



Austin Regional ITS Architecture Update

Regional ITS Architecture Appendices

June 2015



APPENDIX A – SERVICE PACKAGE DEFINITIONS

Service Package	Service Package Name	Description
Traffic Management Service Area		
ATMS01	Network Surveillance	Includes traffic detectors, CCTV cameras, other surveillance equipment, supporting field equipment and fixed point to point communications to transmit the collected data back to a traffic management center.
ATMS02	Traffic Probe Surveillance	Provides an alternative approach for surveillance of the roadway network. Probe vehicles are tracked, and the vehicle's position and speed information are utilized to determine road network conditions such as average speed and congestion conditions.
ATMS03	Traffic Signal Control	Provides the central control and monitoring equipment, communication links, and the signal control equipment that support traffic control at signalized intersections. This service package is consistent with typical traffic signal control systems.
ATMS04	Traffic Metering	Includes central monitoring and control, communications, and field equipment that support metering of traffic. It supports the complete range of metering strategies including ramp, interchange, and mainline metering.
ATMS05	HOV Lane Management	Manages HOV lanes by coordinating freeway ramp meters and connector signals with HOV lane usage signals.
ATMS06	Traffic Information Dissemination	Provides driver information using roadway equipment such as dynamic message signs or highway advisory radio. Information can include traffic and road conditions, closure and detour information, incident information, emergency alerts and driver advisories.
ATMS07	Regional Traffic Management	Sharing of traffic information and control among traffic management centers to support a regional management strategy. The nature of optimization and extent of information and control sharing is determined through working arrangements between jurisdictions.
ATMS08	Traffic Incident Management System	Manages both unexpected incidents and planned events so that the impact to the transportation network and traveler safety is minimized. This service package includes incident detection capabilities and coordination with other agencies. It supports traffic operations personnel in developing an appropriate response in coordination with emergency management, maintenance and construction management, and other incident response personnel.
ATMS09	Traffic Decision Support and Demand Management	Recommends courses of action to traffic operations personnel based on an assessment of current and forecast road network performance. All recommendations are based on historical evaluation, real-time assessment, and forecast of the roadway network performance based on predicted travel demand patterns. This service package also collects air quality, parking availability, transit usage, and vehicle occupancy data to support TDM, where applicable.
ATMS10	Electronic Toll Collection	Provides toll operators with the ability to collect tolls electronically and detect and process violations.
ATMS11	Emissions Monitoring and Management	Monitors individual vehicle emissions and provides general air quality monitoring using distributed sensors to collect the data.
ATMS12	Roadside Lighting System Control	Manages electrical lighting systems by monitoring operational conditions and using the lighting controls to vary the amount of light provided along the roadside.
ATMS13	Standard Railroad Grade Crossing	Manages highway traffic at highway-rail intersections (HRIs) where rail operational speeds are less than 80 mph.
ATMS14	Advanced Railroad Grade Crossing	Manages highway traffic at highway-rail intersections (HRIs) where operational speeds are greater than 80 mph. Augments Standard Railroad Grade Crossing service package with additional safety features to mitigate the risks associated with higher rail speeds.
ATMS15	Railroad Operations Coordination	Provides an additional level of strategic coordination between freight rail operations and traffic management centers. Could include train schedules, maintenance schedules or any other anticipated HRI closures.

Service Package	Service Package Name	Description
Traffic Management Service Area (continued)		
ATMS16	Parking Facility Management	Provides enhanced monitoring and management of parking facilities. Service package assists in the management of parking operations, coordinates with transportation authorities, and supports electronic collection of parking fees.
ATMS17	Regional Parking Management	Supports communication and coordination between parking facilities as well as coordination between parking facilities and traffic and transit management systems.
ATMS18	Reversible Lane Management	Provides for the management of reversible lane facilities and includes the field equipment, physical lane access controls, and associated control electronics.
ATMS19	Speed Warning and Enforcement	Monitors vehicle speeds and supports warning drivers when their speed is excessive. Also the service includes notifications to an enforcement agency to enforce the speed limit of the roadway.
ATMS20	Drawbridge Management	Supports systems that manage drawbridges at rivers and canals and other multimodal crossings. Includes control devices as well as traveler information systems.
ATMS21	Roadway Closure Management	Closes roadways to vehicular traffic when driving conditions are unsafe, maintenance must be performed, or other situations. Service package covers general road closures applications; specific closure systems that are used at railroad grade crossings, drawbridges, reversible lanes, etc. are covered by other service packages.
ATMS22	Variable Speed Limits	Sets variable speed limits along a roadway to create more uniform speeds, to promote safer driving during adverse conditions (such as fog), and/or to reduce air pollution. Also known as speed harmonization, this service monitors traffic and environmental conditions along the roadway.
ATMS23	Dynamic Lane Management and Shoulder Use	Includes the field equipment, physical overhead lane signs and associated control electronics that are used to manage and control specific lanes and/or the shoulders along a roadway. This equipment can be used to change the lane configuration on the roadway according to traffic demand and lane destination along a typical roadway section or on approach to or access from a border crossing, multimodal crossing or intermodal freight depot. This package can be used to allow temporary or interim use of shoulders as travel lanes.
ATMS24	Dynamic Roadway Warning	Includes systems that dynamically warn drivers approaching hazards on a roadway. These dynamic roadway warning systems can alert approaching drivers via warning signs, flashing lights, in-vehicle messages, etc. Such systems can increase the safety of a roadway by reducing the occurrence of incidents.
ATMS25	VMT Road User Payment	Facilitates charging fees to roadway vehicle owners for using specific roadways with potentially differential payment rates based on time-of-day, which specific roadway is used, and class of vehicle (a local policy decision by each roadway owner).
ATMS26	Mixed Use Warning Systems	Supports the sensing and warning systems used to interact with pedestrians, bicyclists, and other vehicles that operate on the main vehicle roadways, or on pathways which intersect the main vehicle roadways. These systems could allow automated warning or active protection for this class of users.
Emergency Management Service Area		
EM01	Emergency Call-Taking and Dispatch	Provides basic public safety call-taking and dispatch services. Includes emergency vehicle equipment, equipment used to receive and route emergency calls, wireless communications and coordination between emergency management agencies.
EM02	Emergency Routing	Supports automated vehicle location and dynamic routing of emergency vehicles. Traffic information, road conditions and suggested routing information are provided to enhance emergency vehicle routing. Includes signal preemption and priority applications.

Service Package	Service Package Name	Description
Emergency Management Service Area (continued)		
EM03	Mayday and Alarms Support	Allows the user to initiate a request for emergency assistance and enables the emergency management subsystem to locate the user, gather information about the incident and determine the appropriate response.
EM04	Roadway Service Patrols	Supports the roadway service patrol vehicles that aid motorists, offering rapid response to minor incidents (flat tire, crashes, out of gas) to minimize disruption to the traffic stream. This service package monitors service patrol vehicle locations and supports vehicle dispatch.
EM05	Transportation Infrastructure Protection	Includes the monitoring of transportation infrastructure (e.g. bridges, tunnels and management centers) for potential threats using sensors, surveillance equipment, barriers and safeguard systems to preclude an incident, control access during and after an incident or mitigate the impact of an incident. Threats can be acts of nature, terrorist attacks or other incidents causing damage to the infrastructure.
EM06	Wide-Area Alert	Uses ITS driver and traveler information systems to alert the public in emergency situations such as child abductions, severe weather, civil emergencies or other situations that pose a threat to life and property.
EM07	Early Warning System	Monitors and detects potential, looming and actual disasters including natural, technological and man-made disasters.
EM08	Disaster Response and Recovery	Enhances the ability of the surface transportation system to respond to and recover from disasters. Supports coordination of emergency response plans, provides enhanced access to the scene and better information about the transportation system in the vicinity of the disaster, and maintains situation awareness.
EM09	Evacuation and Reentry Management	Supports evacuation of the general public from a disaster area and manages subsequent reentry to the disaster area. This service package supports both anticipated, well-planned and orderly evacuations such as for a hurricane, as well as sudden evacuations with little or no time for preparation or public warning such as a terrorist act. Employs a number of strategies to maximize capacity along an evacuation route including coordination with transit.
EM10	Disaster Traveler Information	Use of ITS to provide disaster-related traveler information to the general public, including evacuation and reentry information and other information concerning the operation of the transportation system during a disaster.
Maintenance and Construction Management Service Area		
MC01	Maintenance and Construction Vehicle and Equipment Tracking	Tracks the location of maintenance and construction vehicles and other equipment to ascertain the progress of their activities.
MC02	Maintenance and Construction Vehicle Maintenance	Performs vehicle maintenance scheduling and manages both routine and corrective maintenance activities. Includes on-board sensors capable of automatically performing diagnostics.
MC03	Road Weather Data Collection	Collects current road weather conditions using data collected from environmental sensors deployed on and about the roadway.
MC04	Weather Information Processing and Distribution	Processes and distributes the environmental information collected from the Road Weather Data Collection service package. This service package uses the environmental data to detect environmental hazards such as icy road conditions, high winds, dense fog, etc. so system operators can make decisions on corrective actions to take.
MC05	Roadway Automated Treatment	Automatically treats a roadway section based on environmental or atmospheric conditions. Includes the sensors that detect adverse conditions, automated treatment (such as anti-icing chemicals), and driver information systems.
MC06	Winter Maintenance	Supports winter road maintenance. Monitors environmental conditions and weather forecasts and uses the information to schedule winter maintenance activities.

Service Package	Service Package Name	Description
Maintenance and Construction Management Service Area (continued)		
MC07	Roadway Maintenance and Construction	Supports numerous services for scheduled and unscheduled maintenance and construction on a roadway system or right-of-way. Environmental conditions information is also received from various weather sources to aid in scheduling maintenance and construction activities.
MC08	Work Zone Management	Directs activity in work zones, controlling traffic through portable dynamic message signs and informing other groups of activity for better coordination management. Also provides speed and delay information to motorists prior to the work zone.
MC09	Work Zone Safety Monitoring	Includes systems that improve work crew safety and reduce collisions between the motoring public and maintenance and construction vehicles. Detects vehicle intrusions in work zones and warns workers and drivers of safety hazards when encroachment occurs.
MC10	Maintenance and Construction Activity Coordination	Supports the dissemination of maintenance and construction activity to centers that can utilize it as part of their operations. (i.e., traffic management, transit, emergency management)
MC11	Environmental Probe Surveillance	Collects data from vehicles in the road network that can be used to directly measure or infer current environmental conditions.
MC12	Infrastructure Monitoring	Monitors the condition of pavement, bridges, tunnels, associated hardware, and other transportation-related infrastructure using both fixed and vehicle-based infrastructure monitoring sensors. Monitors vehicle probes used to determine current pavement conditions.
Public Transportation Service Area		
APTS01	Transit Vehicle Tracking	Monitors current transit vehicle location using an automated vehicle location system. Location data may be used to determine real time schedule adherence and update the transit system's schedule in real time.
APTS02	Transit Fixed-Route Operations	Performs vehicle routing and scheduling, as well as operator assignment and system monitoring for fixed-route and flexible-route transit services.
APTS03	Demand Response Transit Operations	Performs vehicle routing and scheduling, as well as operator assignment and system monitoring for demand responsive transit services.
APTS04	Transit Fare Collection Management	Manages transit fare collection on-board transit vehicles and at transit stops using electronic means. Allows the use of a traveler card or other electronic payment device.
APTS05	Transit Security	Provides for the physical security of transit passengers and transit vehicle operators. Includes on-board security cameras and panic buttons.
APTS06	Transit Fleet Management	Supports automatic transit maintenance scheduling and monitoring for both routine and corrective maintenance.
APTS07	Multi-modal Coordination	Establishes two way communications between multiple transit and traffic agencies to improve service coordination.
APTS08	Transit Traveler Information	Provides transit users at transit stops and on board transit vehicles with ready access to transit information. Services include stop annunciation, imminent arrival signs and real-time transit schedule displays. Systems that provide custom transit trip itineraries and other tailored transit information services are also represented by this service package.
APTS09	Transit Signal Priority	Determines the need for transit priority on routes and at certain intersections and requests transit vehicle priority at these locations to improve on-time performance of the transit system.
APTS10	Transit Passenger Counting	Counts the number of passengers entering and exiting a transit vehicle using sensors mounted on the vehicle and communicates the collected passenger data back to the management center.
APTS11	Multi-modal Connection Protection	Supports the coordination of multimodal services to optimize the travel time of travelers as they move from mode to mode (or to different routes within a single mode).

Service Package	Service Package Name	Description
Commercial Vehicle Operations Service Area		
CVO01	Carrier Operations and Fleet Management	Provides the capabilities to manage a fleet of commercial vehicles. Vehicle routing and tracking as well as notification of emergency management of any troublesome route deviations (such as a HAZMAT vehicle) are part of this service package.
CVO02	Freight Administration	Tracks the movement of cargo and monitors the cargo condition.
CVO03	Electronic Clearance	Provides for automatic clearance at roadside check facilities. Allows a good driver/vehicle/carrier to pass roadside facilities at highway speeds using transponders and dedicated short range communications to the roadside.
CVO04	CV Administrative Processes	Provides for electronic application, processing, fee collection, issuance and distribution of CVO credentials and tax filing.
CVO05	International Border Electronic Clearance	Provides for automated clearance at international border crossings.
CVO06	Weigh-In-Motion	Provides for high speed weigh-in-motion with or without automated vehicle identification capabilities.
CVO07	Roadside CVO Safety	Provides for automated roadside safety monitoring and reporting. Automates commercial vehicle safety inspections at the roadside check facilities.
CVO08	On-board CVO Safety	Provides for on-board commercial vehicle safety monitoring and reporting, and includes support for collecting on-board safety data via transceivers or other means. The on-board safety data are assessed by an off-board system. In some cases the monitoring and safety assessment may occur remotely (i.e., not at a roadside site).
CVO09	CVO Fleet Maintenance	Supports maintenance of CVO fleet vehicles with on-board monitoring equipment and automated vehicle location capabilities.
CVO10	HAZMAT Management	Integrates incident management capabilities with commercial vehicle tracking to assure effective treatment of HAZMAT material and incidents.
CVO11	Roadside HAZMAT Security Detection and Mitigation	Provides the capability to detect and classify security sensitive HAZMAT on commercial vehicles using roadside sensing and imaging technology. Credentials information can be accessed to verify if the commercial driver, vehicle and carrier are permitted to transport the identified HAZMAT.
CVO12	CV Driver Security Authentication	Provides the ability for fleet and freight management to detect when an unauthorized commercial vehicle driver attempts to drive a vehicle based on stored identity information. If an unauthorized driver has been detected the commercial vehicle can be disabled.
CVO13	Freight Assignment Tracking	Provides for the planning and tracking of the commercial vehicle, freight equipment and the commercial vehicle driver.
Traveler Information Service Area		
ATIS01	Broadcast Traveler Information	Collects traffic conditions, advisories, general public transportation, toll and parking information, incident information, roadway maintenance and construction information, air quality and weather information, and broadly disseminates this information through existing infrastructures (radio, cell phones, etc.).
ATIS02	Interactive Traveler Information	Provides tailored information in response to a traveler request. The traveler can obtain current information regarding traffic conditions, roadway maintenance and construction, transit services, ride share/ride match, parking management, detours and pricing information.
ATIS03	Autonomous Route Guidance	Using vehicle location and other information, this service package enables route planning and detailed route guidance based on static, stored information.
ATIS04	Dynamic Route Guidance	Offers advanced route planning and guidance that is responsive to current conditions.
ATIS05	ISP Based Trip Planning and Route Guidance	Offers the user pre-trip route planning and en-route guidance services. Routes may be based on static or real time network conditions.

Service Package	Service Package Name	Description
Traveler Information Service Area		
ATIS06	Transportation Operations Data Sharing	Collects, processes, and stores current information on traffic and travel conditions and other information about the current state of the transportation network and makes the information available to transportation system operators.
ATIS07	Travel Service Information and Reservation	Provides travel information and reservation services to the user. This service package provides multiple ways for accessing information either while en route in a vehicle using wide-area wireless communications or pre-trip via fixed-point to fixed-point connections.
ATIS08	Dynamic Ridesharing	Provides dynamic ridesharing/ride matching services to travelers.
ATIS09	In Vehicle Signing	Supports the distribution of traffic and travel advisory information to drivers through in-vehicle devices.
ATIS10	Short Range Communications Traveler Information	Provides location-specific or situation-relevant information to travelers in vehicles using Dedicated Short Range Communications (DSRC) infrastructure supporting mobility applications for connected vehicles. Delivers real-time traveler information including travel times, incident information, road conditions, and emergency traveler information to vehicles as they pass DSRC roadside equipment along their route.
Archived Data Management Service Area		
AD1	ITS Data Mart	Provides a focused archive that houses data collected and owned by a single agency or other organization. Focused archive typically covers a single transportation mode and one jurisdiction.
AD2	ITS Data Warehouse	Includes all the data collection and management capabilities of the ITS Data Mart. Adds the functionality to allow collection of data from multiple agencies and data sources across modal and jurisdictional boundaries.
AD3	ITS Virtual Data Warehouse	Provides the same broad access to multimodal, multidimensional data from varied sources as in the ITS Data Warehouse Service Package, but provides this access using enhanced interoperability between physically distributed ITS archives that are each locally managed.
Vehicle Safety Service Area		
AVSS01	Vehicle Safety Monitoring	Diagnoses critical components of the vehicle and warns the driver of potential dangers. On-board sensors will determine the vehicle's condition, performance, and on-board safety data and display that information to the driver.
AVSS02	Driver Safety Monitoring	Determines the driver's condition and warns the driver of potential dangers. On-board sensors will determine the driver's condition, performance, and on-board safety data and display that information to the driver.
AVSS03	Longitudinal Safety Monitoring	Uses on-board safety sensors and collision sensors to monitor the areas in front of and behind the vehicle and present warnings to the driver about potential hazards.
AVSS04	Lateral Safety Warning	Uses on-board safety sensors and collision sensors to monitor the areas to the sides of the vehicle and present warnings to the driver about potential hazards.
AVSS05	Intersection Safety Warning	Determines the probability of a collision in an equipped intersection (either highway-highway or highway-rail) and provides timely warnings to drivers in response to hazardous conditions. Monitors in the roadway infrastructure assess vehicle locations and speeds near an intersection. Using this information, a warning is determined and communicated to the approaching vehicle using a short range communications system. Information can be provided to the driver through the ATIS09 – In-Vehicle Signing service package.
AVSS06	Pre-Crash Restraint Deployment	Provides in-vehicle sensors to monitor the vehicle's local environment (lateral and longitudinal gaps, weather, and roadway conditions), determine collision probability, and deploy a pre-crash safety system.

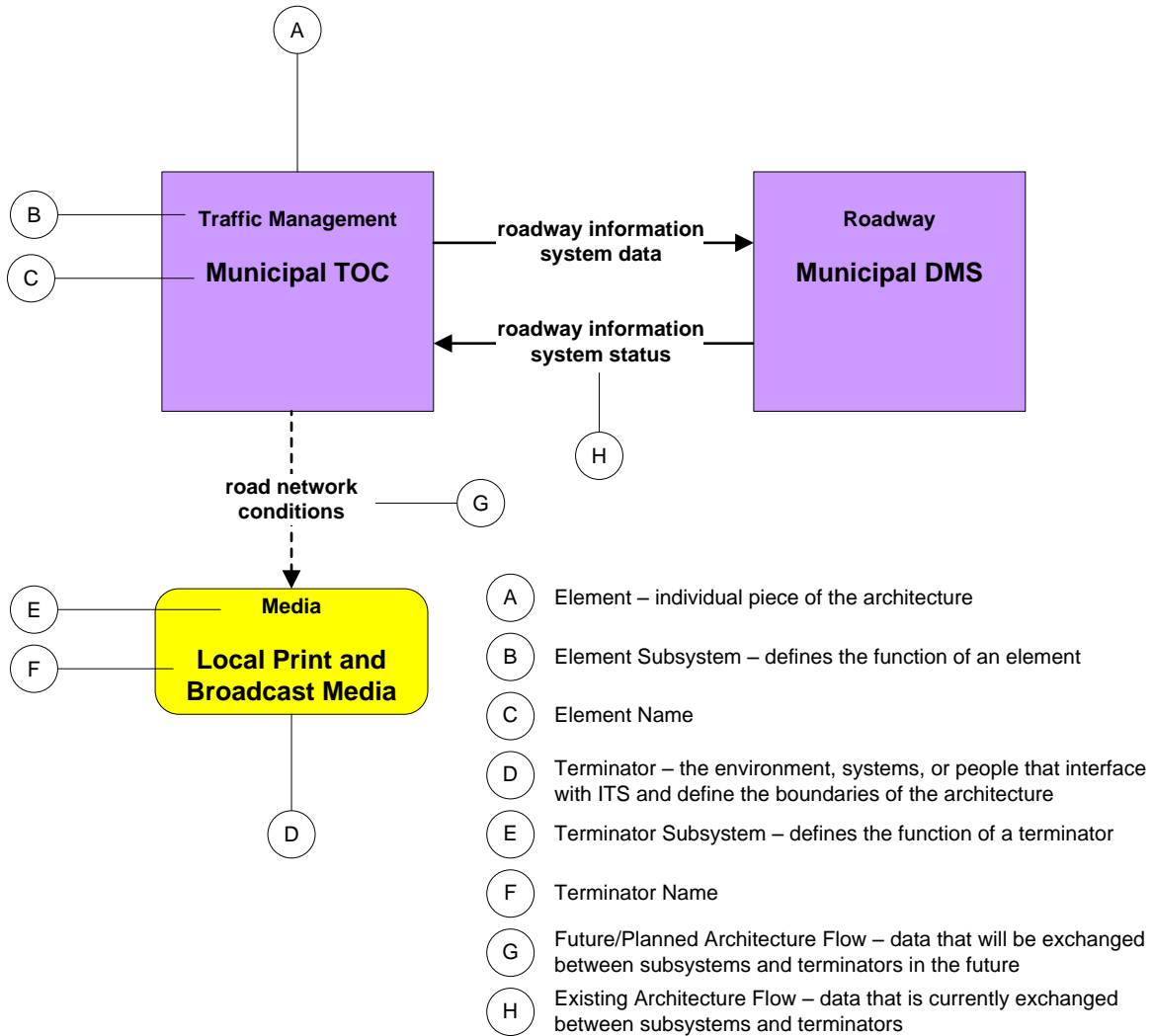
Service Package	Service Package Name	Description
Vehicle Safety Service Area (continued)		
AVSS07	Driver Visibility Improvement	Enhances the driver visibility using an enhanced vision system. On-board display hardware is needed.
AVSS08	Advanced Vehicle Longitudinal Control	Automates the speed and headway control functions on board the vehicle utilizing safety sensors and collision sensors combined with vehicle dynamics processing to control the throttle and brakes. Requires on-board sensors to measure longitudinal gaps and a processor for controlling the vehicle speed.
AVSS09	Advanced Vehicle Lateral Control	Automates the steering control on board the vehicle utilizing safety sensors and collision sensors combined with vehicle dynamics processing to control the steering. Requires on-board sensors to measure lane position and lateral deviations and a processor for controlling the vehicle steering.
AVSS10	Intersection Collision Avoidance	Determines the probability of an intersection collision and provides timely warnings to approaching vehicles so that avoidance actions can be taken. This service package builds on the intersection collision warning infrastructure and in-vehicle equipment and adds equipment in the vehicle that can take control of the vehicle in emergency situations.
AVSS11	Automated Vehicle Operations	Enables “hands-off” operation of the vehicle on the automated portion of the highway system. Implementation requires lateral lane holding, vehicle speed and steering control, and automated highway system check-in and check-out.
AVSS12	Cooperative Vehicle Safety Systems	Enhances the on-board longitudinal and lateral warning stand-alone systems by exchanging messages wirelessly with other surrounding vehicles. Vehicles send out information concerning their location, speed, and direction to any surrounding vehicles. Special messages from approaching emergency vehicles may also be received and processed.

APPENDIX B – CUSTOMIZED ITS SERVICE PACKAGES

APPENDIX B

ITS SERVICE PACKAGE

DIAGRAM COMPONENTS AND TERMINOLOGY KEY



Austin Regional ITS Architecture Service Packages

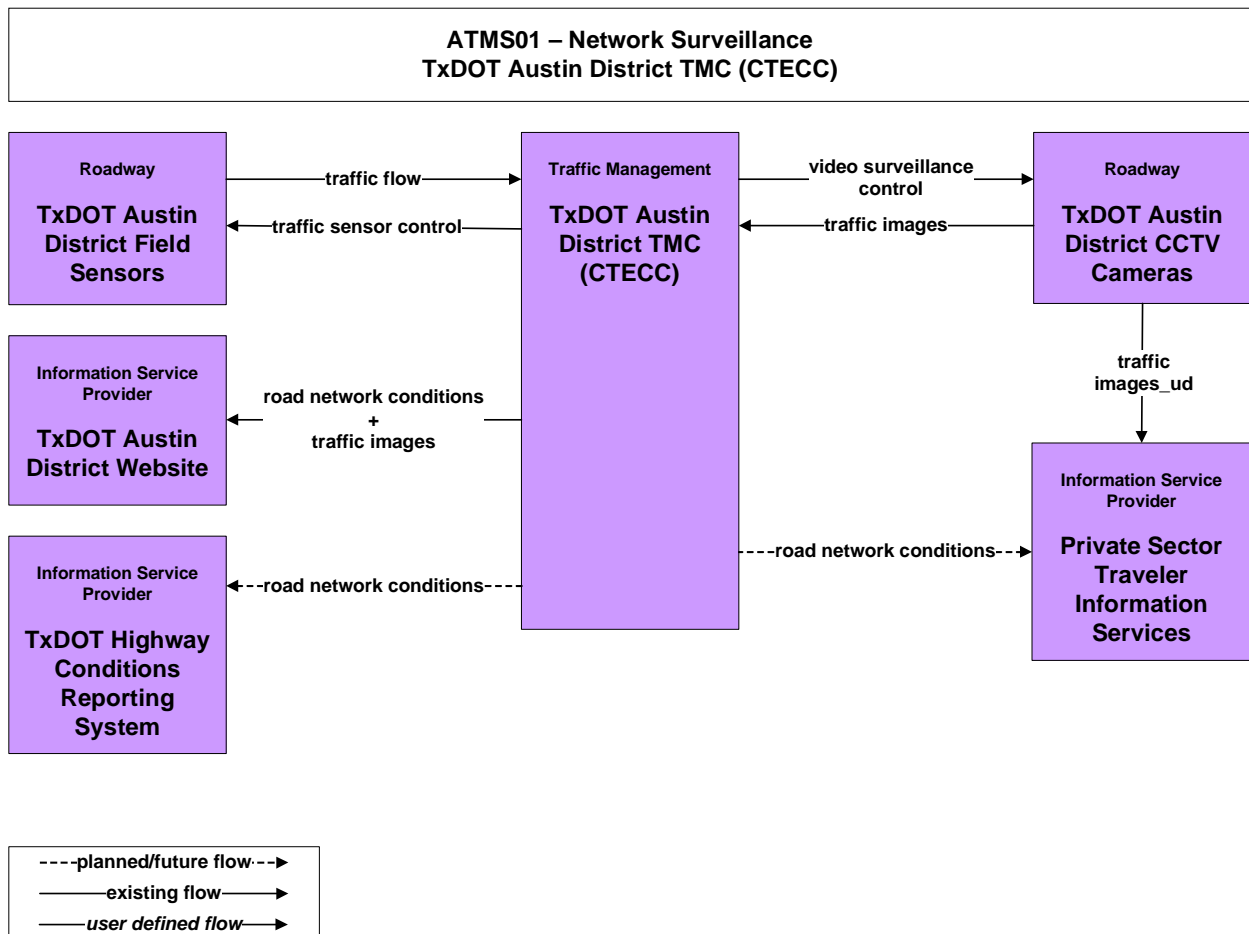
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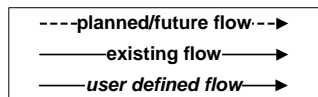
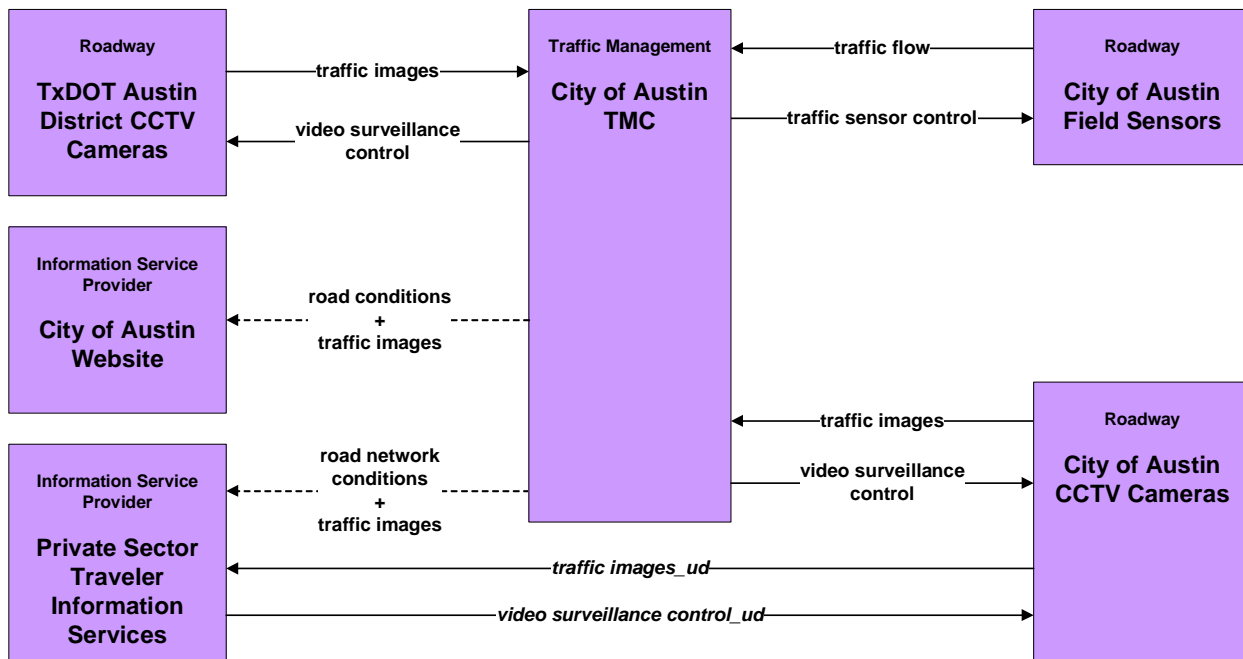
Austin Regional ITS Architecture

Customized ITS Service Package Diagrams

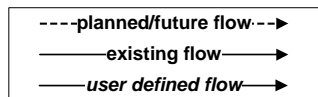
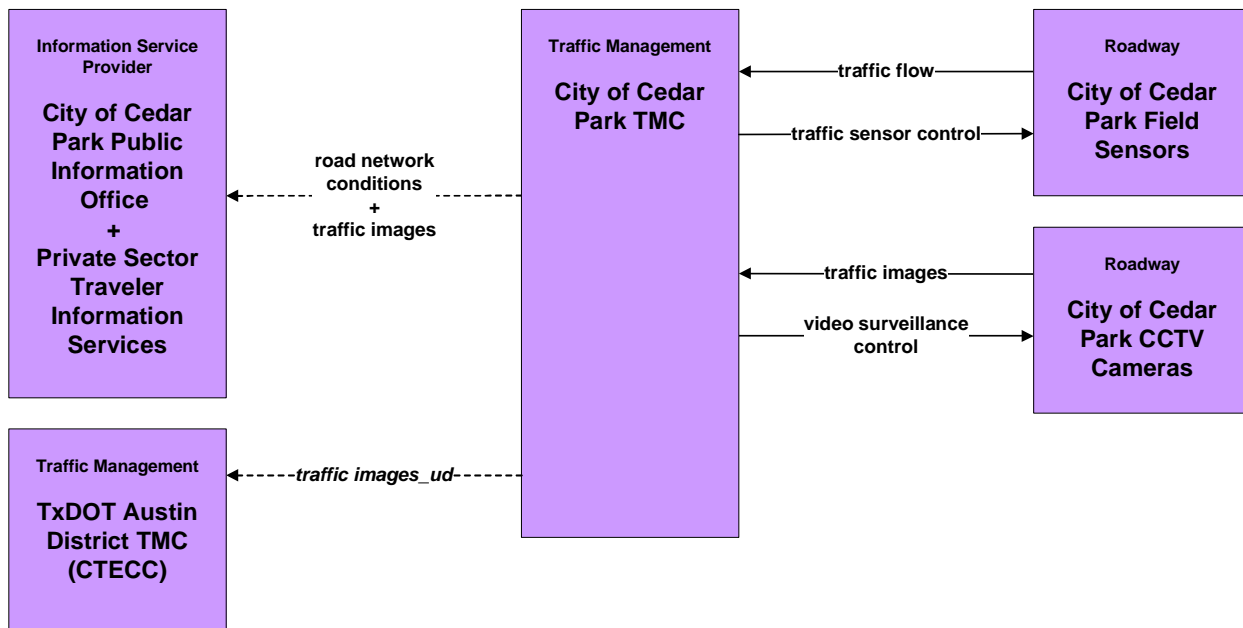
Advanced Traffic Management Systems (ATMS)



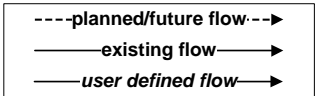
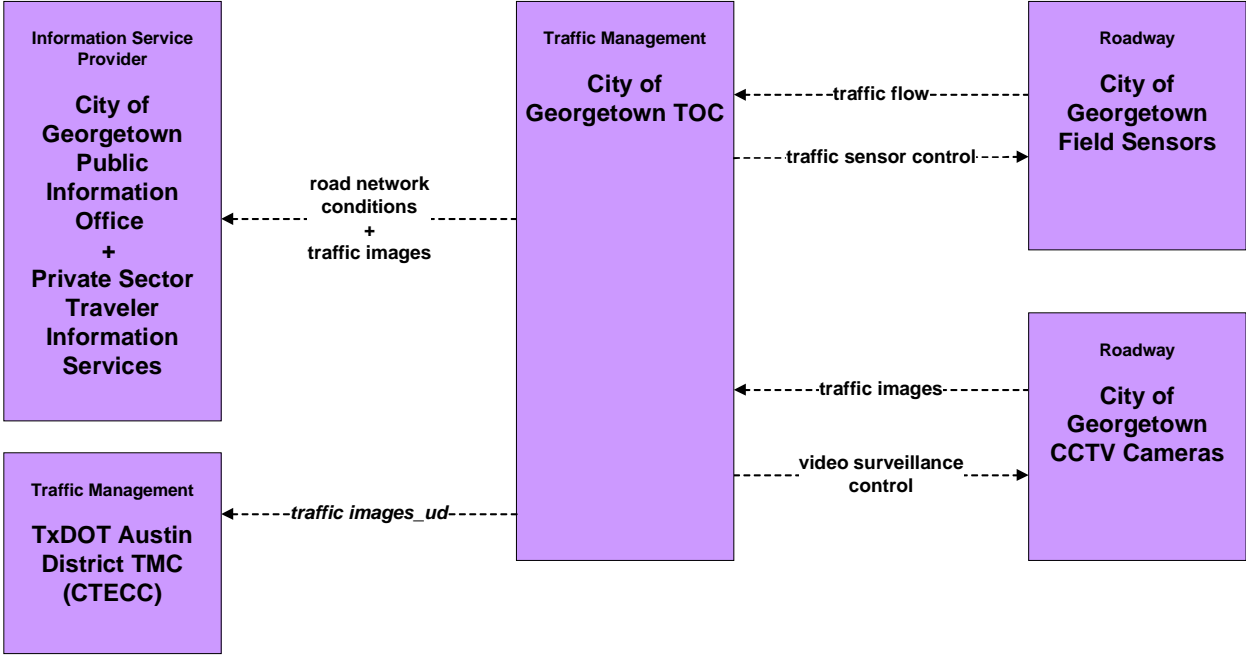
**ATMS01 - Network Surveillance
City of Austin Traffic Management Center**



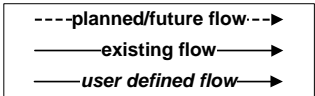
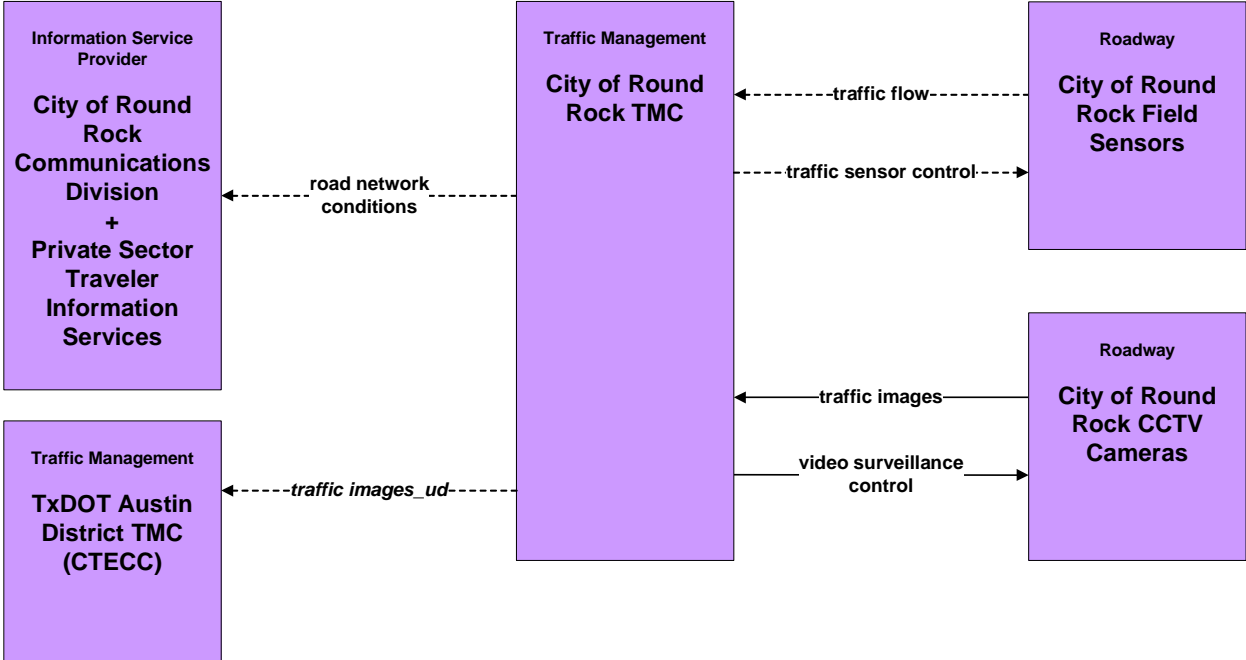
**ATMS01 - Network Surveillance
City of Cedar Park Traffic Management Center**



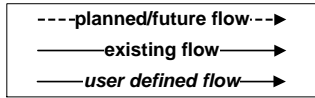
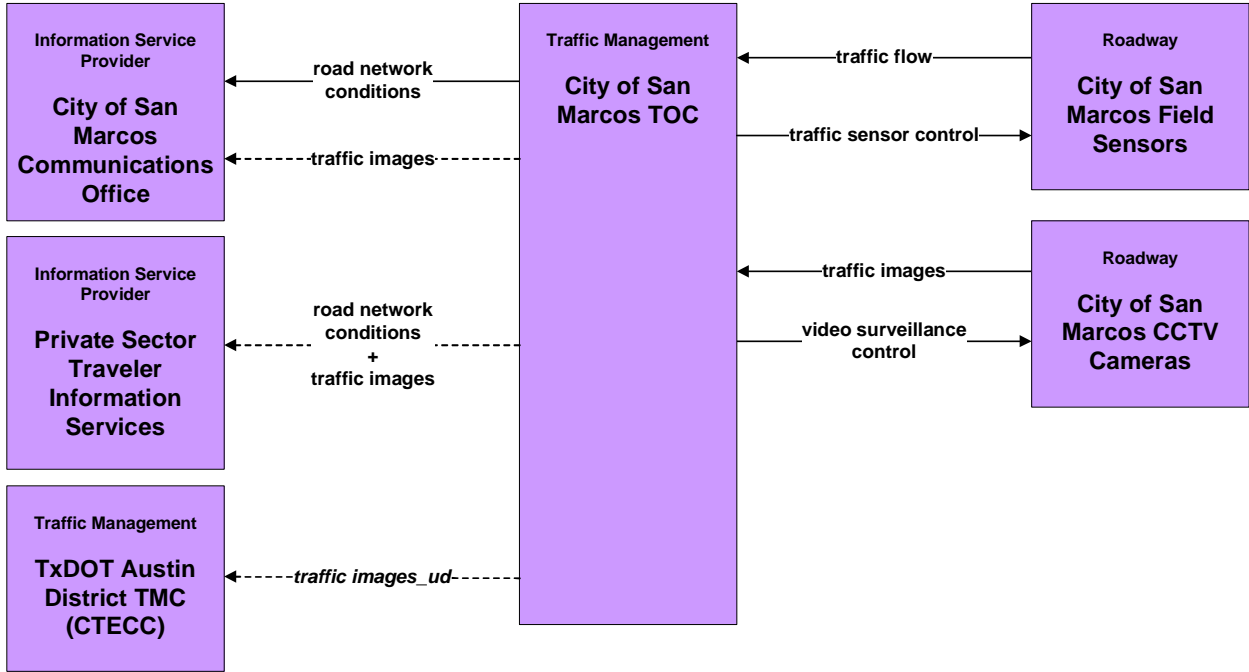
ATMS01 - Network Surveillance
City of Georgetown Traffic Management Center



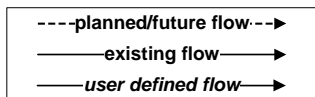
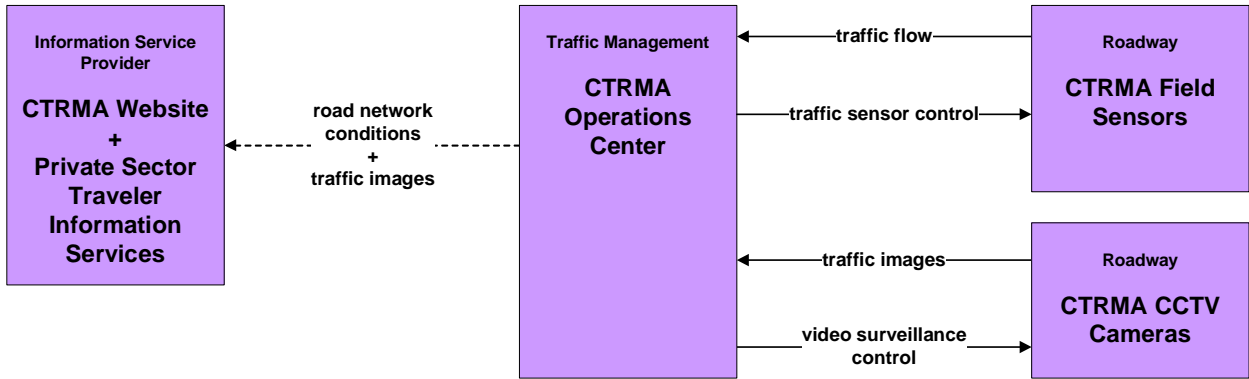
ATMS01 - Network Surveillance
City of Round Rock Traffic Management Center



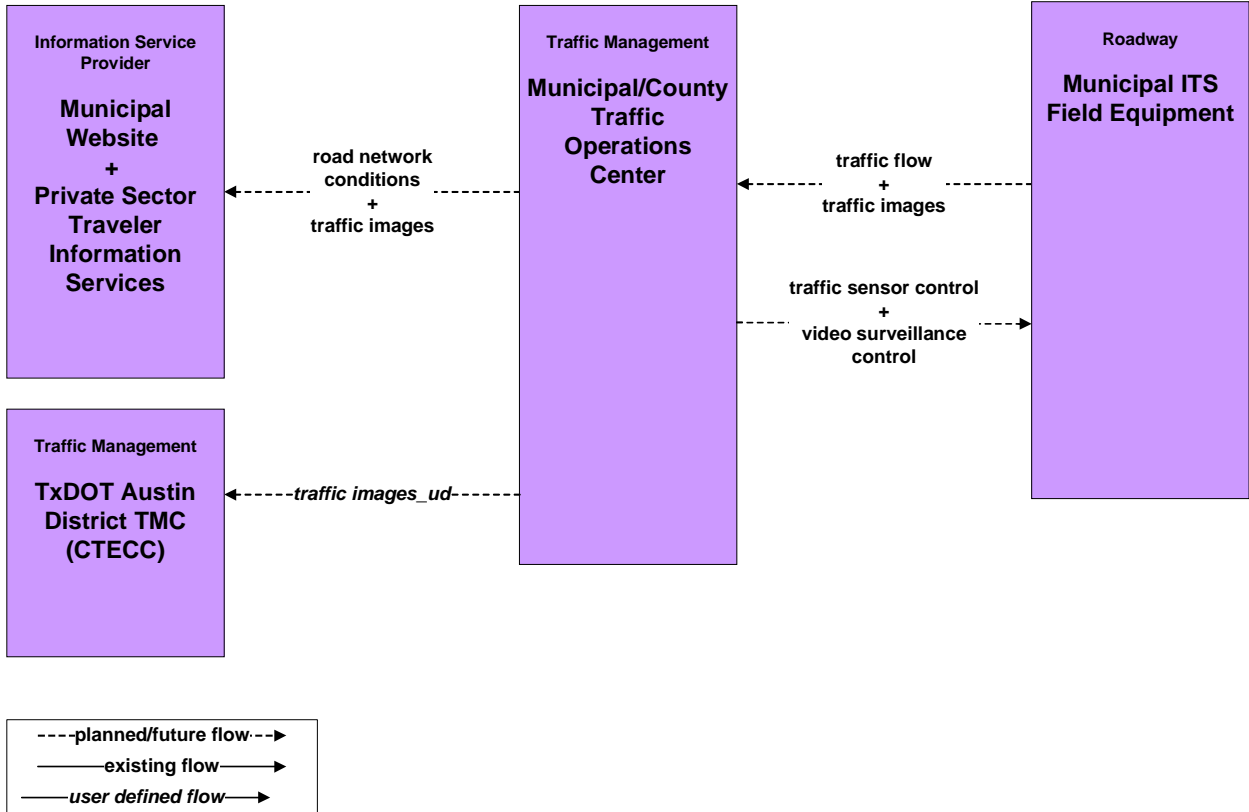
**ATMS01 - Network Surveillance
City of San Marcos Traffic Management Center**



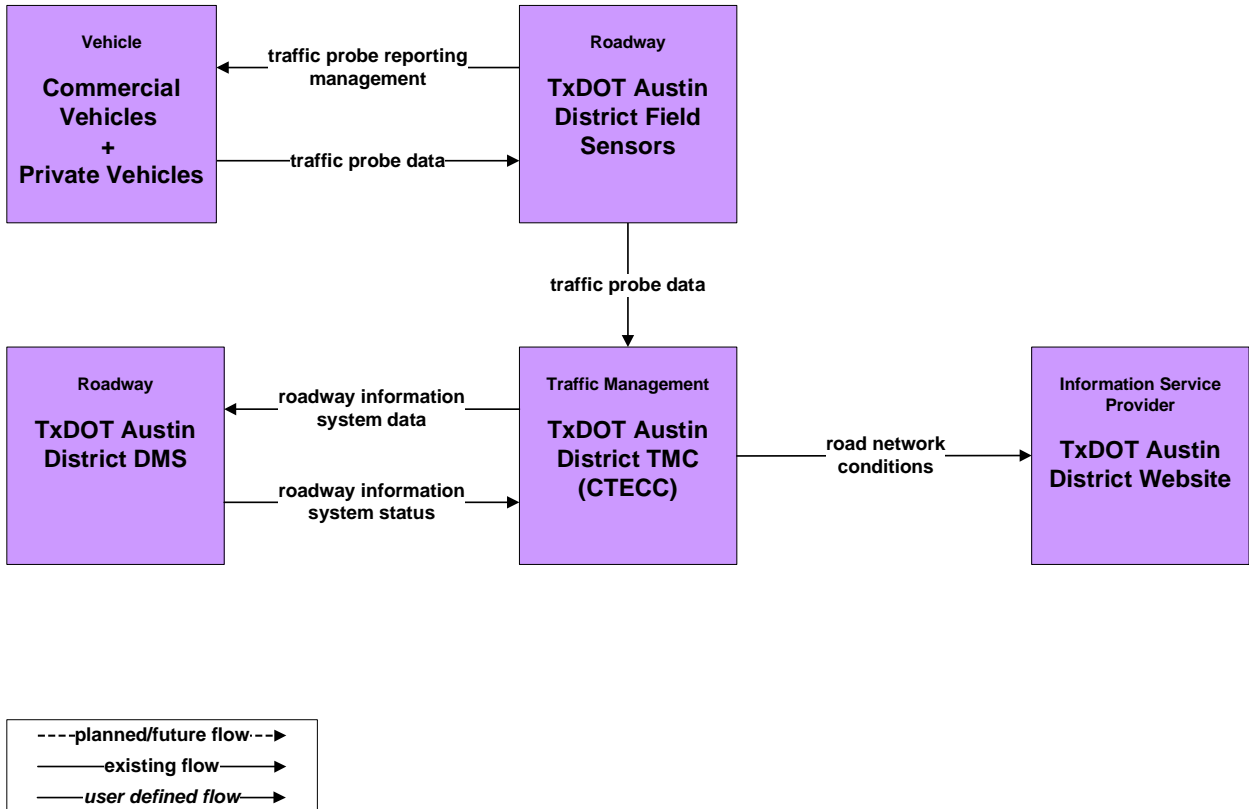
**ATMS01 - Network Surveillance
CTRMA Operations Center**



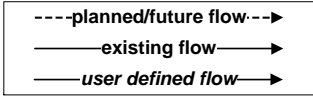
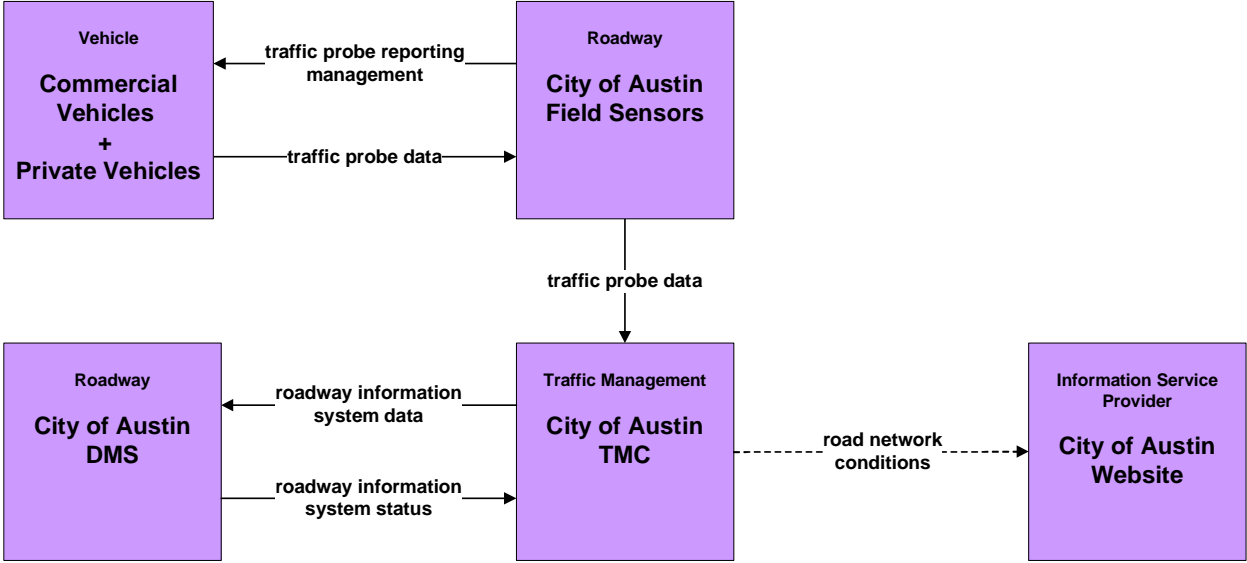
**ATMS01 - Network Surveillance
Municipal/County Traffic Operations Center**



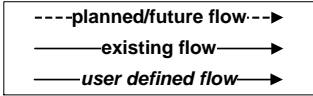
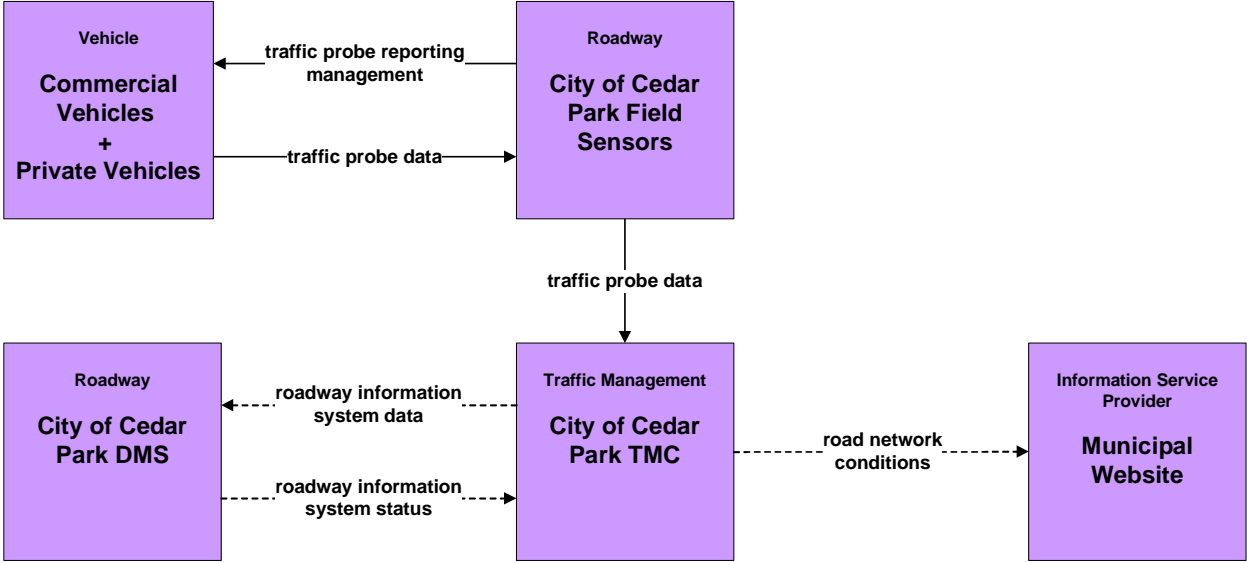
**ATMS02 – Traffic Probe Surveillance
TxDOT Austin District TMC (CTECC)**



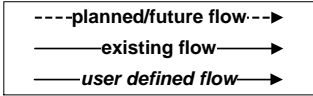
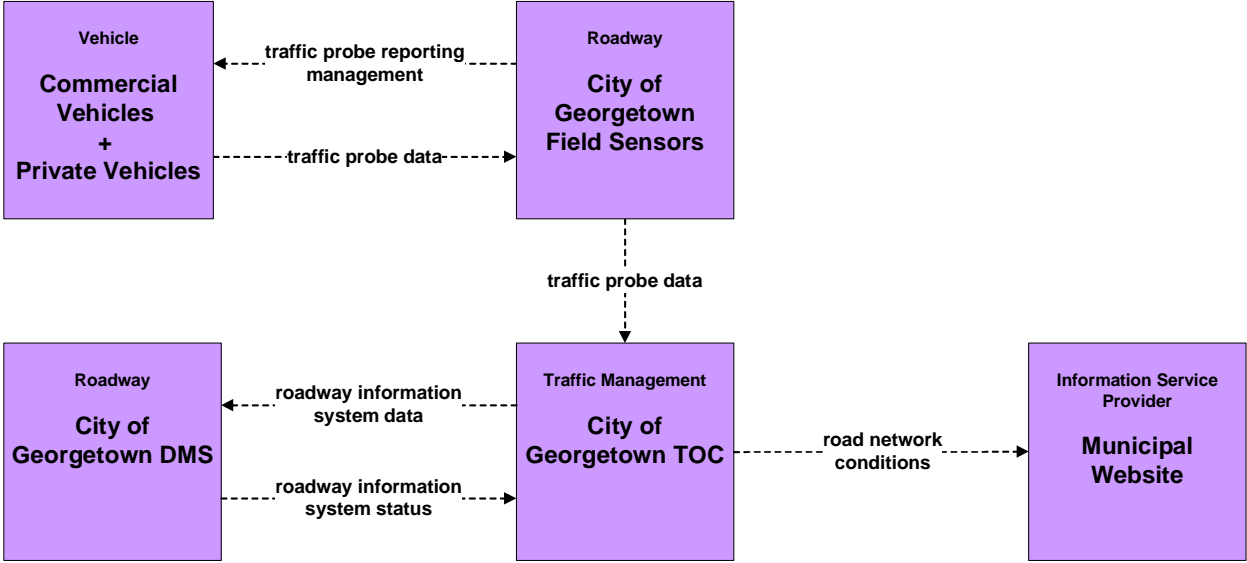
**ATMS02 – Traffic Probe Surveillance
City of Austin**



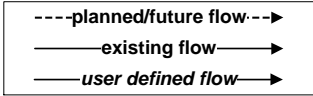
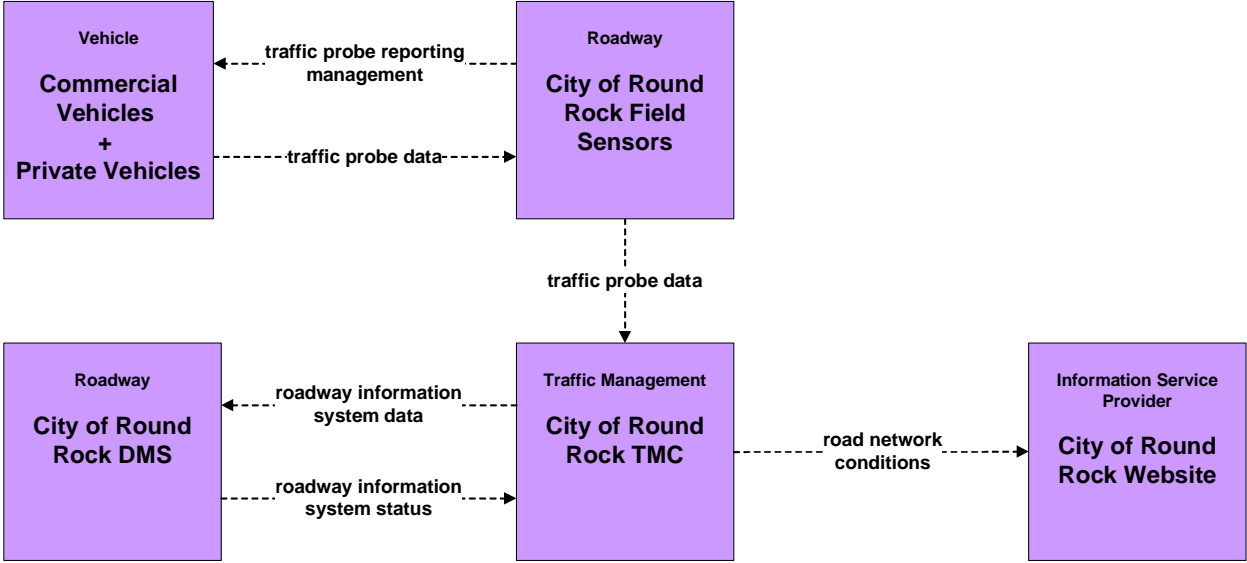
**ATMS02 – Traffic Probe Surveillance
City of Cedar Park**



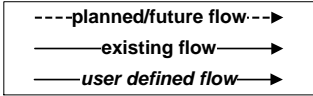
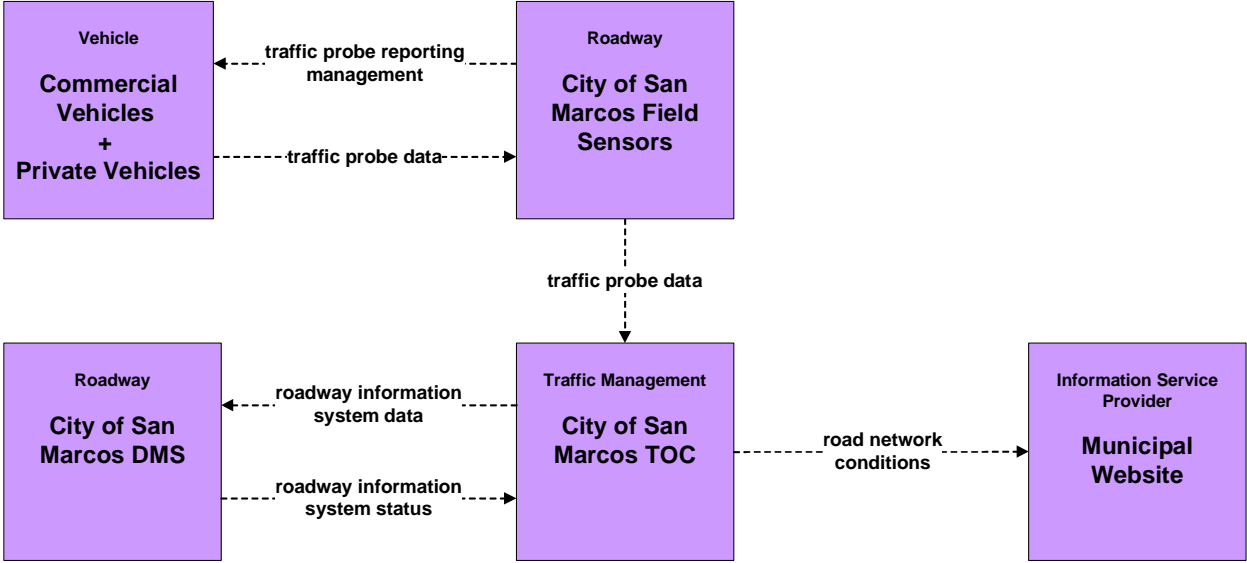
**ATMS02 – Traffic Probe Surveillance
City of Georgetown**



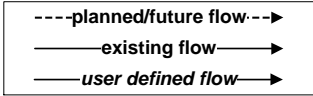
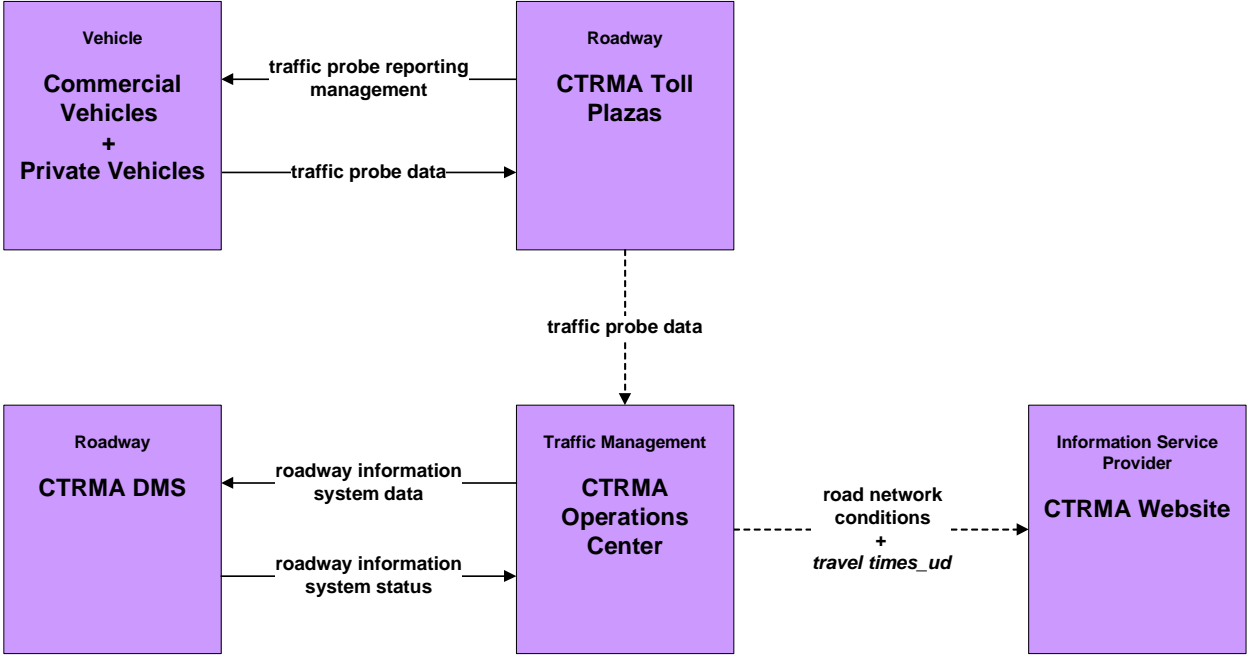
**ATMS02 – Traffic Probe Surveillance
City of Round Rock**



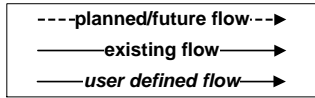
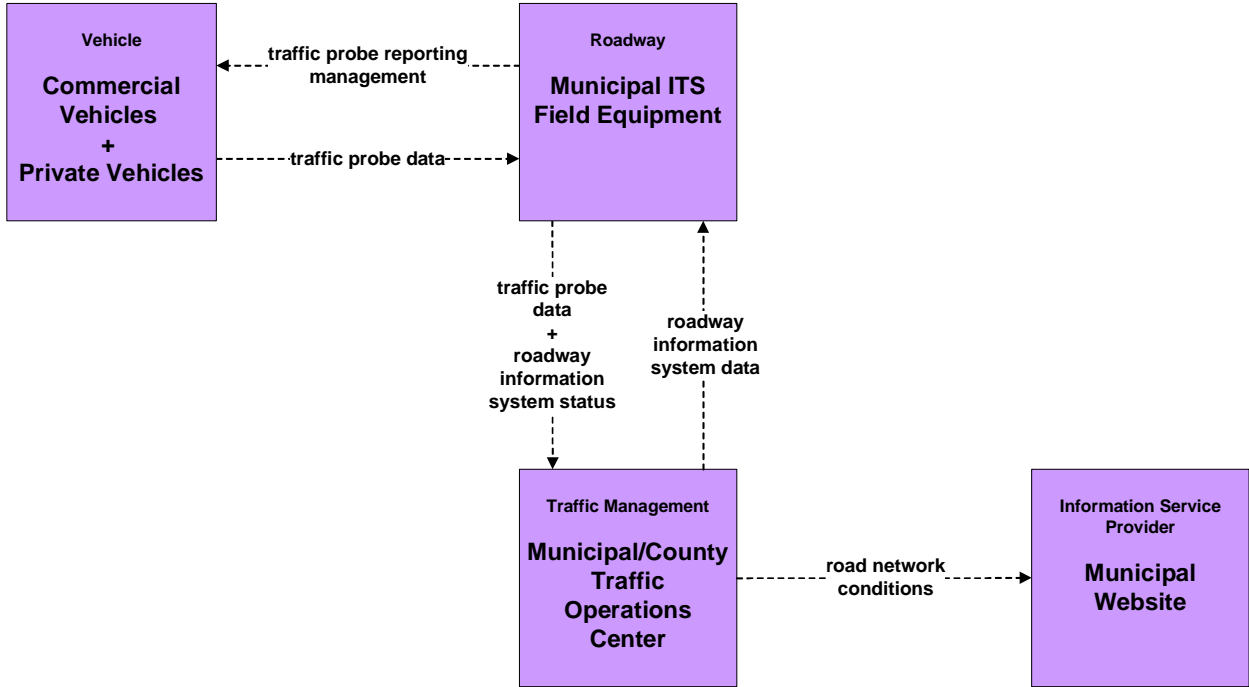
**ATMS02 – Traffic Probe Surveillance
City of San Marcos**



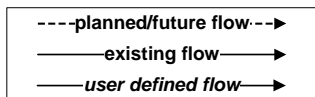
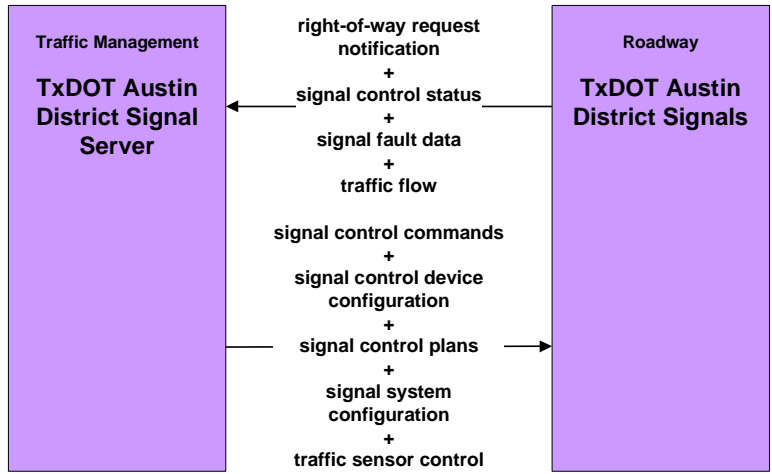
**ATMS02 – Traffic Probe Surveillance
CTRMA**



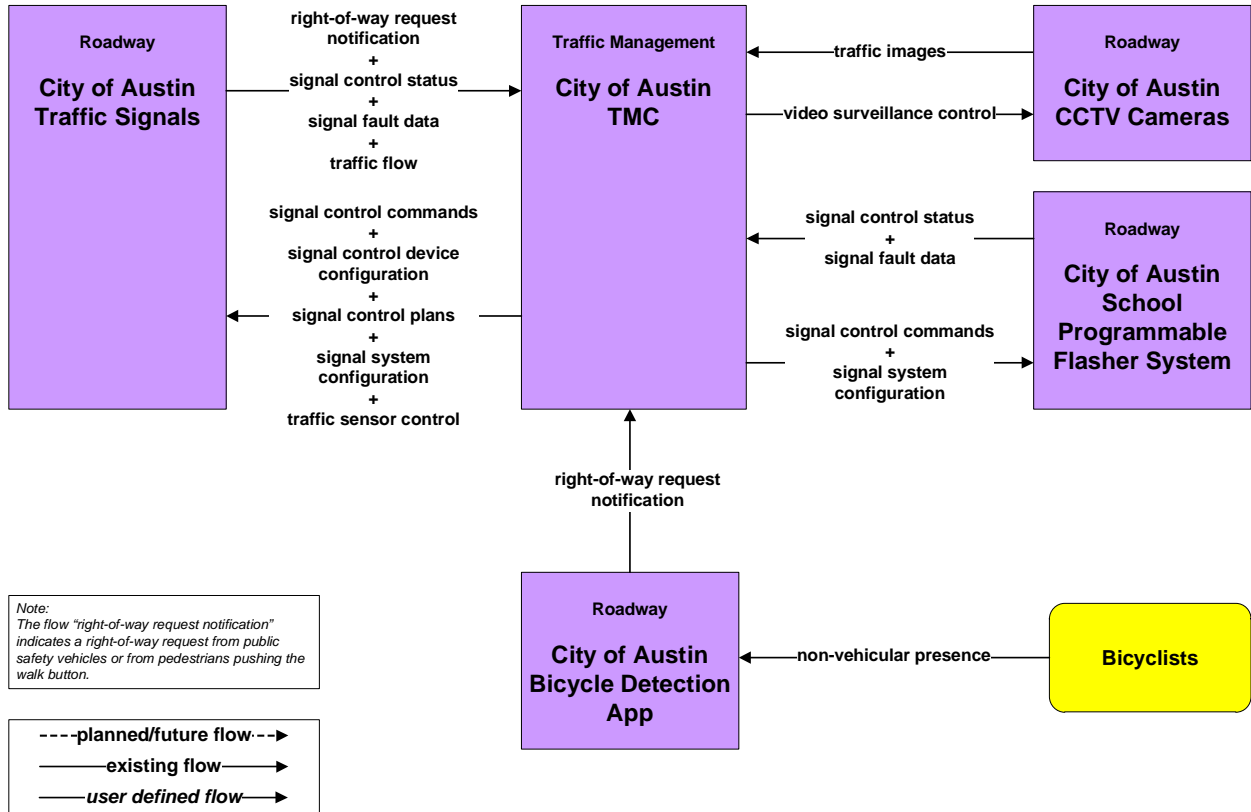
**ATMS02 – Traffic Probe Surveillance
Municipal/County Traffic Operations Center**



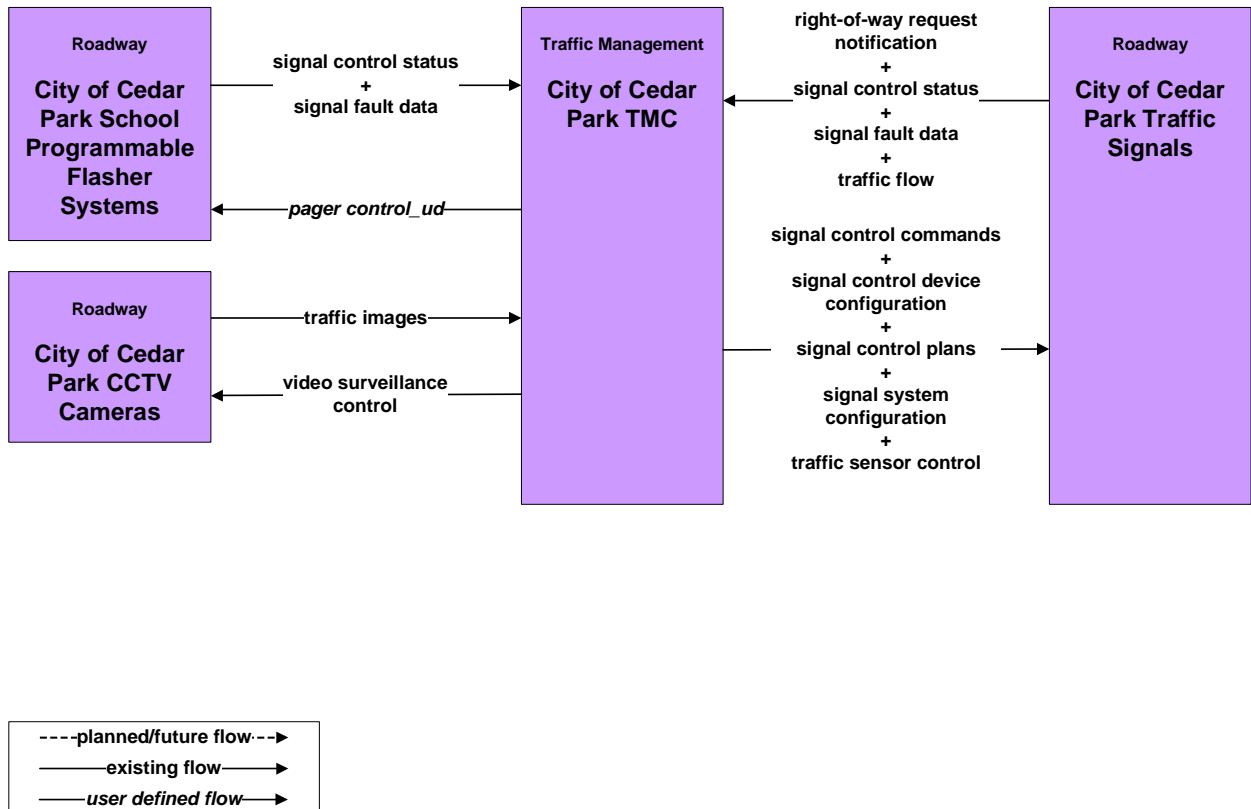
**ATMS03 – Traffic Signal Control
TxDOT Austin District Signal Server**



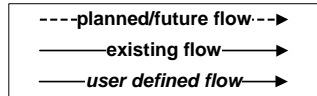
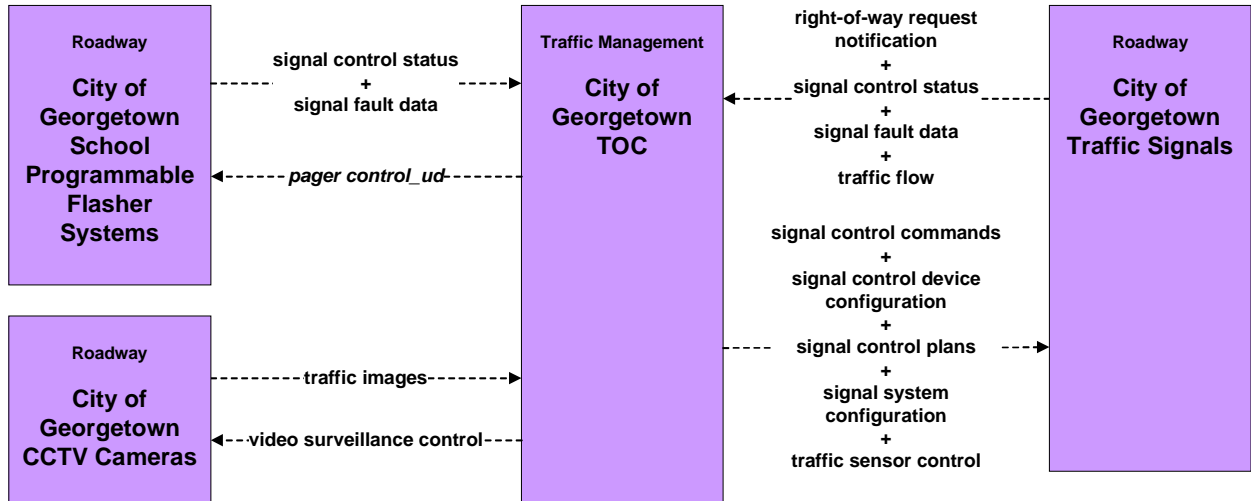
ATMS03 - Traffic Signal Control
City of Austin Traffic Management Center



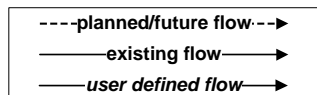
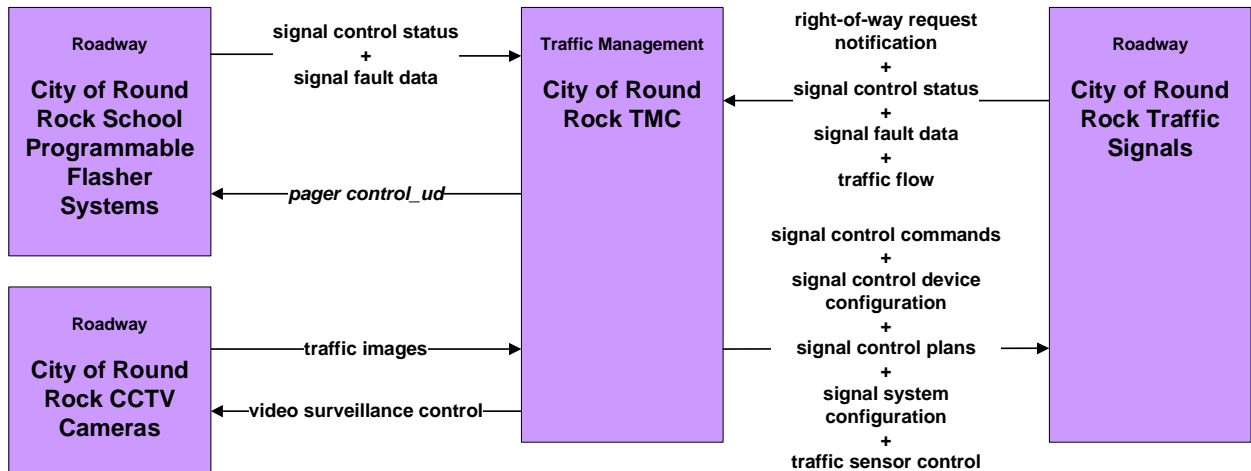
ATMS03 - Traffic Signal Control
City of Cedar Park Traffic Operations Center



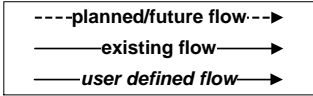
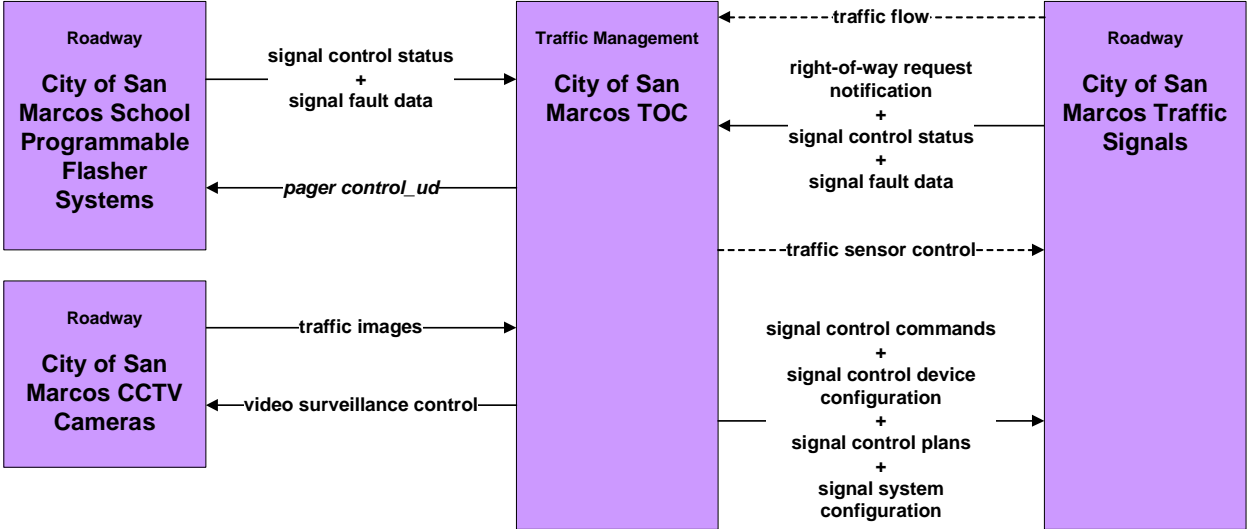
ATMS03 - Traffic Signal Control
City of Georgetown Traffic Operations Center



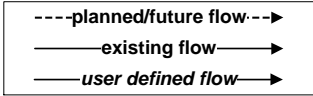
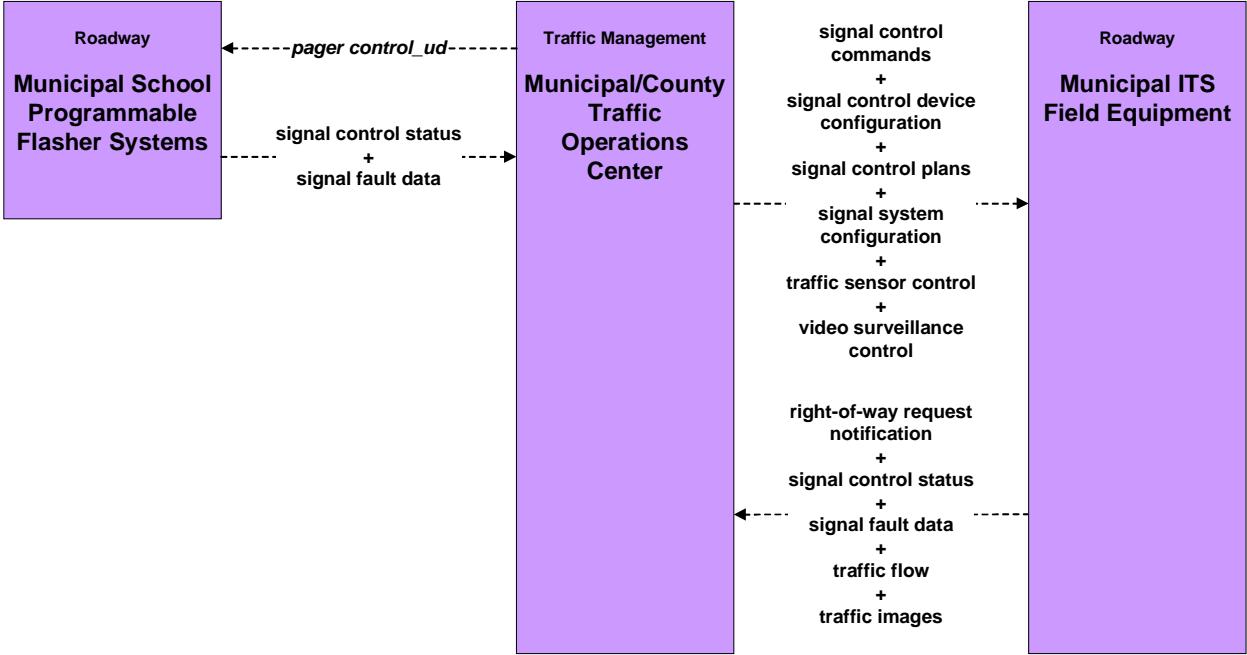
ATMS03 - Traffic Signal Control
City of Round Rock Traffic Management Center



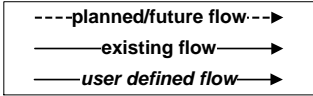
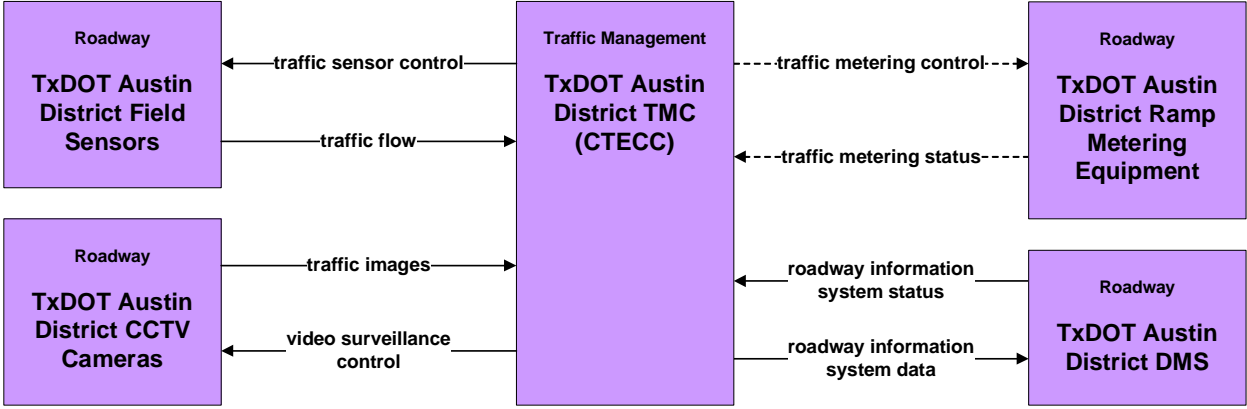
ATMS03 - Traffic Signal Control
City of San Marcos Traffic Operations Center



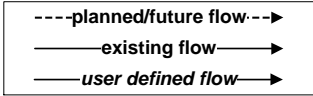
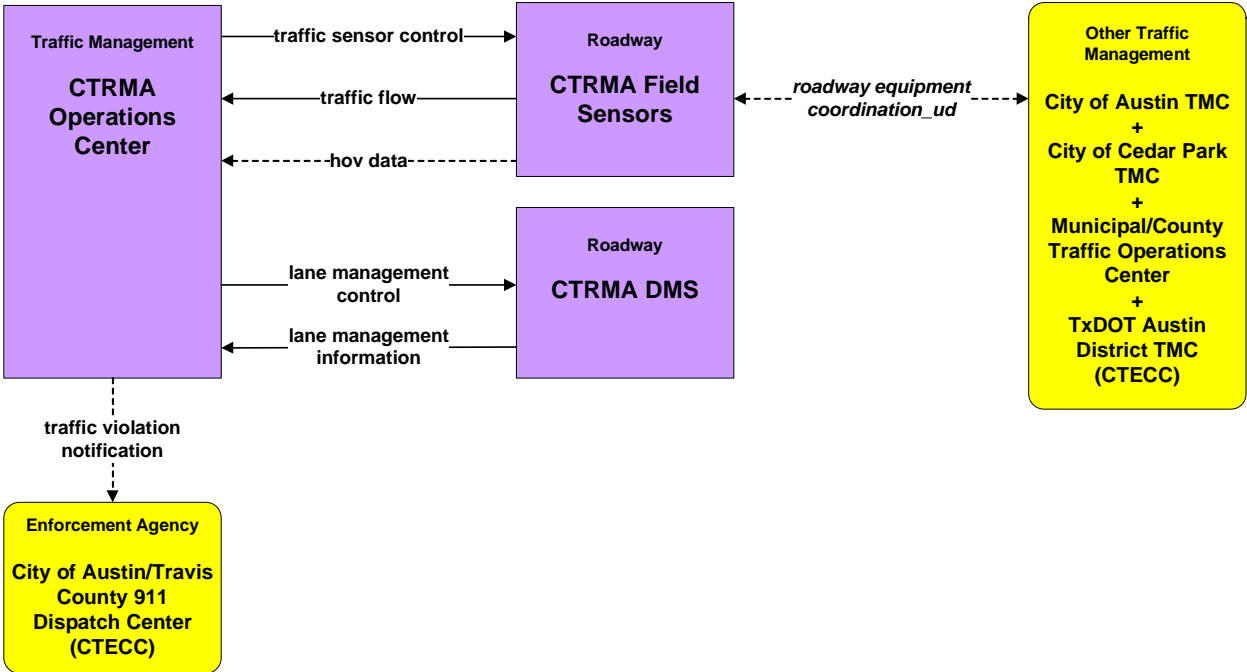
ATMS03 - Traffic Signal Control
Municipal/County Traffic Operations Center



**ATMS04 – Traffic Metering
TxDOT Austin District TMC (CTECC)**

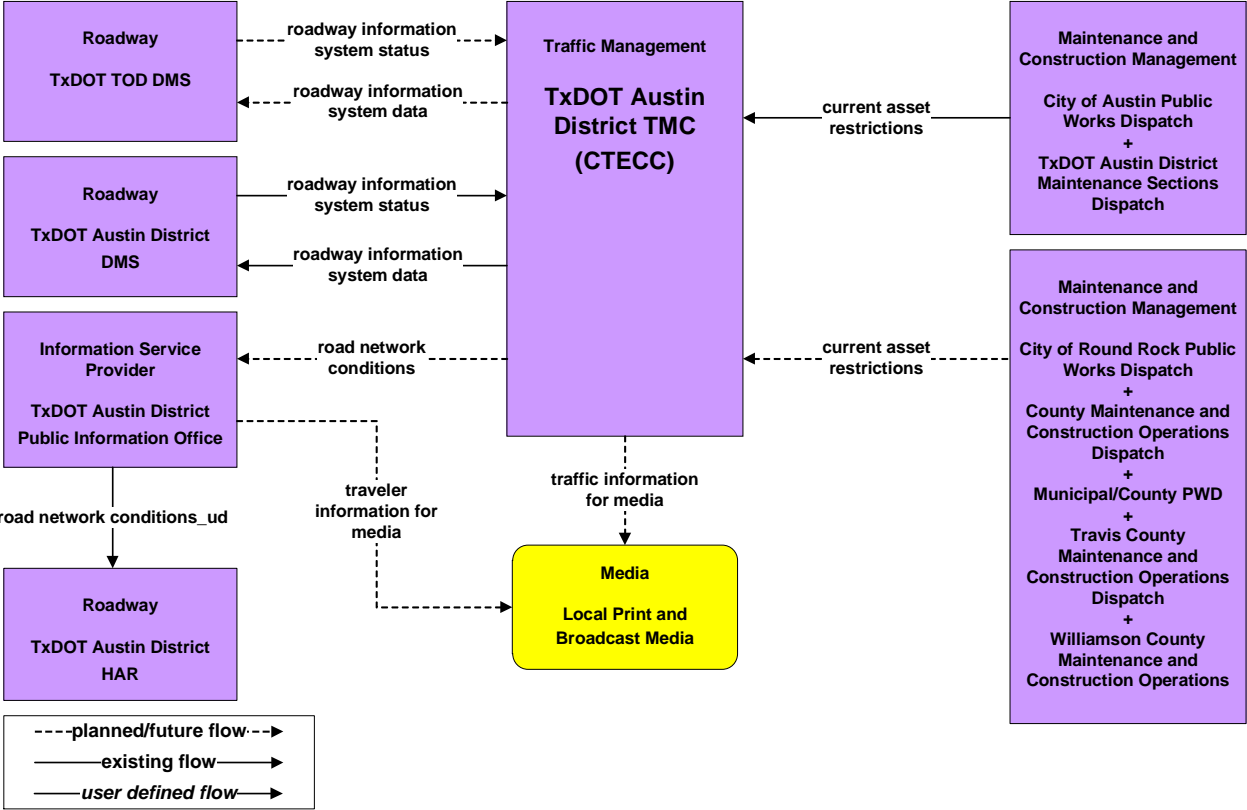


**ATMS05 - HOV Lane Management
CTRMA Austin District TMC (CTECC)**

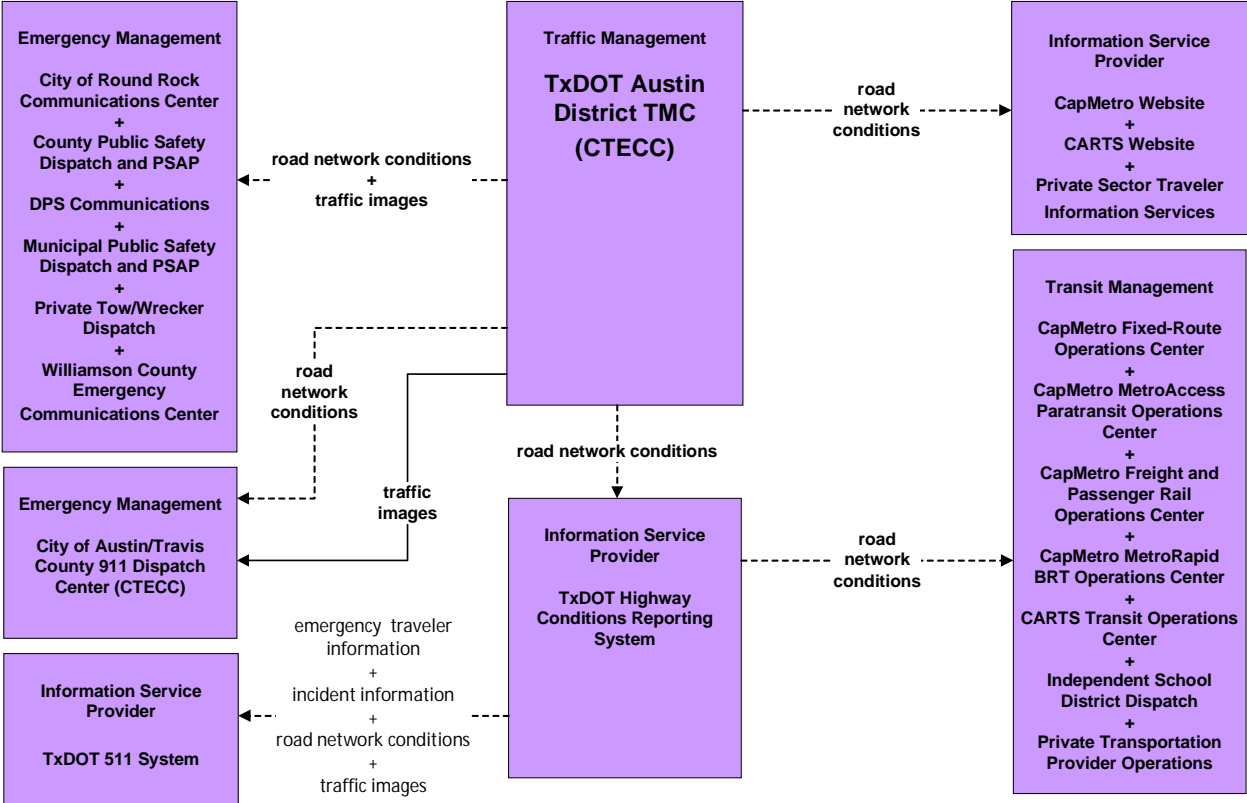


Note:
CTRMA is currently constructing Express Lanes along MoPac. These lanes will be free for emergency vehicles, registered van pools, and public transit vehicles. All other vehicles will pay a variable toll that will change based on congestion.

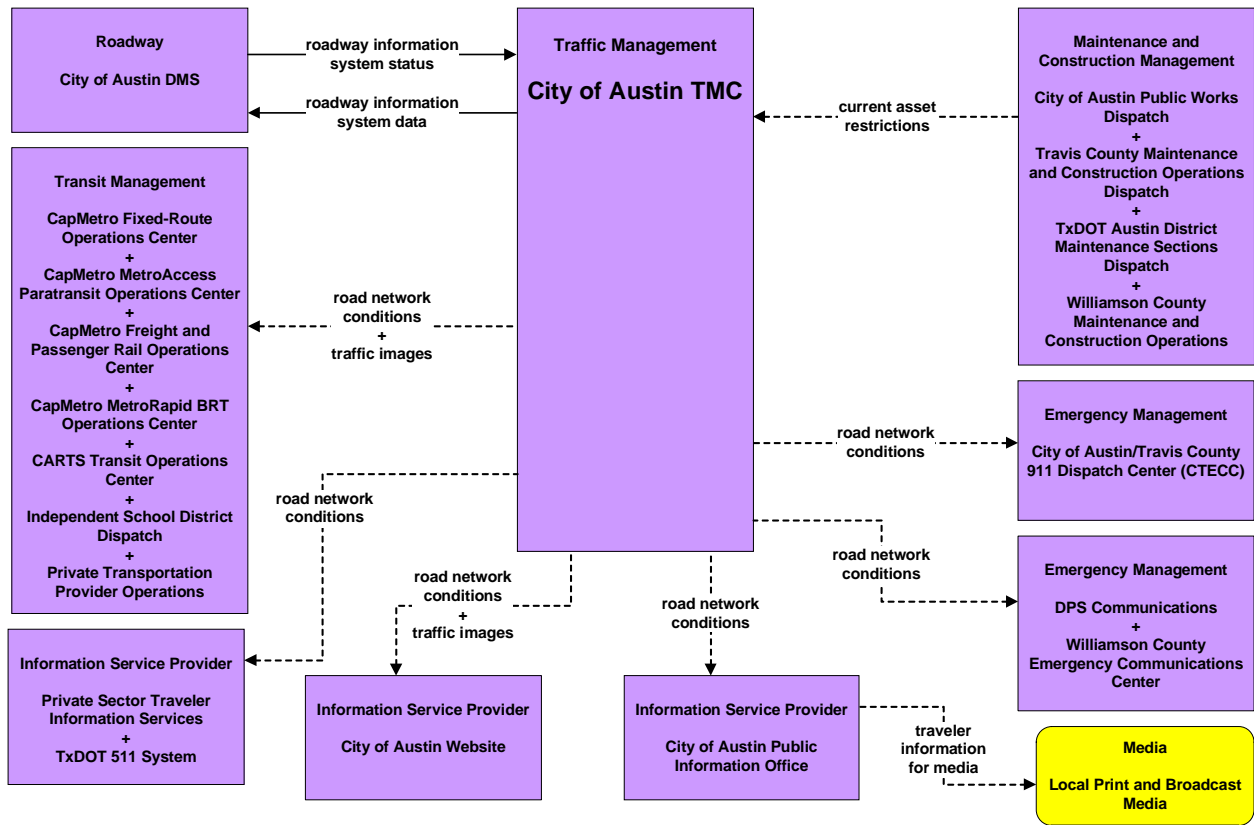
ATMS06 – Traffic Information Dissemination
TxDOT Austin District TMC (CTECC) (1 of 2)



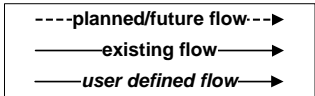
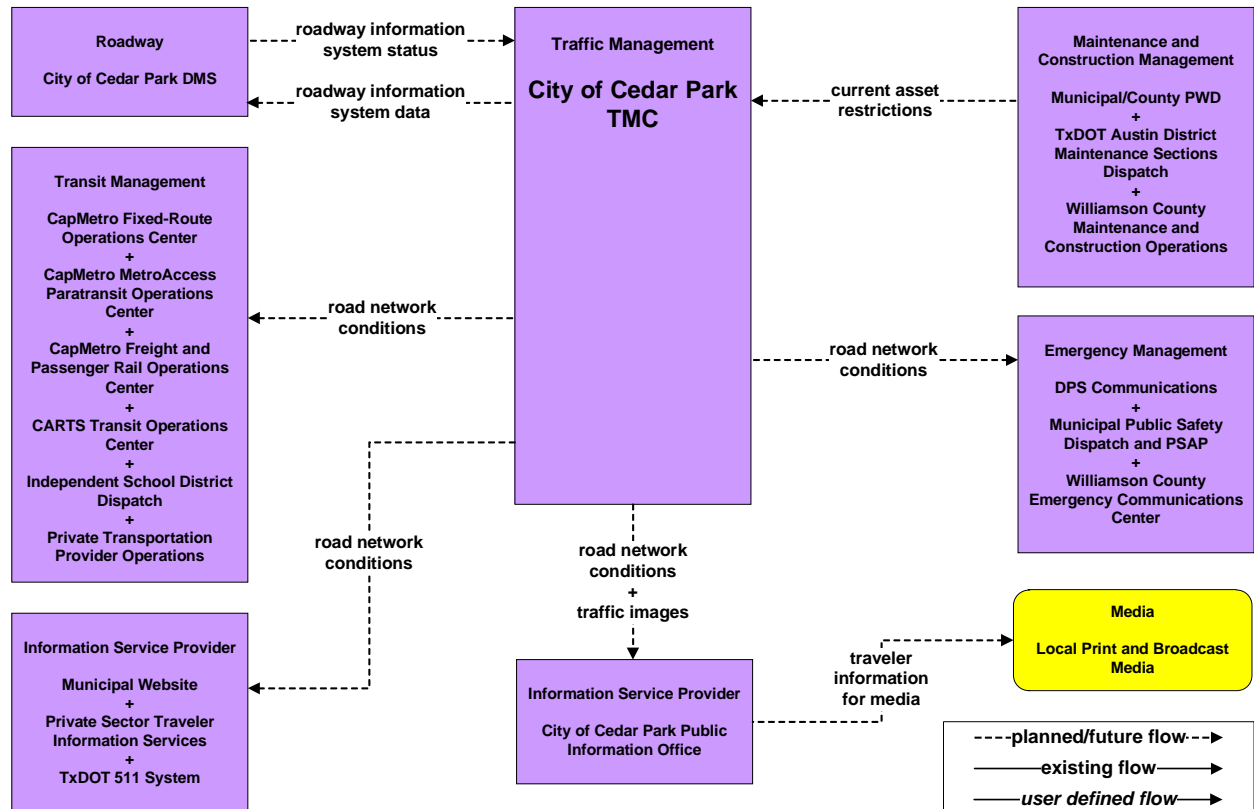
ATMS06 – Traffic Information Dissemination
TxDOT Austin District TMC (CTECC) (2 of 2)



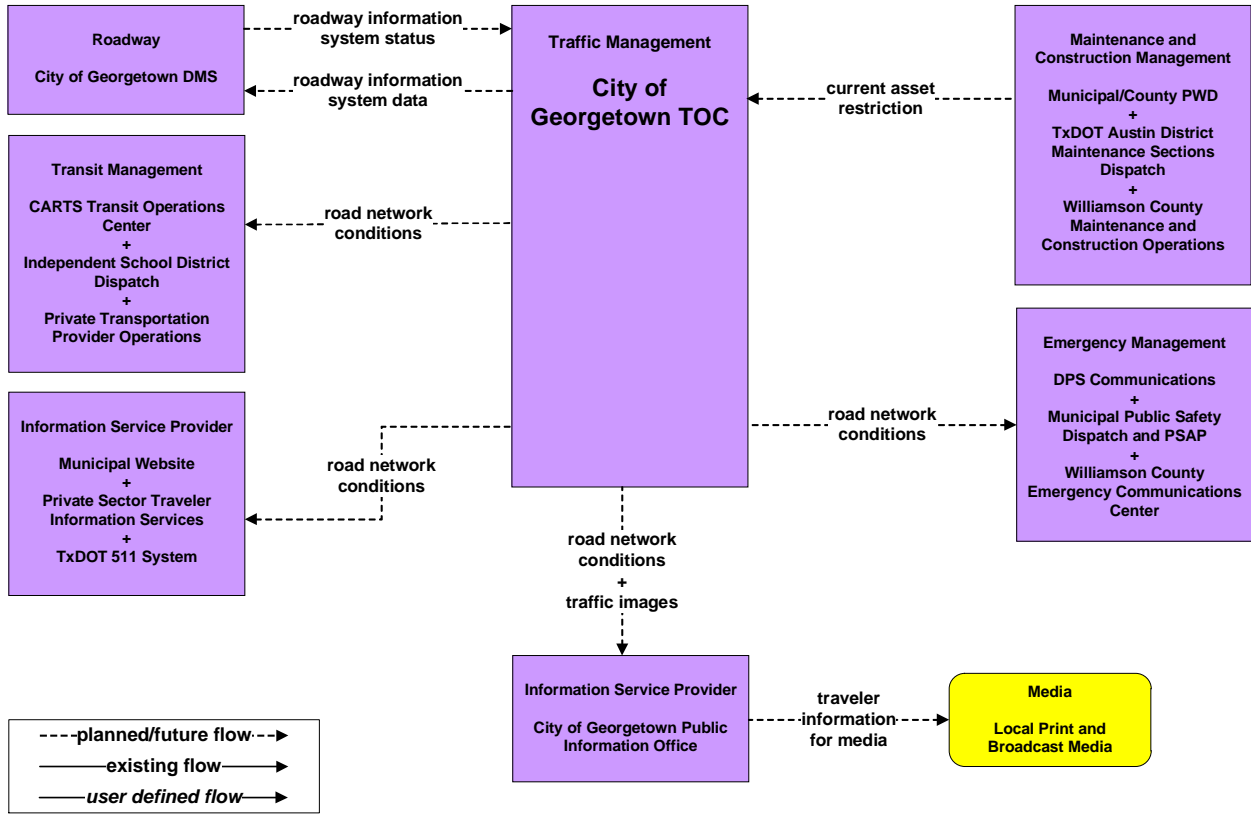
**ATMS06 – Traffic Information Dissemination
City of Austin Traffic Management Center**



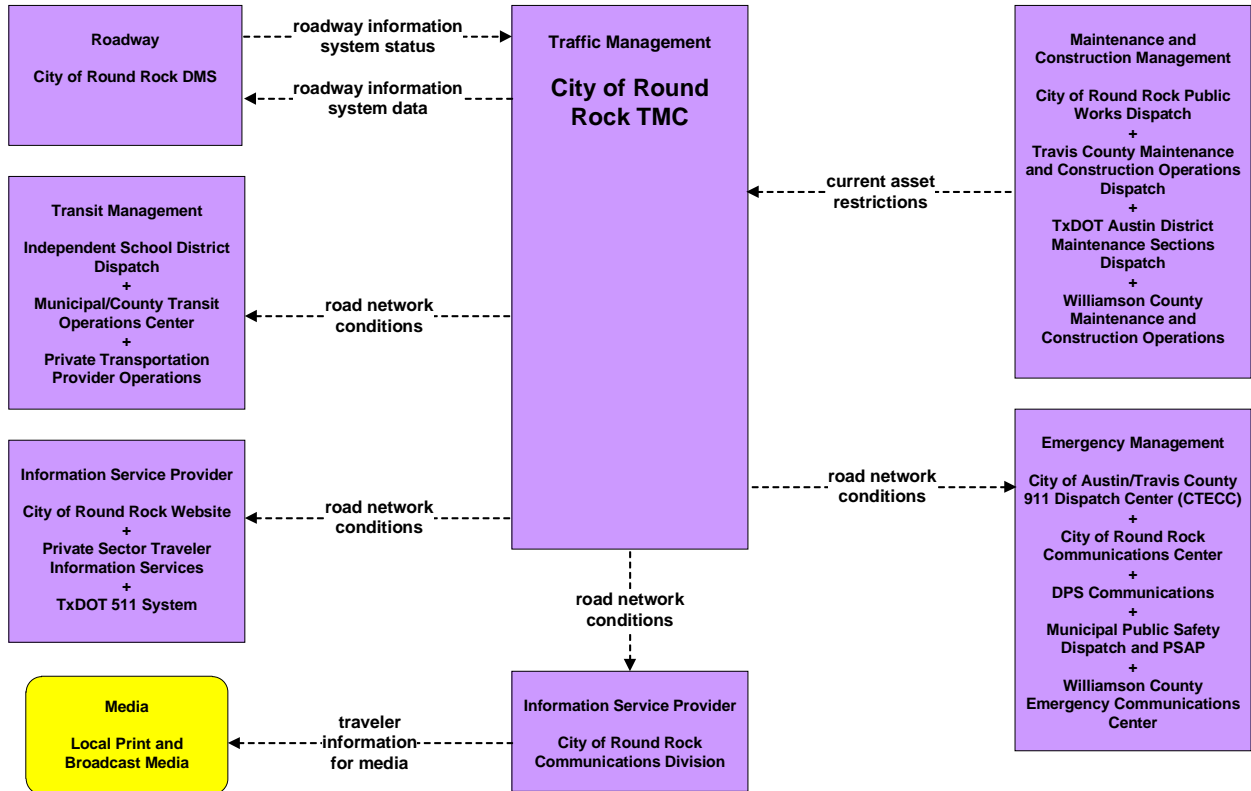
**ATMS06 – Traffic Information Dissemination
City of Cedar Park Traffic Operations Center**



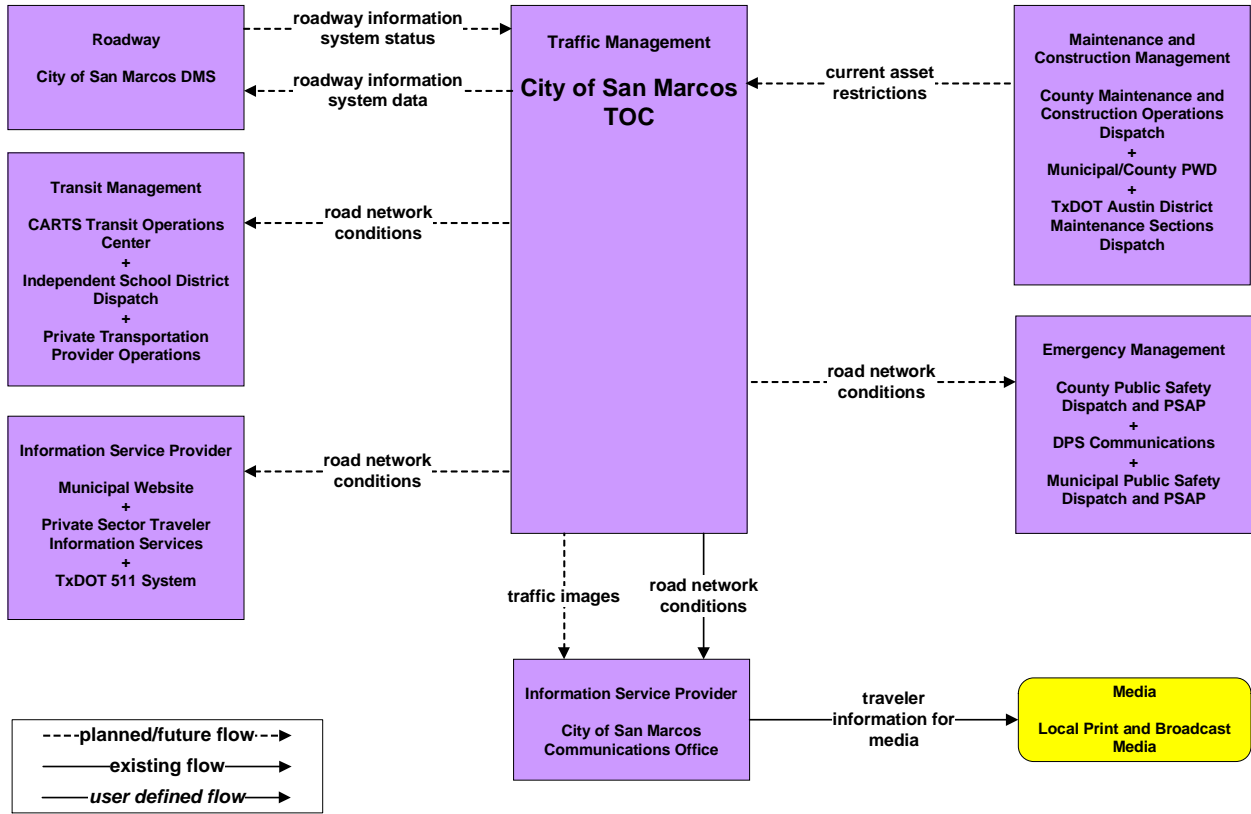
**ATMS06 – Traffic Information Dissemination
City of Georgetown Traffic Operations Center**



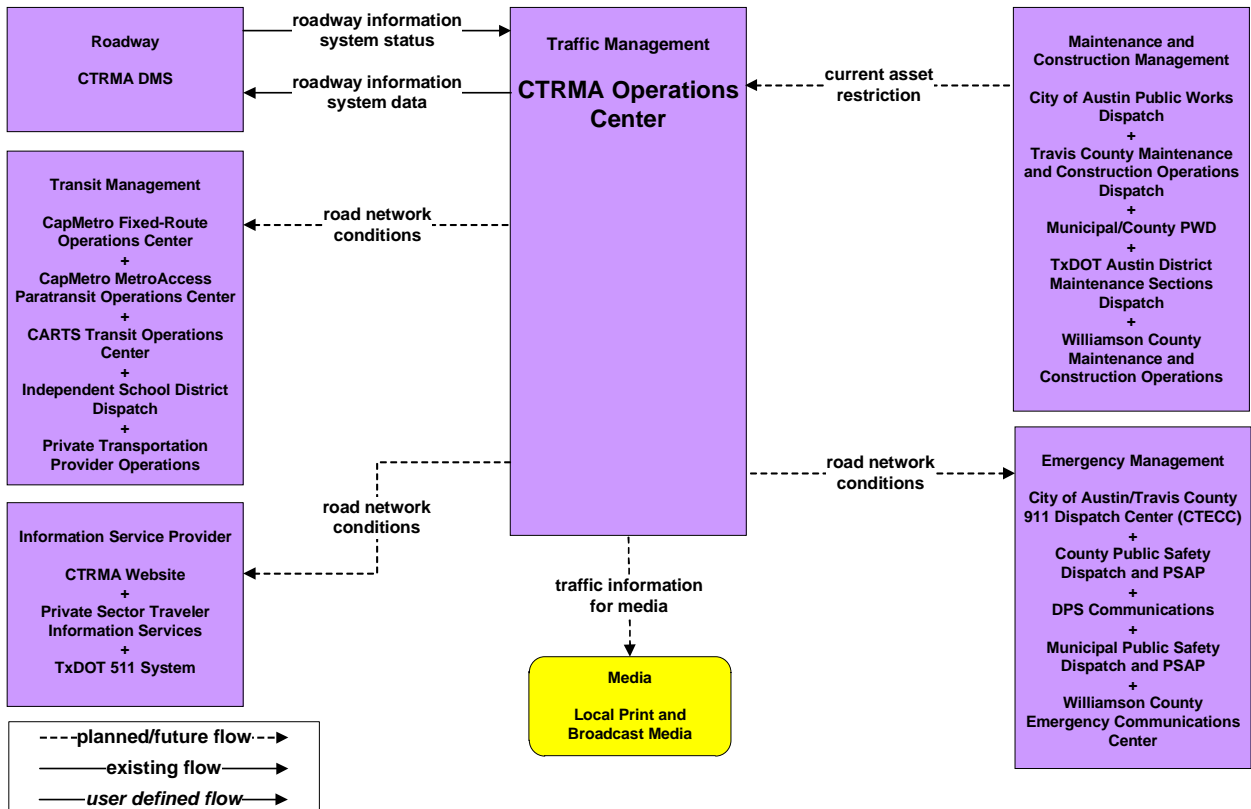
**ATMS06 – Traffic Information Dissemination
City of Round Rock Traffic Operations Center**



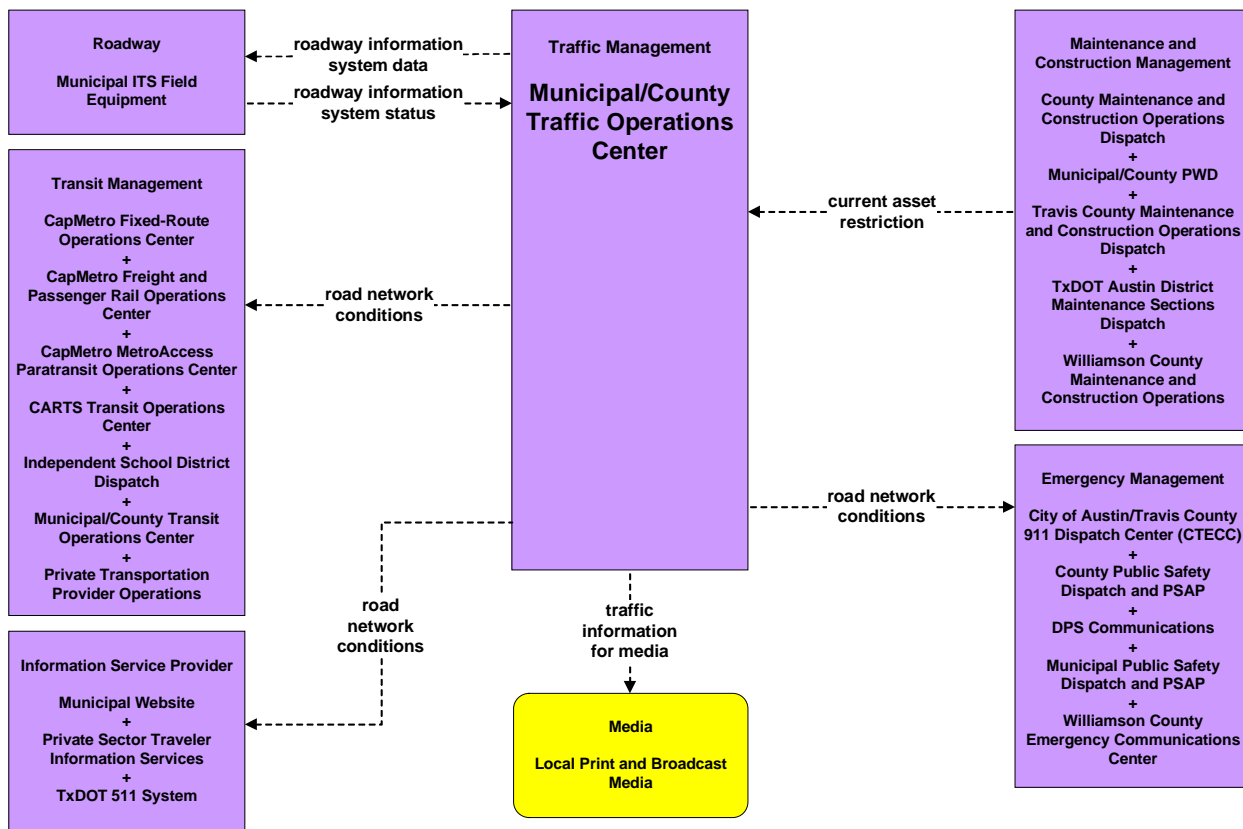
**ATMS06 – Traffic Information Dissemination
City of San Marcos Traffic Operations Center**



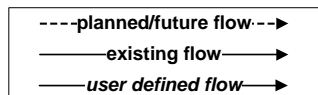
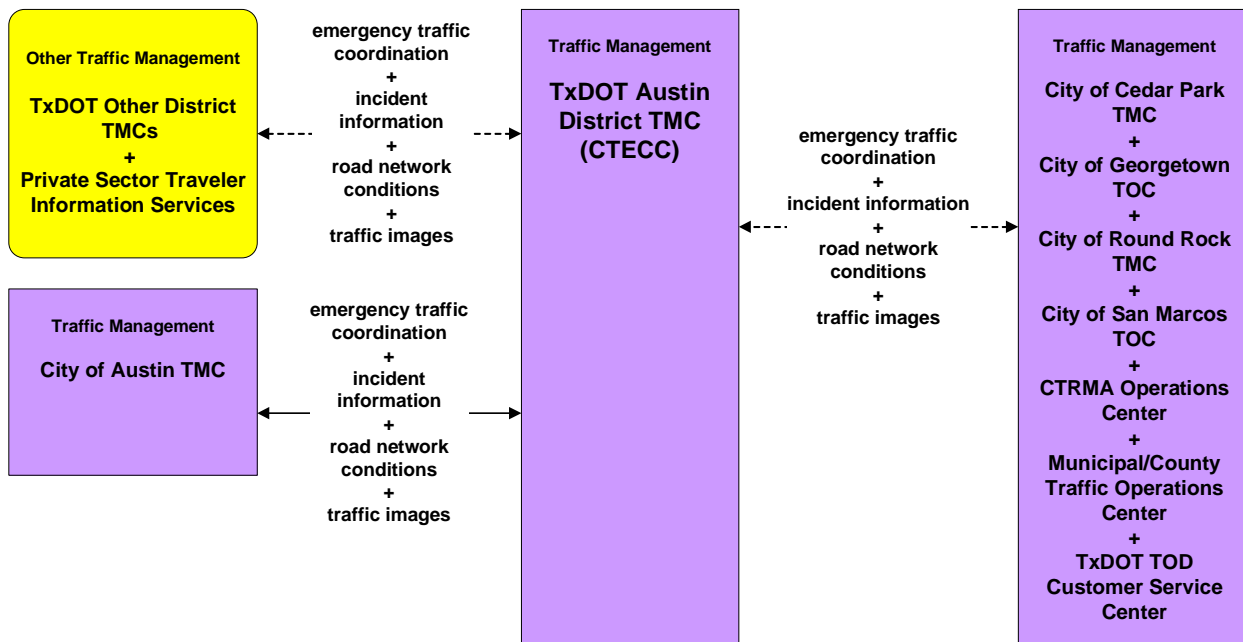
**ATMS06 – Traffic Information Dissemination
CTRMA Operations Center**



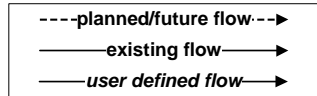
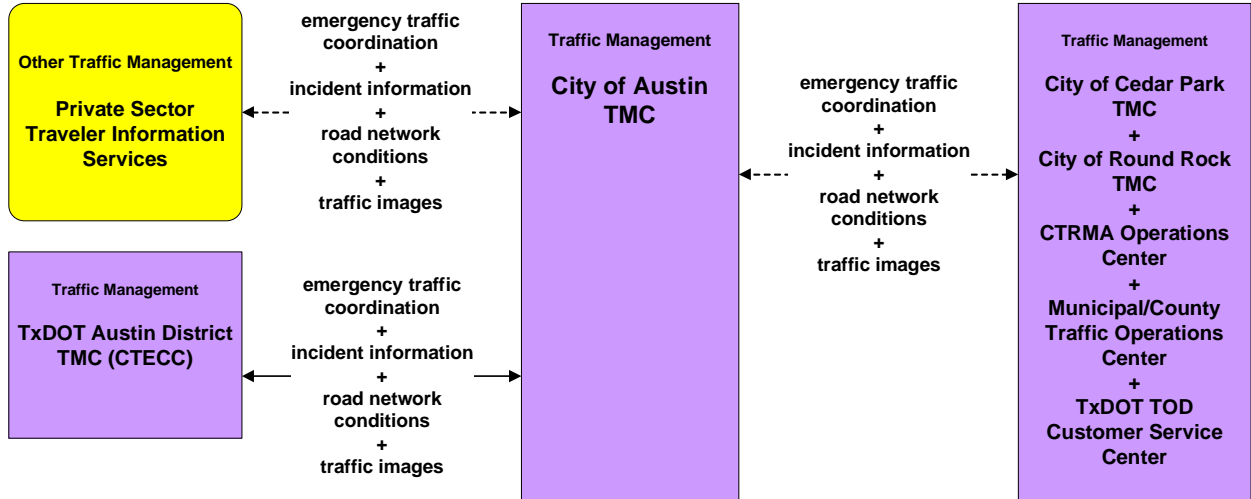
**ATMS06 – Traffic Information Dissemination
Municipal/County Traffic Operations Center**



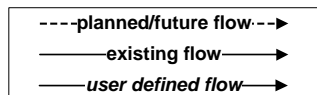
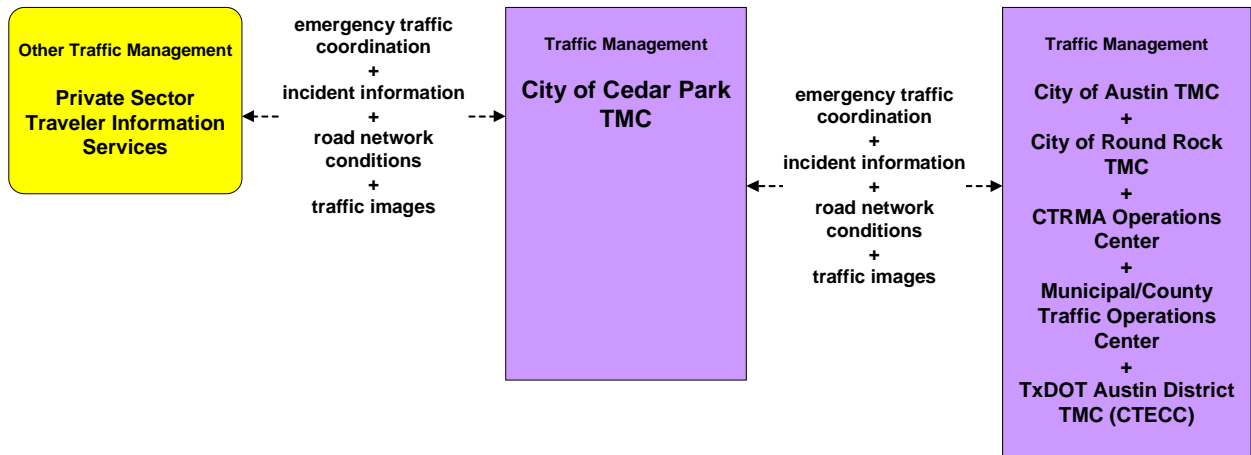
**ATMS07 - Regional Traffic Management
TxDOT Austin District TMC (CTECC)**



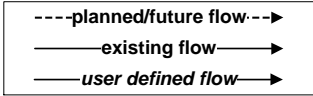
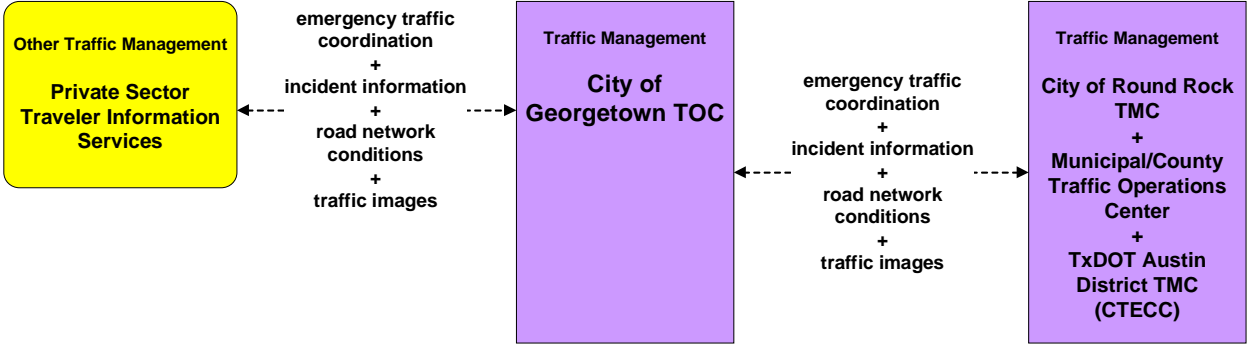
**ATMS07 - Regional Traffic Management
City of Austin TMC**



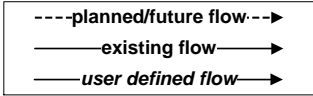
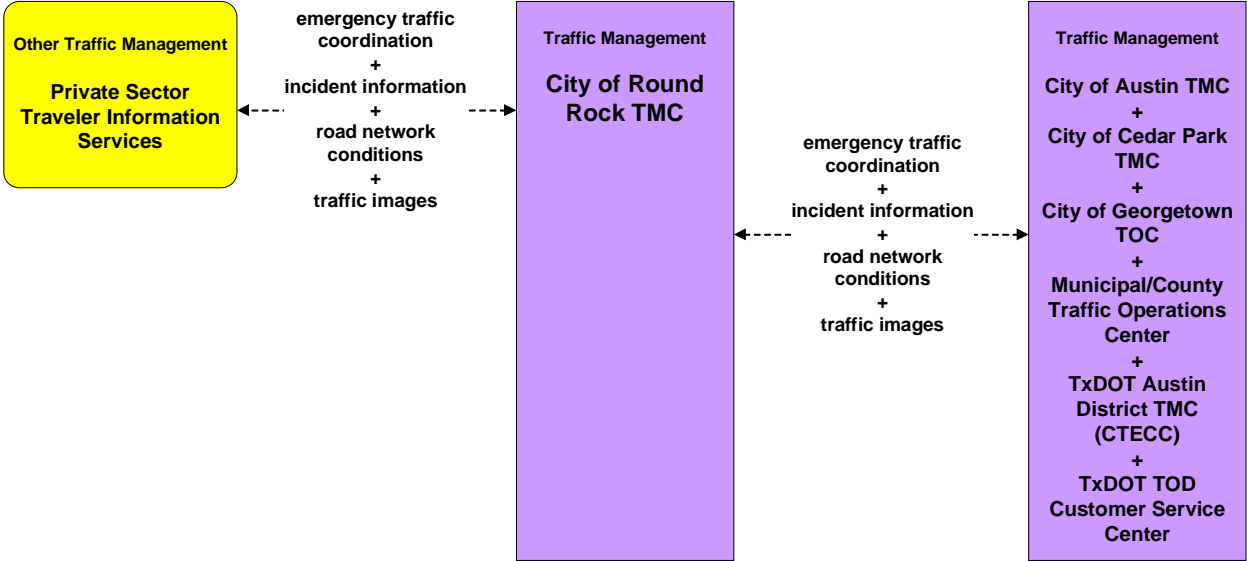
**ATMS07 - Regional Traffic Management
City of Cedar Park TMC**



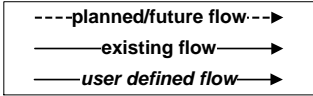
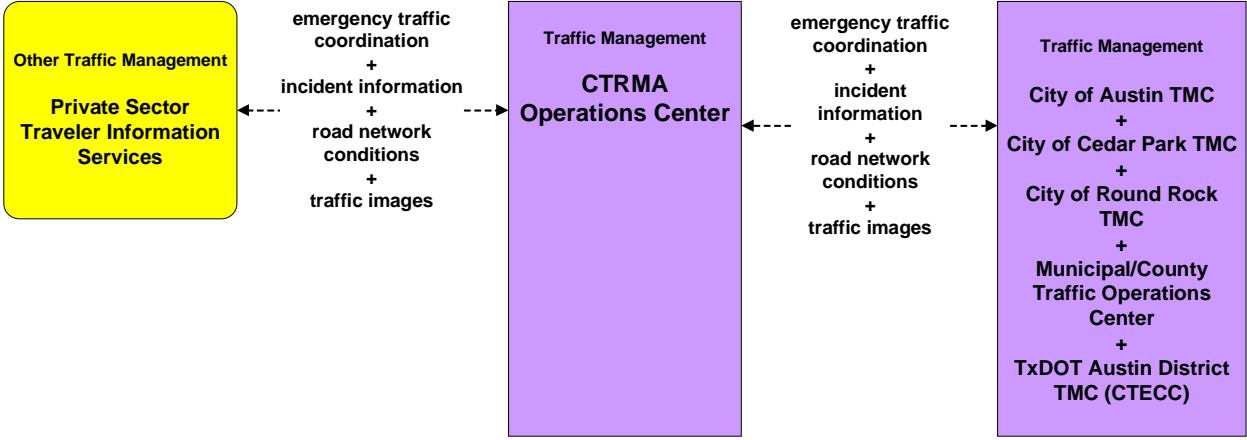
**ATMS07 - Regional Traffic Management
City of Georgetown TOC**



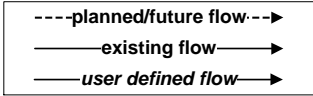
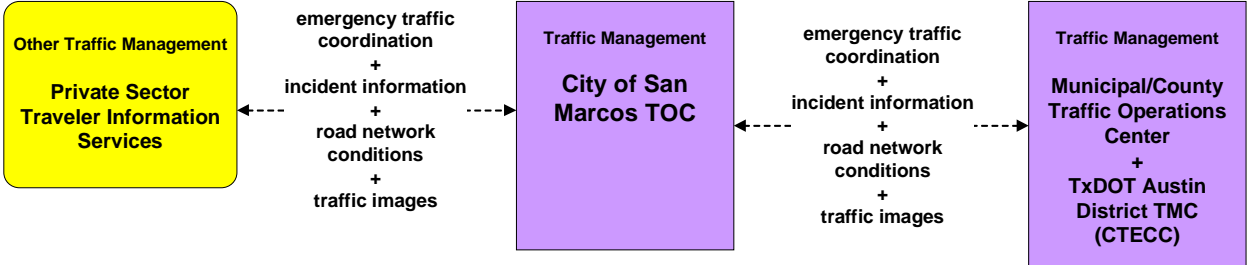
**ATMS07 - Regional Traffic Management
City of Round Rock TMC**



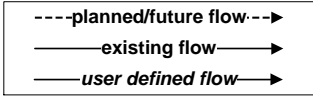
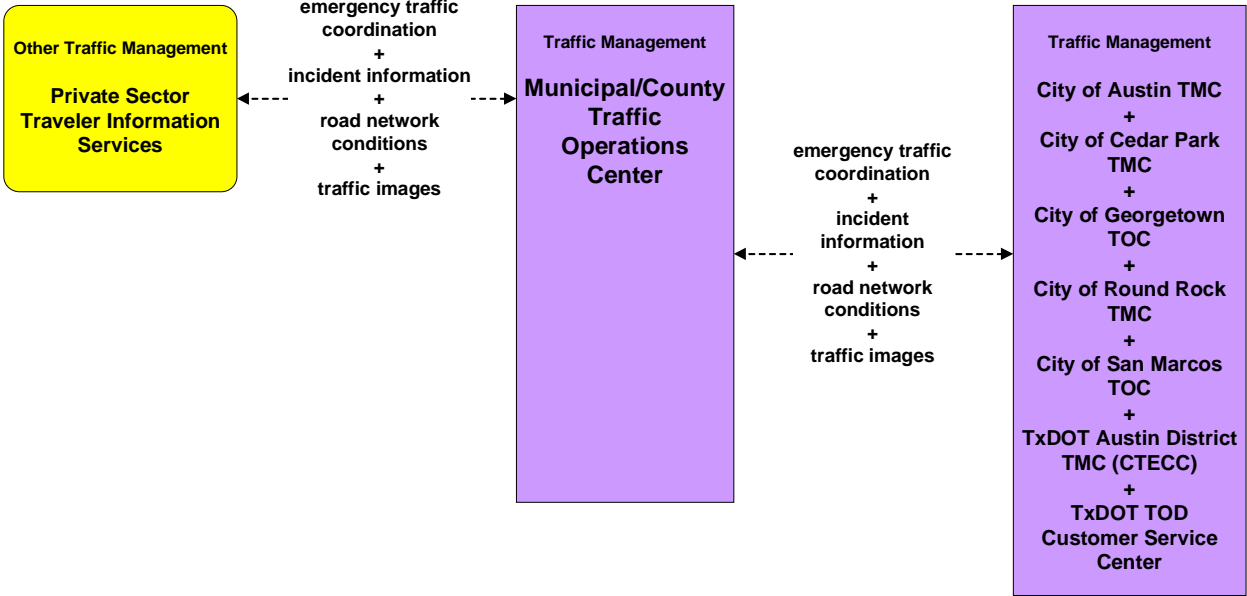
**ATMS07 - Regional Traffic Management
CTRMA Operations Center**



