WisDOT's vision for security is to be able to prevent, prepare for or coordinate response to any incident, whether caused by natural or human events. By the end of the plan period, WisDOT envisions a state transportation system that will be less vulnerable to incidents, whether caused by natural or human events. The policies in this chapter focus on continuing to improve the department’s speed and ability to prevent, coordinate, respond to, and recover from incidents.

Security considerations have been a part of WisDOT’s policies for many years. The September 11, 2001, attacks and Hurricanes Katrina and Rita in 2005 raised additional concerns about the transportation sector’s ability to handle emergencies. More recently, flooding and blizzard events in Wisconsin have affected travelers, businesses and communities. These experiences have resulted in the public expecting transportation agencies and providers to make the transportation system more resilient. In response, WisDOT has implemented a 511 Traveler Information system, increased the State Traffic Operation’s Center’s statewide monitoring and emergency response capabilities, and has developed a fully operational Emergency Transportation Operations (ETO) plan. For more information on this plan, see the “Improve the reliability and efficiency of state trunk highway system operations” policy in Chapter 9, Promote Transportation Efficiencies.

Transportation providers and state and local governments already address security concerns through preventive measures, emergency preparedness strategies and comprehensive responses to incidents. Government agencies are also developing strategies to maintain critical transportation operations during hazardous events such as power outages, destruction of facilities from natural or human acts, and pandemics. Prioritizing...
these strategies incorporates risk assessment and risk management techniques.

WisDOT’s role in security and incident management complements the roles of other agencies, from management of disruptive local incidents such as crashes blocking interstate highways, to incidents of regional concern like hazardous materials spills and fires. In general, incidents are handled by the appropriate agency, depending on the scale and duration of the event. Local law enforcement personnel and emergency crews typically handle incidents of smaller scale and shorter duration; incidents of larger scale and longer duration require broader state and federal oversight.

The plan’s objectives to improve transportation security overlap with several objectives from other themes in the plan. The following plan objectives promote transportation security:

- Support a comprehensive vision of homeland security and defense mobilization
- Improve emergency response
- Improve data/decision support systems
- Maintain our transportation system to maximize the use of existing facilities
- Use technology and other methods to operate existing facilities and services more efficiently

To achieve these plan objectives, WisDOT will pursue the following policies:

- Enhance the security of the transportation system by reducing vulnerability
- Improve emergency response to make the transportation system more resilient

**Support for Local Governments**

Under Wisconsin Home Rule statute Chapters 59 and 163, it is the responsibility of the local government to respond to emergency events. Due to this statutory requirement, WisDOT will typically serve in a support role unless the local jurisdiction defers command to WisDOT.

**Wisconsin’s role in transportation security**

WisDOT partners with agencies at all levels of government to implement security initiatives. Several federal agencies, including the Transportation Security Administration and the Department of Homeland Security, share responsibility for preventing and responding to attacks.

While Transportation Security Administration and the Department of Homeland Security primarily
address the aviation sector, other agencies, such as the U.S. Coast Guard and the Federal Motor Carrier Safety Administration, are responsible for the security of other transportation sectors such as Great Lakes shipping and commercial motor vehicles, respectively. The Federal Emergency Management Agency, which is part of the Department of Homeland Security, coordinates disaster response activities when states request federal assistance.

The Office of Wisconsin Emergency Management (WEM) in the Department of Military Affairs is responsible for coordinating all security matters in Wisconsin. WEM operates the State Emergency Operations Center. Some of WisDOT’s systems, such as traffic cameras, are connected to the State Emergency Operations Center to support the center’s security efforts. The governor’s Homeland Security Council coordinates all transportation security issues within the state.

Emergency planners have continuously improved the response capabilities of the state and the department, moving from reactive planning to more integrated, comprehensive and proactive planning. This comprehensive process, known as the “All Hazards Approach,” addresses all types and scales of incidents, whether natural or human-induced. WisDOT has adapted almost all of its activities to incorporate security awareness and strategic security planning.

