

Incorporating Security into the Louisville (KY-IN) Metropolitan Transportation Planning Process



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Louisville (KY-IN) Metropolitan

Transportation Planning Process

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INTRODUCTION

Since the terrorist attacks on September 11, 2001, our nation has become increasingly conscious of security. Securing the nation's infrastructure from additional terrorist attacks became a high priority that day. The increased security at our borders and ports, as well as the emphasis on securing our air and surface transportation systems have been highly publicized and scrutinized. Various agencies have defined their role regarding security and developed action plans based on their role. Relatively little action, however, has been taken by Metropolitan Planning Organizations (MPOs) across the country to define their role prior to, during, and after a disaster/security incident.

As a part of the *Safe, Accountable, Flexible, Efficient Transportation Act: A Legacy for Users* (SAFETEA-LU), security is now required to be addressed as a stand-alone planning factor. By treating safety and security separately, important distinctions can be emphasized. This document examines the new requirements and addresses how they affect the transportation planning process within the region.

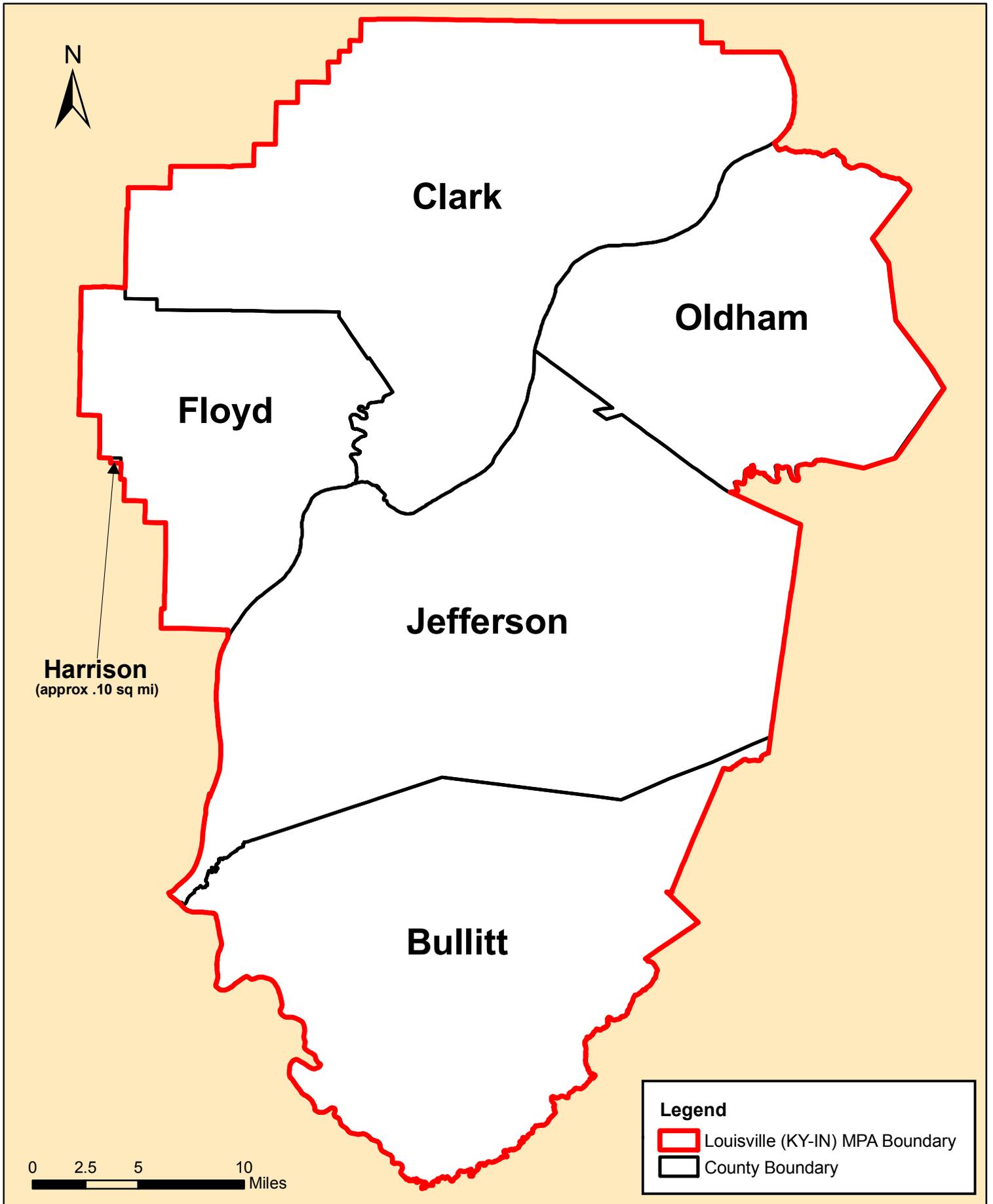
The focus of this report is exclusively on the security of the surface transportation system in the five-county Louisville (KY-IN) Metropolitan Planning Area (Figure 1), and what can be done to effectively incorporate security into the transportation planning process. This report will not discuss the security of the region's air, rail, water or pipeline modes of transportation. The primary responsibility of the MPO is to conduct the transportation planning process for the surface transportation system, including the intermodal links between the surface transportation system and other passenger and freight modes.

