traveler's request in this interactive service.	No	2	The center shall disseminate customized maintenance and construction information to travelers, including scheduled maintenance and construction work activities and work zone activities upon request.	Planned	No
Public Private Traveler Information	Transportation Information Center	TIC Interactive Traveler Information	TIC Interactive Traveler Information' disseminates personalized traveler information including traffic and road conditions, transit information, maintenance and construction information, multimodal information, event information, and weather information. Tailored information is provided based on the traveler's request in this interactive service.	No	3	The center shall disseminate customized transit routes and schedules, transit transfer options, transit fares, and real-time schedule adherence information to travelers upon request.	Planned	No
Public Private Traveler Information	Transportation Information Center	TIC Interactive Traveler Information	TIC Interactive Traveler Information' disseminates personalized traveler information including traffic and road conditions, transit information, maintenance and construction information, multimodal information, event information, and weather information. Tailored information is provided based on the traveler's request in this interactive service.	No	4	The center shall disseminate customized parking information to travelers, including location, availability, and fees upon request.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Public Private Traveler Information	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No	1	The center shall provide the capability to process voice-formatted requests for traveler information from a traveler telephone information system, and return the information in the requested format.	Existing	No
Public Private Traveler Information	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No	2	The center shall provide the capability to process dual-tone multifrequency (DTMF)-based requests (touch-tone) for traveler information from a traveler telephone information system.	Planned	No
Public Private Traveler Information	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No	3	The center shall provide the capability to process traveler information requests from a traveler telephone information system.	Planned	No
Public Private Traveler Information	Transportation Information Center	TIC Trip Planning	TIC Trip Planning' provides pre-trip and en-route trip planning services for travelers. It receives origin, destination, constraints, and preferences and returns trip plan(s) that meet the supplied criteria. Trip plans may be based on current traffic and road conditions, transit schedule information, and other real-time traveler information. Candidate trip plans are multimodal and may include vehicle, transit, and alternate mode segments (e.g., rail, ferry, bicycle routes, and walkways) based on traveler preferences. It also confirms the trip plan for the traveler and supports reservations and advanced payment for portions of the trip. The trip plan includes specific routing information and instructions for each segment of the trip and may also include information and reservations for additional services (e.g., parking) along the route.	No	1	The center shall provide the capability to provide specific pre-trip and en route directions to travelers (and drivers), including costs, arrival times, and transfer points.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Public Private Traveler Information	Transportation Information Center	TIC Trip Planning	TIC Trip Planning' provides pre-trip and en-route trip planning services for travelers. It receives origin, destination, constraints, and preferences and returns trip plan(s) that meet the supplied criteria. Trip plans may be based on current traffic and road conditions, transit schedule information, and other real-time traveler information. Candidate trip plans are multimodal and may include vehicle, transit, and alternate mode segments (e.g., rail, ferry, bicycle routes, and walkways) based on traveler preferences. It also confirms the trip plan for the traveler and supports reservations and advanced payment for portions of the trip. The trip plan includes specific routing information and instructions for each segment of the trip and may also include information and reservations for additional services (e.g., parking) along the route.	No	2	The center shall include bicycle routes, walkways, skyways, and multi-use trails in the pre-trip and en route directions it provides to travelers.	Planned	No
Public Private Traveler Information	Transportation Information Center	TIC Trip Planning	TIC Trip Planning' provides pre-trip and en-route trip planning services for travelers. It receives origin, destination, constraints, and preferences and returns trip plan(s) that meet the supplied criteria. Trip plans may be based on current traffic and road conditions, transit schedule information, and other real-time traveler information. Candidate trip plans are multimodal and may include vehicle, transit, and alternate mode segments (e.g., rail, ferry, bicycle routes, and walkways) based on traveler preferences. It also confirms the trip plan for the traveler and supports reservations and advanced payment for portions of the trip. The trip plan includes specific routing information and instructions for each segment of the trip and may also include information and reservations for additional services (e.g., parking) along the route.	No	3	The center shall support on-line route guidance for travelers using personal devices (such as PDAs).	Planned	No
Public Private Traveler Information	Transportation Information Center	TIC Trip Planning	TIC Trip Planning' provides pre-trip and en-route trip planning services for travelers. It receives origin, destination, constraints, and preferences and returns trip plan(s) that meet the supplied criteria. Trip plans may be based on current traffic and road conditions, transit schedule information, and other real-time traveler information. Candidate trip plans are multimodal and may include vehicle, transit, and alternate mode segments (e.g., rail, ferry, bicycle routes, and walkways) based on traveler preferences. It also confirms the trip plan for the traveler and supports reservations and advanced payment for portions of the trip. The trip plan includes specific routing information and instructions for each segment of the trip and may also include information and reservations for additional services (e.g., parking) along the route.	No	4	The center shall support on-line route guidance for drivers in vehicles.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Public Private Traveler Information	Transportation Information Center	TIC Trip Planning	TIC Trip Planning' provides pre-trip and en-route trip planning services for travelers. It receives origin, destination, constraints, and preferences and returns trip plan(s) that meet the supplied criteria. Trip plans may be based on current traffic and road conditions, transit schedule information, and other real-time traveler information. Candidate trip plans are multimodal and may include vehicle, transit, and alternate mode segments (e.g., rail, ferry, bicycle routes, and walkways) based on traveler preferences. It also confirms the trip plan for the traveler and supports reservations and advanced payment for portions of the trip. The trip plan includes specific routing information and instructions for each segment of the trip and may also include information and reservations for additional services (e.g., parking) along the route.	No	5	The center shall support on-line route guidance for specialty vehicles, such as commercial vehicles.	Planned	No
Public Private Traveler Information	Transportation Information Center	TIC Trip Planning	TIC Trip Planning' provides pre-trip and en-route trip planning services for travelers. It receives origin, destination, constraints, and preferences and returns trip plan(s) that meet the supplied criteria. Trip plans may be based on current traffic and road conditions, transit schedule information, and other real-time traveler information. Candidate trip plans are multimodal and may include vehicle, transit, and alternate mode segments (e.g., rail, ferry, bicycle routes, and walkways) based on traveler preferences. It also confirms the trip plan for the traveler and supports reservations and advanced payment for portions of the trip. The trip plan includes specific routing information and instructions for each segment of the trip and may also include information and reservations for additional services (e.g., parking) along the route.	No	6	The center shall generate route plans based on current and/or predicted conditions of the road network, scheduled maintenance and construction work activities, and work zone activities.	Planned	No
Public Private Traveler Information	Transportation Information Center	TIC Trip Planning	TIC Trip Planning' provides pre-trip and en-route trip planning services for travelers. It receives origin, destination, constraints, and preferences and returns trip plan(s) that meet the supplied criteria. Trip plans may be based on current traffic and road conditions, transit schedule information, and other real-time traveler information. Candidate trip plans are multimodal and may include vehicle, transit, and alternate mode segments (e.g., rail, ferry, bicycle routes, and walkways) based on traveler preferences. It also confirms the trip plan for the traveler and supports reservations and advanced payment for portions of the trip. The trip plan includes specific routing information and instructions for each segment of the trip and may also include information and reservations for additional services (e.g., parking) along the route.	No	7	The center shall generate route plans based on transit services, including fares, schedules, and requirements for travelers with special needs.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Rail Grade Wayside Warning Systems	ITS Roadway Equipment	Roadway Standard Rail Crossing	Roadway Standard Rail Crossing' manages highway traffic at highway-rail intersections (HRIs) where operational requirements do not dictate advanced features (e.g., where rail operational speeds are less than 80 miles per hour). Either passive (e.g., the crossbuck sign) or active warning systems (e.g., flashing lights and gates) are supported depending on the specific requirements for each intersection. These traditional HRI warning systems may also be augmented with other standard traffic management devices. The warning systems are activated on notification of an approaching train by interfaced wayside equipment. The equipment at the HRI may also be interconnected with adjacent signalized intersections so that local control can be adapted to highway-rail intersection activities. Health monitoring of the HRI equipment and interfaces is performed; detected abnormalities are reported through interfaces to the wayside interface equipment and the Traffic Management Center.	No	1	The field element shall collect and process, traffic sensor data in the vicinity of a highway-rail intersection (HRI).	Existing	No
Rail Grade Wayside Warning Systems	ITS Roadway Equipment	Roadway Standard Rail Crossing	Roadway Standard Rail Crossing' manages highway traffic at highway-rail intersections (HRIs) where operational requirements do not dictate advanced features (e.g., where rail operational speeds are less than 80 miles per hour). Either passive (e.g., the crossbuck sign) or active warning systems (e.g., flashing lights and gates) are supported depending on the specific requirements for each intersection. These traditional HRI warning systems may also be augmented with other standard traffic management devices. The warning systems are activated on notification of an approaching train by interfaced wayside equipment. The equipment at the HRI may also be interconnected with adjacent signalized intersections so that local control can be adapted to highway-rail intersection activities. Health monitoring of the HRI equipment and interfaces is performed; detected abnormalities are reported through interfaces to the wayside interface equipment and the Traffic Management Center.	No	2	The field element shall monitor the status of the highway-rail intersection (HRI) equipment, including both the current state and mode of operation and the current equipment condition, to be forwarded on to the traffic management center.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Rail Grade Wayside Warning Systems	ITS Roadway Equipment	Roadway Standard Rail Crossing	Roadway Standard Rail Crossing' manages highway traffic at highway-rail intersections (HRIs) where operational requirements do not dictate advanced features (e.g., where rail operational speeds are less than 80 miles per hour). Either passive (e.g., the crossbuck sign) or active warning systems (e.g., flashing lights and gates) are supported depending on the specific requirements for each intersection. These traditional HRI warning systems may also be augmented with other standard traffic management devices. The warning systems are activated on notification of an approaching train by interfaced wayside equipment. The equipment at the HRI may also be interconnected with adjacent signalized intersections so that local control can be adapted to highway-rail intersection activities. Health monitoring of the HRI equipment and interfaces is performed; detected abnormalities are reported through interfaces to the wayside interface equipment and the Traffic Management Center.	No	3	The field element shall monitor the status of the highway-rail intersection (HRI) equipment, including both the current state and mode of operation and the current equipment condition, to be forwarded on to the rail wayside equipment.	Planned	No
Rail Grade Wayside Warning Systems	ITS Roadway Equipment	Roadway Standard Rail Crossing	Roadway Standard Rail Crossing' manages highway traffic at highway-rail intersections (HRIs) where operational requirements do not dictate advanced features (e.g., where rail operational speeds are less than 80 miles per hour). Either passive (e.g., the crossbuck sign) or active warning systems (e.g., flashing lights and gates) are supported depending on the specific requirements for each intersection. These traditional HRI warning systems may also be augmented with other standard traffic management devices. The warning systems are activated on notification of an approaching train by interfaced wayside equipment. The equipment at the HRI may also be interconnected with adjacent signalized intersections so that local control can be adapted to highway-rail intersection activities. Health monitoring of the HRI equipment and interfaces is performed; detected abnormalities are reported through interfaces to the wayside interface equipment and the Traffic Management Center.	No	4	The field element shall receive track status from the rail wayside equipment that can be passed on to the traffic management center. This may include the current status of the tracks and whether a train is approaching.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Rail Grade Wayside Warning Systems	ITS Roadway Equipment	Roadway Standard Rail Crossing	Roadway Standard Rail Crossing' manages highway traffic at highway-rail intersections (HRIs) where operational requirements do not dictate advanced features (e.g., where rail operational speeds are less than 80 miles per hour). Either passive (e.g., the crossbuck sign) or active warning systems (e.g., flashing lights and gates) are supported depending on the specific requirements for each intersection. These traditional HRI warning systems may also be augmented with other standard traffic management devices. The warning systems are activated on notification of an approaching train by interfaced wayside equipment. The equipment at the HRI may also be interconnected with adjacent signalized intersections so that local control can be adapted to highway-rail intersection activities. Health monitoring of the HRI equipment and interfaces is performed; detected abnormalities are reported through interfaces to the wayside interface equipment and the Traffic Management Center.	No	5	The field element shall collect pedestrian images and pedestrian sensor data, and respond to pedestrian crossing requests via display, audio signal, or other manner.	Planned	No
Rail Grade Wayside Warning Systems	ITS Roadway Equipment	Roadway Standard Rail Crossing	Roadway Standard Rail Crossing' manages highway traffic at highway-rail intersections (HRIs) where operational requirements do not dictate advanced features (e.g., where rail operational speeds are less than 80 miles per hour). Either passive (e.g., the crossbuck sign) or active warning systems (e.g., flashing lights and gates) are supported depending on the specific requirements for each intersection. These traditional HRI warning systems may also be augmented with other standard traffic management devices. The warning systems are activated on notification of an approaching train by interfaced wayside equipment. The equipment at the HRI may also be interconnected with adjacent signalized intersections so that local control can be adapted to highway-rail intersection activities. Health monitoring of the HRI equipment and interfaces is performed; detected abnormalities are reported through interfaces to the wayside interface equipment and the Traffic Management Center.	No	6	The field element shall control the dynamic message signs (DMS) in the vicinity of a highway-rail intersection (HRI) to advise drivers, cyclists, and pedestrians of approaching trains.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Rail Grade Wayside Warning Systems	ITS Roadway Equipment	Roadway Standard Rail Crossing	Roadway Standard Rail Crossing' manages highway traffic at highway-rail intersections (HRIs) where operational requirements do not dictate advanced features (e.g., where rail operational speeds are less than 80 miles per hour). Either passive (e.g., the crossbuck sign) or active warning systems (e.g., flashing lights and gates) are supported depending on the specific requirements for each intersection. These traditional HRI warning systems may also be augmented with other standard traffic management devices. The warning systems are activated on notification of an approaching train by interfaced wayside equipment. The equipment at the HRI may also be interconnected with adjacent signalized intersections so that local control can be adapted to highway-rail intersection activities. Health monitoring of the HRI equipment and interfaces is performed; detected abnormalities are reported through interfaces to the wayside interface equipment and the Traffic Management Center.	No	7	The field element shall close the highway-rail intersection (HRI) when a train is approaching using gates, lights/signs, barriers, and traffic control signals.	Planned	No
Rail Grade Wayside Warning Systems	ITS Roadway Equipment	Roadway Standard Rail Crossing	Roadway Standard Rail Crossing' manages highway traffic at highway-rail intersections (HRIs) where operational requirements do not dictate advanced features (e.g., where rail operational speeds are less than 80 miles per hour). Either passive (e.g., the crossbuck sign) or active warning systems (e.g., flashing lights and gates) are supported depending on the specific requirements for each intersection. These traditional HRI warning systems may also be augmented with other standard traffic management devices. The warning systems are activated on notification of an approaching train by interfaced wayside equipment. The equipment at the HRI may also be interconnected with adjacent signalized intersections so that local control can be adapted to highway-rail intersection activities. Health monitoring of the HRI equipment and interfaces is performed; detected abnormalities are reported through interfaces to the wayside interface equipment and the Traffic Management Center.	No	8	The field element shall support the integrated control of adjacent traffic signals to clear an area in advance of an approaching train and to manage traffic around the intersection.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Rail Grade Wayside Warning Systems	ITS Roadway Equipment	Roadway Standard Rail Crossing	Roadway Standard Rail Crossing' manages highway traffic at highway-rail intersections (HRIs) where operational requirements do not dictate advanced features (e.g., where rail operational speeds are less than 80 miles per hour). Either passive (e.g., the crossbuck sign) or active warning systems (e.g., flashing lights and gates) are supported depending on the specific requirements for each intersection. These traditional HRI warning systems may also be augmented with other standard traffic management devices. The warning systems are activated on notification of an approaching train by interfaced wayside equipment. The equipment at the HRI may also be interconnected with adjacent signalized intersections so that local control can be adapted to highway-rail intersection activities. Health monitoring of the HRI equipment and interfaces is performed; detected abnormalities are reported through interfaces to the wayside interface equipment and the Traffic Management Center.	No	9	The field element shall forward rail traffic advisories received from the Wayside Equipment to the traffic management center.	Planned	No
Rail Grade Wayside Warning Systems	Wayside Equipment			No				No
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	1	The center shall manage electronic credentials filing and processing for commercial vehicles.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	2	The center shall manage the filing of appropriate taxes for the operation of commercial vehicles.	Existing	No
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	3	The center shall process requests for payments of electronic credentials and tax filing, maintaining an interface to a Financial Institution as necessary.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	4	The center shall exchange credentials and tax information with other commercial vehicle administration centers, either other states or the federal government.	Existing	No
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	5	The center shall provide route restrictions information, including hazmat restrictions, to other centers and agencies for distribution to commercial vehicle operators. These centers and agencies may include commercial fleet and freight management operators, traveler information centers, digital map update providers, and other commercial vehicle administration centers.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	6	The center shall use information on asset restrictions received from maintenance centers to develop the commercial vehicle route restrictions and process credentials applications.	Planned	No
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	7	The center shall provide an interface with commercial vehicle fleet and freight management centers to exchange audit and compliance review reports.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	8	The center shall provide credentials information about commercial vehicle operators and carriers to authorized requestors, including roadside check stations that determine when a vehicle should be pulled-in based on their credentials and their actual load/freight contents.	Planned	No
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	9	The center shall receive and store information on commercial vehicle violations from enforcement agencies as part of the processing of credentials applications.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	10	The center shall manage driver licensing for commercial vehicle drivers.	Planned	No
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	11	The center shall enroll carriers in commercial vehicle programs and support user account management.	Planned	No

