

Security element



12.1 Introduction

Transportation and personal security have received greater attention across the country since the terrorist attacks in New York City in 2001. The hurricane and resulting flooding along the Gulf Coast in 2005 demonstrated the importance of transportation facilities and services in an emergency event. Transportation facilities and systems are critical to maintaining the region's economy and everyday quality of life, and responding to natural and manmade disasters.

Goal: Support a healthy, strong, regional economy.

The security of the region's transportation system is critical to maintaining strong and vibrant economic sectors. The goods and people that are moved with regional transportation infrastructure rely on dependable maintenance, accessibility and connectivity. A disaster involving transportation infrastructure can have devastating consequences on a region's economy.

Goal: Maximize access to opportunity for all area residents.

Bridges, roads, transit centers, airports, intermodal facilities, railroads and other critical transportation infrastructure are central components of the region's transportation system. Solutions that reduce security risks may be different for roads and bridges than an intermodal facility. Despite the challenge of securing facilities appropriately, all residents and businesses should have a transportation choice that is safe and secure. During times of disaster, certain population segments will have transportation challenges in traveling away from an impacted area or reaching relief services.

Goal: Support a quality built and natural environment.

Some elements of security planning involve altering transportation infrastructure and the surrounding environment. These elements should blend within the community and have few adverse impacts on the natural environment. Quality security planning is mindful of the potential impacts on the cultural and built environment.



Goal: Promote the safety and well-being of the traveling public.

A safe transportation system includes the protection of people and goods using the system. Security, as a planning factor, enhances the region's transportation system as reliable infrastructure in case of emergencies.

12.2 Background

The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 was landmark transportation legislation that outlined factors to incorporate in the development of transportation plans and programs in metropolitan areas. It identified a need to consider capital investments that would result in increased security for transit systems. With its successor legislation in 1998, the Transportation Equity Act for the 21st Century (TEA-21), the factors outlined in ISTEA were consolidated into seven distinct planning factors. One factor closely aligned with homeland security needs advised improving the safety and security of the transportation system for motorized and non-motorized users. Most security planning efforts undertaken by metropolitan planning organizations (MPOs) involved freight movements within, through and out of a region with an emphasis on hazardous materials. Response to natural disasters and acts of terrorism was given little consideration.

Following the terrorist events in New York City and the hurricane-related disasters along the Gulf Coast, the meaning of the safety and security planning factor outlined in TEA-21 changed for many urban areas. Now there is now greater emphasis on security issues by elected and appointed officials. Experts often cite public transportation as one of the more vulnerable areas of the nation's transportation system. Congress has authorized new programs and grant opportunities to help urban areas identify risks and collaborative ways to manage them.

In 2005, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) was signed into law and continued many of the programs established in ISTEA and TEA-21. SAFETEA-LU reflects the renewed interest in security issues with transportation infrastructure. It identifies security as a stand-alone planning factor, signaling an increase in importance from prior legislation.

Security Planning Factor: Increase the security of the transportation system for motorized and non-motorized users.