PURPOSE

The purpose of this report is to discuss and clearly define the MPO's potential role in regard to transportation security. While safety has been incorporated as an important part of the transportation planning process, security has not been explicitly or equally addressed. These terms are often grouped together when planning transportation projects, with safety usually receiving more emphasis due to crash data being more quantifiable and readily available, and with safety benefits being more visible. For this report, it is important to distinguish between safety and security as planning factors in an effort to emphasize the importance of security on its individual basis.

Security (NCHRP Report 525 Volume 3):

Protection from terrorist threats or actions due to acts of extreme violence resulting in significant loss of life, injury, and/or damage or destruction of facilities and infrastructure, whether or not these acts are intended to further political or social objectives.



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Figure 1

LOUISVILLE (KY-IN) METROPOLITAN PLANNING AREA BOUNDARY

In addition to the high-profile kinds of terrorist threats and actions that warrant heightened security measures, it is important to also consider non-terroristic types of threats as well. Natural disasters and situations caused by the accidental release of hazardous materials should be incorporated into the planning process. In fact, weather-related disasters, such as severe thunderstorms, tornadoes, and flooding, are considered to be the most likely threats to the region.

IMPACT OF SAFETEA-LU ON TRANSPORTATION SECURITY

SAFETEA-LU, signed into law in August 2005, is the current federal legislation that provides federal transportation funding. It funds highway, highway safety, and public transportation projects totaling \$244.1 billion through 2009. It addresses transportation security, but primarily does so in an indirect manner through targeted investments in safety, congestion relief, and efficiency improvements. The lack of a separate security funding category in the SAFETEA-LU bill appears to reflect the more recent nature of the topic of transportation security. The bill does, however, address security (as it pertains to the MPO and the metropolitan transportation planning process) in several sections (Figure 2).

Figure 2
SAFETEA-LU Security Excerpts

23 CFR 450.306 (a):

“The metropolitan planning process shall be continuous, cooperative, and comprehensive, and provide for consideration and implementation of projects, strategies, and services that will address the following factors...Increase the security of the transportation system for motorized and non-motorized users.”

23 CFR 450.306 (h):

“The metropolitan planning process should be consistent with the Strategic Highway Safety Plan, as specified in 23 U.S.C. 148, and other transit safety and security planning and review processes, plans, and programs, as appropriate.”

23 CFR 450.322 (h):

“The metropolitan transportation plan should include a safety element that incorporates or summarizes the priorities, goals, countermeasures, or projects for the MPA contained in the Strategic Highway Safety Plan required under 23 U.S.C. 148, as well as (as appropriate) emergency relief and disaster preparedness plans and strategies and policies that support homeland security (as appropriate) and safeguard the personal security of all motorized and non-motorized users.”

In addition to the excerpts in Figure 2, there is similar, sometimes identical language in the legislation that pertains to security in statewide transportation planning. States are now required to include an element summarizing the state's security goals and priorities.

These excerpts are the extent of the references to security within SAFETEA-LU. The text of the legislation provides very little guidance for MPOs and state departments of transportation, other than to say that MPOs shall consider projects that will "...increase the security of the transportation system for motorized and non-motorized users". While much of the language in the document leaves some room for interpretation by individual MPOs, it does say that security considerations should be consistent with the processes already in place. SAFETEA-LU also contains the most basic and most important step that an MPO can take regarding security, that is, setting up the process in which security enhancing projects can be selected and implemented.

