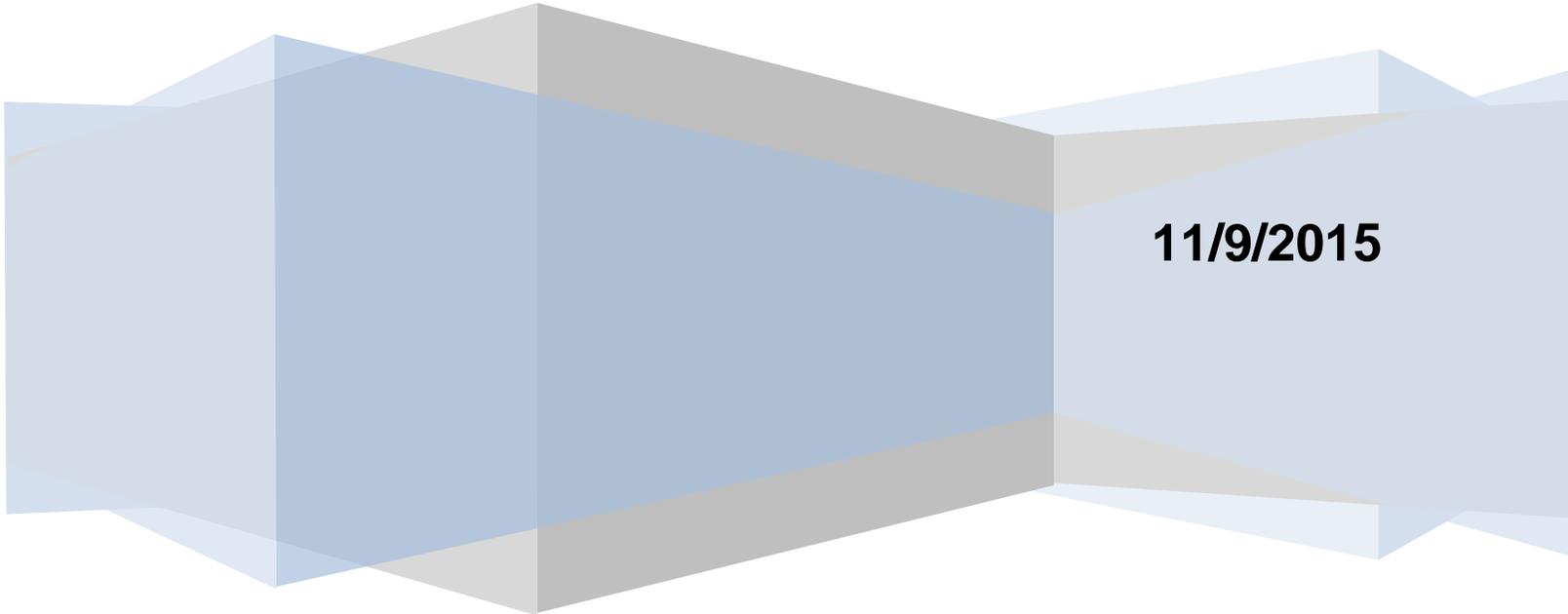


Flint Hills Regional ITS Architecture

Turbo Architecture Report



11/9/2015

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1 Introduction

The Flint Hills Regional Intelligent Transportation Systems (ITS) Architecture is a roadmap for the deployment and integration of ITS in the Flint Hills Metropolitan Planning Organization (FHMPPO) planning area for the next ten years. The FHMPPO planning area, defined as the region in this Architecture, geographically covers portions of Riley County, Geary County, and Pottawatomie County in Kansas. The Flint Hills Regional ITS Architecture provides a framework for institutional agreements and technical integration of ITS implementation projects in the region. It describes the “big picture” for ITS deployment in terms of individual ITS components that will perform the functions necessary to deliver the desired needs. It supports effective and efficient deployment of transportation and ITS projects that address the transportation problems and needs in the region.

The Flint Hills Regional ITS Architecture is an open and integrated ITS architecture that is compliant with the Federal Highway Administration (FHWA) Final Rule and Federal Transit Administration (FTA) Policy on ITS Architecture and Standards. The Architecture has been developed through a cooperative effort by the highway, transit, law enforcement, emergency management, commercial vehicle and freight management agencies. It represents a shared vision of how each agency’s systems work together by sharing information and resources to enhance transportation safety, efficiency, capacity, mobility, reliability, and security.

The Flint Hills Regional ITS Architecture describes coordination of overall system operations by defining interfaces between equipment and systems which have been or will be deployed by different organizational or operating agencies in the region. The Architecture identifies the current ITS deployment and how these systems interact and integrate with each other. It also builds on the existing systems and addresses the additional components deemed necessary to grow the ITS systems in the region over the next 10 years to accommodate specific needs and issues of participating stakeholders.

The Flint Hills Regional ITS Architecture is documented in the following four forms:

1. Turbo Architecture Report (this report): The Turbo Architecture Report is a detailed report generated using the Turbo Architecture software and the database for the Regional ITS Architecture.
2. Flint Hills Regional ITS Architecture Report: This report provides a technical oriented summary regarding various aspects of the Architecture.
3. Architecture website: The architecture website provides detailed architecture outputs in an organized web environment.
4. Turbo Architecture Database: The database prepared using the Turbo Architecture version 7.1, a software tool developed by FHWA for developing ITS architectures.

By its nature, an ITS architecture is not a static set of outputs. The Flint Hills Regional ITS Architecture is a living document and should be modified as plans and priorities change, ITS projects are implemented, and ITS needs and services evolve in the region. An architecture maintenance plan is developed as a separate document to address the needs for maintenance and updates. The FHMPO will be responsible for housing and maintaining the ITS Architecture. The general steps for architecture maintenance are:

1. Stakeholders identify changes, notify the FHMPO of changes and submit it to the FHMPO.
2. The FHMPO and the ITS Committee review the proposed changes, offer comments, and/or ask for additional information.
3. The FHMPO and the ITS Committee, in coordination with the appropriate stakeholders affected by the proposed changes, evaluate the changes and determine any potential impact on the Architecture and/or associated documentation.
4. After reviewing the proposed changes, the ITS Committee decides whether to accept the modification.
5. If the decision is to accept the modification, the appropriate portions of the architecture baseline are updated by the FHMPO.
6. Once the ITS Architecture is modified, the FHMPO publishes the updated architecture documentation, database and website.
7. The FHMPO notifies all stakeholders of architecture updates and provides information on how to obtain the latest version of the Architecture.

2 Architecture Scope

The Flint Hills Regional ITS Architecture is a roadmap for transportation systems integration. The architecture was developed through a cooperative effort by the region's transportation agencies, covering all modes and all roads in the region. It represents a shared vision of how each agency's systems will work together in the future, sharing information and resources to provide a safer, more efficient, and more effective transportation system for travelers in the region.

The architecture provides an overarching framework that spans all of the region's transportation organizations and individual transportation projects. Using the architecture, each transportation project can be viewed as an element of the overall transportation system, providing visibility into the relationship between individual transportation projects and ways to cost-effectively build an integrated transportation system over time. This chapter establishes the scope of the architecture in terms of its geographic breadth, the scope of services that are covered, and the time horizon that is addressed.

Description

The purpose of the Flint Hills Regional ITS Architecture is to illustrate and document the integration of regional ITS systems to allow planning and deployment to occur in an organized and coordinated process. The Architecture helps guide the planning, implementation, and integration of ITS devices deployed and managed by multiple types of agencies that provide transportation services within the region.

The Flint Hills Regional ITS Architecture provides a framework for institutional agreements and technical integration of ITS implementation projects in the region. It describes the "big picture" for ITS deployment in terms of individual ITS components that will perform the functions necessary to deliver the desired needs. It supports effective and efficient deployment of transportation and ITS projects that address the transportation problems and needs in the region.

Timeframe

2015 - 2025 (10 years)

Geographic Scope

The Flint Hills Region covers parts of Geary County, Pottawatomie County, and Riley County and the City of Junction City and the City of Manhattan. The FHMPO was designated by the Kansas DOT in February 2013. The Flint Hills Regional ITS Architecture covers the area within the FHMPO boundary.

Service Scope

Traffic management and operations, traveler information, public transportation management, incident management, emergency management, parking management, and maintenance and construction management

Developer

AECOM

Maintainer

FHMPO

Version

1.0

3 ITS Stakeholders

Identifying stakeholders is an important task in ITS architecture development since effective ITS involves the integration of multiple stakeholders and their transportation systems. This section describes the stakeholders who either participated in the creation of the Flint Hills Regional ITS Architecture or whom the participating stakeholders felt were needed to be included in the architecture. Some stakeholders have been grouped in order to better reflect mutual participation or involvement in transportation services and elements. Every stakeholder in this section is related to one or more of the transportation inventory elements described in the next chapter, either as an individual stakeholder or as a member of a stakeholder group.

Table 1: ITS Stakeholders

Stakeholder Name	Stakeholder Description
Blue Township Fire Department	The Blue Township Fire Department (Pottawatomie County Fire District #5) is a Volunteer Fire Department serving the area of Blue Township in Eastern Manhattan, KS.
City of Junction City	Junction City is a city and county seat of Geary County, Kansas. As of the 2010 census, the city population was 23,353. Fort Riley, a major U.S. Army post, is nearby.
City of Junction City Engineering	Junction City Engineering Department provides engineering services including; Airport Operations, Construction Criteria & Specifications, Current Bids/Proposals, Engineering Permits, Pavement Management, Resources, Storm Water Management, and Traffic and Right-of-way.
City of Junction City Fire Department	The Junction City Fire Department provides joint fire and EMS operations. The department provides fire protection throughout the city limits. The EMS coverage is for all of Geary County.
City of Junction City Police Department	The Junction City Police Department provides public safety services to Junction City.
City of Junction City Public Works	The Junction City Public Works Department provides services including: street maintenance, snow and ice removal, storm water collection, fleet maintenance, water distribution, sanitary sewer collection, and sanitation collection.
City of Manhattan	Manhattan is a city located at the junction of the Kansas River and Big Blue River. It is the county seat of Riley County, although it also extends into Pottawatomie County. As of the 2010 census, the city population was 52,281.
City of Manhattan Fire Department	The Manhattan Fire Department provides fire protection and emergency medical services in Manhattan.
City of Manhattan Public Works	The Manhattan Public Works Department provides the resources to manage and maintain programs, services and facilities such as streets and traffic control devices; storm drainage and flood protection systems; and public buildings.
FHATA	FHATA (Flint Hills Area Transportation Agency) provides public transportation serving the areas including: Manhattan and Riley County, Green Valley and St. George in Pottawatomie County, Fort Riley, and Junction City. FHATA provides both fixed-route and paratransit services.
FHMPO	The Flint Hills Metropolitan Planning Organization (FHMPO) is the designated entity to provide regional transportation planning and programming services for the safe and efficient movement of people and goods throughout the FHMPO planning area. The FHMPO covers portions of Geary, Pottawatomie, and Riley Counties; including the City of Junction City and the City of Manhattan.
FHWA	The Federal Highway Administration (FHWA) is a Federal agency with a board responsibility of ensuring that America's roads and highways continue to be the safest and most technologically up-to-date. FHWA provides financial and technical support to State, local and tribal governments for constructing, improving, and preserving America's highway system.
Fort Riley	Fort Riley is a United States Army installation located in North Central Kansas, on the Kansas River, between Junction City and Manhattan. The Fort Riley Military Reservation covers 100,656 acres in Geary and Riley counties

Stakeholder Name	Stakeholder Description
FTA	The Federal Transit Administration (FTA) administers public transportation including buses, subways, light rail, commuter rail, monorail, passenger ferries, trolleys, inclined railways, and people movers. FTA provides financial assistance to state and local transit providers for developing new transit systems and improving, maintaining, and operating existing systems. FTA is a sister agency to FHWA.
Geary County Emergency Management	Geary County Emergency Management is the primary agency responsible for coordinating the mitigation of, preparedness for, response to, and recovery from disasters in Geary County.
Geary County Public Works	Geary County Public Works Department consists of six divisions: Road and Bridge, Traffic Control/Sign Shop, Rural Water District #2, Sewer District #4, Solid Waste Transfer Station, Building Maintenance, and Noxious Weed.
Geary County Rural Fire Department	Geary County Rural Fire Department handles calls throughout Geary County with the exception of the Southeast area of the County which is handled by the Alta Vista Rural Fire Department and the Dwight Fire District.
Geary County Sheriff	Geary County Sheriff's Department includes four divisions: Corrections, Investigations, K-9 Unit, and Patrol. Patrol Division provides emergency law enforcement services, traffic enforcement, accident investigation, criminal investigation and reporting, crime prevention and detection, and response to other emergencies.
Kansas Division of Emergency Management	KDEM (Kansas Division of Emergency Management) is a state-level agency that works to reduce loss of life and property and protect Kansans from all hazards by providing and coordinating resources, expertise, leadership and advocacy through a comprehensive, risk-based emergency management program of mitigation, preparedness, response and recovery.
Kansas DOT	The Kansas Department of Transportation (KDOT) State-level agency responsible for the transportation system for Kansas.
Kansas Highway Patrol	KHP (Kansas Highway Patrol) is a state-level agency responsible for incident and emergency management and enforcement of Kansas Interstate highways. 11 Troops serve east, central, and west regions throughout the state.
Kansas Homeland Security	Kansas Homeland Security, within the Adjutant General's Department, coordinates statewide activities pertaining to the prevention of and protection from terrorist-related events. This involves all aspects of prevention/mitigation, protection/preparedness, response and recovery.
Kansas State University	Kansas State University, commonly shortened to Kansas State or K-State, is a public research university with its main campus in Manhattan, Kansas.
Media	This stakeholder represents local TV stations, radio stations, newspapers, cable TV providers and satellite TV providers.
Neighboring Cities and Counties	This stakeholder group represents cities and counties that are adjacent to Geary, Riley and Pottawatomie Counties.
NOAA	National Oceanic and Atmospheric Administration provides weather, hydrologic, and climate information and warnings of hazardous weather including thunderstorms, flooding, hurricanes, tornadoes, winter weather, tsunamis, and climate events. It provides atmospheric weather observations and forecasts that are collected and derived by the National Weather Service, private sector providers, and various research organizations.
Pottawatomie County	Pottawatomie County is an expansive county of 551,692 acres or 862 square miles.
Pottawatomie County Emergency Management	Pottawatomie County Emergency Management is the primary agency responsible for coordinating the mitigation of, preparedness for, response to, and recovery from disasters in Pottawatomie County.
Pottawatomie County Public Works	Pottawatomie County Public Works Department is comprised of five divisions: Road and Bridge, Environmental Health, Solid Waste, Utilities, and Facilities. The Road & Bridge Division is responsible for maintenance of roads, bridges and drainage structures, and snow removal.
Pottawatomie County Sheriff	Pottawatomie County Sheriff's Department includes five divisions: Communications, Detention, Investigations, Patrol, and Special Programs. The Communications Division is responsible for relaying information between the public and the Sheriff's Office. It includes the Dispatch Center. The Patrol Division conducts preventive patrols, responds to calls for service, investigates criminal complaints, directs and controls traffic, and maintains public order.
Riley County	Riley County is home to two of Kansas' largest employers: Fort Riley and Kansas State University. As of the 2010 census, the population was 71,115. The largest city and county seat is Manhattan.
Riley County Emergency Management	Riley County Emergency Management is the primary agency responsible for coordinating the mitigation of, preparedness for, response to, and recovery from disasters in Riley County.

Stakeholder Name	Stakeholder Description
Riley County Fire Department	Riley County Fire Department (District #1) provides fire services to all unincorporated areas of Riley County and provides first responder level medical services in cooperation with Riley County EMS.
Riley County Police Department	This is the Law Enforcement Department for both the Riley County and the City of Manhattan. This department is also charged with 911 response and emergency vehicle dispatch.
Riley County Public Works	Riley County Public Works Department consists of six divisions: Engineering & Construction, Operations, Fleet, Solid Waste, Facilities, and Utilities. Major functions include: construction and maintenance of roadway infrastructure, installation and maintenance of traffic signs, traffic studies, maintenance of county vehicles and equipment, and facilities repairs and maintenance.
Travelers	Travelers include the motoring public operating private, commercial, or public conveyances, passengers, transit riders, pedestrians, and bicyclists.
US Department of Homeland Security	US Department of Homeland Security (DHS) has a vital mission: to secure the nation from the many threats we face. This includes preventing terrorism and enhancing security; managing our borders; administering immigration laws; securing cyberspace; and ensuring disaster resilience.

4 ITS Inventory

An inventory of existing and planned transportation systems is the basis for the Flint Hills Regional ITS Architecture. The transportation system inventory was developed based on input from stakeholders throughout the region. The inventory includes a list of ITS elements and the associated stakeholder responsible for system operation.

This section describes every surface transportation inventory element for the region. A transportation element can be either a center, vehicle, traveler or field equipment. Each transportation element listed below has one or more stakeholders associated with it. In order to reduce the complexity of the architecture, some transportation elements with like functionality have been grouped together. Each transportation inventory element is mapped to at least one National ITS Architecture entity.

Table 2: ITS Inventory

Element Name	Element Description	Stakeholder	Element Status	Associated Entity
Bicyclists	This terminator provides input (e.g. a request for right of way at an intersection) from a specialized form of the Traveler who is not using any type of vehicle (including bicycles) as a form of transport. Pedestrians may comprise those on foot and those in wheelchairs.	Travelers	Planned	Pedestrians
Blue Township Fire Department	This element represents the Blue Township Fire Department (Pottawatomie County District 5). It is a Volunteer Fire Department serving the area of Blue Township in Eastern Manhattan, KS.	Blue Township Fire Department	Existing	Emergency Management
Blue Township Fire Department Vehicles	This element represents the vehicles operated by the Blue Township Fire Department.	Blue Township Fire Department	Existing	Emergency Vehicle
Drivers	This terminator represents the human entity that operates a licensed vehicle on the roadway. Included are operators of private, Transit, Commercial, and Emergency vehicles where the data being sent or received is not particular to the type of vehicle. Thus this terminator originates driver requests and receives driver information that reflects the interactions which might be useful to all drivers, regardless of vehicle classification. The Driver terminator is the operator of the Basic Vehicle terminator. Information and interactions which are unique to drivers of a specific vehicle type (e.g., fleet interactions with transit, commercial, or emergency vehicle drivers) are covered separately.	Travelers	Existing	Driver
FHATA Dispatch Center	This element represents the FHATA Control/Dispatch Center. A new CAD/AVL system is being procured through KDOT to replace the current system in 2015. The new CAD system along with a new management system will enable real-time monitoring of bus trips to enhance performance.	FHATA	Existing	Emergency Management
FHATA Dispatch Center	This element represents the FHATA Control/Dispatch Center. A new CAD/AVL system is being procured through KDOT to replace the current system in 2015. The new CAD system along with a new management system will enable real-time monitoring of bus trips to enhance performance.	FHATA	Existing	Transit Management

Element Name	Element Description	Stakeholder	Element Status	Associated Entity
FHATA Real-Time Signs	Signs at transit stops providing real-time bus arrival/departure information. FHATA envisions installing such signs at key stops in the long term.	FHATA	Planned	Remote Traveler Support
FHATA Vehicles	This element represents transit vehicles operated by FHATA. A new AVL system is being procured through KDOT to replace the current system in 2015. New vehicle cameras will be installed in FY 2016. Tablets will be installed on board to provide real time monitoring of vehicles and trips and provide information to drivers.	FHATA	Existing	Transit Vehicle
Fort Riley Emergency Management	Fort Riley Emergency Management Program synchronizes EM Plan with on & off post partners, runs Community Awareness Campaign (Ready Army), manages Army compliant Exercise Program, serves as interface to staff jurisdictional requests for Military Assistance (not Mutual Aid), and serves as interface for requests for Defense Support of Civil Authorities (DSCA).	Fort Riley	Existing	Emergency Management
Fort Riley Emergency Services	This element represents the Fort Riley Directorate of Emergency Services. It provides continuous holistic emergency services to the Fort Riley military community in order to ensure the installation is safe and secure.	Fort Riley	Existing	Emergency Management
Fort Riley Fire Department	Fort Riley Fire Department protects the lives, property, and environment of the Soldiers and citizens of the Fort Riley Community. The department responds to any natural and man-made disasters, provides emergency medical care, and reinforces education through prevention while being a proactive community partner in the Flint Hills Region.	Fort Riley	Existing	Emergency Management
Fort Riley Police Department	This element represents the 97th Military Police Battalion. The 97th Military Police Battalion conducts continuous Law and Order operations in support of the Fort Riley military community. It deploys worldwide to conduct Military Police operations in support of the U.S. Army Forces Command.	Fort Riley	Existing	Emergency Management
Fort Riley Public Works	The Fort Riley Public Works is comprised of 6 Divisions: Business Operations Division; Engineering Services Division; Environmental Division; RCI / Housing Services Office; Master Planning Division; and Operations & Maintenance Center.	Fort Riley	Existing	Traffic Management
Geary County Emergency Operations Center	This element represents the Geary County Emergency Operations Center (EOC). The EOC is responsible for communications and coordination of local, regional and State resources during a disaster or large scale incident.	Geary County Emergency Management	Existing	Emergency Management
Geary County Emergency Vehicles	This element represents all emergency services vehicles in Geary County, including sheriff vehicles, fire trucks, and emergency management vehicles. Vehicles have radio communications, and some sheriff's vehicles have mobile data terminals (MDT). Vehicles utilize sound-based Emergency Vehicle Pre-emption through use of vehicle sirens.	Geary County Rural Fire Department	Existing	Emergency Vehicle
Geary County Maintenance and Construction Vehicles	This element represents Geary County's vehicles and equipment for roadway maintenance and construction purposes, including heavy equipment, trucks, supervisory vehicles, and snow plows. Vehicles have radio communications.	Geary County Public Works	Existing	Maintenance and Construction Vehicle

Element Name	Element Description	Stakeholder	Element Status	Associated Entity
Geary County Public Works	<p>Geary County Public Works Department consists of six divisions: Road and Bridge, Traffic Control/Sign Shop, Rural Water District #2, Sewer District #4, Solid Waste Transfer Station, Building Maintenance, and Noxious Weed.</p> <p>The Road and Bridge Division provides roadway, bridge, ditch and culvert maintenance and installation; snow removal; roadside mowing; and maintenance of motorgraders, sandspreader/plow trucks and mowers.</p> <p>The Traffic Control/Sign Shop fabricates, installs and maintains all County roadside markers, street signs and traffic control signs.</p>	Geary County Public Works	Existing	Maintenance and Construction Management
Geary County Rural Fire Department	<p>Geary County Rural Fire Department handles calls throughout Geary County with the exception of the Southeast area of the County which is handled by the Alta Vista Rural Fire Department and the Dwight Fire District. The department operates 15 trucks out of 9 stations located throughout Geary County and relies on volunteers to operate the trucks.</p>	Geary County Rural Fire Department	Existing	Emergency Management
Geary County Sheriff Department	<p>Geary County Sheriff's Department includes four divisions: Corrections, Investigations, K-9 Unit, and Patrol. Patrol Division provides emergency law enforcement services, traffic enforcement, accident investigation, criminal investigation and reporting, crime prevention and detection, and response to other emergencies.</p>	Geary County Sheriff	Existing	Emergency Management
Junction City CCTV Cameras	<p>This element represents future CCTV cameras in Junction City for traffic monitoring purpose.</p>	City of Junction City Public Works	Planned	Roadway
Junction City Dynamic Message Signs	<p>This element represents future dynamic message signs for Junction City.</p>	City of Junction City Public Works	Planned	Roadway
Junction City Emergency Vehicles	<p>This element represents all emergency vehicles in Junction City, including police vehicles, fire trucks, ambulances, and other EMS vehicles. Police vehicles have InTouch AVL equipment installed in 14 vehicles to allow for central monitoring of vehicle locations.</p>	City of Junction City	Existing	Emergency Vehicle
Junction City Engineering Department	<p>Junction City Engineering Department provides engineering services including; Airport Operations, Construction Criteria & Specifications, Current Bids/Proposals, Engineering Permits, Pavement Management, Resources, Storm Water Management, and Traffic and Right-of-way.</p>	City of Junction City Engineering	Existing	Maintenance and Construction Management
Junction City Engineering Department	<p>Junction City Engineering Department provides engineering services including; Airport Operations, Construction Criteria & Specifications, Current Bids/Proposals, Engineering Permits, Pavement Management, Resources, Storm Water Management, and Traffic and Right-of-way.</p>	City of Junction City Engineering	Existing	Traffic Management
Junction City Fire Department	<p>The Junction City Fire Department provides joint fire and EMS operations. The department provides fire protection throughout the city limits. The EMS coverage is for all of Geary County.</p>	City of Junction City Fire Department	Existing	Emergency Management
Junction City Maintenance and Construction Vehicles	<p>This element represents Junction City's vehicles and equipment for roadway maintenance and construction purposes, including heavy equipment, trucks, supervisory vehicles, and snow plows. InTouch AVL equipment is installed on these vehicles to allow for central monitoring of vehicle locations.</p>	City of Junction City Public Works	Existing	Maintenance and Construction Vehicle

Element Name	Element Description	Stakeholder	Element Status	Associated Entity
Junction City Police / 911 Center	Junction City 911 Center is the public safety answering point for all of Geary County.	City of Junction City Police Department	Existing	Emergency Management
Junction City Public Works Department	The Junction City Public Works Department provides services including: street maintenance, snow and ice removal, storm water collection, fleet maintenance, water distribution, sanitary sewer collection, and sanitation collection.	City of Junction City Public Works	Existing	Maintenance and Construction Management
Junction City Traffic Detection Equipment	The element represents the City of Junction City's traffic detection equipment. Junction City is currently looking at installing video detection systems.	City of Junction City Public Works	Planned	Roadway
Junction City Traffic Signals	This element represents traffic signals owned and operated by Junction City. Traffic signals are not currently centrally monitored or controlled.	City of Junction City Public Works	Existing	Roadway
Kansas Homeland Security	Kansas Homeland Security, within the Adjutant General's Department, coordinates statewide activities pertaining to the prevention of and protection from terrorist-related events. This involves all aspects of prevention/mitigation, protection/preparedness, response and recovery.	Kansas Homeland Security	Existing	Emergency Management
Kansas State Emergency Operations Center	The State Emergency Operations Center (SEOC) gathers, processes, and reports emergency situation intelligence to aid in State policy and decision making; support local communities as they direct and control disaster emergency response operations; and account for the State's response support costs. In non-disaster conditions, the SEOC is maintained in an operational status that facilitates a timely response to rapidly evolving emergencies. The SEOC's ability to exchange critical disaster information is achieved through diverse and redundant communications technologies.	Kansas Division of Emergency Management	Existing	Emergency Management
KDOT CCTV Cameras	This element represents the CCTV cameras in the Flint Hills Region. Currently there are six cameras: <ul style="list-style-type: none"> - One camera on I-70 at Junction City Exit 299 (a PTZ camera) - One camera on I-70 at Junction City MP 298 (a static camera mounted on an RWIS station) - One camera on I-70 at Junction City Exit 301 (a PTZ camera) - One camera on I-70 at exit 313 (K-177 in Geary County, a PTZ camera) - One camera on I-70 at exit 315 (Deep Creek in Geary County, a PTZ camera) - One camera on I-70 at MP 302 viewing only the WB DMS at MP 302 (a static camera) KDOT is also in the process of adding cameras at the following locations: <ul style="list-style-type: none"> - One camera at the RWIS site on Kansas River Viaduct on K-18 (K-177) in Manhattan - One camera on I-70 at exit 328 (K-99) in Wabaunsee County 	Kansas DOT	Existing	Roadway

Element Name	Element Description	Stakeholder	Element Status	Associated Entity
KDOT District 1 Office	KDOT District 1 is responsible for construction and maintenance activities for 17 counties in Northeast Kansas, including Riley and Pottawatomie Counties. These responsibilities include providing snow and ice removal on state highways that are housed in this district. KDOT District 1 Office is located in Topeka.	Kansas Highway Patrol	Existing	Maintenance and Construction Management
KDOT District 1 Office	KDOT District 1 is responsible for construction and maintenance activities for 17 counties in Northeast Kansas, including Riley and Pottawatomie Counties. These responsibilities include providing snow and ice removal on state highways that are housed in this district. KDOT District 1 Office is located in Topeka.	Kansas Highway Patrol	Existing	Other MCM
KDOT District 1 Office	KDOT District 1 is responsible for construction and maintenance activities for 17 counties in Northeast Kansas, including Riley and Pottawatomie Counties. These responsibilities include providing snow and ice removal on state highways that are housed in this district. KDOT District 1 Office is located in Topeka.	Kansas Highway Patrol	Existing	Traffic Management
KDOT District 2 Office	KDOT District 2 is responsible for construction and maintenance activities for 16 counties in North Central Kansas, including Geary County. These responsibilities include providing snow and ice removal on state highways that are housed in this district. KDOT District 2 Office is located in Salina.	Kansas DOT	Existing	Maintenance and Construction Management
KDOT District 2 Office	KDOT District 2 is responsible for construction and maintenance activities for 16 counties in North Central Kansas, including Geary County. These responsibilities include providing snow and ice removal on state highways that are housed in this district. KDOT District 2 Office is located in Salina.	Kansas DOT	Existing	Other MCM
KDOT District 2 Office	KDOT District 2 is responsible for construction and maintenance activities for 16 counties in North Central Kansas, including Geary County. These responsibilities include providing snow and ice removal on state highways that are housed in this district. KDOT District 2 Office is located in Salina.	Kansas DOT	Existing	Traffic Management
KDOT Dynamic Message Signs	The element represents both permanent and portable dynamic message signs owned and operated by KDOT. KDOT has three dynamic message signs along I-70 in the region. The locations of the signs are: <ul style="list-style-type: none"> - I-70 WB at Milford Lake Rd MP 291 - I-70 EB at Junction City MP 302 - I-70 WB at Junction City MP 301 - I-70 WB at exit 315 (Deep Creek) 	Kansas DOT	Existing	Roadway
KDOT KanDrive Website and 511 Phone Traveler Information System	The KanDrive Website provides real time travel information including weather-related road conditions and construction/maintenance work zones and detours as well as camera snapshots and active messages on electronic signs. The information covers each of the six KDOT districts and the Kansas City, Topeka, and Wichita metropolitan areas. Road conditions, camera snapshots and sign messages for the Kansas Turnpike are also provided. Links to the Kansas AMBER Alert website and traveler information from surrounding states and other sources are also provided on the website. The 511 phone system provides road condition and construction/maintenance work zones and detours via a touch tone menu. The 511 phone system can be accessed by calling 511 or 1-866-511-KDOT (5368).	Kansas DOT	Existing	Information Service Provider

Element Name	Element Description	Stakeholder	Element Status	Associated Entity
KDOT KanDrive Website and 511 Phone Traveler Information System	<p>The KanDrive Website provides real time travel information including weather-related road conditions and construction/maintenance work zones and detours as well as camera snapshots and active messages on electronic signs. The information covers each of the six KDOT districts and the Kansas City, Topeka, and Wichita metropolitan areas. Road conditions, camera snapshots and sign messages for the Kansas Turnpike are also provided. Links to the Kansas AMBER Alert website and traveler information from surrounding states and other sources are also provided on the website.</p> <p>The 511 phone system provides road condition and construction/maintenance work zones and detours via a touch tone menu. The 511 phone system can be accessed by calling 511 or 1-866-511-KDOT (5368).</p>	Kansas DOT	Existing	Other ISP
KDOT KanRoad	<p>KanRoad is internet-based software that allows multiple users, primarily KDOT and KTA personnel, to enter information about construction work zones, maintenance work zones, detours, weather-related road conditions and other hazards into a reporting system. Data gathered by the KanRoad is then provided to the KDOT Internet website (KanDrive.org) and the 511 phone system for public use.</p>	Kansas DOT	Existing	Information Service Provider
KDOT KanRoad	<p>KanRoad is internet-based software that allows multiple users, primarily KDOT and KTA personnel, to enter information about construction work zones, maintenance work zones, detours, weather-related road conditions and other hazards into a reporting system. Data gathered by the KanRoad is then provided to the KDOT Internet website (KanDrive.org) and the 511 phone system for public use.</p>	Kansas DOT	Existing	Other ISP
KDOT Maintenance and Construction Vehicles	<p>This element represents KDOT's vehicles and equipment for roadway maintenance and construction purposes, including heavy equipment, trucks, supervisory vehicles, and snow plows.</p>	Kansas DOT	Existing	Maintenance and Construction Vehicle
KDOT RWIS Central Server	<p>Weather-related information is transmitted by a combination of land lines, cell phones, radios and Local Area- or Wide-Area-Networks (LAN/WAN) from weather stations to KDOT RWIS Central Server located in Topeka. The information is presented both on an Intranet-based Website for KDOT use as well as a KDOT Internet site for the public.</p>	Kansas DOT	Existing	Maintenance and Construction Management
KDOT RWIS Stations	<p>This element represents KDOT owned Road Weather Information System (RWIS) stations in the Flint Hills Region. Currently there are two KDOT RWIS stations in the region, one in Manhattan and another in Junction City. KDOT owns and operates 43 RWIS stations located throughout the state. The KDOT RWIS also leverages other Kansas RWIS assets by integrating information from 10 additional weather stations owned by the Kansas Turnpike Authority (KTA). It uses sensors both mounted in the road surface as well as mounted away from the road to determine pavement temperature, subsurface temperature, ambient air temperature, wind speed, wind direction, pavement wet/dry, precipitation, and relative humidity.</p>	Kansas DOT	Existing	Roadway

Element Name	Element Description	Stakeholder	Element Status	Associated Entity
KDOT Statewide TOC	KDOT Statewide TOC is a virtual TOC with a PC-based software application that communicates with a central server in Topeka to allow for the control of electronic signs and cameras and has reporting capabilities based on gathered data. The Statewide TOC allows for immediate and real-time transportation system operation from both the local level at KDOT District and Area offices and a statewide level in Topeka headquarters or Kansas City Scout to notify travelers of incidents and construction activities through messages on electronic signs. Users can have access to the application through any KDOT networked computer with the appropriate software capability.	Kansas DOT	Existing	Traffic Management
KHP Communications Center	This element represents the Statewide center for KHP communications for Highway Patrol operations. This statewide central call taking and dispatching center receives incident/emergency calls from travelers who dial *47 (HP) or the listed KHP telephone number. The center also receives calls related to state highway incidents and emergencies which are transferred by county 911 centers. The center dispatches a full range of emergency medical, towing and other incident response personnel. The KHP Communications Center is located in Salina.	Kansas Highway Patrol	Existing	Emergency Management
KHP Troop C	KHP Troop C consists of 18 counties in north central-Kansas. Its headquarters share the former Marymount College campus in Salina with the Training Academy (Troop J), and some of its members assist with training. Troop C's pilots and aircraft often assist with surveillance, searches, traffic enforcement, and transportation.	Kansas Highway Patrol	Existing	Emergency Management
KHP Troop C	KHP Troop C consists of 18 counties in north central-Kansas. Its headquarters share the former Marymount College campus in Salina with the Training Academy (Troop J), and some of its members assist with training. Troop C's pilots and aircraft often assist with surveillance, searches, traffic enforcement, and transportation.	Kansas Highway Patrol	Existing	Enforcement Agency
KHP Troop C Vehicles	This element represents Kansas Highway Patrol Troop C vehicles.	Kansas Highway Patrol	Existing	Emergency Vehicle
K-State Athletics Department	K-State Athletics Department represents the key special event sponsor who schedules and manages major events on K-State campus that may impact travel on roadways and transit.	Kansas State University	Existing	Event Promoters
K-State Parking Services	K-State Parking Services provide parking information and services to University students, faculty, staff and visitors. It also manages the University parking facilities.	Kansas State University	Planned	Parking Management
K-State Police Department	K-State Police Department is the law enforcement agency responsible for safety and security of the Kansas State University campus.	Kansas State University	Existing	Emergency Management
K-State Police Department	K-State Police Department is the law enforcement agency responsible for safety and security of the Kansas State University campus.	Kansas State University	Existing	Enforcement Agency
Manhattan Bicycle Detection System	This element represents a future bicycle detection system at signalized intersections that will improve safety and reduce bicycle-vehicle collisions.	City of Manhattan Public Works	Planned	Roadway

Element Name	Element Description	Stakeholder	Element Status	Associated Entity
Manhattan Bluetooth Readers	The City of Manhattan installed 3 Bluetooth readers and the associate reporting software and sever to provide travel time and speed reporting along K-113. 8 additional Bluetooth readers will be installed on two additional arterials within the city. The corridors selected are K-18 from East Poyntz Avenue to 17th Street, and Heritage Square on US-24 through US-24 and McCall Road along the McCall Road arterial. Manhattan is also applying for a grant from KDOT to install Bluetooth readers on 6 or so signals along the US-24/Tuttle Creek Blvd corridor.	City of Manhattan Public Works	Existing	Roadway
Manhattan CCTV Cameras	This element represents the pan-tilt-zoom (PTZ) traffic cameras owned and operated by the City of Manhattan.	City of Manhattan Public Works	Existing	Roadway
Manhattan Dynamic Message Signs	This element represents future permanent dynamic message signs for the City of Manhattan. The City of Manhattan is considering installing dynamic message signs, as well as speed and count stations and fiber optic cable along K-18 from the K-18/K-113 interchange to the K-18 and I-70 interchange.	City of Manhattan Public Works	Planned	Roadway
Manhattan Emergency Vehicles	This element represents all emergency vehicles in Manhattan, including police vehicles, fire trucks, ambulances, and other EMS vehicles. Fire trucks utilize Emergency Vehicle Pre-emption (EVP) equipment to pre-empt signals during emergencies within the City of Manhattan. The Manhattan Fire Department currently has VHF radio communications on all of its emergency vehicles. The Fire Department also plans to have MDTs in each of its first out responding apparatus by the end of 2015. This will include AVL/GPS equipment to allow for tracking in dispatch.	City of Manhattan	Existing	Emergency Vehicle
Manhattan Fire Department	Manhattan Fire Department provides fire protection and emergency medical services in Manhattan.	City of Manhattan Fire Department	Existing	Emergency Management
Manhattan GIS Mapping Service	This element represents the GIS section within the City of Manhattan Engineering Division.	City of Manhattan Public Works	Existing	Map Update Provider
Manhattan Maintenance and Construction Vehicles	This element represents Manhattan's vehicles and equipment for roadway maintenance and construction purposes, including heavy equipment, trucks, supervisory vehicles, and snow plows. Manhattan plans to install MDTs by the end of 2015 and also has plans to use on-board GPS devices as an AVL/Computer Aided Dispatch system as well.	City of Manhattan Public Works	Existing	Maintenance and Construction Vehicle
Manhattan Portable Changeable Message Signs	This element represents Manhattan's portable changeable message signs. Those signs are used for special event traffic management, work zone traffic management, and potentially for providing travel time information. The signs are programmed and controlled locally. Future enhancements may include adding communications capabilities to allow signs to be remotely accessed and controlled by the Manhattan Traffic Operations Facility.	City of Manhattan Public Works	Existing	Roadway
Manhattan RWIS Stations	The City of Manhattan currently has one RWIS station located on K-18. Three additional RWIS monitoring stations on the North, East and West arterials surrounding the city, as well as the wireless or fiber links for communications are being considered.	City of Manhattan Public Works	Existing	Roadway

Element Name	Element Description	Stakeholder	Element Status	Associated Entity
Manhattan Street Division Office	Manhattan Street Division provides a wide variety of services essential to the public including repair and maintenance of city streets and alleyways, sweeping, brush and limb collection if necessary, and salting of city streets, as well as snow and ice removal during the winter months.	City of Manhattan Public Works	Existing	Maintenance and Construction Management
Manhattan Traffic Detection Equipment	The element represents the City of Manhattan's traffic detection equipment, including loop detectors and fixed camera video detection.	City of Manhattan Public Works	Existing	Roadway
Manhattan Traffic Information Website	City of Manhattan's traffic information website providing current street closures, detours, snow and ice maintenance routes, and traffic camera images.	City of Manhattan Public Works	Existing	Information Service Provider
Manhattan Traffic Operations Facility	The Manhattan Traffic Operations Facility (MTOF) is the traffic operations center as well as the traffic maintenance facility for the City of Manhattan. It monitors and controls City owned CCTV cameras, traffic signals, and RWIS station(s).	City of Manhattan Public Works	Existing	Maintenance and Construction Management
Manhattan Traffic Operations Facility	The Manhattan Traffic Operations Facility (MTOF) is the traffic operations center as well as the traffic maintenance facility for the City of Manhattan. It monitors and controls City owned CCTV cameras, traffic signals, and RWIS station(s).	City of Manhattan Public Works	Existing	Traffic Management
Manhattan Traffic Signals	This element represents the City of Manhattan traffic signal system and other roadside equipment used for traffic control and management. The system include traffic signals, controllers, loop detectors, video detection, and other signal operation equipment used for the control and management of traffic at intersections. Emergency vehicle signal preemption capability exists at many intersections.	City of Manhattan Public Works	Existing	Roadway
Media Outlets	This element represents the information systems that provide traffic reports, travel conditions, and other transportation-related news services to the traveling public through radio, TV, and other media. Traffic and travel advisory information collected by ITS is provided to this element. It is also a source for traffic flow information, incident and special event information, and other events which may have implications for the transportation system.	Media	Existing	Media
National Weather Service	The National Weather Service (NWS) provides weather, hydrologic, and climate forecasts and warnings for the United States, its territories, adjacent waters and ocean areas, for the protection of life.	NOAA	Existing	Weather Service
Neighboring 911 Centers	This element represents public safety answering points in neighboring cities and counties.	Neighboring Cities and Counties	Existing	Emergency Management
Neighboring County Emergency Operations Centers	This element represents the emergency operations centers (EOCs) in neighboring counties.	Neighboring Cities and Counties	Existing	Emergency Management
Personal Computing Devices	This element represents devices that has the capability for travelers to receive formatted traffic advisories from their homes, place of work, major trip generation sites, personal portable devices, over multiple types of electronic media. This includes computers, smartphones, tablets, etc.	Travelers	Existing	Personal Information Access
Pottawatomie County Emergency Operations Center	This element represents the Pottawatomie County Emergency Operations Center (EOC). The EOC is responsible for communications and coordination of local, regional and State resources during a disaster or large scale incident.	Pottawatomie County Emergency Management	Existing	Emergency Management

Element Name	Element Description	Stakeholder	Element Status	Associated Entity
Pottawatomie County Emergency Vehicles	This element represents public safety (sheriff, fire, EMS) vehicles in Pottawatomie County.	Pottawatomie County	Existing	Emergency Vehicle
Pottawatomie County Maintenance and Construction Vehicles	This element represents Pottawatomie County's vehicles and equipment for roadway maintenance and construction purposes, including heavy equipment, trucks, supervisory vehicles, and snow plows. Most vehicles have radio communications and 55 vehicles utilize InTouch Automated Vehicle Location (AVL) equipment to allow for central monitoring of vehicle locations.	Pottawatomie County Public Works	Existing	Maintenance and Construction Vehicle
Pottawatomie County Public Works	Pottawatomie County Public Works Department is comprised of five divisions: Road and Bridge, Environmental Health, Solid Waste, Utilities, and Facilities. The Road & Bridge Division is responsible for maintenance of roads, bridges and drainage structures, and snow removal. Most vehicles have radio communications and automated vehicle location (AVL).	Pottawatomie County Public Works	Existing	Maintenance and Construction Management
Pottawatomie County Sheriff Office / 911 Center	Pottawatomie County Sheriff's Department includes five divisions: Communications, Detention, Investigations, Patrol, and Special Programs. The Communications Division is responsible for relaying information between the public and the Sheriff's Office. It includes the Dispatch Center. The Patrol Division conducts preventive patrols, responds to calls for service, investigates criminal complaints, directs and controls traffic, and maintains public order.	Pottawatomie County Sheriff	Existing	Emergency Management
Riley County 911 Center	Riley County 911 Center is the public safety answering point for both Riley County and City of Manhattan. The center is responsible for emergency response and emergency vehicle dispatch.	Riley County Police Department	Existing	Emergency Management
Riley County Emergency Operations Center	This element represents the Riley County Emergency Operations Center (EOC). The EOC is responsible for communications and coordination of local, regional and State resources during a disaster or large scale incident.	Riley County Emergency Management	Existing	Emergency Management
Riley County Emergency Vehicles	This element represents police vehicles, fire trucks and EMS vehicles in Riley County. Vehicles utilize various VHF and cross band repeater systems to communicate with other EM responders. All Riley County police vehicles use VHF radios and about half of the vehicles have a Mobile Data Terminal (MDT) that is also equipped with an AVL feature.	Riley County	Existing	Emergency Vehicle
Riley County Fire Department	Riley County Fire Department (District #1) provides fire services to all unincorporated areas of Riley County and provides first responder level medical services in cooperation with Riley County EMS.	Riley County Fire Department	Existing	Emergency Management
Riley County Maintenance and Construction Vehicles	This element represents Riley County's vehicles and equipment for roadway maintenance and construction purposes, including heavy equipment, trucks, supervisory vehicles, and snow plows. Vehicles utilize various VHF and cross band repeater systems to communicate with others.	Riley County Public Works	Existing	Maintenance and Construction Vehicle
Riley County Mobile Emergency Command Post	Used for on scene command and control of emergency responders. It has multi band radio capability and satellite broadband.	Riley County Emergency Management	Existing	Emergency Management

Element Name	Element Description	Stakeholder	Element Status	Associated Entity
Riley County Public Works	Riley County Public Works Department consists of six divisions: Engineering & Construction, Operations, Fleet, Solid Waste, Facilities, and Utilities. Major functions include: construction and maintenance of roadway infrastructure, installation and maintenance of traffic signs, traffic studies, maintenance of county vehicles and equipment, and facilities repairs and maintenance.	Riley County Public Works	Existing	Maintenance and Construction Management
Roadway Environment	This terminator represents the physical condition and geometry of the road surface and the conditions surrounding the roadway. The geometry of the roadway and the road surface characteristics must be sensed and interpreted to support automated vehicle control services. Surrounding conditions may include fog, ice, snow, rain, wind, etc. which will influence the way in which a vehicle can be safely operated on the roadway.		Existing	Roadway Environment
Travelers	This element represents travelers using various modes of transportation in the region.	Travelers	Existing	Traveler

5 ITS Services

ITS services describe what can be done to improve the efficiency, safety, and convenience of the regional transportation system through better information, advanced systems and new technologies. Some services are specific to one primary stakeholder while others require broad stakeholder participation. This section describes the ITS services that meet the transportation needs in the region.

Table 3: ITS Services

Service Package	Service Package Name	Service Package Status	Included Elements
APTS01	Transit Vehicle Tracking	Existing	FHATA Dispatch Center
APTS01	Transit Vehicle Tracking	Existing	FHATA Vehicles
APTS02	Transit Fixed-Route Operations	Existing	FHATA Dispatch Center
APTS02	Transit Fixed-Route Operations	Existing	FHATA Vehicles
APTS03	Demand Response Transit Operations	Existing	FHATA Dispatch Center
APTS03	Demand Response Transit Operations	Existing	FHATA Vehicles
APTS05	Transit Security	Planned	FHATA Dispatch Center
APTS05	Transit Security	Planned	FHATA Vehicles
APTS06	Transit Fleet Management	Planned	FHATA Dispatch Center
APTS06	Transit Fleet Management	Planned	FHATA Vehicles
APTS08	Transit Traveler Information	Planned	FHATA Dispatch Center
APTS08	Transit Traveler Information	Planned	FHATA Real-Time Signs
APTS08	Transit Traveler Information	Planned	FHATA Vehicles
APTS08	Transit Traveler Information	Planned	Manhattan Traffic Information Website
APTS08	Transit Traveler Information	Planned	Media Outlets
APTS08	Transit Traveler Information	Planned	Personal Computing Devices
APTS08	Transit Traveler Information	Planned	Travelers
ATIS01	Broadcast Traveler Information	Existing	FHATA Dispatch Center
ATIS01	Broadcast Traveler Information	Existing	Fort Riley Public Works
ATIS01	Broadcast Traveler Information	Existing	Junction City Engineering Department
ATIS01	Broadcast Traveler Information	Existing	Junction City Public Works Department
ATIS01	Broadcast Traveler Information	Existing	KDOT District 1 Office
ATIS01	Broadcast Traveler Information	Existing	KDOT District 2 Office
ATIS01	Broadcast Traveler Information	Existing	KDOT KanDrive Website and 511 Phone Traveler Information System
ATIS01	Broadcast Traveler Information	Existing	KDOT KanRoad
ATIS01	Broadcast Traveler Information	Existing	KDOT Statewide TOC
ATIS01	Broadcast Traveler Information	Existing	K-State Athletics Department
ATIS01	Broadcast Traveler Information	Existing	K-State Parking Services
ATIS01	Broadcast Traveler Information	Existing	Manhattan Street Division Office
ATIS01	Broadcast Traveler Information	Existing	Manhattan Traffic Information Website
ATIS01	Broadcast Traveler Information	Existing	Manhattan Traffic Operations Facility
ATIS01	Broadcast Traveler Information	Existing	Media Outlets
ATIS01	Broadcast Traveler Information	Existing	National Weather Service

Service Package	Service Package Name	Service Package Status	Included Elements
ATIS01	Broadcast Traveler Information	Existing	Personal Computing Devices
ATIS01	Broadcast Traveler Information	Existing	Travelers
ATMS01	Network Surveillance	Existing	Junction City CCTV Cameras
ATMS01	Network Surveillance	Existing	Junction City Engineering Department
ATMS01	Network Surveillance	Existing	Junction City Traffic Detection Equipment
ATMS01	Network Surveillance	Existing	KDOT CCTV Cameras
ATMS01	Network Surveillance	Existing	KDOT Statewide TOC
ATMS01	Network Surveillance	Existing	Manhattan CCTV Cameras
ATMS01	Network Surveillance	Existing	Manhattan GIS Mapping Service
ATMS01	Network Surveillance	Existing	Manhattan Traffic Detection Equipment
ATMS01	Network Surveillance	Existing	Manhattan Traffic Operations Facility
ATMS02	Traffic Probe Surveillance	Existing	Manhattan Bluetooth Readers
ATMS02	Traffic Probe Surveillance	Existing	Manhattan Traffic Operations Facility
ATMS03	Traffic Signal Control	Existing	Junction City Engineering Department
ATMS03	Traffic Signal Control	Existing	Junction City Traffic Signals
ATMS03	Traffic Signal Control	Existing	Manhattan Traffic Operations Facility
ATMS03	Traffic Signal Control	Existing	Manhattan Traffic Signals
ATMS06	Traffic Information Dissemination	Existing	Drivers
ATMS06	Traffic Information Dissemination	Existing	Junction City Dynamic Message Signs
ATMS06	Traffic Information Dissemination	Existing	Junction City Engineering Department
ATMS06	Traffic Information Dissemination	Existing	KDOT Dynamic Message Signs
ATMS06	Traffic Information Dissemination	Existing	KDOT Statewide TOC
ATMS06	Traffic Information Dissemination	Existing	Manhattan Dynamic Message Signs
ATMS06	Traffic Information Dissemination	Existing	Manhattan Portable Changeable Message Signs
ATMS06	Traffic Information Dissemination	Existing	Manhattan Traffic Operations Facility
ATMS07	Regional Traffic Management	Planned	Junction City Engineering Department
ATMS07	Regional Traffic Management	Planned	Junction City Traffic Signals
ATMS07	Regional Traffic Management	Planned	Manhattan Traffic Operations Facility
ATMS07	Regional Traffic Management	Planned	Manhattan Traffic Signals
ATMS08	Traffic Incident Management System	Existing	Fort Riley Emergency Management
ATMS08	Traffic Incident Management System	Existing	Fort Riley Emergency Services
ATMS08	Traffic Incident Management System	Existing	Fort Riley Fire Department
ATMS08	Traffic Incident Management System	Existing	Fort Riley Police Department
ATMS08	Traffic Incident Management System	Existing	Junction City Police / 911 Center
ATMS08	Traffic Incident Management System	Existing	KHP Communications Center
ATMS08	Traffic Incident Management System	Existing	K-State Athletics Department
ATMS08	Traffic Incident Management System	Existing	K-State Police Department
ATMS08	Traffic Incident Management System	Existing	Manhattan Bluetooth Readers
ATMS08	Traffic Incident Management System	Existing	Manhattan CCTV Cameras
ATMS08	Traffic Incident Management System	Existing	Manhattan Dynamic Message Signs
ATMS08	Traffic Incident Management System	Existing	Manhattan Portable Changeable Message Signs
ATMS08	Traffic Incident Management System	Existing	Manhattan Traffic Detection Equipment
ATMS08	Traffic Incident Management System	Existing	Manhattan Traffic Information Website
ATMS08	Traffic Incident Management System	Existing	Manhattan Traffic Operations Facility

Service Package	Service Package Name	Service Package Status	Included Elements
ATMS08	Traffic Incident Management System	Existing	Manhattan Traffic Signals
ATMS08	Traffic Incident Management System	Existing	Pottawatomie County Sheriff Office / 911 Center
ATMS08	Traffic Incident Management System	Existing	Riley County 911 Center
ATMS16	Parking Facility Management	Planned	Drivers
ATMS16	Parking Facility Management	Planned	K-State Parking Services
ATMS26	Mixed Use Warning Systems	Planned	Bicyclists
ATMS26	Mixed Use Warning Systems	Planned	Drivers
ATMS26	Mixed Use Warning Systems	Planned	Manhattan Bicycle Detection System
ATMS26	Mixed Use Warning Systems	Planned	Manhattan Traffic Operations Facility
ATMS26	Mixed Use Warning Systems	Planned	Manhattan Traffic Signals
EM01	Emergency Call-Taking and Dispatch	Existing	Blue Township Fire Department Vehicles
EM01	Emergency Call-Taking and Dispatch	Existing	Geary County Emergency Vehicles
EM01	Emergency Call-Taking and Dispatch	Existing	Junction City Emergency Vehicles
EM01	Emergency Call-Taking and Dispatch	Existing	Junction City Police / 911 Center
EM01	Emergency Call-Taking and Dispatch	Existing	KHP Communications Center
EM01	Emergency Call-Taking and Dispatch	Existing	KHP Troop C Vehicles
EM01	Emergency Call-Taking and Dispatch	Existing	Manhattan Emergency Vehicles
EM01	Emergency Call-Taking and Dispatch	Existing	Manhattan GIS Mapping Service
EM01	Emergency Call-Taking and Dispatch	Existing	Pottawatomie County Emergency Vehicles
EM01	Emergency Call-Taking and Dispatch	Existing	Pottawatomie County Sheriff Office / 911 Center
EM01	Emergency Call-Taking and Dispatch	Existing	Riley County 911 Center
EM01	Emergency Call-Taking and Dispatch	Existing	Riley County Emergency Vehicles
EM02	Emergency Routing	Existing	Geary County Emergency Vehicles
EM02	Emergency Routing	Existing	Junction City Emergency Vehicles
EM02	Emergency Routing	Existing	Junction City Engineering Department
EM02	Emergency Routing	Existing	Junction City Traffic Signals
EM02	Emergency Routing	Existing	KHP Communications Center
EM02	Emergency Routing	Existing	KHP Troop C Vehicles
EM02	Emergency Routing	Existing	Manhattan Emergency Vehicles
EM02	Emergency Routing	Existing	Manhattan GIS Mapping Service
EM02	Emergency Routing	Existing	Manhattan Traffic Operations Facility
EM02	Emergency Routing	Existing	Manhattan Traffic Signals
EM02	Emergency Routing	Existing	Riley County Emergency Vehicles
EM06	Wide-Area Alert	Existing	Blue Township Fire Department
EM06	Wide-Area Alert	Existing	FHATA Dispatch Center
EM06	Wide-Area Alert	Existing	Fort Riley Emergency Management
EM06	Wide-Area Alert	Existing	Fort Riley Emergency Services
EM06	Wide-Area Alert	Existing	Fort Riley Fire Department
EM06	Wide-Area Alert	Existing	Fort Riley Police Department
EM06	Wide-Area Alert	Existing	Geary County Emergency Operations Center
EM06	Wide-Area Alert	Existing	Geary County Public Works
EM06	Wide-Area Alert	Existing	Geary County Rural Fire Department
EM06	Wide-Area Alert	Existing	Geary County Sheriff Department
EM06	Wide-Area Alert	Existing	Junction City Dynamic Message Signs

Service Package	Service Package Name	Service Package Status	Included Elements
EM06	Wide-Area Alert	Existing	Junction City Engineering Department
EM06	Wide-Area Alert	Existing	Junction City Fire Department
EM06	Wide-Area Alert	Existing	Junction City Police / 911 Center
EM06	Wide-Area Alert	Existing	Junction City Public Works Department
EM06	Wide-Area Alert	Existing	Kansas Homeland Security
EM06	Wide-Area Alert	Existing	Kansas State Emergency Operations Center
EM06	Wide-Area Alert	Existing	KDOT District 1 Office
EM06	Wide-Area Alert	Existing	KDOT District 2 Office
EM06	Wide-Area Alert	Existing	KDOT Dynamic Message Signs
EM06	Wide-Area Alert	Existing	KDOT Statewide TOC
EM06	Wide-Area Alert	Existing	KHP Communications Center
EM06	Wide-Area Alert	Existing	KHP Troop C
EM06	Wide-Area Alert	Existing	K-State Police Department
EM06	Wide-Area Alert	Existing	Manhattan Dynamic Message Signs
EM06	Wide-Area Alert	Existing	Manhattan Fire Department
EM06	Wide-Area Alert	Existing	Manhattan Portable Changeable Message Signs
EM06	Wide-Area Alert	Existing	Manhattan Street Division Office
EM06	Wide-Area Alert	Existing	Manhattan Traffic Operations Facility
EM06	Wide-Area Alert	Existing	Neighboring 911 Centers
EM06	Wide-Area Alert	Existing	Neighboring County Emergency Operations Centers
EM06	Wide-Area Alert	Existing	Personal Computing Devices
EM06	Wide-Area Alert	Existing	Pottawatomie County Emergency Operations Center
EM06	Wide-Area Alert	Existing	Pottawatomie County Public Works
EM06	Wide-Area Alert	Existing	Pottawatomie County Sheriff Office / 911 Center
EM06	Wide-Area Alert	Existing	Riley County 911 Center
EM06	Wide-Area Alert	Existing	Riley County Emergency Operations Center
EM06	Wide-Area Alert	Existing	Riley County Fire Department
EM06	Wide-Area Alert	Existing	Riley County Public Works
EM08	Disaster Response and Recovery	Existing	Blue Township Fire Department
EM08	Disaster Response and Recovery	Existing	FHATA Dispatch Center
EM08	Disaster Response and Recovery	Existing	Fort Riley Emergency Management
EM08	Disaster Response and Recovery	Existing	Fort Riley Fire Department
EM08	Disaster Response and Recovery	Existing	Fort Riley Police Department
EM08	Disaster Response and Recovery	Existing	Fort Riley Public Works
EM08	Disaster Response and Recovery	Existing	Geary County Emergency Operations Center
EM08	Disaster Response and Recovery	Existing	Geary County Public Works
EM08	Disaster Response and Recovery	Existing	Geary County Rural Fire Department
EM08	Disaster Response and Recovery	Existing	Junction City Engineering Department
EM08	Disaster Response and Recovery	Existing	Junction City Police / 911 Center
EM08	Disaster Response and Recovery	Existing	Junction City Public Works Department
EM08	Disaster Response and Recovery	Existing	Kansas Homeland Security
EM08	Disaster Response and Recovery	Existing	Kansas State Emergency Operations Center
EM08	Disaster Response and Recovery	Existing	KDOT District 1 Office

Service Package	Service Package Name	Service Package Status	Included Elements
EM08	Disaster Response and Recovery	Existing	KDOT District 2 Office
EM08	Disaster Response and Recovery	Existing	KDOT Statewide TOC
EM08	Disaster Response and Recovery	Existing	KHP Communications Center
EM08	Disaster Response and Recovery	Existing	KHP Troop C
EM08	Disaster Response and Recovery	Existing	K-State Police Department
EM08	Disaster Response and Recovery	Existing	Manhattan Fire Department
EM08	Disaster Response and Recovery	Existing	Manhattan Street Division Office
EM08	Disaster Response and Recovery	Existing	Manhattan Traffic Operations Facility
EM08	Disaster Response and Recovery	Existing	Neighboring 911 Centers
EM08	Disaster Response and Recovery	Existing	Neighboring County Emergency Operations Centers
EM08	Disaster Response and Recovery	Existing	Pottawatomie County Emergency Operations Center
EM08	Disaster Response and Recovery	Existing	Pottawatomie County Public Works
EM08	Disaster Response and Recovery	Existing	Pottawatomie County Sheriff Office / 911 Center
EM08	Disaster Response and Recovery	Existing	Riley County 911 Center
EM08	Disaster Response and Recovery	Existing	Riley County Emergency Operations Center
EM08	Disaster Response and Recovery	Existing	Riley County Fire Department
EM08	Disaster Response and Recovery	Existing	Riley County Mobile Emergency Command Post
EM08	Disaster Response and Recovery	Existing	Riley County Public Works
EM09	Evacuation and Reentry Management	Existing	Blue Township Fire Department
EM09	Evacuation and Reentry Management	Existing	FHATA Dispatch Center
EM09	Evacuation and Reentry Management	Existing	Fort Riley Emergency Management
EM09	Evacuation and Reentry Management	Existing	Fort Riley Fire Department
EM09	Evacuation and Reentry Management	Existing	Fort Riley Police Department
EM09	Evacuation and Reentry Management	Existing	Geary County Emergency Operations Center
EM09	Evacuation and Reentry Management	Existing	Geary County Public Works
EM09	Evacuation and Reentry Management	Existing	Geary County Rural Fire Department
EM09	Evacuation and Reentry Management	Existing	Junction City Engineering Department
EM09	Evacuation and Reentry Management	Existing	Junction City Police / 911 Center
EM09	Evacuation and Reentry Management	Existing	Junction City Public Works Department
EM09	Evacuation and Reentry Management	Existing	Kansas Homeland Security
EM09	Evacuation and Reentry Management	Existing	Kansas State Emergency Operations Center
EM09	Evacuation and Reentry Management	Existing	KDOT District 1 Office
EM09	Evacuation and Reentry Management	Existing	KDOT District 2 Office
EM09	Evacuation and Reentry Management	Existing	KDOT Statewide TOC
EM09	Evacuation and Reentry Management	Existing	KHP Communications Center
EM09	Evacuation and Reentry Management	Existing	KHP Troop C
EM09	Evacuation and Reentry Management	Existing	K-State Police Department
EM09	Evacuation and Reentry Management	Existing	Manhattan Fire Department
EM09	Evacuation and Reentry Management	Existing	Manhattan Street Division Office
EM09	Evacuation and Reentry Management	Existing	Manhattan Traffic Information Website
EM09	Evacuation and Reentry Management	Existing	Manhattan Traffic Operations Facility
EM09	Evacuation and Reentry Management	Existing	Neighboring 911 Centers

Service Package	Service Package Name	Service Package Status	Included Elements
EM09	Evacuation and Reentry Management	Existing	Neighboring County Emergency Operations Centers
EM09	Evacuation and Reentry Management	Existing	Pottawatomie County Emergency Operations Center
EM09	Evacuation and Reentry Management	Existing	Pottawatomie County Public Works
EM09	Evacuation and Reentry Management	Existing	Pottawatomie County Sheriff Office / 911 Center
EM09	Evacuation and Reentry Management	Existing	Riley County 911 Center
EM09	Evacuation and Reentry Management	Existing	Riley County Emergency Operations Center
EM09	Evacuation and Reentry Management	Existing	Riley County Fire Department
EM09	Evacuation and Reentry Management	Existing	Riley County Mobile Emergency Command Post
EM09	Evacuation and Reentry Management	Existing	Riley County Public Works
EM10	Disaster Traveler Information	Existing	Blue Township Fire Department
EM10	Disaster Traveler Information	Existing	FHATA Dispatch Center
EM10	Disaster Traveler Information	Existing	Fort Riley Emergency Management
EM10	Disaster Traveler Information	Existing	Fort Riley Fire Department
EM10	Disaster Traveler Information	Existing	Fort Riley Police Department
EM10	Disaster Traveler Information	Existing	Geary County Emergency Operations Center
EM10	Disaster Traveler Information	Existing	Geary County Rural Fire Department
EM10	Disaster Traveler Information	Existing	Junction City Police / 911 Center
EM10	Disaster Traveler Information	Existing	Kansas Homeland Security
EM10	Disaster Traveler Information	Existing	Kansas State Emergency Operations Center
EM10	Disaster Traveler Information	Existing	KDOT Statewide TOC
EM10	Disaster Traveler Information	Existing	KHP Communications Center
EM10	Disaster Traveler Information	Existing	KHP Troop C
EM10	Disaster Traveler Information	Existing	K-State Police Department
EM10	Disaster Traveler Information	Existing	Manhattan Fire Department
EM10	Disaster Traveler Information	Existing	Manhattan Traffic Information Website
EM10	Disaster Traveler Information	Existing	Manhattan Traffic Operations Facility
EM10	Disaster Traveler Information	Existing	Media Outlets
EM10	Disaster Traveler Information	Existing	National Weather Service
EM10	Disaster Traveler Information	Existing	Neighboring 911 Centers
EM10	Disaster Traveler Information	Existing	Neighboring County Emergency Operations Centers
EM10	Disaster Traveler Information	Existing	Personal Computing Devices
EM10	Disaster Traveler Information	Existing	Pottawatomie County Emergency Operations Center
EM10	Disaster Traveler Information	Existing	Pottawatomie County Sheriff Office / 911 Center
EM10	Disaster Traveler Information	Existing	Riley County 911 Center
EM10	Disaster Traveler Information	Existing	Riley County Emergency Operations Center
EM10	Disaster Traveler Information	Existing	Riley County Fire Department
EM10	Disaster Traveler Information	Existing	Travelers
MC01	Maintenance and Construction Vehicle and Equipment Tracking	Existing	Junction City Maintenance and Construction Vehicles
MC01	Maintenance and Construction Vehicle and Equipment Tracking	Existing	Junction City Public Works Department

Service Package	Service Package Name	Service Package Status	Included Elements
MC01	Maintenance and Construction Vehicle and Equipment Tracking	Existing	Manhattan GIS Mapping Service
MC01	Maintenance and Construction Vehicle and Equipment Tracking	Existing	Manhattan Maintenance and Construction Vehicles
MC01	Maintenance and Construction Vehicle and Equipment Tracking	Existing	Manhattan Street Division Office
MC01	Maintenance and Construction Vehicle and Equipment Tracking	Existing	Pottawatomie County Maintenance and Construction Vehicles
MC01	Maintenance and Construction Vehicle and Equipment Tracking	Existing	Pottawatomie County Public Works
MC03	Road Weather Data Collection	Existing	KDOT District 1 Office
MC03	Road Weather Data Collection	Existing	KDOT District 2 Office
MC03	Road Weather Data Collection	Existing	KDOT Maintenance and Construction Vehicles
MC03	Road Weather Data Collection	Existing	KDOT RWIS Central Server
MC03	Road Weather Data Collection	Existing	KDOT RWIS Stations
MC03	Road Weather Data Collection	Existing	Manhattan RWIS Stations
MC03	Road Weather Data Collection	Existing	Manhattan Traffic Operations Facility
MC03	Road Weather Data Collection	Existing	Roadway Environment
MC04	Weather Information Processing and Distribution	Existing	KDOT District 1 Office
MC04	Weather Information Processing and Distribution	Existing	KDOT District 2 Office
MC04	Weather Information Processing and Distribution	Existing	KDOT KanDrive Website and 511 Phone Traveler Information System
MC04	Weather Information Processing and Distribution	Existing	KDOT KanRoad
MC04	Weather Information Processing and Distribution	Existing	KDOT RWIS Central Server
MC04	Weather Information Processing and Distribution	Existing	KDOT Statewide TOC
MC04	Weather Information Processing and Distribution	Existing	KHP Communications Center
MC04	Weather Information Processing and Distribution	Existing	KHP Troop C
MC04	Weather Information Processing and Distribution	Existing	Manhattan Traffic Information Website
MC04	Weather Information Processing and Distribution	Existing	Manhattan Traffic Operations Facility
MC04	Weather Information Processing and Distribution	Existing	Media Outlets
MC04	Weather Information Processing and Distribution	Existing	National Weather Service
MC06	Winter Maintenance	Existing	Geary County Maintenance and Construction Vehicles
MC06	Winter Maintenance	Existing	Geary County Public Works
MC06	Winter Maintenance	Existing	Junction City Maintenance and Construction Vehicles
MC06	Winter Maintenance	Existing	Junction City Public Works Department
MC06	Winter Maintenance	Existing	KDOT District 1 Office
MC06	Winter Maintenance	Existing	KDOT District 2 Office

Service Package	Service Package Name	Service Package Status	Included Elements
MC06	Winter Maintenance	Existing	KDOT Maintenance and Construction Vehicles
MC06	Winter Maintenance	Existing	Manhattan Maintenance and Construction Vehicles
MC06	Winter Maintenance	Existing	Manhattan Street Division Office
MC06	Winter Maintenance	Existing	National Weather Service
MC06	Winter Maintenance	Existing	Pottawatomie County Maintenance and Construction Vehicles
MC06	Winter Maintenance	Existing	Pottawatomie County Public Works
MC06	Winter Maintenance	Existing	Riley County Maintenance and Construction Vehicles
MC06	Winter Maintenance	Existing	Riley County Public Works
MC07	Roadway Maintenance and Construction	Existing	Geary County Maintenance and Construction Vehicles
MC07	Roadway Maintenance and Construction	Existing	Geary County Public Works
MC07	Roadway Maintenance and Construction	Existing	Junction City CCTV Cameras
MC07	Roadway Maintenance and Construction	Existing	Junction City Dynamic Message Signs
MC07	Roadway Maintenance and Construction	Existing	Junction City Engineering Department
MC07	Roadway Maintenance and Construction	Existing	Junction City Maintenance and Construction Vehicles
MC07	Roadway Maintenance and Construction	Existing	Junction City Public Works Department
MC07	Roadway Maintenance and Construction	Existing	Junction City Traffic Detection Equipment
MC07	Roadway Maintenance and Construction	Existing	KDOT District 1 Office
MC07	Roadway Maintenance and Construction	Existing	KDOT District 2 Office
MC07	Roadway Maintenance and Construction	Existing	KDOT Maintenance and Construction Vehicles
MC07	Roadway Maintenance and Construction	Existing	KDOT Statewide TOC
MC07	Roadway Maintenance and Construction	Existing	Manhattan Bluetooth Readers
MC07	Roadway Maintenance and Construction	Existing	Manhattan CCTV Cameras
MC07	Roadway Maintenance and Construction	Existing	Manhattan Dynamic Message Signs
MC07	Roadway Maintenance and Construction	Existing	Manhattan Maintenance and Construction Vehicles
MC07	Roadway Maintenance and Construction	Existing	Manhattan Portable Changeable Message Signs
MC07	Roadway Maintenance and Construction	Existing	Manhattan RWIS Stations
MC07	Roadway Maintenance and Construction	Existing	Manhattan Street Division Office
MC07	Roadway Maintenance and Construction	Existing	Manhattan Traffic Detection Equipment
MC07	Roadway Maintenance and Construction	Existing	Manhattan Traffic Operations Facility
MC07	Roadway Maintenance and Construction	Existing	Manhattan Traffic Signals
MC07	Roadway Maintenance and Construction	Existing	National Weather Service
MC07	Roadway Maintenance and Construction	Existing	Pottawatomie County Maintenance and Construction Vehicles
MC07	Roadway Maintenance and Construction	Existing	Pottawatomie County Public Works
MC07	Roadway Maintenance and Construction	Existing	Riley County Maintenance and Construction Vehicles
MC07	Roadway Maintenance and Construction	Existing	Riley County Public Works
MC08	Work Zone Management	Planned	Manhattan Portable Changeable Message Signs
MC08	Work Zone Management	Planned	Manhattan Street Division Office

Service Package	Service Package Name	Service Package Status	Included Elements
MC08	Work Zone Management	Planned	Manhattan Traffic Operations Facility

6 Operational Concept

The Operational Concept lists the roles and responsibilities that each participating agency must take on to provide the ITS services included in the ITS Architecture. Changing needs may arise that will require an agreement to be formed between all affected parties that defines new or additional roles. Defining the roles and responsibilities of the participating stakeholders in the region and the willingness of agencies to accept their roles and responsibilities is an important step in realizing the common goal of an interoperable ITS system throughout the region.