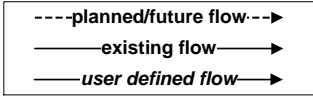
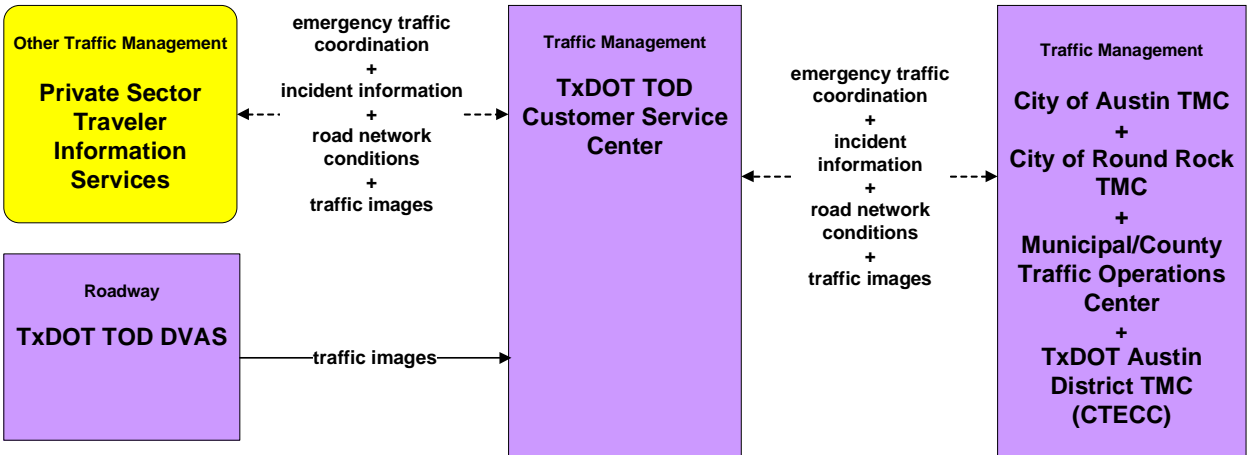
**ATMS07 - Regional Traffic Management
City of San Marcos TOC**



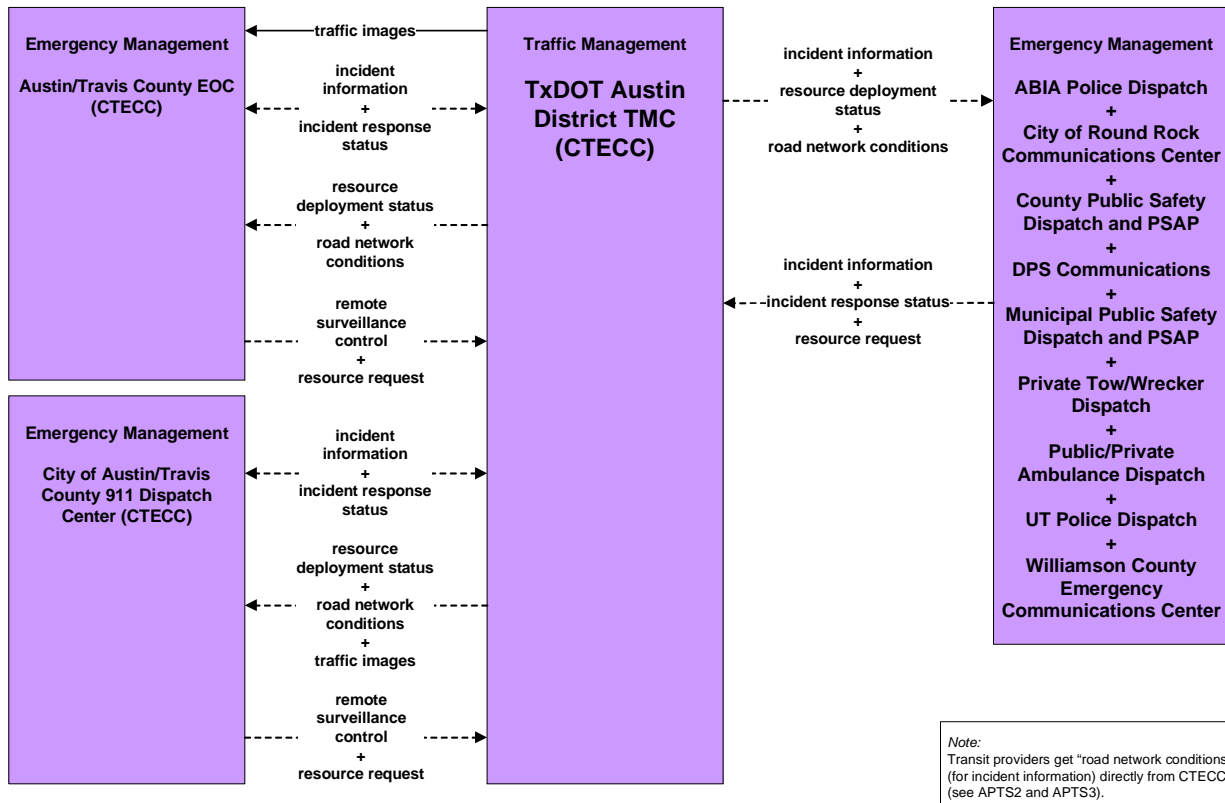
**ATMS07 - Regional Traffic Management
Municipal/County TOC**



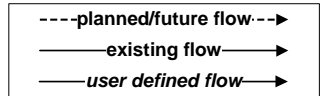
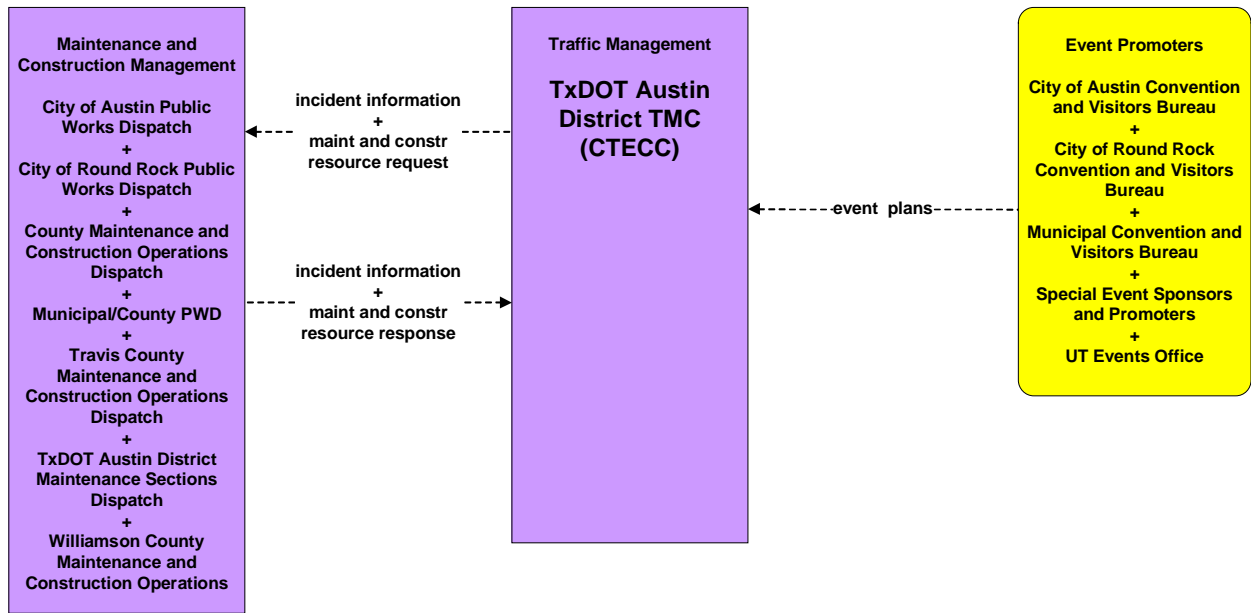
**ATMS07 - Regional Traffic Management
TxDOT TOD Operations Center**



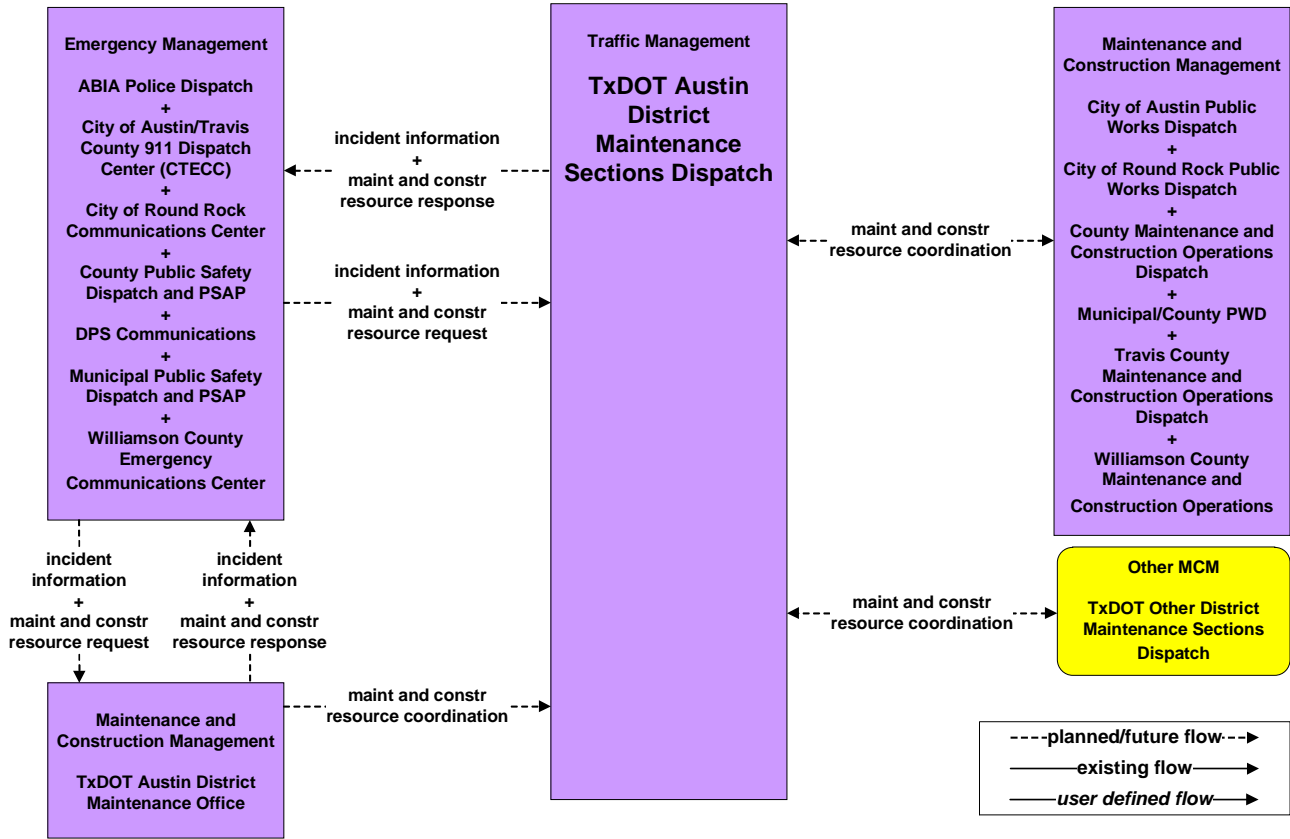
ATMS08 – Traffic Incident Management System
 TxDOT Austin District (1 of 3)



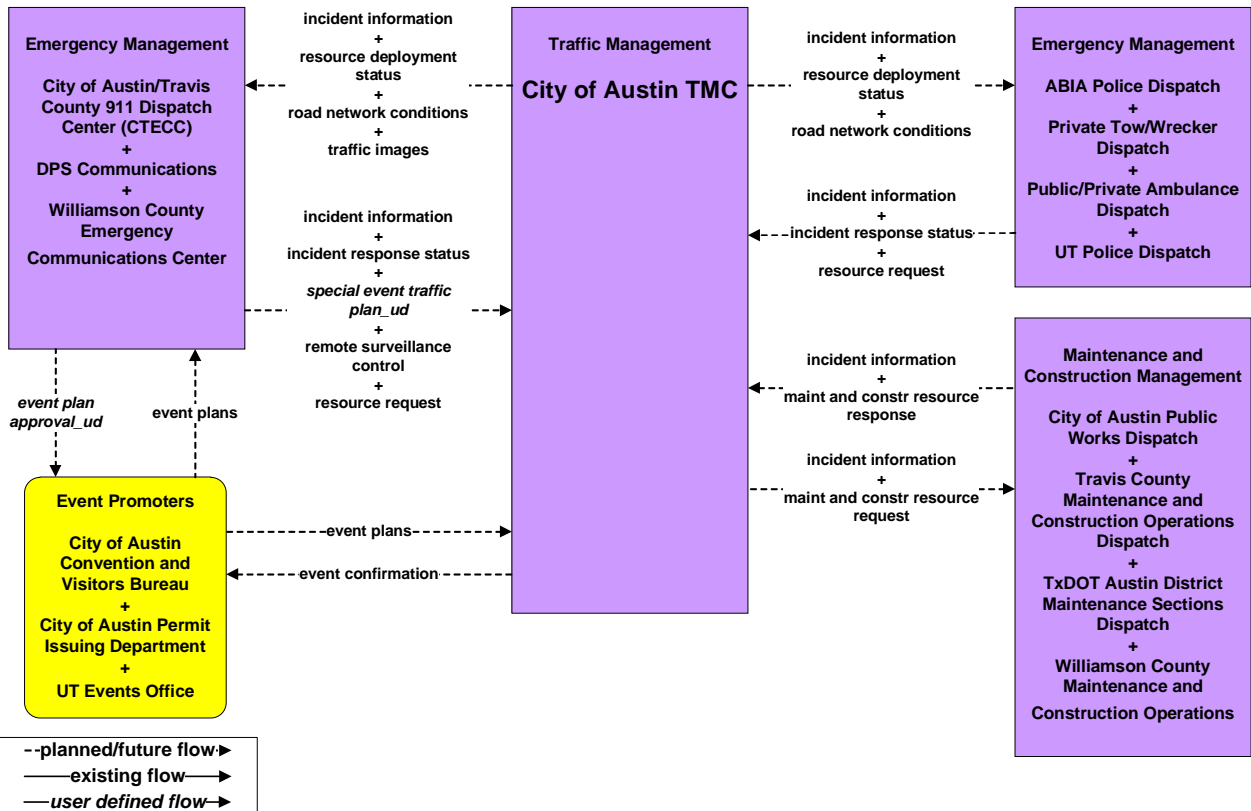
ATMS08 – Traffic Incident Management System
 TxDOT Austin District (2 of 3)



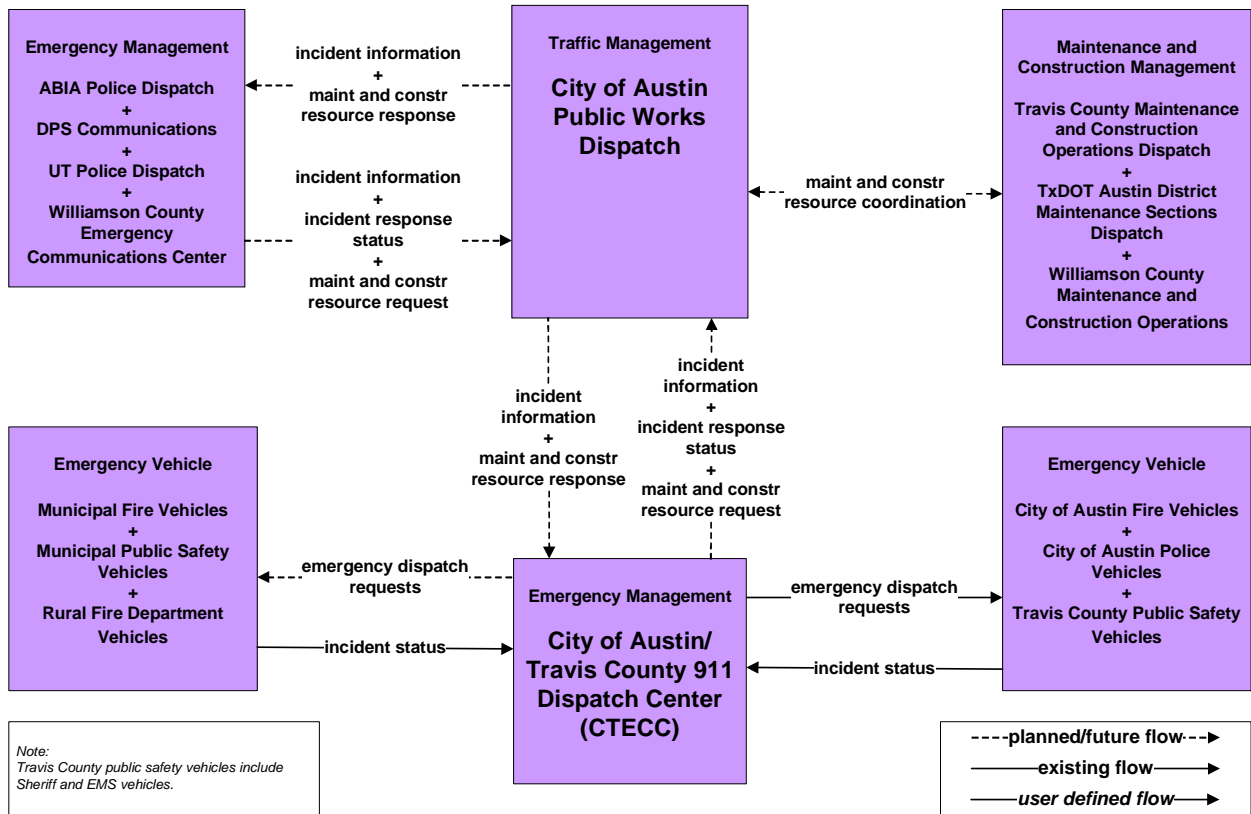
ATMS08 – Traffic Incident Management System
 TxDOT Austin District (3 of 3)



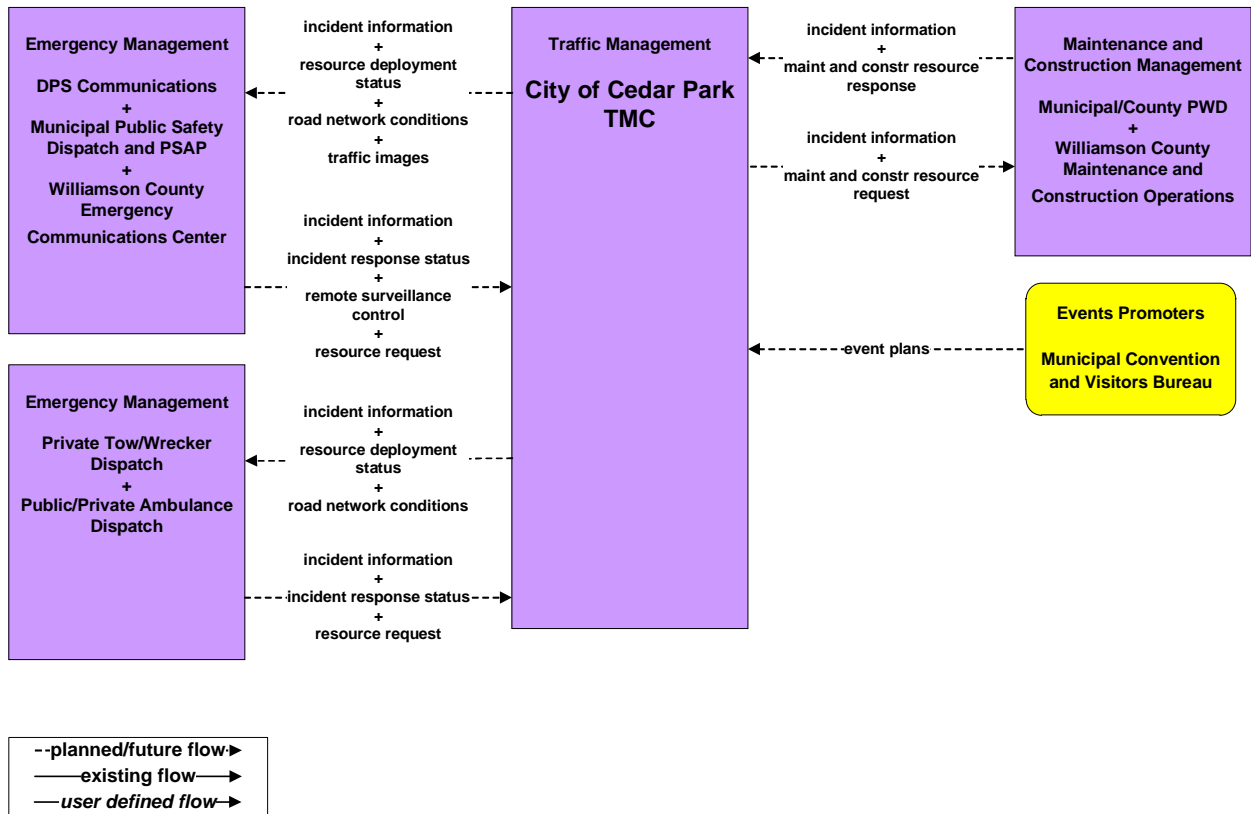
ATMS08 – Traffic Incident Management System
 City of Austin (1 of 2)



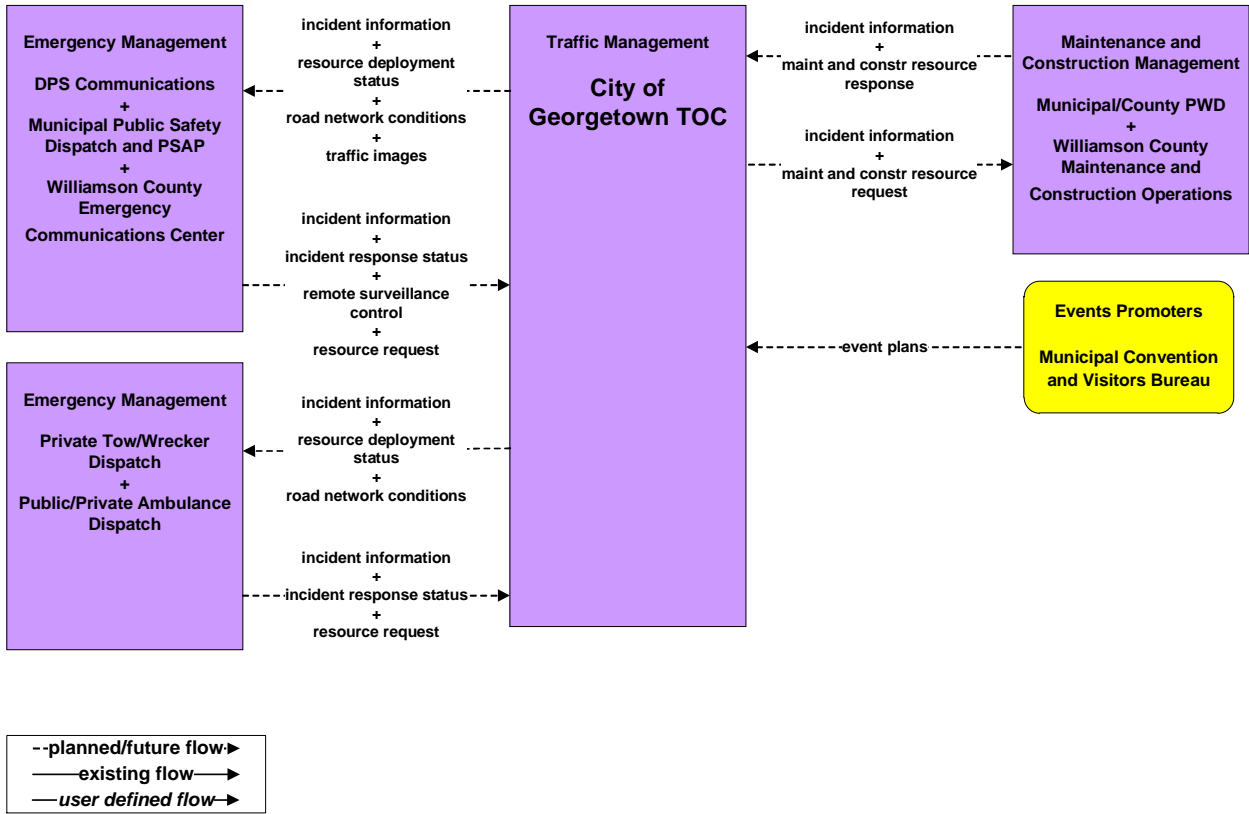
ATMS08 – Traffic Incident Management System
City of Austin (2 of 2)



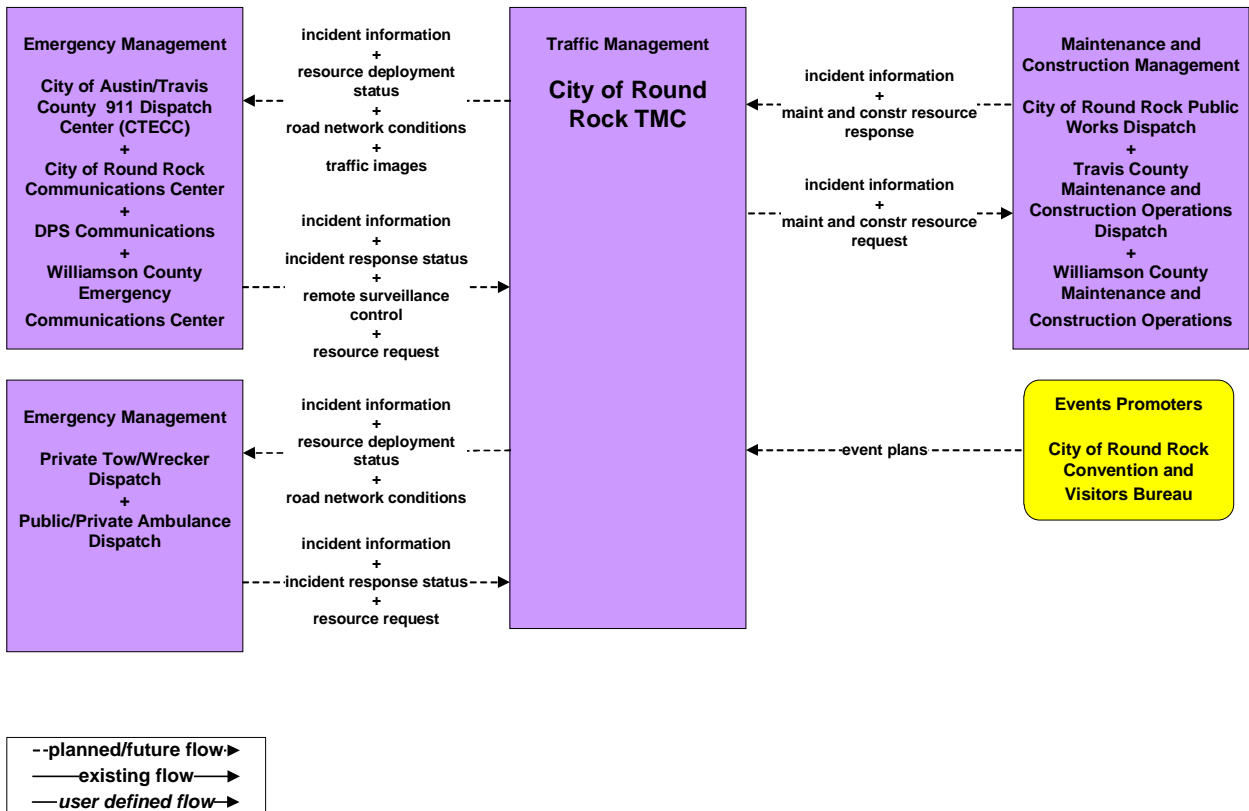
ATMS08 – Traffic Incident Management System
City of Cedar Park Traffic Operations Center



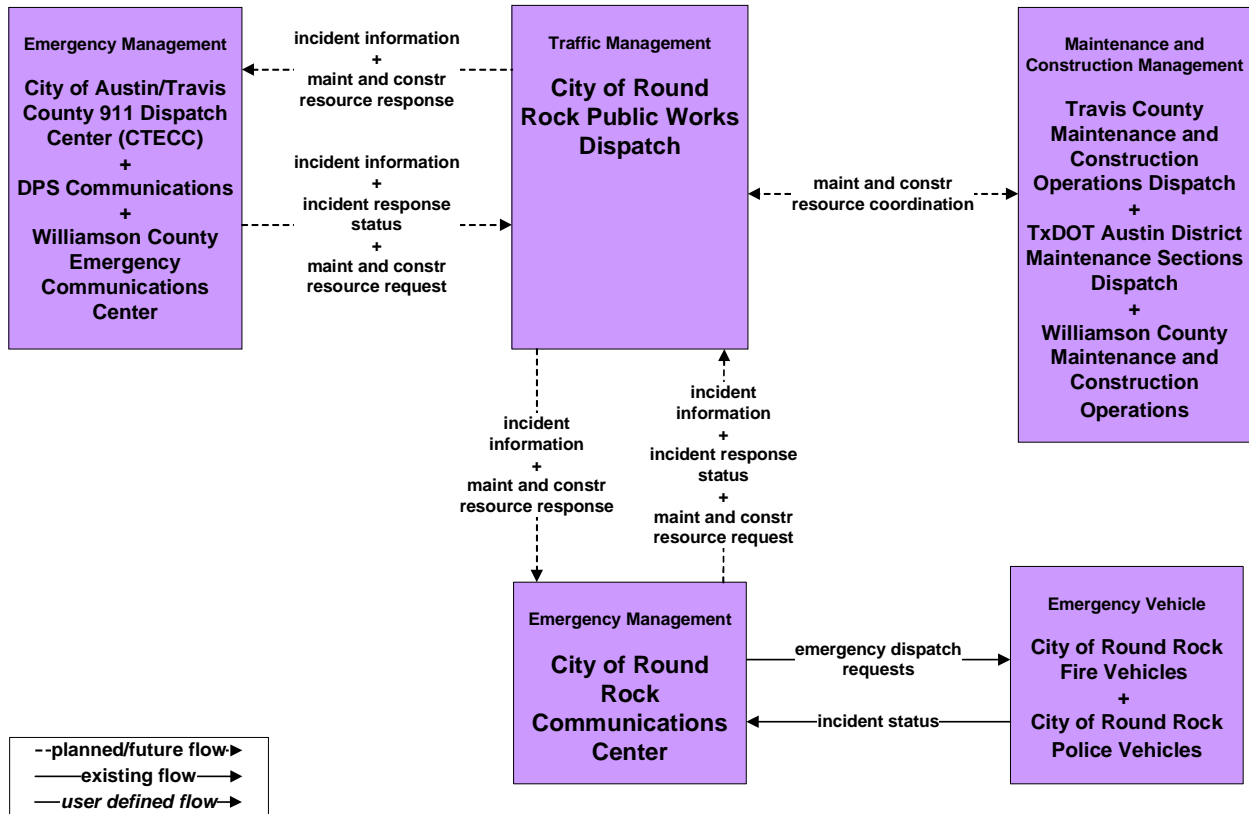
ATMS08 – Traffic Incident Management System
City of Georgetown Traffic Operations Center



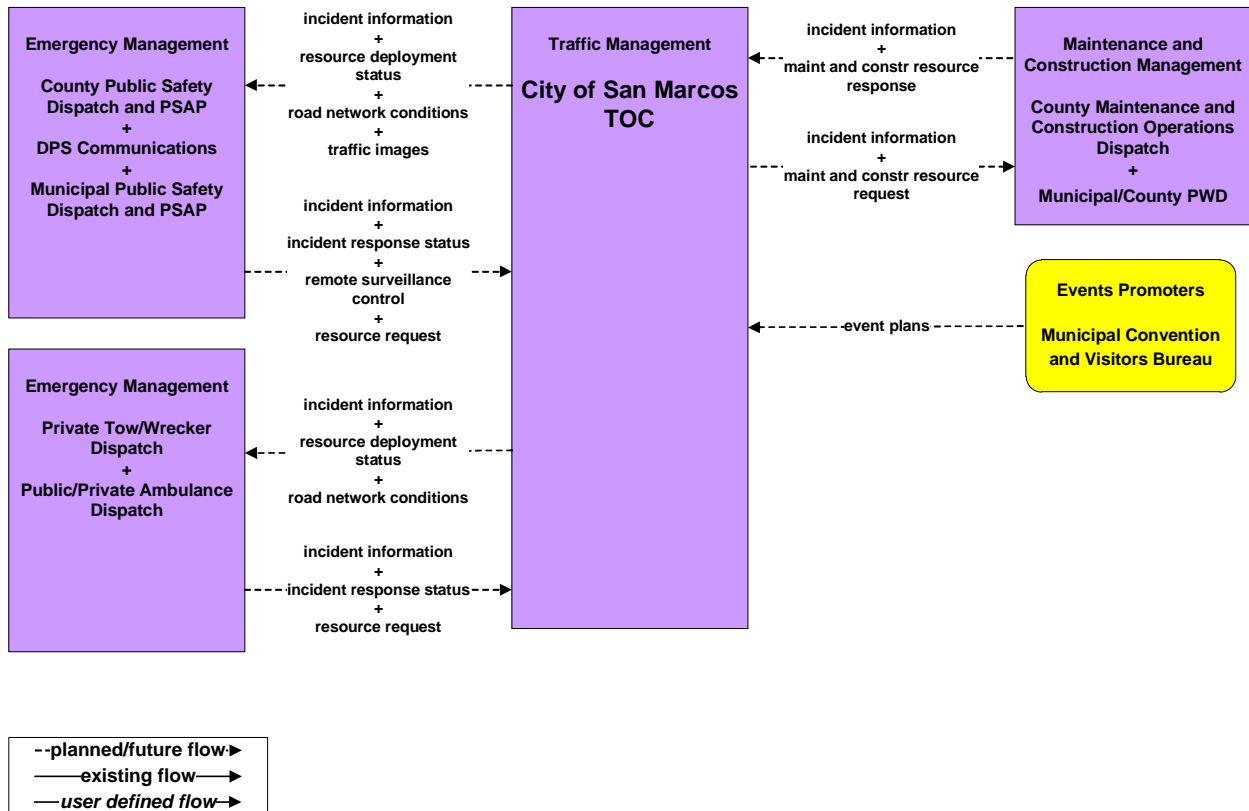
ATMS08 – Traffic Incident Management System
City of Round Rock (1 of 2)



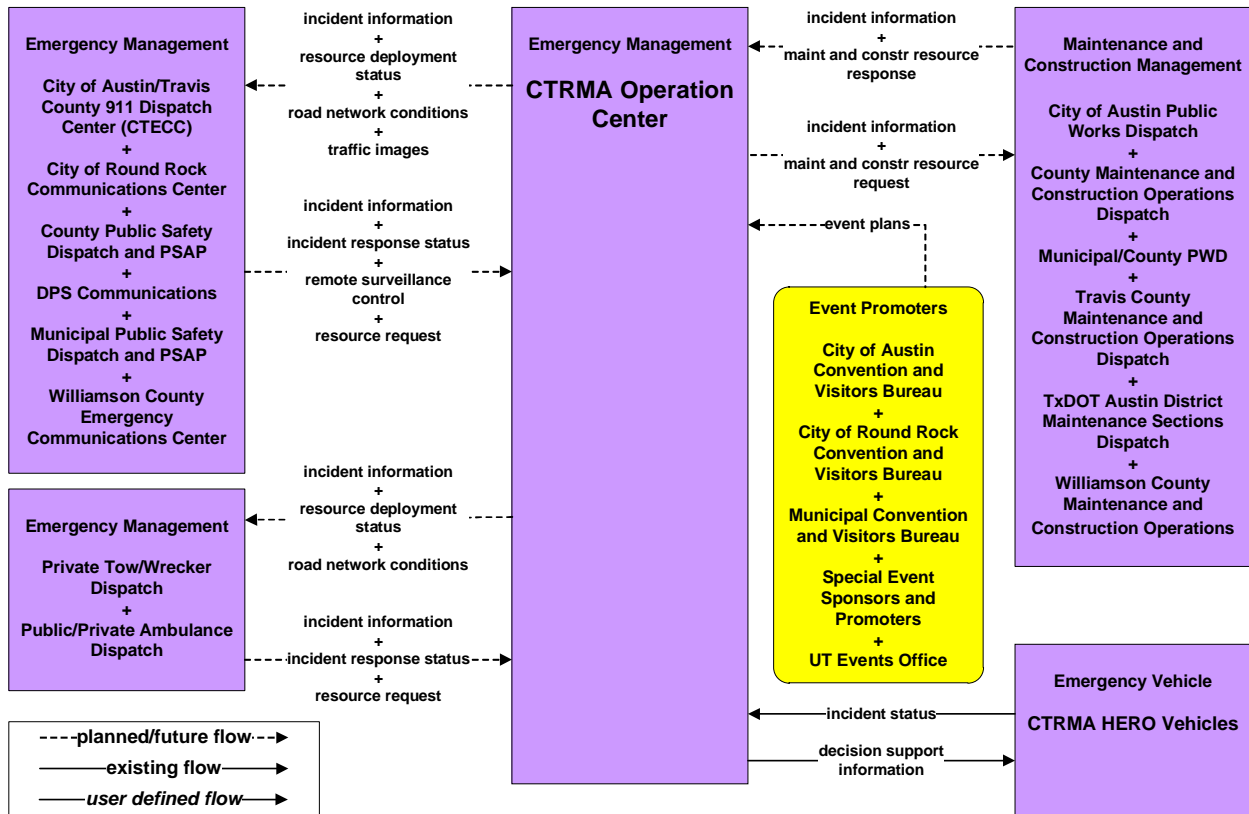
ATMS08 – Traffic Incident Management System
City of Round Rock (2 of 2)



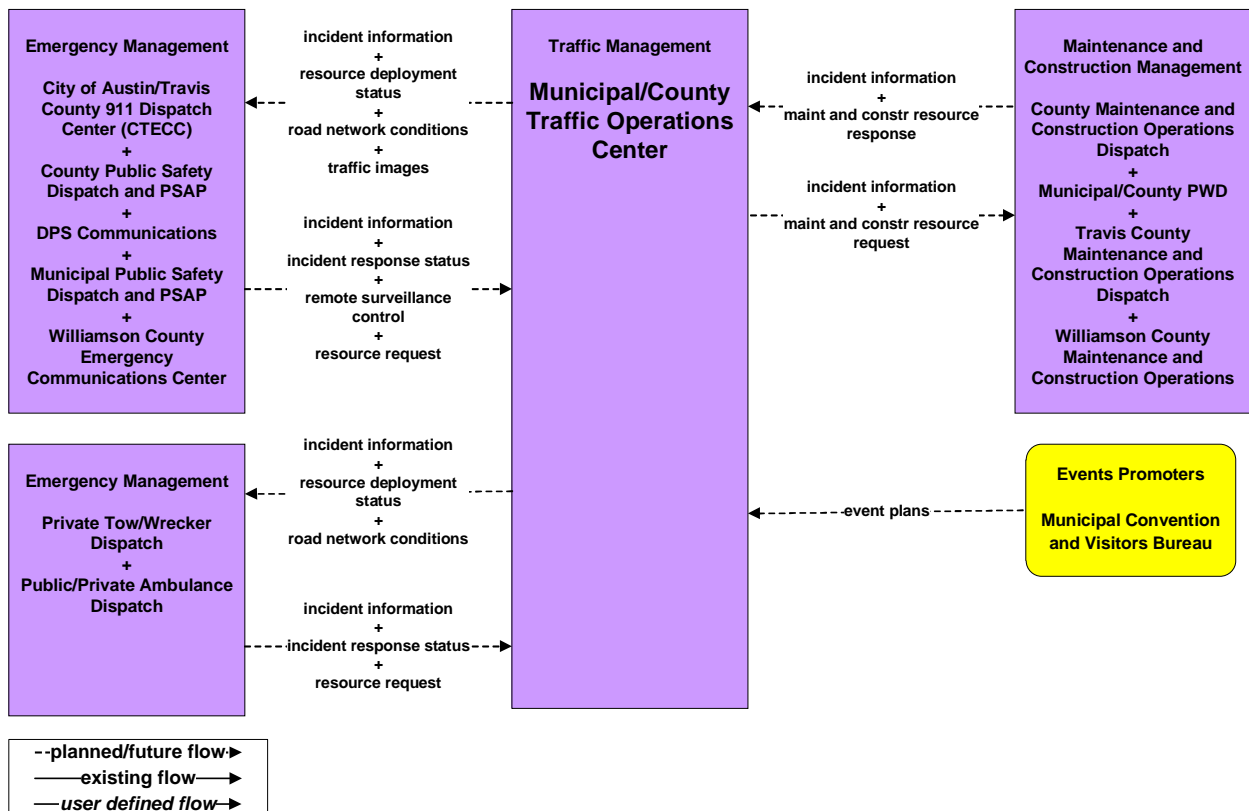
ATMS08 – Traffic Incident Management System
City of San Marcos Traffic Operations Center



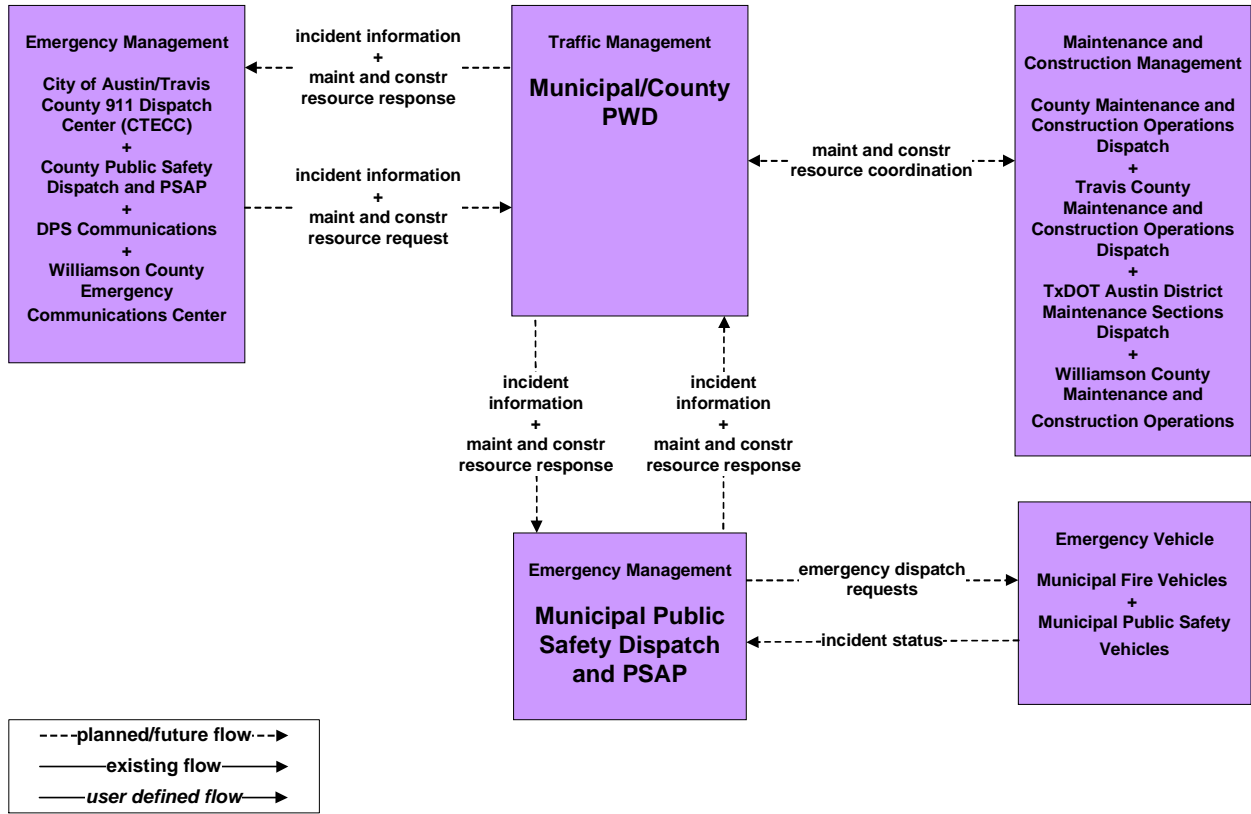
ATMS08 – Traffic Incident Management System
CTRMA



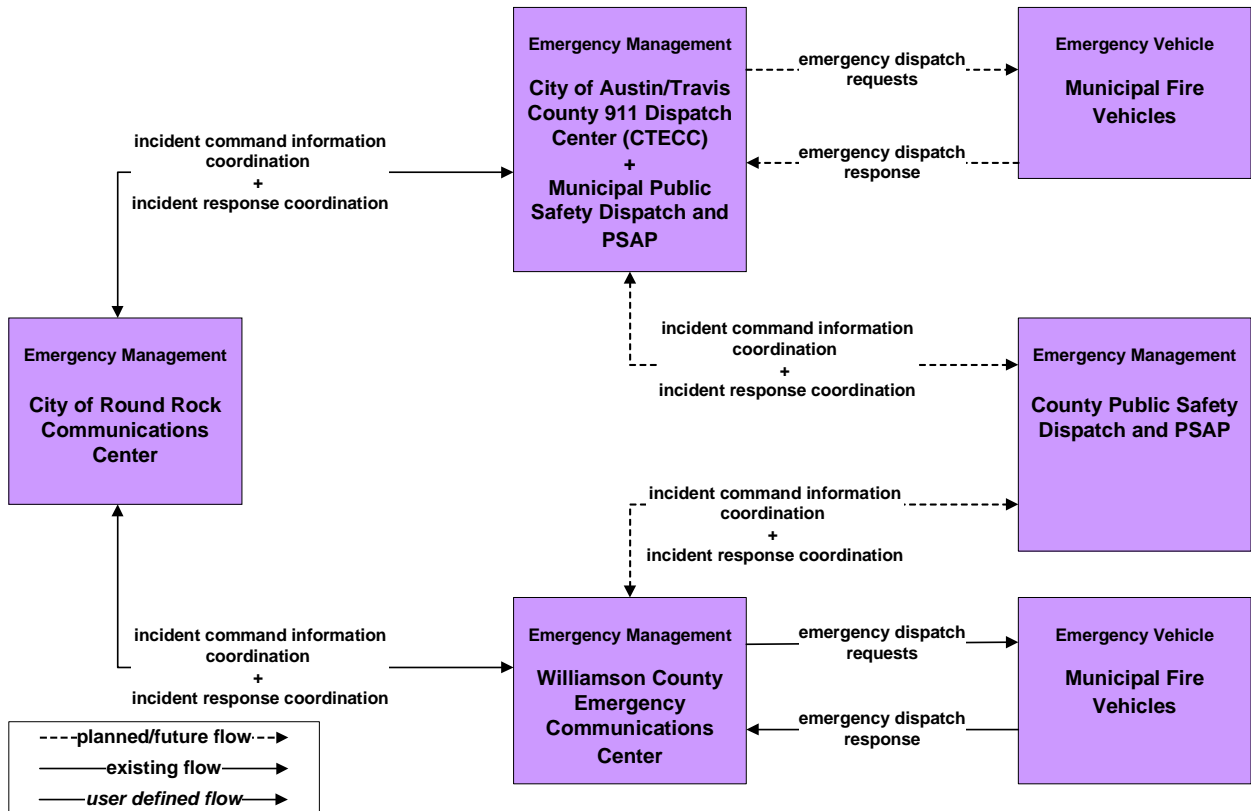
ATMS08 – Traffic Incident Management System
Municipal (1 of 3)



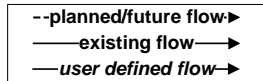
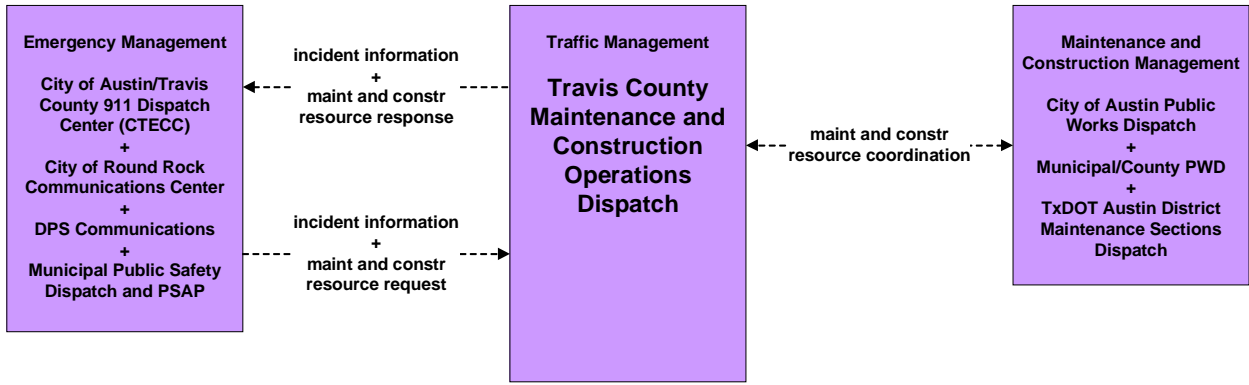
ATMS08 – Traffic Incident Management System
Municipal (2 of 3)



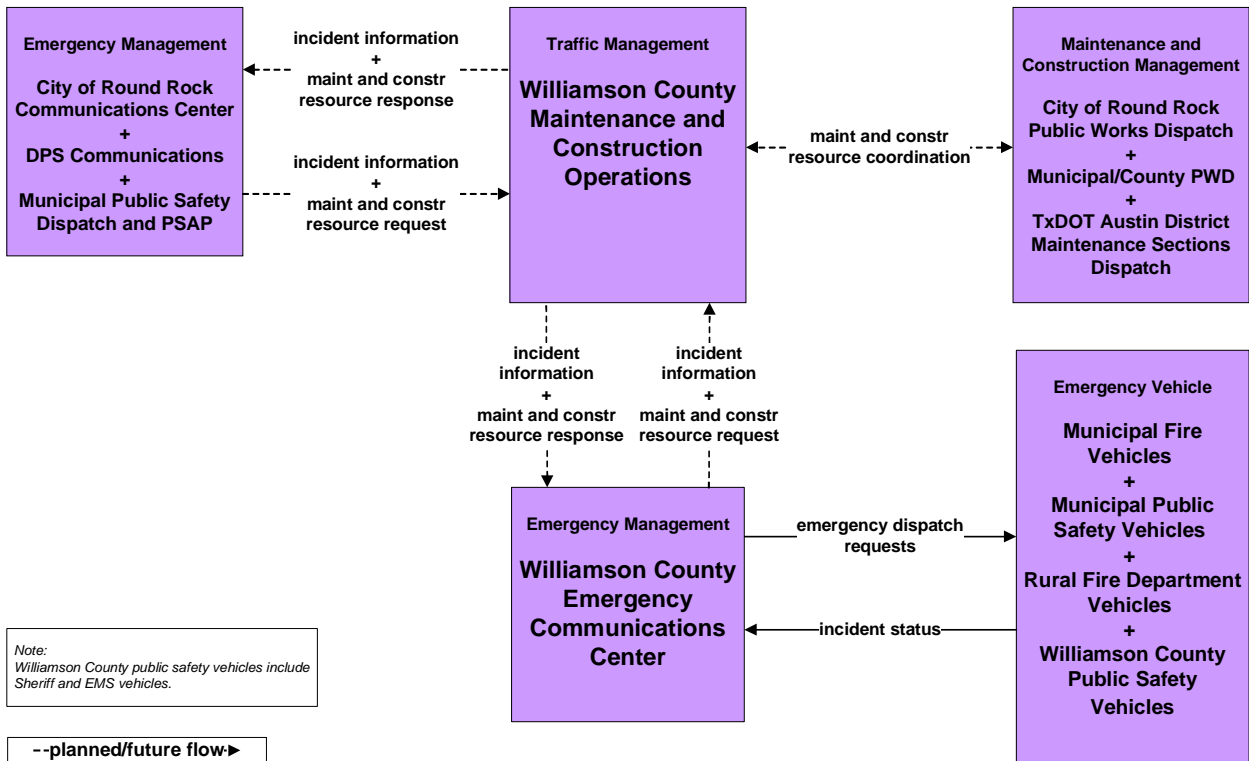
ATMS08 – Traffic Incident Management System
Municipal (3 of 3)



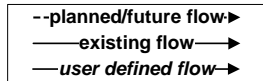
ATMS08 – Traffic Incident Management System
Travis County Maintenance and Construction Operations



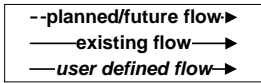
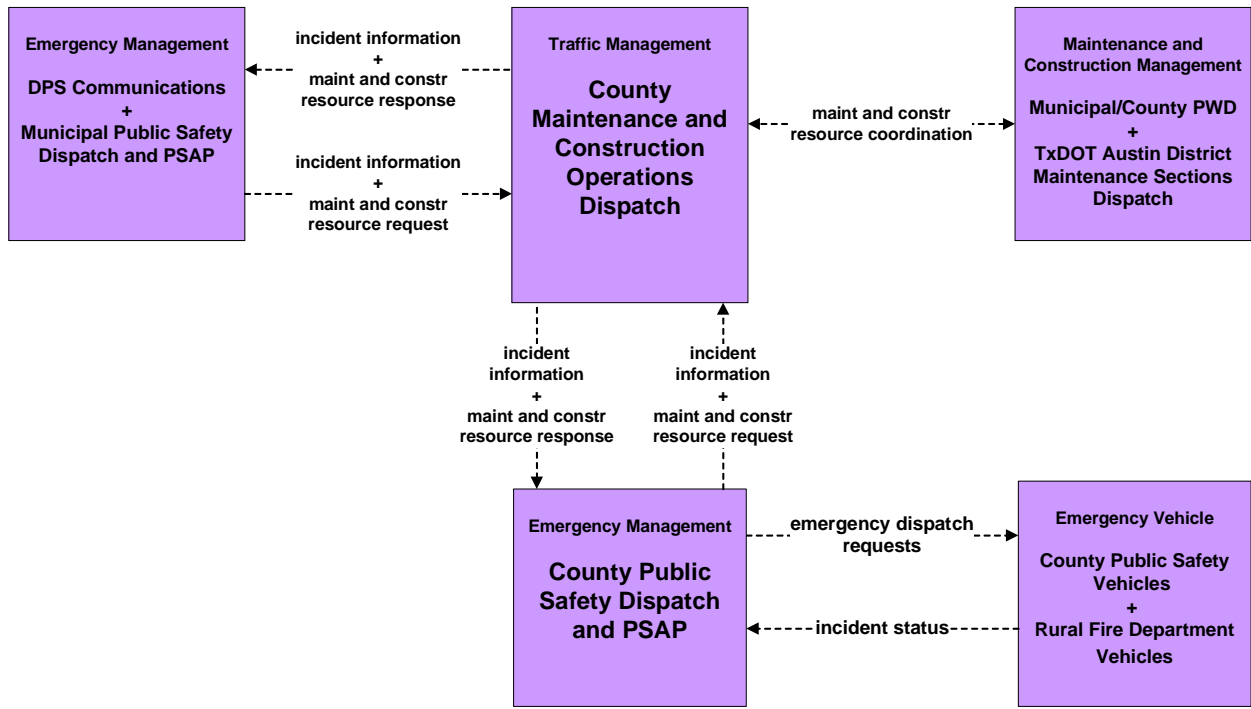
ATMS08 – Traffic Incident Management System
Williamson County Maintenance and Construction Operations



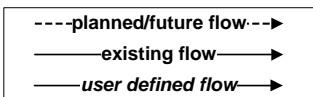
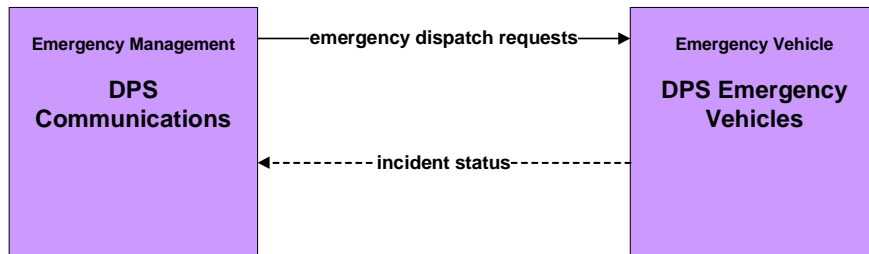
Note:
Williamson County public safety vehicles include Sheriff and EMS vehicles.



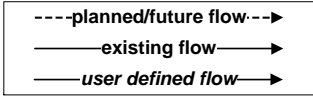
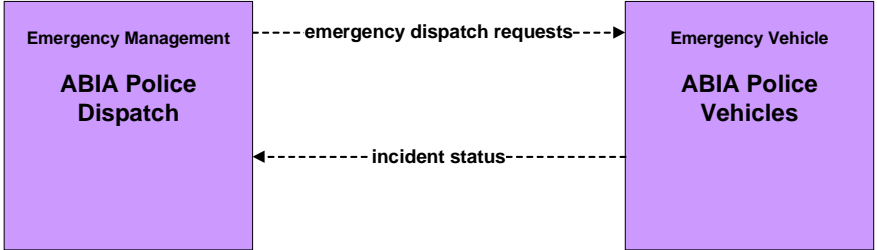
ATMS08 – Traffic Incident Management System
County Maintenance and Construction Operations



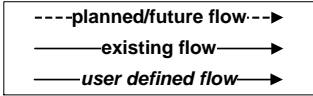
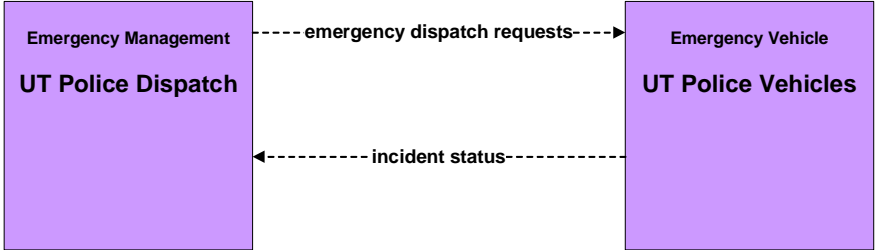
ATMS08 - Traffic Incident Management System
Department of Public Safety



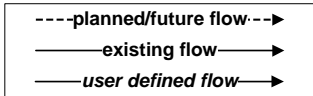
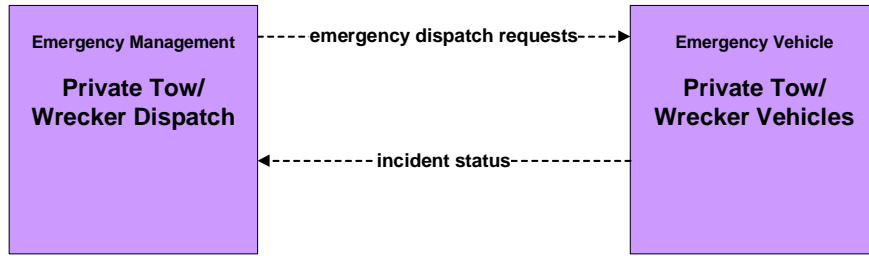
**ATMS08 - Traffic Incident Management System
Austin Bergstrom International Airport**



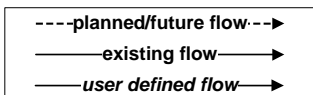
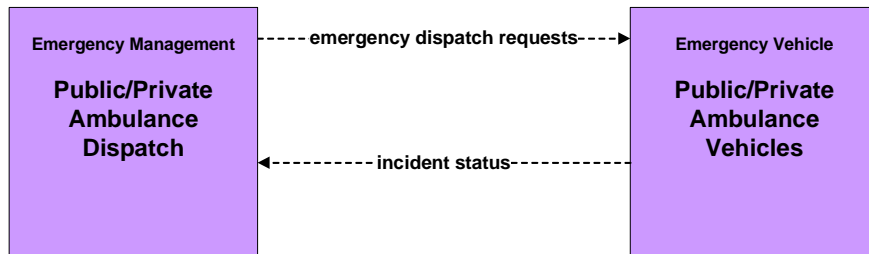
**ATMS08 - Traffic Incident Management System
University of Texas**



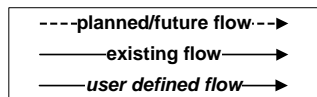
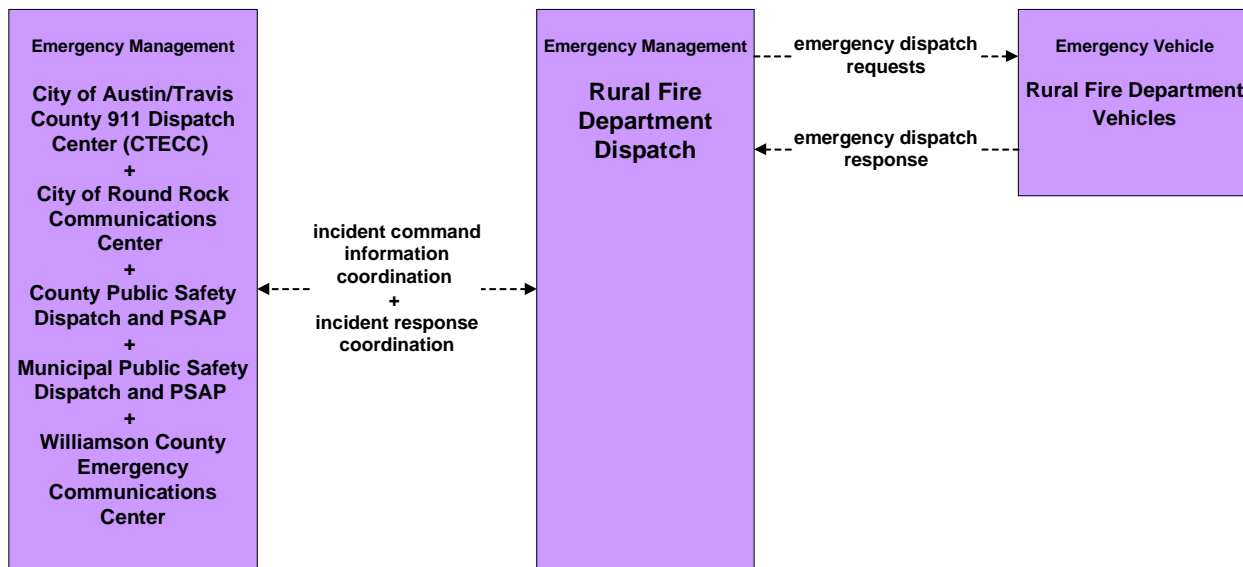
ATMS08 – Traffic Incident Management System
Private Tow/Wrecker



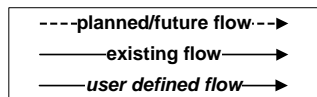
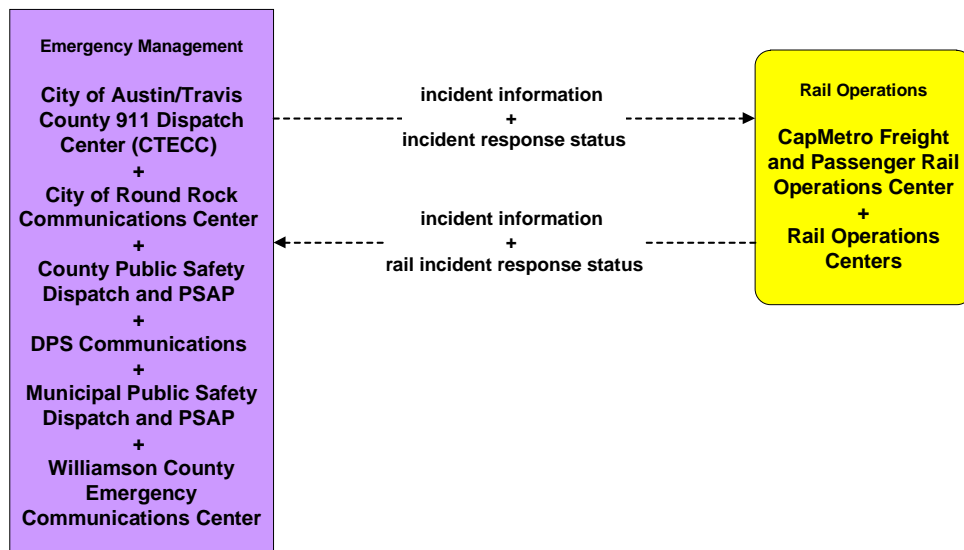
ATMS08 – Traffic Incident Management System
Public/Private Ambulance



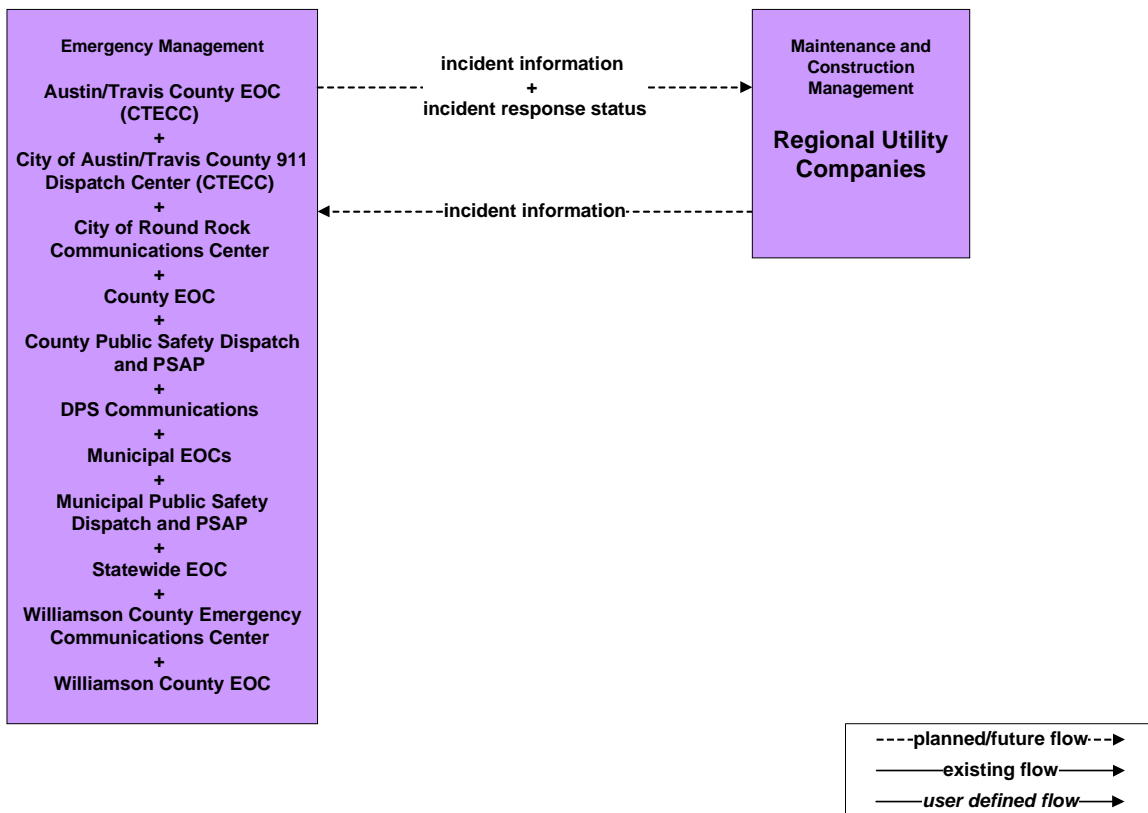
**ATMS08 - Traffic Incident Management System
Rural Fire Departments**



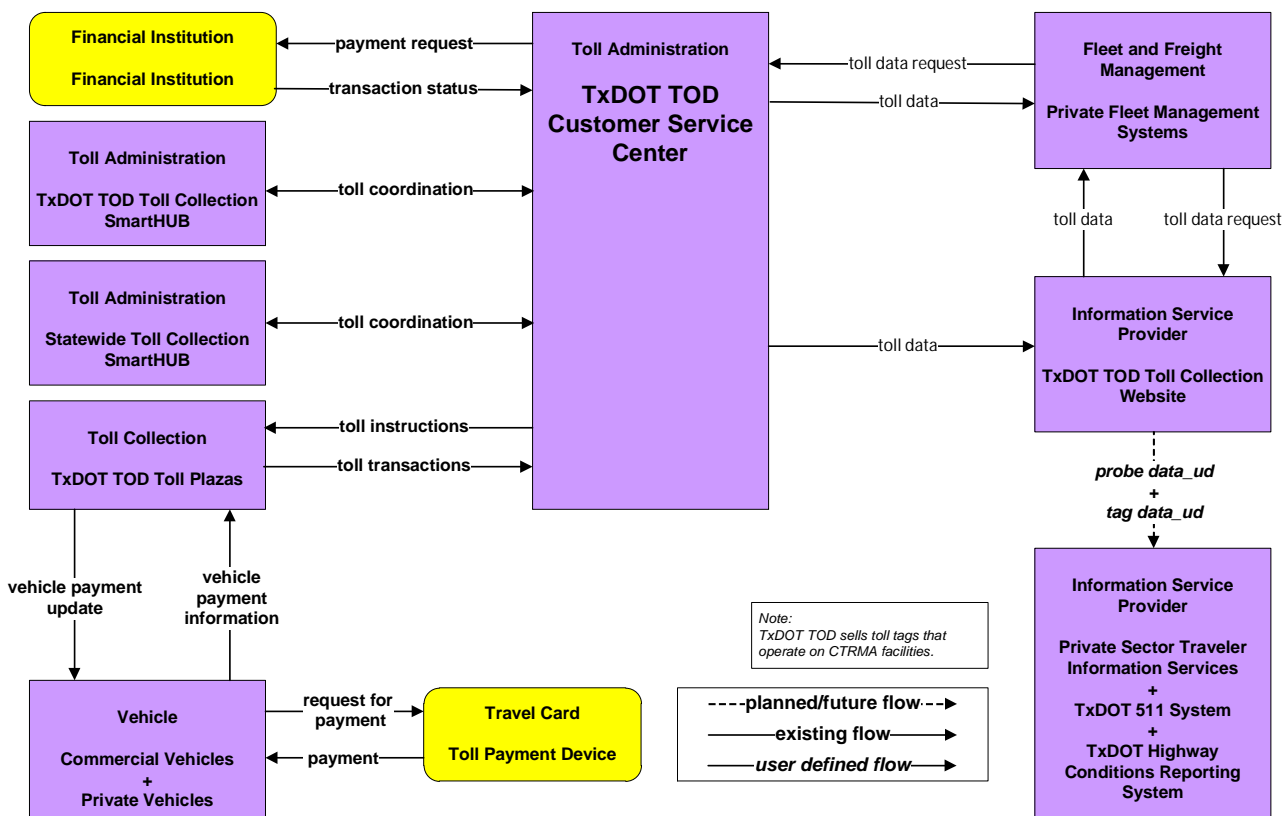
**ATMS08 - Traffic Incident Management System
Rail Operations Coordination**



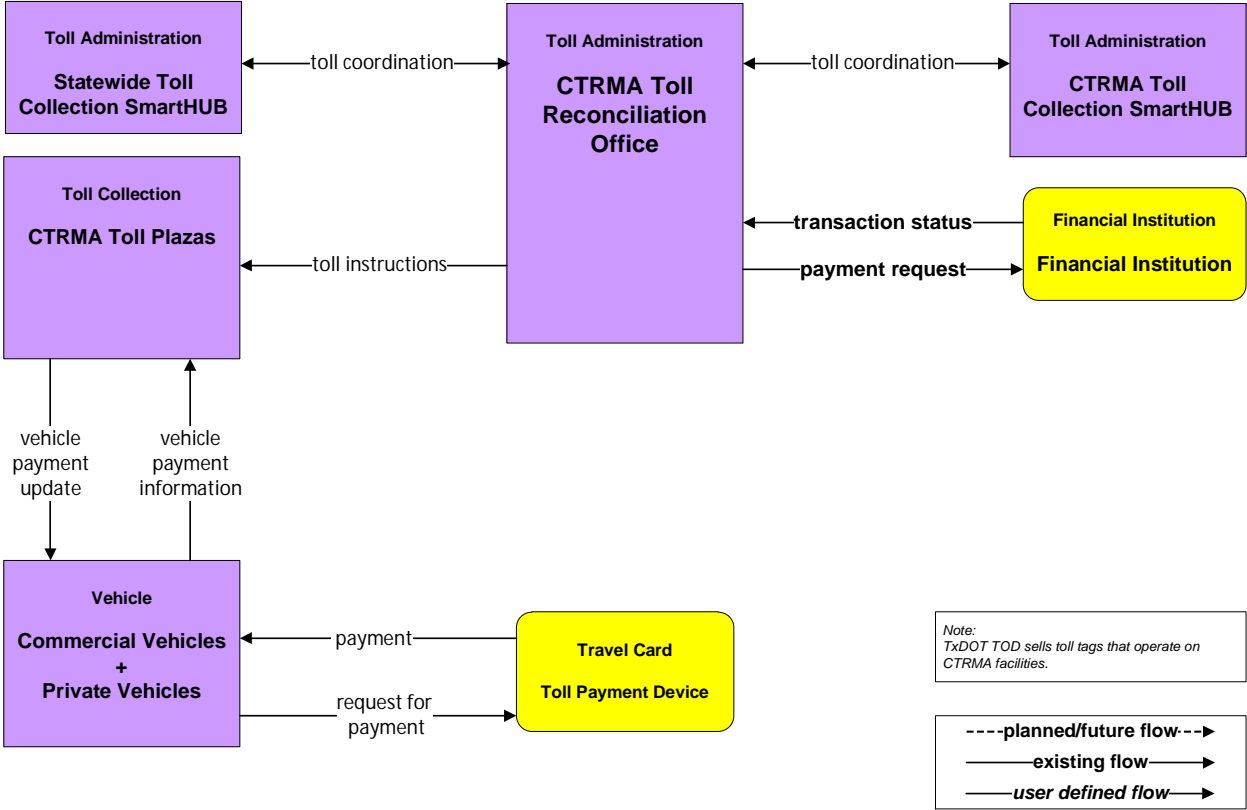
**ATMS08 - Traffic Incident Management System
Regional Utility Companies**



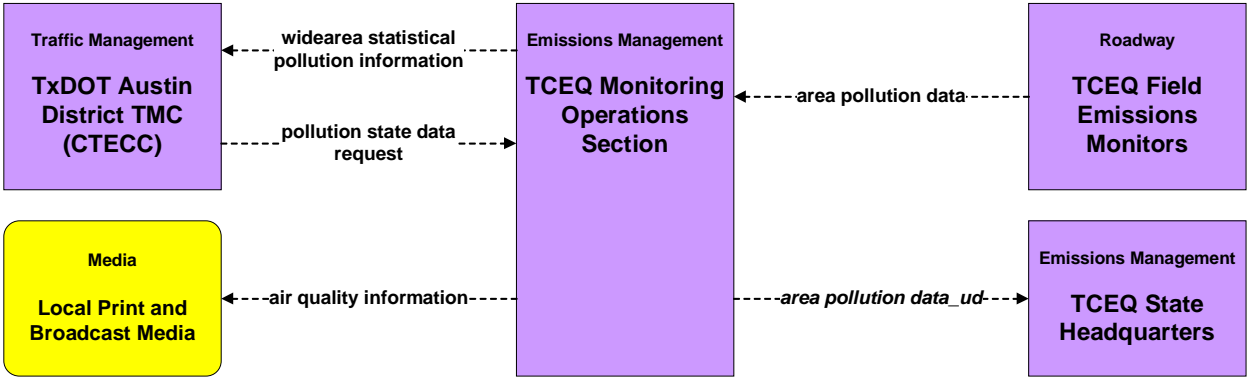
**ATMS10 – Electronic Toll Collection
TxDOT Toll Operations Division – Toll Administration**



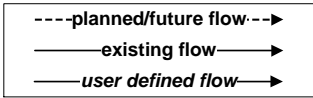
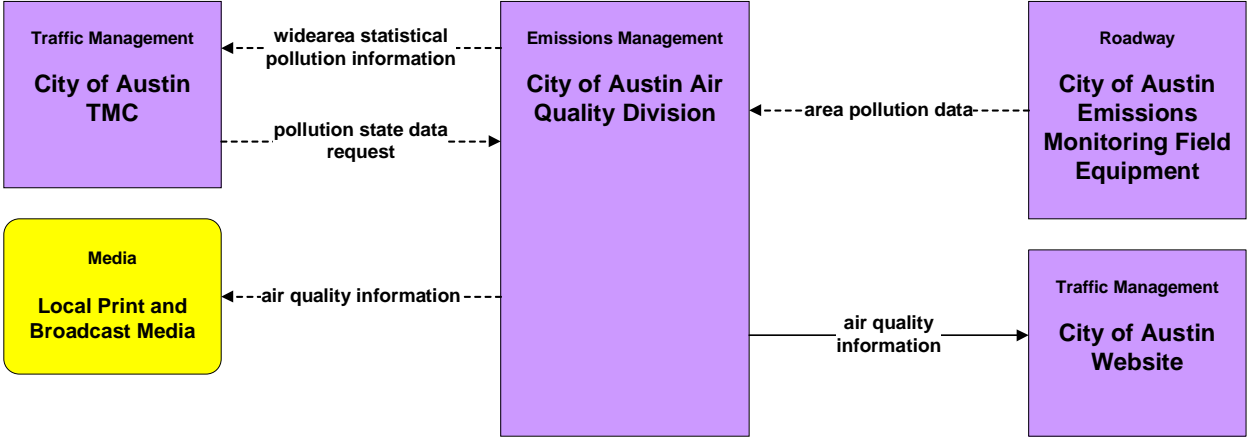
**ATMS10 – Electronic Toll Collection
CTRMA – Toll Administration**



**ATMS11 - Emissions Monitoring and Management
TCEQ**

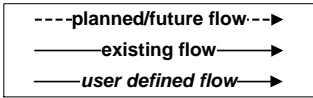
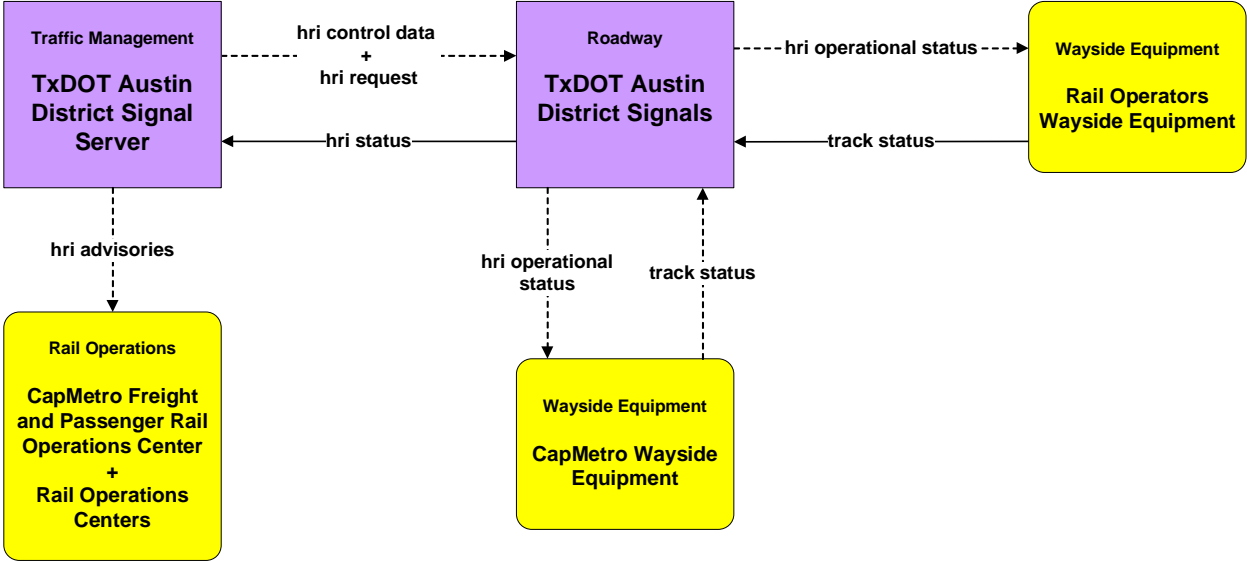


**ATMS11 - Emissions Monitoring and Management
City of Austin**

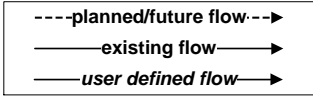
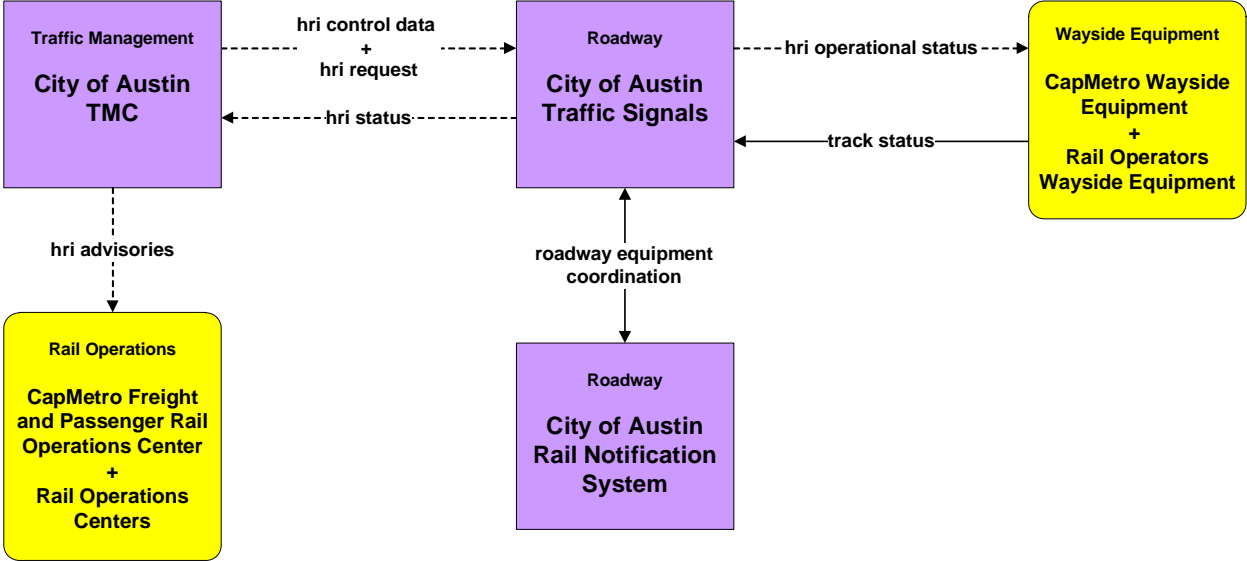


Note:
The City of Austin Air Quality Division displays the air quality forecast for the Austin Region on their website. The air quality forecast is obtained from the Texas Commission on Environmental Quality (TCEQ).

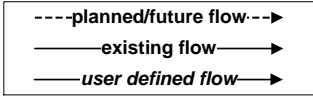
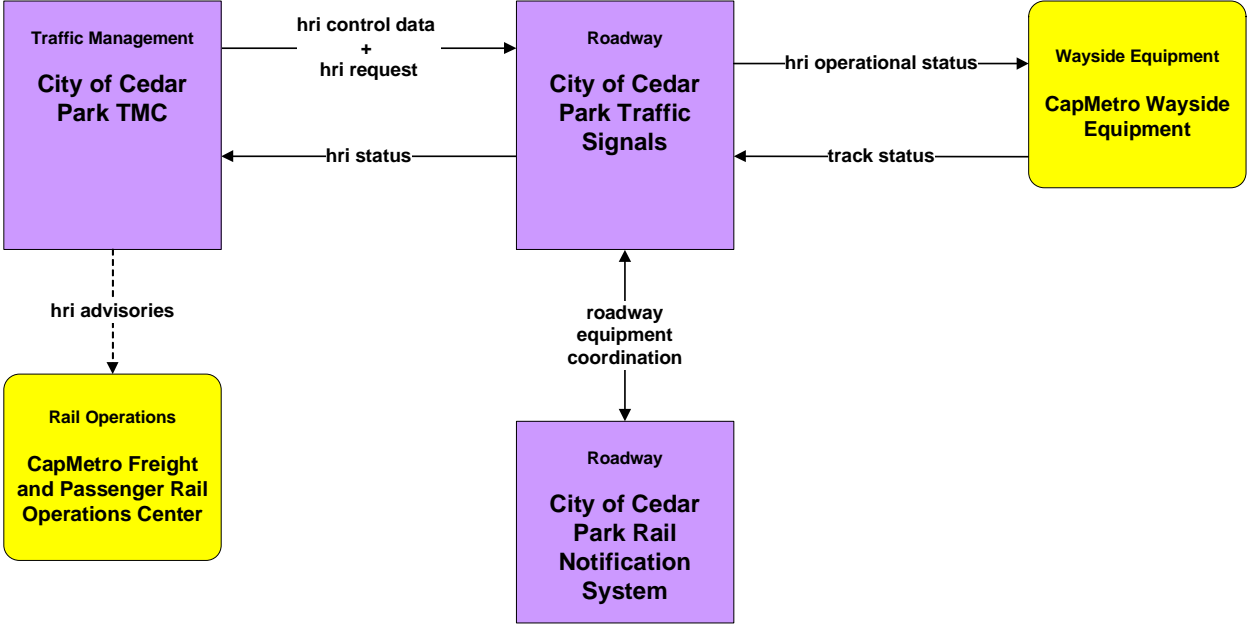
**ATMS13 - Standard Railroad Grade Crossing
TxDOT Austin District Traffic Management Center (CTECC)**



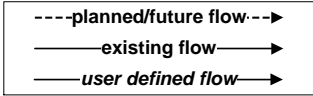
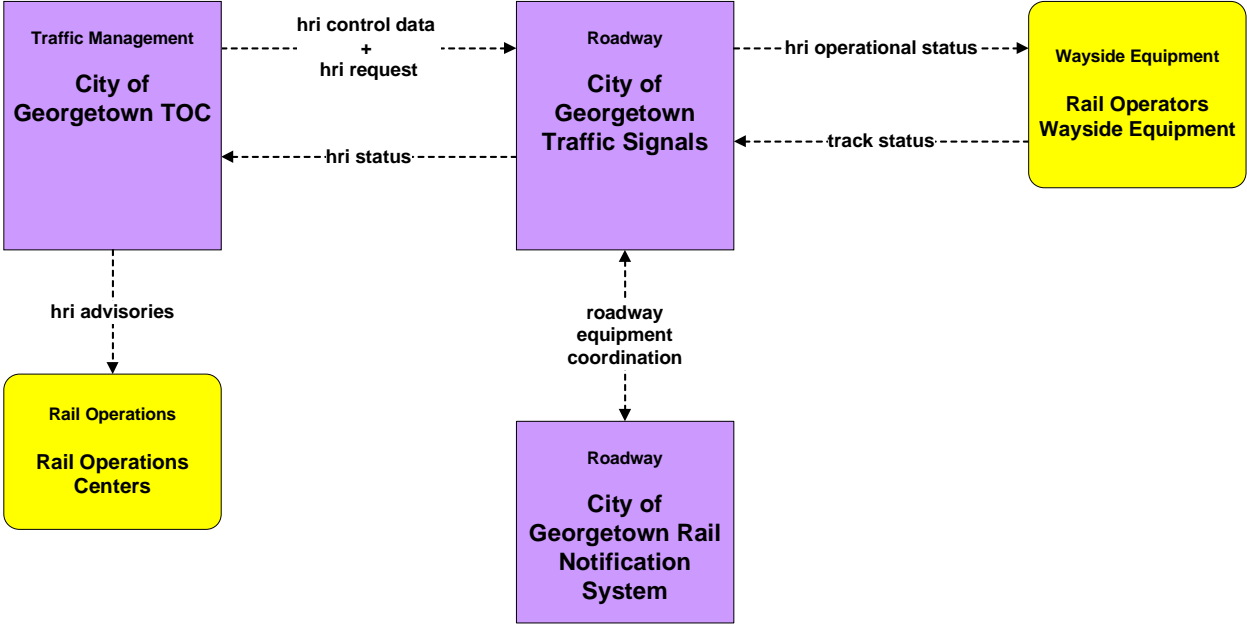
**ATMS13 - Standard Railroad Grade Crossing
City of Austin Traffic Management Center**



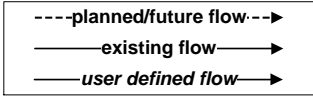
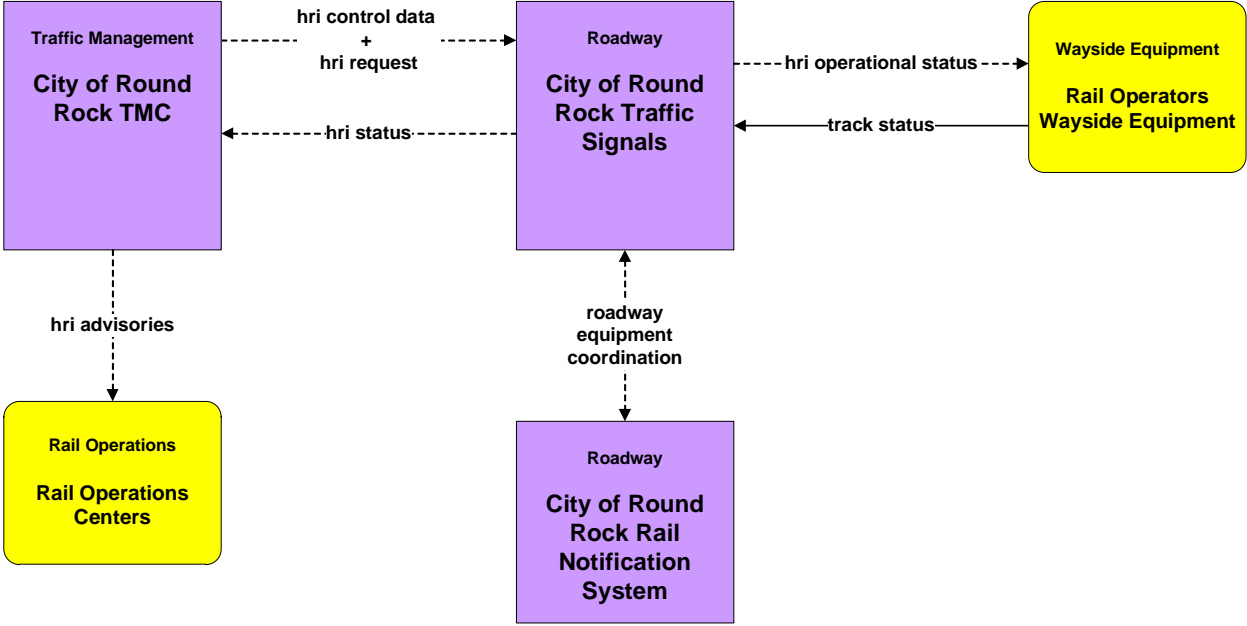
**ATMS13 - Standard Railroad Grade Crossing
City of Cedar Park Traffic Operations Center**



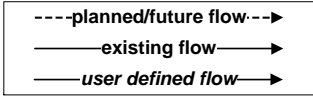
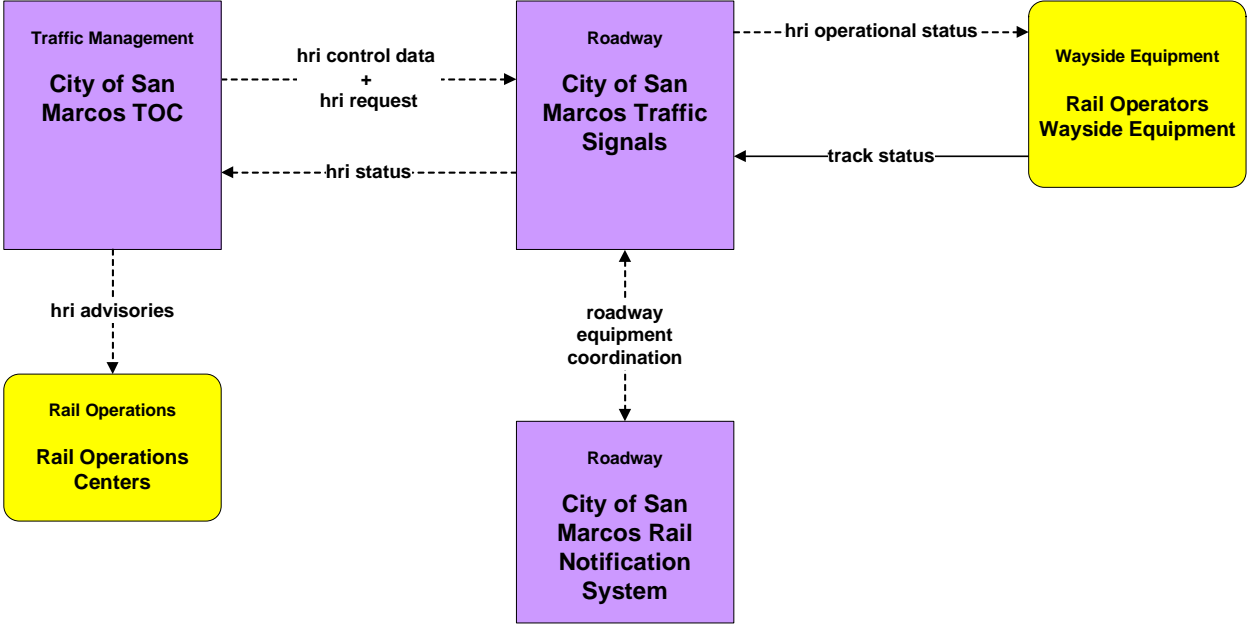
**ATMS13 - Standard Railroad Grade Crossing
City of Georgetown Traffic Operations Center**



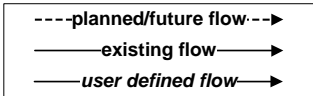
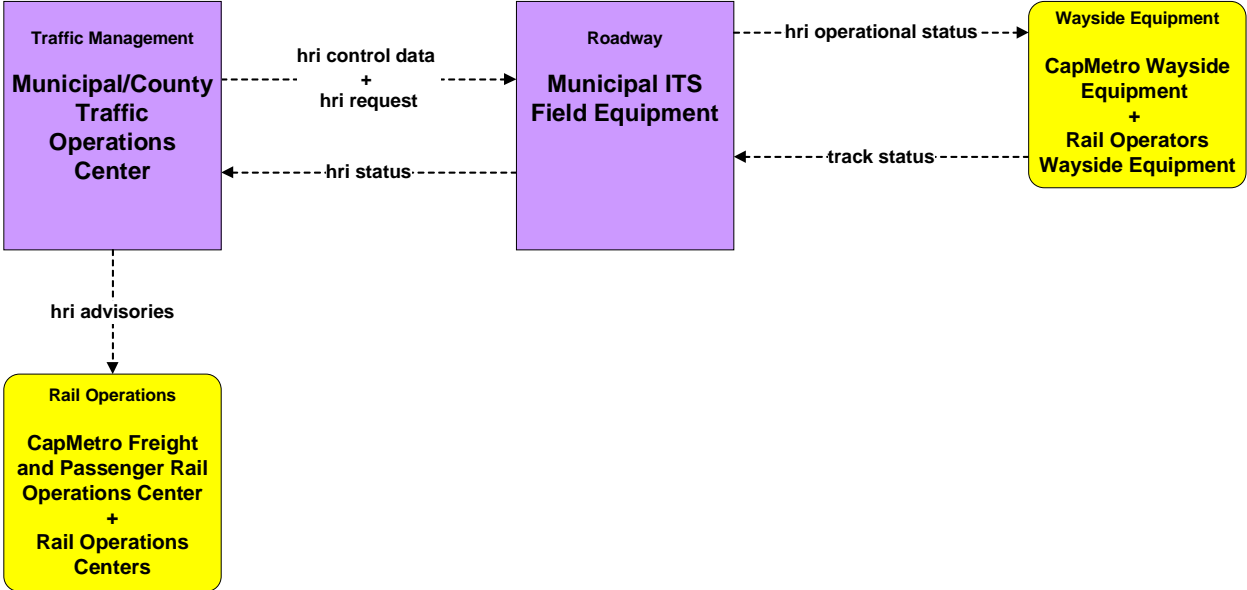
**ATMS13 - Standard Railroad Grade Crossing
City of Round Rock Traffic Management Center**



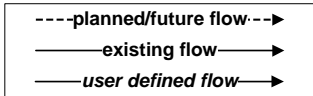
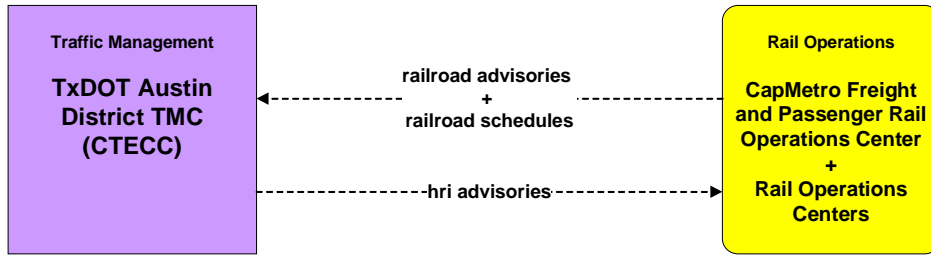
**ATMS13 - Standard Railroad Grade Crossing
City of San Marcos Traffic Operations Center**



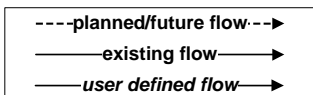
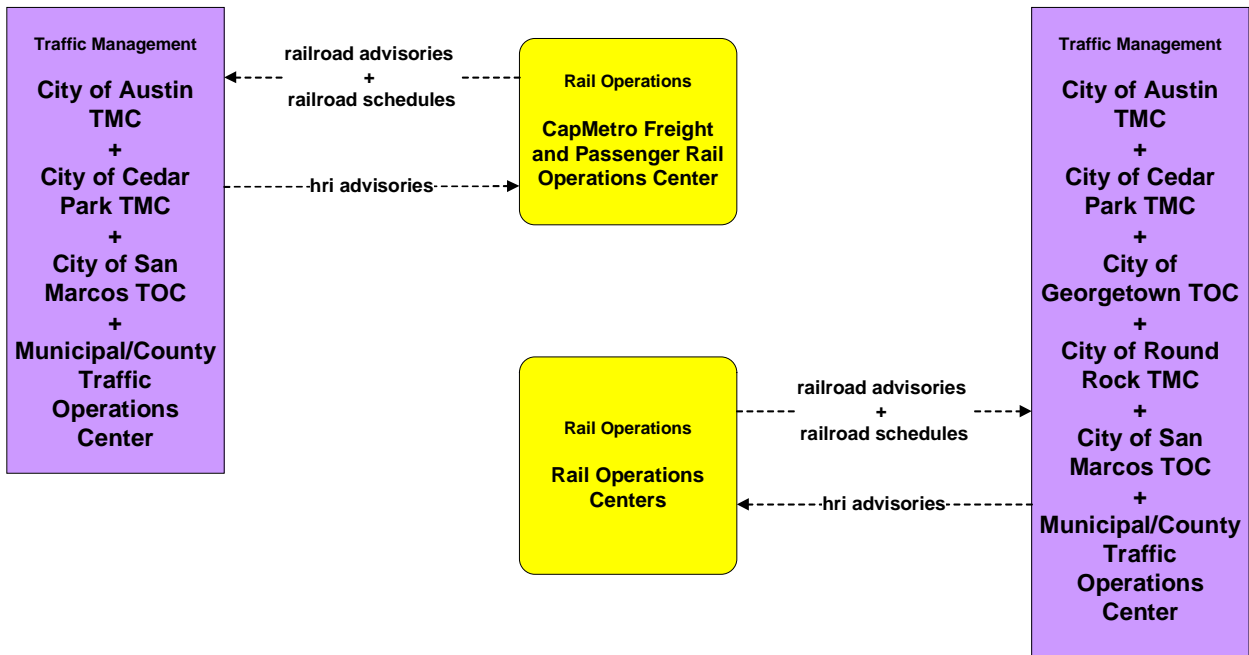
**ATMS13 - Standard Railroad Grade Crossing
Municipal/County Traffic Operations Center**



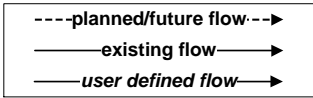
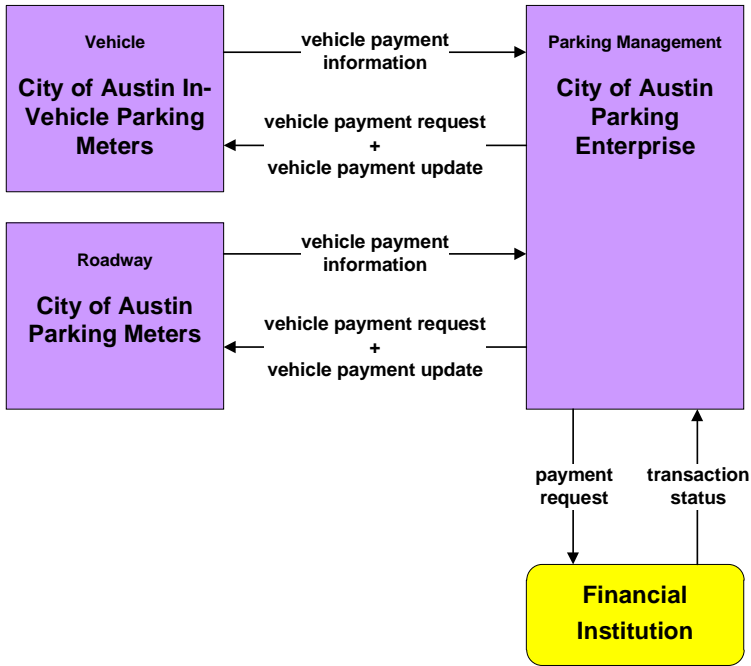
**ATMS15 - Railroad Operations Coordination
TxDOT Austin District Traffic Management Center**



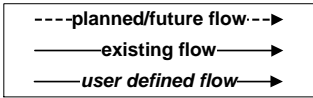
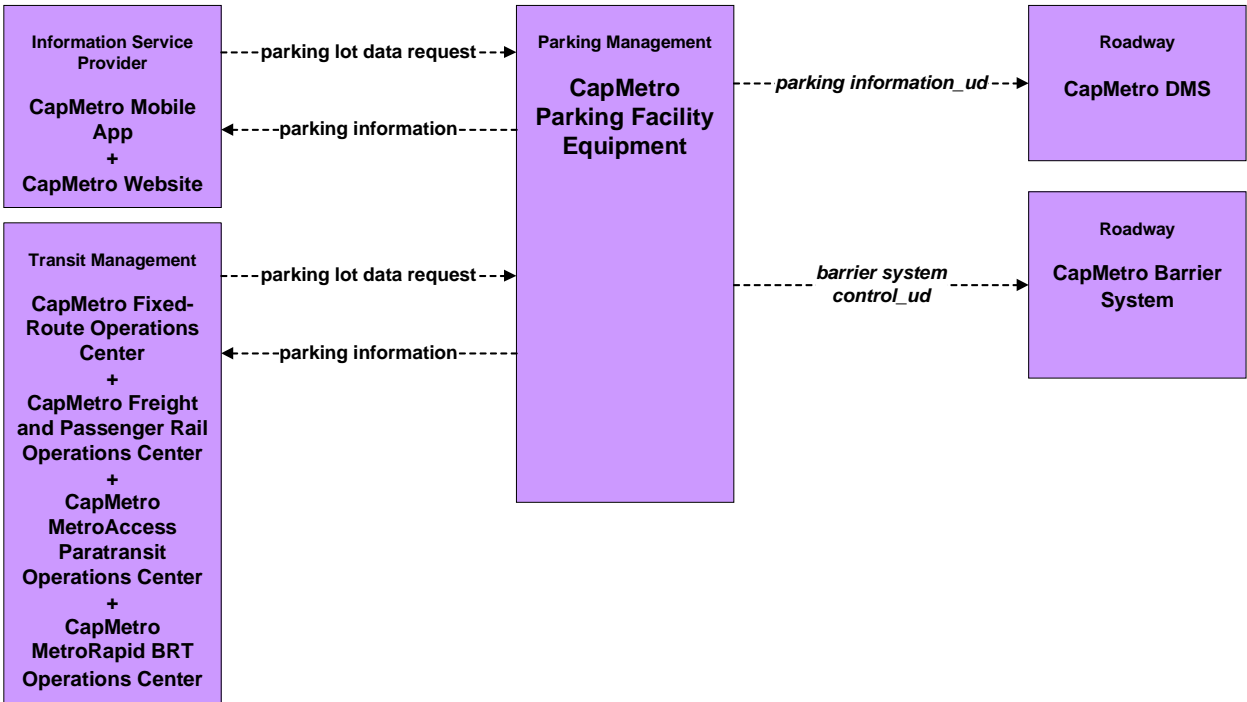
**ATMS15 - Railroad Operations Coordination
City TMCs / City TOCs / Municipal/County Traffic Operations Center**



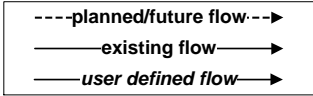
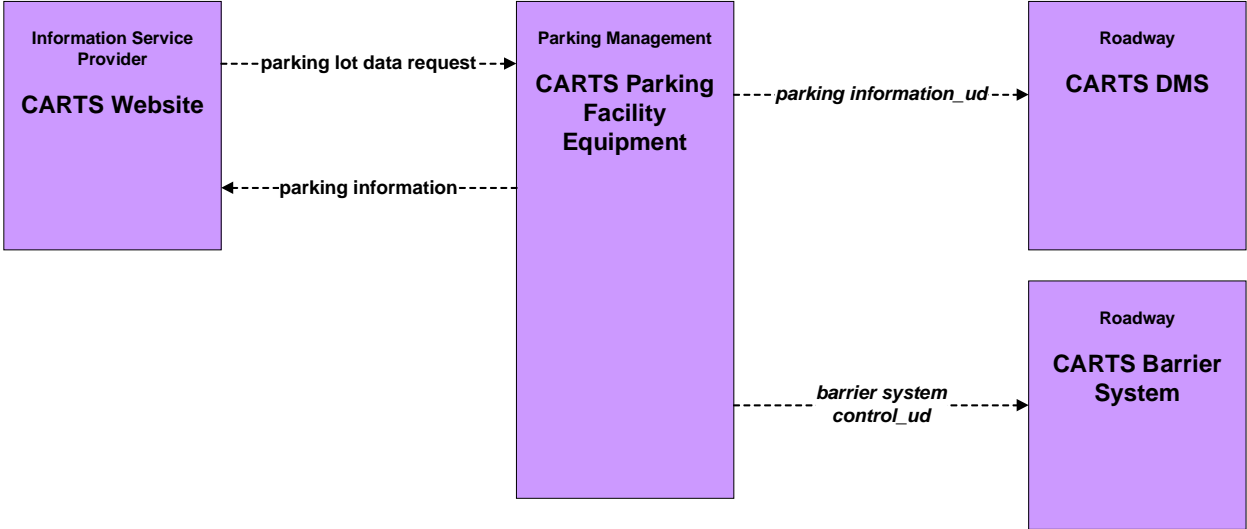
**ATMS16 - Parking Facility Management
City of Austin**



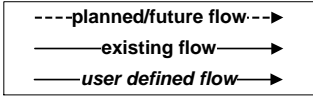
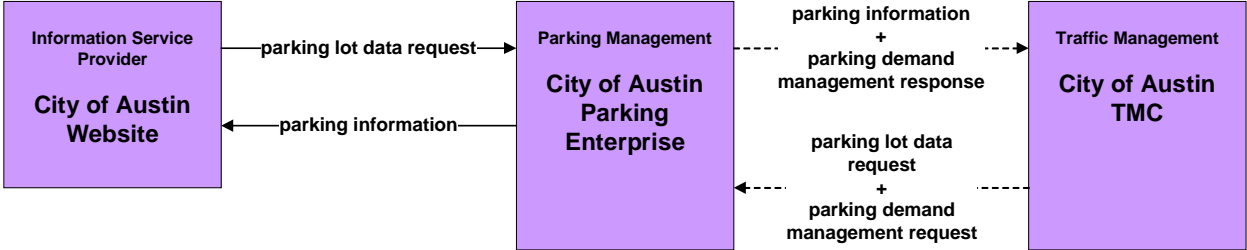
**ATMS17 – Regional Parking Management
CapMetro**



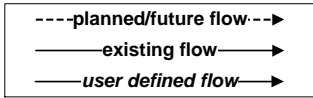
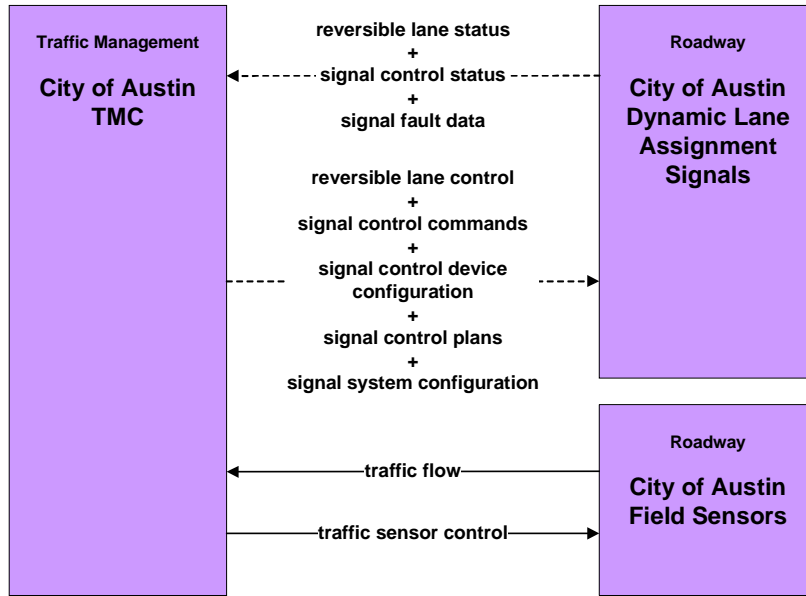
**ATMS17 - Regional Parking Management
CARTS**



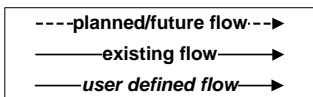
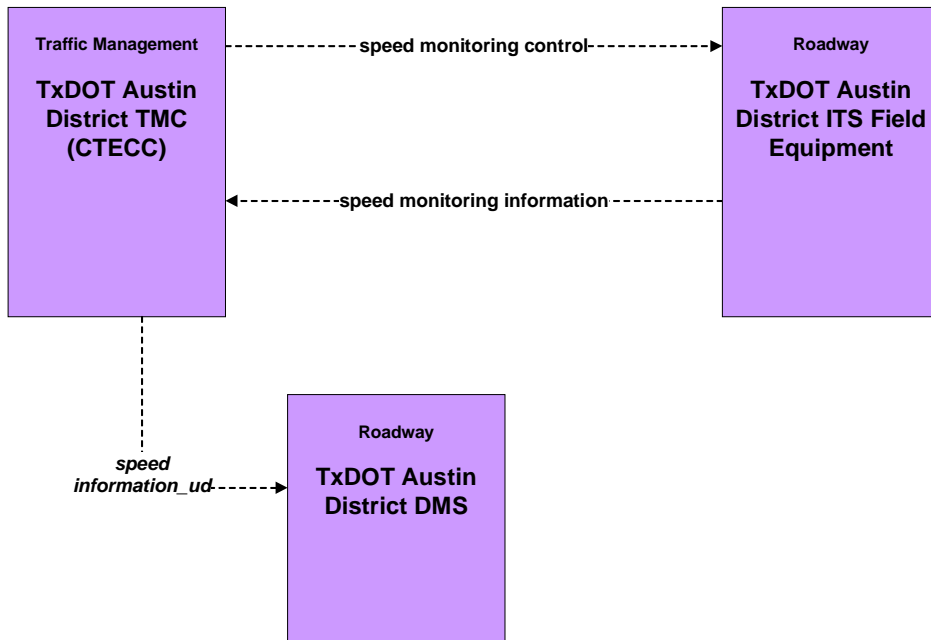
**ATMS17 - Regional Parking Management
City of Austin**



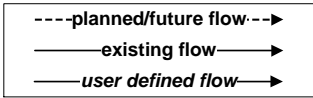
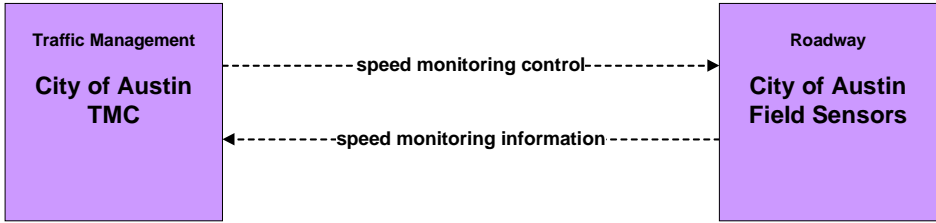
**ATMS18 - Reversible Lane Management
City of Austin**



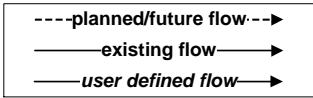
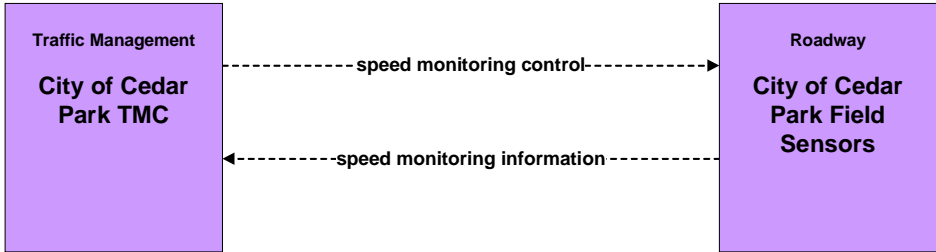
**ATMS19 - Speed Warning and Enforcement
TxDOT Austin District**



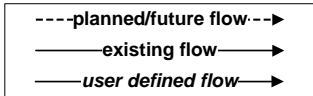
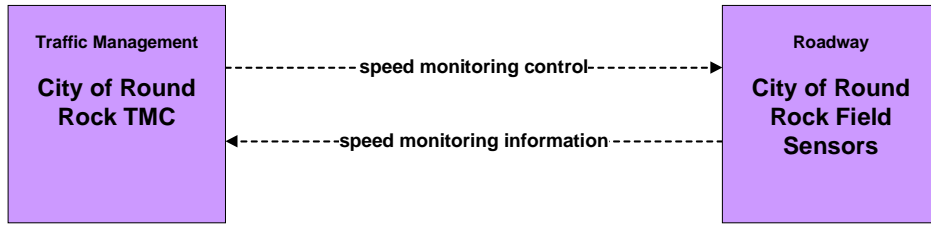
**ATMS19 - Speed Warning and Enforcement
City of Austin**



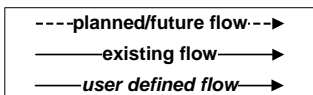
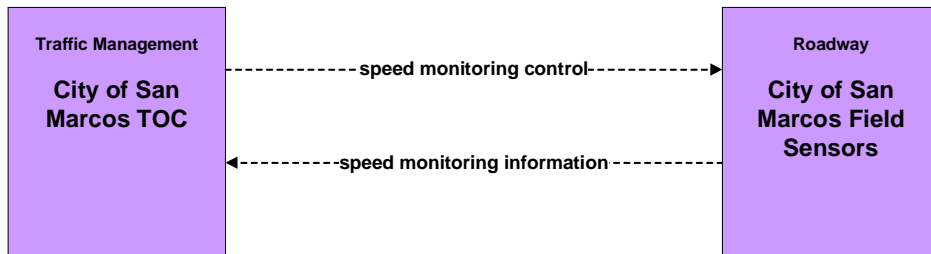
**ATMS19 - Speed Warning and Enforcement
City of Cedar Park**



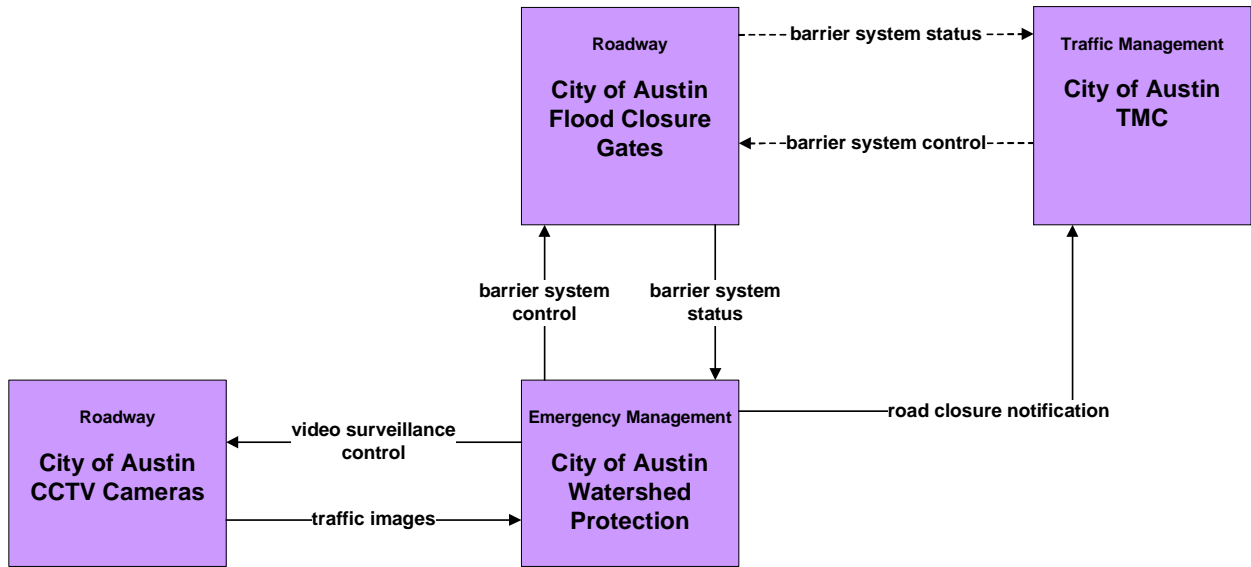
**ATMS19 - Speed Warning and Enforcement
City of Round Rock**



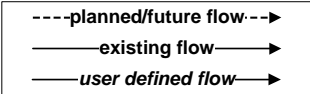
**ATMS19 - Speed Warning and Enforcement
City of San Marcos**



**ATMS21 - Roadway Closure Management
City of Austin – Flood Closure Gates**

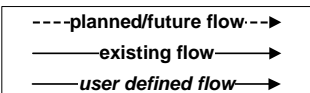
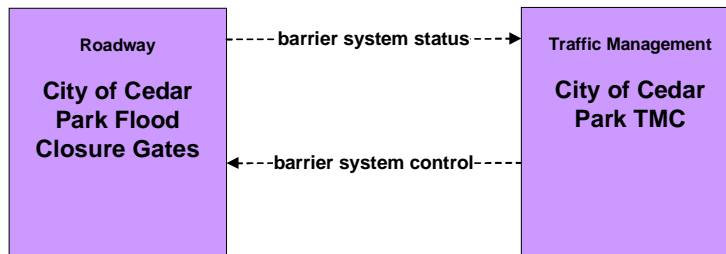


*Note:
City of Austin CCTV Cameras located at low water crossings are operated by the City of Austin Watershed Protection.*



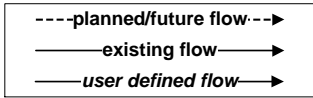
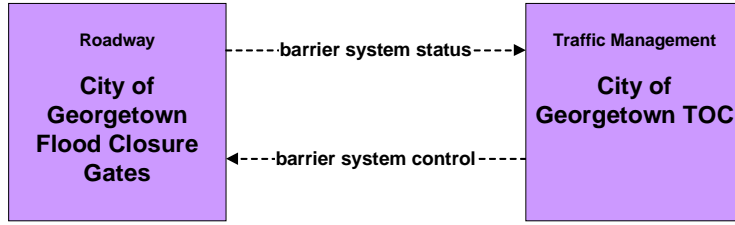
*Note:
Additional Flood Detection information can be found in EM07.*

**ATMS21 - Roadway Closure Management
City of Cedar Park – Flood Closure Gates**



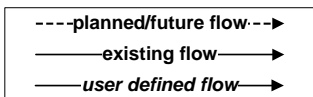
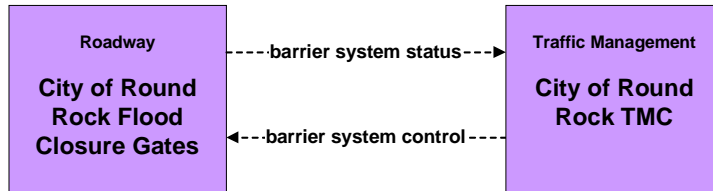
*Note:
Additional Flood Detection information can be found in EM07.*

**ATMS21 - Roadway Closure Management
City of Georgetown – Flood Closure Gates**



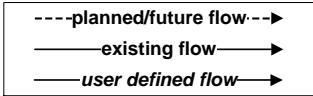
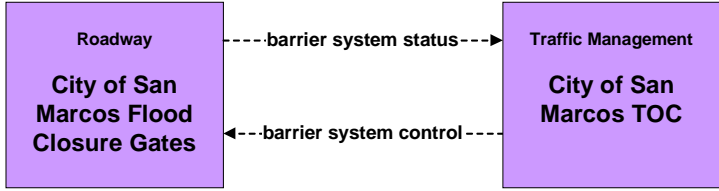
*Note:
Additional Flood Detection information can be
found in EM07.*

**ATMS21 - Roadway Closure Management
City of Round Rock – Flood Closure Gates**



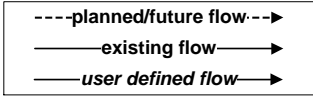
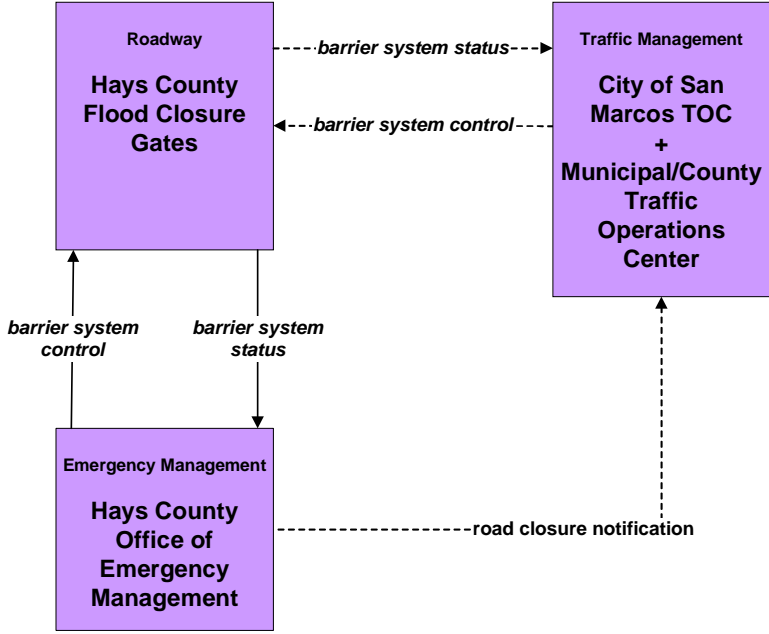
*Note:
Additional Flood Detection information can be
found in EM07.*

**ATMS21 - Roadway Closure Management
City of San Marcos – Flood Closure Gates**



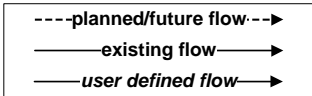
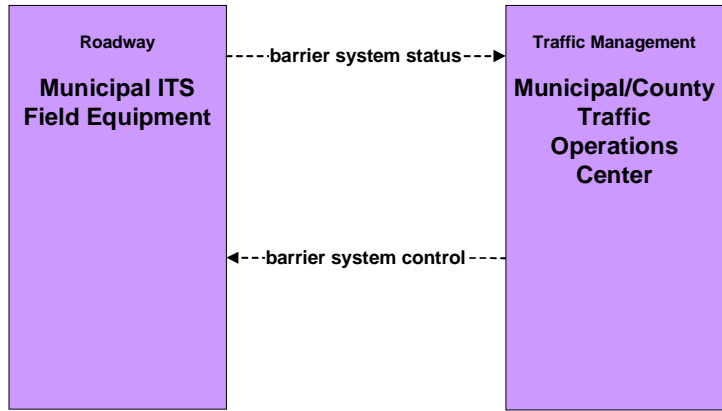
*Note:
Additional Flood Detection information can be found in EM07.*

**ATMS21 - Roadway Closure Management
Hays County – Flood Closure Gates**



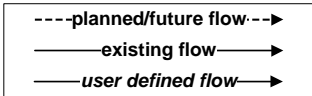
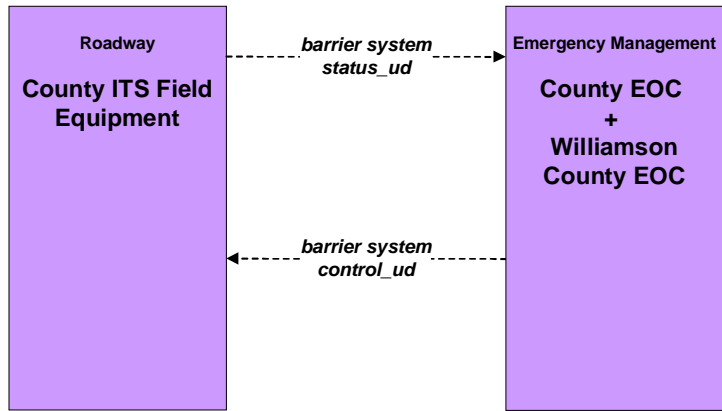
*Note:
Additional Flood Detection information can be found in EM07.*

**ATMS21 - Roadway Closure Management
Municipal – Flood Closure Gates**



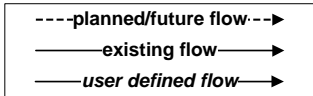
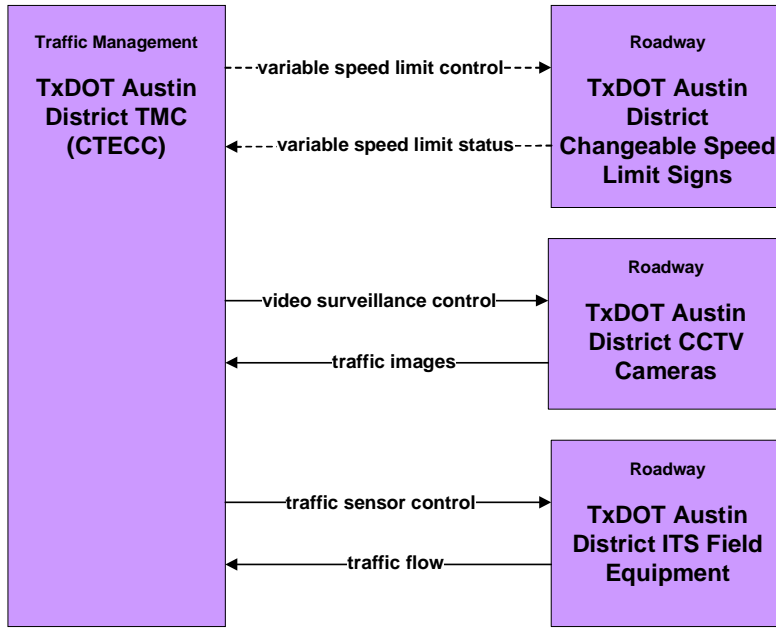
*Note:
Additional Flood Detection information can be found in EM07.*

**ATMS21 - Roadway Closure Management
County – Flood Closure Gates**

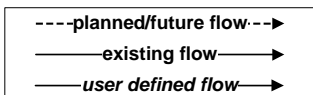
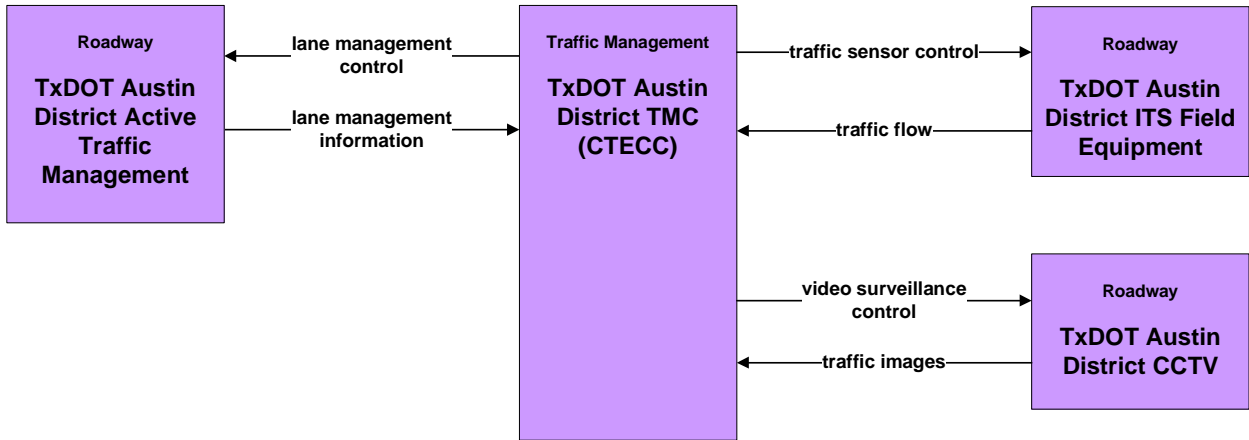


Additional Flood Detection information can be found in EM07.