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Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	12	The center shall process requests for review of carrier and driver status.	Planned	No
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Credentials and Taxes Administration	CVAC Credentials and Taxes Administration' issues credentials, collects fees and taxes, and supports enforcement of credential requirements. It manages driver licensing and enrolls carriers in additional CVO programs such as wireless roadside inspection programs. It communicates with the Fleet and Freight Management Centers associated with the motor carriers to process applications and collect fuel taxes, weight/distance taxes, and other taxes and fees associated with commercial vehicle operations. It also receives applications for, and issues special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities. It supports user account management and receives and processes requests for review of carrier and driver status. It communicates with peer functional objects in other jurisdictions to exchange credentials database information.	No	13	The center shall issue special Oversize/Overweight and HAZMAT permits in coordination with other cognizant authorities.	Planned	No
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Data Collection	CVAC Data Collection' collects and stores commercial vehicle information that is collected in the course of Commercial Vehicle Administration Center operations. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	1	The center shall receive operational data from the roadside check systems as well as administration and credentials data.	Existing	No
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Data Collection	CVAC Data Collection' collects and stores commercial vehicle information that is collected in the course of Commercial Vehicle Administration Center operations. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	2	The center shall assign quality control metrics and meta-data to be stored along with the data. Meta-data may include attributes that describe the source and quality of the data and the conditions surrounding the collection of the data.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Data Collection	CVAC Data Collection' collects and stores commercial vehicle information that is collected in the course of Commercial Vehicle Administration Center operations. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	3	The center shall receive and respond to requests from ITS Archives for either a catalog of the commercial vehicle operations data or for the data itself.	Planned	No
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Data Collection	CVAC Data Collection' collects and stores commercial vehicle information that is collected in the course of Commercial Vehicle Administration Center operations. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	4	The center shall be able to produce sample products of the data available.	Planned	No
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Information Exchange	CVAC Information Exchange' supports the exchange of safety, credentials, permit data, and other data concerning the operation of commercial vehicles among jurisdictions. The object also supports the exchange of safety, credentials, permit, and operations data between systems (for example, an administrative center and the roadside check facilities) within a single jurisdiction. Data are collected from multiple authoritative sources and packaged into snapshots (top-level summary and critical status information) and profiles (detailed and historical data). Data is made available to fleet operators and other information requestors on request or based on subscriptions established by the requestor.	No	1	The center shall exchange information with roadside check facilities, including credentials and credentials status information, safety status information, daily site activity data, driver records, and citations.	Existing	No
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Information Exchange	CVAC Information Exchange' supports the exchange of safety, credentials, permit data, and other data concerning the operation of commercial vehicles among jurisdictions. The object also supports the exchange of safety, credentials, permit, and operations data between systems (for example, an administrative center and the roadside check facilities) within a single jurisdiction. Data are collected from multiple authoritative sources and packaged into snapshots (top-level summary and critical status information) and profiles (detailed and historical data). Data is made available to fleet operators and other information requestors on request or based on subscriptions established by the requestor.	No	2	The center shall exchange safety and credentials data among other commercial vehicle administration centers, including border clearance status, credentials information, credentials status information, driver records, accident reports, permit information, and safety status information.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Information Exchange	CVAC Information Exchange' supports the exchange of safety, credentials, permit data, and other data concerning the operation of commercial vehicles among jurisdictions. The object also supports the exchange of safety, credentials, permit, and operations data between systems (for example, an administrative center and the roadside check facilities) within a single jurisdiction. Data are collected from multiple authoritative sources and packaged into snapshots (top-level summary and critical status information) and profiles (detailed and historical data). Data is made available to fleet operators and other information requestors on request or based on subscriptions established by the requestor.	No	3	The center shall package data concerning commercial vehicle safety and credentials into snapshots (top-level summary and critical status information).	Planned	No
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Information Exchange	CVAC Information Exchange' supports the exchange of safety, credentials, permit data, and other data concerning the operation of commercial vehicles among jurisdictions. The object also supports the exchange of safety, credentials, permit, and operations data between systems (for example, an administrative center and the roadside check facilities) within a single jurisdiction. Data are collected from multiple authoritative sources and packaged into snapshots (top-level summary and critical status information) and profiles (detailed and historical data). Data is made available to fleet operators and other information requestors on request or based on subscriptions established by the requestor.	No	4	The center shall package data concerning commercial vehicle safety and credentials into profiles (detailed and historical data).	Planned	No
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Information Exchange	CVAC Information Exchange' supports the exchange of safety, credentials, permit data, and other data concerning the operation of commercial vehicles among jurisdictions. The object also supports the exchange of safety, credentials, permit, and operations data between systems (for example, an administrative center and the roadside check facilities) within a single jurisdiction. Data are collected from multiple authoritative sources and packaged into snapshots (top-level summary and critical status information) and profiles (detailed and historical data). Data is made available to fleet operators and other information requestors on request or based on subscriptions established by the requestor.	No	5	The center shall provide reports to the commercial vehicle fleet manager regarding fleet activity through roadside facilities including accident reports, citations, credentials status information, driver records, and safety status information.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC International Administration	CVAC International Administration' generates and processes the entry documentation necessary to obtain release of vehicle, cargo, and driver across an international border, report the results of the crossing event, and handle duty fee processing. It interfaces with the systems used by customs and border protection, immigration, carriers, and service providers (e.g., brokers) to generate, process, and store entry documentation.	No	1	The center shall receive domestic transportation and declaration information from Border Inspection Administration Agencies such as U.S. Bureau of Immigration and Customs Enforcement (ICE), the U.S. Bureau of Customs and Border Protection (CBP), and their counterparts in Canada and Mexico.	Existing	No
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC International Administration	CVAC International Administration' generates and processes the entry documentation necessary to obtain release of vehicle, cargo, and driver across an international border, report the results of the crossing event, and handle duty fee processing. It interfaces with the systems used by customs and border protection, immigration, carriers, and service providers (e.g., brokers) to generate, process, and store entry documentation.	No	2	The center shall provide an assessment regarding a commercial vehicle and driver at a border crossing. The assessment or clearance data will be forwarded on to the appropriate regulatory agencies and roadside check facilities operating at the border crossing.	Planned	No
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC International Administration	CVAC International Administration' generates and processes the entry documentation necessary to obtain release of vehicle, cargo, and driver across an international border, report the results of the crossing event, and handle duty fee processing. It interfaces with the systems used by customs and border protection, immigration, carriers, and service providers (e.g., brokers) to generate, process, and store entry documentation.	No	3	The center shall provide border clearance status concerning commercial vehicles and their shipments to the roadside check facilities, the commercial vehicle fleet and freight management centers, intermodal freight shippers, other commercial vehicle administration centers, and border inspection administration centers.	Planned	No
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC International Administration	CVAC International Administration' generates and processes the entry documentation necessary to obtain release of vehicle, cargo, and driver across an international border, report the results of the crossing event, and handle duty fee processing. It interfaces with the systems used by customs and border protection, immigration, carriers, and service providers (e.g., brokers) to generate, process, and store entry documentation.	No	4	The center shall receive and store border clearance event data from the roadside check facilities that are located near border crossings.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Safety and Security Administration	CVAC Safety and Security Administration' provides commercial vehicle safety and security criteria to roadside check facilities, collects and reviews safety and security data from the field and distributes safety and security information to other centers, carriers, and enforcement agencies. It also supports wireless roadside inspections, including carrier enrollment, managing and distributing information about trigger areas where wireless inspections may occur, and monitoring the condition of the commercial vehicle and driver using wireless communications at identified trigger areas. It supports the collection and review of carrier and driver safety and security data and supports determination of the carrier and driver safety and security ratings. It clears the out-of-service status when the responsible carrier or driver reports that deficiencies flagged during inspections have been corrected.	No	1	The center shall provide commercial vehicle safety and security data to roadside check facilities.	Planned	No
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Safety and Security Administration	CVAC Safety and Security Administration' provides commercial vehicle safety and security criteria to roadside check facilities, collects and reviews safety and security data from the field and distributes safety and security information to other centers, carriers, and enforcement agencies. It also supports wireless roadside inspections, including carrier enrollment, managing and distributing information about trigger areas where wireless inspections may occur, and monitoring the condition of the commercial vehicle and driver using wireless communications at identified trigger areas. It supports the collection and review of carrier and driver safety and security data and supports determination of the carrier and driver safety and security ratings. It clears the out-of-service status when the responsible carrier or driver reports that deficiencies flagged during inspections have been corrected.	No	2	The center shall collect and review safety inspection reports and violations from the roadside check facilities and pass on appropriate portions to other commercial vehicle administrative centers and commercial vehicle fleet operators.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Safety and Security Administration	CVAC Safety and Security Administration' provides commercial vehicle safety and security criteria to roadside check facilities, collects and reviews safety and security data from the field and distributes safety and security information to other centers, carriers, and enforcement agencies. It also supports wireless roadside inspections, including carrier enrollment, managing and distributing information about trigger areas where wireless inspections may occur, and monitoring the condition of the commercial vehicle and driver using wireless communications at identified trigger areas. It supports the collection and review of carrier and driver safety and security data and supports determination of the carrier and driver safety and security ratings. It clears the out-of-service status when the responsible carrier or driver reports that deficiencies flagged during inspections have been corrected.	No	3	The center shall notify enforcement agencies of commercial vehicle safety violations by individual commercial vehicles, drivers, or carriers.	Planned	No
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Safety and Security Administration	CVAC Safety and Security Administration' provides commercial vehicle safety and security criteria to roadside check facilities, collects and reviews safety and security data from the field and distributes safety and security information to other centers, carriers, and enforcement agencies. It also supports wireless roadside inspections, including carrier enrollment, managing and distributing information about trigger areas where wireless inspections may occur, and monitoring the condition of the commercial vehicle and driver using wireless communications at identified trigger areas. It supports the collection and review of carrier and driver safety and security data and supports determination of the carrier and driver safety and security ratings. It clears the out-of-service status when the responsible carrier or driver reports that deficiencies flagged during inspections have been corrected.	No	4	The center shall provide commercial vehicle accident reports to enforcement agencies and the commercial fleet management center.	Planned	No

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Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Safety and Security Administration	CVAC Safety and Security Administration' provides commercial vehicle safety and security criteria to roadside check facilities, collects and reviews safety and security data from the field and distributes safety and security information to other centers, carriers, and enforcement agencies. It also supports wireless roadside inspections, including carrier enrollment, managing and distributing information about trigger areas where wireless inspections may occur, and monitoring the condition of the commercial vehicle and driver using wireless communications at identified trigger areas. It supports the collection and review of carrier and driver safety and security data and supports determination of the carrier and driver safety and security ratings. It clears the out-of-service status when the responsible carrier or driver reports that deficiencies flagged during inspections have been corrected.	No	5	The center shall receive citation records from roadside check facilities.	Planned	No
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Safety and Security Administration	CVAC Safety and Security Administration' provides commercial vehicle safety and security criteria to roadside check facilities, collects and reviews safety and security data from the field and distributes safety and security information to other centers, carriers, and enforcement agencies. It also supports wireless roadside inspections, including carrier enrollment, managing and distributing information about trigger areas where wireless inspections may occur, and monitoring the condition of the commercial vehicle and driver using wireless communications at identified trigger areas. It supports the collection and review of carrier and driver safety and security data and supports determination of the carrier and driver safety and security ratings. It clears the out-of-service status when the responsible carrier or driver reports that deficiencies flagged during inspections have been corrected.	No	6	The center shall manage the citation records and provide the citations to enforcement agencies and the commercial fleet management center.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Safety and Security Administration	CVAC Safety and Security Administration' provides commercial vehicle safety and security criteria to roadside check facilities, collects and reviews safety and security data from the field and distributes safety and security information to other centers, carriers, and enforcement agencies. It also supports wireless roadside inspections, including carrier enrollment, managing and distributing information about trigger areas where wireless inspections may occur, and monitoring the condition of the commercial vehicle and driver using wireless communications at identified trigger areas. It supports the collection and review of carrier and driver safety and security data and supports determination of the carrier and driver safety and security ratings. It clears the out-of-service status when the responsible carrier or driver reports that deficiencies flagged during inspections have been corrected.	No	7	The center shall provide the capability for the commercial fleet management center to report required commercial vehicle repairs and other corrections of identified deficiencies.	Planned	No
Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Safety and Security Administration	CVAC Safety and Security Administration' provides commercial vehicle safety and security criteria to roadside check facilities, collects and reviews safety and security data from the field and distributes safety and security information to other centers, carriers, and enforcement agencies. It also supports wireless roadside inspections, including carrier enrollment, managing and distributing information about trigger areas where wireless inspections may occur, and monitoring the condition of the commercial vehicle and driver using wireless communications at identified trigger areas. It supports the collection and review of carrier and driver safety and security data and supports determination of the carrier and driver safety and security ratings. It clears the out-of-service status when the responsible carrier or driver reports that deficiencies flagged during inspections have been corrected.	No	8	The center shall support carrier enrollment in wireless roadside inspection programs.	Planned	No

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Safety Fitness Electronic Record (SAFER)	Commercial Vehicle Administration Center	CVAC Safety and Security Administration	CVAC Safety and Security Administration' provides commercial vehicle safety and security criteria to roadside check facilities, collects and reviews safety and security data from the field and distributes safety and security information to other centers, carriers, and enforcement agencies. It also supports wireless roadside inspections, including carrier enrollment, managing and distributing information about trigger areas where wireless inspections may occur, and monitoring the condition of the commercial vehicle and driver using wireless communications at identified trigger areas. It supports the collection and review of carrier and driver safety and security data and supports determination of the carrier and driver safety and security ratings. It clears the out-of-service status when the responsible carrier or driver reports that deficiencies flagged during inspections have been corrected.	No	9	The center shall manage and distribute information about trigger areas where wireless inspections will occur.	Planned	No
Safety Fitness Electronic Record (SAFER)	CVO Information Requestor Center			No				No
Safety Fitness Electronic Record (SAFER)	Enforcement Center			No				No
Social Media and Networking	Social Media			No				No
State Universities Data Archives	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	1	The center shall collect data from centers.	Planned	No

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State Universities Data Archives	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	2	The center shall collect data catalogs from one or more data sources. A catalog describes the data contained in the collection of archived data and may include descriptions of the schema or structure of the data, a description of the contents of the data; e.g., time range of entries, number of entries; or a sample of the data (e. g. a thumbnail).	Planned	No
State Universities Data Archives	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	3	The center shall store collected data in an information repository.	Planned	No
State Universities Data Archives	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	4	The center shall perform quality checks on collected data.	Planned	No