Table 4: Operational Concept

RR Area Name	Stakeholder	RR Description	RR Status
Emergency Management for Flint Hills Regional ITS Architecture	Blue Township Fire Department	Provide emergency response services	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Blue Township Fire Department	Coordinate emergency response with other emergency management agencies, public safety agencies, and/or transportation agencies	Existing
Emergency Management for Flint Hills Regional ITS Architecture	City of Junction City	Provide emergency response services	Existing
Emergency Management for Flint Hills Regional ITS Architecture	City of Junction City	Coordinate emergency response with other emergency management agencies, public safety agencies, and/or transportation agencies	Existing
Emergency Management for Flint Hills Regional ITS Architecture	City of Junction City Engineering	Provide traffic management related services in response to emergencies	Existing
Emergency Management for Flint Hills Regional ITS Architecture	City of Junction City Fire Department	Provide emergency response services	Existing
Emergency Management for Flint Hills Regional ITS Architecture	City of Junction City Fire Department	Coordinate emergency response with other emergency management agencies, public safety agencies, and/or transportation agencies	Existing
Emergency Management for Flint Hills Regional ITS Architecture	City of Junction City Police Department	Operate and maintain a dispatch facility	Existing
Emergency Management for Flint Hills Regional ITS Architecture	City of Junction City Police Department	Provide emergency response services	Existing
Emergency Management for Flint Hills Regional ITS Architecture	City of Junction City Police Department	Provide emergency call taking (911) within the city jurisdiction and dispatch police, fire and EMS services	Existing
Emergency Management for Flint Hills Regional ITS Architecture	City of Junction City Police Department	Coordinate emergency response with other emergency management agencies, public safety agencies, and/or transportation agencies	Existing
Emergency Management for Flint Hills Regional ITS Architecture	City of Junction City Public Works	Provide traffic management related services in response to emergencies	Existing
Emergency Management for Flint Hills Regional ITS Architecture	City of Manhattan	Coordinate emergency response with other emergency management agencies, public safety agencies, and/or transportation agencies	Existing

Flint Hills Regional ITS Architecture

RR Area Name	Stakeholder	RR Description	RR Status
Emergency Management for Flint Hills Regional ITS Architecture	City of Manhattan	Provide emergency response services	Existing
Emergency Management for Flint Hills Regional ITS Architecture	City of Manhattan Fire Department	Provide emergency response services	Existing
Emergency Management for Flint Hills Regional ITS Architecture	City of Manhattan Fire Department	Coordinate emergency response with other emergency management agencies, public safety agencies, and/or transportation agencies	Existing
Emergency Management for Flint Hills Regional ITS Architecture	City of Manhattan Public Works	Provide traffic management related services in response to emergencies	Existing
Emergency Management for Flint Hills Regional ITS Architecture	FHATA	Provide transit vehicles for use in evacuation of people from areas impacted by severe weather events or natural disaster areas	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Fort Riley	Provide emergency response services	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Fort Riley	Coordinate emergency response with other emergency management agencies, public safety agencies, and/or transportation agencies	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Geary County Emergency Management	Provide emergency response services	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Geary County Emergency Management	Coordinate emergency response with other emergency management agencies, public safety agencies, and/or transportation agencies	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Geary County Public Works	Provide traffic management related services in response to emergencies	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Geary County Rural Fire Department	Provide emergency response services	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Geary County Rural Fire Department	Coordinate emergency response with other emergency management agencies, public safety agencies, and/or transportation agencies	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Geary County Sheriff	Provide emergency response services	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Geary County Sheriff	Coordinate emergency response with other emergency management agencies, public safety agencies, and/or transportation agencies	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Kansas Division of Emergency Management	Provide emergency response services in Kansas	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Kansas Division of Emergency Management	Coordinate emergency response with other emergency management agencies, public safety agencies, and/or transportation agencies	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Kansas DOT	Provide traffic management related services in response to emergencies	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Kansas Highway Patrol	Operate and maintain a dispatch facility	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Kansas Highway Patrol	Provide emergency response services	Existing

Flint Hills Regional ITS Architecture

RR Area Name	Stakeholder	RR Description	RR Status
Emergency Management for Flint Hills Regional ITS Architecture	Kansas Highway Patrol	Coordinate emergency response with other emergency management agencies, public safety agencies, and/or transportation agencies	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Kansas Homeland Security	Provide homeland security related emergency response services in Kansas	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Kansas Homeland Security	Coordinate emergency response with other emergency management agencies, public safety agencies, and/or transportation agencies	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Kansas State University	Provide emergency response services on campus	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Kansas State University	Coordinate emergency response with other emergency management agencies, public safety agencies, and/or transportation agencies	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Media	Disseminate emergency information to the public	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Media	Disseminate evacuation and reentry information to the public	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Neighboring Cities and Counties	Provide emergency response services within respective jurisdictions	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Neighboring Cities and Counties	Coordinate emergency response with other emergency management agencies, public safety agencies, and/or transportation agencies	Existing
Emergency Management for Flint Hills Regional ITS Architecture	NOAA	Provide weather information to public agencies, private information providers, and the public	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Pottawatomie County	Provide emergency response services	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Pottawatomie County	Coordinate emergency response with other emergency management agencies, public safety agencies, and/or transportation agencies	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Pottawatomie County Emergency Management	Provide emergency response services	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Pottawatomie County Emergency Management	Coordinate emergency response with other emergency management agencies, public safety agencies, and/or transportation agencies	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Pottawatomie County Public Works	Provide traffic management related services in response to emergencies	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Pottawatomie County Sheriff	Provide emergency response services	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Pottawatomie County Sheriff	Provide emergency call taking (911) within the city jurisdiction and dispatch police, fire and EMS services	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Pottawatomie County Sheriff	Operate and maintain a dispatch facility	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Pottawatomie County Sheriff	Coordinate emergency response with other emergency management agencies, public safety agencies, and/or transportation agencies	Existing

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RR Area Name	Stakeholder	RR Description	RR Status
Emergency Management for Flint Hills Regional ITS Architecture	Riley County	Provide emergency response services	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Riley County	Coordinate emergency response with other emergency management agencies, public safety agencies, and/or transportation agencies	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Riley County Emergency Management	Provide emergency response services	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Riley County Emergency Management	Coordinate emergency response with other emergency management agencies, public safety agencies, and/or transportation agencies	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Riley County Fire Department	Provide emergency response services	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Riley County Fire Department	Coordinate emergency response with other emergency management agencies, public safety agencies, and/or transportation agencies	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Riley County Police Department	Coordinate emergency response with other emergency management agencies, public safety agencies, and/or transportation agencies	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Riley County Police Department	Operate and maintain a dispatch facility	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Riley County Police Department	Provide emergency response services	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Riley County Police Department	Provide emergency call taking (911) within the city jurisdiction and dispatch police, fire and EMS services	Existing
Emergency Management for Flint Hills Regional ITS Architecture	Riley County Public Works	Provide traffic management related services in response to emergencies	Existing
Freeway Management for Flint Hills Regional ITS Architecture	Kansas DOT	Operate and maintain real-time traffic data collection technologies	Existing
Freeway Management for Flint Hills Regional ITS Architecture	Kansas DOT	Operate and maintain CCTV cameras	Existing
Freeway Management for Flint Hills Regional ITS Architecture	Kansas DOT	Operate and maintain permanent and portable DMS	Existing
Freeway Management for Flint Hills Regional ITS Architecture	Kansas DOT	Monitor traffic conditions	Existing
Incident Management for Flint Hills Regional ITS Architecture	Blue Township Fire Department	Support traffic incident response and recovery	Existing
Incident Management for Flint Hills Regional ITS Architecture	City of Junction City Engineering	Operate and maintain CCTV cameras	Planned
Incident Management for Flint Hills Regional ITS Architecture	City of Junction City Engineering	Share CCTV images with 911 centers and incident and emergency responders	Planned
Incident Management for Flint Hills Regional ITS Architecture	City of Junction City Fire Department	Support traffic incident response and recovery	Existing
Incident Management for Flint Hills Regional ITS Architecture	City of Junction City Fire Department	Operate and maintain Automated Vehicle Location (AVL) system	Existing
Incident Management for Flint Hills Regional ITS Architecture	City of Junction City Police Department	Support traffic incident response and recovery	Existing
Incident Management for Flint Hills Regional ITS Architecture	City of Junction City Police Department	Operate and maintain a dispatch facility	Existing

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RR Area Name	Stakeholder	RR Description	RR Status
Incident Management for Flint Hills Regional ITS Architecture	City of Junction City Public Works	Support traffic incident response and recovery	Existing
Incident Management for Flint Hills Regional ITS Architecture	City of Manhattan Fire Department	Support traffic incident response and recovery	Existing
Incident Management for Flint Hills Regional ITS Architecture	City of Manhattan Fire Department	Operate and maintain Automated Vehicle Location (AVL) system	Planned
Incident Management for Flint Hills Regional ITS Architecture	City of Manhattan Public Works	Operate and maintain CCTV cameras	Existing
Incident Management for Flint Hills Regional ITS Architecture	City of Manhattan Public Works	Disseminate traffic or weather condition information via mobile alerts	Planned
Incident Management for Flint Hills Regional ITS Architecture	City of Manhattan Public Works	Disseminate traffic or weather condition information via TV/Radio, social media, webpage, and email alerts	Planned
Incident Management for Flint Hills Regional ITS Architecture	City of Manhattan Public Works	Share CCTV images with 911 centers and incident and emergency responders	Planned
Incident Management for Flint Hills Regional ITS Architecture	City of Manhattan Public Works	Disseminate traffic and road condition information via DMS	Planned
Incident Management for Flint Hills Regional ITS Architecture	Geary County Emergency Management	Support traffic incident response and recovery	Existing
Incident Management for Flint Hills Regional ITS Architecture	Geary County Public Works	Support traffic incident response and recovery	Existing
Incident Management for Flint Hills Regional ITS Architecture	Geary County Rural Fire Department	Support traffic incident response and recovery	Existing
Incident Management for Flint Hills Regional ITS Architecture	Geary County Sheriff	Support traffic incident response and recovery	Existing
Incident Management for Flint Hills Regional ITS Architecture	Kansas Division of Emergency Management	Support traffic incident response and recovery	Existing
Incident Management for Flint Hills Regional ITS Architecture	Kansas DOT	Operate and maintain CCTV cameras	Existing
Incident Management for Flint Hills Regional ITS Architecture	Kansas DOT	Operate and maintain permanent and portable DMS	Existing
Incident Management for Flint Hills Regional ITS Architecture	Kansas DOT	Monitor traffic conditions	Existing
Incident Management for Flint Hills Regional ITS Architecture	Kansas DOT	Disseminate traffic or weather condition information via DMS, 511, social media, webpages, and email	Existing
Incident Management for Flint Hills Regional ITS Architecture	Kansas Highway Patrol	Support traffic incident response and recovery	Existing
Incident Management for Flint Hills Regional ITS Architecture	Kansas Highway Patrol	Operate and maintain a dispatch facility	Planned
Incident Management for Flint Hills Regional ITS Architecture	Kansas Highway Patrol	Operate and maintain Automated Vehicle Location (AVL) system	Planned
Incident Management for Flint Hills Regional ITS Architecture	Pottawatomie County Emergency Management	Support traffic incident response and recovery	Existing
Incident Management for Flint Hills Regional ITS Architecture	Pottawatomie County Public Works	Support traffic incident response and recovery	Existing
Incident Management for Flint Hills Regional ITS Architecture	Pottawatomie County Sheriff	Support traffic incident response and recovery	Existing
Incident Management for Flint Hills Regional ITS Architecture	Riley County Emergency Management	Support traffic incident response and recovery	Existing
Incident Management for Flint Hills Regional ITS Architecture	Riley County Fire Department	Support traffic incident response and recovery	Existing

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RR Area Name	Stakeholder	RR Description	RR Status
Incident Management for Flint Hills Regional ITS Architecture	Riley County Police Department	Support traffic incident response and recovery	Existing
Incident Management for Flint Hills Regional ITS Architecture	Riley County Police Department	Operate and maintain a dispatch facility	Existing
Incident Management for Flint Hills Regional ITS Architecture	Riley County Police Department	Operate and maintain Automated Vehicle Location (AVL) system	Existing
Incident Management for Flint Hills Regional ITS Architecture	Riley County Public Works	Support traffic incident response and recovery	Existing
Maintenance and Construction for Flint Hills Regional ITS Architecture	City of Junction City Public Works	Provide and support on-going operations and maintenance activities	Existing
Maintenance and Construction for Flint Hills Regional ITS Architecture	City of Junction City Public Works	Operate and maintain a vehicle fleet	Existing
Maintenance and Construction for Flint Hills Regional ITS Architecture	City of Junction City Public Works	Manage roadway work zone activities	Existing
Maintenance and Construction for Flint Hills Regional ITS Architecture	City of Junction City Public Works	Operate and maintain Automated Vehicle Location (AVL) system	Existing
Maintenance and Construction for Flint Hills Regional ITS Architecture	City of Junction City Public Works	Perform winter maintenance activities	Existing
Maintenance and Construction for Flint Hills Regional ITS Architecture	City of Manhattan Public Works	Provide and support on-going operations and maintenance activities	Existing
Maintenance and Construction for Flint Hills Regional ITS Architecture	City of Manhattan Public Works	Operate and maintain a vehicle fleet	Existing
Maintenance and Construction for Flint Hills Regional ITS Architecture	City of Manhattan Public Works	Collect road and weather conditions data from environmental sensors located on or near the roadway	Existing
Maintenance and Construction for Flint Hills Regional ITS Architecture	City of Manhattan Public Works	Manage roadway work zone activities	Existing
Maintenance and Construction for Flint Hills Regional ITS Architecture	City of Manhattan Public Works	Perform winter maintenance activities	Existing
Maintenance and Construction for Flint Hills Regional ITS Architecture	City of Manhattan Public Works	Use environmental data or information to detect environmental hazards such as icy road conditions, high winds, or dense fog	Existing
Maintenance and Construction for Flint Hills Regional ITS Architecture	City of Manhattan Public Works	Operate and maintain Automated Vehicle Location (AVL) system	Planned
Maintenance and Construction for Flint Hills Regional ITS Architecture	Geary County Public Works	Operate and maintain a vehicle fleet	Existing
Maintenance and Construction for Flint Hills Regional ITS Architecture	Geary County Public Works	Provide and support on-going operations and maintenance activities	Existing
Maintenance and Construction for Flint Hills Regional ITS Architecture	Geary County Public Works	Manage roadway work zone activities	Existing
Maintenance and Construction for Flint Hills Regional ITS Architecture	Geary County Public Works	Perform winter maintenance activities	Existing

Flint Hills Regional ITS Architecture

RR Area Name	Stakeholder	RR Description	RR Status
Maintenance and Construction for Flint Hills Regional ITS Architecture	Kansas DOT	Provide and support on-going operations and maintenance activities	Existing
Maintenance and Construction for Flint Hills Regional ITS Architecture	Kansas DOT	Operate and maintain a vehicle fleet	Existing
Maintenance and Construction for Flint Hills Regional ITS Architecture	Kansas DOT	Collect road and weather conditions data from environmental sensors located on or near the roadway	Existing
Maintenance and Construction for Flint Hills Regional ITS Architecture	Kansas DOT	Manage roadway work zone activities	Existing
Maintenance and Construction for Flint Hills Regional ITS Architecture	Kansas DOT	Perform winter maintenance activities	Existing
Maintenance and Construction for Flint Hills Regional ITS Architecture	Kansas DOT	Use environmental data or information to detect environmental hazards such as icy road conditions, high winds, or dense fog	Existing
Maintenance and Construction for Flint Hills Regional ITS Architecture	Pottawatomie County Public Works	Provide and support on-going operations and maintenance activities	Existing
Maintenance and Construction for Flint Hills Regional ITS Architecture	Pottawatomie County Public Works	Operate and maintain a vehicle fleet	Existing
Maintenance and Construction for Flint Hills Regional ITS Architecture	Pottawatomie County Public Works	Manage roadway work zone activities	Existing
Maintenance and Construction for Flint Hills Regional ITS Architecture	Pottawatomie County Public Works	Operate and maintain Automated Vehicle Location (AVL) system	Existing
Maintenance and Construction for Flint Hills Regional ITS Architecture	Pottawatomie County Public Works	Perform winter maintenance activities	Existing
Maintenance and Construction for Flint Hills Regional ITS Architecture	Riley County Public Works	Provide and support on-going operations and maintenance activities	Existing
Maintenance and Construction for Flint Hills Regional ITS Architecture	Riley County Public Works	Operate and maintain a vehicle fleet	Existing
Maintenance and Construction for Flint Hills Regional ITS Architecture	Riley County Public Works	Manage roadway work zone activities	Existing
Maintenance and Construction for Flint Hills Regional ITS Architecture	Riley County Public Works	Perform winter maintenance activities	Existing
Parking Management for Flint Hills Regional ITS Architecture	City of Manhattan Public Works	Disseminate parking information to the public via traveler information website	Planned
Parking Management for Flint Hills Regional ITS Architecture	Kansas State University	Provide parking information at parking facilities	Planned
Parking Management for Flint Hills Regional ITS Architecture	Kansas State University	Monitor and provide parking availability information to the public	Planned
Surface Street Management for Flint Hills Regional ITS Architecture	City of Junction City Engineering	Operate and maintain traffic signals	Existing
Surface Street Management for Flint Hills Regional ITS Architecture	City of Junction City Engineering	Operate and maintain emergency vehicle preemption equipment at signals	Existing

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RR Area Name	Stakeholder	RR Description	RR Status
Surface Street Management for Flint Hills Regional ITS Architecture	City of Junction City Engineering	Operate and maintain real-time traffic data collection technologies	Planned
Surface Street Management for Flint Hills Regional ITS Architecture	City of Junction City Engineering	Operate and maintain CCTV cameras	Planned
Surface Street Management for Flint Hills Regional ITS Architecture	City of Manhattan Public Works	Operate and maintain traffic signals	Existing
Surface Street Management for Flint Hills Regional ITS Architecture	City of Manhattan Public Works	Operate and maintain CCTV cameras	Existing
Surface Street Management for Flint Hills Regional ITS Architecture	City of Manhattan Public Works	Operate and maintain emergency vehicle preemption equipment at signals	Existing
Surface Street Management for Flint Hills Regional ITS Architecture	City of Manhattan Public Works	Operate and maintain real-time traffic data collection technologies, including Bluetooth readers	Existing
Surface Street Management for Flint Hills Regional ITS Architecture	City of Manhattan Public Works	Operate and maintain communications network and equipment	Existing
Surface Street Management for Flint Hills Regional ITS Architecture	City of Manhattan Public Works	Operate and maintain permanent and portable DMS	Planned
Surface Street Management for Flint Hills Regional ITS Architecture	City of Manhattan Public Works	Operate and maintain bicycle detection equipment	Planned
Transit Services for Flint Hills Regional ITS Architecture	City of Manhattan Public Works	Disseminate transit information to the public via traveler information website	Planned
Transit Services for Flint Hills Regional ITS Architecture	FHATA	Operate and maintain an Automated Vehicle Location (AVL) system	Existing
Transit Services for Flint Hills Regional ITS Architecture	FHATA	Operate demand response transit services	Existing
Transit Services for Flint Hills Regional ITS Architecture	FHATA	Operate fixed-route transit services	Existing
Transit Services for Flint Hills Regional ITS Architecture	FHATA	Provide maintenance of the transit vehicles	Existing
Transit Services for Flint Hills Regional ITS Architecture	FHATA	Automate vehicle maintenance scheduling and manage both routine and corrective maintenance activities on vehicles	Planned
Transit Services for Flint Hills Regional ITS Architecture	FHATA	Directly or indirectly provide transit information to the public	Planned
Transit Services for Flint Hills Regional ITS Architecture	FHATA	Operate and maintain security monitoring systems on-board transit vehicles	Planned
Traveler Information for Flint Hills Regional ITS Architecture	City of Junction City Public Works	Directly or indirectly provide traffic information to the public	Planned
Traveler Information for Flint Hills Regional ITS Architecture	City of Manhattan Public Works	Disseminate traffic or weather condition information via TV/Radio, social media, webpage, and email alerts	Existing
Traveler Information for Flint Hills Regional ITS Architecture	City of Manhattan Public Works	Operate and maintain traffic information website to provide updates on roadway closures	Existing
Traveler Information for Flint Hills Regional ITS Architecture	City of Manhattan Public Works	Disseminate parking information to the public via traveler information website	Planned
Traveler Information for Flint Hills Regional ITS Architecture	City of Manhattan Public Works	Disseminate transit information to the public via traveler information website	Planned

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RR Area Name	Stakeholder	RR Description	RR Status
Traveler Information for Flint Hills Regional ITS Architecture	City of Manhattan Public Works	Disseminate traffic or weather condition information via mobile alerts	Planned
Traveler Information for Flint Hills Regional ITS Architecture	City of Manhattan Public Works	Disseminate traffic and road condition information via DMS	Planned
Traveler Information for Flint Hills Regional ITS Architecture	FHATA	Directly or indirectly provide transit information to the public	Planned
Traveler Information for Flint Hills Regional ITS Architecture	Kansas DOT	Disseminate traffic or weather condition information via DMS, 511, social media, webpages, and email	Existing
Traveler Information for Flint Hills Regional ITS Architecture	Kansas State University	Provide parking information at parking facilities	Planned
Traveler Information for Flint Hills Regional ITS Architecture	Kansas State University	Monitor and provide parking availability information to the public	Planned
Traveler Information for Flint Hills Regional ITS Architecture	Media	Disseminate traffic and road conditions information to the public	Existing
Traveler Information for Flint Hills Regional ITS Architecture	Media	Disseminate whether information to the public	Existing
Traveler Information for Flint Hills Regional ITS Architecture	Media	Disseminate emergency information to the public	Existing
Traveler Information for Flint Hills Regional ITS Architecture	Media	Disseminate evacuation and reentry information to the public	Existing
Traveler Information for Flint Hills Regional ITS Architecture	NOAA	Provide weather information to public agencies, private information providers, and the public	Existing

7 Functional Requirements

Each ITS system operated by the stakeholders must perform certain functions to effectively deliver the ITS services desired by the region. The primary functions that each system needs to perform are broadly defined in the Flint Hills Regional ITS Architecture. The high-level requirements are grouped into functional areas that identify requirements associated with each selected ITS service.

Table 5: Functional Requirements

Element Name	Entity Name	Functional Area	Functional Area Description
Blue Township Fire Department	Emergency Management	Emergency Early Warning System	Monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies in order to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to other ITS centers to notify the traveling public.
Blue Township Fire Department	Emergency Management	Emergency Evacuation Support	Evacuation planning and coordination to manage evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety.
Blue Township Fire Department	Emergency Management	Emergency Response Management	Strategic emergency planning and response capabilities and broad inter-agency interfaces to support large-scale incidents and disasters, commonly associated with Emergency Operations Centers.
Blue Township Fire Department	Emergency Management	Incident Command	Tactical decision support, resource coordination, and communications integration among emergency management agencies for Incident Commands that are established by first responders to support local management of an incident.
Blue Township Fire Department Vehicles	Emergency Vehicle	On-board EV En Route Support	On-board systems for gathering of dispatch and routing information for emergency vehicle personnel, vehicle tracking, communications with care facilities, and signal preemption via short range communication directly with traffic control equipment at the roadside.
FHATA Dispatch Center	Emergency Management	Emergency Evacuation Support	Evacuation planning and coordination to manage evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety.
FHATA Dispatch Center	Emergency Management	Emergency Response Management	Strategic emergency planning and response capabilities and broad inter-agency interfaces to support large-scale incidents and disasters, commonly associated with Emergency Operations Centers.
FHATA Dispatch Center	Transit Management	Transit Center Fixed-Route Operations	Management of fixed route transit operations. Planning, scheduling, and dispatch associated with fixed and flexible route transit services. Updates customer service operator systems, and provides current vehicle schedule adherence and optimum scenarios for schedule adjustment.

Element Name	Entity Name	Functional Area	Functional Area Description
FHATA Dispatch Center	Transit Management	Transit Center Information Services	Provide interactive traveler information to travelers (on-board transit vehicles, at stops/stations, using personal devices), traveler information service providers, media, and other transit organizations. Includes routes, schedules, transfer options, fares, real-time schedule adherence, current incidents, weather conditions, yellow pages, and special events.
FHATA Dispatch Center	Transit Management	Transit Center Paratransit Operations	Management of demand response transit services, including paratransit. Planning and scheduling of these services. Supports automated vehicle dispatch and automatically updates customer service operator systems.
FHATA Dispatch Center	Transit Management	Transit Center Security	Monitor transit vehicle operator or traveler activated alarms; authenticate transit vehicle operators; remotely disable a transit vehicle; alert operators, travelers, and police to potential incidents identified by these security features.
FHATA Dispatch Center	Transit Management	Transit Center Vehicle Tracking	Monitoring transit vehicle locations via interactions with on-board systems. Furnish users with real-time transit schedule information and maintain interface with digital map providers.
FHATA Dispatch Center	Transit Management	Transit Evacuation Support	Support evacuation and subsequent reentry of a population in the vicinity of a disaster or other emergency. Coordinate regional evacuation plans and resources including transit and school bus fleets.
FHATA Dispatch Center	Transit Management	Transit Garage Maintenance	Collect operational and maintenance data from transit vehicles, manage vehicle service histories, automatically generate preventative maintenance schedules, and provide information to service personnel.
FHATA Dispatch Center	Transit Management	Transit Vehicle Assignment	Assigns individual transit vehicles to vehicle blocks and downloads this information to the transit vehicle, updating assignments as necessitated by changes. It also provides an inventory management function that stores attributes about each of the transit vehicles.
FHATA Dispatch Center	Transit Management	Transit Vehicle Operator Assignment	Assignment of transit operators to runs in a fair manner while minimizing labor and overtime services, considering operator preferences, qualifications, accumulated work hours, and other information about each operator.
FHATA Real-Time Signs	Remote Traveler Support	Remote Transit Information Services	Public traveler interface that provides real-time travel-related information at transit stops and multi-modal transfer points, including general annunciation, display of imminent arrival information, the latest available information on transit routes, schedules, transfer options, available services, fares, and real-time schedule adherence.
FHATA Vehicles	Transit Vehicle	On-board Paratransit Operations	On-board systems to manage paratransit and flexible-route dispatch requests, including multi-stop runs. Passenger data is collected and provided to the center.
FHATA Vehicles	Transit Vehicle	On-board Schedule Management	Collecting of data for schedule generation and adjustment on-board a transit vehicle. Supports communication between the vehicle, operator, and center.

Element Name	Entity Name	Functional Area	Functional Area Description
FHATA Vehicles	Transit Vehicle	On-board Transit Information Services	On-board systems to furnish next-stop announcement as well as interactive travel-related information, including routes, schedules, transfer options, fares, real-time schedule adherence, current incidents, weather conditions, non-motorized transportation services, and special events.
FHATA Vehicles	Transit Vehicle	On-board Transit Security	On-board video/audio surveillance systems, threat sensors, and object detection sensors to enhance security and safety on-board a transit vehicles. Also includes silent alarms activated by transit user or vehicle operator, operator authentication, and remote vehicle disabling.
FHATA Vehicles	Transit Vehicle	On-board Transit Trip Monitoring	Support fleet management with automatic vehicle location (AVL) and automated mileage and fuel reporting and auditing.
Fort Riley Emergency Management	Emergency Management	Emergency Early Warning System	Monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies in order to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to other ITS centers to notify the traveling public.
Fort Riley Emergency Management	Emergency Management	Emergency Evacuation Support	Evacuation planning and coordination to manage evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety.
Fort Riley Emergency Management	Emergency Management	Emergency Response Management	Strategic emergency planning and response capabilities and broad inter-agency interfaces to support large-scale incidents and disasters, commonly associated with Emergency Operations Centers.
Fort Riley Emergency Management	Emergency Management	Incident Command	Tactical decision support, resource coordination, and communications integration among emergency management agencies for Incident Commands that are established by first responders to support local management of an incident.
Fort Riley Emergency Services	Emergency Management	Incident Command	Tactical decision support, resource coordination, and communications integration among emergency management agencies for Incident Commands that are established by first responders to support local management of an incident.
Fort Riley Fire Department	Emergency Management	Emergency Early Warning System	Monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies in order to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to other ITS centers to notify the traveling public.
Fort Riley Fire Department	Emergency Management	Emergency Evacuation Support	Evacuation planning and coordination to manage evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety.
Fort Riley Fire Department	Emergency Management	Emergency Response Management	Strategic emergency planning and response capabilities and broad inter-agency interfaces to support large-scale incidents and disasters, commonly associated with Emergency Operations Centers.

Element Name	Entity Name	Functional Area	Functional Area Description
Fort Riley Fire Department	Emergency Management	Incident Command	Tactical decision support, resource coordination, and communications integration among emergency management agencies for Incident Commands that are established by first responders to support local management of an incident.
Fort Riley Police Department	Emergency Management	Emergency Early Warning System	Monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies in order to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to other ITS centers to notify the traveling public.
Fort Riley Police Department	Emergency Management	Emergency Evacuation Support	Evacuation planning and coordination to manage evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety.
Fort Riley Police Department	Emergency Management	Emergency Response Management	Strategic emergency planning and response capabilities and broad inter-agency interfaces to support large-scale incidents and disasters, commonly associated with Emergency Operations Centers.
Fort Riley Police Department	Emergency Management	Incident Command	Tactical decision support, resource coordination, and communications integration among emergency management agencies for Incident Commands that are established by first responders to support local management of an incident.
Fort Riley Public Works	Traffic Management	TMC Incident Dispatch Coordination/Communication	Formulates an incident response that takes into account the incident potential, incident impacts, and/or resources required for incident management. Facilitates the dispatch of emergency response and service vehicles and coordinates the response with cooperating agencies.
Geary County Emergency Operations Center	Emergency Management	Emergency Early Warning System	Monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies in order to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to other ITS centers to notify the traveling public.
Geary County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	Evacuation planning and coordination to manage evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety.
Geary County Emergency Operations Center	Emergency Management	Emergency Response Management	Strategic emergency planning and response capabilities and broad inter-agency interfaces to support large-scale incidents and disasters, commonly associated with Emergency Operations Centers.
Geary County Emergency Operations Center	Emergency Management	Incident Command	Tactical decision support, resource coordination, and communications integration among emergency management agencies for Incident Commands that are established by first responders to support local management of an incident.

Element Name	Entity Name	Functional Area	Functional Area Description
Geary County Emergency Vehicles	Emergency Vehicle	On-board EV En Route Support	On-board systems for gathering of dispatch and routing information for emergency vehicle personnel, vehicle tracking, communications with care facilities, and signal preemption via short range communication directly with traffic control equipment at the roadside.
Geary County Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Roadway Maintenance and Construction	On-board systems that support routine non-winter maintenance on the roadway or right-of-way. Includes landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of equipment on the roadway.
Geary County Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Winter Maintenance	On-board systems that support snow plow operations and other roadway treatments (e.g., salt spraying and other material applications). Supports information sharing between snow plows.
Geary County Public Works	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	Overall management and support for routine maintenance on the roadway or right-of-way. Includes landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of both ITS and non-ITS equipment.
Geary County Public Works	Maintenance and Construction Management	MCM Winter Maintenance Management	Manages winter road maintenance, tracking and controlling snow plow operations, roadway treatment (e.g., salt spraying and other material applications) based on weather information.
Geary County Rural Fire Department	Emergency Management	Emergency Early Warning System	Monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies in order to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to other ITS centers to notify the traveling public.
Geary County Rural Fire Department	Emergency Management	Emergency Evacuation Support	Evacuation planning and coordination to manage evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety.
Geary County Rural Fire Department	Emergency Management	Emergency Response Management	Strategic emergency planning and response capabilities and broad inter-agency interfaces to support large-scale incidents and disasters, commonly associated with Emergency Operations Centers.
Geary County Rural Fire Department	Emergency Management	Incident Command	Tactical decision support, resource coordination, and communications integration among emergency management agencies for Incident Commands that are established by first responders to support local management of an incident.
Geary County Sheriff Department	Emergency Management	Emergency Early Warning System	Monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies in order to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to other ITS centers to notify the traveling public.

Element Name	Entity Name	Functional Area	Functional Area Description
Geary County Sheriff Department	Emergency Management	Emergency Evacuation Support	Evacuation planning and coordination to manage evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety.
Geary County Sheriff Department	Emergency Management	Emergency Response Management	Strategic emergency planning and response capabilities and broad inter-agency interfaces to support large-scale incidents and disasters, commonly associated with Emergency Operations Centers.
Geary County Sheriff Department	Emergency Management	Incident Command	Tactical decision support, resource coordination, and communications integration among emergency management agencies for Incident Commands that are established by first responders to support local management of an incident.
Junction City CCTV Cameras	Roadway	Roadway Basic Surveillance	Field elements that monitor traffic conditions using loop detectors and CCTV cameras.
Junction City Dynamic Message Signs	Roadway	Roadway Traffic Information Dissemination	Driver information systems, such as dynamic message signs and Highway Advisory Radio (HAR).
Junction City Emergency Vehicles	Emergency Vehicle	On-board EV En Route Support	On-board systems for gathering of dispatch and routing information for emergency vehicle personnel, vehicle tracking, communications with care facilities, and signal preemption via short range communication directly with traffic control equipment at the roadside.
Junction City Engineering Department	Traffic Management	Collect Traffic Surveillance	Management of traffic sensors and surveillance (CCTV) equipment, collection of current traffic conditions, and distribution of the collected information to other centers and operators.
Junction City Engineering Department	Traffic Management	TMC Evacuation Support	Development, coordination, and execution of special traffic management strategies during evacuation and subsequent reentry of a population in the vicinity of a disaster or major emergency. Interfaces with emergency management and other traffic management centers.
Junction City Engineering Department	Traffic Management	TMC Incident Detection	Remotely monitors traffic sensor and surveillance systems to detect and verify incidents. Also monitors external advisory and incident reporting systems, intermodal freight depots, and border crossings for additional incident information. Identified incidents are reported to operations personnel and other centers.
Junction City Engineering Department	Traffic Management	TMC Incident Dispatch Coordination/Communication	Formulates an incident response that takes into account the incident potential, incident impacts, and/or resources required for incident management. Facilitates the dispatch of emergency response and service vehicles and coordinates the response with cooperating agencies.
Junction City Engineering Department	Traffic Management	TMC Regional Traffic Management	Coordination between traffic management centers in order to share traffic information between centers as well as control of traffic management field equipment. This may be used during incidents and special events and during day-to-day operations.

Element Name	Entity Name	Functional Area	Functional Area Description
Junction City Engineering Department	Traffic Management	TMC Signal Control	Remotely controls traffic signal controllers to implement traffic management strategies at signalized intersections based on traffic conditions, incidents, emergency vehicle preemptions, pedestrian crossings, etc.
Junction City Engineering Department	Traffic Management	TMC Traffic Information Dissemination	Controls dissemination of traffic-related data to other centers, the media, and travelers via the driver information systems (DMS, HAR) that it operates.
Junction City Engineering Department	Traffic Management	Traffic Equipment Maintenance	Monitoring and remote diagnostics of field equipment - detect failures, issue problem reports, and track the repair or replacement of the failed equipment.
Junction City Fire Department	Emergency Management	Emergency Early Warning System	Monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies in order to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to other ITS centers to notify the traveling public.
Junction City Fire Department	Emergency Management	Emergency Evacuation Support	Evacuation planning and coordination to manage evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety.
Junction City Fire Department	Emergency Management	Emergency Response Management	Strategic emergency planning and response capabilities and broad inter-agency interfaces to support large-scale incidents and disasters, commonly associated with Emergency Operations Centers.
Junction City Fire Department	Emergency Management	Incident Command	Tactical decision support, resource coordination, and communications integration among emergency management agencies for Incident Commands that are established by first responders to support local management of an incident.
Junction City Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Roadway Maintenance and Construction	On-board systems that support routine non-winter maintenance on the roadway or right-of-way. Includes landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of equipment on the roadway.
Junction City Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Vehicle Location Tracking	On-board systems to track vehicle location and reports the position and timestamp information to the dispatch center.
Junction City Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Winter Maintenance	On-board systems that support snow plow operations and other roadway treatments (e.g., salt spraying and other material applications). Supports information sharing between snow plows.
Junction City Police / 911 Center	Emergency Management	Emergency Call-Taking	Provides interface to the emergency call-taking systems such as the Emergency Telecommunications System (e.g., 911) that correlate call information with emergencies reported by transit agencies, commercial vehicle operators, or other public safety agencies. Allows the operator to verify the incident and forward the information to the responding agencies.

Element Name	Entity Name	Functional Area	Functional Area Description
Junction City Police / 911 Center	Emergency Management	Emergency Dispatch	Dispatch emergency vehicles to incidents, tracking their location and status. Pertinent incident information is gathered and relayed to the responding units.
Junction City Police / 911 Center	Emergency Management	Emergency Early Warning System	Monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies in order to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to other ITS centers to notify the traveling public.
Junction City Police / 911 Center	Emergency Management	Emergency Evacuation Support	Evacuation planning and coordination to manage evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety.
Junction City Police / 911 Center	Emergency Management	Emergency Response Management	Strategic emergency planning and response capabilities and broad inter-agency interfaces to support large-scale incidents and disasters, commonly associated with Emergency Operations Centers.
Junction City Police / 911 Center	Emergency Management	Incident Command	Tactical decision support, resource coordination, and communications integration among emergency management agencies for Incident Commands that are established by first responders to support local management of an incident.
Junction City Public Works Department	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	Overall management and support for routine maintenance on the roadway or right-of-way. Includes landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of both ITS and non-ITS equipment.
Junction City Public Works Department	Maintenance and Construction Management	MCM Vehicle Tracking	Remotely tracks the location of maintenance and construction vehicles and other equipment; presented to the center personnel.
Junction City Public Works Department	Maintenance and Construction Management	MCM Winter Maintenance Management	Manages winter road maintenance, tracking and controlling snow plow operations, roadway treatment (e.g., salt spraying and other material applications) based on weather information.
Junction City Traffic Detection Equipment	Roadway	Roadway Basic Surveillance	Field elements that monitor traffic conditions using loop detectors and CCTV cameras.
Junction City Traffic Signals	Roadway	Field Management Stations Operation	Supports direct communications between field management stations and the local field equipment under their control.
Junction City Traffic Signals	Roadway	Roadway Equipment Coordination	Field elements that control and send data to other field elements (such as environmental sensors that send data to a DMS or coordination between traffic controllers on adjacent intersections), without center control.
Junction City Traffic Signals	Roadway	Roadway Signal Controls	Field elements including traffic signal controllers for use at signalized intersections; also supports pedestrian crossings.
Junction City Traffic Signals	Roadway	Roadway Signal Preemption	Field elements that receive signal preemption requests from approaching emergency vehicles and overrides the current operation of the traffic signals

Element Name	Entity Name	Functional Area	Functional Area Description
Kansas Homeland Security	Emergency Management	Emergency Early Warning System	Monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies in order to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to other ITS centers to notify the traveling public.
Kansas Homeland Security	Emergency Management	Emergency Evacuation Support	Evacuation planning and coordination to manage evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety.
Kansas Homeland Security	Emergency Management	Emergency Response Management	Strategic emergency planning and response capabilities and broad inter-agency interfaces to support large-scale incidents and disasters, commonly associated with Emergency Operations Centers.
Kansas Homeland Security	Emergency Management	Incident Command	Tactical decision support, resource coordination, and communications integration among emergency management agencies for Incident Commands that are established by first responders to support local management of an incident.
Kansas State Emergency Operations Center	Emergency Management	Emergency Early Warning System	Monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies in order to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to other ITS centers to notify the traveling public.
Kansas State Emergency Operations Center	Emergency Management	Emergency Evacuation Support	Evacuation planning and coordination to manage evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety.
Kansas State Emergency Operations Center	Emergency Management	Emergency Response Management	Strategic emergency planning and response capabilities and broad inter-agency interfaces to support large-scale incidents and disasters, commonly associated with Emergency Operations Centers.
Kansas State Emergency Operations Center	Emergency Management	Incident Command	Tactical decision support, resource coordination, and communications integration among emergency management agencies for Incident Commands that are established by first responders to support local management of an incident.
KDOT CCTV Cameras	Roadway	Roadway Basic Surveillance	Field elements that monitor traffic conditions using loop detectors and CCTV cameras.
KDOT District 1 Office	Maintenance and Construction Management	MCM Environmental Information Collection	Remotely controls environmental sensors and assimilates collected data with environmental probe data and other current and forecast road conditions and surface weather information from weather service providers and transportation operations.
KDOT District 1 Office	Maintenance and Construction Management	MCM Incident Management	Supports coordinated response to incidents - share incident notifications, manage incident response resources, and coordinate overall incident situation and response among allied response organizations.

Element Name	Entity Name	Functional Area	Functional Area Description
KDOT District 1 Office	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	Overall management and support for routine maintenance on the roadway or right-of-way. Includes landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of both ITS and non-ITS equipment.
KDOT District 1 Office	Maintenance and Construction Management	MCM Winter Maintenance Management	Manages winter road maintenance, tracking and controlling snow plow operations, roadway treatment (e.g., salt spraying and other material applications) based on weather information.
KDOT District 1 Office	Traffic Management	TMC Traffic Information Dissemination	Controls dissemination of traffic-related data to other centers, the media, and travelers via the driver information systems (DMS, HAR) that it operates.
KDOT District 1 Office	Traffic Management	Traffic Equipment Maintenance	Monitoring and remote diagnostics of field equipment - detect failures, issue problem reports, and track the repair or replacement of the failed equipment.
KDOT District 2 Office	Maintenance and Construction Management	MCM Environmental Information Collection	Remotely controls environmental sensors and assimilates collected data with environmental probe data and other current and forecast road conditions and surface weather information from weather service providers and transportation operations.
KDOT District 2 Office	Maintenance and Construction Management	MCM Incident Management	Supports coordinated response to incidents - share incident notifications, manage incident response resources, and coordinate overall incident situation and response among allied response organizations.
KDOT District 2 Office	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	Overall management and support for routine maintenance on the roadway or right-of-way. Includes landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of both ITS and non-ITS equipment.
KDOT District 2 Office	Maintenance and Construction Management	MCM Winter Maintenance Management	Manages winter road maintenance, tracking and controlling snow plow operations, roadway treatment (e.g., salt spraying and other material applications) based on weather information.
KDOT District 2 Office	Traffic Management	TMC Traffic Information Dissemination	Controls dissemination of traffic-related data to other centers, the media, and travelers via the driver information systems (DMS, HAR) that it operates.
KDOT District 2 Office	Traffic Management	Traffic Equipment Maintenance	Monitoring and remote diagnostics of field equipment - detect failures, issue problem reports, and track the repair or replacement of the failed equipment.
KDOT Dynamic Message Signs	Roadway	Roadway Traffic Information Dissemination	Driver information systems, such as dynamic message signs and Highway Advisory Radio (HAR).
KDOT KanDrive Website and 511 Phone Traveler Information System	Information Service Provider	Basic Information Broadcast	Broadcast dissemination of traffic, transit, maintenance and construction, event, and weather information to traveler interface systems and vehicles.
KDOT KanDrive Website and 511 Phone Traveler Information System	Information Service Provider	Traveler Telephone Information	Distribution of traveler information and wide-area alerts to traveler telephone information systems such as 511, based on voice-based traveler requests.

Element Name	Entity Name	Functional Area	Functional Area Description
KDOT KanRoad	Information Service Provider	ISP Traveler Data Collection	Collects traveler information from other centers, consolidates and refines the collected data, and makes this data available to traveler information applications.
KDOT Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Environmental Monitoring	On-board systems that collect environmental and road condition data (including road surface or air temperature, wind speed, and road traction information - spatially located and time stamped) from sensors on-board the maintenance vehicle or located at the roadway.
KDOT Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Roadway Maintenance and Construction	On-board systems that support routine non-winter maintenance on the roadway or right-of-way. Includes landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of equipment on the roadway.
KDOT Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Winter Maintenance	On-board systems that support snow plow operations and other roadway treatments (e.g., salt spraying and other material applications). Supports information sharing between snow plows.
KDOT RWIS Central Server	Maintenance and Construction Management	MCM Environmental Information Collection	Remotely controls environmental sensors and assimilates collected data with environmental probe data and other current and forecast road conditions and surface weather information from weather service providers and transportation operations.
KDOT RWIS Central Server	Maintenance and Construction Management	MCM Environmental Information Processing	Processes current and forecast weather data, road condition information, local environmental data, and uses internal models to develop specialized detailed forecasts of local weather and surface conditions. Disseminates road weather information to other agencies and centers.
KDOT RWIS Stations	Roadway	Roadway Environmental Monitoring	Environmental sensors, surface and sub-surface, that collect weather and road surface information. Weather conditions measured include temperature, wind, humidity, precipitation, and visibility. Sensors measure road surface temperature, moisture, icing, salinity, etc.
KDOT Statewide TOC	Traffic Management	Collect Traffic Surveillance	Management of traffic sensors and surveillance (CCTV) equipment, collection of current traffic conditions, and distribution of the collected information to other centers and operators.
KDOT Statewide TOC	Traffic Management	TMC Evacuation Support	Development, coordination, and execution of special traffic management strategies during evacuation and subsequent reentry of a population in the vicinity of a disaster or major emergency. Interfaces with emergency management and other traffic management centers.
KDOT Statewide TOC	Traffic Management	TMC Incident Detection	Remotely monitors traffic sensor and surveillance systems to detect and verify incidents. Also monitors external advisory and incident reporting systems, intermodal freight depots, and border crossings for additional incident information. Identified incidents are reported to operations personnel and other centers.

Element Name	Entity Name	Functional Area	Functional Area Description
KDOT Statewide TOC	Traffic Management	TMC Incident Dispatch Coordination/Communication	Formulates an incident response that takes into account the incident potential, incident impacts, and/or resources required for incident management. Facilitates the dispatch of emergency response and service vehicles and coordinates the response with cooperating agencies.
KDOT Statewide TOC	Traffic Management	TMC Traffic Information Dissemination	Controls dissemination of traffic-related data to other centers, the media, and travelers via the driver information systems (DMS, HAR) that it operates.
KDOT Statewide TOC	Traffic Management	Traffic Equipment Maintenance	Monitoring and remote diagnostics of field equipment - detect failures, issue problem reports, and track the repair or replacement of the failed equipment.
KHP Communications Center	Emergency Management	Emergency Call-Taking	Provides interface to the emergency call-taking systems such as the Emergency Telecommunications System (e.g., 911) that correlate call information with emergencies reported by transit agencies, commercial vehicle operators, or other public safety agencies. Allows the operator to verify the incident and forward the information to the responding agencies.
KHP Communications Center	Emergency Management	Emergency Dispatch	Dispatch emergency vehicles to incidents, tracking their location and status. Pertinent incident information is gathered and relayed to the responding units.
KHP Communications Center	Emergency Management	Emergency Early Warning System	Monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies in order to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to other ITS centers to notify the traveling public.
KHP Communications Center	Emergency Management	Emergency Environmental Monitoring	Collects current and forecast road and weather information that is used by the operator to more effectively manage incidents.
KHP Communications Center	Emergency Management	Emergency Evacuation Support	Evacuation planning and coordination to manage evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety.
KHP Communications Center	Emergency Management	Emergency Response Management	Strategic emergency planning and response capabilities and broad inter-agency interfaces to support large-scale incidents and disasters, commonly associated with Emergency Operations Centers.
KHP Communications Center	Emergency Management	Emergency Routing	Routing of emergency vehicles to facilitate the quickest/safest arrival. Routes may be determined based on real-time traffic information and road conditions or routes may be provided by Traffic Management on request.
KHP Communications Center	Emergency Management	Incident Command	Tactical decision support, resource coordination, and communications integration among emergency management agencies for Incident Commands that are established by first responders to support local management of an incident.

Element Name	Entity Name	Functional Area	Functional Area Description
KHP Troop C	Emergency Management	Emergency Early Warning System	Monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies in order to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to other ITS centers to notify the traveling public.
KHP Troop C	Emergency Management	Emergency Environmental Monitoring	Collects current and forecast road and weather information that is used by the operator to more effectively manage incidents.
KHP Troop C	Emergency Management	Emergency Evacuation Support	Evacuation planning and coordination to manage evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety.
KHP Troop C	Emergency Management	Emergency Response Management	Strategic emergency planning and response capabilities and broad inter-agency interfaces to support large-scale incidents and disasters, commonly associated with Emergency Operations Centers.
KHP Troop C	Emergency Management	Incident Command	Tactical decision support, resource coordination, and communications integration among emergency management agencies for Incident Commands that are established by first responders to support local management of an incident.
KHP Troop C Vehicles	Emergency Vehicle	On-board EV En Route Support	On-board systems for gathering of dispatch and routing information for emergency vehicle personnel, vehicle tracking, communications with care facilities, and signal preemption via short range communication directly with traffic control equipment at the roadside.
K-State Parking Services	Parking Management	Parking Management	Monitor vehicles and current parking availability within parking facilities. Use driver information systems (e.g., DMS) to provide parking availability and other parking facility information to drivers. Support local traffic control coordination around the parking facility.
K-State Police Department	Emergency Management	Emergency Early Warning System	Monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies in order to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to other ITS centers to notify the traveling public.
K-State Police Department	Emergency Management	Emergency Evacuation Support	Evacuation planning and coordination to manage evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety.
K-State Police Department	Emergency Management	Emergency Response Management	Strategic emergency planning and response capabilities and broad inter-agency interfaces to support large-scale incidents and disasters, commonly associated with Emergency Operations Centers.
K-State Police Department	Emergency Management	Incident Command	Tactical decision support, resource coordination, and communications integration among emergency management agencies for Incident Commands that are established by first responders to support local management of an incident.

Element Name	Entity Name	Functional Area	Functional Area Description
Manhattan Bicycle Detection System	Roadway	Roadway Mixed Use Sensing	Provides the field devices that provide sensing and warning systems for pedestrians, bicyclists, and other vehicles that operate on the main vehicle roadways, or on pathways which intersect the main vehicle roadways.
Manhattan Bluetooth Readers	Roadway	Roadway Probe Data Communications	Field elements that collect probe data from vehicles using short range communications.
Manhattan CCTV Cameras	Roadway	Roadway Basic Surveillance	Field elements that monitor traffic conditions using loop detectors and CCTV cameras.
Manhattan Dynamic Message Signs	Roadway	Roadway Traffic Information Dissemination	Driver information systems, such as dynamic message signs and Highway Advisory Radio (HAR).
Manhattan Emergency Vehicles	Emergency Vehicle	On-board EV En Route Support	On-board systems for gathering of dispatch and routing information for emergency vehicle personnel, vehicle tracking, communications with care facilities, and signal preemption via short range communication directly with traffic control equipment at the roadside.
Manhattan Fire Department	Emergency Management	Emergency Early Warning System	Monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies in order to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to other ITS centers to notify the traveling public.
Manhattan Fire Department	Emergency Management	Emergency Evacuation Support	Evacuation planning and coordination to manage evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety.
Manhattan Fire Department	Emergency Management	Emergency Response Management	Strategic emergency planning and response capabilities and broad inter-agency interfaces to support large-scale incidents and disasters, commonly associated with Emergency Operations Centers.
Manhattan Fire Department	Emergency Management	Incident Command	Tactical decision support, resource coordination, and communications integration among emergency management agencies for Incident Commands that are established by first responders to support local management of an incident.
Manhattan Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Roadway Maintenance and Construction	On-board systems that support routine non-winter maintenance on the roadway or right-of-way. Includes landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of equipment on the roadway.
Manhattan Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Vehicle Location Tracking	On-board systems to track vehicle location and reports the position and timestamp information to the dispatch center.
Manhattan Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Winter Maintenance	On-board systems that support snow plow operations and other roadway treatments (e.g., salt spraying and other material applications). Supports information sharing between snow plows.
Manhattan Portable Changeable Message Signs	Roadway	Roadway Traffic Information Dissemination	Driver information systems, such as dynamic message signs and Highway Advisory Radio (HAR).

Element Name	Entity Name	Functional Area	Functional Area Description
Manhattan Portable Changeable Message Signs	Roadway	Roadway Work Zone Traffic Control	Field elements in maintenance and construction areas including CCTV cameras, driver information systems (such as DMS), and gates/barriers that monitor and control traffic and provide information directly to drivers in affected areas.
Manhattan RWIS Stations	Roadway	Roadway Environmental Monitoring	Environmental sensors, surface and sub-surface, that collect weather and road surface information. Weather conditions measured include temperature, wind, humidity, precipitation, and visibility. Sensors measure road surface temperature, moisture, icing, salinity, etc.
Manhattan Street Division Office	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	Overall management and support for routine maintenance on the roadway or right-of-way. Includes landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of both ITS and non-ITS equipment.
Manhattan Street Division Office	Maintenance and Construction Management	MCM Vehicle Tracking	Remotely tracks the location of maintenance and construction vehicles and other equipment; presented to the center personnel.
Manhattan Street Division Office	Maintenance and Construction Management	MCM Winter Maintenance Management	Manages winter road maintenance, tracking and controlling snow plow operations, roadway treatment (e.g., salt spraying and other material applications) based on weather information.
Manhattan Traffic Detection Equipment	Roadway	Roadway Basic Surveillance	Field elements that monitor traffic conditions using loop detectors and CCTV cameras.
Manhattan Traffic Information Website	Information Service Provider	Basic Information Broadcast	Broadcast dissemination of traffic, transit, maintenance and construction, event, and weather information to traveler interface systems and vehicles.
Manhattan Traffic Information Website	Information Service Provider	ISP Emergency Traveler Information	Distribution of emergency information to the traveling public, including evacuation information and wide-area alerts.
Manhattan Traffic Information Website	Information Service Provider	ISP Traveler Data Collection	Collects traveler information from other centers, consolidates and refines the collected data, and makes this data available to traveler information applications.
Manhattan Traffic Operations Facility	Maintenance and Construction Management	MCM Environmental Information Collection	Remotely controls environmental sensors and assimilates collected data with environmental probe data and other current and forecast road conditions and surface weather information from weather service providers and transportation operations.
Manhattan Traffic Operations Facility	Maintenance and Construction Management	MCM Environmental Information Processing	Processes current and forecast weather data, road condition information, local environmental data, and uses internal models to develop specialized detailed forecasts of local weather and surface conditions. Disseminates road weather information to other agencies and centers.
Manhattan Traffic Operations Facility	Traffic Management	Collect Traffic Surveillance	Management of traffic sensors and surveillance (CCTV) equipment, collection of current traffic conditions, and distribution of the collected information to other centers and operators.

Element Name	Entity Name	Functional Area	Functional Area Description
Manhattan Traffic Operations Facility	Traffic Management	TMC Environmental Monitoring	Management of environmental sensors and assimilation of collected data with other current and forecast road conditions and surface weather information from weather service providers and roadway maintenance operations.
Manhattan Traffic Operations Facility	Traffic Management	TMC Evacuation Support	Development, coordination, and execution of special traffic management strategies during evacuation and subsequent reentry of a population in the vicinity of a disaster or major emergency. Interfaces with emergency management and other traffic management centers.
Manhattan Traffic Operations Facility	Traffic Management	TMC Incident Detection	Remotely monitors traffic sensor and surveillance systems to detect and verify incidents. Also monitors external advisory and incident reporting systems, intermodal freight depots, and border crossings for additional incident information. Identified incidents are reported to operations personnel and other centers.
Manhattan Traffic Operations Facility	Traffic Management	TMC Incident Dispatch Coordination/Communication	Formulates an incident response that takes into account the incident potential, incident impacts, and/or resources required for incident management. Facilitates the dispatch of emergency response and service vehicles and coordinates the response with cooperating agencies.
Manhattan Traffic Operations Facility	Traffic Management	TMC Probe Information Collection	Collects, assimilates, and disseminates vehicle probe data collected from roadside beacons and centers controlling transit vehicles, emergency vehicles, toll collection points, and route-guided vehicles.
Manhattan Traffic Operations Facility	Traffic Management	TMC Regional Traffic Management	Coordination between traffic management centers in order to share traffic information between centers as well as control of traffic management field equipment. This may be used during incidents and special events and during day-to-day operations.
Manhattan Traffic Operations Facility	Traffic Management	TMC Signal Control	Remotely controls traffic signal controllers to implement traffic management strategies at signalized intersections based on traffic conditions, incidents, emergency vehicle preemptions, pedestrian crossings, etc.
Manhattan Traffic Operations Facility	Traffic Management	TMC Traffic Information Dissemination	Controls dissemination of traffic-related data to other centers, the media, and travelers via the driver information systems (DMS, HAR) that it operates.
Manhattan Traffic Operations Facility	Traffic Management	TMC Work Zone Traffic Management	Coordination with maintenance systems using work zone images and traveler information systems (such as DMS), and distribution of work plans so that work zones are established that have minimum traffic impact.
Manhattan Traffic Operations Facility	Traffic Management	Traffic Equipment Maintenance	Monitoring and remote diagnostics of field equipment - detect failures, issue problem reports, and track the repair or replacement of the failed equipment.
Manhattan Traffic Signals	Roadway	Field Management Stations Operation	Supports direct communications between field management stations and the local field equipment under their control.

Element Name	Entity Name	Functional Area	Functional Area Description
Manhattan Traffic Signals	Roadway	Roadway Equipment Coordination	Field elements that control and send data to other field elements (such as environmental sensors that send data to a DMS or coordination between traffic controllers on adjacent intersections), without center control.
Manhattan Traffic Signals	Roadway	Roadway Mixed Use Sensing	Provides the field devices that provide sensing and warning systems for pedestrians, bicyclists, and other vehicles that operate on the main vehicle roadways, or on pathways which intersect the main vehicle roadways.
Manhattan Traffic Signals	Roadway	Roadway Signal Controls	Field elements including traffic signal controllers for use at signalized intersections; also supports pedestrian crossings.
Manhattan Traffic Signals	Roadway	Roadway Signal Preemption	Field elements that receive signal preemption requests from approaching emergency vehicles and overrides the current operation of the traffic signals
Neighboring 911 Centers	Emergency Management	Emergency Early Warning System	Monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies in order to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to other ITS centers to notify the traveling public.
Neighboring 911 Centers	Emergency Management	Emergency Evacuation Support	Evacuation planning and coordination to manage evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety.
Neighboring 911 Centers	Emergency Management	Emergency Response Management	Strategic emergency planning and response capabilities and broad inter-agency interfaces to support large-scale incidents and disasters, commonly associated with Emergency Operations Centers.
Neighboring 911 Centers	Emergency Management	Incident Command	Tactical decision support, resource coordination, and communications integration among emergency management agencies for Incident Commands that are established by first responders to support local management of an incident.
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Early Warning System	Monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies in order to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to other ITS centers to notify the traveling public.
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Evacuation Support	Evacuation planning and coordination to manage evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety.
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Response Management	Strategic emergency planning and response capabilities and broad inter-agency interfaces to support large-scale incidents and disasters, commonly associated with Emergency Operations Centers.
Neighboring County Emergency Operations Centers	Emergency Management	Incident Command	Tactical decision support, resource coordination, and communications integration among emergency management agencies for Incident Commands that are established by first responders to support local management of an incident.

Element Name	Entity Name	Functional Area	Functional Area Description
Personal Computing Devices	Personal Information Access	Personal Basic Information Reception	Personal traveler interface that provides formatted traffic advisories, transit, event, and other traveler information, as well as broadcast alerts. Devices include personal computers and personal portable devices such as PDAs and pagers.
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Early Warning System	Monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies in order to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to other ITS centers to notify the traveling public.
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	Evacuation planning and coordination to manage evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety.
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Response Management	Strategic emergency planning and response capabilities and broad inter-agency interfaces to support large-scale incidents and disasters, commonly associated with Emergency Operations Centers.
Pottawatomie County Emergency Operations Center	Emergency Management	Incident Command	Tactical decision support, resource coordination, and communications integration among emergency management agencies for Incident Commands that are established by first responders to support local management of an incident.
Pottawatomie County Emergency Vehicles	Emergency Vehicle	On-board EV En Route Support	On-board systems for gathering of dispatch and routing information for emergency vehicle personnel, vehicle tracking, communications with care facilities, and signal preemption via short range communication directly with traffic control equipment at the roadside.
Pottawatomie County Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Roadway Maintenance and Construction	On-board systems that support routine non-winter maintenance on the roadway or right-of-way. Includes landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of equipment on the roadway.
Pottawatomie County Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Vehicle Location Tracking	On-board systems to track vehicle location and reports the position and timestamp information to the dispatch center.
Pottawatomie County Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Winter Maintenance	On-board systems that support snow plow operations and other roadway treatments (e.g., salt spraying and other material applications). Supports information sharing between snow plows.
Pottawatomie County Public Works	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	Overall management and support for routine maintenance on the roadway or right-of-way. Includes landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of both ITS and non-ITS equipment.
Pottawatomie County Public Works	Maintenance and Construction Management	MCM Vehicle Tracking	Remotely tracks the location of maintenance and construction vehicles and other equipment; presented to the center personnel.

Element Name	Entity Name	Functional Area	Functional Area Description
Pottawatomie County Public Works	Maintenance and Construction Management	MCM Winter Maintenance Management	Manages winter road maintenance, tracking and controlling snow plow operations, roadway treatment (e.g., salt spraying and other material applications) based on weather information.
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Call-Taking	Provides interface to the emergency call-taking systems such as the Emergency Telecommunications System (e.g., 911) that correlate call information with emergencies reported by transit agencies, commercial vehicle operators, or other public safety agencies. Allows the operator to verify the incident and forward the information to the responding agencies.
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Dispatch	Dispatch emergency vehicles to incidents, tracking their location and status. Pertinent incident information is gathered and relayed to the responding units.
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Early Warning System	Monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies in order to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to other ITS centers to notify the traveling public.
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Evacuation Support	Evacuation planning and coordination to manage evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety.
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Response Management	Strategic emergency planning and response capabilities and broad inter-agency interfaces to support large-scale incidents and disasters, commonly associated with Emergency Operations Centers.
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Incident Command	Tactical decision support, resource coordination, and communications integration among emergency management agencies for Incident Commands that are established by first responders to support local management of an incident.
Riley County 911 Center	Emergency Management	Emergency Call-Taking	Provides interface to the emergency call-taking systems such as the Emergency Telecommunications System (e.g., 911) that correlate call information with emergencies reported by transit agencies, commercial vehicle operators, or other public safety agencies. Allows the operator to verify the incident and forward the information to the responding agencies.
Riley County 911 Center	Emergency Management	Emergency Dispatch	Dispatch emergency vehicles to incidents, tracking their location and status. Pertinent incident information is gathered and relayed to the responding units.
Riley County 911 Center	Emergency Management	Emergency Early Warning System	Monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies in order to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to other ITS centers to notify the traveling public.
Riley County 911 Center	Emergency Management	Emergency Evacuation Support	Evacuation planning and coordination to manage evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety.

Element Name	Entity Name	Functional Area	Functional Area Description
Riley County 911 Center	Emergency Management	Emergency Response Management	Strategic emergency planning and response capabilities and broad inter-agency interfaces to support large-scale incidents and disasters, commonly associated with Emergency Operations Centers.
Riley County 911 Center	Emergency Management	Incident Command	Tactical decision support, resource coordination, and communications integration among emergency management agencies for Incident Commands that are established by first responders to support local management of an incident.
Riley County Emergency Operations Center	Emergency Management	Emergency Early Warning System	Monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies in order to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to other ITS centers to notify the traveling public.
Riley County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	Evacuation planning and coordination to manage evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety.
Riley County Emergency Operations Center	Emergency Management	Emergency Response Management	Strategic emergency planning and response capabilities and broad inter-agency interfaces to support large-scale incidents and disasters, commonly associated with Emergency Operations Centers.
Riley County Emergency Operations Center	Emergency Management	Incident Command	Tactical decision support, resource coordination, and communications integration among emergency management agencies for Incident Commands that are established by first responders to support local management of an incident.
Riley County Emergency Vehicles	Emergency Vehicle	On-board EV En Route Support	On-board systems for gathering of dispatch and routing information for emergency vehicle personnel, vehicle tracking, communications with care facilities, and signal preemption via short range communication directly with traffic control equipment at the roadside.
Riley County Fire Department	Emergency Management	Emergency Early Warning System	Monitors alerting and advisory systems, information collected by ITS surveillance and sensors, and reports from other agencies in order to identify potential, imminent, or in-progress major incidents or disasters. Notification is provided to other ITS centers to notify the traveling public.
Riley County Fire Department	Emergency Management	Emergency Evacuation Support	Evacuation planning and coordination to manage evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety.
Riley County Fire Department	Emergency Management	Emergency Response Management	Strategic emergency planning and response capabilities and broad inter-agency interfaces to support large-scale incidents and disasters, commonly associated with Emergency Operations Centers.
Riley County Fire Department	Emergency Management	Incident Command	Tactical decision support, resource coordination, and communications integration among emergency management agencies for Incident Commands that are established by first responders to support local management of an incident.

Element Name	Entity Name	Functional Area	Functional Area Description
Riley County Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Roadway Maintenance and Construction	On-board systems that support routine non-winter maintenance on the roadway or right-of-way. Includes landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of equipment on the roadway.
Riley County Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Winter Maintenance	On-board systems that support snow plow operations and other roadway treatments (e.g., salt spraying and other material applications). Supports information sharing between snow plows.
Riley County Mobile Emergency Command Post	Emergency Management	Emergency Evacuation Support	Evacuation planning and coordination to manage evacuation and reentry of a population in the vicinity of a disaster or other emergency that poses a risk to public safety.
Riley County Mobile Emergency Command Post	Emergency Management	Emergency Response Management	Strategic emergency planning and response capabilities and broad inter-agency interfaces to support large-scale incidents and disasters, commonly associated with Emergency Operations Centers.
Riley County Mobile Emergency Command Post	Emergency Management	Incident Command	Tactical decision support, resource coordination, and communications integration among emergency management agencies for Incident Commands that are established by first responders to support local management of an incident.
Riley County Public Works	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	Overall management and support for routine maintenance on the roadway or right-of-way. Includes landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of both ITS and non-ITS equipment.
Riley County Public Works	Maintenance and Construction Management	MCM Winter Maintenance Management	Manages winter road maintenance, tracking and controlling snow plow operations, roadway treatment (e.g., salt spraying and other material applications) based on weather information.

8 Interfaces Between Systems

The interfaces of the transportation systems in Flint Hills Regional ITS Architecture are based on the National ITS Architecture and tailored to reflect the plan for the region. Architecture diagrams display the transportation systems in the Flint Hills Regional ITS Architecture, and more importantly, how these systems are and will be connected with one another so information can be exchanged and transportation services can be coordinated. Stakeholders may use these diagrams to identify integration opportunities. Each system in the region is represented with two types of diagrams, a context diagram and an architecture flow diagram.

A context diagram shows a particular system and all other systems with which it shares information. Interconnects are represented as single lines and indicate information sharing without specifying the type of information being shared or the direction of the information movement.

Following each interconnect context diagram are a series of architecture flow diagrams showing the information (i.e. architecture flows) movement between the various systems. Descriptions of the architecture flows are included at the end of the chapter.

Information about the interfaces of the systems in the region is contained in the Turbo Architecture™ database. Turbo Architecture™ can be used to create tailored interconnect and architecture flow diagrams for any system in the database.

Table 6: Interconnects

Element 1	Element 2	Status
Bicyclists	Manhattan Bicycle Detection System	Planned
Bicyclists	Manhattan Traffic Signals	Planned
Blue Township Fire Department	Pottawatomie County Emergency Operations Center	Existing
Blue Township Fire Department	Pottawatomie County Sheriff Office / 911 Center	Existing
Blue Township Fire Department	Riley County Mobile Emergency Command Post	Existing
Blue Township Fire Department Vehicles	Pottawatomie County Sheriff Office / 911 Center	Existing
Drivers	Junction City Dynamic Message Signs	Planned
Drivers	Junction City Traffic Signals	Existing
Drivers	KDOT Dynamic Message Signs	Existing
Drivers	K-State Parking Services	Planned
Drivers	Manhattan Dynamic Message Signs	Planned

Element 1	Element 2	Status
Drivers	Manhattan Portable Changeable Message Signs	Existing
Drivers	Manhattan Traffic Signals	Planned
FHATA Dispatch Center	FHATA Real-Time Signs	Planned
FHATA Dispatch Center	FHATA Vehicles	Existing
FHATA Dispatch Center	Fort Riley Emergency Management	Existing
FHATA Dispatch Center	Geary County Emergency Operations Center	Existing
FHATA Dispatch Center	Junction City Police / 911 Center	Existing
FHATA Dispatch Center	Kansas Homeland Security	Existing
FHATA Dispatch Center	Kansas State Emergency Operations Center	Existing
FHATA Dispatch Center	KHP Communications Center	Existing
FHATA Dispatch Center	K-State Police Department	Existing
FHATA Dispatch Center	Manhattan Traffic Information Website	Planned
FHATA Dispatch Center	Manhattan Traffic Operations Facility	Existing
FHATA Dispatch Center	Pottawatomie County Emergency Operations Center	Existing
FHATA Dispatch Center	Pottawatomie County Sheriff Office / 911 Center	Existing
FHATA Dispatch Center	Riley County 911 Center	Existing
FHATA Dispatch Center	Riley County Emergency Operations Center	Existing
FHATA Real-Time Signs	Travelers	Planned
FHATA Vehicles	Travelers	Planned
Fort Riley Emergency Management	Fort Riley Emergency Services	Existing
Fort Riley Emergency Management	Fort Riley Fire Department	Existing
Fort Riley Emergency Management	Fort Riley Police Department	Existing
Fort Riley Emergency Management	Fort Riley Public Works	Existing
Fort Riley Emergency Management	Geary County Emergency Operations Center	Existing
Fort Riley Emergency Management	Junction City Engineering Department	Existing
Fort Riley Emergency Management	Kansas Homeland Security	Existing
Fort Riley Emergency Management	Kansas State Emergency Operations Center	Existing
Fort Riley Emergency Management	KDOT Statewide TOC	Existing
Fort Riley Emergency Management	KHP Communications Center	Existing
Fort Riley Emergency Management	Manhattan Traffic Operations Facility	Existing
Fort Riley Emergency Management	Media Outlets	Existing
Fort Riley Emergency Management	Neighboring County Emergency Operations Centers	Existing

Element 1	Element 2	Status
Fort Riley Emergency Management	Pottawatomie County Emergency Operations Center	Existing
Fort Riley Emergency Management	Riley County Emergency Operations Center	Existing
Fort Riley Emergency Management	Riley County Mobile Emergency Command Post	Existing
Fort Riley Emergency Services	Fort Riley Fire Department	Existing
Fort Riley Emergency Services	Fort Riley Police Department	Existing
Fort Riley Emergency Services	Fort Riley Public Works	Existing
Fort Riley Fire Department	Fort Riley Police Department	Existing
Fort Riley Fire Department	Fort Riley Public Works	Existing
Fort Riley Police Department	Fort Riley Public Works	Existing
Fort Riley Public Works	Geary County Sheriff Department	Existing
Fort Riley Public Works	Junction City Engineering Department	Existing
Fort Riley Public Works	Junction City Fire Department	Existing
Fort Riley Public Works	Manhattan Traffic Operations Facility	Existing
Geary County Emergency Operations Center	Geary County Public Works	Existing
Geary County Emergency Operations Center	Geary County Rural Fire Department	Existing
Geary County Emergency Operations Center	Geary County Sheriff Department	Existing
Geary County Emergency Operations Center	Junction City Engineering Department	Existing
Geary County Emergency Operations Center	Junction City Fire Department	Existing
Geary County Emergency Operations Center	Junction City Police / 911 Center	Existing
Geary County Emergency Operations Center	Junction City Public Works Department	Existing
Geary County Emergency Operations Center	Kansas Homeland Security	Existing
Geary County Emergency Operations Center	Kansas State Emergency Operations Center	Existing
Geary County Emergency Operations Center	KDOT District 2 Office	Existing
Geary County Emergency Operations Center	KHP Communications Center	Existing
Geary County Emergency Operations Center	Manhattan Traffic Operations Facility	Existing
Geary County Emergency Operations Center	Media Outlets	Existing
Geary County Emergency Operations Center	Neighboring 911 Centers	Existing
Geary County Emergency Operations Center	Neighboring County Emergency Operations Centers	Existing
Geary County Emergency Operations Center	Pottawatomie County Emergency Operations Center	Existing
Geary County Emergency Operations Center	Pottawatomie County Sheriff Office / 911 Center	Existing
Geary County Emergency Operations Center	Riley County 911 Center	Existing
Geary County Emergency Operations Center	Riley County Emergency Operations Center	Existing
Geary County Emergency Operations Center	Riley County Mobile Emergency Command Post	Existing

Element 1	Element 2	Status
Geary County Emergency Vehicles	Geary County Rural Fire Department	Planned
Geary County Emergency Vehicles	Junction City Police / 911 Center	Existing
Geary County Emergency Vehicles	Junction City Traffic Signals	Existing
Geary County Maintenance and Construction Vehicles	Geary County Public Works	Existing
Geary County Public Works	Junction City Police / 911 Center	Existing
Geary County Public Works	Media Outlets	Planned
Geary County Public Works	National Weather Service	Existing
Geary County Rural Fire Department	Junction City Police / 911 Center	Existing
Geary County Rural Fire Department	Riley County Mobile Emergency Command Post	Existing
Geary County Sheriff Department	Junction City Police / 911 Center	Existing
Geary County Sheriff Department	Kansas State Emergency Operations Center	Existing
Junction City CCTV Cameras	Junction City Engineering Department	Planned
Junction City CCTV Cameras	Junction City Public Works Department	Planned
Junction City CCTV Cameras	Manhattan Traffic Operations Facility	Planned
Junction City Dynamic Message Signs	Junction City Engineering Department	Planned
Junction City Dynamic Message Signs	Junction City Public Works Department	Planned
Junction City Dynamic Message Signs	Manhattan Traffic Operations Facility	Planned
Junction City Emergency Vehicles	Junction City Police / 911 Center	Existing
Junction City Emergency Vehicles	Junction City Traffic Signals	Existing
Junction City Engineering Department	Junction City Police / 911 Center	Existing
Junction City Engineering Department	Junction City Public Works Department	Existing
Junction City Engineering Department	Junction City Traffic Detection Equipment	Planned
Junction City Engineering Department	Junction City Traffic Signals	Planned
Junction City Engineering Department	Kansas State Emergency Operations Center	Existing
Junction City Engineering Department	KDOT District 2 Office	Existing
Junction City Engineering Department	KHP Communications Center	Existing
Junction City Engineering Department	Manhattan Traffic Operations Facility	Existing
Junction City Engineering Department	National Weather Service	Existing
Junction City Fire Department	Junction City Police / 911 Center	Existing
Junction City Fire Department	Kansas State Emergency Operations Center	Existing
Junction City Maintenance and Construction Vehicles	Junction City Public Works Department	Existing
Junction City Police / 911 Center	Junction City Public Works Department	Existing
Junction City Police / 911 Center	Kansas State Emergency Operations Center	Existing

Element 1	Element 2	Status
Junction City Police / 911 Center	KHP Communications Center	Existing
Junction City Police / 911 Center	Manhattan Traffic Operations Facility	Planned
Junction City Police / 911 Center	Media Outlets	Existing
Junction City Police / 911 Center	Neighboring County Emergency Operations Centers	Existing
Junction City Police / 911 Center	Pottawatomie County Emergency Operations Center	Existing
Junction City Police / 911 Center	Pottawatomie County Sheriff Office / 911 Center	Existing
Junction City Police / 911 Center	Riley County 911 Center	Existing
Junction City Police / 911 Center	Riley County Emergency Operations Center	Existing
Junction City Police / 911 Center	Riley County Mobile Emergency Command Post	Existing
Junction City Public Works Department	Junction City Traffic Detection Equipment	Planned
Junction City Public Works Department	Junction City Traffic Signals	Planned
Junction City Public Works Department	National Weather Service	Existing
Junction City Traffic Detection Equipment	Manhattan Traffic Operations Facility	Planned
Junction City Traffic Signals	Manhattan Traffic Operations Facility	Planned
Kansas Homeland Security	Kansas State Emergency Operations Center	Existing
Kansas Homeland Security	KDOT District 1 Office	Existing
Kansas Homeland Security	KDOT District 2 Office	Existing
Kansas Homeland Security	KDOT Statewide TOC	Existing
Kansas Homeland Security	KHP Communications Center	Existing
Kansas Homeland Security	KHP Troop C	Existing
Kansas Homeland Security	K-State Police Department	Existing
Kansas Homeland Security	Media Outlets	Existing
Kansas Homeland Security	Neighboring County Emergency Operations Centers	Existing
Kansas Homeland Security	Pottawatomie County Emergency Operations Center	Existing
Kansas Homeland Security	Riley County Emergency Operations Center	Existing
Kansas State Emergency Operations Center	KDOT District 1 Office	Existing
Kansas State Emergency Operations Center	KDOT District 2 Office	Existing
Kansas State Emergency Operations Center	KDOT Statewide TOC	Existing
Kansas State Emergency Operations Center	KHP Communications Center	Existing
Kansas State Emergency Operations Center	K-State Police Department	Existing
Kansas State Emergency Operations Center	Manhattan Traffic Operations Facility	Existing
Kansas State Emergency Operations Center	Media Outlets	Existing

Element 1	Element 2	Status
Kansas State Emergency Operations Center	National Weather Service	Existing
Kansas State Emergency Operations Center	Neighboring 911 Centers	Existing
Kansas State Emergency Operations Center	Neighboring County Emergency Operations Centers	Existing
Kansas State Emergency Operations Center	Pottawatomie County Emergency Operations Center	Existing
Kansas State Emergency Operations Center	Pottawatomie County Sheriff Office / 911 Center	Existing
Kansas State Emergency Operations Center	Riley County 911 Center	Existing
Kansas State Emergency Operations Center	Riley County Emergency Operations Center	Existing
KDOT CCTV Cameras	KDOT Statewide TOC	Existing
KDOT District 1 Office	KDOT District 2 Office	Existing
KDOT District 1 Office	KDOT Dynamic Message Signs	Existing
KDOT District 1 Office	KDOT KanRoad	Existing
KDOT District 1 Office	KDOT Maintenance and Construction Vehicles	Existing
KDOT District 1 Office	KDOT RWIS Central Server	Existing
KDOT District 1 Office	KDOT RWIS Stations	Existing
KDOT District 1 Office	KDOT Statewide TOC	Existing
KDOT District 1 Office	KHP Communications Center	Existing
KDOT District 1 Office	Media Outlets	Existing
KDOT District 1 Office	National Weather Service	Existing
KDOT District 2 Office	KDOT Dynamic Message Signs	Existing
KDOT District 2 Office	KDOT KanRoad	Existing
KDOT District 2 Office	KDOT Maintenance and Construction Vehicles	Existing
KDOT District 2 Office	KDOT RWIS Central Server	Existing
KDOT District 2 Office	KDOT RWIS Stations	Existing
KDOT District 2 Office	KDOT Statewide TOC	Existing
KDOT District 2 Office	KHP Communications Center	Existing
KDOT District 2 Office	KHP Troop C	Existing
KDOT District 2 Office	Media Outlets	Existing
KDOT District 2 Office	National Weather Service	Existing
KDOT Dynamic Message Signs	KDOT Statewide TOC	Existing
KDOT KanDrive Website and 511 Phone Traveler Information System	KDOT KanRoad	Existing
KDOT KanDrive Website and 511 Phone Traveler Information System	KDOT RWIS Central Server	Existing
KDOT KanDrive Website and 511 Phone Traveler Information System	Media Outlets	Existing

Element 1	Element 2	Status
KDOT KanDrive Website and 511 Phone Traveler Information System	Personal Computing Devices	Existing
KDOT KanRoad	KDOT RWIS Central Server	Existing
KDOT KanRoad	KDOT Statewide TOC	Existing
KDOT KanRoad	National Weather Service	Existing
KDOT KanRoad	Personal Computing Devices	Existing
KDOT Maintenance and Construction Vehicles	KDOT RWIS Central Server	Existing
KDOT Maintenance and Construction Vehicles	Roadway Environment	Existing
KDOT RWIS Central Server	KDOT RWIS Stations	Existing
KDOT RWIS Central Server	KDOT Statewide TOC	Existing
KDOT RWIS Central Server	KHP Communications Center	Existing
KDOT RWIS Central Server	KHP Troop C	Existing
KDOT RWIS Central Server	National Weather Service	Existing
KDOT RWIS Stations	Roadway Environment	Existing
KDOT Statewide TOC	KHP Communications Center	Existing
KDOT Statewide TOC	Manhattan Traffic Operations Facility	Existing
KDOT Statewide TOC	National Weather Service	Existing
KHP Communications Center	KHP Troop C	Existing
KHP Communications Center	KHP Troop C Vehicles	Existing
KHP Communications Center	Manhattan Traffic Operations Facility	Existing
KHP Communications Center	Media Outlets	Existing
KHP Communications Center	National Weather Service	Existing
KHP Communications Center	Neighboring 911 Centers	Existing
KHP Communications Center	Neighboring County Emergency Operations Centers	Existing
KHP Communications Center	Pottawatomie County Emergency Operations Center	Existing
KHP Communications Center	Pottawatomie County Sheriff Office / 911 Center	Existing
KHP Communications Center	Riley County 911 Center	Existing
KHP Communications Center	Riley County Emergency Operations Center	Existing
KHP Communications Center	Riley County Mobile Emergency Command Post	Existing
KHP Troop C	National Weather Service	Existing
KHP Troop C	Riley County Mobile Emergency Command Post	Existing
K-State Athletics Department	K-State Police Department	Existing
K-State Athletics Department	Manhattan Traffic Operations Facility	Existing
K-State Parking Services	Manhattan Traffic Information Website	Planned
K-State Parking Services	Manhattan Traffic Operations Facility	Planned

Element 1	Element 2	Status
K-State Police Department	Manhattan Traffic Operations Facility	Existing
K-State Police Department	Media Outlets	Existing
K-State Police Department	Riley County 911 Center	Existing
K-State Police Department	Riley County Emergency Operations Center	Existing
K-State Police Department	Riley County Mobile Emergency Command Post	Existing
Manhattan Bicycle Detection System	Manhattan Traffic Operations Facility	Planned
Manhattan Bicycle Detection System	Manhattan Traffic Signals	Planned
Manhattan Bluetooth Readers	Manhattan Traffic Operations Facility	Existing
Manhattan CCTV Cameras	Manhattan Traffic Operations Facility	Existing
Manhattan Dynamic Message Signs	Manhattan Traffic Operations Facility	Planned
Manhattan Emergency Vehicles	Manhattan Fire Department	Planned
Manhattan Emergency Vehicles	Manhattan Traffic Signals	Existing
Manhattan Emergency Vehicles	Riley County 911 Center	Existing
Manhattan Emergency Vehicles	Riley County Fire Department	Planned
Manhattan Fire Department	Riley County 911 Center	Existing
Manhattan Fire Department	Riley County Emergency Operations Center	Existing
Manhattan Fire Department	Riley County Mobile Emergency Command Post	Existing
Manhattan GIS Mapping Service	Manhattan Street Division Office	Planned
Manhattan GIS Mapping Service	Manhattan Traffic Operations Facility	Planned
Manhattan Maintenance and Construction Vehicles	Manhattan Street Division Office	Existing
Manhattan Maintenance and Construction Vehicles	Manhattan Traffic Operations Facility	Existing
Manhattan Portable Changeable Message Signs	Manhattan Traffic Operations Facility	Planned
Manhattan RWIS Stations	Manhattan Traffic Operations Facility	Existing
Manhattan RWIS Stations	Roadway Environment	Existing
Manhattan Street Division Office	Manhattan Traffic Operations Facility	Existing
Manhattan Street Division Office	National Weather Service	Existing
Manhattan Traffic Detection Equipment	Manhattan Traffic Operations Facility	Existing
Manhattan Traffic Detection Equipment	Manhattan Traffic Signals	Existing
Manhattan Traffic Information Website	Manhattan Traffic Operations Facility	Existing
Manhattan Traffic Information Website	Media Outlets	Planned
Manhattan Traffic Information Website	Personal Computing Devices	Existing
Manhattan Traffic Operations Facility	Manhattan Traffic Signals	Existing
Manhattan Traffic Operations Facility	Media Outlets	Existing
Manhattan Traffic Operations Facility	National Weather Service	Existing
Manhattan Traffic Operations Facility	Riley County 911 Center	Existing

Element 1	Element 2	Status
Manhattan Traffic Operations Facility	Riley County Emergency Operations Center	Existing
Manhattan Traffic Operations Facility	Riley County Mobile Emergency Command Post	Existing
Manhattan Traffic Operations Facility	Riley County Public Works	Existing
Manhattan Traffic Signals	Riley County Emergency Vehicles	Existing
Media Outlets	Neighboring 911 Centers	Existing
Media Outlets	Neighboring County Emergency Operations Centers	Existing
Media Outlets	Pottawatomie County Emergency Operations Center	Existing
Media Outlets	Pottawatomie County Sheriff Office / 911 Center	Existing
Media Outlets	Riley County 911 Center	Existing
Media Outlets	Riley County Emergency Operations Center	Existing
Media Outlets	Riley County Fire Department	Existing
National Weather Service	Pottawatomie County Public Works	Existing
National Weather Service	Riley County Public Works	Existing
Neighboring 911 Centers	Neighboring County Emergency Operations Centers	Existing
Neighboring 911 Centers	Pottawatomie County Emergency Operations Center	Existing
Neighboring 911 Centers	Pottawatomie County Sheriff Office / 911 Center	Existing
Neighboring 911 Centers	Riley County 911 Center	Existing
Neighboring 911 Centers	Riley County Emergency Operations Center	Existing
Neighboring County Emergency Operations Centers	Pottawatomie County Emergency Operations Center	Existing
Neighboring County Emergency Operations Centers	Pottawatomie County Sheriff Office / 911 Center	Existing
Neighboring County Emergency Operations Centers	Riley County 911 Center	Existing
Neighboring County Emergency Operations Centers	Riley County Emergency Operations Center	Existing
Personal Computing Devices	Travelers	Existing
Pottawatomie County Emergency Operations Center	Pottawatomie County Public Works	Existing
Pottawatomie County Emergency Operations Center	Pottawatomie County Sheriff Office / 911 Center	Existing
Pottawatomie County Emergency Operations Center	Riley County 911 Center	Existing

Element 1	Element 2	Status
Pottawatomie County Emergency Operations Center	Riley County Emergency Operations Center	Existing
Pottawatomie County Emergency Operations Center	Riley County Mobile Emergency Command Post	Existing
Pottawatomie County Emergency Vehicles	Pottawatomie County Sheriff Office / 911 Center	Existing
Pottawatomie County Maintenance and Construction Vehicles	Pottawatomie County Public Works	Existing
Pottawatomie County Public Works	Pottawatomie County Sheriff Office / 911 Center	Existing
Pottawatomie County Sheriff Office / 911 Center	Riley County 911 Center	Existing
Pottawatomie County Sheriff Office / 911 Center	Riley County Emergency Operations Center	Existing
Pottawatomie County Sheriff Office / 911 Center	Riley County Mobile Emergency Command Post	Existing
Riley County 911 Center	Riley County Emergency Operations Center	Existing
Riley County 911 Center	Riley County Emergency Vehicles	Existing
Riley County 911 Center	Riley County Fire Department	Existing
Riley County 911 Center	Riley County Mobile Emergency Command Post	Existing
Riley County 911 Center	Riley County Public Works	Existing
Riley County Emergency Operations Center	Riley County Fire Department	Existing
Riley County Emergency Operations Center	Riley County Mobile Emergency Command Post	Existing
Riley County Emergency Operations Center	Riley County Public Works	Existing
Riley County Fire Department	Riley County Mobile Emergency Command Post	Existing
Riley County Maintenance and Construction Vehicles	Riley County Public Works	Existing

9 ITS Standards

Standardizing the flow of information between the systems is essential to cost-effectively integrating ITS throughout the region. ITS standards are fundamental to the establishment of an open ITS environment that achieves the goal of interoperability for ITS. Standards facilitate deployment of interoperable systems at local, regional, and national levels without impeding innovation as technology advances and new approaches evolve.

