

CHAPTER 11 –TRANSPORTATION SYSTEM SECURITY

11.1 Overview

The emphasis on transportation security results from the identification of surface transportation facilities as a common target worldwide. The importance of addressing the transportation system infrastructure’s vulnerability to natural and human actions can be attributed to several factors:

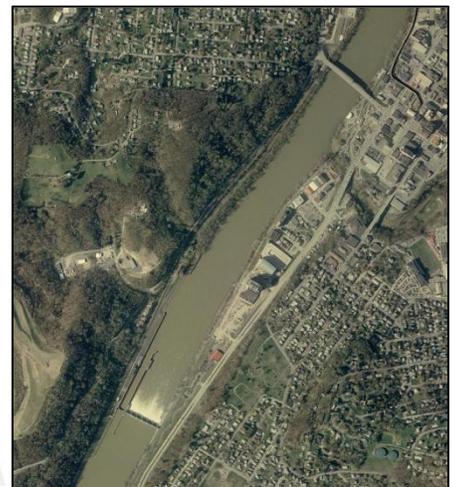
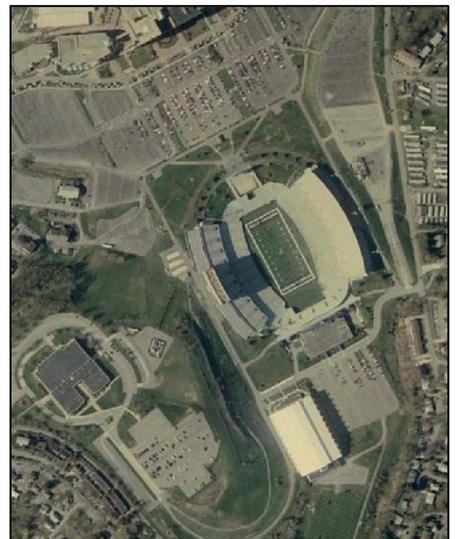
- Transportation infrastructure (roadway networks, vehicles, airports and transit facilities) serve high concentrations of people, thereby increasing the potential number of casualties.
- Transportation systems provide essential services to the public, thereby threatening our way of life if they are damaged and/or shut down through a natural or social act.
- Transportation systems can be used to both deliver a blow impacting a large number of people and as an escape avenue for the terrorist.

These factors make transportation infrastructure a target of choice for those wanting to spread fear to society at large, but they also make transportation infrastructure harder to secure from terrorist actions.

Over the past decade, the focus on improving the security and stability of our nation’s transportation infrastructure has intensified. Actions taken to date across the country include:

- Determining the vulnerability of transportation infrastructure to terrorist attack.
- Developing strategies to better protect key assets from terrorist attack.
- Generating policies and procedures to mitigate the effects of terrorist events and to expedite response and recovery.

In many of the programs administered across the country, incident prevention and mitigation strategies are heavily oriented to facility design and retrofitting. These efforts have identified that it is most cost-effective to address transportation infrastructure security issues when the facilities are being planned and designed. Addressing facility/asset security in the post-construction or operations phase generally makes efforts to enhance the asset protection much more expensive.

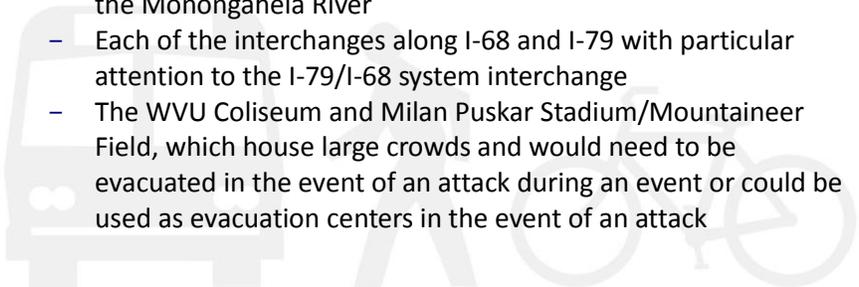


Most efforts to address security issues at the metropolitan planning level have been limited to the operational aspects of facilities, with little or no consideration of security in the development of the long range transportation plans or the statewide transportation improvement programs. The purpose of separating security from the safety planning factor is to enhance the emphasis on directly addressing issues and concerns in the planning process.