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State Universities Data Archives	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	5	The center shall notify the system operator of errors related to data collection, analysis and archival.	Planned	No
State Universities Data Archives	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	1	The center shall provide archive data to federal, state, and local government reporting systems.	Planned	No
State Universities Data Archives	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	2	The center shall respond to requests for government report data.	Planned	No
State Universities Data Archives	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	3	The center shall provide the capability to format data suitable for input into government reports.	Planned	No
State Universities Data Archives	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	4	The center shall provide the applicable meta-data for any ITS archived data to satisfy government reporting system requests. Meta-data may include attributes that describe the source and quality of the data and the conditions surrounding the collection of the data.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
State Universities Data Archives	Archived Data System	Archive Situation Data Archival	Archive Situation Data Archival' collects and archives traffic, roadway, and environmental information for use in off-line planning, research, and analysis. It controls and collects information directly from equipment at the roadside, reflecting the deployment of traffic detectors that are used primarily for traffic monitoring and planning purposes, rather than for traffic management. It also collects situation data from connected vehicles. The data collected, quality checks performed, and aggregation strategies are defined to support transportation system performance monitoring and management.	No	1	The center shall collect data from roadside devices.	Planned	No
State Universities Data Archives	Archived Data System	Archive Situation Data Archival	Archive Situation Data Archival' collects and archives traffic, roadway, and environmental information for use in off-line planning, research, and analysis. It controls and collects information directly from equipment at the roadside, reflecting the deployment of traffic detectors that are used primarily for traffic monitoring and planning purposes, rather than for traffic management. It also collects situation data from connected vehicles. The data collected, quality checks performed, and aggregation strategies are defined to support transportation system performance monitoring and management.	No	2	The center shall respond to requests from the administrator interface function to manage field-sourced data collection.	Planned	No
State Universities Data Archives	Other Data Sources			No				No
State Universities Data User Systems	Archived Data User System			No				No
Transit Provider Vehicles	Basic Transit Vehicle			No				No
Transit Provider Vehicles	Transit Vehicle OBE	Transit Vehicle On-Board Fare Management	Transit Vehicle On-board Fare Management' supports fare collection using a standard fare card or other non-monetary fare medium and detects payment violations. Collected fare data are made available to the center.	No	1	The transit vehicle shall read data from the traveler card / payment instrument presented by boarding passengers.	Planned	No
Transit Provider Vehicles	Transit Vehicle OBE	Transit Vehicle On-Board Fare Management	Transit Vehicle On-board Fare Management' supports fare collection using a standard fare card or other non-monetary fare medium and detects payment violations. Collected fare data are made available to the center.	No	2	The transit vehicle shall provide an image of all travelers which shall be used for violation processing of those who do not have a traveler card / payment instrument or whose transit fare transaction fails.	Planned	No
Transit Provider Vehicles	Transit Vehicle OBE	Transit Vehicle On-Board Fare Management	Transit Vehicle On-board Fare Management' supports fare collection using a standard fare card or other non-monetary fare medium and detects payment violations. Collected fare data are made available to the center.	No	3	The transit vehicle shall determine the traveler's travel routing based on the transit vehicle's current location and the traveler's destination.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Transit Provider Vehicles	Transit Vehicle OBE	Transit Vehicle On-Board Fare Management	Transit Vehicle On-board Fare Management' supports fare collection using a standard fare card or other non-monetary fare medium and detects payment violations. Collected fare data are made available to the center.	No	4	The transit vehicle shall calculate the traveler's fare based on the origin and destination provided by the traveler as well as factors such as the transit routing, transit fare category, traveler history, and route-specific information.	Planned	No
Transit Provider Vehicles	Transit Vehicle OBE	Transit Vehicle On-Board Trip Monitoring	Transit Vehicle On-Board Trip Monitoring' tracks vehicle location, monitors fuel usage, collects operational status (doors opened/closed, running times, etc.) and sends the collected, time stamped data to the Transit Management Center.	No	1	The transit vehicle shall track the current location of the transit vehicle.	Planned	No
Transit Provider Vehicles	Transit Vehicle OBE	Transit Vehicle On-Board Trip Monitoring	Transit Vehicle On-Board Trip Monitoring' tracks vehicle location, monitors fuel usage, collects operational status (doors opened/closed, running times, etc.) and sends the collected, time stamped data to the Transit Management Center.	No	2	The transit vehicle shall support the computation of the location of a transit vehicle using on-board sensors to augment the location determination function. This may include proximity to the transit stops or other known reference points as well as recording trip length.	Planned	No
Transit Provider Vehicles	Transit Vehicle OBE	Transit Vehicle On-Board Trip Monitoring	Transit Vehicle On-Board Trip Monitoring' tracks vehicle location, monitors fuel usage, collects operational status (doors opened/closed, running times, etc.) and sends the collected, time stamped data to the Transit Management Center.	No	3	The transit vehicle shall record transit trip monitoring data including vehicle mileage and fuel usage.	Planned	No
Transit Provider Vehicles	Transit Vehicle OBE	Transit Vehicle On-Board Trip Monitoring	Transit Vehicle On-Board Trip Monitoring' tracks vehicle location, monitors fuel usage, collects operational status (doors opened/closed, running times, etc.) and sends the collected, time stamped data to the Transit Management Center.	No	4	The transit vehicle shall record transit trip monitoring data including operational status information such as doors open/closed, running times, etc.	Planned	No
Transit Provider Vehicles	Transit Vehicle OBE	Transit Vehicle Passenger Counting	Transit Vehicle Passenger Counting' collects transit vehicle loading data and makes it available to the center.	No	1	The transit vehicle shall count passengers boarding and alighting.	Planned	No
Transit Provider Vehicles	Transit Vehicle OBE	Transit Vehicle Passenger Counting	Transit Vehicle Passenger Counting' collects transit vehicle loading data and makes it available to the center.	No	2	The passenger counts shall be related to location to support association of passenger counts with routes, route segments, or bus stops.	Planned	No
Transit Provider Vehicles	Transit Vehicle OBE	Transit Vehicle Passenger Counting	Transit Vehicle Passenger Counting' collects transit vehicle loading data and makes it available to the center.	No	3	The passenger counts shall be timestamped so that ridership can be measured by time of day and day of week.	Planned	No
Transit Provider Vehicles	Transit Vehicle OBE	Transit Vehicle Passenger Counting	Transit Vehicle Passenger Counting' collects transit vehicle loading data and makes it available to the center.	No	4	The transit vehicle shall send the collected passenger count information to the transit center.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Transit Provider Vehicles	Transit Vehicle OBE	Transit Vehicle Schedule Management	Transit Vehicle Schedule Management' monitors schedule performance and identifies corrective actions when a deviation is detected. It provides two-way communication between the transit vehicle and center, enabling the center to communicate with the vehicle operator and monitor on-board systems.	No	1	The transit vehicle shall receive a vehicle assignment including transit route information, transit service instructions, traffic information, road conditions, and other information for the operator.	Planned	No
Transit Provider Vehicles	Transit Vehicle OBE	Transit Vehicle Schedule Management	Transit Vehicle Schedule Management' monitors schedule performance and identifies corrective actions when a deviation is detected. It provides two-way communication between the transit vehicle and center, enabling the center to communicate with the vehicle operator and monitor on-board systems.	No	2	The transit vehicle shall use the route information and its current location to determine the deviation from the predetermined schedule.	Planned	No
Transit Provider Vehicles	Transit Vehicle OBE	Transit Vehicle Schedule Management	Transit Vehicle Schedule Management' monitors schedule performance and identifies corrective actions when a deviation is detected. It provides two-way communication between the transit vehicle and center, enabling the center to communicate with the vehicle operator and monitor on-board systems.	No	3	The transit vehicle shall calculate the estimated times of arrival (ETA) at transit stops.	Planned	No
Transit Provider Vehicles	Transit Vehicle OBE	Transit Vehicle Schedule Management	Transit Vehicle Schedule Management' monitors schedule performance and identifies corrective actions when a deviation is detected. It provides two-way communication between the transit vehicle and center, enabling the center to communicate with the vehicle operator and monitor on-board systems.	No	4	The transit vehicle shall determine scenarios to correct the schedule deviation.	Planned	No
Transit Provider Vehicles	Transit Vehicle OBE	Transit Vehicle Schedule Management	Transit Vehicle Schedule Management' monitors schedule performance and identifies corrective actions when a deviation is detected. It provides two-way communication between the transit vehicle and center, enabling the center to communicate with the vehicle operator and monitor on-board systems.	No	5	The transit vehicle shall provide the schedule deviations and instructions for schedule corrections to the transit vehicle operator if the deviation is small, or the transit vehicle is operating in an urban area.	Planned	No
Transit Provider Vehicles	Transit Vehicle OBE	Transit Vehicle Schedule Management	Transit Vehicle Schedule Management' monitors schedule performance and identifies corrective actions when a deviation is detected. It provides two-way communication between the transit vehicle and center, enabling the center to communicate with the vehicle operator and monitor on-board systems.	No	6	The transit vehicle shall send the schedule deviation and estimated arrival time information to the center.	Planned	No
Transit Providers - Public and Private	Archived Data User System			No				No
Transit Providers - Public and Private	Transit Management Center	Transit Center Data Collection	Transit Center Data Collection' collects and stores transit information that is collected in the course of transit operations performed by the Transit Management Center. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	1	The center shall collect transit management data such as transit fares and passenger use, transit services, paratransit operations, transit vehicle maintenance data, etc.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Transit Providers - Public and Private	Transit Management Center	Transit Center Data Collection	Transit Center Data Collection' collects and stores transit information that is collected in the course of transit operations performed by the Transit Management Center. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	2	The center shall assign quality control metrics and meta-data to be stored along with the data. Meta-data may include attributes that describe the source and quality of the data and the conditions surrounding the collection of the data.	Planned	No
Transit Providers - Public and Private	Transit Management Center	Transit Center Data Collection	Transit Center Data Collection' collects and stores transit information that is collected in the course of transit operations performed by the Transit Management Center. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	3	The center shall receive and respond to requests from ITS Archives for either a catalog of the transit data or for the data itself.	Planned	No
Transit Providers - Public and Private	Transit Management Center	Transit Center Fare Management	Transit Center Fare Management' manages fare collection and passenger load management at the transit center. It provides the back office functions that support transit fare collection, supporting payment reconciliation with links to financial institutions and enforcement agencies for fare violations. It collects data required to determine accurate ridership levels, establish fares, and distribute fare information. It loads fare data into the vehicle prior to the beginning of normal operations and unloads fare collection data from the vehicle at the close out of normal operations.	No	1	The center shall manage the actual value of transit fares for each segment of each regular transit route, including the transmission of the information to transit vehicles and transit stops or stations.	Planned	No
Transit Providers - Public and Private	Transit Management Center	Transit Center Fare Management	Transit Center Fare Management' manages fare collection and passenger load management at the transit center. It provides the back office functions that support transit fare collection, supporting payment reconciliation with links to financial institutions and enforcement agencies for fare violations. It collects data required to determine accurate ridership levels, establish fares, and distribute fare information. It loads fare data into the vehicle prior to the beginning of normal operations and unloads fare collection data from the vehicle at the close out of normal operations.	No	2	The center shall provide the capability for a system operator to manage the transit fares and control the exchange of transit fare information.	Planned	No
Transit Providers - Public and Private	Transit Management Center	Transit Center Fare Management	Transit Center Fare Management' manages fare collection and passenger load management at the transit center. It provides the back office functions that support transit fare collection, supporting payment reconciliation with links to financial institutions and enforcement agencies for fare violations. It collects data required to determine accurate ridership levels, establish fares, and distribute fare information. It loads fare data into the vehicle prior to the beginning of normal operations and unloads fare collection data from the vehicle at the close out of normal operations.	No	3	The center shall process the financial requests from the transit vehicles or roadside and manage an interface to a Financial Institution.	Planned	No

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Transit Providers - Public and Private	Transit Management Center	Transit Center Fare Management	Transit Center Fare Management' manages fare collection and passenger load management at the transit center. It provides the back office functions that support transit fare collection, supporting payment reconciliation with links to financial institutions and enforcement agencies for fare violations. It collects data required to determine accurate ridership levels, establish fares, and distribute fare information. It loads fare data into the vehicle prior to the beginning of normal operations and unloads fare collection data from the vehicle at the close out of normal operations.	No	4	The center shall support the payment of transit fare transactions using data provided by the traveler cards / payment instruments.	Planned	No
Transit Providers - Public and Private	Transit Management Center	Transit Center Fare Management	Transit Center Fare Management' manages fare collection and passenger load management at the transit center. It provides the back office functions that support transit fare collection, supporting payment reconciliation with links to financial institutions and enforcement agencies for fare violations. It collects data required to determine accurate ridership levels, establish fares, and distribute fare information. It loads fare data into the vehicle prior to the beginning of normal operations and unloads fare collection data from the vehicle at the close out of normal operations.	No	5	The center shall collect data on fare payment violations and send the data, including images of the violator, to the appropriate enforcement agency.	Planned	No
Transit Providers - Public and Private	Transit Management Center	Transit Center Fixed-Route Operations	Transit Center Fixed-Route Operations' manages fixed route transit operations. It supports creation of schedules, blocks and runs for fixed and flexible route transit services. It allows fixed-route and flexible-route transit services to disseminate schedules and automatically updates customer service operator systems with the most current schedule information. It also supports automated dispatch of transit vehicles. Current vehicle schedule adherence and optimum scenarios for schedule adjustment are also provided. It also receives and processes transit vehicle loading data.	No	1	The center shall generate transit routes and schedules based on such factors as parameters input by the system operator, road network conditions, incident information, operational data on current routes and schedules, and digitized map data.	Existing	No
Transit Providers - Public and Private	Transit Management Center	Transit Center Fixed-Route Operations	Transit Center Fixed-Route Operations' manages fixed route transit operations. It supports creation of schedules, blocks and runs for fixed and flexible route transit services. It allows fixed-route and flexible-route transit services to disseminate schedules and automatically updates customer service operator systems with the most current schedule information. It also supports automated dispatch of transit vehicles. Current vehicle schedule adherence and optimum scenarios for schedule adjustment are also provided. It also receives and processes transit vehicle loading data.	No	2	The center shall provide the interface to the system operator to control the generation of new routes and schedules (transit services) including the ability to review and update the parameters used by the routes and schedules generation processes and to initiate these processes	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Transit Providers - Public and Private	Transit Management Center	Transit Center Fixed-Route Operations	Transit Center Fixed-Route Operations' manages fixed route transit operations. It supports creation of schedules, blocks and runs for fixed and flexible route transit services. It allows fixed-route and flexible-route transit services to disseminate schedules and automatically updates customer service operator systems with the most current schedule information. It also supports automated dispatch of transit vehicles. Current vehicle schedule adherence and optimum scenarios for schedule adjustment are also provided. It also receives and processes transit vehicle loading data.	No	3	The center shall be able to generate special routes and schedules to support an incident, disaster, evacuation, or other emergency.	Planned	No
Transit Providers - Public and Private	Transit Management Center	Transit Center Fixed-Route Operations	Transit Center Fixed-Route Operations' manages fixed route transit operations. It supports creation of schedules, blocks and runs for fixed and flexible route transit services. It allows fixed-route and flexible-route transit services to disseminate schedules and automatically updates customer service operator systems with the most current schedule information. It also supports automated dispatch of transit vehicles. Current vehicle schedule adherence and optimum scenarios for schedule adjustment are also provided. It also receives and processes transit vehicle loading data.	No	4	The center shall dispatch fixed route or flexible route transit vehicles.	Planned	No
Transit Providers - Public and Private	Transit Management Center	Transit Center Fixed-Route Operations	Transit Center Fixed-Route Operations' manages fixed route transit operations. It supports creation of schedules, blocks and runs for fixed and flexible route transit services. It allows fixed-route and flexible-route transit services to disseminate schedules and automatically updates customer service operator systems with the most current schedule information. It also supports automated dispatch of transit vehicles. Current vehicle schedule adherence and optimum scenarios for schedule adjustment are also provided. It also receives and processes transit vehicle loading data.	No	5	The center shall collect transit operational data for use in the generation of routes and schedules.	Planned	No
Transit Providers - Public and Private	Transit Management Center	Transit Center Fixed-Route Operations	Transit Center Fixed-Route Operations' manages fixed route transit operations. It supports creation of schedules, blocks and runs for fixed and flexible route transit services. It allows fixed-route and flexible-route transit services to disseminate schedules and automatically updates customer service operator systems with the most current schedule information. It also supports automated dispatch of transit vehicles. Current vehicle schedule adherence and optimum scenarios for schedule adjustment are also provided. It also receives and processes transit vehicle loading data.	No	6	The center shall provide instructions or corrective actions to the transit vehicle operators based upon operational needs.	Planned	No

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Transit Providers - Public and Private	Transit Management Center	Transit Center Fixed-Route Operations	Transit Center Fixed-Route Operations' manages fixed route transit operations. It supports creation of schedules, blocks and runs for fixed and flexible route transit services. It allows fixed-route and flexible-route transit services to disseminate schedules and automatically updates customer service operator systems with the most current schedule information. It also supports automated dispatch of transit vehicles. Current vehicle schedule adherence and optimum scenarios for schedule adjustment are also provided. It also receives and processes transit vehicle loading data.	No	7	The center shall manage large deviations of individual transit vehicles, deviations in rural areas, and deviations of large numbers of vehicles.	Planned	No
Transit Providers - Public and Private	Transit Management Center	Transit Center Fixed-Route Operations	Transit Center Fixed-Route Operations' manages fixed route transit operations. It supports creation of schedules, blocks and runs for fixed and flexible route transit services. It allows fixed-route and flexible-route transit services to disseminate schedules and automatically updates customer service operator systems with the most current schedule information. It also supports automated dispatch of transit vehicles. Current vehicle schedule adherence and optimum scenarios for schedule adjustment are also provided. It also receives and processes transit vehicle loading data.	No	8	The center shall generate the necessary corrective actions which may involve more than the vehicles concerned and more far reaching action, such as, the introduction of extra vehicles, wide area signal priority by traffic management, the premature termination of some services, etc.	Planned	No
Transit Providers - Public and Private	Transit Management Center	Transit Center Fixed-Route Operations	Transit Center Fixed-Route Operations' manages fixed route transit operations. It supports creation of schedules, blocks and runs for fixed and flexible route transit services. It allows fixed-route and flexible-route transit services to disseminate schedules and automatically updates customer service operator systems with the most current schedule information. It also supports automated dispatch of transit vehicles. Current vehicle schedule adherence and optimum scenarios for schedule adjustment are also provided. It also receives and processes transit vehicle loading data.	No	9	The center shall exchange information with Maintenance and Construction Operations concerning work zones, roadway conditions, asset restrictions, work plans, etc.	Planned	No
Transit Providers - Public and Private	Transit Management Center	Transit Center Fixed-Route Operations	Transit Center Fixed-Route Operations' manages fixed route transit operations. It supports creation of schedules, blocks and runs for fixed and flexible route transit services. It allows fixed-route and flexible-route transit services to disseminate schedules and automatically updates customer service operator systems with the most current schedule information. It also supports automated dispatch of transit vehicles. Current vehicle schedule adherence and optimum scenarios for schedule adjustment are also provided. It also receives and processes transit vehicle loading data.	No	10	The center shall disseminate up-to-date schedules and route information to other centers for fixed and flexible route services.	Planned	No

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Transit Providers - Public and Private	Transit Management Center	Transit Center Fixed-Route Operations	Transit Center Fixed-Route Operations' manages fixed route transit operations. It supports creation of schedules, blocks and runs for fixed and flexible route transit services. It allows fixed-route and flexible-route transit services to disseminate schedules and automatically updates customer service operator systems with the most current schedule information. It also supports automated dispatch of transit vehicles. Current vehicle schedule adherence and optimum scenarios for schedule adjustment are also provided. It also receives and processes transit vehicle loading data.	No	11	The center shall provide an interface to the archive data repository to enable the operator to retrieve historical operating data for use in planning transit routes and schedules.	Planned	No
Transit Providers - Public and Private	Transit Management Center	Transit Center Passenger Counting	Transit Center Passenger Counting' receives and processes transit vehicle loading data using two-way communications from equipped transit vehicles.	No	1	The center shall collect passenger count information from each transit vehicle.	Planned	No
Transit Providers - Public and Private	Transit Management Center	Transit Center Passenger Counting	Transit Center Passenger Counting' receives and processes transit vehicle loading data using two-way communications from equipped transit vehicles.	No	2	The center shall calculate transit ridership data by route, route segment, transit stop, time of day, and day of week based on the collected passenger count information.	Planned	No
Transit Providers - Public and Private	Transit Management Center	Transit Center Passenger Counting	Transit Center Passenger Counting' receives and processes transit vehicle loading data using two-way communications from equipped transit vehicles.	No	3	The center shall make the compiled ridership data available to the system operator.	Planned	No
Transit Providers - Public and Private	Transit Management Center	Transit Center Security	Transit Center Security' monitors transit vehicle operator or traveler activated alarms received from on-board a transit vehicle. It supports transit vehicle operator authentication and provides the capability to remotely disable a transit vehicle. It also includes the capability to alert operators and police to potential incidents identified by these security features.	No	1	The center shall monitor transit vehicle operational data to determine if the transit vehicle is off-route and assess whether a security incident is occurring.	Planned	No
Transit Providers - Public and Private	Transit Management Center	Transit Center Security	Transit Center Security' monitors transit vehicle operator or traveler activated alarms received from on-board a transit vehicle. It supports transit vehicle operator authentication and provides the capability to remotely disable a transit vehicle. It also includes the capability to alert operators and police to potential incidents identified by these security features.	No	2	The center shall receive reports of emergencies on-board transit vehicles entered directly be the transit vehicle operator or from a traveler through interfaces such as panic buttons or alarm switches.	Planned	No
Transit Providers - Public and Private	Transit Management Center	Transit Center Security	Transit Center Security' monitors transit vehicle operator or traveler activated alarms received from on-board a transit vehicle. It supports transit vehicle operator authentication and provides the capability to remotely disable a transit vehicle. It also includes the capability to alert operators and police to potential incidents identified by these security features.	No	3	The center shall support the back-office portion of functionality to authenticate transit vehicle operators.	Planned	No