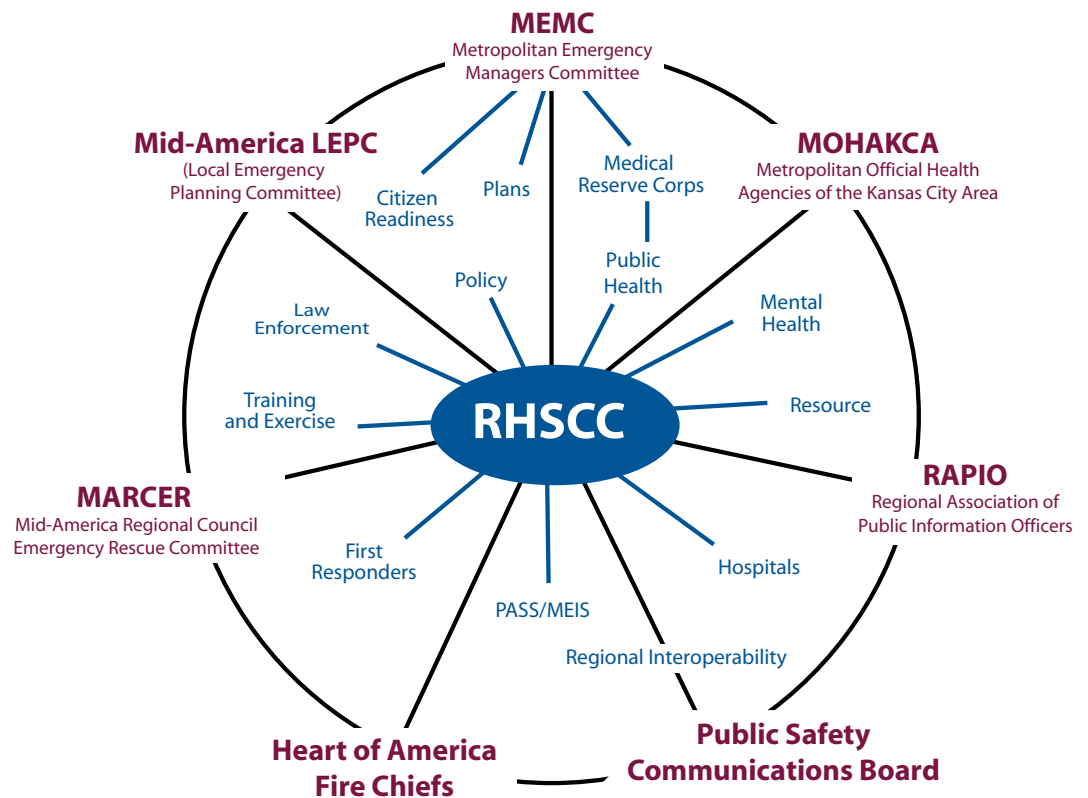
12.3 Regional Risks: A Transportation Perspective

The Mid-America Regional Council (MARC) maintains a forum that engages the region's leadership from local elected officials, fire service, law enforcement, emergency medical services, public health, emergency managers, public works and emergency communications (Figure 12-1). A number of committees contribute to the regional homeland security functions through the Regional Homeland Security Coordinating Committee (RHSCC). Through preparedness planning efforts, a Homeland Security Strategy Plan has been adopted that guides the work of the coordinating committee and other groups to evaluate risks and identify actions and investments to reduce them or increase response capabilities.



Terror acts involving explosive devices, hazardous chemicals or other materials and natural disasters pose the greatest risks for the region’s transportation infrastructure.

**FIGURE 12-1
MARC COMMITTEE RELATIONSHIPS**



The region’s preparedness planning efforts and programs incorporate these most probable risks. Accidental acts involving hazardous materials are more likely because of the number of industrial and manufacturing businesses located within the region. Several intermodal facilities handle freight movement between rail and truck. As the second largest rail hub in the United States, and with the intersection of three major interstate highways, a significant amount of goods and materials — including hazardous materials — are transported by rail and truck through the Kansas City region. Due to these transportation movements, the region is taking proactive steps to identify critical infrastructure that may be more vulnerable to a terrorist attack.

Natural hazards including tornados and floods are additional risks being considered by preparedness planners. Although severe thunderstorms are most common during the spring months in the region, severe weather can occur anytime. Local emergency management is proactive with educating citizens on the importance of weather warnings and appropriate actions to take when a warning is issued. Tornados can damage critical transportation infrastructure such as roads and bridges. Floods pose a similar threat, and

also impact residents that rely on the transportation system in case of evacuation. Floods may limit the use of key transportation routes. Winter weather, though not as damaging to infrastructure, significantly impacts the operation of the transportation system. Hazardous driving conditions threaten personal safety and impact businesses and people that rely on a dependable transportation system for the delivery of goods and services. Local emergency management personnel are familiar with addressing these natural hazards and are participating in regional preparedness planning efforts.

12.4 Critical Transportation Infrastructure

The risks described can impact critical transportation infrastructure. This infrastructure, if damaged or operating deficiently during a disaster, can hamper efforts to assist people in need. Preparedness planning efforts in the Kansas City metropolitan area are aware of these issues and are working to inventory the most critical transportation infrastructure that should be secured against malicious acts, maintained for efficient transportation operations, or prioritized after a disaster for rebuilding efforts.

The most critical transportation infrastructure in the region includes:

12.4.1 Major Bridges

The greater Kansas City metropolitan area is served by three major interstates, four spur or loop interstate routes, and several U.S. highway routes. A series of bridges often connect these major routes. Preparedness planners have identified the major bridges in the region based upon traffic volume. These bridges are essential to maintain the transportation network's efficiency.