Like previous acts, SAFETEA-LU links security and safety in both its language and in its funding categories. It allocates funds toward security-related research to be performed primarily by universities across the country. The research funding is spread across many areas within the realm of security. A portion of the funds is allocated for a study intended to examine evacuation routes in major metropolitan areas. Many of the research dollars that are provided by SAFETEA-LU go toward the study of Intelligent Transportation Systems (ITS), the application of any of a wide range of information technologies designed to enhance communications, operations, and management of transportation systems. ITS not only has the potential to benefit safety and security, but also to play a major role in relieving congestion. One

**Intelligent Transportation System (ITS)
(23 CFR Part 940):**

Electronics, photonics, communications, or information processing used singly or in combination to improve the efficiency or safety of a surface transportation system.

of the new programs introduced under SAFETEA-LU is the Real-Time System Management Information Program. This program is designed to provide real-time monitoring capabilities of all of the nation's major highways, not unlike ITS systems already in place in many metropolitan areas, such as Traffic Response and Incident Management Assisting the River Cities (TRIMARC) in the Louisville (KY-IN) Metropolitan Planning Area. The information will be shared to increase security, to monitor and address congestion problems, and to provide real-time information to travelers. This program is also designed to increase coordination among state and local governments by ensuring that data can be readily exchanged.

ROLE OF THE MPO IN TRANSPORTATION SECURITY

The intent of the federal transportation regulations to mandate consideration of system security in the planning process is clear. What is not so apparent however, are the types of activities and the level of involvement that is appropriate for MPOs. Each urban area must determine its own best approach for incorporating transportation security measures into the transportation planning process. The following section provides a discussion of both potential and current MPO transportation security initiatives.

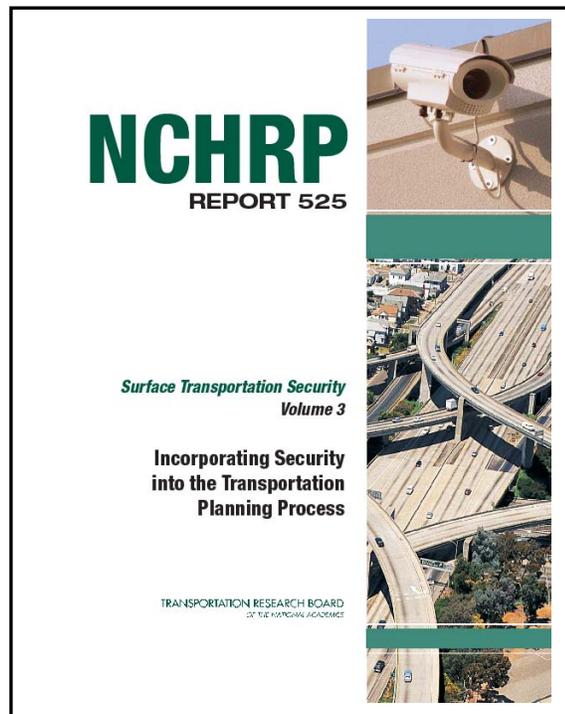
REFERENCE DOCUMENTS

In producing this report, numerous documents involving transportation security were reviewed. Two documents in particular focused on security as it pertains to the transportation planning process, and served as primary references for this report. These documents are briefly summarized below.

NCHRP Report 525 Volume 3: Incorporating Security into the Transportation Planning Process

The National Cooperative Highway Research Program (NCHRP), a program conducted by the Transportation Research Board, produced a twelve volume report that took a comprehensive look at transportation security. Volume 3 of the report looked solely at how security has been incorporated into the transportation planning process. It identifies security related issues that affect transportation planners and provides some guidance to assist planners in the future.

The report recognizes that the best, most cost-effective way to address security issues for our nation's transportation infrastructure is to incorporate security elements early in the transportation planning process, as projects are being planned and designed. In the past, transportation facilities have undergone expensive modifications and retrofits to address security concerns as the perceived threat has increased and as security awareness has heightened. By addressing these issues early on in the planning process, resources can be more effectively allocated than they would be if implemented in the post-construction or operational phases.