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Transit Providers - Public and Private	Transit Management Center	Transit Center Security	Transit Center Security' monitors transit vehicle operator or traveler activated alarms received from on-board a transit vehicle. It supports transit vehicle operator authentication and provides the capability to remotely disable a transit vehicle. It also includes the capability to alert operators and police to potential incidents identified by these security features.	No	4	The center shall provide transit incident information along with other service data to emergency centers.	Planned	No
Transit Providers - Public and Private	Transit Management Center	Transit Center Security	Transit Center Security' monitors transit vehicle operator or traveler activated alarms received from on-board a transit vehicle. It supports transit vehicle operator authentication and provides the capability to remotely disable a transit vehicle. It also includes the capability to alert operators and police to potential incidents identified by these security features.	No	5	The center shall receive information pertaining to a wide-area alert such as weather alerts, disaster situations, or child abductions. This information may come from Emergency Management or from other Alerting and Advisory Systems.	Planned	No
Transit Providers - Public and Private	Transit Management Center	Transit Center Security	Transit Center Security' monitors transit vehicle operator or traveler activated alarms received from on-board a transit vehicle. It supports transit vehicle operator authentication and provides the capability to remotely disable a transit vehicle. It also includes the capability to alert operators and police to potential incidents identified by these security features.	No	6	The center shall send wide-area alert information to travelers (on-board transit vehicles or at stations/stops) and transit vehicle operators.	Planned	No
Transit Providers - Public and Private	Transit Management Center	Transit Center Vehicle Assignment	Transit Center Vehicle Assignment' assigns individual transit vehicles to vehicle blocks and downloads this information to the transit vehicle. It also provides an exception handling process for the vehicle assignment function to generate new, supplemental vehicle assignments when required by changes during the operating day. It provides an inventory management function for the transit facility which stores functional attributes about each of the vehicles owned by the transit operator. These attributes permit the planning and assignment functions to match vehicles with routes based on suitability for the types of service required by the particular routes.	No	1	The center shall assign individual transit vehicles to transit blocks.	Planned	No

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Transit Providers - Public and Private	Transit Management Center	Transit Center Vehicle Assignment	Transit Center Vehicle Assignment' assigns individual transit vehicles to vehicle blocks and downloads this information to the transit vehicle. It also provides an exception handling process for the vehicle assignment function to generate new, supplemental vehicle assignments when required by changes during the operating day. It provides an inventory management function for the transit facility which stores functional attributes about each of the vehicles owned by the transit operator. These attributes permit the planning and assignment functions to match vehicles with routes based on suitability for the types of service required by the particular routes.	No	2	The center shall download vehicle assignments to the transit vehicle prior to the start of the day's operations.	Planned	No
Transit Providers - Public and Private	Transit Management Center	Transit Center Vehicle Assignment	Transit Center Vehicle Assignment' assigns individual transit vehicles to vehicle blocks and downloads this information to the transit vehicle. It also provides an exception handling process for the vehicle assignment function to generate new, supplemental vehicle assignments when required by changes during the operating day. It provides an inventory management function for the transit facility which stores functional attributes about each of the vehicles owned by the transit operator. These attributes permit the planning and assignment functions to match vehicles with routes based on suitability for the types of service required by the particular routes.	No	3	The center shall provide an exception handling process for the vehicle assignment function. This process shall generate new supplemental vehicle assignments as required due to change events which occur during the operating day.	Planned	No
Transit Providers - Public and Private	Transit Management Center	Transit Center Vehicle Tracking	Transit Center Vehicle Tracking' monitors transit vehicle location. The location information is collected via a data communication link between the transit vehicles and the transit center. The location information is presented to the transit operator on a digitized map of the transit service area. The location data may be used to determine real time schedule adherence and update the transit system's schedule in real-time. The real-time schedule information is disseminated to other information providers, which furnish the information to travelers.	No	1	The center shall monitor the locations of all transit vehicles within its network.	Planned	No
Transit Providers - Public and Private	Transit Management Center	Transit Center Vehicle Tracking	Transit Center Vehicle Tracking' monitors transit vehicle location. The location information is collected via a data communication link between the transit vehicles and the transit center. The location information is presented to the transit operator on a digitized map of the transit service area. The location data may be used to determine real time schedule adherence and update the transit system's schedule in real-time. The real-time schedule information is disseminated to other information providers, which furnish the information to travelers.	No	2	The center shall determine adherence of transit vehicles to their assigned schedule.	Planned	No