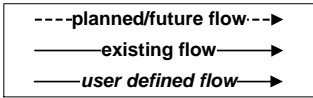
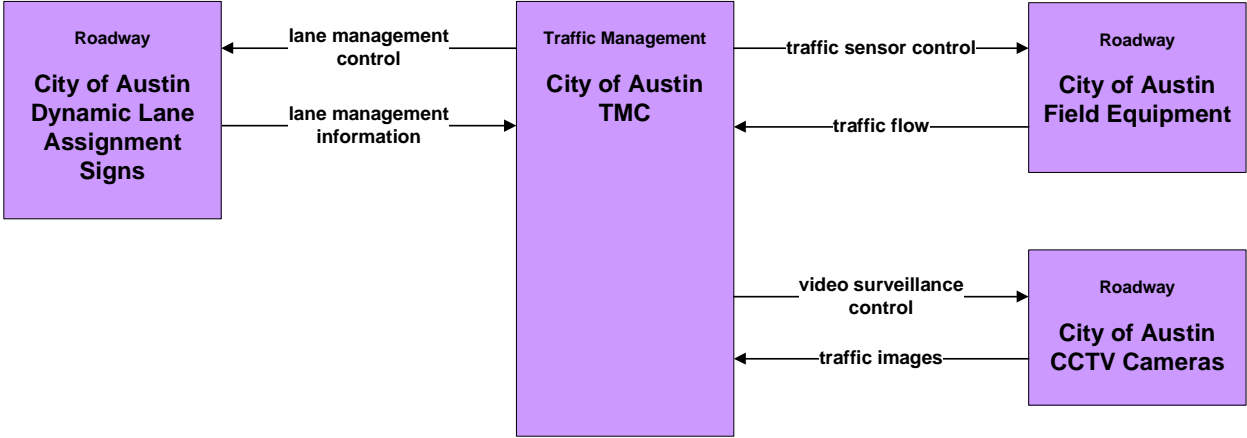
**ATMS22 - Variable Speed Limits
TxDOT Austin District**



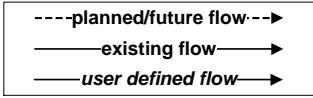
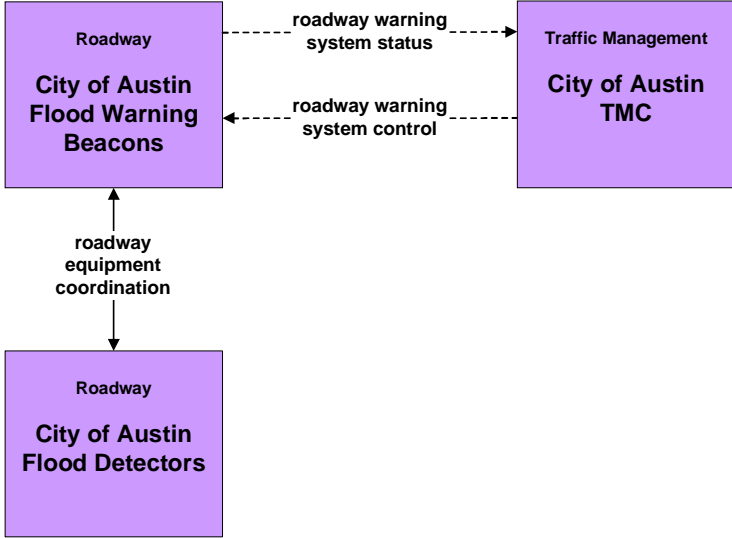
**ATMS23 - Dynamic Lane Management and Shoulder Use
TxDOT Austin District**



**ATMS23 - Dynamic Lane Management and Shoulder Use
City of Austin**

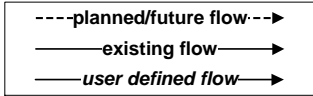
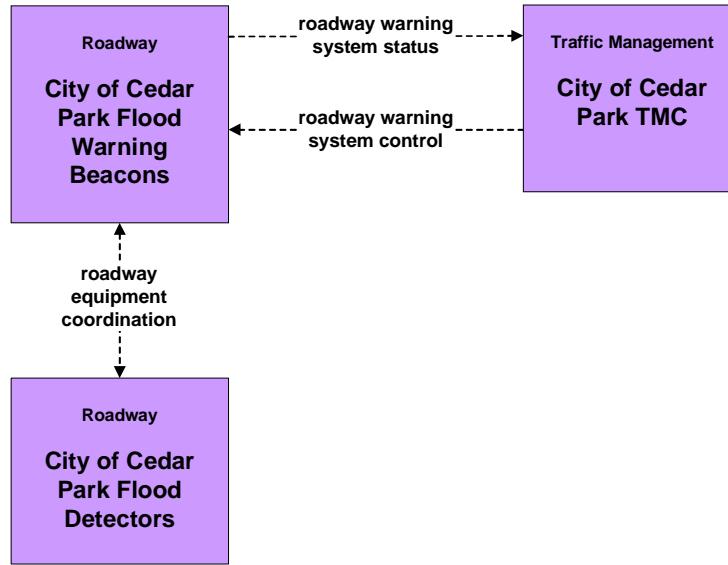


**ATMS24 – Dynamic Roadway Warning
City of Austin – Roadway Flood Warning**



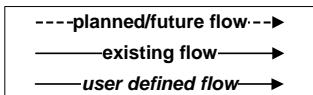
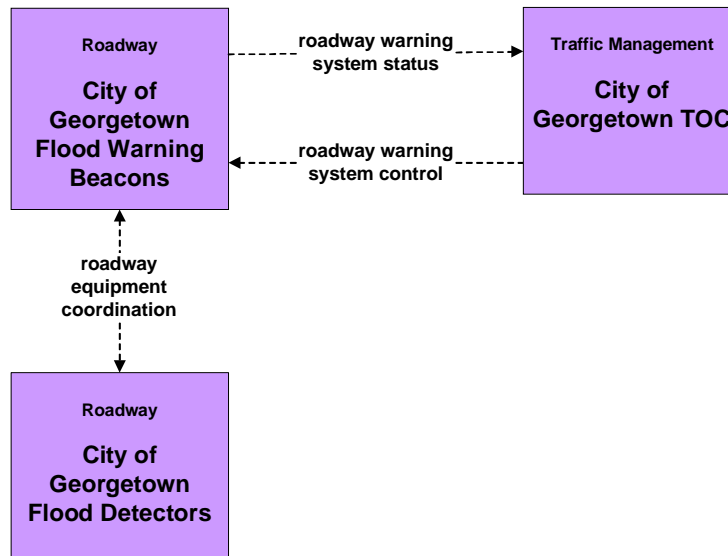
*Note:
Additional Flood Detection information can be found in EM07.*

**ATMS24 – Dynamic Roadway Warning
City of Cedar Park – Roadway Flood Warning**



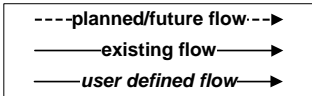
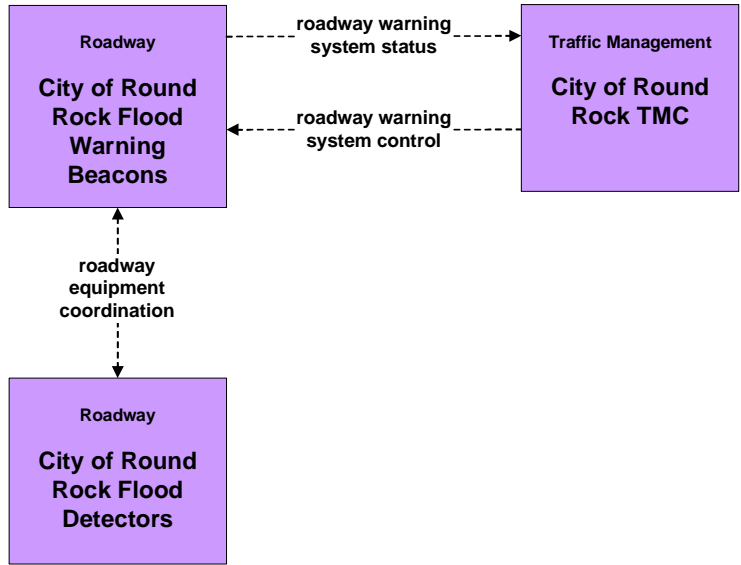
*Note:
Additional Flood Detection information can be found in EM07.*

**ATMS24 – Dynamic Roadway Warning
City of Georgetown – Roadway Flood Warning**



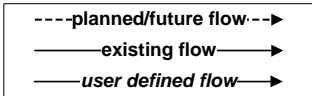
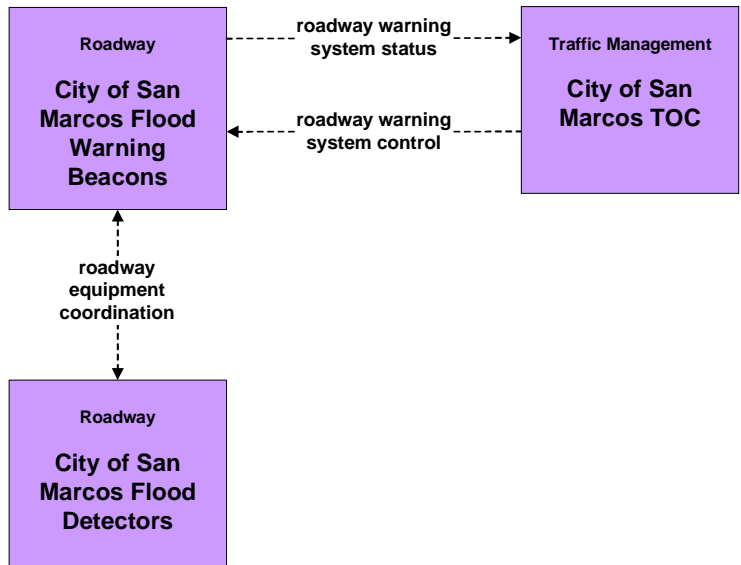
*Note:
Additional Flood Detection information can be found in EM07.*

**ATMS24 – Dynamic Roadway Warning
City of Round Rock – Roadway Flood Warning**



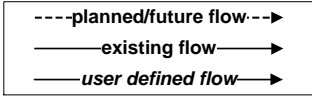
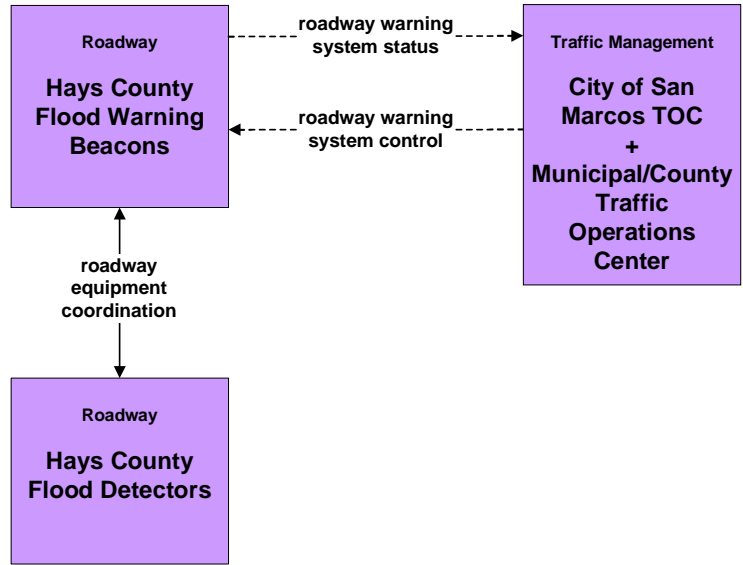
*Note:
Additional Flood Detection information can
be found in EM07.*

**ATMS24 – Dynamic Roadway Warning
City of San Marcos – Roadway Flood Warning**



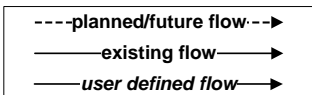
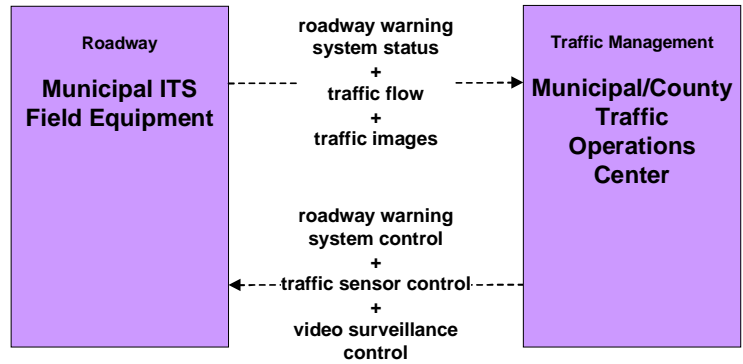
*Note:
Additional Flood Detection information can
be found in EM07.*

**ATMS24 – Dynamic Roadway Warning
Hays County – Roadway Flood Warning**



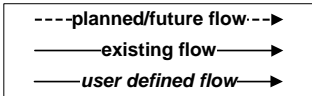
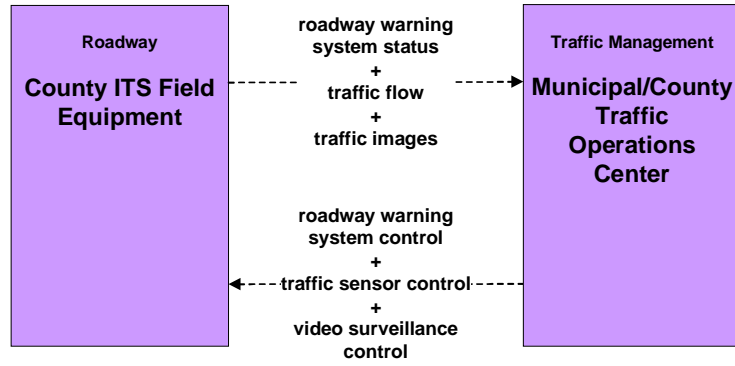
*Note:
Additional Flood Detection information can be found in EM07.*

**ATMS24 – Dynamic Roadway Warning
Municipal – Roadway Flood Warning**



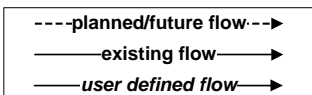
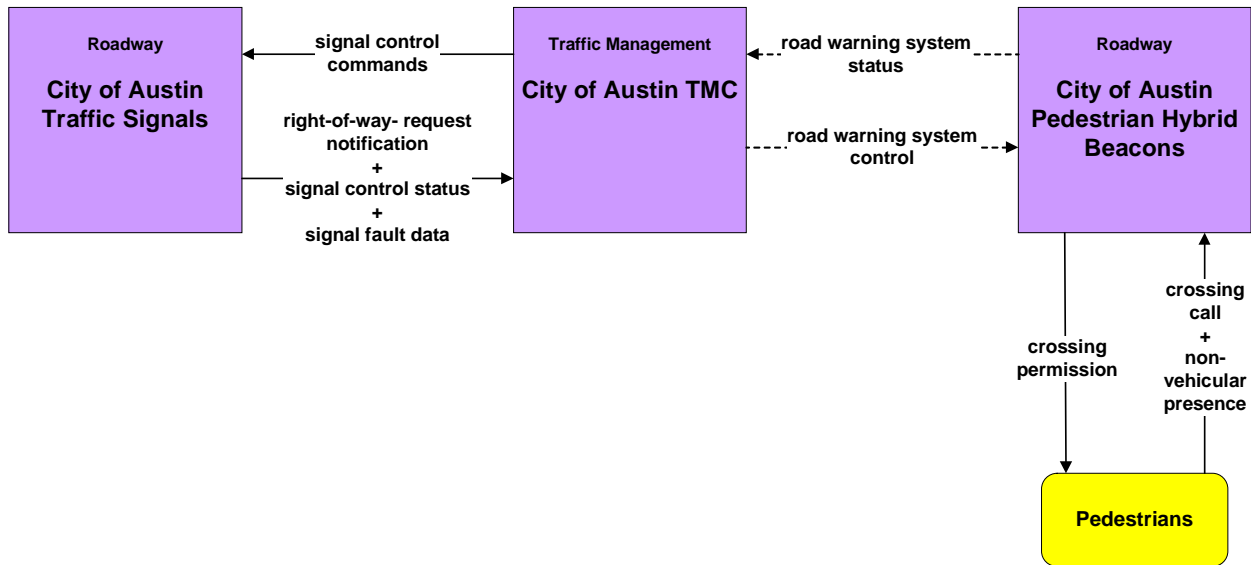
*Note:
Additional Flood Detection information can be found in EM07.*

**ATMS24 – Dynamic Roadway Warning
County – Roadway Flood Warning**

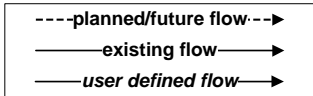
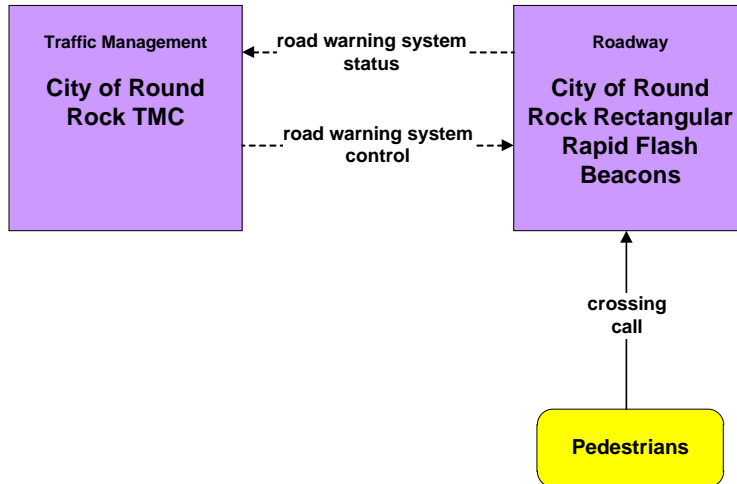


*Note:
Additional Flood Detection information can be found in EM07.*

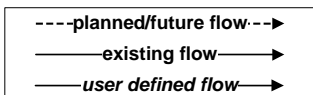
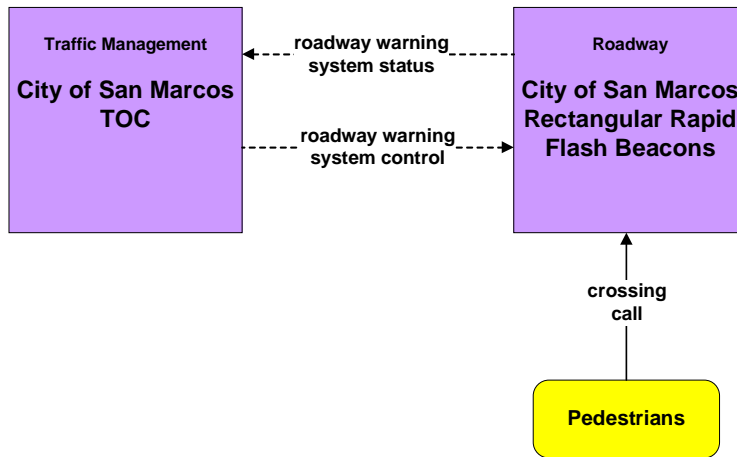
**ATMS26 – Mixed Use Warning Systems
City of Austin**



**ATMS26 – Mixed Use Warning Systems
City of Round Rock**



**ATMS26 – Mixed Use Warning Systems
City of San Marcos**

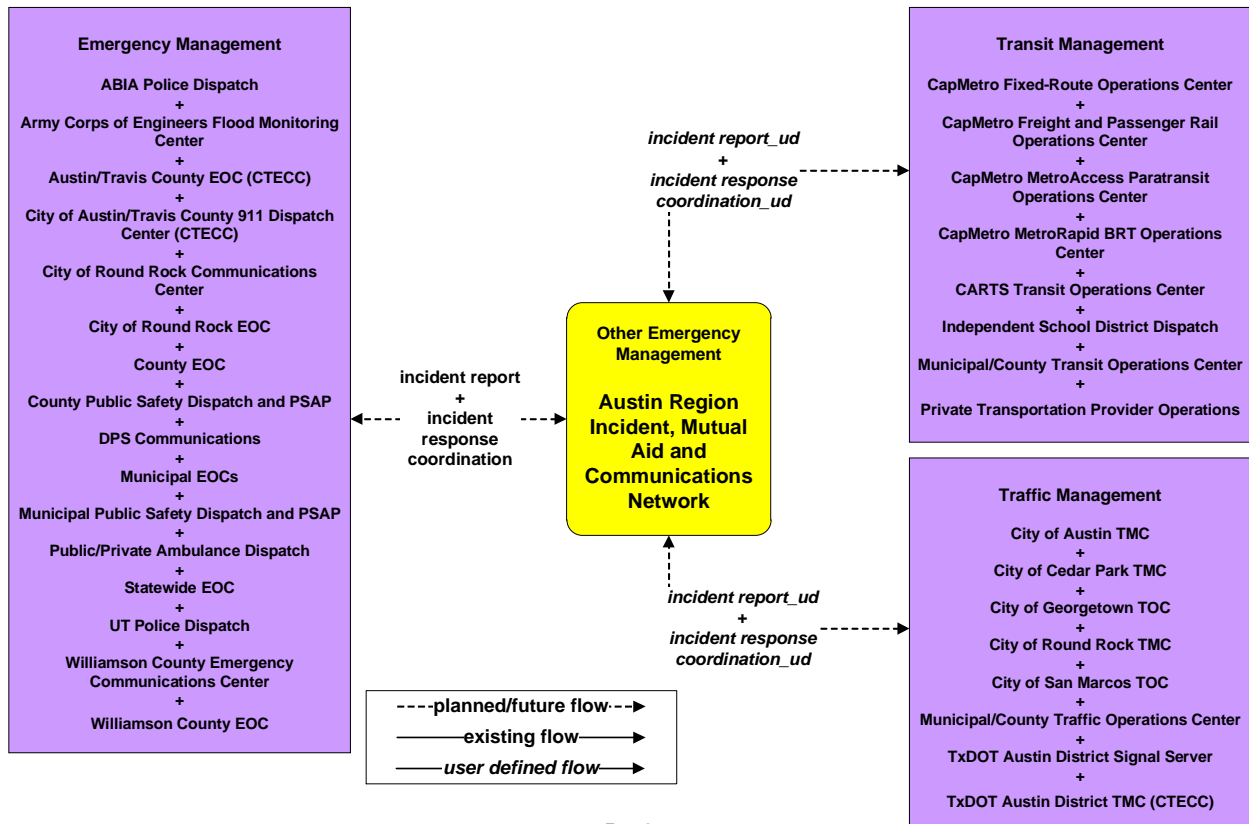


Austin Regional ITS Architecture

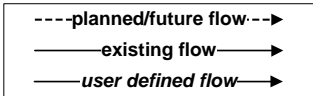
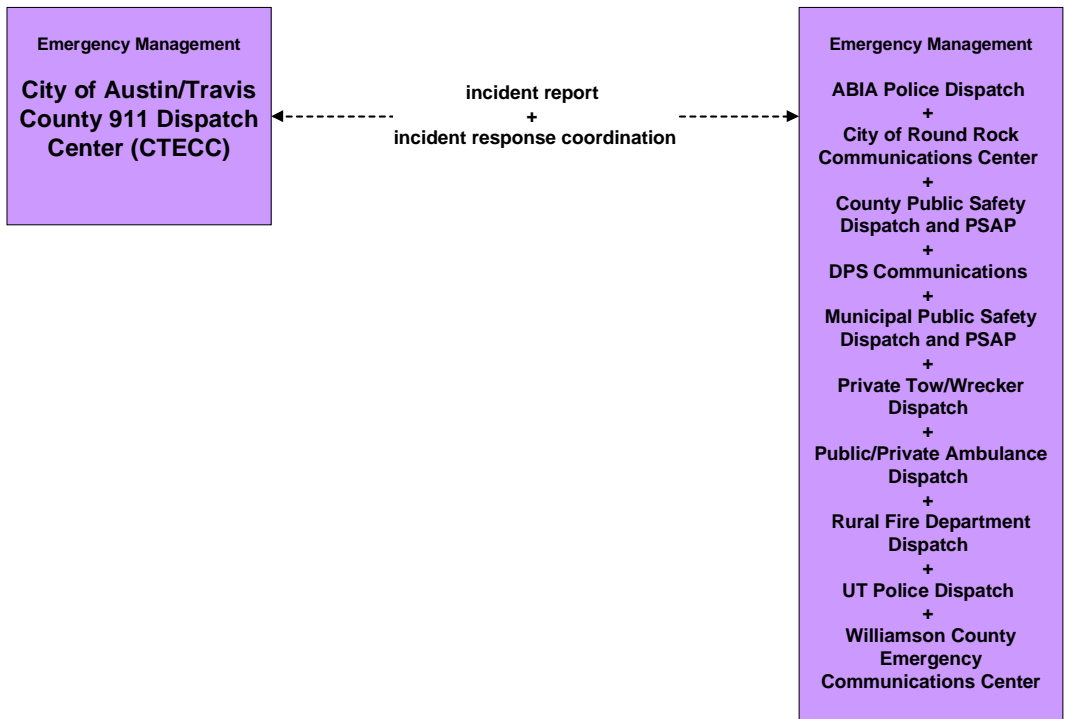
Customized ITS Service Package Diagrams

Emergency Management (EM)

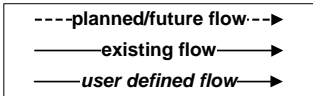
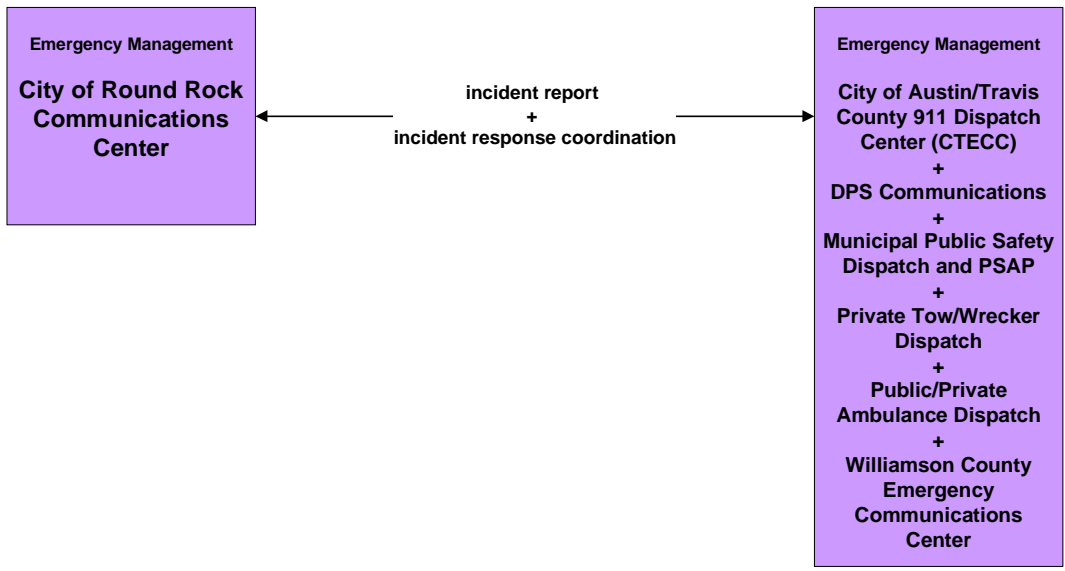
EM01 – Emergency Call-Taking and Dispatch
Regional Emergency Management Network



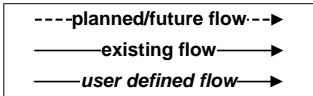
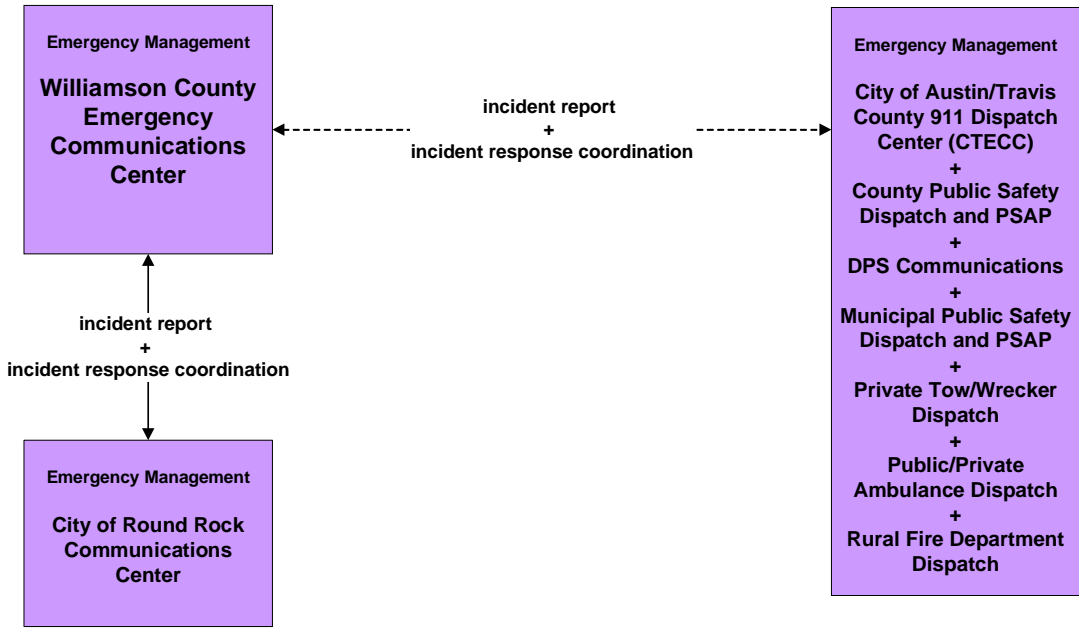
**EM01 - Emergency Call-Taking and Dispatch
City of Austin/Travis County 911 Dispatch Center (CTECC)**



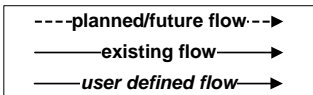
**EM01 - Emergency Call-Taking and Dispatch
City of Round Rock Communications Center**



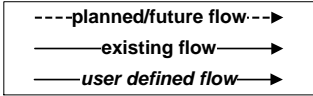
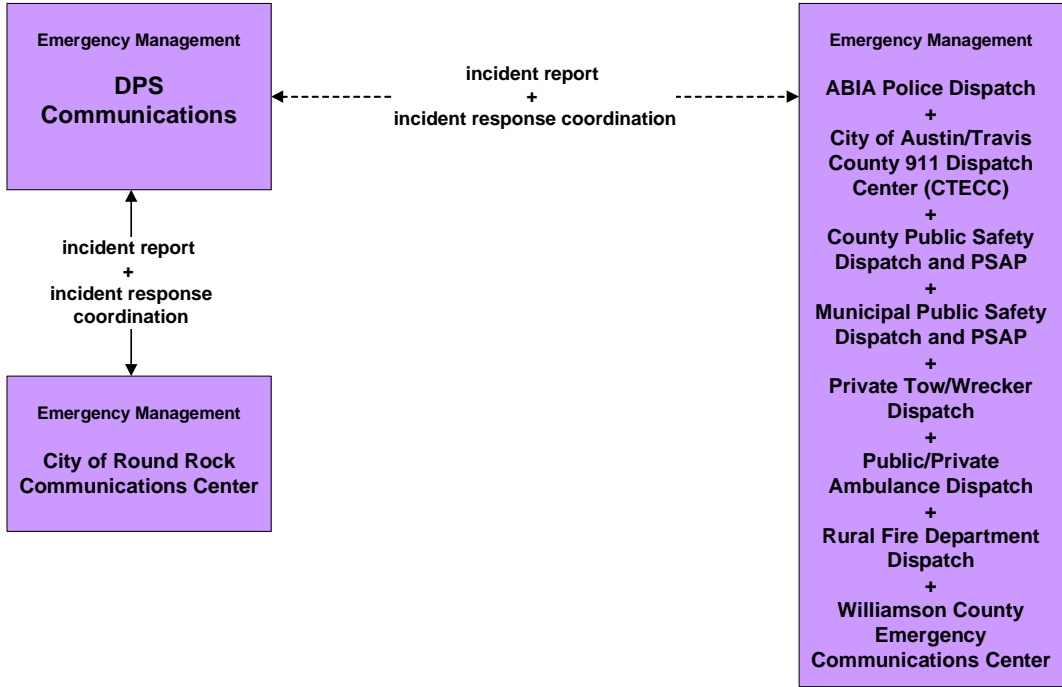
**EM01 - Emergency Call-Taking and Dispatch
Williamson County Emergency Communications Center**



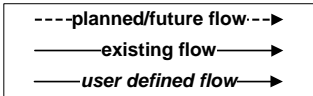
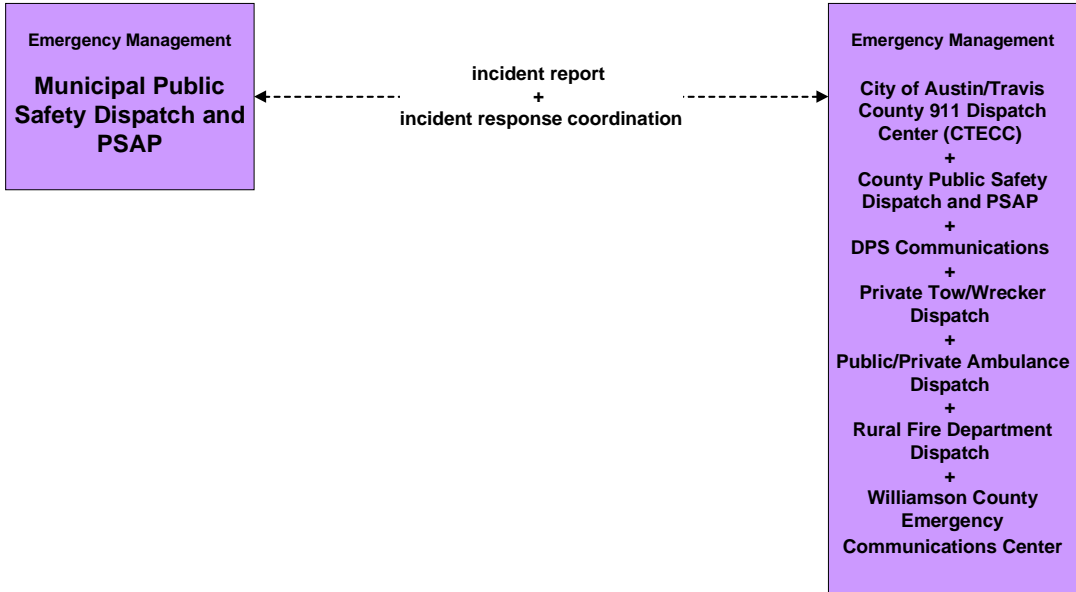
**EM01 - Emergency Call-Taking and Dispatch
County Public Safety and PSAP**



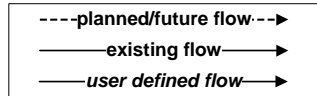
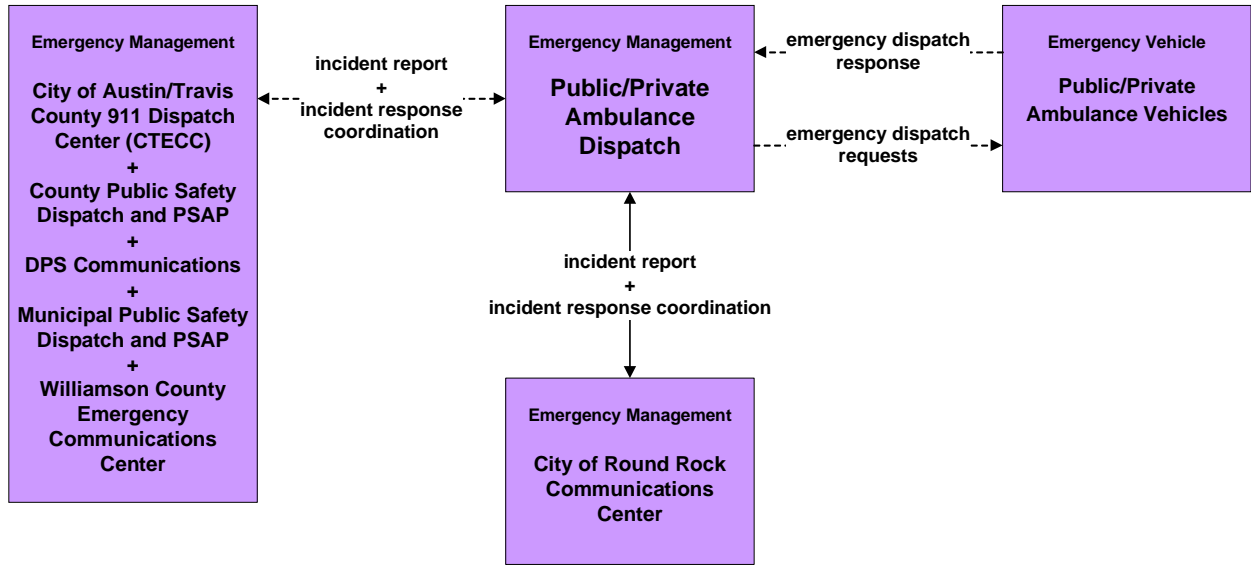
**EM01 - Emergency Call-Taking and Dispatch
DPS**



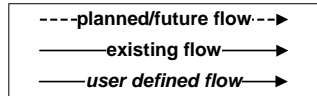
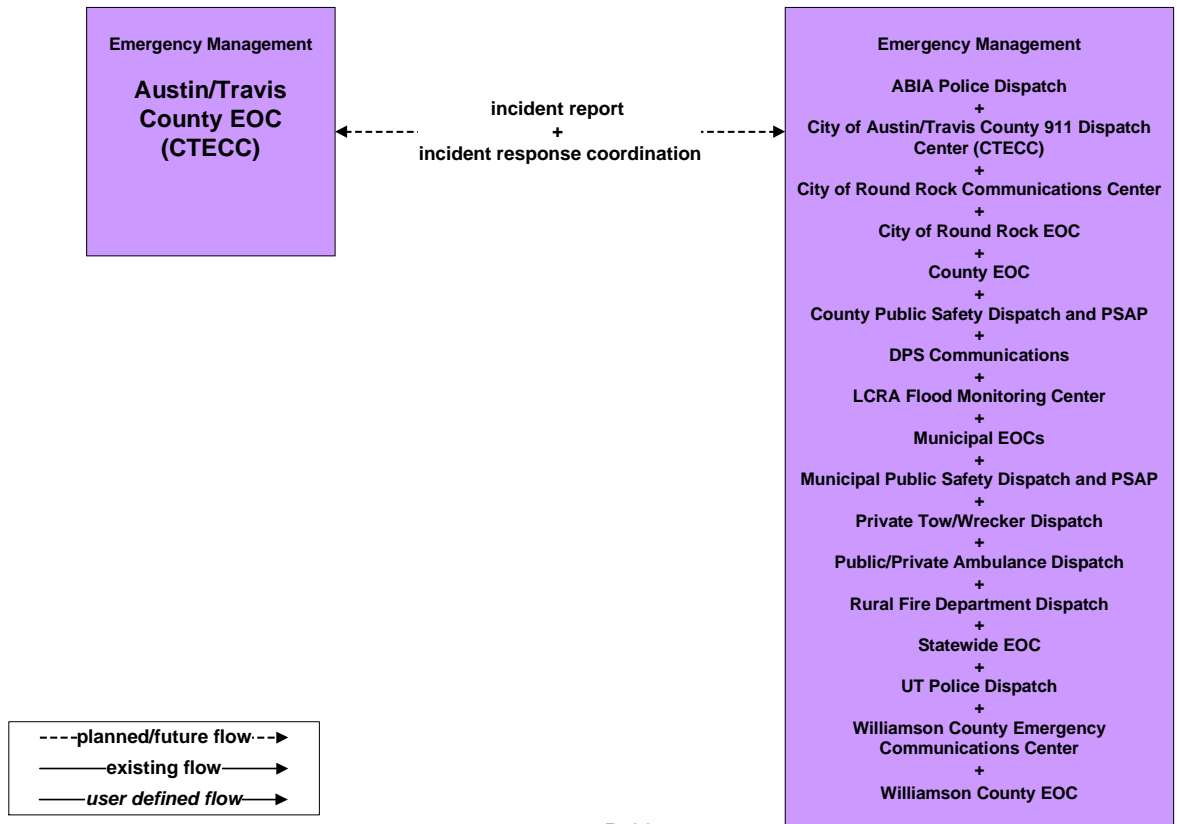
**EM01 - Emergency Call-Taking and Dispatch
Municipal Public Safety**



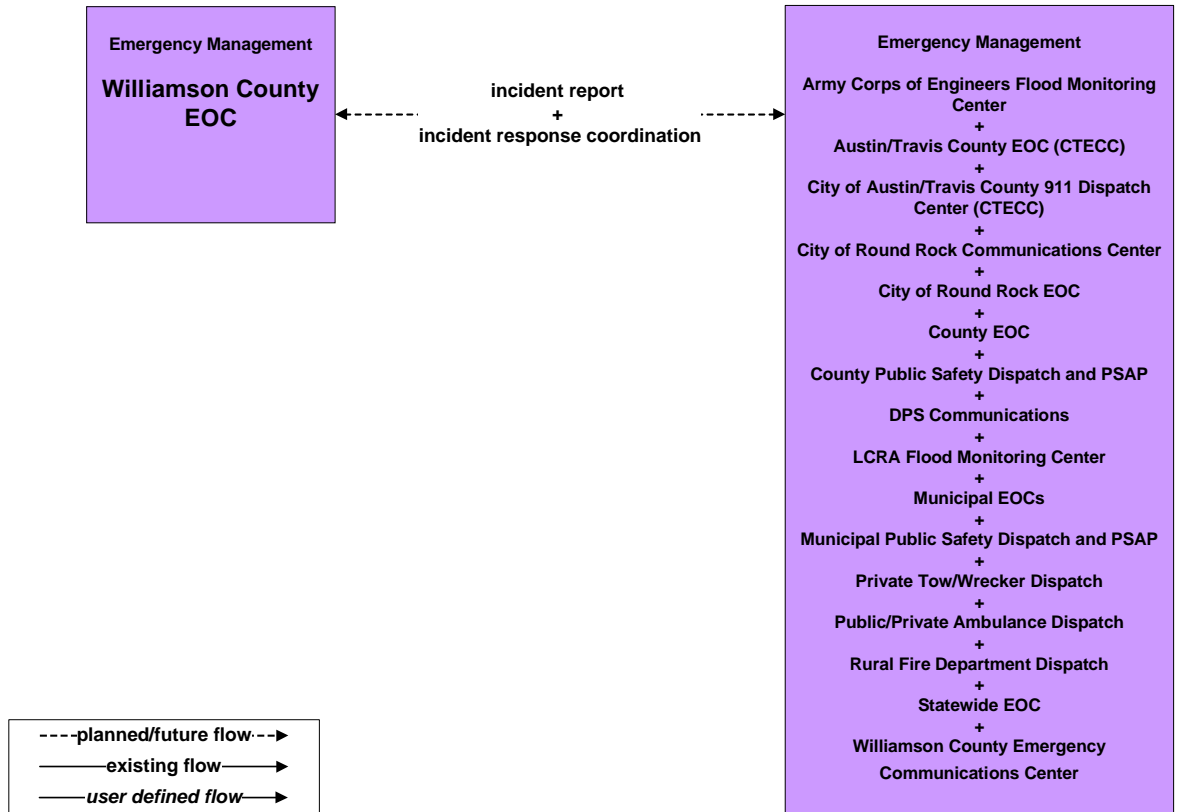
**EM01 - Emergency Call-Taking and Dispatch
Public/Private Ambulance Dispatch**



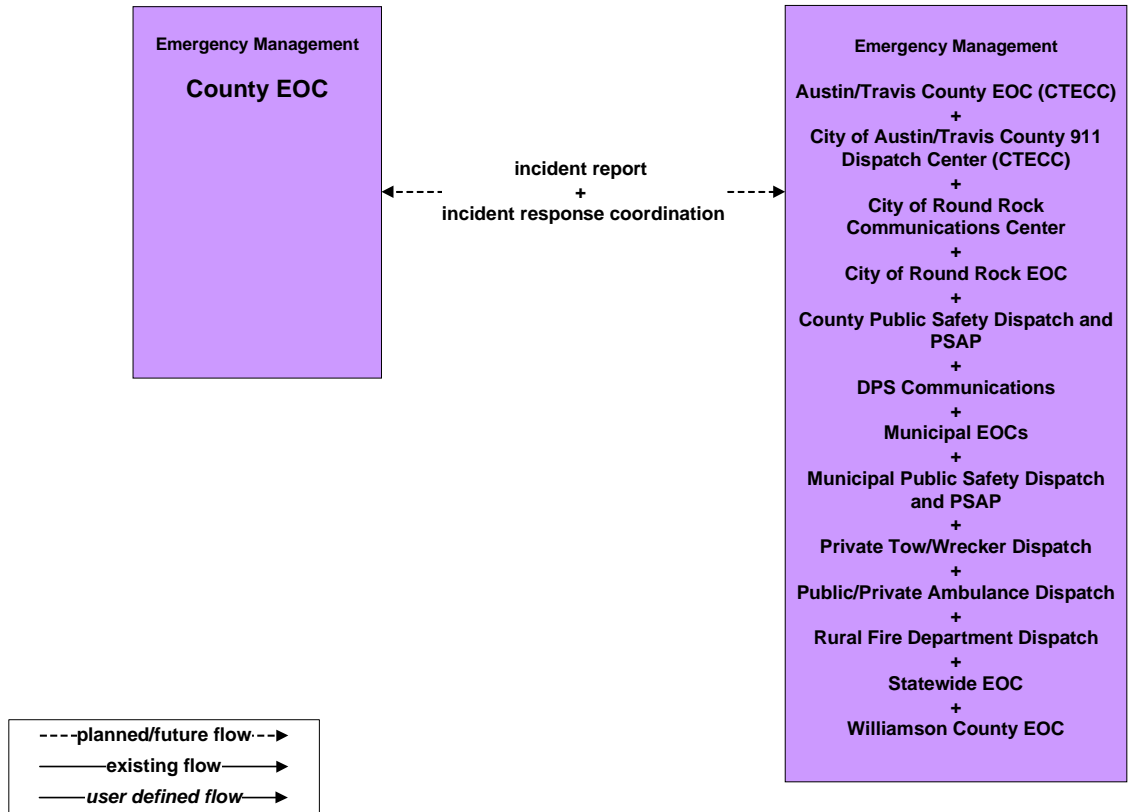
**EM01 - Emergency Call-Taking and Dispatch
Austin/Travis County EOC (CTECC)**



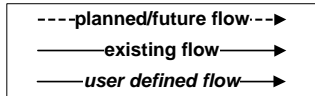
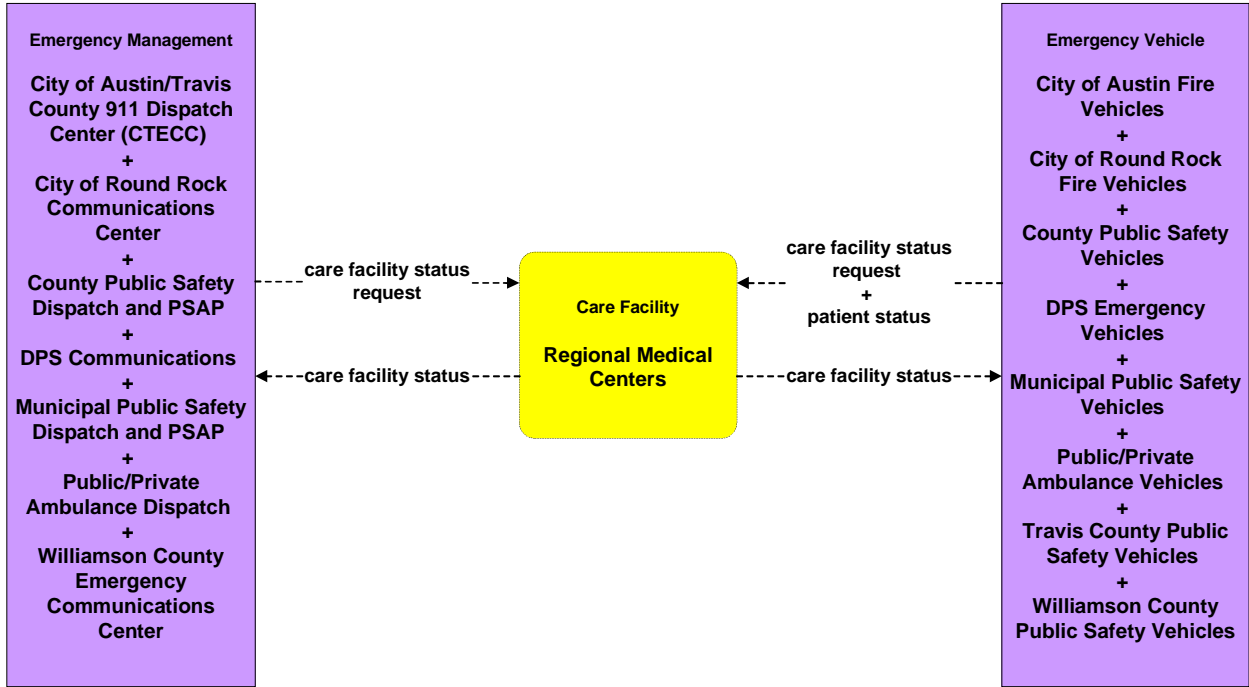
**EM01 - Emergency Call-Taking and Dispatch
Williamson County EOC**



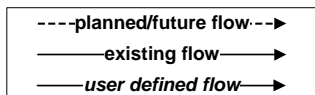
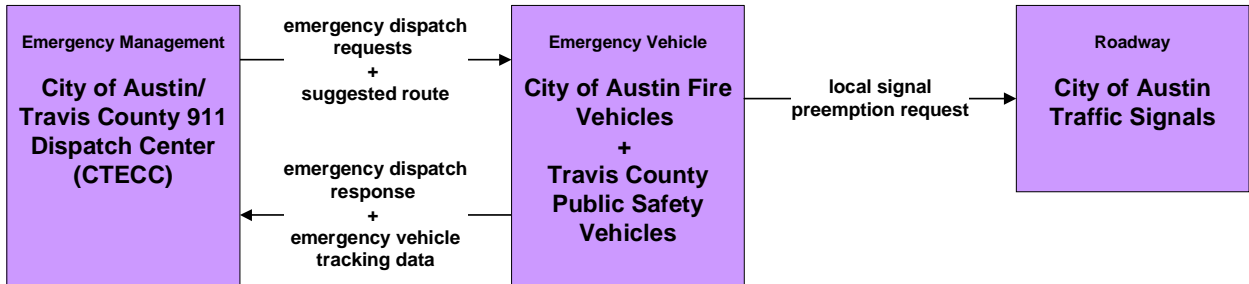
**EM01 - Emergency Call-Taking and Dispatch
County EOC**



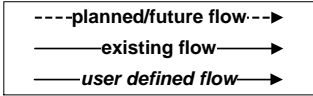
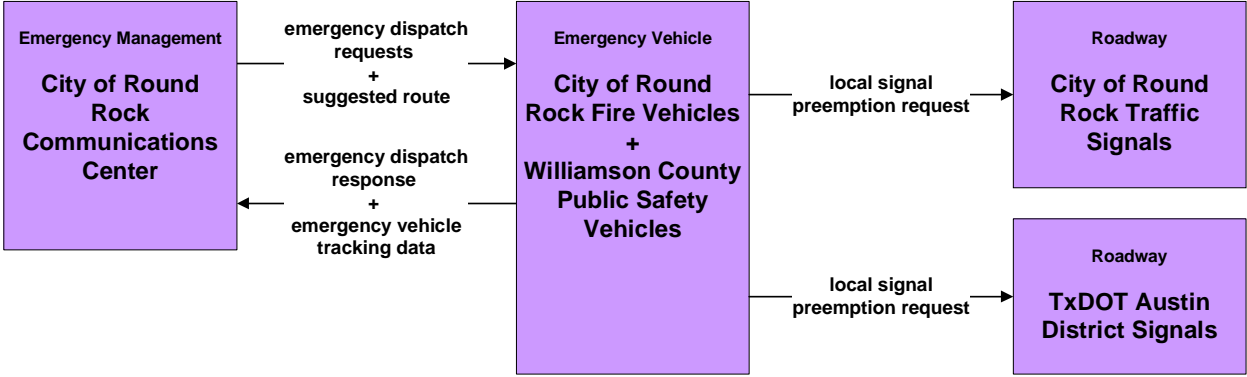
**EM02 - Emergency Routing
Regional Medical Center Coordination**



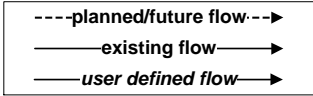
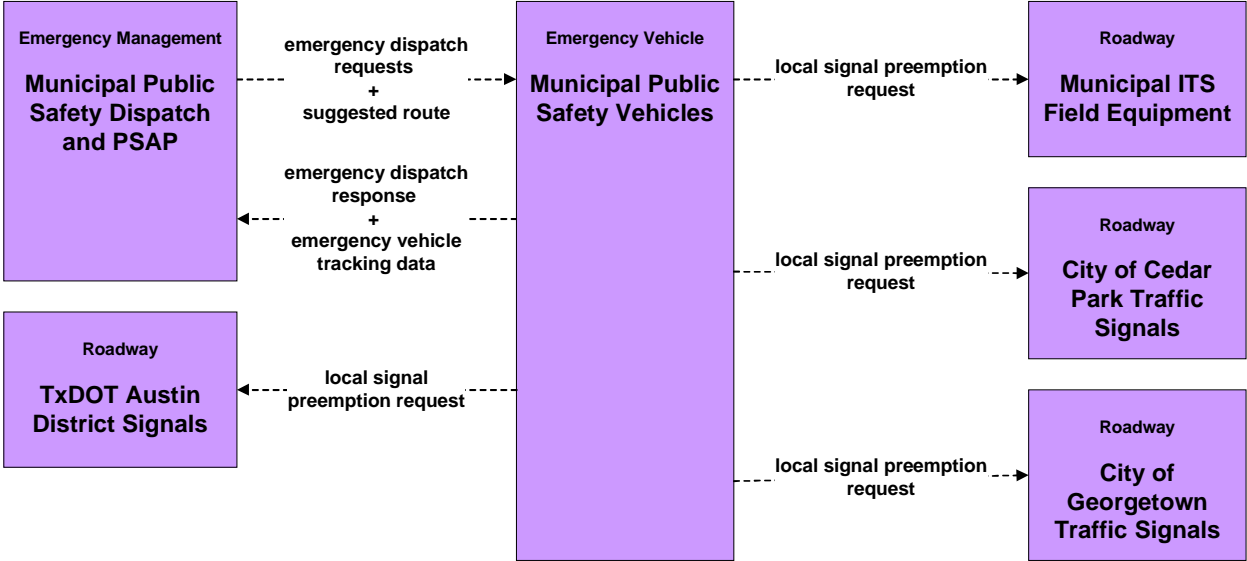
**EM02 - Emergency Routing
City of Austin Fire and Austin/Travis County EMS**



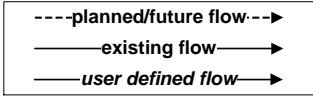
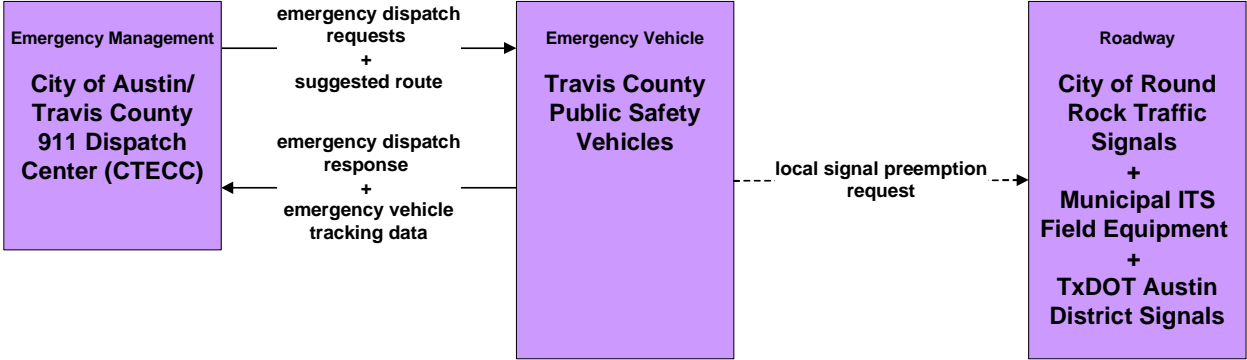
**EM02 - Emergency Routing
City of Round Rock**



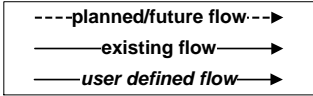
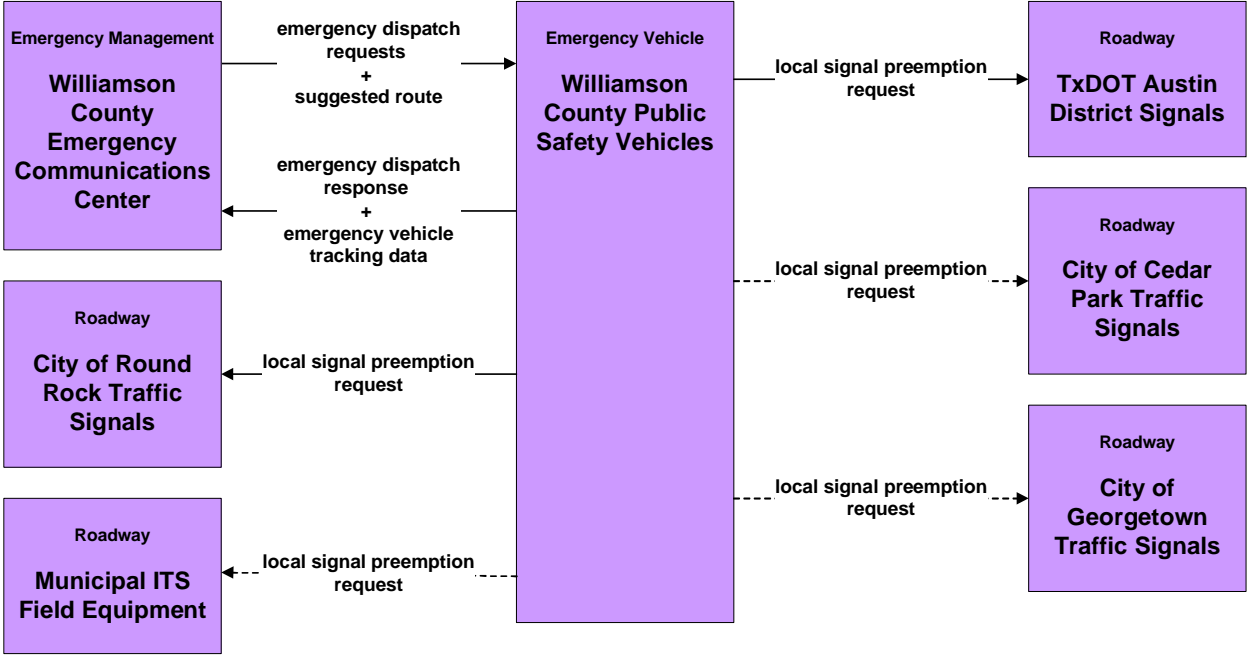
**EM02 - Emergency Routing
Municipal Public Safety Vehicles**



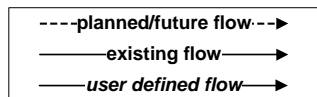
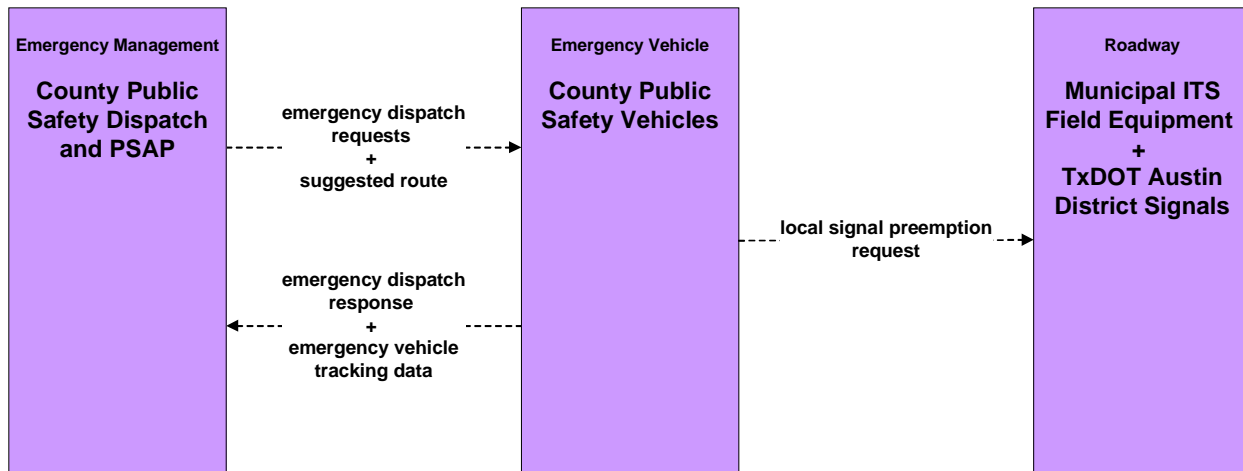
**EM02 - Emergency Routing
Travis County Public Safety Vehicles**



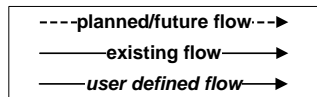
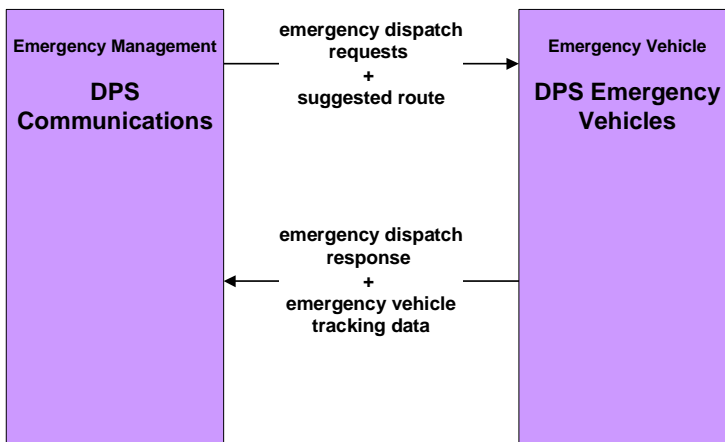
**EM02 - Emergency Routing
Williamson County Public Safety Vehicles**



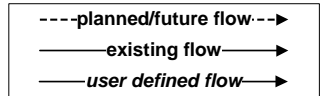
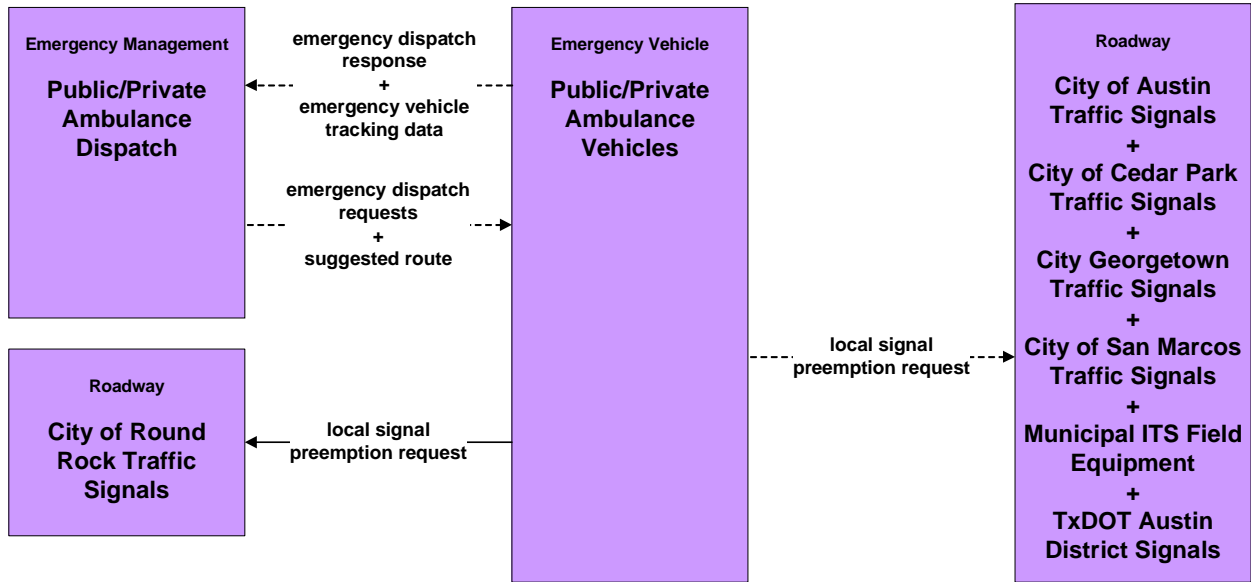
**EM02 - Emergency Routing
County Public Safety Vehicles**



**EM02 - Emergency Routing
DPS Emergency Vehicles**

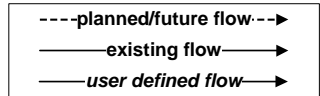
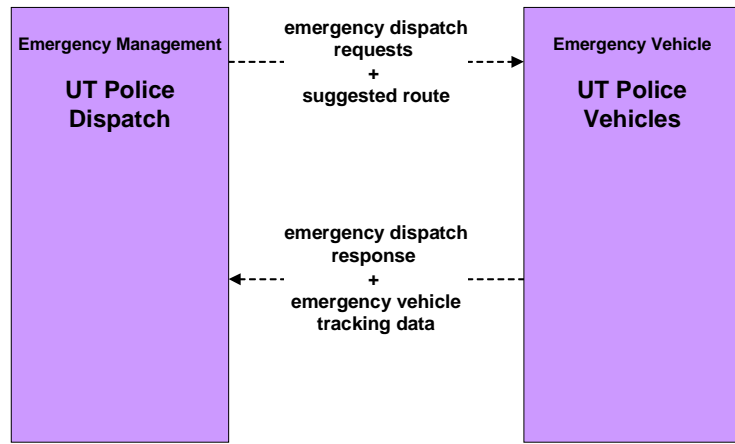


**EM02 – Emergency Routing
Public/Private Ambulance Vehicles**

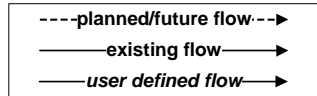
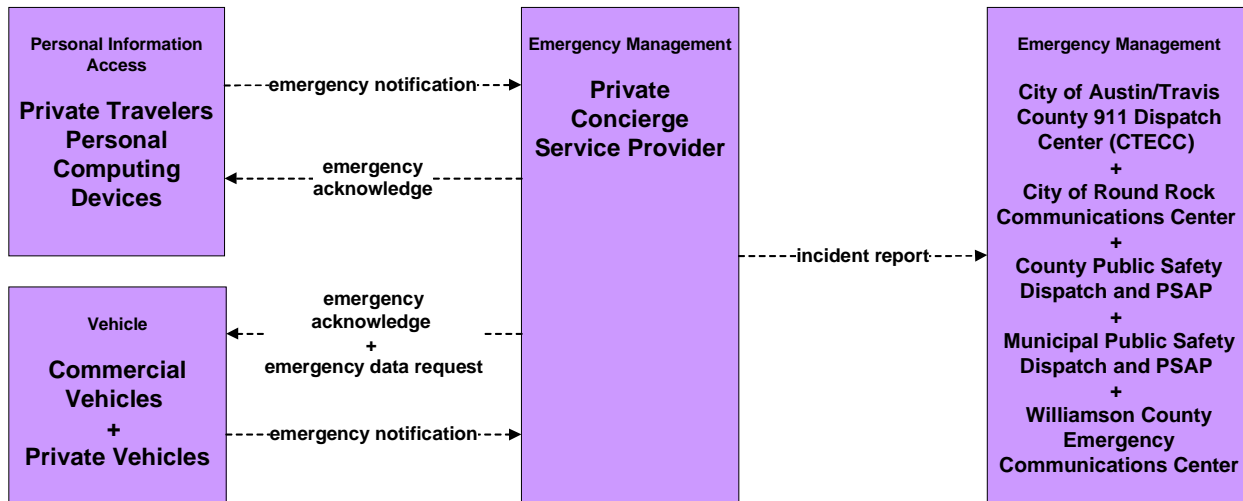


*Note:
Only contract carriers will have signal preemption capabilities (future).*

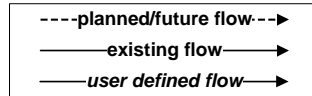
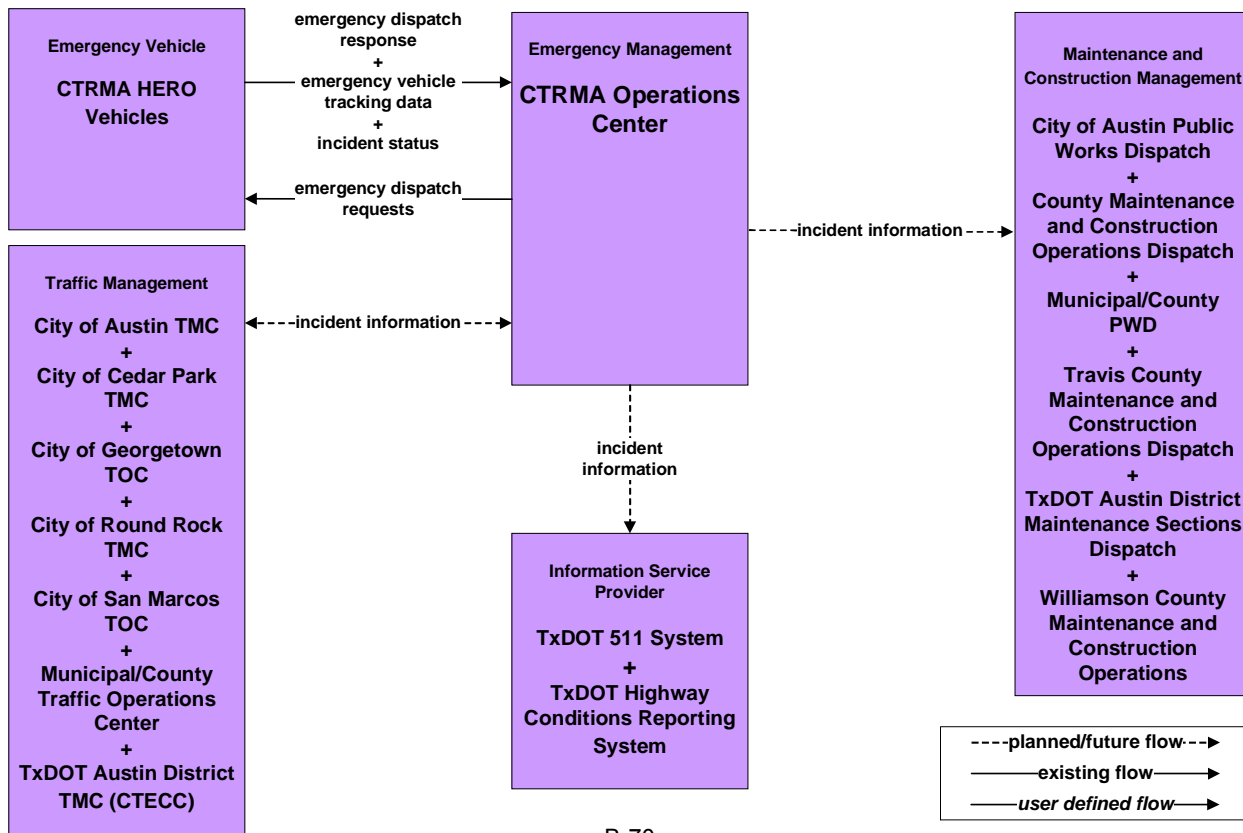
**EM02 - Emergency Routing
University of Texas Police Vehicles**



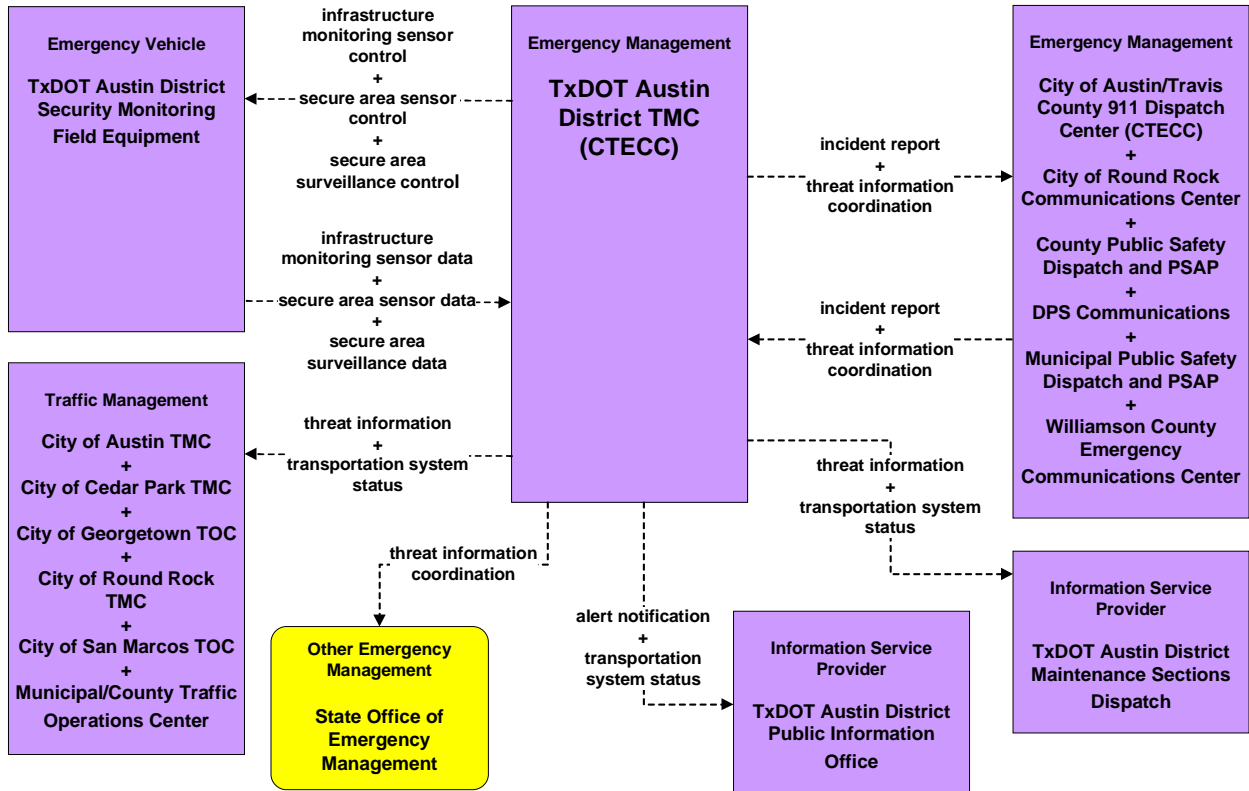
**EM03 - Mayday Support
Private Concierge Service Provider**



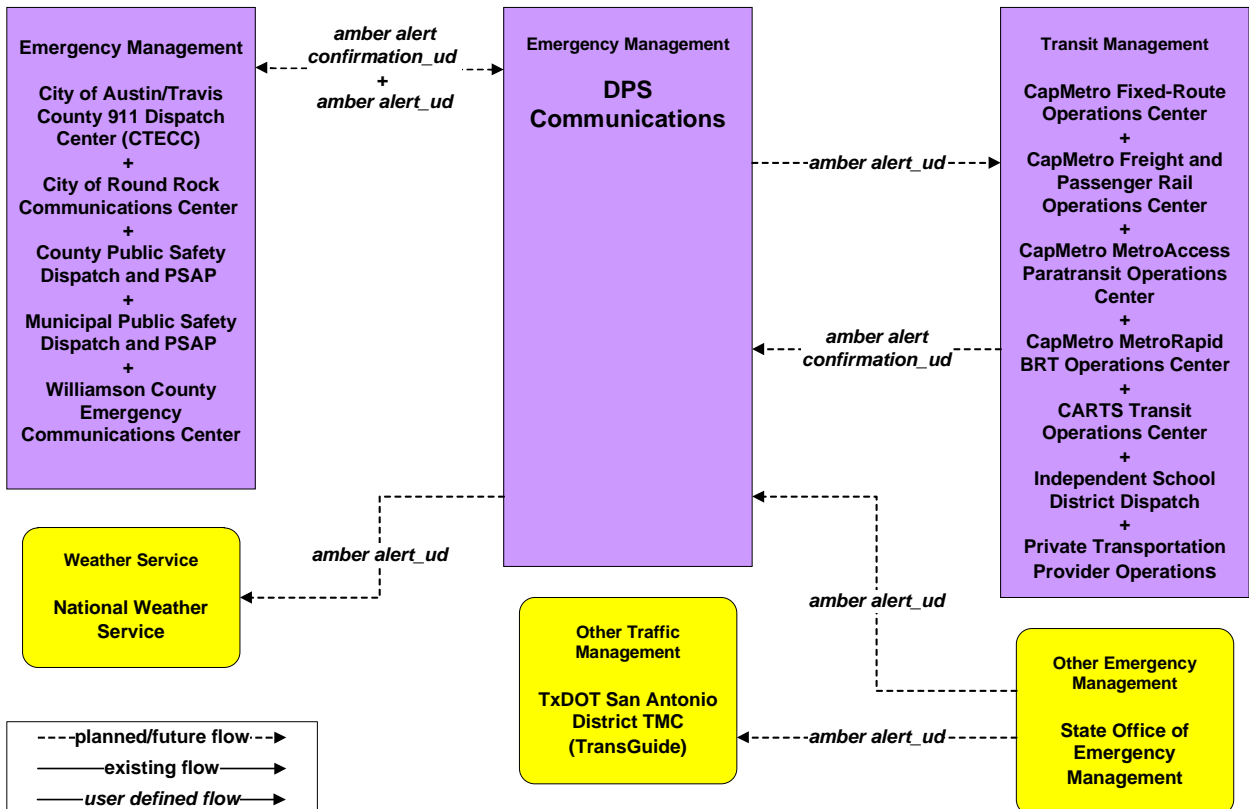
**EM04 - Roadway Service Patrols
CTRMA HERO**



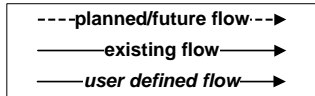
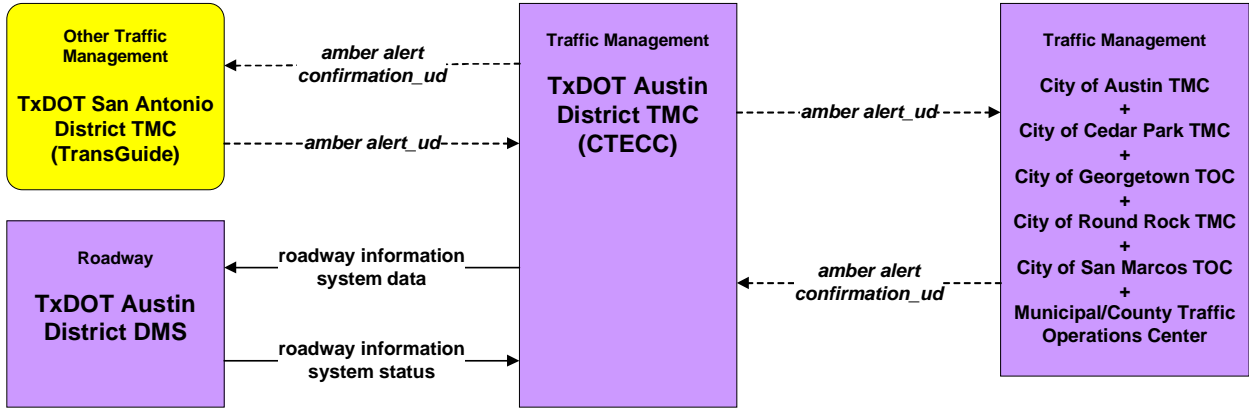
**EM05 – Transportation Infrastructure Protection
TxDOT Austin District (CTECC)**



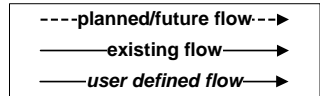
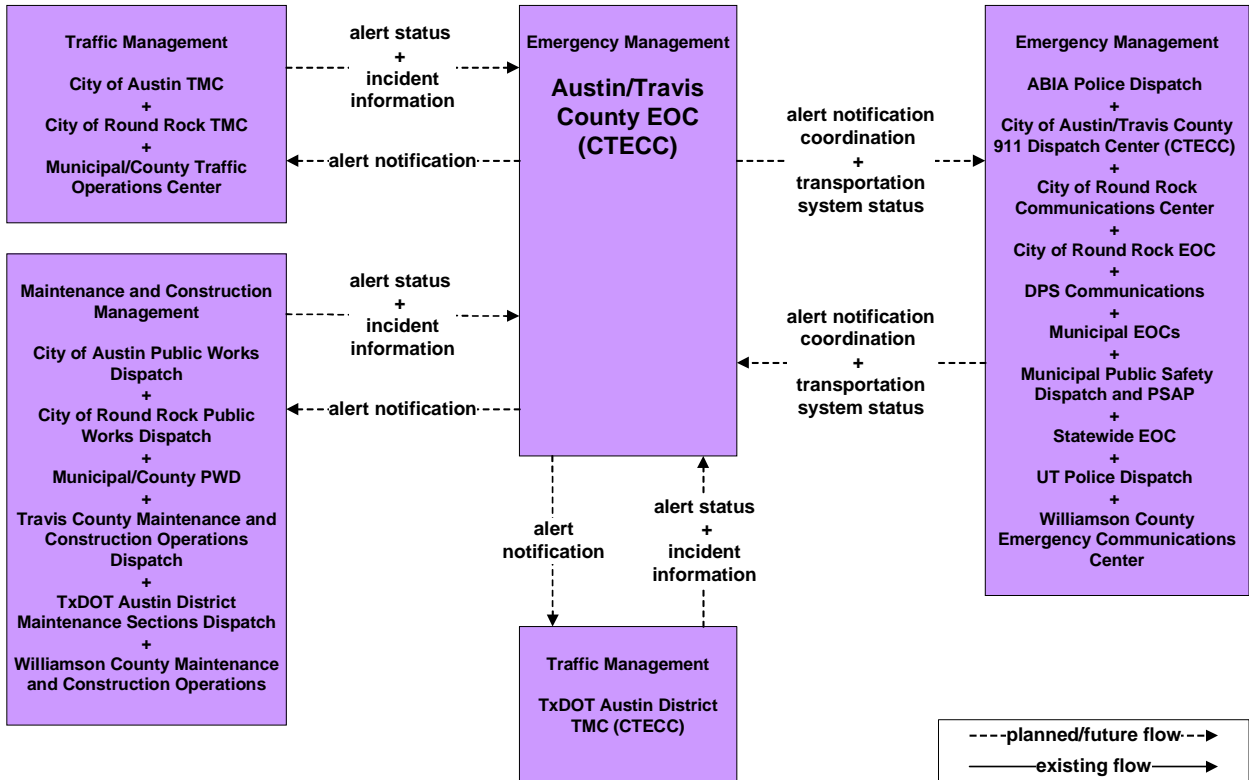
**EM06 - Wide Area Alert
Statewide Amber Alert (1 of 2)**



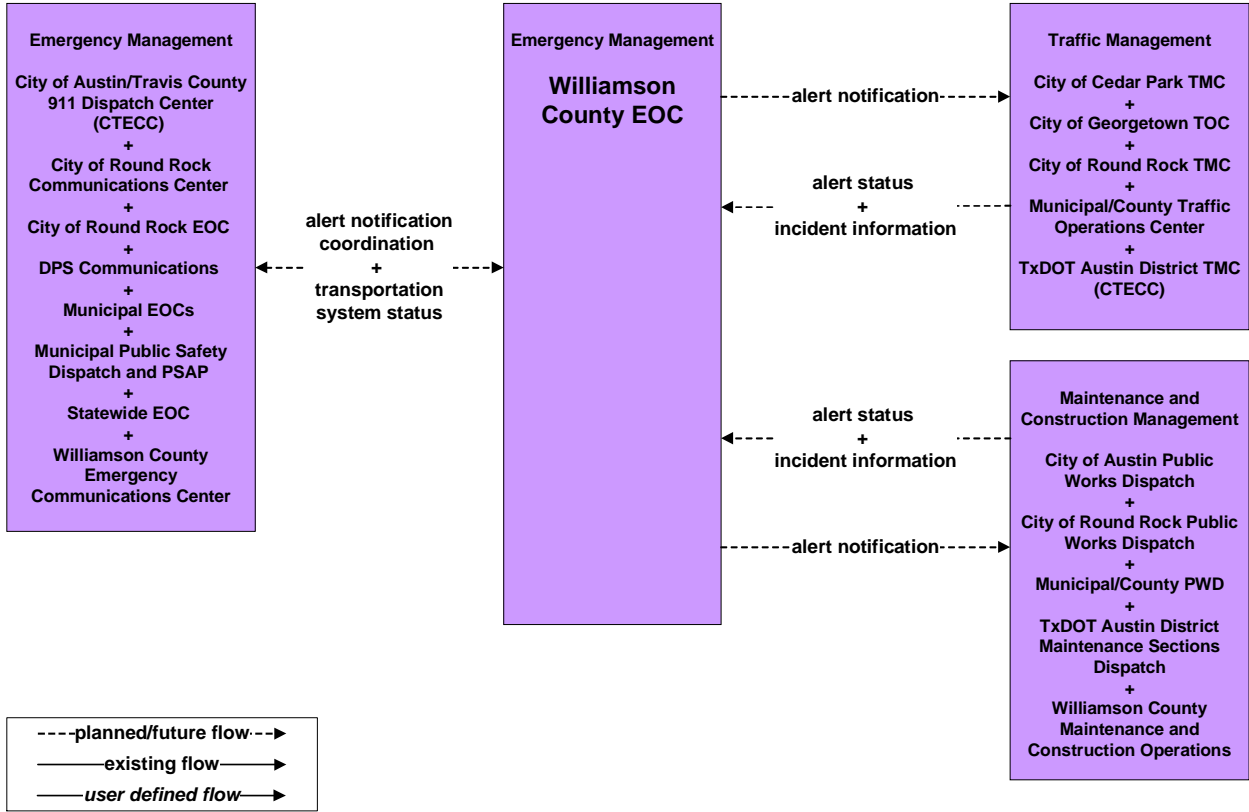
**EM06 - Wide Area Alert
Statewide Amber Alert (2 of 2)**



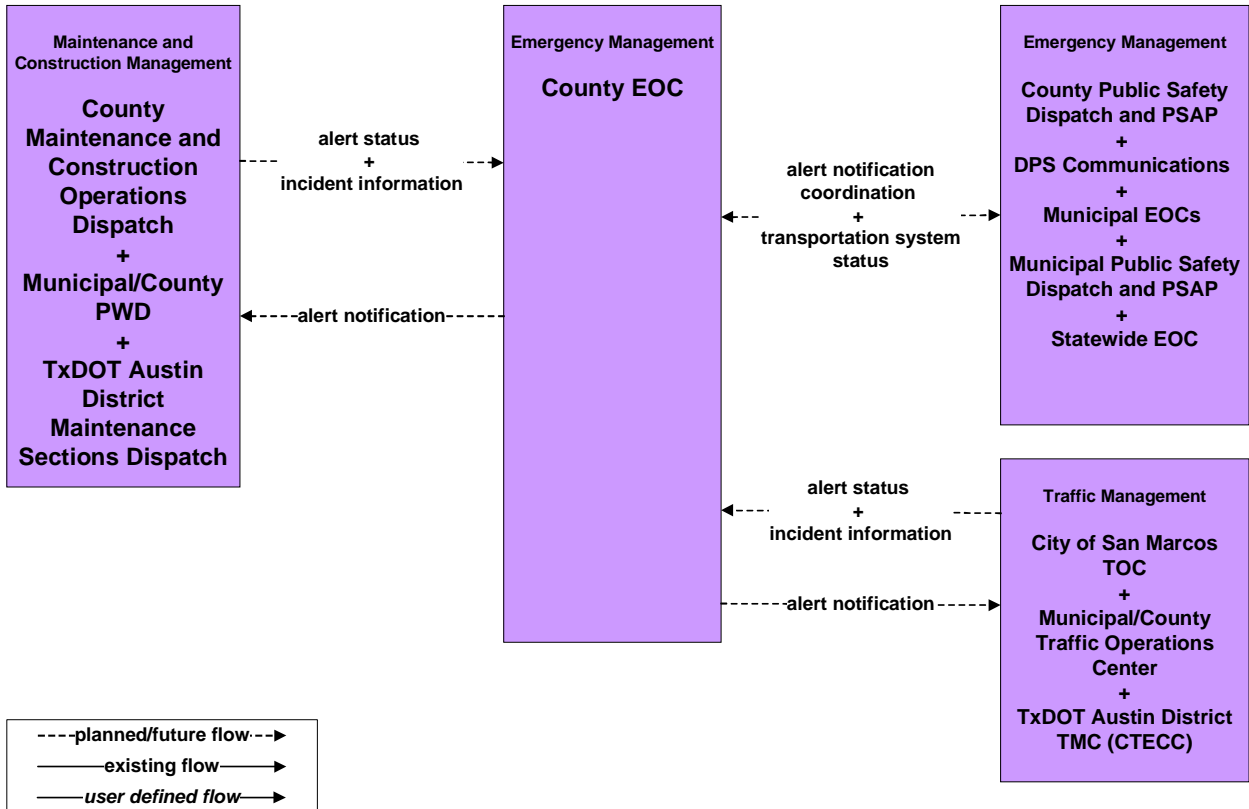
**EM06 - Wide Area Alert
Austin/Travis County EOC (CTECC)**



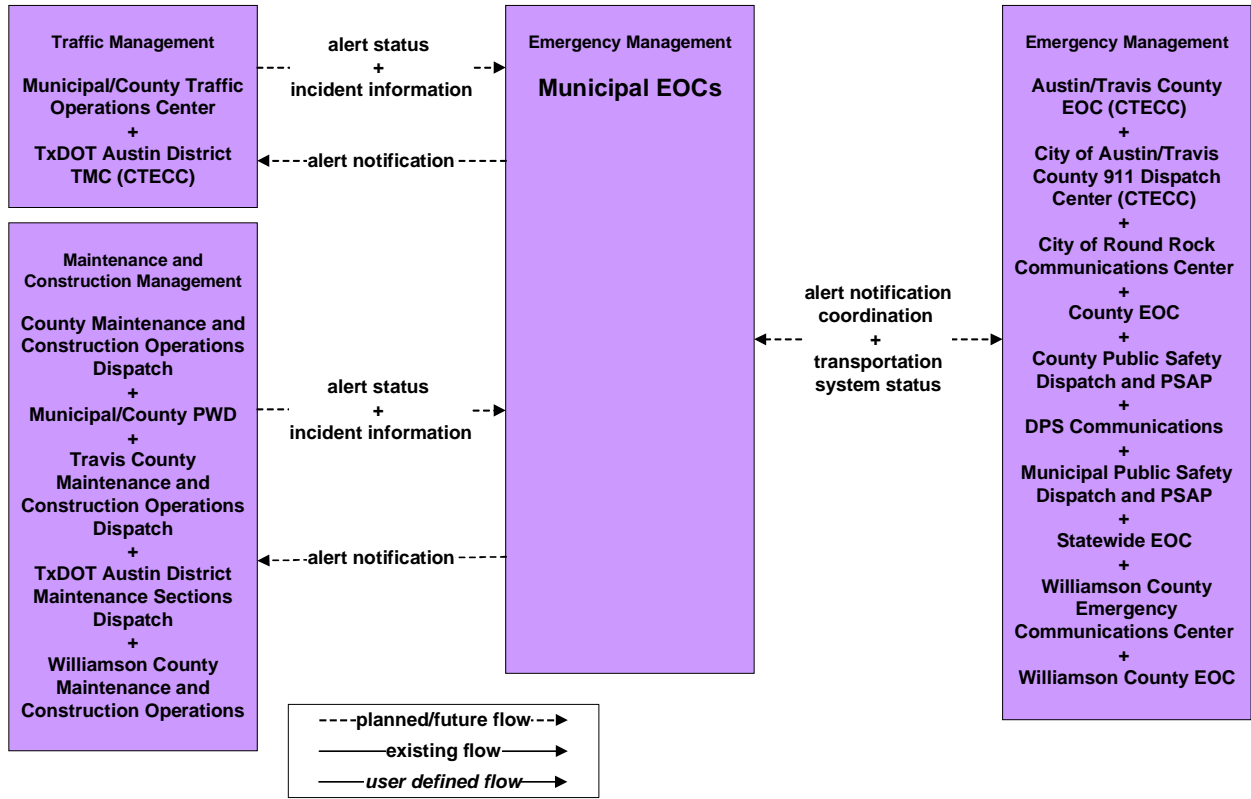
**EM06 - Wide Area Alert
Williamson County EOC**



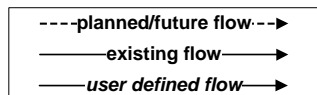
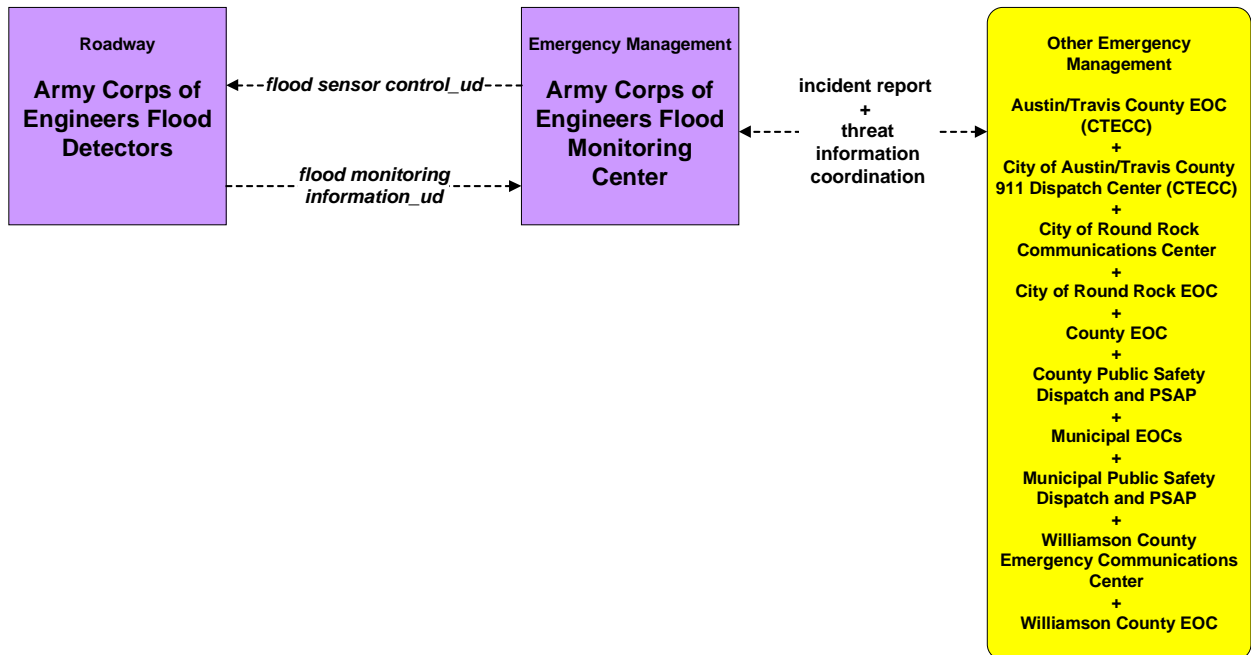
**EM06 - Wide Area Alert
County EOC**



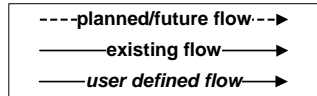
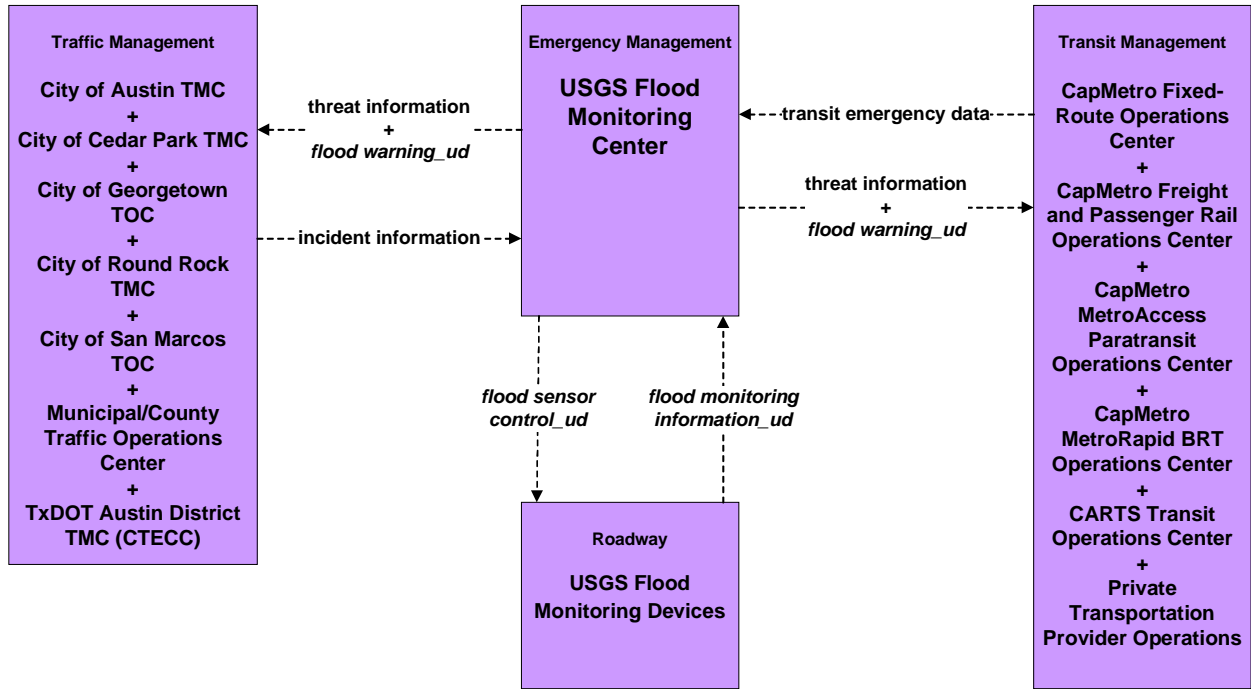
**EM06 - Wide Area Alert
Municipal EOCs**



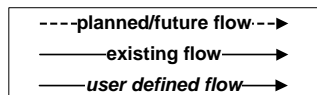
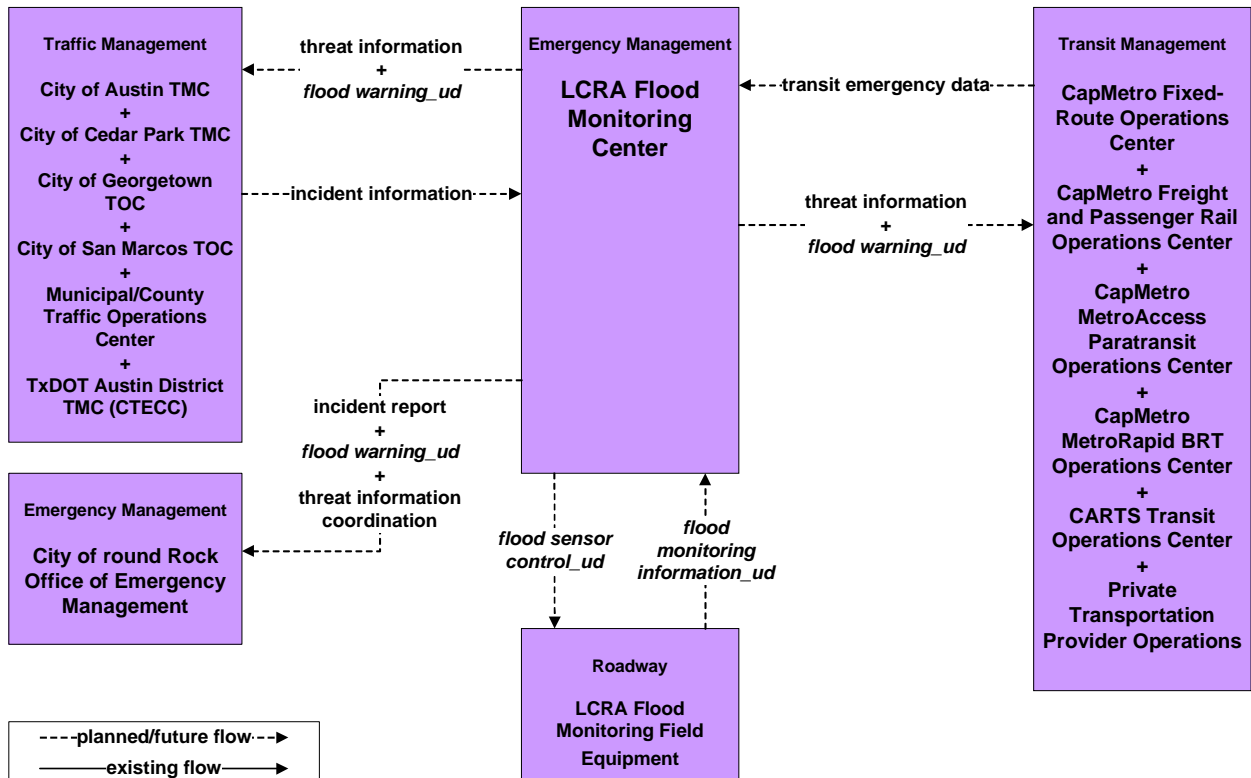
**EM07 - Early Warning System
Army Corps of Engineers – Flood Monitoring System**



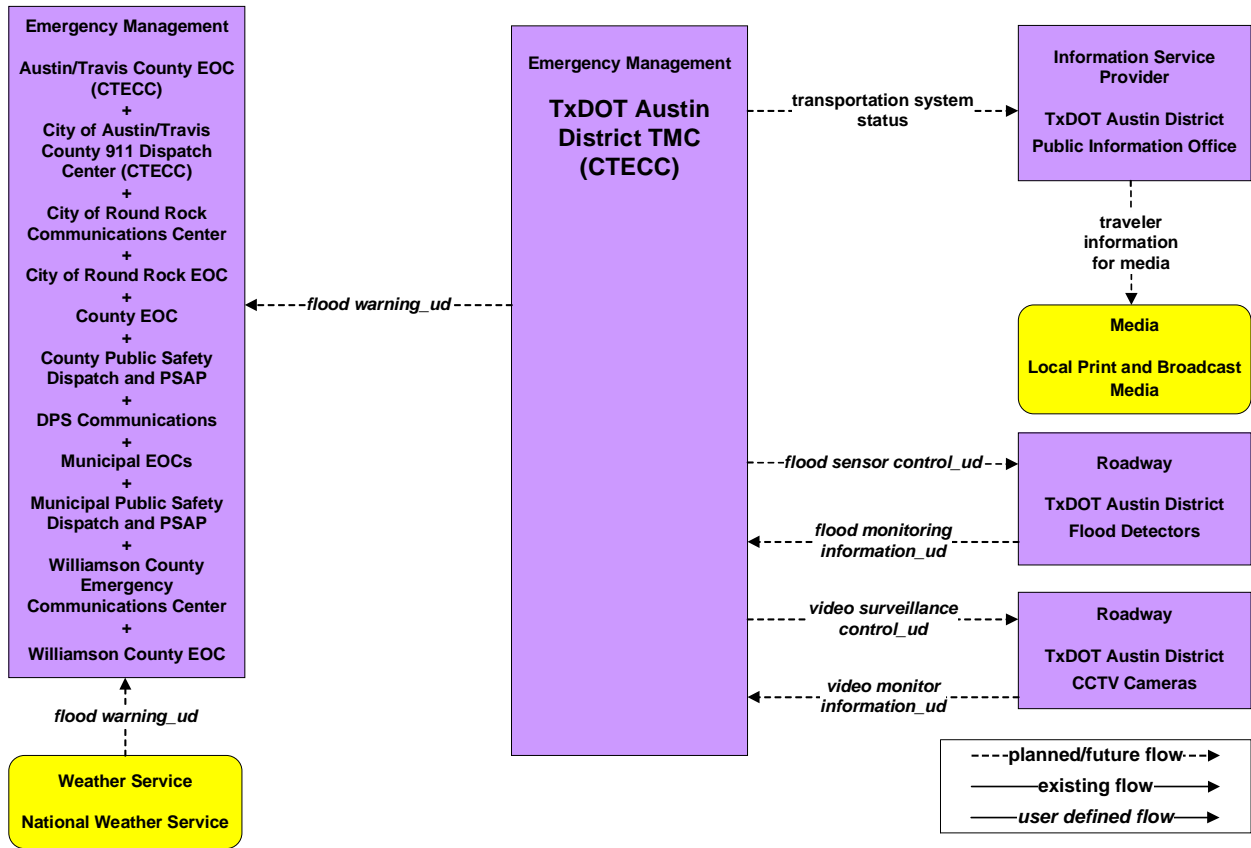
**EM07 - Early Warning System
USGS – Flood Information Dissemination**



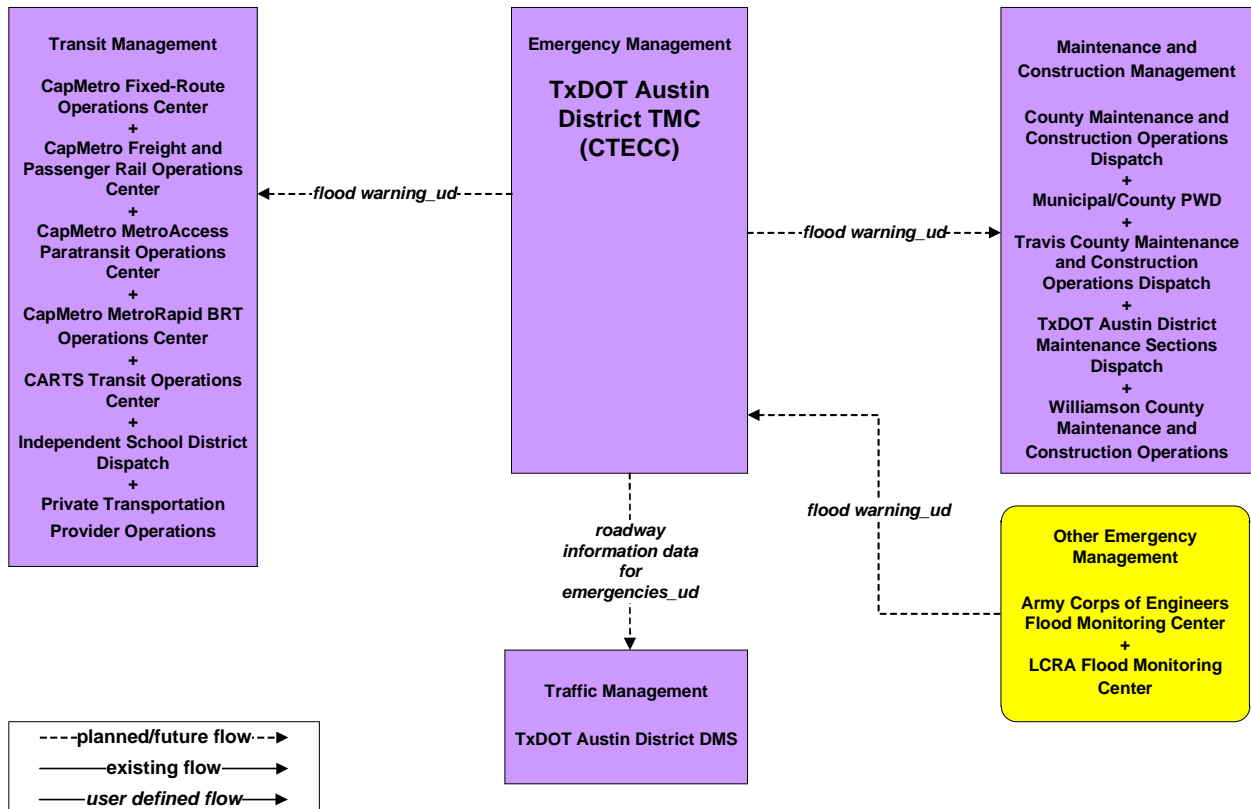
**EM07 - Early Warning System
LCRA – Flood Information Dissemination**



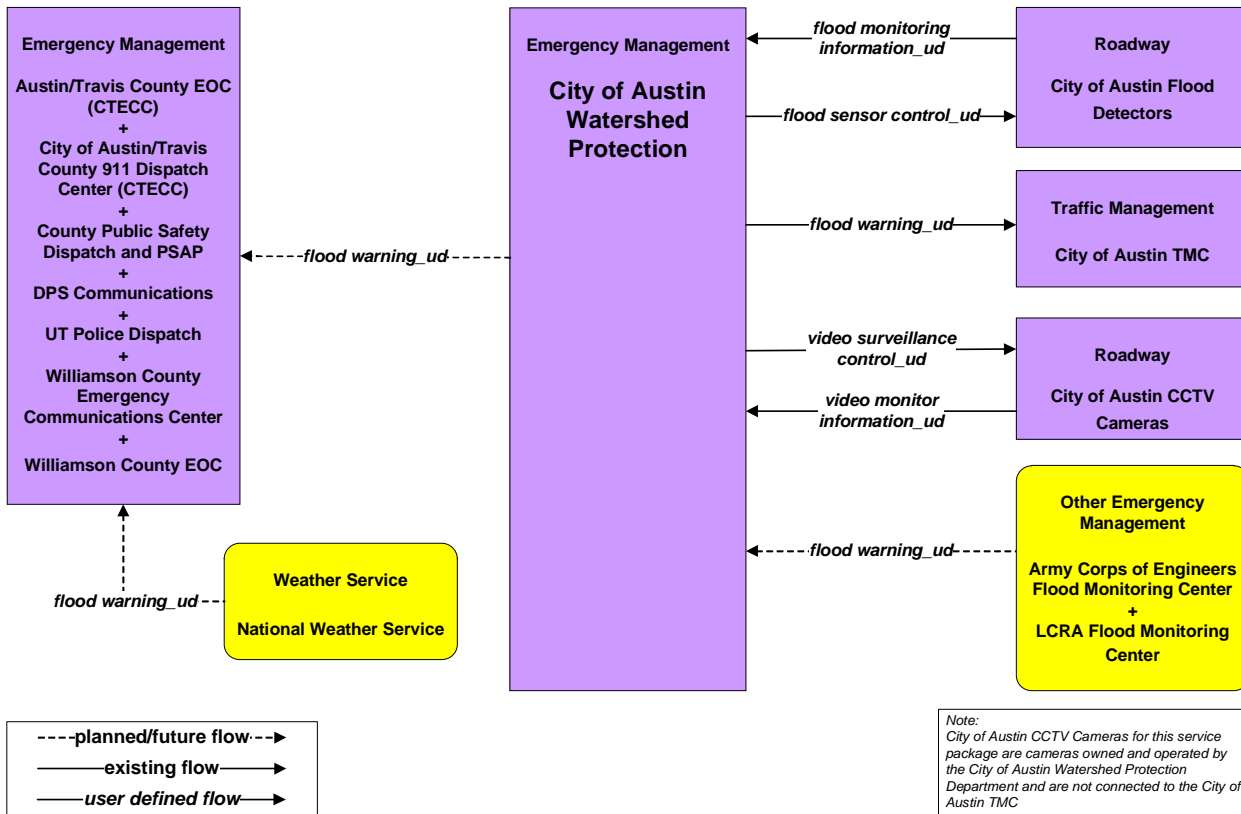
EM07 – Early Warning System
 TxDOT – Flood Monitoring (1 of 2)



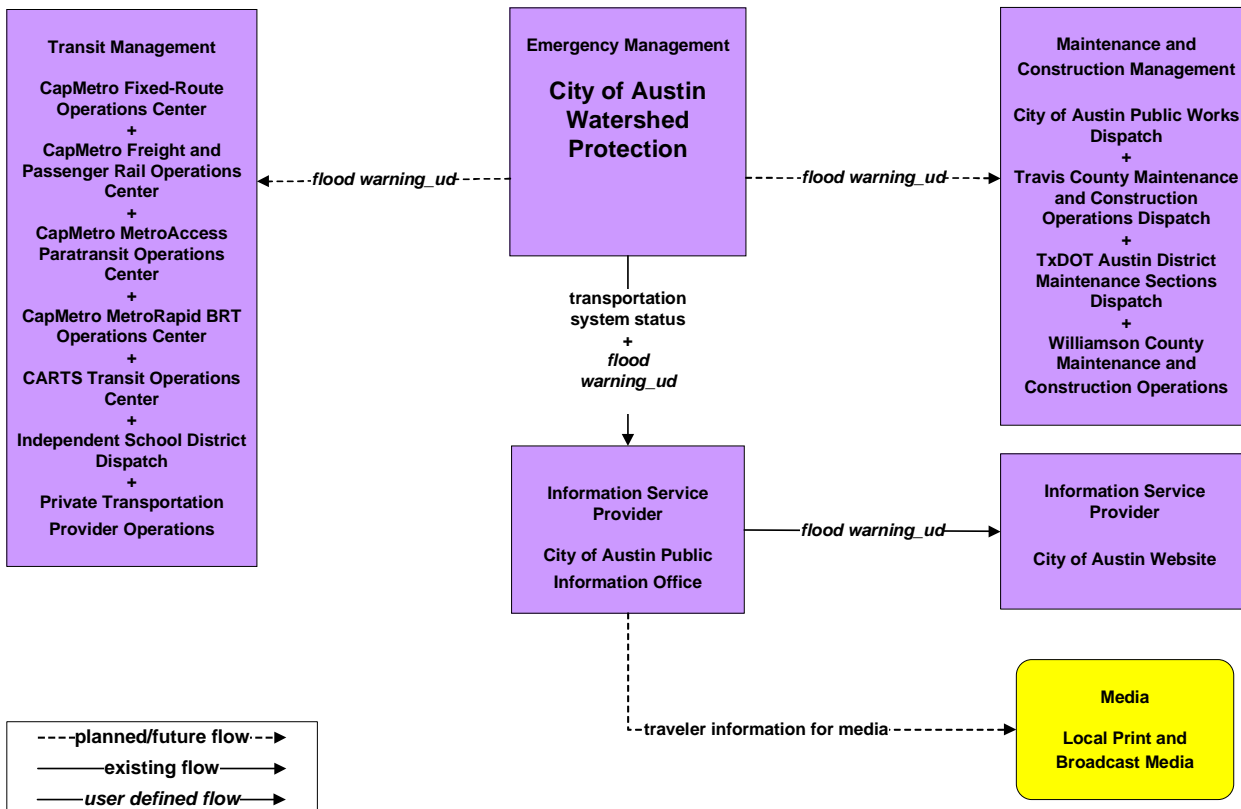
EM07 – Early Warning System
 TxDOT – Flood Monitoring (2 of 2)



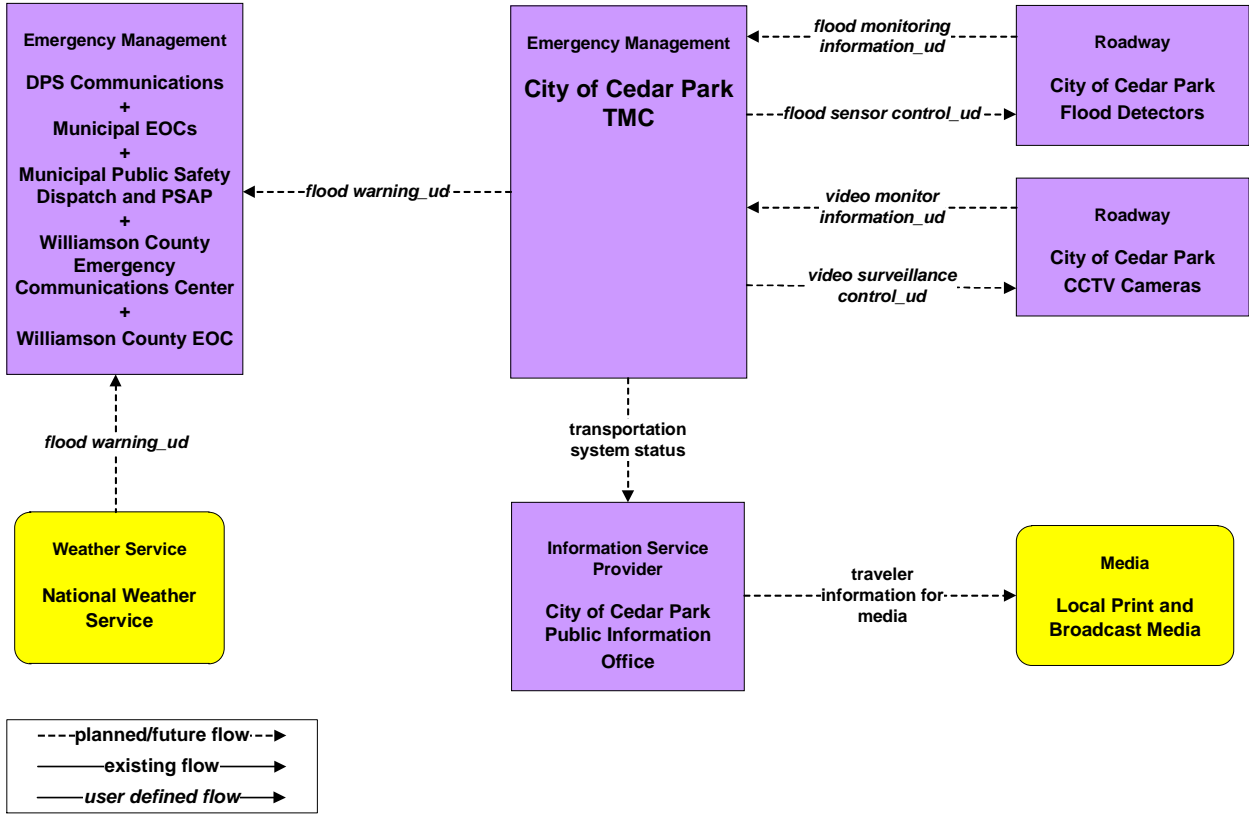
**EM07 – Early Warning System
City of Austin – Flood Monitoring (1 of 2)**



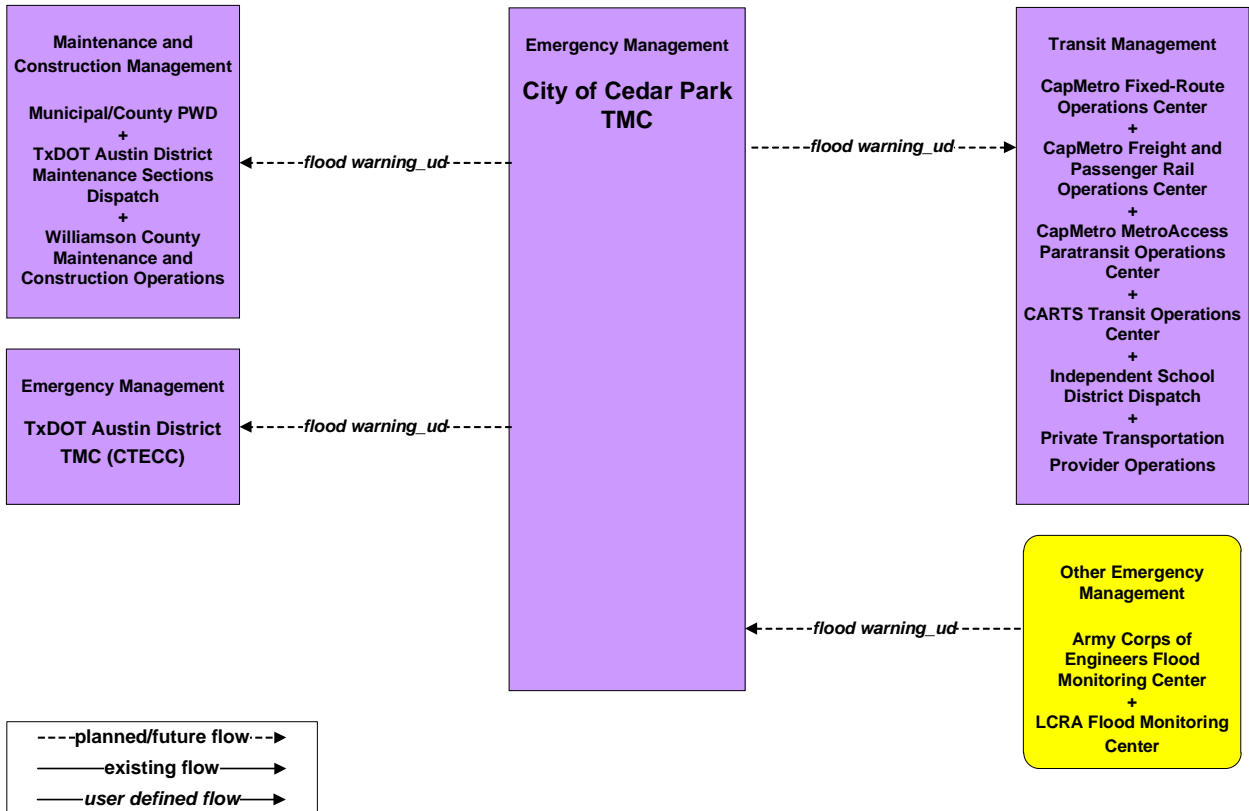
**EM07 – Early Warning System
City of Austin – Flood Monitoring (2 of 2)**



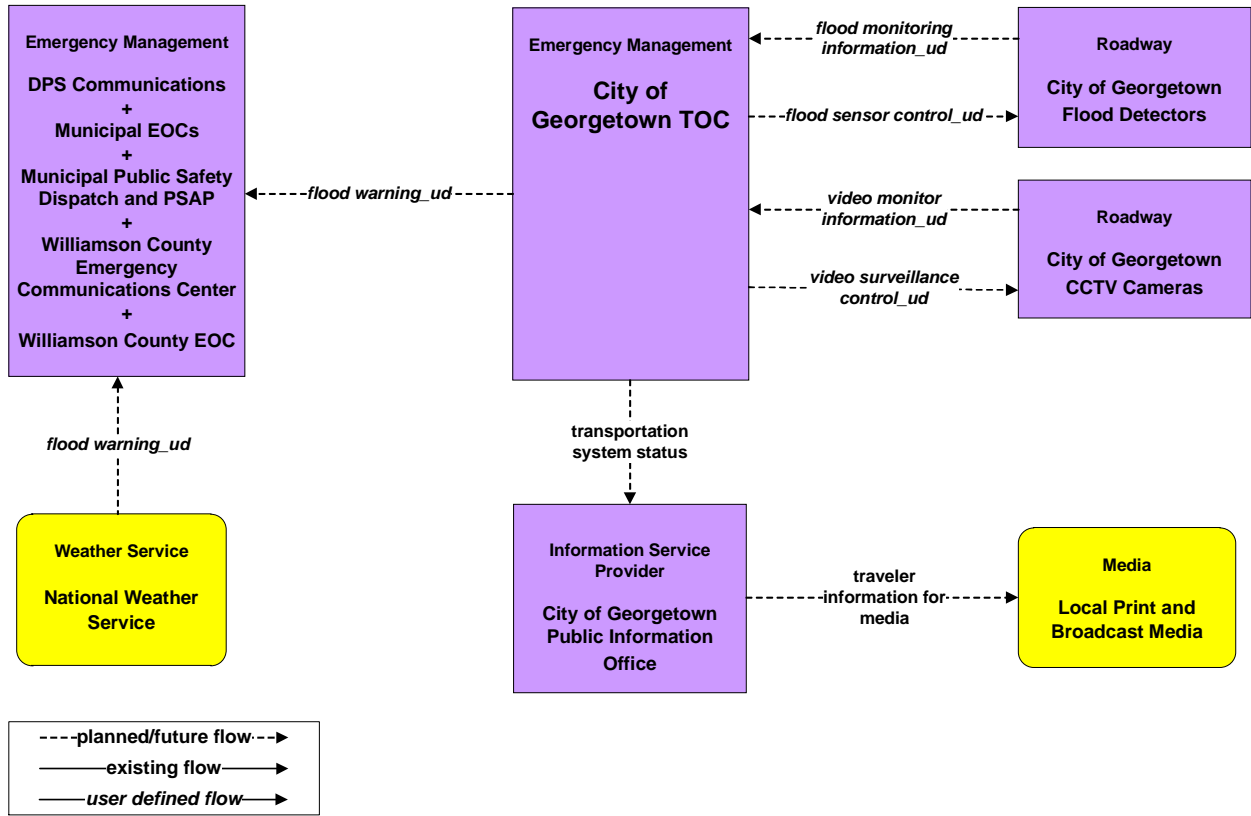
**EM07 – Early Warning System
City of Cedar Park – Flood Monitoring (1 of 2)**



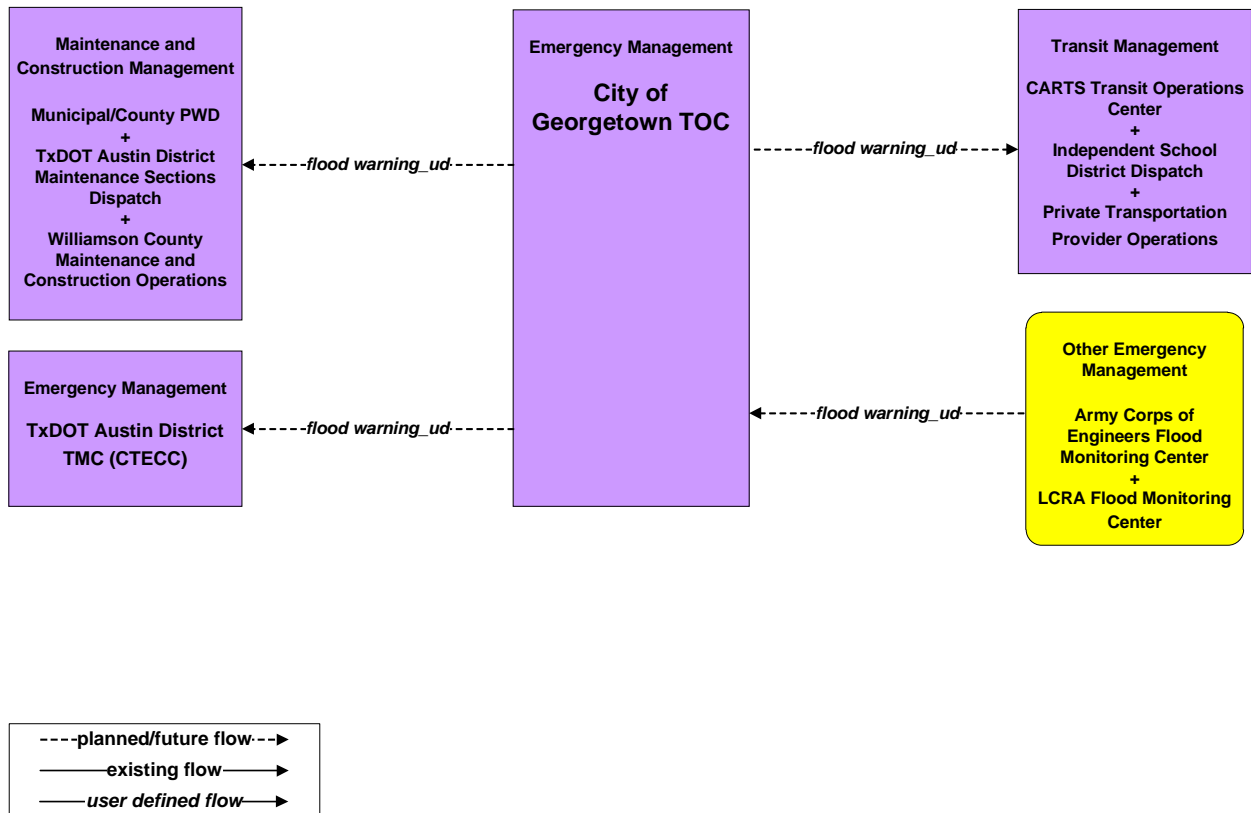
**EM07 – Early Warning System
City of Cedar Park – Flood Monitoring (2 of 2)**



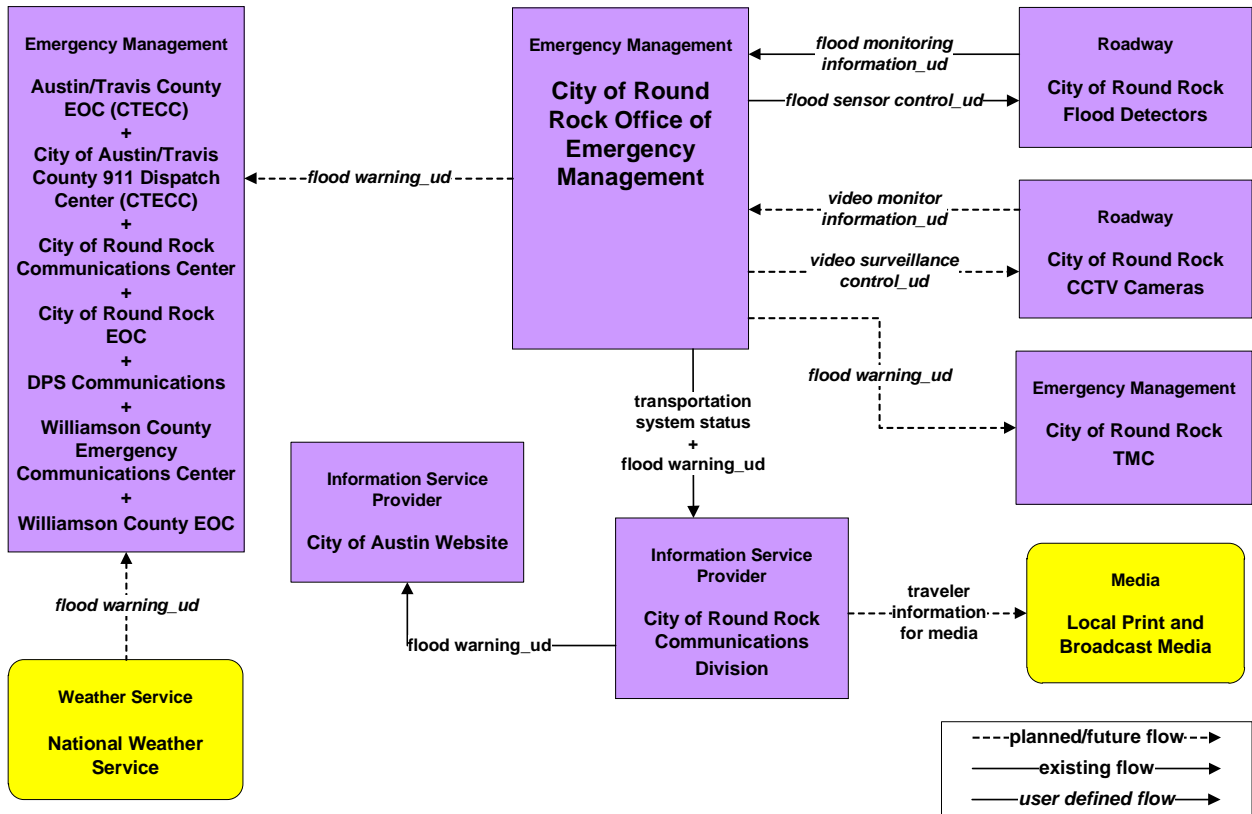
**EM07 – Early Warning System
City of Georgetown – Flood Monitoring (1 of 2)**



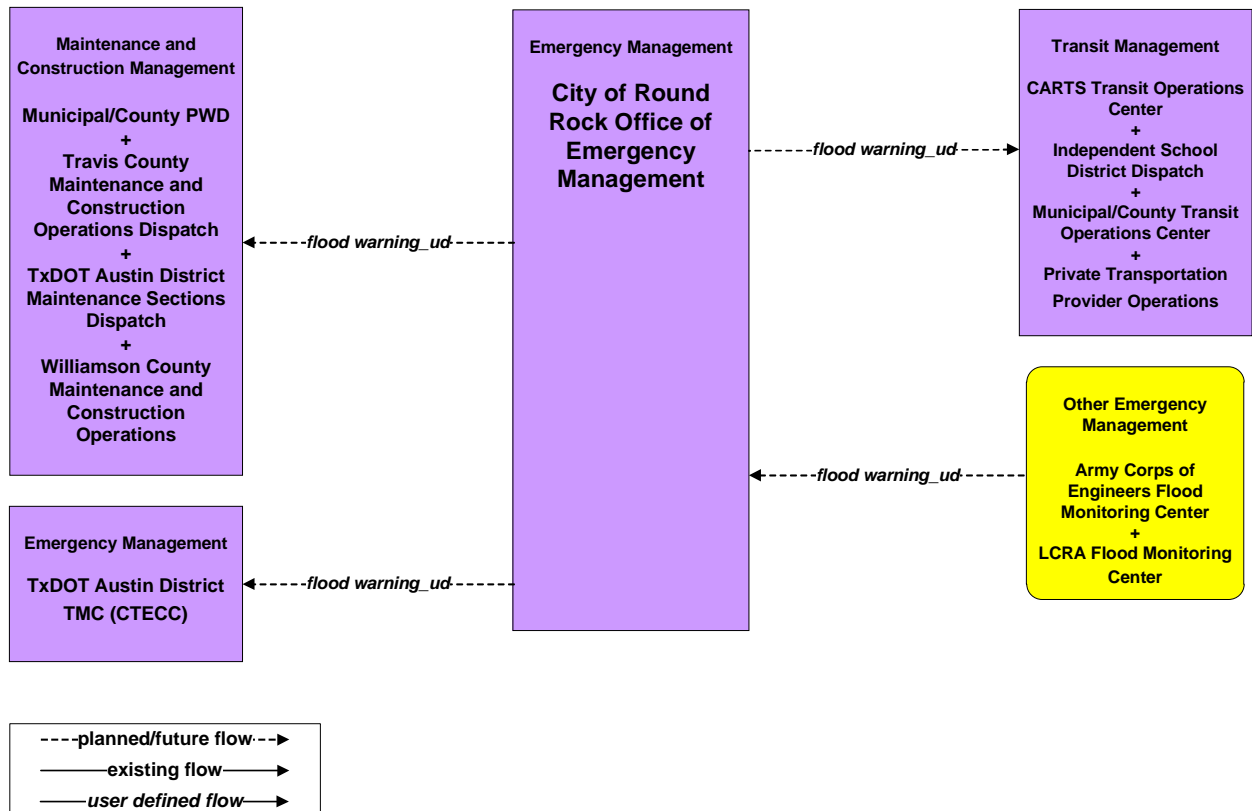
**EM07 – Early Warning System
City of Georgetown – Flood Monitoring (2 of 2)**



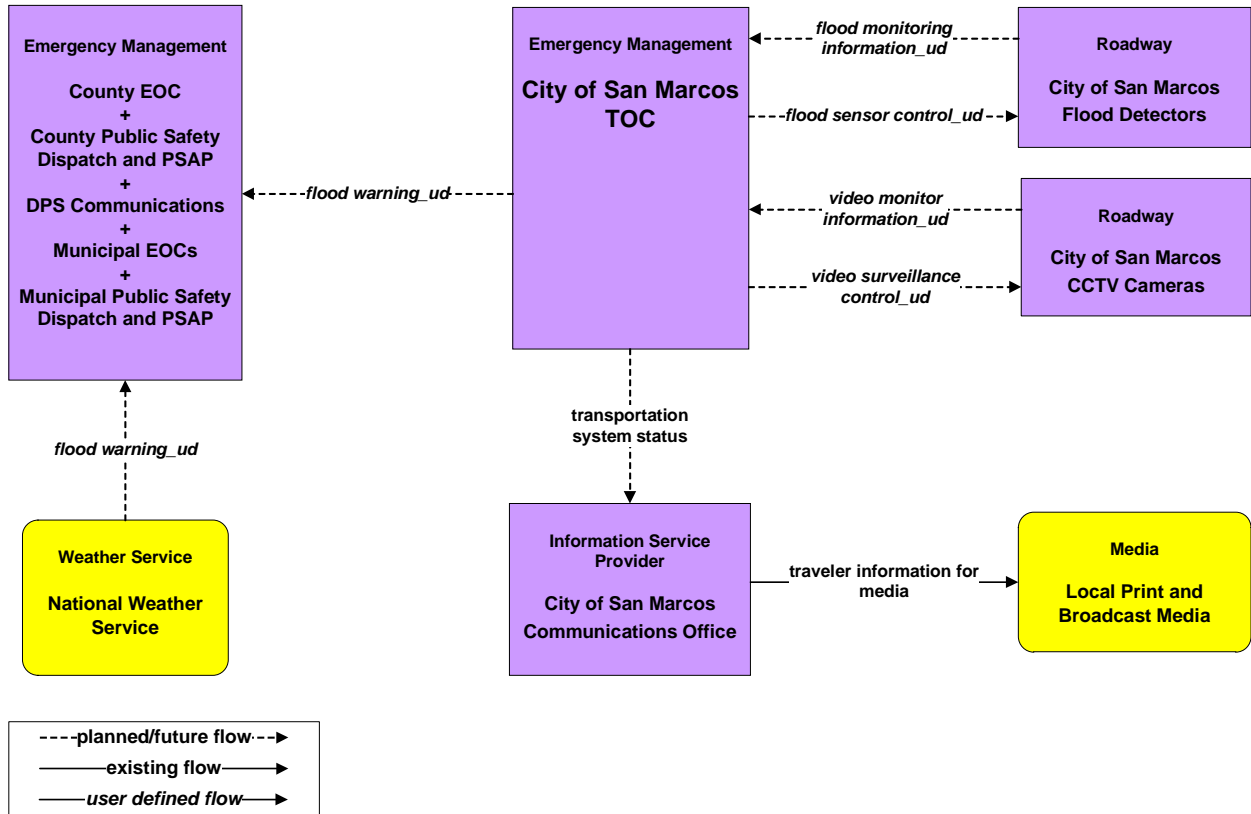
**EM07 – Early Warning System
City of Round Rock – Flood Monitoring (1 of 2)**



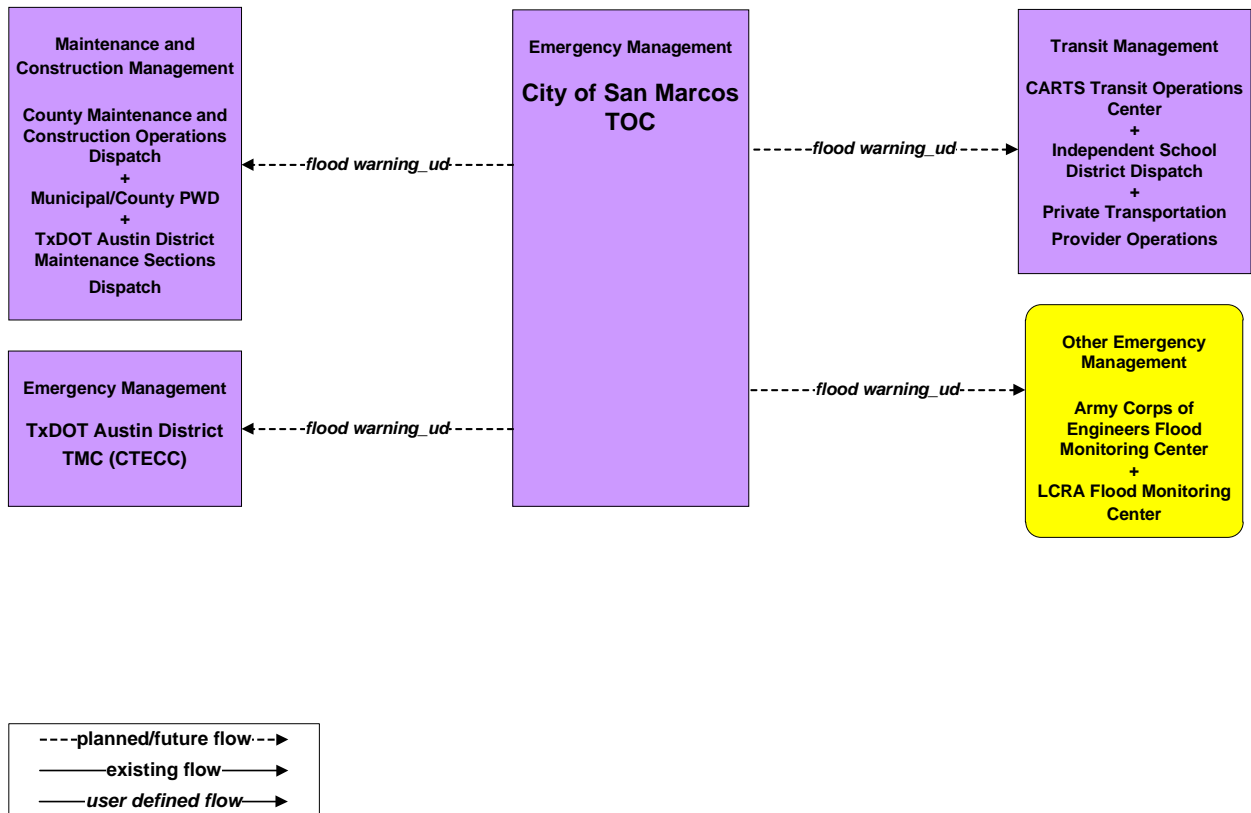
**EM07 – Early Warning System
City of Round Rock – Flood Monitoring (2 of 2)**