**“All Hazards Approach”**

Rather than creating specific action plans for dozens of scenarios, the “All Hazards Approach” develops capabilities to address most incidents, including emergency response, traffic management, and communication between responders and the public.

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**Infrastructure Security Efforts**

are integrated across all department divisions to maintain the safety of WisDOT buildings and staff, as well as roads, bridges and other assets.

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**Figure 11-3:** Private companies also play a crucial role in transportation security, especially in areas where WisDOT has little jurisdictional authority. These private organizations include railroad company police departments and trucking companies cooperating with the Department of Homeland Security in the “Highway Watch” program.
Several cross-divisional efforts within WisDOT address security. Infrastructure security efforts are integrated across all department divisions to maintain the safety of WisDOT buildings and staff, as well as roads, bridges and other assets. WisDOT coordinates responses with transportation partners at other levels of government as well as private sector transportation providers.

Operational planning efforts are developed at the regional level and include coordination with other transportation partners.

Within WisDOT’s Division of State Patrol, the Motor Carrier Enforcement section implemented the Security Contact Review, which thoroughly examines commercial motor carriers’ security measures and has a particular focus on vehicles that transport hazardous materials.

Many of WisDOT’s daily operations also have an integral role in security efforts. These activities include:

» Coordinating communications among first responders through the State Traffic Operations Center

» Coordinating communication to the public through message boards in the Milwaukee and Madison areas

» Maintaining valid identification of individuals through driver’s licenses or identification cards

» Monitoring vulnerable infrastructure through visual and other inspection methods

» Maintaining the transportation system to maximize the use of existing facilities

Local agencies, such as county sheriff’s departments, make significant contributions by providing support at airports and other facilities. Private companies also play a crucial role in transportation security. These private organizations include railroad company police departments and trucking companies cooperating with the Department of Homeland Security in the “Highway Watch” program. WisDOT’s Division of Motor Vehicles continues its efforts to improve the security and integrity of Wisconsin’s drivers license and ID products.
Incident preparation and response are emerging as WisDOT’s primary security focus areas. WisDOT will enhance the security of the transportation system through improvements that make state transportation facilities less vulnerable to incidents of any degree or origin. Specifically, WisDOT will:

- Adopt and apply technological and physical improvements
- Prepare to respond to a range of incidents through plans and exercises

**Background**

In compliance with the Federal Emergency Management Agency, WisDOT completed its *Continuity of Operations* plan and *Continuity of Government* plan. WisDOT is also completing a *Continuity of Operations Plan – Essential* to identify resources and strategies that will allow core department operations to continue in the case of a pandemic. The plan will establish procedures to provide limited, essential functions for up to 90 days.

WisDOT conducted a *Vulnerability Assessment* of critical infrastructure with guidance from the Federal Highway Administration and funding from the Department of Homeland Security. This assessment identified the state’s public and private transportation assets that have the greatest potential to be threatened by attack and those that could most compromise the state’s transportation system if damaged or destroyed. Of the thousands of potentially vulnerable facilities examined for all modes of transportation (including highways, rail, air, transit and waterways), more than 100 facilities were identified as having the potential to catastrophically disrupt the state’s transportation system. Of these, the highest priority facilities are categorized as “Tier 1” facilities, designated as the most vulnerable or the most disruptive to system operations if damaged or destroyed.

### Adopt and apply technological and physical improvements

WisDOT will continue to adopt and apply emerging techniques to ensure the security of driver licenses.
and state identification cards. WisDOT will also utilize technology for monitoring bridges, roadways and other public infrastructure, and will work with partners to identify the most appropriate technologies to employ at sensitive locations. WisDOT will actively seek and utilize applicable federal security funds for identified needs and objectives.