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Transit Providers - Public and Private	Transit Management Center	Transit Center Vehicle Tracking	Transit Center Vehicle Tracking' monitors transit vehicle location. The location information is collected via a data communication link between the transit vehicles and the transit center. The location information is presented to the transit operator on a digitized map of the transit service area. The location data may be used to determine real time schedule adherence and update the transit system's schedule in real-time. The real-time schedule information is disseminated to other information providers, which furnish the information to travelers.	No	3	The center shall provide transit operational data to traveler information service providers.	Planned	No
Transit Providers - Public and Private	Transit Management Center	Transit Center Vehicle Tracking	Transit Center Vehicle Tracking' monitors transit vehicle location. The location information is collected via a data communication link between the transit vehicles and the transit center. The location information is presented to the transit operator on a digitized map of the transit service area. The location data may be used to determine real time schedule adherence and update the transit system's schedule in real-time. The real-time schedule information is disseminated to other information providers, which furnish the information to travelers.	No	4	The center shall provide collected transit probe data to traffic management centers and traveler information service providers for use in measuring current traffic conditions.	Planned	No
Transit Providers - Public and Private	Transit Management Center	Transit Garage Maintenance	Transit Garage Maintenance' provides advanced maintenance functions for the transit property. It collects operational and maintenance data from transit vehicles, manages vehicle service histories, and monitors operators and vehicles. It collects vehicle mileage data and uses it to automatically generate preventative maintenance schedules for each vehicle by utilizing vehicle tracking data. In addition, it provides information to service personnel to support maintenance activities and records and verifies that maintenance work was performed.	No	1	The center shall collect operational and maintenance data from transit vehicles.	Planned	No
Transit Providers - Public and Private	Transit Management Center	Transit Garage Maintenance	Transit Garage Maintenance' provides advanced maintenance functions for the transit property. It collects operational and maintenance data from transit vehicles, manages vehicle service histories, and monitors operators and vehicles. It collects vehicle mileage data and uses it to automatically generate preventative maintenance schedules for each vehicle by utilizing vehicle tracking data. In addition, it provides information to service personnel to support maintenance activities and records and verifies that maintenance work was performed.	No	2	The center shall monitor the condition of a transit vehicle to analyze brake, drive train, sensors, fuel, steering, tire, processor, communications equipment, and transit vehicle mileage to identify mileage based maintenance, out-of-specification or imminent failure conditions.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Transit Providers - Public and Private	Transit Management Center	Transit Garage Maintenance	Transit Garage Maintenance' provides advanced maintenance functions for the transit property. It collects operational and maintenance data from transit vehicles, manages vehicle service histories, and monitors operators and vehicles. It collects vehicle mileage data and uses it to automatically generate preventative maintenance schedules for each vehicle by utilizing vehicle tracking data. In addition, it provides information to service personnel to support maintenance activities and records and verifies that maintenance work was performed.	No	3	The center shall generate transit vehicle maintenance schedules that identify the maintenance or repair to be performed and when the work is to be done.	Planned	No
Traveler Card-Smartcard	Payment Device			No				No
Traveler Card-Smartcard	Traveler Card			No				No
Travelers	Traveler			No				No
Tribal Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	1	The center shall collect data from centers.	Planned	No
Tribal Data Archive	Archived Data System	Archive Data Repository	Archive Data Repository' collects data and data catalogs from one or more data sources and stores the data in a focused repository that is suited to a particular set of ITS data users. It includes capabilities for performing quality checks on the incoming data, error notification, and archive to archive coordination. It supports a broad range of implementations, ranging from simple data marts that collect a focused set of data and serve a particular user community to large-scale data warehouses that collect, integrate, and summarize transportation data from multiple sources and serve a broad array of users within a region. Repositories may be established to support operations planning, performance monitoring and management, and policy and investment decisions.	No	2	The center shall collect data catalogs from one or more data sources. A catalog describes the data contained in the collection of archived data and may include descriptions of the schema or structure of the data, a description of the contents of the data; e.g., time range of entries, number of entries; or a sample of the data (e. g. a thumbnail).	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Tribal Data Archive	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	1	The center shall provide archive data to federal, state, and local government reporting systems.	Planned	No
Tribal Data Archive	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	2	The center shall respond to requests for government report data.	Planned	No
Tribal Data Archive	Archived Data System	Archive Government Reporting	Archive Government Reporting' selects and formats data residing in an ITS archive to facilitate local, state, and federal government data reporting requirements. It provides transportation system statistics and performance measures in required formats to support investment and policy decisions.	No	3	The center shall provide the capability to format data suitable for input into government reports.	Planned	No
Tribal Data Archive	Archived Data System	Archive Situation Data Archival	Archive Situation Data Archival' collects and archives traffic, roadway, and environmental information for use in off-line planning, research, and analysis. It controls and collects information directly from equipment at the roadside, reflecting the deployment of traffic detectors that are used primarily for traffic monitoring and planning purposes, rather than for traffic management. It also collects situation data from connected vehicles. The data collected, quality checks performed, and aggregation strategies are defined to support transportation system performance monitoring and management.	No	1	The center shall collect data from roadside devices.	Planned	No
Tribal Data User Systems	Archived Data User System			No				No
Tribal Fiber for Communications	Data Distribution System			No				No
Tribal ITS Field Equipment	ITS Roadway Equipment	Roadway Basic Surveillance	Roadway Basic Surveillance' monitors traffic conditions using fixed equipment such as loop detectors and CCTV cameras.	No	1	The field element shall collect, process, digitize, and send traffic sensor data (speed, volume, and occupancy) to the center for further analysis and storage, under center control.	Planned	No
Tribal ITS Field Equipment	ITS Roadway Equipment	Roadway Basic Surveillance	Roadway Basic Surveillance' monitors traffic conditions using fixed equipment such as loop detectors and CCTV cameras.	No	2	The field element shall collect, process, and send traffic images to the center for further analysis and distribution.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Tribal ITS Field Equipment	ITS Roadway Equipment	Roadway Basic Surveillance	Roadway Basic Surveillance' monitors traffic conditions using fixed equipment such as loop detectors and CCTV cameras.	No	3	The field element shall collect, digitize, and send multimodal crossing and high occupancy vehicle (HOV), and high occupancy toll (HOT) lane sensor data to the center for further analysis and storage.	Planned	No
Tribal ITS Field Equipment	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	1	The field element shall include surface and sub-surface environmental sensors that measure road surface temperature, moisture, icing, salinity, and other measures.	Planned	No
Tribal ITS Field Equipment	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	2	The field element shall include environmental sensors that measure weather conditions including temperature, wind, humidity, precipitation, and visibility.	Planned	No
Tribal ITS Field Equipment	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	3	The field element's environmental sensors shall be remotely controlled by a maintenance center.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Tribal ITS Field Equipment	ITS Roadway Equipment	Roadway Environmental Monitoring	Roadway Environmental Monitoring' measures environmental conditions and communicates the collected information back to a center where it can be monitored and analyzed or to other field devices to support communications to vehicles. A broad array of general weather and road surface information may be collected. Weather conditions that may be measured include temperature, wind, humidity, precipitation, and visibility. Surface and sub-surface sensors can measure road surface temperature, moisture, icing, salinity, and other measures.	No	4	The field element's environmental sensors shall be remotely controlled by a traffic management center.	Planned	No
Tribal ITS Field Equipment	ITS Roadway Equipment	Roadway Field Management Station Operation	Roadway Field Management Station Operation' supports direct communications between field management stations and the local field equipment under their control.	No	1	The field element shall accept configuration information from the center.	Planned	No
Tribal ITS Field Equipment	ITS Roadway Equipment	Roadway Field Management Station Operation	Roadway Field Management Station Operation' supports direct communications between field management stations and the local field equipment under their control.	No	2	The field element shall pass data provided by the center to local field devices and report data from the field devices back to the center.	Planned	No
Tribal ITS Field Equipment	ITS Roadway Equipment	Roadway Signal Control	Roadway Signal Control' includes the field elements that monitor and control signalized intersections. It includes the traffic signal controllers, detectors, conflict monitors, signal heads, and other ancillary equipment that supports traffic signal control. It also includes field masters, and equipment that supports communications with a central monitoring and/or control system, as applicable. The communications link supports upload and download of signal timings and other parameters and reporting of current intersection status. It represents the field equipment used in all levels of traffic signal control from basic actuated systems that operate on fixed timing plans through adaptive systems. It also supports all signalized intersection configurations, including those that accommodate pedestrians. In advanced, future implementations, environmental data may be monitored and used to support dilemma zone processing and other aspects of signal control that are sensitive to local environmental conditions.	No	1	The field element shall control traffic signals under center control.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Tribal ITS Field Equipment	ITS Roadway Equipment	Roadway Signal Control	Roadway Signal Control' includes the field elements that monitor and control signalized intersections. It includes the traffic signal controllers, detectors, conflict monitors, signal heads, and other ancillary equipment that supports traffic signal control. It also includes field masters, and equipment that supports communications with a central monitoring and/or control system, as applicable. The communications link supports upload and download of signal timings and other parameters and reporting of current intersection status. It represents the field equipment used in all levels of traffic signal control from basic actuated systems that operate on fixed timing plans through adaptive systems. It also supports all signalized intersection configurations, including those that accommodate pedestrians. In advanced, future implementations, environmental data may be monitored and used to support dilemma zone processing and other aspects of signal control that are sensitive to local environmental conditions.	No	2	The field element shall respond to pedestrian crossing requests by accommodating the pedestrian crossing.	Planned	No
Tribal ITS Field Equipment	ITS Roadway Equipment	Roadway Signal Control	Roadway Signal Control' includes the field elements that monitor and control signalized intersections. It includes the traffic signal controllers, detectors, conflict monitors, signal heads, and other ancillary equipment that supports traffic signal control. It also includes field masters, and equipment that supports communications with a central monitoring and/or control system, as applicable. The communications link supports upload and download of signal timings and other parameters and reporting of current intersection status. It represents the field equipment used in all levels of traffic signal control from basic actuated systems that operate on fixed timing plans through adaptive systems. It also supports all signalized intersection configurations, including those that accommodate pedestrians. In advanced, future implementations, environmental data may be monitored and used to support dilemma zone processing and other aspects of signal control that are sensitive to local environmental conditions.	No	3	The field element shall provide the capability to notify the traffic management center of pedestrian calls and pedestrian accommodations.	Planned	No
Tribal MCO Dispatch	Maint and Constr Management Center	MCM Data Collection	MCM Data Collection' collects and stores maintenance and construction information that is collected in the course of operations by the Maintenance and Construction Management Center. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	1	The center shall collect maintenance and construction data (such as field equipment status, infrastructure status, maintenance and construction activity data) gathered from roadway, traffic, and other maintenance and construction sources.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Tribal MCO Dispatch	Maint and Constr Management Center	MCM Data Collection	MCM Data Collection' collects and stores maintenance and construction information that is collected in the course of operations by the Maintenance and Construction Management Center. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	2	The center shall assign quality control metrics and meta-data to be stored along with the data. Meta-data may include attributes that describe the source and quality of the data and the conditions surrounding the collection of the data.	Planned	No
Tribal MCO Dispatch	Maint and Constr Management Center	MCM Data Collection	MCM Data Collection' collects and stores maintenance and construction information that is collected in the course of operations by the Maintenance and Construction Management Center. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	3	The center shall receive and respond to requests from ITS Archives for either a catalog of the maintenance and construction data or for the data itself.	Planned	No
Tribal MCO Dispatch	Maint and Constr Management Center	MCM Data Collection	MCM Data Collection' collects and stores maintenance and construction information that is collected in the course of operations by the Maintenance and Construction Management Center. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	4	The center shall be able to produce sample products of the data available.	Planned	No
Tribal MCO Dispatch	Maint and Constr Management Center	MCM Environmental Information Collection	MCM Environmental Information Collection' collects current road and weather conditions using data collected from environmental sensors deployed on and about the roadway. In addition to fixed sensor stations at the roadside, this functional object also collects environmental information from sensor systems located on Maintenance and Construction Vehicles. It also collects current and forecast environmental conditions information that is made available by other systems. The functional object aggregates the sensor system data and provides it, along with data attributes to other applications.	No	1	The center shall remotely control environmental sensors that measure road surface temperature, moisture, icing, salinity, and other measures.	Planned	No
Tribal MCO Dispatch	Maint and Constr Management Center	MCM Environmental Information Collection	MCM Environmental Information Collection' collects current road and weather conditions using data collected from environmental sensors deployed on and about the roadway. In addition to fixed sensor stations at the roadside, this functional object also collects environmental information from sensor systems located on Maintenance and Construction Vehicles. It also collects current and forecast environmental conditions information that is made available by other systems. The functional object aggregates the sensor system data and provides it, along with data attributes to other applications.	No	2	The center shall remotely control environmental sensors that measure weather conditions including temperature, wind, humidity, precipitation, and visibility.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Tribal MCO Dispatch	Maint and Constr Management Center	MCM Environmental Information Collection	MCM Environmental Information Collection' collects current road and weather conditions using data collected from environmental sensors deployed on and about the roadway. In addition to fixed sensor stations at the roadside, this functional object also collects environmental information from sensor systems located on Maintenance and Construction Vehicles. It also collects current and forecast environmental conditions information that is made available by other systems. The functional object aggregates the sensor system data and provides it, along with data attributes to other applications.	No	3	The center shall remotely control environmental sensors on-board maintenance and construction vehicles that measure road and weather conditions including air and surface temperatures, wind speed, humidity, precipitation, visibility and other measures.	Planned	No
Tribal MCO Dispatch	Maint and Constr Management Center	MCM Environmental Information Collection	MCM Environmental Information Collection' collects current road and weather conditions using data collected from environmental sensors deployed on and about the roadway. In addition to fixed sensor stations at the roadside, this functional object also collects environmental information from sensor systems located on Maintenance and Construction Vehicles. It also collects current and forecast environmental conditions information that is made available by other systems. The functional object aggregates the sensor system data and provides it, along with data attributes to other applications.	No	4	The center shall collect environmental probe data (air temperature, exterior light status, wiper status, traction control status, etc.) from short range communications equipment that communicates with appropriately equipped probe vehicles.	Planned	No
Tribal MCO Dispatch	Maint and Constr Management Center	MCM Environmental Information Collection	MCM Environmental Information Collection' collects current road and weather conditions using data collected from environmental sensors deployed on and about the roadway. In addition to fixed sensor stations at the roadside, this functional object also collects environmental information from sensor systems located on Maintenance and Construction Vehicles. It also collects current and forecast environmental conditions information that is made available by other systems. The functional object aggregates the sensor system data and provides it, along with data attributes to other applications.	No	5	The center shall assimilate current and forecast road conditions and surface weather information using a combination of weather service provider information (such as the National Weather Service and value-added sector specific meteorological services), data from traffic and traveler information providers, and environmental data collected from sensors deployed on and about the roadway as well as the fleet of maintenance and construction vehicles and the broader population of vehicle probes.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Tribal MCO Dispatch	Maint and Constr Management Center	MCM Environmental Information Collection	MCM Environmental Information Collection' collects current road and weather conditions using data collected from environmental sensors deployed on and about the roadway. In addition to fixed sensor stations at the roadside, this functional object also collects environmental information from sensor systems located on Maintenance and Construction Vehicles. It also collects current and forecast environmental conditions information that is made available by other systems. The functional object aggregates the sensor system data and provides it, along with data attributes to other applications.	No	6	The center shall provide weather and road condition information to weather service providers and center personnel.	Planned	No
Tribal MCO Dispatch	Maint and Constr Management Center	MCM Environmental Information Collection	MCM Environmental Information Collection' collects current road and weather conditions using data collected from environmental sensors deployed on and about the roadway. In addition to fixed sensor stations at the roadside, this functional object also collects environmental information from sensor systems located on Maintenance and Construction Vehicles. It also collects current and forecast environmental conditions information that is made available by other systems. The functional object aggregates the sensor system data and provides it, along with data attributes to other applications.	No	7	The center shall respond to control data from center personnel regarding environmental sensor control and weather data collection and processing.	Planned	No
Tribal MCO Dispatch	Maint and Constr Management Center	MCM Environmental Information Collection	MCM Environmental Information Collection' collects current road and weather conditions using data collected from environmental sensors deployed on and about the roadway. In addition to fixed sensor stations at the roadside, this functional object also collects environmental information from sensor systems located on Maintenance and Construction Vehicles. It also collects current and forecast environmental conditions information that is made available by other systems. The functional object aggregates the sensor system data and provides it, along with data attributes to other applications.	No	8	The center shall collect operational status for the roadside and vehicle-based environmental sensor equipment.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Tribal MCO Dispatch	Maint and Constr Management Center	MCM Environmental Information Collection	MCM Environmental Information Collection' collects current road and weather conditions using data collected from environmental sensors deployed on and about the roadway. In addition to fixed sensor stations at the roadside, this functional object also collects environmental information from sensor systems located on Maintenance and Construction Vehicles. It also collects current and forecast environmental conditions information that is made available by other systems. The functional object aggregates the sensor system data and provides it, along with data attributes to other applications.	No	9	The center shall collect fault data for the roadside and vehicle-based environmental sensor equipment for repair.	Planned	No
Tribal MCO Dispatch	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	1	The center shall maintain an interface with asset management systems to track the inventory, restrictions, repair needs and status updates of transportation assets (pavement, bridges, signs, etc.) including location, installation and materials information, vendor/contractor, current maintenance status, standard height, width, and weight restrictions.	Planned	No
Tribal MCO Dispatch	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	2	The center shall respond to requests from emergency management and traffic management centers for hazard removal, field equipment repair, and other roadway maintenance.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Tribal MCO Dispatch	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	3	The center shall exchange information with administrative systems to support the planning and scheduling of maintenance activities. This information includes: equipment and consumables resupply purchase request status, personnel qualifications including training and special certifications, environmental regulations and rules that may impact maintenance activities, and requests and project requirements from contract administration.	Planned	No
Tribal MCO Dispatch	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	4	The center shall provide emergency management and traffic management centers with information about scheduled maintenance and construction work activities including anticipated closures and impact to the roadway, alternate routes, anticipated delays, closure times, and durations.	Planned	No
Tribal MCO Dispatch	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	5	The center shall collect the status and fault data from roadside equipment, such as traffic, infrastructure, and environmental sensors, highway advisory radio and dynamic message signs, automated roadway treatment systems, barrier and safeguard systems, cameras, traffic signals and override equipment, ramp meters, short range communications equipment, security sensors and surveillance equipment, etc., and provide a cohesive view of equipment repair needs.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Tribal MCO Dispatch	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	6	The center shall collect the status and fault data from the centers that operate the equipment, including data for traffic, infrastructure, and environmental sensors, highway advisory radio and dynamic message signs, automated roadway treatment systems, barrier and safeguard systems, cameras, traffic signals and override equipment, ramp meters, short range communications equipment, security sensors and surveillance equipment, etc., and provide a cohesive view of equipment repair needs.	Planned	No
Tribal MCO Dispatch	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	8	The center shall collect current and forecast traffic and weather information from traffic management centers and weather service providers (such as the National Weather Service and value-added sector specific meteorological services).	Planned	No
Tribal MCO Dispatch	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	9	The center shall dispatch and route maintenance and construction vehicle drivers and support them with route-specific environmental, incident, advisory, threat, alert, and traffic congestion information.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Tribal MCO Dispatch	Maint and Constr Management Center	MCM Roadway Maintenance	MCM Roadway Maintenance' provides overall management and support for routine maintenance on a roadway system or right-of-way. Services managed include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of non-ITS equipment on the roadway (e.g., signs, gantries, cabinets, guard rails, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling routine maintenance activities. See also MCM Field Equipment Maintenance for maintenance of ITS field equipment.	No	10	The center shall manage an interface with center personnel to accept vehicle systems control information and remotely control maintenance and construction vehicle on-board equipment.	Planned	No
Tribal MCO Vehicles	Basic Maint and Constr Vehicle			No				No
Tribal MCO Vehicles	Maint and Constr Vehicle OBE			No				No
Tribal Police and Fire Vehicles	Emergency Vehicle OBE			No				No
Tribal Public Safety Dispatch	Emergency Management Center	Emergency Data Collection	Emergency Data Collection' collects and stores emergency information that is collected in the course of operations by the Emergency Management Center. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	1	The center shall collect emergency service data, emergency vehicle management data, emergency vehicle data, sensor and surveillance data, threat data, and incident data.	Planned	No
Tribal Public Safety Dispatch	Emergency Management Center	Emergency Data Collection	Emergency Data Collection' collects and stores emergency information that is collected in the course of operations by the Emergency Management Center. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	2	The center shall assign quality control metrics and meta-data to be stored along with the data. Meta-data may include attributes that describe the source and quality of the data and the conditions surrounding the collection of the data.	Planned	No
Tribal Public Safety Dispatch	Emergency Management Center	Emergency Data Collection	Emergency Data Collection' collects and stores emergency information that is collected in the course of operations by the Emergency Management Center. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	3	The center shall receive and respond to requests from ITS Archives for either a catalog of the emergency management data or for the data itself.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Tribal Public Safety Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Planned	No
Tribal Public Safety Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	5	The center shall provide the capability to correlate alerts and advisories, incident information, and security sensor and surveillance data.	Planned	No
Tribal Public Safety Dispatch	Emergency Management Center	Emergency Environmental Monitoring	Emergency Environmental Monitoring' collects current and forecast road conditions and surface weather information from a variety of sources. The collected environmental information is monitored and presented to the operator and used to more effectively manage incidents.	No	1	The center shall collect current and forecast road and weather information from weather service providers (such as the National Weather Service and value-added sector specific meteorological services).	Planned	No
Tribal Public Safety Dispatch	Emergency Management Center	Emergency Environmental Monitoring	Emergency Environmental Monitoring' collects current and forecast road conditions and surface weather information from a variety of sources. The collected environmental information is monitored and presented to the operator and used to more effectively manage incidents.	No	3	The center shall collect asset restrictions information from roadway maintenance operations.	Planned	No
Tribal Public Safety Dispatch	Emergency Management Center	Emergency Environmental Monitoring	Emergency Environmental Monitoring' collects current and forecast road conditions and surface weather information from a variety of sources. The collected environmental information is monitored and presented to the operator and used to more effectively manage incidents.	No	4	The center shall assimilate current and forecast road conditions and surface weather information to support incident management.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Tribal Public Safety Dispatch	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	1	The center shall manage inter-agency coordination of evacuation operations, from initial planning through the evacuation process and reentry.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Tribal Public Safety Dispatch	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Tribal Public Safety Dispatch	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	3	The center shall provide an interface to the emergency system operator to enter evacuation plans and procedures and present the operator with other agencies' plans.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Tribal Public Safety Dispatch	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	4	The center shall coordinate evacuation destinations and shelter needs with shelter providers (e.g., the American Red Cross) in the region.	Planned	No
Tribal Public Safety Dispatch	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Tribal Public Safety Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Planned	No
Tribal Public Safety Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Tribal Public Safety Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Planned	No
Tribal TMC-TOC-TIC	Traffic Management Center			No				No
Tribal TMC-TOC-TIC	Transportation Information Center			No				No
Tribal Transit Centers	Transit Management Center			No				No
Tribal Transit Vehicles	Basic Transit Vehicle			No				No
Tribal Transit Vehicles	Transit Vehicle OBE			No				No
US Border Patrol Dispatch	Emergency Management Center			No				No
US Border Patrol Dispatch	Enforcement Center			No				No
US Border Patrol Vehicles	Emergency Vehicle OBE			No				No
US VISIT System	Border Inspection System			No				No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Utah State Police Dispatch	Emergency Management Center	Emergency Dispatch	Emergency Dispatch' tracks the location and status of emergency vehicles and dispatches these vehicles to incidents. Pertinent incident information is gathered from the public and other public safety agencies and relayed to the responding units. Incident status and the status of the responding units is tracked so that additional units can be dispatched and/or unit status can be returned to available when the incident is cleared and closed.	No	1	The center shall dispatch emergency vehicles to respond to verified emergencies under center personnel control.	Planned	No
Utah State Police Dispatch	Emergency Management Center	Emergency Dispatch	Emergency Dispatch' tracks the location and status of emergency vehicles and dispatches these vehicles to incidents. Pertinent incident information is gathered from the public and other public safety agencies and relayed to the responding units. Incident status and the status of the responding units is tracked so that additional units can be dispatched and/or unit status can be returned to available when the incident is cleared and closed.	No	2	The center shall store the current status of all emergency vehicles available for dispatch and those that have been dispatched.	Planned	No
Utah State Police Dispatch	Emergency Management Center	Emergency Dispatch	Emergency Dispatch' tracks the location and status of emergency vehicles and dispatches these vehicles to incidents. Pertinent incident information is gathered from the public and other public safety agencies and relayed to the responding units. Incident status and the status of the responding units is tracked so that additional units can be dispatched and/or unit status can be returned to available when the incident is cleared and closed.	No	3	The center shall relay location and incident details to the responding vehicles.	Planned	No
Utah State Police Dispatch	Emergency Management Center	Emergency Dispatch	Emergency Dispatch' tracks the location and status of emergency vehicles and dispatches these vehicles to incidents. Pertinent incident information is gathered from the public and other public safety agencies and relayed to the responding units. Incident status and the status of the responding units is tracked so that additional units can be dispatched and/or unit status can be returned to available when the incident is cleared and closed.	No	4	The center shall track the location and status of emergency vehicles responding to an emergency based on information from the emergency vehicle.	Planned	No
Utah State Police Dispatch	Emergency Management Center	Emergency Dispatch	Emergency Dispatch' tracks the location and status of emergency vehicles and dispatches these vehicles to incidents. Pertinent incident information is gathered from the public and other public safety agencies and relayed to the responding units. Incident status and the status of the responding units is tracked so that additional units can be dispatched and/or unit status can be returned to available when the incident is cleared and closed.	No	5	The center shall store and maintain the emergency service responses in an action log.	Planned	No

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Utah State Police Dispatch	Emergency Management Center	Emergency Dispatch	Emergency Dispatch' tracks the location and status of emergency vehicles and dispatches these vehicles to incidents. Pertinent incident information is gathered from the public and other public safety agencies and relayed to the responding units. Incident status and the status of the responding units is tracked so that additional units can be dispatched and/or unit status can be returned to available when the incident is cleared and closed.	No	6	The center shall coordinate response to incidents with other Emergency Management centers to ensure appropriate resources are dispatched and utilized.	Planned	No
Utah State Police Dispatch	Emergency Management Center	Emergency Dispatch	Emergency Dispatch' tracks the location and status of emergency vehicles and dispatches these vehicles to incidents. Pertinent incident information is gathered from the public and other public safety agencies and relayed to the responding units. Incident status and the status of the responding units is tracked so that additional units can be dispatched and/or unit status can be returned to available when the incident is cleared and closed.	No	7	The center shall receive traffic images to support dispatch of emergency vehicles.	Planned	No
Utah State Police Dispatch	Emergency Management Center	Emergency Dispatch	Emergency Dispatch' tracks the location and status of emergency vehicles and dispatches these vehicles to incidents. Pertinent incident information is gathered from the public and other public safety agencies and relayed to the responding units. Incident status and the status of the responding units is tracked so that additional units can be dispatched and/or unit status can be returned to available when the incident is cleared and closed.	No	8	The center shall provide the capability to request remote control of traffic surveillance devices.	Planned	No
Utah State Police Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Planned	No
Utah State Police Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	2	The center shall receive incident information from other transportation management centers to support the early warning system.	Planned	No

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Utah State Police Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	5	The center shall provide the capability to correlate alerts and advisories, incident information, and security sensor and surveillance data.	Planned	No
Utah State Police Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	6	The center shall broadcast wide-area alerts and advisories to traffic management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned	No
Utah State Police Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	7	The center shall broadcast wide-area alerts and advisories to transit management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned	No
Utah State Police Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	8	The center shall broadcast wide-area alerts and advisories to toll administration centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned	No
Utah State Police Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	9	The center shall broadcast wide-area alerts and advisories to traveler information service providers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned	No

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Utah State Police Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	10	The center shall broadcast wide-area alerts and advisories to maintenance centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned	No
Utah State Police Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	12	The center shall broadcast wide-area alerts and advisories to commercial vehicle administration centers and roadside check facilities for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned	No
Utah State Police Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	13	The center shall process status information from each of the centers that have been sent the wide-area alert.	Planned	No
Utah State Police Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	14	The center shall coordinate the broadcast of wide-area alerts and advisories with other emergency management centers.	Planned	No
Utah State Police Dispatch	Emergency Management Center	Emergency Early Warning System	Emergency Early Warning System' monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies and uses this information to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to initiate the emergency response, including public notification using ITS traveler information systems, where appropriate.	No	15	The center shall present the alert and advisory information and the status of the actions taken in response to the alert by the other centers to the emergency system operator as received from other system inputs.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Utah State Police Dispatch	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	1	The center shall manage inter-agency coordination of evacuation operations, from initial planning through the evacuation process and reentry.	Planned	No

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Utah State Police Dispatch	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Planned	No

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Utah State Police Dispatch	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	3	The center shall provide an interface to the emergency system operator to enter evacuation plans and procedures and present the operator with other agencies' plans.	Planned	No

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Utah State Police Dispatch	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	4	The center shall coordinate evacuation destinations and shelter needs with shelter providers (e.g., the American Red Cross) in the region.	Planned	No

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Utah State Police Dispatch	Emergency Management Center	Emergency Evacuation Support	Emergency Evacuation Support' coordinates evacuation plans among allied agencies and manages evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety. Where appropriate, the affected population is evacuated in shifts, using more than one evacuation route, and including several evacuation destinations to spread demand and thereby expedite the evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. The public is provided with real-time evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times. The evacuation and reentry status are monitored and used to refine the plan and resource allocations during the evacuation and subsequent reentry. It communicates with public health systems to develop evacuation plans and recommended strategies for disasters and evacuation scenarios involving biological or other medical hazards.	No	5	The center shall provide evacuation information to traffic, transit, maintenance and construction, rail operations, and other emergency management centers as needed.	Planned	No
Utah State Police Dispatch	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	1	The center shall provide tactical decision support, resource coordination, and communications integration for first responders to support local management of an incident.	Planned	No