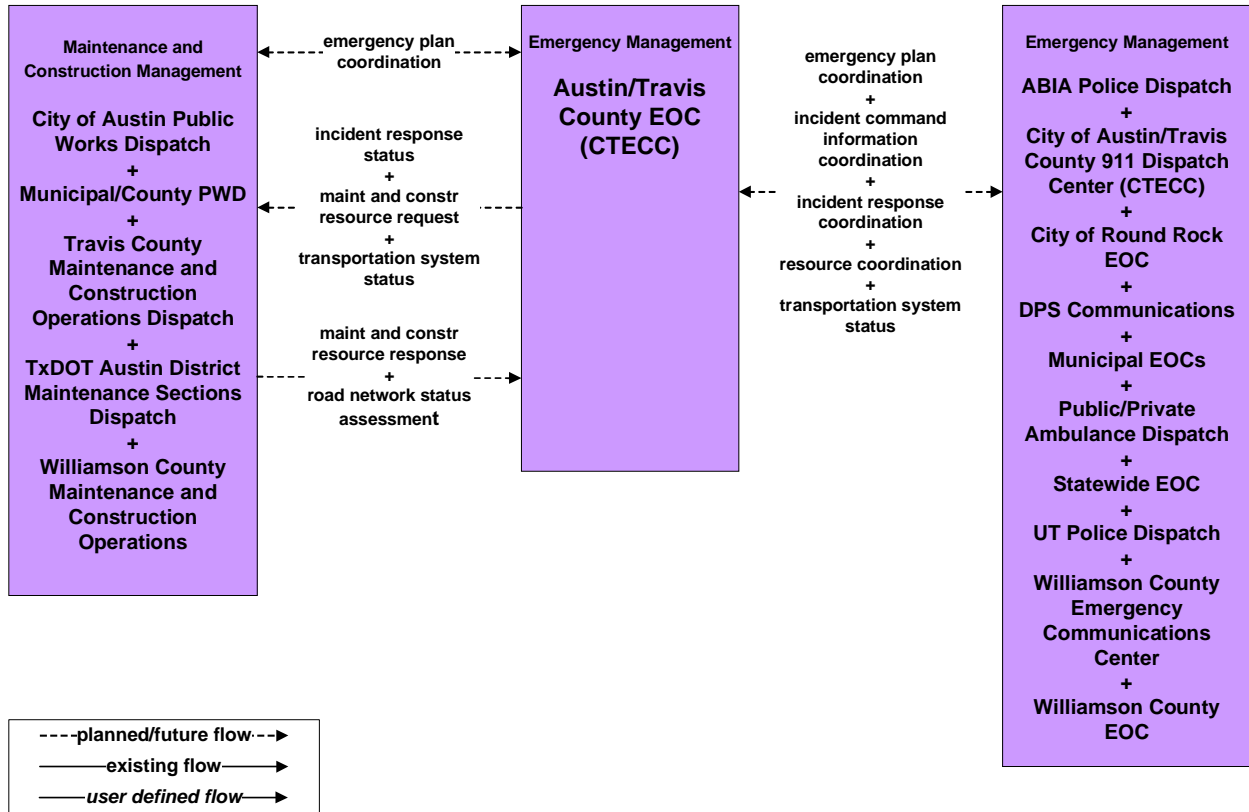
**EM07 – Early Warning System
City San Marcos – Flood Monitoring (1 of 2)**



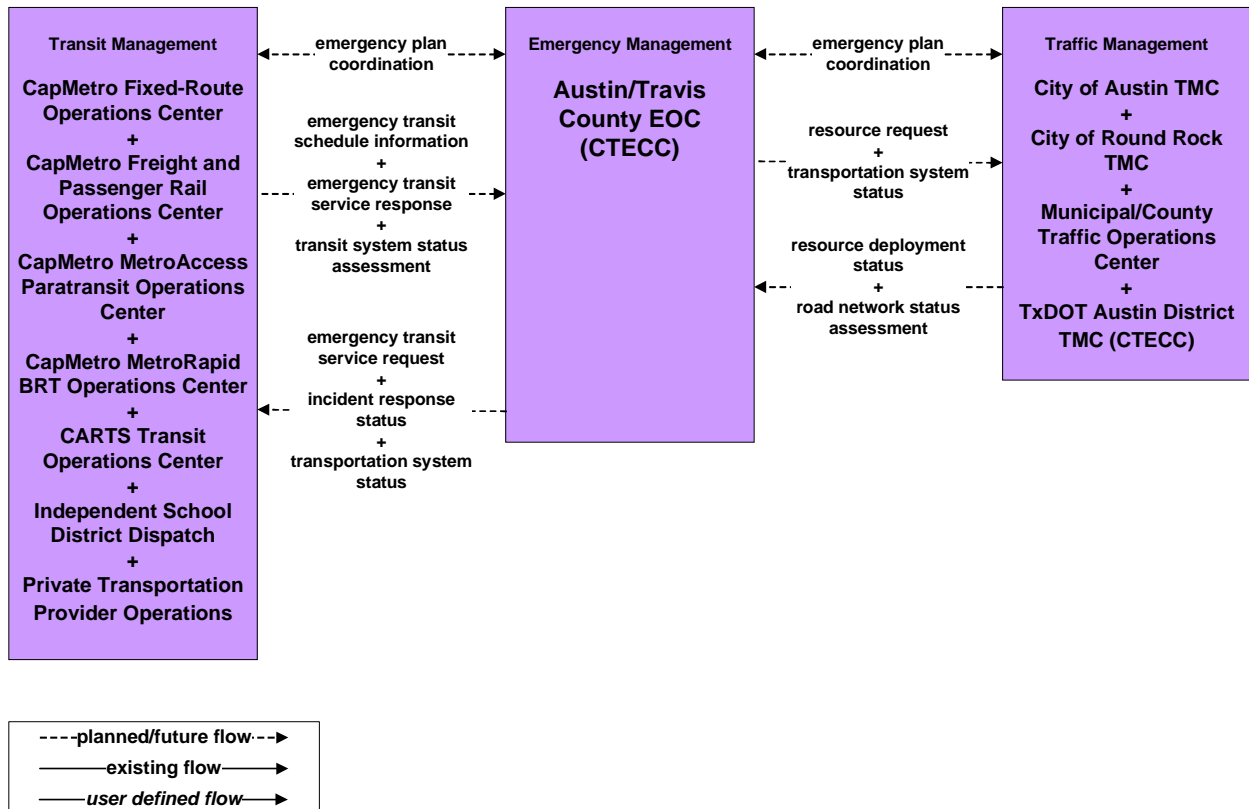
**EM07 – Early Warning System
City of San Marcos – Flood Monitoring (2 of 2)**



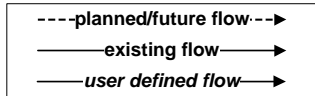
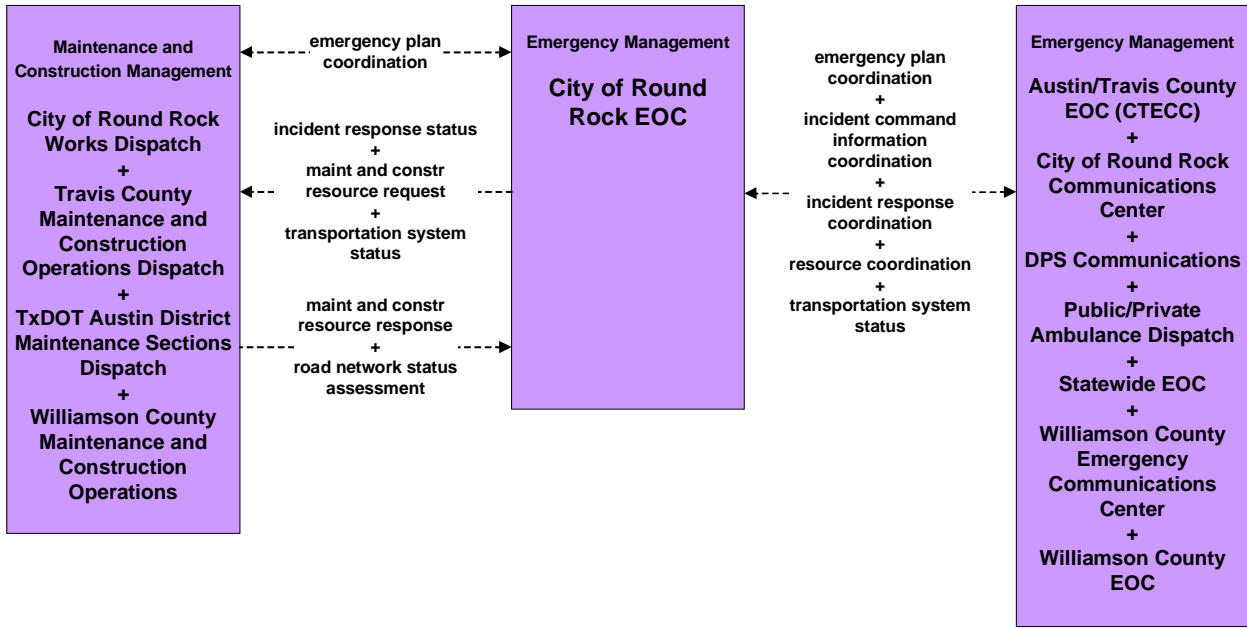
**EM08 – Disaster Response and Recovery
Austin/Travis County EOC (CTECC) (1 of 2)**



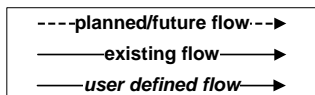
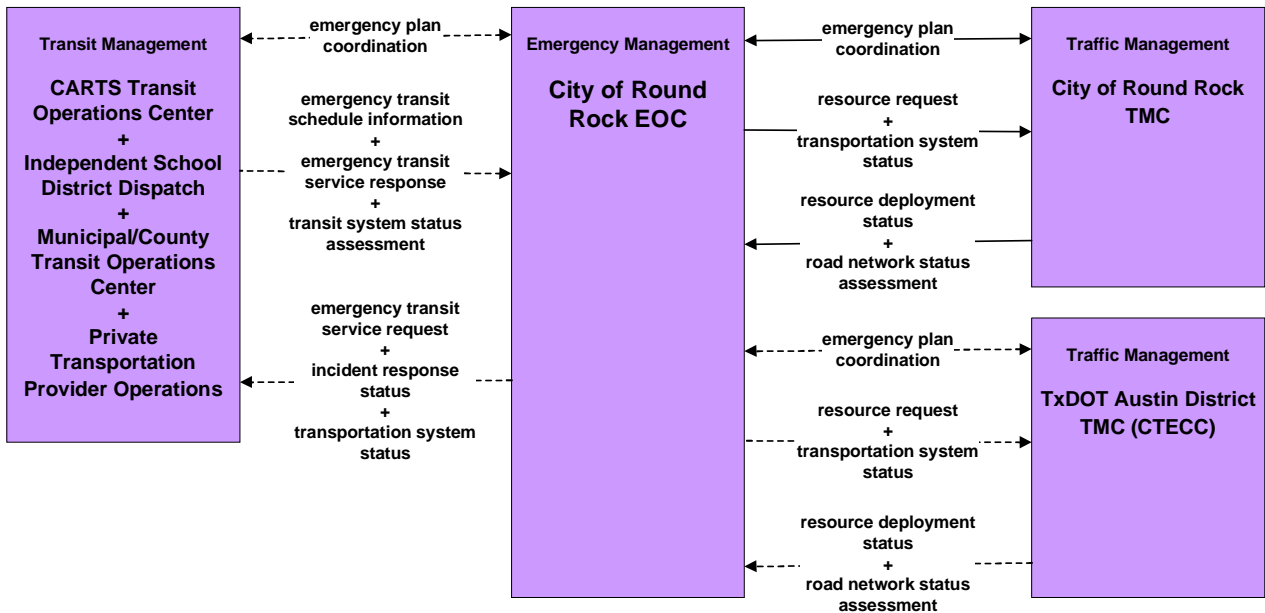
**EM08 – Disaster Response and Recovery
Austin/Travis County EOC (CTECC) (2 of 2)**



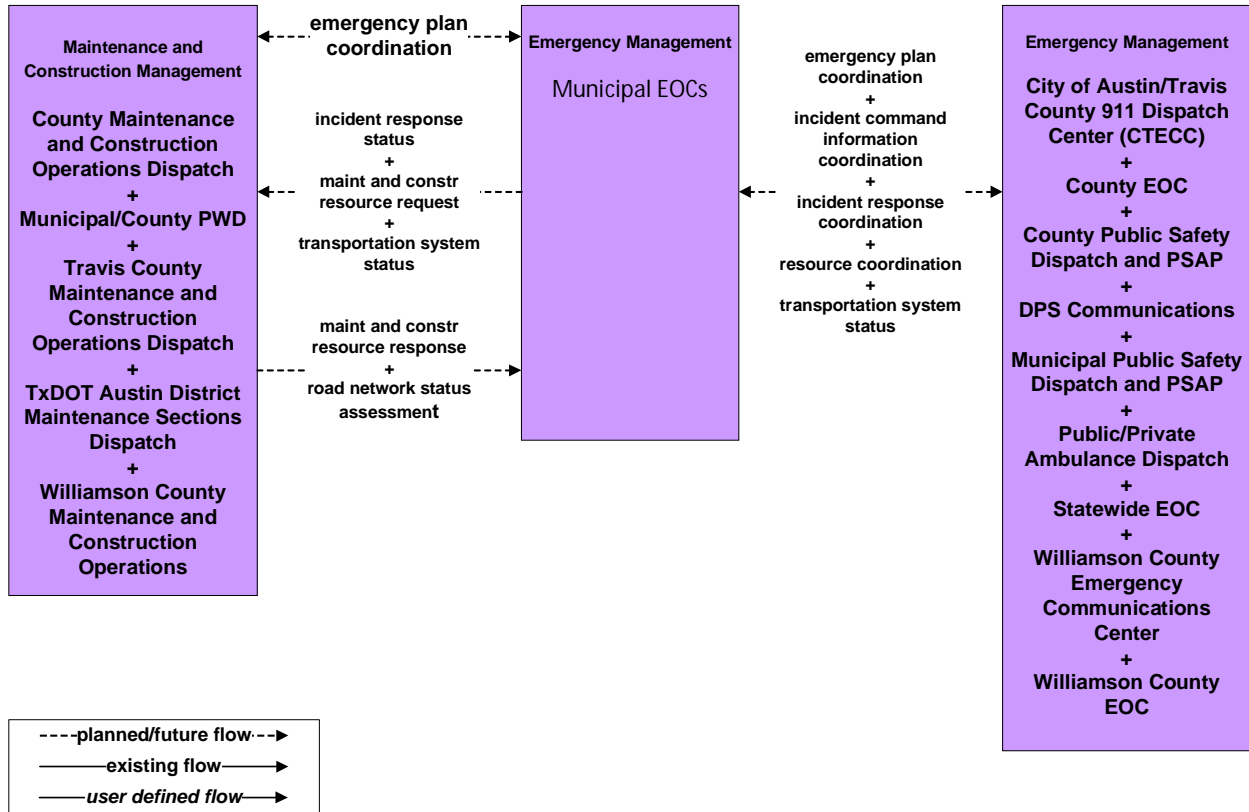
**EM08 – Disaster Response and Recovery
City of Round Rock EOC (1 of 2)**



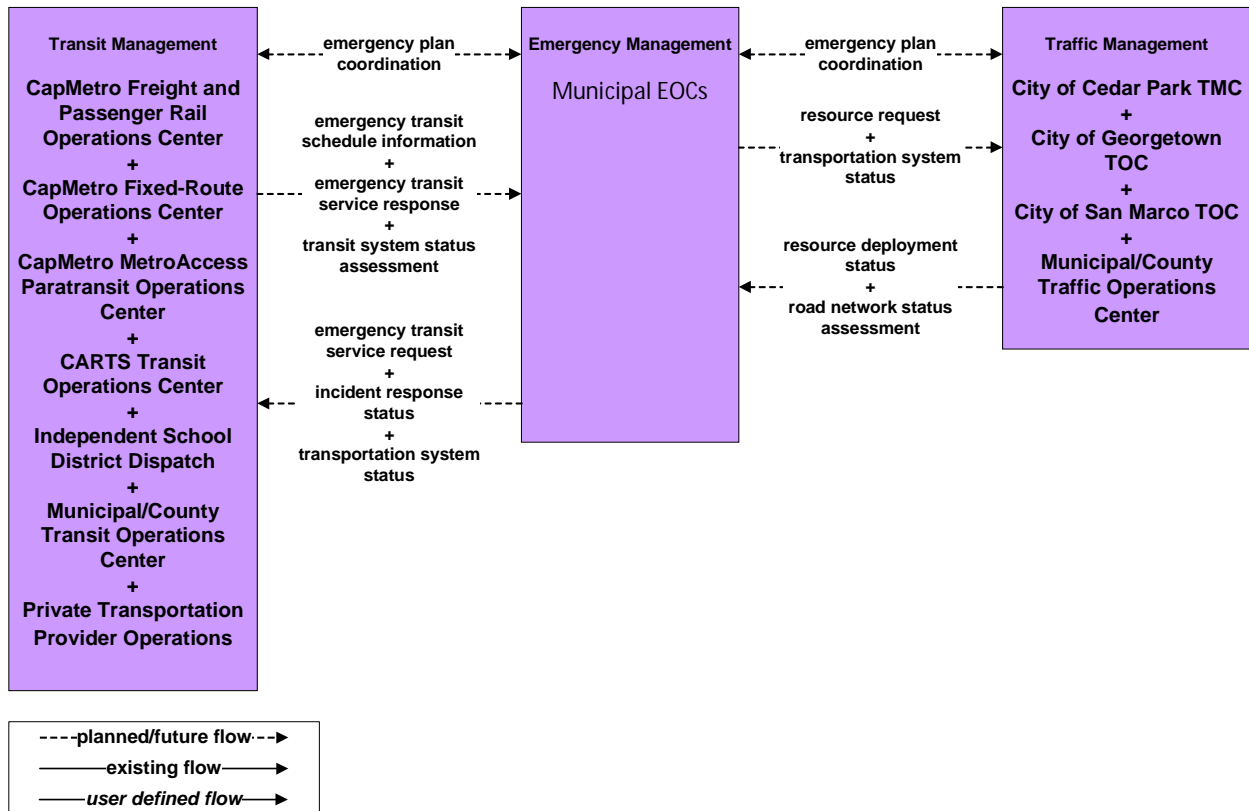
**EM08 – Disaster Response and Recovery
City of Round Rock EOC (2 of 2)**



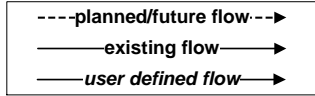
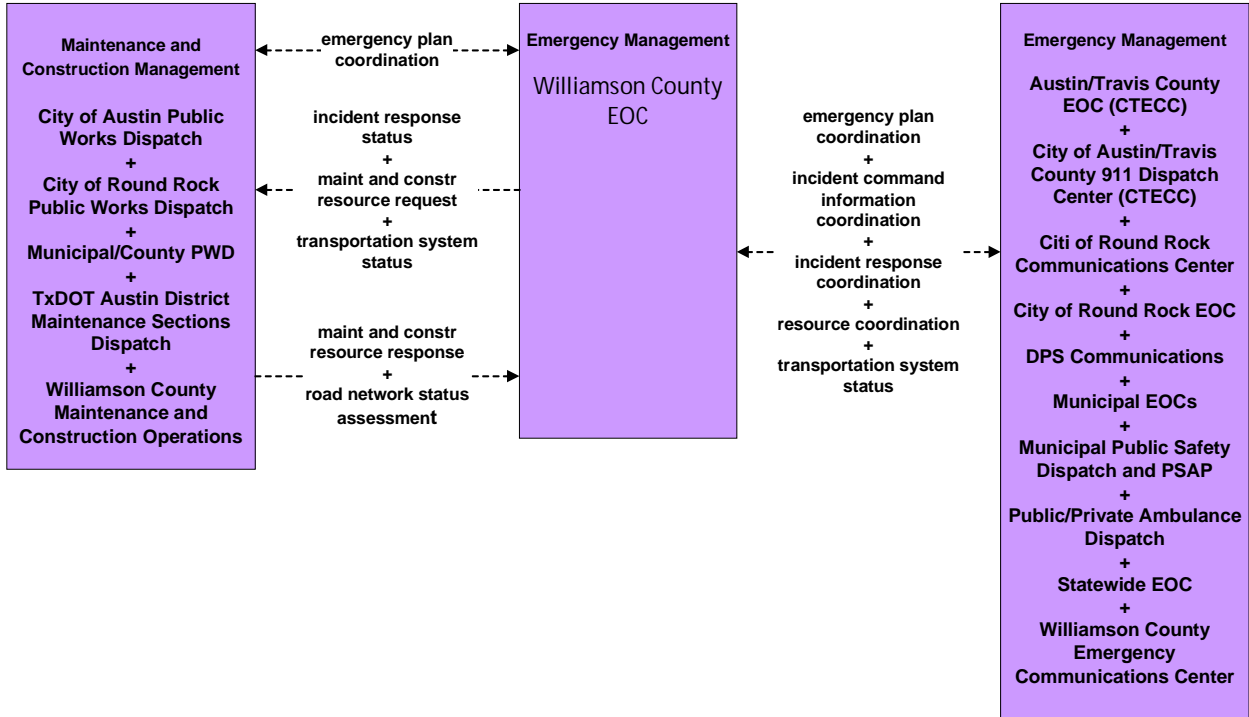
**EM08 – Disaster Response and Recovery
Municipal EOCs (1 of 2)**



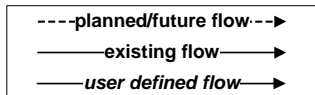
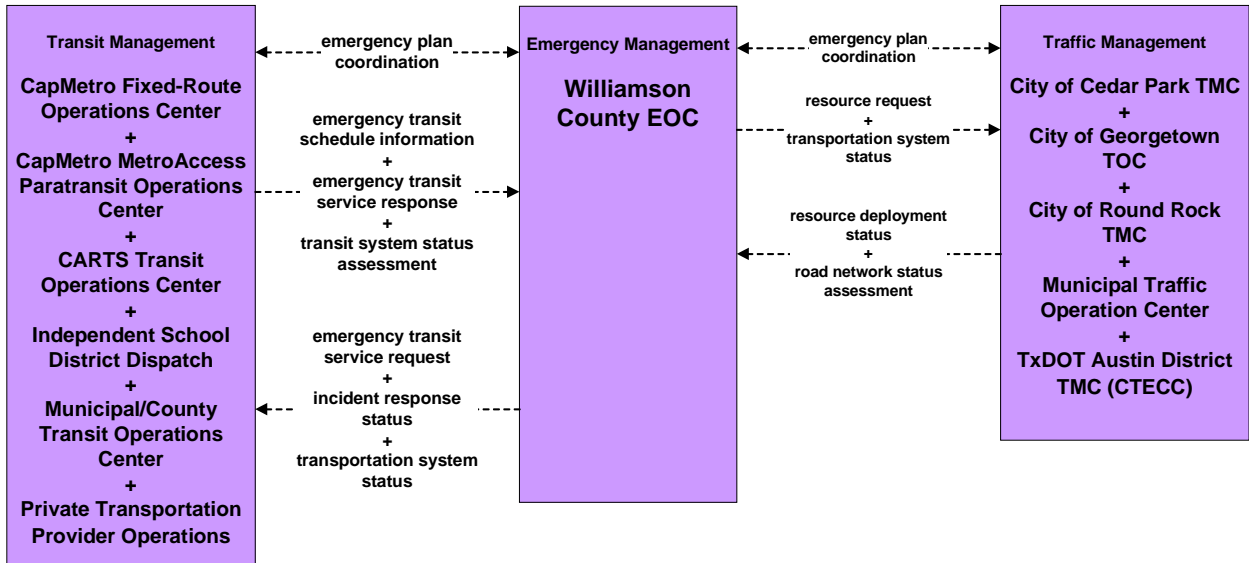
**EM08 – Disaster Response and Recovery
Municipal EOCs (2 of 2)**



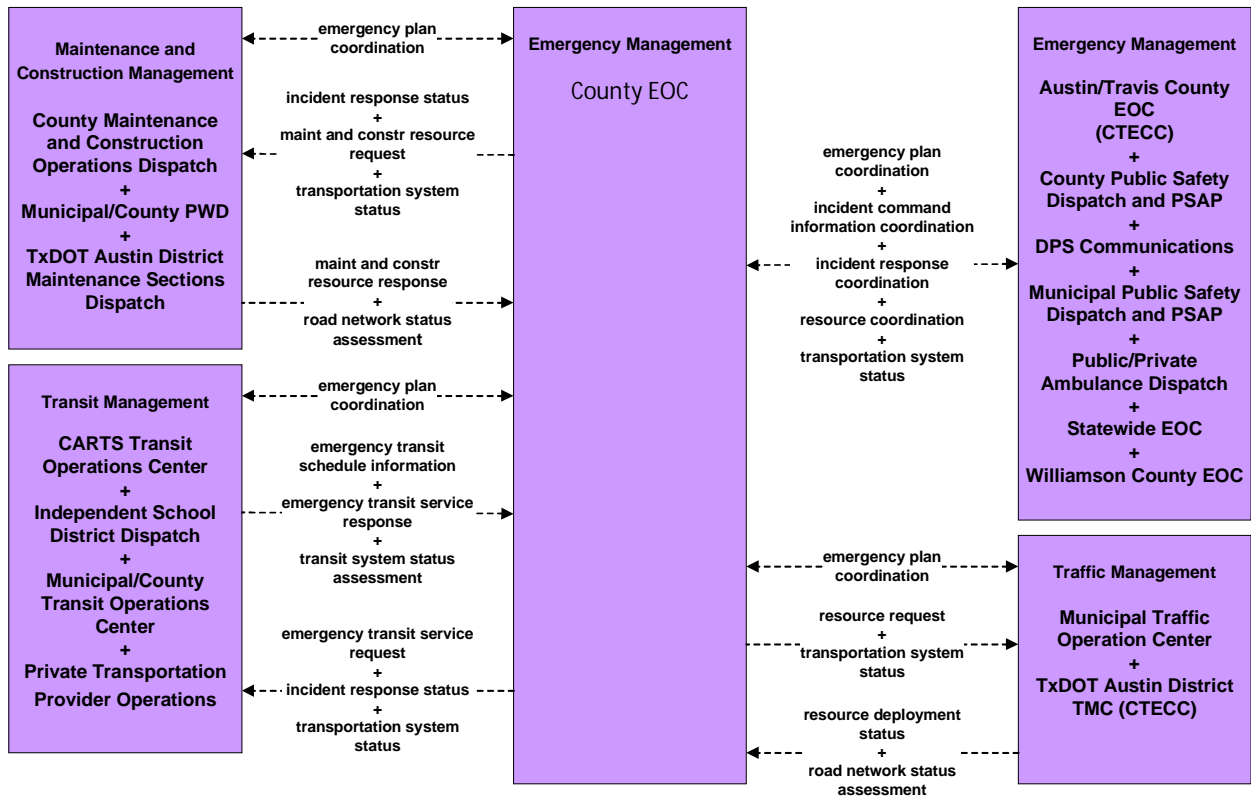
**EM08 – Disaster Response and Recovery
Williamson County EOC (1 of 2)**



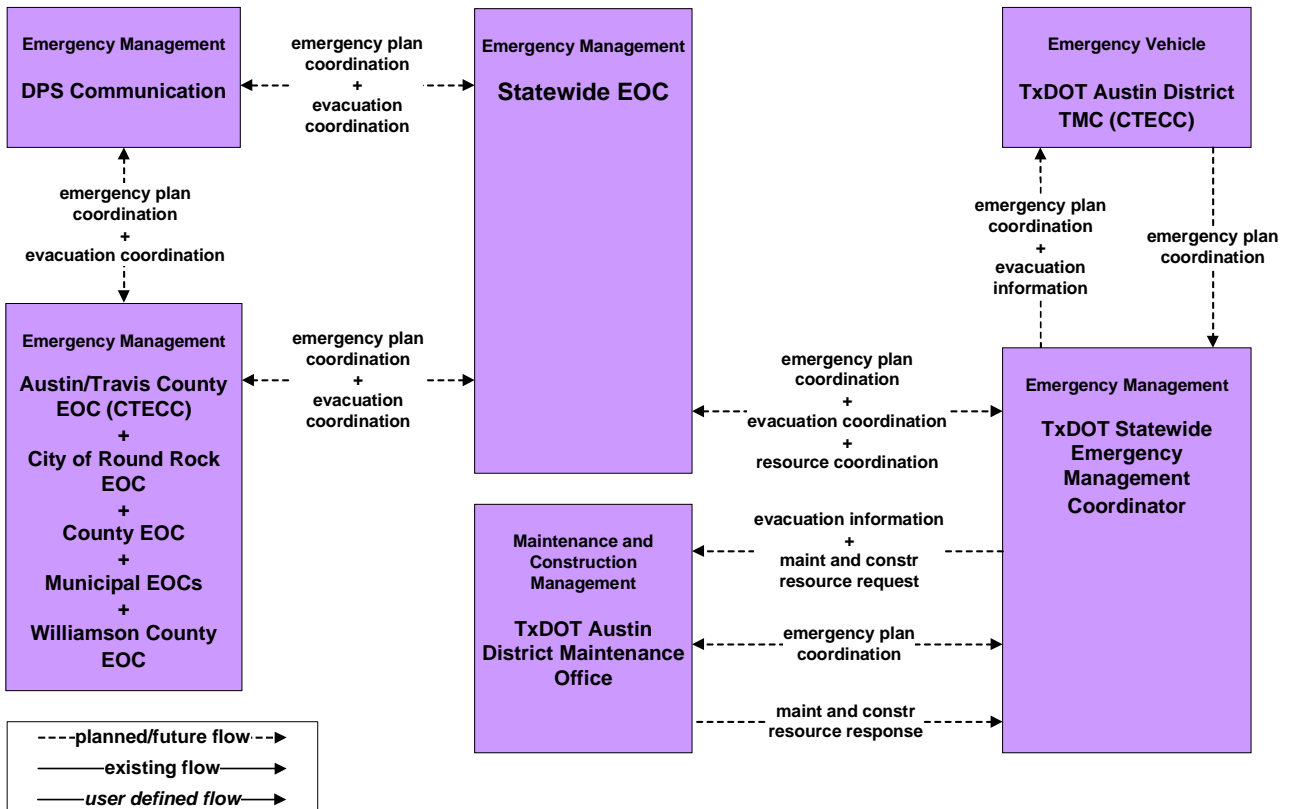
**EM08 – Disaster Response and Recovery
Williamson County EOC (1 of 2)**



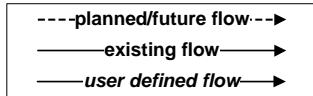
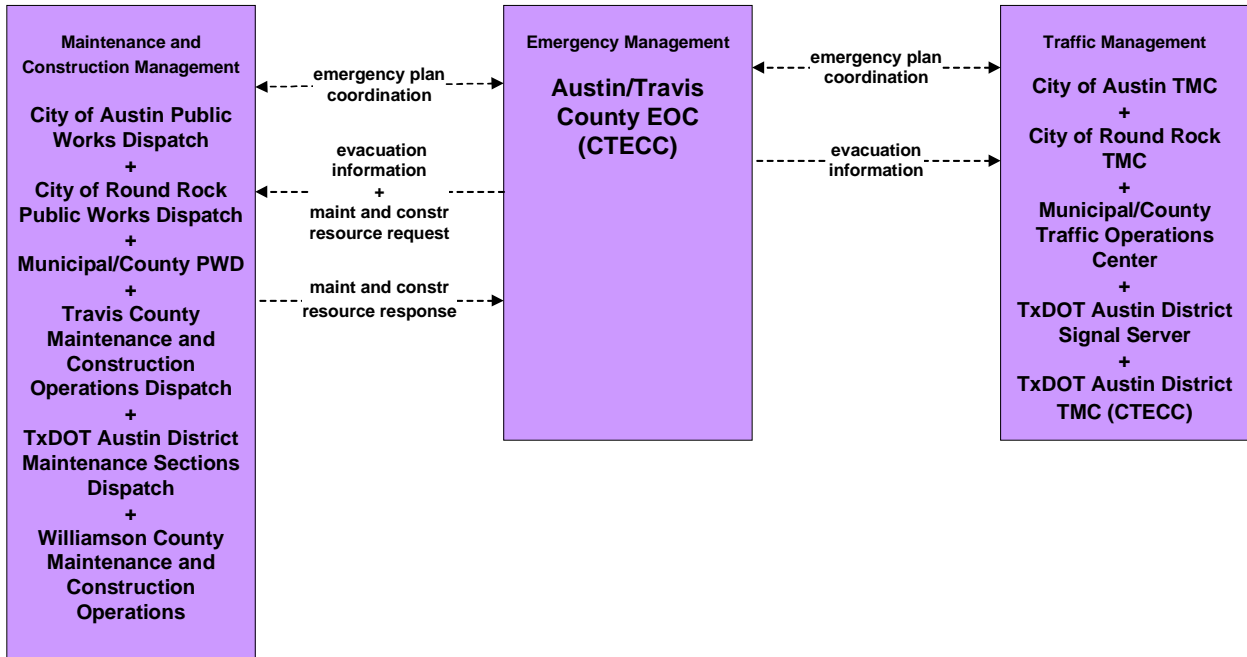
**EM08 – Disaster Response and Recovery
County EOC**



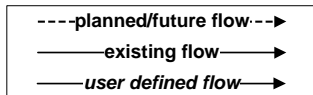
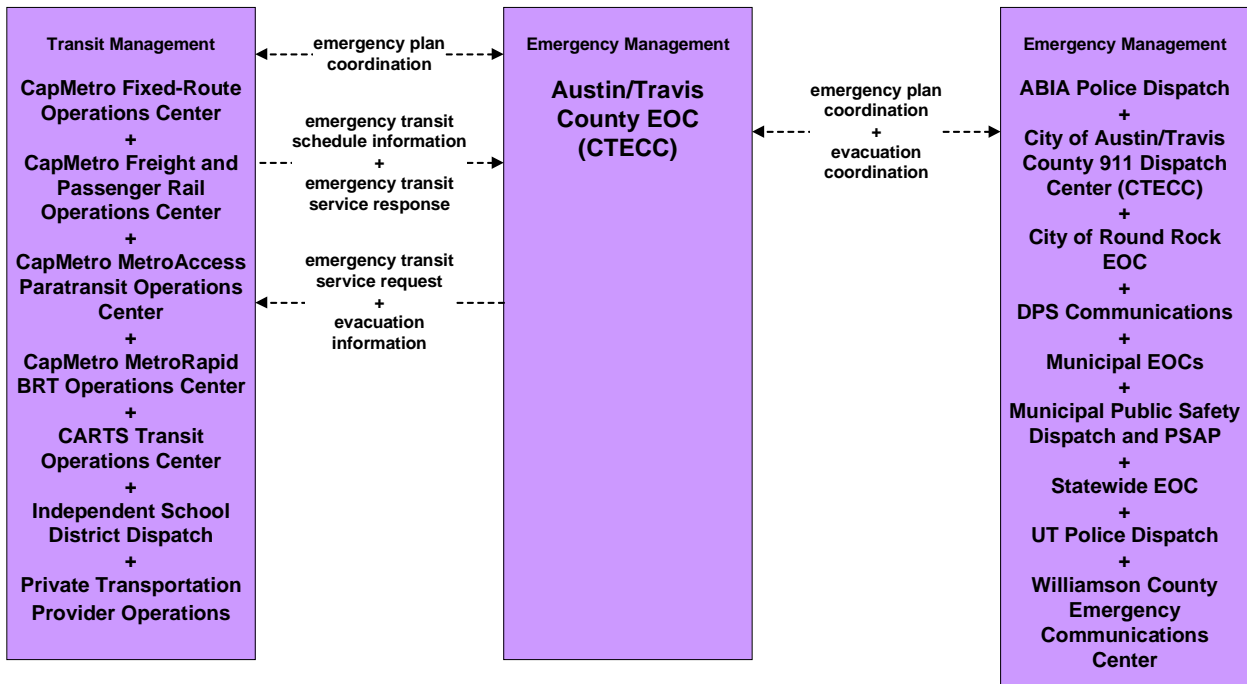
**EM09 – Evacuation and Reentry Management
Statewide EOC**



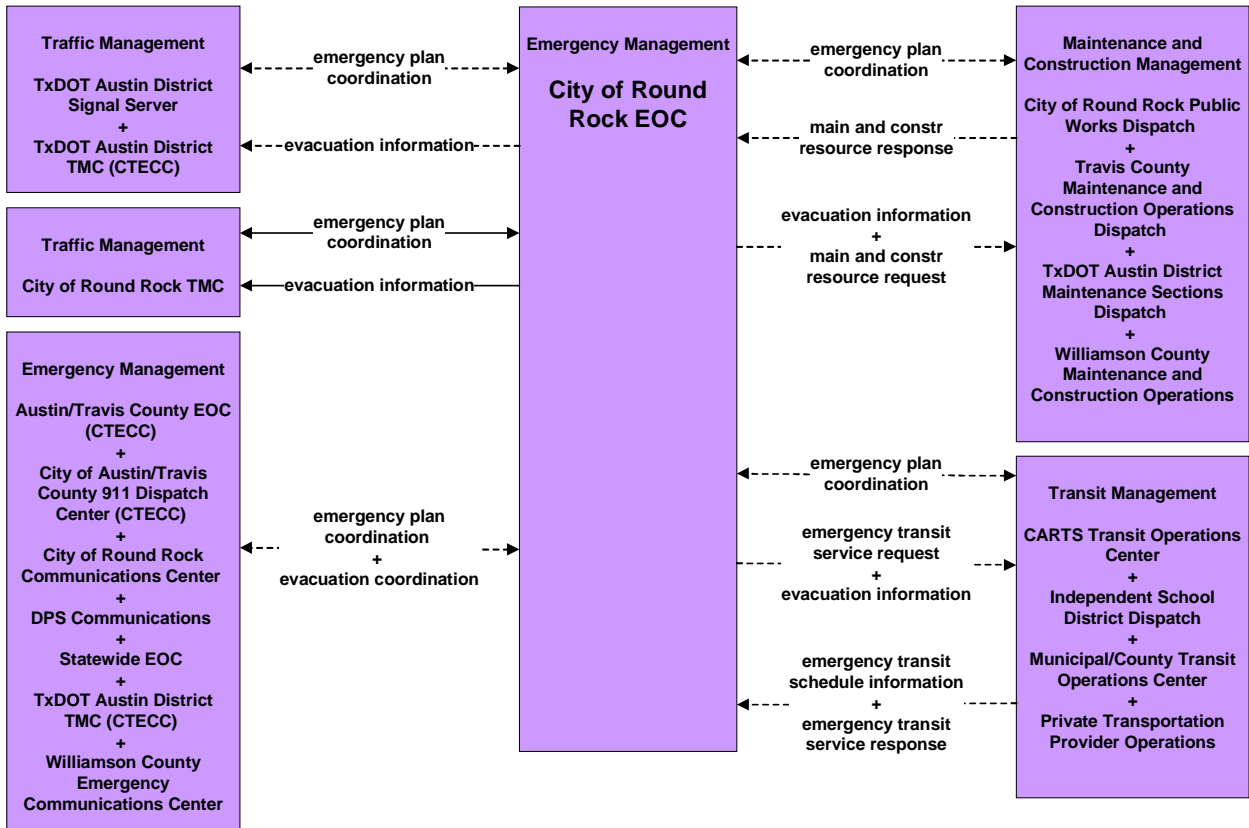
**EM09 – Evacuation and Reentry Management
Austin/Travis County EOC (CTECC) (1 of 2)**



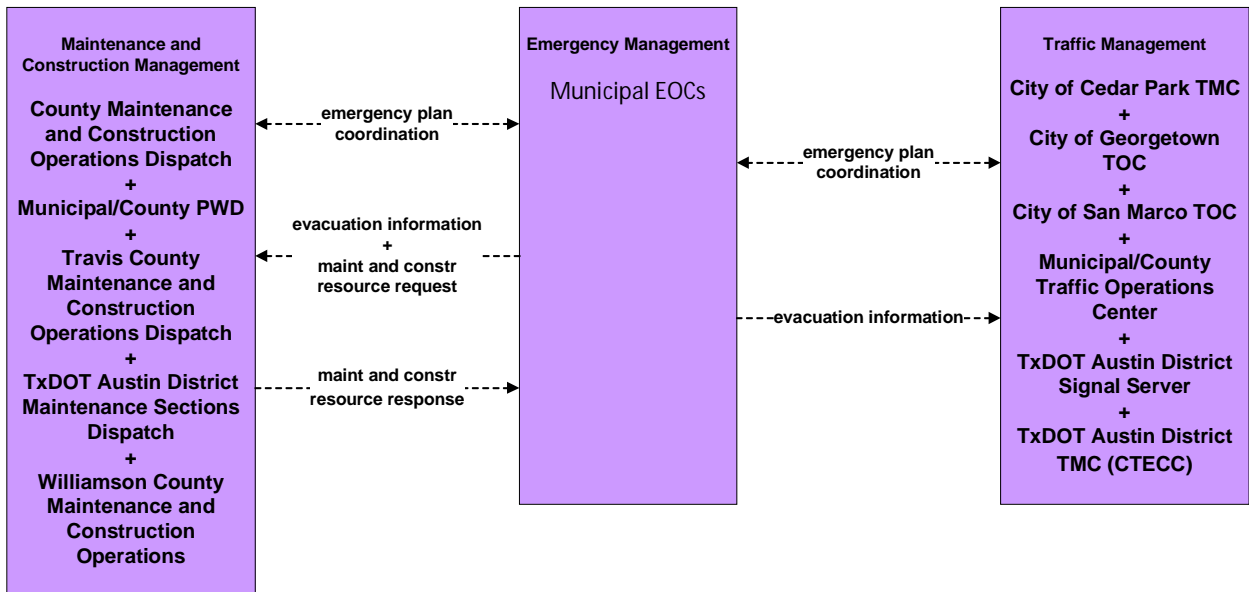
**EM09 – Evacuation and Reentry Management
Austin/Travis County EOC (CTECC) (2 of 2)**



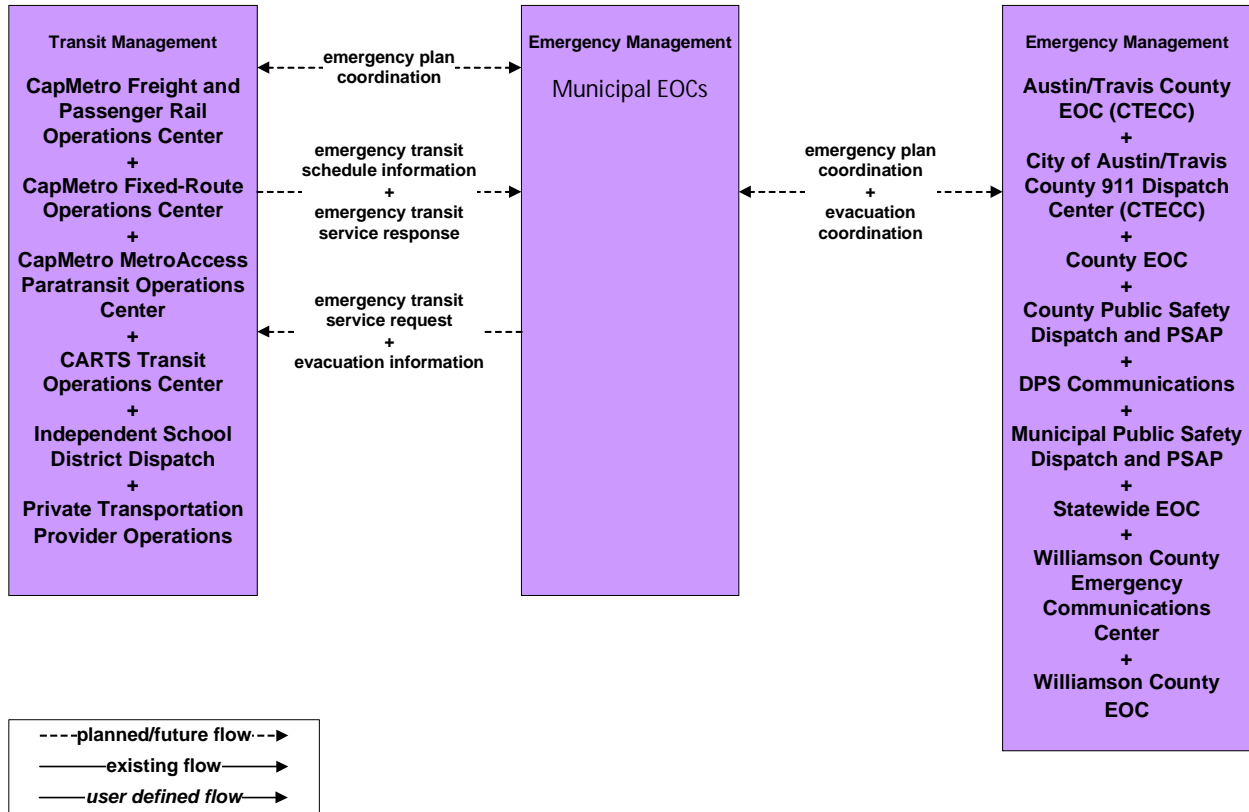
**EM09 - Evacuation and Reentry Management
City of Round Rock EOC**



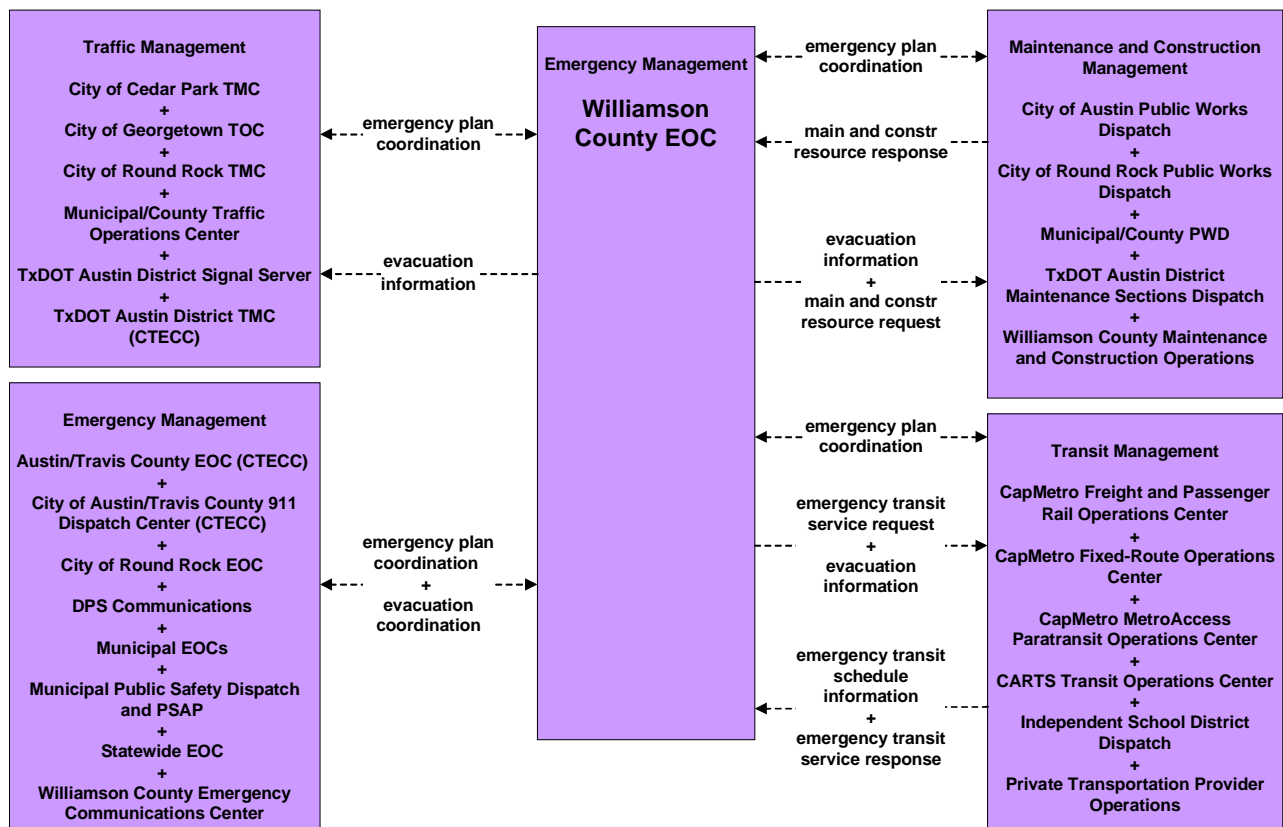
**EM09 – Evacuation and Reentry Management
Municipal EOCs (1 of 2)**



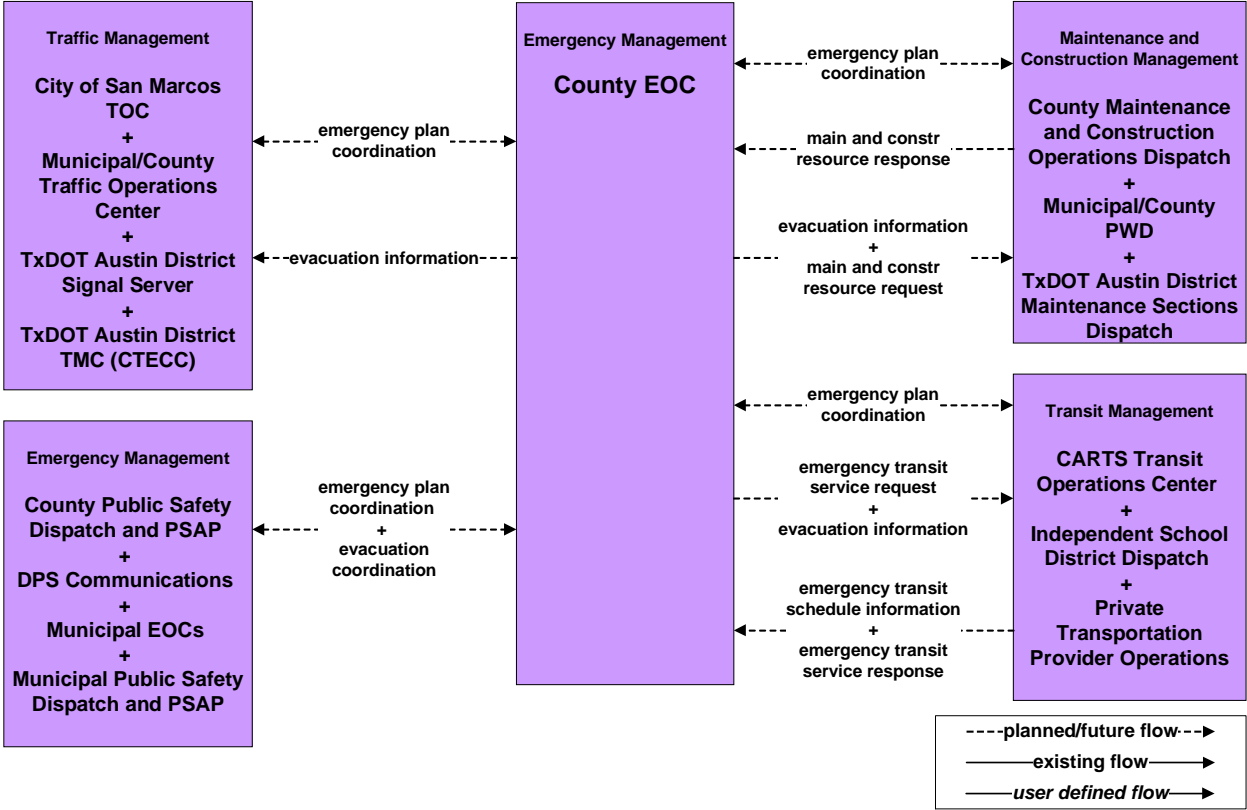
**EM09 – Evacuation and Reentry Management
Municipal EOCs (2 of 2)**



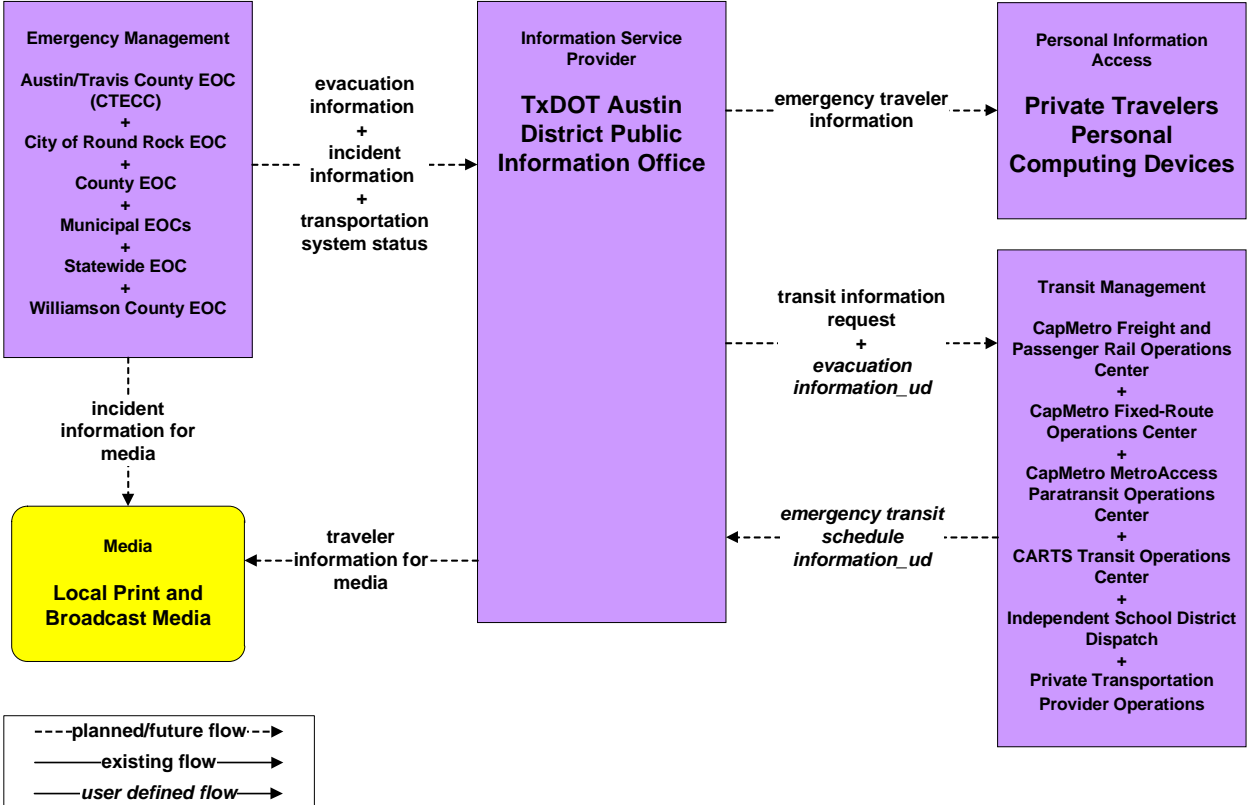
**EM09 - Evacuation and Reentry Management
Williamson County EOC**



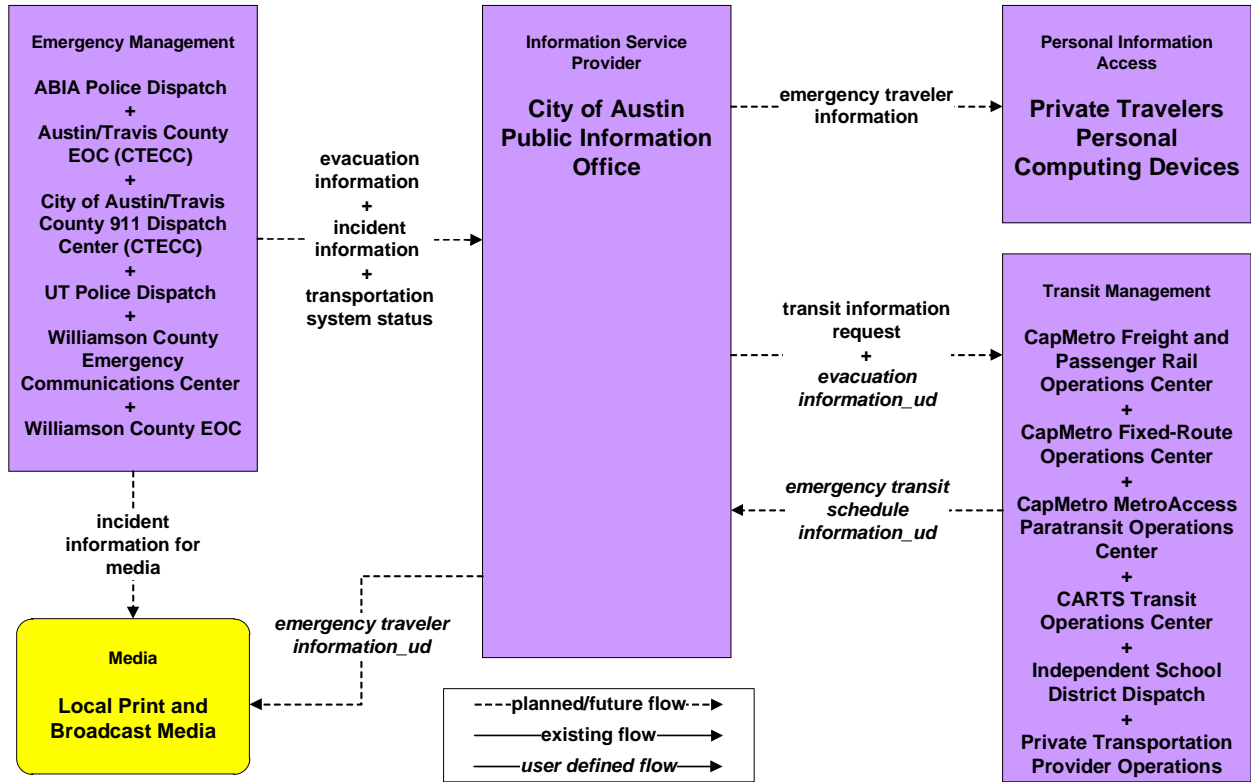
**EM09 - Evacuation and Reentry Management
County EOC**



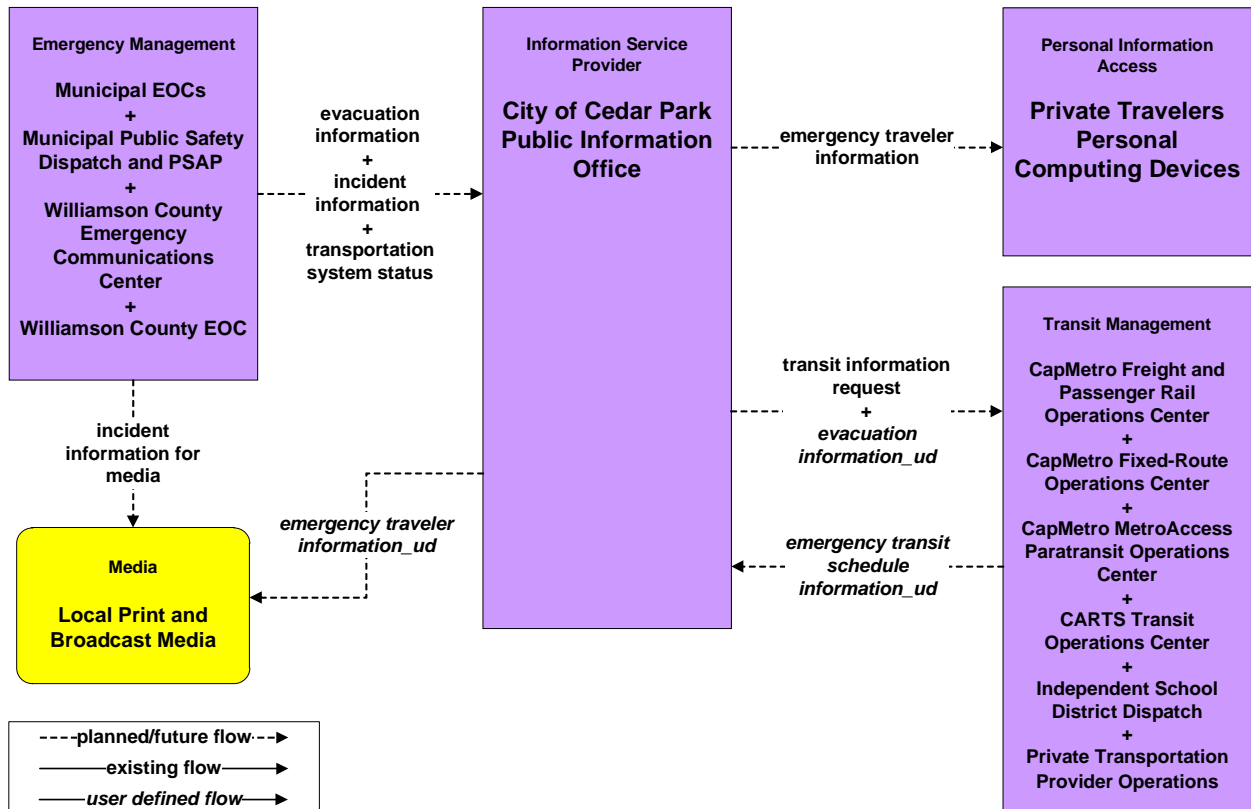
**EM10 - Disaster Traveler Information
TxDOT Austin District Public Information Office**



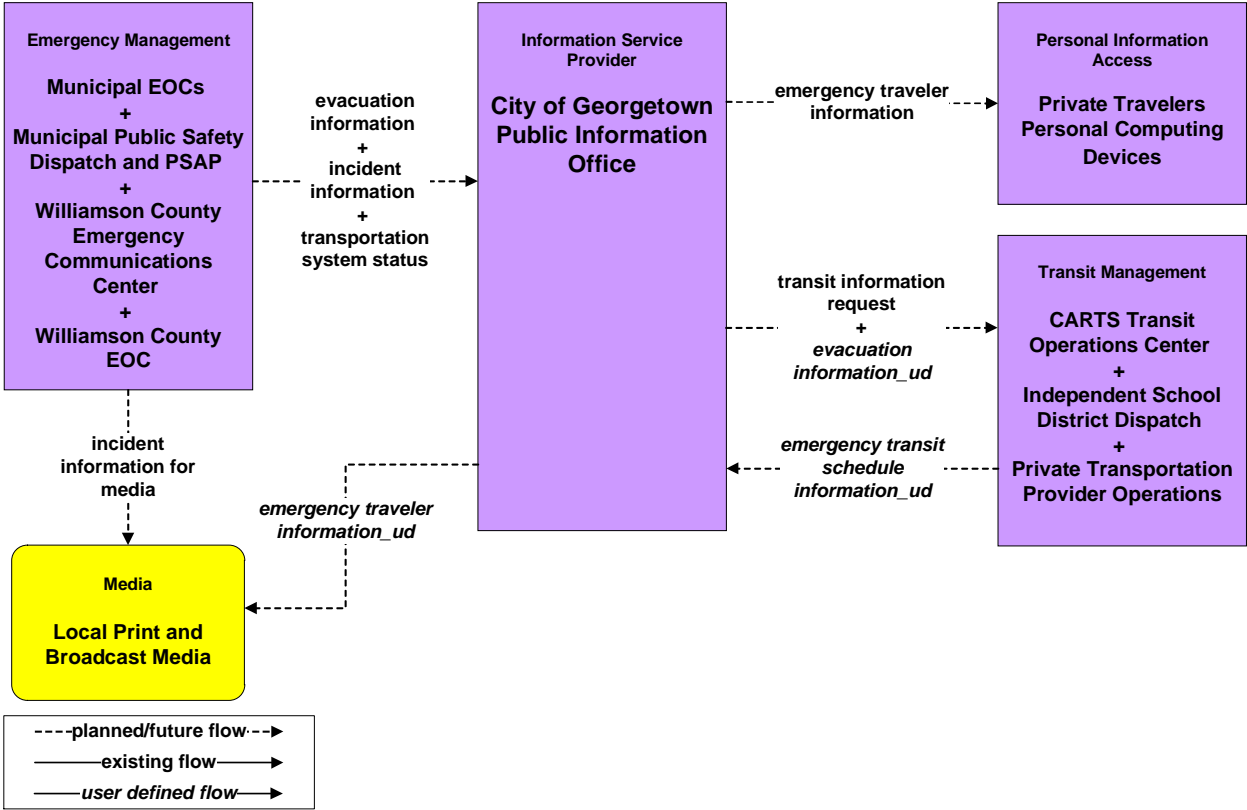
**EM10 - Disaster Traveler Information
City of Austin Public Information Office**



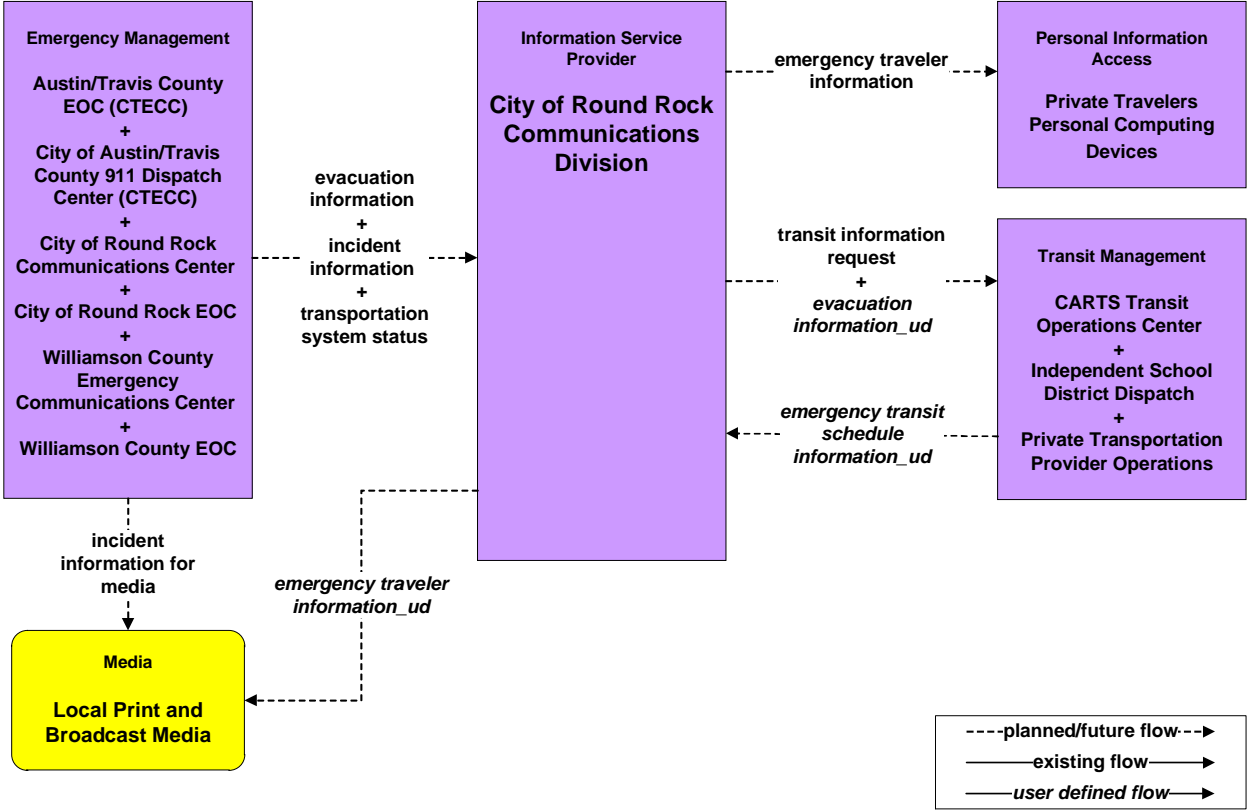
**EM10 - Disaster Traveler Information
City of Cedar Park Public Information Office**



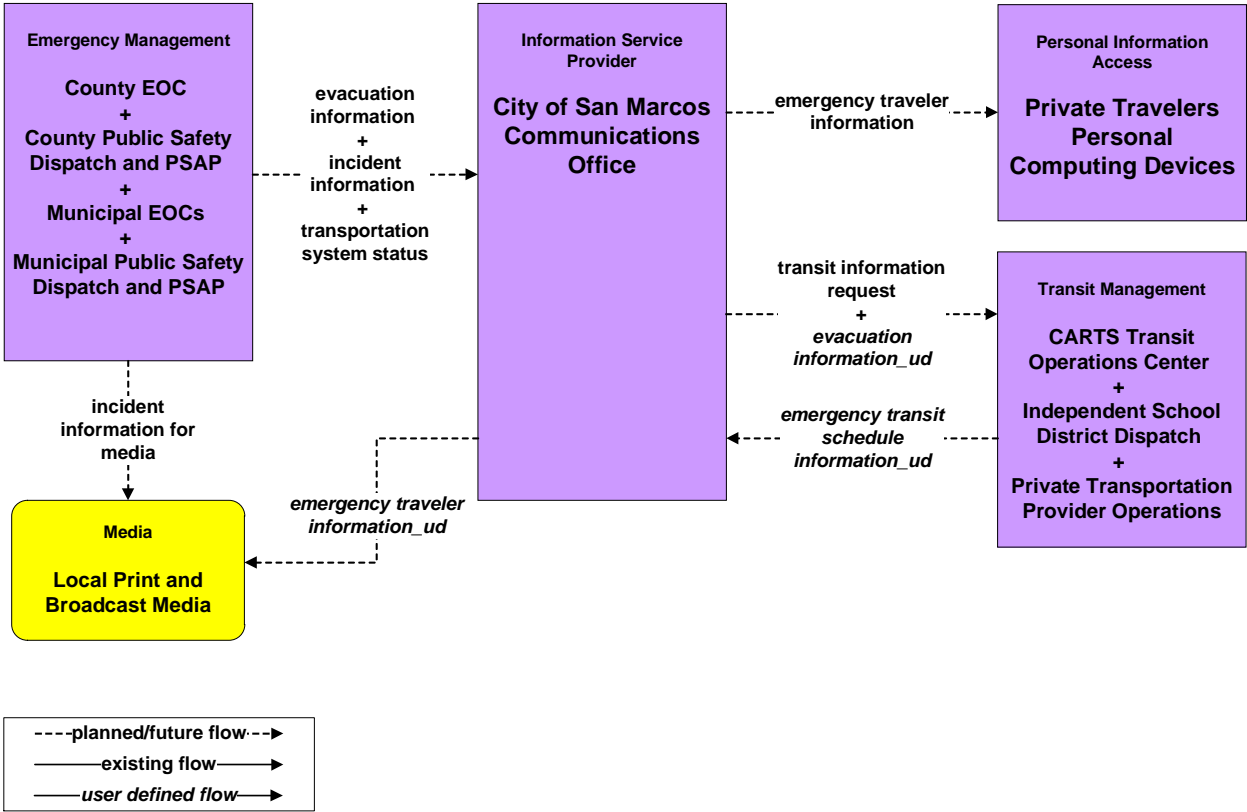
**EM10 - Disaster Traveler Information
City of Georgetown Public Information Office**



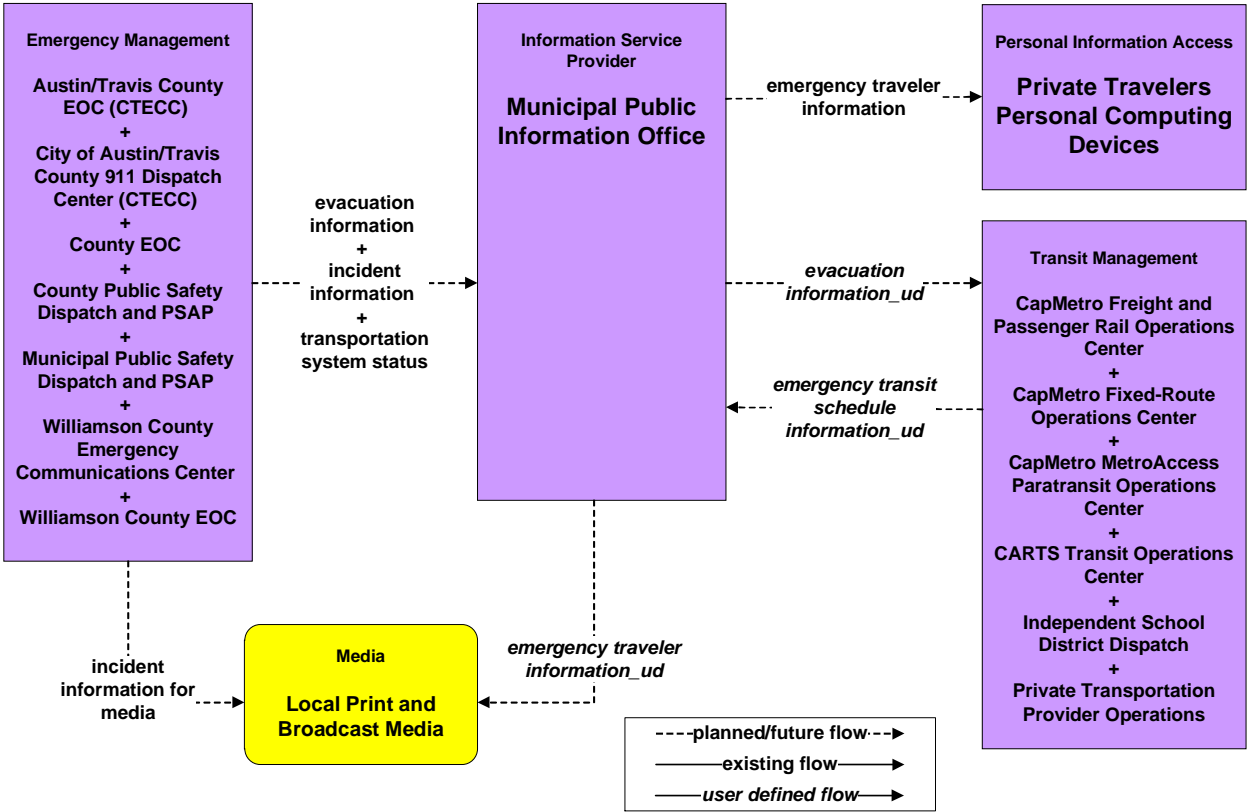
**EM10 - Disaster Traveler Information
City of Round Rock Communications Division**



**EM10 - Disaster Traveler Information
City of San Marcos Communications Office**



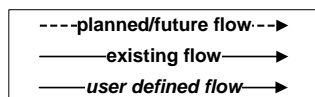
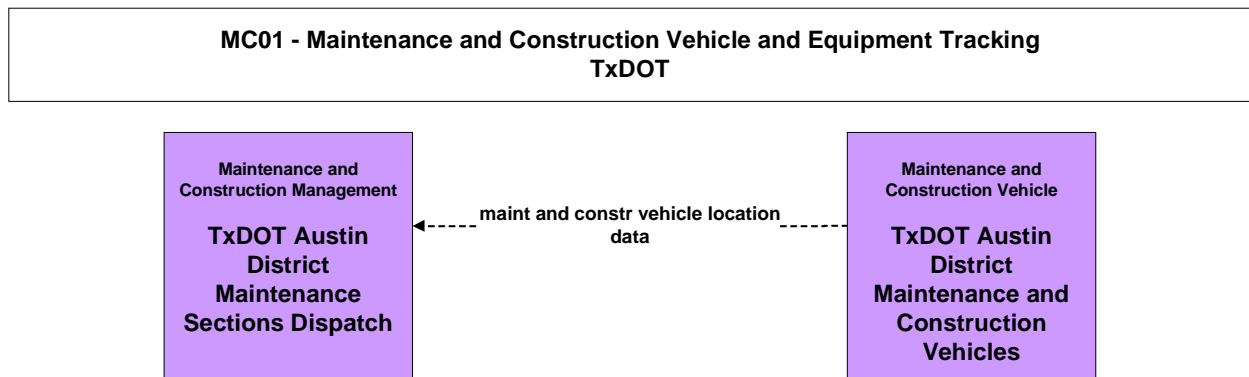
**EM10 - Disaster Traveler Information
Municipal Public Information Office**



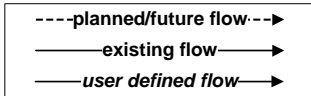
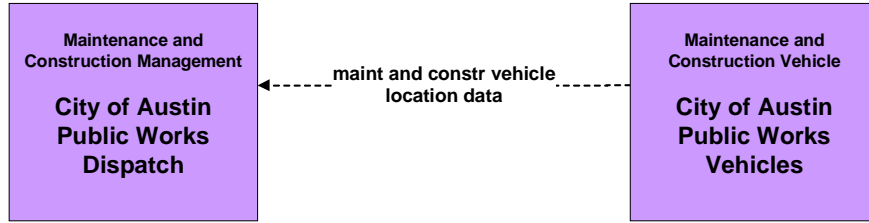
Austin Regional ITS Architecture

Customized ITS Service Package Diagrams

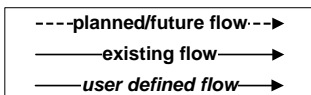
Maintenance and Construction (MC)



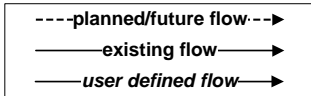
**MC01 - Maintenance and Construction Vehicle and Equipment Tracking
City of Austin**



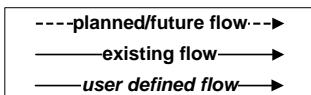
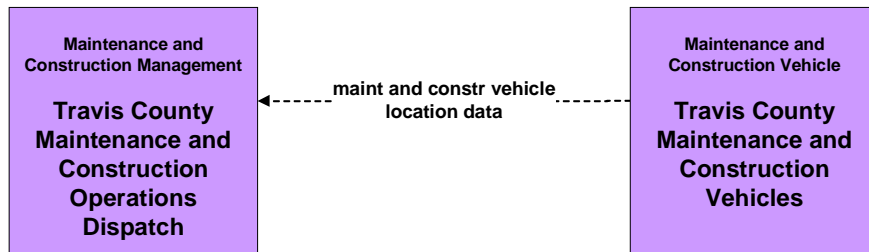
**MC01 - Maintenance and Construction Vehicle and Equipment Tracking
City of Round Rock**



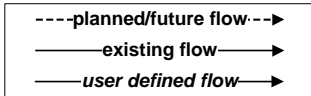
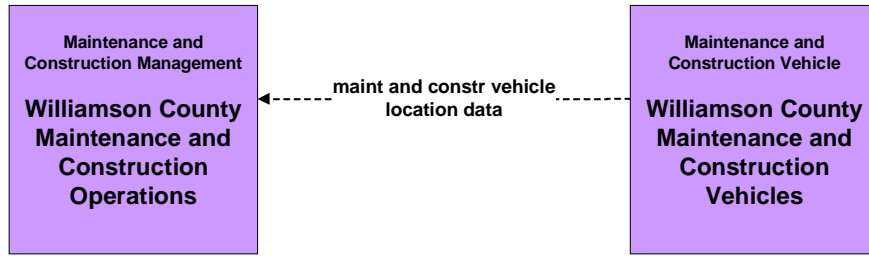
**MC01 - Maintenance and Construction Vehicle and Equipment Tracking
Municipal**



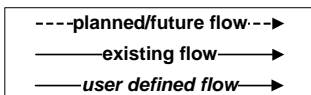
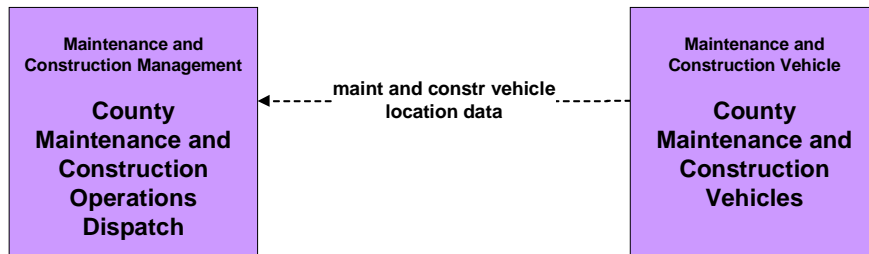
**MC01 - Maintenance and Construction Vehicle and Equipment Tracking
Travis County**



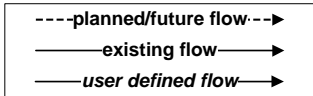
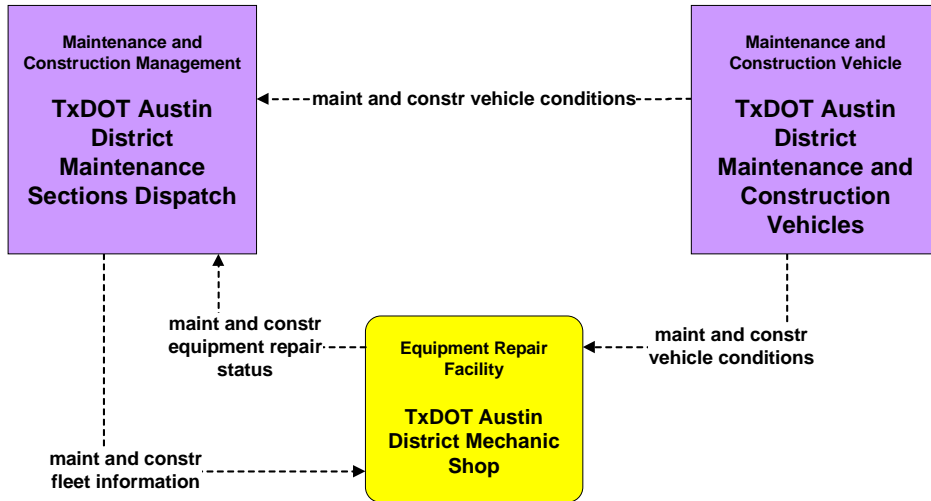
**MC01 - Maintenance and Construction Vehicle and Equipment Tracking
Williamson County**



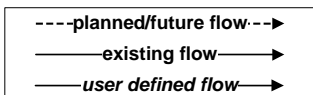
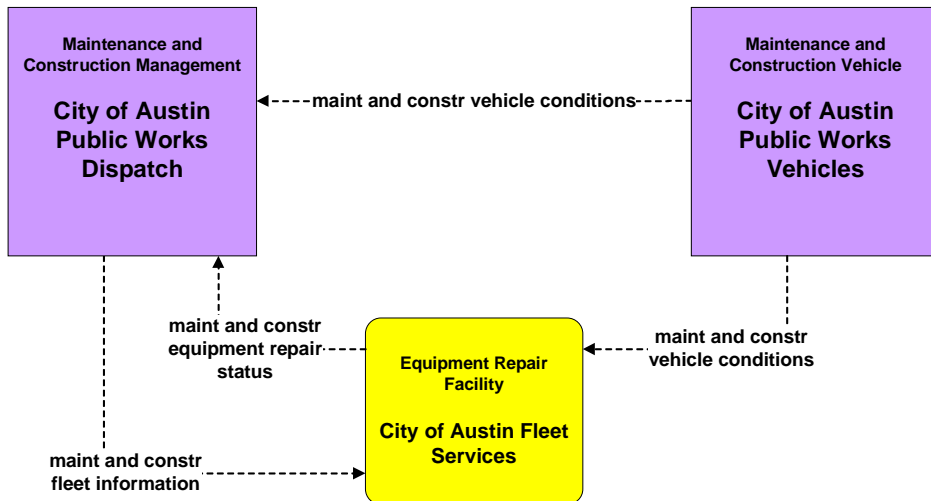
**MC01 - Maintenance and Construction Vehicle and Equipment Tracking
County**



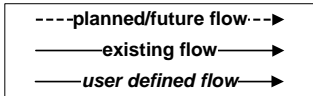
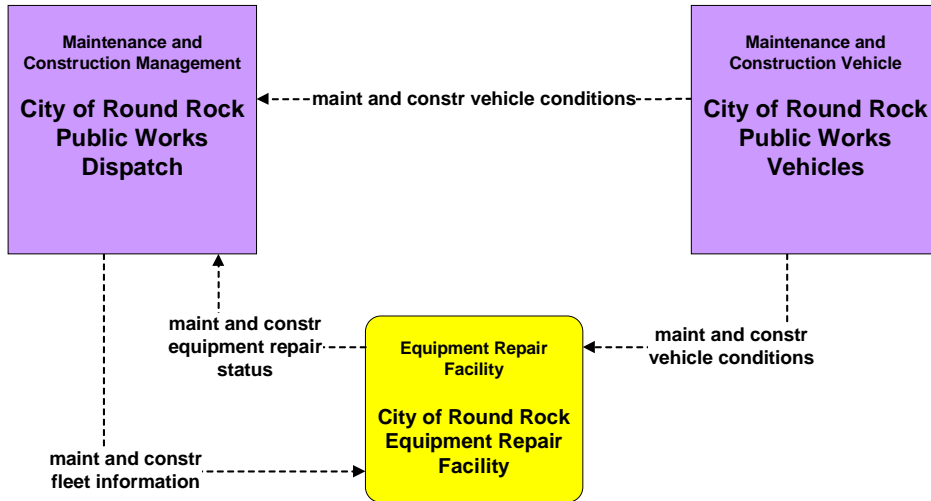
**MC02 - Maintenance and Construction Vehicle Maintenance
TxDOT Austin District Maintenance Sections**



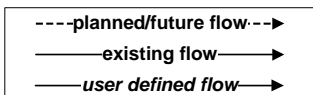
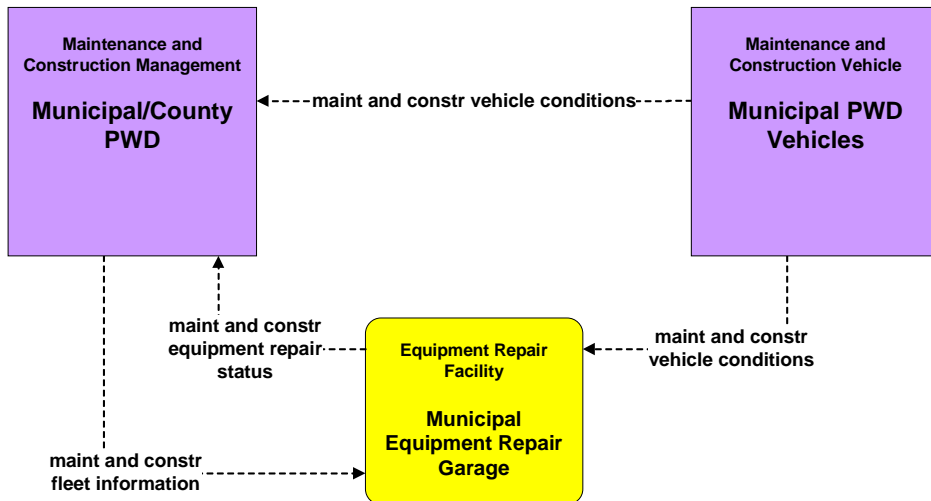
**MC02 - Maintenance and Construction Vehicle Maintenance
City of Austin Public Works**



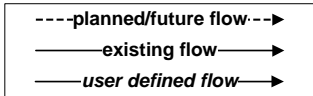
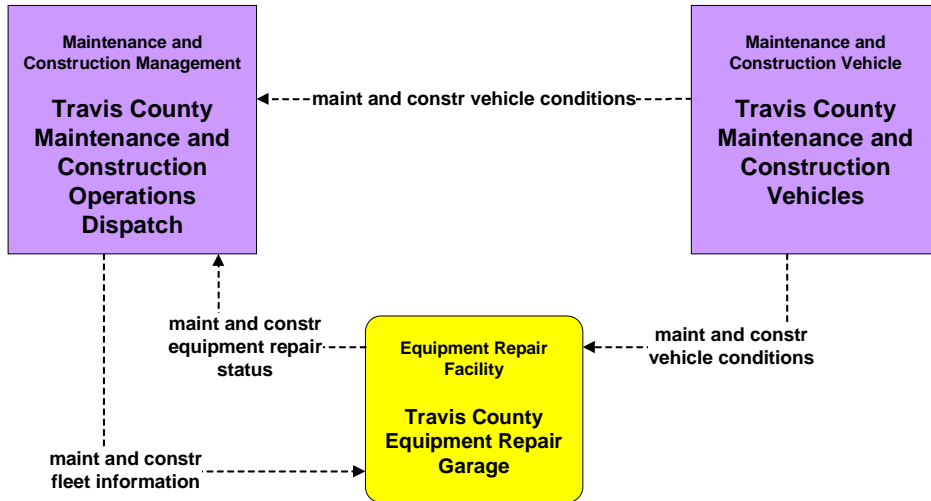
**MC02 - Maintenance and Construction Vehicle Maintenance
City of Round Rock Public Works**



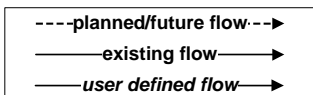
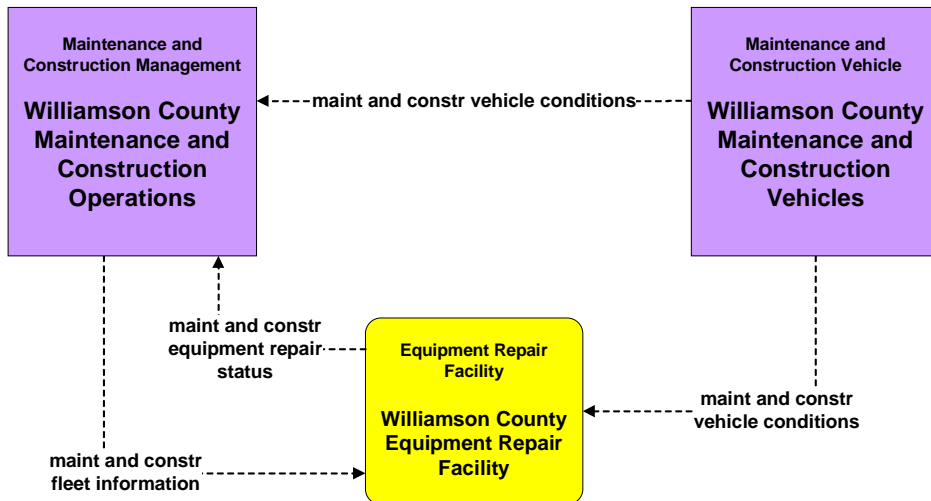
**MC02 - Maintenance and Construction Vehicle Maintenance
Municipal/County PWD**



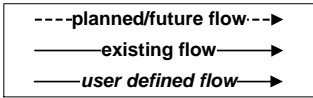
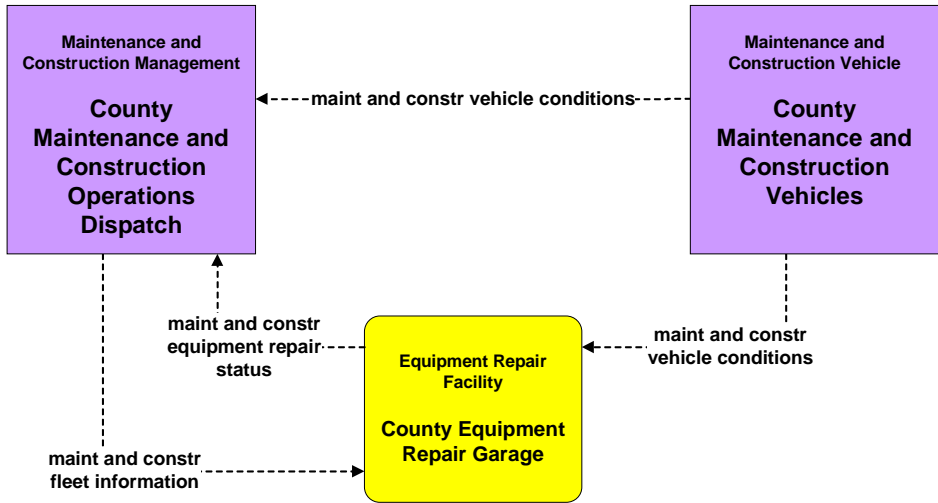
**MC02 - Maintenance and Construction Vehicle Maintenance
Travis County Maintenance and Construction**



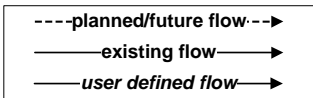
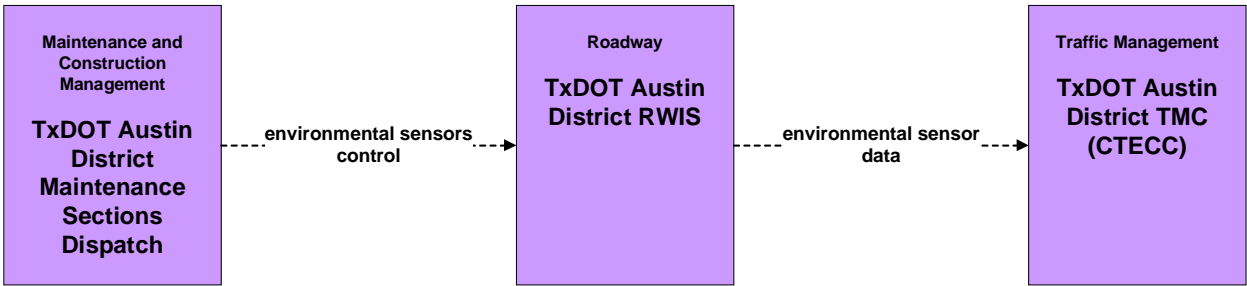
**MC02 - Maintenance and Construction Vehicle Maintenance
Williamson County Maintenance and Construction**



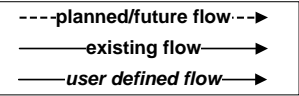
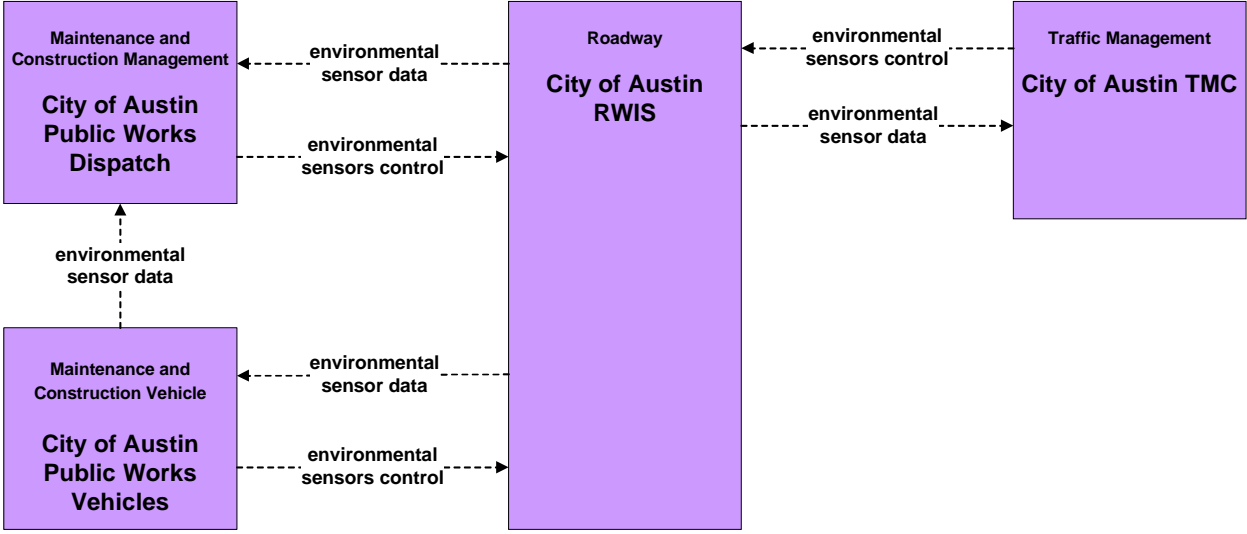
**MC02 - Maintenance and Construction Vehicle Maintenance
County Maintenance and Construction**



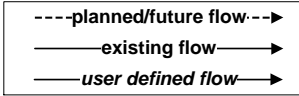
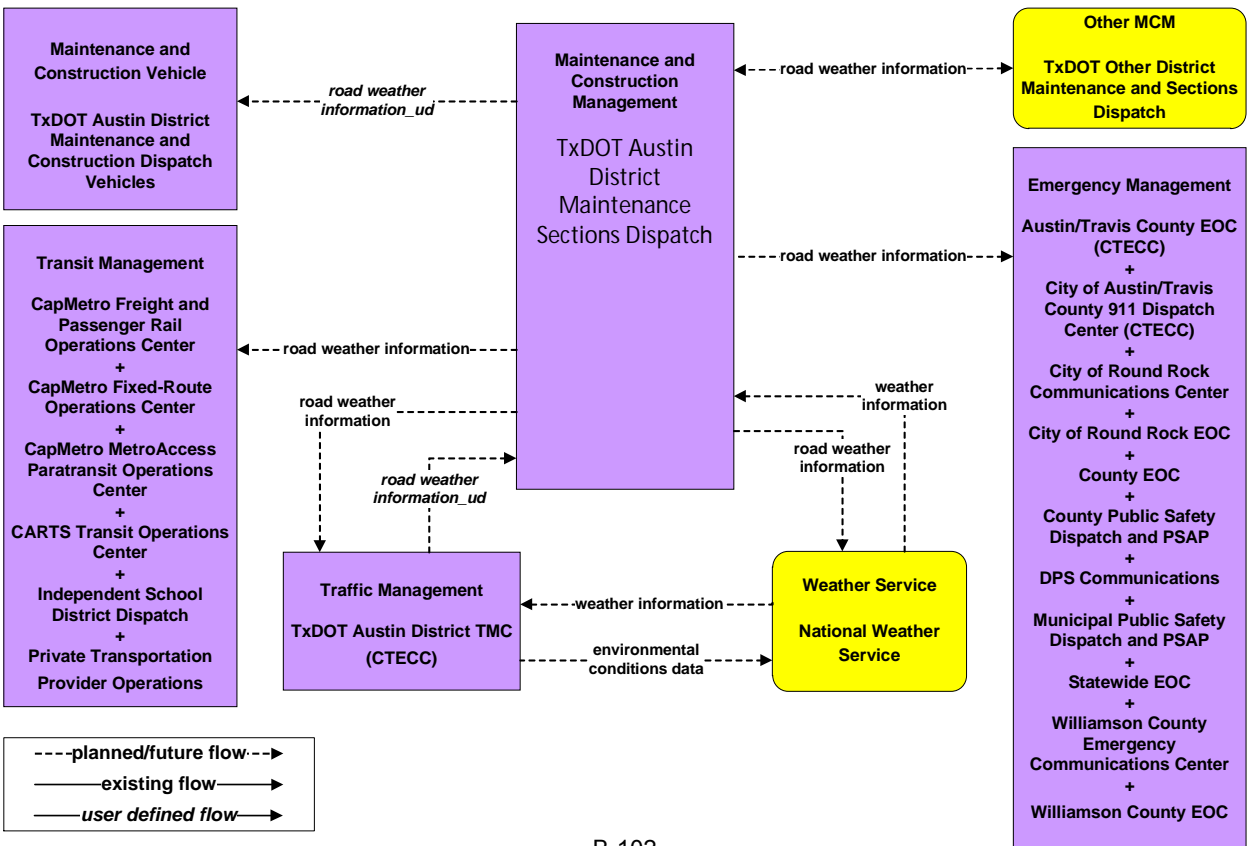
**MC03 - Road Weather Data Collection
TxDOT**



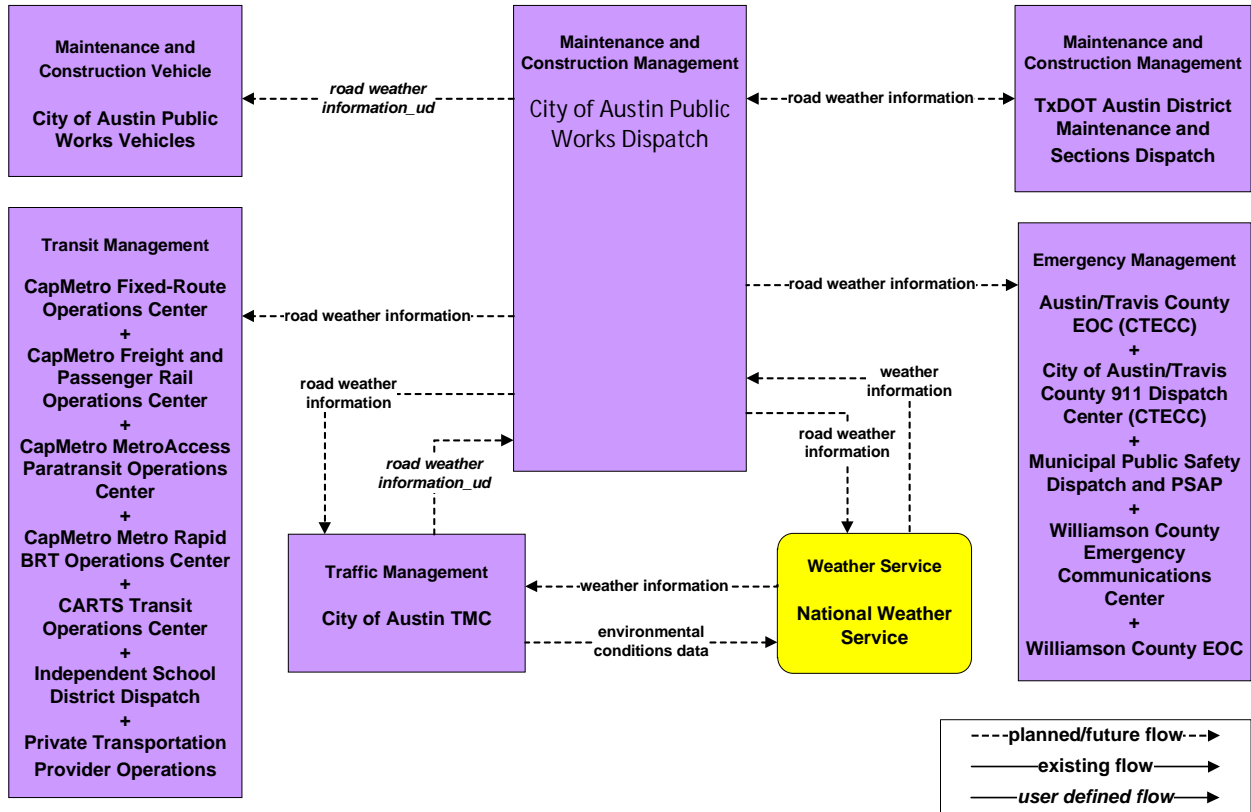
**MC03 - Road Weather Data Collection
City of Austin**



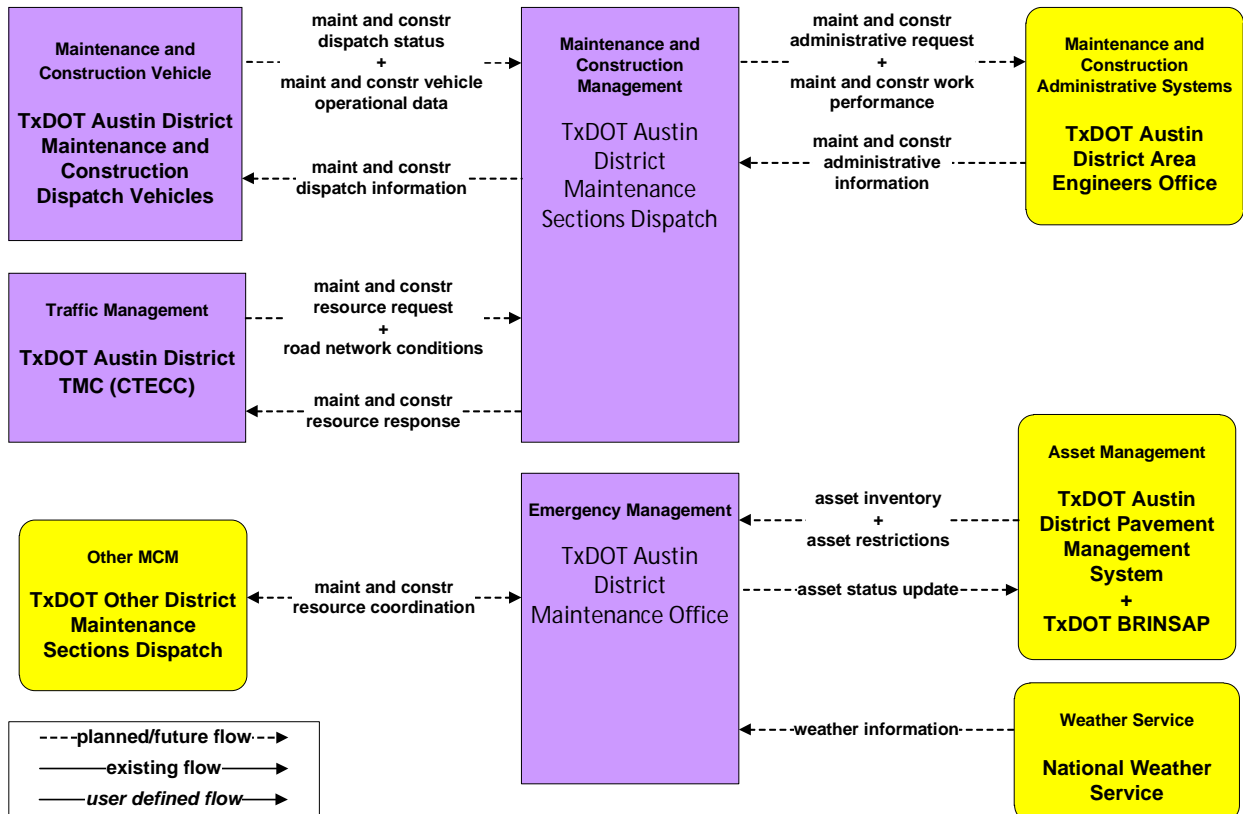
**MC04 – Weather Information Processing and Distribution
TxDOT**



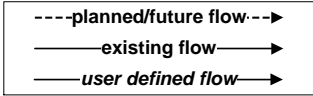
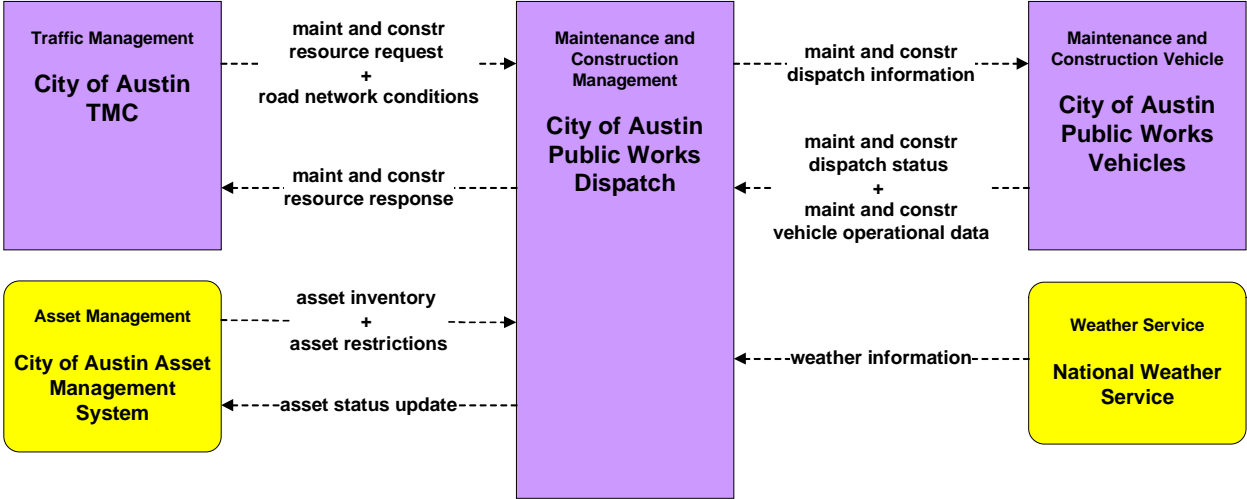
MC04 - Weather Information Processing and Distribution
City of Austin



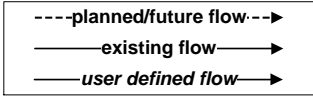
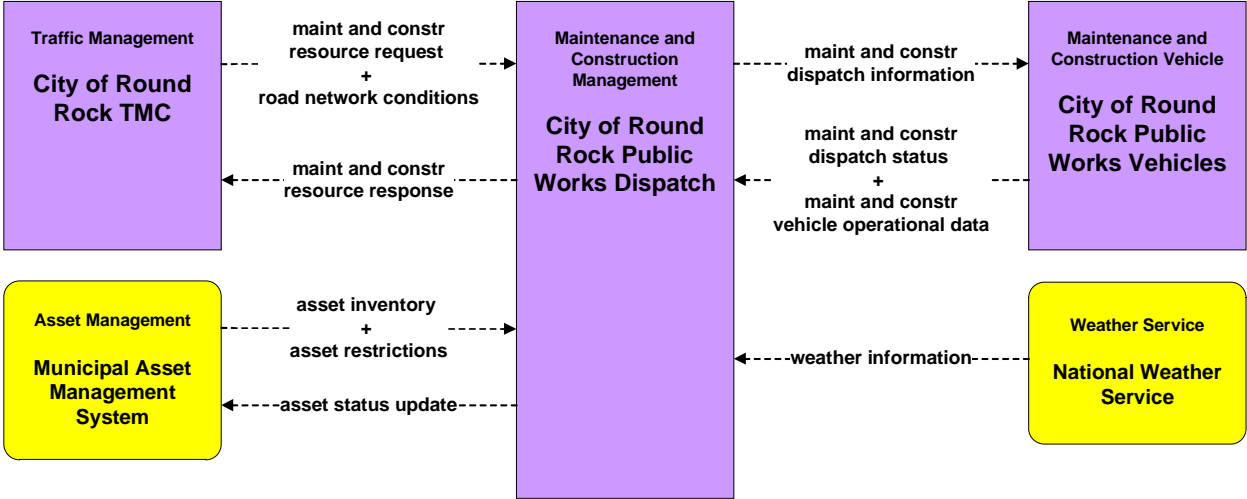
MC07 – Roadway Maintenance and Construction
TxDOT



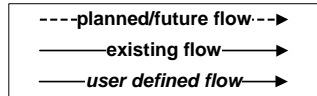
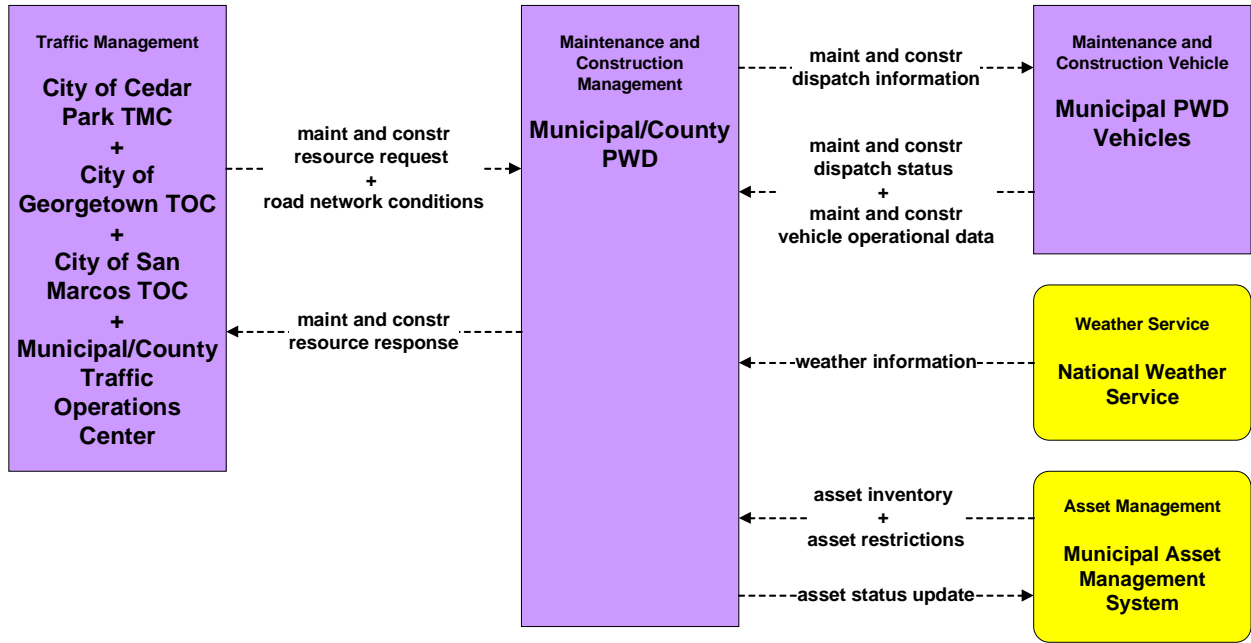
**MC07 - Roadway Maintenance and Construction
City of Austin Public Works**



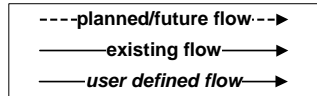
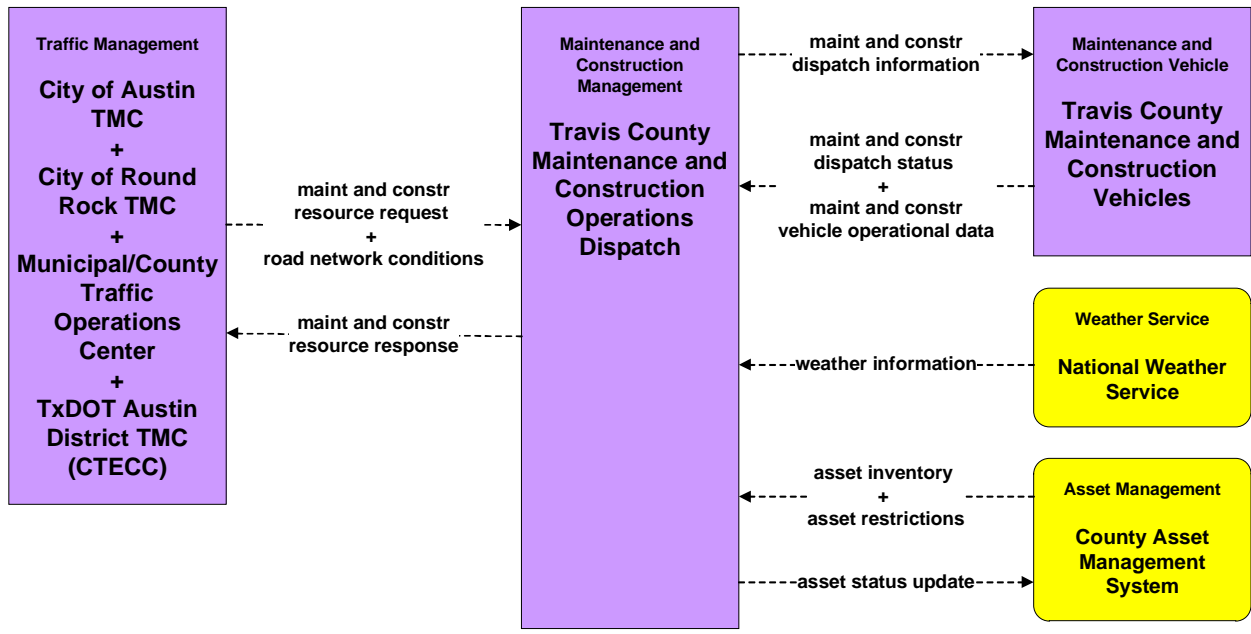
**MC07 - Roadway Maintenance and Construction
City of Round Rock Public Works**



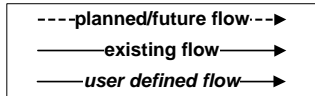
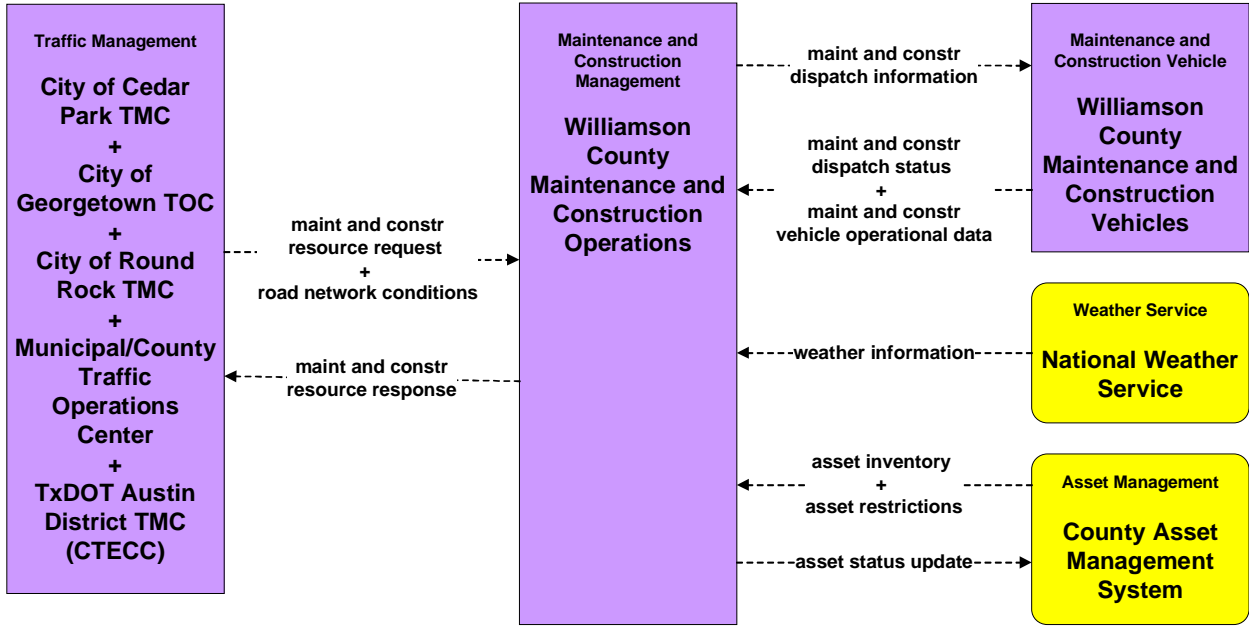
**MC07 - Roadway Maintenance and Construction
Municipal Public Works Department**



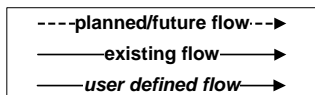
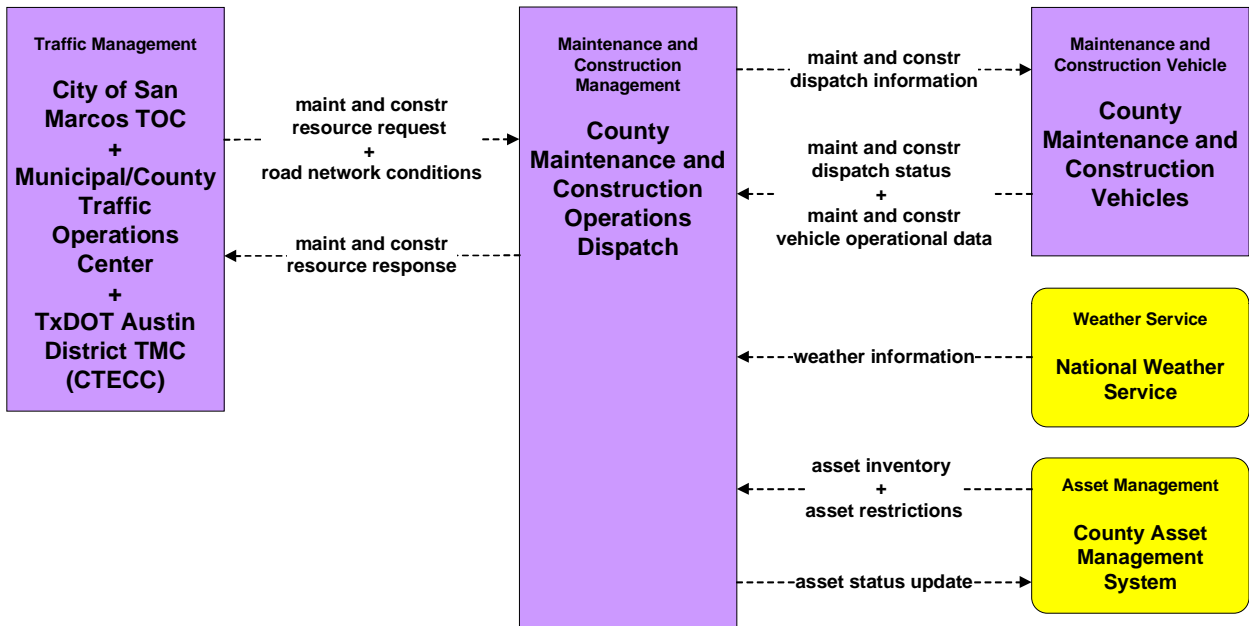
**MC07 - Roadway Maintenance and Construction
Travis County Maintenance and Construction**



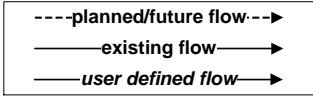
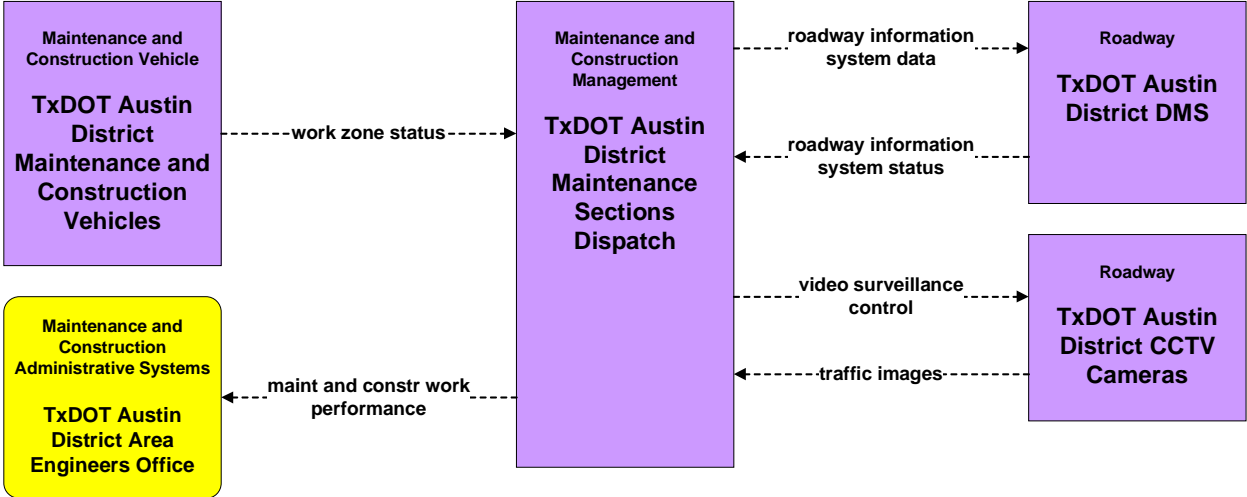
**MC07 - Roadway Maintenance and Construction
Williamson County Maintenance and Construction**



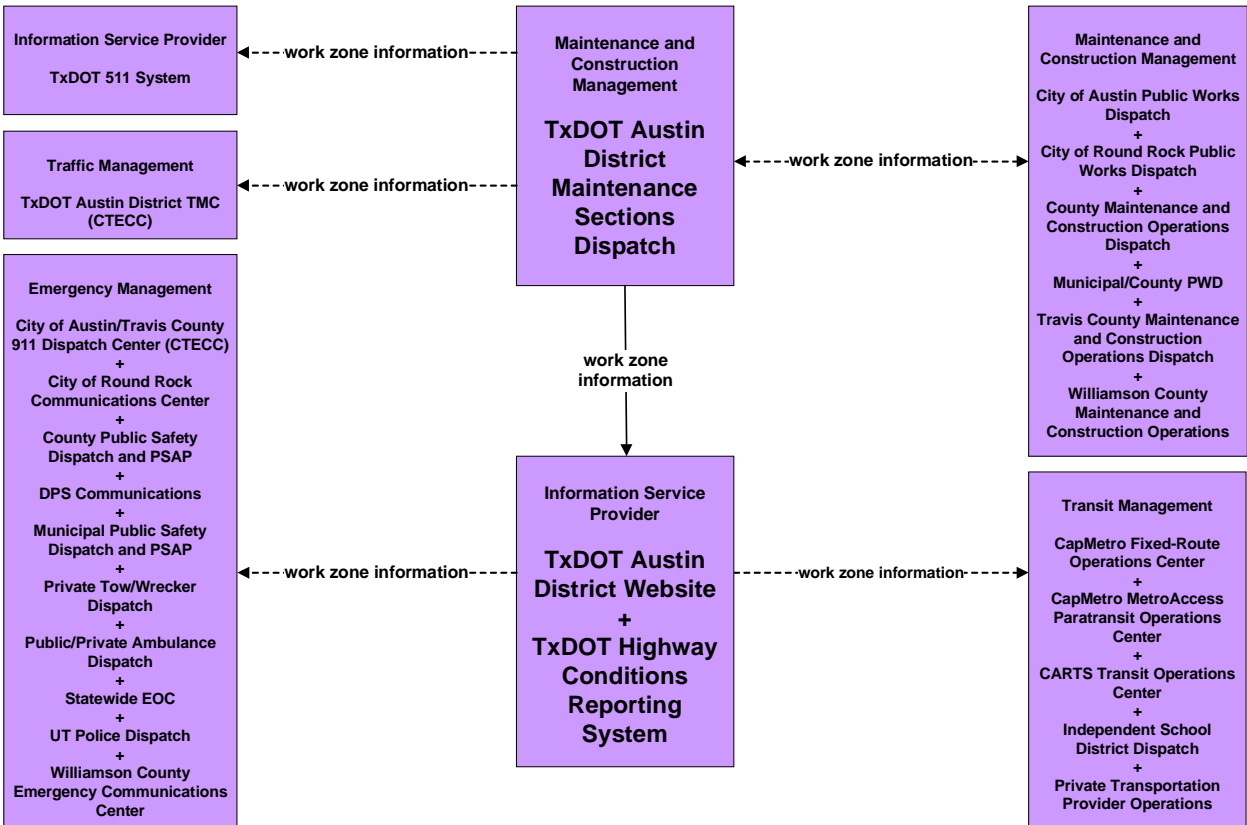
**MC07 - Roadway Maintenance and Construction
County Maintenance and Construction**



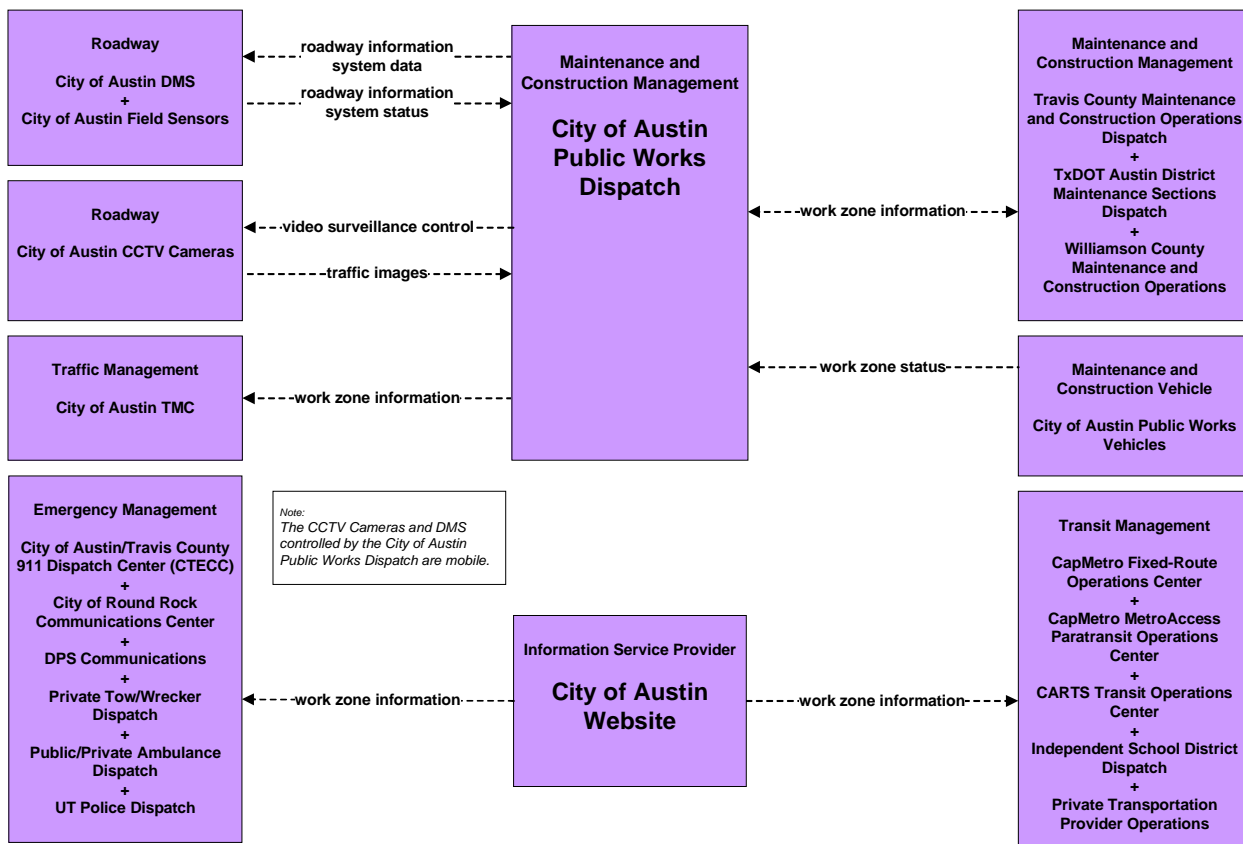
**MC08 - Work Zone Management
TxDOT Austin District Maintenance Sections**



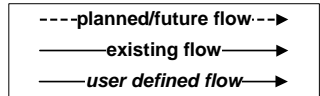
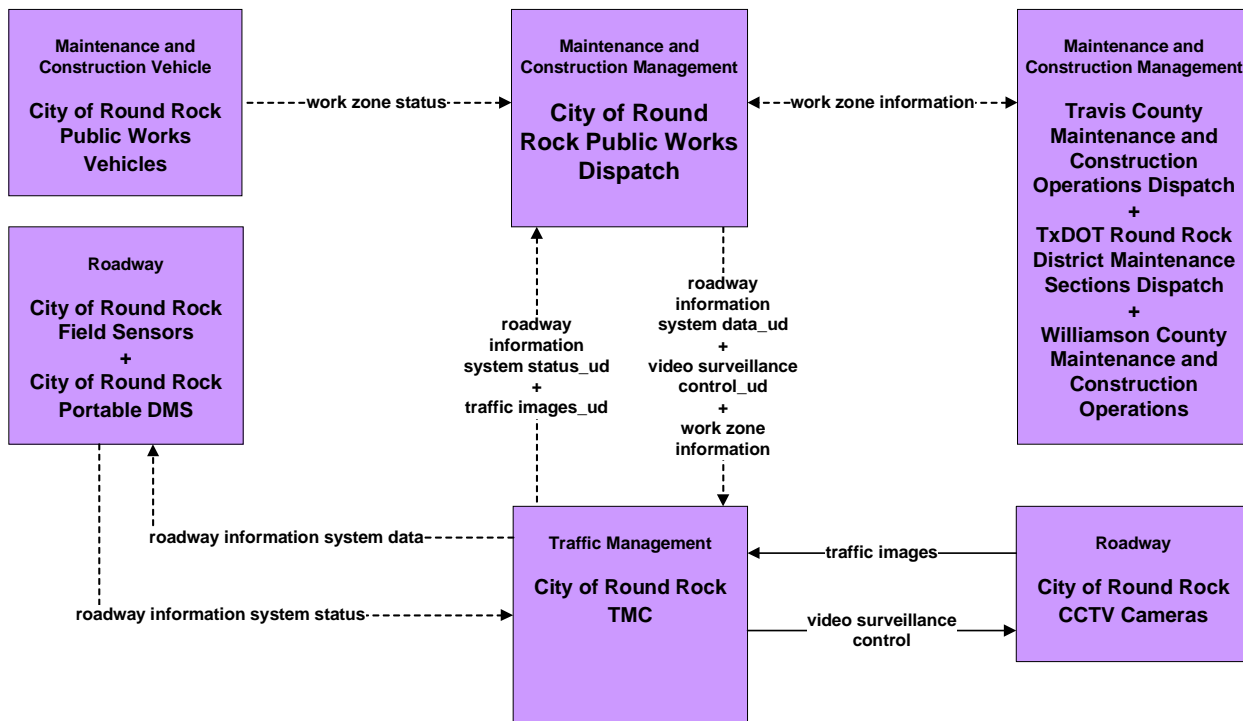
**MC08 – Work Zone Management
TxDOT Austin District Work Zone Information Dissemination**



MC08 – Work Zone Management
City of Austin Public Works Dispatch

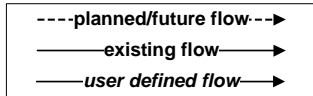
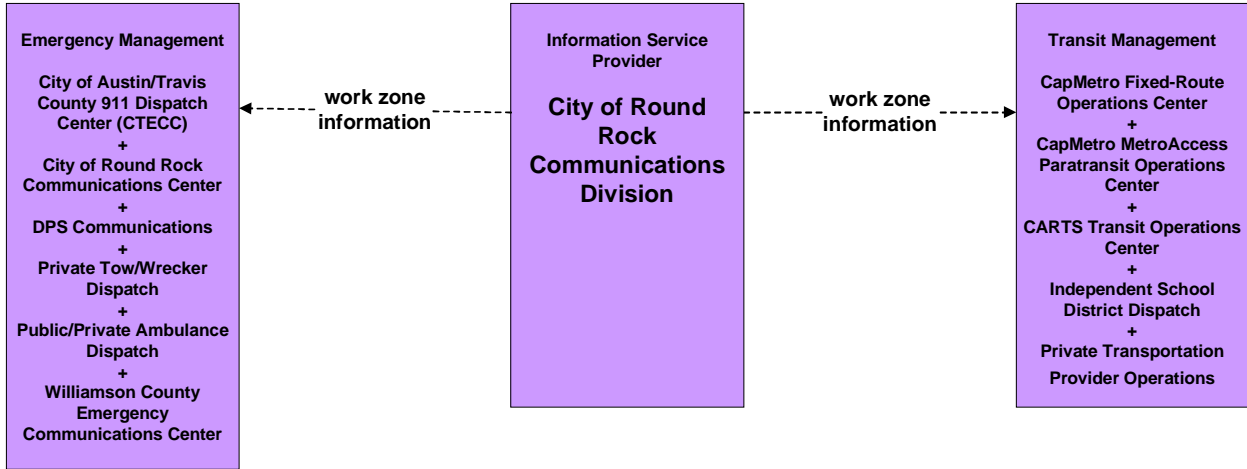


MC08 – Work Zone Management
City of Round Rock Public Works Dispatch (1 of 2)