The report also found that transportation security has rarely been addressed as a stand-alone issue. Often, safety and security are grouped together with much of the emphasis placed on the safety benefits of a transportation infrastructure asset. Safety often has had higher visibility than security and (at least in the past) has a higher perceived relevance as well. Projects that promote safety have become easy to justify in recent years due to its perceived importance. Furthermore, there are very few quantitative performance measures for security and data is often unavailable due to the need to safeguard sensitive information. The major fault with these factors is that, “safety initiatives often have no bearing on the security of transportation facilities or services, and security initiatives may not impact the safety of transportation facilities or services”. This emphasizes the fact that in order to effectively incorporate security into the planning process, it must be clearly defined and independently addressed when prioritizing and selecting projects.

Proposed methods to improve transportation security were grouped into four categories. These include prevention, protection, redundancy, and recovery. Some examples of each category are listed below:

**Figure 3
Methods to Improve Transportation System Security**

Prevention	<ul style="list-style-type: none"> • Alarms • Restricted Access • Closed Circuit Television
Protection	<ul style="list-style-type: none"> • Target Hardening • New Design Standards for Vulnerable Targets
Redundancy	<ul style="list-style-type: none"> • Physical (Structural) Redundancies • Alternate Evacuation Routes
Recovery	<ul style="list-style-type: none"> • Traffic Management Centers • Dynamic Message Signs • Geographic Information Systems

The report also examined the Transportation Improvement Programs (TIPs) of the ten largest MPOs in the country, providing some insight on how security has been addressed in the planning process and what policies and programs have been successfully implemented. Additionally, and perhaps more importantly, the report indicates areas where there

Transportation Improvement Program (TIP) (FY 2007 – FY 2011 Transportation Improvement Program for the Louisville and Southern Indiana Urbanized Area):

[Process which] provides the mechanism for scheduling federal funds for surface transportation projects, indicates regional priorities, and demonstrates a short-range transportation vision for the area.

is room for improvement and suggests solutions. Based on the comprehensive review of TIPs, the authors feel that while security considerations are slowly evolving in the planning process, quite a few improvements have been made in the area of operational systems and equipment. This includes ITS for highway networks and video monitoring and surveillance systems for public transportation. They also found that “overall, there is widespread confusion over what specifically security refers to, which level of government is responsible for addressing national security issues, where the funding for these initiatives will come from, and how federal legislation can be interpreted regarding the need to specifically address security as a core element of the required transportation planning process.”

The report made the following conclusion:

“The current status of security planning for transportation infrastructure at the state and metropolitan/local level is undeveloped, because of confusion over what is security, the distinction between security and safety, the recent nature of this issue, the indefinable and unexpected nature of terrorist threats, the absence of funding specifically dedicated for security-enhancement projects, and the perceived competition for funding from other critical transportation program and project needs.”

The Role of the Metropolitan Planning Organization (MPO) in Preparing for Security Incidents and Transportation System Response by Michael D. Meyer, Ph.D., P.E. Georgia Institute of Technology

This document focuses on the role of the MPOs in regard to security incidents, both before and after the event occurs. Due to their function as a forum for cooperative decision making, the MPO can play an instrumental role in the coordinated planning efforts to address the threats of terrorist attacks and natural disasters. But, due to the varying roles of MPOs in the U.S., the author feels that there is not one model that is appropriate for every MPO. Furthermore, the role of the MPO may change during each stage of an event. Potential roles are grouped into six incident phases: Prevention, Mitigation, Monitoring, Recovery, Investigation, and Institutional Learning. Examples of

The Role of the Metropolitan Planning Organization (MPO) In Preparing for Security Incidents and Transportation System Response

Michael D. Meyer, Ph.D., P.E.
Georgia Institute of Technology

Introduction

The terrorist events of September 11, 2001 provide a good illustration of the challenges facing states and metropolitan areas in preparing for and responding to unexpected security incidents or natural disasters. Given the suddenness of the terrorist incidents and their unexpected nature, it is not surprising that there was some confusion and lack of coordination in managing the transportation system in the aftermath. In some cases, transportation operating agencies did not know what other local agencies were doing. In others, enforcement agencies were telling transportation operators to cease service exactly as the time when services were needed to move people away from the scene. Incompatible communication systems and no single source of public information caused confusion in organizational and public response. One lesson from September 11th is paramount—effective coordination and communication among the many different operating agencies in a region and across the nation is absolutely essential. Such coordination is needed to allow enforcement/security/safety responses to occur in an expeditious manner, while at the same time still permitting the transportation system to handle the possibly overwhelming public response to the incident. Complementary to this is the need to make sure the public has clear and concise information about the situation and what actions they should take.