12.4.2 Tunnels

Tunnels are not uncommon in the Greater Kansas City area; however, one transportation facility runs underneath a major building in the area. This facility has received improvements in past years to improve visibility and safety for drivers and ensure the security of the transportation facility and the building.

12.4.3 Airports

Kansas City International Airport is the main passenger facility and air cargo hub in the region. The Transportation Security Administration works with a private security screening company to screen airline passengers and their luggage. Across the United States, improvements to cargo screening and more surveillance around airport properties have been identified as additional strategies to improve airline safety and security. Kansas City International Airport has similar issues to address. Smaller airports operate throughout the region mainly for corporate and recreational purposes.

12.4.4 Transit Facilities

Transit centers and buses are additional pieces of critical infrastructure. The security of the transit centers and stops are important from a personal security perspective, particularly with perceived levels of crime. Local transit operators take precautions in designing these facilities and training with their drivers to ensure the highest level of personal safety and security. Buses also play a critical role in disasters if evacuation of special needs populations is needed. Security for the operations centers of the region's three transit

operators is also an issue. These facilities provide fuel storage, communications systems for contact with their fleet, and bus storage areas.

A number of inter-city bus companies provide service to and from Kansas City. Five bus lines from Mexico have their first U.S. stop in Kansas City, Missouri.

12.4.5 Railroad Facilities

As the nation's second largest rail center, the Kansas City area has four Class I rail carriers — or freight railroads with operating revenue in excess of \$319.3 million — and one local switching carrier. These carriers sometimes transport hazardous materials through the region. There are numerous roadway-railroad at-grade crossings in the region, so local rail carriers are active participants in Operation Lifesaver, which is an educational and enforcement campaign to prevent vehicle-rail collisions. Operation Lifesaver efforts have made railroad facilities across the nation safer, and reduced the chance of collisions that could lead to a major disaster.

12.4.6 Intermodal Facilities

There are six Kansas City area rail/truck intermodal facilities and an additional facility planned to open. These facilities are important links for cargo shipments through the United States. Congestion is increasing on these rail lines, which is pushing railroads to move freight quicker through the region. Nationally, improving cargo security is a priority that must be balanced with the timeliness delivering goods and services.

12.5 State of Regional Preparedness Plans

Security plans developed on a national, state, regional and local level that impact the Greater Kansas City area include elements of critical transportation infrastructure. Some of these plans are more comprehensive, addressing factors such as public health, housing, special needs populations, communications and coordination. Other plans may only detail one security component or a specific facility, similar to the I-70 Incident Management Plan. The preparedness plans most important to transportation involve critical transportation infrastructure; identify of emergency routes; plan transportation for special needs populations; and select possible evacuation routes.

12.5.1 National Incident Management System (NIMS) and the Regional Incident Management Plan

The federal government has mandated the use of the National Incident Management System by federal, state and local agencies involved in emergency response. Local agencies have committed to using NIMS to standardize resources and incident response. The regional Incident Management Plan describes the incident management system adopted by the Heart of America Metro Fire Chiefs Council to manage emergencies across the Greater Kansas City metropolitan area. This plan is consistent with NIMS. Since many emergencies involve response from multiple disciplines and may involve more than one jurisdiction, the National Incident Management System uses a standardized organizational structure and common terminology. The NIMS is geared towards response and includes elements and functions of public works during an incident.

12.5.2 Hazardous Material Plan

The MARC Local Emergency Planning Committee (LEPC) developed the Hazardous Material Plan to assist emergency response agencies and local governments with hazardous materials emergencies. The plan identifies hazardous material locations and addresses rail and truck traffic carrying these types of materials. The Hazardous Material Plan covers Cass, Clay, Jackson, Platte and Ray counties in Missouri. Johnson and Wyandotte counties in Kansas have created similar plans to guide their response to hazardous materials incidents.

12.5.3 Regional Mass Casualty Plan and Regional Ambulance Diversion Guidelines

MARCER, the Mid-America Regional Council Emergency Rescue Committee, is responsible for developing the region's mass casualty incident plan and ambulance diversion guidelines. The MARCER Committee involves the region's emergency medical services (EMS) agencies and hospitals to ensure high quality pre-hospital emergency care. The mass casualty plan details how the region's EMS agencies and hospitals will work together to address patient load during an emergency involving multiple patients. The region's new Patient-Tracking System helps monitor where patients are transported to assist with family reunification.