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Utah State Police Dispatch	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Planned	No
Utah State Police Dispatch	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	3	The center shall track and maintain resource information and action plans pertaining to the incident command.	Planned	No

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Utah State Police Dispatch	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	4	The center shall share incident command information with other public safety agencies including resource deployment status, hazardous material information, rail incident information, evacuation advice as well as traffic, road, and weather conditions.	Planned	No
Utah State Police Dispatch	Emergency Management Center	Emergency Incident Command	Emergency Incident Command' provides tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders at or near the incident scene to support local management of an incident. It supports communications with public safety, emergency management, transportation, and other allied response agency centers, tracks and maintains resource information, action plans, and the incident command organization itself. Information is shared with agency centers including resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response. It supports the functions and interfaces commonly supported by a mobile command center.	No	5	The center shall assess the status of responding emergency vehicles as part of an incident command.	Planned	No

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Utah State Police Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Planned	No
Utah State Police Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Planned	No

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Utah State Police Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Planned	No
Utah State Police Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Utah State Police Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	5	The center shall track the availability of resources and coordinate resource sharing with allied agency centers including traffic, maintenance, or other emergency centers.	Planned	No
Utah State Police Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	6	The center shall allocate the appropriate emergency services, resources, and vehicle (s) to respond to incidents, and shall provide the capability to override the current allocation to suit the special needs of a current incident.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Utah State Police Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	7	The center shall receive event scheduling information from Event Promoters.	Planned	No
Utah State Police Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	8	The center shall support remote control of field equipment normally under control of the traffic management center including traffic signals, dynamic message signs, gates, and barriers.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Utah State Police Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	9	The center shall provide the capability to remotely control and monitor CCTV systems normally operated by a traffic management center.	Planned	No
Utah State Police Dispatch	Emergency Management Center	Emergency Response Management	Emergency Response Management' provides the strategic emergency response capabilities and broad inter-agency interfaces that are implemented for extraordinary incidents and disasters that require response from outside the local community. It provides the functional capabilities and interfaces commonly associated with Emergency Operations Centers. It develops and stores emergency response plans and manages overall coordinated response to emergencies. It monitors real-time information on the state of the regional transportation system including current traffic and road conditions, weather conditions, special event and incident information. It tracks the availability of resources and assists in the appropriate allocation of these resources for a particular emergency response. It also provides coordination between multiple allied agencies before and during emergencies to implement emergency response plans and track progress through the incident. It also coordinates with the public through the Emergency Telecommunication Systems (e.g., Reverse 911). It coordinates with public health systems to provide the most appropriate response for emergencies involving biological or other medical hazards.	No	10	The center shall provide the capability to request transit resource availability from transit centers for use during disaster and evacuation operations.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Utah Statewide TMC	Other Traffic Management Centers			No				No
Vehicle GPS and Time Data	Vehicle Location and Time Data Source			No				No
Wide Area Alerting Systems	Alerting and Advisory System			No				No
Wide Area Alerting Systems	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	1	The center shall collect, process, and store traffic and highway condition information, including incident information, detours and road closures, event information, recommended routes, and current speeds on specific routes.	Planned	No
Wide Area Alerting Systems	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	3	The center shall collect, process, and store maintenance and construction information, including scheduled maintenance and construction work activities and work zone activities.	Planned	No
Wide Area Alerting Systems	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	4	The center shall collect, process, and store transit routes and schedules, transit transfer options, transit fares, and real-time schedule adherence information.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Wide Area Alerting Systems	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	5	The center shall collect, process, and store parking information, including location, availability, and fees.	Planned	No
Wide Area Alerting Systems	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	6	The center shall collect, process, and store toll fee information.	Planned	No
Wide Area Alerting Systems	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	7	The center shall collect, process, and store current and forecast road conditions and surface weather conditions.	Planned	No

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Wide Area Alerting Systems	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	8	The center shall collect, process, and store event information.	Planned	No
Wide Area Alerting Systems	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	9	The center shall collect, process, and store air quality information.	Planned	No
Wide Area Alerting Systems	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	11	The center shall collect, process, and store border crossing information.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Wide Area Alerting Systems	Transportation Information Center	TIC Emergency Traveler Information	TIC Emergency Traveler Information' provides emergency information to the public, including wide-area alerts and evacuation information. It provides emergency alerts, information on evacuation zones and evacuation requirements, evacuation destinations and shelter information, available transportation modes, and traffic and road conditions at the origin, destination, and along the evacuation routes. In addition to general evacuation information, personalized information including tailored evacuation routes, service information, and estimated travel times is also provided based on traveler specified origin, destination, and route parameters. Updated information is provided throughout the evacuation and subsequent reentry as status changes and plans are adapted.	No	1	The center shall disseminate emergency evacuation information to the traveler interface systems, including evacuation zones, shelter information, available transportation modes, road closures and detours, changes to transit services, and traffic and road conditions at the origin, destination, and along the evacuation routes.	Planned	No
Wide Area Alerting Systems	Transportation Information Center	TIC Emergency Traveler Information	TIC Emergency Traveler Information' provides emergency information to the public, including wide-area alerts and evacuation information. It provides emergency alerts, information on evacuation zones and evacuation requirements, evacuation destinations and shelter information, available transportation modes, and traffic and road conditions at the origin, destination, and along the evacuation routes. In addition to general evacuation information, personalized information including tailored evacuation routes, service information, and estimated travel times is also provided based on traveler specified origin, destination, and route parameters. Updated information is provided throughout the evacuation and subsequent reentry as status changes and plans are adapted.	No	2	The center shall provide evacuation information to shelter providers.	Planned	No
Wide Area Alerting Systems	Transportation Information Center	TIC Emergency Traveler Information	TIC Emergency Traveler Information' provides emergency information to the public, including wide-area alerts and evacuation information. It provides emergency alerts, information on evacuation zones and evacuation requirements, evacuation destinations and shelter information, available transportation modes, and traffic and road conditions at the origin, destination, and along the evacuation routes. In addition to general evacuation information, personalized information including tailored evacuation routes, service information, and estimated travel times is also provided based on traveler specified origin, destination, and route parameters. Updated information is provided throughout the evacuation and subsequent reentry as status changes and plans are adapted.	No	3	The center shall disseminate wide-area alert information to the traveler interface systems, including major emergencies such as a natural or man-made disaster, civil emergency, child abductions, severe weather watches and warnings, military activities, and law enforcement warnings.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Wide Area Alerting Systems	Transportation Information Center	TIC Emergency Traveler Information	TIC Emergency Traveler Information' provides emergency information to the public, including wide-area alerts and evacuation information. It provides emergency alerts, information on evacuation zones and evacuation requirements, evacuation destinations and shelter information, available transportation modes, and traffic and road conditions at the origin, destination, and along the evacuation routes. In addition to general evacuation information, personalized information including tailored evacuation routes, service information, and estimated travel times is also provided based on traveler specified origin, destination, and route parameters. Updated information is provided throughout the evacuation and subsequent reentry as status changes and plans are adapted.	No	4	The center shall provide the capability for a system operator to control the type and update frequency of emergency and wide-area alert information distributed to travelers.	Planned	No
Wide Area Alerting Systems	Transportation Information Center	TIC Operations Data Collection	TIC Operations Data Collection' collects and stores information that is collected about the transportation information service including data on the number of clients serviced and the services that were provided. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	1	The center shall collect traveler information data, such as parking lot data, rideshare data, road network use data, vehicle probe data, and other data from traveler information system operations.	Planned	No
Wide Area Alerting Systems	Transportation Information Center	TIC Operations Data Collection	TIC Operations Data Collection' collects and stores information that is collected about the transportation information service including data on the number of clients serviced and the services that were provided. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	2	The center shall collect traveler requests, confirmations, and payment transaction data for traveler services provided.	Planned	No
Wide Area Alerting Systems	Transportation Information Center	TIC Operations Data Collection	TIC Operations Data Collection' collects and stores information that is collected about the transportation information service including data on the number of clients serviced and the services that were provided. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	3	The center shall assign quality control metrics and meta-data to be stored along with the data. Meta-data may include attributes that describe the source and quality of the data and the conditions surrounding the collection of the data.	Planned	No
Wide Area Alerting Systems	Transportation Information Center	TIC Operations Data Collection	TIC Operations Data Collection' collects and stores information that is collected about the transportation information service including data on the number of clients serviced and the services that were provided. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	4	The center shall receive and respond to requests from ITS Archives for either a catalog of the traveler information data or for the data itself.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Wide Area Alerting Systems	Transportation Information Center	TIC Operations Data Collection	TIC Operations Data Collection' collects and stores information that is collected about the transportation information service including data on the number of clients serviced and the services that were provided. This data can be used directly by operations personnel or it can be made available to other data users and archives in the region.	No	5	The center shall be able to produce sample products of the data available.	Planned	No
Wide Area Alerting Systems	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No	1	The center shall provide the capability to process voice-formatted requests for traveler information from a traveler telephone information system, and return the information in the requested format.	Planned	No
Wide Area Alerting Systems	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No	2	The center shall provide the capability to process dual-tone multifrequency (DTMF)-based requests (touch-tone) for traveler information from a traveler telephone information system.	Planned	No
Wide Area Alerting Systems	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No	3	The center shall provide the capability to process traveler information requests from a traveler telephone information system.	Planned	No

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Wide Area Alerting Systems	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No	4	The center shall provide information on traffic conditions in the requested voice format and for the requested location.	Planned	No
Wide Area Alerting Systems	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No	5	The center shall provide work zone and roadway maintenance information in the requested voice format and for the requested location.	Planned	No
Wide Area Alerting Systems	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No	6	The center shall provide roadway environment conditions information in the requested voice format and for the requested location.	Planned	No
Wide Area Alerting Systems	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No	7	The center shall provide weather and event information in the requested voice format and for the requested location.	Planned	No

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Wide Area Alerting Systems	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No	8	The center shall provide transit service information in the requested voice format and for the requested location.	Planned	No
Wide Area Alerting Systems	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No	9	The center shall provide current ferry and rail schedule and airport status information in the requested voice format and for the requested location.	Planned	No
Wide Area Alerting Systems	Transportation Information Center	TIC Traveler Telephone Information	TIC Traveler Telephone Information' services voice-based traveler requests for information that supports traveler telephone information systems like 511. It takes requests for traveler information, which could be voice-formatted traveler requests, dual-tone multi-frequency (DTMF)-based requests, or a simple traveler information request, and returns the requested traveler information in the proper format. In addition to servicing requests for traveler information, it also collects and forwards alerts and advisories to traveler telephone information systems.	No	10	The center shall provide the capability to support both specific caller requests as well as bulk upload of regional traveler information.	Planned	No
YCAT Buses	Basic Transit Vehicle			No				No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle On-Board Fare Management	Transit Vehicle On-board Fare Management' supports fare collection using a standard fare card or other non-monetary fare medium and detects payment violations. Collected fare data are made available to the center.	No	1	The transit vehicle shall read data from the traveler card / payment instrument presented by boarding passengers.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle On-Board Fare Management	Transit Vehicle On-board Fare Management' supports fare collection using a standard fare card or other non-monetary fare medium and detects payment violations. Collected fare data are made available to the center.	No	2	The transit vehicle shall provide an image of all travelers which shall be used for violation processing of those who do not have a traveler card / payment instrument or whose transit fare transaction fails.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle On-Board Fare Management	Transit Vehicle On-board Fare Management' supports fare collection using a standard fare card or other non-monetary fare medium and detects payment violations. Collected fare data are made available to the center.	No	3	The transit vehicle shall determine the traveler's travel routing based on the transit vehicle's current location and the traveler's destination.	Planned	No

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YCAT Buses	Transit Vehicle OBE	Transit Vehicle On-Board Fare Management	Transit Vehicle On-board Fare Management' supports fare collection using a standard fare card or other non-monetary fare medium and detects payment violations. Collected fare data are made available to the center.	No	4	The transit vehicle shall calculate the traveler's fare based on the origin and destination provided by the traveler as well as factors such as the transit routing, transit fare category, traveler history, and route-specific information.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle On-Board Fare Management	Transit Vehicle On-board Fare Management' supports fare collection using a standard fare card or other non-monetary fare medium and detects payment violations. Collected fare data are made available to the center.	No	5	The transit vehicle shall have access to the complete range of transit services (routes and schedules) that are available to the traveler.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle On-Board Fare Management	Transit Vehicle On-board Fare Management' supports fare collection using a standard fare card or other non-monetary fare medium and detects payment violations. Collected fare data are made available to the center.	No	6	The transit vehicle shall provide a transit fare payment interface that is suitable for travelers with physical disabilities.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle On-Board Fare Management	Transit Vehicle On-board Fare Management' supports fare collection using a standard fare card or other non-monetary fare medium and detects payment violations. Collected fare data are made available to the center.	No	7	The transit vehicle shall include a database on-board the transit vehicle for use in fare processing from which the fares for all possible trips within the transit operational network can be determined.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle On-Board Fare Management	Transit Vehicle On-board Fare Management' supports fare collection using a standard fare card or other non-monetary fare medium and detects payment violations. Collected fare data are made available to the center.	No	8	The transit vehicle shall support the support advanced payments for tolls, and/or parking lot charges, and/or transit fares via the traveler card / payment instrument.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle On-Board Fare Management	Transit Vehicle On-board Fare Management' supports fare collection using a standard fare card or other non-monetary fare medium and detects payment violations. Collected fare data are made available to the center.	No	9	The transit vehicle shall provide fare statistics data to the center.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle On-Board Information Services	Transit Vehicle On-board Information Services' furnishes en-route transit users with real-time travel-related information on-board a transit vehicle. Current information that can be provided to transit users includes transit routes, schedules, transfer options, fares, real-time schedule adherence, current incidents, weather conditions, non-motorized transportation services, and special events are provided. In addition to tailored information for individual transit users, it also supports general annunciation and/or display of general schedule information, imminent arrival information, and other information of general interest to transit users.	No	1	The transit vehicle shall enable traffic and travel advisory information to be requested and output to the traveler. Such information may include transit routes, schedules, transfer options, fares, real-time schedule adherence, current incidents, weather conditions, and special events.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
YCAT Buses	Transit Vehicle OBE	Transit Vehicle On-Board Information Services	Transit Vehicle On-board Information Services' furnishes en-route transit users with real-time travel-related information on-board a transit vehicle. Current information that can be provided to transit users includes transit routes, schedules, transfer options, fares, real-time schedule adherence, current incidents, weather conditions, non-motorized transportation services, and special events are provided. In addition to tailored information for individual transit users, it also supports general annunciation and/or display of general schedule information, imminent arrival information, and other information of general interest to transit users.	No	2	The transit vehicle shall broadcast advisories about the imminent arrival of the transit vehicle at the next stop via an on-board automated annunciation system.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle On-Board Information Services	Transit Vehicle On-board Information Services' furnishes en-route transit users with real-time travel-related information on-board a transit vehicle. Current information that can be provided to transit users includes transit routes, schedules, transfer options, fares, real-time schedule adherence, current incidents, weather conditions, non-motorized transportation services, and special events are provided. In addition to tailored information for individual transit users, it also supports general annunciation and/or display of general schedule information, imminent arrival information, and other information of general interest to transit users.	No	3	The transit vehicle shall support input and output forms that are suitable for travelers with physical disabilities.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle On-Board Information Services	Transit Vehicle On-board Information Services' furnishes en-route transit users with real-time travel-related information on-board a transit vehicle. Current information that can be provided to transit users includes transit routes, schedules, transfer options, fares, real-time schedule adherence, current incidents, weather conditions, non-motorized transportation services, and special events are provided. In addition to tailored information for individual transit users, it also supports general annunciation and/or display of general schedule information, imminent arrival information, and other information of general interest to transit users.	No	4	The transit vehicle shall gather transit advisory data, including alerts and advisories pertaining to major emergencies, or man made disasters.	Planned	No

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YCAT Buses	Transit Vehicle OBE	Transit Vehicle On-Board Information Services	Transit Vehicle On-board Information Services' furnishes en-route transit users with real-time travel-related information on-board a transit vehicle. Current information that can be provided to transit users includes transit routes, schedules, transfer options, fares, real-time schedule adherence, current incidents, weather conditions, non-motorized transportation services, and special events are provided. In addition to tailored information for individual transit users, it also supports general annunciation and/or display of general schedule information, imminent arrival information, and other information of general interest to transit users.	No	5	The transit vehicle shall tailor the output of the request traveler information based on the current location of the transit vehicle.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle On-Board Paratransit Operations	Transit Vehicle On-board Paratransit Operations' forwards paratransit and flexible-route dispatch requests to the operator and forwards acknowledgements to the center. It coordinates with, and assists the operator in managing multi-stop runs associated with demand responsive transit services including paratransit. It collects transit vehicle passenger data and makes it available to the center.	No	1	The transit vehicle shall manage data input to sensor(s) on-board a transit vehicle to determine the vehicle's availability for use in demand responsive and flexible-route transit services based on identity, type, and passenger capacity.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle On-Board Paratransit Operations	Transit Vehicle On-board Paratransit Operations' forwards paratransit and flexible-route dispatch requests to the operator and forwards acknowledgements to the center. It coordinates with, and assists the operator in managing multi-stop runs associated with demand responsive transit services including paratransit. It collects transit vehicle passenger data and makes it available to the center.	No	2	The transit vehicle shall receive the status of demand responsive or flexible-route transit schedules and passenger loading from the transit vehicle operator.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle On-Board Paratransit Operations	Transit Vehicle On-board Paratransit Operations' forwards paratransit and flexible-route dispatch requests to the operator and forwards acknowledgements to the center. It coordinates with, and assists the operator in managing multi-stop runs associated with demand responsive transit services including paratransit. It collects transit vehicle passenger data and makes it available to the center.	No	3	The transit vehicle shall provide the transit vehicle operator instructions about the demand responsive or flexible-route transit schedule that has been confirmed from the center.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle On-Board Paratransit Operations	Transit Vehicle On-board Paratransit Operations' forwards paratransit and flexible-route dispatch requests to the operator and forwards acknowledgements to the center. It coordinates with, and assists the operator in managing multi-stop runs associated with demand responsive transit services including paratransit. It collects transit vehicle passenger data and makes it available to the center.	No	4	The transit vehicle shall provide the capability to log passenger boardings and alightings and make passenger use data available to the transit center.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle On-Board Trip Monitoring	Transit Vehicle On-Board Trip Monitoring' tracks vehicle location, monitors fuel usage, collects operational status (doors opened/closed, running times, etc.) and sends the collected, time stamped data to the Transit Management Center.	No	1	The transit vehicle shall track the current location of the transit vehicle.	Planned	No