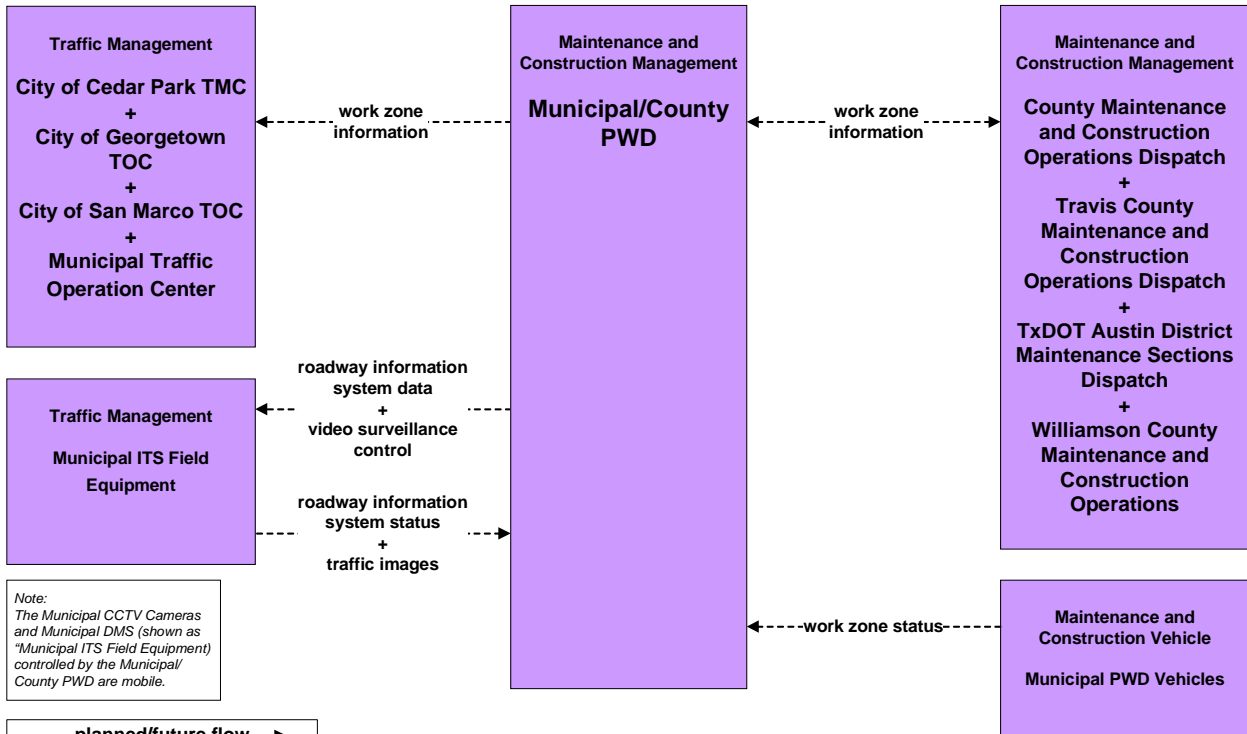


*Note:
The CCTV Cameras controlled by the City of Round Rock TMC are mobile.*

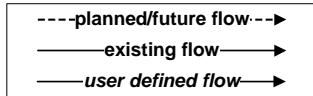
MC08 – Work Zone Management
 City of Round Rock Public Works Dispatch (2 of 2)



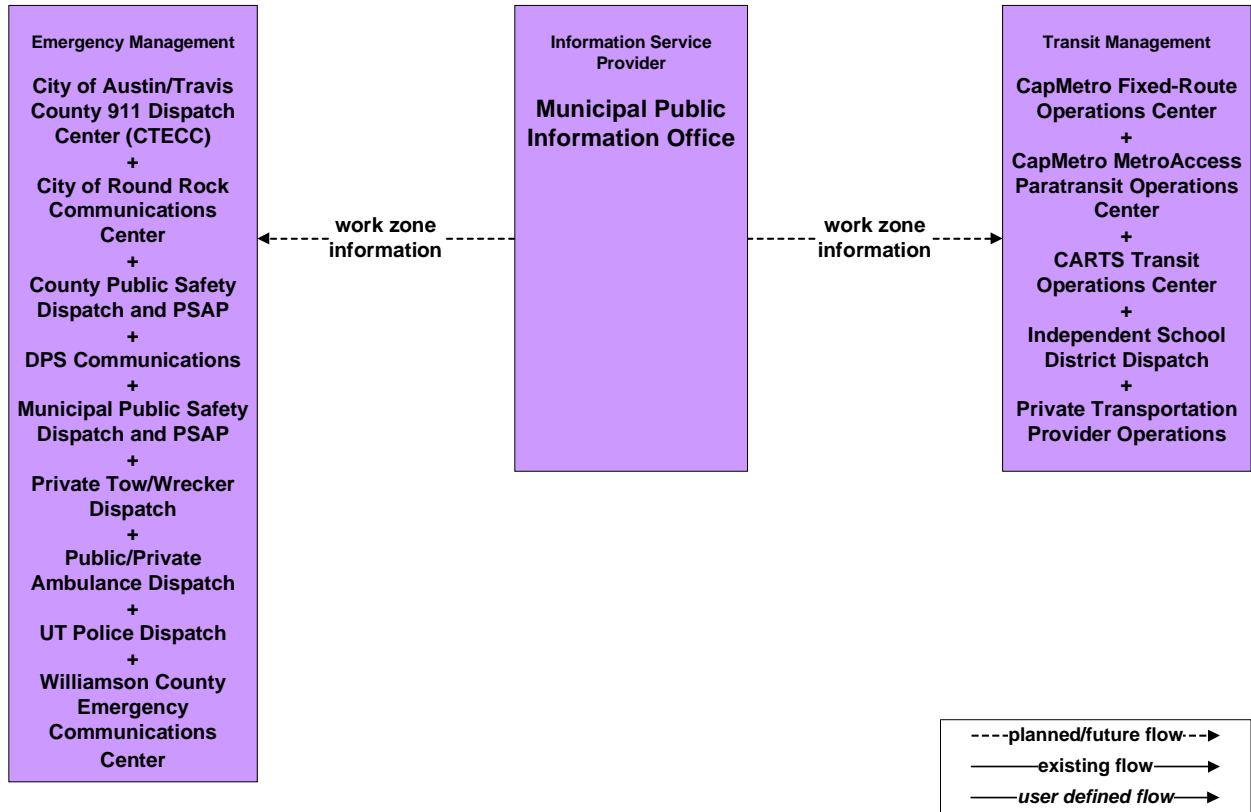
MC08 – Work Zone Management
 Municipal Public Works Department (1 of 2)



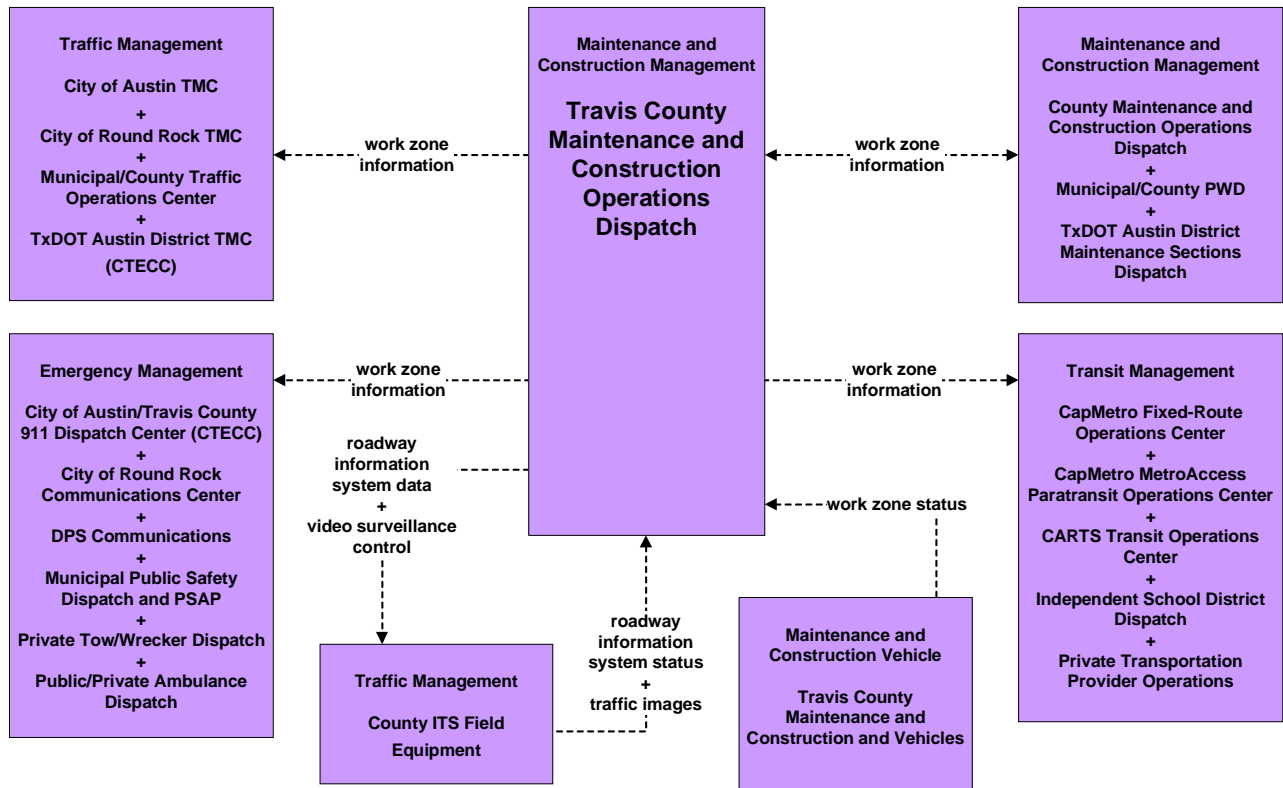
*Note:
 The Municipal CCTV Cameras and Municipal DMS (shown as "Municipal ITS Field Equipment") controlled by the Municipal/County PWD are mobile.*



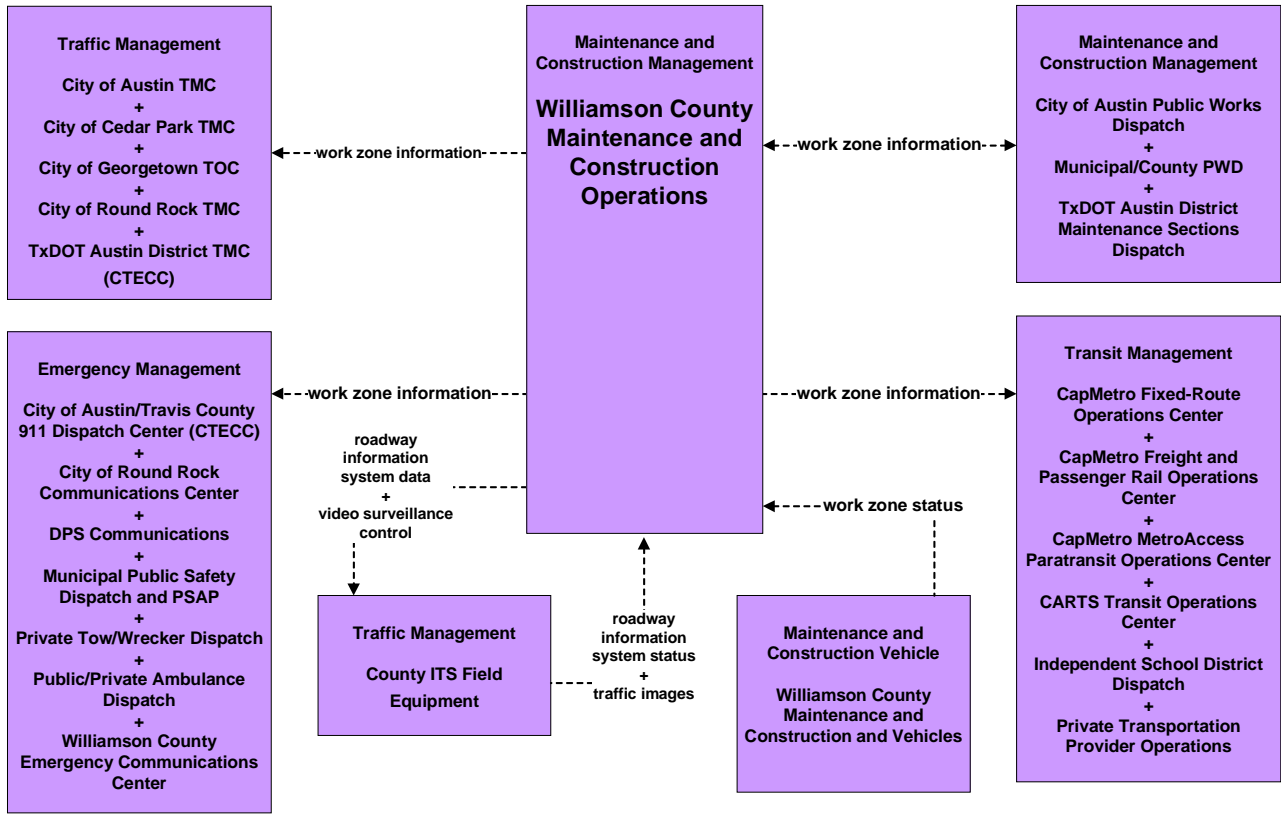
MC08 – Work Zone Management
Municipal Public Works Department (2 of 2)



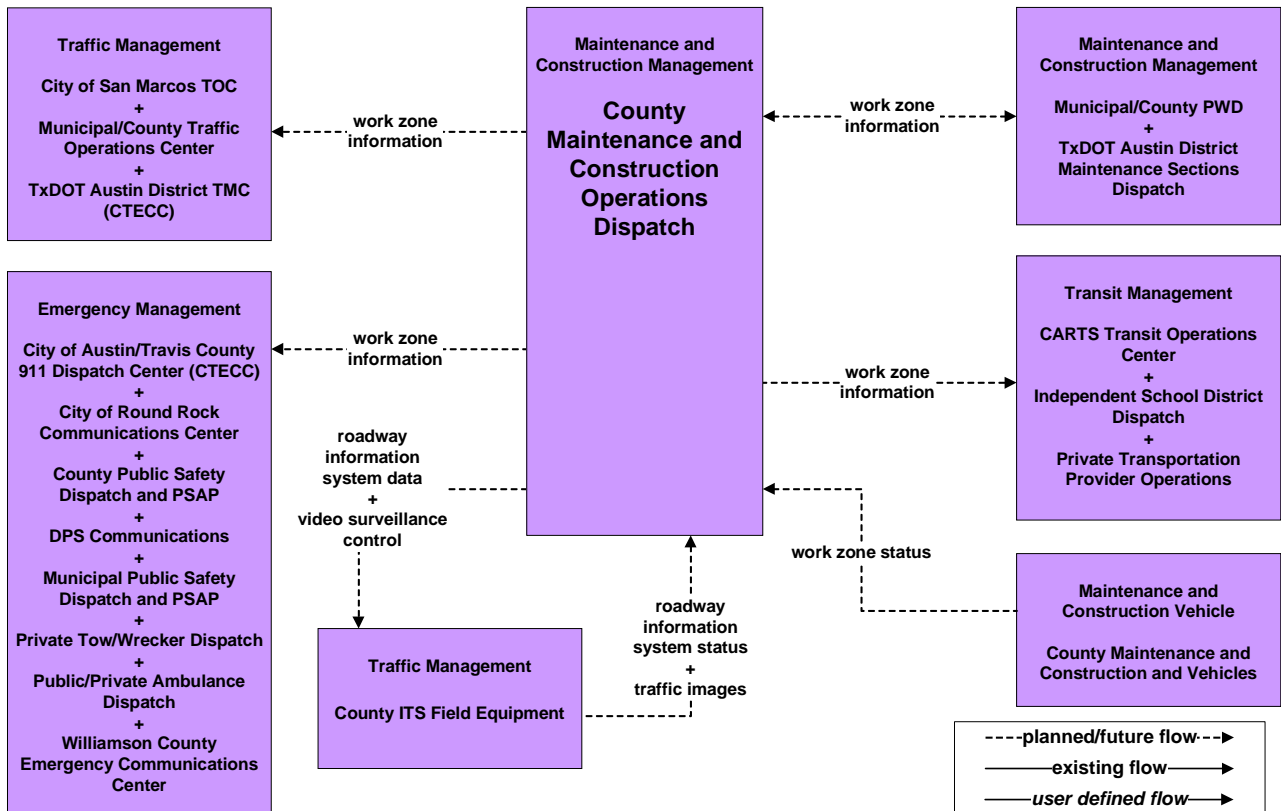
MC08 – Work Zone Management
Travis County Maintenance and Construction



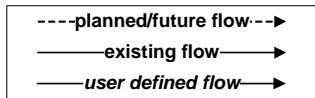
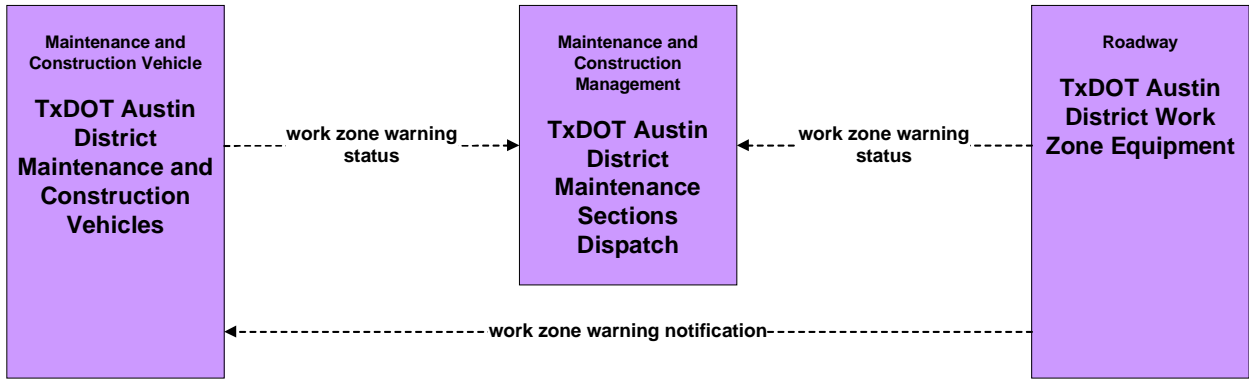
MC08 – Work Zone Management
Williamson County Maintenance and Construction



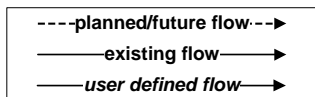
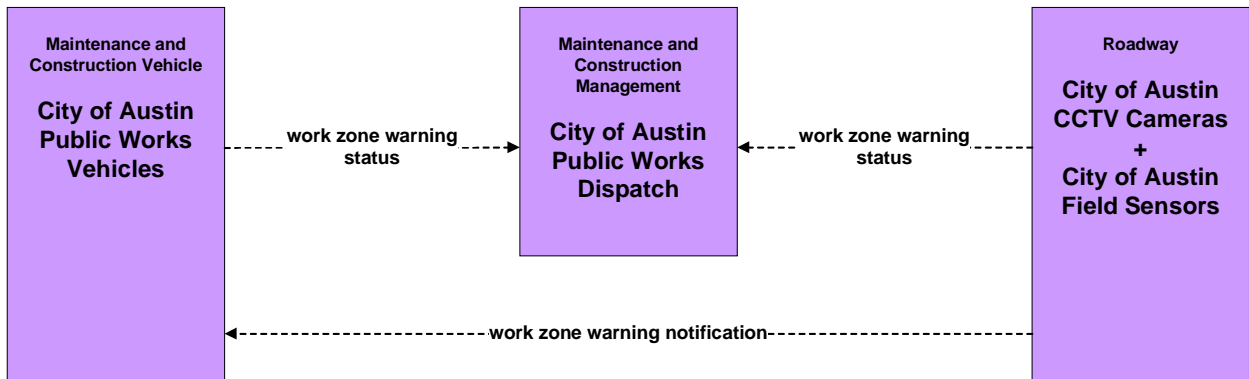
MC08 – Work Zone Management
County Maintenance and Construction



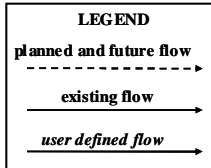
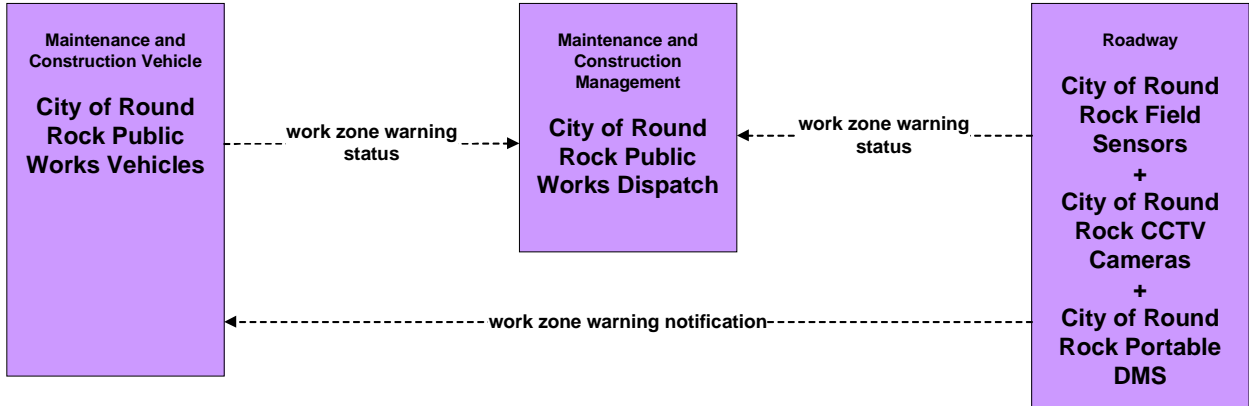
**MC09 - Work Zone Safety Monitoring
 TxDOT Austin District Maintenance Sections**



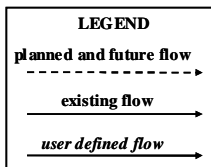
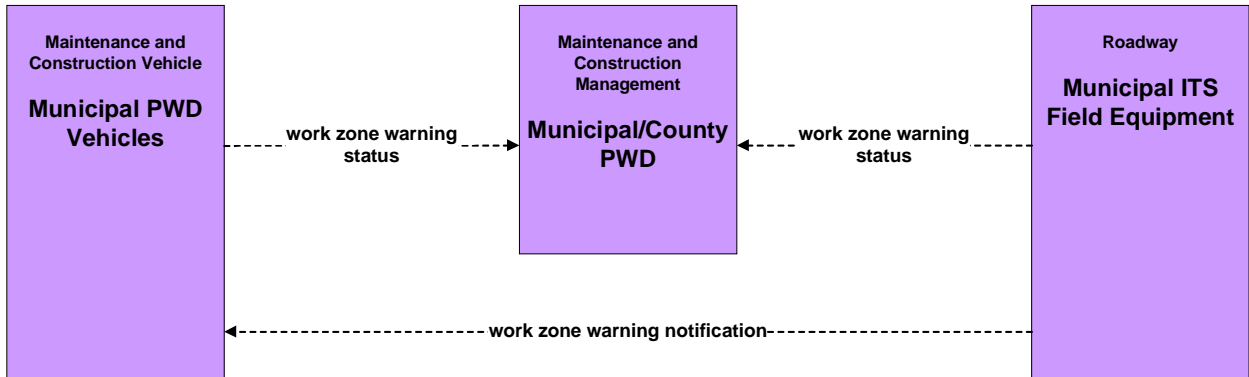
**MC09 - Work Zone Safety Monitoring
 City of Austin Public Works**



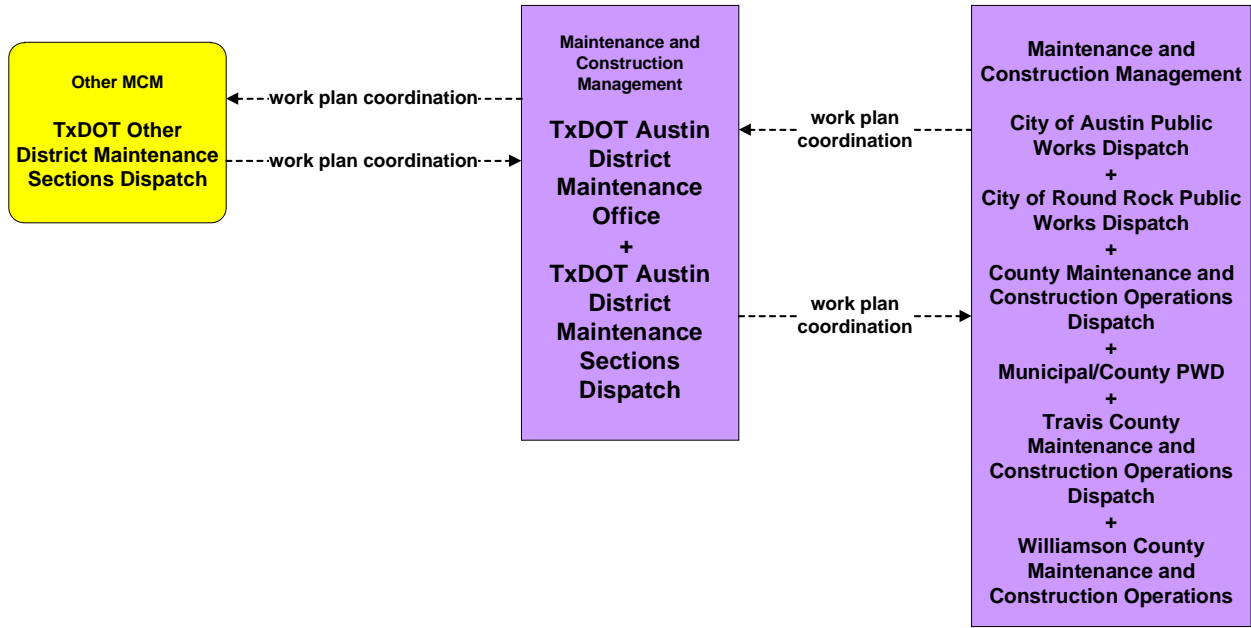
**MC09 - Work Zone Safety Monitoring
City of Round Rock Public Works**



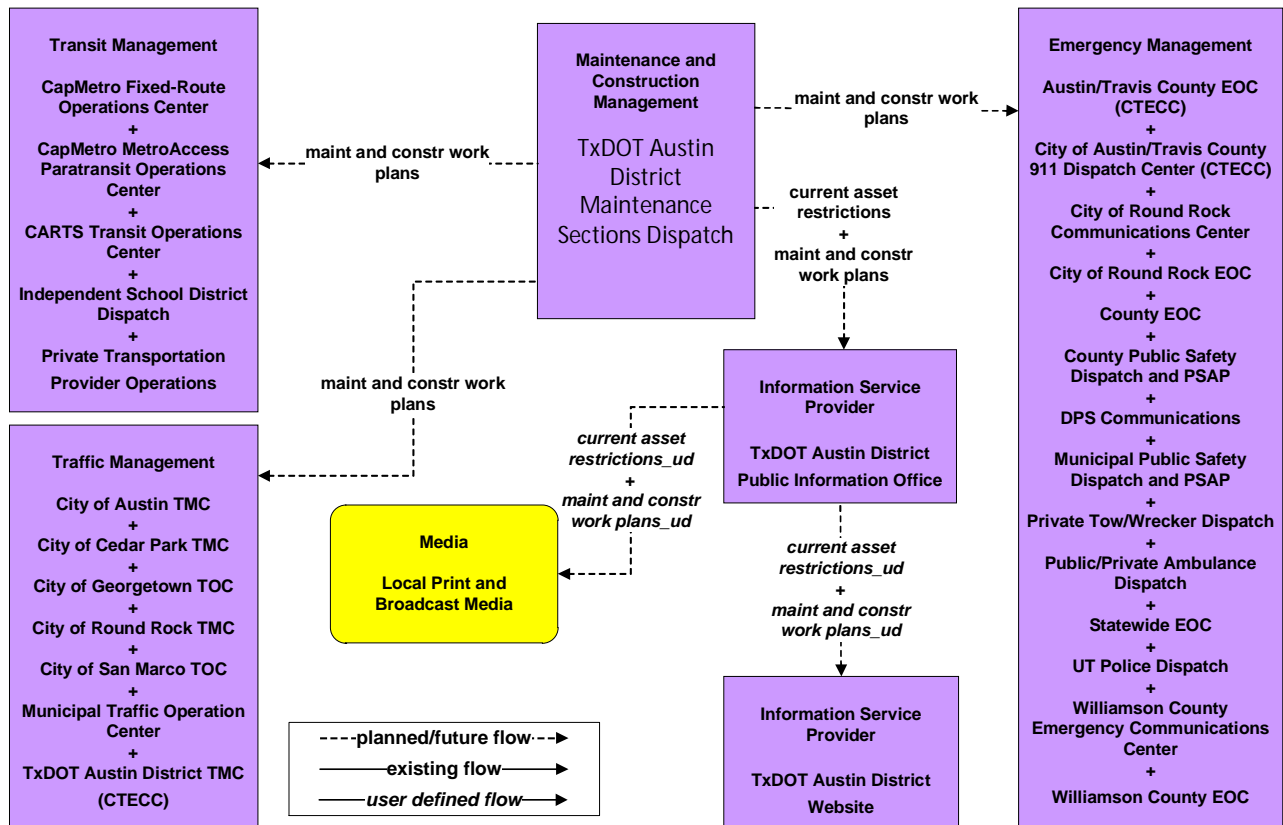
**MC09 - Work Zone Safety Monitoring
Municipal Public Works Department**



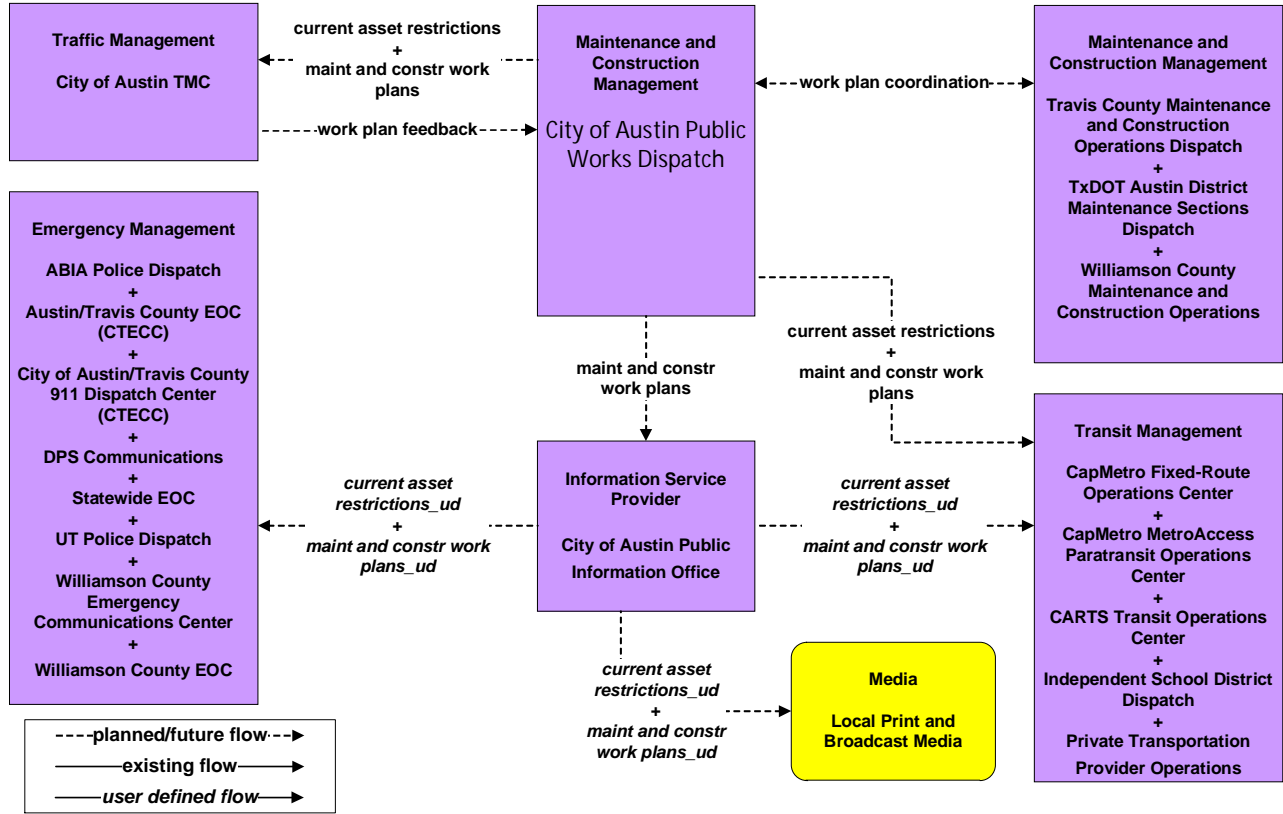
**MC10 - Maintenance and Construction Activity Coordination
Activity Coordination - TxDOT (1 of 2)**



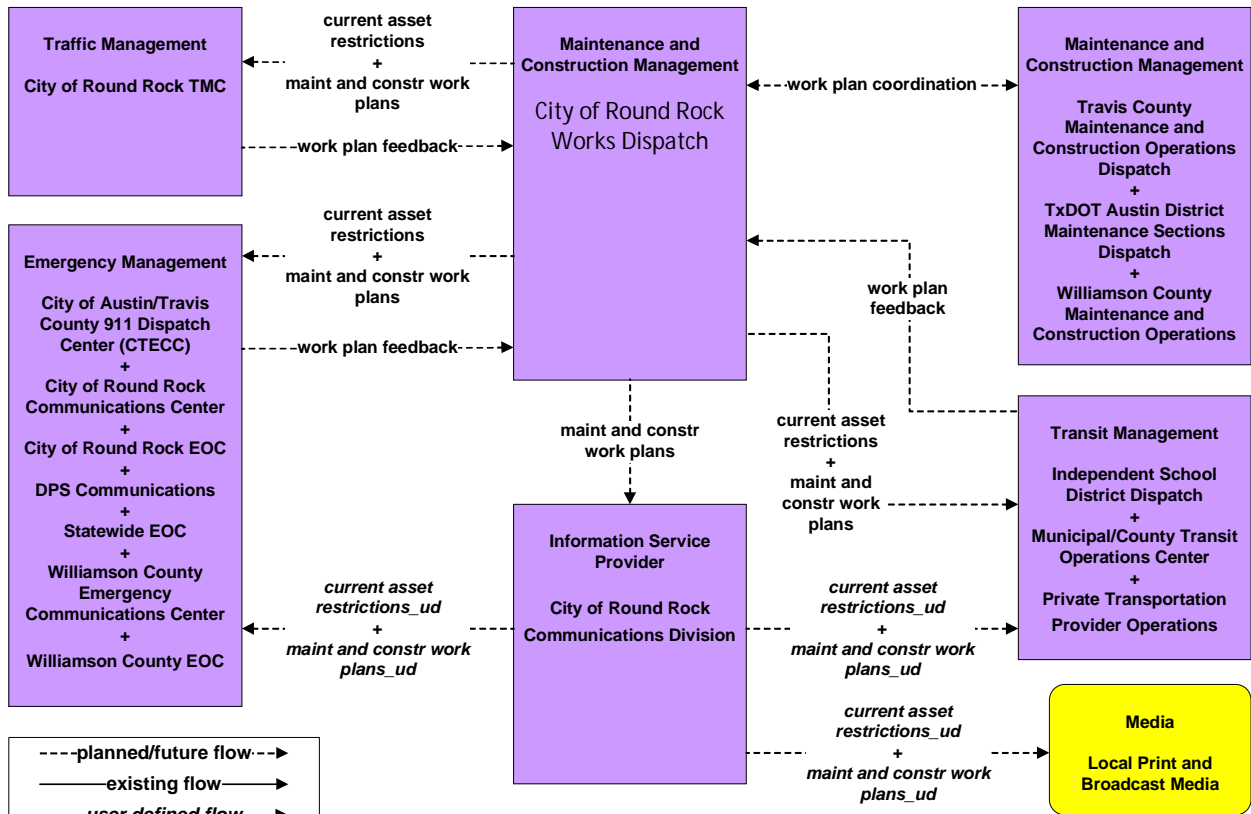
**MC10 – Maintenance and Construction Activity Coordination
Activity Coordination - TxDOT (2 of 2)**



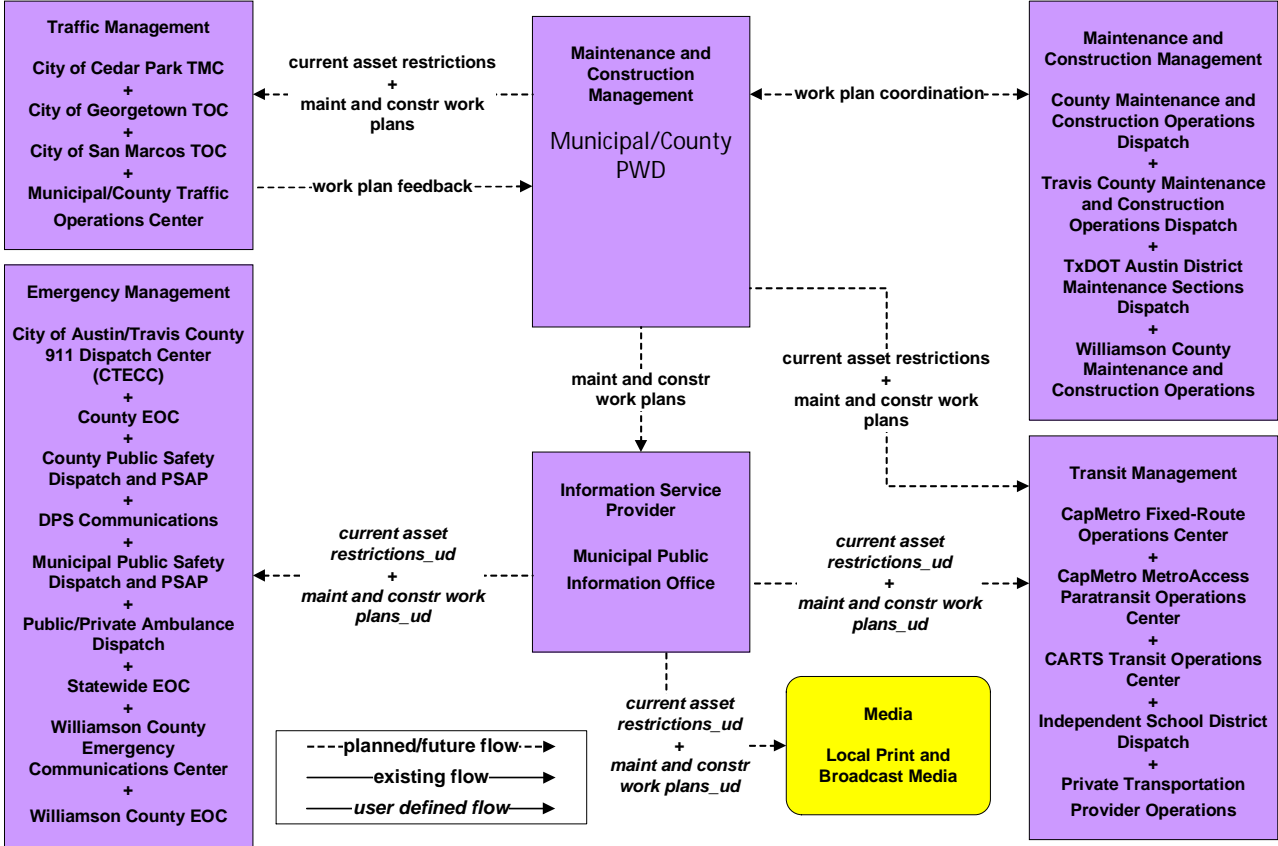
MC10 – Maintenance and Construction Activity Coordination
City of Austin Public Works



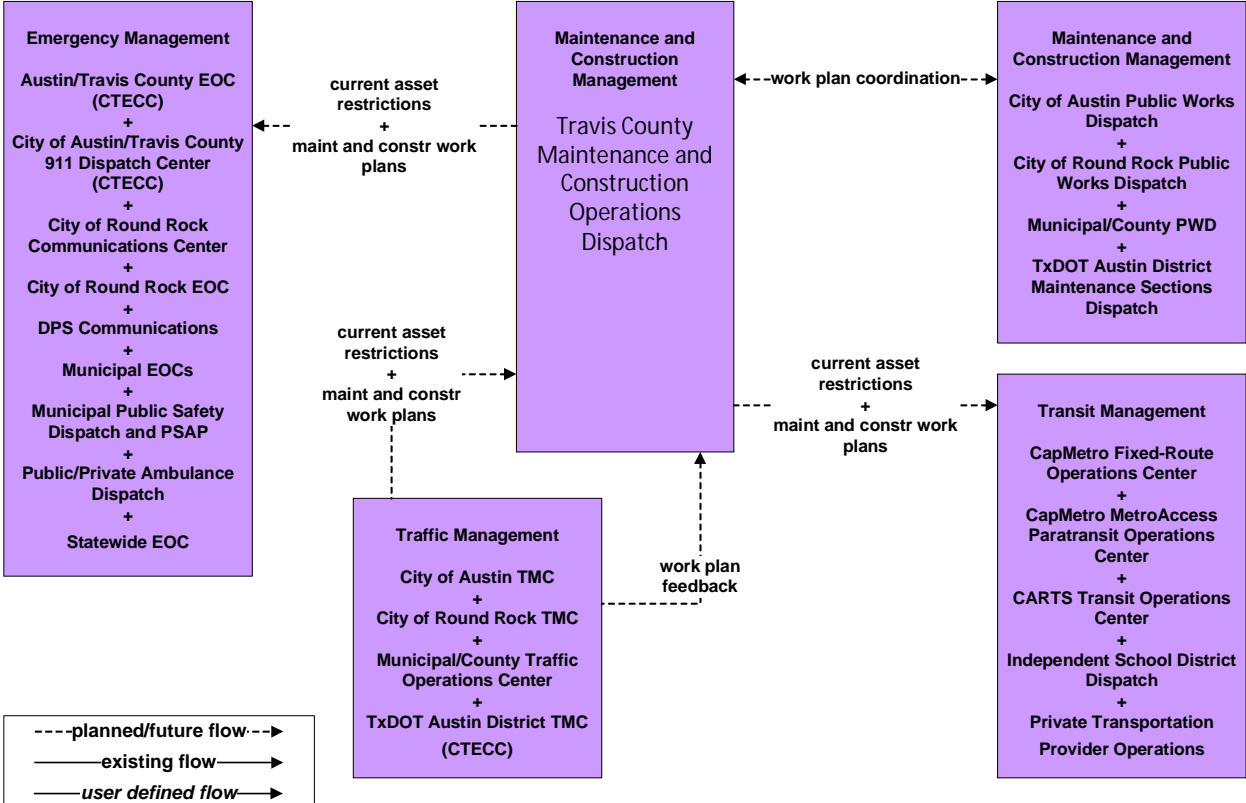
MC10 – Maintenance and Construction Activity Coordination
City of Round Rock Public Works



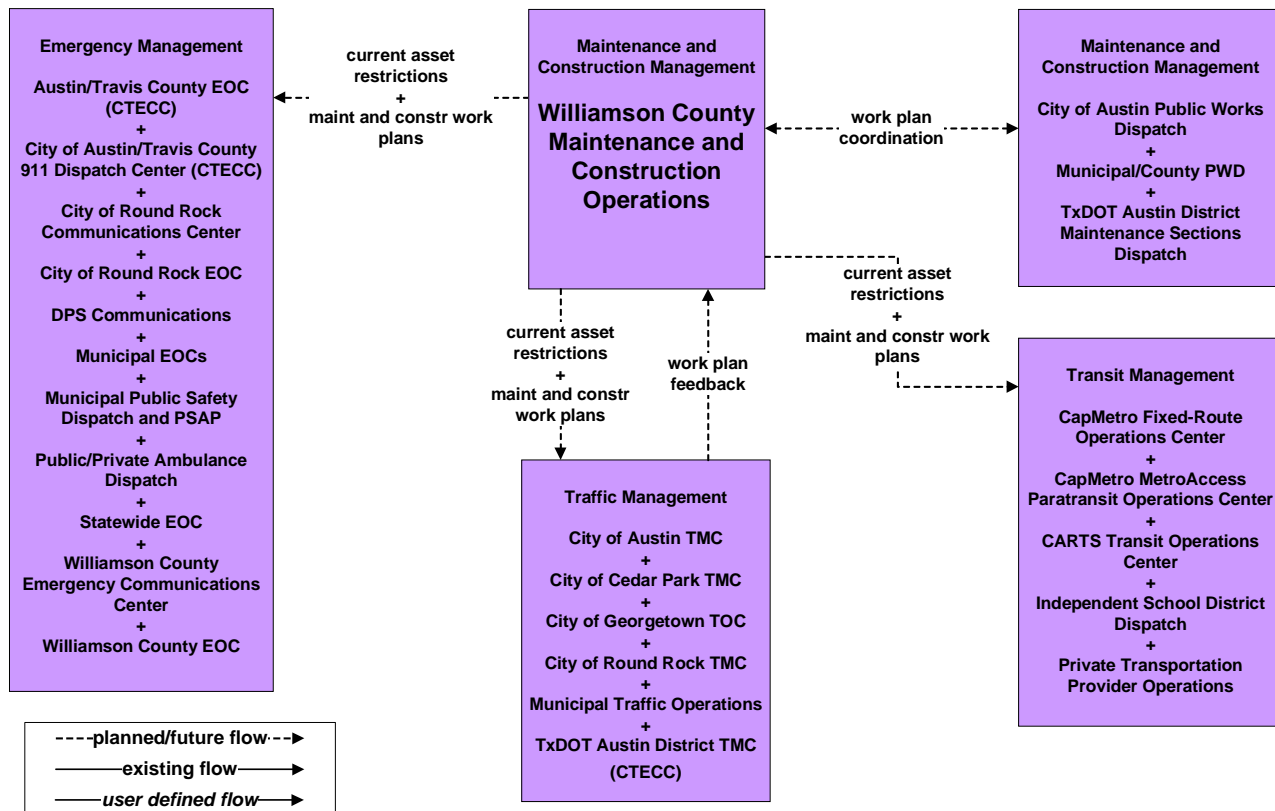
MC10 – Maintenance and Construction Activity Coordination
Municipal Public Works Department



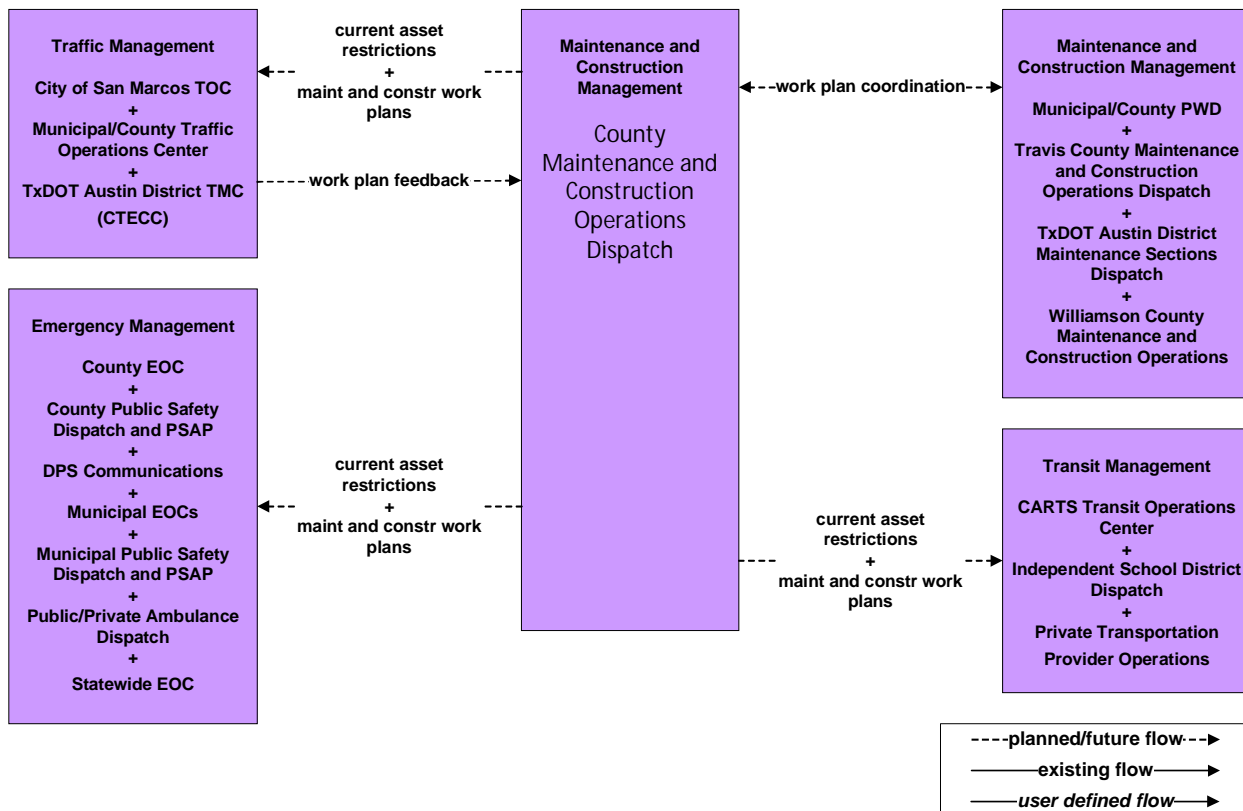
MC10 – Maintenance and Construction Activity Coordination
Travis County Maintenance and Construction



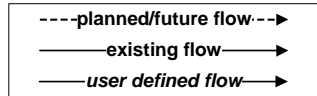
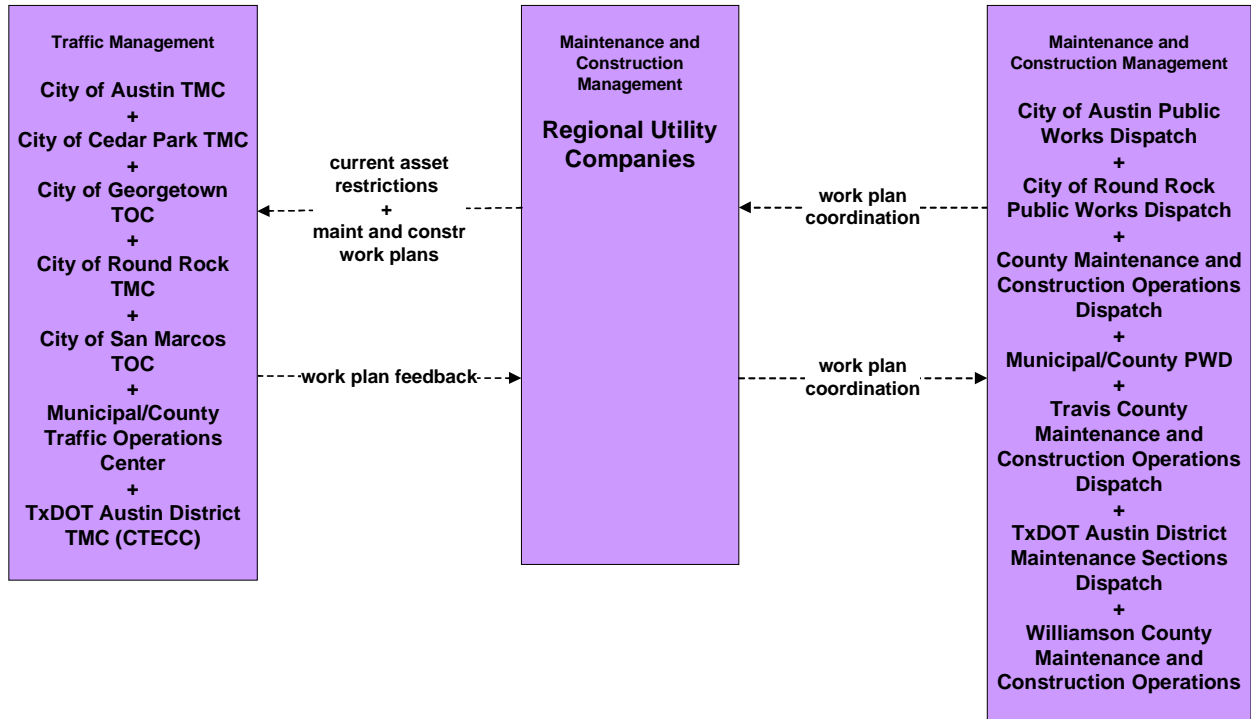
MC10 – Maintenance and Construction Activity Coordination
Williamson County Maintenance and Construction



MC10 – Maintenance and Construction Activity Coordination
County Maintenance and Construction



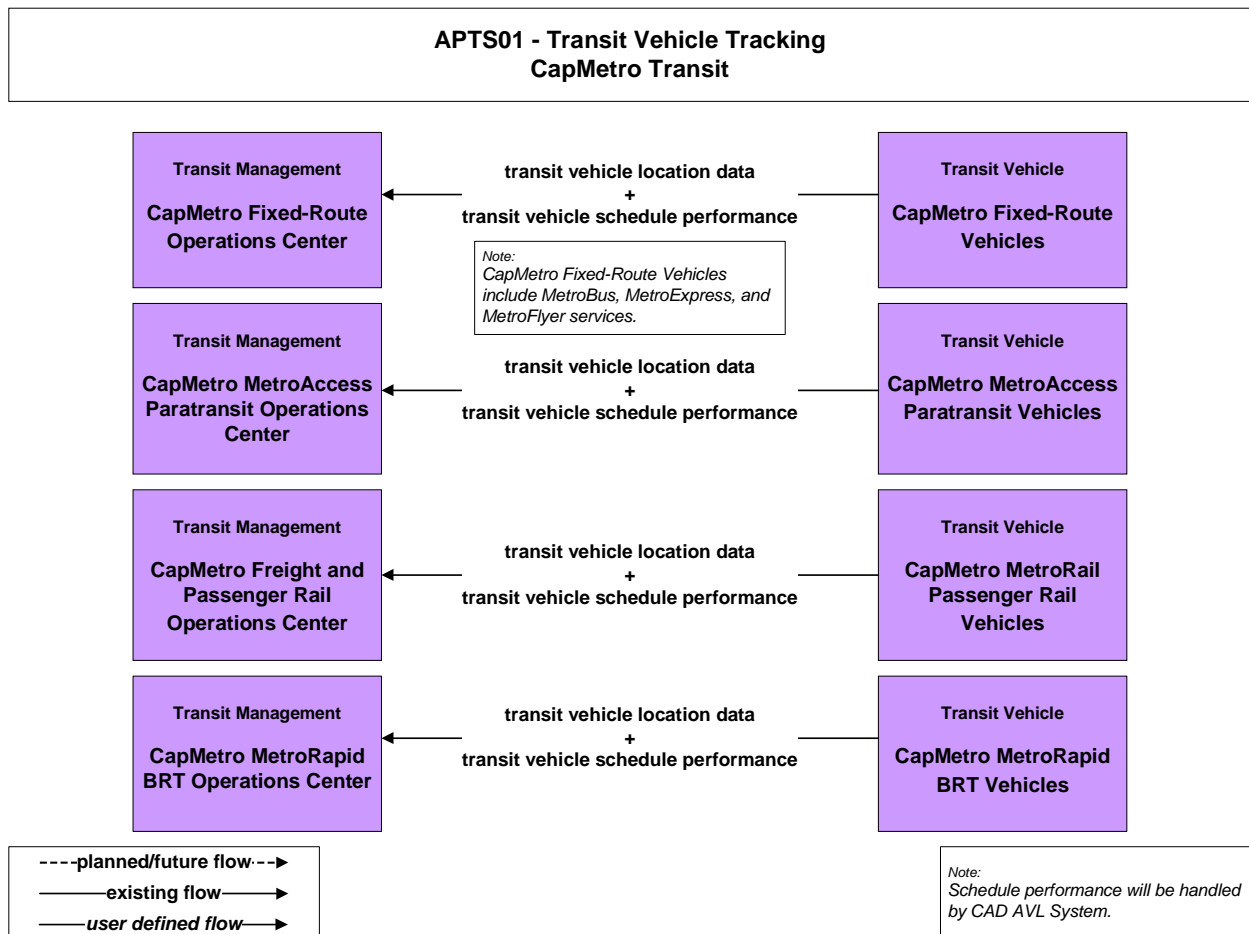
**MC10 - Maintenance and Construction Activity Coordination
Regional Utility Companies**



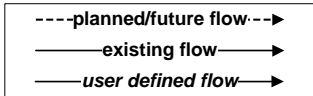
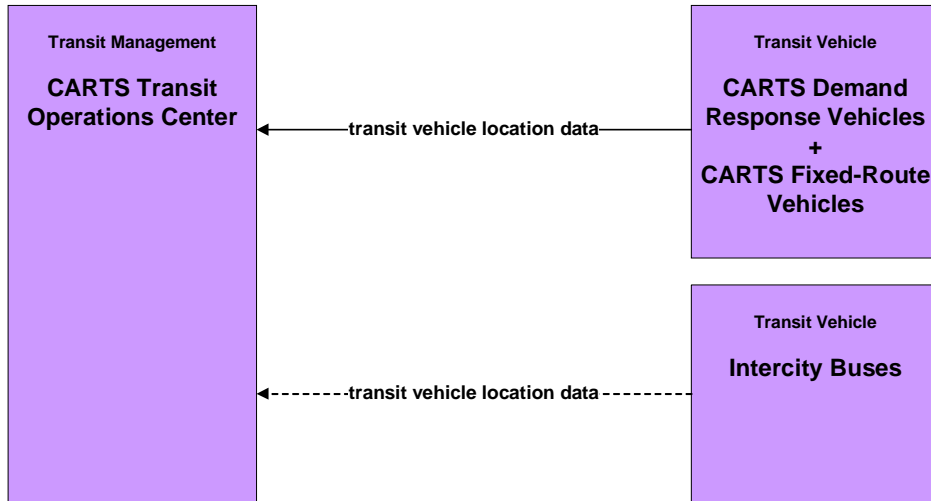
Austin Regional ITS Architecture

Customized ITS Service Package Diagrams

Advanced Public Transportation Systems (APTS)

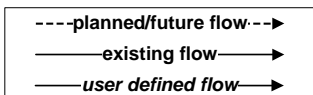
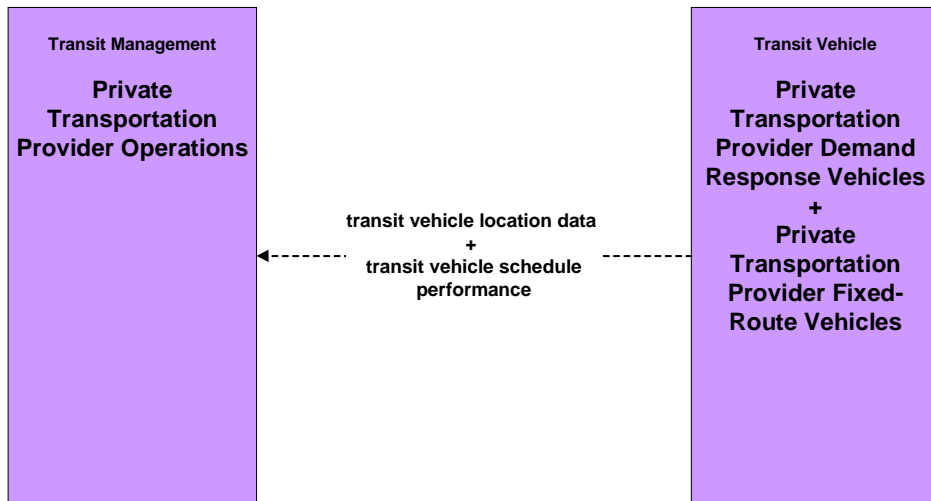


**APTS01 - Transit Vehicle Tracking
CARTS Transit**

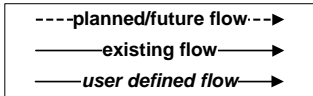
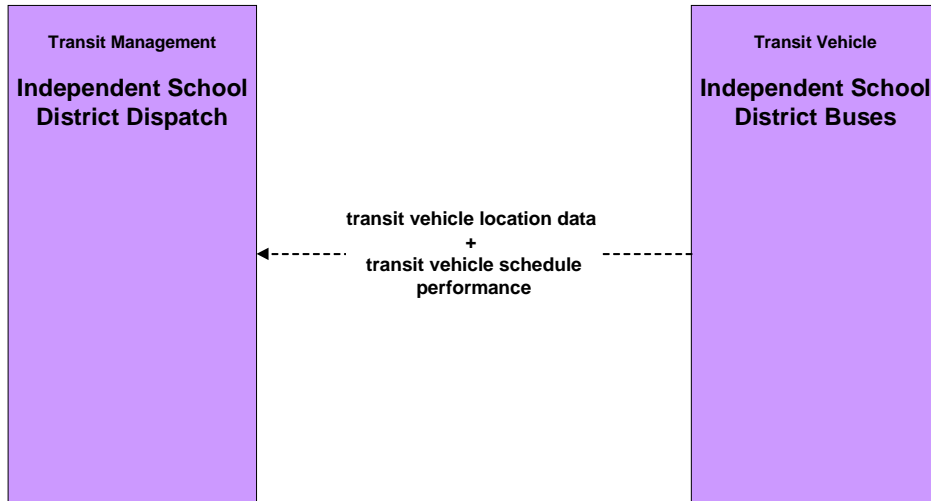


*Note:
Schedule performance will be handled by CAD
AVL System.*

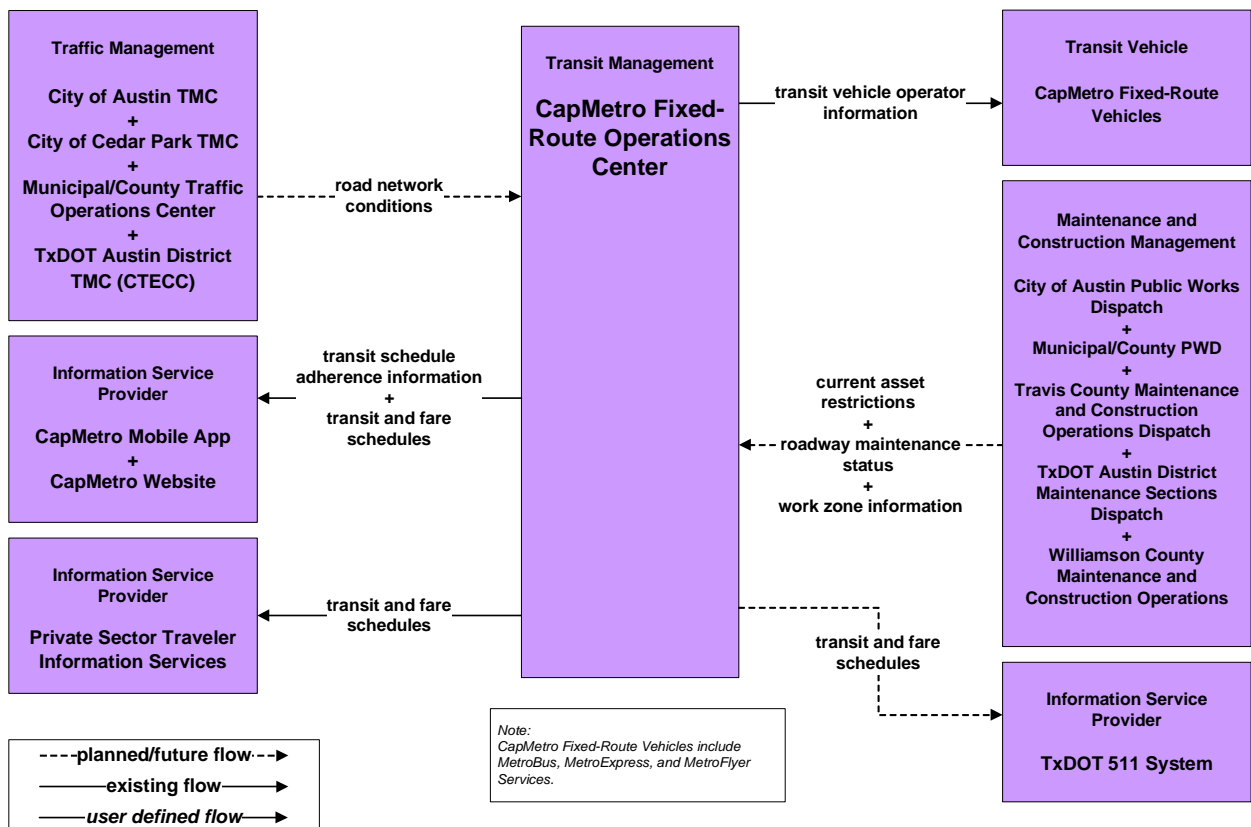
**APTS01 - Transit Vehicle Tracking
Private Transportation Operations**



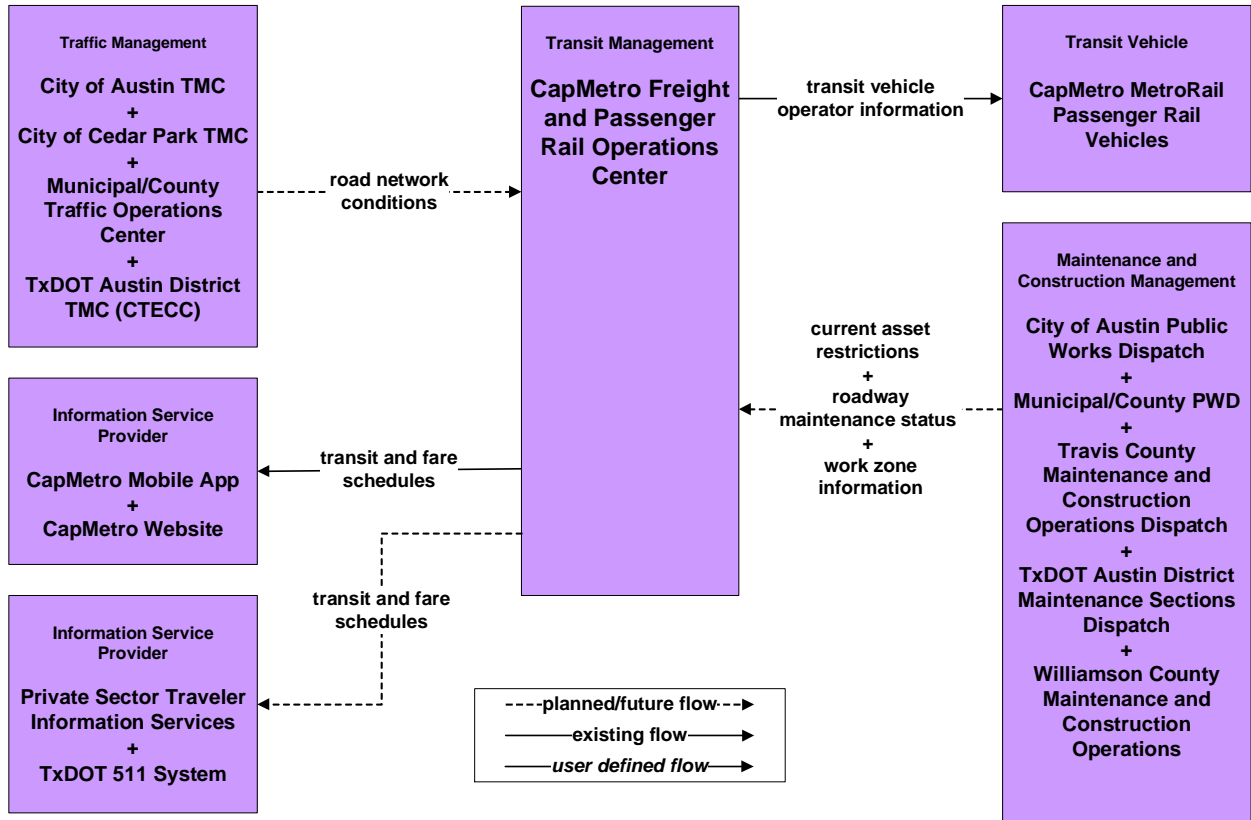
**APTS01 - Transit Vehicle Tracking
Independent School District**



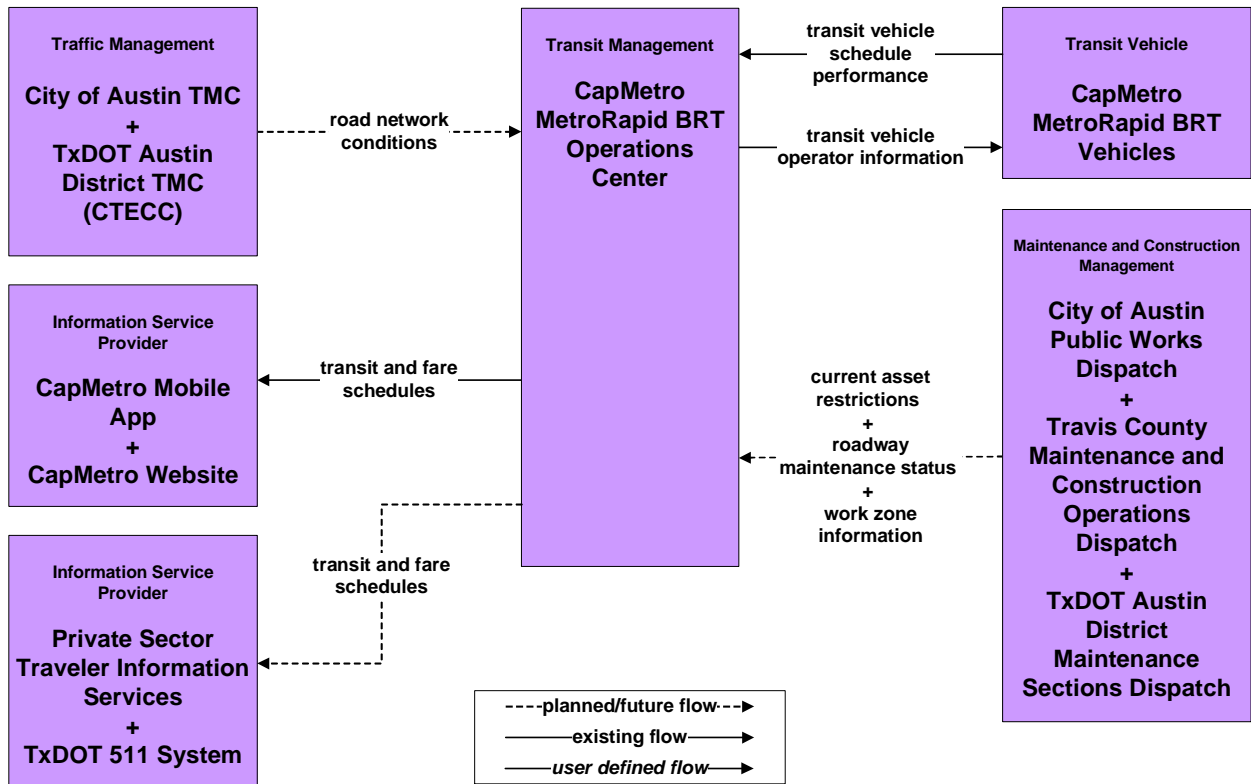
**APTS02 - Transit Fixed-Route Operations
CapMetro Fixed-Route**



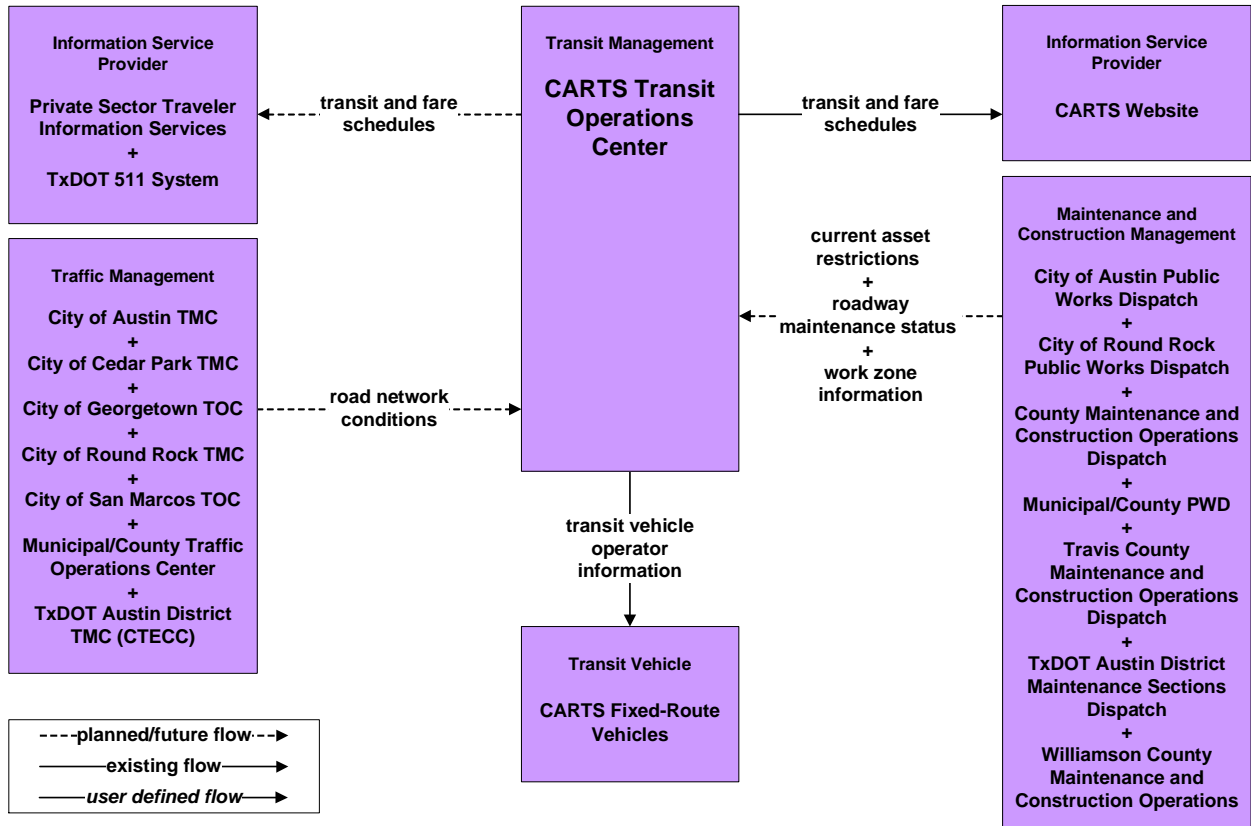
**APTS02 - Transit Fixed-Route Operations
CapMetro MetroRail Passenger Rail**



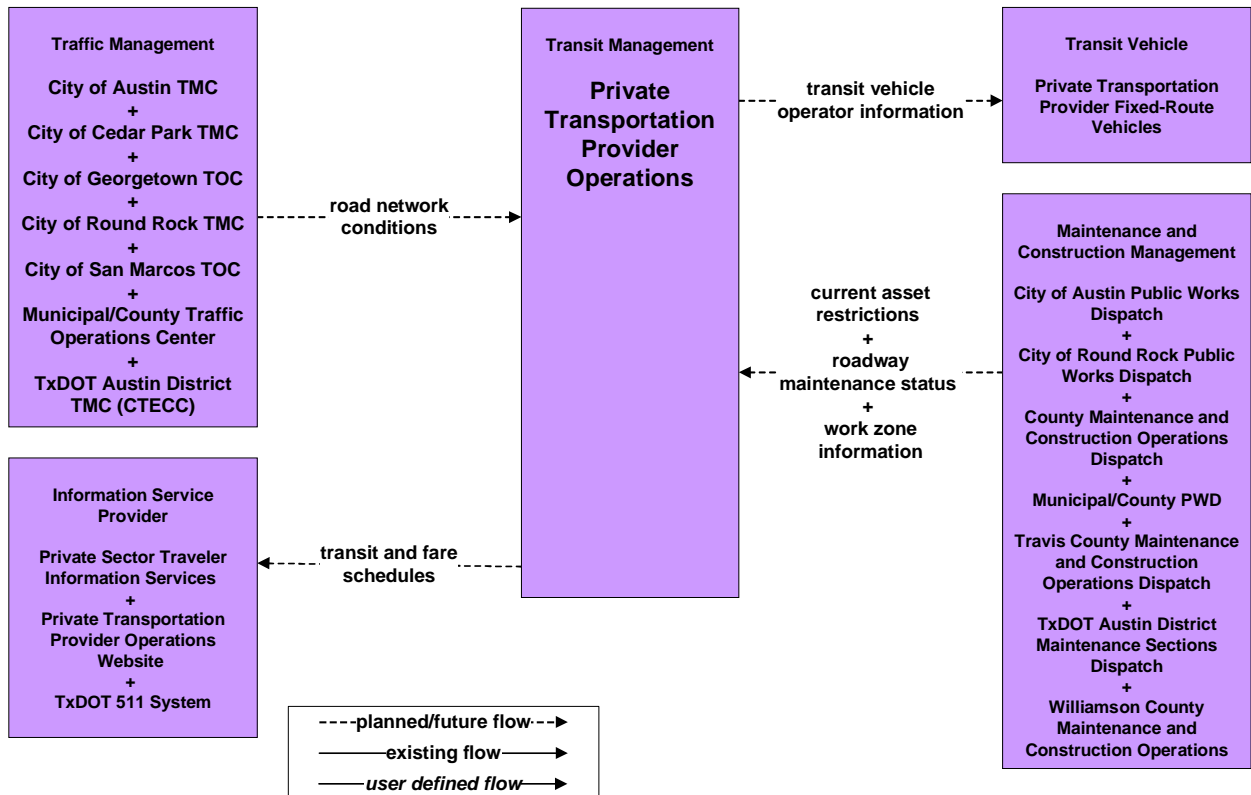
**APTS02 - Transit Fixed-Route Operations
CapMetro MetroRapid Bus Rapid Transit**



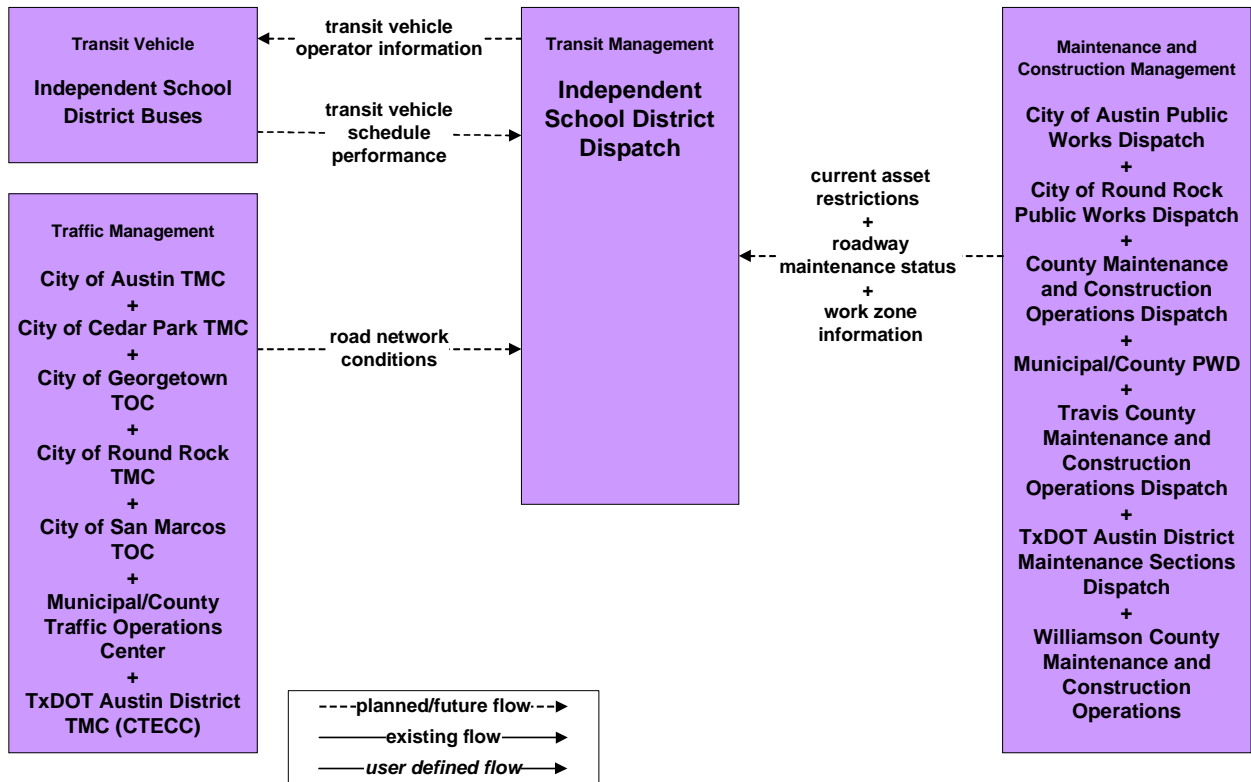
**APTS02 - Transit Fixed-Route Operations
CARTS Transit**



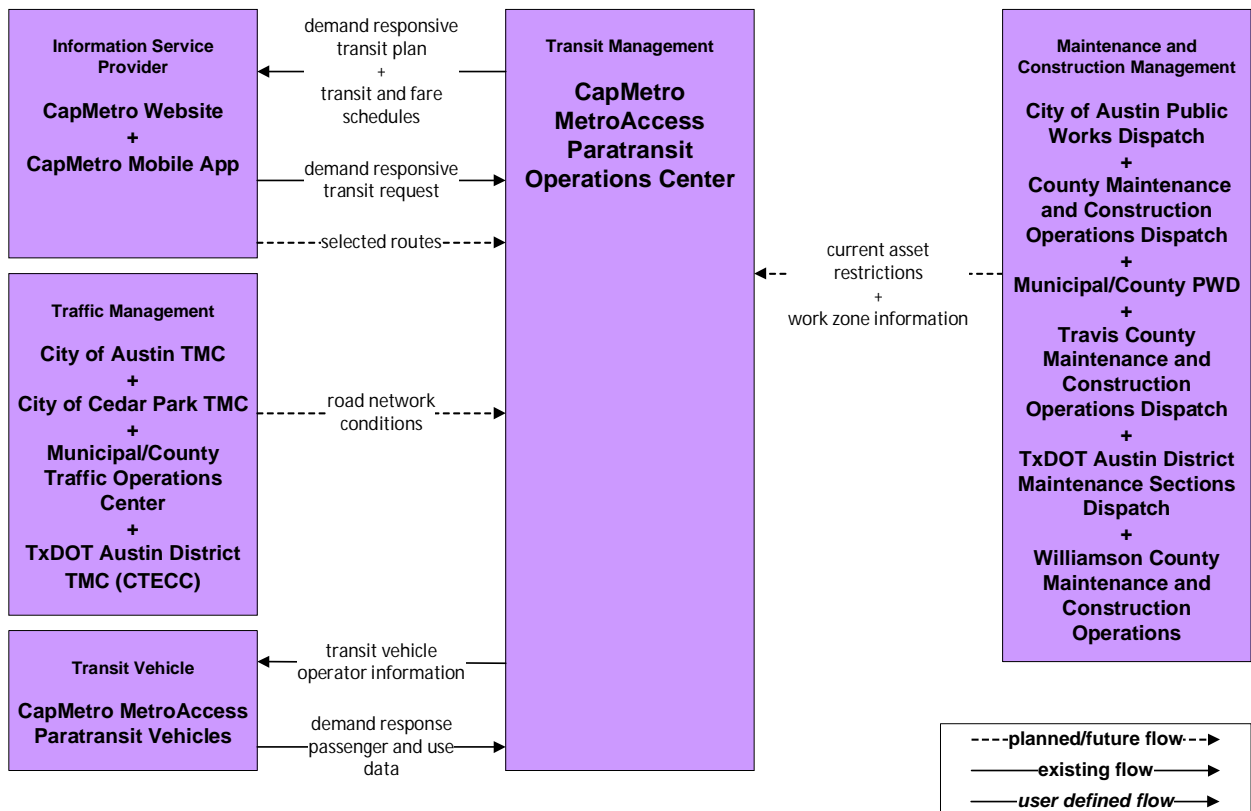
**APTS02 - Transit Fixed-Route Operations
Private Transportation Operations**



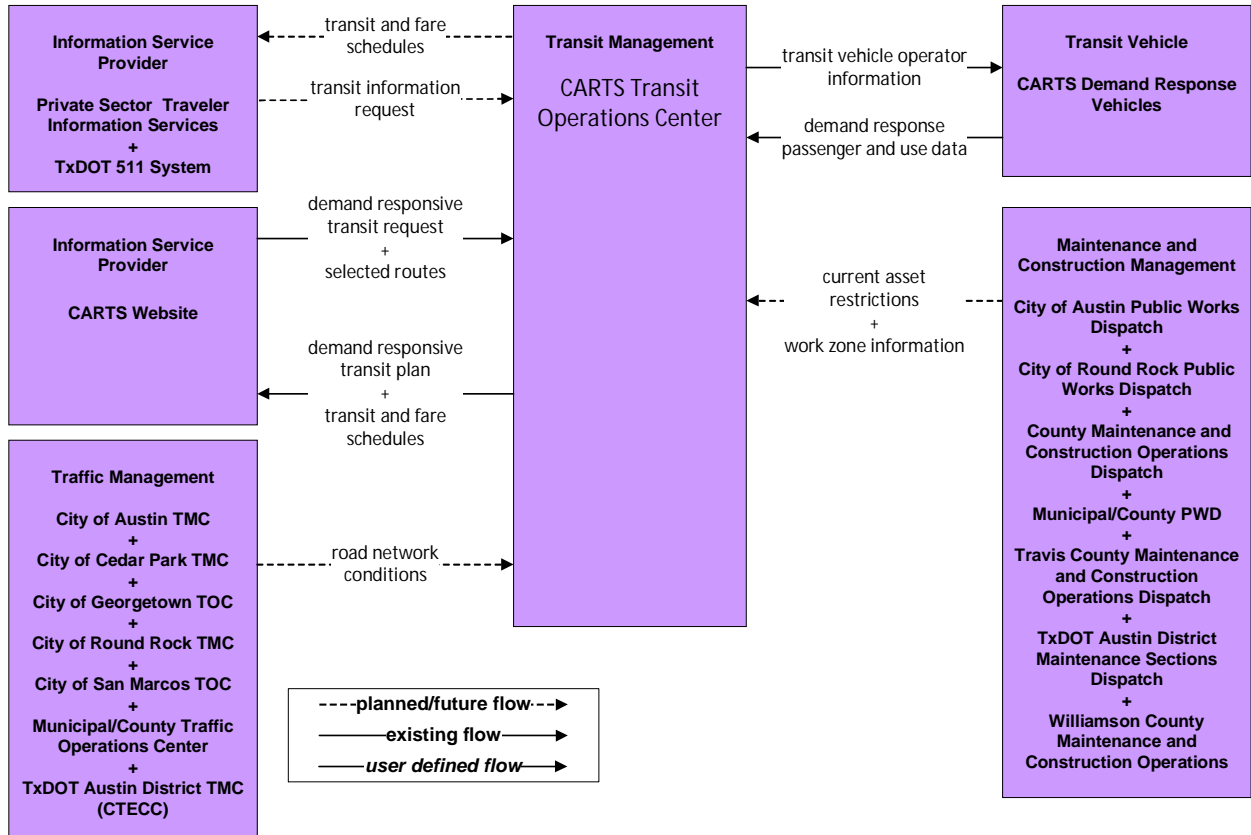
**APTS02 - Transit Fixed-Route Operations
Independent School Districts**



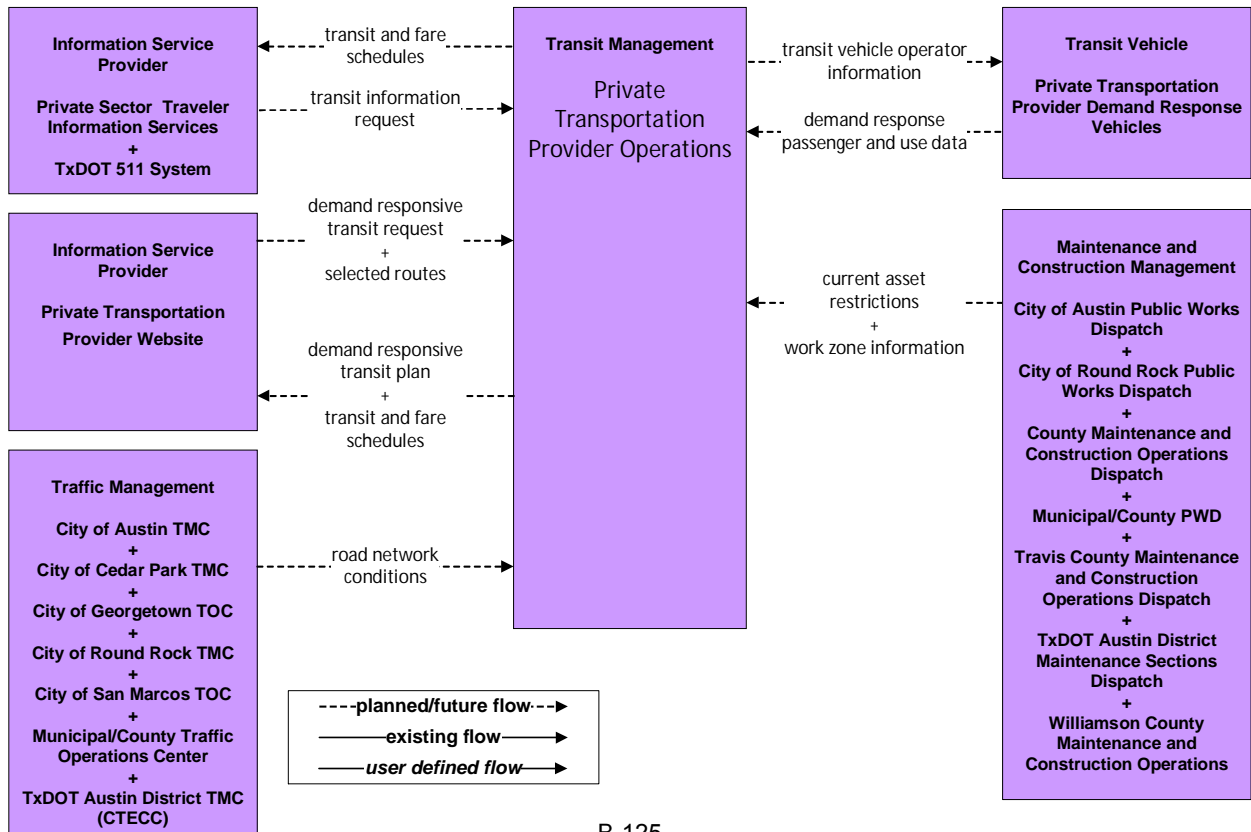
**APTS03 – Demand Response Transit Operations
CapMetro MetroAccess Paratransit**



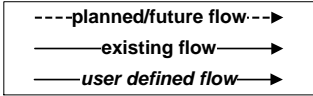
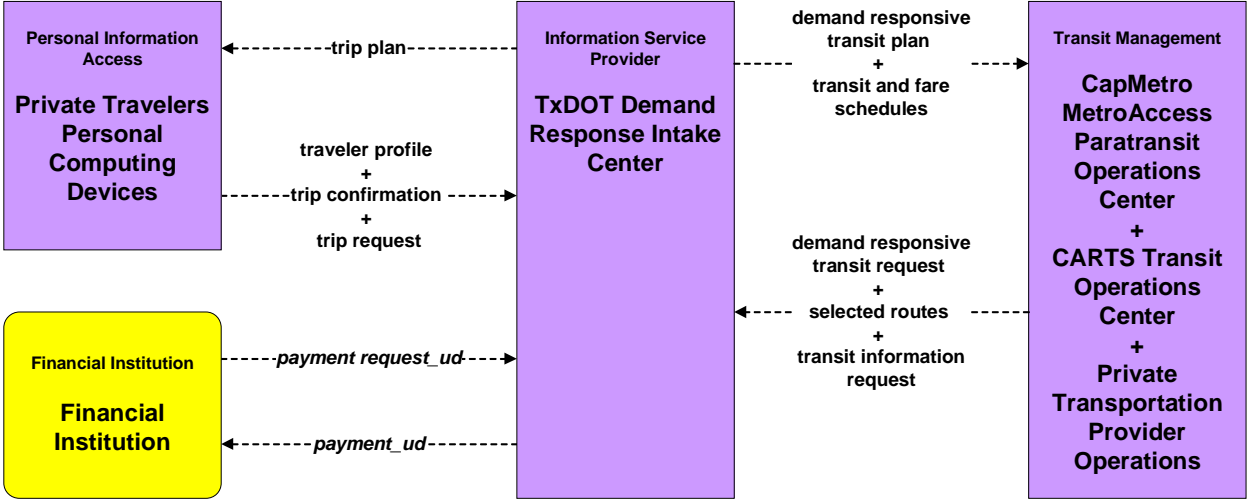
APTS03 – Demand Response Transit Operations
CARTS Transit



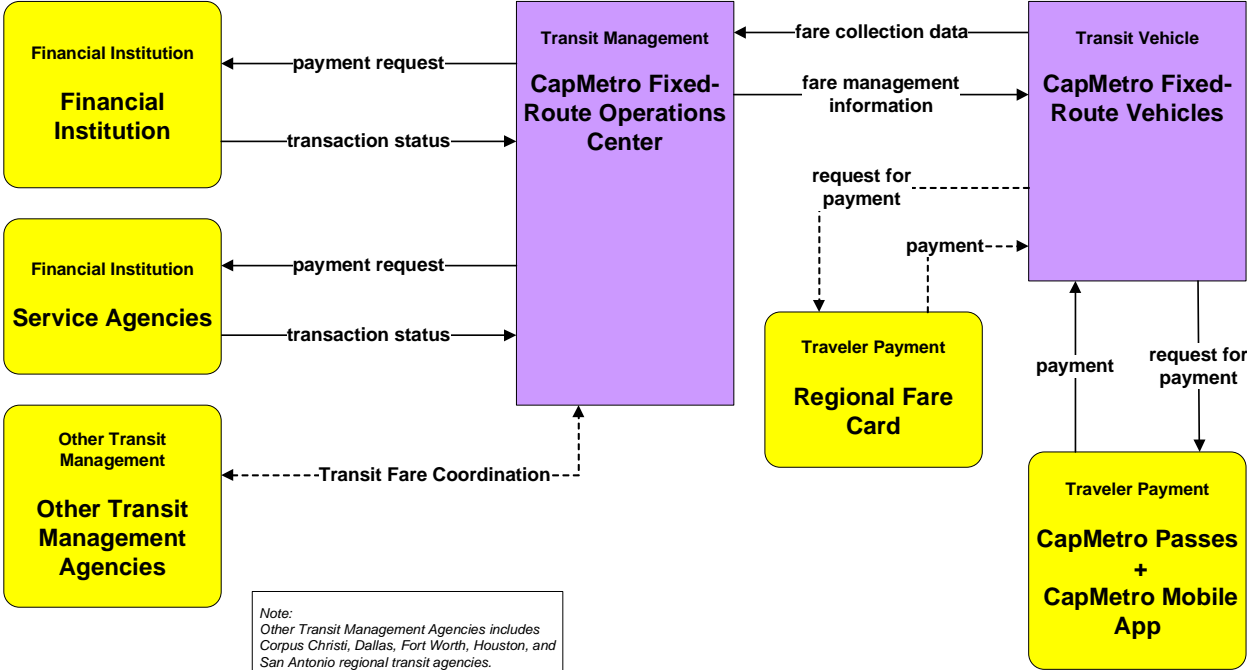
APTS03 – Demand Response Transit Operations
Private Transportation Operations



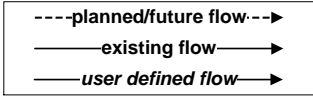
**APTS03 - Demand Response Transit Operations
TxDOT Demand Response Intake Center**



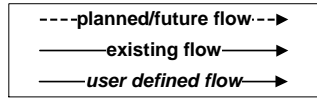
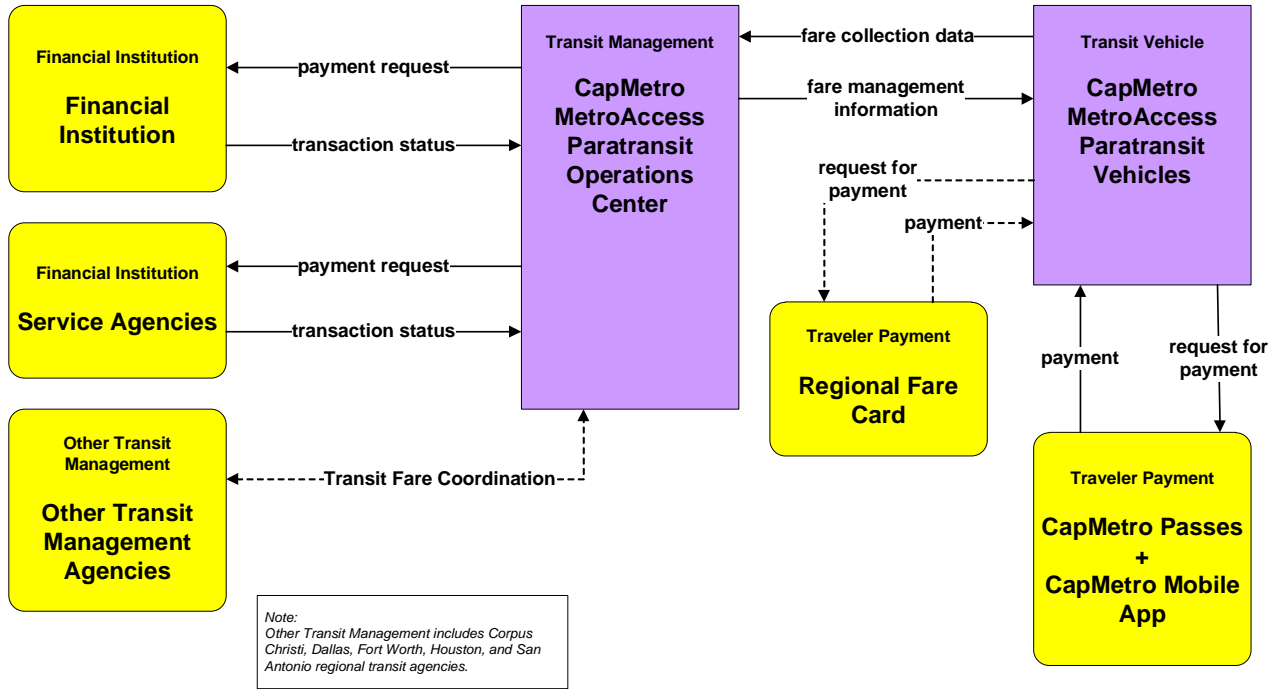
**APTS04 - Transit Fare Collection Management
CapMetro Fixed-Route**



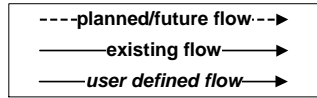
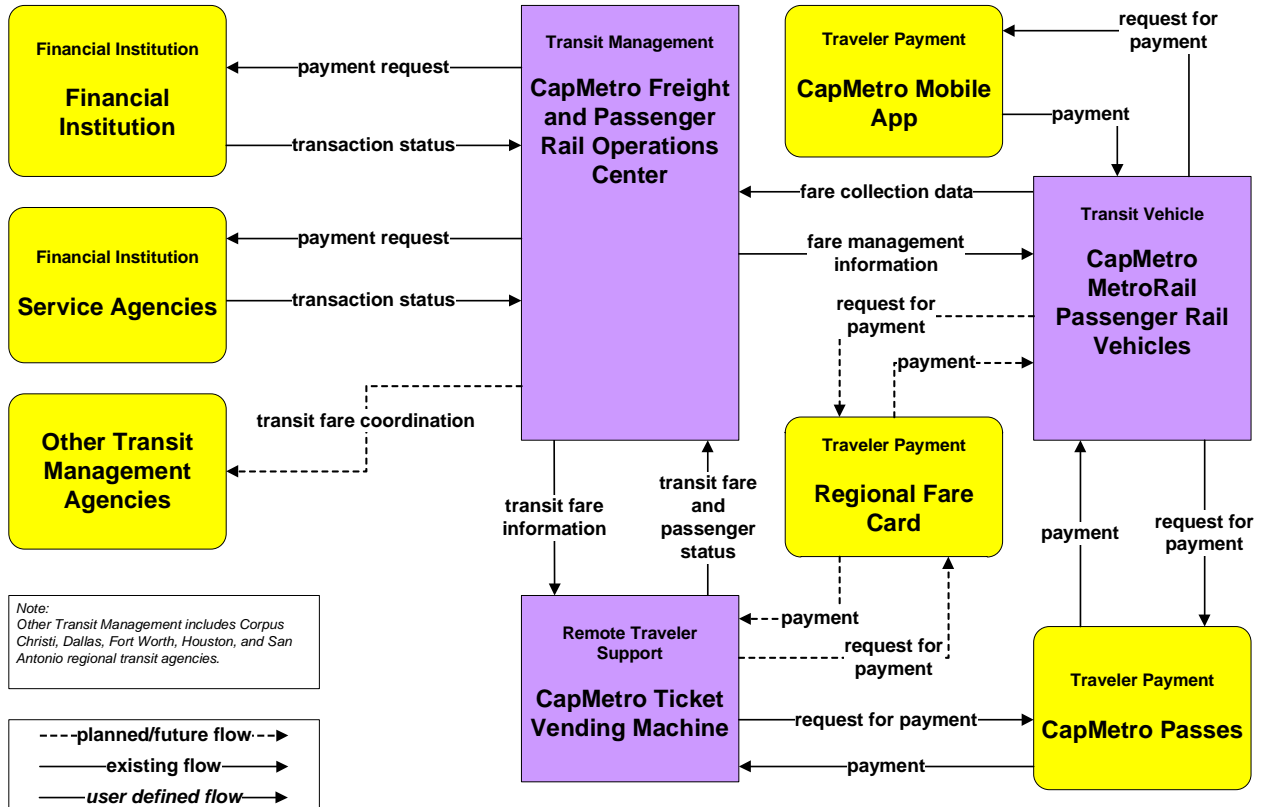
*Note:
Other Transit Management Agencies includes
Corpus Christi, Dallas, Fort Worth, Houston, and
San Antonio regional transit agencies.*



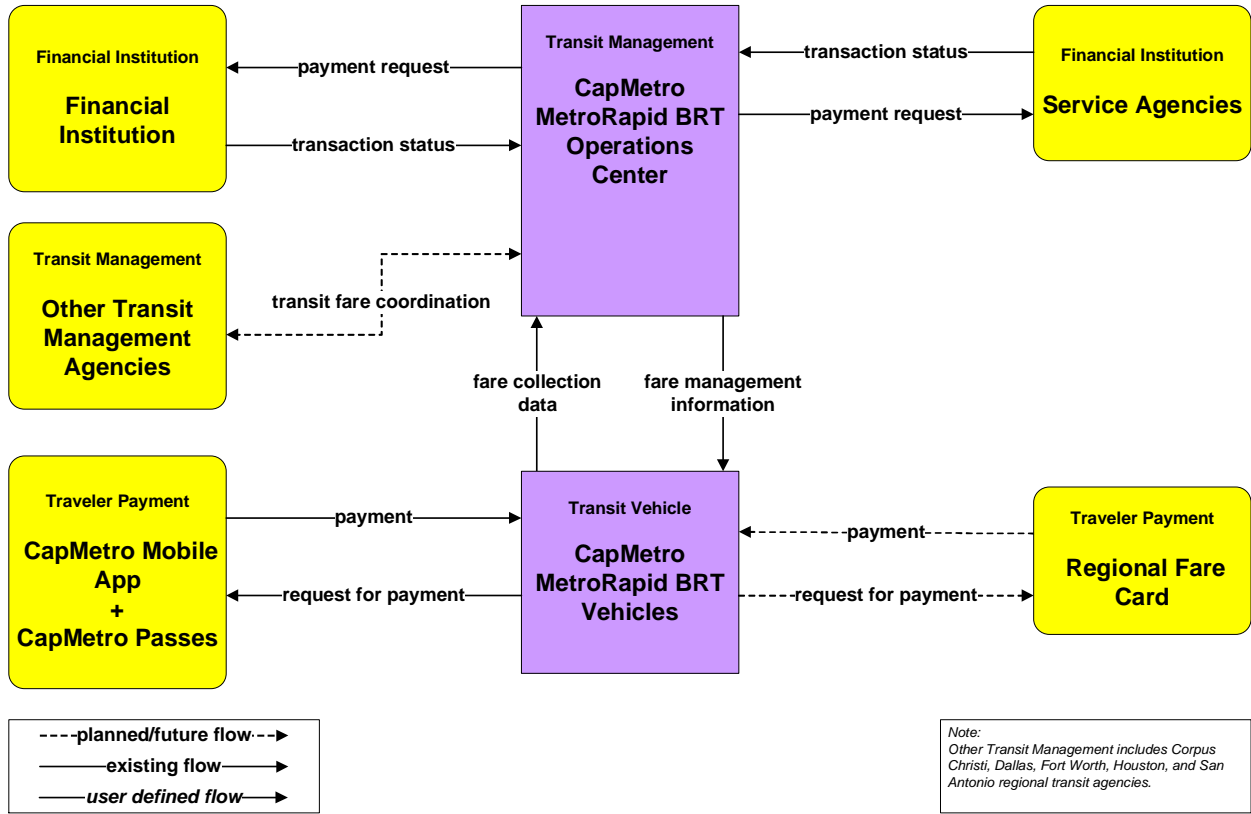
**APTS04 - Transit Fare Collection Management
CapMetro MetroAccess Paratransit**



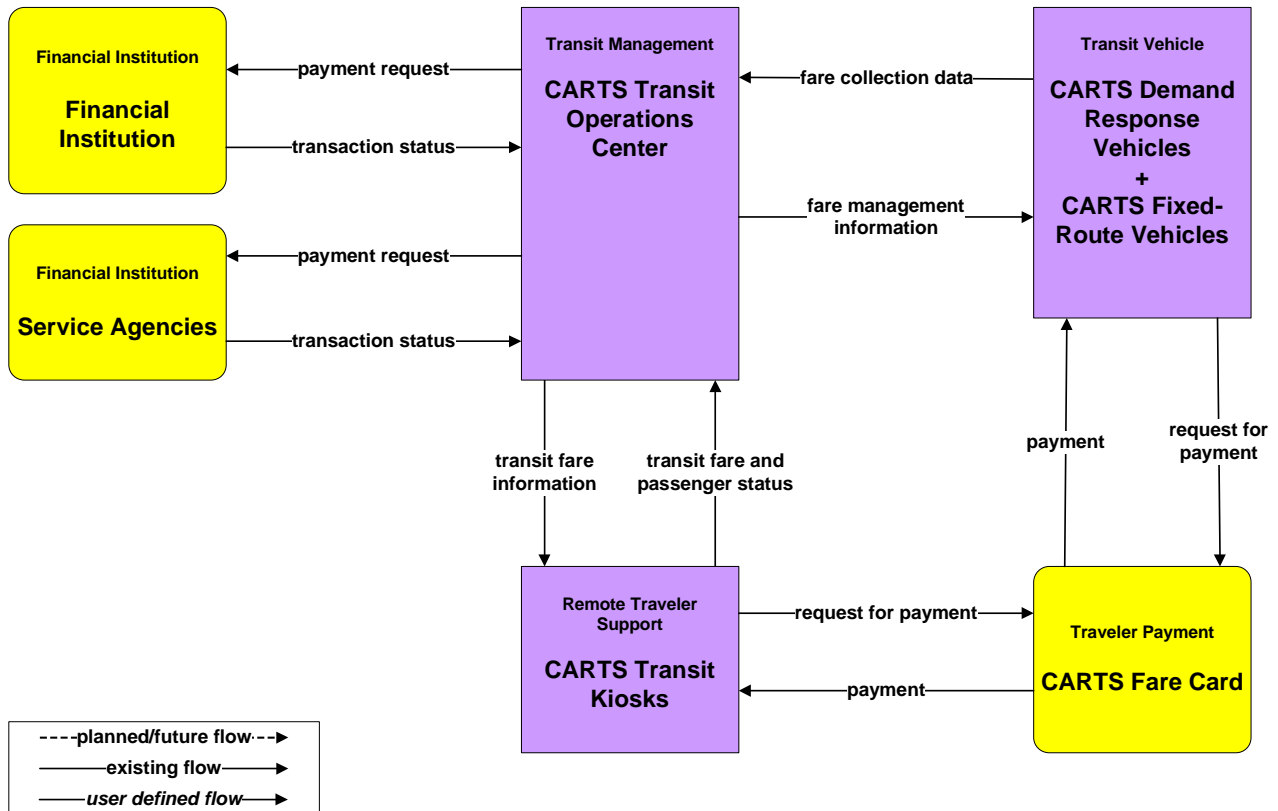
**APTS04 - Transit Fare Collection Management
CapMetro MetroRail Passenger Rail**



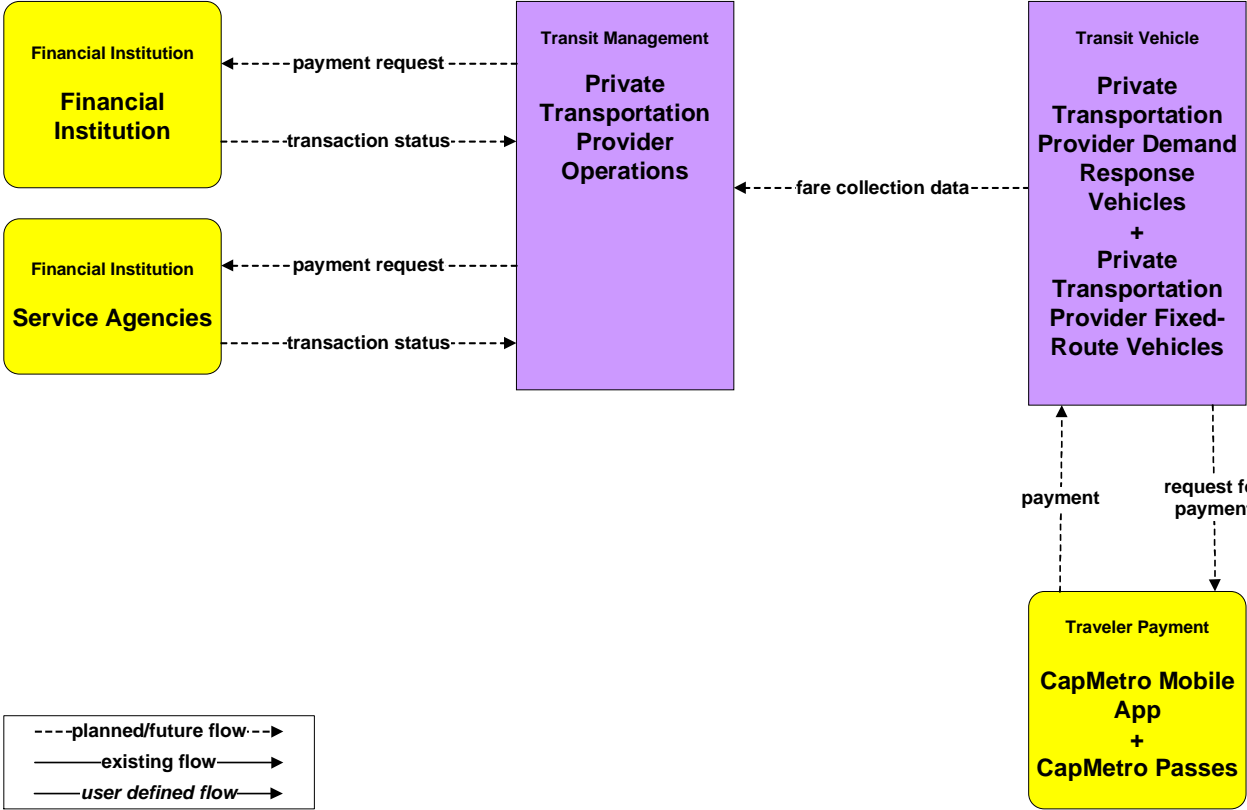
**APTS04 - Transit Fare Collection Management
CapMetro MetroRapid Bus Rapid Transit**



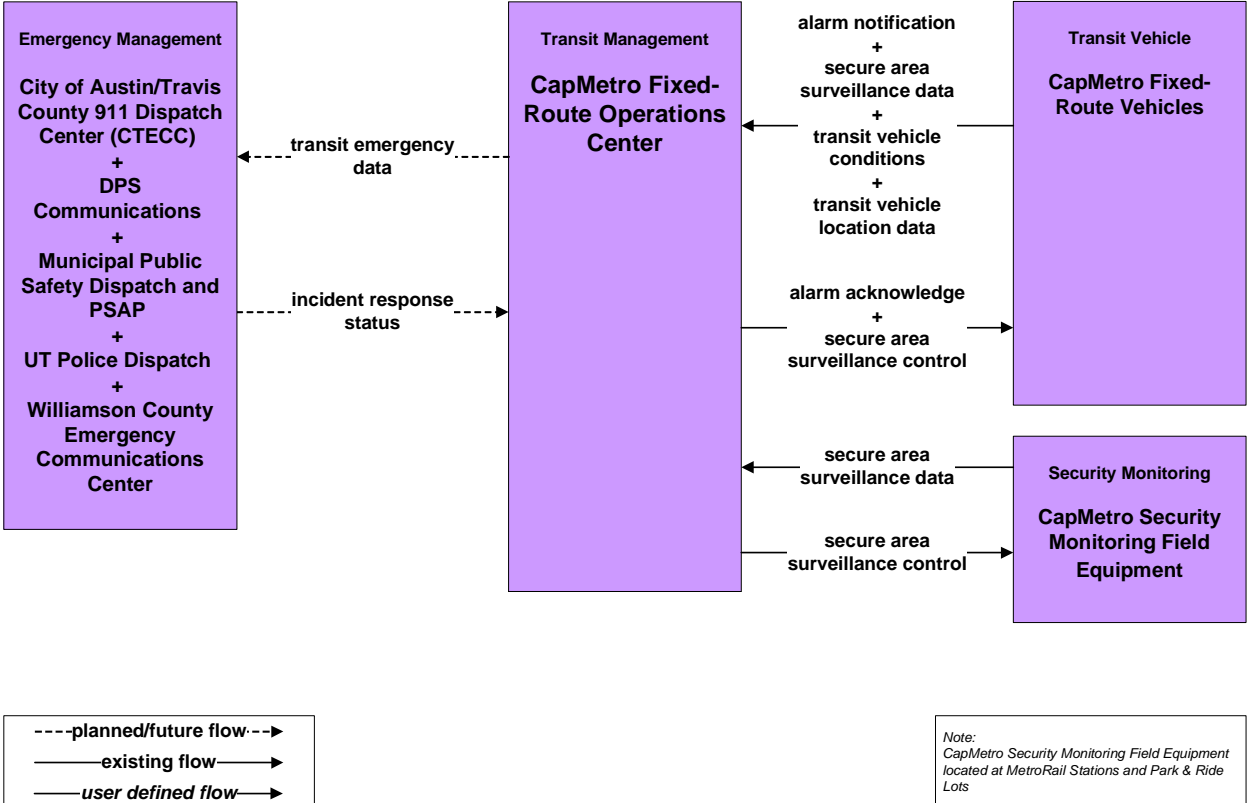
**APTS04 - Transit Fare Collection Management
CARTS Transit**



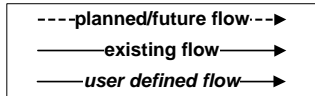
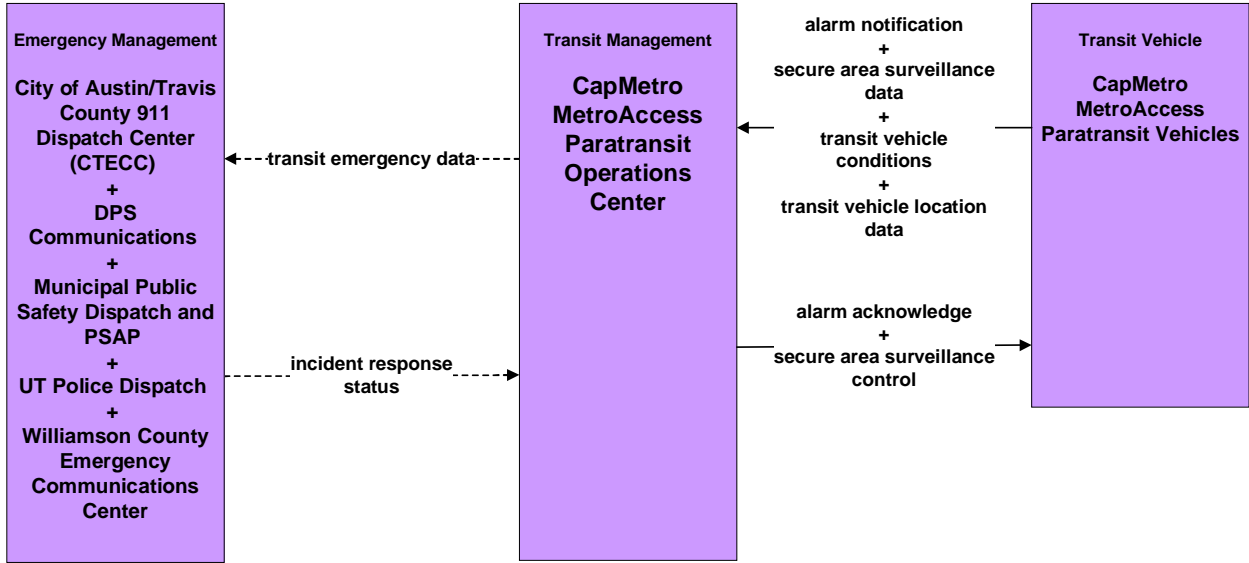
**APTS04 - Transit Fare Collection Management
Private Transportation Operations**



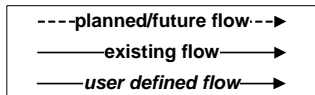
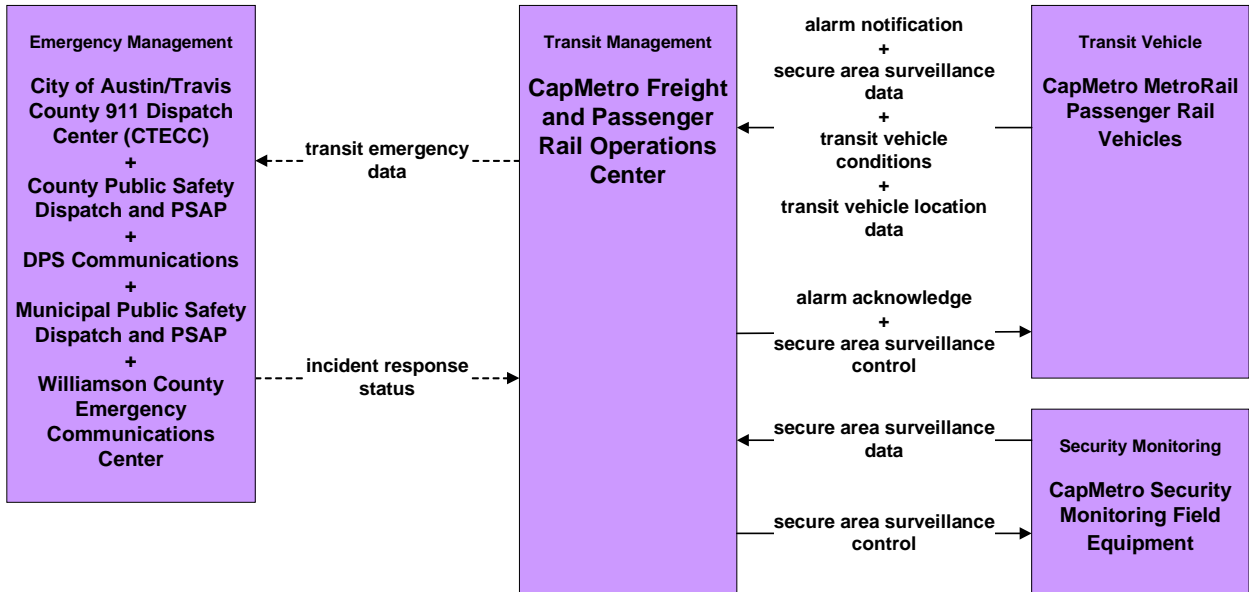
**APTS05 - Transit Security
CapMetro Fixed-Route – Transit Vehicle Monitoring System**



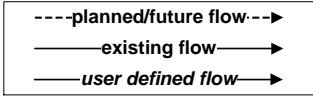
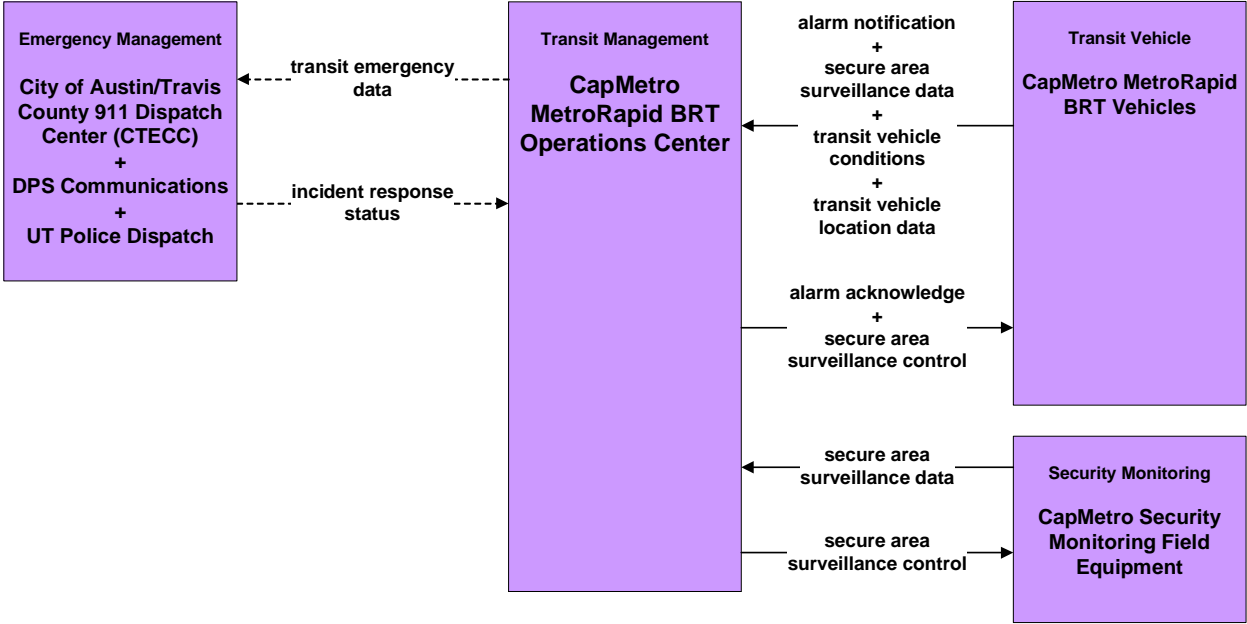
APTS05 - Transit Security
CapMetro MetroAccess Paratransit – Transit Vehicle Monitoring System



APTS05 - Transit Security
CapMetro MetroRail Passenger Rail – Transit Vehicle Monitoring System

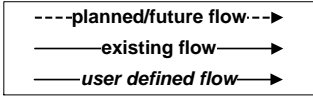
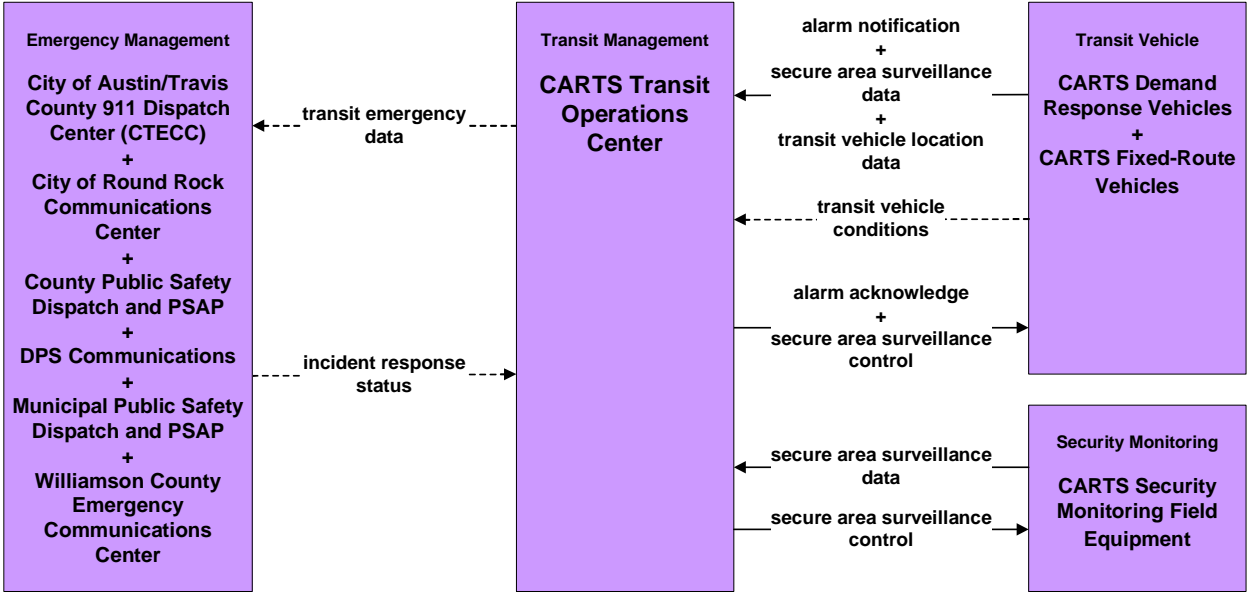


APTS05 - Transit Security
CapMetro MetroRapid Bus Rapid Transit – Transit Vehicle Monitoring System

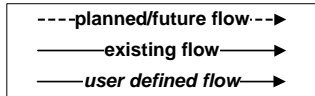
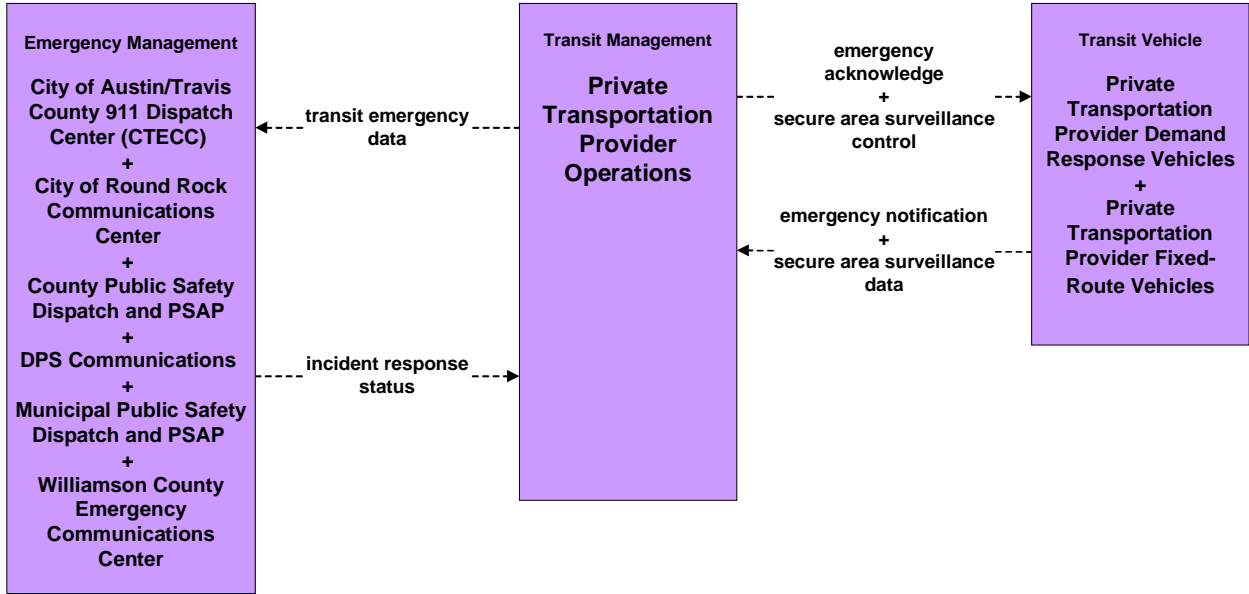


*Note:
 CapMetro Security Monitoring Field Equipment
 located at MetroRail Stations and Park & Ride
 Lots*

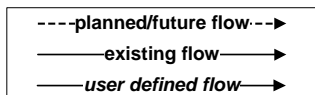
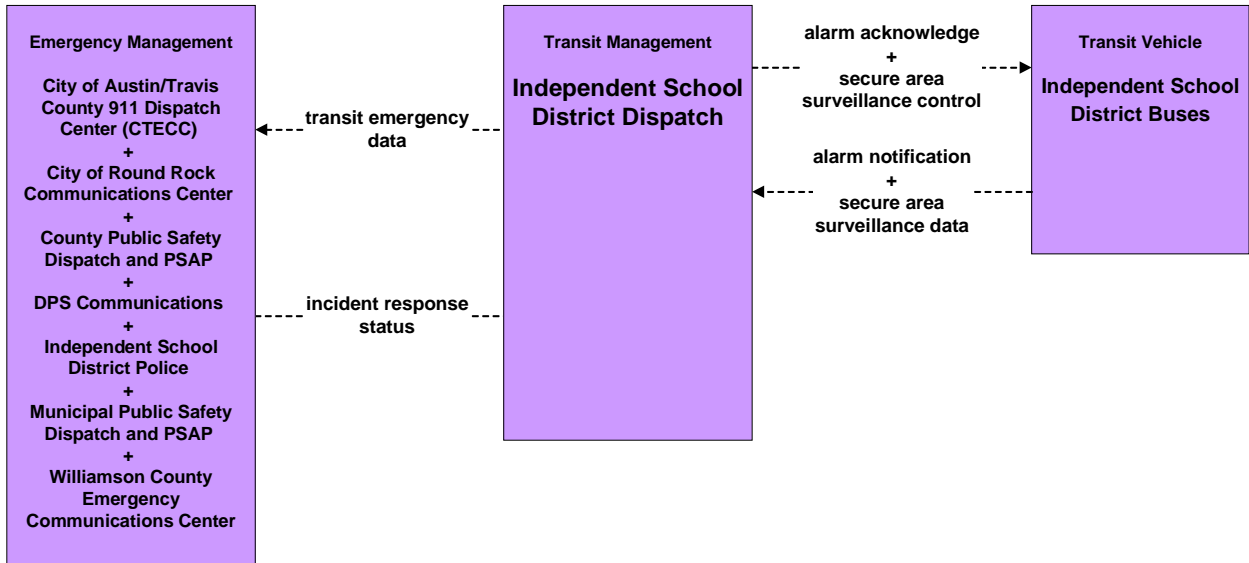
APTS05 - Transit Security
CARTS Transit



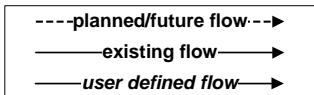
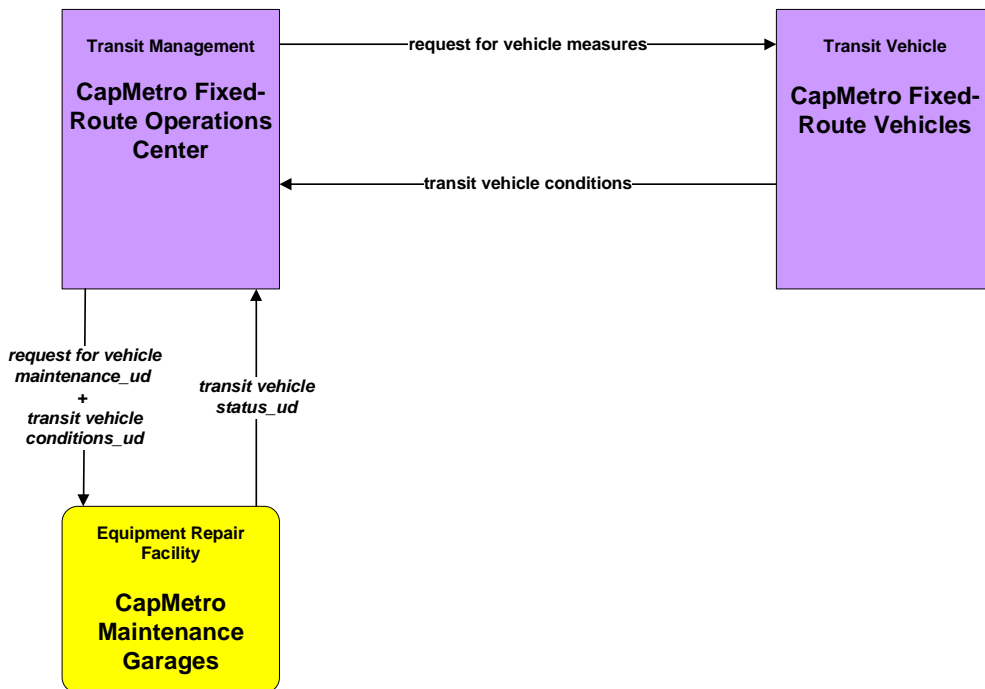
**APTS05 - Transit Security
Private Transportation Operations**



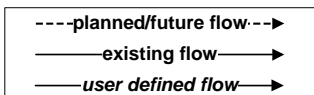
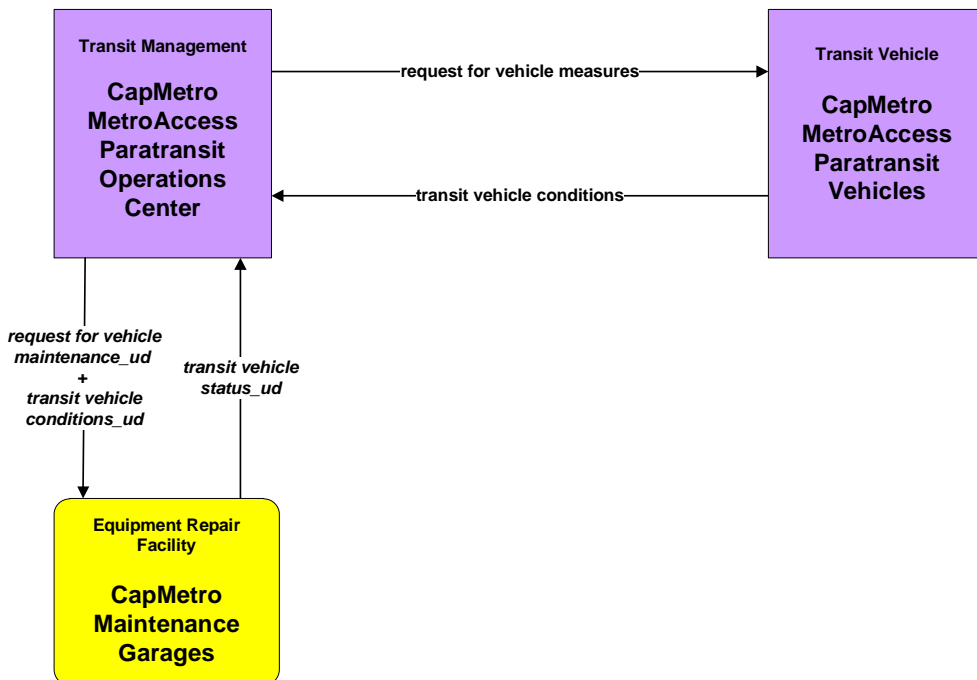
**APTS05 - Transit Security
Independent School Districts**