With the initial prioritization of vulnerable sites completed, security enhancements are being applied with available funding. WisDOT will next develop a benefit/cost methodology to assess security improvement options at the most critical locations. Security improvements at less sensitive or vulnerable locations could be addressed with improved lighting and fencing, while technology such as motion detectors and cameras could be used at top-tier locations. Over time, the benefit/cost methodology would help identify sensitive and vulnerable infrastructure that may require structural retrofitting, or “hardening,” and eventual reconstruction to withstand severe weather or other disasters. Engineers will be trained to apply more secure structural designs into regular projects, much as they currently include drainage systems for infrastructures in flood-prone locations. Many of these design features can be incorporated with no significant impact on the project cost.

WisDOT is also installing continuous, wireless monitoring systems at 15 deck-truss bridges to detect unusual movement in the structures.

Prepare to respond to a range of incidents through plans and exercises

Preparation elements include:

» Evaluating the vulnerability assessment, including recommendations for additional monitoring technology and retrofitting/design revisions for Tier 1 facilities (those 100 or so facilities identified at highest risk)

Decreasing the impacts of incidents

While no transportation system can be completely secure, certain actions help deter or minimize the impacts of incidents, either natural or man-made. Examples are increased monitoring of critical facilities and improved engineering techniques that better resist physical impacts. Response capabilities can also be improved through better communication, the development of redundancies in routes and travel modes, and regular training drills involving public and private organizations.
Developing evacuation plans for the state’s largest metropolitan areas

Conducting training and scenario planning using the “All-Hazards Approach”

Providing ongoing consultation and collaboration with federal, state, local and private sector partners

Training and scenario planning are essential components of any security plan. Therefore, the state prepared comprehensive plans to deal with the aftermath of a disaster. These plans require regular updates, and WisDOT will participate in all relevant revisions. WisDOT will also participate in scheduled and unscheduled training drills to help build and maintain preparedness. WisDOT will also lead regular updates to the transportation elements of the Continuity of Operations plan and Continuity of Government plan. In addition, WisDOT will continue to refine the “All-Hazards Approach” to correct any shortcomings identified through training drills and incident responses.

In the state’s urbanized areas, the long-range transportation plans developed by metropolitan planning organizations are required to include, as appropriate, emergency relief and disaster preparedness plans, as well as strategies and policies that support homeland security and safeguard the personal security of all users. WisDOT will assist metropolitan planning organizations in developing

**Training and scenario planning** are essential components of any security plan. Therefore, the state prepared comprehensive plans to deal with the aftermath of a disaster. These plans require regular updates, and WisDOT will participate in all relevant revisions.
local plans that can be integrated into the statewide process. WisDOT’s regional offices have also been developing detailed plans for the evacuation of major metropolitan areas. These efforts will continue during the Connections 2030 plan period, with ongoing re-examination of policies and practices.

WisDOT hosts regular meetings of transportation sector security partners, including the U.S. Coast Guard, Transportation Security Administration, Office of Wisconsin Emergency Management, WisDOT regional offices, motor carriers, local port managers and others. These meetings include discussions of legislative updates and concerns, and they build familiarity among partners to facilitate future responses – whether in drills or in actual emergencies. These meetings will continue to be at the center of WisDOT’s coordination efforts.

Under federal rules, WisDOT oversees the safety and security of fixed-guideway transit systems, while local agencies are responsible for developing transit security plans and procedures. WisDOT will continue to offer security planning assistance to local transit agencies while taking an active role in the oversight of security for new fixed-guideway systems as they are developed.

WisDOT will continue working with the aviation community on efforts to improve airport security, including the development of the Wisconsin Airport Security Plan. This document will address emergency preparedness and response activities in the state’s aviation sector. Commercial aviation security will remain under the authority of the Federal Aviation Administration, Transportation Security Administration and other federal agencies.