The Ambulance Diversion Guidelines provide a framework for diverting ambulances under the EMSsystem in the Kansas City metropolitan area. The EMSsystem is a Web-based interface used by local hospitals and monitored by EMS agencies and other public agencies. The EMSsystem allows hospitals to share information about their emergency department capabilities. The diversion guidelines address protocol for diversion and most efficient transportation routes between hospital trauma centers.

12.5.4 Regional MMRS Plan

The Regional Metropolitan Medial Response Plan outlines how the region will respond to a major disaster event involving weapons of mass destruction.

12.5.5 Regional Coordination Base Guide

The Regional Coordination Base Guide is under development. The Base Guide will add structure and formality to a system that exists when local first responder agencies need to coordinate efforts for a disaster. It helps addresses areas of conflict that can sometimes prevent coordination. The Base Guide will describe who facilitates the coordination between the 15 different emergency services factors (ESF) and MARC's role in the coordination. The Base Guide will address realistic risks, which means it will likely not address hazards which would evacuate the entire region prior to an incident (e.g., hurricane). The guide will also address evacuation planning where transportation contraflow lane reversal does not seem realistic because of no need to send a population group in only one direction.

The region has identified transportation, communications, and mass care, housing and human services as regional priorities in the Base Guide. Two main functions are related to transportation and include evacuating people out of the region or to another portion of the region, and importing people from an incident outside of the region (e.g., a major

New Madrid earthquake). These two transportation functions are highly connected and coordinated with mass care and housing.

12.5.6 Local Emergency Operations Plan

Each county in the Greater Kansas City metropolitan area has developed a Local Emergency Operations Plan (LEOP). These plans are legally binding and have legal authority for a jurisdiction. The LEOPs are used to address a variety of incidents such as hazardous spills or natural disasters. These risks tend to be more common, unintentional occurrences within the region.

12.6 State of Regional Programs

Specific transportation programs are underway in the Greater Kansas City area with implications upon regional preparedness. Many of these programs were not necessarily conceived to address homeland security needs but were developed to improve traffic flow, reduce congestion, and increase travel safety. These programs and their operating agencies are sometimes identified as stakeholders in regional preparedness plans.

12.6.1 Intelligent Transportation Systems

Intelligent Transportation Systems (ITS) are the application of interrelated systems of computers, electronics and communication technologies and management strategies to improve the safety and efficiency of the surface transportation system. ITS projects seek to optimize existing systems and investments, so cooperation and integration between different agencies and systems is essential.

MARC maintains the Kansas City Regional ITS Architecture which outlines a specific structure for facilitating institutional agreement and technical integration for ITS projects. The architecture defines how systems function and the interconnection of information exchanges that must take place between systems to accomplish transportation services. Many stakeholders described in the ITS architecture are also preparedness planning stakeholders because of the opportunities to utilize existing and planned transportation technologies for homeland security efforts. Local cities, state departments of transportation and transit operators are the primary ITS stakeholders in the Kansas City area.

12.6.2 Operation Green Light

Operation Green Light (OGL) is a regional effort to improve traffic flow and reduce vehicle emissions. OGL works with federal, state and local agencies to develop and implement a system that will coordinate traffic signal timing plans and communication between traffic signal equipment across jurisdictional boundaries. OGL along with Kansas City Scout offers an opportunity to coordinate traffic flow around incidents on the freeway system and major arterials.

12.6.3 Kansas City Scout Transportation Management Center

The Kansas City Scout Transportation Management Center is designed to inform the traveling public about incidents and events on Greater Kansas City area roadways. The Kansas City Scout Advanced Traffic Management System (ATMS) uses closed circuit television and vehicle detection systems to monitor roadways and detect incidents. The Scout Transportation Management Center uses dynamic message signs, highway advisory

radio, and a Web site to disseminate information to the traveling public. The information that Scout distributes continues to change based upon customer feedback, upgrades in technology and expansion of the ATMS network.