Establishing standards for exchanging information among ITS systems is important not only from an interoperability point of view; it also provides interchangeability and expandability thereby reducing risk and cost. Since an agency using standardized interfaces can select among multiple vendors for products and applications, competition is maintained and prices are lower in the long term.

Standards Development Organizations (SDO) are developing ITS standards that support interoperability and interchangeability. Several of the communication standards overlap in applicability. This provides flexibility in the design of ITS systems allowing agencies to choose the most applicable standard for their needs. Before systems are designed, all stakeholders involved in the applicable ITS service(s) should decide upon the standards and their specifics that will be used. Once a decision is made, all future systems should use the agreed upon standards.

Table 7: ITS Standards

SDO	Document ID	Standard Title	Standard Type
AASHTO/ITE	ITE TMDD	Traffic Management Data Dictionary (TMDD) and Message Sets for External Traffic Management Center Communications (MS/ETMCC)	Message/Data
AASHTO/ITE/NEMA	NTCIP 1201	Global Object Definitions	Message/Data
AASHTO/ITE/NEMA	NTCIP 1202	Object Definitions for Actuated Traffic Signal Controller (ASC) Units	Message/Data
AASHTO/ITE/NEMA	NTCIP 1203	Object Definitions for Dynamic Message Signs (DMS)	Message/Data
AASHTO/ITE/NEMA	NTCIP 1204	Object Definitions for Environmental Sensor Stations (ESS)	Message/Data
AASHTO/ITE/NEMA	NTCIP 1205	Object Definitions for Closed Circuit Television (CCTV) Camera Control	Message/Data
AASHTO/ITE/NEMA	NTCIP 1206	Object Definitions for Data Collection and Monitoring (DCM) Devices	Message/Data
AASHTO/ITE/NEMA	NTCIP 1208	Object Definitions for Closed Circuit Television (CCTV) Switching	Message/Data
AASHTO/ITE/NEMA	NTCIP 1209	Data Element Definitions for Transportation Sensor Systems (TSS)	Message/Data
AASHTO/ITE/NEMA	NTCIP 1210	Field Management Stations (FMS) - Part 1: Object Definitions for Signal System Masters	Message/Data
AASHTO/ITE/NEMA	NTCIP 1211	Object Definitions for Signal Control and Prioritization (SCP)	Message/Data
AASHTO/ITE/NEMA	NTCIP 1214	Object Definitions for Conflict Monitor Units (CMU)	Message/Data
AASHTO/ITE/NEMA	NTCIP C2C	NTCIP Center-to-Center Standards Group	Group
AASHTO/ITE/NEMA	NTCIP C2F	NTCIP Center-to-Field Standards Group	Group

SDO	Document ID	Standard Title	Standard Type
APTA	APTA TCIP-S-001 3.0.4	Standard for Transit Communications Interface Profiles	Message/Data
ASTM	DSRC 915MHz	Dedicated Short Range Communication at 915 MHz Standards Group	Group
ASTM/IEEE/SAE	DSRC 5GHz	Dedicated Short Range Communication at 5.9 GHz Standards Group	Group
IEEE	IEEE IM	Incident Management Standards Group	Group
SAE	ATIS General Use	Advanced Traveler Information Systems (ATIS) General Use Standards Group	Group
SAE	ATIS Low Bandwidth	Advanced Traveler Information Systems (ATIS) Bandwidth Limited Standards Group	Group

10 ITS Projects

The Flint Hills Regional ITS Architecture is ultimately implemented one ITS project at a time. This chapter lists the projects that have been identified as part of the regional ITS architecture definition. Additional detail for each of these ITS projects is included in the Turbo Architecture database.

Table 8: ITS Projects

Name	Description	Status	Timeframe
Bicycle Detection System	This project will install a bicycle detection system at signalized intersections to improve safety and reduce bicycle-vehicle collisions.	Planned	Medium Term (2019-2021)
Electronic Vehicle Inspection Report	This project will procure Zonar Electronic Vehicle Inspection Report (EVIR) to provide FHATA the capability of performing pre- and post-trip bus inspections.	Planned	Short Term (2015-2018)
Emergency Vehicle Preemption	Junction City current uses a sound-based emergency vehicle preemption (EVP) system. This project will replace the sound-based system with a light-based EVP system. EVP equipment will be installed at Junction City traffic signals that receives request from emergency vehicles approaching the intersections for signal preemption and provides a green light for the approaching phase of the emergency vehicle. Corresponding equipment will be installed on emergency vehicles (police vehicles, fire trucks, ambulances, etc.) to enable the preemption of the signal timing.	Planned	Medium Term (2019-2021)
Expansion of Bluetooth Travel Time Data Collection Equipment	Several projects are currently underway to expand the Bluetooth readers to other corridors in the Manhattan area. Installation of Bluetooth readers are identified on the K-18 corridor between E. Poyntz Ave and 17th Street; US-24 from Green Valley Road, along McCall Road and then along Kimball Ave from Leavenworth to Marlatt Ave. Additional corridors for Bluetooth reader installation will be identified in the future.	Planned	Short to Long Term (2015-2025)
FHATA Computer-Aided Dispatch / Automatic Vehicle Location System	A new transit CAD/AVL system will be procured through KDOT to replace the current system. The AVL/GPS will be in the form of on-board tablets that will provide real-time monitoring of vehicles and trips. The tablets can also function as mobile data terminals (MDTs) to provide bus operators information such as route information, schedule and adherence, alerts on incidents and detours, etc.	Planned	Short Term (2015)
FHATA On-Board Security Cameras	This project will procure new security cameras that will be installed on FHATA transit vehicles to improve safety and security of transit riders and operators through use of 5311 funds. Camera images can be accessed in real-time provided that communications is established between the vehicles and the dispatch center; or camera recordings can be accessed at the end of the vehicle shift at the transit garage. The procurement is expected in fiscal year 2016.	Planned	Short Term (2016)
Fiber Communications Expansion	This project will expand and build redundancy into Manhattan Public Works Department's fiber network to improve communications between the Manhattan Traffic Operations Facility (MTOF) and its traffic signals and ITS devices. Currently the MTOF can only communicate to half of its traffic signals. The fiber network expansion will allow the MTOF to connect to additional traffic signals and ITS devices as well provide media and bandwidth to share CCTV camera images to 911 centers in the region. This fiber expansion project is also essential to provide the necessary communications backbone to facilitate the implementation of the regional traffic operations center concept. In addition, it is desired to have fiber connections to all fire stations and radio communications towers in Riley County to enhance communications for emergency services.	Planned	Medium to Long Term (2019-2025)

Name	Description	Status	Timeframe
Junction City Communications Project	This project will investigate, identify, and ultimately install communication links dedicated to traffic signal operations for Junction City. This project will allow Junction City the ability to centrally control and monitor traffic signal operations as well as potentially other future ITS devices (e.g. CCTV cameras and DMS). The city-wide communication links will also facilitate the implementation of joint regional traffic operations with the City of Manhattan for the region.	Planned	Medium to Long Term (2019-2025)
Junction City Traffic Signal Interconnects and Upgrades	Junction City currently has one corridor that has signals interconnected; however the communications has been broken. The initial focus of this project will be repair, replacement and/or upgrade of the existing interconnects to enable corridor based signal coordination. Additional signal interconnects desired will be identified. This project will also include upgrades of controllers, hardware, etc. to improve signal connectivity and operational efficiency.	Planned	Short to Medium Term (2015-2021)
Junction City Traffic Signal Timing Optimization	This project will develop/update and implement signal timing plans along key corridors and/or at key intersections to facilitate more efficient movement of traffic, particularly during peak hours.	Planned	Short to Medium Term (2016-2021)
K-18 ITS Project	This project will install various ITS components along K-18 from the K-18/K-113 Interchange to the K-18/I-70 Interchange. Project components include installation of speed and count stations, permanent dynamic message signs, and fiber optic cable. In addition, a fiber optic cable will need to be installed from K-18/K-113 Interchange to the Manhattan Traffic Operations Facility.	Planned	Short Term (2016-2018)
Kansas Highway Patrol AVL System	This project represents the installation of AVL equipment within Kansas Highway Patrol vehicles for dispatch and monitoring of KHP vehicles.	Planned	Long Term (2022 and beyond)
Kimball Avenue Coordination Project	This project will encompass bringing online 5 intersections along the Kimball Avenue corridor, as well as 4 additional PTZ cameras. This project will require the installation of fiber optic cable throughout the corridor. This corridor receives all K-State athletic event traffic to and from the stadiums, as well as traffic that will be generated during and after the completion of the National Bio and Agro-Defense Facility (NBAF).	Planned	Short Term (2015-2018)
Manhattan Traffic Information Website Enhancement	This project will enhance the current City of Manhattan Traffic Information Webpage. The current webpage provides street closures, detours, snow and ice maintenance routes, and traffic camera images. This project will enhance the webpage design as well as provide information on transit services, parking, incidents, and game-day traffic information. Upon implementation of the regional traffic operations center, a longer term enhancement may include evolving the website to a regional traffic information website for the Manhattan-Junction City area.	Planned	Medium to Long Term (2019-2025)
Manhattan/K-State Fiber Optic Sharing	Kansas State University has a fiber optic network that in many places is within the City of Manhattan owned right-of-way. An agreement has been formulated allowing some dark K-State fiber to be utilized by the City of Manhattan to increase its ITS network footprint. This will allow the Manhattan Traffic Operations Facility connections to some intersections that are currently isolated from its network because of topographic or line of sight issues. This project allows the City of Manhattan to gain access to additional intersections and allows K-State Police and K-State Athletics access to the city's traffic management system, as part of this agreement. Riley County will also connect their 911 PSAP to the K-State 911 PSAP via a point-to-point microwave link with this K-State fiber. A connection will also be made to the fire station at 2000 Denison Avenue for use of the facility during and after emergencies.	Planned	Short to Medium Term (2015-2021)
North Tuttle Creek Boulevard (US-24) Coordination Project	This project will allow connections to 6 additional traffic signals along US-24 from East Poyntz North to Kimball Avenue. This project will also install 2 to 3 additional PTZ cameras. In addition, this project will install a fiber optic network for parts or all of the project area, or a hybrid fiber and wireless bridging link for other parts of the project.	Planned	Short Term (2015-2018)

Name	Description	Status	Timeframe
Parking Management System	This project will install an advanced parking management system on and around the Kansas State University Campus. The system will include parking count sensors, dynamic message signs (DMS), and a software package that can determine the availability of parking spaces at parking lots/ramps and display this information on the DMS near the ramp entrances. This information can also be disseminated via internet webpages. This parking management system will be used for everyday parking as well as special events (such as game days).	Planned	Medium Term (2019-2021)
Real-Time Transit Information at Transit Stops	This project will install information displays/signs at key transit stops. The information displays/signs will display transit arrival/departure information that is estimated based on information from AVL equipment on FHATA buses.	Planned	Long Term (2022 and Beyond)
Real-Time Transit Information on Mobile Apps	The project will develop a mobile app for smartphone/tablets to provide near real-time bus location information based on the data from AVL equipment on FHATA buses.	Planned	Short Term (2015-2016)
Regional ITS Expansion	This project represents general ITS installation and expansion projects in the Flint Hills Region that are not specifically listed (that is, specific locations and/or corridors to be determined in the future). The project scopes may include, but not be limited to, installation of additional CCTV cameras, DMS (permanent and portable), vehicle count/speed detection stations, RWIS stations, and communications.	Planned	Short to Long Term (2015-2025)
Regional Traffic Operations Coordination	This project will implement a regional traffic operations center to facilitate traffic management and operations at a regional level. The Manhattan Traffic Operations Facility (MTOF) will become a regional traffic operations center (TOC) that can centrally monitor and control traffic signals in Manhattan and Junction City. The regional TOC will also be capable of controlling and monitoring other ITS devices such as CCTV cameras, DMS, RWIS stations in the region.	Planned	Long Term (2022 and beyond)
Road Weather Information System Stations	This project will install additional road weather information system (RWIS) stations in the City of Manhattan. The City of Manhattan currently has one RWIS station located on K-18. The project will install three additional RWIS monitoring stations on the North, East and West arterials surrounding the city, as well as the wireless or fiber links for communications.	Planned	Short Term (2015-2018)
Traffic Camera Video Sharing with 911 Centers	The project will facilitate the sharing of live Manhattan Traffic Operations Facility CCTV camera feeds with 911 centers in the region for the purpose of increased information sharing and situation awareness for transportation, incident and emergency management (helpful on game days, flood events, incident management).	Planned	Medium to Long Term (2019-2025)

Appendix A. ITS Services Details

ITS services describe what can be done to improve the efficiency, safety, and convenience of the regional transportation system through better information, advanced systems and new technologies. Some services are specific to one primary stakeholder while others require broad stakeholder participation. This appendix provides additional detail for the ITS services selected for the region.

Table 9: ITS Services Details

Service Package	Service Package Name	Service Package Description	Service Package Status
APTS01	Transit Vehicle Tracking	This service package monitors current transit vehicle location using an Automated Vehicle Location System. The location data may be used to determine real time schedule adherence and update the transit system's schedule in real-time. Vehicle position may be determined either by the vehicle (e.g., through GPS) and relayed to the infrastructure or may be determined directly by the communications infrastructure. A two-way wireless communication link with the Transit Management Subsystem is used for relaying vehicle position and control measures. Fixed route transit systems may also employ beacons along the route to enable position determination and facilitate communications with each vehicle at fixed intervals. The Transit Management Subsystem processes this information, updates the transit schedule and makes real-time schedule information available to the Information Service Provider.	Existing
APTS02	Transit Fixed-Route Operations	This service package performs automated dispatch and system monitoring for fixed-route and flexible-route transit services. This service performs scheduling activities including the creation of schedules, blocks and runs, as well as operator assignment. This service determines the transit vehicle trip performance against the schedule using AVL data and provides information displays at the Transit Management Subsystem. Static and real time transit data is exchanged with Information Service Providers where it is integrated with that from other transportation modes (e.g. rail, ferry, air) to provide the public with integrated and personalized dynamic schedules.	Existing
APTS03	Demand Response Transit Operations	This service package performs automated dispatch and system monitoring for demand responsive transit services. This service performs scheduling activities as well as operator assignment. In addition, this service package performs similar functions to support dynamic features of flexible-route transit services. This package monitors the current status of the transit fleet and supports allocation of these fleet resources to service incoming requests for transit service while also considering traffic conditions. The Transit Management Subsystem provides the necessary data processing and information display to assist the transit operator in making optimal use of the transit fleet. This service includes the capability for a traveler request for personalized transit services to be made through the Information Service Provider (ISP) Subsystem. The ISP may either be operated by a transit management center or be independently owned and operated by a separate service provider. In the first scenario, the traveler makes a direct request to a specific paratransit service. In the second scenario, a third party service provider determines that the paratransit service is a viable means of satisfying a traveler request and makes a reservation for the traveler.	Existing

Service Package	Service Package Name	Service Package Description	Service Package Status
APTS05	Transit Security	<p>This service package provides for the physical security of transit passengers and transit vehicle operators. On-board equipment is deployed to perform surveillance and sensor monitoring in order to warn of potentially hazardous situations. The surveillance equipment includes video (e.g., CCTV cameras), audio systems and/or event recorder systems. The sensor equipment includes threat sensors (e.g., chemical agent, toxic industrial chemical, biological, explosives, and radiological sensors) and object detection sensors (e.g., metal detectors). Transit user or transit vehicle operator activated alarms are provided on-board. Public areas (e.g., transit stops, park and ride lots, stations) are also monitored with similar surveillance and sensor equipment and provided with transit user activated alarms. In addition this service package provides surveillance and sensor monitoring of non-public areas of transit facilities (e.g., transit yards) and transit infrastructure such as bridges, tunnels, and transit railways or bus rapid transit (BRT) guideways. The surveillance equipment includes video and/or audio systems. The sensor equipment includes threat sensors and object detection sensors as described above as well as, intrusion or motion detection sensors and infrastructure integrity monitoring (e.g., rail track continuity checking or bridge structural integrity monitoring).</p> <p>The surveillance and sensor information is transmitted to the Emergency Management Subsystem, as are transit user activated alarms in public secure areas. On-board alarms, activated by transit users or transit vehicle operators are transmitted to both the Emergency Management Subsystem and the Transit Management Subsystem, indicating two possible approaches to implementing this service package.</p> <p>In addition the service package supports remote transit vehicle disabling by the Transit Management Subsystem and transit vehicle operator authentication.</p>	Planned
APTS06	Transit Fleet Management	<p>This service package supports automatic transit maintenance scheduling and monitoring. On-board condition sensors monitor system status and transmit critical status information to the Transit Management Subsystem. Hardware and software in the Transit Management Subsystem processes this data and schedules preventative and corrective maintenance. The service package also supports the day to day management of the transit fleet inventory, including the assignment of specific transit vehicles to blocks.</p>	Planned
APTS08	Transit Traveler Information	<p>This service package provides transit users at transit stops and on-board transit vehicles with ready access to transit information. The information services include transit stop annunciation, imminent arrival signs, and real-time transit schedule displays that are of general interest to transit users. Systems that provide custom transit trip itineraries and other tailored transit information services are also represented by this service package.</p>	Planned
ATIS01	Broadcast Traveler Information	<p>This service package collects traffic conditions, advisories, general public transportation, toll and parking information, incident information, roadway maintenance and construction information, air quality and weather information, and broadcasts the information to travelers using technologies such as FM subcarrier, satellite radio, cellular data broadcasts, and Internet web casts. The information may be provided directly to travelers or provided to merchants and other traveler service providers so that they can better inform their customers of travel conditions. Different from the service package ATMS06 - Traffic Information Dissemination, which provides localized HAR and DMS information capabilities, ATIS01 provides a wide area digital broadcast service. Successful deployment of this service package relies on availability of real-time traveler information from roadway instrumentation, probe vehicles or other sources.</p>	Existing

Service Package	Service Package Name	Service Package Description	Service Package Status
ATMS01	Network Surveillance	This service package includes traffic detectors, other surveillance equipment, the supporting field equipment, and fixed-point to fixed-point communications to transmit the collected data back to the Traffic Management Subsystem. The derived data can be used locally such as when traffic detectors are connected directly to a signal control system or remotely (e.g., when a CCTV system sends data back to the Traffic Management Subsystem). The data generated by this service package enables traffic managers to monitor traffic and road conditions, identify and verify incidents, detect faults in indicator operations, and collect census data for traffic strategy development and long range planning. The collected data can also be analyzed and made available to users and the Information Service Provider Subsystem.	Existing
ATMS02	Traffic Probe Surveillance	This service package provides an alternative approach for surveillance of the roadway network. Two general implementation paths are supported by this service package: 1) wide-area wireless communications between the vehicle and center is used to communicate vehicle operational information and status directly to the center, and 2) dedicated short range communications between passing vehicles and the roadside is used to provide equivalent information to the center. The first approach leverages wide area communications equipment that may already be in the vehicle to support personal safety and advanced traveler information services. The second approach utilizes vehicle equipment that supports toll collection, in-vehicle signing, and other short range communications applications identified within the architecture. The service package enables transportation operators and traveler information providers to monitor road conditions, identify incidents, analyze and reduce the collected data, and make it available to users and private information providers. It requires one of the communications options identified above, on-board equipment, data reduction software, and fixed-point to fixed-point links between centers to share the collected information. Both "Opt out" and "Opt in" strategies are available to ensure the user has the ability to turn off the probe functions to ensure individual privacy. Due to the large volume of data collected by probes, data reduction techniques are required, such as the ability to identify and filter out-of-bounds or extreme data reports.	Existing
ATMS03	Traffic Signal Control	This service package provides the central control and monitoring equipment, communication links, and the signal control equipment that support traffic control at signalized intersections. A range of traffic signal control systems are represented by this service package ranging from fixed-schedule control systems to fully traffic responsive systems that dynamically adjust control plans and strategies based on current traffic conditions and priority requests. This service package is generally an intra-jurisdictional package. Systems that achieve coordination across jurisdictions by using a common time base or other strategies that do not require real time coordination would also be represented by this package. Coordination of traffic signal systems using real-time communications is covered in the ATMS07-Regional Traffic Management service package. This service package is consistent with typical traffic signal control systems.	Existing

Service Package	Service Package Name	Service Package Description	Service Package Status
ATMS06	Traffic Information Dissemination	<p>This service package provides driver information using roadway equipment such as dynamic message signs or highway advisory radio. A wide range of information can be disseminated including traffic and road conditions, closure and detour information, travel restrictions, incident information, and emergency alerts and driver advisories. This package provides information to drivers at specific equipped locations on the road network. Careful placement of the roadway equipment provides the information at points in the network where the drivers have recourse and can tailor their routes to account for the new information. This package also covers the equipment and interfaces that provide traffic information from a traffic management center to the media (for instance via a direct tie-in between a traffic management center and radio or television station computer systems), Transit Management, Emergency Management, and Information Service Providers. A link to the Maintenance and Construction Management subsystem allows real time information on road/bridge closures and restrictions due to maintenance and construction activities to be disseminated. The sharing of transportation operations data described in this service package also supports other services like ATMS09- Traffic Decision Support and Demand Management.</p>	Existing
ATMS07	Regional Traffic Management	<p>This service package provides for the sharing of traffic information and control among traffic management centers to support regional traffic management strategies. Regional traffic management strategies that are supported include inter-jurisdictional, real-time coordinated traffic signal control systems and coordination between freeway operations and traffic signal control within a corridor. This service package advances the ATMS03-Traffic Signal Control and ATMS04-Traffic Metering service packages by adding the communications links and integrated control strategies that enable integrated, interjurisdictional traffic management. The nature of optimization and extent of information and control sharing is determined through working arrangements between jurisdictions. This package relies principally on roadside instrumentation supported by the Traffic Signal Control and Traffic Metering service packages and adds hardware, software, and fixed-point to fixed-point communications capabilities to implement traffic management strategies that are coordinated between allied traffic management centers. Several levels of coordination are supported from sharing of information through sharing of control between traffic management centers.</p>	Planned
ATMS08	Traffic Incident Management System	<p>This service package manages both unexpected incidents and planned events so that the impact to the transportation network and traveler safety is minimized. The service package includes incident detection capabilities through roadside surveillance devices (e.g. CCTV) and through regional coordination with other traffic management, maintenance and construction management and emergency management centers as well as rail operations and event promoters. Information from these diverse sources is collected and correlated by this service package to detect and verify incidents and implement an appropriate response. This service package supports traffic operations personnel in developing an appropriate response in coordination with emergency management, maintenance and construction management, and other incident response personnel to confirmed incidents. The response may include traffic control strategy modifications or resource coordination between center subsystems. Incident response also includes presentation of information to affected travelers using the Traffic Information Dissemination service package and dissemination of incident information to travelers through the Broadcast Traveler Information or Interactive Traveler Information service packages. The roadside equipment used to detect and verify incidents also allows the operator to monitor incident status as the response unfolds. The coordination with emergency management might be through a CAD system or through other communication with emergency field personnel. The coordination can also extend to tow trucks and other allied response agencies and field service personnel.</p>	Existing

Service Package	Service Package Name	Service Package Description	Service Package Status
ATMS16	Parking Facility Management	This service package provides enhanced monitoring and management of parking facilities. It assists in the management of parking operations, coordinates with transportation authorities, and supports electronic collection of parking fees. This service package collects current parking status, shares this data with Information Service Providers and Traffic Management, and collects parking fees using the same in-vehicle equipment utilized for electronic toll collection or contact or proximity traveler cards used for electronic payment. Two other service packages, APTS04: Transit Fare Collection Management and ATMS10: Electronic Toll Collection also provide electronic payment services. These three service packages in combination provide an integrated electronic payment system for transportation services.	Planned
ATMS26	Mixed Use Warning Systems	This service package 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.	Planned
EM01	Emergency Call-Taking and Dispatch	This service package provides basic public safety call-taking and dispatch services. It includes emergency vehicle equipment, equipment used to receive and route emergency calls, and wireless communications that enable safe and rapid deployment of appropriate resources to an emergency. Coordination between Emergency Management Subsystems supports emergency notification between agencies. Wide area wireless communications between the Emergency Management Subsystem and an Emergency Vehicle supports dispatch and provision of information to responding personnel.	Existing
EM02	Emergency Routing	This service package 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. Special priority or other specific emergency traffic control strategies can be coordinated to improve the safety and time-efficiency of responding vehicle travel on the selected route(s). The Emergency Management Subsystem provides the routing for the emergency fleet based on real-time conditions and has the option of requesting a route from the Traffic Management subsystem. The Emergency Vehicle may also be equipped with dedicated short range communications for local signal preemption and the transmission of alerts to surrounding vehicles. The service provides for information exchange between care facilities and both the Emergency Management Subsystem and emergency vehicles.	Existing
EM06	Wide-Area Alert	This service package uses ITS driver and traveler information systems to alert the public in emergency situations such as child abductions, severe weather events, civil emergencies, and other situations that pose a threat to life and property. The alert includes information and instructions for transportation system operators and the traveling public, improving public safety and enlisting the public's help in some scenarios. The ITS technologies will supplement and support other emergency and homeland security alert systems such as the Emergency Alert System (EAS). When an emergency situation is reported and verified and the terms and conditions for system activation are satisfied, a designated agency broadcasts emergency information to traffic agencies, transit agencies, information service providers, toll operators, and others that operate ITS systems. The ITS systems, in turn, provide the alert information to transportation system operators and the traveling public using ITS technologies such as dynamic message signs, highway advisory radios, in-vehicle displays, transit displays, 511 traveler information systems, and traveler information web sites.	Existing

Service Package	Service Package Name	Service Package Description	Service Package Status
EM08	Disaster Response and Recovery	<p>This service package enhances the ability of the surface transportation system to respond to and recover from disasters. It addresses the most severe incidents that require an extraordinary response from outside the local community. All types of disasters are addressed including natural disasters (hurricanes, earthquakes, floods, winter storms, tsunamis, etc.) and technological and man-made disasters (hazardous materials incidents, nuclear power plant accidents, and national security emergencies such as nuclear, chemical, biological, and radiological weapons attacks).</p> <p>The service package supports coordination of emergency response plans, including general plans developed before a disaster as well as specific tactical plans with short time horizon that are developed as part of a disaster response. The service package provides enhanced access to the scene for response personnel and resources, provides better information about the transportation system in the vicinity of the disaster, and maintains situation awareness regarding the disaster itself. In addition, this service package tracks and coordinates the transportation resources - the transportation professionals, equipment, and materials - that constitute a portion of the disaster response.</p> <p>The service package identifies the key points of integration between transportation systems and the public safety, emergency management, public health, and other allied organizations that form the overall disaster response. In this service package, the Emergency Management subsystem represents the federal, regional, state, and local Emergency Operations Centers and the Incident Commands that are established to respond to the disaster. The interface between the Emergency Management Subsystem and the other center subsystems provides situation awareness and resource coordination among transportation and other allied response agencies. In its role, traffic management implements special traffic control strategies and detours and restrictions to effectively manage traffic in and around the disaster. Maintenance and construction provides damage assessment of road network facilities and manages service restoration. Transit management provides a similar assessment of status for transit facilities and modifies transit operations to meet the special demands of the disaster. As immediate public safety concerns are addressed and disaster response transitions into recovery, this service package supports transition back to normal transportation system operation, recovering resources, managing on-going transportation facility repair, supporting data collection and revised plan coordination, and other recovery activities.</p> <p>This service package builds on the basic traffic incident response service that is provided by ATMS08, the Traffic Incident Management service package. This service package addresses the additional complexities and coordination requirements that are associated with the most severe incidents that warrant an extraordinary response from outside the local jurisdictions and require special measures such as the activation of one or more emergency operations centers. Many users of the National ITS Architecture will want to consider both ATMS08 and this service package since every region is concerned with both day-to-day management of traffic-related incidents and occasional management of disasters that require extraordinary response.</p> <p>Disaster Response and Recovery is also supported by EM10, the "Disaster Traveler Information" service package that keeps the public informed during a disaster response. See that service package for more information.</p>	Existing

Service Package	Service Package Name	Service Package Description	Service Package Status
EM09	Evacuation and Reentry Management	<p>This service package supports evacuation of the general public from a disaster area and manages subsequent reentry to the disaster area. The service package addresses evacuations for all types of disasters, including disasters like hurricanes that are anticipated and occur slowly, allowing a well-planned orderly evacuation, as well as disasters like terrorist acts that occur rapidly, without warning, and allow little or no time for preparation or public warning.</p> <p>This service package supports coordination of evacuation plans among the federal, state, and local transportation, emergency, and law enforcement agencies that may be involved in a large-scale evacuation. All affected jurisdictions (e.g., states and counties) at the evacuation origin, evacuation destination, and along the evacuation route are informed of the plan. Information is shared with traffic management agencies to implement special traffic control strategies and to control evacuation traffic, including traffic on local streets and arterials as well as the major evacuation routes. Reversible lanes, shoulder use, closures, special signal control strategies, and other special strategies may be implemented to maximize capacity along the evacuation routes. Transit resources play an important role in an evacuation, removing many people from an evacuated area while making efficient use of limited capacity. Additional shared transit resources may be added and managed in evacuation scenarios. Resource requirements are forecast based on the evacuation plans, and the necessary resources are located, shared between agencies if necessary, and deployed at the right locations at the appropriate times.</p> <p>Evacuations are also supported by EM10, the "Disaster Traveler Information" service package, which keeps the public informed during evacuations. See that service package for more information.</p>	Existing

Service Package	Service Package Name	Service Package Description	Service Package Status
EM10	Disaster Traveler Information	<p>This service package uses 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. This service package collects information from multiple sources including traffic, transit, public safety, emergency management, shelter provider, and travel service provider organizations. The collected information is processed and the public is provided with real-time disaster and evacuation information using ITS traveler information systems.</p> <p>A disaster will stress the surface transportation system since it may damage transportation facilities at the same time that it places unique demands on these facilities to support public evacuation and provide access for emergency responders. Similarly, a disaster may interrupt or degrade the operation of many traveler information systems at the same time that safety-critical information must be provided to the traveling public. This service package keeps the public informed in these scenarios, using all available means to provide information about the disaster area including damage to the transportation system, detours and closures in effect, special traffic restrictions and allowances, special transit schedules, and real-time information on traffic conditions and transit system performance in and around the disaster.</p> <p>This service package also provides emergency information to assist the public with evacuations when necessary. Information on mandatory and voluntary evacuation zones, evacuation times, and instructions are provided. Available evacuation routes and destinations and current and anticipated travel conditions along those routes are provided so evacuees are prepared and know their destination and preferred evacuation route. Information on available transit services and traveler services (shelters, medical services, hotels, restaurants, gas stations, etc.) is also provided. In addition to general evacuation information, this service package provides specific evacuation trip planning information that is tailored for the evacuee based on origin, selected destination, and evacuee-specified evacuation requirements and route parameters.</p> <p>This service package augments the ATIS service packages that provide traveler information on a day-to-day basis for the surface transportation system. This service package provides focus on the special requirements for traveler information dissemination in disaster situations.</p>	Existing
MC01	Maintenance and Construction Vehicle and Equipment Tracking	<p>This service package will track the location of maintenance and construction vehicles and other equipment to ascertain the progress of their activities. These activities can include ensuring the correct roads are being plowed and work activity is being performed at the correct locations.</p>	Existing
MC03	Road Weather Data Collection	<p>This service package collects current road and weather conditions using data collected from environmental sensors deployed on and about the roadway (or guideway in the case of transit related rail systems). In addition to fixed sensor stations at the roadside, sensing of the roadway environment can also occur from sensor systems located on Maintenance and Construction Vehicles. The collected environmental data is used by the Weather Information Processing and Distribution service package to process the information and make decisions on operations. The collected environmental data may be aggregated, combined with data attributes and sent to meteorological systems for data qualification and further data consolidation. The service package may also request and receive qualified data sets from meteorological systems.</p>	Existing

Service Package	Service Package Name	Service Package Description	Service Package Status
MC04	Weather Information Processing and Distribution	This service package 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 and decision support systems can make decision on corrective actions to take. The continuing updates of road condition information and current temperatures can be used by system operators to more effectively deploy road maintenance resources, issue general traveler advisories, issue location specific warnings to drivers using the Traffic Information Dissemination service package, and aid operators in scheduling work activity.	Existing
MC06	Winter Maintenance	This service package supports winter road maintenance including snow plow operations, roadway treatments (e.g., salt spraying and other anti-icing material applications), and other snow and ice control activities. This package monitors environmental conditions and weather forecasts and uses the information to schedule winter maintenance activities, determine the appropriate snow and ice control response, and track and manage response operations.	Existing
MC07	Roadway Maintenance and Construction	This service package supports numerous services for scheduled and unscheduled maintenance and construction on a roadway system or right-of-way. Maintenance services would include landscape maintenance, hazard removal (roadway debris, dead animals), routine maintenance activities (roadway cleaning, grass cutting), and repair and maintenance of both ITS and non-ITS equipment on the roadway (e.g., signs, traffic controllers, traffic detectors, dynamic message signs, traffic signals, CCTV, etc.). Environmental conditions information is also received from various weather sources to aid in scheduling maintenance and construction activities.	Existing
MC08	Work Zone Management	This service package manages work zones, controlling traffic in areas of the roadway where maintenance, construction, and utility work activities are underway. Traffic conditions are monitored using CCTV cameras and controlled using dynamic message signs (DMS), Highway Advisory Radio (HAR), gates and barriers. Work zone information is coordinated with other groups (e.g., ISP, traffic management, other maintenance and construction centers). Work zone speeds and delays are provided to the motorist prior to the work zones. This service package provides control of field equipment in all maintenance and construction areas, including fixed, portable, and truck-mounted devices supporting both stationary and mobile work zones.	Planned

Appendix B. Functional Requirements Details

Each ITS system operated by the stakeholders must perform certain functions to effectively deliver the ITS services for the region. The primary functions that each system needs to perform are broadly defined in the Flint Hills Regional ITS Architecture. The high-level requirements are grouped into functional areas that identify requirements associated with each selected ITS service.

Table 10: Functional Requirements Details

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Blue Township Fire Department	Emergency Management	Emergency Early Warning System	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Existing
Blue Township Fire Department	Emergency Management	Emergency Early Warning System	13	The center shall present the alert and advisory information and the status of the actions taken in response to the alert by the other centers to the emergency system operator as received from other system inputs.	Existing
Blue Township Fire Department	Emergency Management	Emergency Evacuation Support	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Existing
Blue Township Fire Department	Emergency Management	Emergency Response Management	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Existing
Blue Township Fire Department	Emergency Management	Emergency Response Management	6	The center shall allocate the appropriate emergency services, resources, and vehicle (s) to respond to incidents, and shall provide the capability to override the current allocation to suit the special needs of a current incident.	Existing
Blue Township Fire Department	Emergency Management	Incident Command	1	The center shall provide tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders to support local management of an incident.	Existing
Blue Township Fire Department	Emergency Management	Incident Command	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Existing
Blue Township Fire Department Vehicles	Emergency Vehicle	On-board EV En Route Support	4	The emergency vehicle shall send the current en route status (including estimated time of arrival) and requests for emergency dispatch updates.	Existing
Blue Township Fire Department Vehicles	Emergency Vehicle	On-board EV En Route Support	6	The emergency vehicle shall provide the personnel on-board with dispatch information, including incident type and location, and forward an acknowledgment from personnel to the center that the vehicle is on its way to the incident scene.	Existing
FHATA Dispatch Center	Emergency Management	Emergency Evacuation Support	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
FHATA Dispatch Center	Emergency Management	Emergency Evacuation Support	3	The center shall provide an interface to the emergency system operator to enter evacuation plans and procedures and present the operator with other agencies' plans.	Existing
FHATA Dispatch Center	Emergency Management	Emergency Evacuation Support	4	The center shall coordinate evacuation destinations and shelter needs with shelter providers (e.g., the American Red Cross) in the region.	Existing
FHATA Dispatch Center	Emergency Management	Emergency Response Management	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Existing
FHATA Dispatch Center	Emergency Management	Emergency Response Management	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Existing
FHATA Dispatch Center	Emergency Management	Emergency Response Management	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Existing
FHATA Dispatch Center	Emergency Management	Emergency Response Management	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Existing
FHATA Dispatch Center	Emergency Management	Emergency Response Management	5	The center shall track the availability of resources and coordinate resource sharing with allied agency centers including traffic, maintenance, or other emergency centers.	Existing
FHATA Dispatch Center	Emergency Management	Emergency Response Management	6	The center shall allocate the appropriate emergency services, resources, and vehicle (s) to respond to incidents, and shall provide the capability to override the current allocation to suit the special needs of a current incident.	Existing
FHATA Dispatch Center	Emergency Management	Emergency Response Management	7	The center shall receive event scheduling information from Event Promoters.	Existing
FHATA Dispatch Center	Emergency Management	Emergency Response Management	14	The center shall provide the capability for center personnel to provide inputs to the management of incidents, disasters and evacuations.	Existing
FHATA Dispatch Center	Transit Management	Transit Center Fixed-Route Operations	1	The center shall generate transit routes and schedules based on such factors as parameters input by the system operator, road network conditions, incident information, operational data on current routes and schedules, and digitized map data.	Existing
FHATA Dispatch Center	Transit Management	Transit Center Fixed-Route Operations	2	The center shall provide the interface to the system operator to control the generation of new routes and schedules (transit services) including the ability to review and update the parameters used by the routes and schedules generation processes and to initiate these processes	Existing
FHATA Dispatch Center	Transit Management	Transit Center Fixed-Route Operations	3	The center shall be able to generate special routes and schedules to support an incident, disaster, evacuation, or other emergency.	Existing
FHATA Dispatch Center	Transit Management	Transit Center Fixed-Route Operations	4	The center shall dispatch fixed route or flexible route transit vehicles	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
FHATA Dispatch Center	Transit Management	Transit Center Fixed-Route Operations	5	The center shall collect transit operational data for use in the generation of routes and schedules.	Existing
FHATA Dispatch Center	Transit Management	Transit Center Fixed-Route Operations	6	The center shall provide instructions or corrective actions to the transit vehicle operators based upon operational needs.	Existing
FHATA Dispatch Center	Transit Management	Transit Center Fixed-Route Operations	10	The center shall disseminate up-to-date schedules and route information to other centers for fixed and flexible route services.	Planned
FHATA Dispatch Center	Transit Management	Transit Center Information Services	1	The center shall provide travelers using public transportation with traffic and advisory information upon request. Such information may include transit routes, schedules, transfer options, fares, real-time schedule adherence, current incidents, weather conditions, and special events.	Planned
FHATA Dispatch Center	Transit Management	Transit Center Information Services	2	The center shall provide transit information to the media including details of deviations from schedule of regular transit services.	Existing
FHATA Dispatch Center	Transit Management	Transit Center Information Services	4	The center shall provide transit service information to traveler information service providers including routes, schedules, schedule adherence, and fare information as well as transit service information during evacuation.	Existing
FHATA Dispatch Center	Transit Management	Transit Center Information Services	6	The center shall broadcast transit advisory data, including alerts and advisories pertaining to major emergencies, or man-made disasters.	Planned
FHATA Dispatch Center	Transit Management	Transit Center Paratransit Operations	1	The center shall process trip requests for demand responsive transit services, i.e. paratransit. Sources of the requests may include traveler information service providers.	Existing
FHATA Dispatch Center	Transit Management	Transit Center Paratransit Operations	2	The center shall monitor the operational status of the demand response vehicles including status of passenger pick-up and drop-off.	Existing
FHATA Dispatch Center	Transit Management	Transit Center Paratransit Operations	3	The center shall generate demand response transit (including paratransit) routes and schedules based on such factors as parameters input by the system operator, what other demand responsive transit schedules have been planned, the availability and location of vehicles, the relevance of any fixed transit routes and schedules, road network information, and incident information.	Existing
FHATA Dispatch Center	Transit Management	Transit Center Paratransit Operations	4	The center shall dispatch demand response (paratransit) transit vehicles.	Existing
FHATA Dispatch Center	Transit Management	Transit Center Security	2	The center shall receive reports of emergencies on-board transit vehicles entered directly by the transit vehicle operator or from a traveler through interfaces such as panic buttons or alarm switches.	Planned
FHATA Dispatch Center	Transit Management	Transit Center Security	3	The center shall support the back-office portion of functionality to authenticate transit vehicle operators.	Planned
FHATA Dispatch Center	Transit Management	Transit Center Security	5	The center shall receive information pertaining to a wide-area alert such as weather alerts, disaster situations, or child abductions. This information may come from Emergency Management or from other Alerting and Advisory Systems.	Planned

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
FHATA Dispatch Center	Transit Management	Transit Center Security	6	The center shall send wide-area alert information to travelers (on-board transit vehicles or at stations/stops) and transit vehicle operators.	Planned
FHATA Dispatch Center	Transit Management	Transit Center Security	7	The center shall coordinate the response to security incidents involving transit with other agencies including Emergency Management, other transit agencies, media, traffic management, and traveler information service providers.	Planned
FHATA Dispatch Center	Transit Management	Transit Center Vehicle Tracking	1	The center shall monitor the locations of all transit vehicles within its network.	Existing
FHATA Dispatch Center	Transit Management	Transit Center Vehicle Tracking	2	The center shall determine adherence of transit vehicles to their assigned schedule.	Existing
FHATA Dispatch Center	Transit Management	Transit Center Vehicle Tracking	3	The center shall support an interface with a map update provider, or other appropriate data sources, through which updates of digitized map data can be obtained and used as a background for transit tracking and dispatch.	Existing
FHATA Dispatch Center	Transit Management	Transit Center Vehicle Tracking	4	The center shall provide transit operational data to traveler information service providers.	Planned
FHATA Dispatch Center	Transit Management	Transit Evacuation Support	1	The center shall manage the use of transit resources to support evacuation and subsequent reentry of a population in the vicinity of a disaster or other emergency.	Existing
FHATA Dispatch Center	Transit Management	Transit Evacuation Support	2	The center shall coordinate regional evacuation plans with Emergency Management - identifying the transit role in an evacuation and the transit resources that would be used.	Existing
FHATA Dispatch Center	Transit Management	Transit Evacuation Support	3	The center shall coordinate the use of transit and school bus fleets during an evacuation, supporting evacuation of those with special needs and the general population.	Existing
FHATA Dispatch Center	Transit Management	Transit Evacuation Support	4	The center shall adjust and update transit service and fare schedules and provide that information to other agencies as they coordinate evacuations.	Existing
FHATA Dispatch Center	Transit Management	Transit Garage Maintenance	1	The center shall collect operational and maintenance data from transit vehicles.	Planned
FHATA Dispatch Center	Transit Management	Transit Garage Maintenance	2	The center shall monitor the condition of a transit vehicle to analyze brake, drive train, sensors, fuel, steering, tire, processor, communications equipment, and transit vehicle mileage to identify mileage based maintenance, out-of-specification or imminent failure conditions.	Planned
FHATA Dispatch Center	Transit Management	Transit Garage Maintenance	3	The center shall generate transit vehicle maintenance schedules that identify the maintenance or repair to be performed and when the work is to be done.	Planned
FHATA Dispatch Center	Transit Management	Transit Garage Maintenance	4	The center shall generate transit vehicle availability listings, current and forecast, to support transit vehicle assignment planning based, in part, on the transit vehicle maintenance schedule.	Planned

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
FHATA Dispatch Center	Transit Management	Transit Garage Maintenance	5	The center shall assign technicians to a transit vehicle maintenance schedule, based upon such factors as personnel eligibility, work assignments, preferences and seniority.	Planned
FHATA Dispatch Center	Transit Management	Transit Garage Maintenance	6	The center shall verify that the transit vehicle maintenance activities were performed correctly, using the transit vehicle's status, the maintenance personnel's work assignment, and the transit maintenance schedules.	Planned
FHATA Dispatch Center	Transit Management	Transit Garage Maintenance	7	The center shall generate a time-stamped maintenance log of all maintenance activities performed on a transit vehicle.	Planned
FHATA Dispatch Center	Transit Management	Transit Garage Maintenance	8	The center shall provide transit operations personnel with the capability to update transit vehicle maintenance information and receive reports on all transit vehicle operations data.	Planned
FHATA Dispatch Center	Transit Management	Transit Vehicle Assignment	1	The center shall assign individual transit vehicles to transit blocks.	Existing
FHATA Dispatch Center	Transit Management	Transit Vehicle Assignment	2	The center shall download vehicle assignments to the transit vehicle prior to the start of the day's operations.	Existing
FHATA Dispatch Center	Transit Management	Transit Vehicle Assignment	3	The center shall provide an exception handling process for the vehicle assignment function. This process shall generate new supplemental vehicle assignments as required due to change events which occur during the operating day.	Existing
FHATA Dispatch Center	Transit Management	Transit Vehicle Assignment	4	The center shall provide an inventory management function for the transit facility that stores functional attributes about each vehicle owned by the transit operator. The functional attributes permit the planning and assignment functions to match vehicles with routes based on suitability for the types of service required by the particular routes.	Existing
FHATA Dispatch Center	Transit Management	Transit Vehicle Assignment	5	The center shall generate transit vehicle availability listings, current and forecast, to support transit vehicle assignment planning.	Existing
FHATA Dispatch Center	Transit Management	Transit Vehicle Assignment	6	The center shall provide transit operations personnel with the capability to update transit vehicle assignments and receive reports on transit vehicle inventory status.	Existing
FHATA Dispatch Center	Transit Management	Transit Vehicle Operator Assignment	1	The center shall maintain records of a transit vehicle operator's performance. This may be done utilizing standardized performance evaluation criteria set forth by governmental regulations and transit operating company policies, assessing the transit vehicle operator's driving history, and assessing comments from the transit vehicle operator's supervisor(s) as well as noting any moving violations or accidents, supervisor comments, government regulations, and company policies.	Existing
FHATA Dispatch Center	Transit Management	Transit Vehicle Operator Assignment	2	The center shall assess the transit vehicle operator's availability based on previous work assignments, accumulated hours, plus health and vacation commitments.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
FHATA Dispatch Center	Transit Management	Transit Vehicle Operator Assignment	3	The center shall assign transit vehicle operators to transit schedules based on their eligibility, route preferences, seniority, and transit vehicle availability.	Existing
FHATA Dispatch Center	Transit Management	Transit Vehicle Operator Assignment	4	The center shall provide an interface through which the transit vehicle operator information can be maintained - either from the transit vehicle operator, center personnel, or other functions.	Existing
FHATA Dispatch Center	Transit Management	Transit Vehicle Operator Assignment	5	The center shall generate supplemental vehicle operator assignments as required due to change events that occur during the operating day.	Existing
FHATA Real-Time Signs	Remote Traveler Support	Remote Transit Information Services	1	The public interface for travelers shall collect and provide real-time travel-related information at transit stops, multi-modal transfer points, and other public transportation areas.	Planned
FHATA Real-Time Signs	Remote Traveler Support	Remote Transit Information Services	2	The public interface for travelers shall collect and present to the transit traveler information on transit routes, schedules, and real-time schedule adherence.	Planned
FHATA Real-Time Signs	Remote Traveler Support	Remote Transit Information Services	3	The public interface for travelers shall provide support for general announcement and/or display of imminent arrival information and other information of general interest to transit users.	Planned
FHATA Vehicles	Transit Vehicle	On-board Paratransit Operations	1	The transit vehicle shall manage data input to sensor(s) on-board a transit vehicle to determine the vehicle's availability for use in demand responsive and flexible-route transit services based on identity, type, and passenger capacity.	Existing
FHATA Vehicles	Transit Vehicle	On-board Paratransit Operations	2	The transit vehicle shall receive the status of demand responsive or flexible-route transit schedules and passenger loading from the transit vehicle operator.	Existing
FHATA Vehicles	Transit Vehicle	On-board Paratransit Operations	3	The transit vehicle shall provide the transit vehicle operator instructions about the demand responsive or flexible-route transit schedule that has been confirmed from the center.	Existing
FHATA Vehicles	Transit Vehicle	On-board Schedule Management	1	The transit vehicle shall receive a vehicle assignment including transit route information, transit service instructions, traffic information, road conditions, and other information for the operator.	Existing
FHATA Vehicles	Transit Vehicle	On-board Schedule Management	2	The transit vehicle shall use the route information and its current location to determine the deviation from the predetermined schedule.	Existing
FHATA Vehicles	Transit Vehicle	On-board Schedule Management	3	The transit vehicle shall calculate the estimated times of arrival (ETA) at transit stops.	Existing
FHATA Vehicles	Transit Vehicle	On-board Schedule Management	8	The transit vehicle shall notify the transit center of vehicle location and operational status as the vehicle exits and returns to the transit facility to support future vehicle assignments.	Existing
FHATA Vehicles	Transit Vehicle	On-board Transit Information Services	1	The transit vehicle shall enable traffic and travel advisory information to be requested and output to the traveler. Such information may include transit routes, schedules, transfer options, fares, real-time schedule adherence, current incidents, weather conditions, and special events.	Planned

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
FHATA Vehicles	Transit Vehicle	On-board Transit Information Services	6	The transit vehicle shall tailor the output of the request traveler information based on the current location of the transit vehicle.	Planned
FHATA Vehicles	Transit Vehicle	On-board Transit Security	1	The transit vehicle shall perform video and audio surveillance inside of transit vehicles and output raw video or audio data for either local monitoring (for processing or direct output to the transit vehicle operator), remote monitoring or for local storage (e.g., in an event recorder).	Planned
FHATA Vehicles	Transit Vehicle	On-board Transit Security	2	The transit vehicle shall perform local monitoring of video or audio surveillance data collected inside of transit vehicles, and identify potential incidents or threats based on received processing parameters.	Planned
FHATA Vehicles	Transit Vehicle	On-board Transit Security	3	The transit vehicle shall output an indication of potential incidents or threats and the processed video or audio information to the center along with the vehicle's current location.	Planned
FHATA Vehicles	Transit Vehicle	On-board Transit Security	8	The transit vehicle shall monitor and output surveillance and sensor equipment status and fault indications.	Planned
FHATA Vehicles	Transit Vehicle	On-board Transit Security	9	The transit vehicle shall accept emergency inputs from either the transit vehicle operator or a traveler through such interfaces as panic buttons, silent or audible alarms, etc.	Planned
FHATA Vehicles	Transit Vehicle	On-board Transit Security	10	The transit vehicle shall output reported emergencies to the center.	Planned
FHATA Vehicles	Transit Vehicle	On-board Transit Security	11	The transit vehicle shall receive acknowledgments of the emergency request from the center and output this acknowledgment to the transit vehicle operator or to the travelers.	Planned
FHATA Vehicles	Transit Vehicle	On-board Transit Security	13	The transit vehicle shall be capable of disabling or enabling the transit vehicle based on commands from the center or authentic inputs from the transit vehicle operator.	Planned
FHATA Vehicles	Transit Vehicle	On-board Transit Security	14	The transit vehicle shall perform authentication of the transit vehicle operator.	Planned
FHATA Vehicles	Transit Vehicle	On-board Transit Trip Monitoring	1	The transit vehicle shall track the current location of the transit vehicle.	Existing
FHATA Vehicles	Transit Vehicle	On-board Transit Trip Monitoring	2	The transit vehicle shall support the computation of the location of a transit vehicle using on-board sensors to augment the location determination function. This may include proximity to the transit stops or other known reference points as well as recording trip length.	Existing
FHATA Vehicles	Transit Vehicle	On-board Transit Trip Monitoring	3	The transit vehicle shall record transit trip monitoring data including vehicle mileage and fuel usage.	Existing
FHATA Vehicles	Transit Vehicle	On-board Transit Trip Monitoring	4	The transit vehicle shall record transit trip monitoring data including operational status information such as doors open/closed, running times, etc.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
FHATA Vehicles	Transit Vehicle	On-board Transit Trip Monitoring	5	The transit vehicle shall send the transit vehicle trip monitoring data to center-based trip monitoring functions.	Existing
Fort Riley Emergency Management	Emergency Management	Emergency Early Warning System	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Existing
Fort Riley Emergency Management	Emergency Management	Emergency Early Warning System	2	The center shall provide the capability to correlate alerts and advisories, incident information, and security sensor and surveillance data.	Existing
Fort Riley Emergency Management	Emergency Management	Emergency Early Warning System	3	The center shall broadcast wide-area alerts and advisories to traffic management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned
Fort Riley Emergency Management	Emergency Management	Emergency Early Warning System	4	The center shall broadcast wide-area alerts and advisories to transit management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Planned
Fort Riley Emergency Management	Emergency Management	Emergency Early Warning System	8	The center shall broadcast wide-area alerts and advisories to other emergency management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Fort Riley Emergency Management	Emergency Management	Emergency Early Warning System	11	The center shall coordinate the broadcast of wide-area alerts and advisories with other emergency management centers.	Existing
Fort Riley Emergency Management	Emergency Management	Emergency Early Warning System	12	The center shall receive incident information from other transportation management centers to support the early warning system.	Planned
Fort Riley Emergency Management	Emergency Management	Emergency Early Warning System	13	The center shall present the alert and advisory information and the status of the actions taken in response to the alert by the other centers to the emergency system operator as received from other system inputs.	Existing
Fort Riley Emergency Management	Emergency Management	Emergency Evacuation Support	1	The center shall manage inter-agency coordination of evacuation operations, from initial planning through the evacuation process and reentry.	Existing
Fort Riley Emergency Management	Emergency Management	Emergency Evacuation Support	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Fort Riley Emergency Management	Emergency Management	Emergency Evacuation Support	3	The center shall provide an interface to the emergency system operator to enter evacuation plans and procedures and present the operator with other agencies' plans.	Existing
Fort Riley Emergency Management	Emergency Management	Emergency Evacuation Support	5	The center shall provide evacuation information to traffic, transit, maintenance and construction, rail operations, and other emergency management centers as needed.	Existing
Fort Riley Emergency Management	Emergency Management	Emergency Evacuation Support	6	The center shall request resources from transit agencies as needed to support the evacuation.	Planned
Fort Riley Emergency Management	Emergency Management	Emergency Evacuation Support	7	The center shall request traffic management agencies to implement special traffic control strategies and to control evacuation traffic, including traffic on local streets and arterials as well as the major evacuation routes.	Planned
Fort Riley Emergency Management	Emergency Management	Emergency Evacuation Support	9	The center shall monitor the progress or status of the evacuation once it begins and exchange tactical plans, prepared during the incident, with allied agencies.	Existing
Fort Riley Emergency Management	Emergency Management	Emergency Evacuation Support	10	The center shall monitor the progress of the reentry process.	Existing
Fort Riley Emergency Management	Emergency Management	Emergency Response Management	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Existing
Fort Riley Emergency Management	Emergency Management	Emergency Response Management	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Existing
Fort Riley Emergency Management	Emergency Management	Emergency Response Management	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Existing
Fort Riley Emergency Management	Emergency Management	Emergency Response Management	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Existing
Fort Riley Emergency Management	Emergency Management	Emergency Response Management	6	The center shall allocate the appropriate emergency services, resources, and vehicle (s) to respond to incidents, and shall provide the capability to override the current allocation to suit the special needs of a current incident.	Existing
Fort Riley Emergency Management	Emergency Management	Emergency Response Management	14	The center shall provide the capability for center personnel to provide inputs to the management of incidents, disasters and evacuations.	Existing
Fort Riley Emergency Management	Emergency Management	Emergency Response Management	15	The center shall collect information about the status of the recovery efforts for the infrastructure during disasters.	Existing
Fort Riley Emergency Management	Emergency Management	Incident Command	1	The center shall provide tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders to support local management of an incident.	Existing

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Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Fort Riley Emergency Management	Emergency Management	Incident Command	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Existing
Fort Riley Emergency Management	Emergency Management	Incident Command	3	The center shall track and maintain resource information and action plans pertaining to the incident command.	Existing
Fort Riley Emergency Management	Emergency Management	Incident Command	4	The center shall share incident command information with other public safety agencies including resource deployment status, hazardous material information, rail incident information, evacuation advice as well as traffic, road, and weather conditions.	Existing
Fort Riley Emergency Management	Emergency Management	Incident Command	5	The center shall assess the status of responding emergency vehicles as part of an incident command.	Existing
Fort Riley Emergency Services	Emergency Management	Incident Command	1	The center shall provide tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders to support local management of an incident.	Existing
Fort Riley Emergency Services	Emergency Management	Incident Command	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Existing
Fort Riley Fire Department	Emergency Management	Emergency Early Warning System	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Existing
Fort Riley Fire Department	Emergency Management	Emergency Early Warning System	12	The center shall receive incident information from other transportation management centers to support the early warning system.	Existing
Fort Riley Fire Department	Emergency Management	Emergency Early Warning System	13	The center shall present the alert and advisory information and the status of the actions taken in response to the alert by the other centers to the emergency system operator as received from other system inputs.	Existing
Fort Riley Fire Department	Emergency Management	Emergency Evacuation Support	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Existing
Fort Riley Fire Department	Emergency Management	Emergency Evacuation Support	9	The center shall monitor the progress or status of the evacuation once it begins and exchange tactical plans, prepared during the incident, with allied agencies.	Existing
Fort Riley Fire Department	Emergency Management	Emergency Evacuation Support	10	The center shall monitor the progress of the reentry process.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Fort Riley Fire Department	Emergency Management	Emergency Response Management	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Existing
Fort Riley Fire Department	Emergency Management	Emergency Response Management	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Existing
Fort Riley Fire Department	Emergency Management	Emergency Response Management	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Existing
Fort Riley Fire Department	Emergency Management	Emergency Response Management	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Existing
Fort Riley Fire Department	Emergency Management	Emergency Response Management	5	The center shall track the availability of resources and coordinate resource sharing with allied agency centers including traffic, maintenance, or other emergency centers.	Existing
Fort Riley Fire Department	Emergency Management	Emergency Response Management	6	The center shall allocate the appropriate emergency services, resources, and vehicle (s) to respond to incidents, and shall provide the capability to override the current allocation to suit the special needs of a current incident.	Existing
Fort Riley Fire Department	Emergency Management	Incident Command	1	The center shall provide tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders to support local management of an incident.	Existing
Fort Riley Fire Department	Emergency Management	Incident Command	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Existing
Fort Riley Fire Department	Emergency Management	Incident Command	3	The center shall track and maintain resource information and action plans pertaining to the incident command.	Existing
Fort Riley Fire Department	Emergency Management	Incident Command	4	The center shall share incident command information with other public safety agencies including resource deployment status, hazardous material information, rail incident information, evacuation advice as well as traffic, road, and weather conditions.	Existing
Fort Riley Fire Department	Emergency Management	Incident Command	5	The center shall assess the status of responding emergency vehicles as part of an incident command.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Fort Riley Police Department	Emergency Management	Emergency Early Warning System	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Existing
Fort Riley Police Department	Emergency Management	Emergency Early Warning System	12	The center shall receive incident information from other transportation management centers to support the early warning system.	Existing
Fort Riley Police Department	Emergency Management	Emergency Early Warning System	13	The center shall present the alert and advisory information and the status of the actions taken in response to the alert by the other centers to the emergency system operator as received from other system inputs.	Existing
Fort Riley Police Department	Emergency Management	Emergency Evacuation Support	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Existing
Fort Riley Police Department	Emergency Management	Emergency Evacuation Support	9	The center shall monitor the progress or status of the evacuation once it begins and exchange tactical plans, prepared during the incident, with allied agencies.	Existing
Fort Riley Police Department	Emergency Management	Emergency Evacuation Support	10	The center shall monitor the progress of the reentry process.	Existing
Fort Riley Police Department	Emergency Management	Emergency Response Management	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Existing
Fort Riley Police Department	Emergency Management	Emergency Response Management	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Existing
Fort Riley Police Department	Emergency Management	Emergency Response Management	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Existing
Fort Riley Police Department	Emergency Management	Emergency Response Management	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Existing
Fort Riley Police Department	Emergency Management	Emergency Response Management	5	The center shall track the availability of resources and coordinate resource sharing with allied agency centers including traffic, maintenance, or other emergency centers.	Existing
Fort Riley Police Department	Emergency Management	Emergency Response Management	6	The center shall allocate the appropriate emergency services, resources, and vehicle (s) to respond to incidents, and shall provide the capability to override the current allocation to suit the special needs of a current incident.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Fort Riley Police Department	Emergency Management	Incident Command	1	The center shall provide tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders to support local management of an incident.	Existing
Fort Riley Police Department	Emergency Management	Incident Command	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Existing
Fort Riley Police Department	Emergency Management	Incident Command	3	The center shall track and maintain resource information and action plans pertaining to the incident command.	Existing
Fort Riley Police Department	Emergency Management	Incident Command	4	The center shall share incident command information with other public safety agencies including resource deployment status, hazardous material information, rail incident information, evacuation advice as well as traffic, road, and weather conditions.	Existing
Fort Riley Police Department	Emergency Management	Incident Command	5	The center shall assess the status of responding emergency vehicles as part of an incident command.	Existing
Fort Riley Public Works	Traffic Management	TMC Incident Dispatch Coordination/Communication	2	The center shall coordinate planning for incidents with emergency management centers - including pre-planning activities for disaster response, evacuation, and recovery operations.	Existing
Fort Riley Public Works	Traffic Management	TMC Incident Dispatch Coordination/Communication	5	The center shall share resources with allied agency centers to implement special traffic control measures, assist in clean up, verify an incident, etc. This may also involve coordination with maintenance centers.	Existing
Fort Riley Public Works	Traffic Management	TMC Incident Dispatch Coordination/Communication	9	The center shall exchange road network status assessment information with emergency management and maintenance centers including an assessment of damage sustained by the road network including location and extent of the damage, estimate of remaining capacity, required closures, alternate routes, necessary restrictions, and time frame for repair and recovery.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Early Warning System	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Early Warning System	2	The center shall provide the capability to correlate alerts and advisories, incident information, and security sensor and surveillance data.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Geary County Emergency Operations Center	Emergency Management	Emergency Early Warning System	3	The center shall broadcast wide-area alerts and advisories to traffic management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Early Warning System	4	The center shall broadcast wide-area alerts and advisories to transit management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Early Warning System	6	The center shall broadcast wide-area alerts and advisories to traveler information service providers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Early Warning System	7	The center shall broadcast wide-area alerts and advisories to maintenance centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Early Warning System	8	The center shall broadcast wide-area alerts and advisories to other emergency management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Early Warning System	10	The center shall process status information from each of the centers that have been sent the wide-area alert.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Early Warning System	11	The center shall coordinate the broadcast of wide-area alerts and advisories with other emergency management centers.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Early Warning System	12	The center shall receive incident information from other transportation management centers to support the early warning system.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Early Warning System	13	The center shall present the alert and advisory information and the status of the actions taken in response to the alert by the other centers to the emergency system operator as received from other system inputs.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Early Warning System	14	The center shall support the entry of alert and advisory information directly from the emergency system operator.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Geary County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	1	The center shall manage inter-agency coordination of evacuation operations, from initial planning through the evacuation process and reentry.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	3	The center shall provide an interface to the emergency system operator to enter evacuation plans and procedures and present the operator with other agencies' plans.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	4	The center shall coordinate evacuation destinations and shelter needs with shelter providers (e.g., the American Red Cross) in the region.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	5	The center shall provide evacuation information to traffic, transit, maintenance and construction, rail operations, and other emergency management centers as needed.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	6	The center shall request resources from transit agencies as needed to support the evacuation.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	7	The center shall request traffic management agencies to implement special traffic control strategies and to control evacuation traffic, including traffic on local streets and arterials as well as the major evacuation routes.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	8	The center shall provide traveler information systems with evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary and when it is safe to return.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	9	The center shall monitor the progress or status of the evacuation once it begins and exchange tactical plans, prepared during the incident, with allied agencies.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	10	The center shall monitor the progress of the reentry process.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Response Management	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Response Management	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Existing

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Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Geary County Emergency Operations Center	Emergency Management	Emergency Response Management	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Response Management	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Response Management	5	The center shall track the availability of resources and coordinate resource sharing with allied agency centers including traffic, maintenance, or other emergency centers.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Response Management	6	The center shall allocate the appropriate emergency services, resources, and vehicle (s) to respond to incidents, and shall provide the capability to override the current allocation to suit the special needs of a current incident.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Response Management	9	The center shall provide the capability to remotely control and monitor CCTV systems normally operated by a traffic management center.	Planned
Geary County Emergency Operations Center	Emergency Management	Emergency Response Management	10	The center shall provide the capability to request transit resource availability from transit centers for use during disaster and evacuation operations.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Response Management	11	The center shall assimilate the damage assessment of the transit, traffic, rail, maintenance, and other emergency center services and systems to create an overall transportation system status, and disseminate to each of these centers and the traveling public via traveler information providers.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Response Management	12	The center shall provide information to the media concerning the status of an emergency response.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Response Management	13	The center shall provide the capability for digitized map data to act as the background to the information presented to the emergency system operator.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Response Management	14	The center shall provide the capability for center personnel to provide inputs to the management of incidents, disasters and evacuations.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Response Management	15	The center shall collect information about the status of the recovery efforts for the infrastructure during disasters.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Response Management	16	The center shall provide the overall status of infrastructure recovery efforts to traveler information providers and media.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Geary County Emergency Operations Center	Emergency Management	Emergency Response Management	17	The center shall provide the capability to communicate information about emergency situations to local population through the Emergency Telecommunications System.	Existing
Geary County Emergency Operations Center	Emergency Management	Emergency Response Management	18	The center shall provide the capability to identify neighborhoods and businesses that should be informed of an emergency situation based on information collected about incidents including their severity, impacted locations, and recovery schedule.	Existing
Geary County Emergency Operations Center	Emergency Management	Incident Command	1	The center shall provide tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders to support local management of an incident.	Existing
Geary County Emergency Operations Center	Emergency Management	Incident Command	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Existing
Geary County Emergency Operations Center	Emergency Management	Incident Command	3	The center shall track and maintain resource information and action plans pertaining to the incident command.	Existing
Geary County Emergency Operations Center	Emergency Management	Incident Command	4	The center shall share incident command information with other public safety agencies including resource deployment status, hazardous material information, rail incident information, evacuation advice as well as traffic, road, and weather conditions.	Existing
Geary County Emergency Operations Center	Emergency Management	Incident Command	5	The center shall assess the status of responding emergency vehicles as part of an incident command.	Existing
Geary County Emergency Vehicles	Emergency Vehicle	On-board EV En Route Support	4	The emergency vehicle shall send the current en route status (including estimated time of arrival) and requests for emergency dispatch updates.	Existing
Geary County Emergency Vehicles	Emergency Vehicle	On-board EV En Route Support	5	The emergency vehicle shall send requests to traffic signal control equipment at the roadside to preempt the signal.	Existing
Geary County Emergency Vehicles	Emergency Vehicle	On-board EV En Route Support	6	The emergency vehicle shall provide the personnel on-board with dispatch information, including incident type and location, and forward an acknowledgment from personnel to the center that the vehicle is on its way to the incident scene.	Existing
Geary County Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Roadway Maintenance and Construction	4	The maintenance and construction vehicle shall respond to dispatch information from the center, presented to the vehicle operator for acknowledgement and returning status.	Existing
Geary County Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Winter Maintenance	4	The maintenance and construction vehicle shall respond to dispatch information from the center, presented to the vehicle operator for acknowledgement and returning status.	Existing

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Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Geary County Public Works	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	2	The center shall respond to requests from emergency management and traffic management centers for hazard removal, field equipment repair, and other roadway maintenance.	Existing
Geary County Public Works	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	4	The center shall provide emergency management and traffic management centers with information about scheduled maintenance and construction work activities including anticipated closures and impact to the roadway, alternate routes, anticipated delays, closure times, and durations.	Planned
Geary County Public Works	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	10	The center shall dispatch and route maintenance and construction vehicle drivers and support them with route-specific environmental, incident, advisory, threat, alert, and traffic congestion information.	Existing
Geary County Public Works	Maintenance and Construction Management	MCM Winter Maintenance Management	1	The center shall respond to requests from emergency management and traffic management centers for hazard removal, field equipment repair, and other winter roadway maintenance.	Existing
Geary County Rural Fire Department	Emergency Management	Emergency Early Warning System	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Existing
Geary County Rural Fire Department	Emergency Management	Emergency Early Warning System	12	The center shall receive incident information from other transportation management centers to support the early warning system.	Existing
Geary County Rural Fire Department	Emergency Management	Emergency Early Warning System	13	The center shall present the alert and advisory information and the status of the actions taken in response to the alert by the other centers to the emergency system operator as received from other system inputs.	Existing
Geary County Rural Fire Department	Emergency Management	Emergency Evacuation Support	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Existing
Geary County Rural Fire Department	Emergency Management	Emergency Evacuation Support	9	The center shall monitor the progress or status of the evacuation once it begins and exchange tactical plans, prepared during the incident, with allied agencies.	Existing
Geary County Rural Fire Department	Emergency Management	Emergency Evacuation Support	10	The center shall monitor the progress of the reentry process.	Existing
Geary County Rural Fire Department	Emergency Management	Emergency Response Management	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Existing

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Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Geary County Rural Fire Department	Emergency Management	Emergency Response Management	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Existing
Geary County Rural Fire Department	Emergency Management	Emergency Response Management	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Existing
Geary County Rural Fire Department	Emergency Management	Emergency Response Management	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Existing
Geary County Rural Fire Department	Emergency Management	Emergency Response Management	5	The center shall track the availability of resources and coordinate resource sharing with allied agency centers including traffic, maintenance, or other emergency centers.	Existing
Geary County Rural Fire Department	Emergency Management	Emergency Response Management	6	The center shall allocate the appropriate emergency services, resources, and vehicle (s) to respond to incidents, and shall provide the capability to override the current allocation to suit the special needs of a current incident.	Existing
Geary County Rural Fire Department	Emergency Management	Incident Command	1	The center shall provide tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders to support local management of an incident.	Existing
Geary County Rural Fire Department	Emergency Management	Incident Command	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Existing
Geary County Rural Fire Department	Emergency Management	Incident Command	3	The center shall track and maintain resource information and action plans pertaining to the incident command.	Existing
Geary County Rural Fire Department	Emergency Management	Incident Command	4	The center shall share incident command information with other public safety agencies including resource deployment status, hazardous material information, rail incident information, evacuation advice as well as traffic, road, and weather conditions.	Existing
Geary County Rural Fire Department	Emergency Management	Incident Command	5	The center shall assess the status of responding emergency vehicles as part of an incident command.	Existing
Geary County Sheriff Department	Emergency Management	Emergency Early Warning System	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Existing
Geary County Sheriff Department	Emergency Management	Emergency Early Warning System	11	The center shall coordinate the broadcast of wide-area alerts and advisories with other emergency management centers.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Geary County Sheriff Department	Emergency Management	Emergency Early Warning System	12	The center shall receive incident information from other transportation management centers to support the early warning system.	Existing
Geary County Sheriff Department	Emergency Management	Emergency Early Warning System	13	The center shall present the alert and advisory information and the status of the actions taken in response to the alert by the other centers to the emergency system operator as received from other system inputs.	Existing
Geary County Sheriff Department	Emergency Management	Emergency Evacuation Support	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Existing
Geary County Sheriff Department	Emergency Management	Emergency Evacuation Support	9	The center shall monitor the progress or status of the evacuation once it begins and exchange tactical plans, prepared during the incident, with allied agencies.	Existing
Geary County Sheriff Department	Emergency Management	Emergency Evacuation Support	10	The center shall monitor the progress of the reentry process.	Existing
Geary County Sheriff Department	Emergency Management	Emergency Response Management	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Existing
Geary County Sheriff Department	Emergency Management	Emergency Response Management	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Existing
Geary County Sheriff Department	Emergency Management	Emergency Response Management	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Existing
Geary County Sheriff Department	Emergency Management	Emergency Response Management	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Existing
Geary County Sheriff Department	Emergency Management	Emergency Response Management	5	The center shall track the availability of resources and coordinate resource sharing with allied agency centers including traffic, maintenance, or other emergency centers.	Existing
Geary County Sheriff Department	Emergency Management	Emergency Response Management	6	The center shall allocate the appropriate emergency services, resources, and vehicle (s) to respond to incidents, and shall provide the capability to override the current allocation to suit the special needs of a current incident.	Existing
Geary County Sheriff Department	Emergency Management	Emergency Response Management	20	The center shall manage coordinated inter-agency responses to incidents at an international border.	Existing
Geary County Sheriff Department	Emergency Management	Incident Command	1	The center shall provide tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders to support local management of an incident.	Existing
Geary County Sheriff Department	Emergency Management	Incident Command	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Geary County Sheriff Department	Emergency Management	Incident Command	3	The center shall track and maintain resource information and action plans pertaining to the incident command.	Existing
Geary County Sheriff Department	Emergency Management	Incident Command	4	The center shall share incident command information with other public safety agencies including resource deployment status, hazardous material information, rail incident information, evacuation advice as well as traffic, road, and weather conditions.	Existing
Geary County Sheriff Department	Emergency Management	Incident Command	5	The center shall assess the status of responding emergency vehicles as part of an incident command.	Existing
Junction City CCTV Cameras	Roadway	Roadway Basic Surveillance	2	The field element shall collect, process, and send traffic images to the center for further analysis and distribution.	Planned
Junction City CCTV Cameras	Roadway	Roadway Basic Surveillance	4	The field element shall return sensor and CCTV system operational status to the controlling center.	Planned
Junction City CCTV Cameras	Roadway	Roadway Basic Surveillance	5	The field element shall return sensor and CCTV system fault data to the controlling center for repair.	Planned
Junction City Dynamic Message Signs	Roadway	Roadway Traffic Information Dissemination	1	The field element shall include dynamic messages signs for dissemination of traffic and other information to drivers, under center control; the DMS may be either those that display variable text messages, or those that have fixed format display(s) (e.g. vehicle restrictions, or lane open/close).	Planned
Junction City Dynamic Message Signs	Roadway	Roadway Traffic Information Dissemination	4	The field element shall provide operational status for the driver information systems equipment (DMS, HAR, etc.) to the center.	Planned
Junction City Dynamic Message Signs	Roadway	Roadway Traffic Information Dissemination	5	The field element shall provide fault data for the driver information systems equipment (DMS, HAR, etc.) to the center for repair.	Planned
Junction City Emergency Vehicles	Emergency Vehicle	On-board EV En Route Support	1	The emergency vehicle, including roadway service patrols, shall track its current location.	Existing
Junction City Emergency Vehicles	Emergency Vehicle	On-board EV En Route Support	2	The emergency vehicle, including roadway service patrols, shall send the vehicle's location and operational data to the center for emergency management and dispatch.	Existing
Junction City Emergency Vehicles	Emergency Vehicle	On-board EV En Route Support	3	The emergency vehicle, including roadway service patrols, shall receive incident details and a suggested route when dispatched to a scene.	Existing
Junction City Emergency Vehicles	Emergency Vehicle	On-board EV En Route Support	4	The emergency vehicle shall send the current en route status (including estimated time of arrival) and requests for emergency dispatch updates.	Existing
Junction City Emergency Vehicles	Emergency Vehicle	On-board EV En Route Support	5	The emergency vehicle shall send requests to traffic signal control equipment at the roadside to preempt the signal.	Existing
Junction City Emergency Vehicles	Emergency Vehicle	On-board EV En Route Support	6	The emergency vehicle shall provide the personnel on-board with dispatch information, including incident type and location, and forward an acknowledgment from personnel to the center that the vehicle is on its way to the incident scene.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Junction City Engineering Department	Traffic Management	Collect Traffic Surveillance	1	The center shall monitor, analyze, and store traffic sensor data (speed, volume, occupancy) collected from field elements under remote control of the center.	Planned
Junction City Engineering Department	Traffic Management	Collect Traffic Surveillance	2	The center shall monitor, analyze, and distribute traffic images from CCTV systems under remote control of the center.	Planned
Junction City Engineering Department	Traffic Management	Collect Traffic Surveillance	4	The center shall distribute road network conditions data (raw or processed) based on collected and analyzed traffic sensor and surveillance data to other centers.	Planned
Junction City Engineering Department	Traffic Management	Collect Traffic Surveillance	5	The center shall respond to control data from center personnel regarding sensor and surveillance data collection, analysis, storage, and distribution.	Planned
Junction City Engineering Department	Traffic Management	Collect Traffic Surveillance	6	The center shall maintain a database of surveillance equipment and sensors and associated data (including the roadway on which they are located, the type of data collected, and the ownership of each)	Planned
Junction City Engineering Department	Traffic Management	Collect Traffic Surveillance	7	The center shall support an interface with a map update provider, or other appropriate data sources, through which updates of digitized map data can be obtained and used as a background for traffic data.	Planned
Junction City Engineering Department	Traffic Management	TMC Evacuation Support	1	The center shall coordinate planning for evacuation with emergency management centers - including pre-planning activities such as establishing routes, areas to be evacuated, timing, etc.	Existing
Junction City Engineering Department	Traffic Management	TMC Evacuation Support	2	The center shall support requests from emergency management centers to preempt the current traffic control strategy, activate traffic control and closure systems such as gates and barriers, activate safeguard systems, or use driver information systems to support evacuation traffic control plans.	Planned
Junction City Engineering Department	Traffic Management	TMC Evacuation Support	3	The center shall coordinate information and controls with other traffic management centers.	Planned
Junction City Engineering Department	Traffic Management	TMC Evacuation Support	4	The center shall coordinate execution of evacuation strategies with emergency management centers - including activities such as setting closures and detours, establishing routes, updating areas to be evacuated, timing the process, etc.	Planned
Junction City Engineering Department	Traffic Management	TMC Incident Detection	1	The center shall receive inputs from the Alerting and Advisory System concerning the possibility or occurrence of severe weather, terrorist activity, or other major emergency, including information provided by the Emergency Alert System.	Existing
Junction City Engineering Department	Traffic Management	TMC Incident Detection	2	The center shall collect and store traffic flow and image data from the field equipment to detect and verify incidents.	Planned