Although the immediate organizational response to security incidents and disasters will be the responsibility of security/public safety agencies, there is an important role that metropolitan planning organizations (MPOs) can play in promoting coordinated planning in anticipation of unexpected events or natural disasters. In addition, the MPO could also provide a centralized location of information on transportation system conditions and local/national responses that might be useful in an emergency. This white paper examines these possible roles and raises other issues that should be considered by MPO officials. Disaster/security planning is divided into several components that reflect the different elements in dealing with such events, e.g., prevention, surveillance/monitoring, information dissemination/communications, incident response, and system recovery. The prospective role of the MPO in each of these components of an incident/disaster event response is discussed.

Major Discussion Points

The major discussion points for this paper are:

- The short timeframe and public safety aspects in responding to unforeseen emergency situations require a command and control organizational structure for providing immediate and effective allocation of emergency response resources. Thus, the planning for, and actual response to, emergency situations in a metropolitan area is the primary responsibility of the emergency response/public safety/operations agencies in the region.
- Because of the widely varying political and institutional contexts for metropolitan planning organizations (MPOs) in the U.S., there is no singular model that can best describe the most appropriate role for MPOs in security/disaster planning.
- However, because of its role as a forum for cooperative decision making in a metropolitan area, and its responsibility for allocating financial resources to improving the performance of the transportation system, the MPO does have a role to play in security/disaster planning.
- The role of the MPO will most likely vary by stage of the security/disaster incident (e.g., the MPO's role might be very different in developing a collaborative strategy to prevent harmful effects of events versus in the actual post event investigation activities).

Characterizing the Nature of the Threat

The September 11, 2001 terrorist incidents have focused attention on large scale, area wide responses to sudden terrorist incidents. There is a wide range of such incidents that could cause varying levels of disruption to the transportation system. A recent report recommending a national research and development strategy for improving surface transportation security presented the list of possible threat scenarios shown in Figure 1, a list that originated in a U.S. Department of Transportation vulnerability assessment of the U.S. transportation system. As shown, the nature of the threats was characterized primarily as being a physical, biological, chemical or cyber attack. The types of responses would clearly be different dependent on what type of attack occurred.

The magnitude and scope of an incident will clearly be an important determinant for gauging the appropriate public safety/emergency response. And most studies of sudden disruptions to the transportation network, either from natural or man-made causes, have concluded that the redundancies in a metropolitan area's transportation system provides a redundancy capability that allows the flow of people and vehicles around disrupted network links. A national research and development study on surface transportation security observed that "experiences with natural disasters suggests that even the

actions that an MPO could potentially take during each stage of an incident are illustrated in the table below. These responsibilities range from potentially funding new strategies/technologies/ projects that can help prevent events, to analyzing the transportation network for redundancies and potential “chokepoints”, to acting as a forum for regional assessment of organizational and system response to an event after it happens.

**Figure 4
Potential MPO Roles by Stage of Incident**

Prevention	<ul style="list-style-type: none"> • Funding new strategies/technologies/projects that can help prevent events • Conducting vulnerability analyses • Providing a forum for security/safety agencies
Mitigation	<ul style="list-style-type: none"> • Analyzing transportation network for redundancies and “choke points” • Analyzing transportation network for emergency route planning • Providing a forum for discussions on coordination of emergency response • Funding systems to speed response to incident
Monitoring	<ul style="list-style-type: none"> • Funding surveillance and detection systems • Coordinating public information dissemination strategies
Recovery	<ul style="list-style-type: none"> • Conducting transportation network analyses to determine most effective recovery investment strategies • Funding recovery strategies
Investigation	<ul style="list-style-type: none"> • Providing data collected under surveillance/ monitoring that might be useful for the investigation
Institutional Learning	<ul style="list-style-type: none"> • Acting as forum for regional assessment of organizational and transportation systems response • Conducting targeted studies on identified deficiencies and recommending corrective action • Coordinating changes to multi-agency actions that will improve future responses • Funding new strategies/technologies/projects that will better prepare region for next event

The author emphasizes that responding to security incidents is not the responsibility of the MPO. It is up to the security, public safety, and transportation operating agencies to respond to these events. However, both before and after the urgency of responding to these events, the MPO has a role to play. In summary, the author feels that the MPO has a critical role to play for three primary reasons: the MPO's role of being capable of technically analyzing the transportation network, as a forum for cooperative decision making, and as a funder of regional transportation strategies.