12.6.4 Traffic Camera Technology

Local cities operate individual traffic management centers that are equipped with closed circuit television and vehicle detection systems to monitor traffic signals, intersections, and major roadways. These systems work in conjunction with Kansas City Scout and Operation Green Light to optimize transportation system performance. The state Departments of Transportation and cities also utilize camera vehicle detection at signalized intersections. These cameras are only used for signal purposes. Additionally, several cities are exploring the use of red light camera technology at select intersections. The red light cameras are only used to identify drivers violating traffic signals.

12.6.5 Transit operators

Kansas City Area Transportation Authority, Johnson County Transit and Unified Government Transit are the major transit operators in the region. Each system operates or coordinates services for bus routes and on-demand services, which can be critical resources in a disaster. The use of these resources ensures that local transit operators remain a stakeholder in regional homeland security discussions.

12.7 Opportunities for Collaboration

MARC's role in part is to help identify opportunities for collaboration between preparedness planning and transportation programs. The preparedness programs identified below are opportunities to bring key stakeholders in the transportation sector into homeland security efforts for regional benefits.

12.7.1 Training and Exercise

Preparedness training and exercise is an area where involving the transportation sector and its programs in regional homeland security efforts is an opportunity to use transportation facilities. Incorporating transportation issues into planned preparedness exercises will help use these resources where possible. Consideration of these resources is necessary when identifying risks and possible strategies to mitigate the impacts of a disaster.

12.7.2 WebEOC

WebEOC is a metro-wide system developed by the RHSCC that allows local Emergency Operations Centers to share information with one another and with other public agencies—during major emergency or disaster events. It is a Web-based information management system that provides a single access point for the collection and dissemination of emergency or event-related information. Transit operators, Kansas City Scout, Operation Green Light and local transportation management centers are key stakeholders to access WebEOC and log in to the regional and local status boards to evaluate emergency events that may impact travel routes.

12.7.3 Terrorism Early Warning Group

The Kansas City Regional Terrorism Early Warning Group (TEW) brings local, state and federal law enforcement officials together with public and private organizations to detect,

deter and respond to terrorist threats in the Greater Kansas City area. Goods movement and public transit issues are additional transportation sectors for the TEW to consider. The TEW analysts could work with the Kansas City Scout Transportation Management Center and other transportation officials to share information on threats to critical infrastructure or operations.

12.7.4 Critical Incident Site Management

The Critical Incident Site Management (CISM) was developed to help first responders arriving on scene identify key elements of a facility. Preparedness planners looked at the infrastructure and inventoried floor plans, electrical systems, HVAC systems, and other key building features that are important in the event of a hostage situation, terrorist act or similar emergencies. The CISM helps first responders stage equipment and lead people to areas of refuge. Facilities included as part of the CISM include schools, government buildings, arenas, airports, and other public spaces. The CISM could be used by the transportation sector in the event of emergencies that impact transportation facilities.

12.7.5 Communications

Improvement in communications across disciplines is a goal of preparedness planners. Interoperability between devices is needed to ensure good communication between fire, police, and emergency medical services. Expanding the interoperability to include transportation agencies is needed to achieve collaboration between all these disciplines in a disaster.

12.8 Security Priority Areas

Identifying key priority areas will help the transportation and security sectors effectively coordinate and use resources. The following are priorities to consider in furthering integration between the two:

1. Ensure transportation sector involvement in preparedness planning efforts.
2. Develop baselines in transportation resources to support preparedness planning and response.
3. Emphasize planning and coordination that has not existed in the past but will provide future benefits on a more regional, comprehensive scale.

12.9 Action Plan

1. Coordinate transportation and homeland security planning efforts to use resources in each sector in an appropriate manner and where possible.
2. Develop the transportation emergency service factor (ESF I) as part of the Regional Coordination Base Guide and include key transportation stakeholders in the discussion.

3. Assist preparedness planners in identifying key transportation stakeholders to include in the security planning process.
4. Continue to seek adoption of a regional public works mutual aid agreement to enable mutual aid between various agencies and communities during emergency events.
5. Involve the transportation sector in critical infrastructure planning.
6. Expand training and exercises to involve the transportation sector.
7. Continue special needs populations planning to involve the transportation sector.
8. Demonstrate technology projects (e.g., WebEOC) to the transportation sector and consider involvement of transportation programs in these projects as appropriate.