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Junction City Engineering Department	Traffic Management	TMC Incident Detection	3	The center shall receive inputs concerning upcoming events that would affect the traffic network from event promoters and traveler information service providers.	Existing
Junction City Engineering Department	Traffic Management	TMC Incident Detection	4	The center shall exchange incident and threat information with emergency management centers as well as maintenance and construction centers; including notification of existence of incident and expected severity, location, time and nature of incident.	Existing
Junction City Engineering Department	Traffic Management	TMC Incident Detection	5	The center shall support requests from emergency management centers and border inspection systems to remotely control sensor and surveillance equipment located in the field.	Planned
Junction City Engineering Department	Traffic Management	TMC Incident Detection	6	The center shall provide road network conditions and traffic images to emergency management centers to support the detection, verification, and classification of incidents.	Planned
Junction City Engineering Department	Traffic Management	TMC Incident Detection	7	The center shall provide video and traffic sensor control commands to the field equipment to detect and verify incidents.	Planned
Junction City Engineering Department	Traffic Management	TMC Incident Dispatch Coordination/Communication	1	The center shall exchange alert information and status with emergency management centers. The information includes notification of a major emergency such as a natural or man-made disaster, civil emergency, or child abduction for distribution to the public. The information may include the alert originator, the nature of the emergency, the geographic area affected by the emergency, the effective time period, and information and instructions necessary for the public to respond to the alert. This may also identify specific information that should not be released to the public.	Existing
Junction City Engineering Department	Traffic Management	TMC Incident Dispatch Coordination/Communication	2	The center shall coordinate planning for incidents with emergency management centers - including pre-planning activities for disaster response, evacuation, and recovery operations.	Existing
Junction City Engineering Department	Traffic Management	TMC Incident Dispatch Coordination/Communication	3	The center shall support requests from emergency management centers to remotely control sensor and surveillance equipment located in the field, provide special routing for emergency vehicles, and to provide responding emergency vehicles with signal preemption.	Planned
Junction City Engineering Department	Traffic Management	TMC Incident Dispatch Coordination/Communication	4	The center shall exchange incident information with emergency management centers, maintenance and construction centers, transit centers, information service providers, and the media including description, location, traffic impact, status, expected duration, and response information.	Planned
Junction City Engineering Department	Traffic Management	TMC Incident Dispatch Coordination/Communication	5	The center shall share resources with allied agency centers to implement special traffic control measures, assist in clean up, verify an incident, etc. This may also involve coordination with maintenance centers.	Planned

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Junction City Engineering Department	Traffic Management	TMC Incident Dispatch Coordination/Communication	6	The center shall receive inputs concerning upcoming events that would affect the traffic network from event promoters, traveler information service providers, media, border crossings, and rail operations centers.	Existing
Junction City Engineering Department	Traffic Management	TMC Incident Dispatch Coordination/Communication	7	The center shall provide road network conditions and traffic images to emergency management centers, maintenance and construction centers, and traveler information service providers.	Planned
Junction City Engineering Department	Traffic Management	TMC Incident Dispatch Coordination/Communication	9	The center shall exchange road network status assessment information with emergency management and maintenance centers including an assessment of damage sustained by the road network including location and extent of the damage, estimate of remaining capacity, required closures, alternate routes, necessary restrictions, and time frame for repair and recovery.	Planned
Junction City Engineering Department	Traffic Management	TMC Incident Dispatch Coordination/Communication	10	The center shall coordinate information and controls with other traffic management centers.	Planned
Junction City Engineering Department	Traffic Management	TMC Incident Dispatch Coordination/Communication	11	The center shall receive inputs from emergency management and transit management centers to develop an overall status of the transportation system including emergency transit schedules in effect and current status and condition of the transportation infrastructure.	Planned
Junction City Engineering Department	Traffic Management	TMC Regional Traffic Management	1	The center shall exchange traffic information with other traffic management centers including incident information, congestion data, traffic data, signal timing plans, and real-time signal control information.	Planned
Junction City Engineering Department	Traffic Management	TMC Regional Traffic Management	2	The center shall exchange traffic control information with other traffic management centers to support remote monitoring and control of traffic management devices (e.g. signs, sensors, signals, cameras, etc.).	Planned
Junction City Engineering Department	Traffic Management	TMC Signal Control	1	The center shall remotely control traffic signal controllers.	Planned
Junction City Engineering Department	Traffic Management	TMC Signal Control	2	The center shall accept notifications of pedestrian calls.	Planned
Junction City Engineering Department	Traffic Management	TMC Signal Control	3	The center shall collect traffic signal controller operational status and compare against the control information sent by the center.	Planned
Junction City Engineering Department	Traffic Management	TMC Signal Control	4	The center shall collect traffic signal controller fault data from the field.	Planned
Junction City Engineering Department	Traffic Management	TMC Signal Control	5	The center shall manage (define, store and modify) control plans to coordinate signalized intersections, to be engaged at the direction of center personnel or according to a daily schedule.	Planned

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Junction City Engineering Department	Traffic Management	TMC Signal Control	6	The center shall implement control plans to coordinate signalized intersections based on data from sensors.	Planned
Junction City Engineering Department	Traffic Management	TMC Signal Control	7	The center shall manage boundaries of the control sections used within the signal system.	Planned
Junction City Engineering Department	Traffic Management	TMC Signal Control	8	The center shall maintain traffic signal coordination including synchronizing clocks throughout the system.	Planned
Junction City Engineering Department	Traffic Management	TMC Traffic Information Dissemination	1	The center shall remotely control dynamic messages signs for dissemination of traffic and other information to drivers.	Planned
Junction City Engineering Department	Traffic Management	TMC Traffic Information Dissemination	3	The center shall collect operational status for the driver information systems equipment (DMS, HAR, etc.).	Planned
Junction City Engineering Department	Traffic Management	TMC Traffic Information Dissemination	4	The center shall collect fault data for the driver information systems equipment (DMS, HAR, etc.) for repair.	Planned
Junction City Engineering Department	Traffic Management	TMC Traffic Information Dissemination	5	The center shall retrieve locally stored traffic information, including current and forecasted traffic information, road and weather conditions, traffic incident information, information on diversions and alternate routes, closures, and special traffic restrictions (lane/shoulder use, weight restrictions, width restrictions, HOV requirements), and the definition of the road network itself.	Planned
Junction City Engineering Department	Traffic Management	Traffic Equipment Maintenance	1	The center shall collect and store sensor (traffic, pedestrian, multimodal crossing) operational status.	Planned
Junction City Engineering Department	Traffic Management	Traffic Equipment Maintenance	2	The center shall collect and store CCTV surveillance system (traffic, pedestrian) operational status.	Planned
Junction City Engineering Department	Traffic Management	Traffic Equipment Maintenance	3	The center shall collect and store sensor (traffic, pedestrian, multimodal crossing) fault data and send to the maintenance center for repair.	Planned
Junction City Engineering Department	Traffic Management	Traffic Equipment Maintenance	4	The center shall collect and store CCTV surveillance system (traffic, pedestrian) fault data send to the maintenance center for repair.	Planned
Junction City Engineering Department	Traffic Management	Traffic Equipment Maintenance	7	The center shall exchange data with maintenance centers concerning the reporting of faulty equipment and the schedule/status of their repair. Information exchanged includes details of new equipment faults, and clearances when the faults are cleared.	Planned

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Junction City Engineering Department	Traffic Management	Traffic Equipment Maintenance	8	The center shall support an interface with a map update provider, or other appropriate data sources, through which updates of digitized map data can be obtained and used as a background for traffic maintenance data.	Planned
Junction City Fire Department	Emergency Management	Emergency Early Warning System	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Existing
Junction City Fire Department	Emergency Management	Emergency Early Warning System	12	The center shall receive incident information from other transportation management centers to support the early warning system.	Existing
Junction City Fire Department	Emergency Management	Emergency Early Warning System	13	The center shall present the alert and advisory information and the status of the actions taken in response to the alert by the other centers to the emergency system operator as received from other system inputs.	Existing
Junction City Fire Department	Emergency Management	Emergency Evacuation Support	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Existing
Junction City Fire Department	Emergency Management	Emergency Evacuation Support	9	The center shall monitor the progress or status of the evacuation once it begins and exchange tactical plans, prepared during the incident, with allied agencies.	Existing
Junction City Fire Department	Emergency Management	Emergency Evacuation Support	10	The center shall monitor the progress of the reentry process.	Existing
Junction City Fire Department	Emergency Management	Emergency Response Management	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Existing
Junction City Fire Department	Emergency Management	Emergency Response Management	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Existing
Junction City Fire Department	Emergency Management	Emergency Response Management	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Existing
Junction City Fire Department	Emergency Management	Emergency Response Management	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Existing
Junction City Fire Department	Emergency Management	Emergency Response Management	5	The center shall track the availability of resources and coordinate resource sharing with allied agency centers including traffic, maintenance, or other emergency centers.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Junction City Fire Department	Emergency Management	Emergency Response Management	6	The center shall allocate the appropriate emergency services, resources, and vehicle (s) to respond to incidents, and shall provide the capability to override the current allocation to suit the special needs of a current incident.	Existing
Junction City Fire Department	Emergency Management	Incident Command	1	The center shall provide tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders to support local management of an incident.	Existing
Junction City Fire Department	Emergency Management	Incident Command	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Existing
Junction City Fire Department	Emergency Management	Incident Command	3	The center shall track and maintain resource information and action plans pertaining to the incident command.	Existing
Junction City Fire Department	Emergency Management	Incident Command	4	The center shall share incident command information with other public safety agencies including resource deployment status, hazardous material information, rail incident information, evacuation advice as well as traffic, road, and weather conditions.	Existing
Junction City Fire Department	Emergency Management	Incident Command	5	The center shall assess the status of responding emergency vehicles as part of an incident command.	Existing
Junction City Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Roadway Maintenance and Construction	1	The maintenance and construction vehicle shall track the location and status of safety systems on-board the vehicle.	Existing
Junction City Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Roadway Maintenance and Construction	3	The maintenance and construction vehicle shall monitor materials information including remaining quantity and current application rate of materials on the vehicle.	Existing
Junction City Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Roadway Maintenance and Construction	4	The maintenance and construction vehicle shall respond to dispatch information from the center, presented to the vehicle operator for acknowledgement and returning status.	Existing
Junction City Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Vehicle Location Tracking	1	The maintenance and construction vehicle shall track its current location.	Existing
Junction City Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Vehicle Location Tracking	2	The maintenance and construction vehicle shall send the time stamped vehicle location to the controlling center.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Junction City Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Winter Maintenance	1	The maintenance and construction vehicle shall track the location and status of safety systems on-board the vehicle.	Existing
Junction City Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Winter Maintenance	3	The maintenance and construction vehicle shall monitor materials information including remaining quantity and current application rate of materials on the vehicle.	Existing
Junction City Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Winter Maintenance	4	The maintenance and construction vehicle shall respond to dispatch information from the center, presented to the vehicle operator for acknowledgement and returning status.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Call-Taking	1	The center shall support the interface to the Emergency Telecommunications System (e.g. 911 or 7-digit call routing) to receive emergency notification information and provide it to the emergency system operator.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Call-Taking	2	The center shall receive emergency call information from 911 services and present the possible incident information to the emergency system operator.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Call-Taking	5	The center shall receive emergency notification information from other public safety agencies and present the possible incident information to the emergency system operator.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Call-Taking	6	The center shall receive emergency notification information from public transit systems and present the possible incident information to the emergency system operator.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Call-Taking	7	The center shall coordinate, correlate, and verify all emergency inputs, including those identified based on external calls and internal analysis of security sensor and surveillance data, and assign each a level of confidence.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Call-Taking	8	The center shall send a request for remote control of CCTV systems from a traffic management center in order to verify the reported incident.	Planned
Junction City Police / 911 Center	Emergency Management	Emergency Call-Taking	9	The center shall forward the verified emergency information to the responding agency based on the location and nature of the emergency.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Call-Taking	10	The center shall update the incident information log once the emergency system operator has verified the incident.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Call-Taking	11	The center shall provide the capability for digitized map data to act as the background to the emergency information presented to the emergency system operator.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Junction City Police / 911 Center	Emergency Management	Emergency Dispatch	1	The center shall dispatch emergency vehicles to respond to verified emergencies under center personnel control.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Dispatch	2	The center shall store the current status of all emergency vehicles available for dispatch and those that have been dispatched.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Dispatch	3	The center shall relay location and incident details to the responding vehicles.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Dispatch	4	The center shall track the location and status of emergency vehicles responding to an emergency based on information from the emergency vehicle.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Dispatch	5	The center shall store and maintain the emergency service responses in an action log.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Dispatch	6	The center shall provide the capability for digitized map data to act as the background to the information presented to the emergency system operator.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Dispatch	7	The center shall receive traffic images to support dispatch of emergency vehicles.	Planned
Junction City Police / 911 Center	Emergency Management	Emergency Dispatch	8	The center shall provide the capability to request remote control of traffic surveillance devices	Planned
Junction City Police / 911 Center	Emergency Management	Emergency Dispatch	9	The center shall coordinate response to incidents with other Emergency Management centers to ensure appropriate resources are dispatched and utilized.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Early Warning System	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Early Warning System	2	The center shall provide the capability to correlate alerts and advisories, incident information, and security sensor and surveillance data.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Early Warning System	3	The center shall broadcast wide-area alerts and advisories to traffic management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Junction City Police / 911 Center	Emergency Management	Emergency Early Warning System	4	The center shall broadcast wide-area alerts and advisories to transit management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Early Warning System	5	The center shall broadcast wide-area alerts and advisories to toll administration centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Early Warning System	6	The center shall broadcast wide-area alerts and advisories to traveler information service providers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Early Warning System	7	The center shall broadcast wide-area alerts and advisories to maintenance centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Early Warning System	8	The center shall broadcast wide-area alerts and advisories to other emergency management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Early Warning System	10	The center shall process status information from each of the centers that have been sent the wide-area alert.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Early Warning System	11	The center shall coordinate the broadcast of wide-area alerts and advisories with other emergency management centers.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Early Warning System	12	The center shall receive incident information from other transportation management centers to support the early warning system.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Early Warning System	13	The center shall present the alert and advisory information and the status of the actions taken in response to the alert by the other centers to the emergency system operator as received from other system inputs.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Early Warning System	14	The center shall support the entry of alert and advisory information directly from the emergency system operator.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Evacuation Support	1	The center shall manage inter-agency coordination of evacuation operations, from initial planning through the evacuation process and reentry.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Junction City Police / 911 Center	Emergency Management	Emergency Evacuation Support	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Evacuation Support	3	The center shall provide an interface to the emergency system operator to enter evacuation plans and procedures and present the operator with other agencies' plans.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Evacuation Support	4	The center shall coordinate evacuation destinations and shelter needs with shelter providers (e.g., the American Red Cross) in the region.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Evacuation Support	5	The center shall provide evacuation information to traffic, transit, maintenance and construction, rail operations, and other emergency management centers as needed.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Evacuation Support	6	The center shall request resources from transit agencies as needed to support the evacuation.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Evacuation Support	7	The center shall request traffic management agencies to implement special traffic control strategies and to control evacuation traffic, including traffic on local streets and arterials as well as the major evacuation routes.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Evacuation Support	8	The center shall provide traveler information systems with evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary and when it is safe to return.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Evacuation Support	9	The center shall monitor the progress or status of the evacuation once it begins and exchange tactical plans, prepared during the incident, with allied agencies.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Evacuation Support	10	The center shall monitor the progress of the reentry process.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Response Management	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Response Management	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Response Management	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Response Management	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Response Management	5	The center shall track the availability of resources and coordinate resource sharing with allied agency centers including traffic, maintenance, or other emergency centers.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Junction City Police / 911 Center	Emergency Management	Emergency Response Management	6	The center shall allocate the appropriate emergency services, resources, and vehicle (s) to respond to incidents, and shall provide the capability to override the current allocation to suit the special needs of a current incident.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Response Management	7	The center shall receive event scheduling information from Event Promoters.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Response Management	9	The center shall provide the capability to remotely control and monitor CCTV systems normally operated by a traffic management center.	Planned
Junction City Police / 911 Center	Emergency Management	Emergency Response Management	10	The center shall provide the capability to request transit resource availability from transit centers for use during disaster and evacuation operations.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Response Management	11	The center shall assimilate the damage assessment of the transit, traffic, rail, maintenance, and other emergency center services and systems to create an overall transportation system status, and disseminate to each of these centers and the traveling public via traveler information providers.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Response Management	12	The center shall provide information to the media concerning the status of an emergency response.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Response Management	13	The center shall provide the capability for digitized map data to act as the background to the information presented to the emergency system operator.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Response Management	14	The center shall provide the capability for center personnel to provide inputs to the management of incidents, disasters and evacuations.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Response Management	15	The center shall collect information about the status of the recovery efforts for the infrastructure during disasters.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Response Management	16	The center shall provide the overall status of infrastructure recovery efforts to traveler information providers and media.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Response Management	17	The center shall provide the capability to communicate information about emergency situations to local population through the Emergency Telecommunications System.	Existing
Junction City Police / 911 Center	Emergency Management	Emergency Response Management	18	The center shall provide the capability to identify neighborhoods and businesses that should be informed of an emergency situation based on information collected about incidents including their severity, impacted locations, and recovery schedule.	Existing
Junction City Police / 911 Center	Emergency Management	Incident Command	1	The center shall provide tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders to support local management of an incident.	Existing
Junction City Police / 911 Center	Emergency Management	Incident Command	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Junction City Police / 911 Center	Emergency Management	Incident Command	3	The center shall track and maintain resource information and action plans pertaining to the incident command.	Existing
Junction City Police / 911 Center	Emergency Management	Incident Command	4	The center shall share incident command information with other public safety agencies including resource deployment status, hazardous material information, rail incident information, evacuation advice as well as traffic, road, and weather conditions.	Existing
Junction City Police / 911 Center	Emergency Management	Incident Command	5	The center shall assess the status of responding emergency vehicles as part of an incident command.	Existing
Junction City Public Works Department	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	2	The center shall respond to requests from emergency management and traffic management centers for hazard removal, field equipment repair, and other roadway maintenance.	Existing
Junction City Public Works Department	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	4	The center shall provide emergency management and traffic management centers with information about scheduled maintenance and construction work activities including anticipated closures and impact to the roadway, alternate routes, anticipated delays, closure times, and durations.	Existing
Junction City Public Works Department	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	9	The center shall collect current and forecast traffic and weather information from traffic management centers and weather service providers (such as the National Weather Service and value-added sector specific meteorological services).	Existing
Junction City Public Works Department	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	10	The center shall dispatch and route maintenance and construction vehicle drivers and support them with route-specific environmental, incident, advisory, threat, alert, and traffic congestion information.	Existing
Junction City Public Works Department	Maintenance and Construction Management	MCM Vehicle Tracking	1	The center shall monitor the locations of all maintenance and construction vehicles and other equipment under its jurisdiction.	Existing
Junction City Public Works Department	Maintenance and Construction Management	MCM Vehicle Tracking	2	The center shall present location data to center personnel for the fleet of maintenance and construction vehicles and other equipment.	Existing
Junction City Public Works Department	Maintenance and Construction Management	MCM Vehicle Tracking	3	The center shall support an interface with a map update provider, or other appropriate data sources, through which updates of digitized map data can be obtained and used as a background for maintenance and construction vehicle tracking.	Existing
Junction City Public Works Department	Maintenance and Construction Management	MCM Winter Maintenance Management	1	The center shall respond to requests from emergency management and traffic management centers for hazard removal, field equipment repair, and other winter roadway maintenance.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Junction City Public Works Department	Maintenance and Construction Management	MCM Winter Maintenance Management	3	The center shall provide status information about scheduled winter maintenance activities including anticipated closures and impact to the roadway, alternate routes, anticipated delays, closure times, and durations. The information is provided to other management centers such as traffic, emergency, transit, traveler information providers, other maintenance centers, and the media.	Existing
Junction City Public Works Department	Maintenance and Construction Management	MCM Winter Maintenance Management	7	The center shall dispatch and route winter maintenance vehicle drivers and support them with route- specific environmental, incident, advisory, threat, alert, and traffic congestion information.	Existing
Junction City Public Works Department	Maintenance and Construction Management	MCM Winter Maintenance Management	9	The center shall provide dispatch instructions for vehicle operators based on input parameters from center personnel, specifically for winter conditions. This could include a treatment route, treatment application rates, start and end times, and other treatment instructions.	Existing
Junction City Traffic Detection Equipment	Roadway	Roadway Basic Surveillance	1	The field element shall collect, process, digitize, and send traffic sensor data (speed, volume, and occupancy) to the center for further analysis and storage, under center control.	Planned
Junction City Traffic Detection Equipment	Roadway	Roadway Basic Surveillance	2	The field element shall collect, process, and send traffic images to the center for further analysis and distribution.	Planned
Junction City Traffic Signals	Roadway	Field Management Stations Operation	1	The field management station shall accept configuration information from the center.	Planned
Junction City Traffic Signals	Roadway	Field Management Stations Operation	2	The field management station shall pass data provided by the center to local field devices and report data from the field devices back to the center.	Planned
Junction City Traffic Signals	Roadway	Roadway Equipment Coordination	1	The field element shall include sensors that provide data and status information to other field element devices, without center control.	Planned
Junction City Traffic Signals	Roadway	Roadway Equipment Coordination	2	The field element shall include sensors that receive configuration data from other field element devices, without center control.	Planned
Junction City Traffic Signals	Roadway	Roadway Equipment Coordination	3	The field element shall include devices that provide data and status information to other field element devices without center control.	Planned
Junction City Traffic Signals	Roadway	Roadway Equipment Coordination	4	The field element shall include devices that receive configuration data from other field element devices, without center control.	Planned
Junction City Traffic Signals	Roadway	Roadway Signal Controls	1	The field element shall control traffic signals under center control.	Planned
Junction City Traffic Signals	Roadway	Roadway Signal Controls	2	The field element shall respond to pedestrian crossing requests by accommodating the pedestrian crossing.	Planned
Junction City Traffic Signals	Roadway	Roadway Signal Controls	3	The field element shall provide the capability to notify the traffic management center of pedestrian calls and pedestrian accommodations.	Planned

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Junction City Traffic Signals	Roadway	Roadway Signal Controls	4	The field element shall report the current signal control information to the center.	Planned
Junction City Traffic Signals	Roadway	Roadway Signal Controls	5	The field element shall report current preemption status to the center.	Planned
Junction City Traffic Signals	Roadway	Roadway Signal Controls	6	The field element shall return traffic signal controller operational status to the center.	Planned
Junction City Traffic Signals	Roadway	Roadway Signal Controls	7	The field element shall return traffic signal controller fault data to the center.	Planned
Junction City Traffic Signals	Roadway	Roadway Signal Preemption	1	The field element shall respond to signal preemption requests from emergency vehicles.	Existing
Kansas Homeland Security	Emergency Management	Emergency Early Warning System	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Existing
Kansas Homeland Security	Emergency Management	Emergency Early Warning System	2	The center shall provide the capability to correlate alerts and advisories, incident information, and security sensor and surveillance data.	Existing
Kansas Homeland Security	Emergency Management	Emergency Early Warning System	3	The center shall broadcast wide-area alerts and advisories to traffic management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Kansas Homeland Security	Emergency Management	Emergency Early Warning System	4	The center shall broadcast wide-area alerts and advisories to transit management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Kansas Homeland Security	Emergency Management	Emergency Early Warning System	5	The center shall broadcast wide-area alerts and advisories to toll administration centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Kansas Homeland Security	Emergency Management	Emergency Early Warning System	6	The center shall broadcast wide-area alerts and advisories to traveler information service providers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Kansas Homeland Security	Emergency Management	Emergency Early Warning System	7	The center shall broadcast wide-area alerts and advisories to maintenance centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Kansas Homeland Security	Emergency Management	Emergency Early Warning System	8	The center shall broadcast wide-area alerts and advisories to other emergency management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Kansas Homeland Security	Emergency Management	Emergency Early Warning System	9	The center shall broadcast wide-area alerts and advisories to commercial vehicle administration centers and roadside check facilities for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Kansas Homeland Security	Emergency Management	Emergency Early Warning System	10	The center shall process status information from each of the centers that have been sent the wide-area alert.	Existing
Kansas Homeland Security	Emergency Management	Emergency Early Warning System	11	The center shall coordinate the broadcast of wide-area alerts and advisories with other emergency management centers.	Existing
Kansas Homeland Security	Emergency Management	Emergency Early Warning System	12	The center shall receive incident information from other transportation management centers to support the early warning system.	Existing
Kansas Homeland Security	Emergency Management	Emergency Early Warning System	13	The center shall present the alert and advisory information and the status of the actions taken in response to the alert by the other centers to the emergency system operator as received from other system inputs.	Existing
Kansas Homeland Security	Emergency Management	Emergency Early Warning System	14	The center shall support the entry of alert and advisory information directly from the emergency system operator.	Existing
Kansas Homeland Security	Emergency Management	Emergency Evacuation Support	1	The center shall manage inter-agency coordination of evacuation operations, from initial planning through the evacuation process and reentry.	Existing
Kansas Homeland Security	Emergency Management	Emergency Evacuation Support	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Existing
Kansas Homeland Security	Emergency Management	Emergency Evacuation Support	3	The center shall provide an interface to the emergency system operator to enter evacuation plans and procedures and present the operator with other agencies' plans.	Existing
Kansas Homeland Security	Emergency Management	Emergency Evacuation Support	4	The center shall coordinate evacuation destinations and shelter needs with shelter providers (e.g., the American Red Cross) in the region.	Existing
Kansas Homeland Security	Emergency Management	Emergency Evacuation Support	5	The center shall provide evacuation information to traffic, transit, maintenance and construction, rail operations, and other emergency management centers as needed.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Kansas Homeland Security	Emergency Management	Emergency Evacuation Support	6	The center shall request resources from transit agencies as needed to support the evacuation.	Existing
Kansas Homeland Security	Emergency Management	Emergency Evacuation Support	7	The center shall request traffic management agencies to implement special traffic control strategies and to control evacuation traffic, including traffic on local streets and arterials as well as the major evacuation routes.	Existing
Kansas Homeland Security	Emergency Management	Emergency Evacuation Support	8	The center shall provide traveler information systems with evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary and when it is safe to return.	Existing
Kansas Homeland Security	Emergency Management	Emergency Evacuation Support	9	The center shall monitor the progress or status of the evacuation once it begins and exchange tactical plans, prepared during the incident, with allied agencies.	Existing
Kansas Homeland Security	Emergency Management	Emergency Evacuation Support	10	The center shall monitor the progress of the reentry process.	Existing
Kansas Homeland Security	Emergency Management	Emergency Evacuation Support	11	The center shall submit evacuation information to toll administration centers along with requests for changes in the toll services or fee collection during an evacuation.	Existing
Kansas Homeland Security	Emergency Management	Emergency Evacuation Support	12	The center shall retrieve information from public health systems to plan for and implement evacuations or in-place sheltering for biological, chemical, radiation, and other public health emergencies.	Existing
Kansas Homeland Security	Emergency Management	Emergency Response Management	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Existing
Kansas Homeland Security	Emergency Management	Emergency Response Management	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Existing
Kansas Homeland Security	Emergency Management	Emergency Response Management	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Existing
Kansas Homeland Security	Emergency Management	Emergency Response Management	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Existing
Kansas Homeland Security	Emergency Management	Emergency Response Management	5	The center shall track the availability of resources and coordinate resource sharing with allied agency centers including traffic, maintenance, or other emergency centers.	Existing
Kansas Homeland Security	Emergency Management	Emergency Response Management	6	The center shall allocate the appropriate emergency services, resources, and vehicle (s) to respond to incidents, and shall provide the capability to override the current allocation to suit the special needs of a current incident.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Kansas Homeland Security	Emergency Management	Emergency Response Management	7	The center shall receive event scheduling information from Event Promoters.	Existing
Kansas Homeland Security	Emergency Management	Emergency Response Management	9	The center shall provide the capability to remotely control and monitor CCTV systems normally operated by a traffic management center.	Existing
Kansas Homeland Security	Emergency Management	Emergency Response Management	10	The center shall provide the capability to request transit resource availability from transit centers for use during disaster and evacuation operations.	Existing
Kansas Homeland Security	Emergency Management	Emergency Response Management	11	The center shall assimilate the damage assessment of the transit, traffic, rail, maintenance, and other emergency center services and systems to create an overall transportation system status, and disseminate to each of these centers and the traveling public via traveler information providers.	Existing
Kansas Homeland Security	Emergency Management	Emergency Response Management	12	The center shall provide information to the media concerning the status of an emergency response.	Existing
Kansas Homeland Security	Emergency Management	Emergency Response Management	13	The center shall provide the capability for digitized map data to act as the background to the information presented to the emergency system operator.	Existing
Kansas Homeland Security	Emergency Management	Emergency Response Management	14	The center shall provide the capability for center personnel to provide inputs to the management of incidents, disasters and evacuations.	Existing
Kansas Homeland Security	Emergency Management	Emergency Response Management	15	The center shall collect information about the status of the recovery efforts for the infrastructure during disasters.	Existing
Kansas Homeland Security	Emergency Management	Emergency Response Management	16	The center shall provide the overall status of infrastructure recovery efforts to traveler information providers and media.	Existing
Kansas Homeland Security	Emergency Management	Emergency Response Management	17	The center shall provide the capability to communicate information about emergency situations to local population through the Emergency Telecommunications System.	Existing
Kansas Homeland Security	Emergency Management	Emergency Response Management	18	The center shall provide the capability to identify neighborhoods and businesses that should be informed of an emergency situation based on information collected about incidents including their severity, impacted locations, and recovery schedule.	Existing
Kansas Homeland Security	Emergency Management	Emergency Response Management	19	The center shall retrieve information from public health systems to increase preparedness for, and implement a response to biological, chemical, radiation, and other public health emergencies.	Existing
Kansas Homeland Security	Emergency Management	Incident Command	1	The center shall provide tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders to support local management of an incident.	Existing
Kansas Homeland Security	Emergency Management	Incident Command	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Kansas Homeland Security	Emergency Management	Incident Command	3	The center shall track and maintain resource information and action plans pertaining to the incident command.	Existing
Kansas Homeland Security	Emergency Management	Incident Command	4	The center shall share incident command information with other public safety agencies including resource deployment status, hazardous material information, rail incident information, evacuation advice as well as traffic, road, and weather conditions.	Existing
Kansas Homeland Security	Emergency Management	Incident Command	5	The center shall assess the status of responding emergency vehicles as part of an incident command.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Early Warning System	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Early Warning System	2	The center shall provide the capability to correlate alerts and advisories, incident information, and security sensor and surveillance data.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Early Warning System	3	The center shall broadcast wide-area alerts and advisories to traffic management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Early Warning System	4	The center shall broadcast wide-area alerts and advisories to transit management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Early Warning System	5	The center shall broadcast wide-area alerts and advisories to toll administration centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Early Warning System	6	The center shall broadcast wide-area alerts and advisories to traveler information service providers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Kansas State Emergency Operations Center	Emergency Management	Emergency Early Warning System	7	The center shall broadcast wide-area alerts and advisories to maintenance centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Early Warning System	8	The center shall broadcast wide-area alerts and advisories to other emergency management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Early Warning System	9	The center shall broadcast wide-area alerts and advisories to commercial vehicle administration centers and roadside check facilities for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Early Warning System	10	The center shall process status information from each of the centers that have been sent the wide-area alert.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Early Warning System	11	The center shall coordinate the broadcast of wide-area alerts and advisories with other emergency management centers.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Early Warning System	12	The center shall receive incident information from other transportation management centers to support the early warning system.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Early Warning System	13	The center shall present the alert and advisory information and the status of the actions taken in response to the alert by the other centers to the emergency system operator as received from other system inputs.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Early Warning System	14	The center shall support the entry of alert and advisory information directly from the emergency system operator.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Evacuation Support	1	The center shall manage inter-agency coordination of evacuation operations, from initial planning through the evacuation process and reentry.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Evacuation Support	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Evacuation Support	3	The center shall provide an interface to the emergency system operator to enter evacuation plans and procedures and present the operator with other agencies' plans.	Existing

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Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Kansas State Emergency Operations Center	Emergency Management	Emergency Evacuation Support	4	The center shall coordinate evacuation destinations and shelter needs with shelter providers (e.g., the American Red Cross) in the region.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Evacuation Support	5	The center shall provide evacuation information to traffic, transit, maintenance and construction, rail operations, and other emergency management centers as needed.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Evacuation Support	6	The center shall request resources from transit agencies as needed to support the evacuation.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Evacuation Support	7	The center shall request traffic management agencies to implement special traffic control strategies and to control evacuation traffic, including traffic on local streets and arterials as well as the major evacuation routes.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Evacuation Support	8	The center shall provide traveler information systems with evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary and when it is safe to return.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Evacuation Support	9	The center shall monitor the progress or status of the evacuation once it begins and exchange tactical plans, prepared during the incident, with allied agencies.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Evacuation Support	10	The center shall monitor the progress of the reentry process.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Evacuation Support	11	The center shall submit evacuation information to toll administration centers along with requests for changes in the toll services or fee collection during an evacuation.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Evacuation Support	12	The center shall retrieve information from public health systems to plan for and implement evacuations or in-place sheltering for biological, chemical, radiation, and other public health emergencies.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Response Management	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Response Management	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Response Management	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Existing

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Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Kansas State Emergency Operations Center	Emergency Management	Emergency Response Management	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Response Management	5	The center shall track the availability of resources and coordinate resource sharing with allied agency centers including traffic, maintenance, or other emergency centers.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Response Management	6	The center shall allocate the appropriate emergency services, resources, and vehicle (s) to respond to incidents, and shall provide the capability to override the current allocation to suit the special needs of a current incident.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Response Management	7	The center shall receive event scheduling information from Event Promoters.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Response Management	9	The center shall provide the capability to remotely control and monitor CCTV systems normally operated by a traffic management center.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Response Management	10	The center shall provide the capability to request transit resource availability from transit centers for use during disaster and evacuation operations.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Response Management	11	The center shall assimilate the damage assessment of the transit, traffic, rail, maintenance, and other emergency center services and systems to create an overall transportation system status, and disseminate to each of these centers and the traveling public via traveler information providers.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Response Management	12	The center shall provide information to the media concerning the status of an emergency response.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Response Management	13	The center shall provide the capability for digitized map data to act as the background to the information presented to the emergency system operator.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Response Management	14	The center shall provide the capability for center personnel to provide inputs to the management of incidents, disasters and evacuations.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Response Management	15	The center shall collect information about the status of the recovery efforts for the infrastructure during disasters.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Response Management	16	The center shall provide the overall status of infrastructure recovery efforts to traveler information providers and media.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Kansas State Emergency Operations Center	Emergency Management	Emergency Response Management	17	The center shall provide the capability to communicate information about emergency situations to local population through the Emergency Telecommunications System.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Response Management	18	The center shall provide the capability to identify neighborhoods and businesses that should be informed of an emergency situation based on information collected about incidents including their severity, impacted locations, and recovery schedule.	Existing
Kansas State Emergency Operations Center	Emergency Management	Emergency Response Management	19	The center shall retrieve information from public health systems to increase preparedness for, and implement a response to biological, chemical, radiation, and other public health emergencies.	Existing
Kansas State Emergency Operations Center	Emergency Management	Incident Command	1	The center shall provide tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders to support local management of an incident.	Existing
Kansas State Emergency Operations Center	Emergency Management	Incident Command	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Existing
Kansas State Emergency Operations Center	Emergency Management	Incident Command	3	The center shall track and maintain resource information and action plans pertaining to the incident command.	Existing
Kansas State Emergency Operations Center	Emergency Management	Incident Command	4	The center shall share incident command information with other public safety agencies including resource deployment status, hazardous material information, rail incident information, evacuation advice as well as traffic, road, and weather conditions.	Existing
Kansas State Emergency Operations Center	Emergency Management	Incident Command	5	The center shall assess the status of responding emergency vehicles as part of an incident command.	Existing
KDOT CCTV Cameras	Roadway	Roadway Basic Surveillance	2	The field element shall collect, process, and send traffic images to the center for further analysis and distribution.	Existing
KDOT CCTV Cameras	Roadway	Roadway Basic Surveillance	4	The field element shall return sensor and CCTV system operational status to the controlling center.	Existing
KDOT CCTV Cameras	Roadway	Roadway Basic Surveillance	5	The field element shall return sensor and CCTV system fault data to the controlling center for repair.	Existing
KDOT District 1 Office	Maintenance and Construction Management	MCM Environmental Information Collection	1	The center shall remotely control environmental sensors that measure road surface temperature, moisture, icing, salinity, and other measures.	Existing
KDOT District 1 Office	Maintenance and Construction Management	MCM Environmental Information Collection	2	The center shall remotely control environmental sensors that measure weather conditions including temperature, wind, humidity, precipitation, and visibility.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
KDOT District 1 Office	Maintenance and Construction Management	MCM Environmental Information Collection	5	The center shall assimilate current and forecast road conditions and surface weather information using a combination of weather service provider information (such as the National Weather Service and value-added sector specific meteorological services), data from traffic and traveler information providers, and environmental data collected from sensors deployed on and about the roadway as well as the fleet of maintenance and construction vehicles and the broader population of vehicle probes.	Existing
KDOT District 1 Office	Maintenance and Construction Management	MCM Environmental Information Collection	7	The center shall respond to control data from center personnel regarding environmental sensor control and weather data collection and processing.	Existing
KDOT District 1 Office	Maintenance and Construction Management	MCM Environmental Information Collection	8	The center shall collect operational status for the roadside and vehicle-based environmental sensor equipment.	Existing
KDOT District 1 Office	Maintenance and Construction Management	MCM Environmental Information Collection	9	The center shall collect fault data for the roadside and vehicle-based environmental sensor equipment for repair.	Existing
KDOT District 1 Office	Maintenance and Construction Management	MCM Incident Management	1	The center shall receive inputs from the Alerting and Advisory System concerning the possibility or occurrence of severe weather, terrorist activity, or other major emergency, including information provided by the Emergency Alert System.	Existing
KDOT District 1 Office	Maintenance and Construction Management	MCM Incident Management	2	The center shall exchange alert information and status with emergency management centers. The information includes notification of a major emergency such as a natural or man-made disaster, civil emergency, or child abduction. The information may include the alert originator, the nature of the emergency, the geographic area affected by the emergency, the effective time period, etc.	Existing
KDOT District 1 Office	Maintenance and Construction Management	MCM Incident Management	3	The center shall exchange incident and threat information with emergency management centers as well as traffic management centers; including notification of existence of incident and expected severity, location, time and nature of incident.	Existing
KDOT District 1 Office	Maintenance and Construction Management	MCM Incident Management	4	The center shall coordinate planning for incidents with emergency management centers - including pre-planning activities for disaster response, evacuation, and recovery operations.	Existing
KDOT District 1 Office	Maintenance and Construction Management	MCM Incident Management	5	The center shall respond to requests from emergency management to provide maintenance and construction resources to implement response plans, assist in clean up, verify an incident, etc. This may also involve coordination with traffic management centers and other maintenance centers.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
KDOT District 1 Office	Maintenance and Construction Management	MCM Incident Management	6	The center shall exchange road network status assessment information with emergency management and traffic management centers including an assessment of damage sustained by the road network including location and extent of the damage, estimate of remaining capacity, required closures, alternate routes, necessary restrictions, and time frame for repair and recovery.	Existing
KDOT District 1 Office	Maintenance and Construction Management	MCM Incident Management	7	The center shall provide work zone activities affecting the road network including the nature of the maintenance or construction activity, location, impact to the roadway, expected time(s) and duration of impact, anticipated delays, alternate routes, and suggested speed limits. This information may be augmented with images that provide a visual indication of current work zone status and traffic impacts.	Existing
KDOT District 1 Office	Maintenance and Construction Management	MCM Incident Management	8	The center shall receive information indicating the damage sustained by transportation assets, derived from aerial surveillance, field reports, inspections, tests, and analyses to support incident management.	Existing
KDOT District 1 Office	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	1	The center shall maintain an interface with asset management systems to track the inventory, restrictions, repair needs and status updates of transportation assets (pavement, bridges, signs, etc.) including location, installation and materials information, vendor/contractor, current maintenance status, standard height, width, and weight restrictions.	Existing
KDOT District 1 Office	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	2	The center shall respond to requests from emergency management and traffic management centers for hazard removal, field equipment repair, and other roadway maintenance.	Existing
KDOT District 1 Office	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	4	The center shall provide emergency management and traffic management centers with information about scheduled maintenance and construction work activities including anticipated closures and impact to the roadway, alternate routes, anticipated delays, closure times, and durations.	Existing
KDOT District 1 Office	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	5	The center shall collect the status and fault data from roadside equipment, such as traffic, infrastructure, and environmental sensors, highway advisory radio and dynamic message signs, automated roadway treatment systems, barrier and safeguard systems, cameras, traffic signals and override equipment, ramp meters, short range communications equipment, security sensors and surveillance equipment, etc., and provide a cohesive view of equipment repair needs.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
KDOT District 1 Office	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	6	The center shall collect the status and fault data from the centers that operate the equipment, including data for traffic, infrastructure, and environmental sensors, highway advisory radio and dynamic message signs, automated roadway treatment systems, barrier and safeguard systems, cameras, traffic signals and override equipment, ramp meters, short range communications equipment, security sensors and surveillance equipment, etc., and provide a cohesive view of equipment repair needs.	Existing
KDOT District 1 Office	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	7	The center shall receive equipment availability and materials storage status information from storage facilities to support the scheduling of roadway maintenance and construction activities.	Existing
KDOT District 1 Office	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	9	The center shall collect current and forecast traffic and weather information from traffic management centers and weather service providers (such as the National Weather Service and value-added sector specific meteorological services).	Existing
KDOT District 1 Office	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	10	The center shall dispatch and route maintenance and construction vehicle drivers and support them with route-specific environmental, incident, advisory, threat, alert, and traffic congestion information.	Existing
KDOT District 1 Office	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	12	The center shall track the status of roadway maintenance and construction activities by monitoring collected data from the dispatched vehicles and equipment.	Existing
KDOT District 1 Office	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	13	The center shall report the status of field equipment maintenance activities to the centers that operate the equipment.	Existing
KDOT District 1 Office	Maintenance and Construction Management	MCM Winter Maintenance Management	1	The center shall respond to requests from emergency management and traffic management centers for hazard removal, field equipment repair, and other winter roadway maintenance.	Existing
KDOT District 1 Office	Maintenance and Construction Management	MCM Winter Maintenance Management	2	The center shall exchange information with administrative systems to support the planning and scheduling of winter maintenance activities. This information includes: equipment and consumables resupply purchase request status, personnel qualifications including training and special certifications, environmental regulations and rules that may impact maintenance activities, and requests and project requirements from contract administration.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
KDOT District 1 Office	Maintenance and Construction Management	MCM Winter Maintenance Management	3	The center shall provide status information about scheduled winter maintenance activities including anticipated closures and impact to the roadway, alternate routes, anticipated delays, closure times, and durations. The information is provided to other management centers such as traffic, emergency, transit, traveler information providers, other maintenance centers, and the media.	Existing
KDOT District 1 Office	Maintenance and Construction Management	MCM Winter Maintenance Management	4	The center shall receive equipment availability and materials storage status information from storage facilities to support the scheduling of winter maintenance activities.	Existing
KDOT District 1 Office	Maintenance and Construction Management	MCM Winter Maintenance Management	6	The center shall collect real-time information on the state of the regional transportation system from other centers including current traffic and road conditions, weather conditions, special event and incident information and use the collected information to support winter maintenance operations.	Existing
KDOT District 1 Office	Maintenance and Construction Management	MCM Winter Maintenance Management	7	The center shall dispatch and route winter maintenance vehicle drivers and support them with route- specific environmental, incident, advisory, threat, alert, and traffic congestion information.	Existing
KDOT District 1 Office	Maintenance and Construction Management	MCM Winter Maintenance Management	9	The center shall provide dispatch instructions for vehicle operators based on input parameters from center personnel, specifically for winter conditions. This could include a treatment route, treatment application rates, start and end times, and other treatment instructions.	Existing
KDOT District 1 Office	Maintenance and Construction Management	MCM Winter Maintenance Management	11	The center shall assess the current status of all winter maintenance activities, including actual work activities performed, current locations and operational conditions of vehicles, materials and equipment inventories, field equipment status, environmental information, etc.	Existing
KDOT District 1 Office	Traffic Management	TMC Traffic Information Dissemination	1	The center shall remotely control dynamic messages signs for dissemination of traffic and other information to drivers.	Existing
KDOT District 1 Office	Traffic Management	TMC Traffic Information Dissemination	3	The center shall collect operational status for the driver information systems equipment (DMS, HAR, etc.).	Existing
KDOT District 1 Office	Traffic Management	TMC Traffic Information Dissemination	4	The center shall collect fault data for the driver information systems equipment (DMS, HAR, etc.) for repair.	Existing
KDOT District 1 Office	Traffic Management	Traffic Equipment Maintenance	5	The center shall collect environmental sensor operational status.	Existing
KDOT District 1 Office	Traffic Management	Traffic Equipment Maintenance	6	The center shall collect environmental sensor equipment fault data and send to the maintenance center for repair.	Existing
KDOT District 2 Office	Maintenance and Construction Management	MCM Environmental Information Collection	1	The center shall remotely control environmental sensors that measure road surface temperature, moisture, icing, salinity, and other measures.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
KDOT District 2 Office	Maintenance and Construction Management	MCM Environmental Information Collection	2	The center shall remotely control environmental sensors that measure weather conditions including temperature, wind, humidity, precipitation, and visibility.	Existing
KDOT District 2 Office	Maintenance and Construction Management	MCM Environmental Information Collection	5	The center shall assimilate current and forecast road conditions and surface weather information using a combination of weather service provider information (such as the National Weather Service and value-added sector specific meteorological services), data from traffic and traveler information providers, and environmental data collected from sensors deployed on and about the roadway as well as the fleet of maintenance and construction vehicles and the broader population of vehicle probes.	Existing
KDOT District 2 Office	Maintenance and Construction Management	MCM Environmental Information Collection	7	The center shall respond to control data from center personnel regarding environmental sensor control and weather data collection and processing.	Existing
KDOT District 2 Office	Maintenance and Construction Management	MCM Environmental Information Collection	8	The center shall collect operational status for the roadside and vehicle-based environmental sensor equipment.	Existing
KDOT District 2 Office	Maintenance and Construction Management	MCM Environmental Information Collection	9	The center shall collect fault data for the roadside and vehicle-based environmental sensor equipment for repair.	Existing
KDOT District 2 Office	Maintenance and Construction Management	MCM Incident Management	1	The center shall receive inputs from the Alerting and Advisory System concerning the possibility or occurrence of severe weather, terrorist activity, or other major emergency, including information provided by the Emergency Alert System.	Existing
KDOT District 2 Office	Maintenance and Construction Management	MCM Incident Management	2	The center shall exchange alert information and status with emergency management centers. The information includes notification of a major emergency such as a natural or man-made disaster, civil emergency, or child abduction. The information may include the alert originator, the nature of the emergency, the geographic area affected by the emergency, the effective time period, etc.	Existing
KDOT District 2 Office	Maintenance and Construction Management	MCM Incident Management	3	The center shall exchange incident and threat information with emergency management centers as well as traffic management centers; including notification of existence of incident and expected severity, location, time and nature of incident.	Existing
KDOT District 2 Office	Maintenance and Construction Management	MCM Incident Management	4	The center shall coordinate planning for incidents with emergency management centers - including pre-planning activities for disaster response, evacuation, and recovery operations.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
KDOT District 2 Office	Maintenance and Construction Management	MCM Incident Management	5	The center shall respond to requests from emergency management to provide maintenance and construction resources to implement response plans, assist in clean up, verify an incident, etc. This may also involve coordination with traffic management centers and other maintenance centers.	Existing
KDOT District 2 Office	Maintenance and Construction Management	MCM Incident Management	6	The center shall exchange road network status assessment information with emergency management and traffic management centers including an assessment of damage sustained by the road network including location and extent of the damage, estimate of remaining capacity, required closures, alternate routes, necessary restrictions, and time frame for repair and recovery.	Existing
KDOT District 2 Office	Maintenance and Construction Management	MCM Incident Management	7	The center shall provide work zone activities affecting the road network including the nature of the maintenance or construction activity, location, impact to the roadway, expected time(s) and duration of impact, anticipated delays, alternate routes, and suggested speed limits. This information may be augmented with images that provide a visual indication of current work zone status and traffic impacts.	Existing
KDOT District 2 Office	Maintenance and Construction Management	MCM Incident Management	8	The center shall receive information indicating the damage sustained by transportation assets, derived from aerial surveillance, field reports, inspections, tests, and analyses to support incident management.	Existing
KDOT District 2 Office	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	1	The center shall maintain an interface with asset management systems to track the inventory, restrictions, repair needs and status updates of transportation assets (pavement, bridges, signs, etc.) including location, installation and materials information, vendor/contractor, current maintenance status, standard height, width, and weight restrictions.	Existing
KDOT District 2 Office	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	2	The center shall respond to requests from emergency management and traffic management centers for hazard removal, field equipment repair, and other roadway maintenance.	Existing
KDOT District 2 Office	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	4	The center shall provide emergency management and traffic management centers with information about scheduled maintenance and construction work activities including anticipated closures and impact to the roadway, alternate routes, anticipated delays, closure times, and durations.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
KDOT District 2 Office	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	5	The center shall collect the status and fault data from roadside equipment, such as traffic, infrastructure, and environmental sensors, highway advisory radio and dynamic message signs, automated roadway treatment systems, barrier and safeguard systems, cameras, traffic signals and override equipment, ramp meters, short range communications equipment, security sensors and surveillance equipment, etc., and provide a cohesive view of equipment repair needs.	Existing
KDOT District 2 Office	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	6	The center shall collect the status and fault data from the centers that operate the equipment, including data for traffic, infrastructure, and environmental sensors, highway advisory radio and dynamic message signs, automated roadway treatment systems, barrier and safeguard systems, cameras, traffic signals and override equipment, ramp meters, short range communications equipment, security sensors and surveillance equipment, etc., and provide a cohesive view of equipment repair needs.	Existing
KDOT District 2 Office	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	7	The center shall receive equipment availability and materials storage status information from storage facilities to support the scheduling of roadway maintenance and construction activities.	Existing
KDOT District 2 Office	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	9	The center shall collect current and forecast traffic and weather information from traffic management centers and weather service providers (such as the National Weather Service and value-added sector specific meteorological services).	Existing
KDOT District 2 Office	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	10	The center shall dispatch and route maintenance and construction vehicle drivers and support them with route-specific environmental, incident, advisory, threat, alert, and traffic congestion information.	Existing
KDOT District 2 Office	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	12	The center shall track the status of roadway maintenance and construction activities by monitoring collected data from the dispatched vehicles and equipment.	Existing
KDOT District 2 Office	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	13	The center shall report the status of field equipment maintenance activities to the centers that operate the equipment.	Existing
KDOT District 2 Office	Maintenance and Construction Management	MCM Winter Maintenance Management	1	The center shall respond to requests from emergency management and traffic management centers for hazard removal, field equipment repair, and other winter roadway maintenance.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
KDOT District 2 Office	Maintenance and Construction Management	MCM Winter Maintenance Management	2	The center shall exchange information with administrative systems to support the planning and scheduling of winter maintenance activities. This information includes: equipment and consumables resupply purchase request status, personnel qualifications including training and special certifications, environmental regulations and rules that may impact maintenance activities, and requests and project requirements from contract administration.	Existing
KDOT District 2 Office	Maintenance and Construction Management	MCM Winter Maintenance Management	3	The center shall provide status information about scheduled winter maintenance activities including anticipated closures and impact to the roadway, alternate routes, anticipated delays, closure times, and durations. The information is provided to other management centers such as traffic, emergency, transit, traveler information providers, other maintenance centers, and the media.	Existing
KDOT District 2 Office	Maintenance and Construction Management	MCM Winter Maintenance Management	4	The center shall receive equipment availability and materials storage status information from storage facilities to support the scheduling of winter maintenance activities.	Existing
KDOT District 2 Office	Maintenance and Construction Management	MCM Winter Maintenance Management	6	The center shall collect real-time information on the state of the regional transportation system from other centers including current traffic and road conditions, weather conditions, special event and incident information and use the collected information to support winter maintenance operations.	Existing
KDOT District 2 Office	Maintenance and Construction Management	MCM Winter Maintenance Management	7	The center shall dispatch and route winter maintenance vehicle drivers and support them with route- specific environmental, incident, advisory, threat, alert, and traffic congestion information.	Existing
KDOT District 2 Office	Maintenance and Construction Management	MCM Winter Maintenance Management	9	The center shall provide dispatch instructions for vehicle operators based on input parameters from center personnel, specifically for winter conditions. This could include a treatment route, treatment application rates, start and end times, and other treatment instructions.	Existing
KDOT District 2 Office	Maintenance and Construction Management	MCM Winter Maintenance Management	11	The center shall assess the current status of all winter maintenance activities, including actual work activities performed, current locations and operational conditions of vehicles, materials and equipment inventories, field equipment status, environmental information, etc.	Existing
KDOT District 2 Office	Traffic Management	TMC Traffic Information Dissemination	1	The center shall remotely control dynamic messages signs for dissemination of traffic and other information to drivers.	Existing
KDOT District 2 Office	Traffic Management	TMC Traffic Information Dissemination	3	The center shall collect operational status for the driver information systems equipment (DMS, HAR, etc.).	Existing
KDOT District 2 Office	Traffic Management	TMC Traffic Information Dissemination	4	The center shall collect fault data for the driver information systems equipment (DMS, HAR, etc.) for repair.	Existing
KDOT District 2 Office	Traffic Management	Traffic Equipment Maintenance	5	The center shall collect environmental sensor operational status.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
KDOT District 2 Office	Traffic Management	Traffic Equipment Maintenance	6	The center shall collect environmental sensor equipment fault data and send to the maintenance center for repair.	Existing
KDOT Dynamic Message Signs	Roadway	Roadway Traffic Information Dissemination	1	The field element shall include dynamic messages signs for dissemination of traffic and other information to drivers, under center control; the DMS may be either those that display variable text messages, or those that have fixed format display(s) (e.g. vehicle restrictions, or lane open/close).	Existing
KDOT Dynamic Message Signs	Roadway	Roadway Traffic Information Dissemination	4	The field element shall provide operational status for the driver information systems equipment (DMS, HAR, etc.) to the center.	Existing
KDOT Dynamic Message Signs	Roadway	Roadway Traffic Information Dissemination	5	The field element shall provide fault data for the driver information systems equipment (DMS, HAR, etc.) to the center for repair.	Existing
KDOT KanDrive Website and 511 Phone Traveler Information System	Information Service Provider	Basic Information Broadcast	1	The center shall disseminate traffic and highway condition information to travelers, including incident information, detours and road closures, event information, recommended routes, and current speeds on specific routes.	Existing
KDOT KanDrive Website and 511 Phone Traveler Information System	Information Service Provider	Basic Information Broadcast	2	The center shall disseminate maintenance and construction information to travelers, including scheduled maintenance and construction work activities and work zone activities.	Existing
KDOT KanDrive Website and 511 Phone Traveler Information System	Information Service Provider	Basic Information Broadcast	10	The center shall provide the capability for a system operator to control the type and update frequency of broadcast traveler information.	Existing
KDOT KanDrive Website and 511 Phone Traveler Information System	Information Service Provider	Traveler Telephone Information	1	The center shall provide the capability to process voice-formatted requests for traveler information from a traveler telephone information system, and return the information in the requested format.	Existing
KDOT KanDrive Website and 511 Phone Traveler Information System	Information Service Provider	Traveler Telephone Information	2	The center shall provide the capability to process dual-tone multifrequency (DTMF)-based requests (touch-tone) for traveler information from a traveler telephone information system.	Existing
KDOT KanDrive Website and 511 Phone Traveler Information System	Information Service Provider	Traveler Telephone Information	3	The center shall provide the capability to process traveler information requests from a traveler telephone information system.	Existing
KDOT KanDrive Website and 511 Phone Traveler Information System	Information Service Provider	Traveler Telephone Information	4	The center shall provide information on traffic conditions in the requested voice format and for the requested location.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
KDOT KanDrive Website and 511 Phone Traveler Information System	Information Service Provider	Traveler Telephone Information	5	The center shall provide work zone and roadway maintenance information in the requested voice format and for the requested location.	Existing
KDOT KanDrive Website and 511 Phone Traveler Information System	Information Service Provider	Traveler Telephone Information	6	The center shall provide roadway environment conditions information in the requested voice format and for the requested location.	Existing
KDOT KanDrive Website and 511 Phone Traveler Information System	Information Service Provider	Traveler Telephone Information	11	The center shall provide the capability to support both specific caller requests as well as bulk upload of regional traveler information.	Existing
KDOT KanDrive Website and 511 Phone Traveler Information System	Information Service Provider	Traveler Telephone Information	12	The center shall receive and forward region-specific wide-area alert and advisory information to the traveler telephone information system, including major emergencies such as a natural or man-made disaster, civil emergency, child abductions, severe weather watches and warnings, military activities, and law enforcement warnings.	Existing
KDOT KanRoad	Information Service Provider	ISP Traveler Data Collection	1	The center shall collect, process, and store traffic and highway condition information, including incident information, detours and road closures, event information, recommended routes, and current speeds on specific routes.	Existing
KDOT KanRoad	Information Service Provider	ISP Traveler Data Collection	2	The center shall collect, process, and store maintenance and construction information, including scheduled maintenance and construction work activities and work zone activities.	Existing
KDOT KanRoad	Information Service Provider	ISP Traveler Data Collection	6	The center shall collect, process, and store current and forecast road conditions and surface weather conditions.	Existing
KDOT Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Environmental Monitoring	1	The maintenance and construction vehicle shall collect environmental data from on-board sensors, including air temperature, wind speed, surface temperature, traction conditions, etc.	Existing
KDOT Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Environmental Monitoring	3	The maintenance and construction vehicle shall provide environmental sensor equipment operational status to the center.	Existing
KDOT Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Environmental Monitoring	4	The maintenance and construction vehicle shall provide environmental sensor equipment fault indication to the center for repair.	Existing
KDOT Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Roadway Maintenance and Construction	3	The maintenance and construction vehicle shall monitor materials information including remaining quantity and current application rate of materials on the vehicle.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
KDOT Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Roadway Maintenance and Construction	4	The maintenance and construction vehicle shall respond to dispatch information from the center, presented to the vehicle operator for acknowledgement and returning status.	Existing
KDOT Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Winter Maintenance	3	The maintenance and construction vehicle shall monitor materials information including remaining quantity and current application rate of materials on the vehicle.	Existing
KDOT Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Winter Maintenance	4	The maintenance and construction vehicle shall respond to dispatch information from the center, presented to the vehicle operator for acknowledgement and returning status.	Existing
KDOT RWIS Central Server	Maintenance and Construction Management	MCM Environmental Information Collection	1	The center shall remotely control environmental sensors that measure road surface temperature, moisture, icing, salinity, and other measures.	Existing
KDOT RWIS Central Server	Maintenance and Construction Management	MCM Environmental Information Collection	2	The center shall remotely control environmental sensors that measure weather conditions including temperature, wind, humidity, precipitation, and visibility.	Existing
KDOT RWIS Central Server	Maintenance and Construction Management	MCM Environmental Information Collection	3	The center shall remotely control environmental sensors on-board maintenance and construction vehicles that measure road and weather conditions including air and surface temperatures, wind speed, humidity, precipitation, visibility and other measures.	Existing
KDOT RWIS Central Server	Maintenance and Construction Management	MCM Environmental Information Collection	5	The center shall assimilate current and forecast road conditions and surface weather information using a combination of weather service provider information (such as the National Weather Service and value-added sector specific meteorological services), data from traffic and traveler information providers, and environmental data collected from sensors deployed on and about the roadway as well as the fleet of maintenance and construction vehicles and the broader population of vehicle probes.	Existing
KDOT RWIS Central Server	Maintenance and Construction Management	MCM Environmental Information Collection	7	The center shall respond to control data from center personnel regarding environmental sensor control and weather data collection and processing.	Existing
KDOT RWIS Central Server	Maintenance and Construction Management	MCM Environmental Information Collection	8	The center shall collect operational status for the roadside and vehicle-based environmental sensor equipment.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
KDOT RWIS Central Server	Maintenance and Construction Management	MCM Environmental Information Collection	9	The center shall collect fault data for the roadside and vehicle-based environmental sensor equipment for repair.	Existing
KDOT RWIS Central Server	Maintenance and Construction Management	MCM Environmental Information Processing	1	The center shall respond to control data from center personnel regarding environmental sensor control and weather data collection and processing.	Existing
KDOT RWIS Central Server	Maintenance and Construction Management	MCM Environmental Information Processing	2	The center shall assimilate current and forecast road conditions and surface weather information using a combination of weather service provider information (such as the National Weather Service and value-added sector specific meteorological services) and local environmental sensor data.	Existing
KDOT RWIS Central Server	Maintenance and Construction Management	MCM Environmental Information Processing	3	The center shall use the various data inputs of environmental sensors and road weather data to develop a view of current and predicted road weather and road conditions.	Existing
KDOT RWIS Central Server	Maintenance and Construction Management	MCM Environmental Information Processing	4	The center shall disseminate current and forecasted road weather and road condition information to weather service providers (such as the National Weather Service and value-added sector specific meteorological services) as well as other agencies including traffic, emergency, and transit management, traveler information providers, rail operations centers, media, and other maintenance management centers.	Existing
KDOT RWIS Stations	Roadway	Roadway Environmental Monitoring	1	The field element shall include surface and sub-surface environmental sensors that measure road surface temperature, moisture, icing, salinity, and other measures.	Existing
KDOT RWIS Stations	Roadway	Roadway Environmental Monitoring	2	The field element shall include environmental sensors that measure weather conditions including temperature, wind, humidity, precipitation, and visibility.	Existing
KDOT RWIS Stations	Roadway	Roadway Environmental Monitoring	3	The field element's environmental sensors shall be remotely controlled by a maintenance center.	Existing
KDOT RWIS Stations	Roadway	Roadway Environmental Monitoring	7	The field element shall provide environmental sensor equipment operational status to the controlling center or maintenance vehicle.	Existing
KDOT RWIS Stations	Roadway	Roadway Environmental Monitoring	8	The field element shall provide environmental sensor equipment fault indication to the controlling center or maintenance vehicle.	Existing
KDOT RWIS Stations	Roadway	Roadway Environmental Monitoring	10	The field element shall provide weather and road surface condition data to centers.	Existing
KDOT Statewide TOC	Traffic Management	Collect Traffic Surveillance	1	The center shall monitor, analyze, and store traffic sensor data (speed, volume, occupancy) collected from field elements under remote control of the center.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
KDOT Statewide TOC	Traffic Management	Collect Traffic Surveillance	2	The center shall monitor, analyze, and distribute traffic images from CCTV systems under remote control of the center.	Existing
KDOT Statewide TOC	Traffic Management	Collect Traffic Surveillance	4	The center shall distribute road network conditions data (raw or processed) based on collected and analyzed traffic sensor and surveillance data to other centers.	Existing
KDOT Statewide TOC	Traffic Management	Collect Traffic Surveillance	5	The center shall respond to control data from center personnel regarding sensor and surveillance data collection, analysis, storage, and distribution.	Existing
KDOT Statewide TOC	Traffic Management	Collect Traffic Surveillance	6	The center shall maintain a database of surveillance equipment and sensors and associated data (including the roadway on which they are located, the type of data collected, and the ownership of each)	Existing
KDOT Statewide TOC	Traffic Management	Collect Traffic Surveillance	7	The center shall support an interface with a map update provider, or other appropriate data sources, through which updates of digitized map data can be obtained and used as a background for traffic data.	Existing
KDOT Statewide TOC	Traffic Management	TMC Evacuation Support	1	The center shall coordinate planning for evacuation with emergency management centers - including pre-planning activities such as establishing routes, areas to be evacuated, timing, etc.	Existing
KDOT Statewide TOC	Traffic Management	TMC Evacuation Support	2	The center shall support requests from emergency management centers to preempt the current traffic control strategy, activate traffic control and closure systems such as gates and barriers, activate safeguard systems, or use driver information systems to support evacuation traffic control plans.	Existing
KDOT Statewide TOC	Traffic Management	TMC Evacuation Support	3	The center shall coordinate information and controls with other traffic management centers.	Existing
KDOT Statewide TOC	Traffic Management	TMC Evacuation Support	4	The center shall coordinate execution of evacuation strategies with emergency management centers - including activities such as setting closures and detours, establishing routes, updating areas to be evacuated, timing the process, etc.	Existing
KDOT Statewide TOC	Traffic Management	TMC Incident Detection	1	The center shall receive inputs from the Alerting and Advisory System concerning the possibility or occurrence of severe weather, terrorist activity, or other major emergency, including information provided by the Emergency Alert System.	Existing
KDOT Statewide TOC	Traffic Management	TMC Incident Detection	2	The center shall collect and store traffic flow and image data from the field equipment to detect and verify incidents.	Existing
KDOT Statewide TOC	Traffic Management	TMC Incident Detection	3	The center shall receive inputs concerning upcoming events that would affect the traffic network from event promoters and traveler information service providers.	Existing
KDOT Statewide TOC	Traffic Management	TMC Incident Detection	4	The center shall exchange incident and threat information with emergency management centers as well as maintenance and construction centers; including notification of existence of incident and expected severity, location, time and nature of incident.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
KDOT Statewide TOC	Traffic Management	TMC Incident Detection	6	The center shall provide road network conditions and traffic images to emergency management centers to support the detection, verification, and classification of incidents.	Existing
KDOT Statewide TOC	Traffic Management	TMC Incident Detection	7	The center shall provide video and traffic sensor control commands to the field equipment to detect and verify incidents.	Existing
KDOT Statewide TOC	Traffic Management	TMC Incident Dispatch Coordination/Communication	1	The center shall exchange alert information and status with emergency management centers. The information includes notification of a major emergency such as a natural or man-made disaster, civil emergency, or child abduction for distribution to the public. The information may include the alert originator, the nature of the emergency, the geographic area affected by the emergency, the effective time period, and information and instructions necessary for the public to respond to the alert. This may also identify specific information that should not be released to the public.	Existing
KDOT Statewide TOC	Traffic Management	TMC Incident Dispatch Coordination/Communication	2	The center shall coordinate planning for incidents with emergency management centers - including pre-planning activities for disaster response, evacuation, and recovery operations.	Existing
KDOT Statewide TOC	Traffic Management	TMC Incident Dispatch Coordination/Communication	4	The center shall exchange incident information with emergency management centers, maintenance and construction centers, transit centers, information service providers, and the media including description, location, traffic impact, status, expected duration, and response information.	Existing
KDOT Statewide TOC	Traffic Management	TMC Incident Dispatch Coordination/Communication	5	The center shall share resources with allied agency centers to implement special traffic control measures, assist in clean up, verify an incident, etc. This may also involve coordination with maintenance centers.	Existing
KDOT Statewide TOC	Traffic Management	TMC Incident Dispatch Coordination/Communication	6	The center shall receive inputs concerning upcoming events that would affect the traffic network from event promoters, traveler information service providers, media, border crossings, and rail operations centers.	Existing
KDOT Statewide TOC	Traffic Management	TMC Incident Dispatch Coordination/Communication	7	The center shall provide road network conditions and traffic images to emergency management centers, maintenance and construction centers, and traveler information service providers.	Existing
KDOT Statewide TOC	Traffic Management	TMC Incident Dispatch Coordination/Communication	8	The center shall monitor incident response performance and calculate incident response and clearance times.	Existing
KDOT Statewide TOC	Traffic Management	TMC Incident Dispatch Coordination/Communication	9	The center shall exchange road network status assessment information with emergency management and maintenance centers including an assessment of damage sustained by the road network including location and extent of the damage, estimate of remaining capacity, required closures, alternate routes, necessary restrictions, and time frame for repair and recovery.	Existing
KDOT Statewide TOC	Traffic Management	TMC Incident Dispatch Coordination/Communication	10	The center shall coordinate information and controls with other traffic management centers.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
KDOT Statewide TOC	Traffic Management	TMC Incident Dispatch Coordination/Communication	12	The center shall support an interface with a map update provider, or other appropriate data sources, through which updates of digitized map data can be obtained and used as a background for traffic incident management.	Existing
KDOT Statewide TOC	Traffic Management	TMC Traffic Information Dissemination	1	The center shall remotely control dynamic messages signs for dissemination of traffic and other information to drivers.	Existing
KDOT Statewide TOC	Traffic Management	TMC Traffic Information Dissemination	3	The center shall collect operational status for the driver information systems equipment (DMS, HAR, etc.).	Existing
KDOT Statewide TOC	Traffic Management	TMC Traffic Information Dissemination	4	The center shall collect fault data for the driver information systems equipment (DMS, HAR, etc.) for repair.	Existing
KDOT Statewide TOC	Traffic Management	TMC Traffic Information Dissemination	5	The center shall retrieve locally stored traffic information, including current and forecasted traffic information, road and weather conditions, traffic incident information, information on diversions and alternate routes, closures, and special traffic restrictions (lane/shoulder use, weight restrictions, width restrictions, HOV requirements), and the definition of the road network itself.	Existing
KDOT Statewide TOC	Traffic Management	TMC Traffic Information Dissemination	6	The center shall distribute traffic data to maintenance and construction centers, transit centers, emergency management centers, and traveler information providers.	Existing
KDOT Statewide TOC	Traffic Management	TMC Traffic Information Dissemination	7	The center shall distribute traffic data to the media; the capability to provide the information in both data stream and graphical display shall be supported.	Existing
KDOT Statewide TOC	Traffic Management	TMC Traffic Information Dissemination	8	The center shall provide the capability for center personnel to control the nature of the data that is available to non-traffic operations centers and the media.	Existing
KDOT Statewide TOC	Traffic Management	Traffic Equipment Maintenance	1	The center shall collect and store sensor (traffic, pedestrian, multimodal crossing) operational status.	Existing
KDOT Statewide TOC	Traffic Management	Traffic Equipment Maintenance	2	The center shall collect and store CCTV surveillance system (traffic, pedestrian) operational status.	Existing
KDOT Statewide TOC	Traffic Management	Traffic Equipment Maintenance	3	The center shall collect and store sensor (traffic, pedestrian, multimodal crossing) fault data and send to the maintenance center for repair.	Existing
KDOT Statewide TOC	Traffic Management	Traffic Equipment Maintenance	4	The center shall collect and store CCTV surveillance system (traffic, pedestrian) fault data send to the maintenance center for repair.	Existing
KDOT Statewide TOC	Traffic Management	Traffic Equipment Maintenance	7	The center shall exchange data with maintenance centers concerning the reporting of faulty equipment and the schedule/status of their repair. Information exchanged includes details of new equipment faults, and clearances when the faults are cleared.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
KHP Communications Center	Emergency Management	Emergency Call-Taking	1	The center shall support the interface to the Emergency Telecommunications System (e.g. 911 or 7-digit call routing) to receive emergency notification information and provide it to the emergency system operator.	Existing
KHP Communications Center	Emergency Management	Emergency Call-Taking	2	The center shall receive emergency call information from 911 services and present the possible incident information to the emergency system operator.	Existing
KHP Communications Center	Emergency Management	Emergency Call-Taking	5	The center shall receive emergency notification information from other public safety agencies and present the possible incident information to the emergency system operator.	Existing
KHP Communications Center	Emergency Management	Emergency Call-Taking	7	The center shall coordinate, correlate, and verify all emergency inputs, including those identified based on external calls and internal analysis of security sensor and surveillance data, and assign each a level of confidence.	Existing
KHP Communications Center	Emergency Management	Emergency Call-Taking	8	The center shall send a request for remote control of CCTV systems from a traffic management center in order to verify the reported incident.	Planned
KHP Communications Center	Emergency Management	Emergency Call-Taking	9	The center shall forward the verified emergency information to the responding agency based on the location and nature of the emergency.	Existing
KHP Communications Center	Emergency Management	Emergency Call-Taking	10	The center shall update the incident information log once the emergency system operator has verified the incident.	Existing
KHP Communications Center	Emergency Management	Emergency Call-Taking	11	The center shall provide the capability for digitized map data to act as the background to the emergency information presented to the emergency system operator.	Planned
KHP Communications Center	Emergency Management	Emergency Dispatch	1	The center shall dispatch emergency vehicles to respond to verified emergencies under center personnel control.	Existing
KHP Communications Center	Emergency Management	Emergency Dispatch	2	The center shall store the current status of all emergency vehicles available for dispatch and those that have been dispatched.	Existing
KHP Communications Center	Emergency Management	Emergency Dispatch	3	The center shall relay location and incident details to the responding vehicles.	Existing
KHP Communications Center	Emergency Management	Emergency Dispatch	4	The center shall track the location and status of emergency vehicles responding to an emergency based on information from the emergency vehicle.	Planned
KHP Communications Center	Emergency Management	Emergency Dispatch	5	The center shall store and maintain the emergency service responses in an action log.	Existing
KHP Communications Center	Emergency Management	Emergency Dispatch	6	The center shall provide the capability for digitized map data to act as the background to the information presented to the emergency system operator.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
KHP Communications Center	Emergency Management	Emergency Dispatch	7	The center shall receive traffic images to support dispatch of emergency vehicles.	Planned
KHP Communications Center	Emergency Management	Emergency Dispatch	8	The center shall provide the capability to request remote control of traffic surveillance devices	Planned
KHP Communications Center	Emergency Management	Emergency Dispatch	9	The center shall coordinate response to incidents with other Emergency Management centers to ensure appropriate resources are dispatched and utilized.	Existing
KHP Communications Center	Emergency Management	Emergency Early Warning System	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Existing
KHP Communications Center	Emergency Management	Emergency Early Warning System	2	The center shall provide the capability to correlate alerts and advisories, incident information, and security sensor and surveillance data.	Existing
KHP Communications Center	Emergency Management	Emergency Early Warning System	3	The center shall broadcast wide-area alerts and advisories to traffic management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
KHP Communications Center	Emergency Management	Emergency Early Warning System	4	The center shall broadcast wide-area alerts and advisories to transit management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
KHP Communications Center	Emergency Management	Emergency Early Warning System	6	The center shall broadcast wide-area alerts and advisories to traveler information service providers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
KHP Communications Center	Emergency Management	Emergency Early Warning System	7	The center shall broadcast wide-area alerts and advisories to maintenance centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
KHP Communications Center	Emergency Management	Emergency Early Warning System	8	The center shall broadcast wide-area alerts and advisories to other emergency management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
KHP Communications Center	Emergency Management	Emergency Early Warning System	10	The center shall process status information from each of the centers that have been sent the wide-area alert.	Existing
KHP Communications Center	Emergency Management	Emergency Early Warning System	11	The center shall coordinate the broadcast of wide-area alerts and advisories with other emergency management centers.	Existing
KHP Communications Center	Emergency Management	Emergency Early Warning System	12	The center shall receive incident information from other transportation management centers to support the early warning system.	Existing
KHP Communications Center	Emergency Management	Emergency Early Warning System	13	The center shall present the alert and advisory information and the status of the actions taken in response to the alert by the other centers to the emergency system operator as received from other system inputs.	Existing
KHP Communications Center	Emergency Management	Emergency Early Warning System	14	The center shall support the entry of alert and advisory information directly from the emergency system operator.	Existing
KHP Communications Center	Emergency Management	Emergency Environmental Monitoring	1	The center shall collect current and forecast road and weather information from weather service providers (such as the National Weather Service and value-added sector specific meteorological services).	Existing
KHP Communications Center	Emergency Management	Emergency Environmental Monitoring	2	The center shall collect current road and weather information from roadway maintenance operations.	Existing
KHP Communications Center	Emergency Management	Emergency Environmental Monitoring	3	The center shall assimilate current and forecast road conditions and surface weather information to support incident management.	Existing
KHP Communications Center	Emergency Management	Emergency Environmental Monitoring	4	The center shall present the current and forecast road and weather information to the emergency system operator.	Existing
KHP Communications Center	Emergency Management	Emergency Evacuation Support	1	The center shall manage inter-agency coordination of evacuation operations, from initial planning through the evacuation process and reentry.	Existing
KHP Communications Center	Emergency Management	Emergency Evacuation Support	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Existing
KHP Communications Center	Emergency Management	Emergency Evacuation Support	3	The center shall provide an interface to the emergency system operator to enter evacuation plans and procedures and present the operator with other agencies' plans.	Existing
KHP Communications Center	Emergency Management	Emergency Evacuation Support	4	The center shall coordinate evacuation destinations and shelter needs with shelter providers (e.g., the American Red Cross) in the region.	Existing
KHP Communications Center	Emergency Management	Emergency Evacuation Support	5	The center shall provide evacuation information to traffic, transit, maintenance and construction, rail operations, and other emergency management centers as needed.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
KHP Communications Center	Emergency Management	Emergency Evacuation Support	7	The center shall request traffic management agencies to implement special traffic control strategies and to control evacuation traffic, including traffic on local streets and arterials as well as the major evacuation routes.	Existing
KHP Communications Center	Emergency Management	Emergency Evacuation Support	8	The center shall provide traveler information systems with evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary and when it is safe to return.	Existing
KHP Communications Center	Emergency Management	Emergency Evacuation Support	9	The center shall monitor the progress or status of the evacuation once it begins and exchange tactical plans, prepared during the incident, with allied agencies.	Existing
KHP Communications Center	Emergency Management	Emergency Evacuation Support	10	The center shall monitor the progress of the reentry process.	Existing
KHP Communications Center	Emergency Management	Emergency Response Management	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Existing
KHP Communications Center	Emergency Management	Emergency Response Management	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Existing
KHP Communications Center	Emergency Management	Emergency Response Management	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Existing
KHP Communications Center	Emergency Management	Emergency Response Management	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Existing
KHP Communications Center	Emergency Management	Emergency Response Management	5	The center shall track the availability of resources and coordinate resource sharing with allied agency centers including traffic, maintenance, or other emergency centers.	Existing
KHP Communications Center	Emergency Management	Emergency Response Management	6	The center shall allocate the appropriate emergency services, resources, and vehicle (s) to respond to incidents, and shall provide the capability to override the current allocation to suit the special needs of a current incident.	Existing
KHP Communications Center	Emergency Management	Emergency Response Management	7	The center shall receive event scheduling information from Event Promoters.	Existing
KHP Communications Center	Emergency Management	Emergency Response Management	9	The center shall provide the capability to remotely control and monitor CCTV systems normally operated by a traffic management center.	Planned
KHP Communications Center	Emergency Management	Emergency Response Management	10	The center shall provide the capability to request transit resource availability from transit centers for use during disaster and evacuation operations.	Existing
KHP Communications Center	Emergency Management	Emergency Response Management	12	The center shall provide information to the media concerning the status of an emergency response.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
KHP Communications Center	Emergency Management	Emergency Response Management	14	The center shall provide the capability for center personnel to provide inputs to the management of incidents, disasters and evacuations.	Existing
KHP Communications Center	Emergency Management	Emergency Response Management	15	The center shall collect information about the status of the recovery efforts for the infrastructure during disasters.	Existing
KHP Communications Center	Emergency Management	Emergency Routing	1	The center shall collect current traffic and road condition information for emergency vehicle route calculation.	Existing
KHP Communications Center	Emergency Management	Emergency Routing	4	The center shall receive asset restriction information to support the dispatching of appropriate emergency resources.	Existing
KHP Communications Center	Emergency Management	Emergency Routing	6	The center shall track current emergency vehicle location and status.	Planned
KHP Communications Center	Emergency Management	Emergency Routing	8	The center shall request and receive ingress and egress routes or other specialized emergency access routes from the traffic management center.	Planned
KHP Communications Center	Emergency Management	Emergency Routing	9	The center shall provide the capability to request special traffic control measures, such as signal preemption, from the traffic management center to facilitate emergency vehicle progress along the suggested route.	Existing
KHP Communications Center	Emergency Management	Incident Command	1	The center shall provide tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders to support local management of an incident.	Existing
KHP Communications Center	Emergency Management	Incident Command	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Existing
KHP Communications Center	Emergency Management	Incident Command	3	The center shall track and maintain resource information and action plans pertaining to the incident command.	Existing
KHP Communications Center	Emergency Management	Incident Command	4	The center shall share incident command information with other public safety agencies including resource deployment status, hazardous material information, rail incident information, evacuation advice as well as traffic, road, and weather conditions.	Existing
KHP Communications Center	Emergency Management	Incident Command	5	The center shall assess the status of responding emergency vehicles as part of an incident command.	Existing
KHP Troop C	Emergency Management	Emergency Early Warning System	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
KHP Troop C	Emergency Management	Emergency Early Warning System	11	The center shall coordinate the broadcast of wide-area alerts and advisories with other emergency management centers.	Existing
KHP Troop C	Emergency Management	Emergency Early Warning System	12	The center shall receive incident information from other transportation management centers to support the early warning system.	Existing
KHP Troop C	Emergency Management	Emergency Early Warning System	13	The center shall present the alert and advisory information and the status of the actions taken in response to the alert by the other centers to the emergency system operator as received from other system inputs.	Existing
KHP Troop C	Emergency Management	Emergency Early Warning System	14	The center shall support the entry of alert and advisory information directly from the emergency system operator.	Existing
KHP Troop C	Emergency Management	Emergency Environmental Monitoring	3	The center shall assimilate current and forecast road conditions and surface weather information to support incident management.	Existing
KHP Troop C Vehicles	Emergency Vehicle	On-board EV En Route Support	1	The emergency vehicle, including roadway service patrols, shall track its current location.	Planned
KHP Troop C Vehicles	Emergency Vehicle	On-board EV En Route Support	2	The emergency vehicle, including roadway service patrols, shall send the vehicle's location and operational data to the center for emergency management and dispatch.	Planned
KHP Troop C Vehicles	Emergency Vehicle	On-board EV En Route Support	3	The emergency vehicle, including roadway service patrols, shall receive incident details and a suggested route when dispatched to a scene.	Existing
KHP Troop C Vehicles	Emergency Vehicle	On-board EV En Route Support	4	The emergency vehicle shall send the current en route status (including estimated time of arrival) and requests for emergency dispatch updates.	Existing
KHP Troop C Vehicles	Emergency Vehicle	On-board EV En Route Support	6	The emergency vehicle shall provide the personnel on-board with dispatch information, including incident type and location, and forward an acknowledgment from personnel to the center that the vehicle is on its way to the incident scene.	Existing
K-State Parking Services	Parking Management	Parking Management	1	The parking element shall maintain parking lot information including static information such as hours of operation, rates, location, entrance locations, capacity, type, and constraints; as well as dynamic information such as current state of the lot, occupancy, arrival rates, and departure rates.	Planned
K-State Parking Services	Parking Management	Parking Management	2	The parking element shall share information with a traffic management center to identify queues at entrances, exits that should be used, and other information that supports coordinated local traffic control in and around the parking facility.	Planned
K-State Parking Services	Parking Management	Parking Management	3	The parking element shall manage local dynamic message signs that display messages to travelers such as the parking lot state, number of spaces available, location of entrances, and current charges.	Planned