**SUMMARY OF POLICY ACTION ITEMS:**

*Enhance the security of the transportation system by reducing vulnerability*

**Short-term (2008 – 2013)**

- Continue to adopt and apply emerging techniques to improve the security of driver licenses and state identification cards.
- Develop benefit/cost methodologies to assess security improvement options at the most critical infrastructure locations.
- Assist metropolitan planning organizations in developing local plans that can be integrated into statewide emergency relief and disaster preparedness plans, strategies and policies.
- Offer security planning assistance to local transit agencies while taking an active role in the oversight of security for new fixed guideway systems as they are developed.

**Entire planning period (2008 – 2030)**

- Utilize improved technologies for monitoring bridges, roadways, and other public infrastructure, work with partners to identify the most appropriate technologies to employ at sensitive locations, and use available federal security funds where appropriate.
- Participate in training drills to help build and maintain preparedness.
- Regularly update the transportation elements of the Continuity of Operations plan, the Continuity of Government plan and the Continuity of Operations – Essential plan, and refine the “All Hazards Approach” to correct any shortcomings identified through training drills and incident responses.
- Develop and periodically review detailed plans for evacuation of major metropolitan areas.
- Continue regular meetings of transportation sector security partners to discuss legislative updates and concerns, and facilitate future responses – whether in drills or in actual emergencies.
- Continue working with the aviation community on efforts to improve airport security, including the development of the Wisconsin Airport Security Plan.
The importance of coordinated, skilled emergency response procedures – in both the initial hours after an incident occurs and in the following weeks and months of reconstruction and rerouting – has been demonstrated repeatedly.

Major incidents typically involve a phase of rescue and recovery followed by a longer period of reconstruction. Therefore, the demands placed on transportation and emergency response partners evolve throughout an emergency situation.

In order to be able to respond to a variety of incidents, plans and procedures should be flexible and adaptable. Related improvements to emergency response can be divided into two general processes:

- Develop and apply response procedures and upgrade communication equipment
- Improve the operability of the transportation system during disruptive events

**Develop and apply response procedures and upgrade communication equipment**

Response elements include:

- Coordinating initial emergency response, based on severity of incident, and in accordance with WisDOT’s Emergency Transportation Operations plan

**POLICY: Improve emergency response to make the transportation system more resilient**

Maintaining communication vertically (among different levels of government) and horizontally (across different response agencies within the same level of government)

Communicating information to the public about the nature and severity of an incident, along with appropriate actions the public should take

The *Emergency Transportation Operations* plan is a coordinated, performance-oriented approach to operating the transportation system during emergencies. The plan addresses the procedures, processes, technology, roles, and relationships used in responding to incidents. An *Emergency Transportation Operations* response is required when there is an exceptional event that disrupts the normal flow of traffic on the Interstate system or state highway network. Incidents and events like these require an extreme response beyond normal daily operating procedures or capabilities. For more information on WisDOT’s Emergency Transportation Operations plan, see the “Improve the reliability of state trunk highway system operations” policy in Chapter 9, *Promote Transportation Efficiencies*.

While many traditional communication systems across the state already have redundancies in place, WisDOT will support further development of backup elements for these systems. Many agencies in Wisconsin, including WisDOT, have improved their communication technology for better emergency response coordination.

A new tool available to the emergency response community is the Mobile Data Communications Network. The Mobile Data Communication Network is a statewide microwave system that uses transmission
towers to transmit real-time data between shock-resistant computers inside patrol cars and regional base stations linked to the enforcement database at the Department of Justice. This system allows for a more secure exchange of information, including driver and vehicle information, location details, specific instructions, guidance, training and audio/visual messaging. Each agency partnering with the Division of State Patrol in use of the Mobile Data Communication Network must purchase and maintain its equipment to the division’s standards.

Another critical component of the state’s emergency response network is the State Traffic Operations Center in Milwaukee. The center is staffed 24 hours a day to coordinate responses to highway emergencies, incidents and infrastructure problems. Its freeway camera feeds are connected to the state Emergency Operations Center in Madison. Center staff can be reached by law enforcement, highway maintenance and other agencies through a single toll-free number. For more information about the State Traffic Operations Center, see Chapter 9, Promote Transportation Efficiencies.