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YCAT Buses	Transit Vehicle OBE	Transit Vehicle On-Board Trip Monitoring	Transit Vehicle On-Board Trip Monitoring' tracks vehicle location, monitors fuel usage, collects operational status (doors opened/closed, running times, etc.) and sends the collected, time stamped data to the Transit Management Center.	No	2	The transit vehicle shall support the computation of the location of a transit vehicle using on-board sensors to augment the location determination function. This may include proximity to the transit stops or other known reference points as well as recording trip length.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle On-Board Trip Monitoring	Transit Vehicle On-Board Trip Monitoring' tracks vehicle location, monitors fuel usage, collects operational status (doors opened/closed, running times, etc.) and sends the collected, time stamped data to the Transit Management Center.	No	3	The transit vehicle shall record transit trip monitoring data including vehicle mileage and fuel usage.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle On-Board Trip Monitoring	Transit Vehicle On-Board Trip Monitoring' tracks vehicle location, monitors fuel usage, collects operational status (doors opened/closed, running times, etc.) and sends the collected, time stamped data to the Transit Management Center.	No	4	The transit vehicle shall record transit trip monitoring data including operational status information such as doors open/closed, running times, etc.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle On-Board Trip Monitoring	Transit Vehicle On-Board Trip Monitoring' tracks vehicle location, monitors fuel usage, collects operational status (doors opened/closed, running times, etc.) and sends the collected, time stamped data to the Transit Management Center.	No	5	The transit vehicle shall send the transit vehicle trip monitoring data to center-based trip monitoring functions.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle Passenger Counting	Transit Vehicle Passenger Counting' collects transit vehicle loading data and makes it available to the center.	No	1	The transit vehicle shall count passengers boarding and alighting.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle Passenger Counting	Transit Vehicle Passenger Counting' collects transit vehicle loading data and makes it available to the center.	No	2	The passenger counts shall be related to location to support association of passenger counts with routes, route segments, or bus stops.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle Passenger Counting	Transit Vehicle Passenger Counting' collects transit vehicle loading data and makes it available to the center.	No	3	The passenger counts shall be timestamped so that ridership can be measured by time of day and day of week.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle Passenger Counting	Transit Vehicle Passenger Counting' collects transit vehicle loading data and makes it available to the center.	No	4	The transit vehicle shall send the collected passenger count information to the transit center.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle Schedule Management	Transit Vehicle Schedule Management' monitors schedule performance and identifies corrective actions when a deviation is detected. It provides two-way communication between the transit vehicle and center, enabling the center to communicate with the vehicle operator and monitor on-board systems.	No	1	The transit vehicle shall receive a vehicle assignment including transit route information, transit service instructions, traffic information, road conditions, and other information for the operator.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
YCAT Buses	Transit Vehicle OBE	Transit Vehicle Schedule Management	Transit Vehicle Schedule Management' monitors schedule performance and identifies corrective actions when a deviation is detected. It provides two-way communication between the transit vehicle and center, enabling the center to communicate with the vehicle operator and monitor on-board systems.	No	2	The transit vehicle shall use the route information and its current location to determine the deviation from the predetermined schedule.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle Schedule Management	Transit Vehicle Schedule Management' monitors schedule performance and identifies corrective actions when a deviation is detected. It provides two-way communication between the transit vehicle and center, enabling the center to communicate with the vehicle operator and monitor on-board systems.	No	3	The transit vehicle shall calculate the estimated times of arrival (ETA) at transit stops.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle Schedule Management	Transit Vehicle Schedule Management' monitors schedule performance and identifies corrective actions when a deviation is detected. It provides two-way communication between the transit vehicle and center, enabling the center to communicate with the vehicle operator and monitor on-board systems.	No	4	The transit vehicle shall determine scenarios to correct the schedule deviation.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle Schedule Management	Transit Vehicle Schedule Management' monitors schedule performance and identifies corrective actions when a deviation is detected. It provides two-way communication between the transit vehicle and center, enabling the center to communicate with the vehicle operator and monitor on-board systems.	No	5	The transit vehicle shall provide the schedule deviations and instructions for schedule corrections to the transit vehicle operator if the deviation is small, or the transit vehicle is operating in an urban area.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle Schedule Management	Transit Vehicle Schedule Management' monitors schedule performance and identifies corrective actions when a deviation is detected. It provides two-way communication between the transit vehicle and center, enabling the center to communicate with the vehicle operator and monitor on-board systems.	No	6	The transit vehicle shall send the schedule deviation and estimated arrival time information to the center.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle Schedule Management	Transit Vehicle Schedule Management' monitors schedule performance and identifies corrective actions when a deviation is detected. It provides two-way communication between the transit vehicle and center, enabling the center to communicate with the vehicle operator and monitor on-board systems.	No	7	The transit vehicle shall support the operations of a flexible route service. This may include requests for route deviations that would then lead to schedule corrective actions.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle Schedule Management	Transit Vehicle Schedule Management' monitors schedule performance and identifies corrective actions when a deviation is detected. It provides two-way communication between the transit vehicle and center, enabling the center to communicate with the vehicle operator and monitor on-board systems.	No	8	The transit vehicle shall notify the transit center of vehicle location and operational status as the vehicle exits and returns to the transit facility to support future vehicle assignments.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
YCAT Buses	Transit Vehicle OBE	Transit Vehicle Signal Priority	Transit Vehicle Signal Priority' provides the capability for transit vehicles to determine eligibility for priority and request signal priority at signalized intersections, ramps, and interchanges through short range communication with traffic control equipment at the roadside.	No	1	The transit vehicle shall determine the schedule deviation and estimated times of arrival (ETA) at transit stops.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle Signal Priority	Transit Vehicle Signal Priority' provides the capability for transit vehicles to determine eligibility for priority and request signal priority at signalized intersections, ramps, and interchanges through short range communication with traffic control equipment at the roadside.	No	2	The transit vehicle shall send priority requests to traffic signal controllers at intersections, pedestrian crossings, and multimodal crossings on the roads (surface streets) and freeway (ramp controls) network that enable a transit vehicle schedule deviation to be corrected.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle Signal Priority	Transit Vehicle Signal Priority' provides the capability for transit vehicles to determine eligibility for priority and request signal priority at signalized intersections, ramps, and interchanges through short range communication with traffic control equipment at the roadside.	No	3	The transit vehicle shall send the schedule deviation data and status of priority requests to the transit vehicle operator and provide the capability for the transit vehicle operator to control the priority system.	Planned	No
YCAT Buses	Transit Vehicle OBE	Transit Vehicle Signal Priority	Transit Vehicle Signal Priority' provides the capability for transit vehicles to determine eligibility for priority and request signal priority at signalized intersections, ramps, and interchanges through short range communication with traffic control equipment at the roadside.	No	4	The transit vehicle shall prevent a priority request from being sent when the transit vehicle cannot use the priority (e.g., when the transit vehicle makes a passenger stop on the approach to an intersection).	Planned	No
YCAT Kiosks	Traveler Support Equipment	Transit Stop Information Services	Transit Stop Information Services' furnishes transit users with real-time travel-related information at transit stops, multi-modal transfer points, and other public transportation areas. It provides transit users with information on transit routes, schedules, transfer options, available services, fares, and real-time schedule adherence. In addition to tailored information for individual transit users, it supports general annunciation and/or display of imminent arrival information and other information of general interest to transit users.	No	1	The public interface for travelers shall collect and provide real-time travel-related information at transit stops, multi-modal transfer points, and other public transportation areas.	Planned	No
YCAT Kiosks	Traveler Support Equipment	Transit Stop Information Services	Transit Stop Information Services' furnishes transit users with real-time travel-related information at transit stops, multi-modal transfer points, and other public transportation areas. It provides transit users with information on transit routes, schedules, transfer options, available services, fares, and real-time schedule adherence. In addition to tailored information for individual transit users, it supports general annunciation and/or display of imminent arrival information and other information of general interest to transit users.	No	2	The public interface for travelers shall collect and present to the transit traveler information on transit routes, schedules, and real-time schedule adherence.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
YCAT Kiosks	Traveler Support Equipment	Transit Stop Information Services	Transit Stop Information Services' furnishes transit users with real-time travel-related information at transit stops, multi-modal transfer points, and other public transportation areas. It provides transit users with information on transit routes, schedules, transfer options, available services, fares, and real-time schedule adherence. In addition to tailored information for individual transit users, it supports general annunciation and/or display of imminent arrival information and other information of general interest to transit users.	No	3	The public interface for travelers shall provide support for general annunciation and/or display of imminent arrival information and other information of general interest to transit users.	Planned	No
YCAT Kiosks	Traveler Support Equipment	Transit Stop Information Services	Transit Stop Information Services' furnishes transit users with real-time travel-related information at transit stops, multi-modal transfer points, and other public transportation areas. It provides transit users with information on transit routes, schedules, transfer options, available services, fares, and real-time schedule adherence. In addition to tailored information for individual transit users, it supports general annunciation and/or display of imminent arrival information and other information of general interest to transit users.	No	4	The public interface for travelers shall present information to the traveler in a form suitable for travelers with physical disabilities including travelers who are visually impaired.	Planned	No
YCAT Kiosks	Traveler Support Equipment	Traveler Fare Management	Traveler Fare Management' provides the capability for the traveler to access and use a common fare medium for transit fares, tolls, and/or parking lot charges using a public device at or near the point of service. It accepts a service request and means of payment, verifies eligibility, calculates the amount due, collects payment, and identifies payment problems. It may be implemented using a card reader/dispenser in a point of sale device that includes a communications interface to the financial infrastructure to support payment collection and reconciliation.	No	1	The public interface for travelers shall accept and process current transit passenger fare collection information.	Planned	No
YCAT Kiosks	Traveler Support Equipment	Traveler Fare Management	Traveler Fare Management' provides the capability for the traveler to access and use a common fare medium for transit fares, tolls, and/or parking lot charges using a public device at or near the point of service. It accepts a service request and means of payment, verifies eligibility, calculates the amount due, collects payment, and identifies payment problems. It may be implemented using a card reader/dispenser in a point of sale device that includes a communications interface to the financial infrastructure to support payment collection and reconciliation.	No	2	The public interface for travelers shall calculate a fare based on the origin and destination provided by the traveler, in conjunction with transit routing, transit fare category, and transit user history.	Planned	No

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YCAT Kiosks	Traveler Support Equipment	Traveler Fare Management	Traveler Fare Management' provides the capability for the traveler to access and use a common fare medium for transit fares, tolls, and/or parking lot charges using a public device at or near the point of service. It accepts a service request and means of payment, verifies eligibility, calculates the amount due, collects payment, and identifies payment problems. It may be implemented using a card reader/dispenser in a point of sale device that includes a communications interface to the financial infrastructure to support payment collection and reconciliation.	No	3	The public interface for travelers shall provide an interface to a transit user traveler card in support of payment for transit fares, tolls, and/or parking lot charges. The stored credit value data from the card shall be collected and updated based on the fare or other charges, or the credit identity shall be collected.	Planned	No
YCAT Kiosks	Traveler Support Equipment	Traveler Fare Management	Traveler Fare Management' provides the capability for the traveler to access and use a common fare medium for transit fares, tolls, and/or parking lot charges using a public device at or near the point of service. It accepts a service request and means of payment, verifies eligibility, calculates the amount due, collects payment, and identifies payment problems. It may be implemented using a card reader/dispenser in a point of sale device that includes a communications interface to the financial infrastructure to support payment collection and reconciliation.	No	4	The public interface for travelers shall provide information to the center for financial authorization and transaction processing.	Planned	No
YCAT Kiosks	Traveler Support Equipment	Traveler Fare Management	Traveler Fare Management' provides the capability for the traveler to access and use a common fare medium for transit fares, tolls, and/or parking lot charges using a public device at or near the point of service. It accepts a service request and means of payment, verifies eligibility, calculates the amount due, collects payment, and identifies payment problems. It may be implemented using a card reader/dispenser in a point of sale device that includes a communications interface to the financial infrastructure to support payment collection and reconciliation.	No	5	The public interface for travelers shall provide an image of all travelers purchasing rides or services to be used for violation processing.	Planned	No
YCAT Kiosks	Traveler Support Equipment	Traveler Fare Management	Traveler Fare Management' provides the capability for the traveler to access and use a common fare medium for transit fares, tolls, and/or parking lot charges using a public device at or near the point of service. It accepts a service request and means of payment, verifies eligibility, calculates the amount due, collects payment, and identifies payment problems. It may be implemented using a card reader/dispenser in a point of sale device that includes a communications interface to the financial infrastructure to support payment collection and reconciliation.	No	6	The public interface for travelers shall determine the routing based on the traveler's destination and the location of the closest transit stop from which a route request is being made.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
YCAT Kiosks	Traveler Support Equipment	Traveler Fare Management	Traveler Fare Management' provides the capability for the traveler to access and use a common fare medium for transit fares, tolls, and/or parking lot charges using a public device at or near the point of service. It accepts a service request and means of payment, verifies eligibility, calculates the amount due, collects payment, and identifies payment problems. It may be implemented using a card reader/dispenser in a point of sale device that includes a communications interface to the financial infrastructure to support payment collection and reconciliation.	No	7	The public interface for travelers shall create fare statistics data based upon data collected at a transit stop.	Planned	No
YCAT Kiosks	Traveler Support Equipment	Traveler Fare Management	Traveler Fare Management' provides the capability for the traveler to access and use a common fare medium for transit fares, tolls, and/or parking lot charges using a public device at or near the point of service. It accepts a service request and means of payment, verifies eligibility, calculates the amount due, collects payment, and identifies payment problems. It may be implemented using a card reader/dispenser in a point of sale device that includes a communications interface to the financial infrastructure to support payment collection and reconciliation.	No	8	The public interface for travelers shall present information to the traveler in a form suitable for travelers with physical disabilities.	Planned	No
YCAT Transit Passes	Payment Device			No				No
YCAT Transit Passes	Traveler Card			No				No
YCAT Transit Passes	Traveler Support Equipment	Traveler Fare Management	Traveler Fare Management' provides the capability for the traveler to access and use a common fare medium for transit fares, tolls, and/or parking lot charges using a public device at or near the point of service. It accepts a service request and means of payment, verifies eligibility, calculates the amount due, collects payment, and identifies payment problems. It may be implemented using a card reader/dispenser in a point of sale device that includes a communications interface to the financial infrastructure to support payment collection and reconciliation.	No	1	The public interface for travelers shall accept and process current transit passenger fare collection information.	Existing	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
YCAT Transit Passes	Traveler Support Equipment	Traveler Fare Management	Traveler Fare Management' provides the capability for the traveler to access and use a common fare medium for transit fares, tolls, and/or parking lot charges using a public device at or near the point of service. It accepts a service request and means of payment, verifies eligibility, calculates the amount due, collects payment, and identifies payment problems. It may be implemented using a card reader/dispenser in a point of sale device that includes a communications interface to the financial infrastructure to support payment collection and reconciliation.	No	2	The public interface for travelers shall calculate a fare based on the origin and destination provided by the traveler, in conjunction with transit routing, transit fare category, and transit user history.	Planned	No
YCAT Transit Passes	Traveler Support Equipment	Traveler Fare Management	Traveler Fare Management' provides the capability for the traveler to access and use a common fare medium for transit fares, tolls, and/or parking lot charges using a public device at or near the point of service. It accepts a service request and means of payment, verifies eligibility, calculates the amount due, collects payment, and identifies payment problems. It may be implemented using a card reader/dispenser in a point of sale device that includes a communications interface to the financial infrastructure to support payment collection and reconciliation.	No	3	The public interface for travelers shall provide an interface to a transit user traveler card in support of payment for transit fares, tolls, and/or parking lot charges. The stored credit value data from the card shall be collected and updated based on the fare or other charges, or the credit identity shall be collected.	Planned	No
YCAT Transit Passes	Traveler Support Equipment	Traveler Fare Management	Traveler Fare Management' provides the capability for the traveler to access and use a common fare medium for transit fares, tolls, and/or parking lot charges using a public device at or near the point of service. It accepts a service request and means of payment, verifies eligibility, calculates the amount due, collects payment, and identifies payment problems. It may be implemented using a card reader/dispenser in a point of sale device that includes a communications interface to the financial infrastructure to support payment collection and reconciliation.	No	4	The public interface for travelers shall provide information to the center for financial authorization and transaction processing.	Planned	No
YCAT Transit Passes	Traveler Support Equipment	Traveler Fare Management	Traveler Fare Management' provides the capability for the traveler to access and use a common fare medium for transit fares, tolls, and/or parking lot charges using a public device at or near the point of service. It accepts a service request and means of payment, verifies eligibility, calculates the amount due, collects payment, and identifies payment problems. It may be implemented using a card reader/dispenser in a point of sale device that includes a communications interface to the financial infrastructure to support payment collection and reconciliation.	No	5	The public interface for travelers shall provide an image of all travelers purchasing rides or services to be used for violation processing.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
YCAT Transit Passes	Traveler Support Equipment	Traveler Fare Management	Traveler Fare Management' provides the capability for the traveler to access and use a common fare medium for transit fares, tolls, and/or parking lot charges using a public device at or near the point of service. It accepts a service request and means of payment, verifies eligibility, calculates the amount due, collects payment, and identifies payment problems. It may be implemented using a card reader/dispenser in a point of sale device that includes a communications interface to the financial infrastructure to support payment collection and reconciliation.	No	6	The public interface for travelers shall determine the routing based on the traveler's destination and the location of the closest transit stop from which a route request is being made.	Planned	No
YCAT Transit Passes	Traveler Support Equipment	Traveler Fare Management	Traveler Fare Management' provides the capability for the traveler to access and use a common fare medium for transit fares, tolls, and/or parking lot charges using a public device at or near the point of service. It accepts a service request and means of payment, verifies eligibility, calculates the amount due, collects payment, and identifies payment problems. It may be implemented using a card reader/dispenser in a point of sale device that includes a communications interface to the financial infrastructure to support payment collection and reconciliation.	No	7	The public interface for travelers shall create fare statistics data based upon data collected at a transit stop.	Planned	No
YCAT Transit Passes	Traveler Support Equipment	Traveler Fare Management	Traveler Fare Management' provides the capability for the traveler to access and use a common fare medium for transit fares, tolls, and/or parking lot charges using a public device at or near the point of service. It accepts a service request and means of payment, verifies eligibility, calculates the amount due, collects payment, and identifies payment problems. It may be implemented using a card reader/dispenser in a point of sale device that includes a communications interface to the financial infrastructure to support payment collection and reconciliation.	No	8	The public interface for travelers shall present information to the traveler in a form suitable for travelers with physical disabilities.	Planned	No
YCAT Website	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	1	The center shall collect, process, and store traffic and highway condition information, including incident information, detours and road closures, event information, recommended routes, and current speeds on specific routes.	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
YCAT Website	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	3	The center shall collect, process, and store maintenance and construction information, including scheduled maintenance and construction work activities and work zone activities.	Planned	No
YCAT Website	Transportation Information Center	TIC Data Collection	TIC Data Collection' collects transportation-related data from other centers, performs data quality checks on the collected data and then consolidates, verifies, and refines the data and makes it available in a consistent format to applications that support operational data sharing between centers and deliver traveler information to end-users. A broad range of data is collected including traffic and road conditions, transit data, emergency information and advisories, weather data, special event information, traveler services, parking, multimodal data, and toll/pricing data. It also shares data with other transportation information centers.	No	4	The center shall collect, process, and store transit routes and schedules, transit transfer options, transit fares, and real-time schedule adherence information.	Planned	No
YCAT Website	Transportation Information Center	TIC Trip Planning	TIC Trip Planning' provides pre-trip and en-route trip planning services for travelers. It receives origin, destination, constraints, and preferences and returns trip plan(s) that meet the supplied criteria. Trip plans may be based on current traffic and road conditions, transit schedule information, and other real-time traveler information. Candidate trip plans are multimodal and may include vehicle, transit, and alternate mode segments (e.g., rail, ferry, bicycle routes, and walkways) based on traveler preferences. It also confirms the trip plan for the traveler and supports reservations and advanced payment for portions of the trip. The trip plan includes specific routing information and instructions for each segment of the trip and may also include information and reservations for additional services (e.g., parking) along the route.	No	1	The center shall provide the capability to provide specific pre-trip and en route directions to travelers (and drivers), including costs, arrival times, and transfer points.	Planned	No