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
K-State Parking Services	Parking Management	Parking Management	4	The parking element shall provide the capability to detect, count, and classify vehicles at entrances, exits, and designated locations within a parking facility.	Planned
K-State Police Department	Emergency Management	Emergency Early Warning System	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Existing
K-State Police Department	Emergency Management	Emergency Early Warning System	8	The center shall broadcast wide-area alerts and advisories to other emergency management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
K-State Police Department	Emergency Management	Emergency Early Warning System	10	The center shall process status information from each of the centers that have been sent the wide-area alert.	Existing
K-State Police Department	Emergency Management	Emergency Early Warning System	11	The center shall coordinate the broadcast of wide-area alerts and advisories with other emergency management centers.	Existing
K-State Police Department	Emergency Management	Emergency Early Warning System	12	The center shall receive incident information from other transportation management centers to support the early warning system.	Existing
K-State Police Department	Emergency Management	Emergency Early Warning System	13	The center shall present the alert and advisory information and the status of the actions taken in response to the alert by the other centers to the emergency system operator as received from other system inputs.	Existing
K-State Police Department	Emergency Management	Emergency Early Warning System	14	The center shall support the entry of alert and advisory information directly from the emergency system operator.	Existing
K-State Police Department	Emergency Management	Emergency Evacuation Support	1	The center shall manage inter-agency coordination of evacuation operations, from initial planning through the evacuation process and reentry.	Existing
K-State Police Department	Emergency Management	Emergency Evacuation Support	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Existing
K-State Police Department	Emergency Management	Emergency Evacuation Support	3	The center shall provide an interface to the emergency system operator to enter evacuation plans and procedures and present the operator with other agencies' plans.	Existing
K-State Police Department	Emergency Management	Emergency Evacuation Support	6	The center shall request resources from transit agencies as needed to support the evacuation.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
K-State Police Department	Emergency Management	Emergency Evacuation Support	7	The center shall request traffic management agencies to implement special traffic control strategies and to control evacuation traffic, including traffic on local streets and arterials as well as the major evacuation routes.	Existing
K-State Police Department	Emergency Management	Emergency Evacuation Support	9	The center shall monitor the progress or status of the evacuation once it begins and exchange tactical plans, prepared during the incident, with allied agencies.	Existing
K-State Police Department	Emergency Management	Emergency Evacuation Support	10	The center shall monitor the progress of the reentry process.	Existing
K-State Police Department	Emergency Management	Emergency Response Management	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Existing
K-State Police Department	Emergency Management	Emergency Response Management	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Existing
K-State Police Department	Emergency Management	Emergency Response Management	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Existing
K-State Police Department	Emergency Management	Emergency Response Management	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Existing
K-State Police Department	Emergency Management	Emergency Response Management	7	The center shall receive event scheduling information from Event Promoters.	Existing
K-State Police Department	Emergency Management	Emergency Response Management	12	The center shall provide information to the media concerning the status of an emergency response.	Existing
K-State Police Department	Emergency Management	Emergency Response Management	17	The center shall provide the capability to communicate information about emergency situations to local population through the Emergency Telecommunications System.	Existing
K-State Police Department	Emergency Management	Incident Command	1	The center shall provide tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders to support local management of an incident.	Existing
K-State Police Department	Emergency Management	Incident Command	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Existing
K-State Police Department	Emergency Management	Incident Command	3	The center shall track and maintain resource information and action plans pertaining to the incident command.	Existing
K-State Police Department	Emergency Management	Incident Command	4	The center shall share incident command information with other public safety agencies including resource deployment status, hazardous material information, rail incident information, evacuation advice as well as traffic, road, and weather conditions.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
K-State Police Department	Emergency Management	Incident Command	5	The center shall assess the status of responding emergency vehicles as part of an incident command.	Existing
Manhattan Bicycle Detection System	Roadway	Roadway Mixed Use Sensing	1	The field element shall collect images or sensor data for pedestrians or bicyclists and respond to pedestrian or bicyclist crossing requests via display, audio signal, or other manner.	Planned
Manhattan Bicycle Detection System	Roadway	Roadway Mixed Use Sensing	4	The field element shall adjust traffic signals timing at intersections and on main highways for urban and rural areas using road user protection sensor data.	Planned
Manhattan Bicycle Detection System	Roadway	Roadway Mixed Use Sensing	5	The field element shall accept, from the controlling center, control or configuration data for the road user protection devices.	Planned
Manhattan Bluetooth Readers	Roadway	Roadway Probe Data Communications	1	The field element shall communicate with passing vehicles for traffic data link time calculations and send collected data to the controlling center; identification will be removed to ensure anonymity.	Existing
Manhattan Bluetooth Readers	Roadway	Roadway Probe Data Communications	2	The field element shall communicate with on-board equipment on passing vehicles to collect current vehicle position, speed, and heading and a record of previous events (e.g., starts and stops, link travel times) that can be used to determine current traffic conditions.	Existing
Manhattan Bluetooth Readers	Roadway	Roadway Probe Data Communications	7	The field element shall provide roadside equipment operational status to the center.	Existing
Manhattan Bluetooth Readers	Roadway	Roadway Probe Data Communications	8	The field element shall provide roadside equipment fault indication to the center for repair.	Existing
Manhattan CCTV Cameras	Roadway	Roadway Basic Surveillance	2	The field element shall collect, process, and send traffic images to the center for further analysis and distribution.	Existing
Manhattan CCTV Cameras	Roadway	Roadway Basic Surveillance	4	The field element shall return sensor and CCTV system operational status to the controlling center.	Existing
Manhattan CCTV Cameras	Roadway	Roadway Basic Surveillance	5	The field element shall return sensor and CCTV system fault data to the controlling center for repair.	Existing
Manhattan Dynamic Message Signs	Roadway	Roadway Traffic Information Dissemination	1	The field element shall include dynamic messages signs for dissemination of traffic and other information to drivers, under center control; the DMS may be either those that display variable text messages, or those that have fixed format display(s) (e.g. vehicle restrictions, or lane open/close).	Planned
Manhattan Dynamic Message Signs	Roadway	Roadway Traffic Information Dissemination	4	The field element shall provide operational status for the driver information systems equipment (DMS, HAR, etc.) to the center.	Planned
Manhattan Dynamic Message Signs	Roadway	Roadway Traffic Information Dissemination	5	The field element shall provide fault data for the driver information systems equipment (DMS, HAR, etc.) to the center for repair.	Planned
Manhattan Emergency Vehicles	Emergency Vehicle	On-board EV En Route Support	1	The emergency vehicle, including roadway service patrols, shall track its current location.	Planned

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Manhattan Emergency Vehicles	Emergency Vehicle	On-board EV En Route Support	2	The emergency vehicle, including roadway service patrols, shall send the vehicle's location and operational data to the center for emergency management and dispatch.	Planned
Manhattan Emergency Vehicles	Emergency Vehicle	On-board EV En Route Support	3	The emergency vehicle, including roadway service patrols, shall receive incident details and a suggested route when dispatched to a scene.	Planned
Manhattan Emergency Vehicles	Emergency Vehicle	On-board EV En Route Support	4	The emergency vehicle shall send the current en route status (including estimated time of arrival) and requests for emergency dispatch updates.	Existing
Manhattan Emergency Vehicles	Emergency Vehicle	On-board EV En Route Support	5	The emergency vehicle shall send requests to traffic signal control equipment at the roadside to preempt the signal.	Existing
Manhattan Emergency Vehicles	Emergency Vehicle	On-board EV En Route Support	6	The emergency vehicle shall provide the personnel on-board with dispatch information, including incident type and location, and forward an acknowledgment from personnel to the center that the vehicle is on its way to the incident scene.	Existing
Manhattan Fire Department	Emergency Management	Emergency Early Warning System	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Existing
Manhattan Fire Department	Emergency Management	Emergency Early Warning System	12	The center shall receive incident information from other transportation management centers to support the early warning system.	Existing
Manhattan Fire Department	Emergency Management	Emergency Early Warning System	13	The center shall present the alert and advisory information and the status of the actions taken in response to the alert by the other centers to the emergency system operator as received from other system inputs.	Existing
Manhattan Fire Department	Emergency Management	Emergency Evacuation Support	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Existing
Manhattan Fire Department	Emergency Management	Emergency Evacuation Support	9	The center shall monitor the progress or status of the evacuation once it begins and exchange tactical plans, prepared during the incident, with allied agencies.	Existing
Manhattan Fire Department	Emergency Management	Emergency Evacuation Support	10	The center shall monitor the progress of the reentry process.	Existing
Manhattan Fire Department	Emergency Management	Emergency Response Management	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Manhattan Fire Department	Emergency Management	Emergency Response Management	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Existing
Manhattan Fire Department	Emergency Management	Emergency Response Management	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Existing
Manhattan Fire Department	Emergency Management	Emergency Response Management	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Existing
Manhattan Fire Department	Emergency Management	Emergency Response Management	5	The center shall track the availability of resources and coordinate resource sharing with allied agency centers including traffic, maintenance, or other emergency centers.	Existing
Manhattan Fire Department	Emergency Management	Emergency Response Management	6	The center shall allocate the appropriate emergency services, resources, and vehicle (s) to respond to incidents, and shall provide the capability to override the current allocation to suit the special needs of a current incident.	Existing
Manhattan Fire Department	Emergency Management	Incident Command	1	The center shall provide tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders to support local management of an incident.	Existing
Manhattan Fire Department	Emergency Management	Incident Command	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Existing
Manhattan Fire Department	Emergency Management	Incident Command	3	The center shall track and maintain resource information and action plans pertaining to the incident command.	Existing
Manhattan Fire Department	Emergency Management	Incident Command	4	The center shall share incident command information with other public safety agencies including resource deployment status, hazardous material information, rail incident information, evacuation advice as well as traffic, road, and weather conditions.	Existing
Manhattan Fire Department	Emergency Management	Incident Command	5	The center shall assess the status of responding emergency vehicles as part of an incident command.	Existing
Manhattan Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Roadway Maintenance and Construction	1	The maintenance and construction vehicle shall track the location and status of safety systems on-board the vehicle.	Planned
Manhattan Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Roadway Maintenance and Construction	3	The maintenance and construction vehicle shall monitor materials information including remaining quantity and current application rate of materials on the vehicle.	Planned

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Manhattan Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Roadway Maintenance and Construction	4	The maintenance and construction vehicle shall respond to dispatch information from the center, presented to the vehicle operator for acknowledgement and returning status.	Existing
Manhattan Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Roadway Maintenance and Construction	5	The maintenance and construction vehicle shall send operational data to the center including the operational state of the maintenance equipment (e.g., blade up/down, spreader pattern), types and quantities of materials used for construction and maintenance activities, and a record of the actual work performed.	Planned
Manhattan Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Vehicle Location Tracking	1	The maintenance and construction vehicle shall track its current location.	Planned
Manhattan Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Vehicle Location Tracking	2	The maintenance and construction vehicle shall send the time stamped vehicle location to the controlling center.	Planned
Manhattan Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Winter Maintenance	1	The maintenance and construction vehicle shall track the location and status of safety systems on-board the vehicle.	Planned
Manhattan Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Winter Maintenance	3	The maintenance and construction vehicle shall monitor materials information including remaining quantity and current application rate of materials on the vehicle.	Planned
Manhattan Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Winter Maintenance	4	The maintenance and construction vehicle shall respond to dispatch information from the center, presented to the vehicle operator for acknowledgement and returning status.	Existing
Manhattan Portable Changeable Message Signs	Roadway	Roadway Traffic Information Dissemination	1	The field element shall include dynamic messages signs for dissemination of traffic and other information to drivers, under center control; the DMS may be either those that display variable text messages, or those that have fixed format display(s) (e.g. vehicle restrictions, or lane open/close).	Planned
Manhattan Portable Changeable Message Signs	Roadway	Roadway Traffic Information Dissemination	4	The field element shall provide operational status for the driver information systems equipment (DMS, HAR, etc.) to the center.	Planned
Manhattan Portable Changeable Message Signs	Roadway	Roadway Traffic Information Dissemination	5	The field element shall provide fault data for the driver information systems equipment (DMS, HAR, etc.) to the center for repair.	Planned

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Manhattan Portable Changeable Message Signs	Roadway	Roadway Work Zone Traffic Control	2	Under traffic and maintenance center control, the field element shall include driver information systems (such as dynamic messages signs and highway advisory radios) that advise drivers of activity around the work zone through which they are currently passing.	Planned
Manhattan Portable Changeable Message Signs	Roadway	Roadway Work Zone Traffic Control	3	Under the control of field personnel within maintenance vehicles, the field element shall include driver information systems (such as dynamic messages signs and highway advisory radios) that advise drivers of activity around a work zone through which they are currently passing.	Existing
Manhattan Portable Changeable Message Signs	Roadway	Roadway Work Zone Traffic Control	5	The field element shall provide operational status for the surveillance (e.g. CCTV), driver information systems, and gates/barriers in work zones to the maintenance center.	Planned
Manhattan Portable Changeable Message Signs	Roadway	Roadway Work Zone Traffic Control	6	The field element shall provide fault data for the surveillance (e.g. CCTV), driver information systems, and gates/barriers in work zones to the maintenance center for repair.	Planned
Manhattan RWIS Stations	Roadway	Roadway Environmental Monitoring	1	The field element shall include surface and sub-surface environmental sensors that measure road surface temperature, moisture, icing, salinity, and other measures.	Existing
Manhattan RWIS Stations	Roadway	Roadway Environmental Monitoring	2	The field element shall include environmental sensors that measure weather conditions including temperature, wind, humidity, precipitation, and visibility.	Existing
Manhattan RWIS Stations	Roadway	Roadway Environmental Monitoring	3	The field element's environmental sensors shall be remotely controlled by a maintenance center.	Existing
Manhattan RWIS Stations	Roadway	Roadway Environmental Monitoring	4	The field element's environmental sensors shall be remotely controlled by a traffic management center.	Existing
Manhattan RWIS Stations	Roadway	Roadway Environmental Monitoring	8	The field element shall provide environmental sensor equipment fault indication to the controlling center or maintenance vehicle.	Existing
Manhattan RWIS Stations	Roadway	Roadway Environmental Monitoring	10	The field element shall provide weather and road surface condition data to centers.	Existing
Manhattan Street Division Office	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	2	The center shall respond to requests from emergency management and traffic management centers for hazard removal, field equipment repair, and other roadway maintenance.	Planned
Manhattan Street Division Office	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	3	The center shall exchange information with administrative systems to support the planning and scheduling of maintenance activities. This information includes: equipment and consumables resupply purchase request status, personnel qualifications including training and special certifications, environmental regulations and rules that may impact maintenance activities, and requests and project requirements from contract administration.	Planned

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Manhattan Street Division Office	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	4	The center shall provide emergency management and traffic management centers with information about scheduled maintenance and construction work activities including anticipated closures and impact to the roadway, alternate routes, anticipated delays, closure times, and durations.	Existing
Manhattan Street Division Office	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	8	The center shall support an interface with a map update provider, or other appropriate data sources, through which updates of digitized map data can be obtained and used as a background for the scheduling of roadway maintenance and construction activities.	Planned
Manhattan Street Division Office	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	9	The center shall collect current and forecast traffic and weather information from traffic management centers and weather service providers (such as the National Weather Service and value-added sector specific meteorological services).	Existing
Manhattan Street Division Office	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	10	The center shall dispatch and route maintenance and construction vehicle drivers and support them with route-specific environmental, incident, advisory, threat, alert, and traffic congestion information.	Planned
Manhattan Street Division Office	Maintenance and Construction Management	MCM Vehicle Tracking	1	The center shall monitor the locations of all maintenance and construction vehicles and other equipment under its jurisdiction.	Planned
Manhattan Street Division Office	Maintenance and Construction Management	MCM Vehicle Tracking	2	The center shall present location data to center personnel for the fleet of maintenance and construction vehicles and other equipment.	Planned
Manhattan Street Division Office	Maintenance and Construction Management	MCM Vehicle Tracking	3	The center shall support an interface with a map update provider, or other appropriate data sources, through which updates of digitized map data can be obtained and used as a background for maintenance and construction vehicle tracking.	Planned
Manhattan Street Division Office	Maintenance and Construction Management	MCM Winter Maintenance Management	1	The center shall respond to requests from emergency management and traffic management centers for hazard removal, field equipment repair, and other winter roadway maintenance.	Existing
Manhattan Street Division Office	Maintenance and Construction Management	MCM Winter Maintenance Management	3	The center shall provide status information about scheduled winter maintenance activities including anticipated closures and impact to the roadway, alternate routes, anticipated delays, closure times, and durations. The information is provided to other management centers such as traffic, emergency, transit, traveler information providers, other maintenance centers, and the media.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Manhattan Street Division Office	Maintenance and Construction Management	MCM Winter Maintenance Management	6	The center shall collect real-time information on the state of the regional transportation system from other centers including current traffic and road conditions, weather conditions, special event and incident information and use the collected information to support winter maintenance operations.	Planned
Manhattan Street Division Office	Maintenance and Construction Management	MCM Winter Maintenance Management	7	The center shall dispatch and route winter maintenance vehicle drivers and support them with route- specific environmental, incident, advisory, threat, alert, and traffic congestion information.	Existing
Manhattan Street Division Office	Maintenance and Construction Management	MCM Winter Maintenance Management	9	The center shall provide dispatch instructions for vehicle operators based on input parameters from center personnel, specifically for winter conditions. This could include a treatment route, treatment application rates, start and end times, and other treatment instructions.	Existing
Manhattan Street Division Office	Maintenance and Construction Management	MCM Winter Maintenance Management	11	The center shall assess the current status of all winter maintenance activities, including actual work activities performed, current locations and operational conditions of vehicles, materials and equipment inventories, field equipment status, environmental information, etc.	Planned
Manhattan Traffic Detection Equipment	Roadway	Roadway Basic Surveillance	1	The field element shall collect, process, digitize, and send traffic sensor data (speed, volume, and occupancy) to the center for further analysis and storage, under center control.	Existing
Manhattan Traffic Detection Equipment	Roadway	Roadway Basic Surveillance	4	The field element shall return sensor and CCTV system operational status to the controlling center.	Existing
Manhattan Traffic Detection Equipment	Roadway	Roadway Basic Surveillance	5	The field element shall return sensor and CCTV system fault data to the controlling center for repair.	Existing
Manhattan Traffic Information Website	Information Service Provider	Basic Information Broadcast	1	The center shall disseminate traffic and highway condition information to travelers, including incident information, detours and road closures, event information, recommended routes, and current speeds on specific routes.	Existing
Manhattan Traffic Information Website	Information Service Provider	Basic Information Broadcast	2	The center shall disseminate maintenance and construction information to travelers, including scheduled maintenance and construction work activities and work zone activities.	Planned
Manhattan Traffic Information Website	Information Service Provider	Basic Information Broadcast	3	The center shall disseminate transit routes and schedules, transit transfer options, transit fares, and real-time schedule adherence information to travelers.	Planned
Manhattan Traffic Information Website	Information Service Provider	Basic Information Broadcast	4	The center shall disseminate parking information to travelers, including location, availability, and fees.	Planned
Manhattan Traffic Information Website	Information Service Provider	Basic Information Broadcast	6	The center shall disseminate weather information to travelers.	Planned
Manhattan Traffic Information Website	Information Service Provider	Basic Information Broadcast	7	The center shall disseminate event information to travelers.	Planned

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Manhattan Traffic Information Website	Information Service Provider	Basic Information Broadcast	10	The center shall provide the capability for a system operator to control the type and update frequency of broadcast traveler information.	Planned
Manhattan Traffic Information Website	Information Service Provider	ISP Emergency Traveler Information	1	The center shall disseminate emergency evacuation information to the traveler interface systems, including evacuation zones, shelter information, available transportation modes, road closures and detours, changes to transit services, and traffic and road conditions at the origin, destination, and along the evacuation routes.	Planned
Manhattan Traffic Information Website	Information Service Provider	ISP Emergency Traveler Information	3	The center shall disseminate wide-area alert information to the traveler interface systems, including major emergencies such as a natural or man-made disaster, civil emergency, child abductions, severe weather watches and warnings, military activities, and law enforcement warnings.	Planned
Manhattan Traffic Information Website	Information Service Provider	ISP Emergency Traveler Information	4	The center shall provide the capability for a system operator to control the type and update frequency of emergency and wide-area alert information distributed to travelers.	Planned
Manhattan Traffic Information Website	Information Service Provider	ISP Traveler Data Collection	1	The center shall collect, process, and store traffic and highway condition information, including incident information, detours and road closures, event information, recommended routes, and current speeds on specific routes.	Existing
Manhattan Traffic Information Website	Information Service Provider	ISP Traveler Data Collection	2	The center shall collect, process, and store maintenance and construction information, including scheduled maintenance and construction work activities and work zone activities.	Existing
Manhattan Traffic Information Website	Information Service Provider	ISP Traveler Data Collection	6	The center shall collect, process, and store current and forecast road conditions and surface weather conditions.	Planned
Manhattan Traffic Information Website	Information Service Provider	ISP Traveler Data Collection	7	The center shall collect, process, and store event information.	Planned
Manhattan Traffic Operations Facility	Maintenance and Construction Management	MCM Environmental Information Collection	1	The center shall remotely control environmental sensors that measure road surface temperature, moisture, icing, salinity, and other measures.	Existing
Manhattan Traffic Operations Facility	Maintenance and Construction Management	MCM Environmental Information Collection	2	The center shall remotely control environmental sensors that measure weather conditions including temperature, wind, humidity, precipitation, and visibility.	Existing
Manhattan Traffic Operations Facility	Maintenance and Construction Management	MCM Environmental Information Collection	8	The center shall collect operational status for the roadside and vehicle-based environmental sensor equipment.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Manhattan Traffic Operations Facility	Maintenance and Construction Management	MCM Environmental Information Collection	9	The center shall collect fault data for the roadside and vehicle-based environmental sensor equipment for repair.	Existing
Manhattan Traffic Operations Facility	Maintenance and Construction Management	MCM Environmental Information Processing	3	The center shall use the various data inputs of environmental sensors and road weather data to develop a view of current and predicted road weather and road conditions.	Existing
Manhattan Traffic Operations Facility	Maintenance and Construction Management	MCM Environmental Information Processing	4	The center shall disseminate current and forecasted road weather and road condition information to weather service providers (such as the National Weather Service and value-added sector specific meteorological services) as well as other agencies including traffic, emergency, and transit management, traveler information providers, rail operations centers, media, and other maintenance management centers.	Existing
Manhattan Traffic Operations Facility	Traffic Management	Collect Traffic Surveillance	1	The center shall monitor, analyze, and store traffic sensor data (speed, volume, occupancy) collected from field elements under remote control of the center.	Existing
Manhattan Traffic Operations Facility	Traffic Management	Collect Traffic Surveillance	2	The center shall monitor, analyze, and distribute traffic images from CCTV systems under remote control of the center.	Existing
Manhattan Traffic Operations Facility	Traffic Management	Collect Traffic Surveillance	4	The center shall distribute road network conditions data (raw or processed) based on collected and analyzed traffic sensor and surveillance data to other centers.	Existing
Manhattan Traffic Operations Facility	Traffic Management	Collect Traffic Surveillance	5	The center shall respond to control data from center personnel regarding sensor and surveillance data collection, analysis, storage, and distribution.	Existing
Manhattan Traffic Operations Facility	Traffic Management	Collect Traffic Surveillance	6	The center shall maintain a database of surveillance equipment and sensors and associated data (including the roadway on which they are located, the type of data collected, and the ownership of each)	Existing
Manhattan Traffic Operations Facility	Traffic Management	Collect Traffic Surveillance	7	The center shall support an interface with a map update provider, or other appropriate data sources, through which updates of digitized map data can be obtained and used as a background for traffic data.	Existing
Manhattan Traffic Operations Facility	Traffic Management	TMC Environmental Monitoring	1	The center shall remotely control environmental sensors that measure road surface temperature, moisture, icing, salinity, and other measures.	Existing
Manhattan Traffic Operations Facility	Traffic Management	TMC Environmental Monitoring	2	The center shall remotely control environmental sensors that measure weather conditions including temperature, wind, humidity, precipitation, and visibility.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Manhattan Traffic Operations Facility	Traffic Management	TMC Environmental Monitoring	3	The center shall assimilate current and forecast road conditions and surface weather information using a combination of weather service provider information (such as the National Weather Service and value-added sector specific meteorological services), data from roadway maintenance operations, and environmental data collected from sensors deployed on and about the roadway.	Existing
Manhattan Traffic Operations Facility	Traffic Management	TMC Environmental Monitoring	5	The center shall respond to control data from center personnel regarding environmental sensor control and weather data collection and processing.	Existing
Manhattan Traffic Operations Facility	Traffic Management	TMC Evacuation Support	1	The center shall coordinate planning for evacuation with emergency management centers - including pre-planning activities such as establishing routes, areas to be evacuated, timing, etc.	Existing
Manhattan Traffic Operations Facility	Traffic Management	TMC Evacuation Support	2	The center shall support requests from emergency management centers to preempt the current traffic control strategy, activate traffic control and closure systems such as gates and barriers, activate safeguard systems, or use driver information systems to support evacuation traffic control plans.	Existing
Manhattan Traffic Operations Facility	Traffic Management	TMC Evacuation Support	3	The center shall coordinate information and controls with other traffic management centers.	Planned
Manhattan Traffic Operations Facility	Traffic Management	TMC Evacuation Support	4	The center shall coordinate execution of evacuation strategies with emergency management centers - including activities such as setting closures and detours, establishing routes, updating areas to be evacuated, timing the process, etc.	Existing
Manhattan Traffic Operations Facility	Traffic Management	TMC Incident Detection	1	The center shall receive inputs from the Alerting and Advisory System concerning the possibility or occurrence of severe weather, terrorist activity, or other major emergency, including information provided by the Emergency Alert System.	Existing
Manhattan Traffic Operations Facility	Traffic Management	TMC Incident Detection	2	The center shall collect and store traffic flow and image data from the field equipment to detect and verify incidents.	Planned
Manhattan Traffic Operations Facility	Traffic Management	TMC Incident Detection	3	The center shall receive inputs concerning upcoming events that would affect the traffic network from event promoters and traveler information service providers.	Existing
Manhattan Traffic Operations Facility	Traffic Management	TMC Incident Detection	4	The center shall exchange incident and threat information with emergency management centers as well as maintenance and construction centers; including notification of existence of incident and expected severity, location, time and nature of incident.	Existing
Manhattan Traffic Operations Facility	Traffic Management	TMC Incident Detection	5	The center shall support requests from emergency management centers and border inspection systems to remotely control sensor and surveillance equipment located in the field.	Planned

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Manhattan Traffic Operations Facility	Traffic Management	TMC Incident Detection	6	The center shall provide road network conditions and traffic images to emergency management centers to support the detection, verification, and classification of incidents.	Planned
Manhattan Traffic Operations Facility	Traffic Management	TMC Incident Detection	7	The center shall provide video and traffic sensor control commands to the field equipment to detect and verify incidents.	Planned
Manhattan Traffic Operations Facility	Traffic Management	TMC Incident Dispatch Coordination/Communication	1	The center shall exchange alert information and status with emergency management centers. The information includes notification of a major emergency such as a natural or man-made disaster, civil emergency, or child abduction for distribution to the public. The information may include the alert originator, the nature of the emergency, the geographic area affected by the emergency, the effective time period, and information and instructions necessary for the public to respond to the alert. This may also identify specific information that should not be released to the public.	Existing
Manhattan Traffic Operations Facility	Traffic Management	TMC Incident Dispatch Coordination/Communication	2	The center shall coordinate planning for incidents with emergency management centers - including pre-planning activities for disaster response, evacuation, and recovery operations.	Existing
Manhattan Traffic Operations Facility	Traffic Management	TMC Incident Dispatch Coordination/Communication	3	The center shall support requests from emergency management centers to remotely control sensor and surveillance equipment located in the field, provide special routing for emergency vehicles, and to provide responding emergency vehicles with signal preemption.	Planned
Manhattan Traffic Operations Facility	Traffic Management	TMC Incident Dispatch Coordination/Communication	4	The center shall exchange incident information with emergency management centers, maintenance and construction centers, transit centers, information service providers, and the media including description, location, traffic impact, status, expected duration, and response information.	Existing
Manhattan Traffic Operations Facility	Traffic Management	TMC Incident Dispatch Coordination/Communication	5	The center shall share resources with allied agency centers to implement special traffic control measures, assist in clean up, verify an incident, etc. This may also involve coordination with maintenance centers.	Existing
Manhattan Traffic Operations Facility	Traffic Management	TMC Incident Dispatch Coordination/Communication	6	The center shall receive inputs concerning upcoming events that would affect the traffic network from event promoters, traveler information service providers, media, border crossings, and rail operations centers.	Existing
Manhattan Traffic Operations Facility	Traffic Management	TMC Incident Dispatch Coordination/Communication	7	The center shall provide road network conditions and traffic images to emergency management centers, maintenance and construction centers, and traveler information service providers.	Planned
Manhattan Traffic Operations Facility	Traffic Management	TMC Incident Dispatch Coordination/Communication	8	The center shall monitor incident response performance and calculate incident response and clearance times.	Planned

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Manhattan Traffic Operations Facility	Traffic Management	TMC Incident Dispatch Coordination/Communication	9	The center shall exchange road network status assessment information with emergency management and maintenance centers including an assessment of damage sustained by the road network including location and extent of the damage, estimate of remaining capacity, required closures, alternate routes, necessary restrictions, and time frame for repair and recovery.	Existing
Manhattan Traffic Operations Facility	Traffic Management	TMC Incident Dispatch Coordination/Communication	10	The center shall coordinate information and controls with other traffic management centers.	Planned
Manhattan Traffic Operations Facility	Traffic Management	TMC Incident Dispatch Coordination/Communication	11	The center shall receive inputs from emergency management and transit management centers to develop an overall status of the transportation system including emergency transit schedules in effect and current status and condition of the transportation infrastructure.	Planned
Manhattan Traffic Operations Facility	Traffic Management	TMC Incident Dispatch Coordination/Communication	12	The center shall support an interface with a map update provider, or other appropriate data sources, through which updates of digitized map data can be obtained and used as a background for traffic incident management.	Existing
Manhattan Traffic Operations Facility	Traffic Management	TMC Probe Information Collection	1	The center shall collect traffic probe data from vehicles via roadside field equipment.	Existing
Manhattan Traffic Operations Facility	Traffic Management	TMC Probe Information Collection	5	The center shall assimilate current and forecast traffic conditions based on collected probe data and distribute to other centers for dissemination to travelers.	Planned
Manhattan Traffic Operations Facility	Traffic Management	TMC Probe Information Collection	6	The center shall collect operational status for the roadside probe data collection equipment.	Existing
Manhattan Traffic Operations Facility	Traffic Management	TMC Probe Information Collection	7	The center shall collect fault data for the roadside probe data collection equipment for repair.	Existing
Manhattan Traffic Operations Facility	Traffic Management	TMC Regional Traffic Management	1	The center shall exchange traffic information with other traffic management centers including incident information, congestion data, traffic data, signal timing plans, and real-time signal control information.	Planned
Manhattan Traffic Operations Facility	Traffic Management	TMC Regional Traffic Management	2	The center shall exchange traffic control information with other traffic management centers to support remote monitoring and control of traffic management devices (e.g. signs, sensors, signals, cameras, etc.).	Planned
Manhattan Traffic Operations Facility	Traffic Management	TMC Signal Control	1	The center shall remotely control traffic signal controllers.	Existing
Manhattan Traffic Operations Facility	Traffic Management	TMC Signal Control	2	The center shall accept notifications of pedestrian calls.	Existing
Manhattan Traffic Operations Facility	Traffic Management	TMC Signal Control	3	The center shall collect traffic signal controller operational status and compare against the control information sent by the center.	Existing
Manhattan Traffic Operations Facility	Traffic Management	TMC Signal Control	4	The center shall collect traffic signal controller fault data from the field.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Manhattan Traffic Operations Facility	Traffic Management	TMC Signal Control	5	The center shall manage (define, store and modify) control plans to coordinate signalized intersections, to be engaged at the direction of center personnel or according to a daily schedule.	Existing
Manhattan Traffic Operations Facility	Traffic Management	TMC Signal Control	6	The center shall implement control plans to coordinate signalized intersections based on data from sensors.	Existing
Manhattan Traffic Operations Facility	Traffic Management	TMC Signal Control	7	The center shall manage boundaries of the control sections used within the signal system.	Existing
Manhattan Traffic Operations Facility	Traffic Management	TMC Signal Control	8	The center shall maintain traffic signal coordination including synchronizing clocks throughout the system.	Existing
Manhattan Traffic Operations Facility	Traffic Management	TMC Traffic Information Dissemination	1	The center shall remotely control dynamic messages signs for dissemination of traffic and other information to drivers.	Planned
Manhattan Traffic Operations Facility	Traffic Management	TMC Traffic Information Dissemination	3	The center shall collect operational status for the driver information systems equipment (DMS, HAR, etc.).	Planned
Manhattan Traffic Operations Facility	Traffic Management	TMC Traffic Information Dissemination	4	The center shall collect fault data for the driver information systems equipment (DMS, HAR, etc.) for repair.	Planned
Manhattan Traffic Operations Facility	Traffic Management	TMC Traffic Information Dissemination	5	The center shall retrieve locally stored traffic information, including current and forecasted traffic information, road and weather conditions, traffic incident information, information on diversions and alternate routes, closures, and special traffic restrictions (lane/shoulder use, weight restrictions, width restrictions, HOV requirements), and the definition of the road network itself.	Planned
Manhattan Traffic Operations Facility	Traffic Management	TMC Traffic Information Dissemination	6	The center shall distribute traffic data to maintenance and construction centers, transit centers, emergency management centers, and traveler information providers.	Planned
Manhattan Traffic Operations Facility	Traffic Management	TMC Traffic Information Dissemination	7	The center shall distribute traffic data to the media; the capability to provide the information in both data stream and graphical display shall be supported.	Planned
Manhattan Traffic Operations Facility	Traffic Management	TMC Traffic Information Dissemination	8	The center shall provide the capability for center personnel to control the nature of the data that is available to non-traffic operations centers and the media.	Planned
Manhattan Traffic Operations Facility	Traffic Management	TMC Work Zone Traffic Management	3	The center shall remotely control driver information systems (such as dynamic messages signs, highway advisory radios) to advise drivers of activity around a work zone.	Planned
Manhattan Traffic Operations Facility	Traffic Management	TMC Work Zone Traffic Management	4	The center shall collect operational status for the driver information systems equipment in work zones.	Planned
Manhattan Traffic Operations Facility	Traffic Management	TMC Work Zone Traffic Management	5	The center shall collect fault data for the driver information systems equipment in work zones for repair.	Planned
Manhattan Traffic Operations Facility	Traffic Management	TMC Work Zone Traffic Management	6	The center shall receive proposed maintenance and construction work plans, analyze the activity as a possible incident, and provide work plan feedback to the sending center.	Planned

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Manhattan Traffic Operations Facility	Traffic Management	Traffic Equipment Maintenance	1	The center shall collect and store sensor (traffic, pedestrian, multimodal crossing) operational status.	Existing
Manhattan Traffic Operations Facility	Traffic Management	Traffic Equipment Maintenance	2	The center shall collect and store CCTV surveillance system (traffic, pedestrian) operational status.	Existing
Manhattan Traffic Operations Facility	Traffic Management	Traffic Equipment Maintenance	3	The center shall collect and store sensor (traffic, pedestrian, multimodal crossing) fault data and send to the maintenance center for repair.	Existing
Manhattan Traffic Operations Facility	Traffic Management	Traffic Equipment Maintenance	4	The center shall collect and store CCTV surveillance system (traffic, pedestrian) fault data send to the maintenance center for repair.	Existing
Manhattan Traffic Operations Facility	Traffic Management	Traffic Equipment Maintenance	5	The center shall collect environmental sensor operational status.	Existing
Manhattan Traffic Operations Facility	Traffic Management	Traffic Equipment Maintenance	6	The center shall collect environmental sensor equipment fault data and send to the maintenance center for repair.	Existing
Manhattan Traffic Operations Facility	Traffic Management	Traffic Equipment Maintenance	7	The center shall exchange data with maintenance centers concerning the reporting of faulty equipment and the schedule/status of their repair. Information exchanged includes details of new equipment faults, and clearances when the faults are cleared.	Existing
Manhattan Traffic Signals	Roadway	Field Management Stations Operation	1	The field management station shall accept configuration information from the center.	Existing
Manhattan Traffic Signals	Roadway	Field Management Stations Operation	2	The filed management station shall pass data provided by the center to local field devices and report data from the field devices back to the center.	Existing
Manhattan Traffic Signals	Roadway	Roadway Equipment Coordination	1	The field element shall include sensors that provide data and status information to other field element devices, without center control.	Existing
Manhattan Traffic Signals	Roadway	Roadway Equipment Coordination	2	The field element shall include sensors that receive configuration data from other field element devices, without center control.	Existing
Manhattan Traffic Signals	Roadway	Roadway Equipment Coordination	3	The field element shall include devices that provide data and status information to other field element devices without center control.	Existing
Manhattan Traffic Signals	Roadway	Roadway Equipment Coordination	4	The field element shall include devices that receive configuration data from other field element devices, without center control.	Existing
Manhattan Traffic Signals	Roadway	Roadway Mixed Use Sensing	2	The field element shall provide the capability to notify the traffic management center that a pedestrian or bicyclist has requested right-of-way and when the request was or will be granted.	Planned
Manhattan Traffic Signals	Roadway	Roadway Mixed Use Sensing	4	The field element shall adjust traffic signals timing at intersections and on main highways for urban and rural areas using road user protection sensor data.	Planned
Manhattan Traffic Signals	Roadway	Roadway Mixed Use Sensing	5	The field element shall accept, from the controlling center, control or configuration data for the road user protection devices.	Planned

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Manhattan Traffic Signals	Roadway	Roadway Signal Controls	1	The field element shall control traffic signals under center control.	Existing
Manhattan Traffic Signals	Roadway	Roadway Signal Controls	2	The field element shall respond to pedestrian crossing requests by accommodating the pedestrian crossing.	Existing
Manhattan Traffic Signals	Roadway	Roadway Signal Controls	3	The field element shall provide the capability to notify the traffic management center of pedestrian calls and pedestrian accommodations.	Existing
Manhattan Traffic Signals	Roadway	Roadway Signal Controls	4	The field element shall report the current signal control information to the center.	Existing
Manhattan Traffic Signals	Roadway	Roadway Signal Controls	5	The field element shall report current preemption status to the center.	Existing
Manhattan Traffic Signals	Roadway	Roadway Signal Controls	6	The field element shall return traffic signal controller operational status to the center.	Existing
Manhattan Traffic Signals	Roadway	Roadway Signal Controls	7	The field element shall return traffic signal controller fault data to the center.	Existing
Manhattan Traffic Signals	Roadway	Roadway Signal Controls	8	The field element shall report current transit priority status to the center.	Existing
Manhattan Traffic Signals	Roadway	Roadway Signal Preemption	1	The field element shall respond to signal preemption requests from emergency vehicles.	Existing
Neighboring 911 Centers	Emergency Management	Emergency Early Warning System	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Existing
Neighboring 911 Centers	Emergency Management	Emergency Early Warning System	3	The center shall broadcast wide-area alerts and advisories to traffic management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Neighboring 911 Centers	Emergency Management	Emergency Early Warning System	4	The center shall broadcast wide-area alerts and advisories to transit management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Neighboring 911 Centers	Emergency Management	Emergency Early Warning System	7	The center shall broadcast wide-area alerts and advisories to maintenance centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Neighboring 911 Centers	Emergency Management	Emergency Early Warning System	8	The center shall broadcast wide-area alerts and advisories to other emergency management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Neighboring 911 Centers	Emergency Management	Emergency Early Warning System	10	The center shall process status information from each of the centers that have been sent the wide-area alert.	Existing
Neighboring 911 Centers	Emergency Management	Emergency Early Warning System	11	The center shall coordinate the broadcast of wide-area alerts and advisories with other emergency management centers.	Existing
Neighboring 911 Centers	Emergency Management	Emergency Early Warning System	12	The center shall receive incident information from other transportation management centers to support the early warning system.	Existing
Neighboring 911 Centers	Emergency Management	Emergency Early Warning System	13	The center shall present the alert and advisory information and the status of the actions taken in response to the alert by the other centers to the emergency system operator as received from other system inputs.	Existing
Neighboring 911 Centers	Emergency Management	Emergency Early Warning System	14	The center shall support the entry of alert and advisory information directly from the emergency system operator.	Existing
Neighboring 911 Centers	Emergency Management	Emergency Evacuation Support	1	The center shall manage inter-agency coordination of evacuation operations, from initial planning through the evacuation process and reentry.	Existing
Neighboring 911 Centers	Emergency Management	Emergency Evacuation Support	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Existing
Neighboring 911 Centers	Emergency Management	Emergency Evacuation Support	3	The center shall provide an interface to the emergency system operator to enter evacuation plans and procedures and present the operator with other agencies' plans.	Existing
Neighboring 911 Centers	Emergency Management	Emergency Evacuation Support	4	The center shall coordinate evacuation destinations and shelter needs with shelter providers (e.g., the American Red Cross) in the region.	Existing
Neighboring 911 Centers	Emergency Management	Emergency Evacuation Support	9	The center shall monitor the progress or status of the evacuation once it begins and exchange tactical plans, prepared during the incident, with allied agencies.	Existing
Neighboring 911 Centers	Emergency Management	Emergency Evacuation Support	10	The center shall monitor the progress of the reentry process.	Existing
Neighboring 911 Centers	Emergency Management	Emergency Response Management	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Neighboring 911 Centers	Emergency Management	Emergency Response Management	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Existing
Neighboring 911 Centers	Emergency Management	Emergency Response Management	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Existing
Neighboring 911 Centers	Emergency Management	Emergency Response Management	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Existing
Neighboring 911 Centers	Emergency Management	Emergency Response Management	5	The center shall track the availability of resources and coordinate resource sharing with allied agency centers including traffic, maintenance, or other emergency centers.	Existing
Neighboring 911 Centers	Emergency Management	Emergency Response Management	6	The center shall allocate the appropriate emergency services, resources, and vehicle (s) to respond to incidents, and shall provide the capability to override the current allocation to suit the special needs of a current incident.	Existing
Neighboring 911 Centers	Emergency Management	Emergency Response Management	14	The center shall provide the capability for center personnel to provide inputs to the management of incidents, disasters and evacuations.	Existing
Neighboring 911 Centers	Emergency Management	Emergency Response Management	15	The center shall collect information about the status of the recovery efforts for the infrastructure during disasters.	Existing
Neighboring 911 Centers	Emergency Management	Incident Command	1	The center shall provide tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders to support local management of an incident.	Existing
Neighboring 911 Centers	Emergency Management	Incident Command	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Existing
Neighboring 911 Centers	Emergency Management	Incident Command	3	The center shall track and maintain resource information and action plans pertaining to the incident command.	Existing
Neighboring 911 Centers	Emergency Management	Incident Command	4	The center shall share incident command information with other public safety agencies including resource deployment status, hazardous material information, rail incident information, evacuation advice as well as traffic, road, and weather conditions.	Existing
Neighboring 911 Centers	Emergency Management	Incident Command	5	The center shall assess the status of responding emergency vehicles as part of an incident command.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Early Warning System	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Early Warning System	2	The center shall provide the capability to correlate alerts and advisories, incident information, and security sensor and surveillance data.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Early Warning System	3	The center shall broadcast wide-area alerts and advisories to traffic management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Early Warning System	4	The center shall broadcast wide-area alerts and advisories to transit management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Early Warning System	6	The center shall broadcast wide-area alerts and advisories to traveler information service providers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Early Warning System	7	The center shall broadcast wide-area alerts and advisories to maintenance centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Early Warning System	8	The center shall broadcast wide-area alerts and advisories to other emergency management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Early Warning System	10	The center shall process status information from each of the centers that have been sent the wide-area alert.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Early Warning System	11	The center shall coordinate the broadcast of wide-area alerts and advisories with other emergency management centers.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Early Warning System	12	The center shall receive incident information from other transportation management centers to support the early warning system.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Early Warning System	13	The center shall present the alert and advisory information and the status of the actions taken in response to the alert by the other centers to the emergency system operator as received from other system inputs.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Early Warning System	14	The center shall support the entry of alert and advisory information directly from the emergency system operator.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Evacuation Support	1	The center shall manage inter-agency coordination of evacuation operations, from initial planning through the evacuation process and reentry.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Evacuation Support	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Evacuation Support	3	The center shall provide an interface to the emergency system operator to enter evacuation plans and procedures and present the operator with other agencies' plans.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Evacuation Support	4	The center shall coordinate evacuation destinations and shelter needs with shelter providers (e.g., the American Red Cross) in the region.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Evacuation Support	5	The center shall provide evacuation information to traffic, transit, maintenance and construction, rail operations, and other emergency management centers as needed.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Evacuation Support	6	The center shall request resources from transit agencies as needed to support the evacuation.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Evacuation Support	7	The center shall request traffic management agencies to implement special traffic control strategies and to control evacuation traffic, including traffic on local streets and arterials as well as the major evacuation routes.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Evacuation Support	8	The center shall provide traveler information systems with evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary and when it is safe to return.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Evacuation Support	9	The center shall monitor the progress or status of the evacuation once it begins and exchange tactical plans, prepared during the incident, with allied agencies.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Evacuation Support	10	The center shall monitor the progress of the reentry process.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Response Management	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Response Management	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Response Management	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Response Management	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Response Management	5	The center shall track the availability of resources and coordinate resource sharing with allied agency centers including traffic, maintenance, or other emergency centers.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Response Management	6	The center shall allocate the appropriate emergency services, resources, and vehicle (s) to respond to incidents, and shall provide the capability to override the current allocation to suit the special needs of a current incident.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Response Management	14	The center shall provide the capability for center personnel to provide inputs to the management of incidents, disasters and evacuations.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Response Management	15	The center shall collect information about the status of the recovery efforts for the infrastructure during disasters.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Response Management	16	The center shall provide the overall status of infrastructure recovery efforts to traveler information providers and media.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Response Management	17	The center shall provide the capability to communicate information about emergency situations to local population through the Emergency Telecommunications System.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Emergency Response Management	18	The center shall provide the capability to identify neighborhoods and businesses that should be informed of an emergency situation based on information collected about incidents including their severity, impacted locations, and recovery schedule.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Neighboring County Emergency Operations Centers	Emergency Management	Incident Command	1	The center shall provide tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders to support local management of an incident.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Incident Command	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Incident Command	3	The center shall track and maintain resource information and action plans pertaining to the incident command.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Incident Command	4	The center shall share incident command information with other public safety agencies including resource deployment status, hazardous material information, rail incident information, evacuation advice as well as traffic, road, and weather conditions.	Existing
Neighboring County Emergency Operations Centers	Emergency Management	Incident Command	5	The center shall assess the status of responding emergency vehicles as part of an incident command.	Existing
Personal Computing Devices	Personal Information Access	Personal Basic Information Reception	1	The personal traveler interface shall receive traffic information from a center and present it to the traveler.	Existing
Personal Computing Devices	Personal Information Access	Personal Basic Information Reception	2	The personal traveler interface shall receive transit information from a center and present it to the traveler.	Planned
Personal Computing Devices	Personal Information Access	Personal Basic Information Reception	3	The personal traveler interface shall receive event information from a center and present it to the traveler.	Planned
Personal Computing Devices	Personal Information Access	Personal Basic Information Reception	5	The personal traveler interface shall receive wide-area alerts and present it to the traveler.	Existing
Personal Computing Devices	Personal Information Access	Personal Basic Information Reception	6	The personal traveler interface shall provide the capability for digitized map data to act as the background to the information presented to the traveler.	Existing
Personal Computing Devices	Personal Information Access	Personal Basic Information Reception	7	The personal traveler interface shall support traveler input in audio or manual form.	Existing
Personal Computing Devices	Personal Information Access	Personal Basic Information Reception	8	The personal traveler interface shall present information to the traveler in audible or visual forms, consistent with a personal device.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Early Warning System	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Early Warning System	2	The center shall provide the capability to correlate alerts and advisories, incident information, and security sensor and surveillance data.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Early Warning System	3	The center shall broadcast wide-area alerts and advisories to traffic management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Early Warning System	4	The center shall broadcast wide-area alerts and advisories to transit management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Early Warning System	6	The center shall broadcast wide-area alerts and advisories to traveler information service providers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Early Warning System	7	The center shall broadcast wide-area alerts and advisories to maintenance centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Early Warning System	8	The center shall broadcast wide-area alerts and advisories to other emergency management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Early Warning System	10	The center shall process status information from each of the centers that have been sent the wide-area alert.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Early Warning System	11	The center shall coordinate the broadcast of wide-area alerts and advisories with other emergency management centers.	Existing

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Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Early Warning System	12	The center shall receive incident information from other transportation management centers to support the early warning system.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Early Warning System	13	The center shall present the alert and advisory information and the status of the actions taken in response to the alert by the other centers to the emergency system operator as received from other system inputs.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Early Warning System	14	The center shall support the entry of alert and advisory information directly from the emergency system operator.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	1	The center shall manage inter-agency coordination of evacuation operations, from initial planning through the evacuation process and reentry.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	3	The center shall provide an interface to the emergency system operator to enter evacuation plans and procedures and present the operator with other agencies' plans.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	4	The center shall coordinate evacuation destinations and shelter needs with shelter providers (e.g., the American Red Cross) in the region.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	5	The center shall provide evacuation information to traffic, transit, maintenance and construction, rail operations, and other emergency management centers as needed.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	6	The center shall request resources from transit agencies as needed to support the evacuation.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	7	The center shall request traffic management agencies to implement special traffic control strategies and to control evacuation traffic, including traffic on local streets and arterials as well as the major evacuation routes.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	8	The center shall provide traveler information systems with evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary and when it is safe to return.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	9	The center shall monitor the progress or status of the evacuation once it begins and exchange tactical plans, prepared during the incident, with allied agencies.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	10	The center shall monitor the progress of the reentry process.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Response Management	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Response Management	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Response Management	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Response Management	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Response Management	5	The center shall track the availability of resources and coordinate resource sharing with allied agency centers including traffic, maintenance, or other emergency centers.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Response Management	6	The center shall allocate the appropriate emergency services, resources, and vehicle (s) to respond to incidents, and shall provide the capability to override the current allocation to suit the special needs of a current incident.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Response Management	9	The center shall provide the capability to remotely control and monitor CCTV systems normally operated by a traffic management center.	Planned
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Response Management	10	The center shall provide the capability to request transit resource availability from transit centers for use during disaster and evacuation operations.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Response Management	11	The center shall assimilate the damage assessment of the transit, traffic, rail, maintenance, and other emergency center services and systems to create an overall transportation system status, and disseminate to each of these centers and the traveling public via traveler information providers.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Response Management	12	The center shall provide information to the media concerning the status of an emergency response.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Response Management	13	The center shall provide the capability for digitized map data to act as the background to the information presented to the emergency system operator.	Existing

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Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Response Management	14	The center shall provide the capability for center personnel to provide inputs to the management of incidents, disasters and evacuations.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Response Management	15	The center shall collect information about the status of the recovery efforts for the infrastructure during disasters.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Response Management	16	The center shall provide the overall status of infrastructure recovery efforts to traveler information providers and media.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Response Management	17	The center shall provide the capability to communicate information about emergency situations to local population through the Emergency Telecommunications System.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Emergency Response Management	18	The center shall provide the capability to identify neighborhoods and businesses that should be informed of an emergency situation based on information collected about incidents including their severity, impacted locations, and recovery schedule.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Incident Command	1	The center shall provide tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders to support local management of an incident.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Incident Command	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Incident Command	3	The center shall track and maintain resource information and action plans pertaining to the incident command.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Incident Command	4	The center shall share incident command information with other public safety agencies including resource deployment status, hazardous material information, rail incident information, evacuation advice as well as traffic, road, and weather conditions.	Existing
Pottawatomie County Emergency Operations Center	Emergency Management	Incident Command	5	The center shall assess the status of responding emergency vehicles as part of an incident command.	Existing
Pottawatomie County Emergency Vehicles	Emergency Vehicle	On-board EV En Route Support	4	The emergency vehicle shall send the current en route status (including estimated time of arrival) and requests for emergency dispatch updates.	Existing
Pottawatomie County Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Roadway Maintenance and Construction	1	The maintenance and construction vehicle shall track the location and status of safety systems on-board the vehicle.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Pottawatomie County Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Roadway Maintenance and Construction	4	The maintenance and construction vehicle shall respond to dispatch information from the center, presented to the vehicle operator for acknowledgement and returning status.	Existing
Pottawatomie County Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Vehicle Location Tracking	1	The maintenance and construction vehicle shall track its current location.	Existing
Pottawatomie County Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Vehicle Location Tracking	2	The maintenance and construction vehicle shall send the time stamped vehicle location to the controlling center.	Existing
Pottawatomie County Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Winter Maintenance	1	The maintenance and construction vehicle shall track the location and status of safety systems on-board the vehicle.	Existing
Pottawatomie County Public Works	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	1	The center shall maintain an interface with asset management systems to track the inventory, restrictions, repair needs and status updates of transportation assets (pavement, bridges, signs, etc.) including location, installation and materials information, vendor/contractor, current maintenance status, standard height, width, and weight restrictions.	Existing
Pottawatomie County Public Works	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	2	The center shall respond to requests from emergency management and traffic management centers for hazard removal, field equipment repair, and other roadway maintenance.	Existing
Pottawatomie County Public Works	Maintenance and Construction Management	MCM Vehicle Tracking	1	The center shall monitor the locations of all maintenance and construction vehicles and other equipment under its jurisdiction.	Existing
Pottawatomie County Public Works	Maintenance and Construction Management	MCM Vehicle Tracking	2	The center shall present location data to center personnel for the fleet of maintenance and construction vehicles and other equipment.	Existing
Pottawatomie County Public Works	Maintenance and Construction Management	MCM Vehicle Tracking	3	The center shall support an interface with a map update provider, or other appropriate data sources, through which updates of digitized map data can be obtained and used as a background for maintenance and construction vehicle tracking.	Existing
Pottawatomie County Public Works	Maintenance and Construction Management	MCM Winter Maintenance Management	1	The center shall respond to requests from emergency management and traffic management centers for hazard removal, field equipment repair, and other winter roadway maintenance.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Pottawatomie County Public Works	Maintenance and Construction Management	MCM Winter Maintenance Management	7	The center shall dispatch and route winter maintenance vehicle drivers and support them with route- specific environmental, incident, advisory, threat, alert, and traffic congestion information.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Call-Taking	1	The center shall support the interface to the Emergency Telecommunications System (e.g. 911 or 7-digit call routing) to receive emergency notification information and provide it to the emergency system operator.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Call-Taking	2	The center shall receive emergency call information from 911 services and present the possible incident information to the emergency system operator.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Call-Taking	5	The center shall receive emergency notification information from other public safety agencies and present the possible incident information to the emergency system operator.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Call-Taking	6	The center shall receive emergency notification information from public transit systems and present the possible incident information to the emergency system operator.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Call-Taking	7	The center shall coordinate, correlate, and verify all emergency inputs, including those identified based on external calls and internal analysis of security sensor and surveillance data, and assign each a level of confidence.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Call-Taking	8	The center shall send a request for remote control of CCTV systems from a traffic management center in order to verify the reported incident.	Planned
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Call-Taking	9	The center shall forward the verified emergency information to the responding agency based on the location and nature of the emergency.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Call-Taking	10	The center shall update the incident information log once the emergency system operator has verified the incident.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Call-Taking	11	The center shall provide the capability for digitized map data to act as the background to the emergency information presented to the emergency system operator.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Dispatch	1	The center shall dispatch emergency vehicles to respond to verified emergencies under center personnel control.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Dispatch	2	The center shall store the current status of all emergency vehicles available for dispatch and those that have been dispatched.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Dispatch	3	The center shall relay location and incident details to the responding vehicles.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Dispatch	4	The center shall track the location and status of emergency vehicles responding to an emergency based on information from the emergency vehicle.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Dispatch	5	The center shall store and maintain the emergency service responses in an action log.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Dispatch	6	The center shall provide the capability for digitized map data to act as the background to the information presented to the emergency system operator.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Dispatch	7	The center shall receive traffic images to support dispatch of emergency vehicles.	Planned
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Dispatch	8	The center shall provide the capability to request remote control of traffic surveillance devices	Planned
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Dispatch	9	The center shall coordinate response to incidents with other Emergency Management centers to ensure appropriate resources are dispatched and utilized.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Early Warning System	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Early Warning System	2	The center shall provide the capability to correlate alerts and advisories, incident information, and security sensor and surveillance data.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Early Warning System	3	The center shall broadcast wide-area alerts and advisories to traffic management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Early Warning System	4	The center shall broadcast wide-area alerts and advisories to transit management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Early Warning System	5	The center shall broadcast wide-area alerts and advisories to toll administration centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Early Warning System	6	The center shall broadcast wide-area alerts and advisories to traveler information service providers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Early Warning System	7	The center shall broadcast wide-area alerts and advisories to maintenance centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Early Warning System	8	The center shall broadcast wide-area alerts and advisories to other emergency management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Early Warning System	10	The center shall process status information from each of the centers that have been sent the wide-area alert.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Early Warning System	11	The center shall coordinate the broadcast of wide-area alerts and advisories with other emergency management centers.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Early Warning System	12	The center shall receive incident information from other transportation management centers to support the early warning system.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Early Warning System	13	The center shall present the alert and advisory information and the status of the actions taken in response to the alert by the other centers to the emergency system operator as received from other system inputs.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Early Warning System	14	The center shall support the entry of alert and advisory information directly from the emergency system operator.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Evacuation Support	1	The center shall manage inter-agency coordination of evacuation operations, from initial planning through the evacuation process and reentry.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Evacuation Support	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Evacuation Support	3	The center shall provide an interface to the emergency system operator to enter evacuation plans and procedures and present the operator with other agencies' plans.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Evacuation Support	4	The center shall coordinate evacuation destinations and shelter needs with shelter providers (e.g., the American Red Cross) in the region.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Evacuation Support	5	The center shall provide evacuation information to traffic, transit, maintenance and construction, rail operations, and other emergency management centers as needed.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Evacuation Support	6	The center shall request resources from transit agencies as needed to support the evacuation.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Evacuation Support	7	The center shall request traffic management agencies to implement special traffic control strategies and to control evacuation traffic, including traffic on local streets and arterials as well as the major evacuation routes.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Evacuation Support	8	The center shall provide traveler information systems with evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary and when it is safe to return.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Evacuation Support	9	The center shall monitor the progress or status of the evacuation once it begins and exchange tactical plans, prepared during the incident, with allied agencies.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Evacuation Support	10	The center shall monitor the progress of the reentry process.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Response Management	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Response Management	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Response Management	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Response Management	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Response Management	5	The center shall track the availability of resources and coordinate resource sharing with allied agency centers including traffic, maintenance, or other emergency centers.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Response Management	6	The center shall allocate the appropriate emergency services, resources, and vehicle (s) to respond to incidents, and shall provide the capability to override the current allocation to suit the special needs of a current incident.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Response Management	7	The center shall receive event scheduling information from Event Promoters.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Response Management	8	The center shall support remote control of field equipment normally under control of the traffic management center including traffic signals, dynamic message signs, gates, and barriers.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Response Management	9	The center shall provide the capability to remotely control and monitor CCTV systems normally operated by a traffic management center.	Planned
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Response Management	10	The center shall provide the capability to request transit resource availability from transit centers for use during disaster and evacuation operations.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Response Management	11	The center shall assimilate the damage assessment of the transit, traffic, rail, maintenance, and other emergency center services and systems to create an overall transportation system status, and disseminate to each of these centers and the traveling public via traveler information providers.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Response Management	12	The center shall provide information to the media concerning the status of an emergency response.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Response Management	13	The center shall provide the capability for digitized map data to act as the background to the information presented to the emergency system operator.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Response Management	14	The center shall provide the capability for center personnel to provide inputs to the management of incidents, disasters and evacuations.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Response Management	15	The center shall collect information about the status of the recovery efforts for the infrastructure during disasters.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Response Management	16	The center shall provide the overall status of infrastructure recovery efforts to traveler information providers and media.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Response Management	17	The center shall provide the capability to communicate information about emergency situations to local population through the Emergency Telecommunications System.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Emergency Response Management	18	The center shall provide the capability to identify neighborhoods and businesses that should be informed of an emergency situation based on information collected about incidents including their severity, impacted locations, and recovery schedule.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Incident Command	1	The center shall provide tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders to support local management of an incident.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Incident Command	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Incident Command	3	The center shall track and maintain resource information and action plans pertaining to the incident command.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Incident Command	4	The center shall share incident command information with other public safety agencies including resource deployment status, hazardous material information, rail incident information, evacuation advice as well as traffic, road, and weather conditions.	Existing
Pottawatomie County Sheriff Office / 911 Center	Emergency Management	Incident Command	5	The center shall assess the status of responding emergency vehicles as part of an incident command.	Existing
Riley County 911 Center	Emergency Management	Emergency Call-Taking	1	The center shall support the interface to the Emergency Telecommunications System (e.g. 911 or 7-digit call routing) to receive emergency notification information and provide it to the emergency system operator.	Existing
Riley County 911 Center	Emergency Management	Emergency Call-Taking	2	The center shall receive emergency call information from 911 services and present the possible incident information to the emergency system operator.	Existing
Riley County 911 Center	Emergency Management	Emergency Call-Taking	5	The center shall receive emergency notification information from other public safety agencies and present the possible incident information to the emergency system operator.	Existing
Riley County 911 Center	Emergency Management	Emergency Call-Taking	6	The center shall receive emergency notification information from public transit systems and present the possible incident information to the emergency system operator.	Existing
Riley County 911 Center	Emergency Management	Emergency Call-Taking	7	The center shall coordinate, correlate, and verify all emergency inputs, including those identified based on external calls and internal analysis of security sensor and surveillance data, and assign each a level of confidence.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Riley County 911 Center	Emergency Management	Emergency Call-Taking	8	The center shall send a request for remote control of CCTV systems from a traffic management center in order to verify the reported incident.	Planned
Riley County 911 Center	Emergency Management	Emergency Call-Taking	9	The center shall forward the verified emergency information to the responding agency based on the location and nature of the emergency.	Existing
Riley County 911 Center	Emergency Management	Emergency Call-Taking	10	The center shall update the incident information log once the emergency system operator has verified the incident.	Existing
Riley County 911 Center	Emergency Management	Emergency Call-Taking	11	The center shall provide the capability for digitized map data to act as the background to the emergency information presented to the emergency system operator.	Existing
Riley County 911 Center	Emergency Management	Emergency Dispatch	1	The center shall dispatch emergency vehicles to respond to verified emergencies under center personnel control.	Existing
Riley County 911 Center	Emergency Management	Emergency Dispatch	2	The center shall store the current status of all emergency vehicles available for dispatch and those that have been dispatched.	Existing
Riley County 911 Center	Emergency Management	Emergency Dispatch	3	The center shall relay location and incident details to the responding vehicles.	Existing
Riley County 911 Center	Emergency Management	Emergency Dispatch	4	The center shall track the location and status of emergency vehicles responding to an emergency based on information from the emergency vehicle.	Existing
Riley County 911 Center	Emergency Management	Emergency Dispatch	5	The center shall store and maintain the emergency service responses in an action log.	Existing
Riley County 911 Center	Emergency Management	Emergency Dispatch	6	The center shall provide the capability for digitized map data to act as the background to the information presented to the emergency system operator.	Existing
Riley County 911 Center	Emergency Management	Emergency Dispatch	7	The center shall receive traffic images to support dispatch of emergency vehicles.	Planned
Riley County 911 Center	Emergency Management	Emergency Dispatch	8	The center shall provide the capability to request remote control of traffic surveillance devices	Planned
Riley County 911 Center	Emergency Management	Emergency Dispatch	9	The center shall coordinate response to incidents with other Emergency Management centers to ensure appropriate resources are dispatched and utilized.	Existing
Riley County 911 Center	Emergency Management	Emergency Early Warning System	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Riley County 911 Center	Emergency Management	Emergency Early Warning System	2	The center shall provide the capability to correlate alerts and advisories, incident information, and security sensor and surveillance data.	Existing
Riley County 911 Center	Emergency Management	Emergency Early Warning System	3	The center shall broadcast wide-area alerts and advisories to traffic management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Riley County 911 Center	Emergency Management	Emergency Early Warning System	4	The center shall broadcast wide-area alerts and advisories to transit management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Riley County 911 Center	Emergency Management	Emergency Early Warning System	5	The center shall broadcast wide-area alerts and advisories to toll administration centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Riley County 911 Center	Emergency Management	Emergency Early Warning System	6	The center shall broadcast wide-area alerts and advisories to traveler information service providers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Riley County 911 Center	Emergency Management	Emergency Early Warning System	7	The center shall broadcast wide-area alerts and advisories to maintenance centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Riley County 911 Center	Emergency Management	Emergency Early Warning System	8	The center shall broadcast wide-area alerts and advisories to other emergency management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Riley County 911 Center	Emergency Management	Emergency Early Warning System	10	The center shall process status information from each of the centers that have been sent the wide-area alert.	Existing
Riley County 911 Center	Emergency Management	Emergency Early Warning System	11	The center shall coordinate the broadcast of wide-area alerts and advisories with other emergency management centers.	Existing
Riley County 911 Center	Emergency Management	Emergency Early Warning System	12	The center shall receive incident information from other transportation management centers to support the early warning system.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Riley County 911 Center	Emergency Management	Emergency Early Warning System	13	The center shall present the alert and advisory information and the status of the actions taken in response to the alert by the other centers to the emergency system operator as received from other system inputs.	Existing
Riley County 911 Center	Emergency Management	Emergency Early Warning System	14	The center shall support the entry of alert and advisory information directly from the emergency system operator.	Existing
Riley County 911 Center	Emergency Management	Emergency Evacuation Support	1	The center shall manage inter-agency coordination of evacuation operations, from initial planning through the evacuation process and reentry.	Existing
Riley County 911 Center	Emergency Management	Emergency Evacuation Support	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Existing
Riley County 911 Center	Emergency Management	Emergency Evacuation Support	3	The center shall provide an interface to the emergency system operator to enter evacuation plans and procedures and present the operator with other agencies' plans.	Existing
Riley County 911 Center	Emergency Management	Emergency Evacuation Support	4	The center shall coordinate evacuation destinations and shelter needs with shelter providers (e.g., the American Red Cross) in the region.	Existing
Riley County 911 Center	Emergency Management	Emergency Evacuation Support	5	The center shall provide evacuation information to traffic, transit, maintenance and construction, rail operations, and other emergency management centers as needed.	Existing
Riley County 911 Center	Emergency Management	Emergency Evacuation Support	6	The center shall request resources from transit agencies as needed to support the evacuation.	Existing
Riley County 911 Center	Emergency Management	Emergency Evacuation Support	7	The center shall request traffic management agencies to implement special traffic control strategies and to control evacuation traffic, including traffic on local streets and arterials as well as the major evacuation routes.	Existing
Riley County 911 Center	Emergency Management	Emergency Evacuation Support	8	The center shall provide traveler information systems with evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary and when it is safe to return.	Existing
Riley County 911 Center	Emergency Management	Emergency Evacuation Support	9	The center shall monitor the progress or status of the evacuation once it begins and exchange tactical plans, prepared during the incident, with allied agencies.	Existing
Riley County 911 Center	Emergency Management	Emergency Evacuation Support	10	The center shall monitor the progress of the reentry process.	Existing
Riley County 911 Center	Emergency Management	Emergency Response Management	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Existing
Riley County 911 Center	Emergency Management	Emergency Response Management	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Riley County 911 Center	Emergency Management	Emergency Response Management	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Existing
Riley County 911 Center	Emergency Management	Emergency Response Management	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Existing
Riley County 911 Center	Emergency Management	Emergency Response Management	5	The center shall track the availability of resources and coordinate resource sharing with allied agency centers including traffic, maintenance, or other emergency centers.	Existing
Riley County 911 Center	Emergency Management	Emergency Response Management	6	The center shall allocate the appropriate emergency services, resources, and vehicle (s) to respond to incidents, and shall provide the capability to override the current allocation to suit the special needs of a current incident.	Existing
Riley County 911 Center	Emergency Management	Emergency Response Management	7	The center shall receive event scheduling information from Event Promoters.	Existing
Riley County 911 Center	Emergency Management	Emergency Response Management	9	The center shall provide the capability to remotely control and monitor CCTV systems normally operated by a traffic management center.	Planned
Riley County 911 Center	Emergency Management	Emergency Response Management	10	The center shall provide the capability to request transit resource availability from transit centers for use during disaster and evacuation operations.	Existing
Riley County 911 Center	Emergency Management	Emergency Response Management	11	The center shall assimilate the damage assessment of the transit, traffic, rail, maintenance, and other emergency center services and systems to create an overall transportation system status, and disseminate to each of these centers and the traveling public via traveler information providers.	Existing
Riley County 911 Center	Emergency Management	Emergency Response Management	12	The center shall provide information to the media concerning the status of an emergency response.	Existing
Riley County 911 Center	Emergency Management	Emergency Response Management	13	The center shall provide the capability for digitized map data to act as the background to the information presented to the emergency system operator.	Existing
Riley County 911 Center	Emergency Management	Emergency Response Management	14	The center shall provide the capability for center personnel to provide inputs to the management of incidents, disasters and evacuations.	Existing
Riley County 911 Center	Emergency Management	Emergency Response Management	15	The center shall collect information about the status of the recovery efforts for the infrastructure during disasters.	Existing
Riley County 911 Center	Emergency Management	Emergency Response Management	16	The center shall provide the overall status of infrastructure recovery efforts to traveler information providers and media.	Existing
Riley County 911 Center	Emergency Management	Emergency Response Management	17	The center shall provide the capability to communicate information about emergency situations to local population through the Emergency Telecommunications System.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Riley County 911 Center	Emergency Management	Emergency Response Management	18	The center shall provide the capability to identify neighborhoods and businesses that should be informed of an emergency situation based on information collected about incidents including their severity, impacted locations, and recovery schedule.	Existing
Riley County 911 Center	Emergency Management	Incident Command	1	The center shall provide tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders to support local management of an incident.	Existing
Riley County 911 Center	Emergency Management	Incident Command	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Existing
Riley County 911 Center	Emergency Management	Incident Command	3	The center shall track and maintain resource information and action plans pertaining to the incident command.	Existing
Riley County 911 Center	Emergency Management	Incident Command	4	The center shall share incident command information with other public safety agencies including resource deployment status, hazardous material information, rail incident information, evacuation advice as well as traffic, road, and weather conditions.	Existing
Riley County 911 Center	Emergency Management	Incident Command	5	The center shall assess the status of responding emergency vehicles as part of an incident command.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Early Warning System	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Early Warning System	2	The center shall provide the capability to correlate alerts and advisories, incident information, and security sensor and surveillance data.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Early Warning System	3	The center shall broadcast wide-area alerts and advisories to traffic management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Early Warning System	4	The center shall broadcast wide-area alerts and advisories to transit management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Riley County Emergency Operations Center	Emergency Management	Emergency Early Warning System	6	The center shall broadcast wide-area alerts and advisories to traveler information service providers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Early Warning System	7	The center shall broadcast wide-area alerts and advisories to maintenance centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Early Warning System	8	The center shall broadcast wide-area alerts and advisories to other emergency management centers for emergency situations such as severe weather events, civil emergencies, child abduction (AMBER alert system), military activities, and other situations that pose a threat to life and property.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Early Warning System	10	The center shall process status information from each of the centers that have been sent the wide-area alert.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Early Warning System	11	The center shall coordinate the broadcast of wide-area alerts and advisories with other emergency management centers.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Early Warning System	12	The center shall receive incident information from other transportation management centers to support the early warning system.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Early Warning System	13	The center shall present the alert and advisory information and the status of the actions taken in response to the alert by the other centers to the emergency system operator as received from other system inputs.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Early Warning System	14	The center shall support the entry of alert and advisory information directly from the emergency system operator.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	1	The center shall manage inter-agency coordination of evacuation operations, from initial planning through the evacuation process and reentry.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	3	The center shall provide an interface to the emergency system operator to enter evacuation plans and procedures and present the operator with other agencies' plans.	Existing

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Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Riley County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	4	The center shall coordinate evacuation destinations and shelter needs with shelter providers (e.g., the American Red Cross) in the region.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	5	The center shall provide evacuation information to traffic, transit, maintenance and construction, rail operations, and other emergency management centers as needed.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	6	The center shall request resources from transit agencies as needed to support the evacuation.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	7	The center shall request traffic management agencies to implement special traffic control strategies and to control evacuation traffic, including traffic on local streets and arterials as well as the major evacuation routes.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	8	The center shall provide traveler information systems with evacuation guidance including basic information to assist potential evacuees in determining whether evacuation is necessary and when it is safe to return.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	9	The center shall monitor the progress or status of the evacuation once it begins and exchange tactical plans, prepared during the incident, with allied agencies.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Evacuation Support	10	The center shall monitor the progress of the reentry process.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Response Management	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Response Management	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Response Management	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Response Management	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Response Management	5	The center shall track the availability of resources and coordinate resource sharing with allied agency centers including traffic, maintenance, or other emergency centers.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Riley County Emergency Operations Center	Emergency Management	Emergency Response Management	6	The center shall allocate the appropriate emergency services, resources, and vehicle (s) to respond to incidents, and shall provide the capability to override the current allocation to suit the special needs of a current incident.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Response Management	9	The center shall provide the capability to remotely control and monitor CCTV systems normally operated by a traffic management center.	Planned
Riley County Emergency Operations Center	Emergency Management	Emergency Response Management	10	The center shall provide the capability to request transit resource availability from transit centers for use during disaster and evacuation operations.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Response Management	11	The center shall assimilate the damage assessment of the transit, traffic, rail, maintenance, and other emergency center services and systems to create an overall transportation system status, and disseminate to each of these centers and the traveling public via traveler information providers.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Response Management	12	The center shall provide information to the media concerning the status of an emergency response.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Response Management	13	The center shall provide the capability for digitized map data to act as the background to the information presented to the emergency system operator.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Response Management	14	The center shall provide the capability for center personnel to provide inputs to the management of incidents, disasters and evacuations.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Response Management	15	The center shall collect information about the status of the recovery efforts for the infrastructure during disasters.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Response Management	16	The center shall provide the overall status of infrastructure recovery efforts to traveler information providers and media.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Response Management	17	The center shall provide the capability to communicate information about emergency situations to local population through the Emergency Telecommunications System.	Existing
Riley County Emergency Operations Center	Emergency Management	Emergency Response Management	18	The center shall provide the capability to identify neighborhoods and businesses that should be informed of an emergency situation based on information collected about incidents including their severity, impacted locations, and recovery schedule.	Existing
Riley County Emergency Operations Center	Emergency Management	Incident Command	1	The center shall provide tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders to support local management of an incident.	Existing

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Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Riley County Emergency Operations Center	Emergency Management	Incident Command	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Existing
Riley County Emergency Operations Center	Emergency Management	Incident Command	3	The center shall track and maintain resource information and action plans pertaining to the incident command.	Existing
Riley County Emergency Operations Center	Emergency Management	Incident Command	4	The center shall share incident command information with other public safety agencies including resource deployment status, hazardous material information, rail incident information, evacuation advice as well as traffic, road, and weather conditions.	Existing
Riley County Emergency Operations Center	Emergency Management	Incident Command	5	The center shall assess the status of responding emergency vehicles as part of an incident command.	Existing
Riley County Emergency Vehicles	Emergency Vehicle	On-board EV En Route Support	1	The emergency vehicle, including roadway service patrols, shall track its current location.	Existing
Riley County Emergency Vehicles	Emergency Vehicle	On-board EV En Route Support	2	The emergency vehicle, including roadway service patrols, shall send the vehicle's location and operational data to the center for emergency management and dispatch.	Existing
Riley County Emergency Vehicles	Emergency Vehicle	On-board EV En Route Support	3	The emergency vehicle, including roadway service patrols, shall receive incident details and a suggested route when dispatched to a scene.	Existing
Riley County Emergency Vehicles	Emergency Vehicle	On-board EV En Route Support	4	The emergency vehicle shall send the current en route status (including estimated time of arrival) and requests for emergency dispatch updates.	Existing
Riley County Emergency Vehicles	Emergency Vehicle	On-board EV En Route Support	5	The emergency vehicle shall send requests to traffic signal control equipment at the roadside to preempt the signal.	Existing
Riley County Emergency Vehicles	Emergency Vehicle	On-board EV En Route Support	6	The emergency vehicle shall provide the personnel on-board with dispatch information, including incident type and location, and forward an acknowledgment from personnel to the center that the vehicle is on its way to the incident scene.	Existing
Riley County Fire Department	Emergency Management	Emergency Early Warning System	1	The center shall monitor information from Alerting and Advisory Systems such as the Information Sharing and Analysis Centers (ISACs), the National Infrastructure Protection Center (NIPC), the Homeland Security Advisory System (HSAS), etc. The information may include assessments (general incident and vulnerability awareness information), advisories (identification of threats or recommendations to increase preparedness levels), or alerts (information on imminent or in-progress emergencies).	Existing
Riley County Fire Department	Emergency Management	Emergency Early Warning System	12	The center shall receive incident information from other transportation management centers to support the early warning system.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Riley County Fire Department	Emergency Management	Emergency Early Warning System	13	The center shall present the alert and advisory information and the status of the actions taken in response to the alert by the other centers to the emergency system operator as received from other system inputs.	Existing
Riley County Fire Department	Emergency Management	Emergency Evacuation Support	2	The center shall develop and exchange evacuation plans with allied agencies prior to the occurrence of a disaster.	Existing
Riley County Fire Department	Emergency Management	Emergency Evacuation Support	9	The center shall monitor the progress or status of the evacuation once it begins and exchange tactical plans, prepared during the incident, with allied agencies.	Existing
Riley County Fire Department	Emergency Management	Emergency Evacuation Support	10	The center shall monitor the progress of the reentry process.	Existing
Riley County Fire Department	Emergency Management	Emergency Response Management	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Existing
Riley County Fire Department	Emergency Management	Emergency Response Management	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Existing
Riley County Fire Department	Emergency Management	Emergency Response Management	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Existing
Riley County Fire Department	Emergency Management	Emergency Response Management	4	The center shall develop, coordinate with other agencies, and store emergency response plans.	Existing
Riley County Fire Department	Emergency Management	Emergency Response Management	5	The center shall track the availability of resources and coordinate resource sharing with allied agency centers including traffic, maintenance, or other emergency centers.	Existing
Riley County Fire Department	Emergency Management	Emergency Response Management	6	The center shall allocate the appropriate emergency services, resources, and vehicle (s) to respond to incidents, and shall provide the capability to override the current allocation to suit the special needs of a current incident.	Existing
Riley County Fire Department	Emergency Management	Incident Command	1	The center shall provide tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders to support local management of an incident.	Existing
Riley County Fire Department	Emergency Management	Incident Command	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Existing
Riley County Fire Department	Emergency Management	Incident Command	3	The center shall track and maintain resource information and action plans pertaining to the incident command.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Riley County Fire Department	Emergency Management	Incident Command	4	The center shall share incident command information with other public safety agencies including resource deployment status, hazardous material information, rail incident information, evacuation advice as well as traffic, road, and weather conditions.	Existing
Riley County Fire Department	Emergency Management	Incident Command	5	The center shall assess the status of responding emergency vehicles as part of an incident command.	Existing
Riley County Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Roadway Maintenance and Construction	4	The maintenance and construction vehicle shall respond to dispatch information from the center, presented to the vehicle operator for acknowledgement and returning status.	Existing
Riley County Maintenance and Construction Vehicles	Maintenance and Construction Vehicle	MCV Winter Maintenance	4	The maintenance and construction vehicle shall respond to dispatch information from the center, presented to the vehicle operator for acknowledgement and returning status.	Existing
Riley County Mobile Emergency Command Post	Emergency Management	Emergency Evacuation Support	1	The center shall manage inter-agency coordination of evacuation operations, from initial planning through the evacuation process and reentry.	Existing
Riley County Mobile Emergency Command Post	Emergency Management	Emergency Evacuation Support	3	The center shall provide an interface to the emergency system operator to enter evacuation plans and procedures and present the operator with other agencies' plans.	Existing
Riley County Mobile Emergency Command Post	Emergency Management	Emergency Evacuation Support	4	The center shall coordinate evacuation destinations and shelter needs with shelter providers (e.g., the American Red Cross) in the region.	Existing
Riley County Mobile Emergency Command Post	Emergency Management	Emergency Evacuation Support	5	The center shall provide evacuation information to traffic, transit, maintenance and construction, rail operations, and other emergency management centers as needed.	Existing
Riley County Mobile Emergency Command Post	Emergency Management	Emergency Evacuation Support	6	The center shall request resources from transit agencies as needed to support the evacuation.	Existing
Riley County Mobile Emergency Command Post	Emergency Management	Emergency Evacuation Support	7	The center shall request traffic management agencies to implement special traffic control strategies and to control evacuation traffic, including traffic on local streets and arterials as well as the major evacuation routes.	Planned
Riley County Mobile Emergency Command Post	Emergency Management	Emergency Evacuation Support	9	The center shall monitor the progress or status of the evacuation once it begins and exchange tactical plans, prepared during the incident, with allied agencies.	Existing
Riley County Mobile Emergency Command Post	Emergency Management	Emergency Evacuation Support	10	The center shall monitor the progress of the reentry process.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Riley County Mobile Emergency Command Post	Emergency Management	Emergency Response Management	1	The center shall provide strategic emergency response capabilities provided by an Emergency Operations Center for large-scale incidents and disasters.	Existing
Riley County Mobile Emergency Command Post	Emergency Management	Emergency Response Management	2	The center shall manage coordinated inter-agency responses to and recovery from large-scale emergencies. Such agencies include traffic management, transit, maintenance and construction management, rail operations, and other emergency management agencies.	Existing
Riley County Mobile Emergency Command Post	Emergency Management	Emergency Response Management	3	The center shall provide the capability to implement response plans and track progress through the incident by exchanging incident information and response status with allied agencies.	Existing
Riley County Mobile Emergency Command Post	Emergency Management	Emergency Response Management	9	The center shall provide the capability to remotely control and monitor CCTV systems normally operated by a traffic management center.	Planned
Riley County Mobile Emergency Command Post	Emergency Management	Emergency Response Management	10	The center shall provide the capability to request transit resource availability from transit centers for use during disaster and evacuation operations.	Existing
Riley County Mobile Emergency Command Post	Emergency Management	Emergency Response Management	13	The center shall provide the capability for digitized map data to act as the background to the information presented to the emergency system operator.	Existing
Riley County Mobile Emergency Command Post	Emergency Management	Emergency Response Management	14	The center shall provide the capability for center personnel to provide inputs to the management of incidents, disasters and evacuations.	Existing
Riley County Mobile Emergency Command Post	Emergency Management	Emergency Response Management	15	The center shall collect information about the status of the recovery efforts for the infrastructure during disasters.	Existing
Riley County Mobile Emergency Command Post	Emergency Management	Incident Command	1	The center shall provide tactical decision support, resource coordination, and communications integration for Incident Commands that are established by first responders to support local management of an incident.	Existing
Riley County Mobile Emergency Command Post	Emergency Management	Incident Command	2	The center shall provide incident command communications with public safety, emergency management, transportation, and other allied response agency centers.	Existing
Riley County Mobile Emergency Command Post	Emergency Management	Incident Command	3	The center shall track and maintain resource information and action plans pertaining to the incident command.	Existing
Riley County Mobile Emergency Command Post	Emergency Management	Incident Command	4	The center shall share incident command information with other public safety agencies including resource deployment status, hazardous material information, rail incident information, evacuation advice as well as traffic, road, and weather conditions.	Existing

Element Name	Entity Name	Functional Area	RequirementID	Requirement	Status
Riley County Mobile Emergency Command Post	Emergency Management	Incident Command	5	The center shall assess the status of responding emergency vehicles as part of an incident command.	Existing
Riley County Public Works	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	1	The center shall maintain an interface with asset management systems to track the inventory, restrictions, repair needs and status updates of transportation assets (pavement, bridges, signs, etc.) including location, installation and materials information, vendor/contractor, current maintenance status, standard height, width, and weight restrictions.	Existing
Riley County Public Works	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	2	The center shall respond to requests from emergency management and traffic management centers for hazard removal, field equipment repair, and other roadway maintenance.	Existing
Riley County Public Works	Maintenance and Construction Management	MCM Roadway Maintenance and Construction	4	The center shall provide emergency management and traffic management centers with information about scheduled maintenance and construction work activities including anticipated closures and impact to the roadway, alternate routes, anticipated delays, closure times, and durations.	Planned
Riley County Public Works	Maintenance and Construction Management	MCM Winter Maintenance Management	1	The center shall respond to requests from emergency management and traffic management centers for hazard removal, field equipment repair, and other winter roadway maintenance.	Existing

Appendix C. Interfaces Details

The interfaces of the transportation systems in the Flint Hills Regional ITS Architecture are based on the National ITS Architecture and tailored to reflect the plan for the region. Architecture diagrams display the transportation systems in the Flint Hills Regional ITS Architecture, and more importantly, how these systems are and will be connected with one another so information can be exchanged and transportation services can be coordinated. Stakeholders may use these diagrams to identify integration opportunities. Each system in the region is represented with two types of diagrams, a context diagram and an architecture flow diagram.