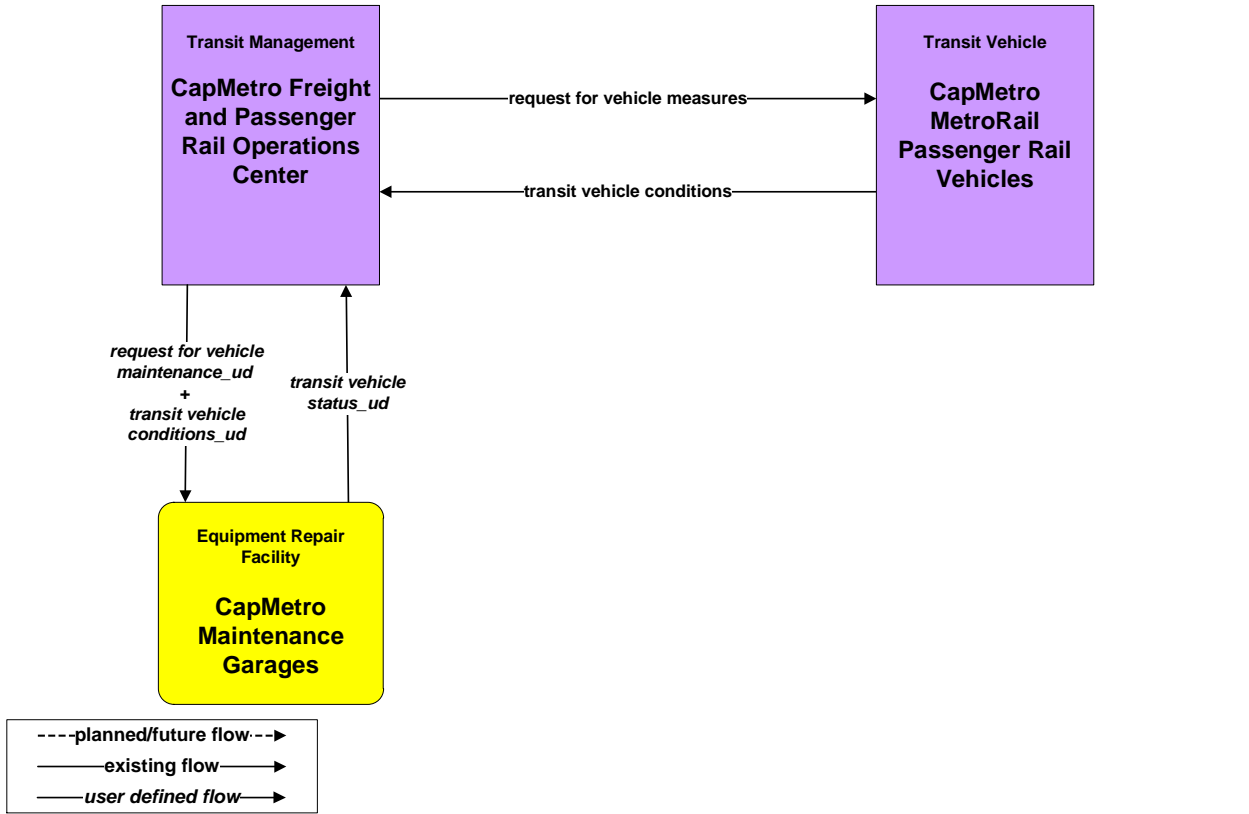
**APTS06 - Transit Fleet Maintenance
CapMetro Fixed-Route**



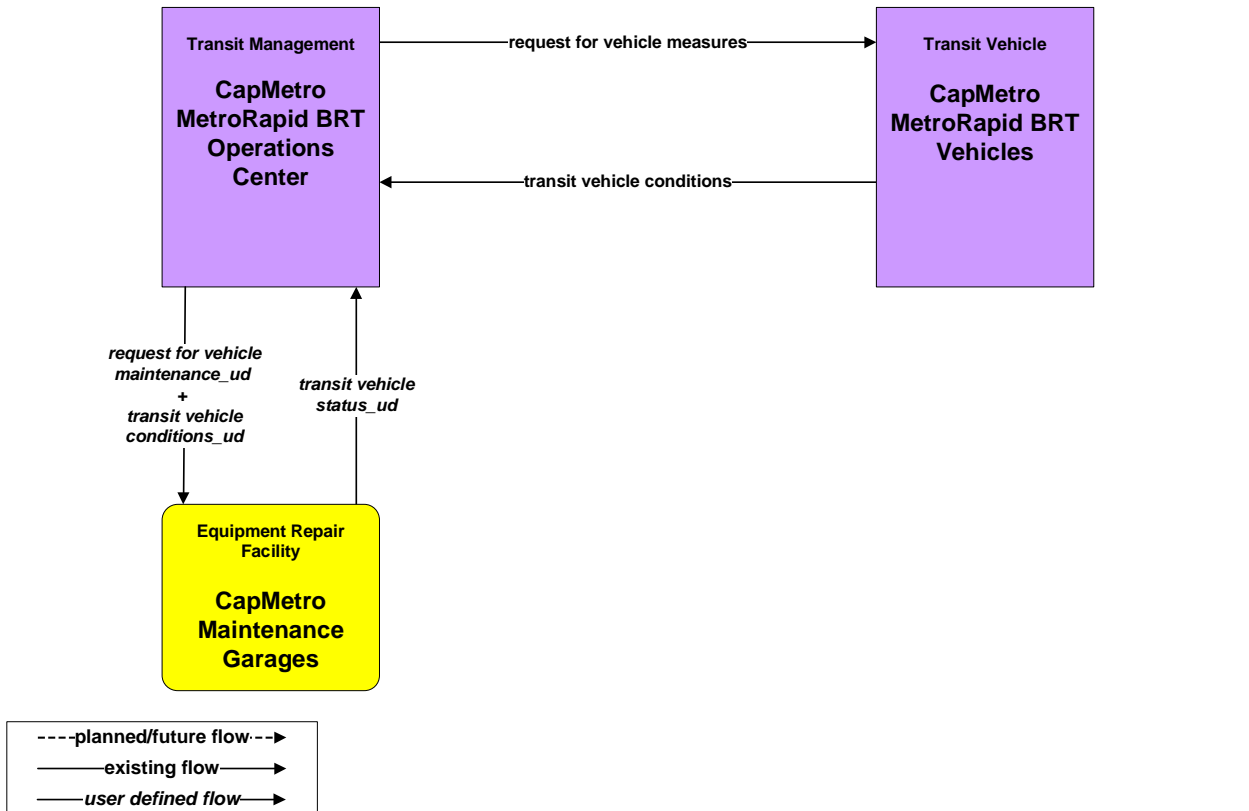
**APTS06 - Transit Fleet Maintenance
CapMetro MetroAccess Paratransit**



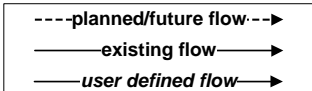
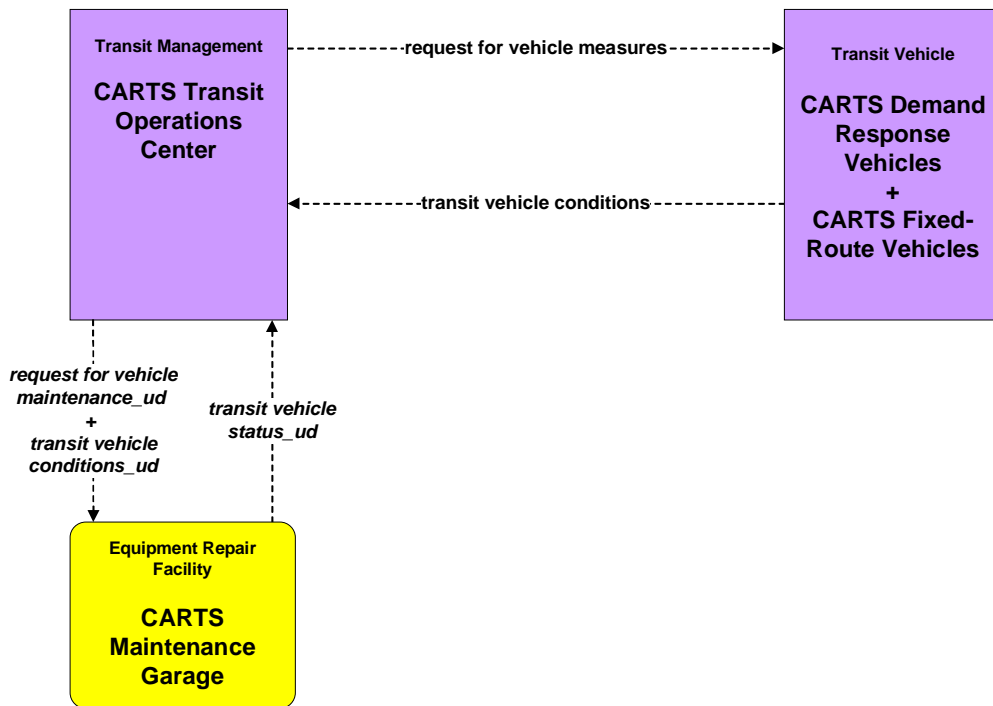
**APTS06 - Transit Fleet Maintenance
CapMetro MetroRail Passenger Rail**



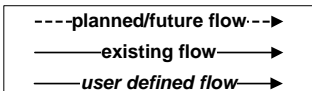
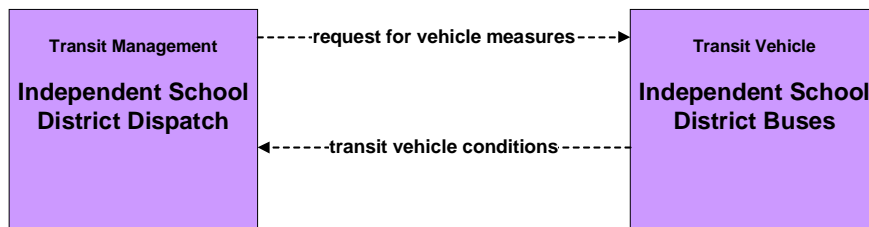
**APTS06 - Transit Fleet Maintenance
CapMetro MetroRapid Bus Rapid Transit**



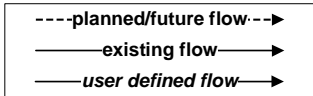
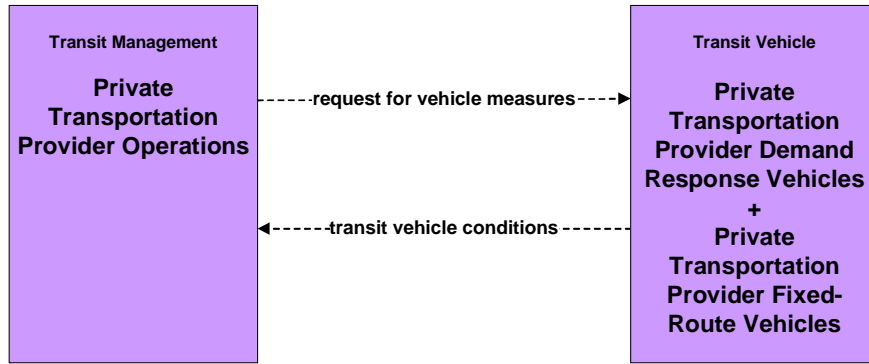
**APTS06 - Transit Fleet Maintenance
CARTS Transit**



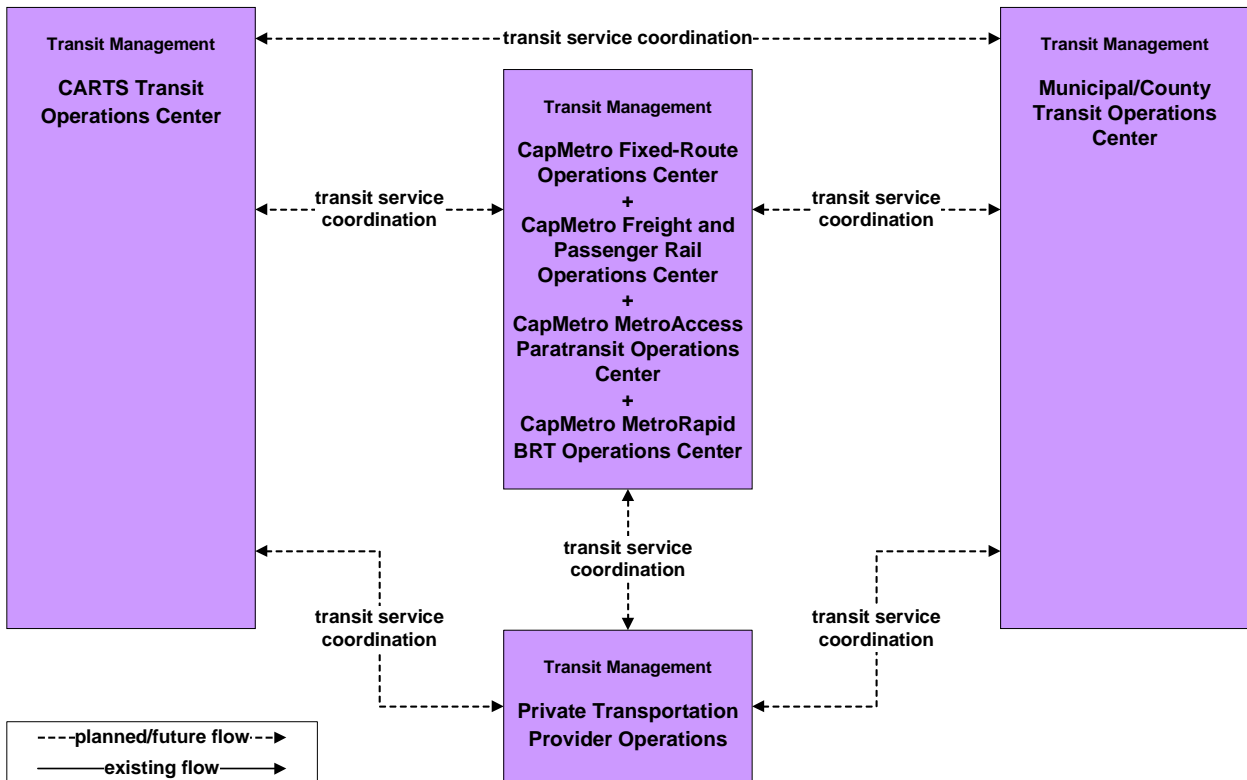
**APTS06 - Transit Fleet Maintenance
Independent School Districts**



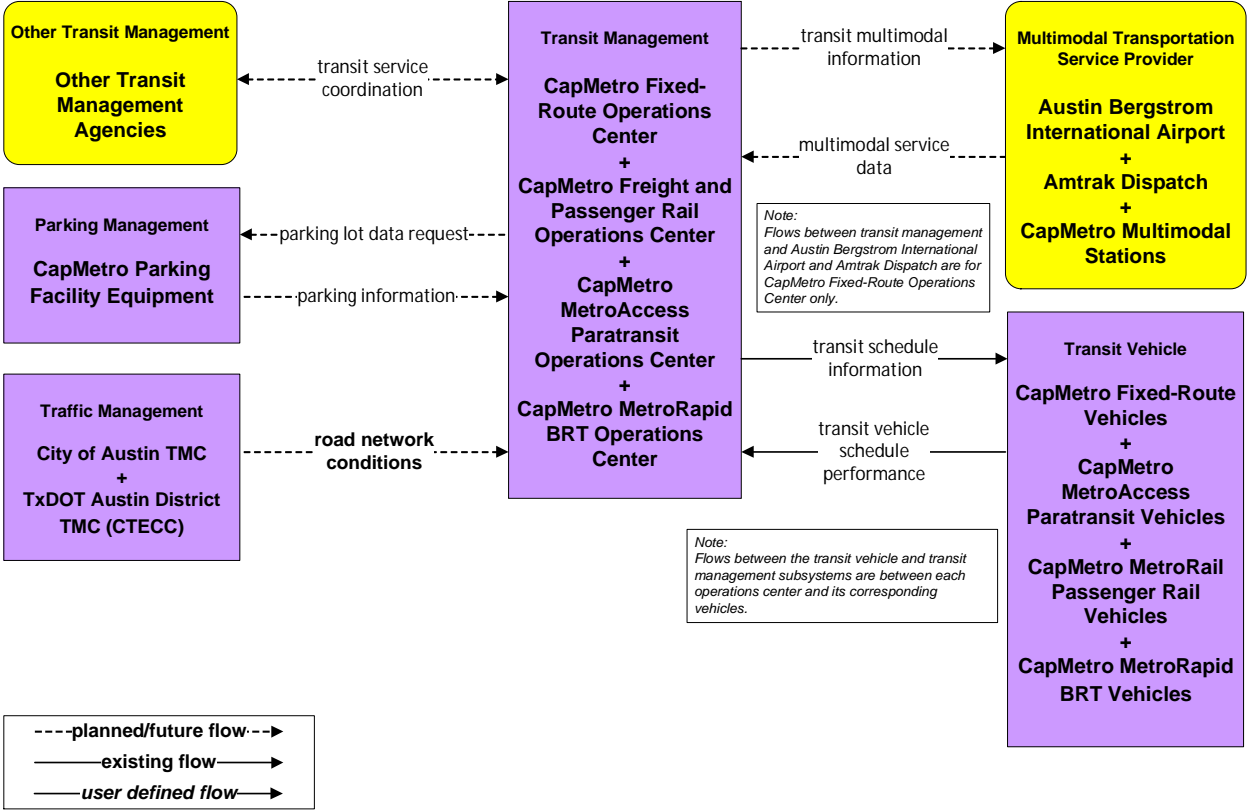
**APTS06 - Transit Fleet Maintenance
Private Transportation Operations**



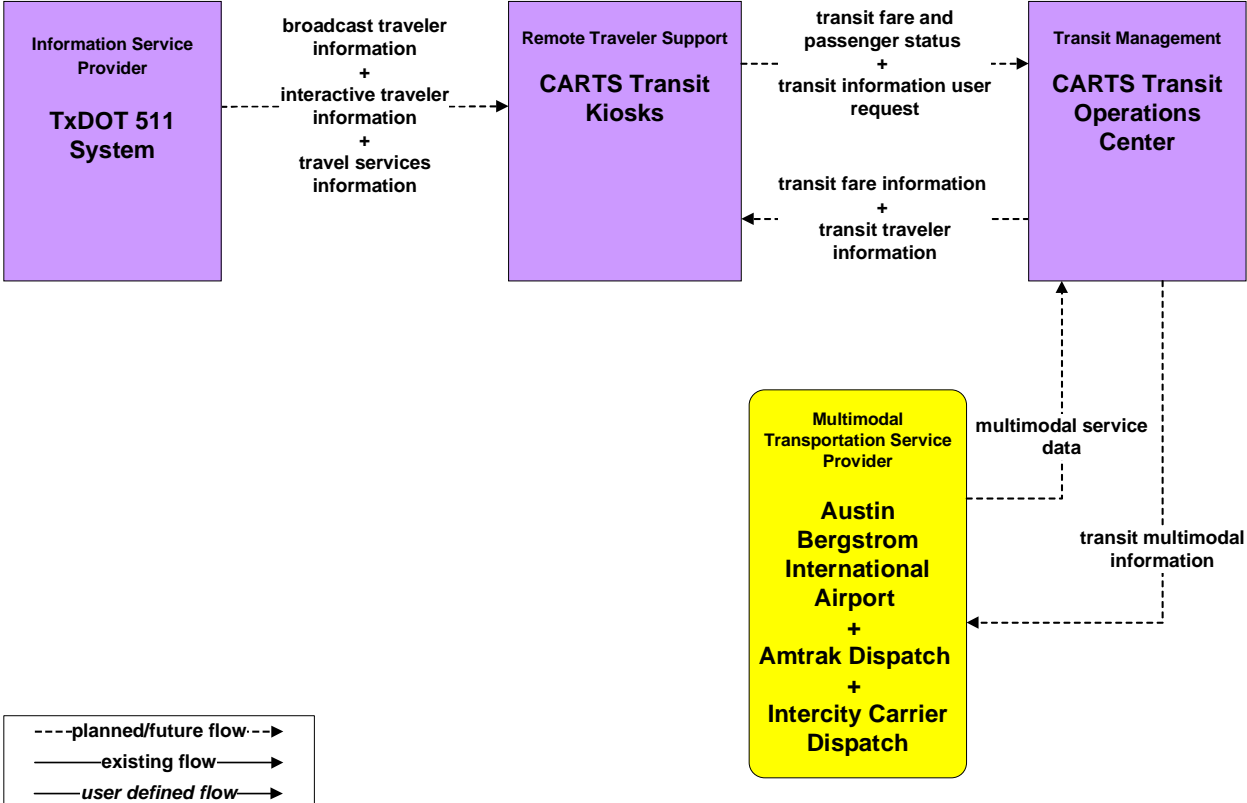
**APTS07 - Multi-modal Coordination
Regional Transit Coordination**



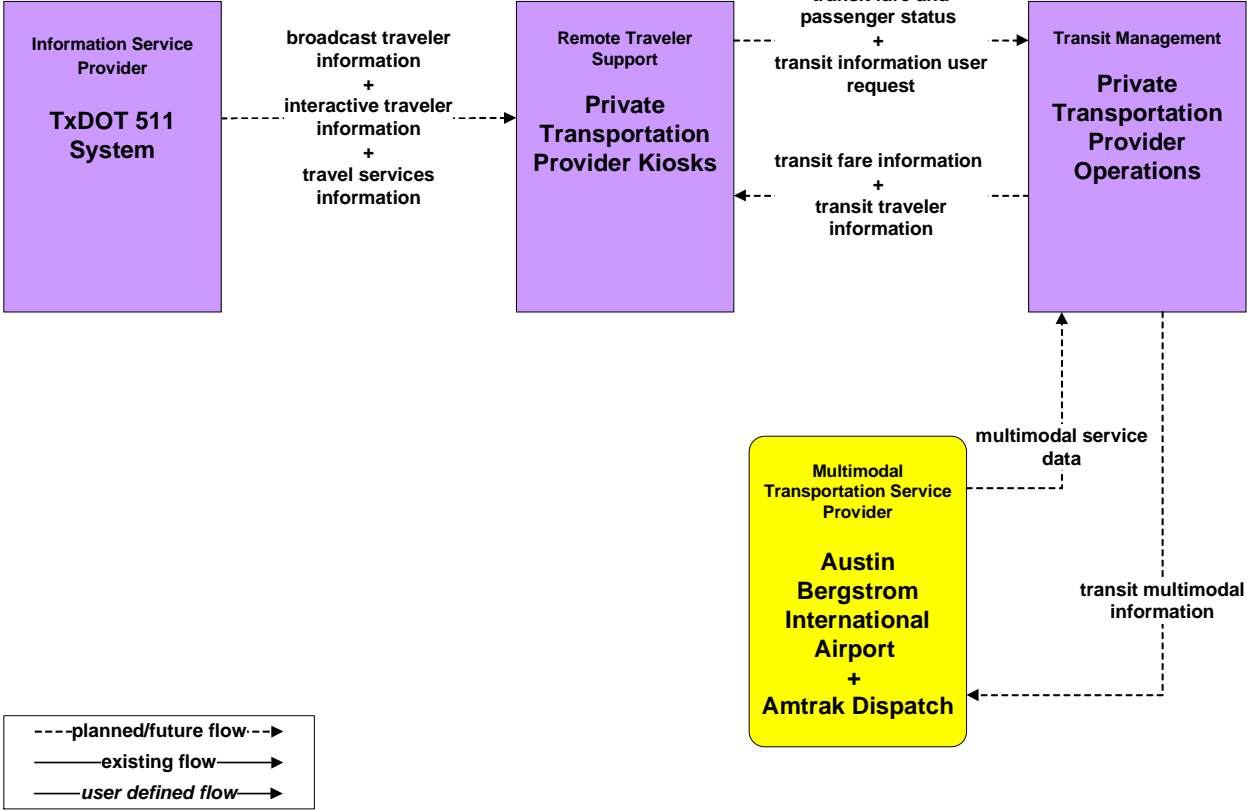
APTS07 – Multi-modal Coordination
CapMetro Transit Coordination



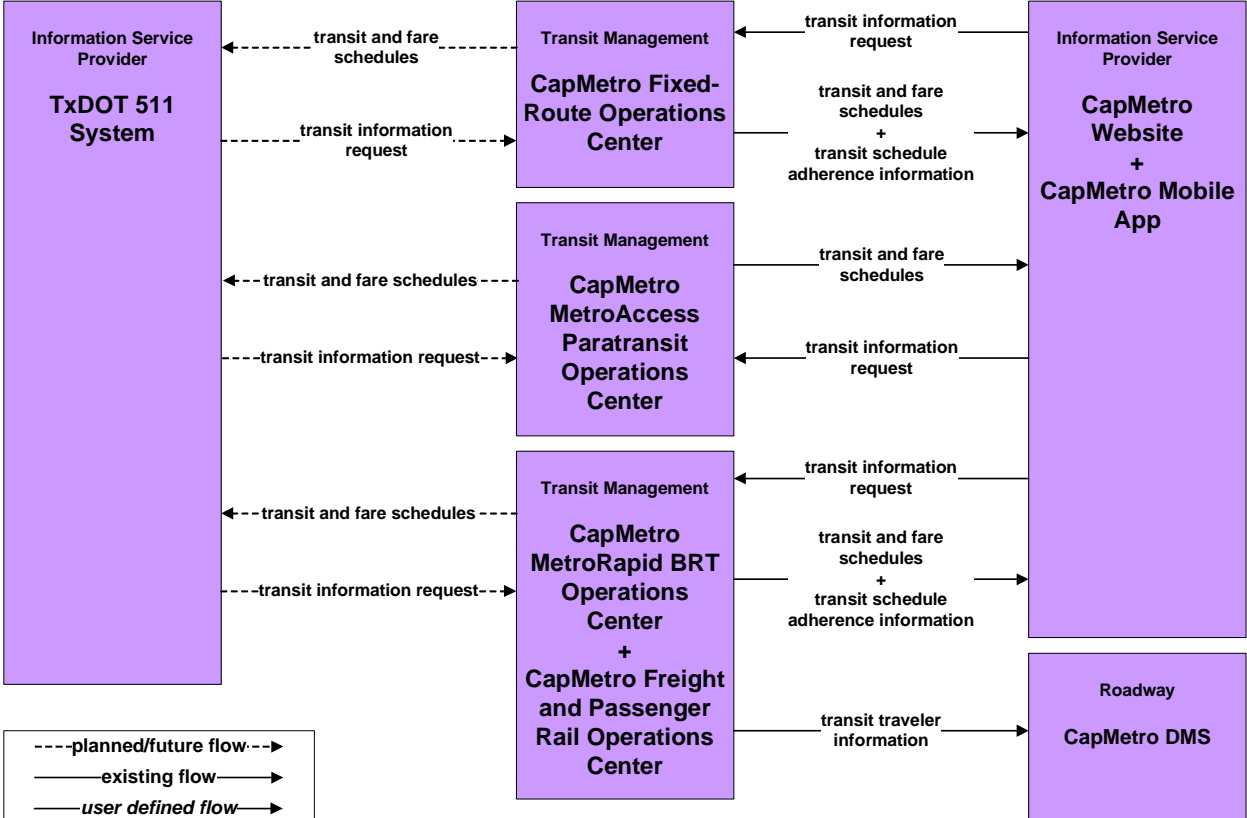
APTS07 - Multi-modal Coordination
CARTS Transit



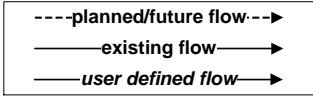
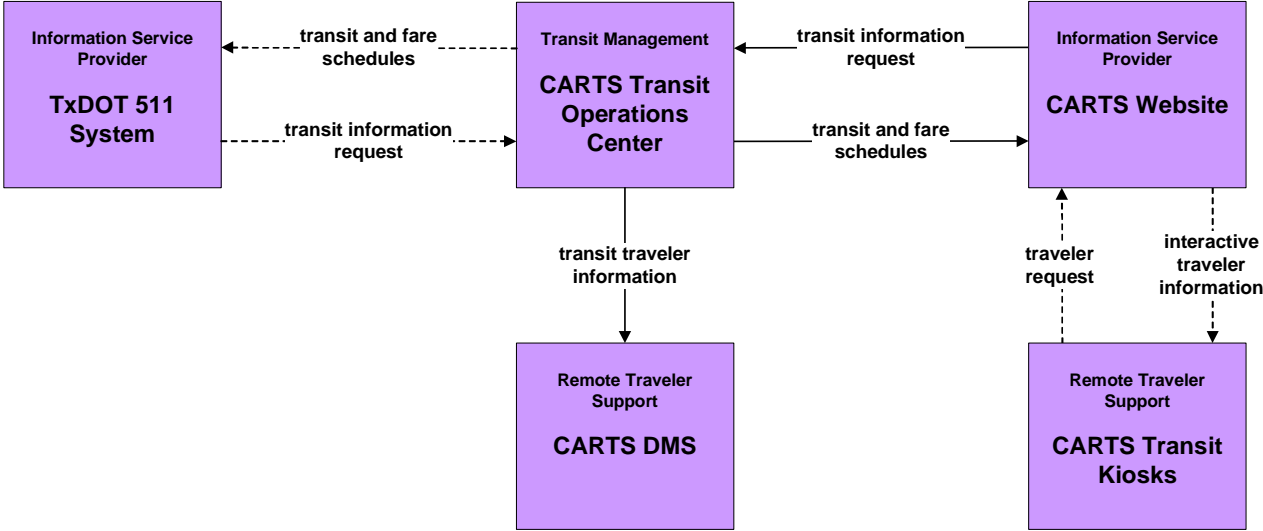
**APTS07 - Multi-modal Coordination
Private Transportation Operations**



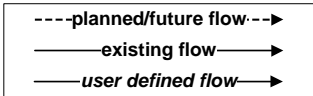
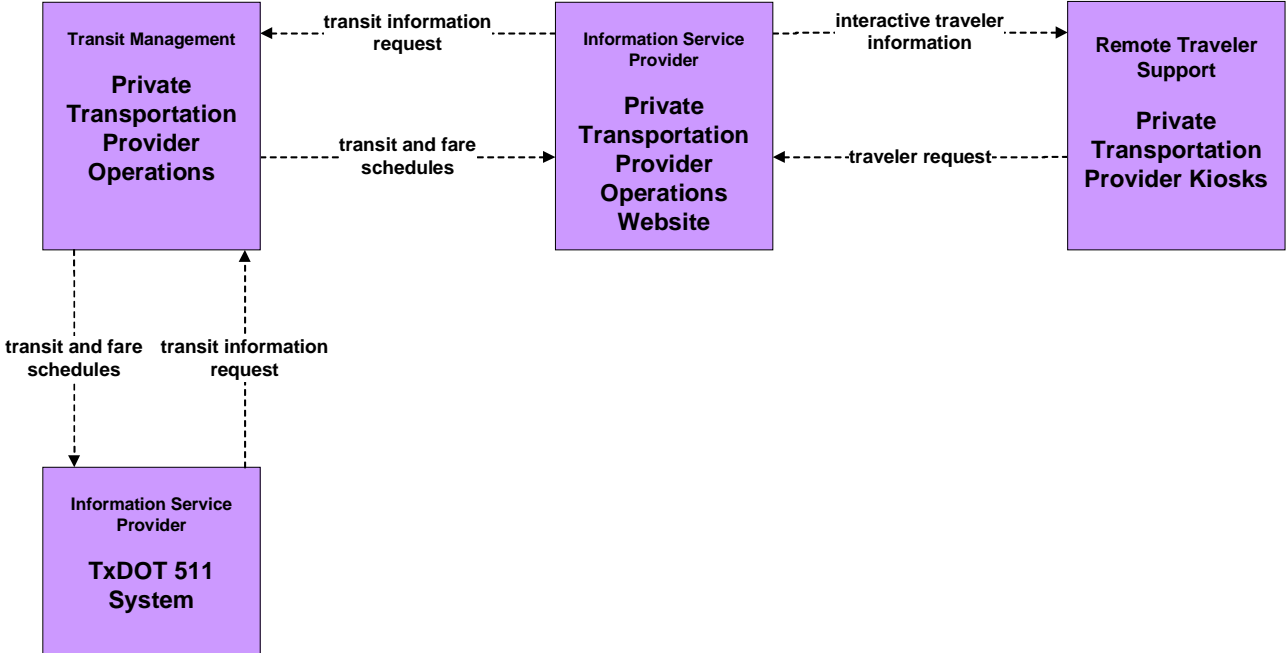
**APTS08 - Transit Traveler Information
CapMetro Transit**



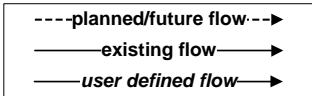
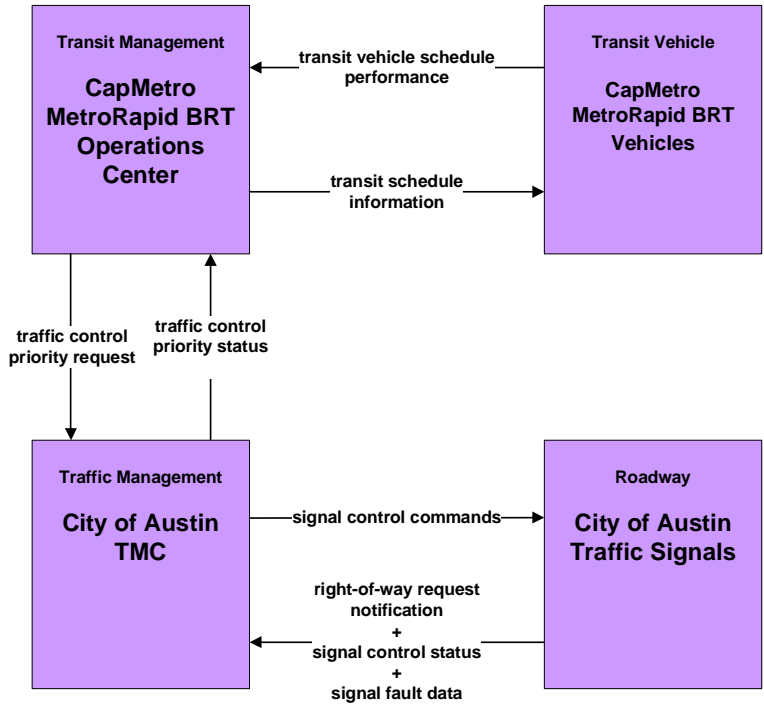
**APTS08 - Transit Traveler Information
CARTS Transit**



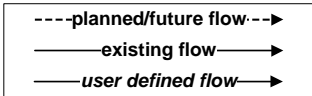
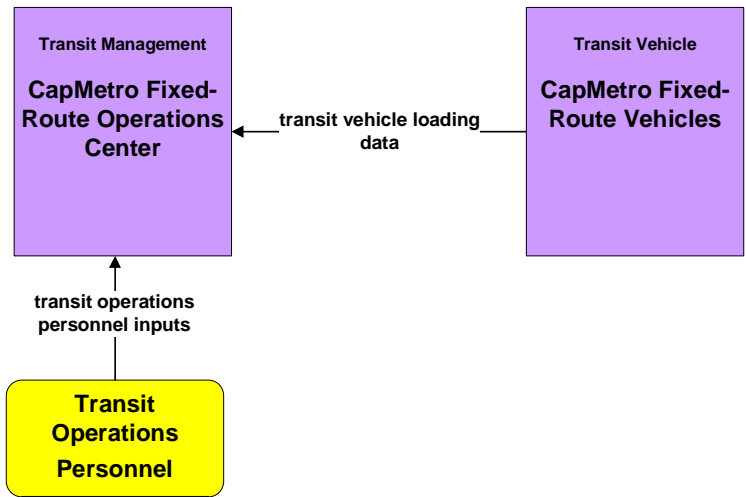
**APTS08 - Transit Traveler Information
Private Transportation Operations**



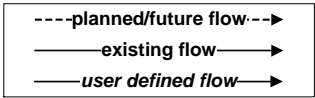
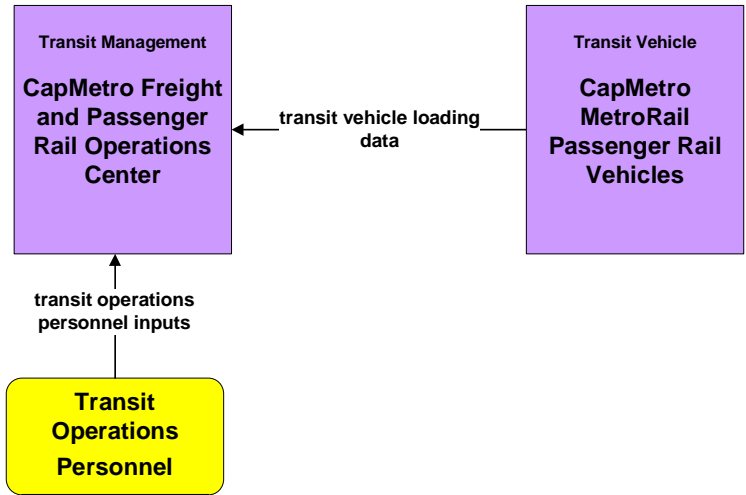
**APTS09 – Transit Signal Priority
CapMetro MetroRapid Bus Rapid Transit**



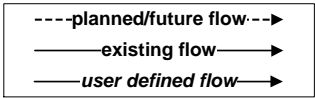
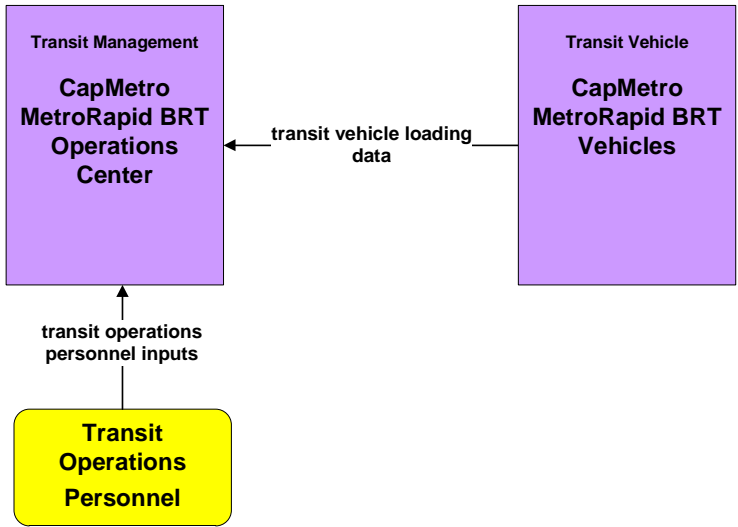
**APTS10 - Transit Passenger Counting
CapMetro Fixed-Route**



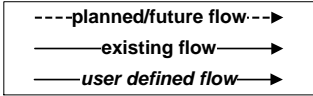
**APTS10 - Transit Passenger Counting
CapMetro MetroRail Passenger Rail**



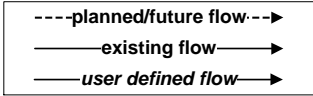
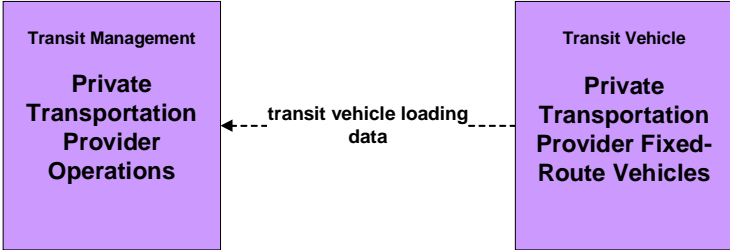
**APTS10 - Transit Passenger Counting
CapMetro MetroRapid Bus Rapid Transit**



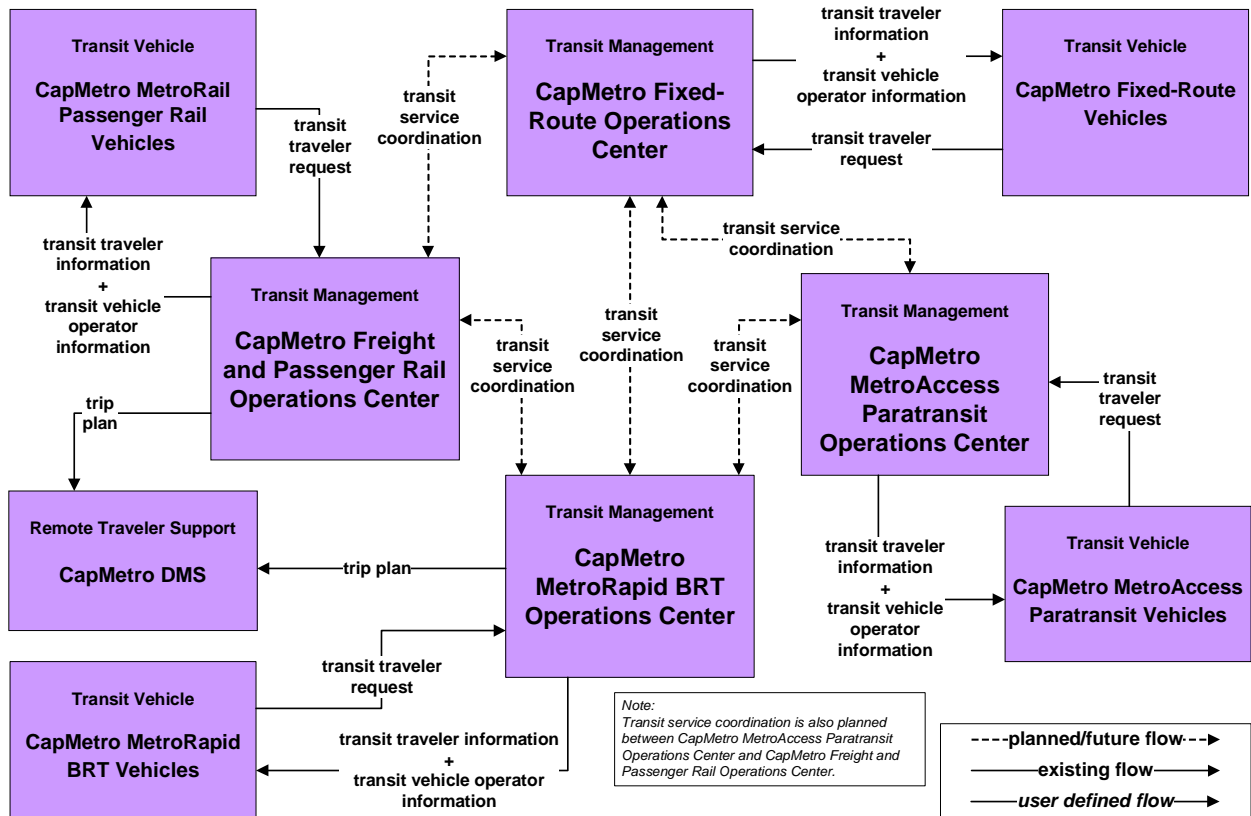
**APTS10 - Transit Passenger Counting
CARTS Transit**



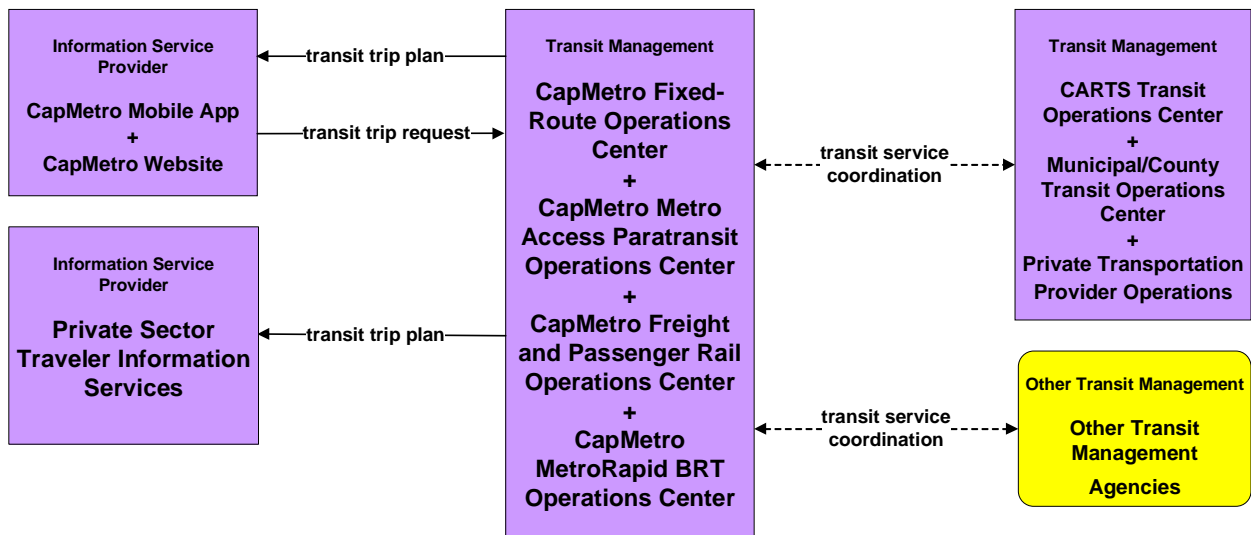
**APTS10 - Transit Passenger Counting
Private Transportation Operations**



**APTS11 – Multimodal Connection Protection
CapMetro Transit (1 of 2)**



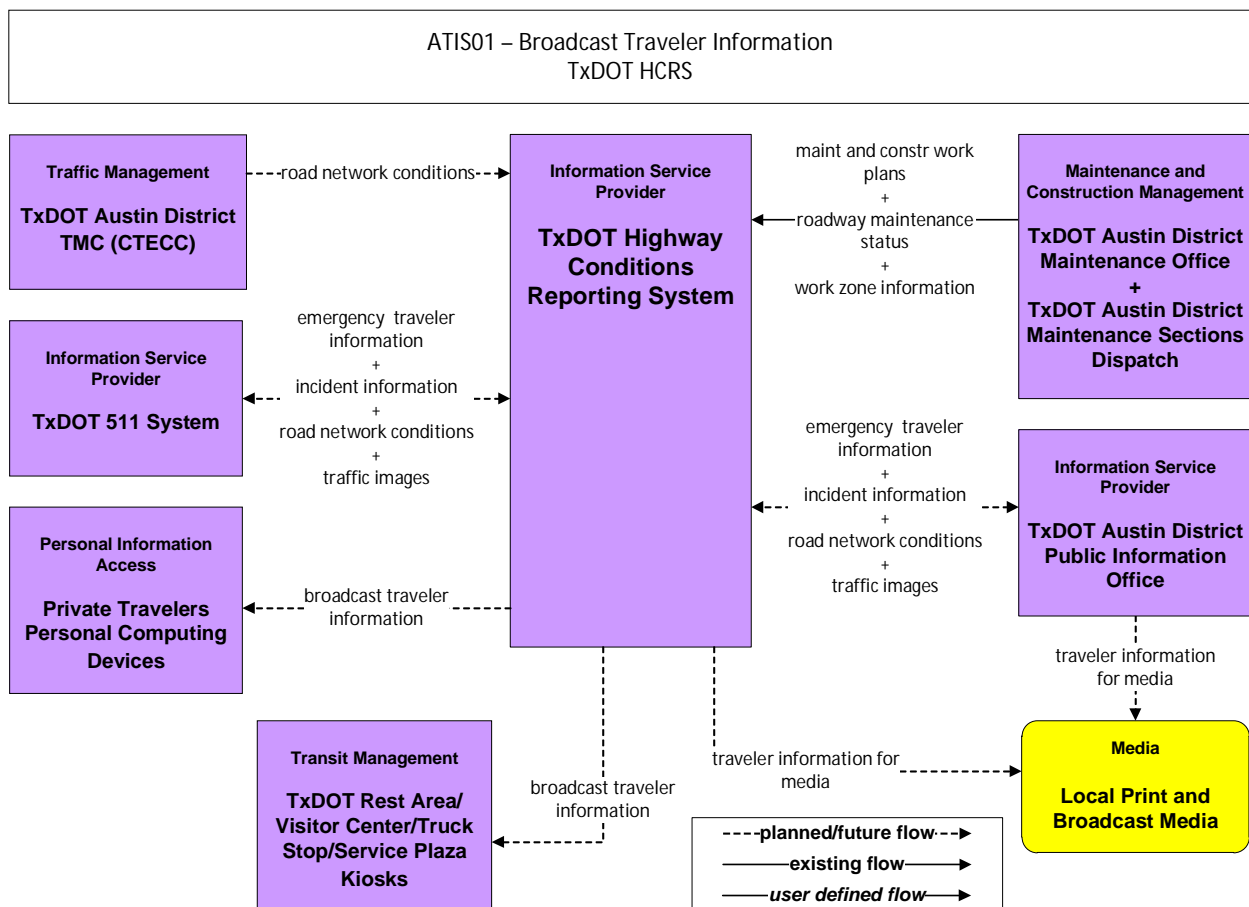
**APTS11 – Multimodal Connection Protection
CapMetro Transit (2 of 2)**



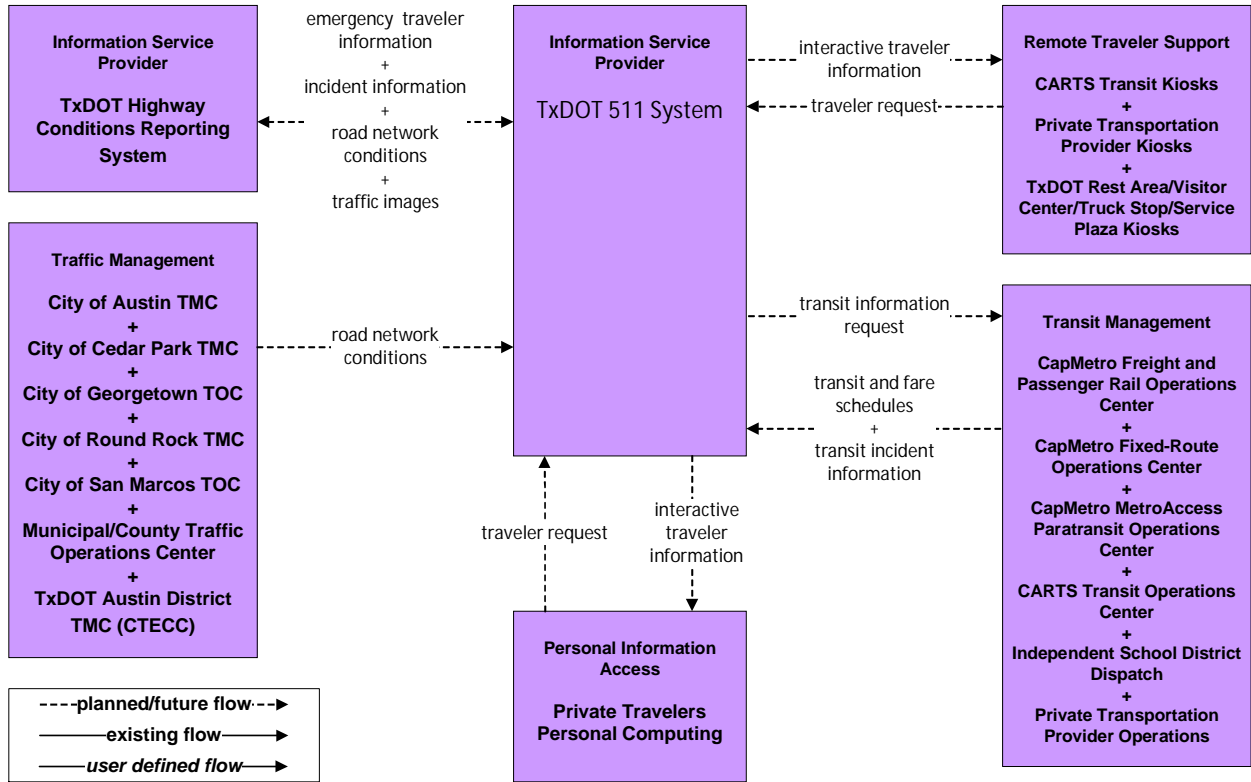
Austin Regional ITS Architecture

Customized ITS Service Package Diagrams

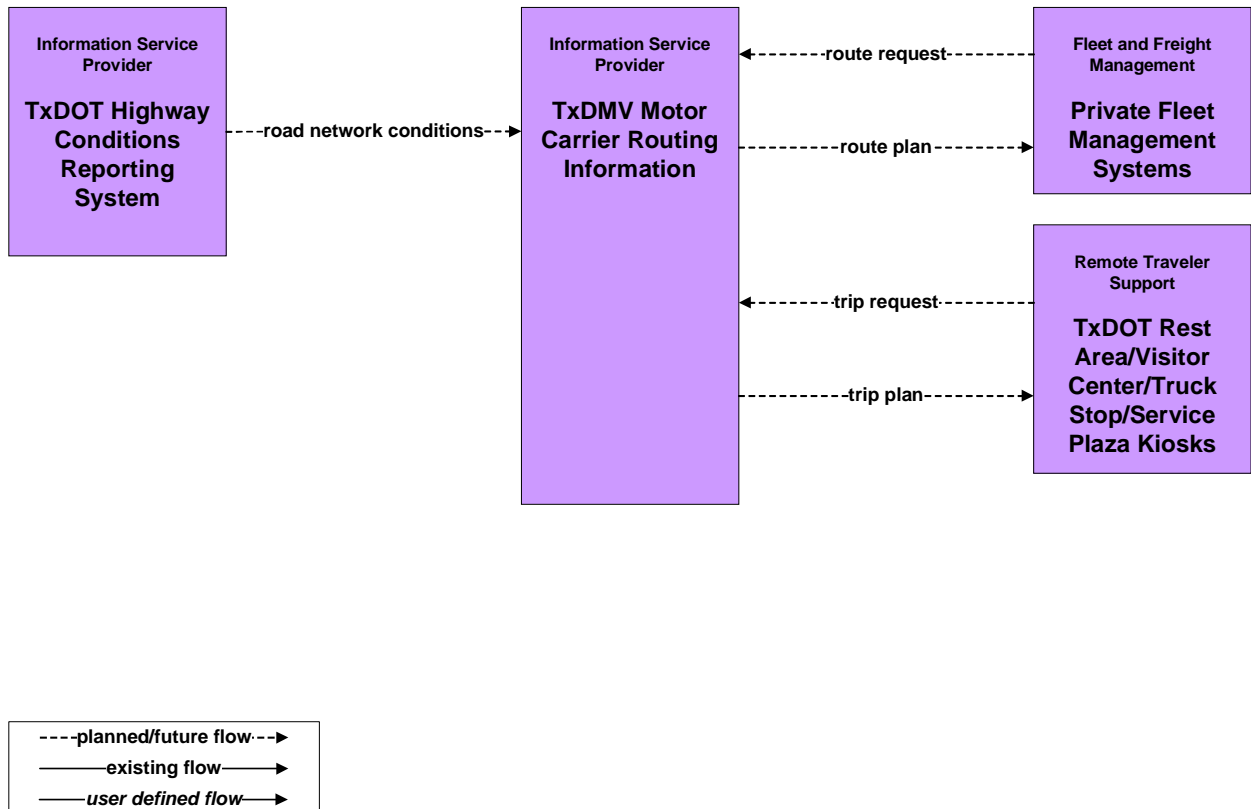
Advanced Traveler Information Systems (ATIS)



ATIS02 – Interactive Traveler Information
TxDOT 511



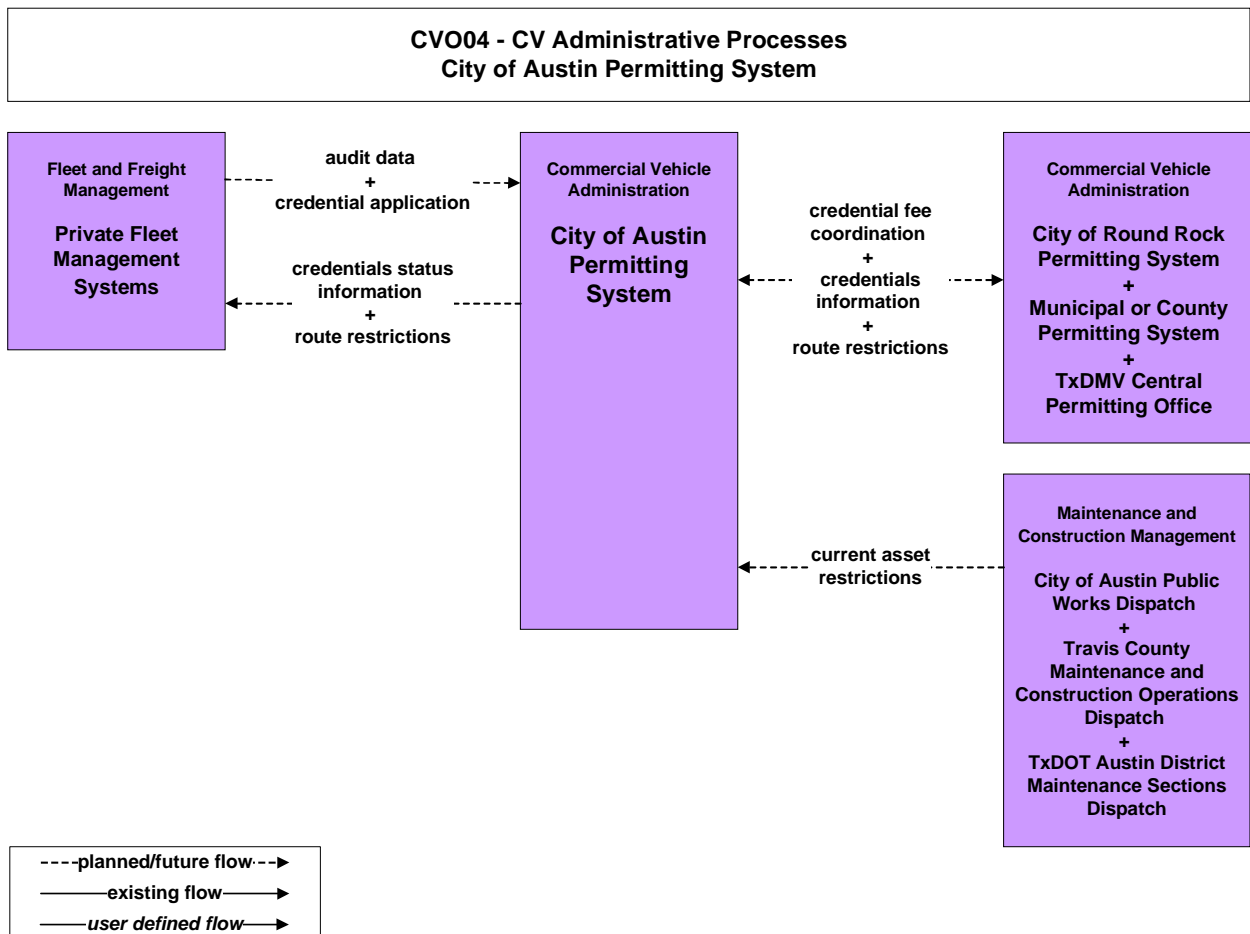
ATIS05 - ISP Based Trip Planning and Route Guidance
TxDMV Motor Carrier Routing Information



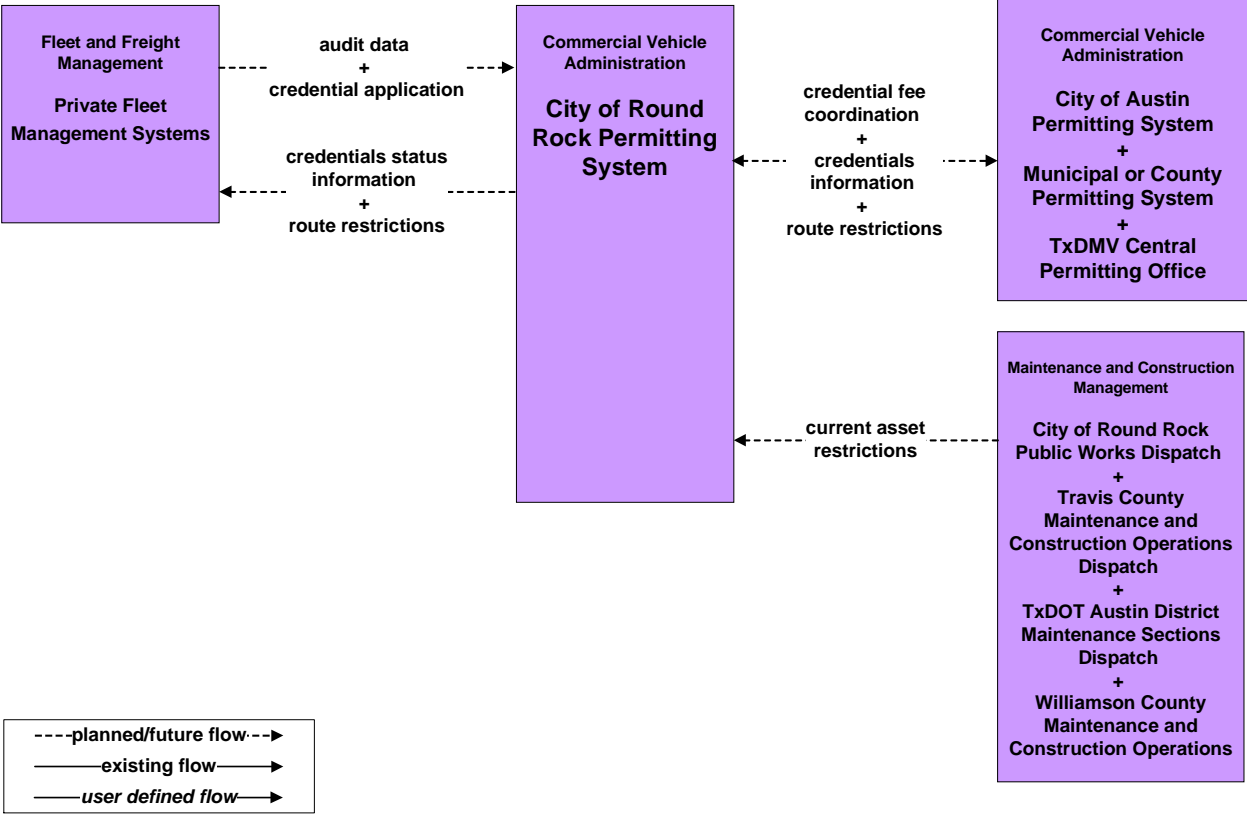
Austin Regional ITS Architecture

Customized ITS Service Package Diagrams

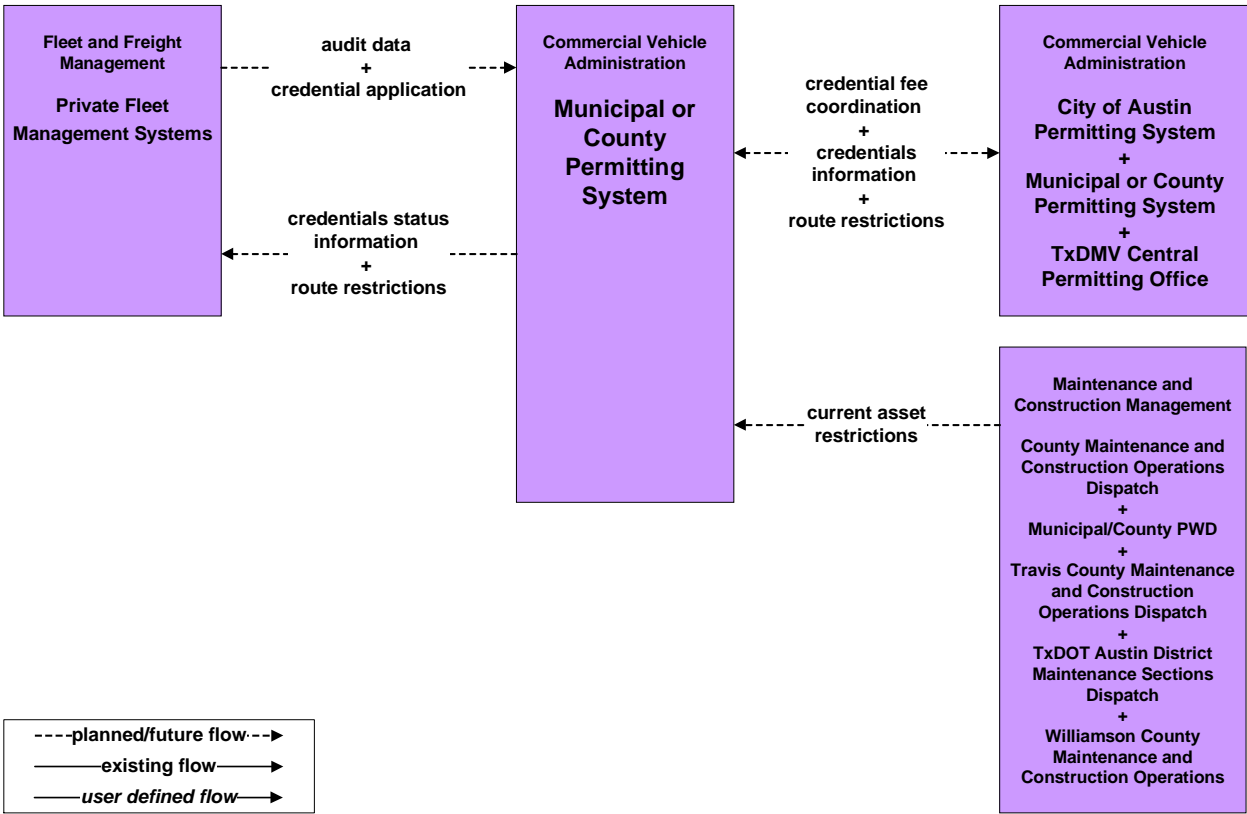
Commercial Vehicle Operations (CVO)



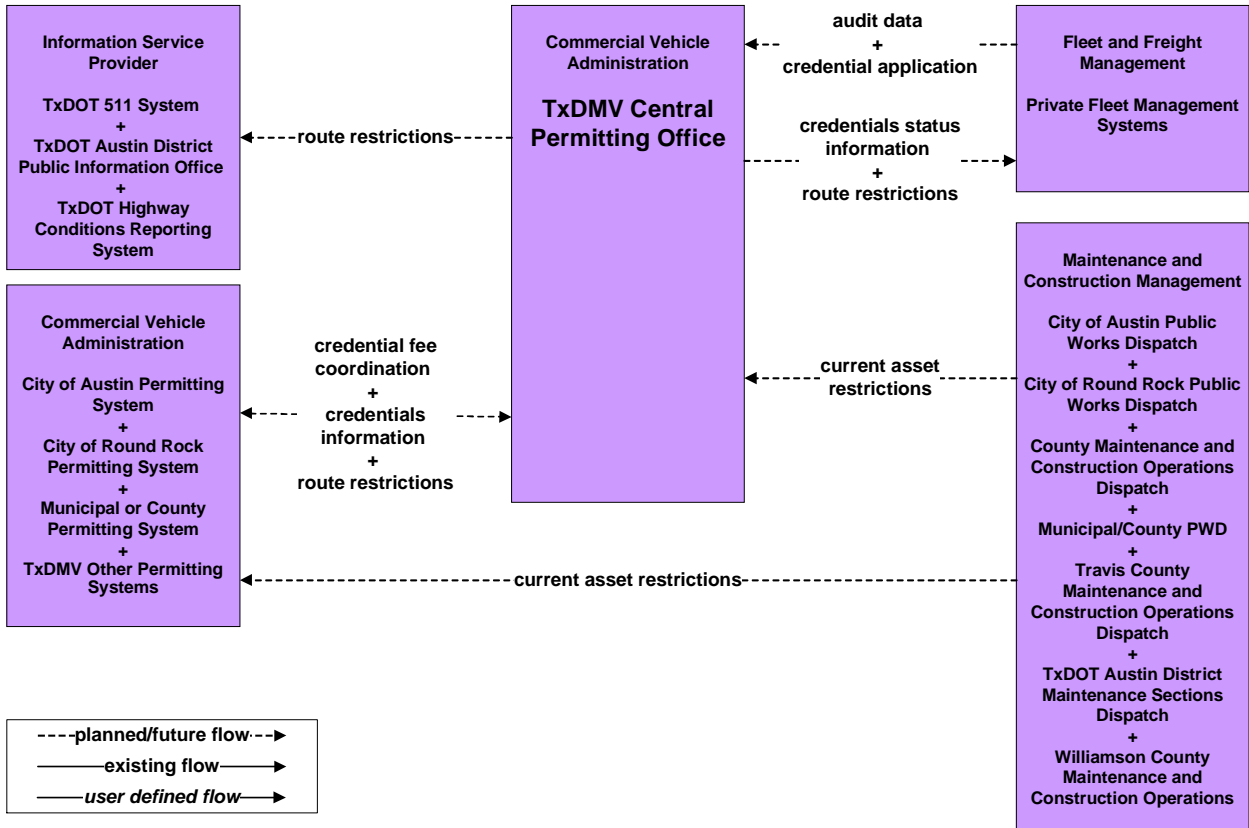
**CVO04 - CV Administrative Processes
City of Round Rock Permitting System**



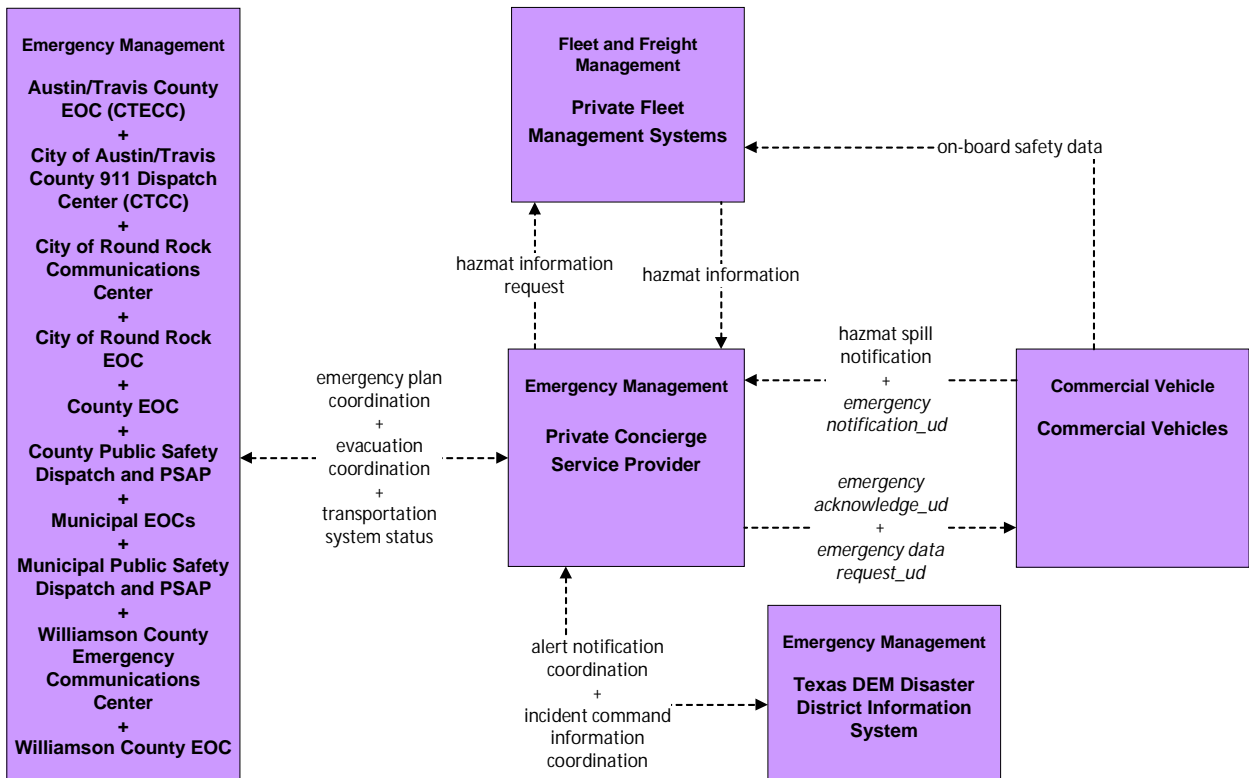
**CVO04 - CV Administrative Processes
Municipal or County Permitting System**



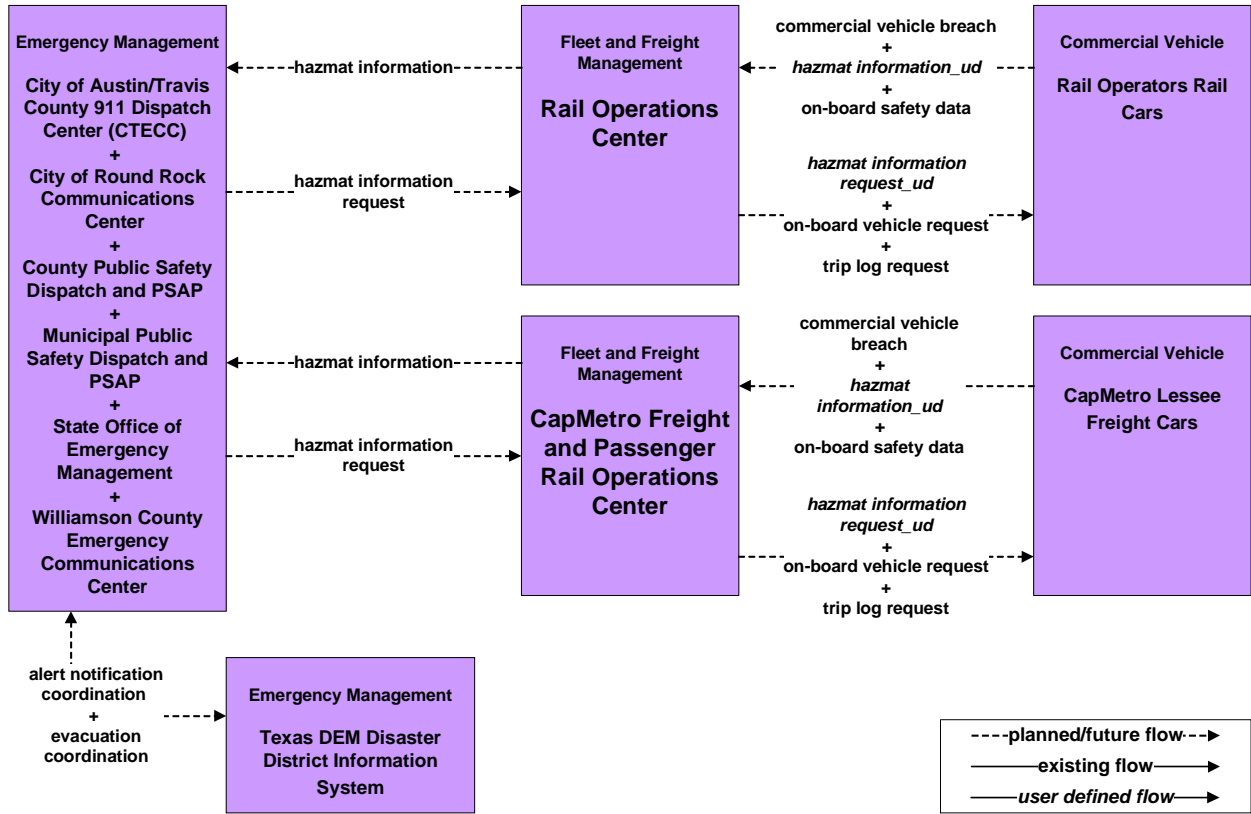
**CVO04 - CV Administrative Processes
TxDMV Central Permitting Office**



**CVO10 – HAZMAT Management
Commercial Vehicles**



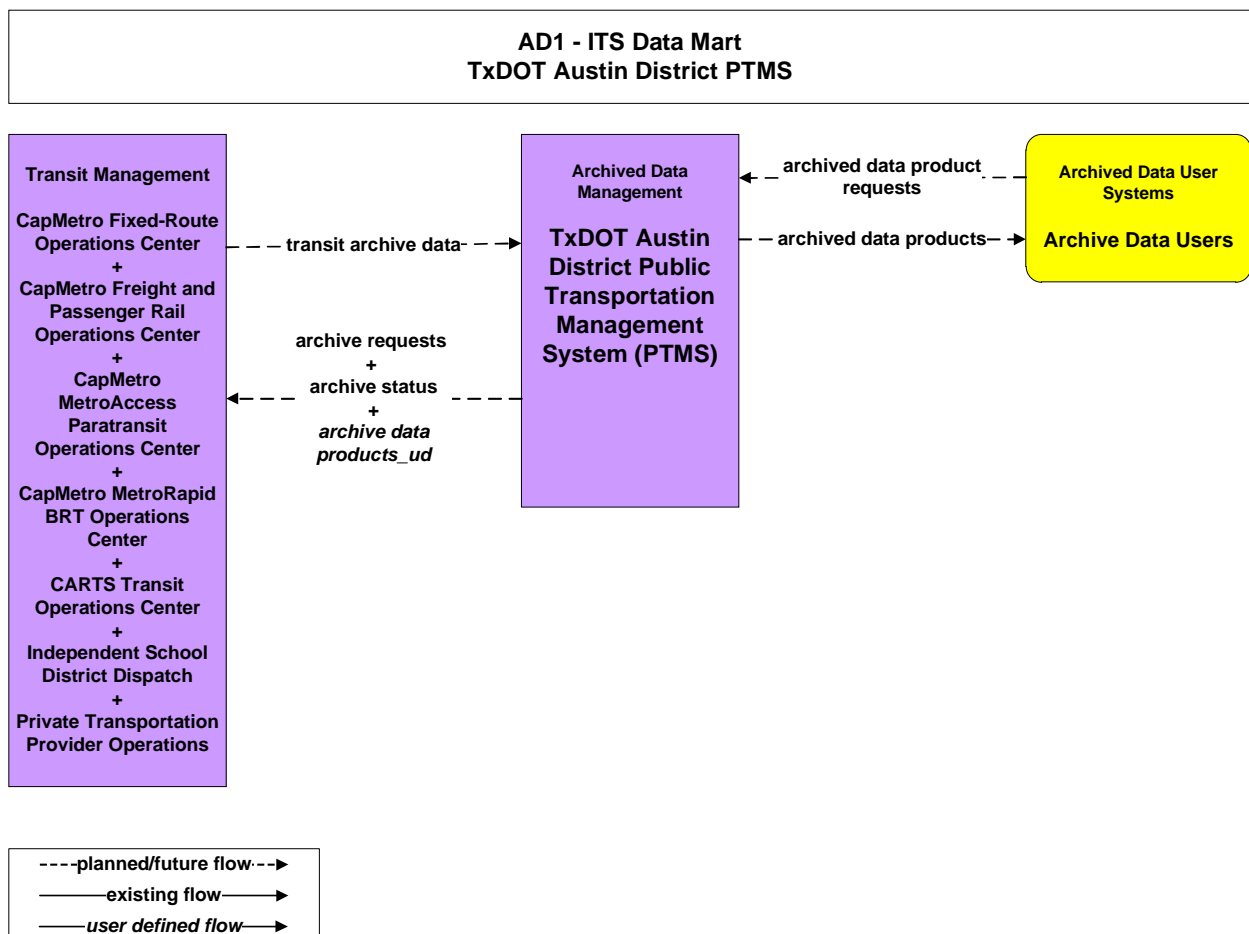
**CVO10 - HAZMAT Management
Rail Operations**



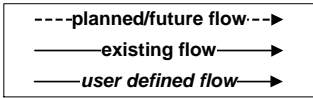
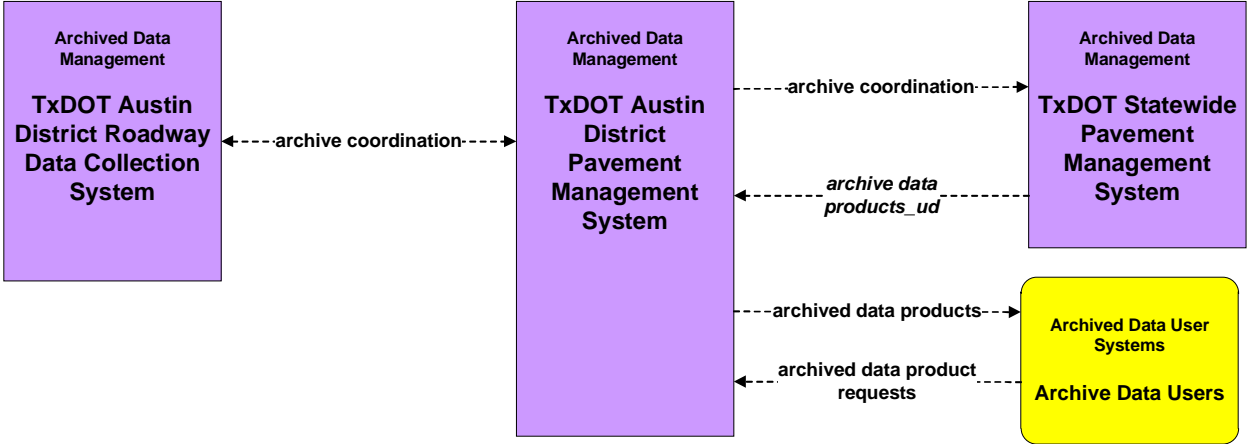
Austin Regional ITS Architecture

Customized ITS Service Package Diagrams

Archived Data (AD)



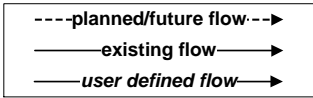
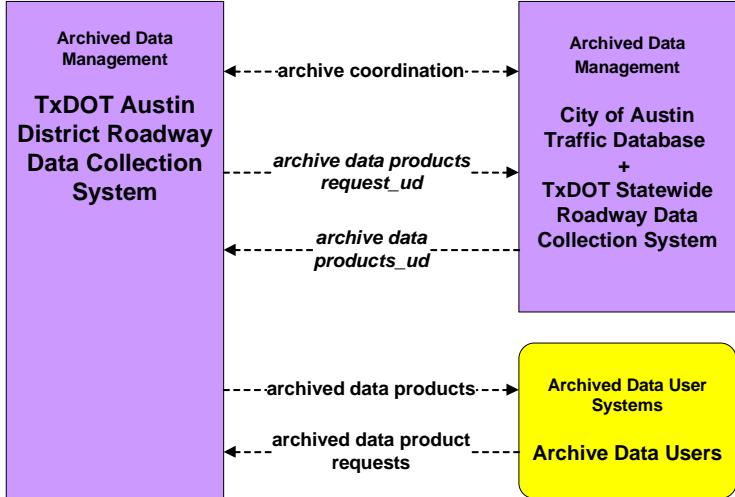
**AD1 - ITS Data Mart
TxDOT Austin District Pavement Management System**



Note:
Users include:

- Transportation Planners
- TxDOT
- Federal Highway Administration
- Public Requests

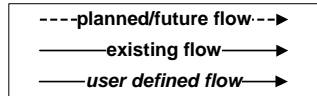
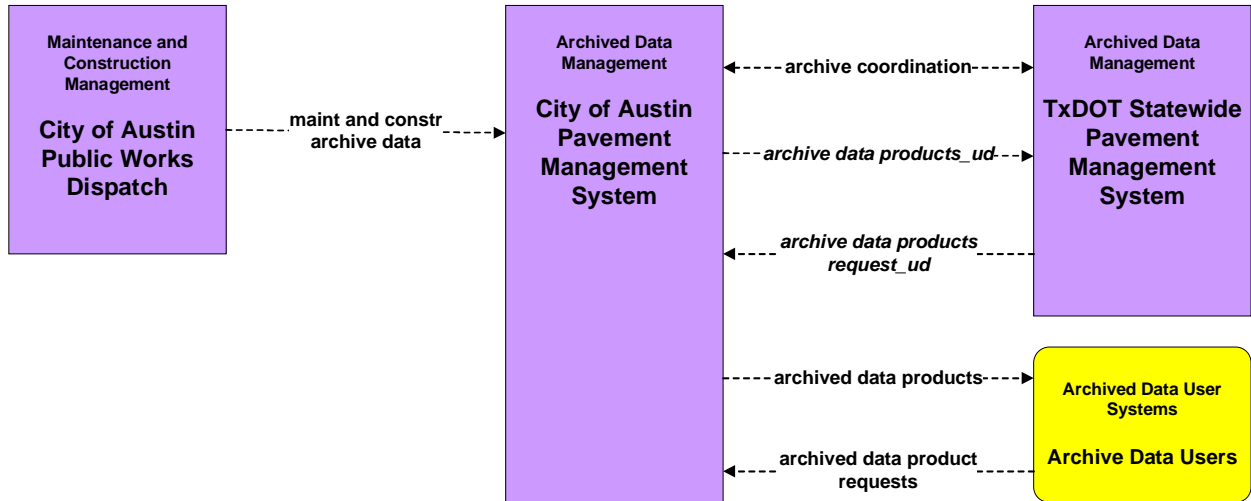
**AD1 - ITS Data Mart
TxDOT Austin District Roadway Data Collection System**



Note:
Users include:

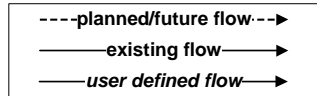
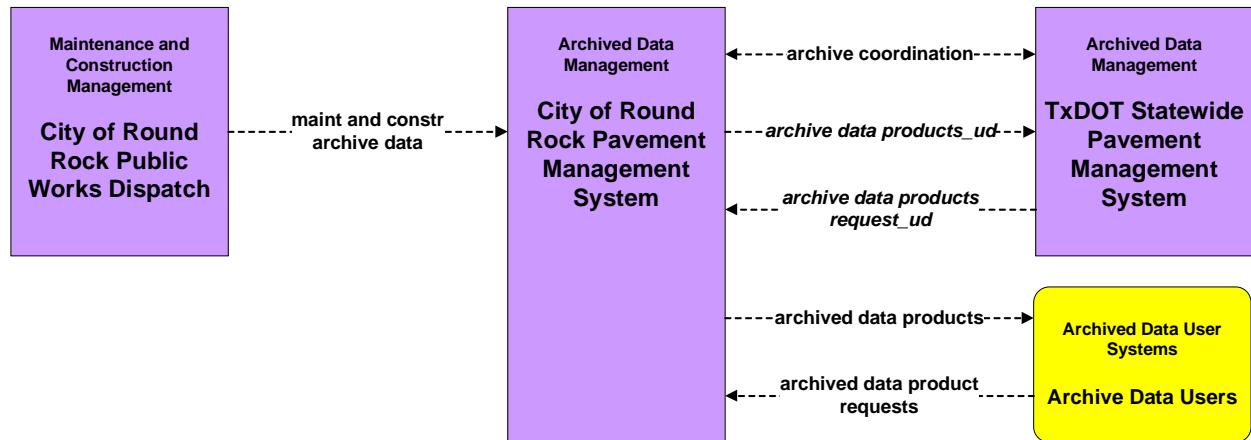
- Transportation Planners
- TxDOT
- Federal Highway Administration
- Public Requests

**AD1 - ITS Data Mart
City of Austin Pavement Management System**



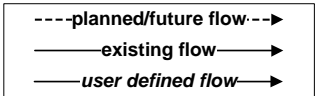
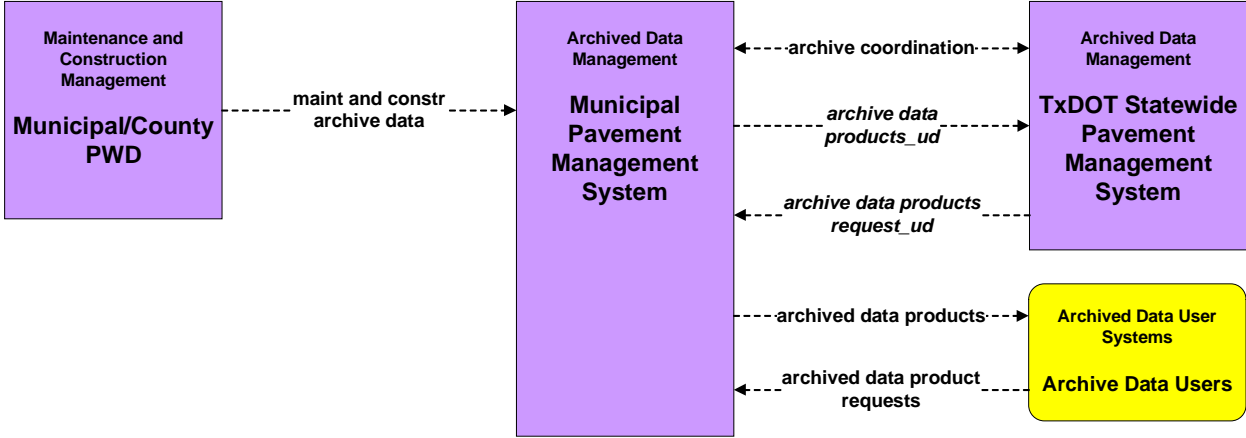
Note:
Users include:
 • Transportation Planners
 • TxDOT
 • Federal Highway Administration
 • Public Requests

**AD1 - ITS Data Mart
City of Round Rock Pavement Management System**



Note:
Users include:
 • Transportation Planners
 • TxDOT
 • Federal Highway Administration
 • Public Requests

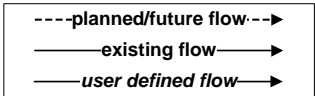
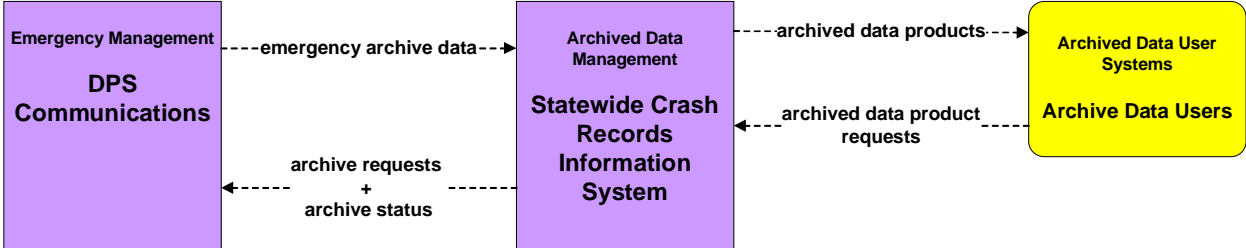
**AD1 - ITS Data Mart
Municipal Pavement Management System**



Note:
Users include:

- Transportation Planners
- TxDOT
- Federal Highway Administration
- Public Requests
- City of Cedar Park
- City of Georgetown
- City of San Marcos

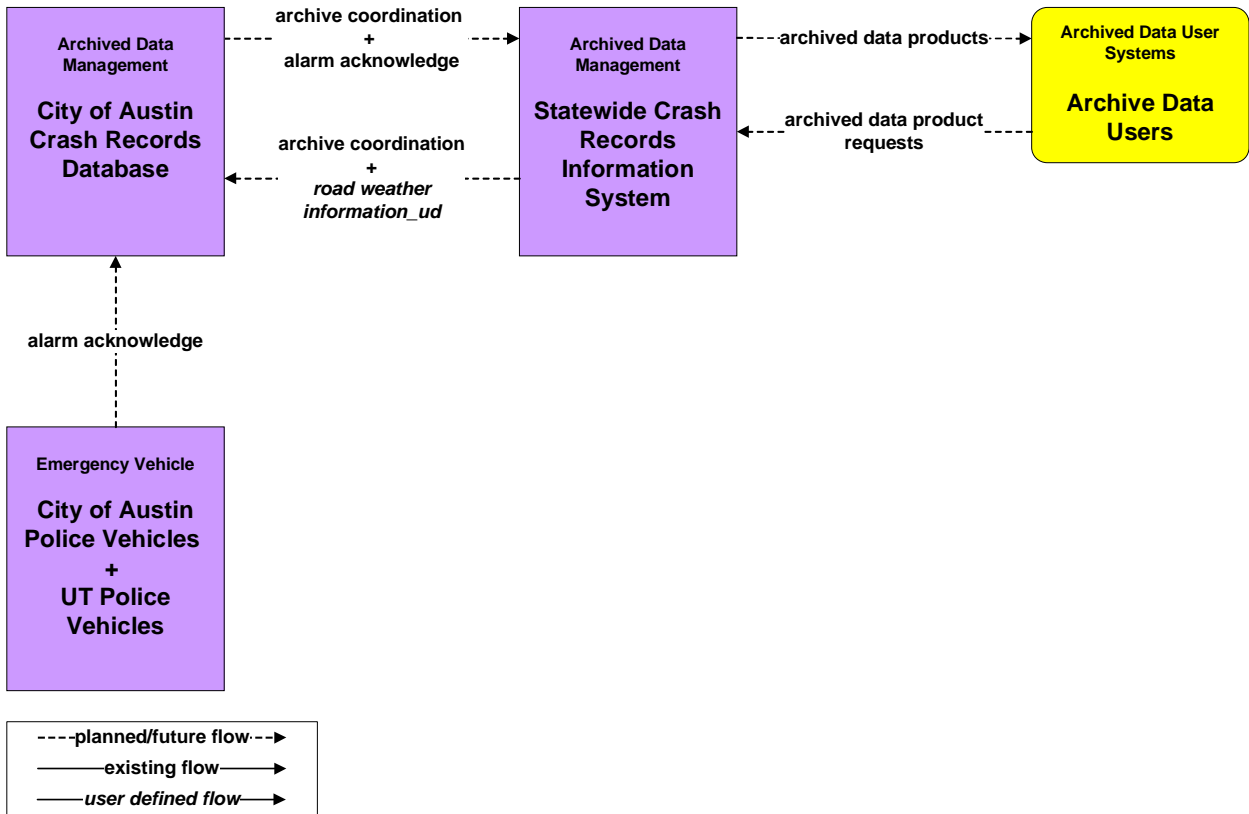
**AD1 - ITS Data Mart
Statewide Crash Records Information System**



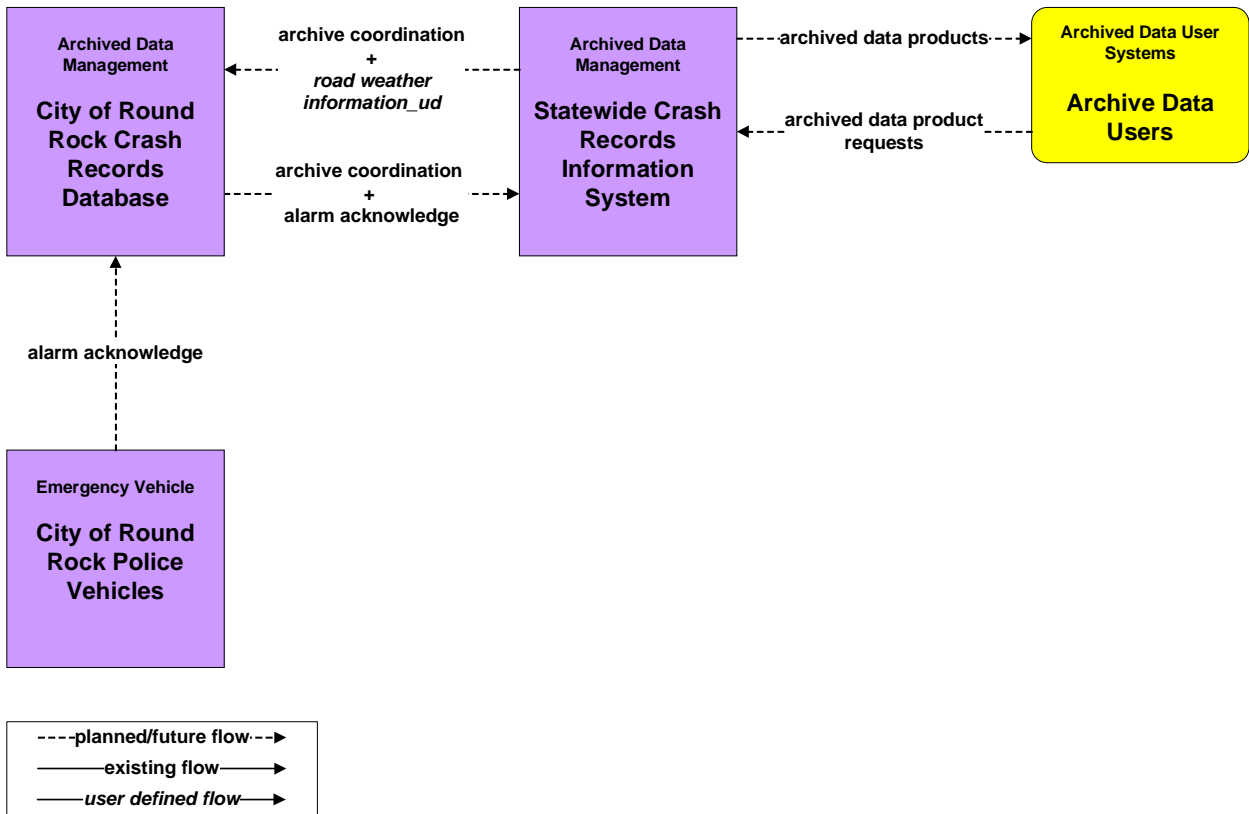
Note:
Users include:

- TxDOT Austin District
- City of Austin/Travis County 911 Center
- City of Round Rock Communications Center
- County Public Safety Dispatch
- Municipal Public Safety Dispatch
- Williamson County Communications Center

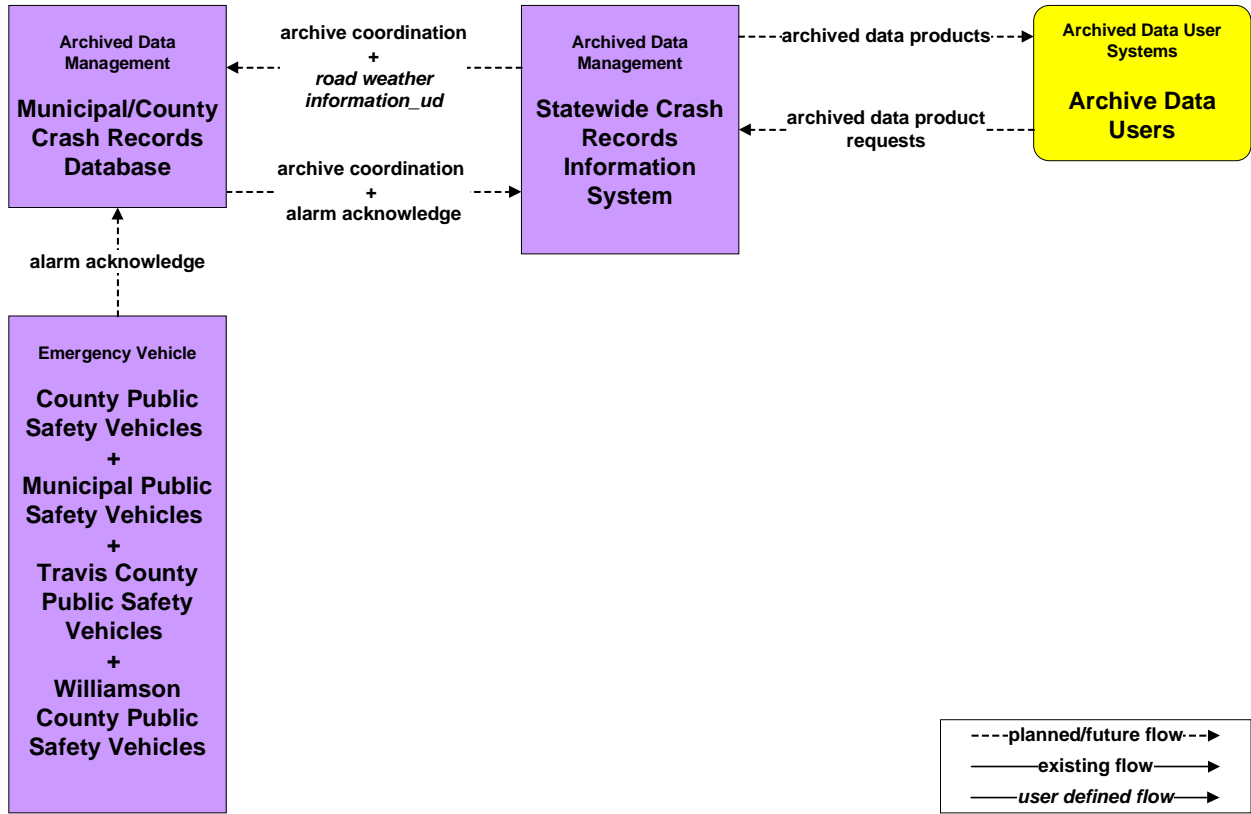
AD1 - ITS Data Mart
City of Austin Crash Records Database



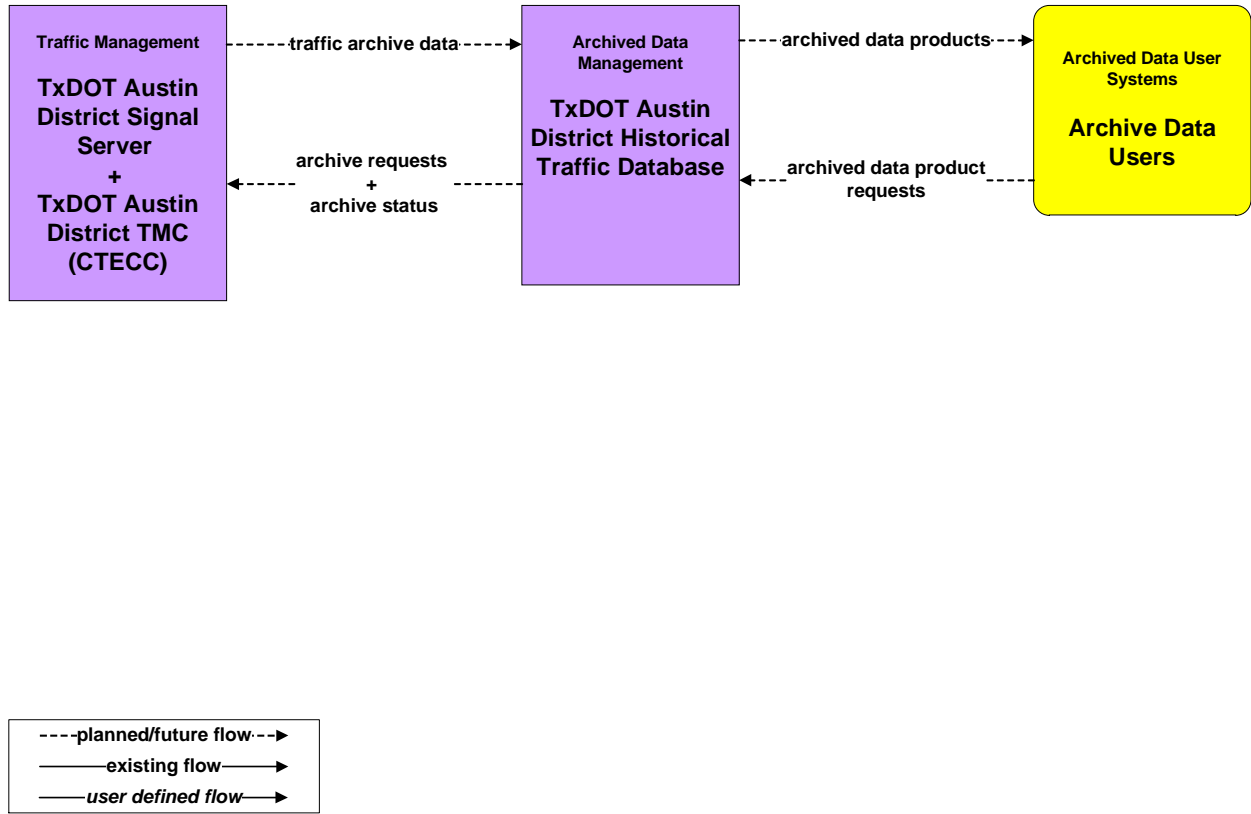
AD1 - ITS Data Mart
City of Round Rock Crash Records Database



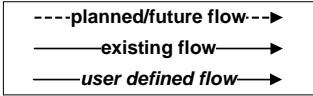
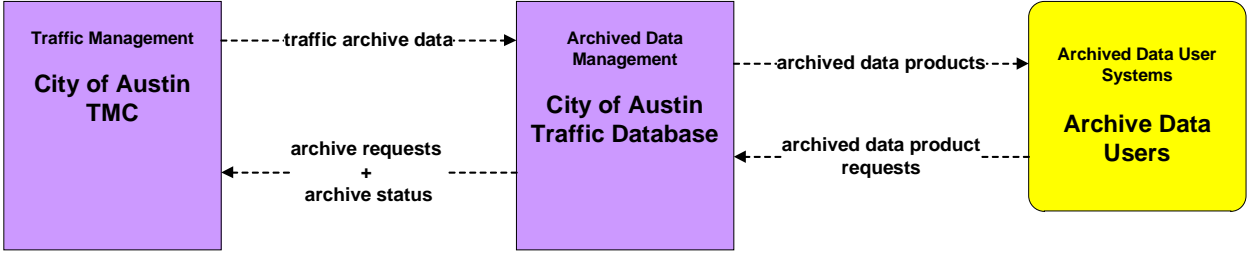
**AD1 - ITS Data Mart
Municipal/County Crash Records Database**



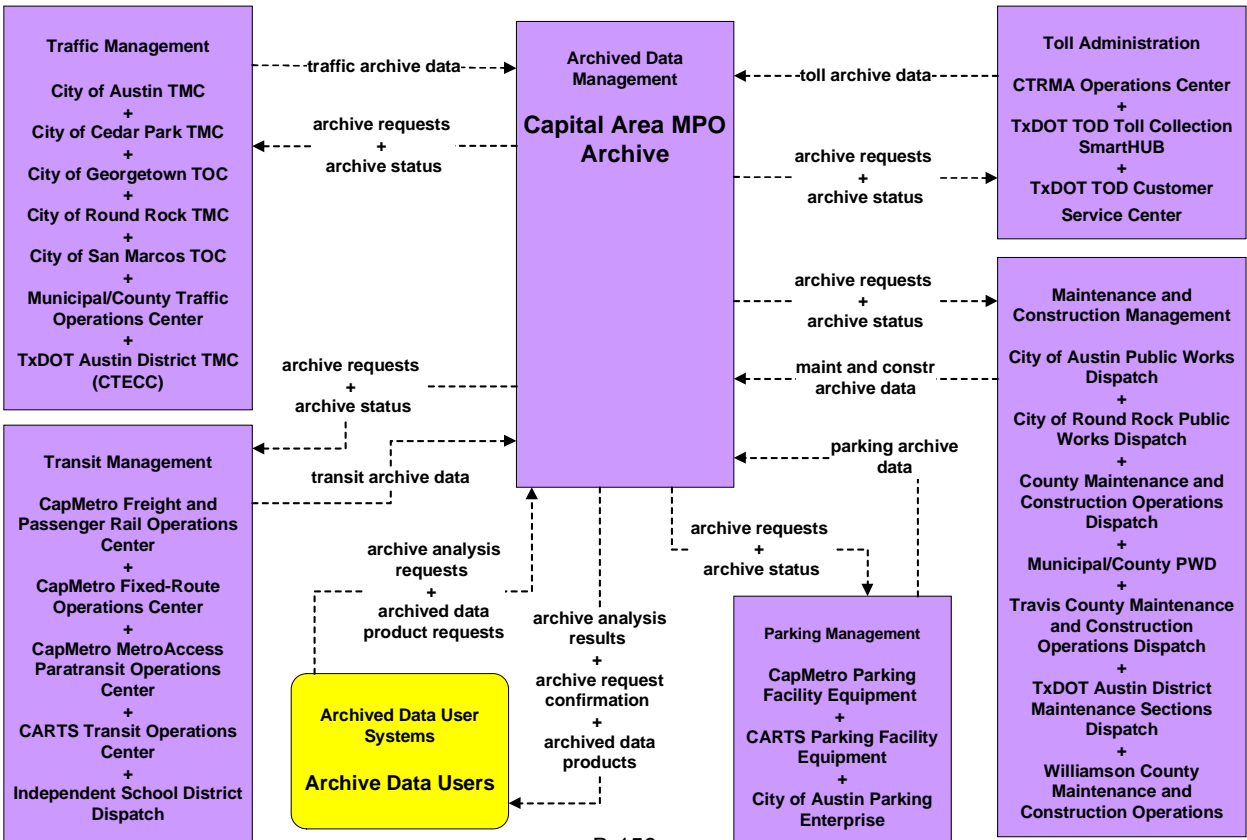
**AD1 - ITS Data Mart
TxDOT Austin District Traffic Archive Databases**



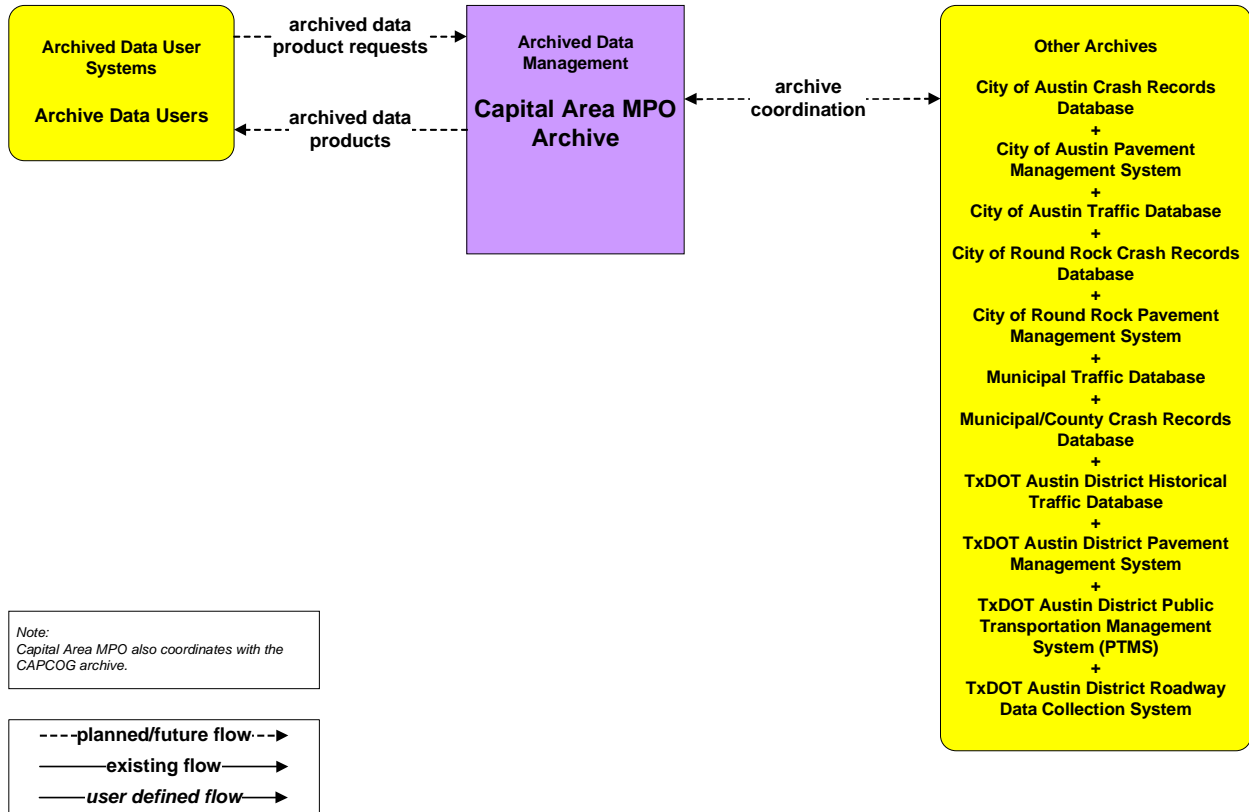
**AD1 - ITS Data Mart
City of Austin Traffic Archive Databases**



**AD2 - ITS Data Warehouse
Capital Area MPO**



**AD3 - ITS Virtual Data Warehouse
Capital Area MPO**



APPENDIX C – ELEMENT FUNCTIONS

Element Name	Equipment Package (Function)
ABIA (Airport) Police Dispatch	Emergency Call-Taking
	Emergency Data Collection
	Emergency Dispatch
	Emergency Early Warning System
	Emergency Evacuation Support
	Emergency Response Management
	Incident Command
ABIA (Airport) Police Vehicle	On-board EV Incident Management Communication
Army Corps of Engineers Flood Detectors	Roadway Environmental Monitoring
	Roadway Safety Warning System
Army Corps of Engineers Flood Monitoring Center	Center Secure Area Sensor Management
	Center Secure Area Surveillance
	Emergency Early Warning System
	Emergency Environmental Monitoring
Austin/Travis County EOC (CTECC)	Emergency Call-Taking
	Emergency Commercial vehicle Response
	Emergency Data Collection
	Emergency Dispatch
	Emergency Early Warning System
	Emergency Environmental Monitoring
	Emergency Evacuation Support
	Emergency Response Management
	Emergency Routing
	Incident Command
	Mayday Support
Capital Area MPO Archive	Government Reporting Systems Support
	ITS Data Repository
	On-Line Analysis and Mining
	Traffic and Roadside Data Archival
	Virtual Data Warehouse Services
CapMetro Barrier System	Field Barrier System Control
CapMetro DMS	Remote Transit Information Services
CapMetro Fixed-Route Operations Center	Center Secure Area Alarm Support
	Center Secure Area Surveillance
	Transit Center Connection Protection
	Transit Center Fare Management
	Transit Center Fixed-Route Operations
	Transit Center Information Services

Element Name	Equipment Package (Function)
CapMetro Fixed-Route Operations Center (continued)	Transit Center Multi-Modal Coordination
	Transit Passenger Counting
	Transit Center Security
	Transit Center Vehicle Tracking
	Transit Data Collection
	Transit Evacuation Support
	Transit Garage Maintenance
	Transit Transportation Operations Data Collection
CapMetro Fixed-Route Vehicles	On-board Connection Protection
	On-board Maintenance
	On-board Passenger Counting
	On-board Schedule Management
	On-board Transit Fare Management
	On-board Transit Information Services
	On-board Transit Security
	On-board Transit Trip Monitoring
CapMetro Freight and Passenger Rail Operations Center	Center Secure Area Alarm Support
	Center Secure Area Surveillance
	Transit Center Connection Protection
	Transit Center Fare Management
	Transit Center Fixed-Route Operations
	Transit Center Information Services
	Transit Center Multi-Modal Coordination
	Transit Passenger Counting
	Transit Center Security
	Transit Center Signal Priority
	Transit Center Vehicle Tracking
	Transit Data Collection
	Transit Evacuation Support
	Transit Garage Maintenance
Transit Transportation Operations Data Collection	
CapMetro Lessee Freight Cars	On-board Cargo Monitoring
	On-board Trip Monitoring
	Vehicle Location Determination
	Vehicle Mayday I/F

Element Name	Equipment Package (Function)
CapMetro MetroAccess Paratransit Operations Center	Transit Center Connection Protection
	Transit Center Fare Management
	Transit Center Information Services
	Transit Center Multi-Modal Coordination
	Transit Center Paratransit Operations
	Transit Passenger Counting
	Transit Center Security
	Transit Center Vehicle Tracking
	Transit Data Collection
	Transit Evacuation Support
	Transit Garage Maintenance
	Transit Transportation Operations Data Collection
CapMetro MetroAccess Paratransit Vehicles	On-board Connection Protection
	On-board Maintenance
	On-board Paratransit Operations
	On-board Schedule Management
	On-board Transit Fare Management
	On-board Transit Security
	On-board Transit Trip Monitoring
CapMetro MetroRail Passenger Rail Vehicles	On-board Connection Protection
	On-board Maintenance
	On-board Passenger Counting
	On-board Schedule Management
	On-board Transit Fare Management
	On-board Transit Information Services
	On-board Transit Security
	On-board Transit Trip Monitoring
CapMetro MetroRapid BRT Operations Center	Center Secure Area Alarm Support
	Center Secure Area Surveillance
	Transit Center Connection Protection
	Transit Center Fare Management
	Transit Center Fixed-Route Operations
	Transit Center Information Services
	Transit Center Multi-Modal Coordination
	Transit Passenger Counting
	Transit Center Security
	Transit Center Signal Priority

Element Name	Equipment Package (Function)
CapMetro MetroRapid BRT Operations Center (continued)	Transit Center Vehicle Tracking
	Transit Data Collection
	Transit Evacuation Support
	Transit Garage Maintenance
	Transit Transportation Operations Data Collection
CapMetro MetroRapid BRT Vehicles	On-board Connection Protection
	On-board Maintenance
	On-board Passenger County
	On-board Schedule Management
	On-board Transit Fare Management
	On-board Transit Information Services
	On-board Transit Security
	On-board Transit Signal Priority
	On-board Transit Trip Monitoring
CapMetro Mobile App	Infrastructure Provided Trip Planning
	ISP Traveler Data Collection
	ISP Traveler Information Alerts
CapMetro Parking Facility Equipment	Parking Data Collection
	Parking Electronic Payment
	Parking Management
CapMetro Security Monitoring Field Equipment	Field Secure Area Sensor Monitoring
	Field Secure Area Surveillance
CapMetro Ticket Vending Machines	Remote Transit Fare Management
CapMetro Wayside Equipment	Standard Rail Crossing
CapMetro Website	Infrastructure Provided Trip Planning
	ISP Traveler Data Collection
	ISP Traveler Information Alerts
CARTS Barrier System	Field Barrier System Control
CARTS Demand Response Vehicles	On-board Connection Protection
	On-board Maintenance
	On-board Paratransit Operations
	On-board Transit Fare Management
	On-board Transit Security
	On-board Transit Trip Monitoring
CARTS DMS	Remote Transit Information Services
CARTS Fixed-Route Vehicles	On-board Connection Protection
	On-board Maintenance
	On-board Passenger Counting

Element Name	Equipment Package (Function)
CARTS Fixed-Route Vehicles (continued)	On-board Schedule Management
	On-board Transit Fare Management
	On-board Transit Information Services
	On-board Transit Security
	On-board Transit Trip Monitoring
CARTS Parking Facility Equipment	Parking Data Collection
	Parking Electronic Payment
	Parking Management
CARTS Security Monitoring Field Equipment	Field Secure Area Sensor Monitoring
	Field Secure Area Surveillance
CARTS Transit Kiosks	Remote Basic Information Reception
	Remote Interactive Information
	Remote Transit Fare Management
	Remote Transit Information Services
CARTS Transit Operations Center	Center Secure Area Alarm Support
	Center Secure Area Surveillance
	Transit Center Connection Protection
	Transit Center Fare Management
	Transit Center Fixed-Route Operations
	Transit Center Information Services
	Transit Center Multi-Modal Coordination
	Transit Center Paratransit Operations
	Transit Passenger Counting
	Transit Center Security
	Transit Center Vehicle Tracking
	Transit Data Collection
	Transit Evacuation Support
	Transit Garage Maintenance
Transit Transportation Operations Data Collection	
CARTS Website	Infrastructure Provided Route Selection
	ISP Traveler Data Collection
	ISP Traveler Information Alerts
City of Austin Air Quality Division	Emission Data Collection
	Emissions Data Management
City of Austin Bicycle Detection	Roadway Mixed Use Sensing
	Roadway Probe Data Communications
City of Austin CCTV Cameras	Roadway Basic Surveillance
	Roadway Equipment Coordination

Element Name	Equipment Package (Function)
City of Austin CCTV Cameras (continued)	Roadway Incident Detection
	Roadway Safety Warning System
	Roadway Signal Controls
	Roadway Work Zone Traffic Control
City of Austin Crash Records Database	Government Reporting Systems Support
	ITS Data Repository
	Traffic and Roadside Data Archival
	Virtual Data Warehouse Services
City of Austin DMS	Roadway Equipment Coordination
	Roadway Traffic Information Dissemination
	Roadway Work Zone Traffic Control
City of Austin Dynamic Lane Assignment Signals	Roadway Dynamic Lane Management and Shoulder Use
	Roadway Reversible Lanes
	Roadway Signal Controls
City of Austin Emissions Monitoring Field Equipment	Roadway Emissions Monitoring
	Roadway Equipment Coordination
City of Austin Field Sensors	Roadway Basic Surveillance
	Roadway Probe Data Communications
	Roadway Equipment Coordination
City of Austin Fire Vehicles	On-board EV En Route Support
	On-board EV Incident Management Communication
City of Austin Flood Closure Gates	Field Barrier System Control
	Roadway Equipment Coordination
City of Austin Flood Detectors	Roadway Equipment Coordination
	Roadway Safety Warning System
City of Austin Flood Warning Beacons	Roadway Warning
City of Austin In-vehicle Parking Meters	Vehicle Toll/Parking Interface
City of Austin Parking Enterprise	Parking Coordination
	Parking Data Collection
	Parking Electronic Payment
	Parking Management
City of Austin Parking Meters	Parking Coordination
	Parking Electronic Payment

Element Name	Equipment Package (Function)
City of Austin Pavement Management System	Government Reporting Systems Support
	ITS Data Repository
	Traffic and Roadside Data Archival
	Virtual Data Warehouse Services
City of Austin Pedestrian Hybrid Beacons	Multimodal Crossing Control
	Roadway Mixed Use Sensing
City of Austin Permitting System	Credentials and Taxes Administration
	CV Information Exchange
City of Austin Police Vehicles	On-board EV Incident Management Communication
City of Austin Public Information Office	ISP Emergency Traveler Information
	ISP Traveler Data Collection
	Traveler Telephone Information
City of Austin Public Works Dispatch	MCM Data Collection
	MCM Environmental Information Collection
	MCM Environmental Information Processing
	MCM Incident Management
	MCM Maintenance Decision Support
	MCM Roadway Maintenance and Construction
	MCM Vehicle and Equipment Maintenance Management
	MCM Vehicle Tracking
	MCM Work Activity Coordination
	MCM Work Zone Management
	MCM Work Zone Safety Management
City of Austin Public Works Vehicles	MCV Barrier System Control
	MCV Environmental Monitoring
	MCV Infrastructure Monitoring
	MCV Roadway Maintenance and Construction
	MCV Vehicle Location Tracking
	MCV Vehicle Safety Monitoring
	MCV Vehicle System Monitoring and Diagnostics
	MCV Work Zone Support
City of Austin Rail Notification System	Standard Rail Crossing
City of Austin RWIS	Roadway Environmental Monitoring
City of Austin School Programmable Flasher System	Roadway Basic Surveillance
	Roadway Equipment Coordination
	Roadway Signal Controls
	Center Secure Area Sensor Management
	Center Secure Area Surveillance

Element Name	Equipment Package (Function)
City of Austin TMC	Collect Traffic Surveillance
	HRI Traffic Management
	Rail Operations Coordination
	TMC Environmental Monitoring
	TMC Evacuation Support
	TMC Incident Detection
	TMC Incident Dispatch Coordination/Communication
	TMC Multimodal Coordination
	TMC Multimodal Crossing Management
	TMC Probe Information Collection
	TMC Regional Traffic Control
	TMC Reversible Lane Management
	TMC Signal Control
	TMC Speed Monitoring and Warning
	TMC Traffic Information Dissemination
	TMC Work Zone Traffic Management
	City of Austin Traffic Database
ITS Data Repository	
Traffic and Roadside Data Archival	
Virtual Data Warehouse Services	
City of Austin Traffic Signals	Roadway Basic Surveillance
	Roadway Equipment Coordination
	Roadway Signal Controls
	Roadway Signal Preemption
	Roadway Signal Priority
	Standard Rail Crossing
City of Austin Watershed Protection	Emergency Early Warning System
	Emergency environmental Monitoring
	Barrier System Management
	TMC Environmental Monitoring
	TMC Roadway Warning
City of Austin Website	ISP Traveler Data Collection
City of Austin/Travis County 911 Dispatch Center (CTECC)	Emergency Call-Taking
	Emergency Data Collection
	Emergency Dispatch
	Emergency Evacuation Support
	Emergency Response Management

Element Name	Equipment Package (Function)
City of Austin/Travis County 911 Dispatch Center (CTECC) (continued)	Emergency Routing
	Incident Command
	Mayday Support
City of Cedar Park CCTV Cameras	Roadway Basic Surveillance
	Roadway Equipment Coordination
	Roadway Signal Controls
City of Cedar Park DMS	Roadway Equipment Coordination
	Roadway Traffic Information Dissemination
City of Cedar Park Field Sensors	Roadway Basic Surveillance
	Roadway Equipment Coordination
	Roadway Probe Data Communications
City of Cedar Park Flood Closure Gates	Field Barrier System Control
	Roadway Equipment Coordination
City of Cedar Park Flood Detectors	Roadway Equipment Coordination
	Roadway Safety Warning System
City of Cedar Park Flood Warning Beacons	Roadway Warning
City of Cedar Park Public Information Office	ISP Emergency Traveler Information
	ISP Traveler Data Collection
	Traveler Telephone Information
City of Cedar Park Rail Notification System	Standard Rail Crossing
City of Cedar Park School Programmable Flasher Systems	Roadway Basic Surveillance
	Roadway Equipment Coordination
	Roadway Signal Controls
City of Cedar Park TMC	Collect Traffic Surveillance
	HRI Traffic Management
	Rail Operations Coordination
	TMC Evacuation Support
	TMC Incident Detection
	TMC Incident Dispatch Coordination/Communication
	TMC Multimodal Coordination
	TMC Multimodal Crossing Management
	TMC Probe Information Collection
	TMC Regional Traffic Control
	TMC Signal Control
	TMC Speed Monitoring and Warning
	TMC Traffic Information Dissemination
TMC Work Zone Traffic Management	

Element Name	Equipment Package (Function)
City of Cedar Park TMC (continued)	Traffic Data Collection
	Traffic Equipment Maintenance
City of Cedar Park Traffic Signals	Roadway Basic Surveillance
	Roadway Equipment Coordination
	Roadway Signal Controls
	Roadway Signal Preemption
	Roadway Signal Priority
	Standard Rail Crossing
City of Georgetown CCTV Cameras	Roadway Basic Surveillance
	Roadway Equipment Coordination
	Roadway Signal Controls
City of Georgetown DMS	Roadway Equipment Coordination
	Roadway Traffic Information Dissemination
City of Georgetown Field Sensors	Roadway Basic Surveillance
	Roadway Equipment Coordination
City of Georgetown Flood Closure Gates	Field Barrier System Control
	Roadway Equipment Coordination
City of Georgetown Flood Detectors	Roadway Equipment Coordination
	Roadway Safety Warning System
City of Georgetown Flood Warning Beacons	Roadway Warning
City of Georgetown Public Information Office	ISP Emergency Traveler Information
	ISP Traveler Data Collection
	Traveler Telephone Information
City of Georgetown Rail Notification System	Standard Rail Crossing
City of Georgetown School Programmable Flasher Systems	Roadway Basic Surveillance
	Roadway Equipment Coordination
	Roadway Signal Controls
City of Georgetown TOC	Collect Traffic Surveillance
	HRI Traffic Management
	Rail Operations Coordination
	TMC Evacuation Support
	TMC Incident Detection
	TMC Incident Dispatch Coordination/Communication
	TMC Multimodal Coordination
	TMC Multimodal Crossing Management
	TMC Probe Information Collection
	TMC Regional Traffic Control
	TMC Signal Control
	TMC Speed Monitoring and Warning

Element Name	Equipment Package (Function)
City of Georgetown TOC (continued)	TMC Traffic Information Dissemination
	TMC Work Zone Traffic Management
	Traffic Data Collection
	Traffic Equipment Maintenance
City of Georgetown Traffic Signals	Roadway Basic Surveillance
	Roadway Equipment Coordination
	Roadway Signal Controls
	Roadway Signal Preemption
	Roadway Signal Priority
	Standard Rail Crossing
City of Round Rock CCTV Cameras	Roadway Basic Surveillance
	Roadway Equipment Coordination
	Roadway Signal Controls
City of Round Rock Communications Center	Emergency Call-Taking
	Emergency Dispatch
	Emergency Evacuation Support
	Emergency Response Management
	Emergency Routing
	Incident Command
	Mayday Support
City of Round Rock Communications Division	ISP Emergency Traveler Information
	ISP Traveler Data Collection
	Traveler Telephone Information
City of Round Rock Crash Records Database	Government Reporting Systems Support
	ITS Data Repository
	Traffic and Roadside Data Archival
	Virtual Data Warehouse Services
City of Round Rock DMS	Roadway Equipment Coordination
	Roadway Traffic Information Dissemination
City of Round Rock EOC	Emergency Call-Taking
	Emergency Data Collection
	Emergency Dispatch
	Emergency Evacuation Support
	Emergency Response Management
	Emergency Routing
	Incident Command
	Mayday Support
City of Round Rock Field Sensors	Roadway Basic Surveillance
	Roadway Equipment Coordination

Element Name	Equipment Package (Function)
City of Round Rock Fire Vehicles	On-board EV En Route Support
	On-board EV Incident Management Communication
City of Round Rock Flood Closure Gates	Field Barrier System Control
	Roadway Equipment Coordination
City of Round Rock Flood Detectors	Roadway Equipment Coordination
	Roadway Safety Warning System
City of Round Rock Flood Warning Beacons	Roadway Warning
City of Round Rock Office of Emergency Management	Emergency Early Warning System
	Emergency Environmental Monitoring
	Emergency Evacuation Support
	Emergency Response Management
City of Round Rock Pavement Management System	Government Reporting Systems Support
	ITS Data Repository
	Traffic and Roadside Data Archival
	Virtual Data Warehouse Services
City of Round Rock Permitting System	Credentials and Taxes Administration
	CV Information Exchange
City of Round Rock Police Vehicles	On-board EV Incident Management Communication
City of Round Rock Portable DMS	Roadway Traffic Information Dissemination
	Roadway Work Zone Traffic Control
City of Round Rock Public Works Dispatch	MCM Data Collection
	MCM Incident Management
	MCM Maintenance Decision Support
	MCM Roadway Maintenance and Construction
	MCM Vehicle and Equipment Maintenance Management
	MCM Vehicle Tracking
	MCM Work Activity Coordination
	MCM Work Zone Management
	MCM Work Zone Safety Management
City of Round Rock Public Works Vehicles	MCV Barrier System Control
	MCV Infrastructure Monitoring
	MCV Roadway Maintenance and Construction
	MCV Vehicle Location Tracking
	MCV Vehicle Safety Monitoring
	MCV Vehicle System Monitoring and Diagnostics
	MCV Work Zone Support
City of Round Rock Rail Notification System	Standard Rail Crossing
City of Round Rock Rectangular Rapid Flash Beacons	Multimodal Crossing Control
	Roadway Mixed Use Sensing

Element Name	Equipment Package (Function)
City of Round Rock School Programmable Flasher Systems	Roadway Basic Surveillance
	Roadway Equipment Coordination
	Roadway Signal Controls
City of Round Rock TMC	Collect Traffic Surveillance
	HRI Traffic Management
	Rail Operations Coordination
	TMC Evacuation Support
	TMC Incident Detection
	TMC Incident Dispatch Coordination/Communication
	TMC Multimodal Coordination
	TMC Multimodal Crossing Management
	TMC Probe Information Collection
	TMC Regional Traffic Control
	TMC Signal Control
	TMC Speed Monitoring and Warning
	TMC Traffic Information Dissemination
	TMC Work Zone Traffic Management
	Traffic Data Collection
Traffic Equipment Maintenance	
City of Round Rock Traffic Signals	Roadway Basic Surveillance
	Roadway Equipment Coordination
	Roadway Signal Controls
	Roadway Signal Preemption
	Roadway Signal Priority
	Standard Rail Crossing
City of Round Rock Website	ISO Traveler Data Collection
City of San Marcos CCTV Cameras	Roadway Basic Surveillance
	Roadway Equipment Coordination
	Roadway Signal Controls
San Marcos Communications Office	ISP Emergency Traveler Information
	ISP Traveler Data Collection
	Traveler Telephone Information
City of San Marcos DMS	Roadway Equipment Coordination
	Roadway Traffic Information Dissemination
City of San Marcos Field Sensors	Roadway Basic Surveillance
	Roadway Equipment Coordination

Element Name	Equipment Package (Function)
City of San Marcos Flood Closure Gates	Field Barrier System Control
	Roadway Equipment Coordination
City of San Marcos Flood Detectors	Roadway Equipment Coordination
	Roadway Safety Warning System
City of San Marcos Flood Warning Beacons	Roadway Warning
City of San Marcos Rail Notification System	Standard Rail Crossing
City of San Marcos Rectangular Rapid Flash Beacons	Multimodal Crossing Control
	Roadway Mixed Use Sensing
City of San Marcos School Programmable Flasher Systems	Roadway Basic Surveillance
	Roadway Equipment Coordination
	Roadway Signal Controls
City of San Marcos TOC	Collect Traffic Surveillance
	HRI Traffic Management
	Rail Operations Coordination
	TMC Evacuation Support
	TMC Incident Detection
	TMC Incident Dispatch Coordination/Communication
	TMC Multimodal Coordination
	TMC Multimodal Crossing Management
	TMC Probe Information Collection
	TMC Regional Traffic Control
	TMC Signal Control
	TMC Speed Monitoring and Warning
	TMC Traffic Information Dissemination
	TMC Work Zone Traffic Management
	Traffic Data Collection
Traffic Equipment Maintenance	
City of San Marcos Traffic Signals	Roadway Basic Surveillance
	Roadway Equipment Coordination
	Roadway Signal Controls
	Roadway Signal Preemption
	Roadway Signal Priority
	Standard Rail Crossing
Commercial Vehicles	On-board Cargo Monitoring
	Vehicle Location Determination
	Vehicle Mayday I/F
	Vehicle Toll/Parking Interface
	Vehicle Traffic Probe Support

Element Name	Equipment Package (Function)
County EOC	Emergency Call-Taking
	Emergency Commercial Vehicle Response
	Emergency Data Collection
	Emergency Dispatch
	Emergency Early Warning System
	Emergency Environmental Monitoring
	Emergency Evacuation Support
	Emergency Response Management
	Emergency Routing
	Incident Command
	Mayday Support
County ITS Field Equipment	Field Barrier System Control
	Multimodal Crossing Control
	Roadway Basic Surveillance
	Roadway Data Collection
	Roadway Environmental Monitoring
	Roadway Equipment Coordination
	Roadway Field Device Monitoring
	Roadway Mixed Use Sensing
	Roadway Safety Warning System
	Roadway Signal Controls
	Roadway Signal Preemption
	Roadway Signal Priority
	Roadway Speed Monitoring and Warning
	Roadway Traffic Information Dissemination
	Roadway Warning
Road Work Zone Traffic Control	
Standard Rail Crossing	
County Maintenance and Construction Operations Dispatch	MCM Data Collection
	MCM Incident Management
	MCM Maintenance Decision Support
	MCM Roadway Maintenance and Construction
	MCM Vehicle and Equipment Maintenance Management
	MCM Vehicle Tracking
	MCM Work Activity Coordination
	MCM Work Zone Management

Element Name	Equipment Package (Function)
County Maintenance and Construction Vehicles	MCV Barrier System Control
	MCV Infrastructure Monitoring
	MCV Roadway Maintenance and Construction
	MCV Vehicle Location Tracking
	MCV Vehicle System Monitoring and Diagnostics
	MCV Work Zone Support
County Public Safety Dispatch and PSAP	Emergency Call-Taking
	Emergency Data Collection
	Emergency Dispatch
	Emergency Early Warning System
	Emergency Environmental Monitoring
	Emergency Evacuation Support
	Emergency Response Management
	Emergency Routing
	Incident Command
	Mayday Support
County Public Safety Vehicles	On-board EV En Route Support
	On-board EV Incident Management Communication
CTRMA CCTV Cameras	Roadway Basic Surveillance
	Roadway Equipment Coordination
CTRMA DMS	Roadway Equipment Coordination
	Roadway Traffic Information Dissemination
CTRMA Field Sensors	Roadway Basic Surveillance
	Roadway Equipment Coordination
	Roadway Probe Data Communications
CTRMA HERO Vehicles	On-board EV En Route Support
	On-board EV Incident Management Communication
CTRMA Operations Center	Emergency Call-Taking
	Emergency Routing
	Service Patrol Management
	Toll Administration
	Toll Data Collection
	Collect Traffic Surveillance
	TMC Demand Management Coordination
	TMC HOV Lane Management
	TMC Incident Detection
	TMC Incident Dispatch Coordination/Communication
	TMC Probe Information Collection

Element Name	Equipment Package (Function)
CTRMA Operations Center (continued)	TMC Regional Traffic Management
	TMC Speed Monitoring and Warning
	TMC Traffic Information Dissemination
	TMC Traffic Metering
	Traffic Data Collection
CTRMA Toll Collection SmarHUB	Toll Administration
CTRMA Toll Plazas	Roadway Equipment Coordination
	Roadway Probe Data Communications
	Roadway Speed Monitoring and Warning
	Toll Plaza Toll Collection
CTRMA Toll Reconciliation Office	Center VMT Payment Administration
	Toll Administration
CTRMA Website	ISP Probe Information Collection
DPS Communications	Center Secure Area Alarm Support
	Center Secure Area Sensor Management
	Center Secure Area Surveillance
	Emergency Call-Taking
	Emergency Data Collection
	Emergency Dispatch
	Emergency Early Warning System
	Emergency Evacuation Support
	Emergency Response Management
	Emergency Routing
	Incident Command
DPS Emergency Vehicles	On-board EV En Route Support
	On-board EV Incident Management Communication
Hays County Flood Closure Gates	Field Barrier System Control
	Roadway Equipment Coordination
Hays County Flood Detectors	Roadway Equipment Coordination
	Roadway Safety Warning System
Hays County Flood Warning Beacons	Roadway Warning
Hays County Office of Emergency Management	Emergency Early Warning System
	Emergency Environmental Monitoring
	Emergency Evacuation Support
	Emergency Response Management
	Barrier System Management
	TMC Roadway Warning