INCORPORATION OF SECURITY INTO THE PROJECT SELECTION PROCESS

The most basic method in which security can be incorporated into the metropolitan transportation planning process is by explicitly considering, prioritizing, and selecting transportation projects and planning studies that enhance security in the region. Projects requesting funding should be evaluated for their potential to increase the security of the surface transportation network, especially if their purpose is not explicitly stated as such. Planning studies that examine vulnerabilities of the region's transportation system can be an effective way to enhance the region's security as well.

To effectively incorporate security into the process, planners, committees, and other decision makers must understand several points. They must understand the benefits of enhancing security, that safety and security are often mutually exclusive, and that by addressing safety in the project selection process, they have not necessarily addressed security as well.

Currently, safety data (crash data, Freeway Incident Management, Regional Highway Safety Committee, etc.) are collected, maintained, and provided to the appropriate committees and subcommittees. There has not been a similar effort to collect security data, and it is clear that security does not receive the emphasis in the planning process that safety does. As the NCHRP Report found, there are several reasons that security and security data are not incorporated into the planning process as often as safety data. There are little data for planners or other groups to collect that would be useful to a committee that prioritizes and selects projects to be funded. Also, important, useful data concerning security often needs to be safeguarded. Obviously, the results of an infrastructure vulnerability assessment of key transportation assets certainly do not need to get into the wrong hands and it is critical that this data can only be accessed by those with a definite need to do so. In this instance, by attempting to assess and improve the security of the region's transportation infrastructure assets, the consequences of not safeguarding the critical information could cause the opposite of the desired outcome to occur, potentially putting key assets and the public at risk. Because of this, it might not be possible to select and justify security enhancing transportation projects as easily as it has been done in the past with safety enhancing projects. The committees must be aware of these factors and select projects based on their impact on security with the

understanding that the justification for approving these projects may not be as clear cut or quantifiable as might be desired.

Even though justifying a security enhancing project will be somewhat different than justifying other projects in the past, there are still numerous justifications for funding projects. Items to consider when evaluating a project include whether the project will have an effect on emergency access and response or whether it will have an effect on potential evacuation routes from the city center or incident site. Priority should be given to projects that can help prevent security incidents (by identifying vulnerabilities prior to an incident occurring), funding projects that can speed up response to an incident, and funding recovery strategies should an incident occur. The most ideal, most important, and least expensive time to fund and implement a project is prior to an event occurring.

In examining other MPOs' Transportation Improvement Programs and long-range plans (via the reviewed documentation), there is very little experience in how MPOs address security as a stand-alone planning factor. Many MPOs address security in their Unified Planning Work Programs and have promoted security as more of a priority, but very few projects have been selected based on these revised processes to this point.

ONGOING SECURITY EFFORTS IN THE LOUISVILLE (KY-IN) MPA

Transportation system security is being addressed at various levels in the Louisville (KY-IN) MPA. Activities are being tailored to the purview and expertise of involved agencies and groups.

STATEWIDE EFFORTS

SAFETEA-LU requires state departments of transportation to include an element in their long range plans summarizing their security priorities, goals, or projects. The Kentucky Transportation Cabinet (KYTC) and the Indiana Department of Transportation (INDOT) have both included this item in the most recent updates of their statewide long-range plans; however, each has addressed it in a somewhat different manner.

INDOT complies with the new SAFETEA-LU requirements by stating in their 2030 Long-Range Plan (Draft) that they are a stakeholder and planning partner with the Indiana Department of Homeland Security (IDHS) and including a reference to the *Indiana Strategy for Homeland Security* document. This document does not explicitly discuss transportation specific issues, projects, or initiatives, but does address security in more general terms. It contains the vision, mission statement, goals, and strategies that IDHS has implemented. The long-range plan briefly outlines a list of strategic goals that IDHS has set such as Teamwork, Outreach and Engagement, Training and Exercise, and

Response, among others. The plan also discusses mode-specific security issues later in the document.

KYTC has complied with the SAFETEA-LU requirements by adding an amendment to the 2006 Kentucky Long-Range Statewide Transportation Plan. This amendment lists some of the state's priorities as well as transportation-related security projects and initiatives. These include the installation of radiation and chemical detection devices at highway weigh stations at points of entry into the state. Also, it discusses the creation of the Kentucky Intelligence Fusion Center (KIFC) and the Division of Transportation System Management. The KIFC analyzes, integrates, and shares real-time information among agencies, while the Division of Transportation System Management serves as a clearinghouse for highway condition information.