A context diagram shows a particular system and all other systems with which it shares information. Interconnects are represented as single lines and indicate information sharing without specifying the type of information being shared or the direction of the information movement.

Following each interconnect context diagram are a series of architecture flow diagrams showing the information (i.e. architecture flows) movement between the various systems. Descriptions of the architecture flows are included at the end of the chapter.

Information about the interfaces of the systems in the region is contained in the Turbo Architecture™ database. Turbo Architecture™ can be used to create tailored interconnect and architecture flow diagrams for any system in the database.

Flint Hills Regional ITS Architecture Context Diagrams

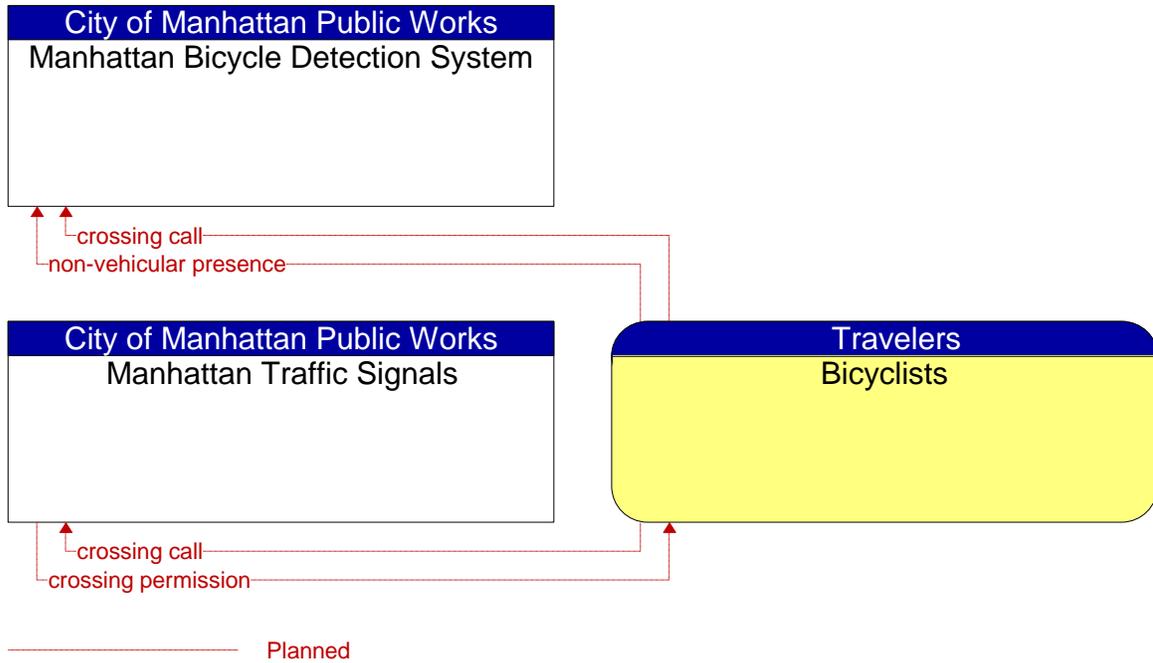


Figure 1: Bicyclists Context Diagram

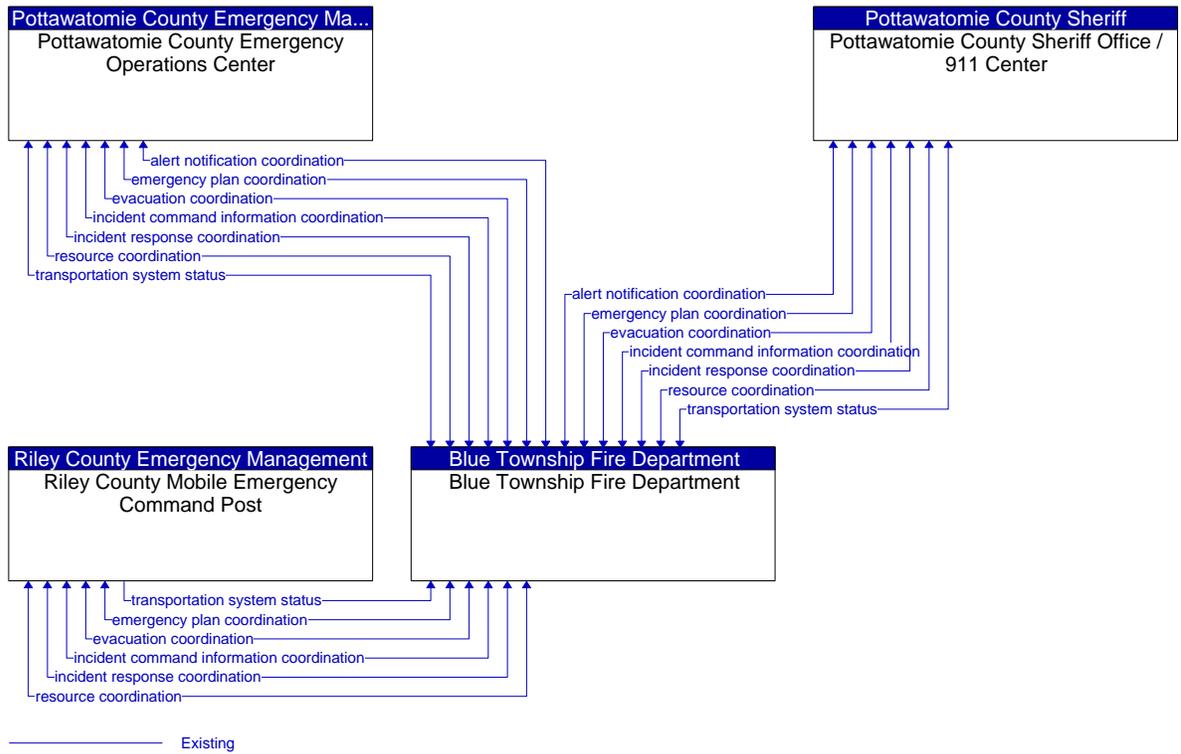


Figure 2: Blue Township Fire Department Context Diagram

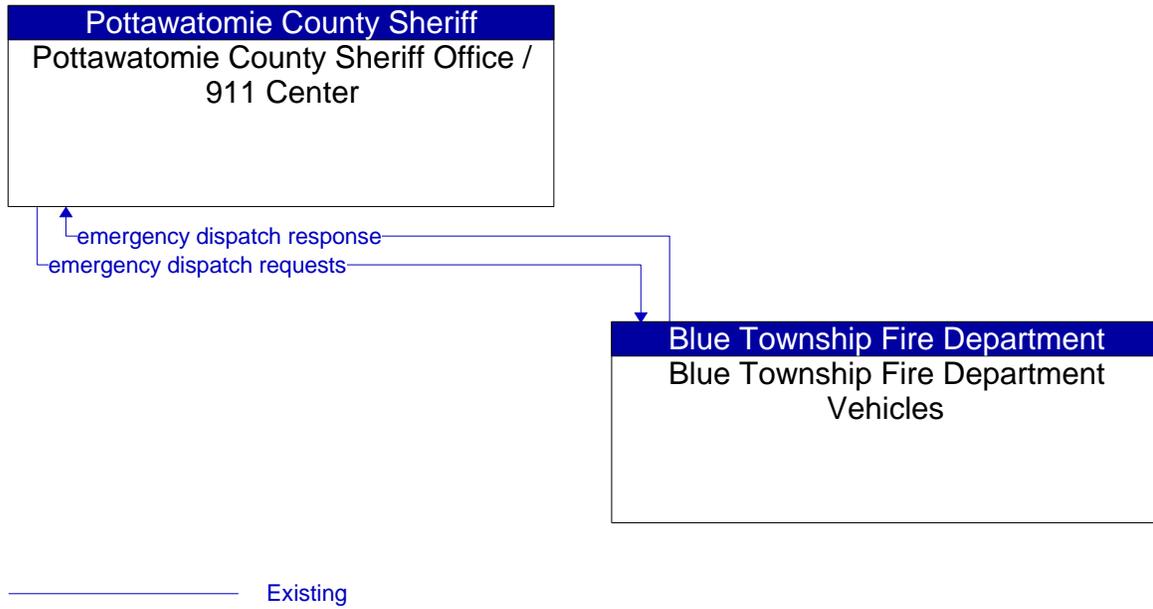


Figure 3: Blue Township Fire Department Vehicles Context Diagram

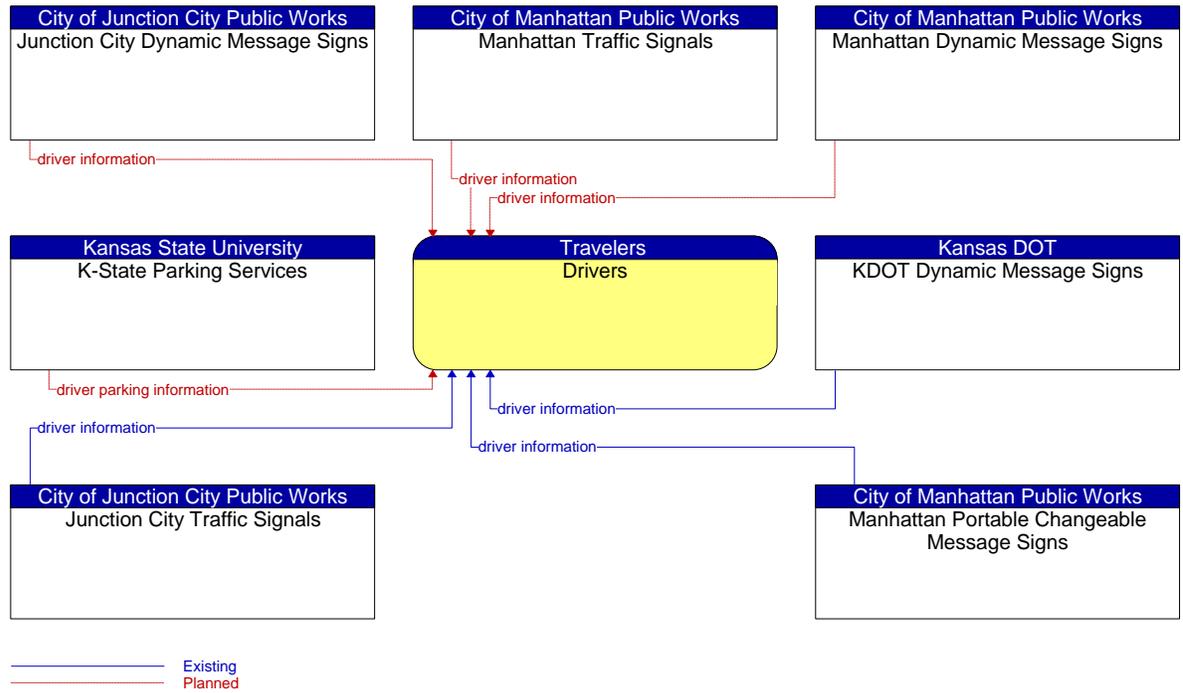


Figure 4: Drivers Context Diagram

Flint Hills Regional ITS Architecture

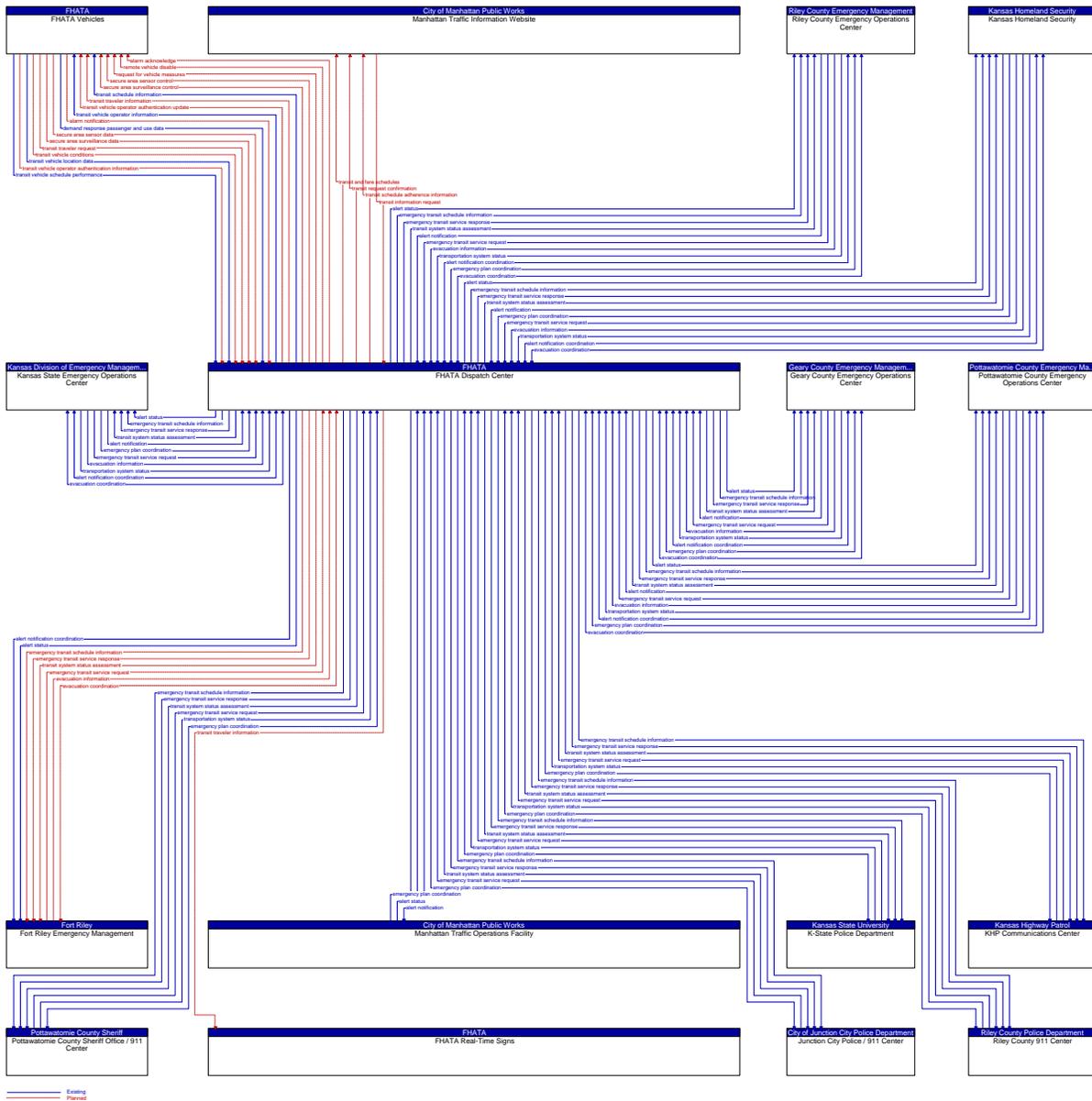


Figure 5: FHATA Dispatch Center Context Diagram

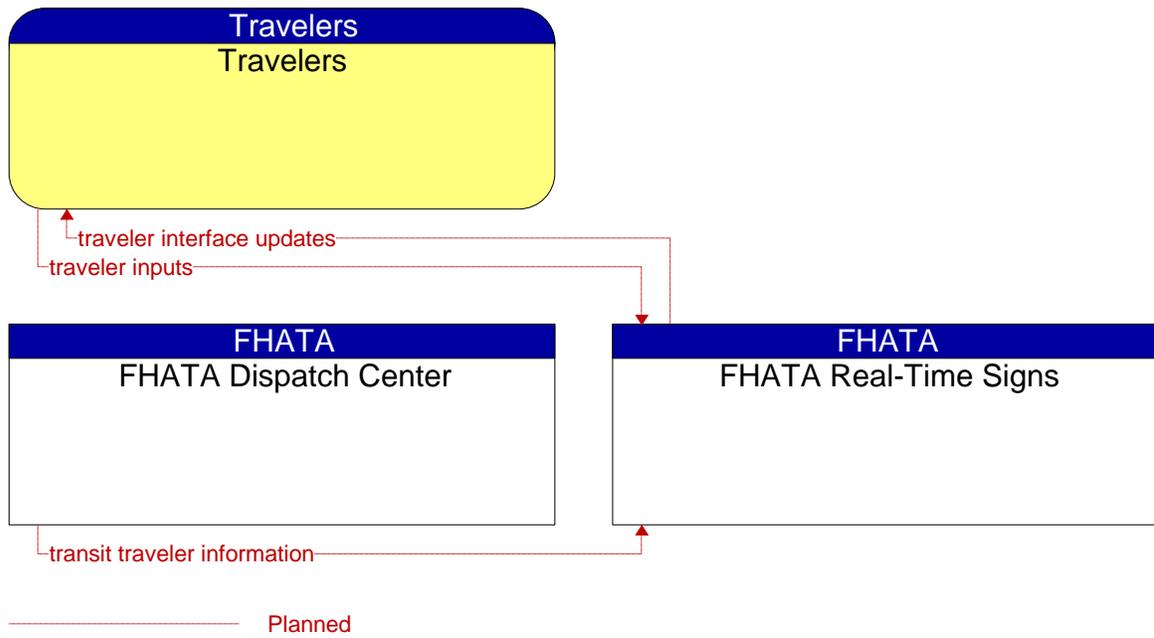


Figure 6: FHATA Real-Time Signs Context Diagram

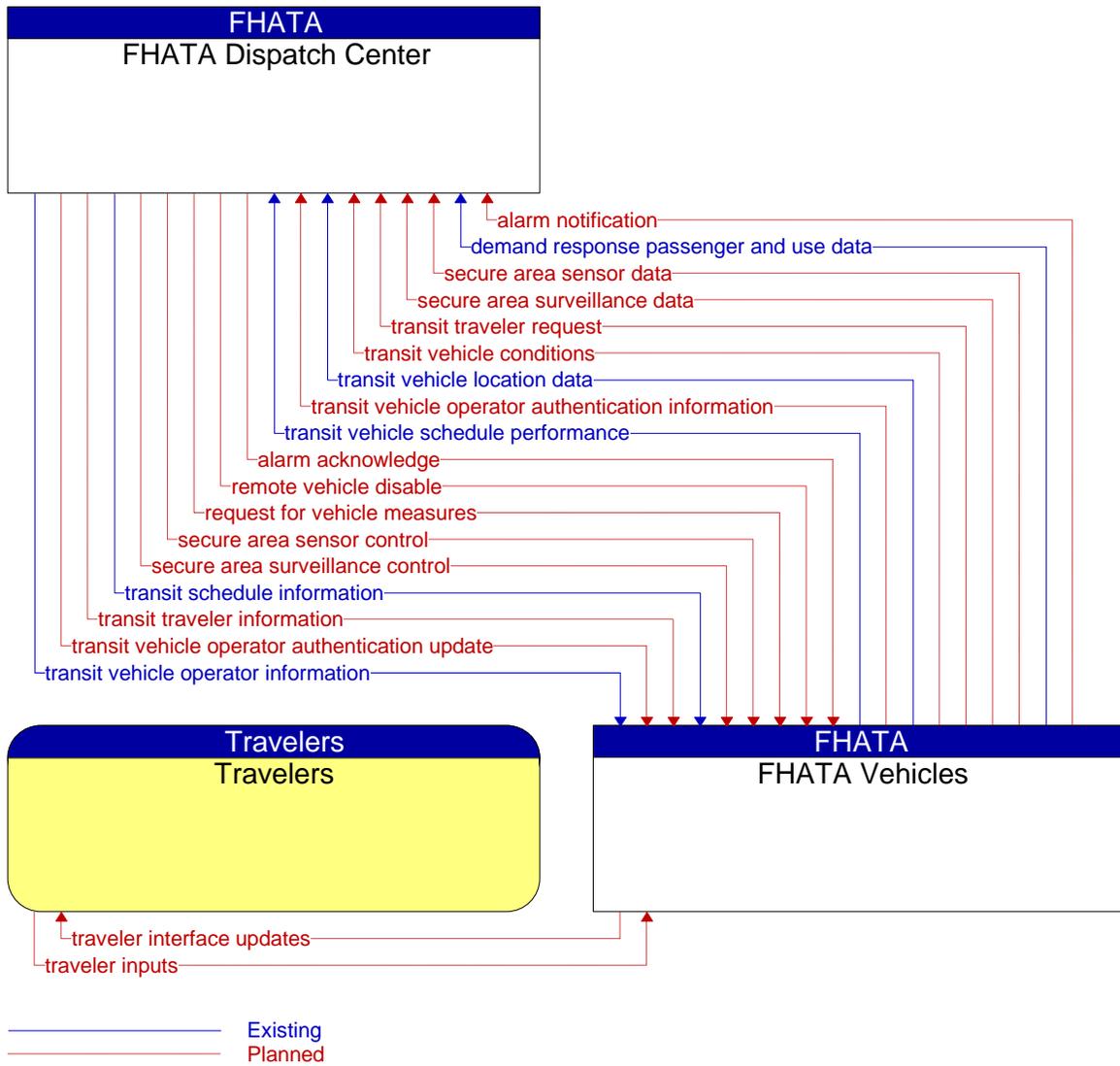


Figure 7: FHATA Vehicles Context Diagram

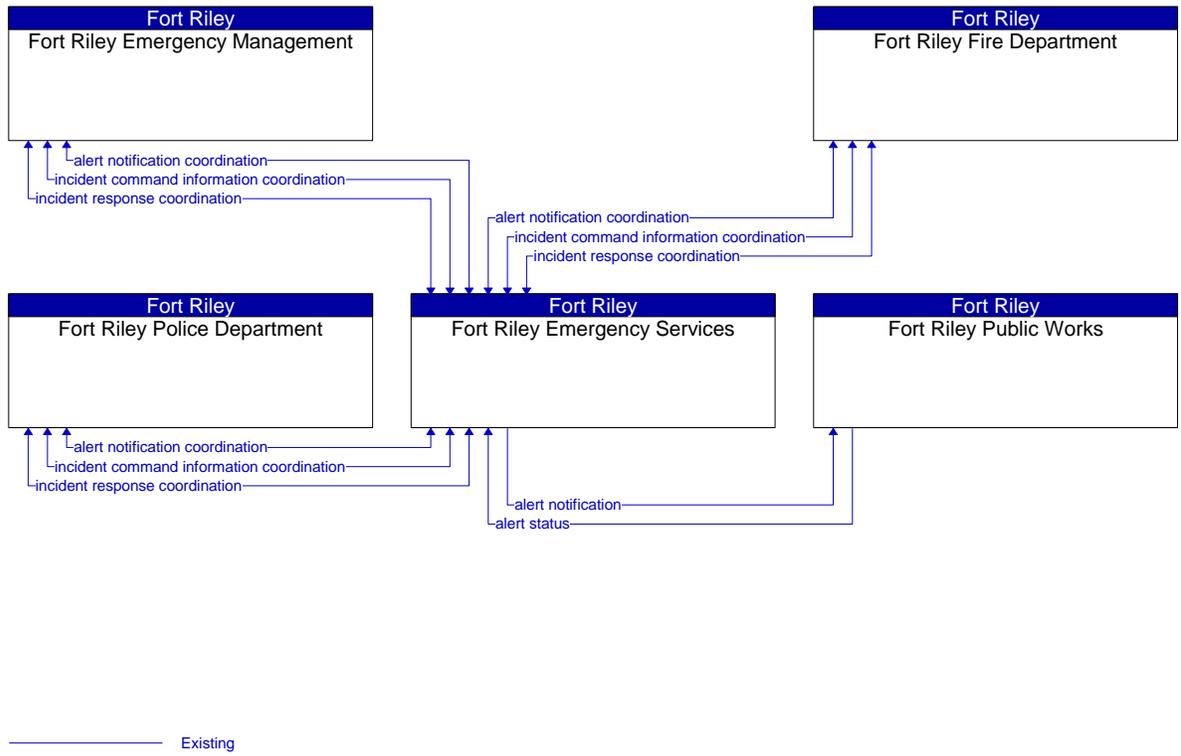


Figure 9: Fort Riley Emergency Services Context Diagram

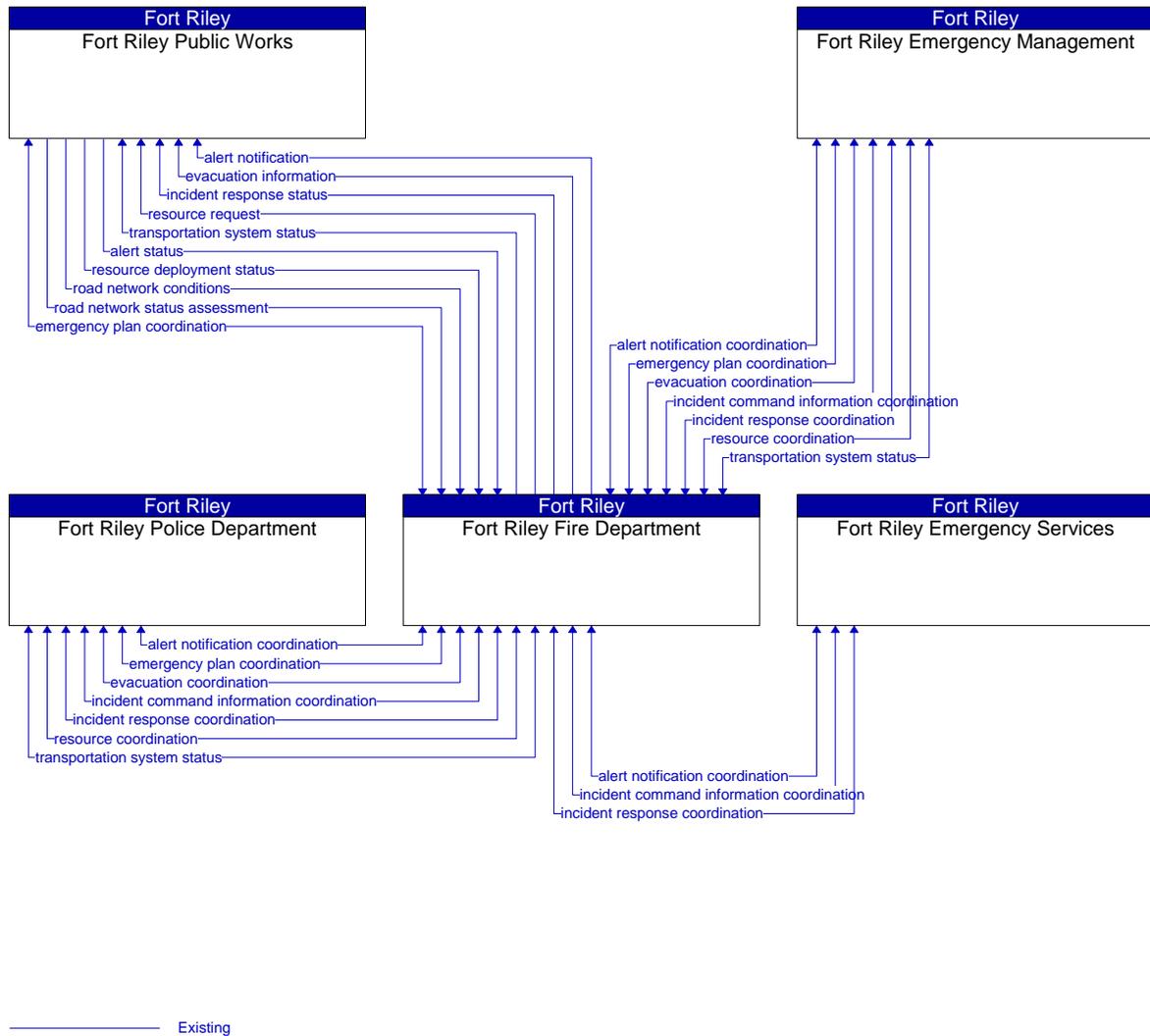


Figure 10: Fort Riley Fire Department Context Diagram

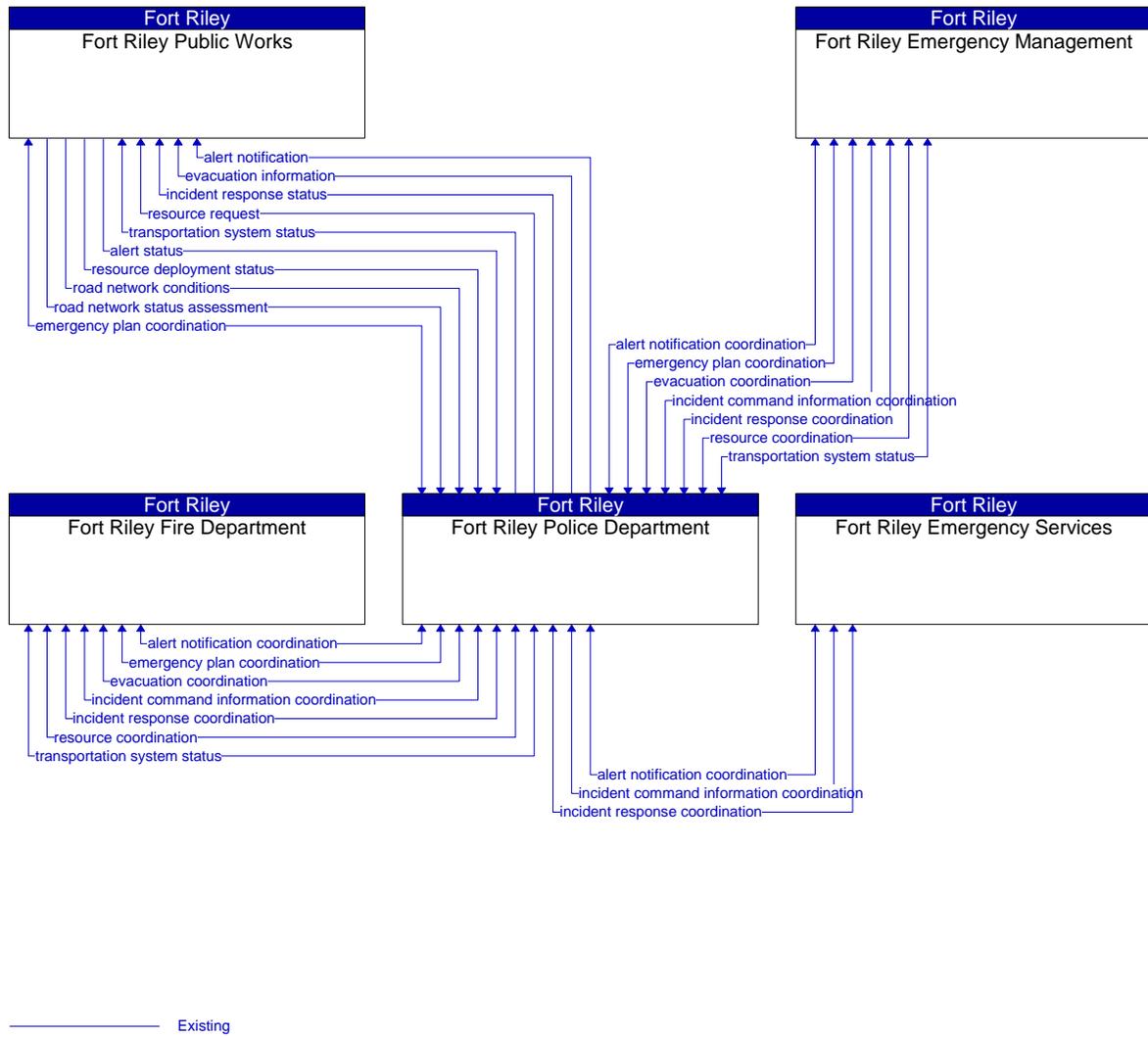


Figure 11: Fort Riley Police Department Context Diagram

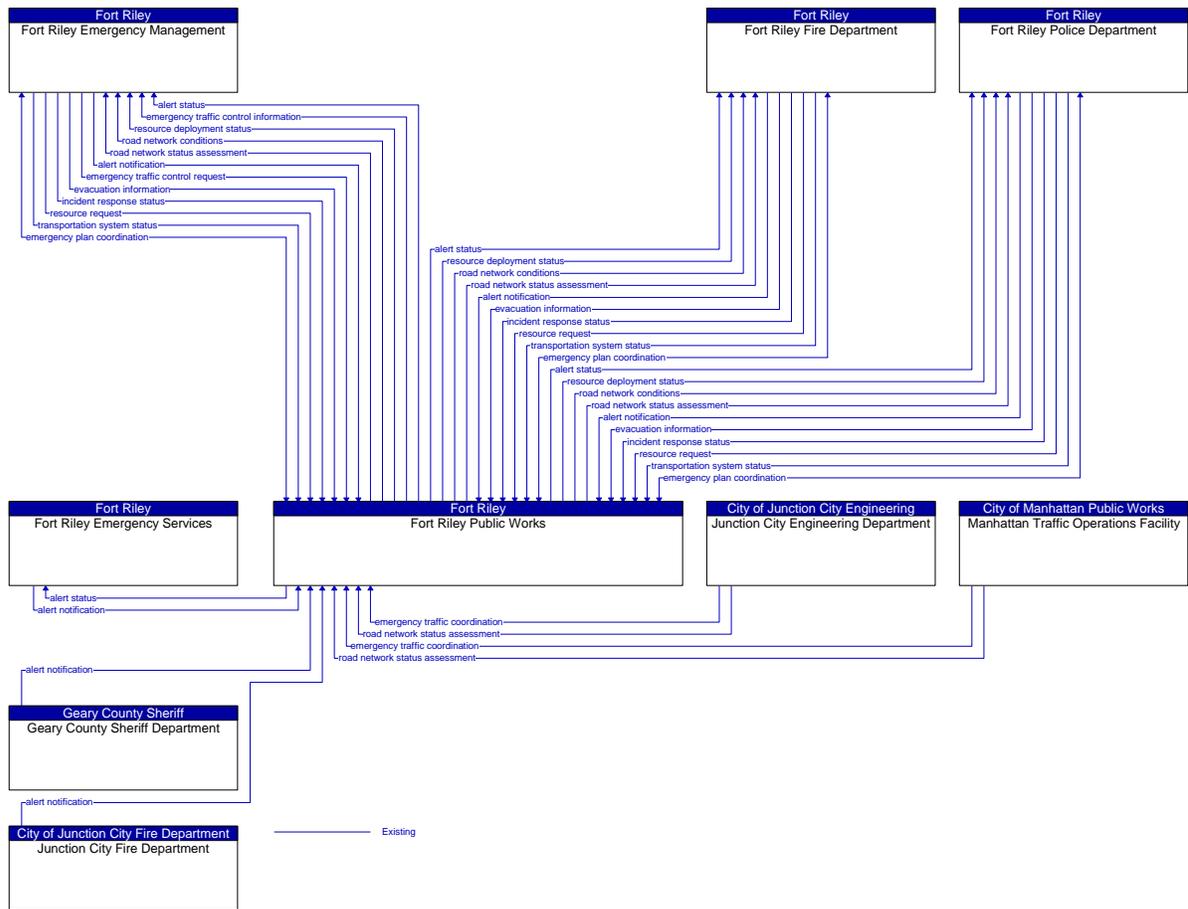


Figure 12: Fort Riley Public Works Context Diagram

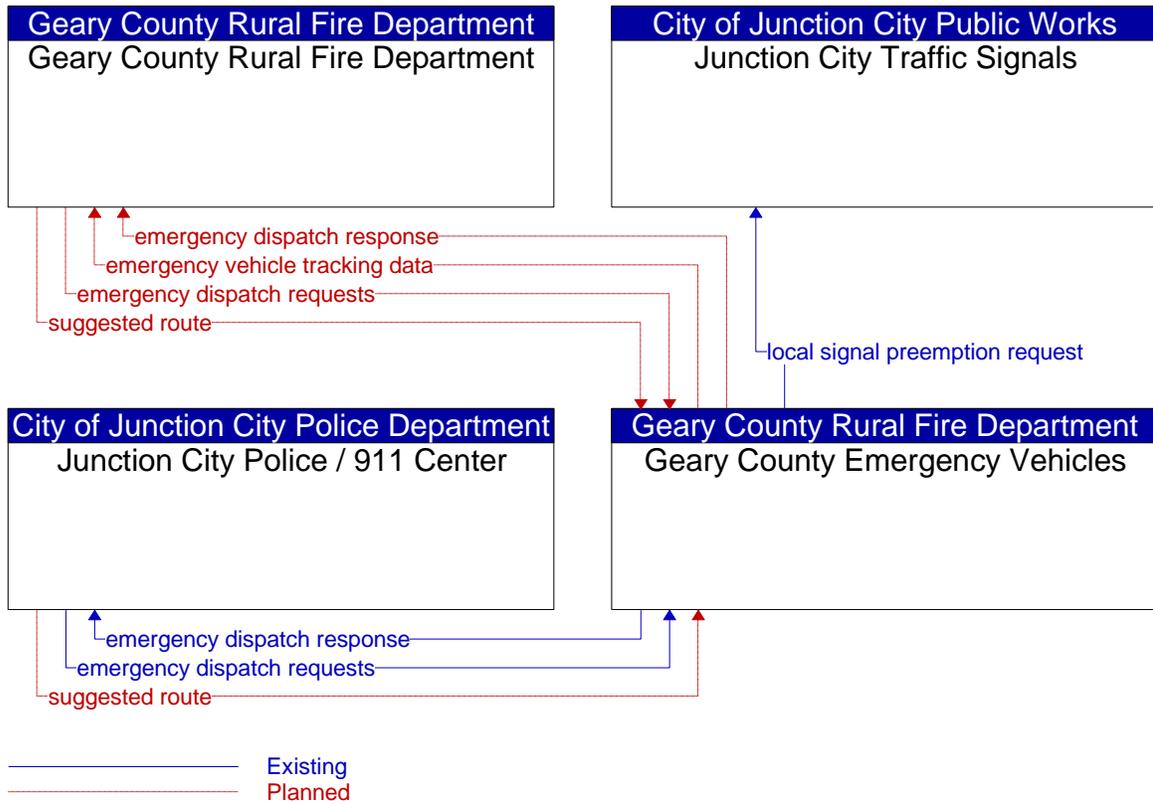


Figure 14: Geary County Emergency Vehicles Context Diagram

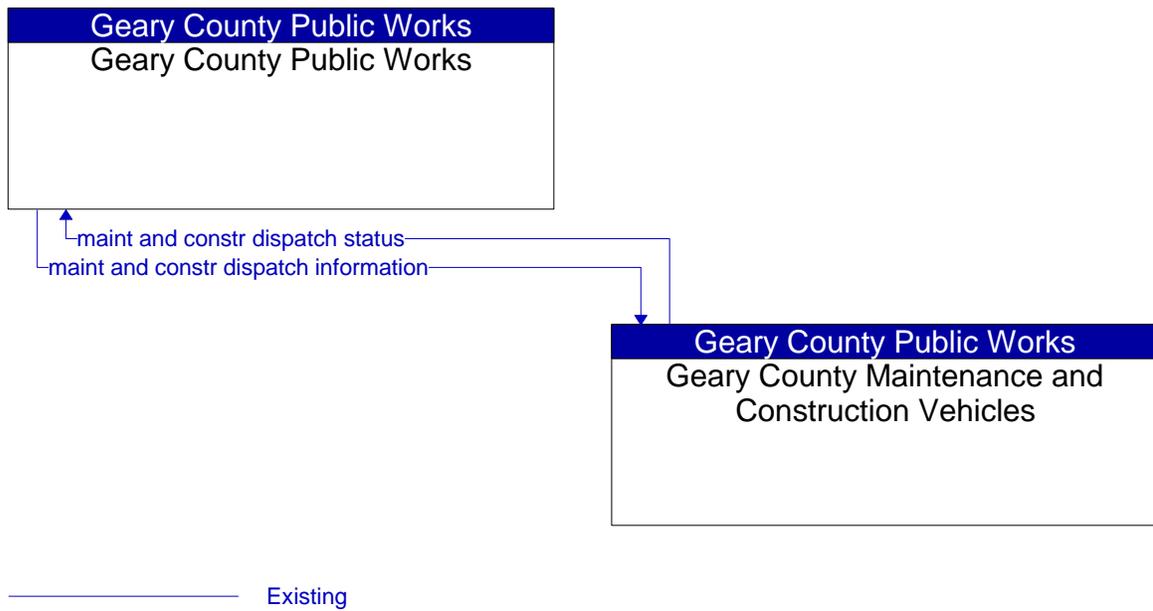


Figure 15: Geary County Maintenance and Construction Vehicles Context Diagram

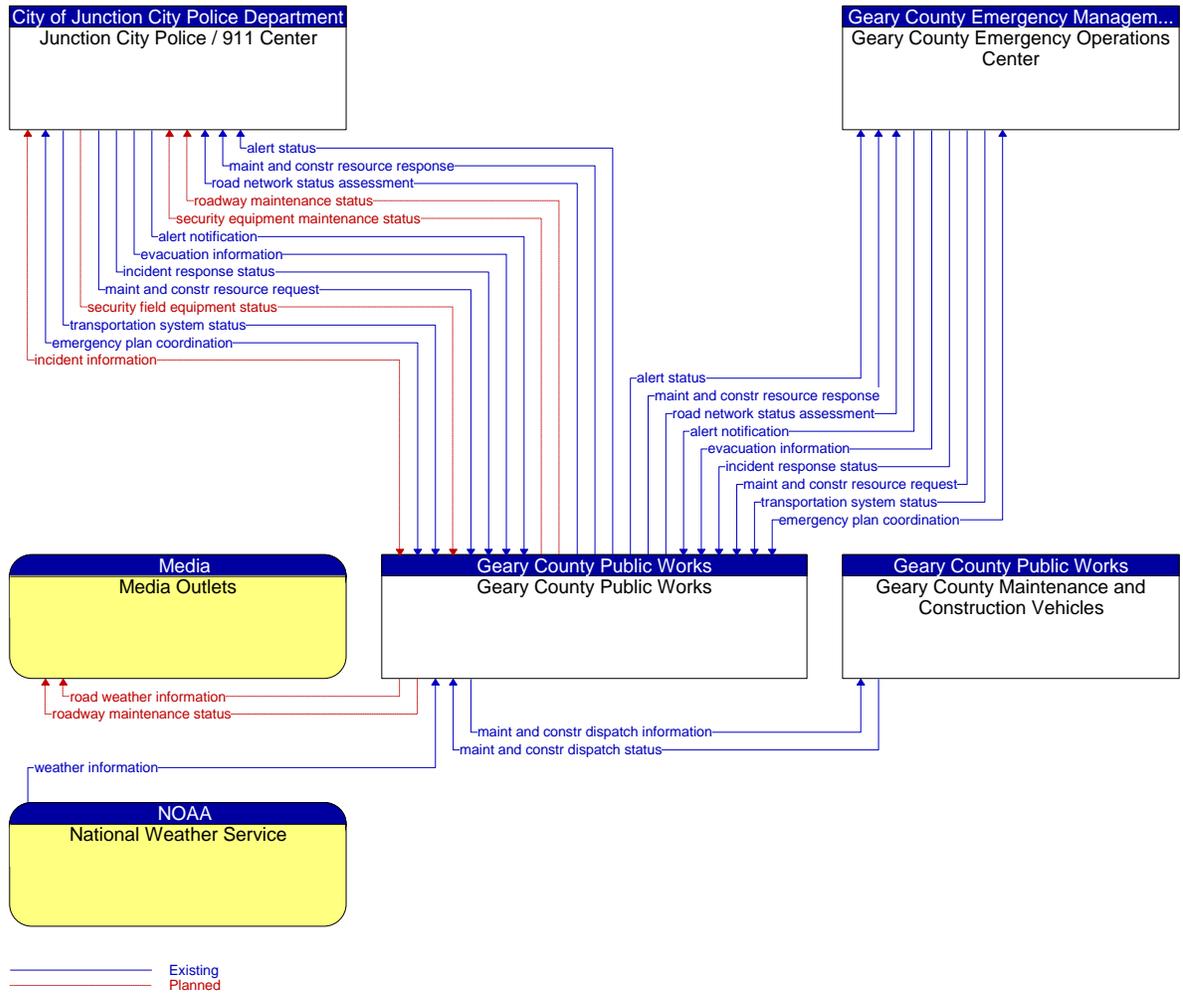


Figure 16: Geary County Public Works Context Diagram

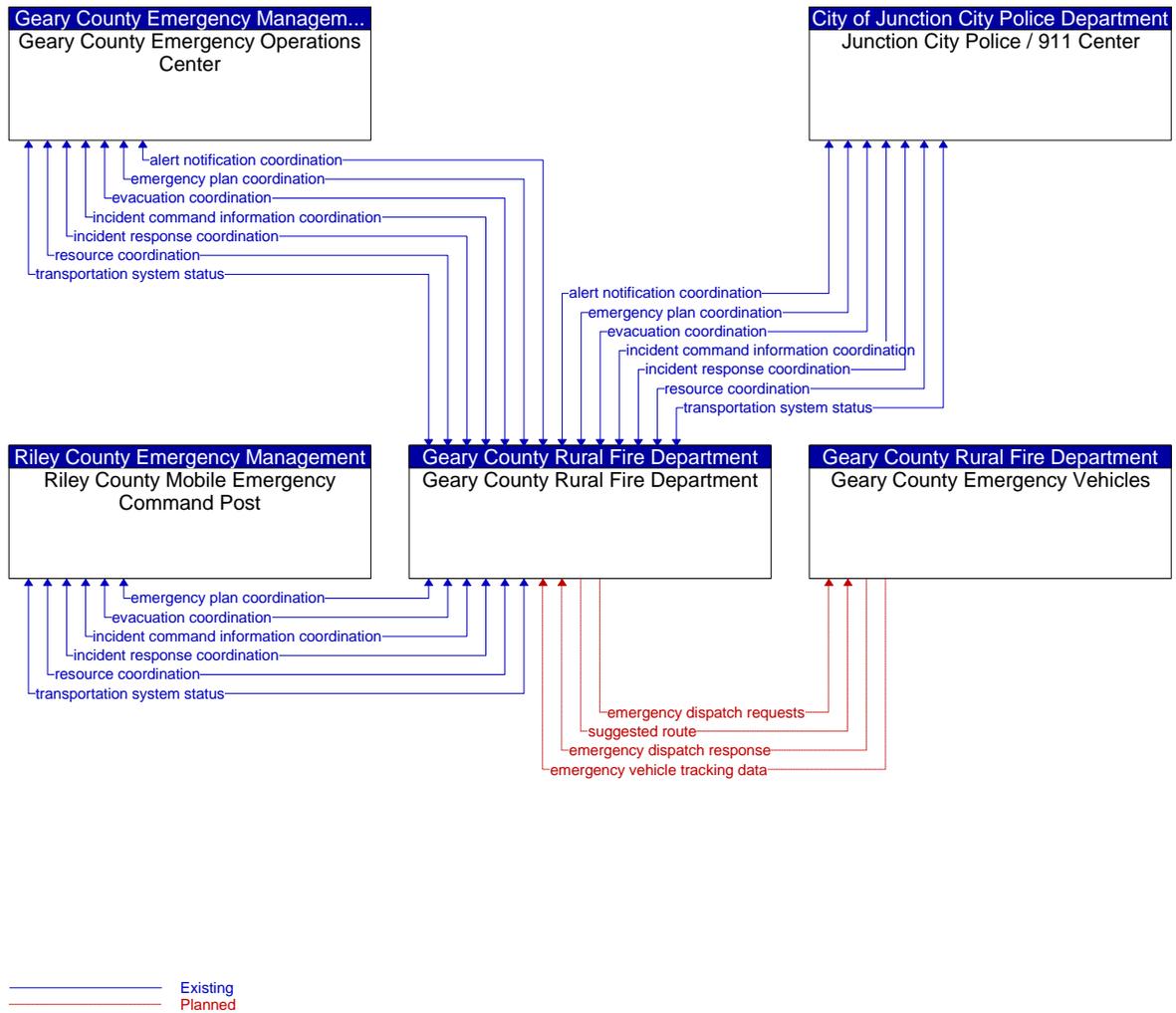


Figure 17: Geary County Rural Fire Department Context Diagram

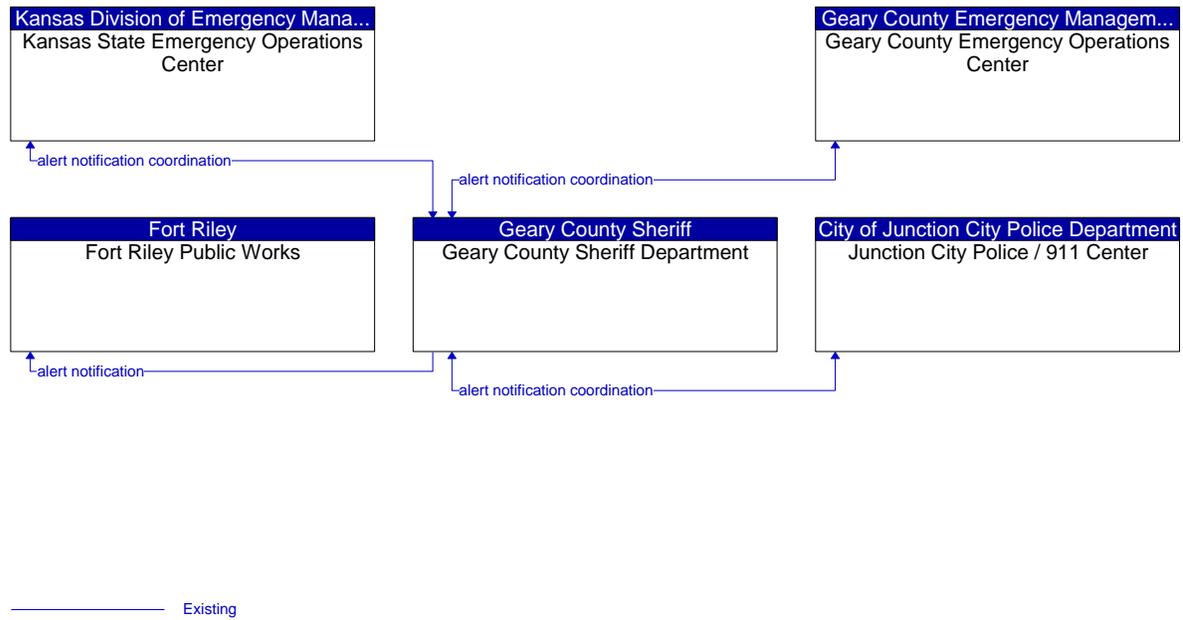


Figure 18: Geary County Sheriff Department Context Diagram