Element Name	Equipment Package (Function)
Independent School District Buses	On-board Maintenance
	On-board Schedule Management
	On-board Transit Security
	On-board Transit Trip Monitoring
Independent School District Dispatch	Incident Command
	Transit Center Fixed-Route Operations
	Transit Center Information Services
	Transit Center Multi-Modal Coordination
	Transit Center Security
	Transit Center Vehicle Tracking
	Transit Data Collection
	Transit Environmental Monitoring
	Transit Evacuation Support
	Transit Garage Maintenance
Independent School District Police	Center Secure Area Alarm Support
	Center Secure Area Sensor Management
	Center Secure Area Surveillance
	Emergency Response Management
Intercity Buses	On-board Transit Trip Monitoring
LCRA Flood Monitoring Center	Center Secure Area Sensor Management
	Center Secure Area Surveillance
	Emergency Early Warning System
	Emergency Environmental Monitoring
LCRA Flood Monitoring Field Equipment	Emergency Environmental Monitoring
	Roadway Safety Warning System
Municipal EOCs	Emergency Call-Taking
	Emergency Commercial Vehicle Response
	Emergency Data Collection
	Emergency Dispatch
	Emergency Early Warning System
	Emergency Environmental Monitoring
	Emergency Evacuation Support
	Emergency Response Management
	Emergency Routing
	Incident Command
	Mayday Support
Municipal Fire Vehicles	On-board EV En Route Support
	On-board EV Incident Management Communication

Element Name	Equipment Package (Function)
Municipal ITS Field Equipment	Field Barrier System Control
	Multimodal Crossing Control
	Roadway Basic Surveillance
	Roadway Data Collection
	Roadway Environmental Monitoring
	Roadway Equipment Coordination
	Roadway Field Device Monitoring
	Roadway Mixed Use Sensing
	Roadway Safety Warning System
	Roadway Signal Controls
	Roadway Signal Preemption
	Roadway Signal Priority
	Roadway Speed Monitoring and Warning
	Roadway Traffic Information Dissemination
	Roadway Warning
Road Work Zone Traffic Control	
Standard Rail Crossing	
Municipal or County Permitting System	Credentials and Taxes Administration
	CV Information Exchange
Municipal Pavement Management System	Government Reporting Systems Support
	ITS Data Repository
	Traffic and Roadside Data Archival
Municipal Public Information Office	ISP Emergency Traveler Information
	ISP Traveler Data Collection
	Traveler Telephone Information
Municipal Public Safety Dispatch and PSAP	Emergency Call-Taking
	Emergency Data Collection
	Emergency Dispatch
	Emergency Early Warning System
	Emergency Environmental Monitoring
	Emergency Evacuation Support
	Emergency Response Management
	Emergency Routing
	Incident Command
	Mayday Support
Municipal Public Safety Vehicles	On-board EV En Route Support
	On-board EV Incident Management Communication

Element Name	Equipment Package (Function)
Municipal PWD Vehicles	MCV Barrier System Control
	MCV Infrastructure Monitoring
	MCV Roadway Maintenance and Construction
	MCV Vehicle Location Tracking
	MCV Vehicle System Monitoring and Diagnostics
	MCV Work Zone Support
Municipal School Programmable Flasher Systems	Roadway Basic Surveillance
	Roadway Equipment Coordination
	Roadway Signal Controls
Municipal Traffic Database	ITS Data Repository
	Virtual Data Warehouse Services
Municipal Website	ISP Traveler Data Collection
Municipal/County Crash Records Database	Government Reporting Systems Support
	ITS Data Repository
	Traffic and Roadside Data Archival
Municipal/County PWD	MCM Data Collection
	MCM Environmental Information Collection
	MCM Incident Management
	MCM Infrastructure Monitoring
	MCM Maintenance Decision Support
	MCM Roadway Maintenance and Construction
	MCM Vehicle and Equipment Maintenance Management
	MCM Vehicle Tracking
	MCM Winter Maintenance Management
	MCM Work Activity Coordination
	MCM Work Zone Management
Municipal /County Traffic Operations Center	Collect Traffic Surveillance
	HRI Traffic Management
	Rail Operations Coordination
	TMC Evacuation Support
	TMC Incident Detection
	TMC Incident Dispatch Coordination/Communication
	TMC Multimodal Coordination
	TMC Multimodal Crossing Management
	TMC Probe Information Collection
	TMC Regional Traffic Management
	TMC Signal Control
	TMC Speed Monitoring and Warning

Element Name	Equipment Package (Function)
Municipal /County Traffic Operations Center (continued)	TMC Traffic Information Dissemination
	TMC Work Zone Traffic Management
	Traffic Data Collection
	Traffic Equipment Maintenance
Municipal/County Transit Operations Center	Transit Center Connection Protection
	Transit Center Fare Management
	Transit Center Fixed-Route Operations
	Transit Center Information Services
	Transit Center Multi-Modal Coordination
	Transit Center Paratransit Operations
	Transit Passenger Counting
	Transit Center Security
	Transit Center Vehicle Tracking
	Transit Data Collection
	Transit Evacuation Support
	Transit Garage Maintenance
	Transit Transportation Operations Data Collection
Private Concierge Service Provider	Center Secure Area Alarm Support
	Center Secure Area Sensor Management
	Mayday Support
Private Fleet Management Systems	Fleet Administration
	Fleet Credentials and Taxes Management and Reporting
	Fleet HAZMAT Management
	Fleet Maintenance Management
Private Sector Traveler Information Services	Infrastructure Provided Trip Planning
	ISP Traveler Data Collection
Private Tow/Wrecker Dispatch	Emergency Call-Taking
	Emergency Dispatch
	Emergency Response Management
	Emergency Routing
	Incident Command
Private Tow/Wrecker Vehicles	On-board EV en Route Support
	On-board EV Incident Management Communication
Private Transportation Demand Response Vehicles	On-board Connection Protection
	On-board Maintenance
	On-board Paratransit Operations
	On-board Transit Fare and Management
	On-board Transit Security
	On-board Transit Trip Monitoring

Element Name	Equipment Package (Function)
Private Transportation Fixed-Route Vehicles	On-board Connection Protection
	On-board Maintenance
	On-board Schedule Management
	On-board Transit Fare and Management
	On-board Transit Security
	On-board Transit Trip Monitoring
Private Transportation Provider Kiosks	Remote Basic Information Reception
	Remote Interactive Information Reception
	Remote Transit Fare Management
	Remote Transit Information Services
Private Transportation Provider Operations	Transit Center Connection Protection
	Transit Center Fare and Management
	Transit Center Fixed-Route Operations
	Transit Center Information Services
	Transit Center Multi-Modal Coordination
	Transit Center Paratransit Operations
	Transit Center Passenger Counting
	Transit Center Security
	Transit Center Vehicle Tracking
	Transit Data Collection
	Transit Environmental Monitoring
	Transit Evacuation Support
	Transit Garage Maintenance
Private Transportation Provider Operations Website	ISP Traveler Data Collection
Private Travelers Personal Computing Devices	Personal Autonomous Route Guidance
	Personal Basic Information Reception
	Personal Interactive Information Reception
	Personal Location Determination
	Personal Mayday I/F
Private Vehicles	Basic Vehicle Reception
	Interactive Vehicle Reception
	Vehicle Automated Operations
	Vehicles Autonomous Route Guidance
	Vehicle Lateral Warning System
	Vehicle Location Determination
	Vehicle Longitudinal Control
	Vehicle Longitudinal Warning System
	Vehicle Mayday I/F

Element Name	Equipment Package (Function)
Private Vehicles (continued)	Vehicle On-board Diagnostic System
	Vehicle Pre-Crash Safety Systems
	Vehicle Safety Monitoring System
	Vehicle Toll/Parking Interface
	Vehicle Traffic Probe Support
	Vehicle Warning System
Public/Private Ambulance Dispatch	Emergency Call-Taking
	Emergency Dispatch
	Emergency Response Management
	Emergency Routing
	Incident Command
Public/Private Ambulance Vehicles	On-board EV En Route Support
	On-board EV Incident Management Communication
Rail Operators Rail Cars	On-board Cargo Monitoring
	On-board Trip Monitoring
Regional Utility Companies	MCM Incident Management
	MCM Work Activity Coordination
Rural Fire Department Dispatch	Emergency Call-Taking
	Emergency Dispatch
	Emergency Response Management
	Incident Command
Rural Fire Department Vehicles	On-board EV En Route Support
	On-board EV Incident Management Communication
State Office of Emergency Management	Center Secure Area Sensor Management
	Center Secure Area Surveillance
	Emergency Commercial Vehicle Response
	Emergency Early Warning System
	Mayday Support
Statewide Crash Records Information System	Government Reporting Systems Support
	ITS Data Repository
	Traffic and Roadside Data Archival
Statewide EOC	Emergency Call-Taking
	Emergency Commercial Vehicle Response
	Emergency Dispatch
	Emergency Early Warning System
	Emergency Environmental Monitoring

Element Name	Equipment Package (Function)
Statewide EOC (continued)	Emergency Evacuation Support
	Emergency Response Management
	Incident Command
Statewide Toll Collection SmarHUB	Toll Administration
TCEQ Field Emissions Monitors	Roadway Emissions Monitoring
	Roadway Equipment Coordination
TCEQ Monitoring Operations Section	Emissions Data Collection
	Emissions Data Management
TCEQ State Headquarters	Emissions Data Collection
	Emissions Data Management
Texas DEM Disaster District Information System	Emergency Commercial Vehicle Response
	Emergency Environmental Monitoring
	Emergency Response Management
	Mayday Support
Travis County Construction and Maintenance Operations Dispatch	MCM Data Collection
	MCM Environmental Information Collection
	MCM Incident Management
	MCM Infrastructure Monitoring
	MCM Maintenance Decision Support
	MCM Roadway Maintenance and Construction
	MCM Vehicle and Equipment Maintenance Management
	MCM Vehicle Tracking
	MCM Winter Maintenance Management
	MCM Work Activity Coordination
	MCM Work Zone Management
Travis County Construction and Maintenance Vehicles	MCV Barrier System Control
	MCV Infrastructure Monitoring
	MCV Roadway Maintenance and Construction
	MCV Vehicle Location Tracking
	MCV Vehicle System Monitoring and Diagnostics
	MCV Work Zone Support
Travis County Public Safety Vehicles	On-board EV En Route Support
	On-board EV Incident Management Communication
TxDMV Central Permitting Office	Credentials and Taxes Administration
	CV Information Exchange
TxDMV Motor Carrier Routing Information	Infrastructure Provided Route Selection
	ISP Traveler Data Collection
TxDMV Other Permitting Systems	Credentials and Taxes Administration
	CV Information Exchange

Element Name	Equipment Package (Function)
TxDOT 511 System	Basic Information Broadcast
	Infrastructure Provided Trip Planning
	Interactive Infrastructure Information
	ISP Traveler Data collection
	ISP Traveler Information Alerts
	Traveler Data Collection
TxDOT Austin District Active Traffic Management	Roadway Dynamic Lane Management and Shoulder Use
	Roadway Equipment Coordination
TxDOT Austin District Area Engineers Office	MCM Maintenance Decision Support
	MCM Roadway Maintenance and Construction
	MCM Work Zone Management
TxDOT Austin District CCTV Cameras	Roadway Basic Surveillance
	Roadway Equipment Coordination
	Roadway Incident Detection
	Roadway Signal Controls
	Roadway Work Zone Traffic Control
TxDOT Austin District Changeable Speed Limit Signs	Roadway Equipment Coordination
	Roadway Variable Speed Limits
	Roadway Warning
	Roadway Work Zone Traffic Control
TxDOT Austin District DMS	Roadway Equipment Coordination
	Roadway Traffic Information Dissemination
	Roadway Work Zone Traffic Control
TxDOT Austin District Field Sensors	Roadway Basic Surveillance
	Roadway Equipment Coordination
	Roadway Speed Monitoring and Warning
TxDOT Austin District Flood Detectors	Roadway Equipment Coordination
	Roadway Safety Warning System
TxDOT Austin District HAR	Roadway Equipment Coordination
	Roadway Traffic Information Dissemination
	Roadway Work Zone Traffic Control
TxDOT Austin District Historical Traffic Database	Government Reporting Systems Support
	ITS Data Repository
	Traffic and Roadside Data Archival
	Virtual Data Warehouse Services

Element Name	Equipment Package (Function)
TxDOT Austin District ITS Field Equipment	Roadway Basic Surveillance
	Roadway Data Collection
	Roadway Equipment Coordination
	Roadway Probe Data Communications
	Roadway Speed Monitoring and Warning
TxDOT Austin District Maintenance and Construction Vehicles	Barrier System Control
	MCV Infrastructure Monitoring
	MCV Roadway Maintenance and Construction
	MCV vehicle Location Tracking
	MCV Vehicles Safety Monitoring and Diagnostic
	MCV Winter Maintenance
	MCV Work Zone Support
TxDOT Austin District Maintenance Office	MCM Incident Management
	MCM Maintenance Decision Support
	MCM Roadway Maintenance and Construction
	MCM Work Activity Coordination
	MCM Work Zone Management
TxDOT Austin District Maintenance Sections Dispatch	MCM Data Collection
	MCM Environmental Information Collection
	MCM Environmental Information Processing
	MCM Incident Management
	MCM Maintenance Decision Support
	MCM Roadway Maintenance and Construction
	MCM Vehicle and Equipment Maintenance Management
	MCM Vehicle Tracking
	MCM Winter Maintenance Management
	MCM Work Activity Coordination
	MCM Work Zone Management
	MCM Work Zone Safety Management
TxDOT Austin District Pavement Management System	Government Reporting Systems Support
	ITS Data Repository
	Traffic and Roadside Data Archival
	Virtual Data Warehouse Services
TxDOT Austin District Public Information Office	ISP Emergency Traveler Information
	ISP Traveler Data Collection
	Traveler Telephone Information

Element Name	Equipment Package (Function)
TxDOT Austin District Public Transportation Management System (PTMS)	Government Reporting Systems Support
	ITS Data Repository
	Traffic and Roadside Data Archival
	Virtual Data Warehouse Services
TxDOT Austin District Ramp Metering Equipment	Roadway Basic Surveillance
	Roadway Equipment Coordination
	Roadway Traffic Metering
TxDOT Austin District Roadway Data Collection System	Government Reporting Systems Support
	ITS Data Repository
	Traffic and Roadside Data Archival
	Virtual Data Warehouse Services
TxDOT Austin District RWIS	Roadway Environmental Monitoring
TxDOT Austin District Security Monitoring Field Equipment	Field Secure Area Sensor Monitoring
	Filed Secure Area Surveillance
TxDOT Austin District Signal Server	Collect Traffic Surveillance
	HRI Traffic Management
	TMC Incident Dispatch Coordination/Communication
	TMC Signal Control
	Traffic Data Collection
	Traffic Maintenance
TxDOT Austin District Signals	Roadway Basic Surveillance
	Roadway Equipment Coordination
	Roadway Mixed Use Sensing
	Roadway Signal Controls
	Roadside Signal Priority
	Standard Rail Crossing
TxDOT Austin District TMC (CTECC)	Incident Command
	Collect Traffic Surveillance
	HRI Traffic Management
	Rail Operations Coordination
	TMC Dynamic Lane Management and Shoulder Use
	TMC Environmental Monitoring
	TMC Evacuation Support
	TMC Incident Detection
	TMC Incident Dispatch Coordination/Communication
	TMC Multimodal Coordination
	TMC Multimodal Crossing Management
	TMC Probe Information Collection
TMC Regional Traffic Control	

Element Name	Equipment Package (Function)
TxDOT Austin District TMC (CTECC) (continued)	TMC Roadway Warning
	TMC Signal Control
	TMC Speed Monitoring and Warning
	TMC Traffic Information Dissemination
	TMC Traffic Metering
	TMC Variable Speed Limits
	TMC Work Zone Traffic Management
	Traffic Data Collection Traffic Equipment Maintenance
TxDOT Austin District Website	ISP Probe Information Collection
	ISP Traveler Data Collection
TxDOT Austin District Work Zone Equipment	Roadway Equipment Coordination
	Roadway Work Zone Safety
TxDOT Highway Conditions Reporting System	Basic Information Broadcast
	Infrastructure Provided Trip Planning
	Interactive Infrastructure Information
	ISP Traveler Data Collection
	Traveler Telephone Information
TxDOT Rest Areas/Visitor Centers/Truck Stops/Service Plaza Kiosks	Remote Basic Information Reception
	Remote Interactive Information Reception
TxDOT Statewide Emergency Management Coordinator	Emergency Evacuation Support
	Incident Command
TxDOT Statewide Pavement Management System	Government Reporting Systems Support
	ITS Data Repository
	Traffic and Roadside Data Archival
TxDOT Statewide Roadway Data Collection System	Government Reporting Systems Support
	ITS Data Repository
	Traffic and Roadside Data Archival
TxDOT TOD Customer Service Center	Toll Administration
	Toll Data Collection
	TMC Incident Dispatch Coordination/Communication
	TMC Probe Information Collection
TxDOT TOD DMS	Roadway Equipment Coordination
	Roadway Traffic Information Dissemination
TxDOT TOD DVAS	Roadway Basic Surveillance
	Roadway Equipment Coordination

Element Name	Equipment Package (Function)
TxDOT TOD Field Sensors	Roadway Basic Surveillance
	Roadway Equipment Coordination
	Roadway Probe Data Communications
TTA Toll Collection SmartHUB	Toll Administration
	Toll Data Collection
TxDOT TOD Toll Collection Website	ISP Traveler Data Collection
TxDOT – TTA Toll Plazas	Toll Plaza Toll Collection
USGS Flood Monitoring Center	Center Secure Area Sensor Management
	Center Secure Area Surveillance
	Emergency Early Warning System
	Emergency Environmental Monitoring
USGS Flood Monitoring Devices	Roadway Environmental Monitoring
	Roadway Safety Warning System
UT Police Dispatch	Emergency Call-Taking
	Emergency Dispatch
	Emergency Early Warning System
	Emergency Evacuation Support
	Emergency Response Management
	Emergency Routing
	Incident Command
UT Police Vehicles	On-board EV En Route Support
	On-board EV Incident Management Communication
Williamson County Emergency Communications Center	Emergency Call-Taking
	Emergency Dispatch
	Emergency Evacuation Support
	Emergency Response Management
	Emergency Routing
	Incident Command
	Mayday Support
Williamson County EOC	Emergency Call-Taking
	Emergency Data Collection
	Emergency Dispatch
	Emergency Evacuation Support
	Emergency Response Management
	Emergency Routing
Williamson County EOC (continued)	Incident Command
	Mayday Support

Element Name	Equipment Package (Function)
Williamson County Maintenance and Construction Operations	MCM Data Collection
	MCM Environmental Information Collection
	MCM Incident Management
	MCM Infrastructure Monitoring
	MCM Maintenance Decision Support
	MCM Roadway Maintenance and Construction
	MCM Vehicle and Equipment Maintenance Management
	MCM Vehicle Tracking
	MCM Winter Maintenance Management
	MCM Work Activity Coordination
	MCM Work Zone Management
Williamson County Maintenance and Construction Vehicles	MCV Barrier System Control
	MCV Infrastructure Monitoring
	MCV Roadway Maintenance and Construction
	MCV Vehicle Location Tracking
	MCV Vehicle System Monitoring and Diagnostics
	MCV Work Zone Support
Williamson County Public Safety Vehicles	On-board EV En Route Support
	On-board EV Incident Management Communication

APPENDIX D – STAKEHOLDER DATABASE

Austin Regional ITS Architecture Update Stakeholder Participation Record

Organization	Invitees		Attendance				
	First Name	Last Name	Kick-off Workshop	Interview	Architecture Workshop	Deployment Plan Workshop	Training Workshop
Village of Bee Cave	Travis	Askey					
City of San Marcos Engineering Department	Sabas	Avila	X	X	X		
City of Fredericksburg	Clinton	Bailey					
Travis County Office of Emergency Management	Pete	Baldwin	X				
City of Kyle Police Department	Jeff	Barnett					
TxDOT	Imelda	Barrett	X				
Texas A&M Transportation Institute	Curtis	Beaty				X	X
City of San Marcos	Ken	Bell					
Williamson County Unified Road System	Greg	Bergeron					
Capital Metro	Sharon	Berry					
Center for Transportation Research	Chandra	Bhat					
DPS	Charles	Booker			X	X	
Hays County Transportation Department	Jerry	Borcherding					
Williamson County EMS	Thomas	Bradford					
City of Georgetown	Paul	Brandenburg					
Llano County	Wayne	Brascom					
Capital Area Rural Transportation System	Rachid	Breir	X		X		
Williamson County Sheriff's Office	Joey	Briggs	X				
City of Austin Fire Department	William	Brooks	X				
City of Austin	Jasper	Brown	X				
City of Lampasas Streets Department	Shane	Brown					
CTRMA	Ginny	Burcham					

Austin Regional ITS Architecture Update Stakeholder Participation Record

Organization	Invitees		Kick-off Workshop	Interview	Attendance		
	First Name	Last Name			Architecture Workshop	Deployment Plan Workshop	Training Workshop
CTRMA	Wes	Burford		X			
TxDOT - Austin District	Brian	Burk		X	X	X	X
TxDOT	Bruce	Byron			X		
City of Leander	Kent	Cagle					
DPS	Michael	Cantu					
City of Marble Falls Fire Department	Johnny	Caraway					
City of Austin	David	Carey				X	X
City of Round Rock Police Department	Justin	Carmichael					
City of Austin CTECC	Terry	Carroll					
Llano County	Melissa	Cavness					
Hays County	Mark	Chambers					
City of Round Rock Police Department	Vinnie	Cherrone	X				
TxDOT	Lowell	Choate					
Bastrop County Office of Emergency Management	Blake	Clampffer					
City of Round Rock Fire Department	David	Coatney					
TxDOT - Austin District	Ed	Collins	X				
ATA (Finger Towing)	Reid	Courtney					
City of Austin, Traffic Signals	Brian	Craig		X	X	X	
CAMPO	Katheryn	Cromwell		X			X
City of Austin	Jim	Dale	X	X			
CAMPO	Dan	Dargevics	X				
Burnet County	Herb	Darling					

Austin Regional ITS Architecture Update Stakeholder Participation Record

Organization	Invitees		Kick-off Workshop	Interview	Attendance		
	First Name	Last Name			Architecture Workshop	Deployment Plan Workshop	Training Workshop
ATA (Lakeside Towing)	Billy	Davenport					
TxDOT - Austin District	Rusty	Davenport					
City of Round Rock Police Department	Justin	Davis					
Burnet County	Joe Don	Dockery					
DPS	Jack	Doebbler			X		
City of Lockhart	Jerry	Doyle					
TxDOT - Austin District	Clint	Dube					
TxDOT	Kris	Dudley					
City of Lakeway	Paul	Duncan					
City of Austin Police Department	Jason	Dusterhoft					
City of Austin	Michael	Dutton					
Travis County Office of the Medical Examiner	Robin	Dwyer					
City of Taylor	Pat	Ekiss					
Capital Area Rural Transportation System	Adrian	Elliott		X	X		
Austin-Travis County Emergency Medical Services	Mike	Elliott					
Williamson County	Joe	England		X			
Texas Trucking Association	John	Esparza					
Lee County	Paul	Fischer					
Bastrop County	Michael	Fisher					
City of Elgin	Karen	Flanagan					
Williamson County 9-1-1 Communications	Sara	Floyd					
WP Engineering—HERO Patrol	Tom	Frank					

Austin Regional ITS Architecture Update Stakeholder Participation Record

Organization	Invitees		Attendance				
	First Name	Last Name	Kick-off Workshop	Interview	Architecture Workshop	Deployment Plan Workshop	Training Workshop
City of Pflugerville	Dan	Franz		X			
TxDOT - Traffic Operations Division	Alesia	Gamboa	X		X	X	X
Travis County Public Works Department	Joe	Gieselman					
City of Pflugerville	Laurie	Gillam					
City of Round Rock Fire Department	Shane	Glasier	X		X		
DPS - Highway Patrol	Casey	Goetz					
TxDOT - Austin District	John	Gold					
Travis County	David	Greear	X	X			
City of Austin Police Department	Brian	Gruetzner					
Capital Area Rural Transportation System	René	Guajardo	X		X		
Blanco County	Bill	Guthrie					
Travis County - Traffic Engineering	Joe	Hall					
City of Cedar Park	Stephen	Hanuscin				X	
City of Austin	Ed	Harris					
Hays County	Jeff	Hauff					
Williamson County EMS	Jeff	Hayes					
City of Marble Falls	Ralph	Hendricks					
City of Kyle Police Department	Pedro	Hernandez, Jr.					
Burnet County	Ronny	Hibler					
Travis County	Danny	Hobby					
City of Pflugerville	Charles	Hooker					
Texas State University	Steven	Huerrera					

Austin Regional ITS Architecture Update Stakeholder Participation Record

Organization	Invitees		Attendance				
	First Name	Last Name	Kick-off Workshop	Interview	Architecture Workshop	Deployment Plan Workshop	Training Workshop
Capital Metro	Joe	Iannello	X	X	X		
Travis County Office of the Medical Examiner	Daniel	Jackson					
TxDOT - Rail Division	Orlando	Jamandre	X	X			
Caldwell County	Dwight	Jeffrey					
City of Bastrop	Trey	Job					
Austin-Travis County EMS	Adam	Johnson					
CAMPO	Ashby	Johnson		X			
ATA (Austex Towing)	Henry	Jones					
City of San Marcos Police Department	Bob	Klett			X		
CAMPO	Alex	Kone		X	X	X	
City of Marble Falls	Caleb	Kraenzel					
City of Elgin	Kerry	Lacy					
Travis County	David	Lampl					
City of Austin Office of Emergency Management	Otis	Latin					
City of Lampasas Fire Department	Terry	Lindsey					
Cedar Park Police Department	Tara	Long					
TxDOT - Austin District Burnet Area Office	Howard	Lyons					
TxDOT - Traffic Operations Division	Jianming	Ma	X				X
CTRMA	Greg	Mack				X	
City of Marble Falls	Perry	Malkemus					
City of Cedar Park Fire Department	James	Mallinger					
City of Cedar Park Police Department	Sean	Mannix					

Austin Regional ITS Architecture Update Stakeholder Participation Record

Organization	Invitees		Kick-off Workshop	Interview	Attendance		
	First Name	Last Name			Architecture Workshop	Deployment Plan Workshop	Training Workshop
City of Cedar Park	Darwin	Marchell					
Capital Area Rural Transportation System	Dave	Marsh		X			
City of Austin Watershed Protection	Thain	Maurer					
TxDOT - Transportation Planning and Programming Division	Caroline	Mays					
Travis County	Drew	McAngus					
City of Austin Police Department	David	McDonald					
TxDMV - Motor Carrier Division	Grady	Meyer					
City of Austin Police Department	Bob	Miljenovich					
City of Georgetown Utility Systems	Mark	Miller					
Lonestar Rail	Ross	Milloy		X			
Williamson County Sheriff's Office	Scott	Mount	X				
City of San Marcos	Laurie	Moyer					
City of Cedar Park	Ali	Mozdbar		X	X		
TxDOT	Neal	Munn					
Capital Area Rural Transportation System	Lyle	Nelson		X			
City of Georgetown Police Department	Wayne	Nero					
Williamson County Sheriff's Office	Shawn	Newson					
CAPOG	Gregg	Obuch					
FHWA - Texas Division	Mark	Olson	X				
FTA - Region 6	Robert	Patrick					
Lee County	Delynn	Peschke					
City of Georgetown	Mike	Peters					

Austin Regional ITS Architecture Update Stakeholder Participation Record

Organization	Invitees		Kick-off Workshop	Interview	Attendance		
	First Name	Last Name			Architecture Workshop	Deployment Plan Workshop	Training Workshop
Travis County Sheriff's Office	Robert	Phillips					
Williamson County	Melissa	Pogue					
TxDOT - Traffic Operations Division	Alex	Power	X				X
Austin Police Department	Tim	Prueh				X	
TxDOT - Toll Operations Division	Erica	Ramirez				X	X
TxDOT - Austin District	Marisabel	Ramthun	X		X		
FHWA - Texas Division	Stephen	Ratke					X
City of Cedar Park	Eric	Rauschber, P.E.					
TxDOT - Austin District	Wayne	Rehnborg					
CTRMA	Tim	Reilly		X		X	
City of Austin Police Department	Ely	Reyes					
Caldwell County	Martin	Ritchey					
Williamson County	Jay	Schade					
City of Austin	Gary	Schatz					
Williamson County EMS	Kenny	Schnell					
Capital Metro	Jane	Schroter	X	X		X	
Lone Star Rail	Alison	Schulze					
DPS - Highway Patrol	Paul	Schulze	X		X		
TxDOT - Austin District	Ronny	Schulze					
City of Round Rock Fire Department / EOC	Mark	Selby					
Williamson County	Richard	Semple					
TxDOT - Toll Operations Division	Linda	Sexton		X			

Austin Regional ITS Architecture Update Stakeholder Participation Record

Organization	Invitees		Kick-off Workshop	Interview	Attendance		
	First Name	Last Name			Architecture Workshop	Deployment Plan Workshop	Training Workshop
City of Georgetown Fire Department	Clay	Shell					
City Of San Marcos	Jennifer	Shell					
Texas Trucking Association	Lance	Shillingburg					
Hays County Emergency Management	Kharley	Smith					
TxDOT	Lawrance	Smith					
City of Austin Fire Department	Thayer	Smith		X			
Williamson County EMS	John	Sneed					
City of San Marcos Police Department	Chase	Stapp					
City of San Marcos Fire Department	Les	Stephens					
Texas A&M Transportation Institute	Charles	Stevens					
City of Lakeway	Donald	Stevenson					
City of Georgetown Fire Department	John	Sullivan					
City of Austin	Scott	Swearengin	X				
CAPCOG	Mark	Sweeney					
City of Austin Fire Department	Chris	Swenson	X				
DPS	Victor	Taylor					
City of Georgetown Police Department	Cory	Tchida					
TxDOT - Austin District	Travis	Temmert					
Capital Metro	Elaine	Timbes					
City of Austin Watershed Protection	Stan	Tindel					
TxDOT - Traffic Operations Division	Robert	Travis		X			
City of Austin	Robert	Turner	X		X	X	X

Austin Regional ITS Architecture Update Stakeholder Participation Record

Organization	Invitees		Kick-off Workshop	Interview	Attendance		
	First Name	Last Name			Architecture Workshop	Deployment Plan Workshop	Training Workshop
City of Austin Police Department	David	Valles					
Hays County Road and Bridge Department	Tim	Van De Vorde					
TxDOT - Austin District	Charles	Vaughn					
City of Cedar Park	Joseph	Vining					
City of Austin Fire Department	Rob	Vires					
Austin-Travis County Emergency Medical Services	Mike	von Wupperfeld					
Travis County Sheriff	Chris	Wallace			X		
City of Round Rock	David	Walther	X	X	X		
Capital Metro	Daryl	Weinberg					X
City of Marble Falls Police Department	Mark	Whitacre					
City of Pflugerville Police Department	Daryl	Wilkes		X			
DPS	Kelly	Wilkison					
City of San Marcos Police Department	Howard	Williams					
TxDOT - Austin District	Josh	Wilson					
TxDOT - Transportation Planning and Programming Division	Catherine	Wolff	X		X		
City of Round Rock	Chad	Wood	X	X	X		X
City of Pflugerville	Tom	Word					
Williamson County	Michael	Wright					
City of Round Rock Fire Department	Billy	Wusterhausen	X				
City of Taylor	Lance	Zeplin					
City of San Marcos Police Department	Warren	Zerr					
City of San Marcos	Ning	Zou	X	X			

APPENDIX E – AGREEMENTS

AUSTIN-AREA INCIDENT MANAGEMENT FOR HIGHWAYS (AIMHIGH) MEMORANDUM OF REGIONAL COOPERATION

TXDOT AGREEMENT FOR SHARING INTELLIGENT TRANSPORTATION SYSTEMS (ITS) DATA WITH MEDIA OUTLETS

TRAVIS COUNTY AND CITY OF AUSTIN PROCEDURES FOR THE MOVEMENT AND TRANSPORTATION OF DECEASED INDIVIDUALS FROM THE ROADWAY

JOINT OPERATIONS/SHARED CONTROL MEMORANDUM OF UNDERSTANDING REGARDING THE ESTABLISHMENT OF A UNIFIED PUBLIC SAFETY COMMUNICATIONS SYSTEM

TXDOT AND PRIVATE RAILROAD RIGHT-OF-WAY AGREEMENT FOR THE INSTALLATION AND MAINTENANCE OF FIBER OPTIC CABLE BOTH ABOVE AND BELOW RAILROAD TRACKS

TXDOT AND LOCAL GOVERNMENT MULTIPLE USE AGREEMENT FOR SHARING FIBER OPTIC CABLE AND/OR RELATED INFRASTRUCTURE

INTERLOCAL AGREEMENT FOR OPERATION AND MAINTENANCE OF THE CTECC FACILITY AND SUPPORTED SYSTEMS

CITY OF AUSTIN AND TRAVIS COUNTY INTERLOCAL AGREEMENT FOR INSTALLATION, MAINTENANCE, UPGRADING, AND OPERATION OF TRAFFIC CONTROL DEVICES

TXDOT AND CITY OF SAN MARCOS LOCAL PROJECT ADVANCE FUNDING AGREEMENT FOR THE UPGRADING OF TRAFFIC SIGNALS WITHIN A MUNICIPALITY

CITY OF AUSTIN AND CAPITAL METROPOLITAN TRANSIT AUTHORITY INTERLOCAL COOPERATION AGREEMENT TRAFFIC SIGNAL PRIORITY SYSTEM

AIMHigh

Austin-area Incident Management for Highways

MEMORANDUM OF REGIONAL COOPERATION

THIS MEMORANDUM OF REGIONAL COOPERATION, dated this ___ day of _____, 2011 is by, between, and among the State and local jurisdictions and private industry in the Austin region for effective and efficient traffic incident management. The Austin region's local jurisdictions include the City of Austin, City of Georgetown, City of Kyle, City of Pflugerville, City of Round Rock, Bastrop County, Hays County, Travis County, and Williamson County. The Capital Area Metropolitan Planning Organization (CAMPO) is the Metropolitan Planning Organization (MPO) for the Bastrop, Caldwell, Hays, Travis, and Williamson Counties in central Texas. The Austin region's State jurisdictions include the Texas Department of Transportation and Department of Public Safety. Private industry includes Austin Towing Association and the Highway Emergency Response Operators (HERO) Program contractors.

Whereas, the Austin region experiences very high traffic volumes and blockage of roadway lanes by traffic accidents, disabled vehicles, or other incidents frequently has a substantial and detrimental impact on the movement of traffic, not only in the immediate vicinity of the blockage but also over a considerable portion of the highway system and adjacent local streets; and

Whereas, the blockage of roadway lanes by traffic accidents, disabled vehicles, or other incidents frequently has a substantial and detrimental impact on the safety of both incident response personnel and the motoring public; and

Whereas, the State and local jurisdictions and private industry have established and desire to maintain a high level of interagency communication and regional cooperation through the Austin-area Incident Management for Highways (AIMHigh) forum; and

Whereas, the State and local jurisdictions and private industry have supporting traffic management resources and technology at the Combined Transportation, Emergency, and Communications Center (CTECC), which operates on a 24-hour basis; and

Whereas, the State and local jurisdictions and private industry provide support for and implementation of a successful partnership of regional public safety and transportation agencies, and a means of establishing a regional cooperative approach to transportation management, including the coordination of traffic incident management operating procedures and improved agency communications to facilitate regional mobility across jurisdictional lines;

Now, therefore, it is agreed as follows:

By being a signatory to this Memorandum of Regional Cooperation, the State and local jurisdictions and private industry agree to:

1. Maintain and promote a safe, quick incident clearance philosophy. Whenever a highway or lane is partially closed, or blocked by a crash or incident, public safety and transportation agencies and private industry will make every reasonable effort to open the roadway as soon as possible ON AN URGENT BASIS while maintaining and protecting the safety of responders and the public. The safety of incident responders and of the public will not be compromised.
2. Maintain and promote participation of regional public safety and transportation agency and private industry personnel in bimonthly AIMHigh meetings to discuss traffic incident management operations and local and national traffic incident management initiatives in support of improved interagency communication and regional cooperation.
3. Singularly or collectively pursue implementation opportunities for priority traffic incident management tools and strategies identified in the *AIMHigh Traffic Incident Management Strategic Plan* (February 2010). This *Plan* will be periodically updated to ensure continued responsiveness to perceived operational challenges, support local internal agency goals, maintain consistency with national directives, and reflect implementation progress. This *Plan* is intended to support integrated resource planning and budgeting across and among diverse participating agencies and industries with a focus on enhanced traffic incident management operations. This *Plan* is also intended to guide individual or collective requests for external private, State, or Federal program support.

To ensure conformity with this Memorandum of Regional Cooperation and subsequent improvements to the Austin region's traffic mobility and public safety through effective and efficient operations, the Capital Area Metropolitan Planning Organization—with support from the Texas Department of Transportation—will facilitate the ongoing traffic incident management efforts of the State and local jurisdictions and private industry in the Austin region.

In witness hereto, the representatives of the State and local jurisdictions and private industry herein cause this Memorandum of Regional Cooperation to be executed.

Capital Area Metropolitan Planning Organization	Williamson County
City of Austin	Texas Department of Transportation
City of Georgetown	Texas Department of Public Safety
City of Kyle	Austin Towing Association
City of Pflugerville	Highway Emergency Response Operators (HERO) Program Contractors
City of Round Rock	
Bastrop County	
Hays County	
Travis County	

STATE OF TEXAS §

COUNTY OF TRAVIS §

**AGREEMENT for SHARING
INTELLIGENT TRANSPORTATION SYSTEMS (ITS) DATA**

CONTRACTING PARTIES:

Texas Department of Transportation	TxDOT
-- enter name of TxDOT district -- District	
-- enter name of local government, private entity, etc. --	Grantee

TxDOT is the owner of Intelligent Transportation Systems (ITS) infrastructure that consists of:

- an ITS Field Network (including but not limited to sensors, cameras, signs, and communications links constructed along segments of the State highway system); and
- an ITS Business Network that has produced and produces transportation-related information that is used for the purpose of traffic management in which the State owns certain rights, title, and interests related thereto, including copyrights.

The Grantee desires TxDOT to grant rights to receive and use TxDOT transportation-related information ("Traffic Data"). TxDOT is agreeable to grant rights provided the Grantee agrees to the terms and conditions established in this agreement.

This agreement incorporates the provisions of **Attachment A**, Descriptions and Specifications of Rights Granted in Article 2, **Attachment B**, Guidelines for Use of State Equipment and Infrastructure, and **Attachment C**, Connectivity Diagram.

B A C K G R O U N D

TxDOT, in accordance with Texas Transportation Code, §201.205, may:

1. Apply for, register, secure, hold and protect its intellectual property, patents, copyrights, trademarks, or other evidence of protection of exclusivity; and
2. Enter into non-exclusive license agreements with any third party for the receipt of fees, royalties, or other things of monetary and non-monetary value; and
3. Waive or reduce the amount of fees if it determines that such waiver will further the goal and missions of TxDOT and result in a net benefit to TxDOT; and

Texas Transportation Code, §202.052 authorizes TxDOT to lease highway assets if the area to be leased is not needed for highway purposes during the term of the lease and TxDOT charges fair market value for the leased asset, and authorizes TxDOT to waive such fees for social, economic, and environmental mitigation purposes.

TxDOT – alone or as a stakeholder in -- enter name of traffic management center (TMC) --, the regional traffic management center (TMC) – has trademark registrations on marks in accordance with the requirements of Title 15 U.S.C. Section 1051 et seq., as amended:

- Registration Number(s) _____, hereinafter identified as the "_____."

A G R E E M E N T

In consideration of the mutual promises contained in this agreement, TxDOT and the Grantee now agree as follows:

ARTICLE 1. CONTRACT PERIOD

This agreement becomes effective when signed and dated by the last party whose signing makes the agreement fully executed. This agreement shall terminate five (5) years from that date, or when otherwise modified or terminated, as hereinafter provided.

ARTICLE 2. RIGHTS GRANTED

TxDOT hereby grants the Grantee a non-exclusive right, license, and privilege worldwide to use all or portions of Traffic Data from TxDOT's ITS Field Network and ITS Business Network. The Grantee agrees that this agreement does not transfer or convey any ownership or any rights other than those rights expressly granted by the agreement.

TxDOT further agrees to provide connectivity to Grantee to access TxDOT Traffic Data as described in Attachment A to this agreement, which is attached hereto and incorporated herein for all purposes.

ARTICLE 3. PROVISION OF INFRASTRUCTURE

The Grantee is responsible for providing and maintaining any hardware, software, and additional ITS infrastructure that is necessary to obtain the Traffic Data. TxDOT may provide unused ITS infrastructure and TxDOT facilities to support the additional infrastructure when possible, and when deemed to be in the best interest of TxDOT. Grantee agrees that TxDOT does not guarantee the availability of the Traffic Data or a minimum response time to reestablish the availability of the Traffic Data due to maintenance or network or system failures. A more detailed description of ITS infrastructure to be provided by each party is shown in Attachment A. The Grantee shall not place any objects or equipment in the State Right-of-Way or on any other TxDOT property without advanced written permission from the District Engineer or designee.

ARTICLE 4. FEE

As the use of the Traffic Data will result in social, economic, and environmental mitigation, by increasing mobility and reducing congestion on public highways, TxDOT agrees to waive any monetary fee associated with the use of the Traffic Data. After the initial year, TxDOT reserves the right to charge a fee for the use of the Traffic Data by providing not less than thirty (30) days written notice to the Grantee defining the terms of the fee.

ARTICLE 5. COPYRIGHT INFRINGEMENT

The Grantee shall notify TxDOT of any infringement or potential infringement by a third party, of which it becomes aware, of the copyright or any other rights owned by TxDOT relating to the use of the Traffic Data. The Grantee shall provide TxDOT, if feasible, any information or other assistance requested by TxDOT to assist in TxDOT's prosecution of any breaches or infringements.

ARTICLE 6. TAXES AND FEES

Grantee agrees to report to the appropriate taxation authority and pay all federal, state, and local taxes or fees that may be imposed by any governmental entity for the use of the Traffic Data.

ARTICLE 7. ASSIGNMENT PROHIBITION

The Grantee is prohibited from assigning any of the rights conferred by this agreement, to any third party. Notwithstanding the foregoing, the Grantee may assign the rights of this agreement of the Traffic Data to an affiliated corporate entity or to a purchaser of substantially all its assets without TxDOT's consent, provided that TxDOT's rights under this agreement remain unaffected. Any assignments shall be subject to the terms and conditions of this agreement.

ARTICLE 8. TERMINATION

- a) Including the provisions established herein, this agreement may be terminated by any of the following conditions.
 - i) Mutual agreement and consent of the parties hereto.
 - ii) By TxDOT for reason of its own and not subject to the approval of the Grantee upon not less than thirty (30) days written notice to the Grantee.
 - iii) By the Grantee for reason of its own and not subject to the approval of TxDOT upon not less than thirty (30) days written notice to TxDOT.
 - iv) Immediately for breach of this agreement as determined by TxDOT.
- b) Termination of the agreement shall extinguish all rights, duties, obligations and liabilities of TxDOT and Grantee of this agreement. All rights granted to the Grantee shall revert to TxDOT as owner of the Traffic Data. Upon termination of this agreement, the Grantee will immediately cease transmitting, using, distributing and/or modifying the electronic signals of the Traffic Data.
- c) Termination or expiration of this agreement shall not extinguish any of the Grantee's or TxDOT's obligations under this agreement which by their terms continue after the date of termination or expiration.

ARTICLE 9. HOLD HARMLESS

The Grantee shall indemnify and save harmless TxDOT and its officers and employees from all claims and liability due to its materials or activities of itself, its agents, or employees, performed under this agreement and that are caused by or result from error, omission, or negligent act of the Grantee or of any person employed by the Grantee. The Grantee shall also indemnify and save harmless TxDOT from any and all expense, including but not limited to attorney fees that may be incurred by TxDOT in litigation or otherwise resisting the claim or liabilities that may be imposed on TxDOT as a result of such activities by the Grantee, its agents, or employees. The Grantee agrees to indemnify and save harmless TxDOT and its officers, agents, and employees from any and all claims, damages, and attorneys' fees

arising from the use of outdated Traffic Data or other information. The Grantee's indemnification of TxDOT shall extend for a period of three (3) years beyond the date of termination of this agreement.

ARTICLE 10. RELATIONSHIP BETWEEN THE PARTIES

Each party acknowledges that it is not an agent, servant, or employee of the other party. Each party is responsible for its own acts and deeds and for those of its agents, servants, or employees.

ARTICLE 11. REMEDIES

Violation or breach of contract by the Grantee shall be grounds for termination of the agreement. Any increased costs arising from the Grantee's default, breach of contract or violation of contract terms shall be paid by the Grantee.

ARTICLE 12. AMENDMENTS

Any changes in the contract period, character, or agreement terms shall be enacted by a written amendment executed by both parties. Amendments must be executed during the contract period established in Article I.

ARTICLE 13. VENUE

This agreement is governed by the laws of the State of Texas.

ARTICLE 14. NOTICES

All notices to either party by the other party required under this agreement shall be delivered personally or sent by certified or U.S. Mail, postage prepaid, addressed to such party at the following respective physical addresses:

STATE: Texas Department of Transportation
 ATTN: --enter title of Transportation Engineer or other--
 -- enter street address --
 -- enter City, State, Zip --

GRANTEE: --enter Grantee--
 ATTN: -- enter title of primary contact (not a person's name) --
 -- enter street address --
 -- enter City, State, Zip --

and shall be deemed to be received by the addressee on the date so delivered or so deposited in the mail, unless otherwise provided within. Either party hereto may change the above address by sending written notice of such change to the other.

ARTICLE 15. CONFIDENTIALITY

The Grantee shall not disclose information obtained from TxDOT under this agreement without the express written consent of TxDOT.

ARTICLE 16. COMPLIANCE WITH LAWS

The Grantee shall comply with all applicable federal, state, and local laws, statutes, ordinances, rules and regulations, and with the orders and decrees of any court or administrative bodies or tribunals in any manner affecting the performance of this agreement. When requested, the Grantee shall furnish TxDOT with satisfactory proof of this compliance. The Grantee shall provide or obtain all applicable permits, plans, or other documentation required by a federal or state entity.

ARTICLE 17. PROHIBITION AGAINST VIDEOTAPING OF TxDOT VIDEO FEED

Grantee further agrees that it shall not copy nor duplicate, or allow to be copied, any of the video feeds that are provided by TxDOT in connection with this agreement, but Grantee shall, if it is a media outlet, have permission to maintain recorded footage from the provided video feeds that became part of its regular programming.

ARTICLE 18. STATE AUDITOR'S PROVISION

The State Auditor may conduct an audit or investigation of any entity receiving funds from TxDOT directly under this agreement or indirectly through a subcontract under this agreement. Acceptance of funds directly under this agreement or indirectly through a subcontract under this agreement acts as acceptance of the authority of the State Auditor, under the direction of the legislative audit committee, to conduct an audit or investigation in connection with those funds. An entity that is the subject of an audit or investigation must provide the State Auditor with access to any information the State Auditor considers relevant to the investigation or audit.

ARTICLE 19. SIGNATORY WARRANTY

The signatories to this agreement warrant that each has the authority to enter into this agreement on behalf of the party they represent.

IN TESTIMONY WHEREOF, TxDOT and the Grantee have executed duplicate counterparts of this agreement.

-- ENTER GRANTEE --

By _____ Date _____

Typed or Printed Name and Title

THE STATE OF TEXAS

Executed for the Executive Director and approved for the Texas Transportation Commission for the purpose and effect of activating and/or carrying out the orders, established policies or work programs heretofore approved and authorized by the Texas Transportation Commission.

By _____ Date _____
-- enter name --, P.E., -- enter District name -- District Engineer

****Option #1:
Public or Private Entity to obtain
TxDOT Full-Motion Video directly from a TxDOT TMC via hard-wire connection**

Includes Media and Partners (e.g. Government Agencies);
TxDOT discourages this connection with Private Traffic Information Service Providers (ISP)**

**ATTACHMENT A
DESCRIPTIONS and SPECIFICATIONS of RIGHTS GRANTED**

RIGHTS GRANTED	
By TxDOT	By Grantee
1. TxDOT will Provide a connection into TxDOT's traffic management center (TMC), -- name the TMC if applicable - -, for Grantee to obtain all TxDOT traffic camera images to broadcast on-air.	1. none

PROVISION OF INFRASTRUCTURE	
By TxDOT	By Grantee
1. TxDOT will provide space for all equipment required to complete the video connection. 2. TxDOT will provide -- list types of equipment, switches, connections, etc. -- up to the TxDOT demarcation as noted on the attached communications diagram. 3. TxDOT will provide software and support to allow Grantee access to and selection of video images.	1. As described in Article 3-Provision of Infrastructure, the Grantee is responsible for providing and maintaining any hardware, software, and additional ITS infrastructure that is necessary to obtain the video connection.

NON-MONETARY COMPENSATION	
By TxDOT	By Grantee
1. none	1. Grantee shall provide TxDOT with: -- list data or resource that Grantee will share with TxDOT (e.g. traffic data) --. 2. Grantee shall give TxDOT and/or TMC voice and/or visual credit (TxDOT and/or TMC logos) for all Traffic Data provided by TxDOT. TxDOT may transmit video data to the Grantee with an embedded logo; the Grantee shall not block, modify, or remove the Logo. 3. Grantee agrees to broadcast public service announcements (PSAs) provided by TxDOT. The total number of broadcasts shall equal an average of five (5) minutes per month, including one (1) early evening newscast and one (1) early morning newscast. 4. Grantee shall provide TxDOT with an electronic file of any TxDOT related stories or any stories that involve any input from TxDOT employees that are distributed by the Grantee. Grantee shall provide TxDOT with an electronic file formatted for Windows Media Player within two weeks of the time the story was released.

****Option #2:
Public or Private Entity to obtain
TxDOT Data, including Snapshot images, from TxDOT TSD Front Door via Internet**

**Includes Media, Partners (e.g. Government Agencies),
and Private Traffic Information Service Providers (ISP)****

**ATTACHMENT A
DESCRIPTIONS and SPECIFICATIONS of RIGHTS GRANTED**

RIGHTS GRANTED	
By TxDOT	By Grantee
<ol style="list-style-type: none"> 1. TxDOT will make Traffic Data available to Grantee. 2. TxDOT will provide the Grantee with its Center-to-Center (C2C) Development Toolkit needed to develop plug-in software compatible with the C2C infrastructure to extract the Traffic Data. 3. TxDOT provides the Grantee the right to use TxDOT ITS software necessary to obtain the Traffic Data. 4. TxDOT will provide the Grantee with TxDOT logos for identification of traffic service and information provided by TxDOT. The use of the TxDOT and/or TMC logos is limited to giving TxDOT credit for contributed data. The Grantee shall not use the logos for any other purpose. 	<ol style="list-style-type: none"> 1. Grantee will -- describe how Grantee intends to use the ITS Traffic Data --. 2. Grantee shall provide TxDOT with Non-Monetary Compensation as identified below.

PROVISION OF INFRASTRUCTURE	
By TxDOT	By Grantee
<ol style="list-style-type: none"> 1. TxDOT will provide the Grantee a connection into TxDOT's Statewide portal for Grantee to obtain Traffic Data. 2. TxDOT will provide and maintain any communication links, hardware, software, and additional ITS infrastructure that is necessary to obtain Grantee's traffic data. 	<ol style="list-style-type: none"> 1. As described in Article 3-Provision of Infrastructure, the Grantee is responsible for providing and maintaining any communication links, hardware, software, and additional ITS infrastructure that is necessary to obtain the Traffic Data. 2. Grantee shall provide TxDOT with (a) verifiable, static, routable IP address(es).

NON-MONETARY COMPENSATION	
By TxDOT	By Grantee
<ol style="list-style-type: none"> 1. none 	<ol style="list-style-type: none"> 1. Grantee shall provide TxDOT with: -- list data or resource that Grantee will share with TxDOT (e.g. traffic data) --. 2. Grantee shall give TxDOT and/or TMC voice and/or visual credit (TxDOT and/or TMC logos) for all Traffic Data provided by TxDOT. TxDOT may transmit video data to the Grantee with an embedded logo; the Grantee shall not block, modify, or remove the Logo. 3. Grantee agrees to broadcast public service announcements (PSAs) provided by TxDOT. The total number of broadcasts shall equal an average of five (5) minutes per month, including one (1) early evening newscast and one (1) early morning newscast. 4. Grantee shall provide TxDOT with an electronic file of any TxDOT related stories or any stories that involve any input from TxDOT employees that are distributed by the Grantee. Grantee shall provide TxDOT with an electronic file formatted for Windows Media Player within two weeks of the time the story was released.

ATTACHMENT B**Guidelines for Use of State Equipment and Infrastructure**

(Applicable to Rights Granted in Attachment A)

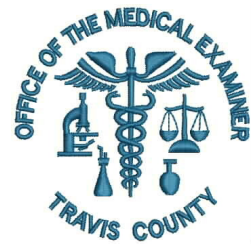
ITS FIELD EQUIPMENT: Closed Circuit Television (CCTV) Cameras; Dynamic Message Sign (DMS); Highway Advisory Radio (HAR) System; Lane Control Signal (LCS) System

1. During periods of peak traffic flow, access shall normally be limited to TxDOT. Peak traffic flow is normally considered to exist regularly during two periods of the day, Monday through Friday. In general, one period of peak traffic flow exists in the early morning and the other period of peak traffic flow exists in the late afternoon. Additional periods of peak traffic flow may exist at other times during the weekday and weekend due to special events and public gatherings. Precise times of regular and additional anticipated peak periods of traffic flow shall be the sole determination of TxDOT and may change from time to time.
2. During an incident, access shall normally be limited to TxDOT and local emergency service agencies. An incident is defined as any condition in which traffic flow is not normal. As an example, abnormal traffic flow could be caused by debris in the road, such as a mattress or board, or could be caused by non-recurring congestion, such as on-lookers to an automobile accident, public gathering, construction, or roadway maintenance. The duration of the incident shall be considered complete once any TxDOT and/or emergency service personnel and vehicles have departed from the incident scene and traffic flow has returned to normal.
3. During periods described above in which TxDOT normal daily operations have ceased or local emergency service agencies do not operate, access to TxDOT equipment shall be limited to the following:
 - CCTV – pan, tilt, and zoom controls shall be limited to obtaining broad general traffic information. Panning, tilting, or zooming to obtain visual detailed information of an incident scene or traffic flow is limited to TxDOT and emergency service agencies at all times.
 - DMS and HAR – messages shall be limited to a pre-approved library and schedule of broad general traffic information. Removal of existing messages and posting of new messages shall require approval by TxDOT or emergency personnel, and be limited to pre-approved library and hierarchy rules for control.
 - LCS – indicators will be turned off. If an incident requires activation of LCS, TxDOT or emergency personnel must be contacted for direction.
4. During all other periods, not described above, access shall be limited to obtaining and providing transportation-related information only.
 - CCTV pan, tilt, and zoom for enforcement and any non-transportation related information purpose is forbidden at any time. A single breach of any of the above guidelines shall be grounds to immediately withdraw the privilege of pan, tilt, and zoom.
 - Changes to DMS, HAR or LCS settings for any non-transportation related information purpose is forbidden at any time. A single breach of any of the above guidelines shall be grounds to immediately withdraw the privilege of DMS, LCS or HAR control.
5. Access to ITS field equipment may be withdrawn at anytime By TxDOT without notice if access is determined to not be in the best interest of TxDOT.

ATTACHMENT C

Connectivity Diagram

TEMPLATE



PROCEDURES FOR THE TRANSPORTATION AND MOVEMENT OF DECEASED PERSONS FROM ROADWAYS

Traffic incidents involving fatalities - requiring law enforcement investigation and additional response by the county medical examiner - often result in extended lane or roadway closures. When responding to fatality traffic incidents, it is important to balance the need for thorough investigations into the cause of death, with the need to minimize responder exposure to danger, minimize risk of secondary incidents involving the motoring public, respect the dignity and privacy of the decedent and the decedent's family, and restore the flow of traffic.

The *Texas Code of Criminal Procedures, Article 49.25, Subchapter B* states that a "body shall not be disturbed or removed from the position in which it is found by any person without authorization from the medical examiner or authorized deputy, except for the purpose of preserving such body from loss or destruction or maintaining the flow of traffic on a highway".

These procedures have been developed by the Austin Police Department (APD), Austin Fire Department (AFD), Austin-Travis County Emergency Medical Services (EMS), and Travis County Office of the Medical Examiner (TCME) and they outline mutual operating procedures to expedite the removal of deceased persons from the scene of an incident when the incident restricts the free movement of traffic on the State and National Highway Systems. They also address operating procedures related to the dispatch of and communications with TCME investigative personnel, the expedited transport of deceased person(s), the relocation/removal of deceased persons in the absence of TCME investigative personnel, and the maintenance/capture of evidentiary information.

Dispatch and Communications

The first qualified responder on the scene (i.e., personnel from APD, AFD, EMS) should notify APD dispatch, who will subsequently notify the TCME investigator; APD dispatch notification is not limited to the first arriving APD officer or APD Crime Scene Unit (CSU) or Vehicle Homicide detective. This notification process should occur through existing communication channels. TCME should continue to make traffic fatalities its top response priority in the County; earlier notification would allow the TCME investigator additional time to mobilize for response.

Direct communications between the TCME investigator and either the on-scene APD officer or Vehicle Homicide detective should be established as soon as possible thereafter to exchange further details about the incident, estimate the potential timeline of actions, and, as necessary, determine the need to move the deceased person(s) and/or vehicle(s) out of the roadway prior to TCME's arrival at the scene. Through better communications with the on-site officer or detective, unproductive on-scene "wait" time for the ME investigator may be avoided. To support this change in procedure, APD and TCME should routinely exchange contact and on-call information for their respective investigators.

Expedited Transport

To expedite transport of the deceased person(s), the TCME investigator should either: (1) call to request transport services immediately when arriving at the scene (the contracted transported services are allowed up to a one-hour response time but have significant hourly costs; requesting them late in the process could significantly delay incident clearance but requesting them too early in the process could result in unnecessarily high transport costs) or (2) provide transport in the TCME investigator's vehicle, with the assistance of either APD or AFD personnel for loading at the scene and offloading at the TCME office or other designated location.

Relocation or Removal

When the TCME investigator is determined to be detained and unable to respond to the incident scene in a reasonable amount of time or if extrication efforts are determined to be lengthy, the decision to relocate or remove deceased person(s) and/or vehicle(s), in the interest of responder and public safety, should be mutually determined by the APD Vehicle Homicide detective, or qualified supervisor, and the TCME investigator. Law enforcement has jurisdiction over the incident scene; TCME has jurisdiction over the decedent.

Where death is quite evident, ejected person(s) located in the roadway that constitute a traffic hazard to other vehicles, law enforcement, or fire and rescue personnel may be moved to a safer off-site location, such as the TCME office or other agreed upon facility, or discreetly to the side of the road.

Deceased person(s) still located inside a vehicle(s) may also be moved to a safer off-site location, such as the TCME office or other agreed upon facility, or to the shoulder of the roadway or other nearby location for further investigation.

If the deceased person(s) are transported while still in the vehicle(s) to an off-site location, TCME should make arrangements with AFD/EMS to assist with the extrication of the person(s) from the vehicle(s). Prior to transport, the vehicle should be securely covered with a tarp to ensure human remains are not visible and that no evidence and/or property is lost during transport. The vehicle(s) should be transported on a flatbed vehicle; TCME or APD, if appropriate, should follow or meet the transporting vehicle to the off-site facility to preserve the chain of evidence.

The transport of deceased person(s) and/or vehicle(s) to an off-site location maintains the privacy and dignity of the decedent and the decedent's family, provides a safer environment for AFD/EMS responders to perform extrication, and expedites reopening the roadway.

Evidentiary Information

Fatality traffic incidents are investigated from two perspectives: (1) APD's Vehicle Homicide Unit is responsible for determining whether criminal negligence has occurred, and (2) TCME is responsible for determining the specific cause of death and confirming positive identification. APD and TCME should consider opportunities to conduct their respective investigations concurrently rather than sequentially to reduce the duration of related lane or roadway closures.

When the TCME investigator is determined to be detained and the decision is made to relocate or remove deceased person(s) and/or vehicle(s), APD Vehicle Homicide detectives should provide necessary information to assist TCME in determining placement of the deceased

person(s) as they were found, as well as any preserved medical evidence, physical evidence, shoes, and clothing for later forensic examination, as needed. APD's Vehicle Homicide Unit or CSU will take photos of the scene prior to the removal of the decedent or possessions from their original location.

These procedures are to better balance the need for thorough investigations into the cause of death, with the need to minimize responder exposure to danger, minimize risk of secondary incidents involving the motoring public, respect the dignity and privacy of the decedent and the decedent's family, and restore the flow of traffic.

I concur with these procedures and intend to implement them among the employees under my supervision.

Date: 11/12/08



David Carter, Assistant Chief – Chief of Staff
Austin Police Department

I concur with these procedures and intend to implement them among the employees under my supervision.

Date: 12-4-08



Jim Evans, Assistant Chief – Chief of Staff
Austin Fire Department

I concur with these procedures and intend to implement them among the employees under my supervision.

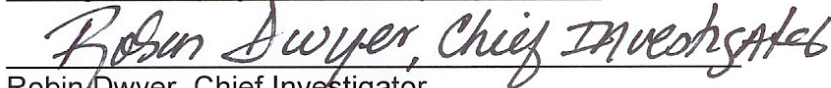
Date: 12-15-08



James Shamard, Assistant Chief – Chief of Staff
Austin-Travis County Emergency Medical Services

I concur with these procedures and intend to implement them among the employees under my supervision.

Date: 12-8-08



Robin Dwyer, Chief Investigator
Travis County Medical Examiner

Texas Department of Transportation

Memorandum Of Understanding

Whereas, individual governmental entities in the Austin-Travis County area operate various wireless public safety communication systems, and many of these systems are nearing the end of their useful lives; and

Whereas, the public safety agencies using these systems are becoming more inter-dependent, and would benefit from regional integration of these systems and shared information flow; and

Whereas, the Texas Department of Transportation believes that it is time to start planning and developing a regional wireless public safety communications system, and wishes to participate with other area governmental entities in the consideration of and planning for a unified public safety wireless emergency communications system for the greater Austin-Travis County area; and

Whereas, such a unified public safety communications system could include 911 operations, computer-aided dispatch, mobile data information transfer, public safety and public service radio communications, and 'intelligent transportation' management, all of which might be operated from a fully integrated combined center; and

Whereas, a cooperative effort between area governmental entities is necessary to facilitate financing, planning and development of such a project;

NOW, THEREFORE, BE IT RESOLVED BY THE TEXAS DEPARTMENT OF TRANSPORTATION THAT:

1. The Texas Department of Transportation is interested in cooperating with other participating governments to plan and develop a regional unified public safety wireless emergency communications system, and will pursue this goal with other participating governments so that benefits and costs can be equitably shared; and
2. The Texas Department of Transportation is hereby committed to assign appropriate staff to cooperate with staff assigned by other governmental entities to meet and develop plans for a unified public safety communications system and center; and
3. The Texas Department of Transportation is hereby committed to seek and apply for funding from whatever source of funds may be available for such a cooperative intergovernmental project, including federal, state, local or private grants funding; and
4. The staff of the Texas Department of Transportation is committed to bring back to the management necessary information and items for policy-making and decisions necessary to implement such a system.

Approved: William C. Garbade, P.E.
William C. Garbade, P.E.
District Engineer
Austin District



RESOLUTION
OF THE
CAPITAL METROPOLITAN TRANSPORTATION AUTHORITY
BOARD OF DIRECTORS

STATE OF TEXAS

RESOLUTION NO: CMTA-96-0325-022

COUNTY OF TRAVIS

WHEREAS, individual governmental entities in the Austin - Travis County area operate various wireless public safety communication systems, and many of these systems are nearing the end of their useful lives; and

WHEREAS, the public safety agencies using these systems are becoming more inter-dependent, and would benefit from regional integration of these systems and shared information flow; and

WHEREAS, the Board of Directors of the Capital Metropolitan Transportation Authority believes that it is time to start planning and developing a regional wireless public safety communications system, and wishes to participate with other area governmental entities in the consideration of and planning for a unified public safety wireless emergency communications system for the greater Austin - Travis County area; and

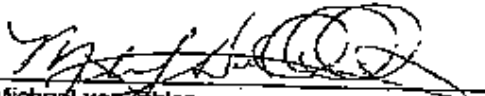
WHEREAS, such a unified public safety communications system could include 911 operations, computer aided dispatch, mobile data information transfer, public safety and public service radio communications, and 'intelligent transportation' management, all of which might be operated from a fully integrated combined center; and

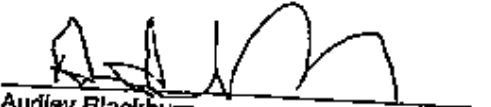
WHEREAS, a cooperative effort between area governmental entities is necessary to facilitate financing, planning and development of such a project;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Capital Metropolitan Transportation Authority that:

1. The Board of Directors of the Capital Metropolitan Transportation Authority is interested in cooperating with other participating governments to plan and develop a regional unified public safety wireless emergency communications system, and will pursue this goal with other participating governments so that benefits and costs can be equitably shared; and
2. The General Manager is hereby authorized to seek and apply for funding from whatever source of funds may be available for such a cooperative intergovernmental project, including federal, state, local or private grants funding.

Date: March 25, 1996


Michael von Ohlen
Chairperson


Audley Blackburn
Secretary

City of Austin

RESOLUTION

WHEREAS, individual governmental entities in the Austin-Travis County area operate various wireless public safety communication systems, and many of these systems are nearing the end of their useful lives; and

WHEREAS, the public safety agencies using these systems are becoming more inter-dependent, and would benefit from regional integration of these systems and shared information flow; and

WHEREAS, the City Council believes that it is time to start planning and developing a regional wireless public safety communications system, and wishes to participate with other area governmental entities in the consideration of and planning for a unified public safety wireless emergency communications system for the greater Austin-Travis County area; and


WHEREAS, such a unified public safety communications system could include 911 operations, computer-aided dispatch, mobile data information transfer, public safety and public service radio communications, and "intelligent transportation" management, all of which might be operated from a fully integrated combined center; and

WHEREAS, a cooperative effort between area governmental entities is necessary to facilitate financing, planning and development of such a project; NOW, THEREFORE,

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF AUSTIN:

1. That the City Council is interested in cooperating with other participating governments to plan and develop a regional unified public safety wireless emergency communications system, and will pursue this goal with other participating governments so that benefits and costs can be equitably shared; and
2. That the City Manager is hereby directed to assign appropriate staff to cooperate with staff assigned by other governmental entities to meet and develop plans for a unified public safety communications system and center; and
3. That the City Manager is hereby directed to seek and apply for funding from whatever source of funds may be available for such a cooperative intergovernmental project, including federal, state, local or private grants funding; and
4. That the City Manager is hereby directed to bring back to the City Council the necessary information and items for policy-making and decisions necessary to implement such a system.

ADOPTED: March 28, 1996 ATTEST:


James E. Aldridge
City Clerk

RESOLUTION

Whereas, individual governmental entities in the Austin-Travis County area operate various wireless public safety communication systems, and many of these systems are nearing the end of their useful lives; and

Whereas, the public safety agencies using these system are becoming more inter-dependent, and would benefit from regional integration of these systems and shared information flow; and

Whereas, the Travis County Commissioners' Court believes that it is time to start planning and developing a regional wireless public safety communications system, and wishes to participate with other area governmental entities in the consideration of and planning for a unified public safety wireless emergency communications system for the greater Austin - Travis County area; and

Whereas, such a unified public safety communications system could include 911 operations, computer-aided dispatch, mobile data information transfer, public safety and public service radio communications, and 'intelligent transportation' management, all of which might be operated from a fully integrated combined center; and

Whereas, a cooperative effort between area governmental entities is necessary to facilitate financing, planning and development of such project;

NOW, THEREFORE, BE IT RESOLVED BY THE TRAVIS COUNTY COMMISSIONERS' COURT THAT:

1. The Commissioners' Court is interested in cooperating with other participating governments to plan and develop a regional unified public safety wireless emergency communications system, and will pursue this goal with other participating governments so that benefits and costs can be equitably shared; and
2. The Commissioners' Court directs its appointments to the Community Core Leader Group and to the 911-RDMT Executive Board to cooperate with other participating governmental entities to meet and develop plans for a unified public safety communications system and center; and
3. The Commissioners' Court expresses its intent to seek and apply for funding from whatever source of funds may be available for such a cooperative intergovernmental project, including federal, state, local or private grants funding; and
4. The Commissioners' Court directs its appointments to the Community Core Leaders Group and Executive Board to bring back to the Court the necessary information and items for policy-making and decisions necessary to implement such a system.

Approved: 

4/16/96

Attest: _____

CFDA #20.205
Federal Highway Administration (FHWA)
Not Research and Development

_____ COUNTY
CCSJ , Etc. _____
Billing CSJ _____
Project CM 1402(021)
Location _____
DOT No. _____, RRMP #
ADD Subdivision

STATE OF TEXAS §

UPRR Folder No. _____

COUNTY OF TRAVIS §

TxDOT Contract No. _____

**TEXAS DEPARTMENT OF TRANSPORTATION
CONDUIT OVER TRACK AGREEMENT**

THIS SUPPLEMENTAL AGREEMENT, made and entered into on the date hereinafter shown as being fully executed, by and between the State of Texas, acting by and through the Texas Department of Transportation, hereinafter called the "State" and/or "Department," and the Union Pacific Railroad Company, a Delaware corporation, hereinafter called the "Railroad," acting by and through its official contracting executives.

W I T N E S S E T H

WHEREAS, on **DATE**, a contract, hereinafter called the original agreement, was executed between the State of Texas and the **NAME** Company (tracks now owned by the Union Pacific Railroad Company) for the construction and maintenance of an overpass structure(s) on **ROADWAY, TOWN, COUNTY** County, Texas, said original agreement being further identified as CSJ NUMBER; and,

WHEREAS, the State proposes to attach conduit with fiber optic cable to the ROADWAY overpass structure for the State's in-house, closed system Traffic Management System (TMS) at DOT No. **NUMBER**, RRMP #, **NAME** Subdivision, in **TOWN, COUNTY** County, Texas, to be hereinafter identified as the "Project," as shown on **Exhibit A** attached hereto and made a part hereof, and,

WHEREAS, the approved Railroad force account cost estimate shall be marked **Exhibit B**, attached hereto and made a part hereof; and

WHEREAS, said work is to be performed at no expense to the Railroad, unless as provided herein.

A G R E E M E N T

NOW, THEREFORE, in consideration of the premises and of the mutual covenants and agreements of the parties hereto be by them respectively kept and performed, as hereinafter set forth, it is agreed as follows:

Article 1. Agreement Period

Upon execution by all parties, this Agreement will be in effect and continue thereafter for so long as the Railroad premises shall be used for the purposes set forth herein; provided, however, if the State shall abandon the use of the Railroad premises, or any part thereof, for such purposes, this license and permission and the rights and privileges granted hereby as to the portion or portions so abandoned shall expire and terminate at the time each such portion shall be so abandoned; whereupon the Railroad shall have the same complete title to the Railroad premises so abandoned as though these presents had never been executed and the right to enter thereon and exclude therefrom the State, its successors, and assigns.

Article 2. Permission

a. The Railroad hereby grants permission to the State and/or its Contractor to attach conduit with fiber optic cable for TMS purposed to the highway structure(s) and over the railroad tracks where the State has existing license to cross the Railroad's right-of-way. The permission given herein shall not prevent the Railroad from operating its trains or multiplying or changing its tracks across the land over which permission has been given.

b. The permission given is subject to the rights of utility companies to maintain and operate facilities thereon and thereover, and the State will make its own arrangements with the utility companies for any necessary relocation or alteration of said facilities.

c. No legal right which the Railroad now has to reconstruct, maintain, and operate its existing track and appurtenances or to construct, maintain, and operate an additional track or tracks and appurtenances upon and across said property shall in anyway be affected by the giving of this license.

d. It is agreed that should the property or any portion thereof, which is licensed hereunder, cease to be used for public road purposes, this license, as to the portion so abandoned, shall immediately cease and terminate.

e. Permission is granted solely for the purposes of the State, at its sole cost and expense, for the proposed improvements as shown on the attached **Exhibit A** and is expressly subject and subordinate to the present and future rights of the Railroad, its successors, assignees, lessees, grantees and licensees, to construct, maintain, use, operate, and renew on, beneath, or above the surface of the Railroad premises any telephone, telegraph, power, communication, or signal lines, poles and/or appurtenances, fiber optic communications, tracks, roadways, pipelines, structures, improvements, or facilities of similar or different character, as now located, and to construct, install, establish, and thereafter maintain, use, operate, and to renew on, beneath, or above the surface of the Railroad premises, any or all said things, provided the same do not materially interfere with the State's use of the Railroad premises as hereinabove provided.

Article 3. Scope of Work

a. The Railroad, the State and/or their Contractor agree to perform the work as outlined in the attached **Exhibit A**. The work will generally consist of constructing a highway overpass across the tracks as necessitated by constructing a dedicated northbound direct connector from westbound _____ Road to SH _____ northbound over the rail line as shown in **Exhibit A**.

b. In order to provide for the safety of rail traffic, the Railroad may provide, at State's expense, flaggers during the period of performance of work in or incident to the proposed installation of conduit and fiber optic cable. The Railroad shall prepare a written cost estimate, subject to approval by the State, attached hereto and to be identified as **Exhibit B**. The Railroad should include the cost associated with flagging and engineering in the estimate. Only work shown in the approved estimate will be reimbursed. The providing of this service shall not relieve the State and/or its Contractor of any responsibility or liability.

c. The State shall give the Railroad at least thirty (30) days written notice prior to commencement of any work hereunder.

Article 4. Plans, Estimates, Construction and Maintenance

a. The State, at its expense, has prepared the plans and specifications, to include any signal wiring diagram(s) if applicable, for the proposed Project and has submitted such plans and specifications to the Railroad for review and approval. The approved plans and specifications are hereby adopted as the plans and specifications covering the construction as contemplated herein and identified as **Exhibit A**. No changes to such final plans and specifications shall be made without the written approval of such changes by the State and the Railroad. Neither the State nor its contractors shall commence any work on Railroad's property involving such plans until such plans have been approved in writing by the Railroad.

b. If, in after a period of three (3) years from the date the Railroad executes this Agreement and the Project has not let to contract, the Railroad shall have the right to perform a design plan review of the previously approved design to confirm the design meets the then-current Railroad design guidelines and requirements.

c. The State and/or the State's Contractor shall furnish material for and perform the work to be done by it hereunder in accordance with the approved plans and specifications. The State and/or the State's Contractor shall install conduit with fiber optic cable across the Railroad's right-of-way as shown on the plans and in accordance with approved specifications and shall maintain or arrange for the maintenance of these facilities.

d. The Railroad and/or the State's Contractor, unless otherwise provided, shall make such changes or alterations in the tracks, communication, and signal pole and wire lines, pipe sewer and drainage, or other facilities or buildings located upon the Railroad's right-of-way, which may be displaced or required by the construction of the Project, as may be necessary to maintain continuous service and conform them to said construction and restore them to former condition for service either prior to, during, or following construction of said work. The Railroad has prepared cost estimates, and has been approved by the State, for the adjustment of such facilities. Flagging and engineering in the cost estimate have been included. Only work shown in the cost estimates will be reimbursed. Said cost estimates are identified as **Exhibit B**.

e. The Railroad shall commence the work to be done by it herein within thirty (30) days, or by a date mutually acceptable by the State and the Railroad, after receipt of written notice from the State that the work may proceed and shall proceed diligently to the conclusion of its obligations herein. Assembly of materials should be made sufficiently in advance of the work to assure prompt delivery to the jobsite.

f. Following the issuance of the Work Order, it will be necessary for the Railroad to contact the Texas Department of Transportation district office a minimum of seven (7) days prior to the actual commencement of work in order that State forces may provide inspection during the necessary work.

g. Following the completion of the Project, for future maintenance work, the Railroad, under terms of this Agreement, gives the State and/or its Contractor permission to enter the Railroad right-of-way to perform routine maintenance and/or emergency work as required. The State's Contractor shall provide the usual insurance coverages as contained in Article 5 of this Agreement and be required to execute the Railroad's Contractor Right-of-Entry Agreement before commencing any maintenance work on the Railroad's property.

h. The State and/or its Contractor assumes the entire responsibility for the construction, maintenance, and use of said highway and drainage facility upon the Railroad's property at the location herein described to the extent required by law, and nothing contained herein shall ever be construed to place upon the Railroad any manner of liability for injury to or death of persons, or for damage to or loss of property arising from or in any manner connected with the construction, maintenance, or use of the portion of said highway located upon the Railroad's property.

i. The State shall require the State's Contractor to provide the insurance coverages as contained in Article 5 of this Agreement before commencing any work on the Railroad's property.

Article 5. Insurance Requirements

The contract or contracts to be let by the State for the construction of the work to be undertaken by it hereunder shall provide:

a. Commercial Comprehensive General Liability Insurance Policy.
The State's Contractor shall furnish evidence to the State that, with respect to the operations the Contractor performs, the Contractor carries a Standard Comprehensive General Liability Insurance Policy providing limits of not less than two million dollars (\$2,000,000) for bodily injury and property damage per occurrence, and not less than two million dollars (\$2,000,000) aggregate for all occurrences.

If any part of the work is sublet, similar insurance shall be provided by or on behalf of the subcontractors to cover their operations.

b. Railroad Protective Liability Insurance (which includes Bodily Injury, Property Damage, and Physical Damage Insurance). The State's Contractor shall furnish an original policy to the State for and on behalf of the Railroad which, with respect to the operations the Contractor or any subcontractors perform, provides the Standard Railroad Protective Liability Insurance Policy with a limit of not less than two million dollars (\$2,000,000) for bodily injury, property damage and physical damage to property, and not less than six million dollars (\$6,000,000) aggregate for all occurrences.

c. Business Automobile Coverage. The State's Contractor shall furnish an original policy to the State for and on behalf of the Railroad which, with respect to the operations of the Contractor or any subcontractors perform, provide the Standard Business Automobile Coverage Insurance Policy with a limit of not less than \$2,000,000 per occurrence to claim, including but not limited to coverage for the bodily injury, property damage, and any and all motor vehicles including owned, hired and non-owned.

d. Workers compensation and Employers Liability. The State's Contractor shall furnish an original policy to the State for and on behalf of the Railroad which, with respect to the operations of the Contractor or any subcontractors perform, provide the Standard Worker's Compensation and Employers Liability insurance including but not limited to Contractor's statutory liability under the workers' compensation laws of the State of Texas and Employers' Liability (Part B) with limits of at least \$500,000 each accident, \$500,000 disease policy limit, and \$500,000 each employee.

e. General. The insurance specified in paragraphs a. and b. shall be carried until all work required to be performed under the terms of the contract is satisfactorily completed as evidenced by formal acceptance by the State.

Article 6. Payment.

a. No payment, except for any preliminary engineering costs in Article 6 (c) and where written Authority To Order material may have been issued prior to the Work Order resulting in some material and material handling costs, will be due the Railroad unless a Work Order for work to begin is issued by the State.

b. Reimbursement to the Railroad will be made for work performed and materials furnished, including but not limited to, insurance premiums and coverage at the rate and amount set forth in the approved cost estimate attached hereto, in accordance with the provisions of Title 23, Code of Federal Regulations (CFR), Subchapter B, Part 140, Subpart I, issued by the Federal Highway Administration, and amendments thereto except as modified by the provisions herein. Work performed and materials furnished by the Railroad will be reimbursed by the State based on actual costs incurred by the Railroad as they relate to the development of the Project and approved in the cost estimate identified as **Exhibit B**.

c. The cost of preliminary engineering will be eligible for reimbursement if incurred after the State's request for preparation of estimates.

d. The Railroad may submit monthly bills prepared in satisfactory form for flagging work performed and materials installed. Payment will be made within thirty (30) days the costs detailed on the bills.

e. Upon completion of the Project, the Railroad shall submit a final invoice for all work performed clearly marked "Final Invoice" no later than one (1) year from the date of the Project Completion & Acceptance Letter stating the project is completed. Payment will be made within thirty (30) days of receipt of the Final Invoice.

Article 7. Termination

The State reserves the right to cancel this Agreement for any reason and at any time prior to the issuance of a Work Order by the State to the Railroad to proceed with any part of the work outlined herein. The State will not be responsible for any expense incident to any cost incurred in the event of the cancellation of this contract, unless a Work Order was issued by the State and the Railroad incurred expenses pursuant to that Work Order, except for any preliminary engineering costs in Article 6 (c) and where written Authority To Order material may have been issued prior to the Work Order resulting in some material and material handling costs. In the event the State terminates this Agreement, any materials ordered by the Railroad upon receipt of the Authority to Order may be re-allocated to other State-approved projects upon consultation with the State.

Article 8. Records & Audits

a. The State and the Railroad shall maintain books, documents, papers, accounting records, and other evidence pertaining to costs incurred and work performed hereunder and shall make such materials available at their offices during the contract period and for three (3) years from the date of final payment. The records shall be made available to representatives from the State or U. S. Department of Transportation, including the Office of Inspector General, for the purpose of making audits, inspections, transcriptions, or excerpts.

b. The State Auditor may conduct an audit or investigation of any entity receiving funds from the State directly under the contract or indirectly through a subcontract under the contract. Acceptance of funds directly under the contract or indirectly through a subcontract under this contract acts as acceptance of the authority of the State Auditor, under the direction of the legislative audit committee, to conduct an audit or investigation in connection with those funds. An entity that is the subject of an audit or investigation must provide the State Auditor with access to any information the State Auditor considers relevant to the investigation or audit.

c. The Railroad is required to make any information created or exchanged with the State pursuant to this Agreement, and not otherwise excepted from disclosure under the Texas Public Information Act, available in a format that is accessible by the public at no additional charge to the State.

Railroad and the State agree that Railroad will produce such information in an image format, or in another format selected by the Railroad that is accessible by the public.

Article 9. Existing Agreements

It is agreed that all existing agreements between the Railroad and the State concerning permission, permits, leases or easements at this location shall remain in full force and effect.

Article 10. Protection of Fiber Optic Cable System

Fiber optic cable systems may be buried on the Railroad's property. Protection of the fiber optic cable systems is of extreme importance since any break could disrupt service to users resulting in business interruption and loss of revenue and profits. The State and/or its Contractor shall telephone the Railroad during normal business hours (7:00 a.m. to 9:00 p.m., Central Standard Time, Monday through Friday, except holidays) at (800) 336-9193 (also a 24-hour, seven-day number for emergency calls) to determine if fiber optic cable is buried anywhere on the Railroad's premises to be used by the State. If it is, the State and/or its Contractor will telephone the telecommunications company(ies) involved, arrange for a cable locator, and make arrangements for relocation or other protection of the fiber optic cable prior to beginning any work on the Railroad's premises.

Article 11. Limited Access

The State hereby agrees that during the construction of the proposed improvements it will keep its employees, material, and machinery within the defined area of the premises unless otherwise specified on the attached **Exhibit A**. There shall be no crossings of the Railroad's tracks except at existing, open, and public crossings.

Article 12. Transfer

The parties hereto shall not assign this Agreement, in whole or in part, or any rights herein granted, without the written consent of the other party(ies), and it is agreed that any transfer or assignment of this Agreement or any of the rights herein granted, whether voluntary, by operation of law, or otherwise, without such consent in writing, shall be absolutely void and, at the option of the non-transferring party(ies), shall terminate this Agreement.

Article 13. Relocation or Removal of Fiber Optic System

a. The permission herein granted for the installation of low voltage fiber optic cable for the State's Traffic Management System (TMS) and/or Intelligent Transportation System (ITS) is subject to the reasonable needs and requirements of the Railroad in the operation of its railroad and in the improvements and use of its property for railroad purposes. The State shall, upon the Railroad giving the District Engineer reasonable advance written notice, relocate all or any portion of the fiber optic cable system as installed as part of this Project to another portion of the Railroad's property. The relocation of the State's Traffic Management System (TMS) and/or Intelligent Transportation System (ITS) shall be at the sole expense of the State to the extent allowed by State law, whenever, in the furtherance of the Railroad's reasonable railroad needs and requirements, the Railroad reasonably finds that such relocation is necessary.

b. All the terms, conditions, and stipulations herein expressed with reference to the State's Traffic Management System (TMS) and/or Intelligent Transportation System (ITS) on property of the Railroad in the locations hereinbefore described as shown in **Exhibit A** shall, so far as the State's fiber optic Traffic Management System (TMS) and/or Intelligent Transportation System (ITS) remains on the property, apply to the fiber optic cable system as modified, changed, or relocated within the contemplation of this section.

c. In State's use, operation, maintenance and repair of the State's fiber optic system located on the Railroad's property and State's TMS and ITS system, the State shall ensure to take all suitable precautions to prevent any interference with the operation of the signal, communication lines or other installations or facilities of the Railroad or its tenants, and if at any time such use, operation, maintenance or repair of the fiber optics, TMS or ITS systems results in any electrostatic or other interference effects which the Railroad deems undesirable or harmful or causes interference with the operation of the signal, communication lines or other installations or facilities, as now existing or which may hereafter be installed by the Railroad and/or its tenants, the State shall, at the State's sole expense, immediately take such actions as may be necessary to eliminate such interference.

Article 14. Notification

The State agrees to notify the Railroad in writing when all work on the Railroad's property is complete.

Article 15. Responsible For Its Own Actions

The parties hereto acknowledge that they are not an agent, servant, or employee of the other parties, and are responsible for their own acts and deeds and for those of its agents and employees during performance of contract work.

Article 16. Conditions

a. In accordance with the provisions of Title 23, Code of Federal Regulations (CFR), Subchapter G, Part 646, Subpart B, issued by the Federal Highway Administration, and amendments thereto, the Railroad will not be required to participate five percent (5%) in the cost of the Project.

b. The State may be reimbursed for its expenditures hereunder from federal funds for this Project. Therefore, the State and the Railroad will comply with statutes, rules, and regulations enacted and promulgated by the U. S. Government and its Federal Highway Administration.

c. If the State will be receiving any federal funding for the Project, the current rules, regulations and provisions of the Federal Aid Policy Guide as contained in 23 CFR 140, Subpart I and 23 CFR 646, Subpart A and B are incorporated into this Agreement by reference. If the State will be receiving American Recovery and Reinvestment Act of 2009 ("ARRA") funding for this Project, the State shall be solely responsible in performing and completing all ARRA reporting documents for this Project. The State further confirms and acknowledges that

Section 1512 of the ARRA provisions applies only to the “recipient” receiving ARRA funds directly from the federal government and, therefore, (i) the ARRA reporting requirements are the responsibility of the State and not of the Railroad and (ii) the State shall not delegate any ARRA reporting responsibilities on the Railroad. The State confirms that (A) the Railroad shall provide the Railroad’s standard and customary billing for expenses incurred by the Railroad for this Project including the Railroad’s standard and customary documentation to support such billing and (B) such standard and customary billing and documentation from the Railroad provides the information needed by the State to perform and complete the ARRA reporting documents. The Railroad confirms that the State and Federal Highway Administration shall have the right to audit the Railroad’s billing and documentation for this Project as provided in Article 8, RECORDS and AUDITS, of this Agreement.

Article 17. Compliance with Laws

The parties shall comply with all applicable federal, state, and local laws, statutes, ordinances, rules and regulations, and the orders and decrees of any courts or administrative bodies or tribunals in any manner affecting the performance of this Agreement. When required, the Railroad shall furnish the State with satisfactory proof of this compliance. Nothing herein is meant to be or will be interpreted to be a waiver of principles of legal preemption or preclusion that may apply to the Railroad because of its status as a common carrier regulated by the federal government.

Article 18. Office of Management and Budget (OMB) Cost Principles

In order to be reimbursed with federal funds, the parties shall comply with the Cost Principles established in OMB Circular A-87 that specify that all reimbursed costs are allowable, reasonable, and allocable to the Project.

Article 19. Disadvantaged Business Enterprise (DBE) Program Requirements

The Railroad maintains that it does not qualify as a recipient or sub-recipient under this Agreement of Federal-aid highway funds authorized under Titles I (other than Part B) and V of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), Pub. L. 105-Stat. 1914, or Titles I, III, and V of the Transportation Equity Act for the 21st Century (TEA-21), Pub. L. 105-178, 112 Stat. 107 (collectively “FHWA Funds”) and that this Agreement does not qualify as a Federal-aid construction contract. If and to the extent required by the authorization for any Federal-aid highway funds applied to this Agreement, upon prior written notice, the Railroad agrees:

a. The State and the Railroad shall set an appropriate DBE goal pursuant to 49 CFR Part 26 for this Agreement consistent with the State’s DBE guidelines and in consideration of the local market, project size, and nature of the goods or services to be acquired. The Railroad shall have final decision-making authority regarding the DBE goal and shall be responsible for documenting its actions. The State and the Railroad agree that the appropriate DBE goal for this contract is zero percent (0%).

b. The Railroad shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of any U. S. Department of Transportation assisted contract or in the administration of any applicable DBE program or the requirements of 49 CFR

Part 26 related to this Agreement. The Railroad shall take all necessary and reasonable steps under 49 CFR Part 26 to ensure non-discrimination in award and administration of U. S. Department of Transportation assisted contracts related to this Agreement.

c. Each contract the Railroad signs with a contractor under this Agreement (and each subcontract the prime contractor signs with a sub-contractor) must include the following assurance: *The contractor, sub-recipient, or sub-contractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of U. S. Department of Transportation assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this Agreement, which may result in the termination of this Agreement or such other remedy as the recipient deems appropriate.*

Article 20. Civil Rights Compliance

If and to the extent required by the authorization for any Federal-aid highway funds applied to this Agreement, the Railroad shall comply with the regulations of the U. S. Department of Transportation as they relate to non-discrimination (49 CFR Part 21 and 23 CFR Part 200), and Executive Order 11246 titled "Equal Employment Opportunity," as amended by Executive Order 11375 and supplemented in the Department of Labor Regulations (41 CFR Part 60).

Article 21. Debarment Certification

If and to the extent required by the authorization for any Federal-aid highway funds applied to this Agreement, the parties agree not to make any award at any tier to any party that they know, or have reason to believe, is debarred or suspended or otherwise excluded from or ineligible for participation in Federal Assistance Programs under Executive Order 12549, "Debarment and Suspension." By executing this Agreement, the Railroad certifies to the best of its knowledge and belief that it is not currently debarred, suspended, or otherwise excluded from or ineligible for participation in Federal Assistance Programs under Executive Order 12549 and that it will not do business with any party that is known to the Railroad to be currently debarred, suspended, or otherwise excluded from or ineligible for participation in Federal Assistance Programs under Executive Order 12549. The parties to this Agreement shall require any party to a subcontract or purchase order awarded under this Agreement to certify its eligibility to receive federal funds and, when requested by the State, to furnish a copy of the certification.

Article 22. Lobbying Certification

If and to the extent required by the authorization for any Federal-aid highway funds applied to this Agreement, the parties agree that, in executing this Agreement, each signatory certifies to the best of that signatory's knowledge and belief, that:

a. No federal appropriated funds have been paid or will be paid by or on behalf of the parties of this Agreement to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.

b. If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with federal contracts, grants, loans, or cooperative agreements, the signatory for the Railroad shall complete and submit the Federal Standard Form-LLL, *Disclosure Form to Report Lobbying*, in accordance with its instructions.

c. The parties shall require that the language of this certification shall be included in all lower tier subcontracts, which exceed \$100,000 and all such sub-recipients shall certify and disclose accordingly. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Title 31 USC §1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each failure.

Article 23. Federal Funding Accountability and Transparency Act Requirements

If and to the extent required by the authorization for any Federal-aid highway funds applied to this Agreement, the Railroad agrees:

a. Any recipient of funds under this Agreement agrees to comply with the Federal Funding Accountability and Transparency Act (FFATA) and implementing regulations at 2 CFR Part 170, including Appendix A. This Agreement is subject to the following award terms: <http://www.gpo.gov/fdsys/pkg/FR-2010-09-14/pdf/2010-22705.pdf> and <http://www.gpo.gov/fdsys/pkg/FR-2010-09-14/pdf/2010-22706.pdf>.

b. The Railroad agrees that it shall:

i. Obtain and provide to the State a Central Contracting Registry (CCR) number (Federal Acquisition Regulation, Part 4, Sub-part 4.1100) if this award provides more than \$25,000 in federal funding. The CCR number may be obtained by visiting the CCR website whose address is: <https://www.sam.gov/portal/public/SAM/>;

ii. Obtain and provide to the State a Data Universal Numbering System (DUNS) number, a unique nine-character number that allows the federal government to track the distribution of federal money. The DUNS may be requested free of charge for all businesses and entities required to do so by visiting the Dun & Bradstreet on-line registration website <http://fedgov.dnb.com/webform>; and

iii. Report the total compensation and names of its top five (5) executives to the State if:

1. More than eighty percent (80%) of annual gross revenues are from the federal government, and those revenues are greater than \$25,000,000 annually; and

2. The compensation information is not already available through reporting to the U.S. Securities and Exchange Commission.

c. The State acknowledges that the FFATA provisions of this Article may have no operative effect on the Railroad based on the Railroad's representation that it does not receive eighty percent (80%) or more of its annual gross revenues from federal procurement contracts and subcontracts.

Article 24. Legal Construction

If one or more of the provisions contained in this Agreement shall for any reason be held inapplicable, invalid, illegal, or unenforceable in any respect, that inapplicability, invalidity, illegality, or unenforceability shall not affect any other provisions and this Agreement shall be construed as if it did not contain the inapplicable, invalid, illegal, or unenforceable provision.

Article 25. Signatory Warranty

Each signatory warrants that the signatory has the necessary authority to execute this Agreement on behalf of the entity represented.

IN WITNESS WHEREOF, the State and the Railroad have executed duplicate counterparts of this Agreement for this Project identified as CSJ _____ on the dates indicated below.

THE STATE OF TEXAS

Executed for the Executive Director and approved for the Texas Transportation Commission for the purpose and effect of activating and/or carrying out the orders, established policies, or work programs heretofore approved and authorized by the Texas Transportation Commission.

By _____ Date _____

Name and Title _____

UNION PACIFIC RAILROAD COMPANY

By _____ Date _____

Name and Title _____

Notices:

For the purposes of this Agreement, all notices, correspondence, billings, and other documentation shall be mailed to the following addresses:

For the State of Texas

Rail Highway Section Director
Texas Department of Transportation
Traffic Operations Division (TRF-RHS)
125 E. 11th Street
Austin, TX 78701-2483

For the Union Pacific Railroad Company

Senior Manager Industry & Public Projects
Union Pacific Railroad Company
24125 Aldine-Westfield Road
Spring, TX 77373-9015

CFDA #20.205
Federal Highway Administration (FHWA)
Not Research and Development

_____ County
CSJ _____
Project _____
Location _____
DOT No. _____, RRMP _____

STATE OF TEXAS §

UPRR Folder No. _____

COUNTY OF TRAVIS §

TxDOT Contract No. _____

TEXAS DEPARTMENT OF TRANSPORTATION

CONDUIT UNDER TRACK AGREEMENT

THIS AGREEMENT, made and entered into on the date hereinafter shown as being fully executed, by and between the State of Texas, acting by and through the Texas Department of Transportation, hereinafter called the "State" and/or "Department," and the Union Pacific Railroad Company, a Delaware corporation, hereinafter called the "Railroad".

W I T N E S S E T H

WHEREAS, the State proposes to improve the safety of the traveling public by installing conduit with fiber-optic cable for the State's in-house, closed system Traffic Management System (TMS) under the railroad track by jack and bore method at IH __ at IH ___ in Houston, DOT No. _____, RRMP ____ in Houston, Harris County, Texas, to be hereinafter identified as the "Project," as shown on **Exhibit A** attached hereto and made a part hereof. **THE FOLLOWING SENTENCE IS OPTIONAL: All other work associated with this project will be covered under a separate agreement; and,**

WHEREAS, the Texas-approved version of the Railroad Contractor's Right-of-Entry Agreement shall be marked **Exhibit B**, attached hereto and made a part hereof; and

WHEREAS, the approved Railroad force account cost estimate shall be marked **Exhibit C**, attached hereto and made a part hereof; and

WHEREAS, said work is to be performed at no expense to the Railroad, unless as provided herein.

A G R E E M E N T

NOW, THEREFORE, in consideration of the premises and of the mutual covenants and agreements of the parties hereto be by them respectively kept and performed, as hereinafter set forth, it is agreed as follows:

Article 1. Agreement Period

Upon execution by all parties, this Agreement will be in effect and continue thereafter for so long as the Railroad premises shall be used for the purposes set forth herein; provided, however, if the State shall abandon the use of the Railroad premises, or any part thereof, for such purposes, this license and permission and the rights and privileges granted hereby as to the portion or portions so abandoned shall expire and terminate at the time each such portion shall be so abandoned; whereupon the Railroad shall have the same complete title to the Railroad premises so abandoned as though these presents had never been executed and the right to enter thereon and exclude therefrom the State its successors, and assigns

Article 2. License & Permission

a. The Railroad hereby gives to the State and/or the State's Contractor license and permission to install TMS conduit under the tracks at the locations referenced above, as shown in said **Exhibit A**. The license and permission given herein shall not prevent the Railroad from operating its trains or multiplying or changing its tracks across the land over which license and permission has been given and grants additional permission to the State for maintenance of said facilities as shown in said **Exhibit A**.

b. The license and permission given is subject to the rights of utility companies to maintain and operate facilities thereon and thereover, and the State will make its own arrangements with the utility companies for any necessary relocation or alteration of said facilities.

c. No legal right which the Railroad now has to reconstruct, maintain, and operate its existing track and appurtenances or to construct, maintain, and operate an additional track or tracks and appurtenances upon and across said property shall in anywise be affected by the giving of this license.

d. It is agreed that should the property or any portion thereof, which is licensed hereunder, cease to be used for public road purposes, this license, as to the portion so abandoned, shall immediately cease and terminate.

e. Permission is granted solely for the purposes of the State, at its sole cost and expense, for the proposed improvements as shown on the attached **Exhibit A** and is expressly subject and subordinate to the present and future rights of the Railroad, its successors, assignees, lessees, grantees and licensees, to construct, maintain, use, operate, and renew on, beneath, or above the surface of the Railroad premises any telephone, telegraph, power, communication, or signal lines, poles and/or appurtenances, fiber optic communications, tracks, roadways, pipelines, structures, improvements, or facilities of similar or different character, as now located, and to construct, install, establish, and thereafter maintain, use, operate, and to renew on, beneath, or above the surface of the Railroad premises, any or all said things, provided the same do not materially interfere with the State use of the Railroad premises as hereinabove provided.

Article 3. Scope of Work

a. The Railroad, the State and/or their Contractor agree to perform the work as outlined in the attached **Exhibit A**. The work will generally consist of installing the State's in-house fiber optic cable under the tracks as shown in **Exhibit A**.

b. In order to provide for the safety of rail traffic, the Railroad may provide, at State's expense, flaggers during the period of performance of work in or incident to the proposed installation of conduit and fiber-optic cable. The Railroad shall prepare a written cost estimate, subject to approval by the State, attached hereto and to be identified as **Exhibit C**. The Railroad should include the cost associated with flagging and engineering in the estimate. Only work shown in the approved estimate will be reimbursed. The providing of this service shall not relieve the State and/or its Contractor of any responsibility or liability.

c. The State shall give the Railroad at least thirty (30) days written notice prior to commencement of any work hereunder.

Article 4. Plans, Estimates, Construction, and Maintenance

a. The State, at its expense, has prepared preliminary plans and specifications, to include any signal wiring diagram(s) if applicable, for the proposed Project and has submitted such plans and specifications to the Railroad for review and approval. The approved plans and specifications are hereby adopted as the plans and specifications covering the construction as contemplated herein and identified as **Exhibit A**. No changes to such final plans and specifications shall be made without the written approval of such changes by the State and the Railroad. Neither the State nor its contractors shall commence any work on Railroad's property involving such plans until such plans have been approved in writing by the Railroad.

b. If, in after a period of three (3) years from the date the Railroad executes this Agreement and the Project has not let to contract, the Railroad shall have the right to perform a design plan review of the previously approved design to confirm the design meets the then-current Railroad design guidelines and requirements.

c. The State and/or the State's Contractor shall furnish material for and perform the work to be done by it hereunder in accordance with the approved plans and specifications. The State and/or the State's Contractor shall install the fiber optic cable across the Railroad's right-of-way as shown on the plans and in accordance with approved specifications and shall maintain or arrange for the maintenance of these facilities.

d. The Railroad and/or the State's Contractor, unless otherwise provided, shall make such changes or alterations in the tracks, communication, and signal pole and wire lines, pipe sewer and drainage, or other facilities or buildings located upon the Railroad's right-of-way, which may be displaced or required by the construction of the Project, as may be necessary to maintain continuous service and conform them to said construction and restore them to former condition for service either prior to, during, or following construction of said work. The Railroad has prepared cost estimates, and has been approved by the State, for the adjustment of such facilities. Flagging and engineering in the cost estimate have been included. Only work shown in the cost estimates will be reimbursed. Said cost estimates are identified as **Exhibit C**.

e. The Railroad shall commence the work to be done by it herein within thirty (30) days, or by a date mutually acceptable by the Sate and the Railroad, after receipt of written

notice from the State that the work may proceed and shall proceed diligently to the conclusion of its obligations herein. Assembly of materials should be made sufficiently in advance of the work to assure prompt delivery to the jobsite.

f. Following the issuance of the Work Order, it will be necessary for the Railroad to contact the Texas Department of Transportation district office a minimum of seven (7) days prior to the actual commencement of work in order that State forces may provide inspection during the necessary work.

g. Following the completion of the Project, for future maintenance work, the Railroad, under terms of this Agreement, gives the State and/or its Contractor permission to enter the Railroad right-of-way to perform routine maintenance and/or emergency work as required. The State's Contractor shall provide the then-current Texas insurance coverages and be required to execute the Railroad's then-current Texas-approved-standard Contractor's Right-of-Entry Agreement before commencing any work on the Railroad's property.

h. The State assumes the entire responsibility for the installation of said TMS facility and the maintenance responsibilities and use upon the Railroad's property at the location herein described to the extent required by law, and nothing contained herein shall ever be construed to place upon the Railroad any manner of liability for injury to or death of persons, or for damage to or loss of property arising from or in any manner connected with the construction, maintenance, or use of the portion of said highway and drainage facility located upon the Railroad's property.

i. The State shall require the State's Contractor to provide the insurance coverages as contained in Article 5 of this Agreement and be required to execute the Railroad then-current Texas-approved standard Contractor's Right-of-Entry Agreement before commencing any work on the Railroad's property.

Article 5. Insurance and Right-Of-Entry Requirements

a. The State shall require the State's Contractor to provide the insurance coverages as contained in the then-current standard Texas-approved Railroad Contractor's Right-of-Entry Agreement, a sample attached hereto and identified as **Exhibit B**. The State's Contractor shall execute the Contractor's Right-of-Entry Agreement before commencing any work on the Railroad's property.

b. For future maintenance work, the State's Contractor shall provide the then-current Texas insurance coverages and be required to execute the Railroad's then-current standard Texas-approved-standard Contractor's Right-of-Entry Agreement before commencing any work on the Railroad's property.

c. The State is self-insured for any work performed by the State with its own employees. To the extent allowed under state law, the State is responsible to the Railroad to cover bodily injury and property damage claims which may occur in the course of operations.

Article 6. Payment

a. No payment, except for any preliminary engineering costs in Article 6 (c) and where written Authority To Order material may have been issued prior to the Work Order resulting in some material and material handling costs, will be due the Railroad unless a Work Order for work to begin is issued by the State.

b. Reimbursement to the Railroad will be made for work performed and materials furnished, including but not limited to, insurance premiums and coverage at the rate and amount set forth in the approved cost estimate attached hereto, in accordance with the provisions of Title 23, Code of Federal Regulations (CFR), Subchapter B, Part 140, Subpart I, issued by the Federal Highway Administration, and amendments thereto except as modified by the provisions herein. Work performed and materials furnished by the Railroad will be reimbursed by the State based on actual costs incurred by the Railroad as they relate to the development of the Project and approved in the cost estimate identified as **Exhibit C**.

c. The cost of preliminary engineering will be eligible for reimbursement if incurred after the State's request for preparation of estimates.

d. The Railroad may submit monthly bills prepared in satisfactory form for flagging work performed and materials installed. Payment will be made within thirty (30) days of the costs detailed on the bills.

e. Upon completion of the Project, the Railroad shall submit a final invoice for all work performed clearly marked "Final Invoice" no later than one (1) year from the date of the Project Completion & Acceptance Letter stating the project is completed. Payment will be made within thirty (30) days of receipt of the Final Invoice.

Article 7. Termination

The State reserves the right to cancel this Agreement for any reason and at any time prior to the issuance of a Work Order by the State to the Railroad to proceed with any part of the work outlined herein. The State will not be responsible for any expense incident to any cost incurred in the event of the cancellation of this contract, unless a Work Order was issued by the State and the Railroad incurred expenses pursuant to that Work Order, except for any preliminary engineering costs in Section 6 (c) and where written Authority To Order material may have been issued prior to the Work Order resulting in some material and material handling costs. In the event the State terminates this Agreement, any materials ordered by the Railroad upon receipt of the Authority to Order may be re-allocated to other State-approved projects upon consultation with the State.

Article 8. Records & Audits

a. The State and the Railroad shall maintain books, documents, papers, accounting records, and other evidence pertaining to costs incurred and work performed hereunder and shall make such materials available at their offices during the contract period and for three (3) years from the date of final payment. The records shall be made available to representatives from the State or U. S. Department of Transportation, including the Office of Inspector General, for the purpose of making audits, inspections, transcriptions, or excerpts.

b. The State Auditor may conduct an audit or investigation of any entity receiving funds from the State directly under the contract or indirectly through a subcontract under the contract. Acceptance of funds directly under the contract or indirectly through a subcontract under this contract acts as acceptance of the authority of the State Auditor, under the direction of the legislative audit committee, to conduct an audit or investigation in connection with those funds. An entity that is the subject of an audit or investigation must provide the State Auditor with access to any information the State Auditor considers relevant to the investigation or audit.

c. The Railroad is required to make any information created or exchanged with the State pursuant to this Agreement, and not otherwise excepted from disclosure under the Texas Public Information Act, available in a format that is accessible by the public at no additional charge to the State.

Railroad and the State agree that Railroad will produce such information in an image format, or in another format selected by the Railroad that is accessible by the public.

Article 9. Existing Agreements

It is agreed that all existing agreements between the Railroad and the State concerning permission, permits, leases or easements at this location shall remain in full force and effect.

Article 10. Protection of Fiber Optic Cable Systems

Fiber optic cable systems may be buried on the Railroad's property. Protection of the fiber optic cable systems is of extreme importance since any break could disrupt service to users resulting in business interruption and loss of revenue and profits. The State and/or its Contractor shall telephone the Railroad during normal business hours (7:00 a.m. to 9:00 p.m., Central Standard Time, Monday through Friday, except holidays) at (800) 336-9193 (also a 24-hour, seven-day number for emergency calls) to determine if fiber optic cable is buried anywhere on the Railroad's premises to be used by the State. If it is, the State and/or its Contractor will telephone the telecommunications company(ies) involved, arrange for a cable locator, and make arrangements for relocation or other protection of the fiber optic cable prior to beginning any work on the Railroad's premises.

Article 11. Limited Access

The State hereby agrees that during the construction of the proposed improvements it will keep its employees, material, and machinery within the defined area of the premises unless otherwise specified on the attached **Exhibit A**. There shall be no crossings of the Railroad's tracks except at existing, open, and public crossings.

Article 12. Transfer

The parties hereto shall not assign this Agreement, in whole or in part, or any rights herein granted, without the written consent of the other party(ies), and it is agreed that any transfer or assignment of this Agreement or any of the rights herein granted, whether voluntary, by operation of law, or otherwise, without such consent in writing, shall be absolutely void and, at the option of the non-transferring party(ies), shall terminate this Agreement.

Article 13. Relocation or Removal of Fiber Optic Systems

a. The permission herein granted for the installation of low voltage fiber-optic cable for the State's Traffic Management System (TMS) and/or Intelligent Transportation System (ITS) is subject to the reasonable needs and requirements of the Railroad in the operation of its railroad and in the improvements and use of its property for railroad purposes. The State shall, upon the Railroad giving the District Engineer reasonable advance written notice, relocate all or any portion of the fiber-optic cable system as installed as part of this Project to another portion of the Railroad's property. The relocation of the State's Traffic Management System (TMS) and/or Intelligent Transportation System (ITS) shall be at the sole expense of the State to the extent allowed by State law, whenever, in the furtherance of the Railroad's reasonable railroad needs and requirements, the Railroad reasonably finds that such relocation is necessary.

b. All the terms, conditions, and stipulations herein expressed with reference to the State's Traffic Management System (TMS) and/or Intelligent Transportation System (ITS) on property of the Railroad in the locations hereinbefore described as shown in **Exhibit A** shall, so far as the State's fiber-optic Traffic Management System (TMS) and/or Intelligent Transportation System (ITS) remains on the property, apply to the fiber-optic cable system as modified, changed, or relocated within the contemplation of this section.

c. In the State's use, operation, maintenance and repair of the State's fiber-optic system located on the Railroad's property and the State's TMS and ITS system, the State shall ensure to take all suitable precautions to prevent any interference with the operation of the signal, communication lines or other installations or facilities of the Railroad or its tenants, and if at any time such use, operation, maintenance or repair of the fiber-optics, TMS or ITS systems results in any electrostatic or other interference effects which the Railroad deems undesirable or harmful or causes interference with the operation of the signal, communication lines or other installations or facilities, as now existing or which may hereafter be installed by the Railroad and/or its tenants, the State shall, at the State's sole expense, immediately take such actions as may be necessary to eliminate such interference.

Article 14. Notification

The State agrees to notify the Railroad in writing when all work on the Railroad's property is complete.

Article 15. Responsible For Its Own Actions

The parties hereto acknowledge that they are not an agent, servant, or employee of the other parties, and are responsible for their own acts and deeds and for those of its agents and employees during performance of contract work.

Article 16. Conditions

a. In accordance with the provisions of Title 23, Code of Federal Regulations (CFR), Subchapter G, Part 646, Subpart B, issued by the Federal Highway Administration, and amendments thereto, the Railroad will not be required to participate five percent (5%) in the cost of the Project.

b. The State may be reimbursed for its expenditures hereunder from federal funds for this Project. Therefore, the State and the Railroad will comply with statutes, rules, and regulations enacted and promulgated by the U. S. Government and its Federal Highway Administration.

c. If the State will be receiving any federal funding for the Project, the current rules, regulations and provisions of the Federal Aid Policy Guide as contained in 23 CFR 140, Subpart I and 23 CFR 646, Subpart A and B are incorporated into this Agreement by reference. If the State will be receiving American Recovery and Reinvestment Act of 2009 (“ARRA”) funding for this Project, the State shall be solely responsible in performing and completing all ARRA reporting documents for this Project. The State further confirms and acknowledges that Section 1512 of the ARRA provisions applies only to the “recipient” receiving ARRA funds directly from the federal government and, therefore, (i) the ARRA reporting requirements are the responsibility of the State and not of the Railroad and (ii) the State shall not delegate any ARRA reporting responsibilities on the Railroad. The State confirms that (A) the Railroad shall provide the Railroad’s standard and customary billing for expenses incurred by the Railroad for this Project including the Railroad’s standard and customary documentation to support such billing and (B) such standard and customary billing and documentation from the Railroad provides the information needed by the State to perform and complete the ARRA reporting documents. The Railroad confirms that the State and Federal Highway Administration shall have the right to audit the Railroad’s billing and documentation for this Project as provided in Article 8, RECORDS and AUDITS, of this Agreement.

Article 17. Compliance with Laws

The parties shall comply with all applicable federal, state, and local laws, statutes, ordinances, rules and regulations, and the orders and decrees of any courts or administrative bodies or tribunals in any manner affecting the performance of this Agreement. When required, the Railroad shall furnish the State with satisfactory proof of this compliance. Nothing herein is meant to be or will be interpreted to be a waiver of principles of legal preemption or preclusion that may apply to the Railroad because of its status as a common carrier regulated by the federal government.

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In order to be reimbursed with federal funds, the parties shall comply with the Cost Principles established in OMB Circular A-87 that specify that all reimbursed costs are allowable, reasonable, and allocable to the Project.

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The Railroad maintains that it does not qualify as a recipient or sub-recipient under this Agreement of Federal-aid highway funds authorized under Titles I (other than Part B) and V of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), Pub. L. 105-Stat. 1914, or Titles I, III, and V of the Transportation Equity Act for the 21st Century (TEA-21), Pub. L. 105-178, 112 Stat. 107 (collectively "FHWA Funds") and that this Agreement does not qualify as a Federal-aid construction contract. If and to the extent required by the authorization for any Federal-aid highway funds applied to this Agreement, upon prior written notice, the Railroad agrees:

a. The State and the Railroad shall set an appropriate DBE goal pursuant to 49 CFR Part 26 for this Agreement consistent with the State's DBE guidelines and in consideration of the local market, project size, and nature of the goods or services to be acquired. The Railroad shall have final decision-making authority regarding the DBE goal and shall be responsible for documenting its actions. The State and the Railroad agree that the appropriate DBE goal for this contract is zero percent (0%).

b. The Railroad shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of any U. S. Department of Transportation assisted contract or in the administration of any applicable DBE program or the requirements of 49 CFR Part 26 related to this Agreement. The Railroad shall take all necessary and reasonable steps under 49 CFR Part 26 to ensure non-discrimination in award and administration of U. S. Department of Transportation assisted contracts related to this Agreement.

c. Each contract the Railroad signs with a contractor under this Agreement (and each subcontract the prime contractor signs with a sub-contractor) must include the following assurance: *The contractor, sub-recipient, or sub-contractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of U. S. Department of Transportation assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this Agreement, which may result in the termination of this Agreement or such other remedy as the recipient deems appropriate.*

Article 20. Civil Rights Compliance

If and to the extent required by the authorization for any Federal-aid highway funds applied to this Agreement, the Railroad shall comply with the regulations of the U. S. Department of Transportation as they relate to non-discrimination (49 CFR Part 21 and 23 CFR Part 200), and Executive Order 11246 titled "Equal Employment Opportunity," as amended by Executive Order 11375 and supplemented in the Department of Labor Regulations (41 CFR Part 60).

Article 21. Debarment Certification

If and to the extent required by the authorization for any Federal-aid highway funds applied to this Agreement, the parties agree not to make any award at any tier to any party that they know, or have reason to believe, is debarred or suspended or otherwise excluded from or ineligible for participation in Federal Assistance Programs under Executive Order 12549, "Debarment and Suspension." By executing this Agreement, the Railroad and the State certify to the best of its knowledge and belief that it is not currently debarred, suspended, or otherwise excluded from or ineligible for participation in Federal Assistance Programs under Executive Order 12549 and

that it will not do business with any party that is known to the Railroad or the State to be currently debarred, suspended, or otherwise excluded from or ineligible for participation in Federal Assistance Programs under Executive Order 12549. The parties to this Agreement shall require any party to a subcontract or purchase order awarded under this Agreement to certify its eligibility to receive federal funds and, when requested by the State, to furnish a copy of the certification.

Article 22. Lobbying Certification

If and to the extent required by the authorization for any Federal-aid highway funds applied to this Agreement, the parties agree that, in executing this Agreement, each signatory certifies to the best of that signatory's knowledge and belief, that:

a. No federal appropriated funds have been paid or will be paid by or on behalf of the parties of this Agreement to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.

b. If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with federal contracts, grants, loans, or cooperative agreements, the signatory for the Railroad shall complete and submit the Federal Standard Form-LLL, *Disclosure Form to Report Lobbying*, in accordance with its instructions.

c. The parties shall require that the language of this certification shall be included in all lower tier subcontracts, which exceed \$100,000 and all such sub-recipients shall certify and disclose accordingly. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Title 31 USC §1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each failure.

Article 23. Federal Funding Accountability and Transparency Act Requirements

If and to the extent required by the authorization for any Federal-aid highway funds applied to this Agreement, the Railroad agrees:

a. Any recipient of funds under this Agreement agrees to comply with the Federal Funding Accountability and Transparency Act (FFATA) and implementing regulations at 2 CFR Part 170, including Appendix A. This Agreement is subject to the following award terms: <http://www.gpo.gov/fdsys/pkg/FR-2010-09-14/pdf/2010-22705.pdf> and <http://www.gpo.gov/fdsys/pkg/FR-2010-09-14/pdf/2010-22706.pdf>.

b. The Railroad agrees that it shall:

i. Obtain and provide to the State a Central Contracting Registry (CCR) number (Federal Acquisition Regulation, Part 4, Sub-part 4.1100) if this award provides more than \$25,000 in federal funding. The CCR number

may be obtained by visiting the CCR website whose address is:
<https://www.sam.gov/portal/public/SAM/>;

- ii. Obtain and provide to the State a Data Universal Numbering System (DUNS) number, a unique nine-character number that allows the federal government to track the distribution of federal money. The DUNS may be requested free of charge for all businesses and entities required to do so by visiting the Dun & Bradstreet on-line registration website <http://fedgov.dnb.com/webform>; and
- iii. Report the total compensation and names of its top five (5) executives to the State if:
 1. More than eighty percent (80%) of annual gross revenues are from the federal government, and those revenues are greater than \$25,000,000 annually; and
 2. The compensation information is not already available through reporting to the U.S. Securities and Exchange Commission.

c. The State acknowledges that the FFATA provisions of this Article may have no operative effect on the Railroad based on the Railroad's representation that it does not receive eighty percent (80%) or more of its annual gross revenues from federal procurement contracts and subcontracts.

Article 24. Legal Construction

If one or more of the provisions contained in this Agreement shall for any reason be held inapplicable, invalid, illegal, or unenforceable in any respect, that inapplicability, invalidity, illegality, or unenforceability shall not affect any other provisions and this Agreement shall be construed as if it did not contain the inapplicable, invalid, illegal, or unenforceable provision.

Article 25. Signatory Warranty

Each signatory warrants that the signatory has the necessary authority to execute this Agreement on behalf of the entity represented.

IN WITNESS WHEREOF, the State and the Railroad have executed duplicate counterparts of this Agreement for this Project identified as CSJ _____ on the dates indicated below.

THE STATE OF TEXAS

Executed for the Executive Director and approved for the Texas Transportation Commission for the purpose and effect of activating and/or carrying out the orders, established policies, or work programs heretofore approved and authorized by the Texas Transportation Commission.

By _____ Date _____

Name and Title _____

UNION PACIFIC RAILROAD COMPANY

By _____ Date _____

Name and Title _____

Notices:

For the purposes of this Agreement, all notices, correspondence, billings, and other documentation shall be mailed to the following addresses:

For the State of Texas

Rail Highway Section Director
Texas Department of Transportation
Traffic Operations Division (TRF-RHS)
125 E. 11th Street
Austin, TX 78701-2483

For the Union Pacific Railroad Company

Senior Manager Industry & Public
Projects
Union Pacific Railroad Company
24125 Aldine-Westfield Road
Spring, TX 77373-9015

STATE OF TEXAS §

COUNTY OF TRAVIS §

MULTIPLE USE AGREEMENT
for
SHARING FIBER OPTIC CABLE and/or RELATED INFRASTRUCTURE

THIS CONTRACT is entered into by the Contracting Parties under Government Code, Chapter 791.

CONTRACTING PARTIES:

Texas Department of Transportation

TxDOT

-- enter name --

Local Government

The parties desire to connect to and/or use existing Fiber Optic Cable and/or Related Infrastructure for the purpose of transmitting transportation-related data only. Related Infrastructure includes but is not limited to fiber optic facilities such as conduit, ducts, control cabinets, poles, structures, etc. along TxDOT roadways and right-of-way, as well as offices, operations and control centers, substations, etc. within the TxDOT operations network. The desired connection and use must not cause damage to or adversely effect data, interconnections, systems, facilities, infrastructure or operations as determined by TxDOT.

The governing body, by resolution or ordinance, dated -- enter date of resolution here --, has authorized the Local Government to enter into this agreement.

This contract incorporates the provisions of **Attachment A**, Local Government's Resolution or Ordinance; **Attachment B**, Descriptions and Specifications of Rights Granted in Article 2; **Attachment C**, Request for Authorization of Fiber Optic Cable Connection; **Attachment D**, Request for Authorization of Fiber Optic Cable-Related Infrastructure Connection; **Attachment E**, Map of Mutually Agreed-Upon Fiber Optic Cable and/or Related Infrastructure.

In consideration of the mutual promises contained in this agreement, the TxDOT and the Local Government now agree as follows:

A G R E E M E N T

ARTICLE 1. CONTRACT PERIOD

This agreement becomes effective when signed by the last party whose signing makes the agreement fully executed, and shall terminate five (5) years from that date, or when otherwise modified or terminated, as hereinafter provided.

ARTICLE 2. RIGHTS GRANTED

- A. The parties agree to allow the connection to their respective Fiber Optic Cable and/or Related Infrastructure by the other party.
- B. The Local Government shall be allowed to use only the mutually agreed upon TxDOT Fiber Optic Cable and/or Related Infrastructure as listed in Attachments B, C, D, and further illustrated in Attachment E.
- C. The unit of capacity exchange by either shared method shall be mutually agreed upon on a case-by-case basis. Capacity exchanges need not be on an equal basis.
- D. Each party permits the other party to enter upon its right-of-way and to attach, install, operate, maintain, remove, reattach, reinstall, relocate, and replace such connections of the entering party's Fiber Optic Cable and/or Related Infrastructure to the owning party's Fiber Optic Cable and/or Related Infrastructure.
- E. Any and all rights expressly granted to either party to use the Fiber Optic Cable and/or Related Infrastructure of the other party shall be subject to the prior and continuing right of the party to whom the Fiber Optic Cable and/or Related Infrastructure belongs to use its Fiber Optic Cable and/or Related Infrastructure for its own purposes under applicable laws. The rights granted shall be further subject to all deeds, easements, dedications, conditions, covenants, restrictions, encumbrances, and claims of title of record which may affect the rights to use the Fiber Optic Cable and/or Related Infrastructure.
- F. Nothing in this agreement shall be deemed to grant, convey, create, or vest in either party a real property interest in land, including any fee, leasehold interest, or easement.

ARTICLE 3. OPERATION AND MAINTENANCE RESPONSIBILITIES

- A. Each party will be responsible for the design, engineering, installation, operation and maintenance of their respective Fiber Optic Cable and/or Related Infrastructure system and components, to include the connections,

within their respective right-of-ways.

- B. Each party is responsible for providing and maintaining any hardware, software, and additional infrastructure that are necessary to obtain the rights in Article 2. TxDOT may provide unused Intelligent Transportation Systems infrastructure and TxDOT facilities to support the additional infrastructure when possible and when deemed to be in the best interest of TxDOT.
- C. Because of unforeseen circumstances that may arise from the operation of TxDOT hardware or software, or other difficulties in telecommunications transmission over which TxDOT has no control, no guarantee is made that use of facilities will be available to the Local Government at all times during the term of this agreement. TxDOT is not responsible for any loss of revenue to the Local Government due to any interruption in the facilities. TxDOT does not guarantee a minimum response time to re-establish the facilities due to TxDOT network or system failures or any other circumstance.

ARTICLE 4. INSTALLATION STANDARDS

- A. Any installation, repairs, or removal of equipment shall be performed in accordance with industry standards.
- B. At the Local Government's sole cost and expense, all such work shall be done in compliance with all applicable building codes, ordinances, and other laws, rules, or regulations of governmental authorities having jurisdiction over such work, including, but not limited to, the Americans with Disabilities Act and the Texas Architectural Barriers Act.
- C. The Local Government must obtain all required governmental agreements, permits, and authorizations prior to beginning any such work and shall provide copies of the same to TxDOT upon request.
- D. After commencement of the installation of the equipment, the Local Government shall perform such work with due diligence to its completion.
- E. The Local Government is solely responsible for meeting and adhering to the above listed standards notwithstanding TxDOT's approval of plans and specifications.

ARTICLE 5. INSTALLATION OF EQUIPMENT

- A. The Local Government shall install any necessary hardware, software, or other infrastructure at its sole cost and risk.
- B. Any equipment installation, engineering design, or operations and maintenance plan provided by the Local Government shall be subject to TxDOT's review and approval to ensure compatibility with existing equipment and software.
- C. All equipment shall be clearly labeled to identify it as equipment installed by the Local Government.
- D. The Local Government shall provide all interface items required to maintain the equipment.
- E. Access by the Local Government's employees or contractors to the equipment located at TxDOT's facility will be by appointment only and must have designated TxDOT personnel present.

ARTICLE 6. NOTICE TO PROCEED

A properly completed Request for Authorization of Fiber Optic Cable and/or Related Infrastructure Connection form, attached to this agreement as Attachments C and D, shall be submitted to TxDOT for approval prior to any work being done. TxDOT shall review and approve or disapprove the connection, in writing, within sixty (60) days. During the course of the work, any substantial changes or alterations must also be submitted to TxDOT for prior written approval. All work shall be done in conformity with the approved Attachment B and/or C. Upon completion of the work, the Local Government shall promptly furnish suitable documentation showing the exact nature of the connection.

ARTICLE 7. FEES

TxDOT may require consideration for the agreement in the form of a payment; shared use of a telecommunication facility; or equipment, facilities, or services. TxDOT requires a tape of any stories related to TxDOT or those that involve any input from TxDOT employees that are aired by the Local Government.

ARTICLE 8. INSPECTION

Ingress and egress shall be allowed at all times to the Local Government's facility for Federal Highway Administration and TxDOT personnel and equipment when highway maintenance operations are necessary, and for inspection purposes; and upon request, all Local Government activities shall be prohibited until further notice from TxDOT.

ARTICLE 9. INSURANCE

To the extent that this agreement authorizes the Local Government or its contractor to perform any work on State right-of-way, before beginning work the entity performing the work shall provide TxDOT with a fully executed copy of

TxDOT's Form 1560 Certificate of Insurance verifying the existence of coverage in the amounts and types specified on the Certificate of Insurance for all persons and entities working on State right-of-way. This coverage shall be maintained until all work on the State right-of-way is complete. If coverage is not maintained, all work on State right-of-way shall cease immediately, and TxDOT may recover damages and all costs of completing the work.

ARTICLE 10. AMENDMENTS

Amendments to this agreement must be in writing and executed by both parties. Any amendments must be executed during the contract period established in Article 1, Contract Period.

ARTICLE 11. TERMINATION

- A. Including the provisions established herein, this agreement may be terminated by either of the following conditions:
1. By mutual written agreement, or thirty (30) days after either party gives notice to the other party, whichever occurs first; or
 2. By TxDOT at any time if it is found that traffic conditions have so changed that the existence or use of the respective Fiber Optic Cable and/or Related Infrastructure is impeding maintenance, damaging the highway facility, impairing safety or that the facility is not being properly operated or maintained or that it is not in the public interest; or
 3. By TxDOT, upon written notice to the Local Government as consequence of the Local Government's failure to comply with the requirements of this agreement, unless the Local Government's failure to comply with the agreement is due to no fault of its own.
- B. If the termination is due to the failure of the Local Government to fulfill its contractual obligations, TxDOT will notify the Local Government that a possible breach of contract has occurred. The Local Government must remedy the breach as outlined by TxDOT to TxDOT's satisfaction within thirty (30) days from receipt of TxDOT's notification. TxDOT will declare this agreement terminated upon the Local Government's failure to remedy the breach within the thirty (30) day period.
- C. Termination of the agreement shall extinguish all rights, duties, obligations and liabilities of TxDOT and the Local Government under this agreement.
- D. Termination or expiration of this agreement shall not extinguish any of the Local Government's or TxDOT's obligations under this agreement that by their terms continue after the date of termination or expiration.

ARTICLE 12. REMEDIES

Violation or breach of contract by the Local Government shall be grounds for termination of the agreement and any increased costs arising from the Local Government's default, breach of contract or violation of agreement terms shall be paid by the Local Government. This agreement shall not be considered as specifying the exclusive remedy for any default, but either party may avail itself of any remedy existing at law or in equity, and all remedies shall be cumulative.

ARTICLE 13. RELATIONSHIP BETWEEN THE PARTIES

Each party acknowledges that it is not an agent, servant, or employee of the other party. Each party is responsible for its own acts and deeds and for those of its agents, servants, or employees.

ARTICLE 14. ASSIGNMENT PROHIBITION

The Local Government is prohibited from assigning any of the rights conferred by this agreement, to any third party without the advance written approval of TxDOT. Any attempted transfer of the rights or obligations of this agreement without TxDOT's consent shall be void and shall be grounds for termination of this agreement.

ARTICLE 15. HOLD HARMLESS

The Local Government shall indemnify and save harmless TxDOT and its officers and employees from all claims and liability due to its materials or activities of itself, its agents, or employees, performed under this agreement and that are caused by or result from error, omission, or negligent act of the Local Government or of any person employed by the Local Government. The Local Government shall also indemnify and save harmless TxDOT from any and all expense, including but not limited to attorney fees that may be incurred by TxDOT in litigation or otherwise resisting the claim or liabilities that may be imposed on TxDOT as a result of such activities by the Local Government, its agents, or employees. The Local Government agrees to indemnify and save harmless TxDOT and its officers, agents, and employees from any and all claims, damages, and attorneys' fees arising from the use of outdated data or information. The Local Government's indemnification of TxDOT shall extend for a period of three (3) years beyond the date of termination of this agreement.

ARTICLE 16. GRATUITIES

Any person who is doing business with or who reasonably speaking may do business with TxDOT under this agreement may not make any offer of benefits, gifts, or favors to employees of TxDOT. The only exceptions allowed are ordinary business lunches and items that have received the advanced written approval of TxDOT's executive director.

ARTICLE 17. CONFLICT OF INTEREST

The Local Government shall not assign an employee to activities relating to this agreement if the employee:

- a. owns an interest in or is an officer or employee of a business entity that has or may have a contract with TxDOT relating to this agreement;
- b. has a direct or indirect financial interest in the outcome of this agreement;
- c. has performed services regarding the subject matter of the agreement for an entity that has a direct or indirect financial interest in the outcome of this agreement or that has or may have a contract with TxDOT; or
- d. is a current part-time or full-time employee of TxDOT.

ARTICLE 18. COMPLIANCE WITH LAWS

The Local Government shall comply with all applicable federal, state, and local laws, statutes, ordinances, rules and regulations, and with the orders and decrees of any court or administrative bodies or tribunals in any manner affecting the performance of this agreement. When requested, the Local Government shall furnish TxDOT with satisfactory proof of this compliance. The Local Government shall provide or obtain all applicable permits, plans, or other documentation required by a federal or state entity.

ARTICLE 19. INFORMATION EXCHANGE

- A. Each party agrees to meet on, at a minimum, an annual basis for the purpose of reviewing future plans and current status of their respective Fiber Optic Cable and/or Related Infrastructure.
- B. The Local Government shall provide quarterly evaluation reports during the first calendar year of the agreement and annually thereafter detailing how and when the rights and infrastructure granted have been used.
- C. The Local Government shall not disclose information obtained from TxDOT under this agreement without the express written consent of TxDOT.

ARTICLE 20. STATE AUDITOR'S PROVISION

The State Auditor may conduct an audit or investigation of any entity receiving funds from TxDOT directly under the contract or indirectly through a subcontract under the contract. Acceptance of funds directly under the contract or indirectly through a subcontract under this contract acts as acceptance of the authority of the State Auditor, under the direction of the legislative audit committee, to conduct an audit or investigation in connection with those funds. An entity that is the subject of an audit or investigation must provide the State Auditor with access to any information the State Auditor considers relevant to the investigation or audit.

ARTICLE 21. NOTICES

All notices to either party by the other party required under this agreement shall be delivered personally or sent by U.S. Mail, postage prepaid, addressed to such party at the following respective addresses:

State of Texas:	Texas Department of Transportation ATTN: Director, Maintenance Division 125 East 11 th Street Austin, Texas 78701
Local Government:	

All notices shall be deemed to be received by the addressee on the date so delivered or so deposited in the mail, unless otherwise provided herein. Either party hereto may change the above address by sending written notice of such change to the other in the manner provided herein.

ARTICLE 22. SIGNATORY AUTHORITY

Each signatory warrants that the signatory has the necessary authority to execute this agreement on behalf of the entity represented.

IN TESTIMONY WHEREOF, TxDOT and the Local Government have executed duplicate counterparts of this agreement.

By _____ Date _____
AUTHORIZED SIGNATURE

THE STATE OF TEXAS

Executed for the Executive Director and approved for the Texas Transportation Commission for the purpose and effect of activating and/or carrying out the orders, established policies or work programs heretofore approved and authorized by the Texas Transportation Commission.

By _____ Date _____
John A. Barton, P.E.
Deputy Executive Director

ATTACHMENT A
LOCAL GOVERNMENT'S RESOLUTION OR ORDINANCE

TEMPLATE

ATTACHMENT B

DESCRIPTIONS AND SPECIFICATIONS OF RIGHTS GRANTED IN ARTICLE 2

PROVISION OF INFRASTRUCTURE	
By TxDOT	By Local Government
1.	1.

NON-MONETARY COMPENSATION	
By TxDOT	By Local Government
1.	1.

TEMPPLATE

ATTACHMENT C

REQUEST FOR AUTHORIZATION of FIBER OPTIC CABLE CONNECTION

Requested by: -- enter name of Requester Agency (i.e. TxDOT or local government) --

Section A – Ingress Fiber Access Location Information

Ingress Location Identification	-- i.e. control cabinet name --
Ingress Location Address	-- provide physical address --
Fiber Interface Method	<input type="checkbox"/> Dark Fiber Splice <input type="checkbox"/> Wave Division Multiplexer Connection
Interface Quantity	-- i.e. # of fiber strands, # of WDM connections, etc. --
Interface Optical Wavelength	<input type="checkbox"/> 850 nm <input type="checkbox"/> 1310 nm <input type="checkbox"/> 1550 nm <input type="checkbox"/> -- Other: please specify --
Maximum Interface Bandwidth	<input type="checkbox"/> T-1 <input type="checkbox"/> NTSC <input type="checkbox"/> 10Mbps <input type="checkbox"/> 100 Mbps <input type="checkbox"/> 1Gbps <input type="checkbox"/> DS-3 <input type="checkbox"/> OC-3 <input type="checkbox"/> OC-12 <input type="checkbox"/> OC-48 <input type="checkbox"/> -- Other: please specify --
Special Ingress Requirements and Comments	-- i.e. routing, backup considerations, maximum loss, etc. --

Section B – Egress Fiber Access Location Information

Egress Location Identification	-- i.e. control cabinet name --
Egress Location Address	-- provide physical address --
Special Egress Requirements and Comments	

Technical Contact Person:	-- print name --	Phone Number:	_____
Activation Date Requested:	_____		
Requested By:	-- print name --	Date:	_____

Section C – Provider Agency (-- enter agency name --) Review and Response

Engineering Comments:		
Engineering Recommendation:	<input type="checkbox"/> Approve <input type="checkbox"/> Do Not Approve	
Engineering Reviewed By:	-- print name --	
Approved by:		
	-- print name here; signature above --	Date

ATTACHMENT D
REQUEST FOR AUTHORIZATION of INFRASTRUCTURE CONNECTION

Requested by: **-- enter name of Requester Agency (i.e. TxDOT or local government) --**

Section A – Ingress Infrastructure Access Location Information

Ingress Point	i.e., ground box
Ingress Location Address	-- provide physical address --
Ingress Location Identification	i.e., reference marker, mile point, cross street offset
Type Infrastructure	<input type="checkbox"/> 3" conduit <input type="checkbox"/> -- Other: please specify -- <input type="checkbox"/> 4" multiduct conduit
Cable Type	<input type="checkbox"/> multi mode fiber optic cable <u>-- quantity --</u> <input type="checkbox"/> single mode fiber optic cable <u>-- quantity --</u> <input type="checkbox"/> -- Other: please specify -- # strands <u>-- quantity --</u>
Special Ingress Requirements and Comments	

Section B – Egress Infrastructure Access Location Information

Egress Point	-- i.e., ground box --
Egress Location Address	-- provide physical address --
Egress Location Identification	--i.e., reference marker, mile point, cross street offset --
Special Egress Requirements and Comments	

Technical Contact Person:	<u>-- print name --</u>	Phone Number:	_____
Activation Date Requested:	_____		
Requested By:	<u>-- print name --</u>	Date:	_____

Section C – Provider Agency (-- enter agency name --) Review and Response

Engineering Comments:			
Engineering Recommendation:	<input type="checkbox"/> Approve <input type="checkbox"/> Do Not Approve		
Engineering Reviewed By:	<u>-- print name --</u>		
Approved by:			
	<u>-- print name here; signature above --</u>		Date

ATTACHMENT E
MAP OF MUTUALLY AGREED-UPON
FIBER OPTIC CABLE and/or RELATED INFRASTRUCTURE

TEMPLATE

**Interlocal Agreement for Operations and Maintenance of the
Combined Emergency Communications
Facility and Supported Systems**

STATE OF TEXAS §

COUNTY OF TRAVIS §

This Interlocal Agreement (the Agreement) is between the **State of Texas**, acting through its **Texas Department of Transportation**, the **City of Austin, Travis County**, and the **Capital Metropolitan Transit Authority**, (sometimes collectively referred to as the “Parties” or individually referred to as the “Party”) each acting through their respective duly authorized officers or employees.