11.2 Strategies

Key security elements and elements of a future work program to be incorporated into the transportation planning process include:

- Working with Monongalia Emergency Centralized Communications Agency (MECCA) 9-1-1, West Virginia Department of Transportation (WVDOT), Federal Highway Administration (FHWA), and the U.S. Department of Homeland Security (DHS) to establish a definition of “security” for the transportation system.
- Improve the inter-relationships, planning processes, and communication between transportation system owners and managers and public health and safety officials and staff. Included in coordinated security planning efforts should be:
 - Police departments from each of the communities in the county
 - Monongalia County Sheriff’s department
 - West Virginia State Police
 - Fire departments and rescue squads
 - Federal response agencies such as the Federal Bureau of Investigation (FBI)
 - Agencies within the U.S. DHS, such as the Federal Emergency Management Agency (FEMA), Transportation Security Administration (TSA), and the U.S. Coast Guard
- Using the definition of security developed, establish security goals and objectives.
- Identify a list of key transportation assets, including:
 - The Osage Bridge, the Westover Bridge, and the I-79 Bridge over the Monongahela River
 - Each of the interchanges along I-68 and I-79 with particular attention to the I-79/I-68 system interchange
 - The WVU Coliseum and Milan Puskar Stadium/Mountaineer Field, which house large crowds and would need to be evacuated in the event of an attack during an event or could be used as evacuation centers in the event of an attack



- PRT stations and the PRT line – the PRT has the potential to be used as a means of moving large numbers of people from the downtown area to the medical center complex in the event that it is required
- Power plants in the county
- Medical facilities
- Federal, state and local government buildings
- Conduct a security risk assessment by asset in the region. Include potential transportation system bottlenecks or choke points.
- Evaluate the probability of an incident attempt occurrence assessment and a vulnerability assessment by transportation asset.
- Complete a risk/consequence trade-off analysis of potential action strategies, based on the probability of terrorist attacks occurring, the severity of the consequences of such an attack, and the impact value of proposed strategies for mitigating the likelihood and consequences of terrorist attacks.
- Coordinate the planning and prioritization of security enhancement projects, both short-term and long-term.
- Establish project funding and programming, involving both public and private sector stakeholders.



The process and recommendations developed as part of this continued transportation planning effort should be consistent with the National Infrastructure Protection Plan (NIPP) developed through the DHS. The purpose of the NIPP is to provide a unified national structure for the integrated protection of the existing and future infrastructure. The NIPP provides a framework for prioritizing protection programs and investments with the goal of ensuring that government and private sector resources are applied where they offer the most benefit for mitigating risk. The intent of the plan is to identify various means of lessening vulnerabilities, deterring threats, and minimizing the consequences of terrorist attacks and other manmade and natural disasters. The NIPP risk management framework recognizes and builds on existing protective programs and initiatives.



11.3 Intelligent Transportation Systems (ITS) and Homeland Security

Intelligent Transportation Systems (ITS) can assist greatly with necessary transportation system security and Homeland Security functions. The use of cameras along critical transportation corridors can identify security threats to that infrastructure. Critical bridges, communication infrastructure, rivers and ports, industrial areas, and mass transit

systems should be monitored through the use of Closed-Circuit Television (CCTV), with the images transmitted to the appropriate agency or responsible party.



The use of traveler information dissemination devices such as dynamic/changeable message signs (CMS/DMS), highway advisory radio, 511 telephone and internet systems, and the media are critical in the event of a mass evacuation scenario. The need to include the transportation and ITS community in emergency operations planning is critical and should be encouraged by all emergency responders.