State Traffic Operations Center functions include variable message signs in Milwaukee and Madison, used for both transportation-related information and emergencies such as Amber Alerts. The surveillance cameras in both metropolitan areas help officials quickly identify incidents that disrupt travel.

Highway Advisory Radio is used to notify drivers of lane closures due to construction and traffic conditions at sports events.

Wisconsin now has a 511 Traveler Information System in place. 511 is a nationwide program (administered and funded at the state level) that provides callers with free access to real-time, route-specific travel conditions, including weather, incidents, congestion and construction. The Wisconsin system operates via an automated voice-activated menu, and it is capable of providing Amber Alerts.

The 511 system is highly automated and can handle simultaneous calls. The system is versatile, offering many opportunities to accommodate the “All Hazards Approach” to emergency operations and emergency

![Figure 11-8: The State Traffic Operations Center in Milwaukee is staffed 24 hours a day to coordinate responses to highway emergencies, incidents and infrastructure problems.](image)
alerts. This includes the ability to provide reverse messaging to cell phones or in-vehicle communication devices. WisDOT will support ongoing upgrades to the 511 system, including the development of security and urban evacuation components.

WisDOT’s response capabilities will require extensive improvements. While the Emergency Alert System has been useful in Amber Alerts and severe weather warnings, additional communication and equipment upgrades will be essential. Future WisDOT actions include:

» Continued upgrades of voice and data systems for communication with the public and among primary and secondary responders

» Upgrades to voice and data systems in the Intelligent Transportation System (ITS) networks, including greater integration and coordination with State Traffic Operations Center systems to assist in evacuations and other emergencies. For more information see Chapter 9, Promote Transportation Efficiencies

System improvements for the emergency response community will include purchasing communications infrastructure and equipment capable of interoperability among all responders, including local, state, tribal and federal agencies.

In 2005, Governor Jim Doyle’s Executive Order 87 created the State Interoperability Executive Council to address interoperability and communication issues. During 2007, the State Interoperability Executive Committee conducted several public listening sessions that focused on the impact of state communications plans and proposed standard operating procedures.

In Spring 2008, Assembly Bill 321 was adopted and the Interoperability Council was formed, replacing the State Interoperability Executive Council. The committee’s makeup is indicative of the wide reaching impact of interoperability. Acting as WisDOT’s designee on the council is State Patrol Superintendent David Collins.

The Interoperability Council seeks to achieve statewide public safety radio interoperability. The council:

» Sets goals and objectives to achieve statewide public safety radio interoperability

» Develops and periodically reviews a strategy for achieving public safety radio interoperability including, but not limited to, advising the Office of Justice Assistance on the allocation of homeland security money and other funding available for this purpose

» Sets technical and operational standards for interoperable radio communications

» Develops short and long-term recommendations for local units of government on actions that may be required to achieve public safety radio interoperability

Since the public listening sessions in 2007, the Office of Justice Assistance has already distributed multiple rounds of interoperability equipment grants funded by the homeland security money. This funding replaces and upgrades existing VHF public safety radios. Any local or tribal public safety agency in Wisconsin can apply for the grants.

Through the Wisconsin Interoperable System for Communications, community responders will have the ability to use a common statewide system to communicate during large incidents. Also, responders
in one community will be able to assist another community without loss of communications, from any part of Wisconsin. The Wisconsin Interoperable System for Communications is envisioned to support a minimum of three simultaneous conversation paths during an incident, triple the number currently available, and will be expandable through additional enhancements. Initial build-out will provide 95 percent statewide coverage for mobile radios. Information on the Wisconsin Interoperable System for Communications is available at http://www.ic.wi.gov/section.asp?linkid=1223&locid=70.