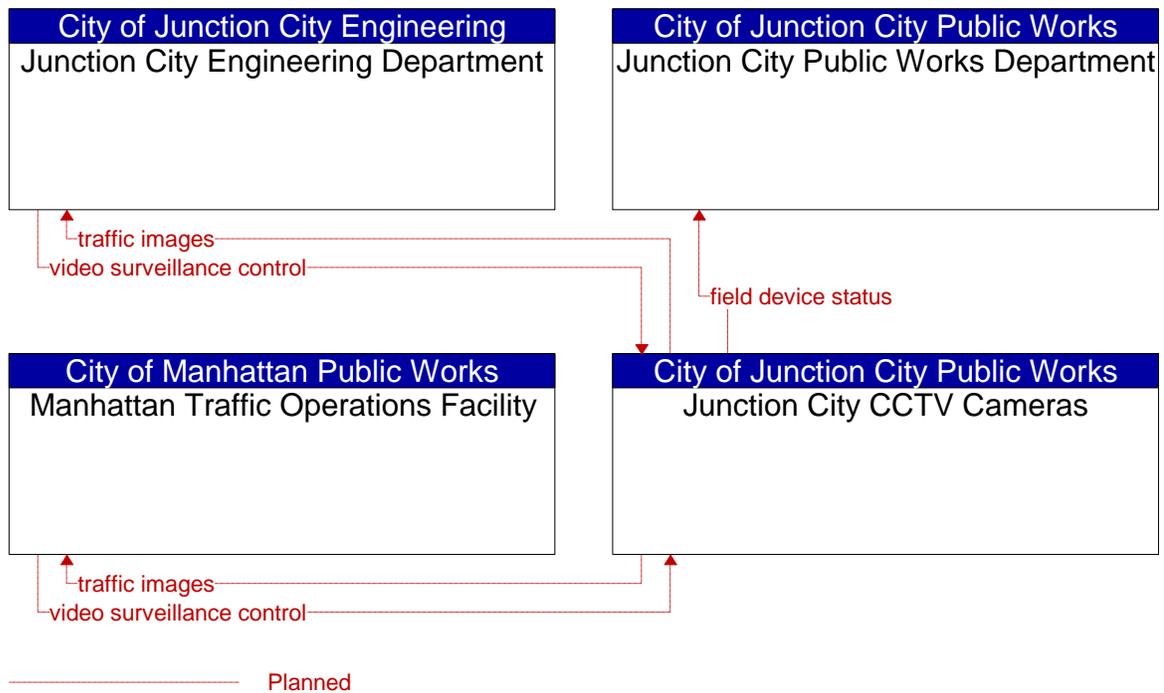


Figure 19: Junction City CCTV Cameras Context Diagram

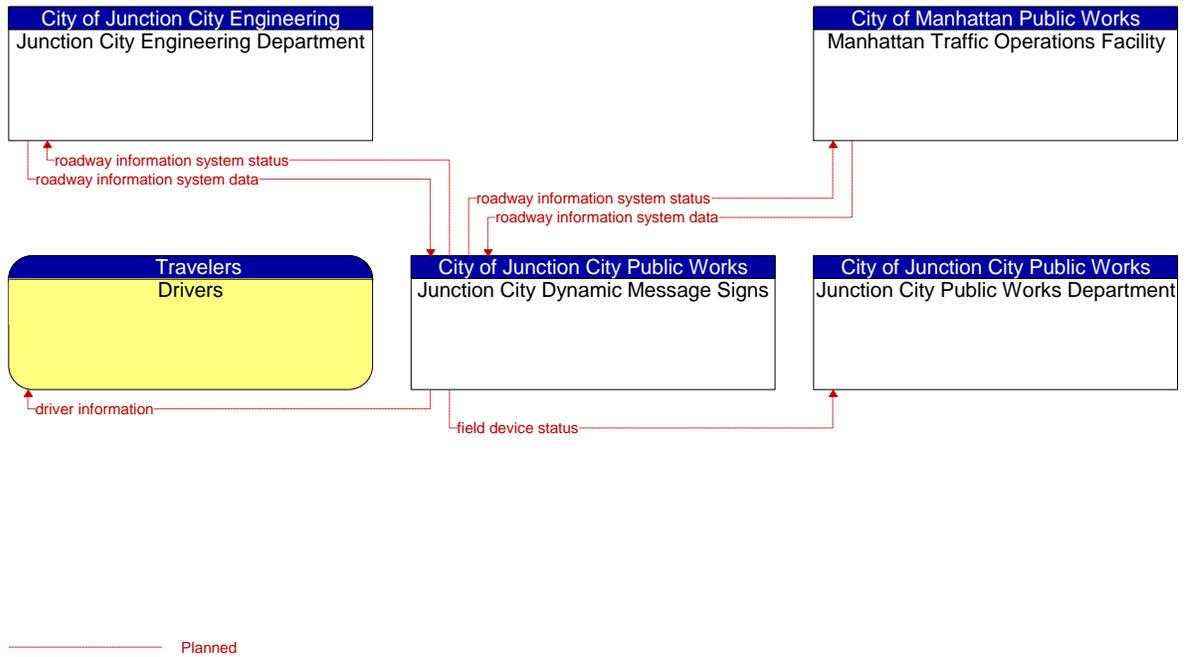


Figure 20: Junction City Dynamic Message Signs Context Diagram

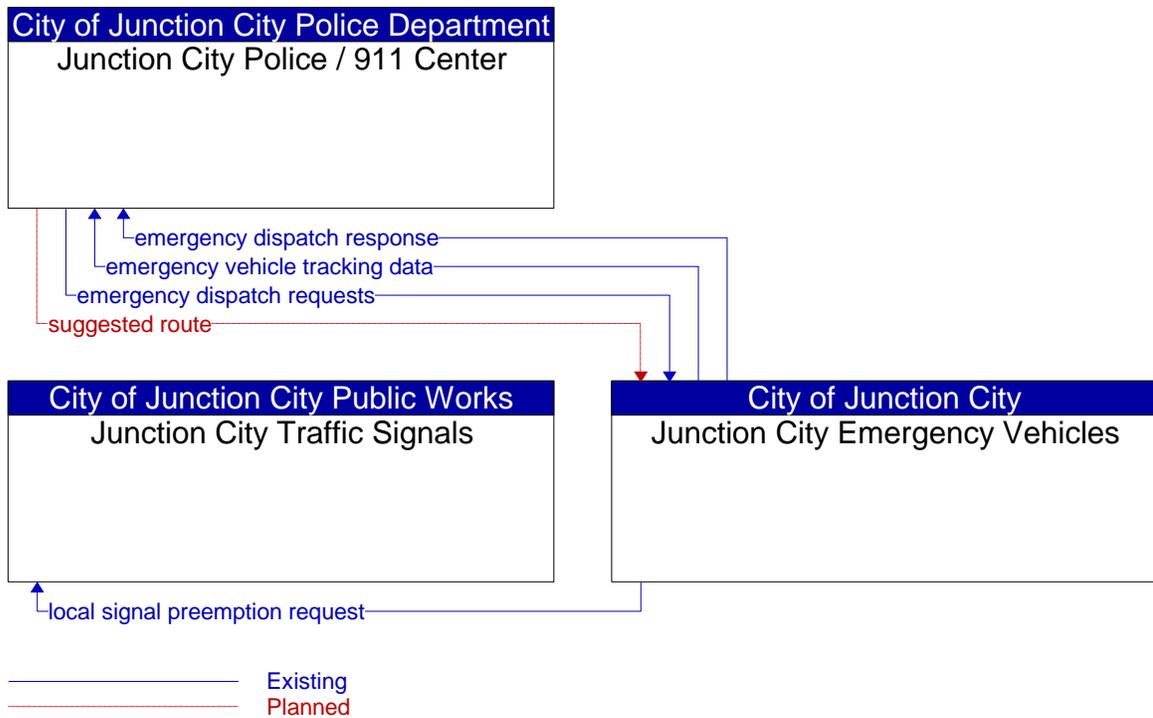


Figure 21: Junction City Emergency Vehicles Context Diagram

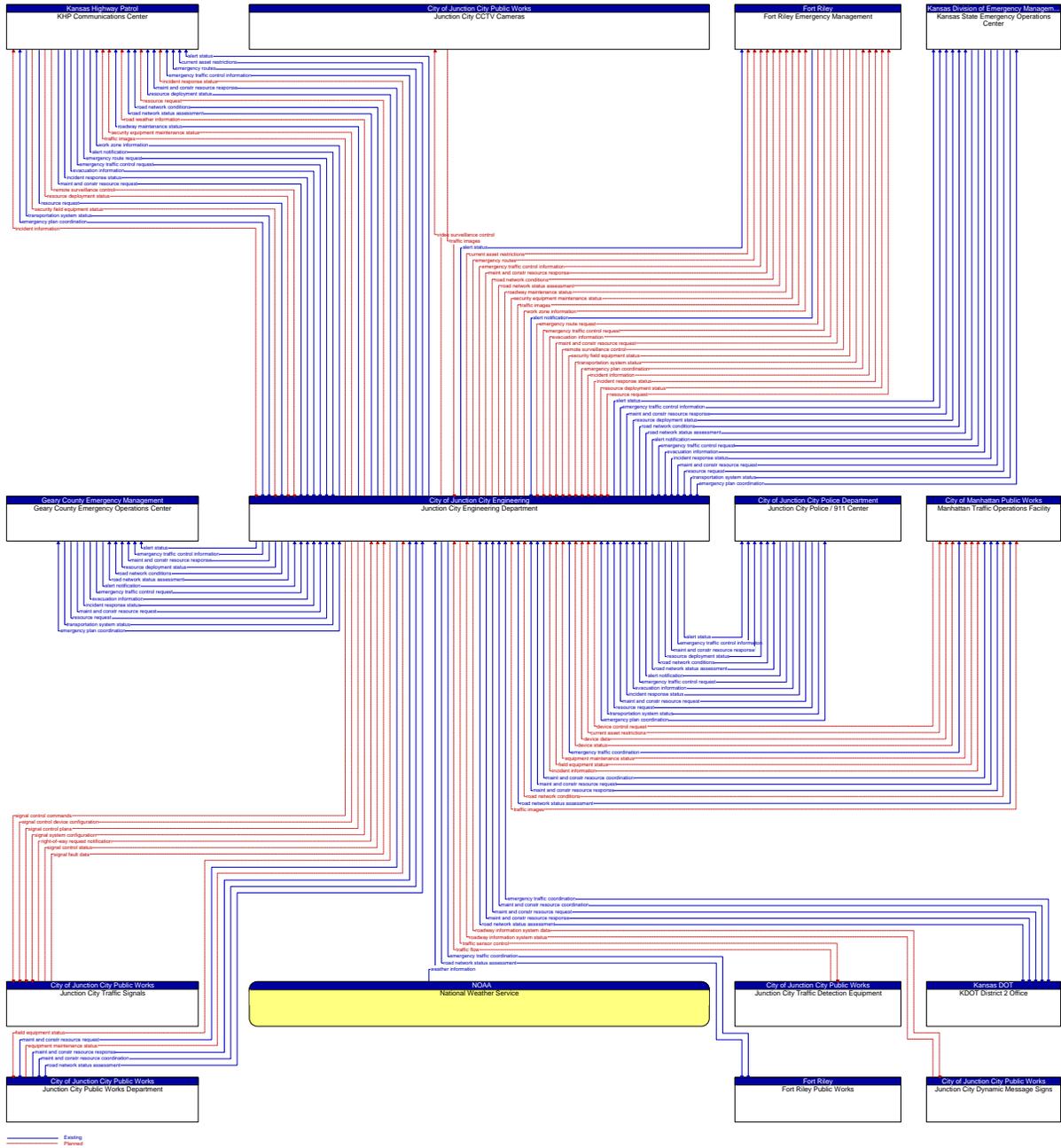


Figure 22: Junction City Engineering Department Context Diagram

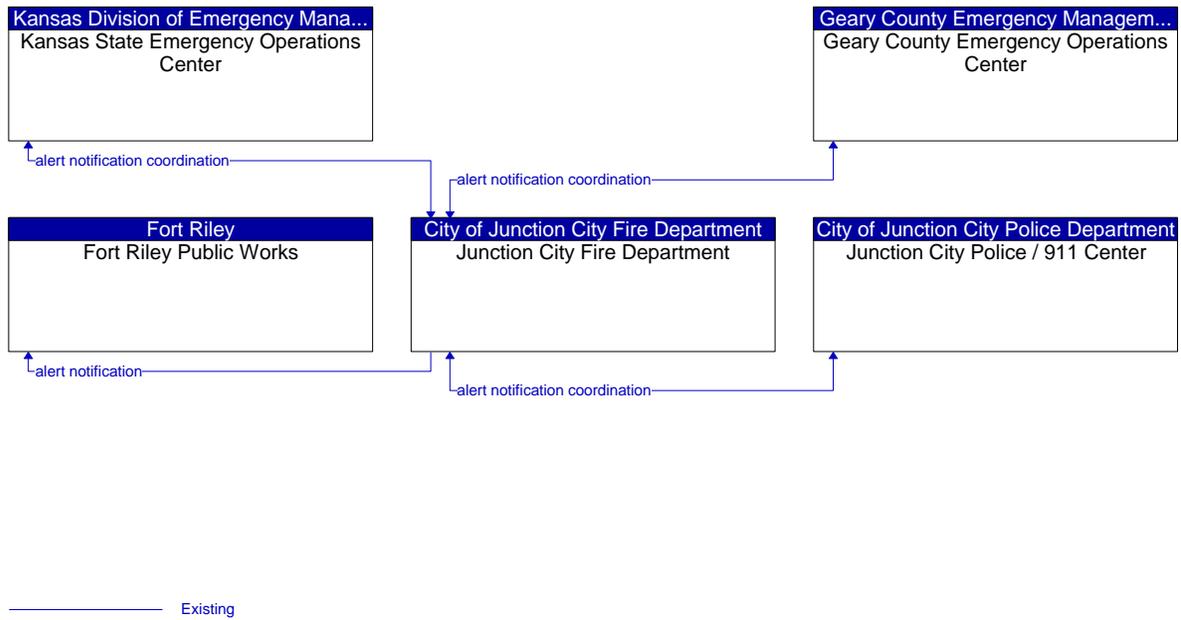


Figure 23: Junction City Fire Department Context Diagram

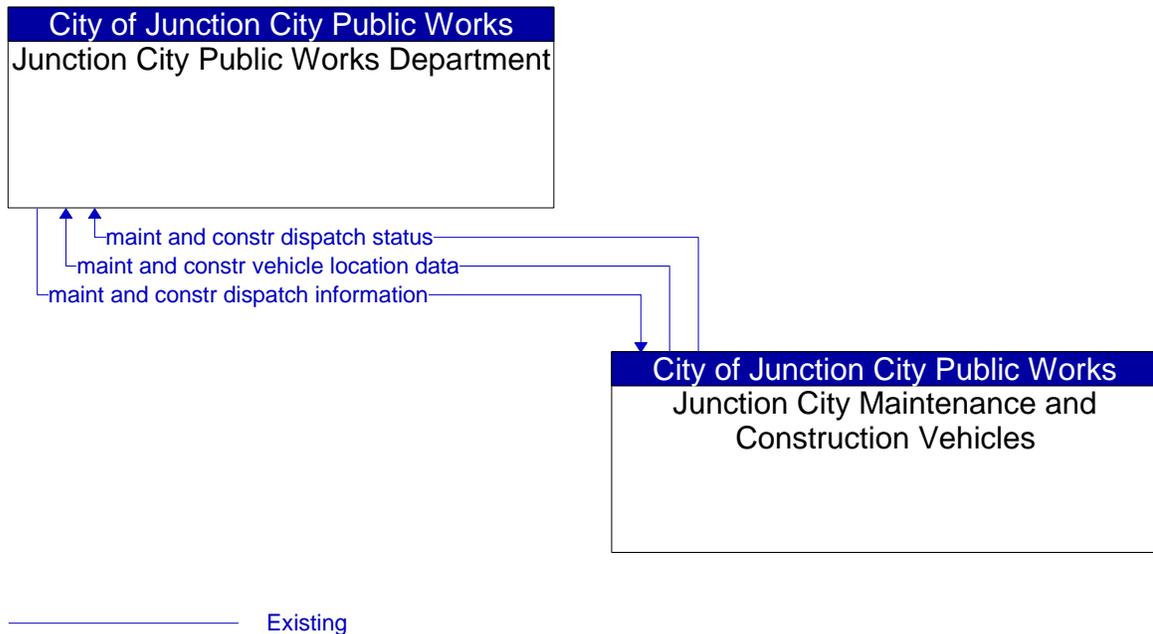


Figure 24: Junction City Maintenance and Construction Vehicles Context Diagram

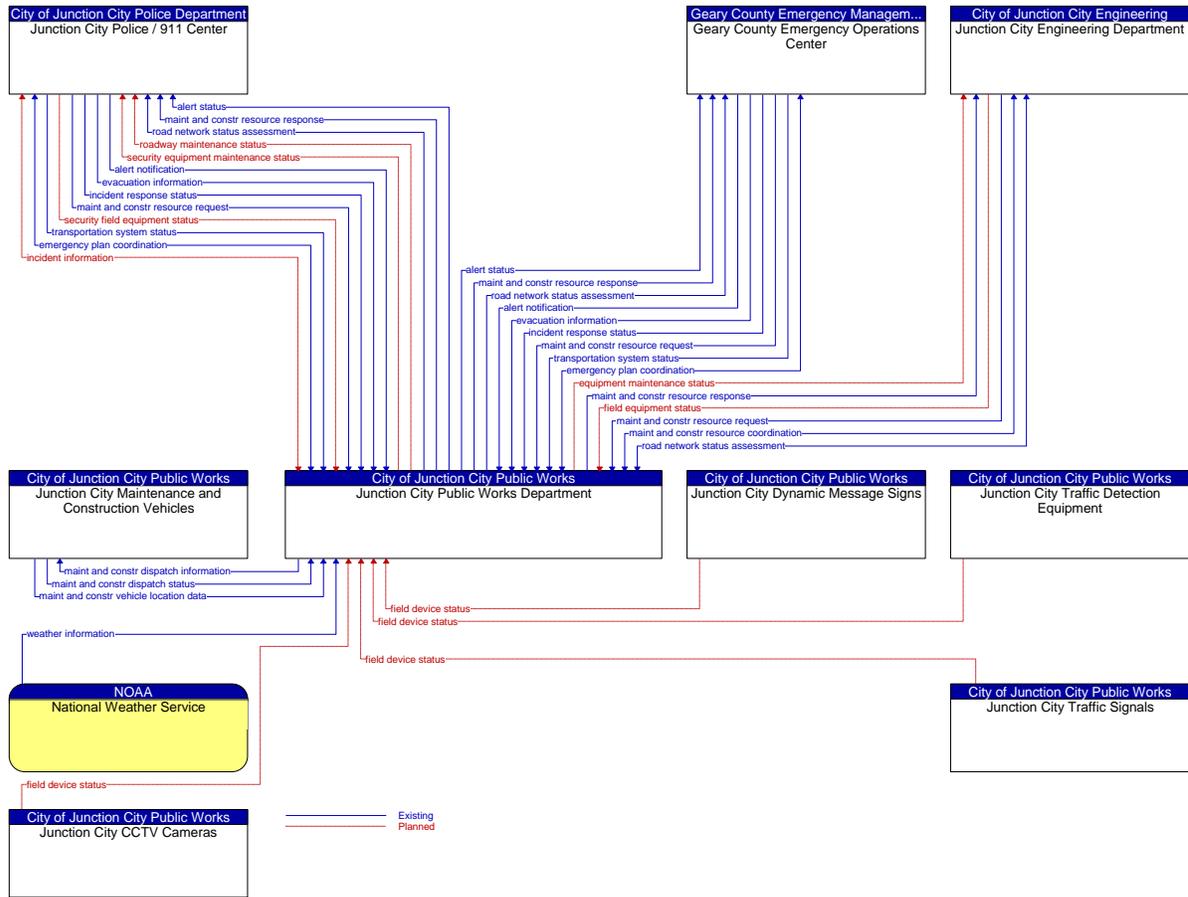


Figure 26: Junction City Public Works Department Context Diagram

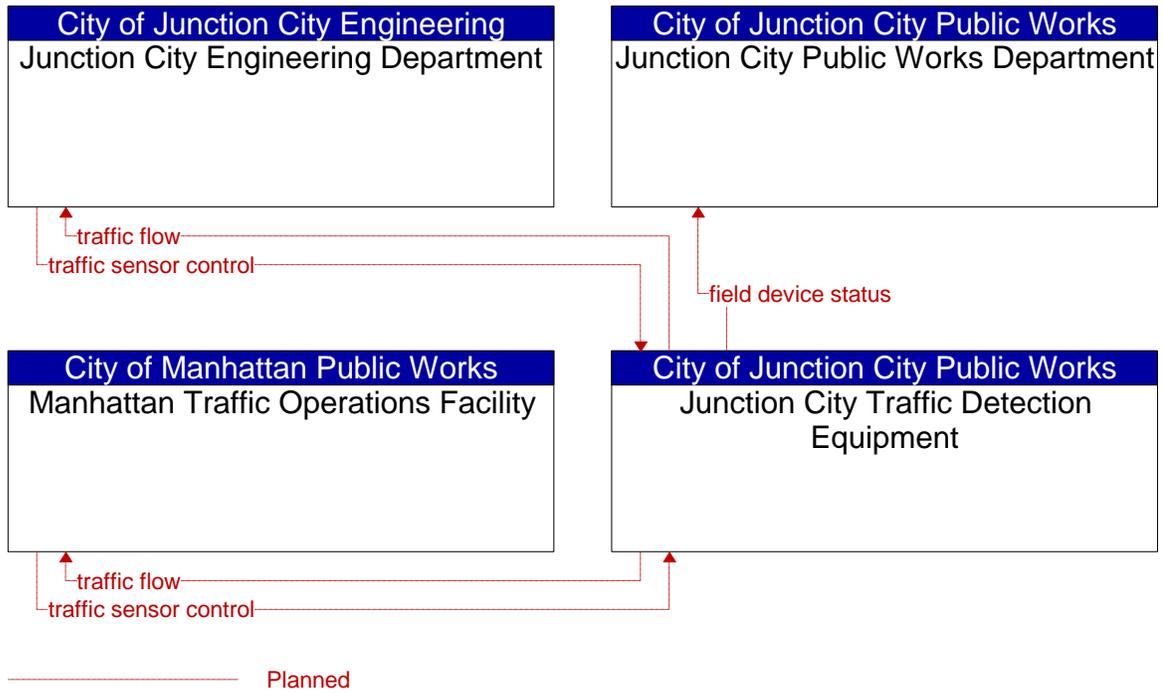


Figure 27: Junction City Traffic Detection Equipment Context Diagram

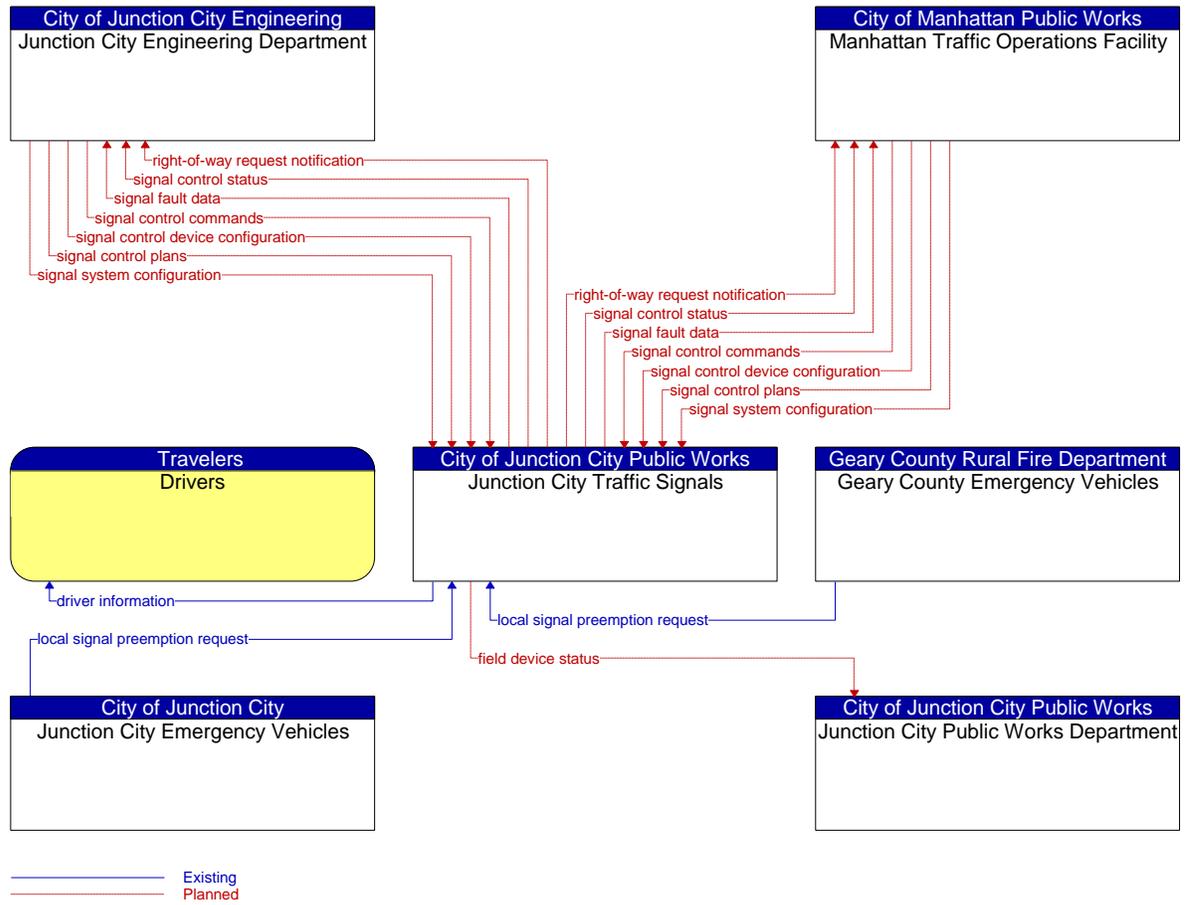


Figure 28: Junction City Traffic Signals Context Diagram

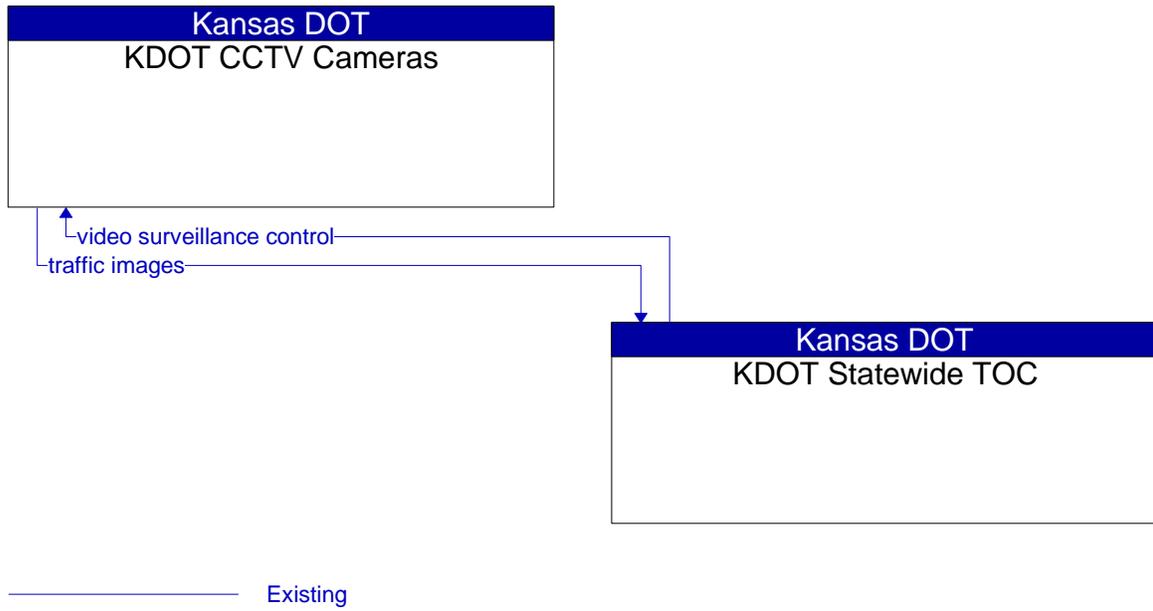


Figure 31: KDOT CCTV Cameras Context Diagram

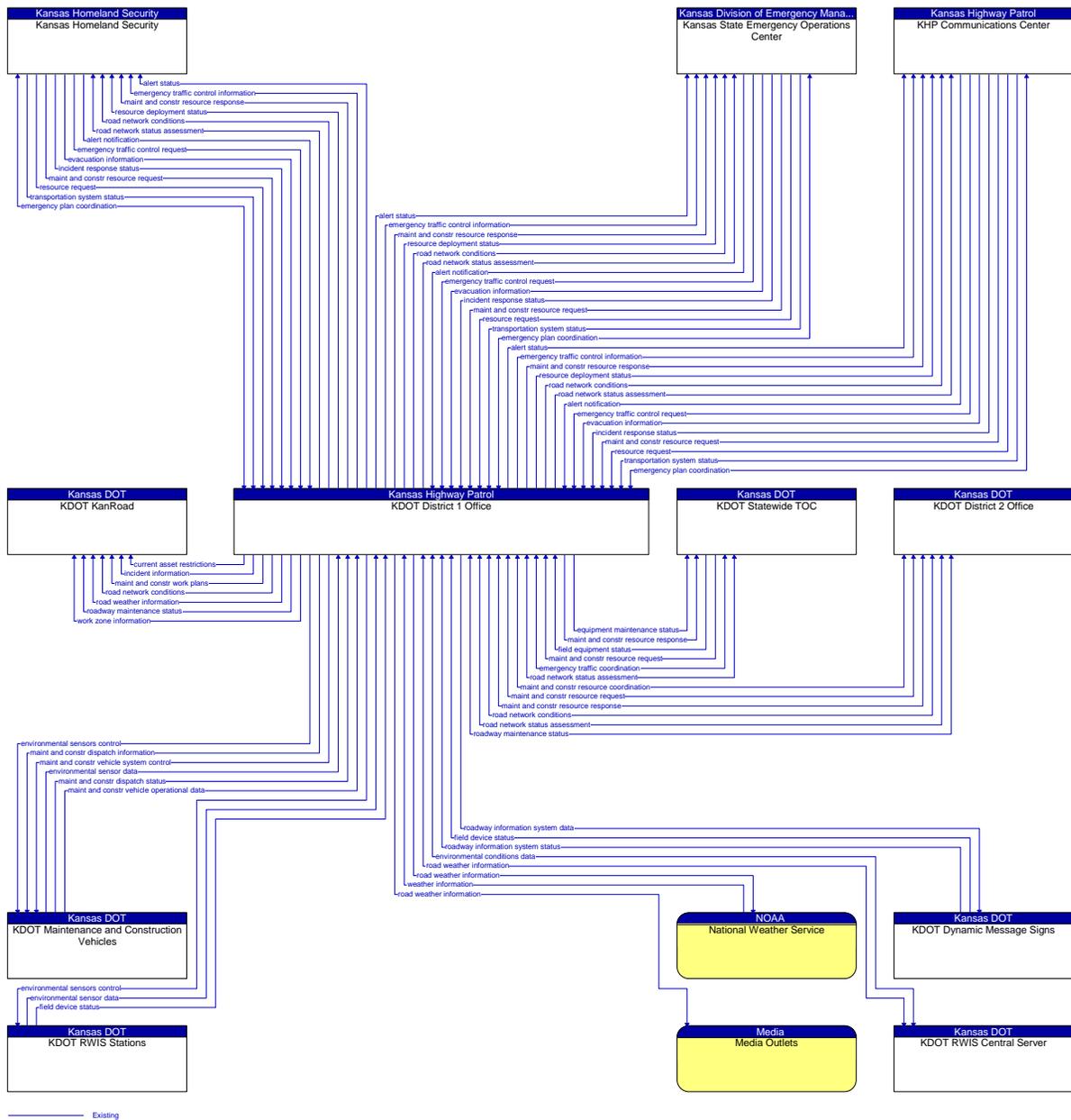


Figure 32: KDOT District 1 Office Context Diagram

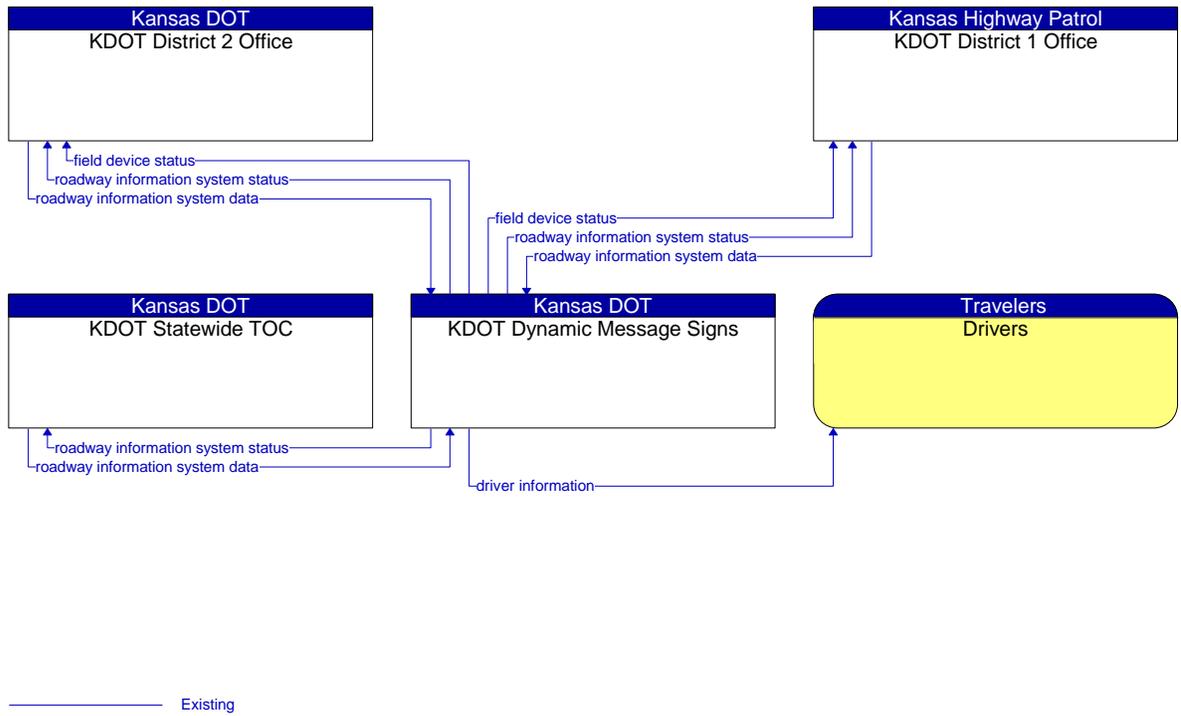


Figure 34: KDOT Dynamic Message Signs Context Diagram

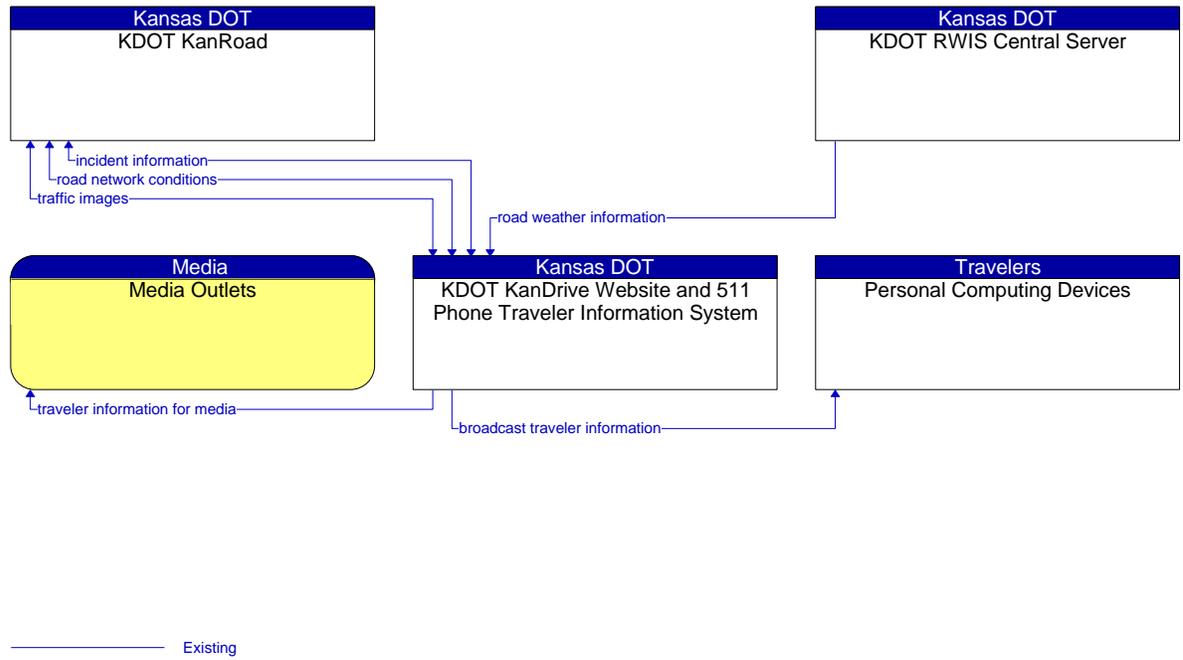


Figure 35: KDOT KanDrive Website and 511 Phone Traveler Information System Context Diagram

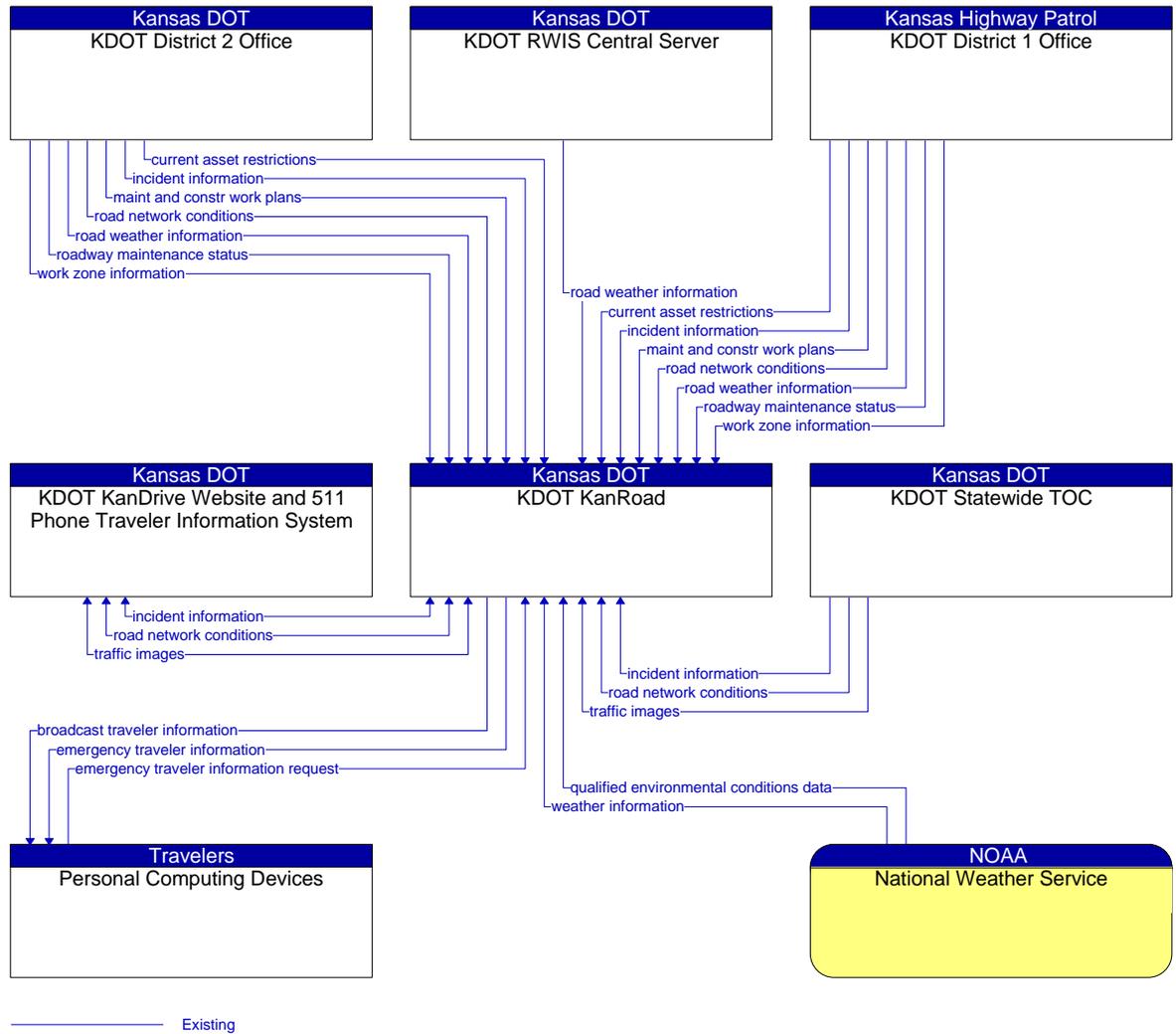


Figure 36: KDOT KanRoad Context Diagram

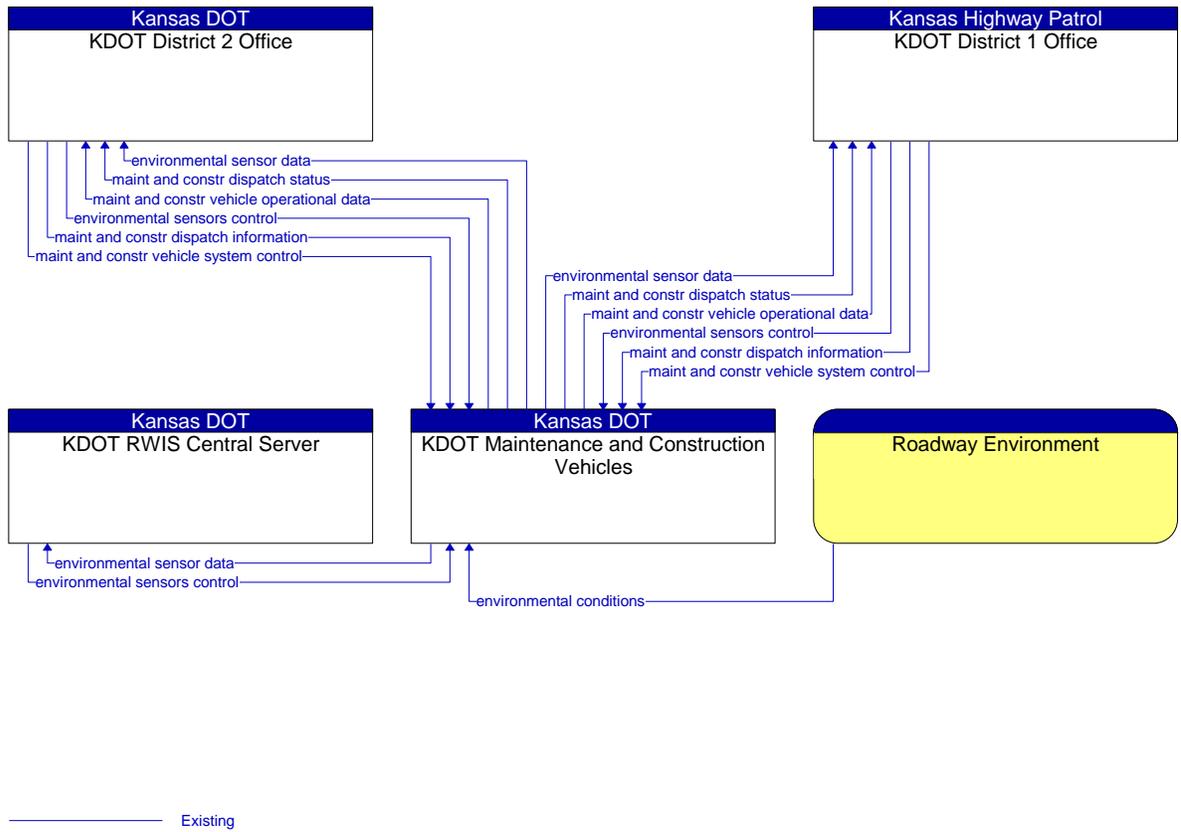


Figure 37: KDOT Maintenance and Construction Vehicles Context Diagram

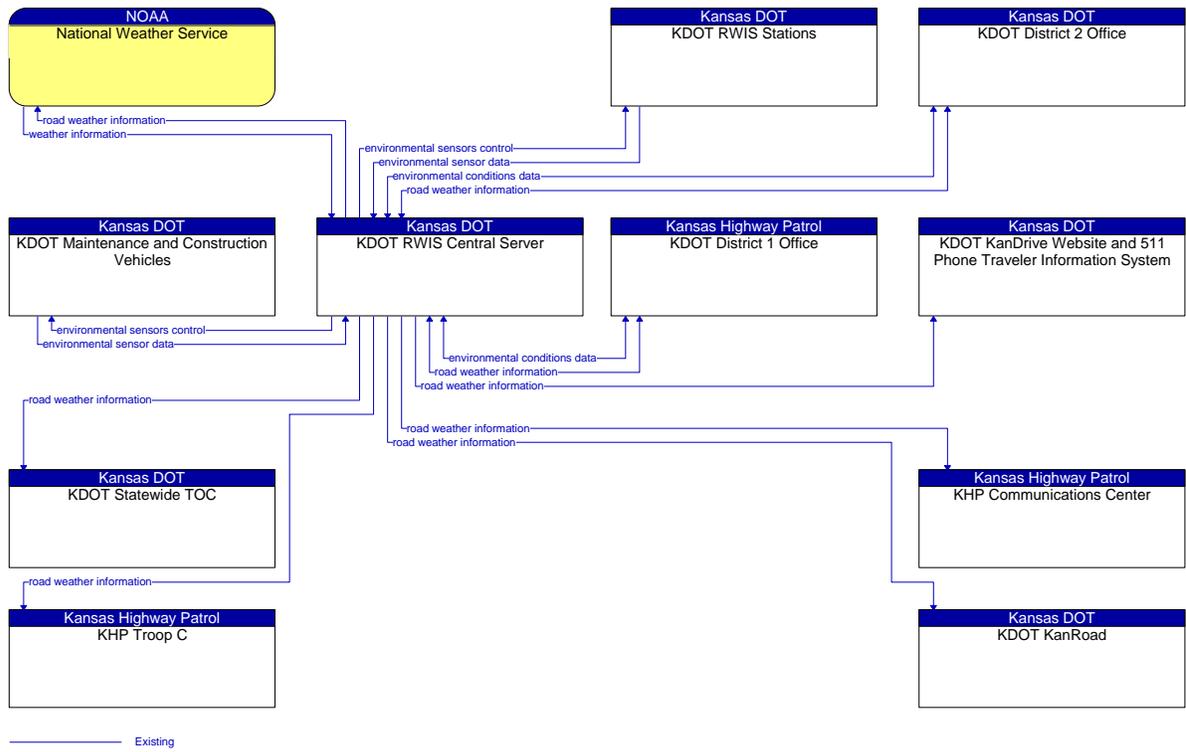


Figure 38: KDOT RWIS Central Server Context Diagram

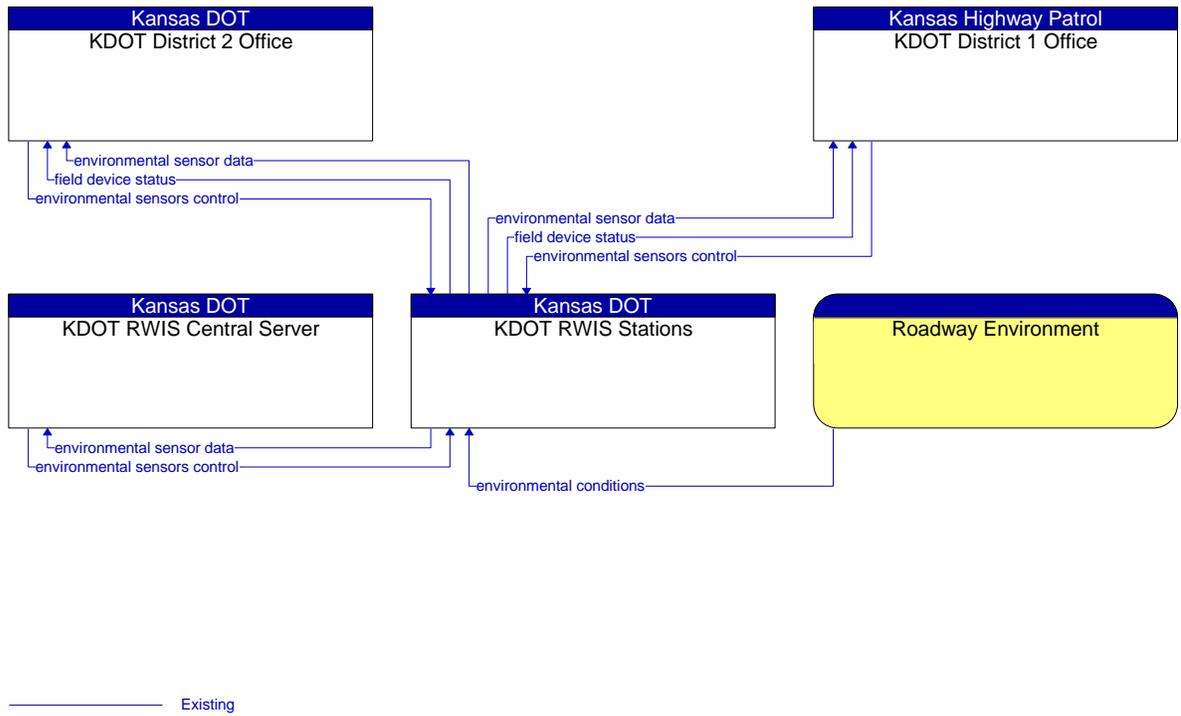


Figure 39: KDOT RWIS Stations Context Diagram

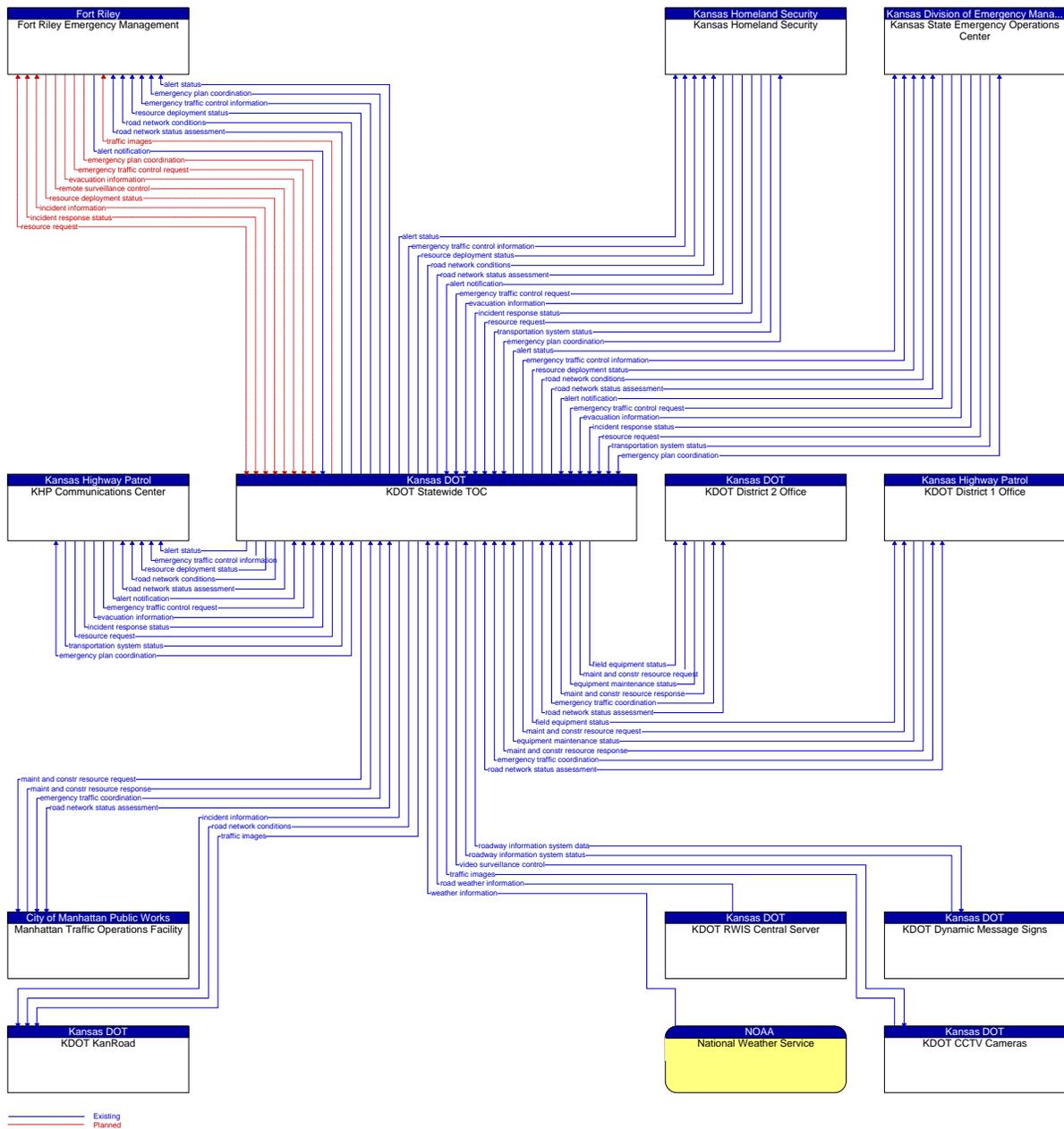


Figure 40: KDOT Statewide TOC Context Diagram

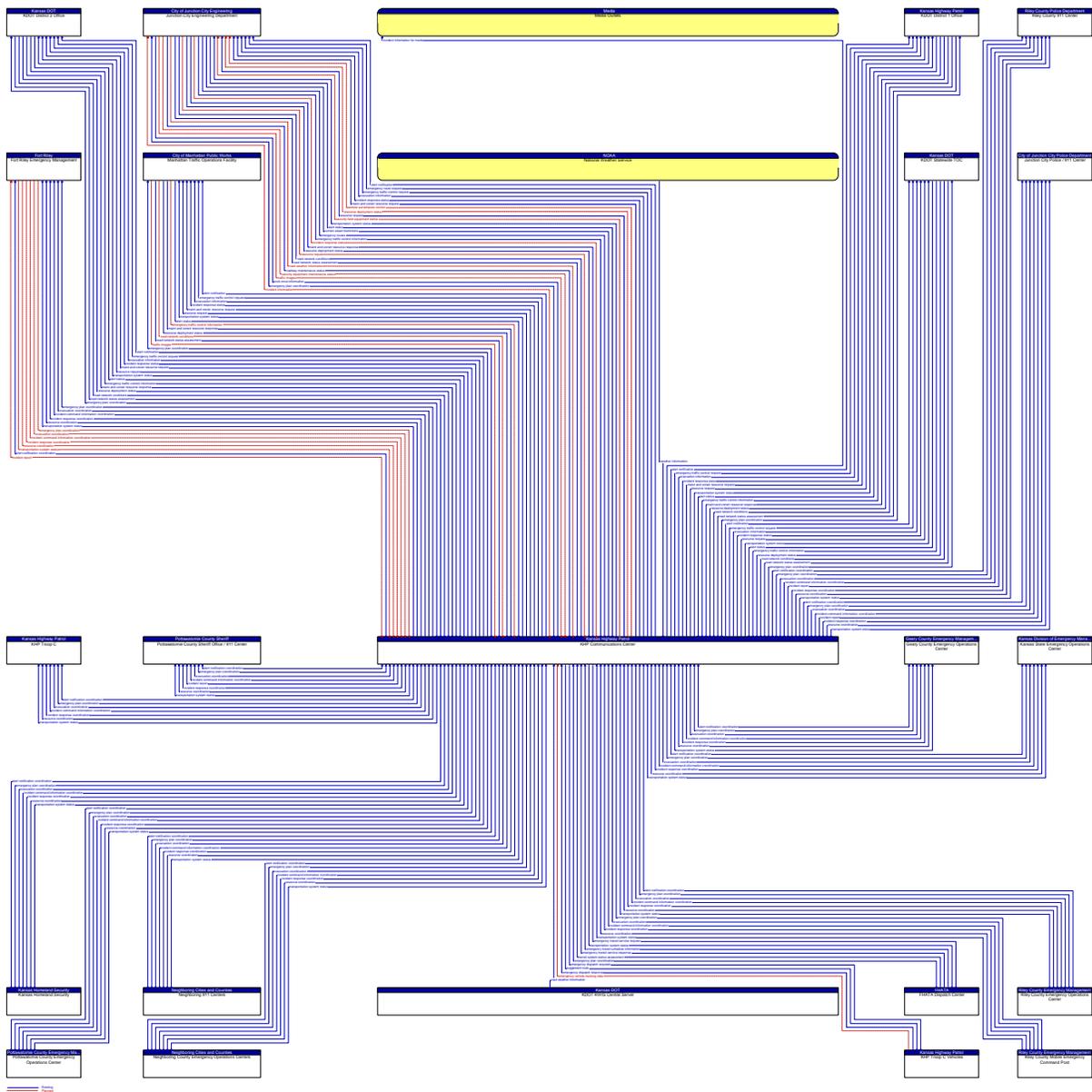


Figure 41: KHP Communications Center Context Diagram

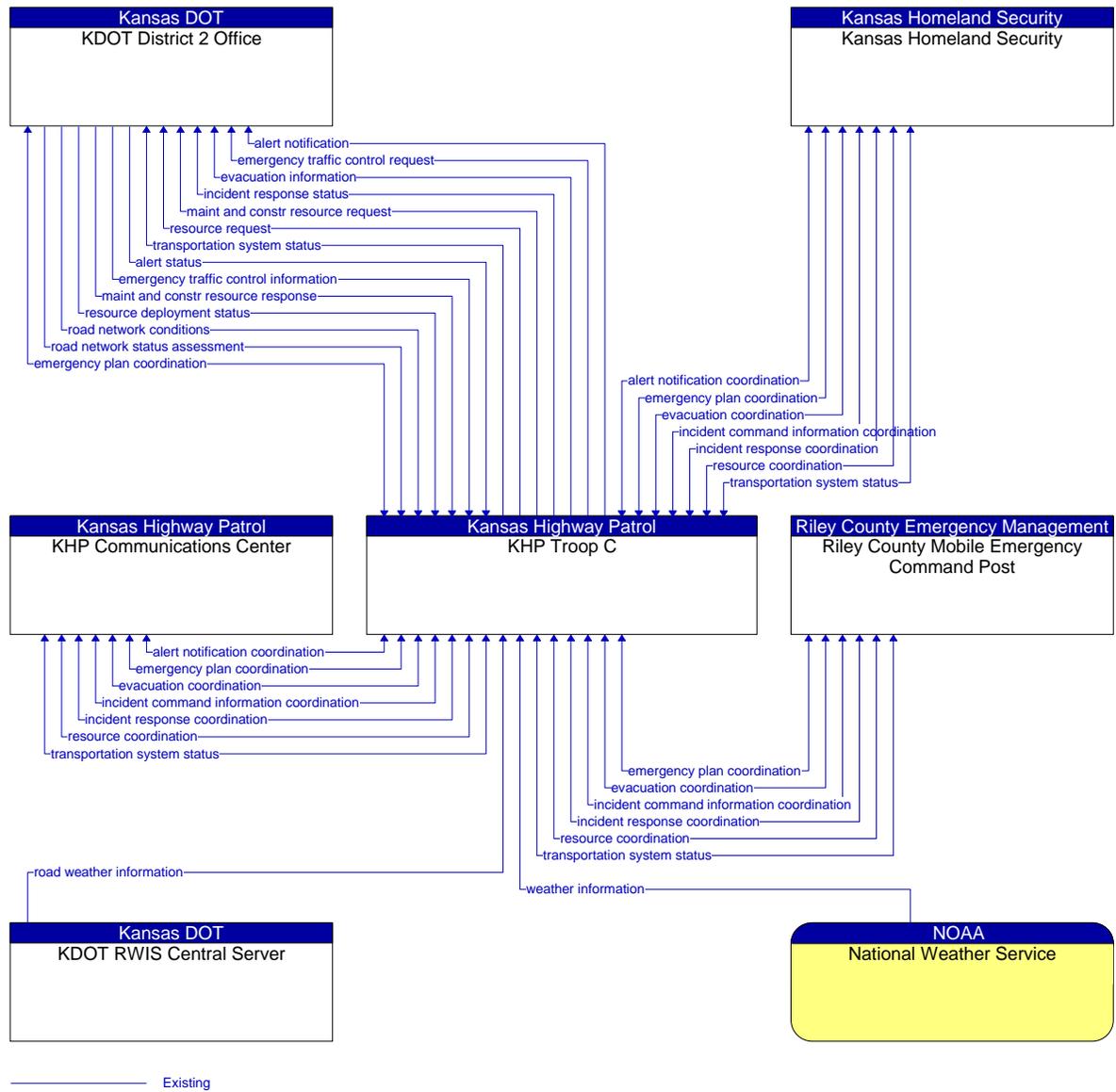


Figure 42: KHP Troop C Context Diagram

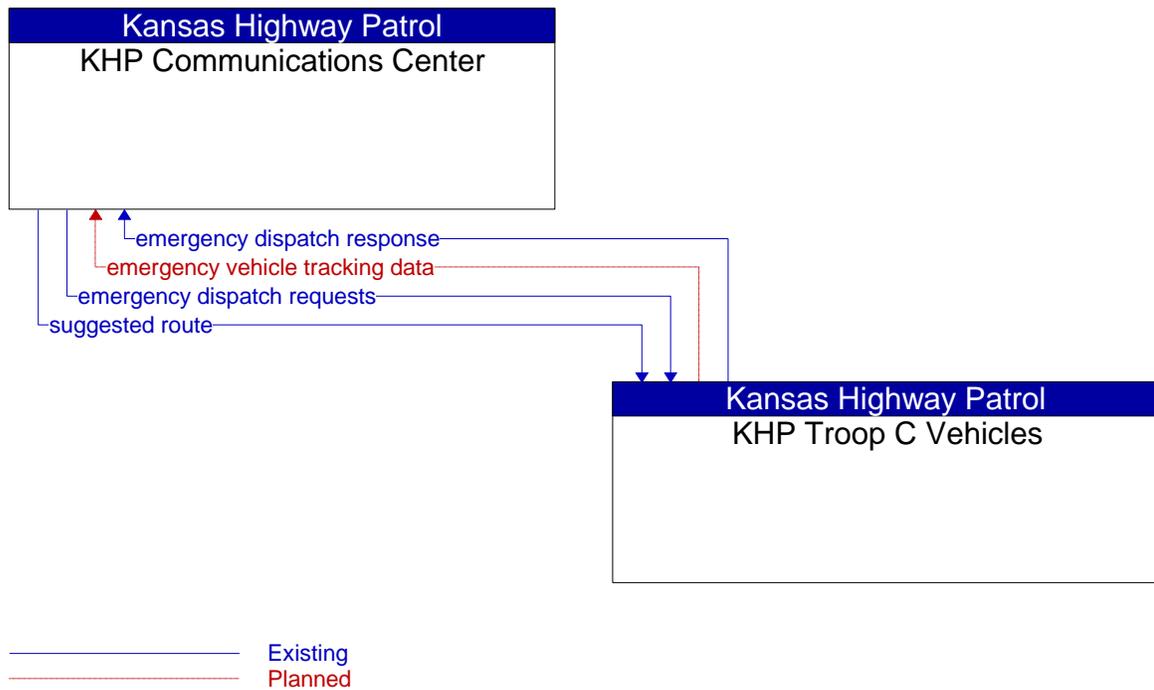


Figure 43: KHP Troop C Vehicles Context Diagram

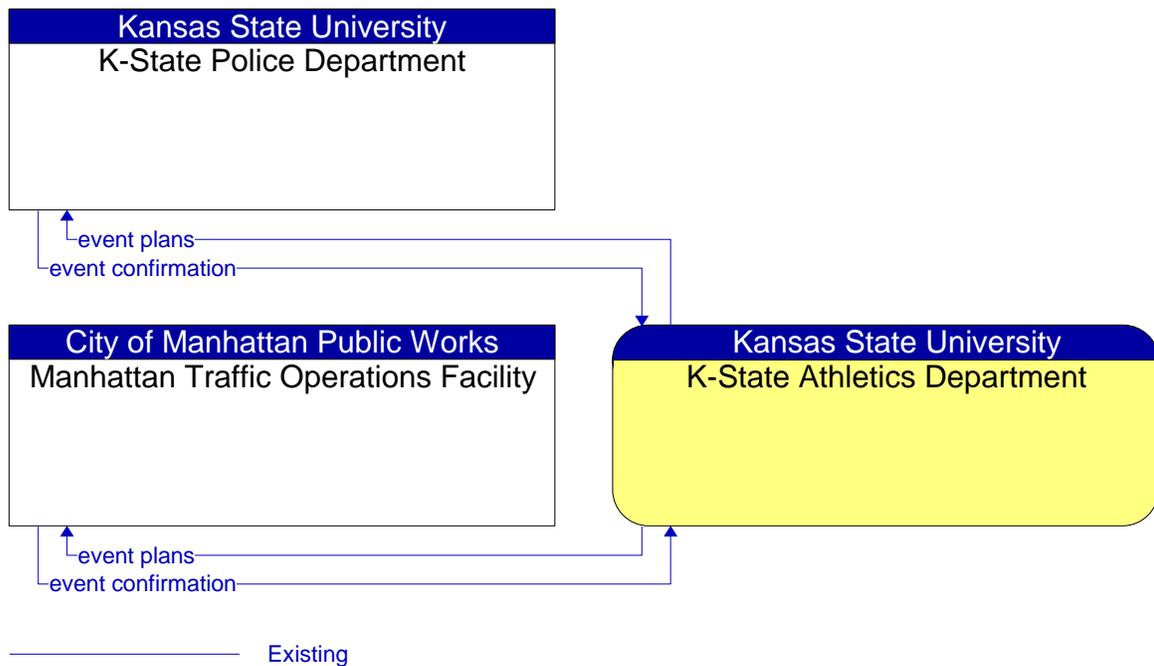


Figure 44: K-State Athletics Department Context Diagram

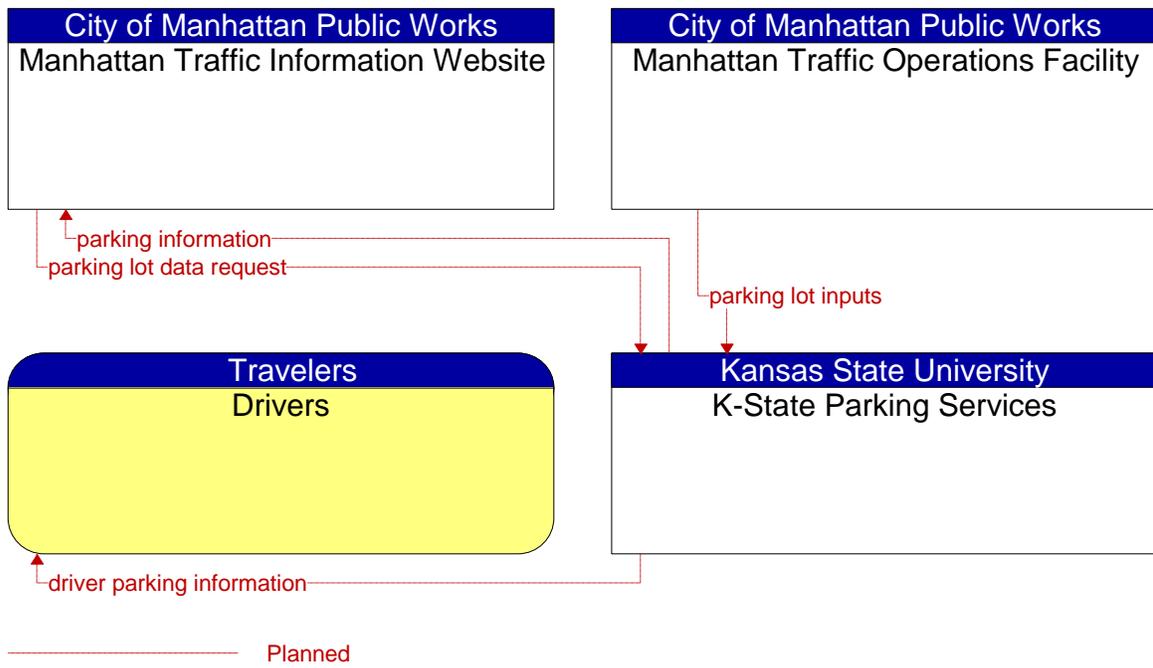


Figure 45: K-State Parking Services Context Diagram

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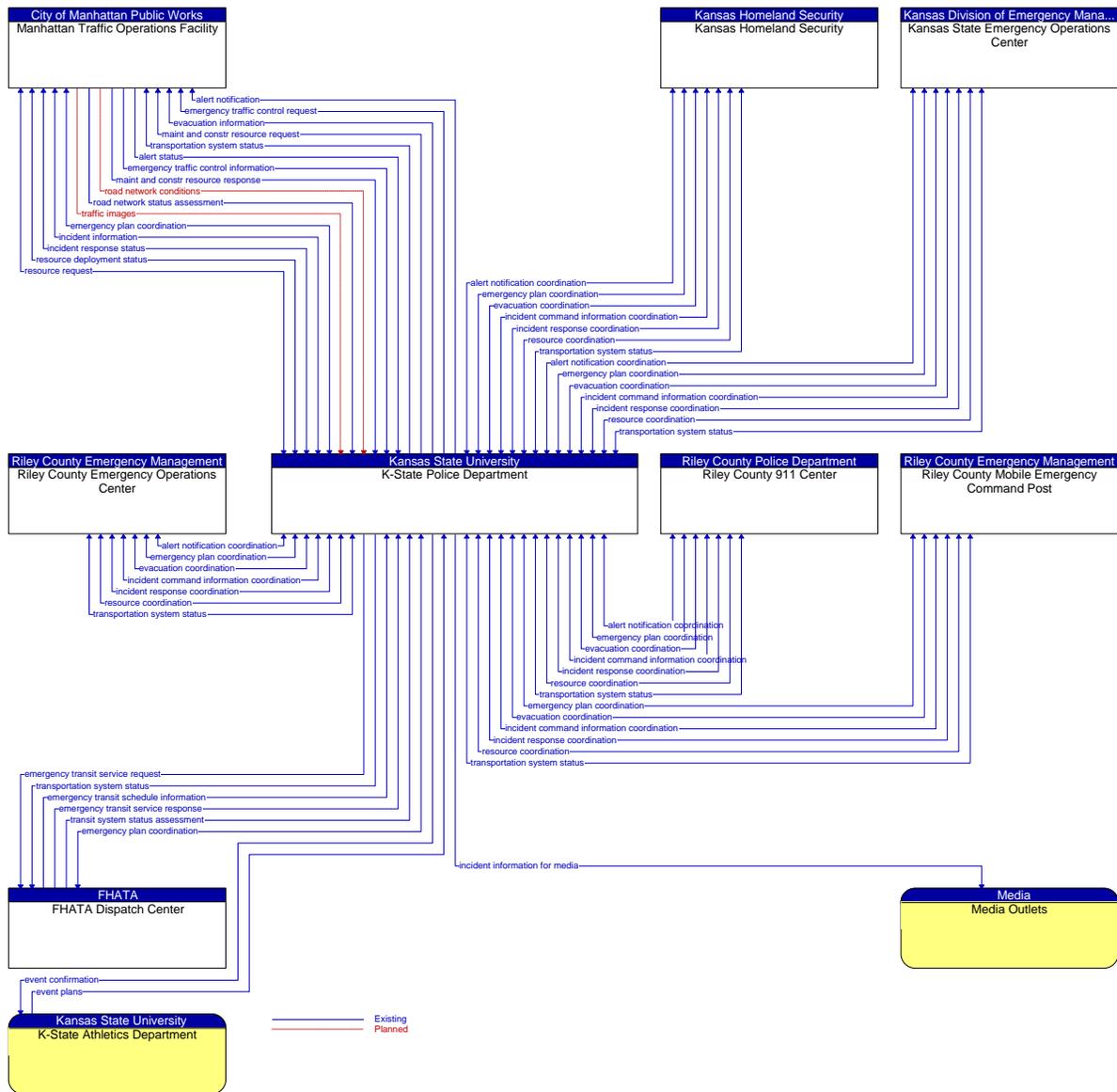