LOCAL EFFORTS

At the local level, there have been steps taken to incorporate security into the regional transportation system. TRIMARC, the ITS system in Louisville and Southern Indiana, utilizes an integrated system of cameras, dynamic message signs, roadway sensors, and highway advisory radio to monitor, inform, and alert drivers and public officials to the presence of congestion, lane closures, or incidents on the interstate system. TRIMARC and other congestion mitigation initiatives and projects enhance security by reducing gridlock that can become a potential terrorist target itself, slow down possible evacuations, and can delay emergency responders.

The Transit Authority of River City (TARC), the transit provider for the metropolitan area, has outlined current and proposed security-related activities in its *System Security Program Plan*. This document outlines TARC's goal of maximizing security and identifies system-specific objectives supporting that goal. It provides a broad outline of the system and operating environment, along with standard operating procedures that operators are to abide by in various threatening scenarios.

At the MPO level, the Louisville (KY-IN) MPO has taken steps toward enhancing security in the region. Security is included as a planning factor in both the TIP and *Horizon 2030* long-range plan documents. Security is currently a consideration in the project formulation, selection, and prioritization processes, but security is not a stand-alone factor at this time. Security has not been considered a regional priority in the past, and security information has not been collected and provided to decision makers on the various committees.

Through the Congestion Management Process and freight analysis, the Louisville (KY-IN) MPO has addressed security as well. The MPO provides decision makers with information concerning congestion, truck flow, priority networks, and intermodal locations in the region. Congestion relief enhances security by

keeping the trucks moving, thus eliminating bottlenecks and enhancing intermodal flows.

In an effort to emphasize the importance of transportation security, the Louisville (KY-IN) MPO hosted a National Highway Institute Training Seminar in May 2007 entitled *Managing Traffic Incidents and Roadway Emergencies*. The course targeted mid-level managers of agencies responsible for response to vehicular crashes and other roadway emergency events in the region. The goal of the seminar was to improve multi-agency response to traffic incidents and roadway emergencies by formulating techniques to effectively manage these incidents. Technological solutions were examined and future actions were discussed. The seminar was also useful in terms of initiating contact with local response agencies.

The MPO also distributed a brief survey (Appendix) to local agencies in the Louisville (KY-IN) MPA in order to establish contact, initiate future dialogue, and take an introductory inventory of the preparedness procedures of local transportation system security stakeholders. The survey was sent to various agencies, including local Emergency Management Agencies (EMAs), local police departments, TARC, and TRIMARC. These groups are important contacts for current and future security planning within the region.

All respondents (100%) indicated they have or follow an established transportation security or emergency plan. The vast majority of those surveyed (80%) said they coordinate transportation disaster and emergency planning evacuation procedures with other nearby jurisdictions, while 90% responded that their organization utilizes the National Incident Management System (NIMS) as a part of their emergency planning and management. NIMS helps local agencies to coordinate disaster and security activities with other jurisdictions and provides assistance when a major event occurs that overwhelms local resources. The survey also inquired about transportation security and emergency plan updates—80% of those surveyed responded that their plans had been updated recently.

National Incident Management System (NIMS):

A system developed by the U.S. Department of Homeland Security that provides a consistent nationwide approach for federal, state, local, and tribal governments to work effectively and efficiently together to prepare for, prevent, respond to, and recover from domestic incidents, regardless of cause, size, or complexity.

POTENTIAL ROLES FOR THE LOUISVILLE (KY-IN) MPO

There is little guidance to date on how most MPOs are addressing transportation security. This leads to a variety of potential roles which vary primarily in how active a role the MPO plays in the process. A passive role might be one where the MPO's primary function is to support other organizations when they request information. Emergency responders from each of the local jurisdictions in the area and the state offices of homeland security, and to a lesser extent the state departments of transportation deal with security on a regular basis, and know what resources are required to perform their jobs and to protect the general public. It is essential, especially during a crisis or disaster situation, that these groups have the appropriate resources available and effectively allocated. The collective expertise of these groups regarding security is much greater than that of the MPO—they know what they need in order to be prepared for, or to respond to an incident, based on their past experiences and training. The MPO could certainly provide these groups with information or assistance whenever necessary or requested.