By definition, public safety communication systems require redundancy so that communications throughout Wisconsin can continue on a backup system if the primary system fails. WisDOT’s network provides the required built-in redundancies. Transportation management communications infrastructure (such as WisDOT’s fiber optic backbone), and public safety communications (such as the microwave backbone and mobile data network) are integrated to provide enhanced public safety and transportation operations linkages, as well as enhanced mobile voice, data and video access.

In incidents across the nation, the inability of various units of government to properly communicate during a crisis has consistently been cited as a major reason for failure of emergency response plans. WisDOT will continue to invest in communication system redundancy and integration throughout the plan period.

Improvements to communication with the public should be multidisciplinary, with heavy reliance on mass media such as TV, radio, and print. The Emergency Alert System is a cost-effective way to inform the public about emergencies that disrupt travel. Additional outreach should also include fixed and mobile variable message signs, and real-time information posted to the Internet.

Improvements to the initial 511 system also must be supported. These include coverage across rural areas of the state, and potential development of cost-effective interactive and reverse-call technology. In addition, Wisconsin should also encourage next-generation technology developments in public communication, to ensure WisDOT’s needs are met.
**Improve the operability of the transportation system during disruptive events**

Operability improvements to transportation systems include:

» Directing traffic around or away from incidents

» Evacuating part or all of an urban area in a major emergency

» Restoring normal transportation service and operations through expedited reconstruction

WisDOT has identified and established emergency “reliever” routes to redirect traffic after disruptive events force the closure or partial closure of the transportation network. Closures may occur in response to weather conditions, serious crashes or other major incidents.

With the added concerns about possible intentional, human-induced acts, emergency plans for high-volume routes and major metropolitan areas have been revised to include evacuation planning. Alternate critical infrastructures and evacuation routes not only need to be identified, but they also need to be maintained to good standards, particularly when capacity on primary evacuation routes is limited by construction or maintenance.

In major catastrophes, the statewide bureaus of WisDOT’s Division of Transportation System Development may request emergency contracting, which is subject to the approval of the governor, according to state law.

WisDOT is developing a comprehensive strategy to ensure mobility, flexibility and emergency operation response capabilities along the most heavily traveled corridors in the state. This approach, called integrated corridor operations planning, looks at techniques that can enhance non-freeway traffic management through use of technology along Backbone corridors. WisDOT will support these efforts through partnerships among state and local agencies. These efforts will first focus on modernizing traffic signals along the corridors parallel to freeways.

In some areas of the state, alternate route signage is already in place, such as the “Blue Route” in the Madison area. These corridors offer drivers alternate routes when a major incident requires a lengthy closure or results in a significant delay. WisDOT regions are identifying and developing additional reliever routes, as well as developing a uniform methodology for designating and signing these routes.

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**Madison-area Blue Route**

The “Blue Route” is an alternate route signing concept designed to direct travelers when a major incident on the interstate requires a lengthy closure or results in major delays.

When a major incident occurs on I-39/90/94 around Madison, electronic message signs will instruct interstate travelers to follow the Blue Route. Static Blue Route signs have been installed that lead drivers off the interstate and along the Blue Route. The electronic signs can be activated remotely, allowing the State Patrol and other responding agencies to better focus their resources on the critical incident scene.

The Blue Route uses US 51 (Stoughton Road) from US 12/18 (the Madison Beltline) at the south to its intersection with I-39/90/94 at the north.

→ www.dot.state.wi.us/travel/stoc/altroute.htm
WisDOT will continue to collaborate with local partners in developing system redundancies and ensuring safe and efficient traffic flows on alternate routes while the transportation network is disrupted.

The National Response Plan guides additional efforts to create a more robust, comprehensive system of emergency planning. It includes a transportation element that identifies sector-specific emergency response strategies.