Figure 46: K-State Police Department Context Diagram

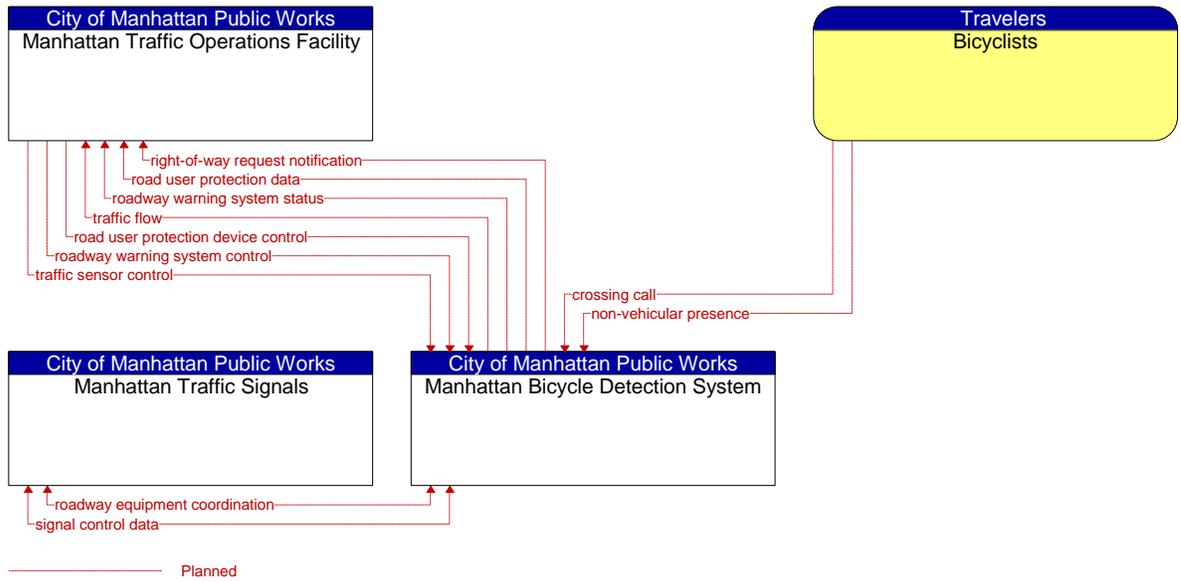


Figure 47: Manhattan Bicycle Detection System Context Diagram

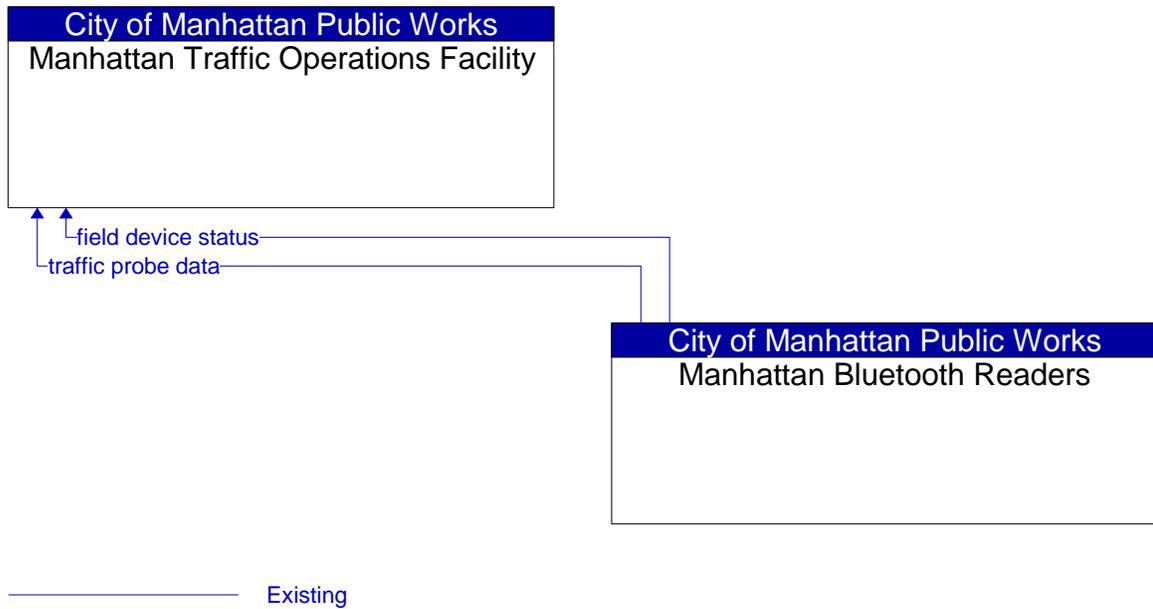


Figure 48: Manhattan Bluetooth Readers Context Diagram

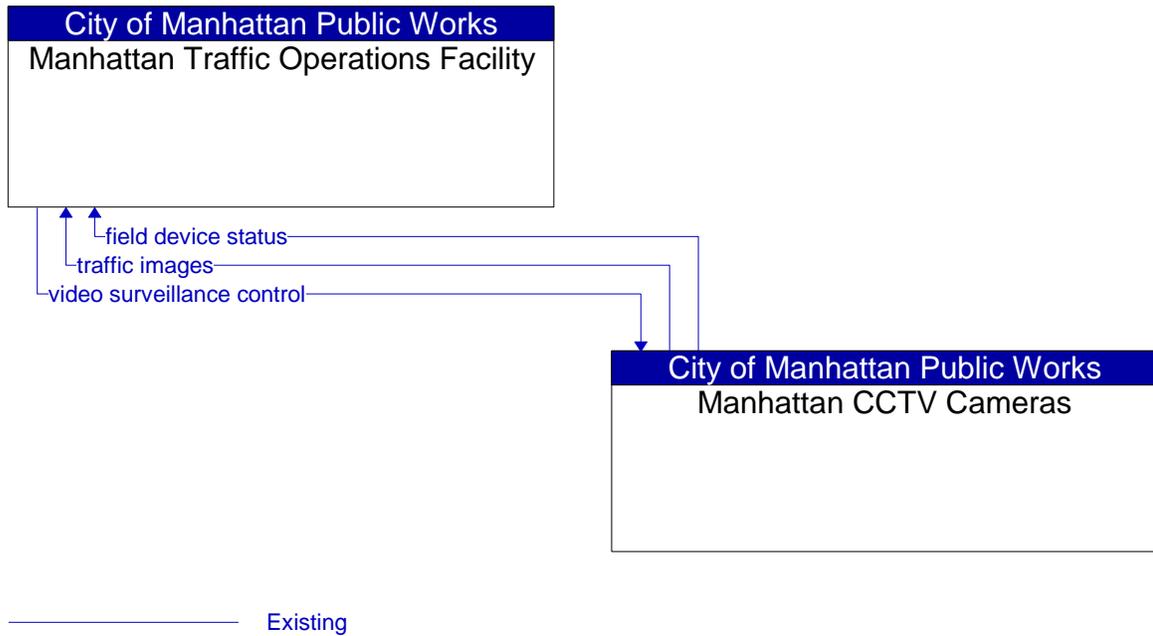


Figure 49: Manhattan CCTV Cameras Context Diagram

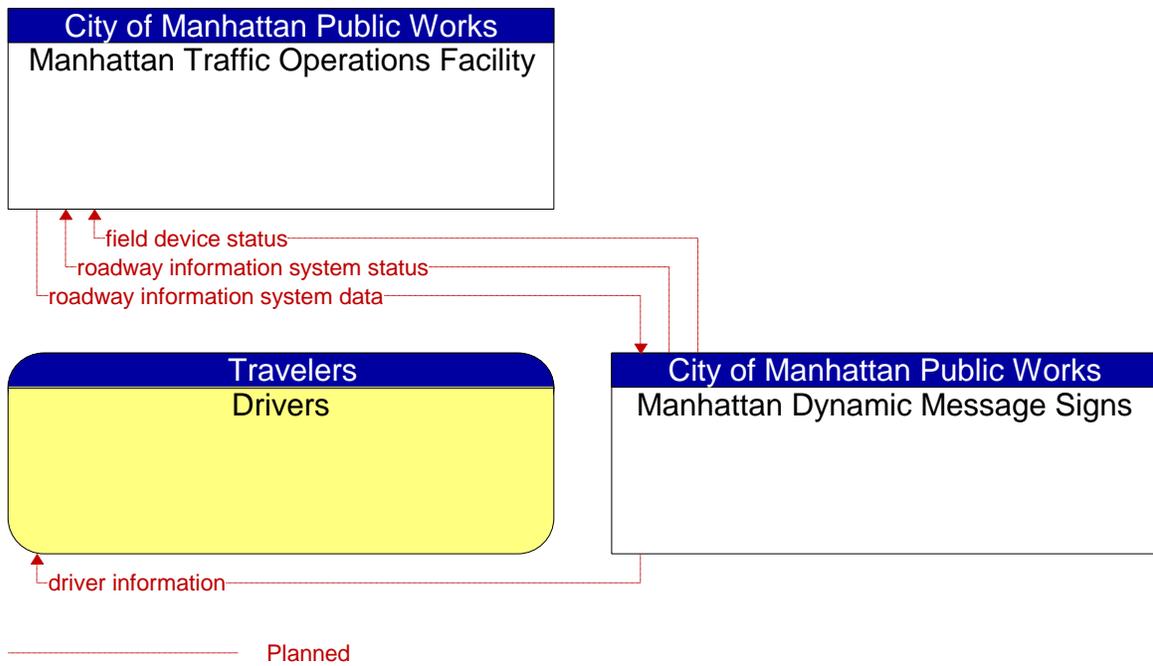


Figure 50: Manhattan Dynamic Message Signs Context Diagram

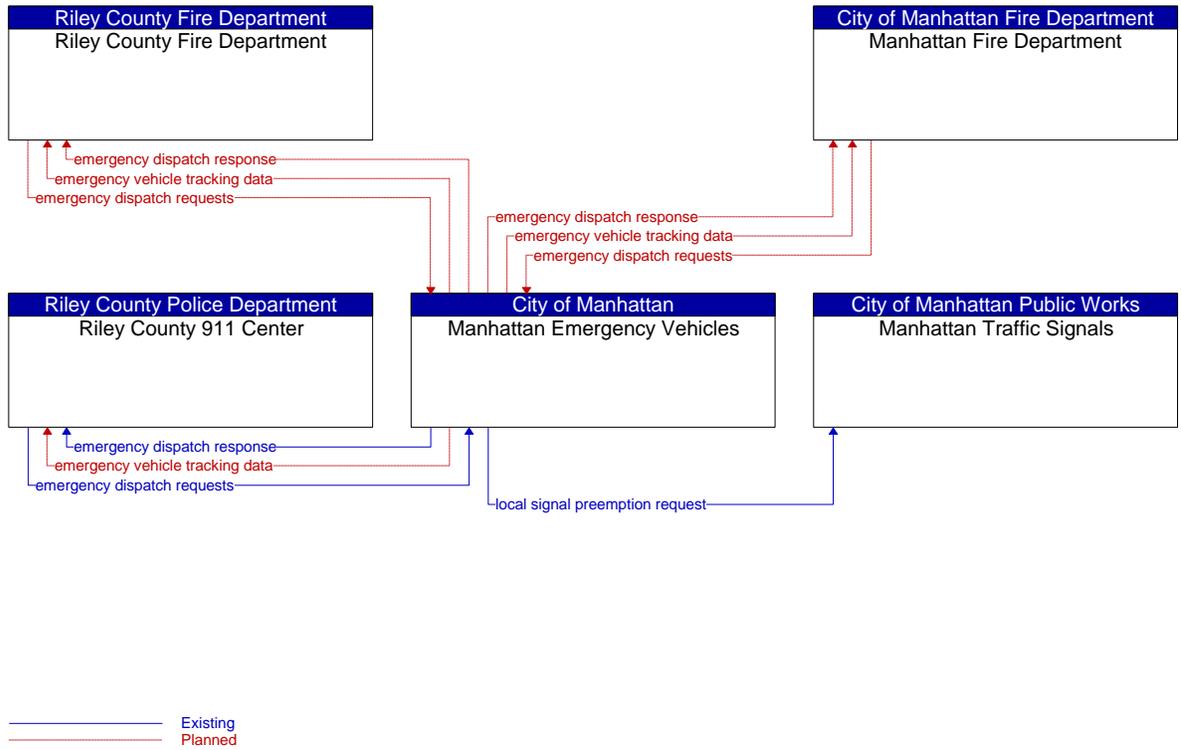


Figure 51: Manhattan Emergency Vehicles Context Diagram

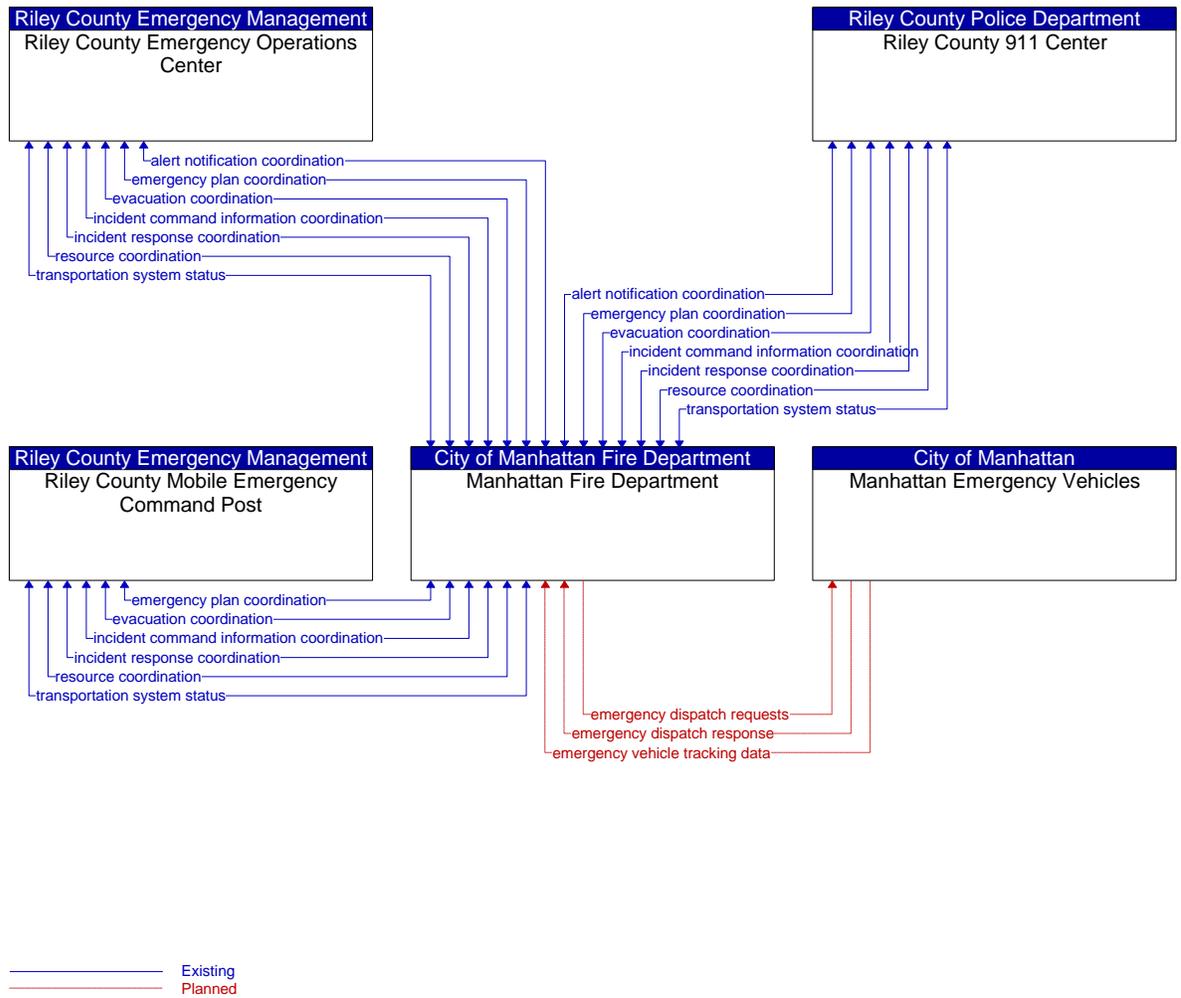


Figure 52: Manhattan Fire Department Context Diagram

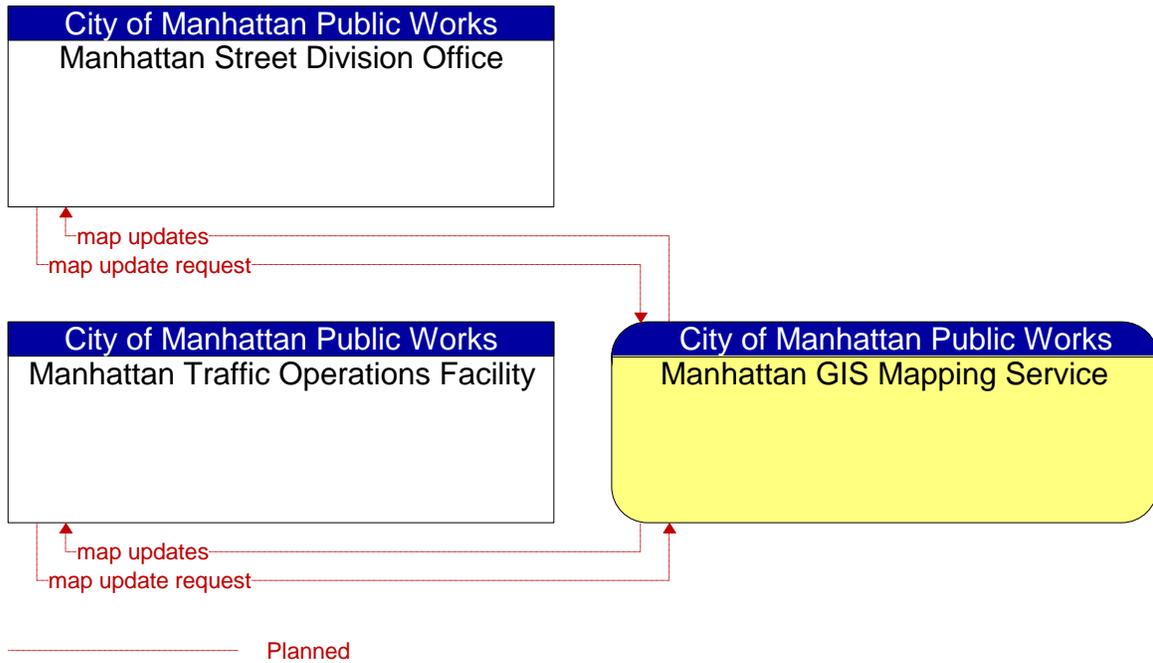


Figure 53: Manhattan GIS Mapping Service Context Diagram

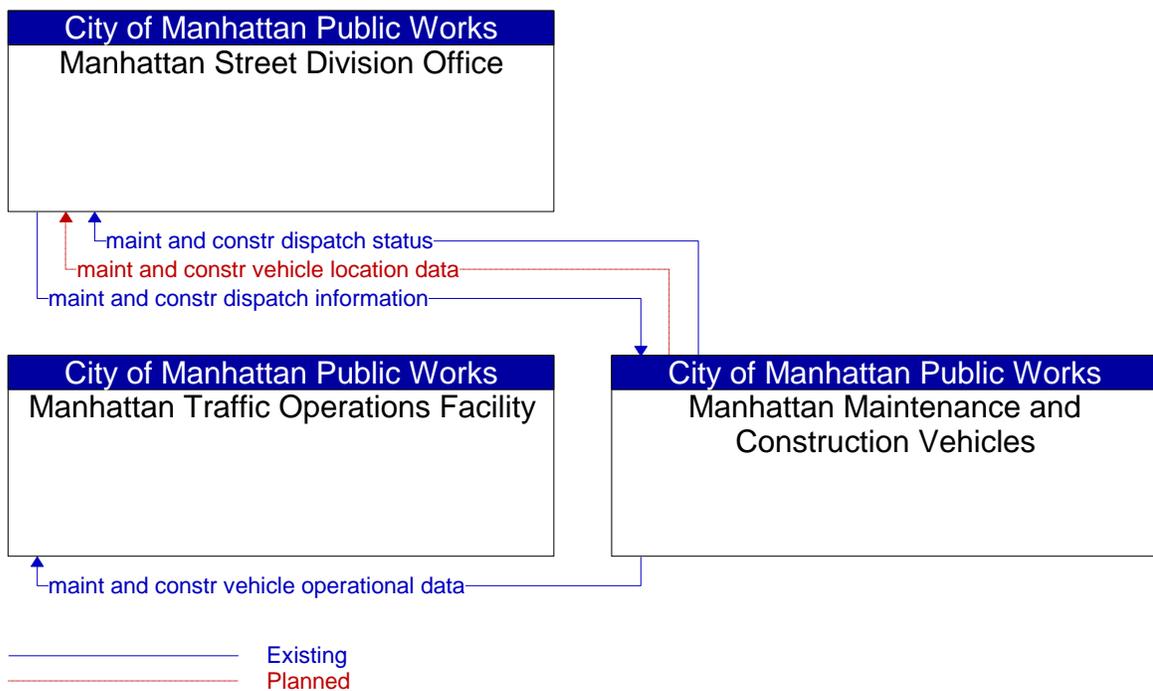


Figure 54: Manhattan Maintenance and Construction Vehicles Context Diagram

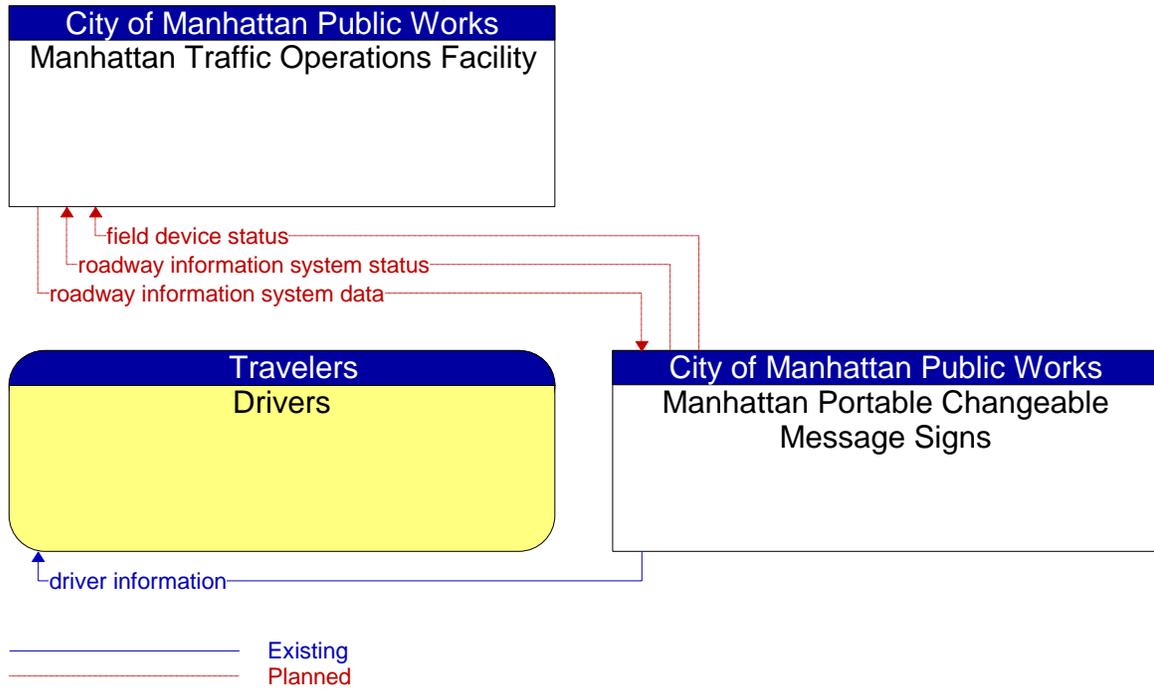


Figure 55: Manhattan Portable Changeable Message Signs Context Diagram

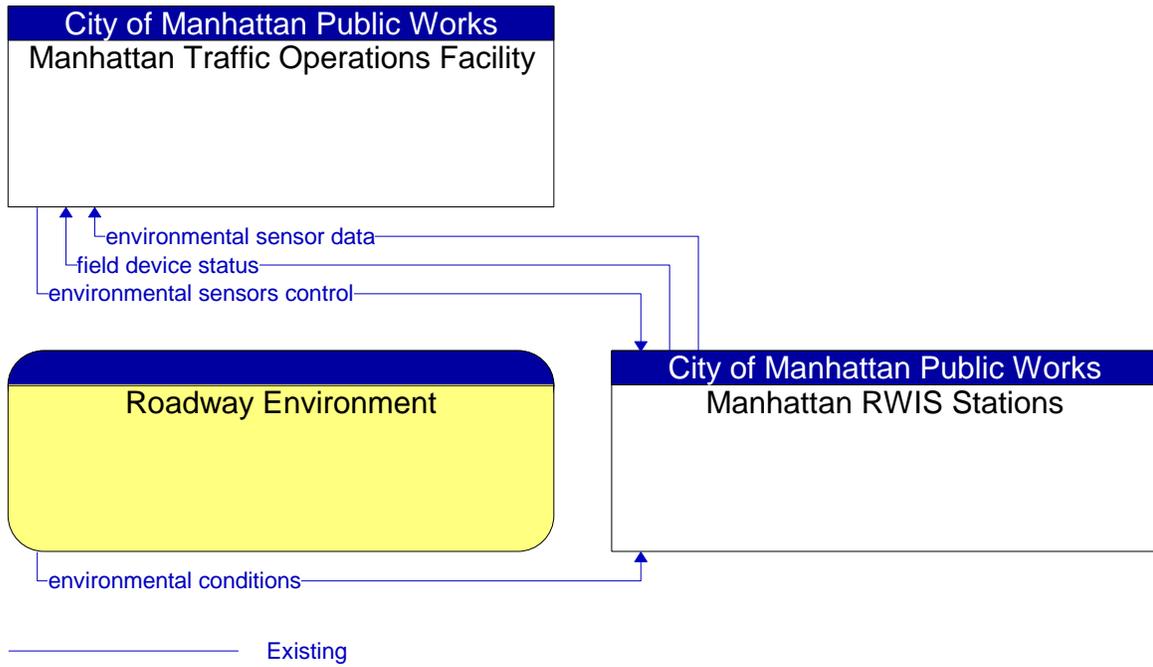


Figure 56: Manhattan RWIS Stations Context Diagram

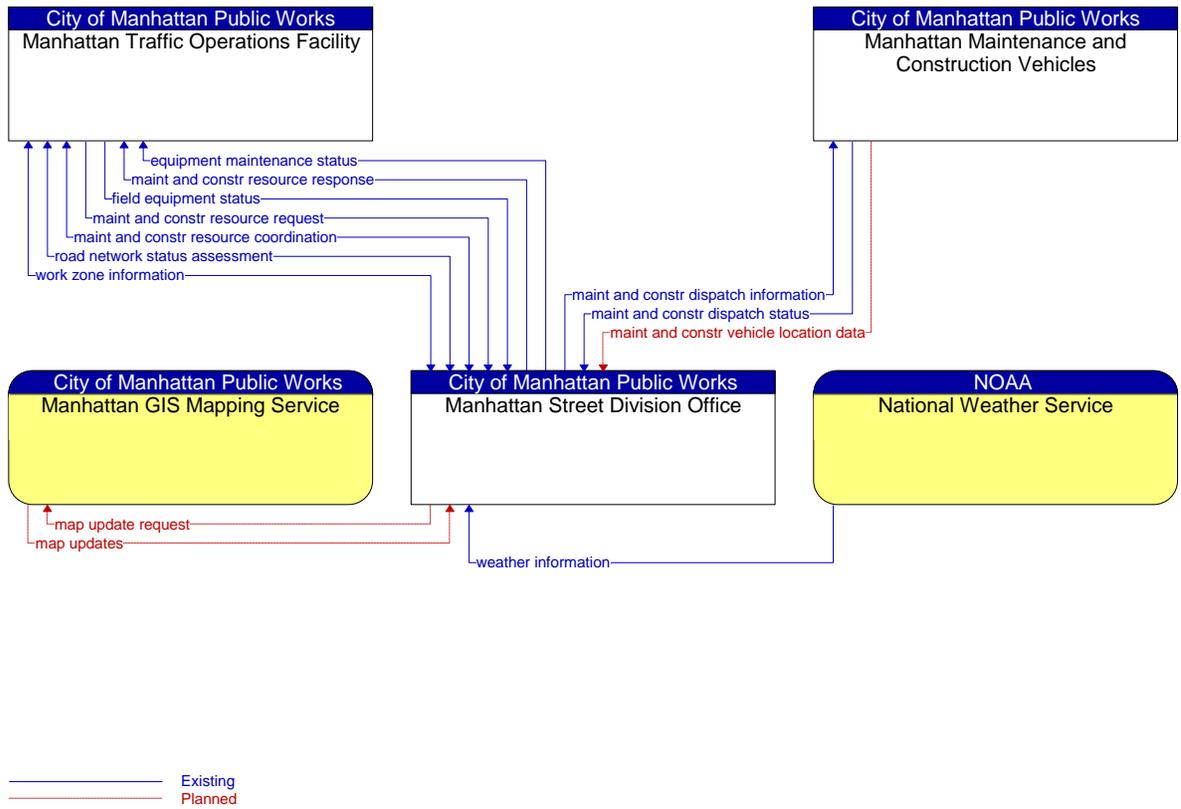


Figure 57: Manhattan Street Division Office Context Diagram

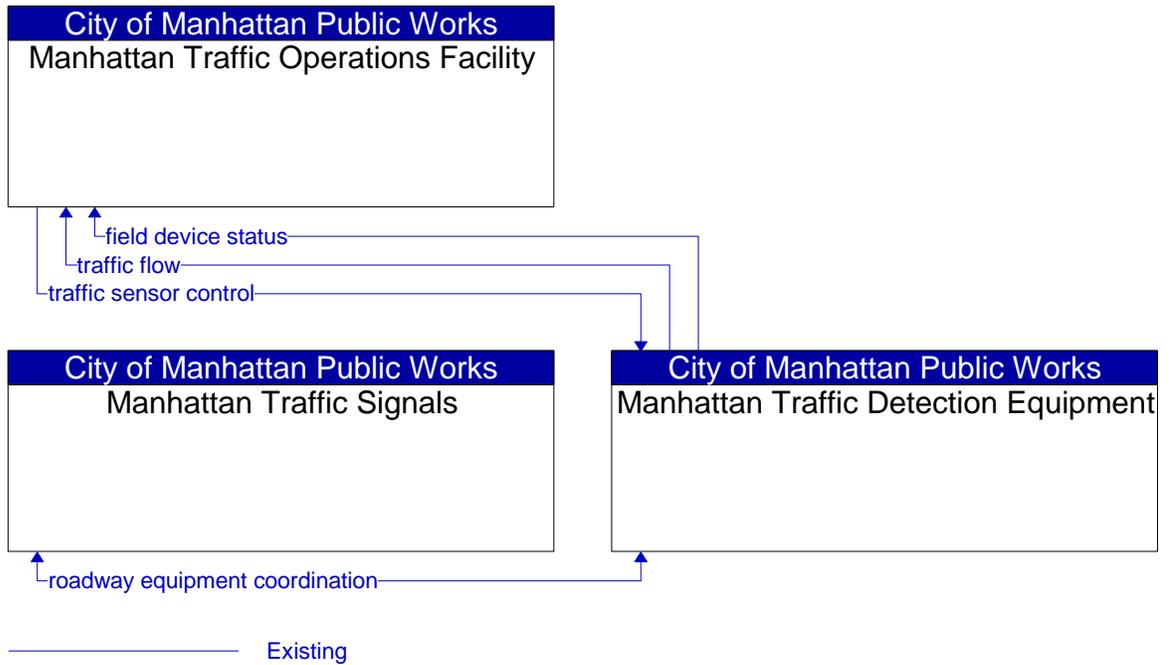


Figure 58: Manhattan Traffic Detection Equipment Context Diagram

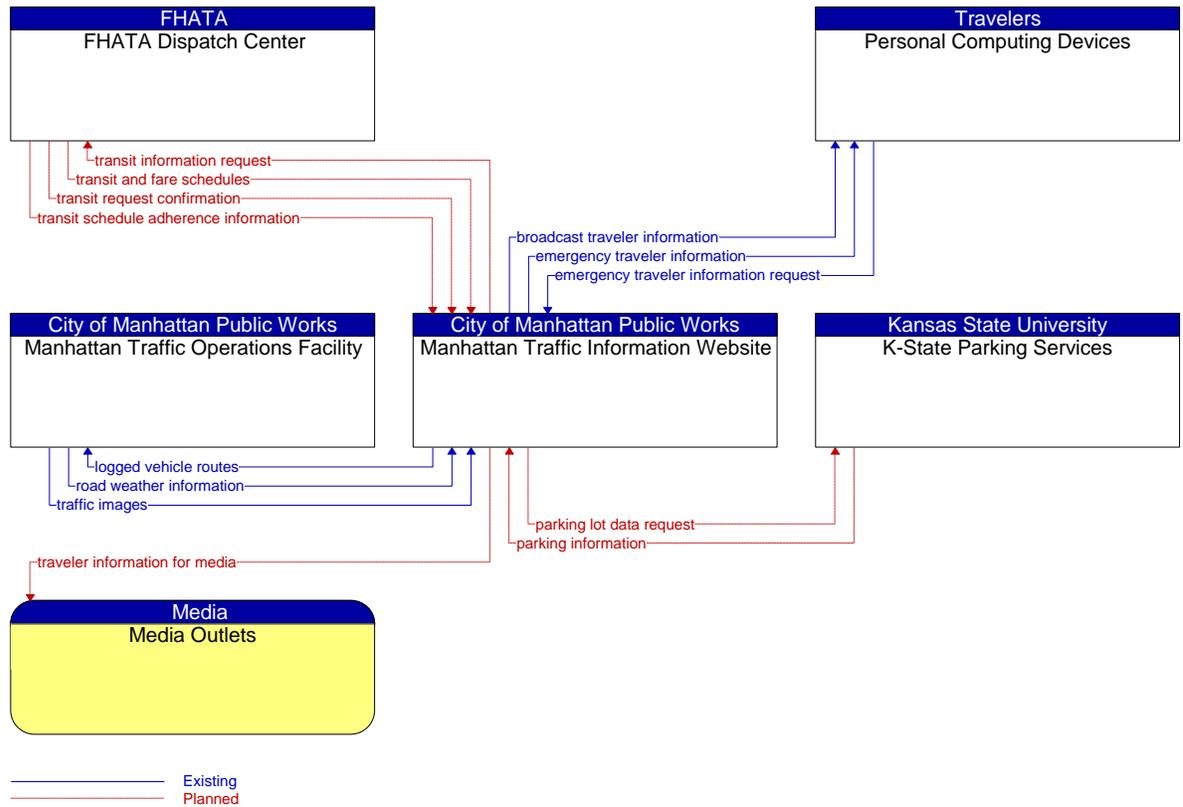


Figure 59: Manhattan Traffic Information Website Context Diagram

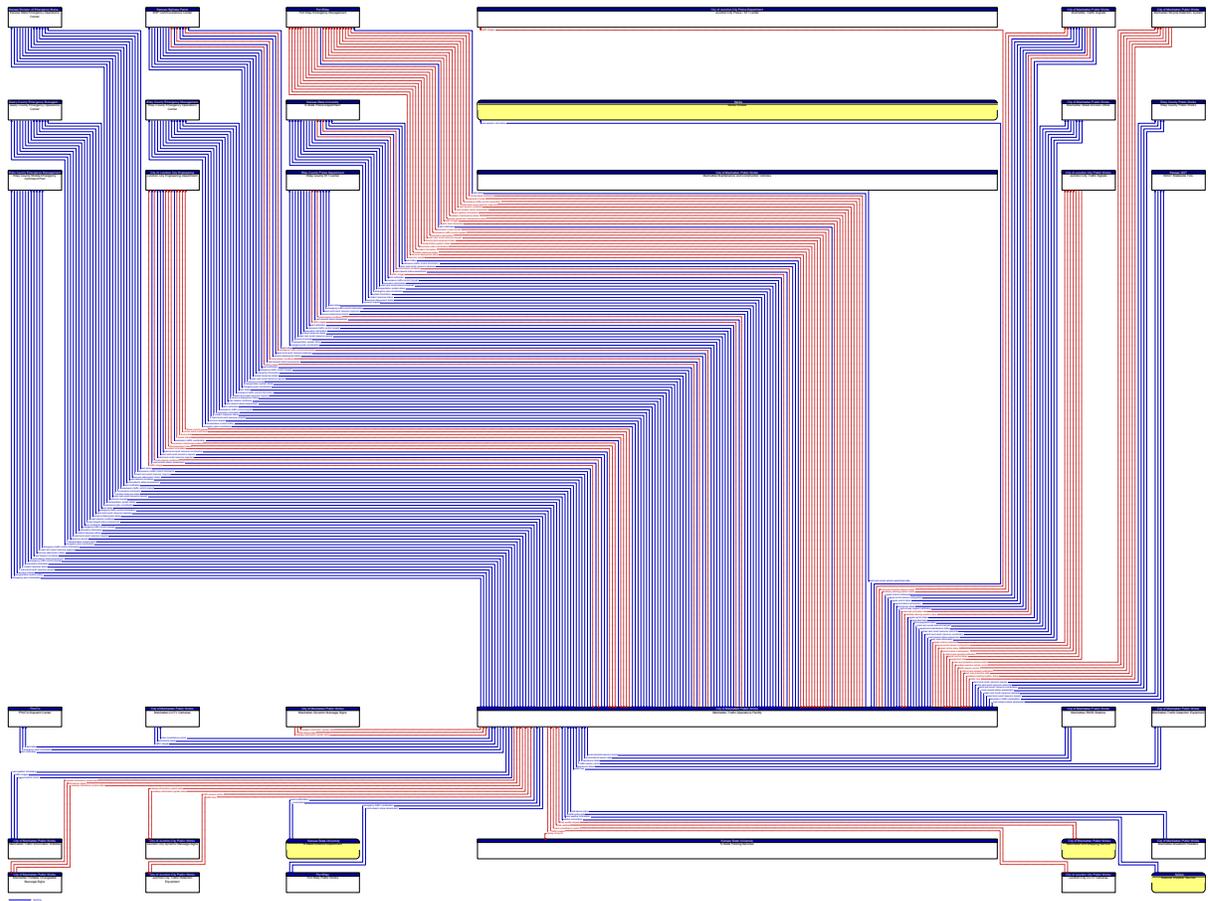


Figure 60: Manhattan Traffic Operations Facility Context Diagram

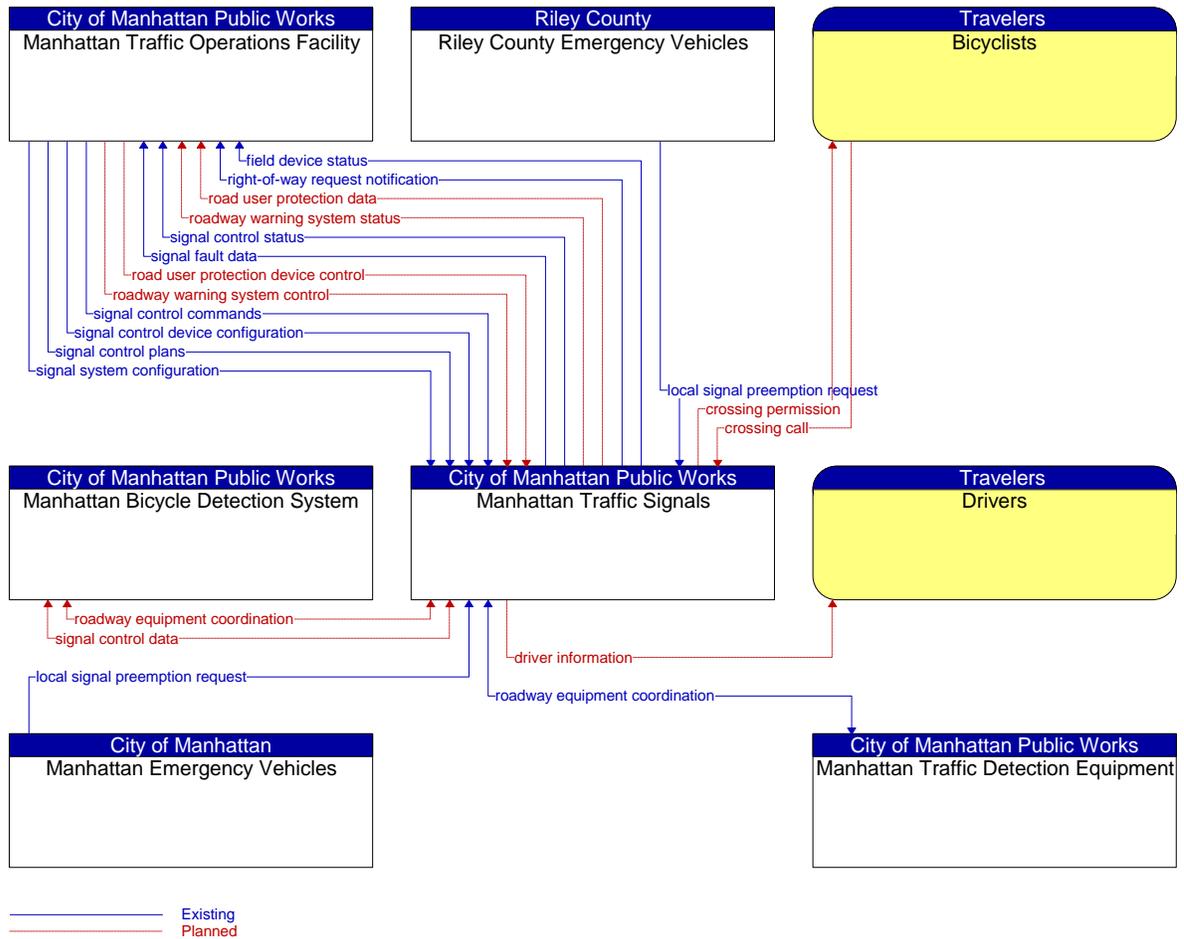


Figure 61: Manhattan Traffic Signals Context Diagram

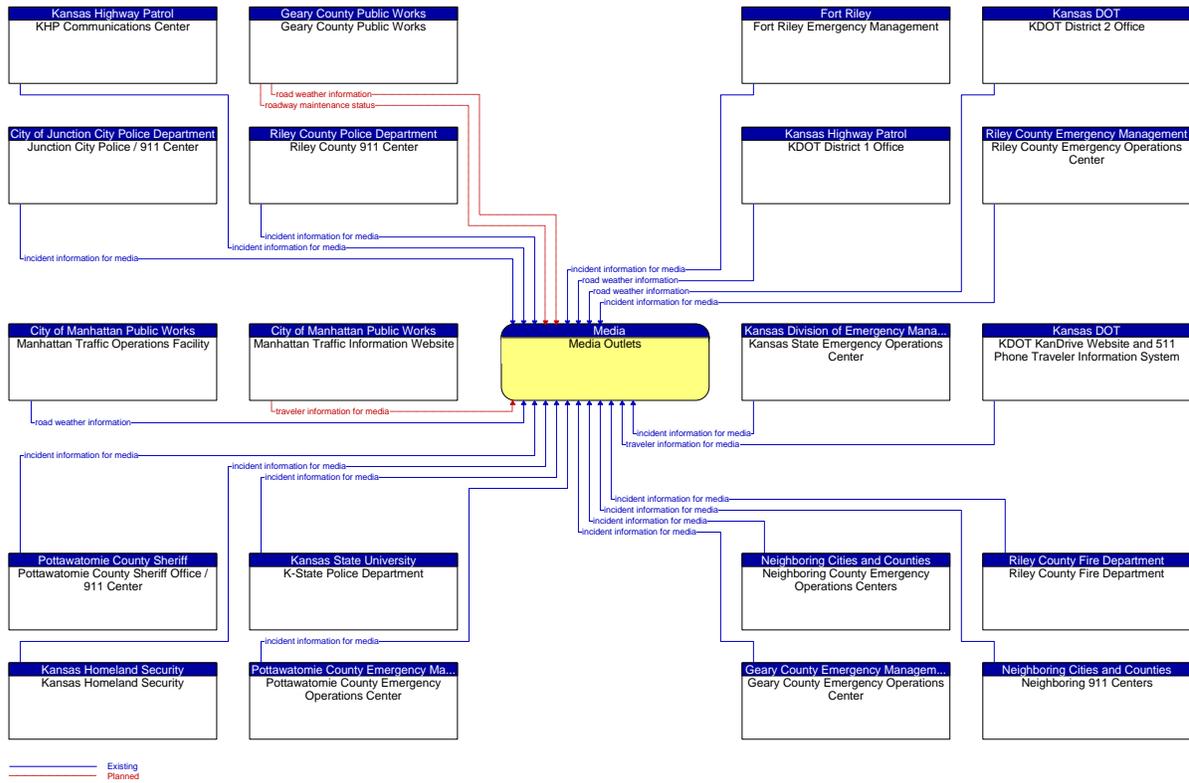


Figure 62: Media Outlets Context Diagram

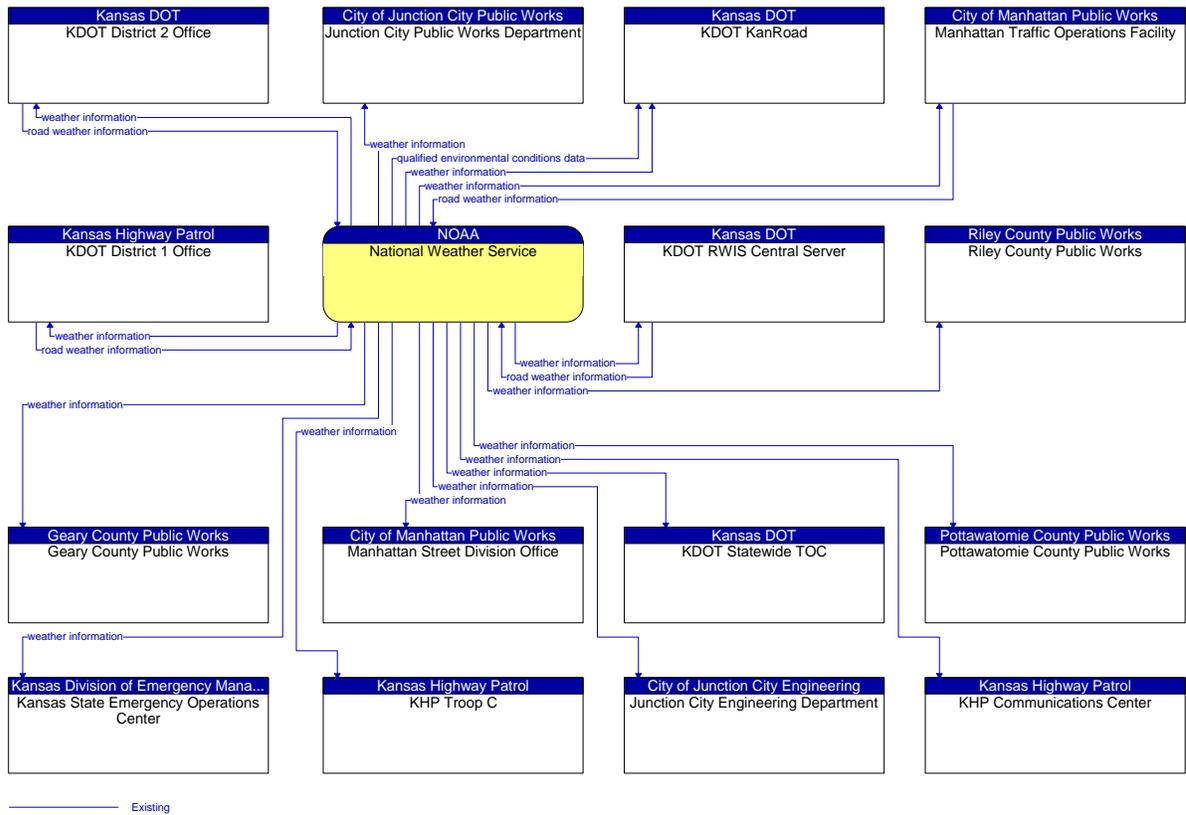


Figure 63: National Weather Service Context Diagram

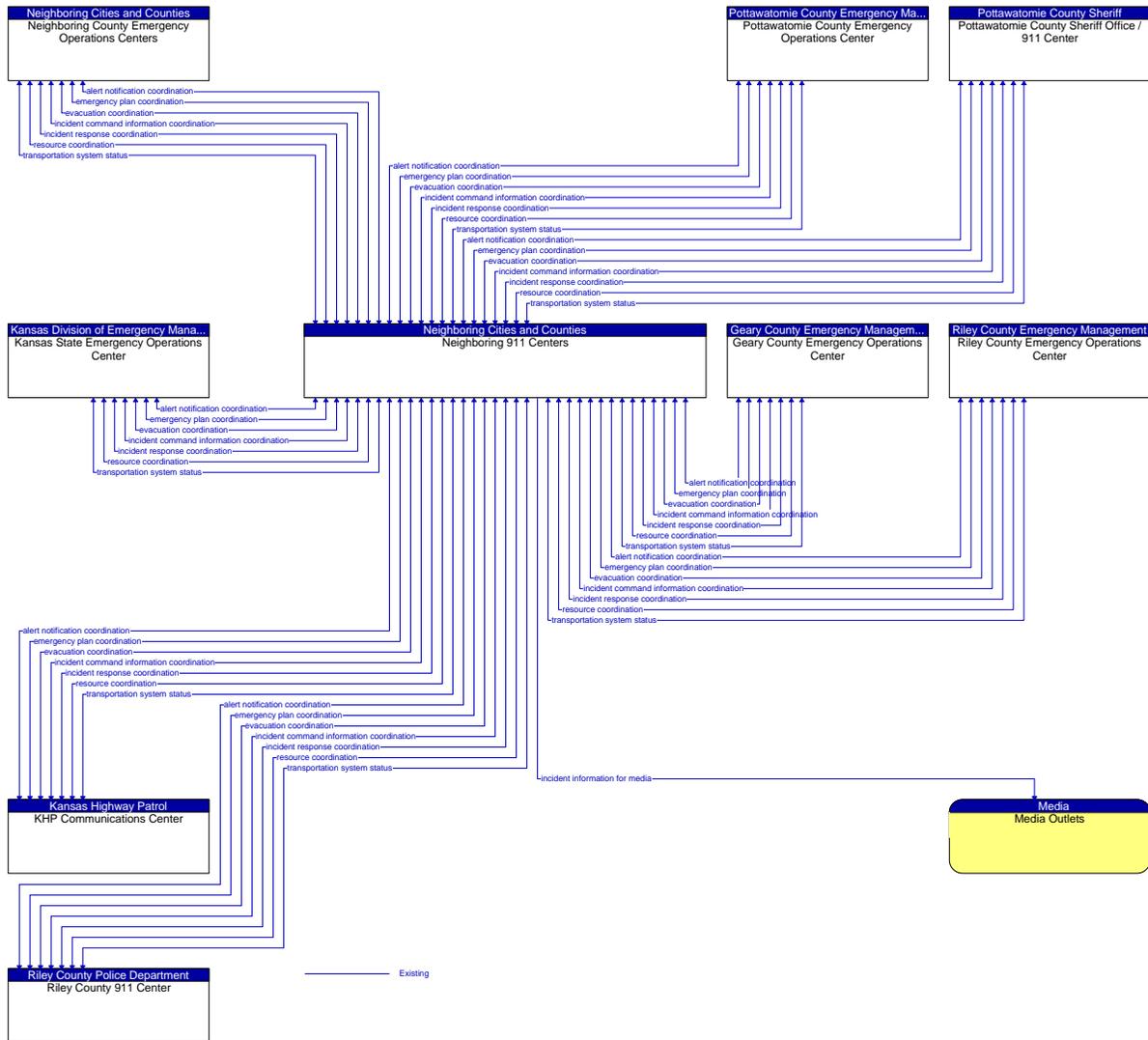


Figure 64: Neighboring 911 Centers Context Diagram

Flint Hills Regional ITS Architecture

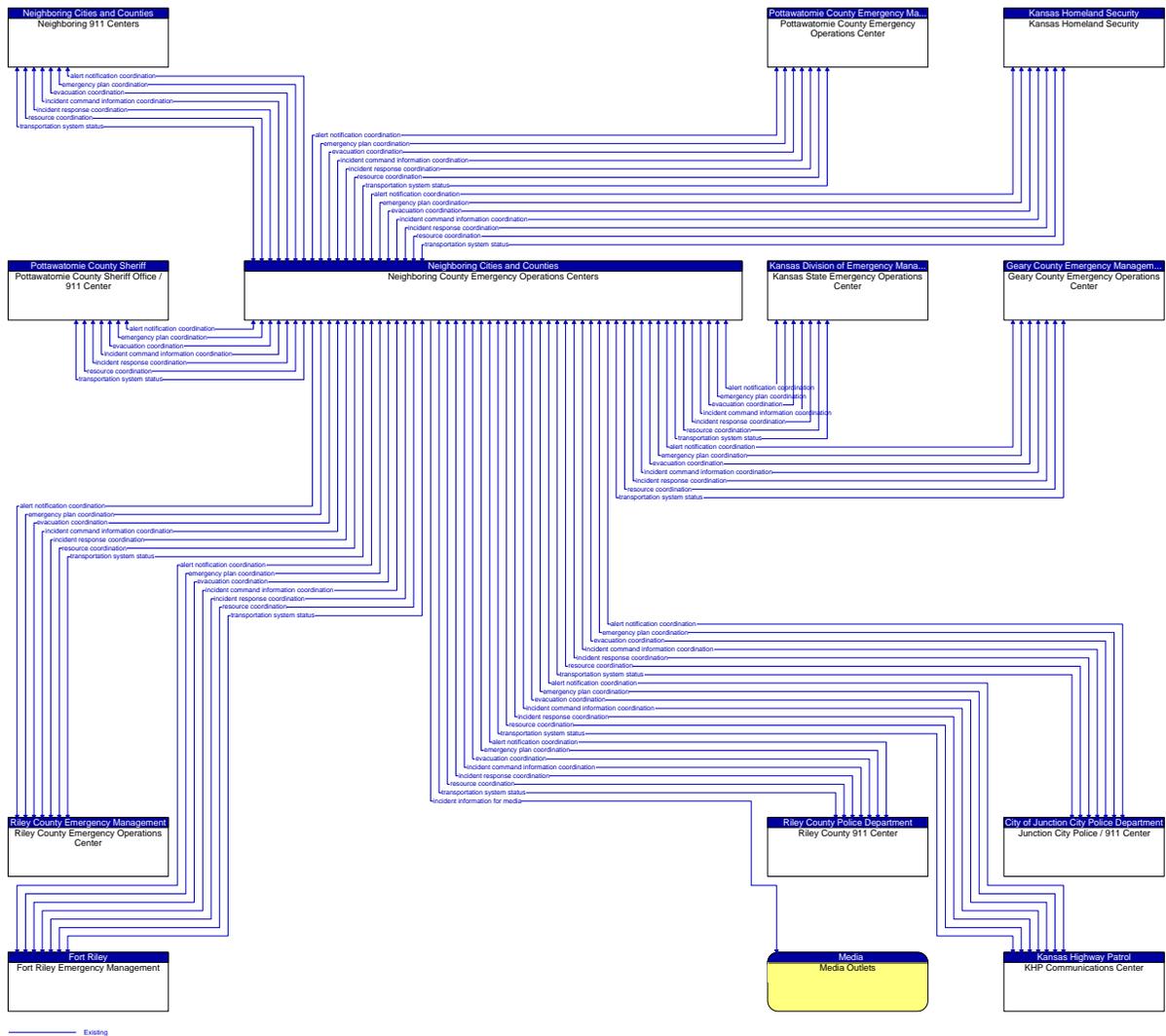


Figure 65: Neighboring County Emergency Operations Centers Context Diagram

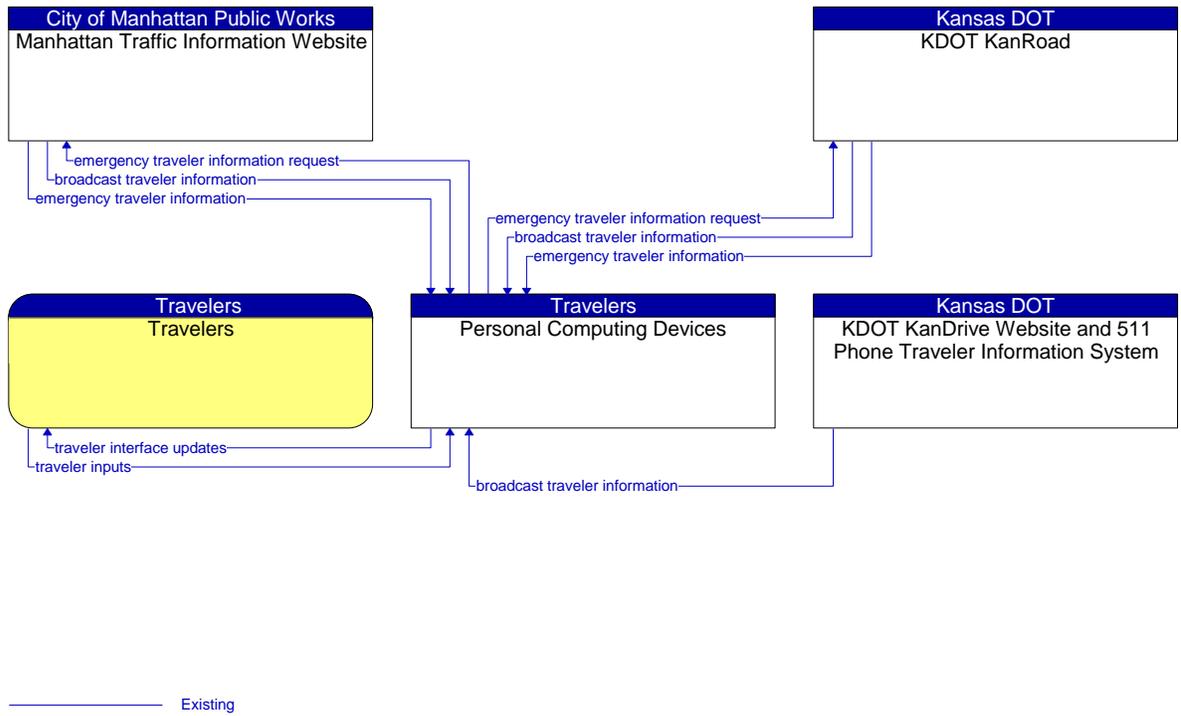


Figure 66: Personal Computing Devices Context Diagram



Figure 67: Pottawatomie County Emergency Operations Center Context Diagram

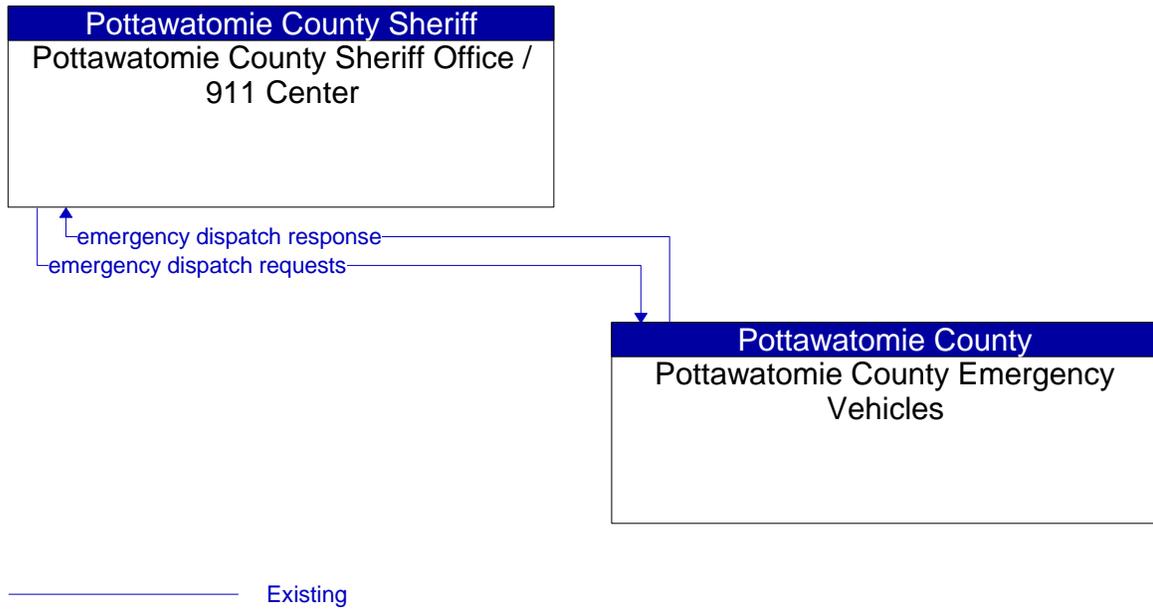


Figure 68: Pottawatomie County Emergency Vehicles Context Diagram

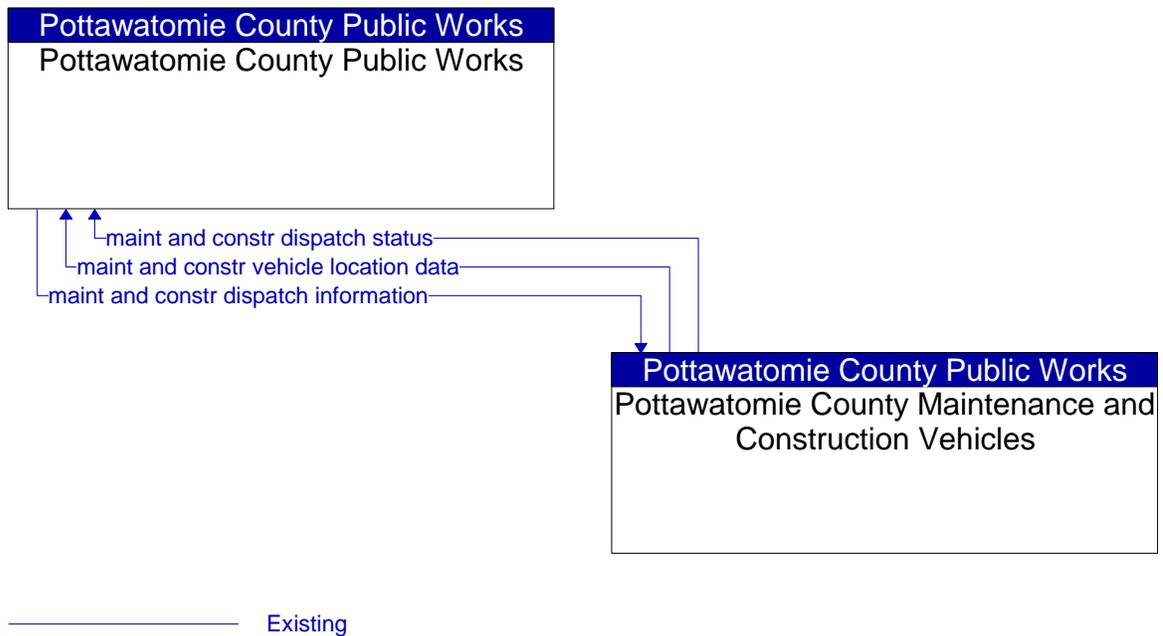


Figure 69: Pottawatomie County Maintenance and Construction Vehicles Context Diagram

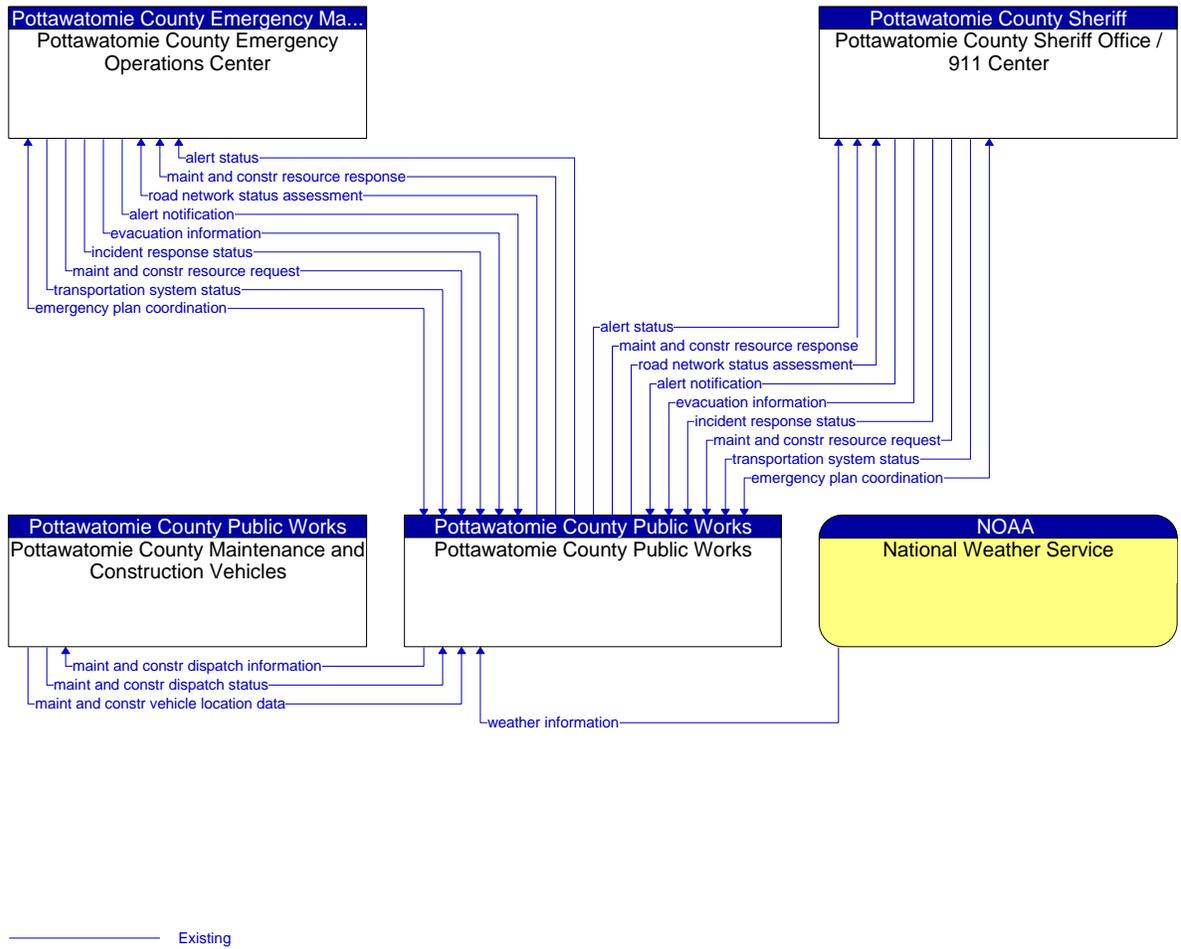


Figure 70: Pottawatomie County Public Works Context Diagram

Flint Hills Regional ITS Architecture

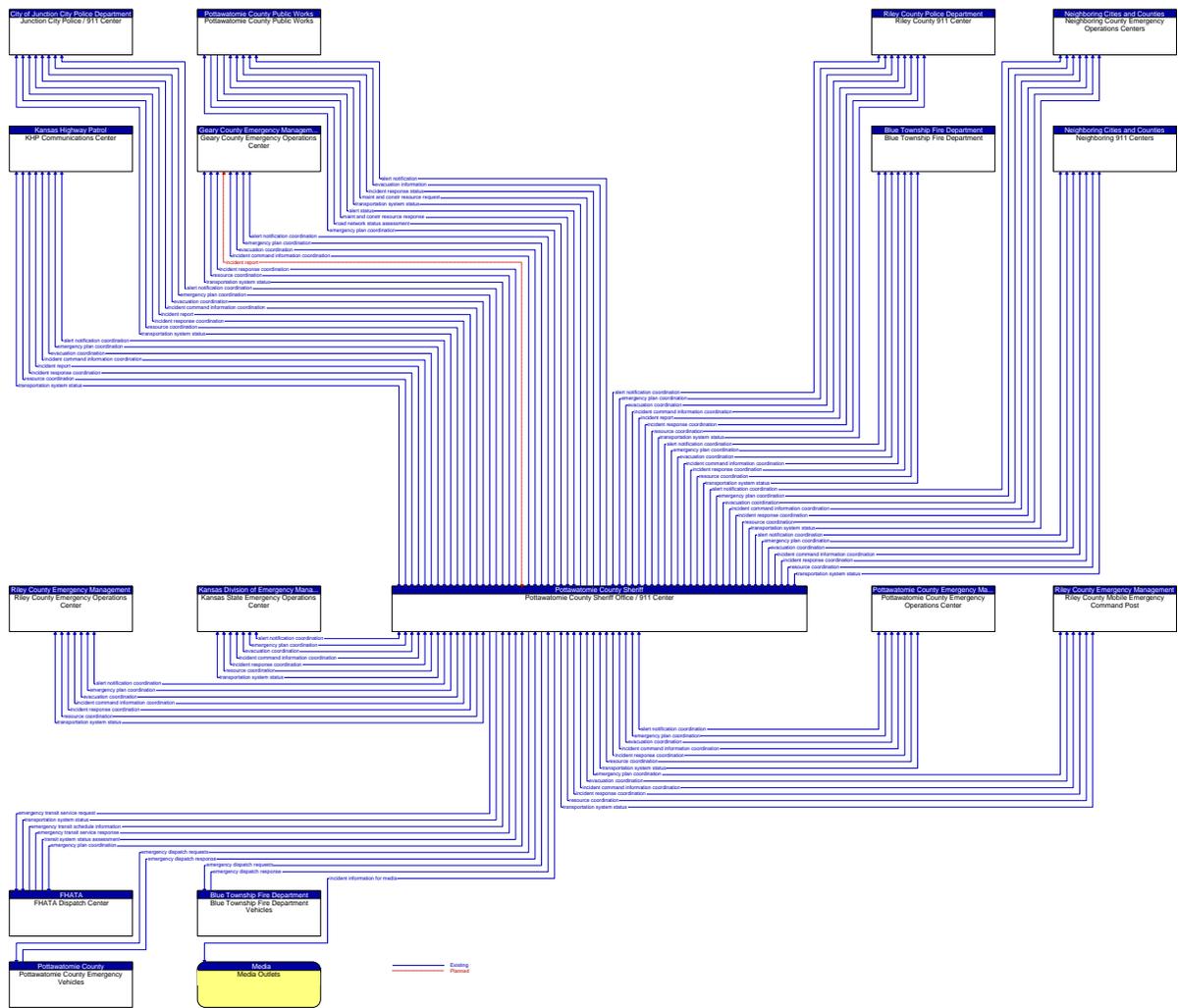


Figure 71: Pottawatomie County Sheriff Office / 911 Center Context Diagram

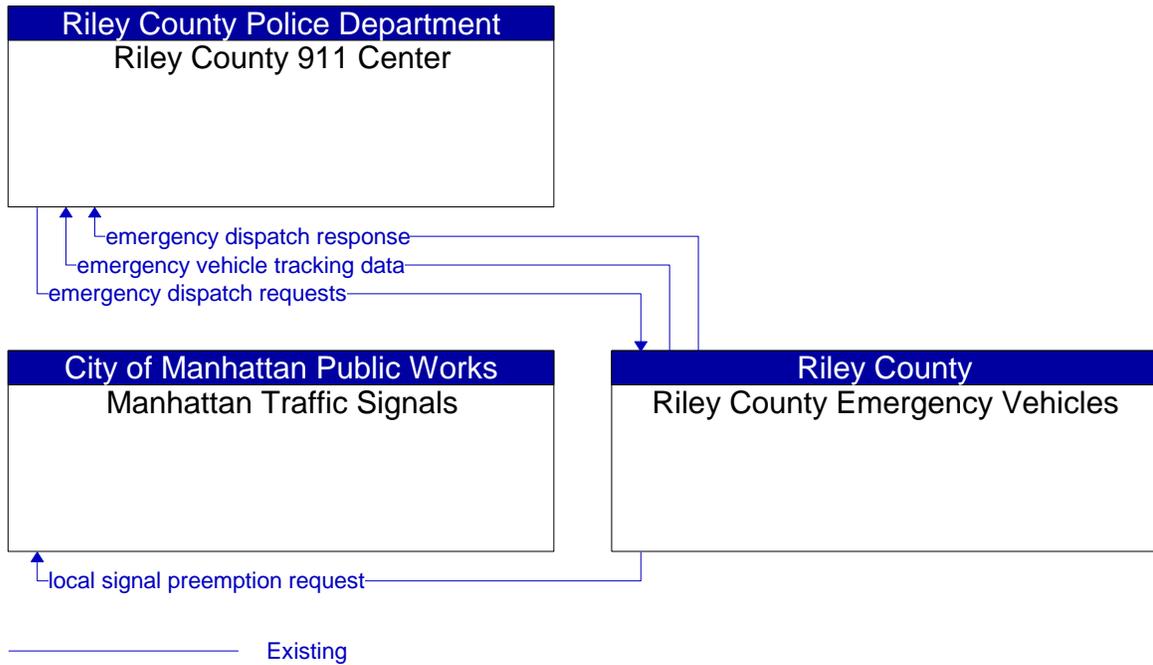


Figure 74: Riley County Emergency Vehicles Context Diagram

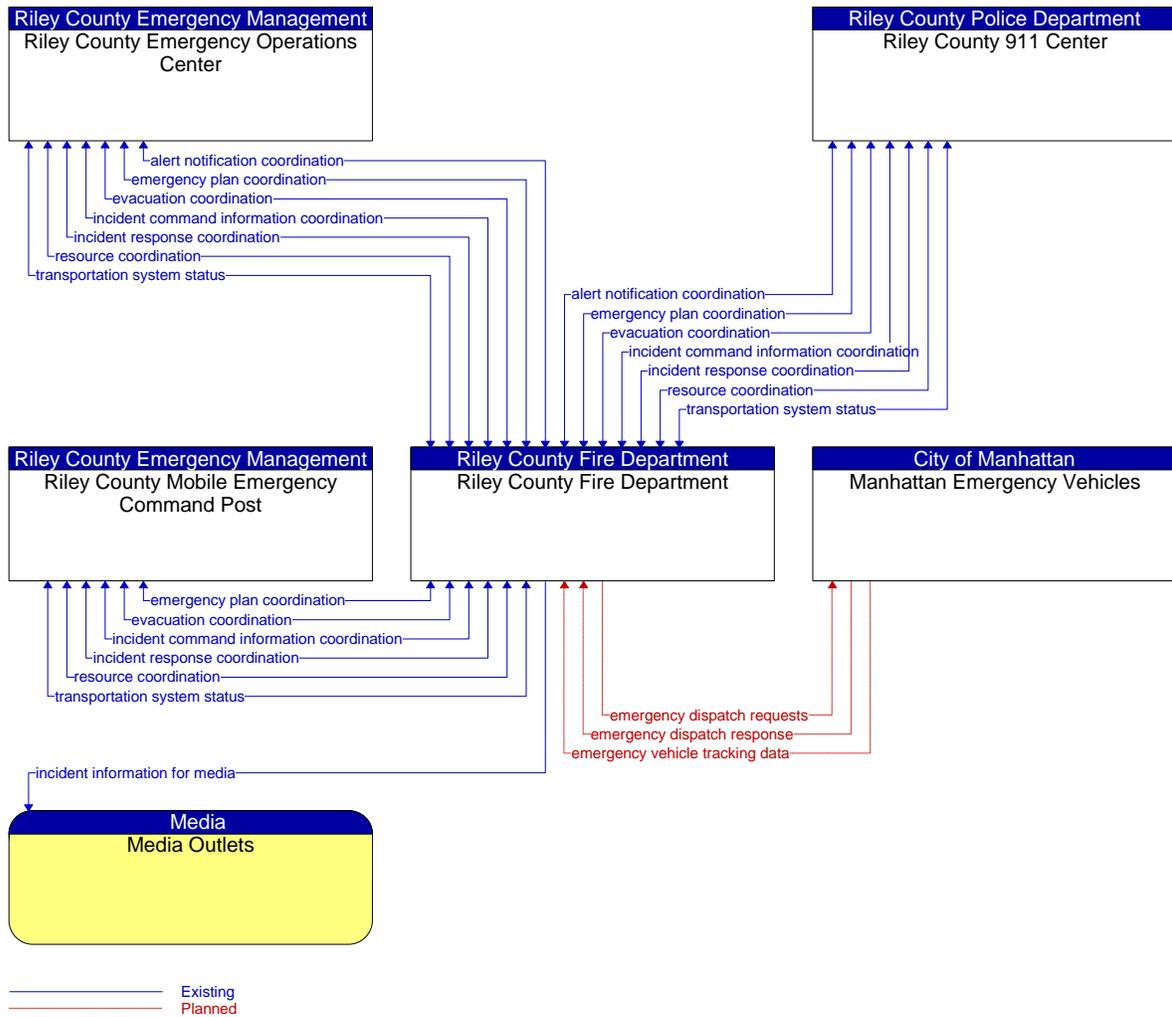


Figure 75: Riley County Fire Department Context Diagram

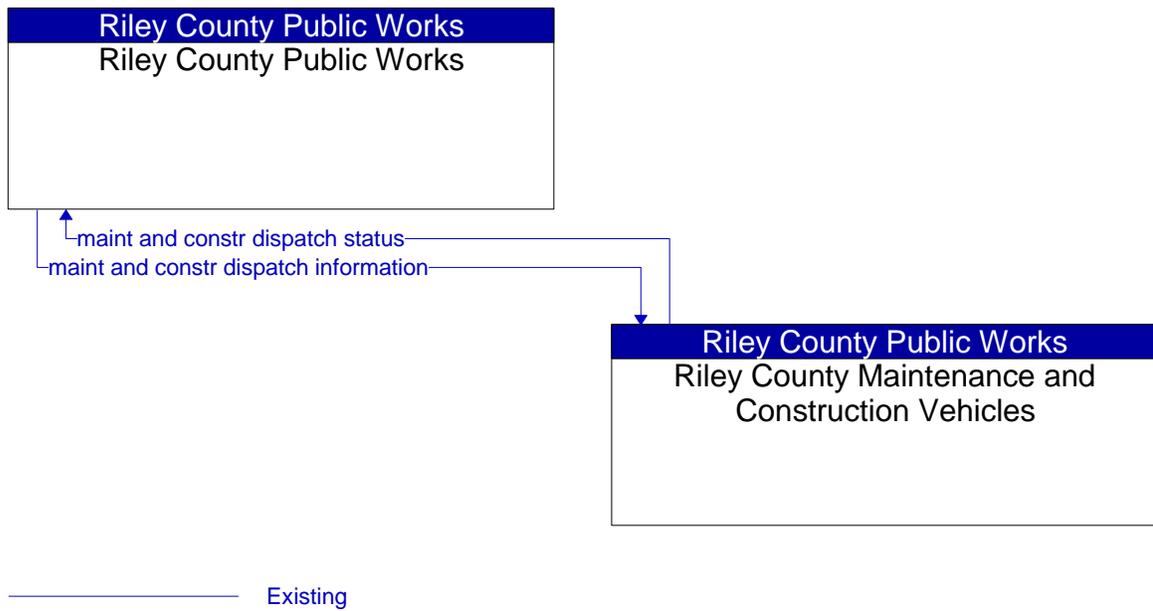


Figure 76: Riley County Maintenance and Construction Vehicles Context Diagram

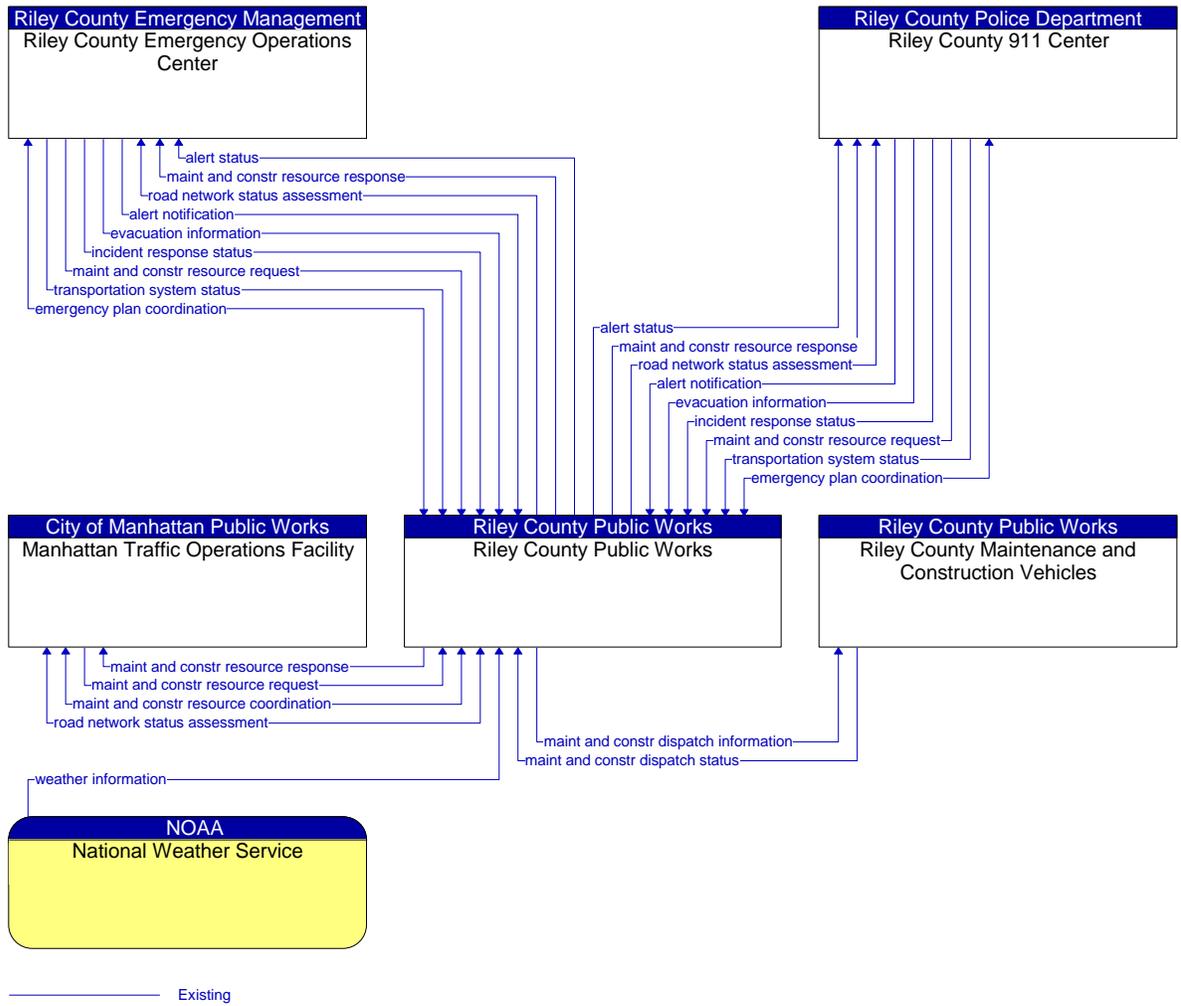


Figure 78: Riley County Public Works Context Diagram

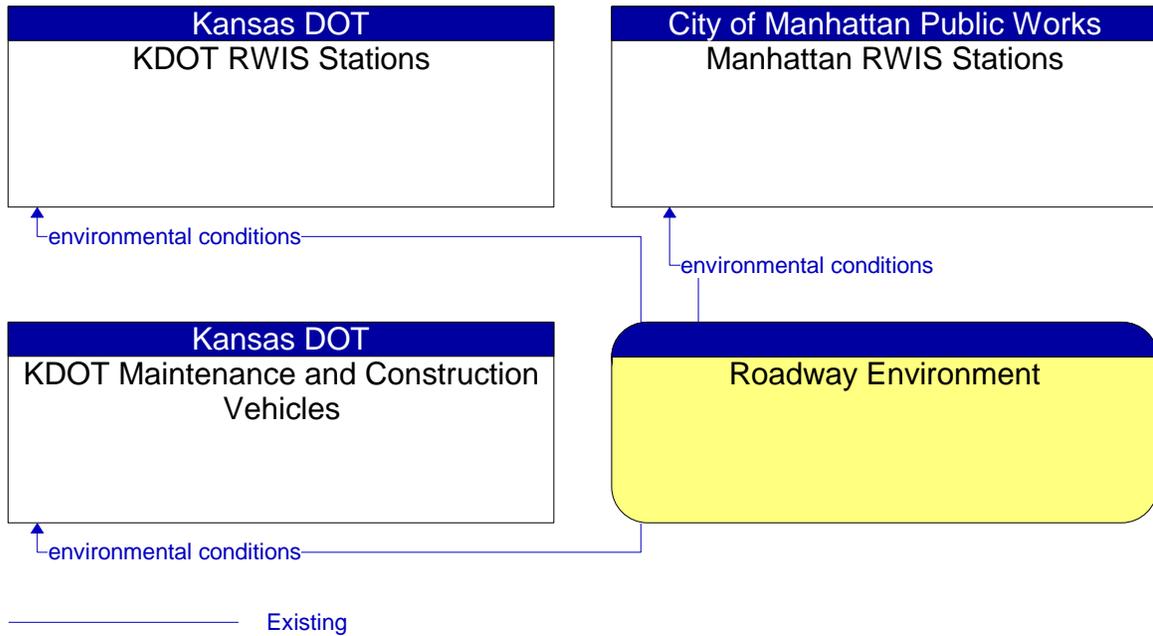


Figure 79: Roadway Environment Context Diagram

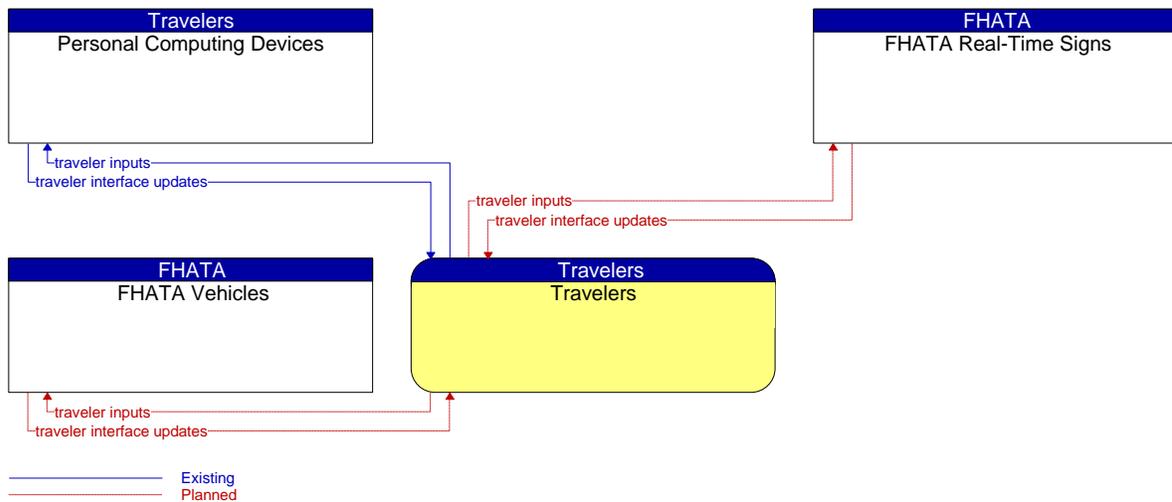


Figure 80: Travelers Context Diagram

Architecture Flow Definitions

Flow Name	Description
alarm acknowledge	Confirmation that alarm was received, instructions and additional information for the alarm initiator, and requests for additional information.

Flow Name	Description
alarm notification	Notification of activation of an audible or silent alarm by a traveler in a public area or by a transit vehicle operator using an on-board device.
alert notification	Notification of a major emergency such as a natural or man-made disaster, civil emergency, or child abduction for distribution to the public. The flow identifies the alert originator, the nature of the emergency, the geographic area affected by the emergency, the effective time period, and information and instructions necessary for the public to respond to the alert. This flow may also identify specific information that should not be released to the public.
alert notification coordination	Coordination of emergency alerts to be distributed to the public. This includes notification of a major emergency such as a natural or man-made disaster, civil emergency, or child abduction for distribution to the public and status of the public notification.
alert status	Information indicating the current status of the emergency alert including identification of the traveler and driver information systems that are being used to provide the alert.
broadcast traveler information	General traveler information that contains traffic and road conditions, link travel times, incidents, advisories, restrictions, transit service information, weather information, parking information, and other related traveler information.
crossing call	Pedestrian request to cross the roadway. This may be an overt (e.g., push button) request from a pedestrian or the physical presence of a pedestrian that can be detected by sensors or surveillance systems.
crossing permission	Signal to pedestrians indicating permission to cross roadway.
current asset restrictions	Restrictions levied on transportation asset usage based on infrastructure design, surveys, tests, or analyses. This includes standard facility design height, width, and weight restrictions, special restrictions such as spring weight restrictions, and temporary facility restrictions that are imposed during maintenance and construction.
demand response passenger and use data	Data collected on board a demand response vehicle relating to the picking up and discharging of passengers.
device control request	Request for device control action
device data	Data from detectors, environmental sensor stations, and traffic control devices including device inventory information.
device status	Status information from devices
driver information	Regulatory, warning, and guidance information provided to the driver while en route to support safe and efficient vehicle operation.
driver parking information	Presentation of general parking information to drivers including lot status, parking availability, and directions to available spaces, entrances, and exits.
emergency dispatch requests	Emergency vehicle dispatch instructions including incident location and available information concerning the incident.
emergency dispatch response	Request for additional emergency dispatch information and provision of en route status.
emergency plan coordination	Information that supports coordination of emergency management plans, continuity of operations plans, emergency response and recovery plans, evacuation plans, and other emergency plans between agencies. This includes general plans that are coordinated prior to an incident and shorter duration tactical plans that are prepared during an incident.
emergency route request	Request for access routes for emergency response vehicles and equipment. This may be a request for ingress or egress routes or other emergency routes.
emergency routes	Suggested ingress and egress routes for access to and between the scene and staging areas or other specialized emergency access routes.
emergency traffic control information	Status of a special traffic control strategy or system activation implemented in response to an emergency traffic control request, a request for emergency access routes, a request for evacuation, a request to activate closure systems, a request to employ driver information systems to support public safety objectives, or other special requests. Identifies the selected traffic control strategy and system control status.

Flow Name	Description
emergency traffic control request	Special request to preempt the current traffic control strategy in effect at one or more signalized intersections or highway segments, activate traffic control and closure systems such as gates and barriers, activate safeguard systems, or use driver information systems. For example, this flow can request all signals to red-flash, request a progression of traffic control preemptions along an emergency vehicle route, request a specific evacuation traffic control plan, request activation of a road closure barrier system, or place a public safety or emergency-related message on a dynamic message sign.
emergency traffic coordination	Coordination supporting disaster response including evacuation and reentry. Includes coordination of special traffic control strategies that support efficient evacuation and reentry while protecting and optimizing movement of response vehicles and other resources responding to the emergency.
emergency transit schedule information	Information on transit schedule and service changes that adapt the service to better meet needs of responders and the general public in an emergency situation, including special service schedules supporting evacuation.
emergency transit service request	Request to modify transit service and fare schedules to address emergencies, including requests for transit services to evacuate people from and/or deploy response agency personnel to an emergency scene. The request may poll for resource availability or request pre-staging, staging, or immediate dispatch of transit resources.
emergency transit service response	Response indicating changes to transit service, fares, and/or restrictions that will be made and status of transit resources to be deployed to support emergency response and/or evacuation.
emergency traveler information	Public notification of an emergency such as a natural or man-made disaster, civil emergency, or child abduction. This flow also includes evacuation information including evacuation instructions, evacuation zones, recommended evacuation times, tailored evacuation routes and destinations, traffic and road conditions along the evacuation routes, traveler services and shelter information, and reentry times and instructions.
emergency traveler information request	Request for alerts, evacuation information, and other emergency information provided to the traveling public.
emergency vehicle tracking data	The current location and operating status of the emergency vehicle.
environmental conditions	Current road conditions (e.g., surface temperature, subsurface temperature, moisture, icing, treatment status) and surface weather conditions (e.g., air temperature, wind speed, precipitation, visibility) that are measured by environmental sensors.
environmental conditions data	Current road conditions (e.g., surface temperature, subsurface temperature, moisture, icing, treatment status) and surface weather conditions (e.g., air temperature, wind speed, precipitation, visibility) as measured and reported by fixed and/or mobile environmental sensors and aggregated by the data collector. Attributes relating to the data collection (and aggregation) are also included.
environmental sensor data	Current road conditions (e.g., surface temperature, subsurface temperature, moisture, icing, treatment status) and surface weather conditions (e.g., air temperature, wind speed, precipitation, visibility) as measured and reported by fixed and/or mobile environmental sensors. Operational status of the sensors is also included.
environmental sensors control	Data used to configure and control environmental sensors.
equipment maintenance status	Current status of field equipment maintenance actions.
evacuation coordination	Coordination of information regarding a pending or in-process evacuation. Includes evacuation zones, evacuation times, evacuation routes, forecast network conditions, and reentry times.
evacuation information	Evacuation instructions and information including evacuation zones, evacuation times, and reentry times.
event confirmation	Confirmation that special event details have been received and processed.
event plans	Plans for major events possibly impacting traffic.
field device status	Reports from field equipment (sensors, signals, signs, controllers, etc.) which indicate current operational status.
field equipment status	Identification of field equipment requiring repair and known information about the associated faults.
incident command information coordination	Information that supports local management of an incident. It includes resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response.

Flow Name	Description
incident information	Notification of existence of incident and expected severity, location, time and nature of incident. As additional information is gathered and the incident evolves, updated incident information is provided. Incidents include any event that impacts transportation system operation ranging from routine incidents (e.g., disabled vehicle at the side of the road) through large-scale natural or human-caused disasters that involve loss of life, injuries, extensive property damage, and multi-jurisdictional response. This also includes special events, closures, and other planned events that may impact the transportation system.
incident information for media	Report of current desensitized incident information prepared for public dissemination through the media.
incident report	Report of an identified incident including incident location, type, severity and other information necessary to initiate an appropriate incident response.
incident response coordination	Incident response procedures and current incident response status that are shared between allied response agencies to support a coordinated response to incidents. This flow provides current situation information, including a summary of incident status and its impact on the transportation system and other infrastructure, and current and planned response activities. This flow also coordinates a positive hand off of responsibility for all or part of an incident response between agencies.
incident response status	Status of the current incident response including a summary of incident status and its impact on the transportation system, traffic management strategies implemented at the site (e.g., closures, diversions, traffic signal control overrides), and current and planned response activities.
local signal preemption request	Direct control signal or message to a signalized intersection that results in preemption of the current control plan and grants right-of-way to the requesting vehicle.
logged vehicle routes	Anticipated route information for guided vehicles, special vehicles (e.g., oversize vehicles) or groups of vehicles (e.g., governor's motorcade) that may require changes in traffic control strategy.
maint and constr dispatch information	Information used to dispatch maintenance and construction vehicles, equipment, and crews and information used to keep work zone crews informed. This information includes routing information, traffic information, road restrictions, incident information, environmental information, decision support information, maintenance schedule data, dispatch instructions, personnel assignments, alert notifications, and corrective actions.
maint and constr dispatch status	Current maintenance and construction status including work data, operator status, crew status, and equipment status.
maint and constr resource coordination	Request for road maintenance and construction resources that can be used in the diversion of traffic (cones, portable signs), clearance of a road hazard, repair of ancillary damage, or any other incident response.
maint and constr resource request	Request for road maintenance and construction resources that can be used in the diversion of traffic (cones, portable signs), clearance of a road hazard, repair of ancillary damage, or any other incident response. The request may poll for resource availability or request pre-staging, staging, or immediate dispatch of resources.
maint and constr resource response	Current status of maintenance and construction resources including availability and deployment status. General resource inventory information covering vehicles, equipment, materials, and people and specific resource deployment status may be included.
maint and constr vehicle location data	The current location and related status (e.g., direction and speed) of the maintenance/construction vehicle.
maint and constr vehicle operational data	Data that describes the maintenance and construction activity performed by the vehicle. Operational data includes materials usage (amount stored and current application rate), operational state of the maintenance equipment (e.g., blade up/down, spreader pattern), vehicle safety status, and other measures associated with the operation of a maintenance, construction, or other special purpose vehicle. Operational data may include basic operational status of the vehicle equipment or a more precise record of the work performed (e.g., application of crack sealant with precise locations and application characteristics).
maint and constr vehicle system control	Configure and control data that supports remote control of on-board maintenance and construction vehicle systems and field equipment that is remotely controlled by the vehicle. For example, the data can be used to adjust material application rates and spread patterns.
maint and constr work plans	Future construction and maintenance work schedules and activities including anticipated closures with anticipated impact to the roadway, alternate routes, anticipated delays, closure times, and durations.
map update request	Request for a map update which could include a new underlying map or map layer updates.
map updates	Map update which could include a new underlying static or real-time map or map layer(s) update.
non-vehicular presence	Sensed presence of pedestrians and other non-motor vehicle travelers at roadway crossing or control points.
parking information	General parking information and status, including current parking availability.

Flow Name	Description
parking lot data request	Request for parking lot occupancy, fares, and availability. The request can be a subscription that initiates as-needed information updates as well as a one-time request for information.
parking lot inputs	Instructions for operation of local parking facilities to support regional traffic management objectives (e.g. which parking lot exits to use). Also, includes inputs from traffic sensors to support calculation of parking lot occupancy and support more effective management of parking entrances and exits.
qualified environmental conditions data	Current road conditions (e.g., surface temperature, subsurface temperature, moisture, icing, treatment status) and surface weather conditions (e.g., air temperature, wind speed, precipitation, visibility) that has had quality checks performed on it and has been formatted and consolidated by the Clarus system. Attributes relating to the data collection (and aggregation) are also included.
remote surveillance control	The control commands used to remotely operate another center's sensors or surveillance equipment so that roadside surveillance assets can be shared by more than one agency.
remote vehicle disable	Signal used to remotely disable a transit vehicle.
request for vehicle measures	Request for vehicle performance and maintenance data collected by onboard sensors.
resource coordination	Coordination of resource inventory information, specific resource status information, resource prioritization and reallocation between jurisdictions, and specific requests for resources and responses that service those requests.
resource deployment status	Status of resource deployment identifying the resources (vehicles, equipment, materials, and personnel) available and their current status. General resource inventory information and specific status of deployed resources may be included.
resource request	A request for resources to implement special traffic control measures, assist in clean up, verify an incident, etc. The request may poll for resource availability or request pre-staging, staging, or immediate deployment of resources. Resources may be explicitly requested or a service may be requested and the specific resource deployment may be determined by the responding agency.
right-of-way request notification	Notice that a request has occurred for signal prioritization, signal preemption, pedestrian call, multi-modal crossing activation, or other source for right-of-way.
road network conditions	Current and forecasted traffic information, road and weather conditions, and other road network status. Either raw data, processed data, or some combination of both may be provided by this architecture flow. Information on diversions and alternate routes, closures, and special traffic restrictions (lane/shoulder use, weight restrictions, width restrictions, HOV requirements) in effect is included along with a definition of the links, nodes, and routes that make up the road network.
road network status assessment	Assessment of damage sustained by the road network including location and extent of the damage, estimate of remaining capacity, required closures, alternate routes, necessary restrictions, and time frame for repair and recovery.
road user protection data	Current data as well as operational status from mixed roadway and right-of-way systems.
road user protection device control	Control requests and operating parameters for mixed roadway and right-of-way systems.
road weather information	Road conditions and weather information that are made available by road maintenance operations to other transportation system operators.
roadway equipment coordination	The direct flow of information between field equipment. This includes transfer of information between sensors and driver information systems (e.g., DMS, HAR, variable speed limit signs, dynamic lane signs) or control devices (e.g., traffic signals, ramp meters), direct coordination between adjacent control devices, interfaces between detection and warning or alarm systems, and any other direct communications between field equipment.
roadway information system data	Information used to initialize, configure, and control roadside systems that provide driver information (e.g., dynamic message signs, highway advisory radio, beacon systems). This flow can provide message content and delivery attributes, local message store maintenance requests, control mode commands, status queries, and all other commands and associated parameters that support remote management of these systems.
roadway information system status	Current operating status of dynamic message signs, highway advisory radios, beacon systems, or other configurable field equipment that provides dynamic information to the driver.
roadway maintenance status	Summary of maintenance fleet operations affecting the road network. This includes the status of winter maintenance (snow plow schedule and current status).
roadway warning system control	Information used to configure and control roadway warning systems.

Flow Name	Description
roadway warning system status	Current operating status of roadway warning systems.
secure area sensor control	Information used to configure and control threat sensors (e.g., thermal, acoustic, radiological, chemical), object, motion and intrusion detection sensors. The provided information controls sensor data collection, aggregation, filtering, and other local processing.
secure area sensor data	Data provided by threat sensors (e.g., thermal, acoustic, radiological, chemical), and intrusion, motion, and object detection sensors in secure areas indicating the sensor's operational status, raw and processed sensor data, and alarm indicators when a threat has been detected.
secure area surveillance control	Information used to configure and control audio and video surveillance systems used for transportation infrastructure security in secure areas. The provided information controls surveillance data collection, aggregation, filtering, and other local processing.
secure area surveillance data	Data collected from surveillance systems used to monitor secure areas. Includes video, audio, processed surveillance data, equipment operational status, and alarm indicators when a threat has been detected.
security equipment maintenance status	Current status of security surveillance and sensor field equipment maintenance actions.
security field equipment status	Identification of security sensors and surveillance equipment requiring repair and known information about the associated faults.
signal control commands	Control of traffic signal controllers or field masters including clock synchronization.
signal control data	Information used to configure local traffic signal controllers.
signal control device configuration	Data used to configure traffic signal control equipment including local controllers and system masters.
signal control plans	Traffic signal timing parameters including minimum green time and interval durations for basic operation and cycle length, splits, offset, phase sequence, etc. for coordinated systems.
signal control status	Operational and status data of traffic signal control equipment including operating condition and current indications.
signal fault data	Faults from traffic signal control equipment.
signal system configuration	Data used to configure traffic signal systems including configuring control sections and mode of operation (time based or traffic responsive).
suggested route	Suggested route for a dispatched emergency or maintenance vehicle that may reflect current network conditions and the additional routing options available to en route emergency or maintenance vehicles that are not available to the general public.
traffic flow	Raw and/or processed traffic detector data which allows derivation of traffic flow variables (e.g., speed, volume, and density measures) and associated information (e.g., congestion, potential incidents). This flow includes the traffic data and the operational status of the traffic detectors.
traffic images	High fidelity, real-time traffic images suitable for surveillance monitoring by the operator or for use in machine vision applications.
traffic probe data	Vehicle data that is used to determine traffic conditions. In a basic implementation, the data could be limited to time stamped unique identifiers that can be used to measure a vehicle's progress through the network. In more advanced implementations, the vehicle may report current position, speed, and heading and snapshots of recent events including route information, starts and stops, speed changes, and other information that can be used to estimate traffic conditions.
traffic sensor control	Information used to configure and control traffic sensor systems.
transit and fare schedules	Transit service information including routes, schedules, and fare information.
transit information request	Request for transit operations information including schedule and fare information. The request can be a subscription that initiates as-needed information updates as well as a one-time request for information.
transit request confirmation	Confirmation of a request for transit information or service.
transit schedule adherence information	Dynamic transit schedule adherence and transit vehicle location information.
transit schedule information	Current and projected transit schedule information used to initialize the transit vehicle with a vehicle assignment, monitor schedule performance, and develop corrective actions on-board.

Flow Name	Description
transit system status assessment	Assessment of damage sustained by the public transportation system including location and extent of the damage, current operational status including an estimate of remaining capacity and necessary restrictions, and time frame for repair and recovery.
transit traveler information	Transit information prepared to support transit users and other travelers. It contains transit schedules, real-time arrival information, fare schedules, alerts and advisories, and general transit service information.
transit traveler request	Request by a Transit traveler to summon assistance, request transit information, or request any other transit services.
transit vehicle conditions	Operating conditions of transit vehicle (e.g., engine running, oil pressure, fuel level and usage).
transit vehicle location data	Current transit vehicle location and related operational conditions data provided by a transit vehicle.
transit vehicle operator authentication information	Information regarding on-board transit operator authentication
transit vehicle operator authentication update	Results of authentication process or update of on-board authentication database.
transit vehicle operator information	Transit service instructions, wide area alerts, traffic information, road conditions, and other information for both transit and paratransit operators.
transit vehicle schedule performance	Estimated times of arrival and anticipated schedule deviations reported by a transit vehicle.
transportation system status	Current status and condition of transportation infrastructure (e.g., tunnels, bridges, interchanges, TMC offices, maintenance facilities). In case of disaster or major incident, this flow provides an assessment of damage sustained by the surface transportation system including location and extent of the damage, estimate of remaining capacity and necessary restrictions, and time frame for repair and recovery.
traveler information for media	General traveler information regarding incidents, unusual traffic conditions, transit issues, or other advisory information that has been desensitized and provided to the media.
traveler inputs	User input from a traveler to summon assistance, request travel information, make a reservation, or request any other traveler service.
traveler interface updates	Visual or audio information (e.g., routes, messages, guidance, emergency information) that is provided to the traveler.
video surveillance control	Information used to configure and control video surveillance systems.
weather information	Accumulated forecasted and current weather data (e.g., temperature, pressure, wind speed, wind direction, humidity, precipitation, visibility, light conditions, etc.).
work zone information	Summary of maintenance and construction work zone activities affecting the road network including the nature of the maintenance or construction activity, location, impact to the roadway, expected time(s) and duration of impact, anticipated delays, alternate routes, and suggested speed limits. This information may be augmented with images that provide a visual indication of current work zone status and traffic impacts.