On the other end of the spectrum, the MPO could potentially take a more active role in regard to security. This could involve taking a leading role in working with various organizations and agencies to advance security issues in the Louisville (KY-IN) Metropolitan Planning Area. Input from various agencies that specialize in security and security planning could be actively pursued. A task force or other committee could be created to coordinate emergency and disaster planning as it pertains to transportation across the region. Emergency response coordination and operations procedures could be established on a regional level between many of the jurisdictions responsible for responding to emergencies in the area in an attempt to eliminate any confusion or miscommunication in an emergency situation.

There is a middle ground between these two potential roles at opposite ends of the spectrum; one where the MPO would support most security functions, while taking the lead on others. As security threats change and evolve over time, the needs of the region will change and it will be important to be proactive when it comes to security measures.

CONCLUSION

There are a variety of potential roles for the Louisville (KY-IN) MPO in the area of transportation security; but, established, ongoing relationships with organizations such as the Kentucky Transportation Cabinet, the Indiana Department of Transportation, TRIMARC, TARC, local agencies, and elected officials from around the region, indicate a support role is the most appropriate one for the MPO at this time. The inherent strengths of the MPO can be most effectively utilized in this capacity.

In order to best support these agencies' efforts to improve the region's security as well as the first responders that are directly responsible for security, the Louisville (KY-IN) MPO proposes to take a number of steps to the processes already in place. Security will be considered in the *Horizon 2035* long-range plan update as a possible Regional Priority, similar to how other planning factors such as Safety, Congestion Management, Travel Demand Management, Air Quality, Freight, and Alternate Modes are currently included in the *Horizon 2030* long-range plan. Projects that meet the various criteria to become a Regional Priority have a better opportunity to advance to the TIP than projects that do not meet the criteria.

Similarly, security will now be addressed as a stand-alone planning factor once the project is advanced to the TIP. It will be explicitly considered as a criterion for prioritizing projects like other factors which are already considered such as congestion mitigation, safety, economic development, and others. Preference will be given to those projects that can demonstrate that they will enhance local and/or regional transportation security.

Another step that the MPO will take is to modify the format of the Project Information Form (PIF) and internal project management database to emphasize transportation security. A checkbox will be added to indicate that the proposed project provides security benefits. Once the box is checked for the project, details can be added to the project's Purpose and Need Statement describing how the project will enhance local and/or regional transportation security.

Another support function the MPO can provide is in the area of technical analysis. The Louisville (KY-IN) MPO maintains the regional travel model that is capable of analyzing the current and future transportation network. The model contains future year networks that could include new security enhancing projects or perhaps, could analyze a network with certain roads closed as they might be in an evacuation or other (short or longer term) emergency situation. The network can be analyzed for redundancies that could be critical in emergencies. It could also be analyzed for other critical gaps or "chokepoints" (such as the Ohio River bridges) in the network as well.

Should some sort of disaster/security event occur, the MPO could play an important supporting role in the recovery stage. With its knowledge of the region's transportation system and with its many resources on a variety of transportation-related topics, the MPO would be able to provide a substantial amount of input to the recovery efforts. Much of this would likely include funding of projects involved in the recovery efforts and strategies to help further secure the area. Even after the recovery efforts conclude, the MPO could collect relevant information to assist other MPOs and other regions in the future.

There is much to be learned from the experiences of other regions to better secure this region's transportation infrastructure should an event take place. There are also a number of ways that the MPO can support others with the goal of providing a secure transportation infrastructure and preventing these events from occurring.

REFERENCES

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APPENDIX

Transportation Security Questionnaire

Transportation Security Questionnaire

1. Does your organization have or follow a transportation security or emergency plan, to move persons and goods in case of a natural or manmade disaster?

YES

NO

Comments:

2. Does your organization utilize the *National Incident Management System*, as part of your emergency planning / management related to transportation movement?

YES

NO

Comments:

3. Does your organization coordinate emergency planning between multiple jurisdictions in relation to transportation disaster and emergency planning evacuation procedures?

YES

NO

Comments:

4. If your organization uses a transportation security / emergency plan, what is the date it was developed and has it ever been updated? Date: _____.

Comments:

5. As a matter of public record, if your organization has a transportation security / emergency plan, could KIPDA obtain a copy for our library?

YES

NO

Comments:

PLEASE COMPLETE AND RETURN BY 5/14/2007 TO PHIL WILLIAMS. USE THE SASE OR FAX (502) 266-5047