The Office of Wisconsin Emergency Management and WisDOT have joint responsibility for the development of the state’s transportation element of the National Response Plan in partnership with counties, municipalities and metropolitan planning organizations. WisDOT and the Office of Wisconsin Emergency Management will develop and refine this element, which will include strategies for coordinating evacuation routes across county lines. In an evacuation scenario, the Office of Wisconsin Emergency Management could assert its authority to allow WisDOT to manage roads not under the department’s normal jurisdiction. WisDOT and the Office of Wisconsin Emergency Management are awaiting the Department of Homeland Security state funding from the Wisconsin Office of Justice Assistance to develop these plans.

WisDOT will also establish criteria to determine when the response plan should be engaged, in the event of an incident. By conducting regular exercises for simulated incidents, security planners will gain important information about which operations are most essential and how best to continue them. Coordination is the key to the success of these plans. To ensure transportation resiliency under a range of circumstances, WisDOT will:

- Assist in coordinating evacuation plans for Wisconsin’s 12 largest communities with the Office of Wisconsin Emergency Management, county governments, metropolitan planning organizations and municipalities
- Assess maximum traffic flow capacities for potential evacuation routes, taking into account the potential for conversion to single-direction operation. This assessment will help determine how quickly a neighborhood or city could be evacuated
- Coordinate border county evacuation plans with Illinois and Minnesota, should the Chicago or Twin Cities metropolitan areas face a crisis
- Schedule regular Emergency Support Function exercises to build intergovernmental cooperation capacities while identifying needs
- Expand ongoing coordination with federal agencies in developing Continuity of Operations-Essential plans (including those for medical pandemics)
- Study the needs of essential freight movement (including food and fuel) during any prolonged incident, and identify strategies that will best meet those needs

In addition to identifying and supporting redundant transportation routes, the state should build

\[ \text{Figure 11-10: Policy development for overall transportation system redundancy should focus on the availability and capacity of other modes in case of emergencies.} \]
In the long term, WisDOT must consider and develop policies for using other modes in case of emergencies. For example, on September 11, 2001, and in the days that followed, the grounding of all domestic air service left thousands of travelers without adequate travel options. Policy development for overall transportation system redundancy should focus on the availability and capacity of other modes.

### SUMMARY OF POLICY ACTION ITEMS:

*Improve emergency response to make the transportation system more resilient*

#### Short-term (2008 – 2013)

- Assist the coordination of evacuation plans for Wisconsin’s 12 largest communities with the Office of Wisconsin Emergency Management, county governments, metropolitan planning organizations and municipalities, and assess maximum capacity for potential evacuation routes, taking into account the potential for conversion to single-direction operation.

#### Entire planning period (2008 – 2030)

- Support ongoing upgrades to the 511 system, including development of security and urban evacuation components.
- Continue upgrades of voice and data systems for communication with the public and among primary and secondary responders.
- Continue upgrades of the voice and data systems in the ITS networks, including greater integration and coordination with the State Traffic Operation Center systems to assist in evacuations and other emergencies.
- Continue to invest in communication system redundancy and integration.
- Partner with state and local agencies to support efforts to ensure mobility, flexibility and emergency operation response capabilities along the most heavily traveled corridors in the state.
- Continue to collaborate with local partners in developing system redundancies and ensuring safe and efficient traffic flows on alternate routes while the state transportation network is disrupted.
- Develop the transportation element of the National Response Plan through collaboration with the Office of Wisconsin Emergency Management, counties, municipalities and metropolitan planning organizations, and establish criteria to determine when the response plan should be engaged, in the event of an incident.
- Coordinate border county evacuation plans with Illinois and Minnesota, should the Chicago and Twin Cities metropolitan areas face a crisis.
- Schedule regular Emergency Support Function exercises to build intergovernmental cooperation capabilities while identifying needs.
- Study the needs of essential freight movement (including food and fuel) during any prolonged incident, and identify strategies that will best meet those needs.
- Build redundancies for essential operations such as State Patrol communications and driver/vehicle records management. WisDOT must also build resilience into other critical areas, such as operations, design and planning. The development of additional computer server systems and project management files is also essential to the department’s most critical daily functions.