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YCAT Website	Transportation Information Center	TIC Trip Planning	TIC Trip Planning' provides pre-trip and en-route trip planning services for travelers. It receives origin, destination, constraints, and preferences and returns trip plan(s) that meet the supplied criteria. Trip plans may be based on current traffic and road conditions, transit schedule information, and other real-time traveler information. Candidate trip plans are multimodal and may include vehicle, transit, and alternate mode segments (e.g., rail, ferry, bicycle routes, and walkways) based on traveler preferences. It also confirms the trip plan for the traveler and supports reservations and advanced payment for portions of the trip. The trip plan includes specific routing information and instructions for each segment of the trip and may also include information and reservations for additional services (e.g., parking) along the route.	No	2	The center shall include bicycle routes, walkways, skyways, and multi-use trails in the pre-trip and en route directions it provides to travelers.	Planned	No
YCAT Website	Transportation Information Center	TIC Trip Planning	TIC Trip Planning' provides pre-trip and en-route trip planning services for travelers. It receives origin, destination, constraints, and preferences and returns trip plan(s) that meet the supplied criteria. Trip plans may be based on current traffic and road conditions, transit schedule information, and other real-time traveler information. Candidate trip plans are multimodal and may include vehicle, transit, and alternate mode segments (e.g., rail, ferry, bicycle routes, and walkways) based on traveler preferences. It also confirms the trip plan for the traveler and supports reservations and advanced payment for portions of the trip. The trip plan includes specific routing information and instructions for each segment of the trip and may also include information and reservations for additional services (e.g., parking) along the route.	No	3	The center shall support on-line route guidance for travelers using personal devices (such as PDAs).	Planned	No
YCAT Website	Transportation Information Center	TIC Trip Planning	TIC Trip Planning' provides pre-trip and en-route trip planning services for travelers. It receives origin, destination, constraints, and preferences and returns trip plan(s) that meet the supplied criteria. Trip plans may be based on current traffic and road conditions, transit schedule information, and other real-time traveler information. Candidate trip plans are multimodal and may include vehicle, transit, and alternate mode segments (e.g., rail, ferry, bicycle routes, and walkways) based on traveler preferences. It also confirms the trip plan for the traveler and supports reservations and advanced payment for portions of the trip. The trip plan includes specific routing information and instructions for each segment of the trip and may also include information and reservations for additional services (e.g., parking) along the route.	No	4	The center shall support on-line route guidance for drivers in vehicles.	Planned	No

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Yuma County Area Transit (YCAT)	Archived Data User System			No				No
Yuma County Area Transit (YCAT)	Other Emergency Management Centers			No				No
Yuma County Area Transit (YCAT)	Transit Management Center	Transit Center Fare Management	Transit Center Fare Management' manages fare collection and passenger load management at the transit center. It provides the back office functions that support transit fare collection, supporting payment reconciliation with links to financial institutions and enforcement agencies for fare violations. It collects data required to determine accurate ridership levels, establish fares, and distribute fare information. It loads fare data into the vehicle prior to the beginning of normal operations and unloads fare collection data from the vehicle at the close out of normal operations.	No	1	The center shall manage the actual value of transit fares for each segment of each regular transit route, including the transmission of the information to transit vehicles and transit stops or stations.	Planned	No
Yuma County Area Transit (YCAT)	Transit Management Center	Transit Center Fare Management	Transit Center Fare Management' manages fare collection and passenger load management at the transit center. It provides the back office functions that support transit fare collection, supporting payment reconciliation with links to financial institutions and enforcement agencies for fare violations. It collects data required to determine accurate ridership levels, establish fares, and distribute fare information. It loads fare data into the vehicle prior to the beginning of normal operations and unloads fare collection data from the vehicle at the close out of normal operations.	No	2	The center shall provide the capability for a system operator to manage the transit fares and control the exchange of transit fare information.	Planned	No
Yuma County Area Transit (YCAT)	Transit Management Center	Transit Center Fare Management	Transit Center Fare Management' manages fare collection and passenger load management at the transit center. It provides the back office functions that support transit fare collection, supporting payment reconciliation with links to financial institutions and enforcement agencies for fare violations. It collects data required to determine accurate ridership levels, establish fares, and distribute fare information. It loads fare data into the vehicle prior to the beginning of normal operations and unloads fare collection data from the vehicle at the close out of normal operations.	No	3	The center shall process the financial requests from the transit vehicles or roadside and manage an interface to a Financial Institution.	Planned	No

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Yuma County Area Transit (YCAT)	Transit Management Center	Transit Center Fare Management	Transit Center Fare Management' manages fare collection and passenger load management at the transit center. It provides the back office functions that support transit fare collection, supporting payment reconciliation with links to financial institutions and enforcement agencies for fare violations. It collects data required to determine accurate ridership levels, establish fares, and distribute fare information. It loads fare data into the vehicle prior to the beginning of normal operations and unloads fare collection data from the vehicle at the close out of normal operations.	No	4	The center shall support the payment of transit fare transactions using data provided by the traveler cards / payment instruments.	Planned	No
Yuma County Area Transit (YCAT)	Transit Management Center	Transit Center Fare Management	Transit Center Fare Management' manages fare collection and passenger load management at the transit center. It provides the back office functions that support transit fare collection, supporting payment reconciliation with links to financial institutions and enforcement agencies for fare violations. It collects data required to determine accurate ridership levels, establish fares, and distribute fare information. It loads fare data into the vehicle prior to the beginning of normal operations and unloads fare collection data from the vehicle at the close out of normal operations.	No	6	The center shall process requests for transit fares to be paid in advance.	Planned	No
Yuma County Area Transit (YCAT)	Transit Management Center	Transit Center Fixed-Route Operations	Transit Center Fixed-Route Operations' manages fixed route transit operations. It supports creation of schedules, blocks and runs for fixed and flexible route transit services. It allows fixed-route and flexible-route transit services to disseminate schedules and automatically updates customer service operator systems with the most current schedule information. It also supports automated dispatch of transit vehicles. Current vehicle schedule adherence and optimum scenarios for schedule adjustment are also provided. It also receives and processes transit vehicle loading data.	No	1	The center shall generate transit routes and schedules based on such factors as parameters input by the system operator, road network conditions, incident information, operational data on current routes and schedules, and digitized map data.	Planned	No
Yuma County Area Transit (YCAT)	Transit Management Center	Transit Center Fixed-Route Operations	Transit Center Fixed-Route Operations' manages fixed route transit operations. It supports creation of schedules, blocks and runs for fixed and flexible route transit services. It allows fixed-route and flexible-route transit services to disseminate schedules and automatically updates customer service operator systems with the most current schedule information. It also supports automated dispatch of transit vehicles. Current vehicle schedule adherence and optimum scenarios for schedule adjustment are also provided. It also receives and processes transit vehicle loading data.	No	2	The center shall provide the interface to the system operator to control the generation of new routes and schedules (transit services) including the ability to review and update the parameters used by the routes and schedules generation processes and to initiate these processes	Planned	No

Element Name	Physical Object Name	Functional Object	Functional Object Description	FO User Defined	Requirement Number	Requirement	Status	Req User Defined
Yuma County Area Transit (YCAT)	Transit Management Center	Transit Center Fixed-Route Operations	Transit Center Fixed-Route Operations' manages fixed route transit operations. It supports creation of schedules, blocks and runs for fixed and flexible route transit services. It allows fixed-route and flexible-route transit services to disseminate schedules and automatically updates customer service operator systems with the most current schedule information. It also supports automated dispatch of transit vehicles. Current vehicle schedule adherence and optimum scenarios for schedule adjustment are also provided. It also receives and processes transit vehicle loading data.	No	3	The center shall be able to generate special routes and schedules to support an incident, disaster, evacuation, or other emergency.	Planned	No
Yuma County Area Transit (YCAT)	Transit Management Center	Transit Center Information Services	Transit Center Information Services' collects the latest available information for a transit service and makes it available to transit customers and to Transportation Information Centers for further distribution. Customers are provided information at transit stops and other public transportation areas before they embark and on-board the transit vehicle once they are enroute. Information provided can include the latest available information on transit routes, schedules, transfer options, fares, real-time schedule adherence, current incidents, weather conditions, yellow pages, and special events. In addition to general service information, tailored information (e.g., itineraries) are provided to individual transit users.	No	1	The center shall provide travelers using public transportation with traffic and advisory information upon request. Such information may include transit routes, schedules, transfer options, fares, real-time schedule adherence, current incidents, weather conditions, and special events.	Planned	No
Yuma County Area Transit (YCAT)	Transit Management Center	Transit Center Information Services	Transit Center Information Services' collects the latest available information for a transit service and makes it available to transit customers and to Transportation Information Centers for further distribution. Customers are provided information at transit stops and other public transportation areas before they embark and on-board the transit vehicle once they are enroute. Information provided can include the latest available information on transit routes, schedules, transfer options, fares, real-time schedule adherence, current incidents, weather conditions, yellow pages, and special events. In addition to general service information, tailored information (e.g., itineraries) are provided to individual transit users.	No	2	The center shall provide transit information to the media including details of deviations from schedule of regular transit services.	Planned	No

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Yuma County Area Transit (YCAT)	Transit Management Center	Transit Center Information Services	Transit Center Information Services' collects the latest available information for a transit service and makes it available to transit customers and to Transportation Information Centers for further distribution. Customers are provided information at transit stops and other public transportation areas before they embark and on-board the transit vehicle once they are enroute. Information provided can include the latest available information on transit routes, schedules, transfer options, fares, real-time schedule adherence, current incidents, weather conditions, yellow pages, and special events. In addition to general service information, tailored information (e.g., itineraries) are provided to individual transit users.	No	3	The center shall exchange transit schedules, real-time arrival information, fare schedules, and general transit service information with other transit organizations to support transit traveler information systems.	Planned	No
Yuma County Area Transit (YCAT)	Transit Management Center	Transit Center Paratransit Operations	Transit Center Paratransit Operations' manages demand responsive transit services, including paratransit services. It supports planning and scheduling of these services, allowing paratransit and other demand response transit services to plan efficient routes and better estimate arrival times. It also supports automated dispatch of paratransit vehicles and tracks passenger pick-ups and drop-offs. Customer service operator systems are updated with the most current schedule information.	No	1	The center shall process trip requests for demand responsive transit services, i.e. paratransit. Sources of the requests may include traveler information service providers.	Planned	No
Yuma County Area Transit (YCAT)	Transit Management Center	Transit Center Paratransit Operations	Transit Center Paratransit Operations' manages demand responsive transit services, including paratransit services. It supports planning and scheduling of these services, allowing paratransit and other demand response transit services to plan efficient routes and better estimate arrival times. It also supports automated dispatch of paratransit vehicles and tracks passenger pick-ups and drop-offs. Customer service operator systems are updated with the most current schedule information.	No	2	The center shall monitor the operational status of the demand response vehicles including status of passenger pick-up and drop-off.	Planned	No
Yuma County Area Transit (YCAT)	Transit Management Center	Transit Center Paratransit Operations	Transit Center Paratransit Operations' manages demand responsive transit services, including paratransit services. It supports planning and scheduling of these services, allowing paratransit and other demand response transit services to plan efficient routes and better estimate arrival times. It also supports automated dispatch of paratransit vehicles and tracks passenger pick-ups and drop-offs. Customer service operator systems are updated with the most current schedule information.	No	3	The center shall generate demand response transit (including paratransit) routes and schedules based on such factors as parameters input by the system operator, what other demand responsive transit schedules have been planned, the availability and location of vehicles, the relevance of any fixed transit routes and schedules, road network information, and incident information.	Planned	No
Yuma County Area Transit (YCAT)	Transit Management Center	Transit Center Passenger Counting	Transit Center Passenger Counting' receives and processes transit vehicle loading data using two-way communications from equipped transit vehicles.	No				No

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Yuma County Area Transit (YCAT)	Transit Management Center	Transit Center Priority Management	Transit Center Priority Management' monitors transit schedule performance and generates requests for transit priority on routes and at certain intersections. It may coordinate with the Traffic Management Center to provide transit priority along the selected route, including allocation of dynamic lanes and granting signal priority. It also coordinates with the Transit Vehicle OBE to monitor and manage local transit signal priority requests at individual intersections.	No				No
Yuma County Area Transit (YCAT)	Transit Management Center	Transit Center Security	Transit Center Security' monitors transit vehicle operator or traveler activated alarms received from on-board a transit vehicle. It supports transit vehicle operator authentication and provides the capability to remotely disable a transit vehicle. It also includes the capability to alert operators and police to potential incidents identified by these security features.	No				No
Yuma County Area Transit (YCAT)	Transit Management Center	Transit Center Vehicle Assignment	Transit Center Vehicle Assignment' assigns individual transit vehicles to vehicle blocks and downloads this information to the transit vehicle. It also provides an exception handling process for the vehicle assignment function to generate new, supplemental vehicle assignments when required by changes during the operating day. It provides an inventory management function for the transit facility which stores functional attributes about each of the vehicles owned by the transit operator. These attributes permit the planning and assignment functions to match vehicles with routes based on suitability for the types of service required by the particular routes.	No				No
Yuma County Area Transit (YCAT)	Transit Management Center	Transit Center Vehicle Tracking	Transit Center Vehicle Tracking' monitors transit vehicle location. The location information is collected via a data communication link between the transit vehicles and the transit center. The location information is presented to the transit operator on a digitized map of the transit service area. The location data may be used to determine real time schedule adherence and update the transit system’s schedule in real-time. The real-time schedule information is disseminated to other information providers, which furnish the information to travelers.	No				No

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Yuma County Area Transit (YCAT)	Transit Management Center	Transit Garage Maintenance	Transit Garage Maintenance' provides advanced maintenance functions for the transit property. It collects operational and maintenance data from transit vehicles, manages vehicle service histories, and monitors operators and vehicles. It collects vehicle mileage data and uses it to automatically generate preventative maintenance schedules for each vehicle by utilizing vehicle tracking data. In addition, it provides information to service personnel to support maintenance activities and records and verifies that maintenance work was performed.	No				No