RECITALS

The Parties, consisting of regional public safety and public service agencies, have formed a coalition with a common vision of improved public service through a partnership of performance. This regional coalition has developed a mission to deliver nationally recognized public safety and public service by working together in a spirit of cooperation, trust, dedication, honesty, commitment, and accountability. The regional coalition desires to maintain a role as leaders in the delivery of emergency and transportation services by ensuring that the CEC and Systems are cost effective, sustainable, reliable, technologically innovative, and support the needs of the users and the community by entering into this Agreement.

This Agreement is to provide for the organizational structure and funding supporting operation and maintenance of a regional Combined Emergency Communications and Transportation Management Center(CEC) and the associated Austin/Travis County Emergency Operations Center, Computer Aided Dispatch System, City of Austin Fire and A/TCEMS Records Management System, City of Austin Police Records Management System, Travis County Law Enforcement Records Management System, 9-1-1 System, and a TxDOT Intelligent Transportation System, all or portions of which will be located in the CEC.

To date, the Parties have developed the CEC by providing a site and designing and constructing the CEC.

NOW, THEREFORE, in consideration of the mutual covenants herein, the Parties agree as follows:

A G R E E M E N T

1. **Incorporation of Recitals.** The above Recitals are incorporated herein for all purposes.

2. **Term of Agreement.** The term of this Agreement is for forty-nine (49) years in increments of twelve (12) months commencing on the date the last Party executes this Agreement (the "Effective Date"). The first year of this Agreement will be less than twelve (12) months, and will end on August 14, 2002. Subsequently, this Agreement will be automatically renewed for twelve (12) month periods, on August 14th annually, subject to earlier termination as provided below.

3. **Definitions**

Budget means the applicable portion of the Operating Budget or Capital Budget, except where expressly stated otherwise.

Capital Metro means the Capital Metropolitan Transportation Authority.

COA means the City of Austin, which has several departments or divisions participating in this Agreement.

COA-AFD means the City of Austin Fire Department.

COA-APD means the City of Austin Police Department.

COA City Manager means the City of Austin City Manager, or designee.

Combined Emergency Communications Center (CEC) means the regional integrated and coordinated combined emergency communications and transportation management center, inclusive of the Facility, structures on and around the Facility on the CEC Site, as well as the Systems on and within the Facility. The Combined Emergency Communications and Transportation Management Center will house the Austin/Travis County Emergency Operations Center and support the operation and maintenance of critical public safety and emergency communications systems for the Austin/Travis County area.

CEC Program means the Combined Emergency Communications Center Program, which includes the Facility and all of the Shared Systems and Internal Program Systems housed and managed within the Facility.

Day, unless otherwise described, means calendar day.

Capital Expenses means expenses required to be budgeted for Capital Costs in excess of \$100,000 in any one budget year, and which may be partially funded in a multi-year Capital Improvement Plan program.

Costs are defined below by category and types of costs, as shown on the Implementation Budget Pro Forma, **Exhibit A**, and the Estimated Operation Budget Pro Forma, **Exhibit B**. **Exhibits A and B** can be amended in the manner set out in **Section 8. Budget**.

Capital Costs means all costs associated with any additions, repairs, replacement, or upgrades to the Combined Emergency Communications Center and the Systems it supports after initial construction of the CEC or Systems is completed.

Operating Costs means all costs incurred to occupy and use the Facility, including without limitation, Commodities Costs, Contractual Costs, Personnel Costs, and System Costs, and further including building system services, utility costs, custodial services, grounds maintenance, security, and the normal, periodic maintenance, tuning, servicing, inspecting, parts replacement and repair, and other similar activities that are intended to keep the Facility and Systems functioning efficiently, maintain the useful life of the assets, and reduce the probability of failures. All Operating Costs must be included in each Annual CEC Budget.

COA CEC Program Management and Administrative Services Costs means those COA costs associated with providing management and administrative services, which will be reimbursed as if COA were a third-party vendor of those services, and not otherwise included as a Cost herein, (e.g., mail service, IT support, etc.)

Commodities Costs means all costs associated with outright purchase of goods and services, such as photographic supplies, developing and printing; educational materials; books; office supplies; computer supplies; computer software; small tools and minor equipment; and minor computer hardware.

Contractual Costs means all costs associated with setting up contracts to supply goods and services, such as rental of copy machines; pagers; utility costs; vehicle maintenance and fuel costs; vending machines; education and seminar fees; travel for training; mileage reimbursement; Facility insurance and content insurance for Shared Systems; building maintenance; security services; office equipment maintenance; computer hardware and software maintenance; telephone base costs; and postage, printing, and binding.

Personnel Costs means regular wages, stability pay, insurance, FICA, Medicare, and retirement contributions.

Systems Costs means all costs associated with Shared Employee Personnel Costs and related costs to operate or upgrade the Systems, hardware, and software licenses; to provide training, and support; costs associated with maintenance contracts.

Internal Program Costs means all costs each Party must annually budget to pay all costs associated with each System it operates out of the CEC Facility, including Internal Program Employee Costs, but excluding the Capital Costs and Operating Costs allocated under this Agreement.

Employees are either “Shared Employees” or “Internal Program Employees” for purposes of this Agreement.

Internal Program Employees means those employees employed directly by a Party to support one or more Systems at the CEC Facility, excluding Shared Employees.

Shared Employees means those employees employed by COA to support one or more Systems at the CEC Facility and whose salary is funded by contributions from the Parties through the Budget process.

Facility means the actual CEC building structure and related site improvements being constructed at 5010 Old Manor Road.

Exclusive Facilities means that portion of the Facilities designed for use by only one of the Parties as shown on the attached and incorporated **Exhibit C**.

Shared Facilities means that portion of the Facilities designated for common and general use by any Party as shown on **Exhibit C**.

Partially Shared Facilities means that portion of the Facilities designated for use by specifically designated Parties as shown on **Exhibit C**.

Exhibit C will be amended to change the location and/or proportion of Exclusive and Shared Facilities to reflect the changes if the Parties enter into a sublease under the Lease or amend the Lease, and it becomes effective when all relevant Parties execute the sublease, or all Parties execute the Lease Amendment, whichever is applicable. A color-coded floor plan will be on file in the office of the General Manager [and will be distributed when available].

Lease means the CEC Lease Agreement dated August 14, 2001, a current copy of which is on file in the office of the General Manager.

Office means the Office of CEC Program set up by the COA City Manager as an office of the City of Austin.

Remaining Parties means those Parties to this Agreement who remain committed to this Agreement in the event one or more Parties withdraw. "Parties" is defined on page one of this Agreement.

Site means that portion of the land at 5010 Old Manor Rd. being developed for the Combined Emergency Communications and Transportation Center (CEC), which is owned by and under the direct control of the COA and designated for the operation of regional combined emergency communications and transportation management.

State of Texas means the “State Agencies” that are Parties to this Agreement and acting on behalf of the State of Texas, e.g. TxDOT.

Systems used individually and in the singular mean each System, and used collectively and in the plural means all Systems defined immediately below and governed by this Agreement. Systems may be added, altered, superseded, or removed from this Agreement by amendment.

Internal Program System means a System that is operated by one Party without using Shared Employees to support any portion of the System.

Shared System means a System that is operated by one or more of the Parties and does use Shared Employees to support that System.

Regional Trunked Voice Radio System (Radio) means an 800 MHz regional trunked radio system that will provide total inter-departmental communication capability between all agencies utilizing the new network, portable radio coverage throughout Travis County and surrounding areas, adequate capacity to meet long-term needs for ten years, survivability during adverse weather conditions, and secure communication with limited unauthorized access to sensitive information.

Computer Aided Dispatch System (CAD) means a regional system to be used by multiple governmental agencies in Travis County for sharing data. Interfaces with 9-1-1 call taking systems, Travis County Sheriff’s Records Management System, City of Austin Public Safety Records Management Systems, and TxDOT ITS, including all related interfaces resulting in improved situation management during public safety emergencies.

COA AFD and A/TCEMS Records Management System (COA-AFD RMS) means an incident reporting system which also allows for management of data relating to personnel, fleet, patient records, building inspections, and other business needs specific to the AFD and A/TCEMS Departments.

COA Police Records Management System (COA-APD RMS) means an incident reporting system which also allows for management of data relating to personnel, fleet, facilities, and other business needs specific to the Police Department, integrated with the Computer Aided Dispatch System and accessible to law enforcement agencies of other municipal and governmental entities.

Travis County Law Enforcement Records Management System (TCLE RMS) means an incident reporting system which also allows for management of data relating to warrants, investigation, personnel and other business needs specific to the County’s Sheriff’s Office and Constables.

9-1-1 System (911) means the three-digit emergency telephone number that provides citizens a direct link to Police, Fire, or Emergency Medical Service personnel. Calls to 9-1-1 are automatically routed to the primary and secondary Public Safety Answering Points (PSAPs) and answered by 9-1-1 call-takers who may dispatch, transfer, or relay the information.

Intelligent Transportation System (TxDOT ITS) means a system of a number of components, a portion of which is owned and operated by TxDOT, including closed circuit television (CCTV) video cameras and monitors, dynamic message signs, vehicle detectors, traffic signal timing, lane control signals, command and control software, courtesy patrol, and highway advisory radio (HAR) to provide travelers with information concerning the transportation system allowing them to make informed decisions to avoid travel delays and integrated with other regional systems.

Systems Improvements means all hardware and software procured for each System.

Travis County means Travis County, a political subdivision of the State of Texas.

TxDOT means the Texas Department of Transportation Austin District.

4. Purpose. The purpose of this Agreement is to establish an operational and management structure to provide authority to participants for ongoing administration and management of the CEC Program, including establishing an organizational structure and funding process. A Table of Participation that shows which Parties participate in which Systems and their level of participation is attached as **Exhibit D**.

The governance flowchart attached as **Exhibit E** shows the operational and management structure in place on the Effective Date. **Exhibit E** can be amended upon a two-thirds majority vote of the Operating Board, and the amended **Exhibit E** becomes effective upon the date of the vote to amend **Exhibit E**. The Parties have developed suggested objectives and performance measures, attached as **Exhibit F**. The **Exhibit** can be amended by a majority vote of the Operating Board, and the new **Exhibit** will become effective upon the date of the vote to amend **Exhibit F**. The CEC Program will be organized and operate in accordance with all applicable Laws.

5. Governing Board.

5.A. Purpose. The Governing Board shall annually approve a draft CEC Budget and recommend approval of the Budget to the governing bodies of the Parties. The Governing Board will also set policy for the CEC Program and assist in the resolution of CEC Program issues.

5.B. Composition. The Governing Board will be composed of the COA's City Manager, Travis County's Executive Manager of Justice and Public Safety, Capital Metro's President/CEO, and TxDOT's District Engineer. Three members of the Governing Board constitutes a quorum to conduct business.

5.C. Secretary. The General Manager, or designee, shall serve as secretary to the Governing Board.

5.D. Meeting Requirements. The Governing Board shall meet at least biannually, but special meetings may be called.

6. Operating Board.

6.A. Purpose. The Program will be administered by an Operating Board, which will provide overall CEC Program direction.

6.B. Composition. The Operating Board will be comprised of members ("Members"), who will be executive-level management from each of the Parties or their designees, such as department heads, TxDOT District/Division directors, or equivalent, of each Party to this Agreement, or his or her respective designee. Any designee must be at least an assistant or deputy department head level executive, or equivalent, of the designating Party, but must not be officed in the Facility, with the exception of the Travis County and City of Austin Emergency Operations Center executives. The Parties' designated Members and/or designees are shown on the attached **Exhibit G**. Notice of a change in designated Members or designees by a Party may be made by sending written notice of the newly designated Member(s)/designee(s) to the other Parties.

A Party with multiple departments participating in the CEC Program will be entitled to one representative on the Operating Board for each such department, (e.g., COA whose police and fire departments use the respective COA-APD RMS or COA-AFD RMS will be entitled to a representative from each department.) Each Party may appoint a proxy, who may attend all Operating Board meetings, but may only vote in the absence of the regular Member. The

Members may only vote on: dispute resolution proceedings, on matters concerning Systems to which they contribute, and on budget recommendations to the Governing Board and each Party's respective governing body, if applicable. The Members will also review and provide input on policies and procedures. If a Party has multiple representatives, only the representatives utilizing the Systems being affected can vote on any matter affecting those Systems.

6.C. Duties. The Operating Board will meet at least quarterly. The Operating Board will examine the apportionment of CEC Program costs between the Parties and recommend any adjustments needed to reflect the beneficial use of the CEC Program by each Party. The Operating Board will annually submit a draft Operating and Capital Program budget to the Governing Board regarding funds needed to maintain, operate, and use the CEC Program. In addition, the Operating Board will provide input into evaluating the performance of the General Manager and will provide input into hiring any new General Manager. The COA's City Manager will give great weight to the Operating Board's evaluation and input, but will retain ultimate hiring and firing responsibility.

6.D. Terms. The appointing Party will determine the term of each Member. All Operating Board Members serve at the pleasure of their appointing Party.

6.E. Attendance Requirements. Either a Member or proxy must attend all meetings. If a Member and the Member's proxy miss more than 25% of the meetings during any calendar year, the Party must promptly appoint a new Member. The Operating Board will schedule meetings.

6.F. Chairman, Vice-Chairman, and Secretary. The Chairman will be elected annually by the Members and may be either a Member or the General Manager. A Vice-Chairman and Secretary will also be elected annually by the Operating Board and shall be Members. The General Manager, who is not a member, will provide the Secretary with staff support to make written minutes of each Operating Board meeting.

6.G. Procedures at Meetings. The Chairman or a majority of the Members may call special meetings of the Operating Board. The Chairman will preside at the meetings and the Vice-Chairman will act in the absence of the Chairman. No action may be taken by the Operating Board without a quorum, which consists of a majority plus one of the Members. Any Member may place items on the Operating Board's meeting agenda by submitting the item to the Chairman at least ten calendar days before the next meeting. The Chairman shall submit the

agenda to the Members no later than seven (7) calendar days before the meeting. Each Member shall have one vote. A majority vote of the quorum present at a meeting is required to authorize any action or determination by the Operating Board, except for those actions specified in this Agreement that require a majority vote of all of the members of the Operating Board. If a decision is brought to the Operating Board that affects a System(s) that only some Members contribute to, only those Members that contribute to the System(s) may vote or be counted towards a quorum for purposes of that vote.

6.H. Actions of Operating Board. The Operating Board may not take any action that would violate any applicable statute, law, regulation, court order, ordinance, commissioner's court order, Texas Transportation Commission Minute Order, or the articles of incorporation, by-laws, or resolutions of Capital Metro. If any such action is taken, it will be null and void.

6.I. Emergency Meetings. The General Manager may call emergency meetings upon 72 hours written notice to the Members to address emergencies or to address budget related items, which may require action by the Parties' governing bodies to increase or decrease currently budgeted expenditures.

7. Staffing and Operations.

7.A. General Manager. The General Manager shall manage the day-to-day operations of the CEC Program under the direction of the Operating Board. The General Manager will also manage the day-to-day operation of the Facility, the Shared Employees and their support of the Systems. The General Manager will report directly to COA's City Manager or the City Manager's designee. The hiring and separation of the General Manager will be determined by COA's City Manager with input from the Operating Board.

7.B. Duties of the General Manager. The General Manager shall:

1. Coordinate Operating Board meetings,
2. Maintain minutes of meetings and CEC Program records,
3. Assure compliance with applicable provisions of the Texas Open Meetings Act, Government Code, Chapter 551,
4. Make recommendations to the Operating Board on the operation and maintenance of the CEC,

5. Supervise the Shared Employees. However, the General Manager will not supervise, manage, or direct any non-COA Party's Internal CEC Program Employees, who shall nonetheless cooperate and coordinate with the General Manager, other Parties Internal CEC Program Employees and the Shared Employees,

6. Provide the first level of administrative dispute resolution as set forth below,

7. Be empowered by the all Parties to this Agreement to make decisions regarding day-to-day operational issues, including making expenditures for budgeted replacement of furniture and equipment, routine repairs, and maintenance in accordance with CEC annual Budget,

8. Maintain a current copy of this Agreement, including any amendments and the most current version of all Exhibits in the General Manager's Office, together with copies of the most current versions of any subsequently developed additional operating procedures or standards, the Lease, all other CEC Program or System related Interlocal Agreements, all related plans, specifications, equipment information and warranties, all other related contracts, and Budget documents. (Until a General Manager is appointed, all such documents will be available for review in the office of the Director for RDMT, a division of the COA Financial Services Department),

9. Become involved in a non-COA Party's Internal Program operations only to the extent that issues cross boundaries between Parties or Systems, and the issues cannot be otherwise resolved,

10. Negotiate service level agreements, or equivalent agreements, with the Parties upon written request, including such agreements with Party's non-System departments or divisions, these service level agreements will include, but not be limited to, operating service level agreements between other operating agencies, or departments thereof, which must be agreed to by all involved parties,

11. Provide quarterly service level reports to the applicable Parties, which reports will be used to review services, staff, resource requirements, and cost allocations,

12. Provide quarterly (or upon request by the Operating Board, monthly) budget reports,

13. Provide a quarterly budget reconciliation for the Parties to account for any failure to spend all budgeted proceeds,

14. Immediately call an emergency Operating Board meeting and provide a special budget report to determine how to fund any unanticipated expenditure or how to reduce budgeted expenditures,

15. Call meetings of the Operating Board Members supporting a particular System to facilitate decision-making about that System. (If a consensus can be reached among the affected Members, the General Manager will implement the decision. If no consensus can be reached, the General Manager will refer the matter to the Governing Board and schedule it for action at their next Board meeting or a specially called Governing Board meeting, if necessary),

16. Maintain job descriptions for the Shared Employees in General Manager's office,

17. Provide annual reports targeting the suggested objectives and performance measures shown on **Exhibit F**.

7.C. Staffing. COA will provide the Shared Employees to conduct the day-to-day activities for the CEC Program. The Shared Employee job descriptions may be modified by a majority vote of the Members whose Systems are affected by the changed job descriptions. The number and types of employees ("FTE") that will constitute the initial Shared Employee staffing required to operate the CEC Program are set out in attached **Exhibit H**, which may be amended annually to provide for any changes in the numbers and types of FTEs shown in the Budget, in the same manner as **Exhibit B** is amended. *See Section 8. Budget.* The amended **Exhibit H** will be effective in the same manner as **Exhibit B** is effective. The total costs of the Shared Employees will be included in each year's COA Budget and the COA will be reimbursed for a portion of the cost of the Shared Employees by the other Parties in accordance with the CEC Budget.

7.D. Operating Procedures. The General Manager shall prepare standard operating procedures to govern the day-to-day management and operation of the Facility and its Shared Systems and Shared Employees ("Standard Operating Procedures"). The General Manager will submit Standard Operating Procedures to the Operating Board for review and approval. The General Manager and the Operating Board will periodically review the Standard Operating

Procedures and recommend any reasonably necessary changes for approval. The General Manager will also monitor implementation and compliance with the Standard Operating Procedures. If there is any conflict between the Standard Operating Procedures and the personnel practices and policies of COA, then the personnel practices and policies of COA control as they impact Shared Employees.

8. Budget.

8.A. Annual Operating Budget. The General Manager shall prepare an annual pro forma CEC Program operating budget (“Operating Budget”) on a calendar year basis for review and approval as to form by the Governing Board. The Operating Budget must provide for all Costs associated with operating the Facility and CEC Program, as shown on **Exhibit B**.

8.B. Annual Capital Improvements Budget. The General Manager shall prepare an annual pro forma CEC Program capital improvements budget (“Capital Improvements Budget”) on a calendar year basis for review and approval as to form by the Governing Board. While a Capital Improvements Budget will be recommended annually, the planning period for Capital Improvements will be five years.

8.C. Budget Format. The FY2003 and FY2004 budget (**Exhibits A and B**) formats are expressly approved by the Parties as to form upon execution of this Agreement. Both the FY2003 and FY 2004 CEC Budgets are subject to the governing body of each Party adopting an FY2003 budget and an FY2004 that includes all of that Party’s CEC Budget Costs and Internal Program Costs.

Each proposed annual Budget must be submitted to the Governing Board during each January beginning in FY 2005. Upon at least a majority vote of all members of the Governing Board, the Budget will be recommended for adoption by each Party’s respective governing body, as applicable.

As the operational budget pro forma is approved by the Parties, the new CEC Budget format will replace **Exhibit B** and will be effective upon approval of the CEC Budget.

8.D. Budgeted Expenditures. After the CEC Budget has been approved and funded by the Parties, the COA City Manager is authorized to incur costs and expenses in accordance with the Budget. Any costs or expenses to be incurred in excess of the approved and funded Operating

or Capital Budget amount will require additional CEC Budget approval and funding or re-allocation of existing funds by the Parties.

8.E. Funding Transfers to COA. COA will provide timely and accurate invoices to facilitate the transfer of funds by each Party to COA, and the Parties will each comply with certain requirements to facilitate payment by COA to the CEC Program vendors and contractors:

8.E.1. Notice. COA must provide at least fifteen (15) calendar days prior written notice (the "Notice") of any amounts due from each Party under an invoice for Budgeted Costs to allow the Parties sufficient time to approve any disbursement of funds, as required by law. The Notice must include a copy of the itemized invoice(s) for services, equipment, or materials and a date on which payment will be made by the COA's City Manager, and which complies with the five (5) day payment and fifteen (15) day notice periods.

8.E.2. Approval. Each Party must approve, or dispute, payment of invoices within 10 business days after receipt of the invoice and provide written notice of any dispute to the General Manager or designee.

8.E.3. Wiring Instructions. COA must provide wiring instructions to each Party for the electronic transfer of Party funds to their respective Accounts.

8.E.4. Party Funds. Each Party must transfer its portion of the CEC Program Costs to its respective Account no later than the sixteenth (16th) day after receipt of an invoice from COA.

8.E.5. Payments. COA must pay invoices for CEC Program costs, which may include COA CEC Program Management and Administrative Services Costs approved in any adopted CEC Program Budget, within five (5) business days after receipt of the respective Party's funds in their respective Accounts, and otherwise in compliance with the Prompt Payment Act.

8.E.6. Confirmation of Payments. COA must provide wire transfer confirmations or copies of cancelled checks to each Party for any disbursements from their respective Accounts, both of which must show date of payment.

8.E.7. Statements. COA must provide monthly statements of Account activity, including any interest earned, to each Party's designated representative on or before the sixth (6th) business day of each month during this Agreement.

The monthly reports will include beginning and ending balances of funding held by COA for each Party, if applicable. Reports for ‘year-end’ account status will be provided as soon after year-end closeout as possible.

8.E.8. Account. COA must provide a separate bank account for each Party (the “Account”) dedicated solely to the administration of that Party’s CEC Program contributions. No money will be invested unless at any Party’s written request to the General Manager, and at that Party’s expense, all funds provided to each account will be invested in the same manner as the City invests its excess funds, and any interest earned on the funds invested will be credited to each account based on the dollar amount in each account and the rate of interest earned on the funds invested. If Capital Costs are budgeted, and each Party requests the investing and accounting services required in this subsection, the duties will be added to an FTE in the next Budget cycle for the duration of the Capital Project, rather than each Party paying the costs of administering the Account.

8.E.9. Interest. COA must pay each Party all interest generated on the funds in the respective Party’s Account, if any, within ten (10) business days of a request for payment from the Party’s designated representative.

8.E.10. Reports. COA must provide each Party with a monthly Budget report, including current CEC Program Cost projections for the succeeding month. The Budget reports will include a quarterly cash flow reconciliation of estimated versus actual Costs.

8.E.11. Party Representatives. For purposes of this **Section 8.E.**, the Parties Designated Representative for receiving the invoices, statements, and reports and demanding interest earnings are as follows:

COA:	RDMT Financial Consultant
Travis County:	Travis County Wireless Manager
TxDOT:	District Engineer
Capital Metro:	Accounts Payable P.O. Box 6308 Austin, TX 78762-6308

Unless a different address is listed here, notices will be sent to the address listed in **Section 17.E. Notices.**

8.E.12. Additional Travis County Process. Further, to the extent the payment process set out above does not include the entire payment process established in the “9-1-1 RDMT Project Payment, Invoicing, and Reporting Agreement”, dated February 15, 2002, COA agrees to follow such additional processes as required by that document with regards to Travis County.

8.E.13. Alternate Quarterly Payment Process. Alternatively, the Parties may agree to interim quarterly payments in accordance with the adopted Budget, subject, however, to a quarterly accounting and adjustment of Operating Costs and Capital Costs.

8.F. State Budget Process. The State of Texas budgets on a two (2) year basis, therefore, all references in this Agreement to annual budget requirements will automatically mean bi-annual budget requirements for the State Agency Parties to this Agreement. Additionally, any annual Budget date requirements in this Agreement automatically will be construed as bi-annual date requirements for the State Agency Parties’ State Budget.

8.G. Funding. The Parties specifically acknowledge that funding for each Party’s share of the CEC Budget has gone through that Party’s normal budgeting process; is current revenue available to each funding Party; and has been approved by its governing body for transfer to COA’s budget for expenditure by the City Manager in accordance with the CEC Budget and COA’s purchasing requirements. The Parties further acknowledge that they will each have their own annual “**Internal Program Costs**” that are separate and in addition to the CEC Budget Costs and that the annual budget that each Party’s governing body adopts will specifically include that Party’s Internal Program Costs, with sufficient additional appropriations over its allocated portion of the CEC Budget to cover those Internal Program Costs in its annual budget.

8.H. Failure to Fund. If any Party authorizes funding at less than their allocated amount recommended by the Governing Board, at the sole discretion of the other Parties by majority vote, the CEC Budget either will be adjusted accordingly or the other Parties may agree to pay the unfunded portion. Action on a Budget adjustment or a Party’s(ies’) agreement to pay more must be taken within thirty (30) days after any Party’s governing body adopts or otherwise authorizes expenditures for less than that Party is allocated for a future budget, or that year’s CEC

Budget is automatically reduced by the unfunded allocation. If the CEC Budget is automatically reduced, the Parties must promptly revise **Exhibit B** to reflect the new Budget amount, unless the Partial Funding is resolved under **Section 8.I.** below.

If any Party fails to provide any funding for its share of the CEC Budget or its Internal Program Costs, such Party will be deemed to have provided its twenty-four (24) month notice of termination of its participation in the CEC Program and this Agreement and the Parties will follow the procedures for termination of a Party set out in **Section 15. Termination.** below.

8.I. Partial Funding. If any Party authorizes funding at less than the amount recommended for that Party by the Governing Board, or if any Party fails to fully fund its Internal Program Costs, (herein called the “Underfunding Party”) the other Parties may take one of the following actions:

8.I.(i) Amend the CEC Budget and then reduce System services, Operating Board representation, and voting rights to the Underfunding Party with such reductions to be consistent with the Underfunding Party’s continued participation in Systems, if any.

8.I.(ii) Reduce the CEC Budget by the amount underfunded by cutting Costs, in the following priority: nonessential services to the Underfunding Party, other services deemed non-essential by the other Parties, and, only if reasonably necessary, essential services to the Underfunding Party.

8.I.(iii) Assess the Underfunding Party an amount, which is the difference in the Underfunding Party’s Budget **Exhibit B** allocation and the amount of funding provided by the Underfunding Party (“Assessment”). Each Party agrees that its future right to participate in the CEC Program is dependent upon fully funding its share of the Budget and its Internal Program Costs. Therefore, the Underfunding Party shall fund the Assessment, and its entire portion of the next annual Budget in its next budget cycle.

8.I.(iv) Amend the CEC Budget by increasing the amounts paid by the other Parties based on a cost-benefit analysis of the CEC Program and Systems value to those Parties with an acknowledgement of the non-quantifiable value to public safety of certain essential CEC Program services with a proportionate increase in Operating Board representation for the Parties commensurate with the additional funding provided.

8.I.(v) Terminate the Underfunding Party's participation in this Agreement by following the procedure for termination of a Party, if the level of funding is deemed substantially a failure to fund by the other Parties.

9. Accounting Records. The General Manager will maintain accounting records in accordance with generally accepted accounting standards, including compliance with federal guidelines for spending federal funds or bond proceeds. Such records will be open to inspection by the Parties during reasonable business hours and will be retained for at least six (6) years.

Upon three (3) days written notice, any Party may audit the records in the Facility.

10. Contracting Authority. The Parties specifically agree that the COA City Manager will have the authority to contract on behalf of the Parties for items that have been approved in the annual CEC Budget, so long as the payments are made from available funds, using the COA's standard purchasing processes, unless expenditure of federal funds or bond proceeds requires use of additional guidelines.

11. Allocation of Costs. The Parties will pay for the percentages allocated for the Budget shown on **Exhibit B**, as it may be amended. There are several categories of percentages that the Parties will pay, depending on the nature of the Cost. The percentages are shown on and a part of **Exhibit B**, and may be amended in the same manner as **Exhibit B**.

12. Federal Funds and Bond Funds. If a Party utilizes Federal funds, grant funds, or bond funds to meet a portion of their financial commitment under this Agreement, the Parties agree to conduct all procurements, maintain all records, and otherwise conduct their activities in furtherance of this Agreement so as to comply with all applicable statutes, regulations, policies, and grant contract provisions necessary to qualify the CEC Program expenditures contemplated herein for Federal and/or grant program reimbursement and to avoid arbitrage penalties. Further, the Parties agree to cooperate with each other in the application for and administration of Federal funds, grant funds, or bond funds in order to maximize funding participation in the operation and maintenance of the CEC Program. Each Party intending to utilize Federal funds, grant funds, or

bond funds to meet a portion of its annual financial commitment shall annually notify the other Parties when those funds are obligated to the CEC Program.

13. Facility Systems Operation.

13.A. The Parties shall operate those Systems for which they are responsible or mutually agree to their integrated operation with other Systems from the CEC. Each Party will be responsible for the operation of any System that is funded as a part of its Internal Program Costs. The COA shall be responsible for the operation of the Shared Systems.

13.B. Each Party shall have primary authority over all its respective Internal Program Employees and Internal Program Systems, if any.

14. Emergency Management Operations. The COA and Travis County will locate their Offices of Emergency Management (OEM) in the Combined Emergency Center at their respective costs and will provide funding for their respective OEMs in their annual budgets.

15. Termination.

15.A. Voluntary Termination. This Agreement may be voluntarily terminated by the agreement of all of the Parties. Further, any non-COA Party to this Agreement may withdraw from this Agreement and terminate its participation in this Agreement (“Terminating Party”) by giving twenty-four (24) months written notice to the Remaining Parties. The termination becomes effective on the first day after the twenty-four (24) month notice period ends (“Effective Termination Date”). Such Terminating Party must continue to fund its portion of the Budget up to its Effective Termination Date and, if it does so, the Terminating Party may continue to participate in the CEC Program and Systems until the Terminating Party’s Effective Termination Date. However, failure of the Terminating Party to provide funding for its portion of the Budget immediately terminates their ability to continue to participate in the CEC Program and Systems until the Effective Termination Date. The portion of the Budget allocated to a Terminating Party after receipt of the notice of termination may be reduced by agreement of the Remaining Parties.

15.B. Termination for Cause. The Parties may terminate the participation of any other Party for cause, including a Party’s failure to fully fund or failure to pay for Budgeted Costs, after a unanimous vote of the non-defaulting Parties by delivery of a written notice of default which

specifies the default under the material provisions of this Agreement and indicates that the default must be cured within thirty (30) days or the Party's interest in this Agreement will automatically terminate. Provided, however, that in the event that the defaulting Party begins to cure such default, the thirty (30) day cure period will be extended as long as the defaulting Party continues to diligently prosecute such a cure to completion. Notwithstanding the immediately preceding sentence, an Assessment under **Section 8.I(iii)** can only be cured on or before the start of the next Budget cycle after an Assessment is made to that Party.

15.C. Rights of Remaining Parties. Once the undepreciated value of the Systems in which a Terminating Party participated ("System Value") is determined, the Remaining Parties will consider alternatives, including but not limited to one of the following:

- (i) Finding another governmental entity to assume the System Value;
 - (ii) Dividing the System Value proportionally among the Remaining Parties;
 - (iii) Allowing one Remaining Party to assume the System Value;
 - (iv) Allowing the Terminating Party to retain its System Value with the stipulation that use of the System(s) will not be made available to that Party, unless and until the Party agrees to pay its Assessment as set out in Section above;
- or
- (v) The Remaining Parties will provide for any payment for System Value to the Terminating Party by amendment to this Agreement.

15.D. Duties of Remaining Parties. Any Remaining Party that assumes all or part of the System Value of a Terminating Party assumes all duties and obligations related to that right. The Remaining Parties must agree on a new allocation of costs under **Section 8. Budget and Exhibits H and B.**

15.E. Voting to Exercise Rights under Section 15.D. The decision to exercise rights granted by **Section 15.C.** above by the Remaining Parties will be made by the Parties. However, the Terminating Party, and all votes allocated to the Terminating Party, will be excluded in determining the votes needed for the Remaining Parties to make a decision.

15.F. Effect of Termination on Remaining Parties. A termination by a Party will have no effect on a Remaining Party's rights to participate in the System Value, CEC Program, Facility, or any System other than the specific rights and duties set out in this **Section 15. Termination.**, and the continuing duty of all Remaining Parties to pay their share of Costs as Budgeted.

15.G. Rights of the Parties upon Termination or Expiration of Agreement. Upon termination or expiration of this Agreement, the non-COA Parties shall vacate the Combined Emergency Center and the Facility. Within thirty (30) days after termination or expiration of this Agreement, the non-COA Parties shall remove their separate personal property, furniture, fixtures and equipment, including any property the removal of which may cause non-structural damage to the Facility. Any non-structural damage must be repaired within fifteen (15) business days to the reasonable satisfaction of the COA. COA may enter and peacefully assume possession and may take possession by summary proceedings, or by action at law or in equity or by force or otherwise, without being liable in trespass or for any damages. The foregoing rights and remedies given to the COA are, and will be deemed to be cumulative of any other rights of the COA under law. The exercise of any right may not be deemed to be an election of rights. Provided, however, the Parties may then elect to continue this Agreement by mutual agreement of the Parties.

16. Dispute Resolution Process.

16.A. All Parties are encouraged to work together to resolve all disputes prior to involving the General Manager or Operating Board.

16.B. A dispute may be withdrawn at any time during the Dispute Resolution process.

16.C. Timeframes:

(i) **Initial Dispute Hearing.** Any Party must first bring an issue or dispute to the General Manager for review and recommendation by delivery of a written notice to the General Manager. Within ten (10) business days after the General Manager receives the notice, he must schedule a meeting with the Party submitting the notice and any other appropriate Party or third party. The General Manager must provide written notice of his decision to all applicable Parties within five (5) business days after the meeting. If there is a dispute with the General Manager, the notice must be given to the Vice Chair of the Operating Board and the Operating Board will hear the matter and provide a written notice of their decision to all applicable Parties within five (5) business days after the meeting.

(ii) **Initial Appeal.** A Party wishing to appeal the decision of the General Manager or Operating Board, as described above, must make written notice of appeal

within five (5) business days after receipt of the General Manager's or Operating Board's written decision. The appeal will be addressed to the Vice Chairman of the Operating Board or, in the case of an appeal from a decision of the Operating Board, to the Governing Board, as provided below. The Vice Chair must schedule a meeting of the Operating Board within fifteen (15) business days of receipt of the notice and provide a written recommendation to the appropriate Parties within five (5) business days after the hearing. Any appeal of the recommendation of the Operating Board will be to the Governing Board.

(iii) Appeal to Governing Board. Any appeal from the decision of the Operating Board must be made by delivery of written notice of appeal to the General Manager and Governing Board within ten (10) business days after receipt of the Operating Board's decision. The Governing Board may meet to hear the appeal or may elect to send the appeal to mediation. The Governing Board, assisted by the General Manager, will either schedule a hearing or send the appeal to mediation within twenty-five (25) business days of receipt of the notice of the appeal. Any appeal from the Governing Board's recommendation will be to a mediator as described below.

(iv) Mediation. If Mediation is the method to finalize the administrative appeal process, the Parties participating in mediation will endeavor to agree on the choice of a mediator within five (5) days of the delivery of any notice of appeal or of the Governing Board's recommendation of mediation. If the Parties cannot agree on the choice of a mediator, each participating Party will choose the name of a qualified mediator. Within five (5) days after the participating Parties choose their mediators, those mediators will choose another mediator to hear the appeal. The mediator chosen must schedule mediation within twenty (20) business days after being chosen, unless the Parties to the mediation agree to a different time schedule. The mediator must provide notice of the date, time, and location of the mediation to the General Manager, who must be allowed to attend or send a designee. However if the subject matter of the mediation is a dispute with the General Manager, neither the General Manager nor a designee may attend. The General Manager or his/her designee may otherwise participate in the mediation, and will be allowed to attend all joint sessions. The mediator must provide a

written decision to the applicable Parties and the General Manager within fifteen (15) business days after the mediation.

Any appeal of the decision of the mediator will be to an appropriate court of law in Travis County, Texas, and will be a trial de novo.

17. Miscellaneous.

17.A. Interlocal Agreement. This Agreement is an Interlocal Agreement authorized and governed by the Interlocal Cooperation Act, Chapter 791 of the Texas Government Code. Each Party agrees that in the performance of its respective obligations as set forth in this Agreement, it is carrying out a duly authorized governmental function, which it is authorized to perform individually under the applicable statutes of the State of Texas and/or its charter. Each Party agrees that the compensation to be made to the other Parties as set forth in this Agreement is in an amount intended to fairly compensate each performing Party for the services or functions each provides hereunder, and are made from current revenues available to the paying Party.

17.B. No Assumption of Liability. No Party assumes the liability for the System(s) under the control of any other Party or for the actions of employees of any other Party. No Party will be responsible for the acts or omissions of any other Party regarding the use, installation, operation, maintenance or updating of any of the Systems or Equipment located within the Combined Emergency Center.

17.C. Immunity as a Defense. No signatory Party has agreed to waive any defense, right, immunity, or other protection under law including any statutory provision, by entering into this Agreement or otherwise participating in the Regional Program.

17.D Relationship of Parties. The parties acknowledge that they are not an agent, servant, or employee of any other Party, and that each Party is responsible for its own acts and deeds and for those of its agents or employees.

The parties expressly agree that this project is not a joint venture or enterprise. However, if a court should find that the parties are engaged in a joint venture or enterprise, then the responsible Party agrees to pay any liability adjudicated against another Party for acts and deed of the responsible Party, its employees or agents.

17.E. Retention of Defenses. The Parties agree that neither this Agreement nor the operation or use of the Combined Emergency Center by the Parties affect, impair, or limit their respective immunities and limitations of liability to the claims of third parties, including claims predicated on premises defects.

17.F. Notices. Notices required under this Agreement must be in writing and delivered personally or sent by certified US Mail, postage prepaid, addressed to such Party at the following respective addresses:

City: City of Austin
P. O. Box 1088
Austin, Texas 78767
ATTENTION: City Manager, with a copy to City Attorney

County: Travis County
P. O. Box 1748
Austin, 78767
ATTENTION: Ex. Manager Justice and Public Safety
and County Attorney (File 164.122)

State: Texas Department of Transportation Austin District
P.O. Drawer 15426
Austin, Texas 78761-5426
7901 N. IH 35, Austin, Texas 78753
ATTENTION: District Engineer

Capital: Capital Metropolitan Transit Authority
Metro: 2910 E. 5th St.
Austin, Texas 78702
ATTENTION: President/CEO

All notices so given, must be deemed given on the date so delivered or so deposited in the mail. All Parties may change their address by sending written notice of such change to the other Parties in the manner provided for above. In **Section 8.E.10.** above, each Party's representative may be different than the person listed above, but the address will be the same unless otherwise noted.

17.G. Assignment. This Agreement being based upon the special qualifications of each Party, any assignment or other transfer of this Agreement or any part hereof without the express consent in writing of the other Parties is void and has no effect.

17.H. Entire Agreement. The entire agreement between the Parties is contained herein and no change in or modification, termination, or discharge of this Agreement in any form whatsoever is valid or enforceable unless it is in writing and signed by duly authorized representatives of all Parties.

17.I. Prior Agreements. This Agreement supersedes any and all prior agreements regarding this subject which may have previously been made.

17.J. Severability. If any term or provision of this Agreement is, to any extent, rendered invalid or unenforceable, the remainder of this Agreement is not affected, and each other term and provision of this Agreement remains valid and enforceable to the fullest extent permitted by law.

17.K. Non-waiver. Failure of a Party to exercise any right of remedy for a breach or default of any other Party does not waive such right or remedy in the event of a subsequent breach or default.

17.L. Authority of Signatories. Each Party represents to all the other Parties that the representative signing this Agreement on any Party's behalf has been duly authorized by the governing body of that Party in compliance with Texas law.

17.M. Further Assurances. Each Party agrees to perform all other acts and execute and deliver all other documents as may be necessary or appropriate to carry out the intent and purposes of this Agreement.

17.N. Exhibits. The Exhibits, which are attached hereto and described below, are incorporated herein and made a part hereof for all purposes.

Exhibit List

- Exhibit A – Implementation Budget Pro Forma
- Exhibit B – Estimated Operation Budget Pro Forma
- Exhibit C – Facility, Exclusive Facilities, Shared Facilities
- Exhibit D – Participation Table
- Exhibit E – Governance Flow Chart
- Exhibit F – Suggested Objectives and Performance Measures
- Exhibit G – List of each Party's Designated Members to the Operating Board
- Exhibit H – Required Program FTE Staffing

17.O. TxDOT Inability to Pay for Insurance. In recognition of the statutory prohibition against state agencies purchasing insurance, absent specific statutory authority to do so, the COA has agreed, as Landowner, to pay for that portion of insurance costs that would otherwise be assessed to TxDOT in the Budget under Contractuals Costs. In the event of a disaster that includes covered losses, which will provide insurance coverage to repair or rebuild all or a portion of the Facility and replace all or a portion of the Systems, TxDOT must transfer to the COA its portion of the money needed to rebuild all or a portion of the Facility and replace all or a portion of the Systems within one-hundred eighty (180) days. If the loss is less than the deductible, or if the loss is not covered under the insurance policy, all Parties will pay their **Exhibit D** cost allocation share of the costs to repair or rebuild all or a portion of the Facility and replace all or a portion of the Systems on a reimbursement basis.

17.P. Occupancy Limits. Staffing Limits for the Facility are: COA-135 Employees; Travis County-25 Employees; TxDOT-18 Employees; and Cap Metro-8 Employees (“Staffing Limits”). These occupancy limits do not include staff contracted to provide security for, or facilities management services to, the CEC. If any Party has contract employees who are providing services to the Party in support of the Party’s mission at the CEC, those contract employees will be counted as if they were that Party’s internal program employees.

The Staffing Limits applies to Shared Employees or Internal Employees who are housed in the Facility during any one eight (8) hour shift for more than sixty (60) consecutive Days. If any Party exceeds the Staffing Limits then the General Manager will give notice that the Party has thirty (30) days to bring its Staffing Limits into compliance. If the Party does not comply, then the General Manager may initiate a complaint under **Section 16. Alternative Dispute Resolution.**

Staffing Limits do not apply to training and meetings by any Party that are held within the Facility. Provided, however, that each event of training or meetings do not exceed more than fourteen (14) consecutive Days.

17.Q. Emergency Occupancy Limits. In the event of an emergency or an alert condition the Staffing Limits in this Agreement are suspended.

17.R. COA City Manager's Designee. For purposes of this Agreement, the COA City Manager's Designee will be the General Manager, who will act on behalf of the City Manager, unless the COA City Manager notifies the other Parties to the contrary in writing.

This Agreement has been executed in multiple originals, each having equal force and effect, on behalf of the Parties as follows:

TEXAS DEPARTMENT OF TRANSPORTATION

Executed for the Executive Director and approved for the Texas Transportation Commission for the purpose and effect of activating and/or carrying out the orders, established policies or work programs heretofore approved and authorized by the Texas Transportation Commission.

Date: 9-27-02

By: William C. Garbade P.E.
William C. Garbade, District Engineer

TRAVIS COUNTY, TEXAS

Date: 7-23-02

By: Samuel T. Biscoe
Samuel T. Biscoe, County Judge

CAPITAL METROPOLITAN TRANSPORTATION AUTHORITY

Date: 10-4/2002

By: Fred M. Gilliam
Fred M. Gilliam, President/CEO
OK
OK

CITY OF AUSTIN

Date: 10/10/02

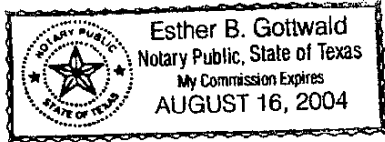
By: Toby Hammett Futrell
Toby Hammett Futrell, City Manager

Legal form approved on 15 October, 2002

By: Alison Gallaway
Alison Gallaway, (Assistant City Attorney)

STATE OF TEXAS §
COUNTY OF TRAVIS §

This instrument was acknowledged before me on this the 27th day of September, 2002, by William C. Garbade, District Engineer, of Texas Department of Transportation-Austin Division, a political subdivision of the State of Texas, on behalf of said public body.

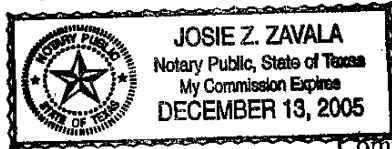


Esther B. Gottwald
Notary Public, State of Texas

Commission Expires: August 16, 2004

STATE OF TEXAS §
COUNTY OF TRAVIS §

This instrument was acknowledged before me on this the 23rd day of July, 2002, by Samuel T. Biscoe, County Judge of Travis County, a political subdivision of the State of Texas, on behalf of said public body.

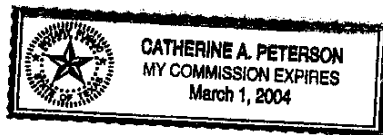


Josie Z. Zavala
Notary Public, State of Texas

Commission Expires: _____

STATE OF TEXAS §
COUNTY OF TRAVIS §

This instrument was acknowledged before me on this the 4th day of October, 2002, by Fred M. Gilliam, President/CEO of Capital Metropolitan Transportation Authority, a political subdivision of the State of Texas, on behalf of said public body.

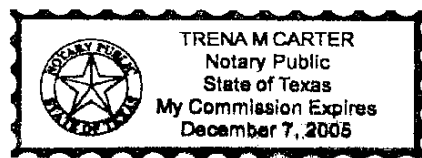


Catherine A. Peterson
Notary Public, State of Texas

Commission Expires: 3/1/2004

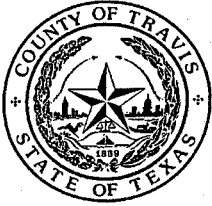
STATE OF TEXAS §
COUNTY OF TRAVIS §

This instrument was acknowledged before me on October 10, 2002, by Toby Hammett Futrell, City Manager of the City of Austin, a Texas municipal corporation, on behalf of said corporation.



Trena M. Carter
Notary Public, State of Texas

Commission Expires: _____



TRAVIS COUNTY PURCHASING OFFICE
Cyd V. Grimes, Purchasing Agent, C.P.M.

314 W. 11th, Room 400 • P.O. Box 1748 • Austin, Texas 78767 • (512) 473-9700 • Fax (512) 473-9185

9531
0102
CODE _____

January 31, 2000

SUBJECT: Amendment No. 1 to Interlocal Agreement Between the City of Austin and Travis County for use of equipment, labor, and materials

Peter Rieck
Director, public Works and Transportation
City of Austin
P.O. Box 1088
Austin, Texas 78767

RECEIVED

FEB 02 2000

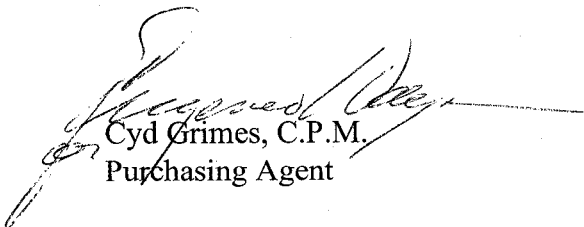
TNR

Dear Mr. Rieck:

Enclosed are two (2) fully-executed Amendment No. 1 to the above referenced Interlocal Agreement for your files.

Should you have any questions regarding this Contract, please contact James Gonzalez at 512/708-4850. Thank you for your assistance in this matter.

Sincerely,


Cyd Grimes, C.P.M.
Purchasing Agent

Encl.: Original Modification No. 1

cc: Joe Gieselman/TNR w/cy of Mod.
Paul Franks, TNR w/cy of Mod.
John Hille/County Attorney's Office w/cy of Mod.
Michele Pearson/County Auditor's Office, w/cy of Mod.

**FIRST AMENDMENT TO INTERLOCAL
AGREEMENT BETWEEN CITY OF AUSTIN AND TRAVIS COUNTY
FOR USE OF EQUIPMENT, LABOR AND MATERIALS**

WHEREAS, on March 29, 1994, Travis County ("COUNTY") and the City of Austin ("CITY") entered into an Interlocal Cooperation Agreement (the "AGREEMENT") Concerning Use of Equipment, Labor and Materials; and,

WHEREAS, the CITY and COUNTY desire to expand the scope of services provided to each other pursuant to the AGREEMENT by this First Amendment.

NOW, THEREFORE, the CITY and COUNTY, in consideration of the mutual benefits expressed herein, amend the AGREEMENT as follows:

- A. Paragraph II of the AGREEMENT is amended by adding the following paragraph as a new Section D.:

"D. In the event that either CITY or COUNTY have an Item awarded for a purchase contract, the awarding party may notify the other party that a bid quantity remains available. The notified party may request the awarding party to purchase the Item(s) for the benefit of the notified party. The awarding party may assign those purchase rights to the notified party. The notified party may order the Item(s) directly from the successful bidder. The successful bidder shall invoice the ordering party directly. If the contract is non-assignable, the awarding party may purchase the item for the notified party, upon receipt of the funds to purchase the Item(s), including the cost of delivery, if any."

- B. All other provisions of the AGREEMENT shall remain in full force and effect.
- C. This First Amendment to the AGREEMENT shall become effective upon execution by both parties.
- D. This First Amendment may be executed by the parties in multiple copies, each of which shall be considered an original.

TRAVIS COUNTY

By: Samuel T. Biscoe
Samuel T. Biscoe
County Judge
Date Signed: 1-25-00

CITY OF AUSTIN

By: Jesus Garza
Jesus Garza
City Manager
Date Signed: 12-3-99

APPROVED AS TO FORM:

John Hall
Assistant County Attorney

ATTEST:

Shirley A. Brown
Shirley Brown
City Clerk

Pat Lehmet
Assistant City Attorney

115 3.15 #

CITY OF AUSTIN AND TRAVIS COUNTY
INTERLOCAL AGREEMENT FOR INSTALLATION, MAINTENANCE,
UPGRADING, AND OPERATION OF TRAFFIC CONTROL DEVICES

This Interlocal Agreement made and entered into pursuant to Article 4413 (32c) V.A.T.S. ("The Interlocal Cooperation Act"), is between the City of Austin, a municipal corporation of the State of Texas ("City") and the County of Travis, a political subdivision of the State of Texas ("County").

WITNESSETH:

WHEREAS, the County has the authority to regulate traffic on County roadways situated within its boundaries and not within the corporate boundaries of a town or city; and

WHEREAS, the regulation of County roadways necessitates the installation, maintenance and upon occasion, upgrading of traffic control devices; and

WHEREAS, the City has the necessary capabilities to effectuate the planning, designing, installing, maintaining and upgrading of traffic control devices on public roadways; and

WHEREAS, the County has expressed the desire, and the City has expressed its willingness to enter into an Agreement whereby the City would design, install, maintain or upgrade traffic control devices needed by the County in accordance with said Agreement,

NOW, THEREFORE, in consideration of the mutual covenants and Agreements hereinafter contained to be kept and performed by the respective parties hereto, it is agreed as follows:

1. The City, at the expense and request of the County, shall provide traffic control installation, maintenance and upgrading services which shall include, but not be limited to the following:

- A. Conducting traffic signalization warrant studies;
- B. Planning and drafting system designs;
- C. Construction of traffic signals and other traffic control devices;
- D. Upgrading existing signals;
- E. Performing necessary maintenance;
- F. Providing necessary equipment, labor and materials;
- G. Conducting equipment test and operation.

It is understood and agreed that the County, reserves for itself, the right to perform any of the foregoing activities at the exclusion of the City. It is understood that the City's cost of performing the foregoing activities may include but not be limited to labor, material, equipment acquisition, equipment operation, computer time, bench time, vehicles, repair and maintenance and indirect costs.

2. The County and the City will designate a contact person within their respective transportation divisions to be responsible for overseeing the projects and transmitting, receiving and coordinating information and service requests on all matters affecting traffic control devices described in this agreement.

3. The City, at the written request and expense of the County, will conduct traffic-warrant studies for new installations and upgrades. The written request from the County will sufficiently define the scope of the work requested.

4. Upon completion of the study, the City will bill the County for the work performed and will submit the results of the study to the County for review, recommendation or approval. The County will, within thirty (30) days of receipt of the bill, pay the City for the City's costs associated with the traffic warrant studies. The parties will make reasonable efforts to resolve any disputes regarding the results of the study; however, the County will make the final decision regarding said results and their application toward the system design.

5. When the approval or final decision is reached, the County will notify the City in writing and authorize the City to proceed with the installation or upgrade of traffic control devices.

6. Upon receipt of written authorization to proceed, the City will timely prepare and submit for review, a preliminary system design with a corresponding cost estimate (including the cost of preparing the preliminary system design) and construction schedule.

7. The parties will work cooperatively to resolve disputes or differences regarding the system design; however, the County will have the authority to make the final decision regarding said design requirements.

8. The County Traffic Engineer will sign the final set of plans evidencing the County's acceptance and approval of the system design and estimated cost of construction. After the County accepts or declines the preliminary system design, or decides not to proceed with construction, the County will

reimburse the City for the City's cost of preparing the preliminary system design within thirty (30) days of receipt of the City's bill for said design work.

9. No construction will be commenced until the City has received the signed plans. The project will then be placed on the City's regular construction schedule; however, when appropriate justification is provided to the City's reasonable satisfaction, County projects will be given preferential scheduling. It will be the responsibility of the County to provide the City with the documents or other evidence sufficient to justify preferential scheduling.

10. The City will furnish, deliver, install or upgrade the system using materials and component parts from the City's stock pile. City crews or City contract labor will perform all required labor.

11. The City will perform the necessary and proper test to place the system in full and completely functional operation.

12. At reasonable intervals after receipt of the request, the City shall submit to the County written documentation on the work performed, the manner of performance and rate of progress. The documentation may also include, but not be limited to, information regarding personnel classification and number assigned to the project, type and amount of material being used, type of equipment and time intervals of equipment use, itemization of salvaged materials and daily project reports. Salvaged material ~~originally~~ belonging to the County will be returned to the County or recycled to other County projects at the City's option. #

13. When construction is completed, the City will notify the County and submit for review and reimbursement, the City's bill itemizing the cost of labor, parts, vehicles, bench time and any other reasonable and necessary expenses as described in the estimate, including amendments thereto.

14. The County will timely review or audit the City's bill and pay the City within thirty (30) days for all cost incurred by the City less any item excepted to. The County will submit a written explanation and grounds for its exception to the item(s) within ten (10) days. The parties will promptly enter negotiation to resolve the dispute.

15. In the event that the City incurs additional cost, due to unforeseen circumstances, requiring additional work or materials, then, prior to proceeding therewith, the City shall set forth a written, detailed justification to and request the County to approve such extra work for payment.

16. The City, at the expense and request of County, will maintain and repair the County's system; however, the County will be responsible for notifying the City of system malfunction. The City will maintain a log of all "trouble calls" received from the County and will bill the County for all the maintenance and repairs performed by the City, which bills the County will pay within thirty (30) days of receipt. The County will not make any adjustments to the traffic signal operation or the installation design without prior written notice to the City. In the event of system malfunction, the City is authorized to make timing adjustments as needed without necessity of prior approval from the County. The City will notify and receive approval from the County prior to making any phasing changes.

17. All notices and requests required herein shall be in writing except that in emergency situations where delay incurred by waiting for written approval or notification would be detrimental to the parties' interests, then, verbal communication will be sufficient with written communication to follow.

18. The County, by execution of this Agreement, assumes responsibility for system design, installations, location, and upgrades of all traffic control devices installed or maintained by the City, pursuant to this Agreement. The County shall and hereby does, to the extent permitted by law, release, defend, indemnify and hold harmless the City against all claims, suits, demands or damages of any character whatsoever, resulting from injuries or damages (including attorney fees and cost of judgment), sustained by any person or property (including the property and employees of the parties hereto) which arises from or as a result of the system design, installation, location or upgrade of the traffic control devices and including any adjustments to the signal operation if the same is made by the County without prior notice to the City. Provided, that to the extent that such loss, damage, injury or death is proximately caused by the negligence of the City, the County shall only be responsible for that percentage of liability equal to the County's percent of fault. The County's obligation pursuant to the above-going indemnity provision shall be payable solely from gross revenues of the County paid pursuant to this Agreement during the term hereof and any other lawfully available current funds in the year in which such obligation or any part thereof is required to be paid.

19. This Agreement shall become effective when duly executed by all parties. This Agreement shall continue in full force and effect and may not be terminated any earlier than September 30, 1989, at which time it shall be automatically renewed and continue in full force and effect each year thereafter until either party sends notice of termination as herein set forth. Either party may terminate this Agreement

by giving sixty (60) days written notice; provided, however, that any pending construction projects shall proceed to completion in a reasonable time; and outstanding projects and bills shall be completed or paid on or before the expiration of the sixty (60) days.

20. Miscellaneous.

A. Assignability

Neither party may assign any of the rights or duties created by this Agreement without the prior written approval of the other Party. It is acknowledged by City that no officer, agency, employee or representative of County has any authority to grant such assignment unless expressly granted that authority by the Travis County Commissioners Court. It is acknowledged by County that no officer, agency, employee or representative of City has any authority to grant such assignment unless expressly granted that authority by the City Council of the City of Austin.

B. Entire Agreement

All oral and written Agreements between the parties to this Agreement relating to the subject matter of this Agreement that were made prior to the execution of this Agreement have been reduced to writing and are contained in this Agreement.

C. Law and Venue

This Agreement is governed by laws of the State of Texas. As obligations under this Agreement shall be performable in Travis County, Texas, venue shall lie in Travis County.

D. Severability

If any portion of this Agreement is ruled invalid by a court of competent jurisdiction, the remainder of it shall remain valid and binding.

E. Notices

Any notice required or permitted to be

given under this Agreement by one party to the other shall be in writing and shall be given and deemed to have been given immediately if delivered in person to the address set forth for the party to whom the notice is given, or on the third day following mailing if placed in the United States Mail, postage prepaid, by registered or certified mail with return receipt requested, addressed to the party at the address specified below.

The address of County for all purposes under this contract shall be:

Honorable Bill Aleshire (or is successor in office)
Travis County Judge
P. O. Box 1748
Austin, Texas 78767

With copies to (registered or certified mail with return receipt is not required)

Honorable Ken Oden (or his successor in office)
Travis County Attorney
P. O. Box 1748
Austin, Texas 78767
File No. 48.53

and

Shyra Darr, Director
Travis County P.I.T.D.
P. O. Box 1748
Austin, Texas 78767

Address of City. The address of the City for all purposes under this Agreement and for all notices hereunder shall be:

Jim Smith, Director
P. O. Box 1088
Austin, Texas 78767-8828

F. Computation of Time

When any period of time is stated in this Agreement, the time shall be computed to exclude the first day and include the last

day of the period. If the last day of any period falls on a Saturday, Sunday or a day that either County or City has declared a holiday for its employees, these days shall be omitted from the computation.

G. Headings

The headings at the beginning of the various provisions of this Agreement have been included only to make it easier to locate the subject matter covered by that section or subsection and are not to be used in construing this Agreement.

H. Legal Authority

City states by its approval of this Agreement that it possesses the legal authority to enter into this Agreement, receive funds authorized by this Agreement, and to perform the services City has obligated itself to perform under this Agreement.

The person or persons signing this Agreement on behalf of City, or representing themselves as signing this Agreement on behalf of City, do hereby warrant and guarantee that he, she or they have been duly authorized by City to sign this Agreement on behalf of City and to bind City to sign this Agreement on behalf of City and to bind City validly and legally to all terms, performances, and provisions in this Agreement.

County states by its approval of this Agreement that County possesses the legal authority to enter into this Agreement, expend funds authorized by this Agreement, and to perform the services County has obligated itself to perform under this Agreement.

The person or persons signing this Agreement on behalf of County, or representing themselves as signing this Agreement on behalf of County, do hereby warrant and guarantee that he, she or they have been duly authorized by County to sign this Agreement on behalf of County and to bind County validly and legally to all terms, performances, and provisions in this Agreement.

In witness whereof, County by affirmative vote of its Commissioners Court approved this Agreement and delegated the County Judge to sign in its behalf as evidenced by the minutes of the Travis County Commissioner's Court on the 15 day of March, 1989, and City has caused this Agreement to be executed in its behalf by its _____ pursuant to a resolution duly passed on the _____ day of _____, 1989, a certified copy of which resolution is attached.

CITY OF AUSTIN

COUNTY OF TRAVIS

BY: *[Signature]*
Title Assistant City Manager
Date March 1, 1989

BY: *[Signature]*
Title County Judge
Date 3/15/89

BJL:jba
1522



MEMORANDUM

TO: Barbara Vinton
Finance Division

DATE: June 28, 2005

FROM: Ron Bailey
Austin District

SUBJECT: Advanced Funding Agreement,
CSJ: 0914-33-036, Etc.
Project No: 0914-33-036, Etc.

Please find attached a copy of the fully executed Advanced Funding Agreement for the above Project. Also attached is an email within which this copy was requested by your office.

The funding for the above Project is contained within two CSJ's. They are 0914-33-036 for all On-system work and 0914-33-037 for all off-system work. The attached Agreement contains an estimate for work to be performed within each.

Our office worked with the Contract Services Section, OGC, in creating and executing this agreement. Therefore, I will be happy to try to answer any questions you may have. I can be contacted either by phone at 832-7156 or by email at rbailey@dot.state.tx.us.

Ron Bailey

cc: Pat Crews-Weight, P.E. District Design

From: Pat Crews-Weight
To: Ron Bailey
Date: 6/28/2005 4:36:43 PM
Subject: Fwd: July Letting

Please send a copy of your agreement for Hays County 0914-33-037 to Barbara Vinton.of FIN. Thanks.

>>> Barbara Vinton 6/28/2005 4:28 PM >>>

Hello Pat,

Could you please have someone in your office send the AFAs for the projects below?

CSJ 0114-04-048
Project No. NH 2005(660)

CSJ 0914-33-037
Project No. CC 917-33-37

We appreciate any help your staff can give us on this matter.

Barbara Vinton
Accounting Management
Finance Division
150 E. Riverside Drive
Austin, TX 78704
Office: (512) 486-5398
Fax: (512) 486-5390
E-mail: bvinton@dot.state.tx.us



MEMORANDUM

TO: Pat Crews-Weight, P.E.
District Design

FROM: Ron Bailey
Transportation Operations Office

SUBJECT: San Marcos Agreement,
San Marcos Signal Upgrade Project

DATE: May 23, 2005

CSJ: 0914-33-036, Etc.
Roadway: Various
County: Hays

Please find attached a copy of the fully executed agreement, with City Resolution, as entered into between TxDOT and the City of San Marcos on May 20, 2005. One original set of documents were retained by the Contract Services Section, with the second original set of documents being provided to the City of San Marcos.

This agreement requires the City to provide funds to reimburse the State for those costs associated with the construction of the City's portion of this project. Therefore, on May 19, the City presented a check to TxDOT for the amount of \$1,114,649.46. This check was handed over to your office on Friday, May 20, 2005, so that it would be deposited into the two CSJ's found within this project.

During the construction phase of this project, forty-five (45) traffic signals will be upgraded into an interconnected traffic control system. Of these forty-five (45) traffic signals, five (5) are located off-system and belong to the City of San Marcos. Per this agreement, maintenance and operational control of the forty (40) TxDOT traffic signals will be turned over to the City of San Marcos once construction has been completed.

This Project is currently set up for a July letting. Our office will be charged with overseeing and inspecting the day to day activities of this project. It has been set up with a five calendar day format. Thus, work is anticipated to last approximately eighteen (18) months, with work beginning around the later part of September.

Ms. Pat Crews-Weight, P.E.

- 2 -

May 23, 2005

If you, or any of the other recipients of this memo, have any questions regarding this agreement or the Traffic Signal Upgrade project itself, please contact me either by phone (832-7156) or by GroupWise. I will be happy to respond to any questions that you may have.

*Thank you!
Row Dailor*

CC: Terri Wilhelm, Office of the District Engineer
James Bartsch, District Accounting
Danny Stabeno, District Construction
Lowell Choate, District Maintenance
Chris Hatla, Planning and Development
Robert Guydosh, P.E., District Traffic Signal Shop
Don Nyland, P.E., South Travis Area Office
Jody Shaw, Transportation Planning and Programming Division



MEMORANDUM

May 23, 2005

TO: Ron Bailey
Transportation Operations Office
Austin District

FROM: Melissa Saucedo
Office of General Counsel - Contract Services Section

SUBJECT: Local Transportation Project Advance Funding Agreement
CSS05 1203 – CSJ – 0914-33-036

Attached is:

- One fully executed original ~~or amendment~~ contract.
- Fully executed copy of original or amendment contract(s) []
- Other:

Please keep a copy of the fully executed counterpart in your district/division file of record. Return at least one original counterpart to each of the outside entities.

If you have any questions, please contact Melissa Saucedo at (512) 936-1976.

Thank You

STATE OF TEXAS §
COUNTY OF TRAVIS §

**LOCAL PROJECT ADVANCE FUNDING AGREEMENT
FOR THE UPGRADING OF TRAFFIC SIGNALS
WITHIN A MUNICIPALITY**

THIS Local Project Advance Funding Agreement (LPAFA) is made by and between the State of Texas, acting by and through the Texas Department of Transportation, hereinafter called the "State", and the City of San Marcos, Hays County, acting by and through its duly authorized officials, hereinafter called the "City."

WITNESSETH

WHEREAS, a Master Advance Funding Agreement (MAFA) between the City and the State has been adopted and states the general terms and conditions for transportation projects developed through this LPAFA; and,

WHEREAS, the Governing Body of the City has approved entering into this LPAFA by Resolution or Ordinance - Attachment A, which is attached hereto and made a part hereof, for development of the specific project (the Project) the project funding of which is identified in the Project Budget Estimate and Source of Funds - Attachment B which is attached hereto and made a part hereof; and,

WHEREAS, the Texas Transportation Commission passed Minute Order 108812 that provides for the development of, and funding for, the Project described herein.

NOW, THEREFORE, in consideration of the premises and of the mutual covenants and agreements of the parties hereto, to be by them respectively kept and performed as hereinafter set forth, it is agreed as follows:

AGREEMENT

1. The period of this LPAFA is as stated in the MAFA, without exception.
2. Prior to the completion of construction and the assumption of maintenance and operations by the City of the traffic signals and traffic signal control system installed within this project, termination of this LPAFA shall be under the conditions as stated in the MAFA. Upon assumption of said maintenance and operations by the City, this agreement may be terminated by one of the following conditions:
 - ◆ By mutual agreement and consent of both parties.
 - ◆ By the State, upon thirty (30) days written notice to the City for failure of the City to provided adequate maintenance and operation services for those traffic signals which the City has agreed to maintain and operate.
 - ◆ By the State, upon sixty (60) days written notice to the City that the State will assume operation and maintenance at the end of the one (1) year period upon completion of the Project.
 - ◆ By the City, upon one hundred twenty (120) days written notice to the State.

In the event this Agreement is terminated by any of the above conditions, the maintenance and operation of the traffic signals and traffic signal control system shall become the responsibility of the State. Any State owned equipment being held by the City shall be promptly returned within 30 days to the State upon termination of the Agreement.

3. Amendments to this LPAFA shall be made as described in the MAFA, without exception.

4. Scope of Work

The scope of work for this LPAFA is described as the upgrading of forty-five (45) independently operating traffic signals and interconnecting them into a single, fully integrated traffic control system. Upon completion of construction, the City will assume maintenance and operational control over the traffic signals and the traffic control system installed within this Project.

- a. Intersection Locations: **(1)** All State-approved on-system intersections in the Project are identified in Attachments "C" and "D" - On State Highway System Intersections, which are attached hereto and made a part hereof; **(2)** All State-approved off-system intersections in the Project are identified in Attachment "E" - Off State Highway System Intersections, which is attached hereto and made a part hereof.
- b. Construction and Maintenance responsibilities for both the State and the City are delineated within this LPAFA.
- c. Directives in regards to reimbursement for tasks performed by the State and the City are delineated within this LPAFA.

5. Right of Way and Real Property shall be the responsibility of the City, as stated in the MAFA, without exception.

6. Adjustment of utilities will be provided by the City, as required and as stated in the MAFA without exception.

7. Environmental Assessment and Mitigation will be carried out as stated in the MAFA, without exception.

8. Compliance with Texas Accessibility Standards and ADA will be as stated in the MAFA, without exception.

9. Architectural and Engineering Services will be provided by the State, as stated in the MAFA, without exception. The State is responsible for performance of any required architectural or preliminary engineering work. The City may review and comment on the work, as required to accomplish the public purposes of the City. The State will cooperate with the City in accomplishing these local public purposes to the degree permitted by State and Federal law.

10. Construction Responsibilities

- a. The construction of the modification of the traffic signals will be performed under State Project 0914-33-036, Etc.

- b. The State shall supervise and inspect all work performed by the Contractor and provide the necessary engineering, inspection, and testing services required to ensure that the construction of the project is accomplished in accordance with the approved plans, specifications, and estimates (PS&E).
 - c. For those traffic signals off of the State Highway System, as indicated on Exhibit E, the City shall be responsible for providing an inspector who shall provide supervised access to the City's traffic signal controllers and perform any needed modifications to bring the signal back up to full and normal operation.
 - d. During construction, the State will retain the responsibility of maintaining and operating those signals indicated on Exhibits C and D. The City will retain the responsibility of maintaining and operating those traffic signals located off of the State Highway System, as indicated on Exhibit E.
 - e. The City will make provisions for the State and Contractor personnel to have supervised access to City facilities into which traffic signal components are installed so that installation, inspection, and maintenance of said work/equipment may be accomplished.
11. Maintenance Responsibilities
- a. Upon completion of the project, the City will provide trained staff to take over the maintenance and operations of those traffic signals upgraded within this Project, as well as the integrated traffic control system created by this Project. All repairs should be prioritized based upon public safety and made as soon as possible.
 - b. The City shall be the responsible authority to make changes in the design and operation of the highway traffic signal(s) as it may deem necessary and advisable to promote the safe, convenient, and orderly movement of traffic.
 - c. Those traffic signals, indicated in Attachment C, will be maintained on a reimbursed basis at a flat rate shown on Attachment C for parts and labor. Attachment C also indicates the means by which the City may request reimbursement for maintenance of these signals.
 - d. Those traffic signals indicated on Attachments D and E will be maintained on a non-reimbursed basis.
 - e. The State will provide assistance with maintenance of the traffic signals indicated in Attachments C and D for a period of six (6) months upon completion of the Project. Such assistance will consist of technical advice, parts, and labor with the goal of getting the City forces to a state of being able to perform said maintenance apart from State assistance. The City will not be responsible for reimbursing the State for those costs associated with the State performing such assistance. During this six (6) month time period, the City will make provisions for providing supervised access of needed City facilities by State personnel so that the required assistance may be provided. It should be noted that such access may be needed during those hours that the facility is not normally operated.
 - f. The City shall maintain and operate the traffic signals in accordance with the minimum requirements specified in Attachment G. The City shall maintain at least one log of all emergency calls and all routine maintenance. Routine maintenance will be performed by the City, as specified in Attachment G.
 - g. The City shall not sublet or transfer any portion of the work under this Agreement, unless specifically approved in writing by the State. All subcontracts shall include the provisions required within this Agreement and shall be approved in writing by the State.

- h. The State shall be responsible for those power costs associated with those signals indicated on Attachment C. The City shall be responsible for those power costs associated with those traffic signals indicated on Attachments D and E.
- i. Knockdowns or damage resulting from an accident or an act of God and which require emergency replacement of major equipment shall not be included in the (monthly/quarterly/annual) payments. For eligibility of payment for emergency replacement of major equipment, the actual cost shall be submitted to the State for review and determination of reimbursement eligibility.
- j. The State will continue to own the traffic signal equipment at those traffic signals indicated on Attachments C and D. If any traffic signal equipment needs to be upgraded or otherwise modified by the State, the State shall give notice of such actions to the City in a timely fashion so as not to unnecessarily disrupt the operations and maintenance activities of the City.
- k. All costs of reconstruction or upgrading of equipment under Article 11(j) above will be paid for by the State. Any other upgrades or modifications performed by the City shall not be reimbursed, unless such reimbursement is approved by the State prior to the upgrades or modifications being performed.
- l. The addition and deletion of traffic signals shall be made by mutual written amendment executed by both the City and the State
- m. If additional signals are added on the State Highway System and are not to become a part of the integrated traffic control system created by this Project, the State shall construct such equipment. All costs associated with the installation of these signals shall be paid for by the State.
- n. If additional signals are added on the State Highway System and are to become a part of the integrated traffic control system created by this Project, the State shall construct such equipment with these additional traffic signals added to this Agreement by a written amendment. The costs associated with the installation of these traffic signals shall be paid for by the State, with the exception of those costs for the signal components necessary to interconnect the signal with the integrated traffic control system created by this Project. These additional costs shall be paid for by the City.
- o. If additional signals are added off of the State Highway System, but within the City, and are to become a part of this same integrated traffic control system created by this Project, the City will be responsible for the construction of such equipment with these signals added to the Agreement by amendment. Costs associated with the installation of these additional signals shall be paid for by the City.
- p. Unless otherwise directed by the State, the City will return any and all parts of said highway traffic signal installations indicated on Attachments C and D to the State should these parts be removed by the City for any reason other than for installation on a State or Federal numbered highway route at a location approved by the State.

12. Local Project Sources and Uses of Funds

- a. Project Cost Estimate: A Project Cost Estimate is provided in Attachment F.
- b. A Source of Funds estimate is also provided in Attachment B. Attachment B shows the dollar amount to be contributed to the Project by federal, state, and local sources.
- c. The City is responsible for all non-federal and non-state funding, including all project cost overruns relative to the percentages listed within Attachment B, unless provided for through amendment of this agreement.

- d. After execution of this LPAFA, the City will remit a check or warrant made payable to the "Texas Department of Transportation", in the amount specified in Attachment B as the local contribution for Administrative Costs.
 - e. Sixty (60) days prior to the date set for receipt of the construction bids, the City shall remit its remaining financial share of the State's estimated cost of this project.
 - f. In the event the State determines that additional funding is required by the City at any time during the development of the Project, the State will notify the City in writing. The City will make payment to the State within thirty (30) days from receipt of the State's written notification.
 - g. Upon completion of the Project, the State will perform an audit of the Project costs. Any funds due to the City, the State, or the Federal Government will be promptly paid by the owing party.
 - h. In the event that the Project is not completed, the State may seek reimbursement from the City of its share of the expended funds. The City will remit the required funds to the State within sixty (60) days from receipt of the State's notification.
 - i. The City will not be responsible for any indirect costs incurred by the State in administering the Project, unless this agreement is terminated at the request of the City prior to the completion of the Project.
 - j. If any existing or future local ordinances, including, but not limited to, outdoor advertising billboards or storm water drainage facility requirements, are more restrictive than State or Federal Regulations, or any other locally proposed changes, including, but not limited to plats or replats, result in increased costs, then, any increased costs associated with the ordinances or changes will be paid by the City. The cost of providing such right of way acquired by the State shall mean the total expenses in acquiring the property interests either through negotiations or eminent domain proceedings, including expenses related to relocation, removal, or adjustment of eligible utilities.
 - k. The state auditor may conduct an audit or investigation of any entity receiving funds from the state directly under the contract or indirectly through a subcontract under the contract. Acceptance of funds directly under the contract or indirectly through a subcontract under this contract acts as acceptance of the authority of the state auditor, under the direction of the legislative audit committee, to conduct an audit or investigation in connection with those funds.
13. Document and Information Exchange. The City agrees to electronically deliver to the State all general notes, specifications, contract provision requirements, and related documentation in a Microsoft® Word or similar document. If requested by the State, the City will use the State's document template. The City shall also provide a detailed construction time estimate including types of activities and month in the format required by the State. This requirement applies whether the City creates the documents with its own forces or by hiring a consultant or professional provider.
14. Incorporation of MAFA Provisions. This LPAFA incorporates all of the governing provisions of the MAFA in effect on the date of final execution of this LPAFA, unless such MAFA provision is specifically excepted herein.

15. As a modification to the MAFA, all notices to either party by the other required under this agreement shall be delivered personally or sent by certified or U.S. mail, postage prepaid or sent by electronic mail, (electronic mail being permitted to the extent permitted by law but only after written consent of the parties), addressed to such party at the following addresses:

State:

District Engineer
Texas Department of Transportation
Austin District
P.O. Box 15426
Austin, Texas 78761-5426

City of San Marcos:

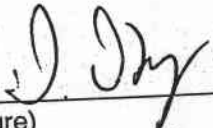
Mayor, City of San Marcos
630 E. Hopkins St.
San Marcos, Texas 78666

All notices shall be deemed given on the date so delivered or so deposited in the mail, unless otherwise provided herein. Either party hereto may change the above address by sending written notice of such change to the other party. Either party may request in writing that such notices shall be delivered personally or by certified U.S. Mail and such request shall be honored and carried out by the other party.

16. Signatory Warranty. The signatories to this LPAFA warrant that each has the authority to enter into this LPAFA on behalf of the party represented.

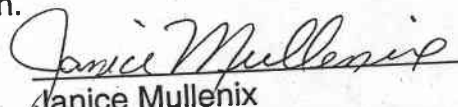
IN TESTIMONY HEREOF, the parties hereto have caused these presents to be executed in duplicate counterparts.

THE CITY

By: 
(Signature)
Name: DAN O'LEARY
(Print/Type)
Title: CITY MANAGER
(Print/Type)
Date: 5/12/05

THE STATE OF TEXAS

Executed for the Executive Director and approved for the Texas Transportation Commission for the purpose and effect of activating and/or carrying out the orders, established policies or work programs heretofore approved and authorized by the Texas Transportation Commission.

By: 
Janice Mullenix
Director of Contract Services Section
Office of General Counsel
Texas Department of Transportation
Date: May 20, 2005

CSJ: 0914-33-036, Etc.
Traffic Signal Upgrade
City of San Marcos, Hays Co.

ATTACHMENT A

**Resolution/Ordinance of The City
Approving This LPAFA**

RESOLUTION 2005- _____ R

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SAN MARCOS, TEXAS, APPROVING AN ADVANCE FUNDING AGREEMENT BETWEEN THE CITY AND THE STATE OF TEXAS ACTING THROUGH THE TEXAS DEPARTMENT OF TRANSPORTATION FOR THE TRAFFIC SIGNALS UPGRADE PROJECT; AUTHORIZING THE CITY MANAGER TO EXECUTE THIS AGREEMENT ON BEHALF OF THE CITY; AND DECLARING AN EFFECTIVE DATE.


BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SAN MARCOS, TEXAS:

PART 1. The attached Advance Funding Agreement for the Traffic Signals Upgrade Project between the City of San Marcos and the State of Texas acting through the Texas Department of Transportation (TxDOT) is approved.


PART 2. The City Manager, Dan O'Leary, is authorized to execute the agreement on behalf of the City.

PART 3. This Resolution shall be in full force and effect immediately from and after its passage.

ADOPTED on May 17, 2005.


Susan Narvaiz
Mayor

Attest:


Janis K. Womack
City Clerk

ATTACHMENT B

PROJECT BUDGET ESTIMATE AND SOURCE OF FUNDS

ON AND OFF SYSTEM PROJECT COSTS

CSJ 0914-33-036

The Local Government's participation is 50% of those costs involving work performed along On-System Roadways. (See Sheets 1 and 2 of Attachment F for breakdown of Total.) The State will be responsible for the remaining 50%.

50% of Estimated Bid Items and State Provided Materials	\$ 607,022.95
Engineering and Contingencies (11.5%)	\$ 69,807.64
Subtotal	\$ 676,830.59
Administration Costs (10%)	\$ 67,683.06
Estimated Cost of On-System Work	\$ 744,513.65

CSJ 0914-33-037

The Local Government's participation is 100% of those costs involving work performed on Off-System Locations. (See Sheets 3 and 4 of Attachment F for breakdown of Total.)

100% of Estimated Bid Items and State Provided Materials	\$ 301,782.15
Engineering and Contingencies (11.5%)	\$ 34,704.95
Subtotal	\$ 336,487.10
Administration Costs (10%)	\$ 33,648.71
Estimated Cost of Off-System Work	\$ 370,135.81

Local Government's Participation \$1,114,649.46

Engineering and Contingencies charges will be based on actual charges

Total Amount Due from Local Government upon execution of this Agreement shall be \$101,331.77. The remainder (\$1,013,317.69) will be due a minimum of sixty (60) days prior to the date set for receipt of the construction bids.

There are no Federal Funds contained within the Funding to be provided within this Project.

ATTACHMENT C

"On State Highway System Intersections"

Traffic Signal Maintenance With Reimbursement

The City shall be responsible for maintenance and operation of the following signals on a reimbursed basis:

IH 35 at LP 82/Guadalupe
IH 35 at LP 82/Aquarena Springs
IH 35 at RM 12/SH 80
IH 35 at Centerpoint Rd

The City shall be reimbursed at the following rate:

Interchange Signals shall be reimbursed at \$1,729.08 per intersection per year.

Calculations: 4 Locations x \$1,729.08 = \$6,916.32

(Billed as \$144.09 per location, per month.)

Upon completion of the project and assumption of maintenance by the City, the State agrees to reimburse the City at the flat rate shown above.

The maximum amount payable under this Agreement is \$6,916.32:

The City shall submit the State's Form 132, Billing Statement, or other type of invoice acceptable to the State on a (monthly/quarterly/annual) basis. An original Form 132 or acceptable invoice and four copies shall be submitted to the following address:
Texas Department of Transportation P.O. Box 15426 Austin, TX 78761-15426

The City shall maintain a system of records necessary to support and establish the eligibility of all claims of payment under the terms of this agreement. These records may be reviewed at any time to substantiate the payment by the State and/or determine the need for an adjustment in the amount paid by the State.

The State shall make payment to the City within 30 days from receipt of the City's request for payment, provided that the request is properly prepared.

The City and the State may renegotiate the rates established by this Agreement provided the City provides documentation that substantiates the increased costs. Such renegotiation may be accomplished through written and signed letter of acceptance.

ATTACHMENT D

“On State Highway System Intersections”

Traffic Signal Maintenance Without Reimbursement

Upon completion of construction, the City shall be responsible for maintenance and operation of the following traffic signals without reimbursement from the State: (36 Total)

LP 82 (University Dr) at Guadalupe
LP 82 (University Dr) at LBJ
LP 82 (University Dr) at Edward Gary
LP 82 (University Dr) at CM Allen Pkwy
LP 82 (Guadalupe) at Hutchison
LP 82 (LBJ) at Hutchison
LP 82 (Guadalupe) at Hopkins St
LP 82 (LBJ) at E Hopkins St
LP 82 (Guadalupe) at San Antonio
LP 82 (LBJ) at San Antonio
LP 82 (Guadalupe) at MLK Blvd
LP 82 (LBJ) at Cheatham St
LP 82 (Guadalupe) at Roosevelt St
LP 82 (University) at Pedestrian Crosswalk
LP 82 (University) at Sessom Dr
LP 82 (Aquarena Springs) at Bobcat Dr
LP 82 (Aquarena Springs) at Post Rd
LP 82 (Aquarena Springs) at Thorpe Ln
SH 80 at Clarewood Dr
SH 80 at River Rd
SH 123 at Broadway
SH 123 at Leah/De Zavala
SH 123 at Staples Rd
RM 12 at FM 2439
RM 12 (Moore St) at Hutchison
RM 12 (E Hopkins) at Bobcat Dr
RM 12 (Hopkins) at Cheatham
RM 12 (W Hopkins) at Comanche St
RM 12 (E Hopkins) at CM Allen Parkway
RM 12 (E Hopkins) at Edward Gary
RM 12 (E Hopkins) at Thorpe Ln
RM 12 (Moore) at Craddock
RM 12 (Moore) at Holland
FM 2439 (Hopkins) at Bishop
FM 2439 (Hunter) at Wonderworld
FM 2439 (Hunter) at Stagecoach

ATTACHMENT E

“Off State Highway System Intersections”

The following signals, also upgraded within this project, are off of the State Highway System and are therefore to be maintained by the City both during and after construction with no reimbursement being provided by the State for said maintenance.

Sessom at Peques
Sessom at LBJ
Sessom at Tomas Rivera
Thorpe at Robbie
Post at Uhland*

*The upgrade of the Post and Uhland signal will be performed only if railroad preemption is existing at this signal during the construction phase of this project within which the remaining forty-four (44) signals are to be upgraded.

Attachment F

CSJ: 0914-33-036, Etc.
Traffic Signal Upgrade
City of San Marcos, Hays Co.

Cost Estimate On-System Traffic Signals CSJ: 0914-33-036

ITEM NO.	DESCRIPTION	UNIT	UNIT COST	ESTIMATED QUANTITIES	SUBTOTAL COSTS
0104-0509	REMOV CONC (SDWLK)	SY	\$ 10.00	166.20	\$ 1,662.00
0500-0501	MOBILIZATION	LS	\$ 108,000.00	0.78	\$ 84,240.00
0420-0503	CL A CONC (MISC)	CY	\$ 400.00	5.00	\$ 2,000.00
0502-0501	BARRICADES, SIGNS AND TRAF HANDLE	MO	\$ 3,000.00	12.00	\$ 36,000.00
0529-0511	CONC CURB AND GUTTER (6")	LF	\$ 15.00	165.00	\$ 2,475.00
0531-0507	CONCRETE SIDEWALK (4")	SY	\$ 28.00	9.13	\$ 255.64
0618-0505	CONDUIT (RM) (2")	LF	\$ 13.00	275.00	\$ 3,575.00
0618-0511	CONDUIT (PVC) (SCHD 40) (2")	LF	\$ 4.00	1,176.00	\$ 4,704.00
0618-0513	CONDUIT (PVC) (SCHD 40) (3")	LF	\$ 5.00	412.00	\$ 2,060.00
0618-0532	CONDUIT (PVC) (SCHD 40) (2") BORE	LF	\$ 18.00	1,480.00	\$ 26,640.00
0618-0534	CONDUIT (PVC) (SCHD 40) (3") BORE	LF	\$ 17.00	3,485.00	\$ 59,245.00
0618-0542	CONDUIT (PVC) (SCHD 40) (4") BORE	LF	\$ 18.00	225.00	\$ 4,050.00
0620-0503	ELEC CONDUCTOR (NO 8) BARE	LF	\$ 0.50	6,731.00	\$ 3,365.50
0620-0504	ELEC CONDUCTOR (NO 6) BARE	LF	\$ 0.70	1,573.00	\$ 1,101.10
0620-0509	ELEC CONDUCTOR (NO 8) INSULATED	LF	\$ 0.70	1,762.00	\$ 1,233.40
0620-0510	ELEC CONDUCTOR (NO 6) INSULATED	LF	\$ 1.00	3,364.00	\$ 3,364.00
0624-0501	GROUND BOX TY A (122311) W/ APRON	EA	\$ 500.00	28.00	\$ 14,000.00
0624-0503	GROUND BOX TY C (162911) W/ APRON	EA	\$ 600.00	24.00	\$ 14,400.00
0625-0501	ZINC-COAT STL WIRE STRAND (1/4 IN)	LF	\$ 1.15	2,587.00	\$ 2,975.05
0625-0502	ZINC-COAT STL WIRE STRAND (3/8 IN)	LF	\$ 1.45	3,177.00	\$ 4,606.65
0628-0698	ELEC SERV TY D (120/240) 060 (NS) GS (N) TP (O)	EA	\$ 2,400.00	1.00	\$ 2,400.00
0628-0715	ELEC SERV TY D (120/240) 060 (NS) GS (N) EX (O)	EA	\$ 1,800.00	9.00	\$ 16,200.00
0628-0910	ELEC SERV TY D (120/240) 100 (NS) AL (E) EX (O)	EA	\$ 2,700.00	5.00	\$ 13,500.00
0656-0510	FND FOR TRAF SIG (24 IN DRIL SHFT)	LF	\$ 120.00	45.60	\$ 5,472.00
0656-0511	FND FOR TRAF SIG (30 IN DRIL SHFT)	LF	\$ 130.00	79.10	\$ 10,283.00
0656-0512	FND FOR TRAF SIG (36 IN DRIL SHFT)	LF	\$ 165.00	92.40	\$ 15,246.00
0656-0532	TRAF SIG CNTRL FND	EA	\$ 1,284.00	4.00	\$ 5,136.00
0668-0567	PREFAB PAV MARK TY C (W) (12") (SLD)	LF	\$ 4.00	1,323.00	\$ 5,292.00
0668-0570	PREFAB PAV MARK TY C (W) (24") (SLD)	LF	\$ 7.00	657.00	\$ 4,599.00
0678-0518	PAV SURF PREP FOR MRKS (BLAST CLN) (12")	LF	\$ 0.50	1,323.00	\$ 661.50
0678-0520	PAV SURF PREP FOR MRKS (BLAST CLN) (24")	LF	\$ 0.75	657.00	\$ 492.75
0680-0502	INSTAL OF HWY TRAF SIG SYSTEM	EA	\$ 2,100.00	39.00	\$ 81,900.00
0682-0509	BACK PLATE (3 SEC) (12 IN)	EA	\$ 70.00	107.00	\$ 7,490.00
0682-0510	BACK PLATE (4 SEC) (12 IN)	EA	\$ 80.00	6.00	\$ 480.00
0682-0511	BACK PLATE (5 SEC) (12 IN)	EA	\$ 90.00	20.00	\$ 1,800.00
0682-0524	VEH SIG SEC (2 IND/1 SEC) (W/O LENS & REFL)	EA	\$ 140.00	433.00	\$ 60,620.00
0682-0525	PED SIG SEC (2 IND/1 SEC) W/O LENS & REFL	EA	\$ 220.00	80.00	\$ 17,600.00
0684-0505	TRAF SIG CBL (TY A) (5 CONDR) (12 AWG)	LF	\$ 1.70	5,586.00	\$ 9,496.20
0684-0507	TRAF SIG CBL (TY A) (5 CONDR) (12 AWG)	LF	\$ 2.00	2,754.00	\$ 5,508.00
0684-0520	TRAF SIG CBL (TY A) (5 CONDR) (12 AWG)	LF	\$ 3.00	4,206.00	\$ 12,618.00
0686-0508	TRAF SIG POLE ASM (STL) 1 ARM (20 FT)	EA	\$ 2,300.00	3.00	\$ 6,900.00
0686-0509	TRAF SIG POLE ASM (STL) 1 ARM (24 FT)	EA	\$ 2,500.00	2.00	\$ 5,000.00
0686-0510	TRAF SIG POLE ASM (STL) 1 ARM (28 FT)	EA	\$ 2,700.00	1.00	\$ 2,700.00
0686-0512	TRAF SIG POLE ASM (STL) 1 ARM (36 FT)	EA	\$ 3,500.00	3.00	\$ 10,500.00
0686-0513	TRAF SIG POLE ASM (STL) 1 ARM (40 FT)	EA	\$ 3,600.00	1.00	\$ 3,600.00
0686-0529	TRAF SIG POLE ASM (STL) 2 ARM (36-32 FT)	EA	\$ 5,000.00	1.00	\$ 5,000.00
0686-0530	TRAF SIG POLE ASM (STL) 2 ARM (36-36 FT)	EA	\$ 5,300.00	1.00	\$ 5,300.00
0686-0554	TRAF SIG POLE ASM (STL) 2 ARM 36-32 LUM	EA	\$ 5,300.00	1.00	\$ 5,300.00
0686-0566	TRAF SIG POLE ASM (STL) 1 ARM (20 FT) LUM	EA	\$ 3,110.00	1.00	\$ 3,110.00

Attachment F

CSJ: 0914-33-036, Etc.
Traffic Signal Upgrade
City of San Marcos, Hays Co.

Cost Estimate On-System Traffic Signals CSJ: 0914-33-036

ITEM NO.	DESCRIPTION	UNIT	UNIT COST	ESTIMATED QUANTITIES	SUBTOTAL COSTS
0686-0576	TRAF SIG POLE ASM (8' LUM ARM)	EA	\$ 325.00	5.00	\$ 1,625.00
0688-0501	PED DETECT (PUSH BTN)	EA	\$ 100.00	28.00	\$ 2,800.00
1201-0501	12 IN LED TRF SIGNAL LAMP (RED BALL)	EA	\$ 80.00	328.00	\$ 26,240.00
1201-0502	12 IN LED TRF SIGNAL LAMP (YELLOW BALL)	EA	\$ 90.00	328.00	\$ 29,520.00
1201-0503	12 IN LED TRF SIGNAL LAMP (GREEN BALL)	EA	\$ 150.00	328.00	\$ 49,200.00
1201-0504	12 IN LED TRF SIGNAL LAMP (YEL ARW)	EA	\$ 90.00	42.00	\$ 3,780.00
1201-0505	12 IN LED TRF SIGNAL LAMP (GRN ARW)	EA	\$ 130.00	54.00	\$ 7,020.00
5012-0501	BKHOE WORK (EROSN CONT) (CL 1)	HR	\$ 25.00	10.00	\$ 250.00
5145-0504	SANDBAG BERMS/DAMS (6 IN)	LF	\$ 5.00	85.00	\$ 425.00
5249-0501	TEMP SEDMT CONT FENCE	LF	\$ 1.50	100.00	\$ 150.00
5249-0503	TEMP SEDMT CONT FENCE (REMOV)	LF	\$ 0.75	100.00	\$ 75.00
5866-0501	CURB RAMP AND LANDING (TY 1)	EA	\$ 930.00	8.00	\$ 7,440.00
5866-0506	CURB RAMP AND LANDING (TY 7)	EA	\$ 1,200.00	8.00	\$ 9,600.00
5866-0507	CURB RAMP AND LANDING (TY 8)	EA	\$ 1,200.00	2.00	\$ 2,400.00
5866-0520	CURB RAMP AND LANDING (TY 1) (MOD)	EA	\$ 1,250.00	2.00	\$ 2,500.00
5866-0501	CURB RAMP AND LANDING (TY 21)	EA	\$ 1,200.00	1.00	\$ 1,200.00
5788-0501	LANDSCAPE PAVERS	SF	\$ 4.20	78.00	\$ 327.60
6007-0501	RDWY LIGHT ON TRAF SGN POLE (250 WATT)	EA	\$ 500.00	7.00	\$ 3,500.00
6010-0501	SALVAGE TRAFFIC SIGNALS	EA	\$ 1,500.00	36.00	\$ 54,000.00
8230-0501	LED PED SIG LAMP (SYMB) (2 IND/1 SEC)	EA	\$ 290.00	151.00	\$ 43,790.00
8288-0502	ANTENNA (UNIDIRECTIONAL)	EA	\$ 200.00	42.00	\$ 8,400.00
8288-0503	ANTENNA (OMNIDIRECTIONAL)	EA	\$ 400.00	4.00	\$ 1,600.00
8288-0504	COAXIAL CABLE	LF	\$ 4.00	5,105.00	\$ 20,420.00
8524-0501	PEDESTAL POLE ASSEMBY	EA	\$ 350.00	8.00	\$ 2,800.00
8970-0505	VIVDS COMMUNICATION CABLE (COAXIAL)	LF	\$ 6.00	5,472.00	\$ 32,832.00
	PREP EXISTING CONDUIT	LF	\$ 1.50	5,663.00	\$ 8,494.50
	PREP EXISTING GROUND BOX	EA	\$ 60.00	100.00	\$ 6,000.00
	REPLACE EXISTING GROUND BOX LID	EA	\$ 80.00	25.00	\$ 2,000.00
TOTAL BID ITEMS					\$ 924,545.89

STATE PROVIDED EQUIPMENT		UNIT	UNIT COST	ESTIMATED QUANTITIES	SUBTOTAL COSTS
	TRAFFIC SIGNAL CONTROLLERS (GROUND MOUNT)	EA	\$ 6,100.00	18.00	\$ 109,800.00
	TRAFFIC SIGNAL CONTROLLERS (POLE MOUNT)	EA	\$ 5,500.00	9.00	\$ 49,500.00
	VIVDS CAMERA SYSTEMS	EA	\$ 6,400.00	11.00	\$ 70,400.00
	SPREAD SPECTRUM RADIOS	EA	\$ 1,300.00	46.00	\$ 59,800.00
TOTAL STATE PROVIDED MATERIALS					289,500.00

TOTAL BID ITEMS AND STATE PROVIDED MATERIALS (ON-SYSTEM)				1,214,045.89
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Attachment F

CSJ: 0914-33-036, Etc.
Traffic Signal Upgrade
City of San Marcos, Hays Co.

Cost Estimate Off-System Traffic Signals CSJ:0914-33-037

ITEM NO.	DESCRIPTION	UNIT	UNIT COST	ESTIMATED QUANTITIES	SUBTOTAL COSTS
0104-0509	REMOV CONC (SDWLK)	SY	\$ 10.00	21.00	\$ 210.00
0500-0501	MOBILIZATION	LS	\$ 108,000.00	0.22	\$ 23,760.00
0502-0501	BARRICADES, SIGNS AND TRAF HANDLE	MO	\$ 3,000.00	4.00	\$ 12,000.00
0618-0505	CONDUIT (RM) (2")	LF	\$ 13.00	30.00	\$ 390.00
0618-0511	CONDUIT (PVC) (SCHD 40) (2")	LF	\$ 4.00	55.00	\$ 220.00
0618-0513	CONDUIT (PVC) (SCHD 40) (3")	LF	\$ 5.00	405.00	\$ 2,025.00
0618-0532	CONDUIT (PVC) (SCHD 40) (2") BORE	LF	\$ 18.00	240.00	\$ 4,320.00
0618-0534	CONDUIT (PVC) (SCHD 40) (3") BORE	LF	\$ 17.00	945.00	\$ 16,065.00
0620-0503	ELEC CONDUCTOR (NO 8) BARE	LF	\$ 0.50	778.00	\$ 389.00
0620-0504	ELEC CONDUCTOR (NO 6) BARE	LF	\$ 0.70	290.00	\$ 203.00
0620-0509	ELEC CONDUCTOR (NO 8) INSULATED	LF	\$ 0.70	1,070.00	\$ 749.00
0620-0510	ELEC CONDUCTOR (NO 6) INSULATED	LF	\$ 1.00	580.00	\$ 580.00
0624-0501	GROUND BOX TY A (122311) W/ APRON	EA	\$ 500.00	7.00	\$ 3,500.00
0624-0503	GROUND BOX TY C (162911) W/ APRON	EA	\$ 600.00	10.00	\$ 6,000.00
0628-0715	ELEC SERV TY D (120/240) 060 (NS) GS (N) EX (O)	EA	\$ 1,800.00	1.00	\$ 1,800.00
0628-0910	ELEC SERV TY D (120/240) 100 (NS) AL (E) EX (O)	EA	\$ 2,700.00	2.00	\$ 5,400.00
0656-0510	FND FOR TRAF SIG (24 IN DRIL SHFT)	LF	\$ 120.00	11.40	\$ 1,368.00
0656-0511	FND FOR TRAF SIG (30 IN DRIL SHFT)	LF	\$ 130.00	57.20	\$ 7,436.00
0656-0512	FND FOR TRAF SIG (36 IN DRIL SHFT)	LF	\$ 165.00	26.40	\$ 4,356.00
0656-0532	TRAF SIG CNTRL FND	EA	\$ 1,284.00	2.00	\$ 2,568.00
0668-0567	PREFAB PAV MARK TY C (W) (12") (SLD)	LF	\$ 4.00	453.00	\$ 1,812.00
0668-0570	PREFAB PAV MARK TY C (W) (24") (SLD)	LF	\$ 7.00	159.00	\$ 1,113.00
0678-0518	PAV SURF PREP FOR MRKS (BLAST CLN) (12")	LF	\$ 0.50	453.00	\$ 226.50
0678-0520	PAV SURF PREP FOR MRKS (BLAST CLN) (24")	LF	\$ 0.75	159.00	\$ 119.25
0680-0502	INSTAL OF HWY TRAF SIG SYSTEM	EA	\$ 2,100.00	5.00	\$ 10,500.00
0682-0509	BACK PLATE (3 SEC) (12 IN)	EA	\$ 70.00	17.00	\$ 1,190.00
0682-0511	BACK PLATE (5 SEC) (12 IN)	EA	\$ 90.00	4.00	\$ 360.00
0682-0524	VEH SIG SEC (2 IND/1 SEC) (W/O LENS & REFL)	EA	\$ 140.00	71.00	\$ 9,940.00
0682-0525	PED SIG SEC (2 IND/1 SEC) W/O LENS & REFL	EA	\$ 220.00	10.00	\$ 2,200.00
0684-0505	TRAF SIG CBL (TY A) (5 CONDR) (12 AWG)	LF	\$ 1.70	667.00	\$ 1,133.90
0684-0507	TRAF SIG CBL (TY A) (5 CONDR) (12 AWG)	LF	\$ 2.00	406.00	\$ 812.00
0684-0520	TRAF SIG CBL (TY A) (5 CONDR) (12 AWG)	LF	\$ 3.00	730.00	\$ 2,190.00
0686-0508	TRAF SIG POLE ASM (STL) 1 ARM (20 FT)	EA	\$ 2,300.00	1.00	\$ 2,300.00
0686-0509	TRAF SIG POLE ASM (STL) 1 ARM (24 FT)	EA	\$ 2,500.00	1.00	\$ 2,500.00
0686-0512	TRAF SIG POLE ASM (STL) 1 ARM (36 FT)	EA	\$ 3,500.00	1.00	\$ 3,500.00
0686-0569	TRAF SIG POLE ASM (STL) 1 ARM (32 FT) LUM	EA	\$ 3,650.00	2.00	\$ 7,300.00
0686-0570	TRAF SIG POLE ASM (STL) 1 ARM (36 FT) LUM	EA	\$ 3,800.00	1.00	\$ 3,800.00
0688-0501	PED DETECT (PUSH BTN)	EA	\$ 100.00	4.00	\$ 400.00
1201-0501	12 IN LED TRF SIGNAL LAMP (RED BALL)	EA	\$ 80.00	40.00	\$ 3,200.00
1201-0502	12 IN LED TRF SIGNAL LAMP (YELLOW BALL)	EA	\$ 90.00	40.00	\$ 3,600.00
1201-0503	12 IN LED TRF SIGNAL LAMP (GREEN BALL)	EA	\$ 150.00	40.00	\$ 6,000.00
1201-0504	12 IN LED TRF SIGNAL LAMP (YEL ARW)	EA	\$ 90.00	8.00	\$ 720.00
1201-0505	12 IN LED TRF SIGNAL LAMP (GRN ARW)	EA	\$ 130.00	8.00	\$ 1,040.00
5012-0501	BKHOE WORK (EROSN CONT) (CL 1)	HR	\$ 25.00	10.00	\$ 250.00
5145-0504	SANDBAG BERMS/DAMS (6 IN)	LF	\$ 5.00	20.00	\$ 100.00
5249-0501	TEMP SEDMT CONT FENCE	LF	\$ 1.50	100.00	\$ 150.00
5249-0503	TEMP SEDMT CONT FENCE (REMOV)	LF	\$ 0.75	100.00	\$ 75.00
5866-0501	CURB RAMP AND LANDING (TY 1)	EA	\$ 930.00	1.00	\$ 930.00
5866-0504	CURB RAMP AND LANDING (TY 4)	EA	\$ 1,350.00	1.00	\$ 1,350.00
5866-0506	CURB RAMP AND LANDING (TY 7)	EA	\$ 1,200.00	1.00	\$ 1,200.00
5866-0507	CURB RAMP AND LANDING (TY 8)	EA	\$ 1,200.00	1.00	\$ 1,200.00

Attachment F

CSJ: 0914-33-036, Etc.
Traffic Signal Upgrade
City of San Marcos, Hays Co.

Cost Estimate Off-System Traffic Signals CSJ:0914-33-037

ITEM NO.	DESCRIPTION	UNIT	UNIT COST	ESTIMATED QUANTITIES	SUBTOTAL COSTS
6007-0501	RDWY LIGHT ON TRAF SGN POLE (250 WATT)	EA	\$ 500.00	3.00	\$ 1,500.00
6010-0501	SALVAGE TRAFFIC SIGNALS	EA	\$ 1,500.00	5.00	\$ 7,500.00
8230-0501	LED PED SIG LAMP (SYMB) (2 IND/1 SEC)	EA	\$ 290.00	18.00	\$ 5,220.00
8288-0502	ANTENNA (UNIDIRECTIONAL)	EA	\$ 200.00	7.00	\$ 1,400.00
8288-0503	ANTENNA (OMNIDIRECTIONAL)	EA	\$ 400.00	2.00	\$ 800.00
8288-0504	COAXIAL CABLE	LF	\$ 4.00	789.00	\$ 3,156.00
8288-0505	HELIAX CABLE	LF	\$ 4.25	750.00	\$ 3,187.50
8524-0501	PEDESTAL POLE ASSEMBY	EA	\$ 350.00	2.00	\$ 700.00
8975-0505	VIVDS COMMUNICATION CABLE (COAXIAL)	LF	\$ 6.00	1,108.00	\$ 6,648.00
	PREP EXISTING CONDUIT	EA	\$ 1.50	600.00	\$ 900.00
	PREP EXISTING GROUNDBOX	EA	\$ 60.00	7.00	\$ 420.00
	SOLAR POWER ASSEMBLY	EA	\$ 1.00	3,000.00	\$ 3,000.00
	60 FT COMMUNICATIONS POLE STRUCTURE	EA	\$ 15,000.00	1.00	\$ 15,000.00
	TRAFFIC CONTROL SYSTEM	LS	\$ 45,000.00	1.00	\$ 45,000.00
TOTAL BID ITEMS					\$ 258,982.15

STATE PROVIDED EQUIPMENT	UNIT	UNIT COST	ESTIMATED QUANTITIES	SUBTOTAL COSTS
TRAFFIC SIGNAL CONTROLLERS (GROUND MOUNT)	EA	\$ 6,100.00	3.00	\$ 18,300.00
TRAFFIC SIGNAL CONTROLLERS (POLE MOUNT)	EA	\$ 5,500.00	0.00	\$ -
VIVDS CAMERA SYSTEMS	EA	\$ 6,400.00	2.00	\$ 12,800.00
SPREAD SPECTRUM RADIOS	EA	\$ 1,300.00	9.00	\$ 11,700.00
TOTAL STATE PROVIDED MATERIALS				42,800.00

TOTAL BID ITEMS AND STATE PROVIDED MATERIALS (OFF-SYSTEM)	301,782.15
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ATTACHMENT G

MAINTENANCE AND OPERATION PROVISIONS

1. The City shall be responsible for maintenance and operation of the traffic signals, and integrated traffic control system, upon the completion of construction operations.
2. All repairs shall be prioritized based upon public safety and made as soon as possible. Delays in response or repairs may be grounds for termination of this Agreement. The City shall maintain a complete log of all emergency calls and all routine maintenance.
3. In maintaining and operating the traffic signals within this Agreement, the City agrees to perform such maintenance and operations in accordance with the minimum requirements that follow:
 - A. Unless specifically noted elsewhere in this agreement, the signal timing and operational phasing shall be the responsibility of the City.
 - B. Inspect the highway traffic signal system a minimum of once every 12 months and replace burned out lamps or damaged sockets as may be required. Police, citizen, or other reports of burned out lamps or other damage, which could jeopardize safety, shall be repaired or replaced as soon as possible after the report, depending on the nature of the report. Otherwise, appropriate steps shall be taken to protect the public. The reflector and lens should be cleaned each time a lamp is replaced. All replacement lamps shall equal the wattage and type of the existing lamp.
 - C. Keep signal poles, controller pedestals, and foundations in alignment.
 - D. Keep signal poles and controller cabinets tight on their foundation(s) or pedestal(s).
 - E. Keep traffic and pedestrian signal heads aligned and properly adjusted. Repair back plates where needed.
 - F. Check the controllers, conflict monitors, detector units, relays, pedestrian push buttons, and detectors a minimum of once every 12 months to ascertain that they are functioning properly and make all necessary repairs and replacements.
 - G. Keep interior of controller cabinets in a neat and clean condition at all times.
 - H. Clean reflectors, lenses, and lamps a minimum of once every twelve months.
 - I. Repaint all corrosive susceptible highway traffic signal components exposed to weather with a non-lead based paint as needed in order to maintain a well kept appearance in the opinion of the Texas Department of Transportation's representative. Plastic signal heads and galvanized and aluminum components are excluded.
 - J. Either replace the lamps of all highway traffic signal heads as a group upon expiration of the average rated lamp life or replace the lamps on a burn out basis.

- K. Repair or replace any and all equipment that malfunctions or is damaged.
- L. Provide alternate traffic control during a period of failure or when the controller must be repaired. This may be accomplished through installation of a spare controller, placing the intersection on flash, manually operating the controller, or manually directing traffic through the use of proper authorities. In addition, barricades and warning signs shall be provided in accordance with the requirements of the latest edition of the *Texas Manual on Uniform Traffic Control Devices*.
- M. Provide maintenance personnel trained in the maintenance of traffic signal equipment who will be available to respond to emergency calls from authorized parties 24 hours a day, including Saturdays, Sundays, and holidays.
- N. Provide the State and local law enforcement agencies the location and respective names and telephone numbers of individuals responsible for emergency maintenance.
- O. Document routine observations during the year by trained City personnel of the traffic signal operation at each traffic signal during various times of the day to assure fair distribution of time and for all traffic movements (phases) during varying traffic conditions.
- P. Check cabinet filter a minimum of once every six months and clean if necessary cabinet filter shall be replaced every two years.
- Q. Document all checks and corrective actions in a separate logbook for each intersection.
- R. In metropolitan cities where Intelligent Transportation Systems and/or incident management systems are being implemented the signal timing will be the responsibility of the City in cooperation with the Texas Department of Transportation.

Traffic accidents, inclement weather, special events, maintenance, and construction activities are a few of the causes of nonrecurrent congestion. Nonrecurrent congestion often changes the normal traffic demand patterns. Effective and efficient movement of traffic through the transportation network during periods of nonrecurrent congestion must be considered in the design and operation of all traffic management systems, including traffic signal systems. Priority should be given to freeway or expressway frontage roads when nonrecurrent congestion occurs on freeway or expressway main lanes.

INTERLOCAL COOPERATION AGREEMENT
CITY OF AUSTIN AND CAPITAL METROPOLITAN TRANSPORTATION AUTHORITY
TRAFFIC SIGNAL PRIORITY SYSTEM

STATE OF TEXAS

COUNTY OF TRAVIS

This Interlocal Cooperation Agreement ("Agreement") is entered into by and between the City of Austin ("City"), a Texas home rule municipal corporation, and the Capital Metropolitan Transportation Authority ("Capital Metro"), a transportation authority and political subdivision of the State of Texas organized under Chapter 451 of the Texas Transportation Code, collectively referred to as the "Parties". This Agreement is allowed under Section 791 of the Texas Government Code.

WHEREAS, the Parties now desire to cooperate in the development and implementation of a GPS enabled route preemption and priority system that will permit the traffic signal control system within the city of Austin to provide priority treatment for buses on Bus Rapid Transit (BRT) routes in order to improve travel times in the City of Austin, Texas (hereinafter collectively referred to as the "Project");

WHEREAS, the City understands that Capital Metro has received federal funding to provide BRT service; the receipt of such funding is contingent upon BRT service use of a traffic signal priority system; and under this Agreement the City will provide traffic signal priority operation for BRT service no later than February 28, 2013; and

NOW, THEREFORE, in consideration of mutual covenants and agreements contained herein, the Parties agree to the terms and conditions herein:

1. Project Management

- (a) The Director of the City's Transportation Department (the "Director") will act on behalf of the City with respect to the Project, coordinate with Capital Metro, receive and transmit information and instructions, and will have complete authority to interpret and define the City's policies and decisions with respect to the Project. The Director will designate a Project Manager and may designate other representatives to transmit instructions and act on behalf of the City with respect to the Project.
- (b) The terms of this Agreement are subject to review and approval of the Capital Metro Board of Directors. Upon approval of the Board of Director, the Capital Metro President / CEO (the "President/CEO") or her designee will act on behalf of Capital Metro with respect to the Project, coordinate with the City, receive and transmit information and instructions, and will have complete authority to interpret and define Capital Metro's policies and decisions with respect to the Project. The President/CEO may designate a Capital Metro Project Manager and may designate other representatives to transmit instructions and act on behalf of Capital Metro with respect to the Project.

2. Project Description

The objective of the Project, under this Agreement, is to provide traffic signal priority operation for buses operating BRT service on Capital Metro BRT routes by February 28, 2013 ("Objective"). City understands the importance of meeting dates established in this Agreement and will work with Capital Metro to attain this Objective.

City and Capital Metro have performed a preliminary review of the Project Objective and the methods necessary to achieve the Objective. The anticipated methodologies for providing the traffic signal operation for buses includes the following:

- (a) Method 1: A GPS-enabled Route Preemption & Priority feature in the new Advanced Traffic Management System (ATMS) software and utilizing the existing traffic signal communication system between the traffic management center (TMC) and the individual intersections,
- (b) Method 2: A GPS-enabled Route Preemption & Priority module in the new ATMS software and utilizing a wireless traffic signal communication system between the TMC and intersections selected for BRT signal priority operation,
- (c) Method 3: An optically based priority system such as the system currently in use by Fire and EMS emergency vehicles for intersections selected for BRT signal priority operation, or
- (d) Method 4: A combination of some or all of the above Methods.

3. Project Development

- (a) The City will procure new ATMS software with traffic signal priority (TSP) capabilities to control traffic remotely from the TMC and contract for service to implement the ATMS software (System Integrator).
- (b) The solicitation for ATMS software will include a GPS-enabled Route Preemption and Priority Treatment feature. This feature will allow the location of buses to be tracked in real time and provide capability for the traffic signal control system to extend a green traffic signal indication as a bus approaches the signal thus minimizing stops and delays at signalized intersections.
- (c) Acceptance and use of the GPS priority operation will occur only after its successful procurement, installation, integration, and pilot testing. The System Integrator must demonstrate full functionality of the GPS-enabled Route Pre-emption and Priority feature before it is accepted and scheduled for full implementation.

4. Project Costs.

- (a) The City shall be responsible for all costs associated with the acquisition, design, installation, integration and testing of the ATMS software and any associated hardware. This does not include Capital Metro vehicle components installed on Capital Metro buses or any costs associated with operating the buses during priority feature testing.
- (b) Capital Metro shall reimburse City a total of Two Hundred Ten Thousand Dollars and No/100 (\$210,000.00) toward the cost of the traffic signal priority feature of the new ATMS software, the services of the System Integrator and the system components under Method 1. Capital Metro shall make three (3 equal payments) to City using the schedule established below:
 - (1) Seventy Thousand Dollars and No/100 (\$70,000) upon Capital Metro's acceptance of the work plan, schedule, and design but not later than thirty (30) calendar days after the work plan is submitted to Capital Metro;
 - (2) Seventy Thousand Dollars and No/100 (\$70,000) upon successful completion of pilot testing using the ATMS with BRT signal priority feature; and
 - (3) Seventy Thousand Dollars and No/100 (\$70,000) within 30 days after signal priority operation is available at all intersections selected for signal priority operation along the active BRT route(s).

- (c) Section 4(b) assumes that the traffic signal priority feature will be implemented by the City's System Integrator by February 28, 2013 using the new ATMS software and the existing signal communication network as listed in 2(a) under Method 1. If Method 2 is used to provide the traffic signal priority feature, Capital Metro shall reimburse the City a total of Two Hundred Seventy-Five Thousand Dollars and No/100 (\$275,000.00) in 3 equal payments using the same schedule as Method 1. If Method 3 is used to provide the traffic signal priority feature, Capital Metro shall reimburse the City a total of Two Hundred Eighty-Five Thousand Dollars and No/100 (\$285,000.00) in 3 equal payments using the same schedule as Method 1. If Method 4 is used to provide the traffic signal priority feature, Capital Metro shall reimburse the City a total of Two Hundred Seventy-Five Thousand Dollars and No/100 (\$275,000.00) in 3 equal payments using the same schedule as Method 1.
- (i) Following activation and full functionality of a signal priority operation feature that meets the minimum performance standards of the City's solicitation and as evidenced by Capital Metro's acknowledgement of same, Capital Metro will pay an annual traffic signal timing maintenance fee to the City. Capital Metro's acknowledgement will not be unreasonably withheld. If Method 1 or Method 2 are used Capital Metro shall pay Three Hundred Dollars (\$300.00) for each intersection along all BRT routes that is programmed with traffic signal priority software and used by buses on the BRT routes.
 - (ii) If Method 3 is used, Capital Metro shall pay Five Hundred Fifty Dollars and No/100 (\$550.00) for each intersection along all BRT routes that is programmed using an optical based signal priority system. This fee includes the costs of all hardware associated with the signal priority operation, including the optical detectors; field wiring between the detectors and the controller cabinet; and the priority control equipment installed in the controller cabinet. If an intersection equipped with optically based signal priority equipment is converted to ATMS signal priority operation, the annual fee for that intersection will be adjusted to \$300.00.
 - (iii) Capital Metro shall pay all maintenance fees on a quarterly basis with the first payment being prorated and due on or before the last day of the month following the end of the first fiscal quarter following activation of the system..
 - (iv) If the total number of signalized intersections along a BRT route changes within a quarter, or the type signal priority operation changes between optically based and ATMS based, such changes will be reflected in the next quarterly payment calculation. No costs, or credits, will be applied for signalized intersections that are added, deleted, or changed during the quarter in which it is added, deleted, or changed. All adjustments to costs will be made the following quarter after the addition, deletion, or change.

(e) Hardware/software Maintenance

The Parties agree that communication between Capital Metro BRT buses and the City's traffic signal control system is essential for BRT signal operations. The Parties agree to the following:

- (1) The City shall maintain the traffic signal control system software, the hardware installed at the TMC, the signalized intersections, and the communications system between the TMC and the signalized intersections.
- (2) Capital Metro shall maintain all hardware and software installed on the buses used to provide bus location, direction of travel, and related information to the

City's traffic signal control system needed to provide for BRT signal priority operation

5. Procurement and Integration.

- (a) The City will procure the new ATMS central software for the City's TMC in accordance with City procedures and with any applicable state and local requirements.
- (b) Capital Metro may have a staff member present during the presentations by selected proposers.
- (c) The City will use input and advice from Capital Metro to evaluate and make a determination regarding the selection of the System Integrator.
- (d) The City and its System Integrator will coordinate with Capital Metro to develop the specifications for the necessary hardware and software to be used on the Capital Metro buses to ensure that this hardware and software is compatible with the new ATMS software. The GPS-enabled Route Preemption and Priority Treatment feature will utilize existing Capital Metro equipment and software to the extent practicable.
- (e) Capital Metro will procure, install, and make fully functional all hardware and software needed to determine and provide bus location, direction of travel, and other needed information that must be communicated to the City's traffic signal control system software.
- (f) The City will install and test the new traffic signal control system software for the TMC.
- (g) The City will activate the GPS-enabled preemption and priority feature using the data provided by equipment and software installed on Capital Metro buses. The City will also make necessary timing changes to ensure the proper operation of the system.
- (h) The Parties shall coordinate the testing of the BRT system, and provide written acceptance when the system is functioning correctly.

6. Project Schedule

City is currently procuring services for the System Integrator and, accordingly, specific project dates cannot be firmly established, but may be approximated for the purposes of this Agreement. The following dates and time periods are included in this agreement based on the information currently available; dates and times included herein are subject to change as more information is collected. Any necessary revisions to schedule will be included in the final project plan and mutually agreed to by the Parties to this Agreement.

- (a) The City will provide Capital Metro with a work plan and schedule for the ATMS software installation and signal priority feature within 60 days of the date of the Notice to Proceed (NTP) that is issued to the System Integrator.
- (b) After the work plan and schedule has been submitted to Capital Metro, the City will provide monthly status reports and updates to Capital Metro.
- (c) The desired time frame to complete the installation and pilot testing of the new ATMS software features for traffic signal control and BRT signal priority is within nine (9) months of the date of the Notice to Proceed. However, the City understands that Capital Metro's anticipated system readiness date for BRT service is February 28, 2013, so the City will work with its System Integrator to complete the installation and pilot test of the signal priority features no later than May 31, 2012.

The May 31, 2012 date is not subject to change unless Capital Metro, in writing, changes the system readiness date for BRT service. In the event Capital Metro changes the system readiness to a date occurring after February 28, 2013, the May 31, 2012 date

will be adjusted to a later date by the same number of days as the system readiness date adjustment. In the event Capital Metro changes the system readiness date to a date occurring before February 28, 2013, the May 31, 2012 date will not be adjusted unless Capital Metro requests and the City provides written agreement to an adjustment to this date to an earlier date.

- (d) In the event City has not completed the installation and successful pilot test of the BRT signal priority feature by May 31, 2012, an alternative method may be utilized by the City to provide signal priority for buses on BRT routes to Capital Metro by February 28, 2013. If City cannot complete the installation and successfully pilot test the signal priority feature on or before May 31, 2012, City shall notify Capital Metro in advance that an alternative method is necessary. The nine (9) month lead time, mentioned above, includes the estimated time reasonably necessary to implement an alternative method for providing the signal priority feature.

7. Alternative Methods of Providing Signal Priority Feature

Notwithstanding anything in this Agreement to the contrary, Capital Metro reserves the right, in its sole discretion, to request an alternative method be used to provide BRT signal priority operation, if any of the following occurs:

- (a) The Work Plan, schedule, or design proposed by the System Integrator is deemed unacceptable by Capital Metro;
- (b) Determination by Capital Metro that the on-board vehicle requirements specified by the System Integrator are too expensive or unacceptable; or
- (c) City has not successfully completed the pilot testing using new ATMS software signal priority feature through the existing communication system by May 31, 2012, provided that, if such testing is then underway, the Parties will meet to determine the best course of action.

If Capital Metro requests that an alternative method be used to provide BRT signal priority operation, the Parties shall meet to review the Project progress to date. The Parties shall evaluate whether continued work on providing signal priority operation using the new ATMS software and existing traffic signal communication system between the TMC and the individual intersections will result in a system that provides BRT signal priority operation by February 28, 2013. If it is agreed that such operation cannot, or likely will not, be operational on that date, the Parties shall mutually consider possible alternatives and determine which alternative, or combination of alternatives will be pursued.

In the event an alternative method is used to provide all, or any portion, of traffic signal priority operation for BRT service, the City will migrate, at no cost, the Capital Metro BRT service TSP operations to the fiber optic based traffic signal priority system identified in Section 2 above, when that system is activated for TSP operations.

8. De-activation of the priority system.

The City, in its reasonable discretion, reserves the right to disconnect the priority operation feature from the traffic signals should any problem or problems arise that negatively affects the traffic signals or is considered to pose a possible hazard. The City will notify Capital Metro of any problems with the priority system that may affect the signals or any associated signal equipment. If it is determined that the source of the problem is with hardware or software used to provide bus location and direction of travel information to the City's traffic signal control system software, Capital Metro shall identify and correct the problems, as applicable. If it is determined that the source of the problem is with the City's traffic signal control system software, the City shall identify and correct the problems, as applicable.

Regardless of the source of the problem, the City may, in its reasonable discretion, disconnect the preemption system from the signals or equipment without advance notice to Capital Metro until the problem has been identified and corrected. Notice of any disconnection shall be provided by the City to Capital Metro as soon as practicable. Upon correction of the problem the priority operation feature shall be promptly re-connected and service restored by the City.

9. Miscellaneous

- (a) Force Majeure. In the event that the performance by either Party is interrupted or delayed by any occurrence not occasioned by its own conduct, whether such occurrence be an act of God, or the common enemy, or the result of war, riot, civil commotion, sovereign conduct, or the act of conduct of any person or persons not a party or privy hereto, then it will be excused from such performance for such period of time as it reasonably necessary after such occurrence to remedy the effects hereto.
- (b) Notice. Any notice given hereunder by either party to the other will be in writing and may be effected by personal delivery in writing or by registered or certified mail, return receipt requested when mailed to the proper party, at the following addresses:

CITY: Ali Mozdbar, Project Manager
City of Austin
Transportation Department
1501 Toomey Road
Austin, Texas 78704

WITH COPY TO:
City of Austin Law Department
P.O. Box 1088
Austin, Texas 78767

CAPITAL METRO: Ken Cartwright, PMP, Office of Strategic Management
Capital Metro
2910 East 5th Street
Austin, Texas 78702

WITH COPY TO: Elaine Timbes, EVP and Chief Operating Officer
Capital Metro
2910 East 5th Street
Austin, Texas 78702

- (c) Number and Gender Defined. As used in this Agreement, whenever the context so indicates, the masculine, feminine, or neuter gender and the singular or plural number will each be deemed to include the others.
- (d) Entire Agreement. This Agreement represents the complete and entire agreement between the Parties respecting the matters addressed herein, and supersedes all prior negotiations, agreements, representations, and understanding, if any, between the parties respecting the construction of the Project. Except as expressly provided herein, this Agreement may not be modified, discharged, or changed in any respect whatsoever except by a further agreement in writing duly executed by authorized representatives of the Parties. No official, representative, agent, or employee of Capital Metro, has any authority to modify this Agreement, except pursuant to such express authority as may be granted by the Capital Metro Board of Directors and the Austin City Council.

- (e) Effective Date. This Agreement takes effect upon the date of the last Party to sign. This Agreement will automatically renew from year to year until terminated and the completion of any litigation or other matters surviving the termination of the Project.
- (f) Other Instruments. The parties hereto covenant and agree that they will execute other and further instruments and documents as may become necessary or convenient to effectuate and carry out the purposes of this Agreement.
- (g) Invalid Provision. Any clause, sentence, provision, paragraph, or article of this agreement held by a court of competent jurisdiction to be invalid, illegal, or ineffective will not impair, invalidate, or nullify the remainder of this Agreement," but the effect thereof will be confined to the clause, sentence, provision, paragraph, or article so held to be invalid, illegal, or ineffective.
- (h) Severability. The provisions of this Agreement are severable and, in the event that any portion of this Agreement is found to be invalid or unconstitutional for any reason, the remainder of this Agreement will not be affected and this Agreement will be construed as if it had never contained such invalid or unconstitutional provision.

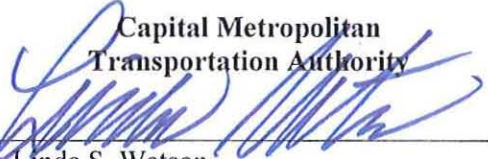
10. Current Funds and Federal Funds.

As provided in this Agreement, the Parties must make payments for governmental functions or services from current revenue available to the paying party. Capital Metro will not use federal funds to pay for services under this Agreement. The City may use federal funds to pay for services under this Agreement.

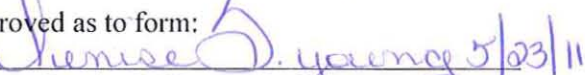
11. Signatories

This Agreement is hereby accepted and agreed to by the following individuals or officers who are duly authorized to bind the Parties as set forth above:

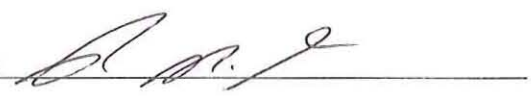
**Capital Metropolitan
Transportation Authority**

By: 
Linda S. Watson
President/CEO


Date: 5/24/11

Approved as to form:
By: 
Denise S. Young, Staff Attorney

City of Austin

By: 
Assistant City Manager, City of Austin

Date: 6/1/11

Approved as to form:
By: 
Assistant City Attorney

APPENDIX F – ARCHITECTURE MAINTENANCE DOCUMENTATION FORM

Austin Regional ITS Architecture

Architecture Maintenance Documentation Form

Please complete the following questionnaire to document changes to the Austin Regional ITS Architecture. Modifications will be made during the next update of the Regional ITS Architecture.

Contact Information

Agency	
Agency Contact Person	
Street Address	
City	
State, Zip Code	
Telephone	
Fax	
E-Mail	

Change Information

Please indicate the type of change to the Regional ITS Architecture or Deployment Plan:

- Administrative Change:** Basic changes that do not affect the structure of the ITS service packages in the Regional ITS Architecture.
Examples include: Changes to stakeholder or element name, element status, or data flow status.
- Functional Change: Single Agency:** Structural changes to the ITS service packages that impact only one agency in the Regional ITS Architecture.
Examples include: Addition of a new ITS service package or changes to data flow connections of an existing ITS service package. The addition or changes would only impact a single agency.
- Functional Change: Multiple Agencies:** Structural changes to the ITS service packages that have the potential to impact multiple agencies in the Regional ITS Architecture.
Examples include: Addition of a new ITS service package or changes to data flow connections of an existing ITS service package. The addition or changes would impact multiple agencies and require coordination between the agencies.
- Project Change:** Addition, modification, or removal of a project in the Regional ITS Deployment Plan.
- Other:** _____

Submittal

Please submit ITS Architecture Maintenance Documentation form to one of the following agencies:

CAMPO – Submit form to CAMPO for changes related to projects located in Bastrop, Burnet, Caldwell, Hays, Travis, and Williamson Counties

TxDOT Austin District – Submit form to TxDOT Austin District for changes related to projects located in Blanco, Gillespie, Lee, Llano, and Mason Counties

Form Submittal Date: _____

Austin Regional ITS Architecture

Architecture Maintenance Documentation Form

<p>Question 1 Describe the requested change to the Regional ITS Architecture or Deployment Plan.</p>	
<p>Question 2 Are any of the Regional ITS Architecture service packages impacted by the proposed change?</p>	<p><input type="checkbox"/> Yes: Please complete Questions 2A and 2B <input type="checkbox"/> No: Please proceed to Question 3 <input type="checkbox"/> Unknown: Please coordinate with the TxDOT Austin District or CAMPO to determine the impacts of proposed change on the Regional ITS Architecture</p>
<p><i>Question 2A</i> <i>List all of the ITS service packages impacted by the proposed change.</i></p>	
<p><i>Question 2B</i> <i>Include a copy of the ITS service packages impacted by the proposed change and mark any proposed modifications to the ITS service packages. Add any additional notes on proposed changes in this section.</i></p>	
<p>Question 3 Does the proposed change impact any stakeholder agencies other than the agency completing this form?</p>	<p><input type="checkbox"/> Yes: Please complete Questions 3A and 3B <input type="checkbox"/> No: Form is complete <input type="checkbox"/> Unknown: Please coordinate with the TxDOT Austin District or CAMPO to determine the impacts of proposed change on the Regional ITS Architecture</p>
<p><i>Question 3A</i> <i>Identify the stakeholder agencies impacted by the change and a contact person for each agency.</i></p>	
<p><i>Question 3B</i> <i>Describe the coordination that has occurred with the stakeholder agencies and the results of the coordination?</i></p>	

Austin Regional ITS Architecture

Architecture Maintenance Documentation Form

Example of Completed Documentation Form

<p>Question 1 Describe the requested change to the Regional ITS Architecture or Deployment Plan.</p>	<p><i>Example: City A is planning to deploy CCTV cameras for network surveillance on arterial streets. In the Regional ITS Architecture, the City A Traffic Operations Center (TOC) is shown as the only center controlling the CCTV cameras. The City A TOC is now planning to provide images and control of the CCTV cameras to the City A Police Department for use during incidents.</i></p>
<p>Question 2 Are any of the Regional ITS Architecture service packages impacted by the proposed change?</p>	<p><input checked="" type="checkbox"/> Yes: Please complete Questions 2A and 2B <input type="checkbox"/> No: Please proceed to Question 3 <input type="checkbox"/> Unknown: Please coordinate with the TxDOT Austin District or CAMPO to determine the impacts of proposed change on the Regional ITS Architecture</p>
<p>Question 2A <i>List all of the ITS service packages impacted by the proposed change.</i></p>	<p><i>Example: ATMS08 – Traffic Incident Management System ATMS01 – Network Surveillance</i></p>
<p>Question 2B <i>Include a copy of the ITS service packages impacted by the proposed change and mark any proposed modifications to the ITS service packages. Add any additional notes on proposed changes in this section.</i></p>	<p><i>Example: A sketch of the ATMS08 – Traffic Incident Management System ITS service package diagram for City A is attached. Changes have been marked by hand to indicate the new data connections that will be established to allow the City A TOC to send traffic images to the City A Police Department, and for the City A Police Department to control the CCTV cameras. The deployment of the CCTV cameras will also result in several of the data flows in ATMS01 – Network Surveillance being changed from planned to existing. These have also been marked on the ITS service package diagram. (Note: The ITS service package diagrams can be found in Appendix B of the Regional ITS Architecture.)</i></p>
<p>Question 3 Does the proposed change impact any stakeholder agencies other than the agency completing this form?</p>	<p><input checked="" type="checkbox"/> Yes: Please complete Questions 3A and 3B <input type="checkbox"/> No: Form is complete <input type="checkbox"/> Unknown: Please coordinate with the TxDOT Austin District or CAMPO to determine the impacts of the proposed change on the Regional ITS Architecture</p>
<p>Question 3A <i>Identify the stakeholder agencies impacted by the change and a contact person for each agency.</i></p>	<p><i>Example: The City A TOC and City A Police Department are the two agencies impacted by this change. (Note: Assuming the City A TOC representative is completing this form, the contact person from the City A Police Department working on this project should be listed.)</i></p>
<p>Question 3B <i>Describe the coordination that has occurred with the stakeholder agencies and the results of the coordination?</i></p>	<p><i>Example: The City A TOC and City A Police Department have had several meetings in the last year to discuss the operations of the arterial CCTV cameras. An agreement for the joint operations of the CCTV cameras is currently being developed.</i></p>