Traffic Incident Management Programs:

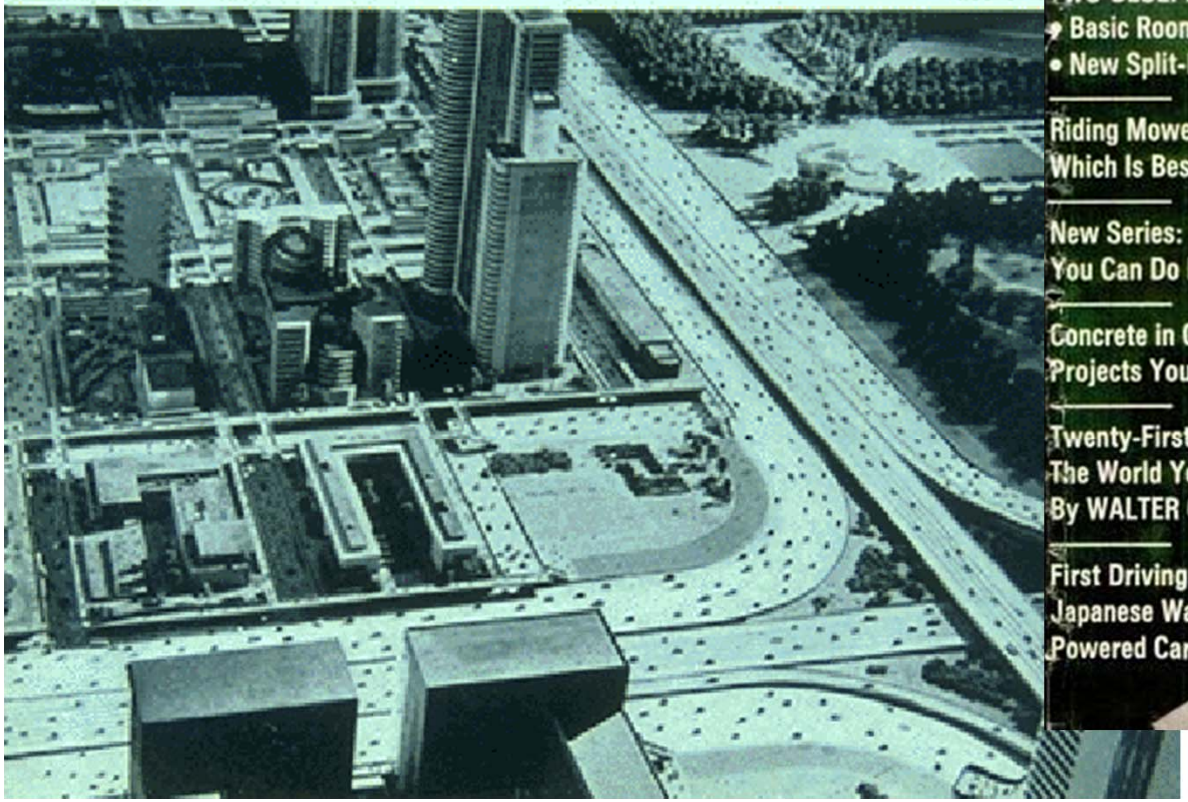
Context & Wisconsin's Experience

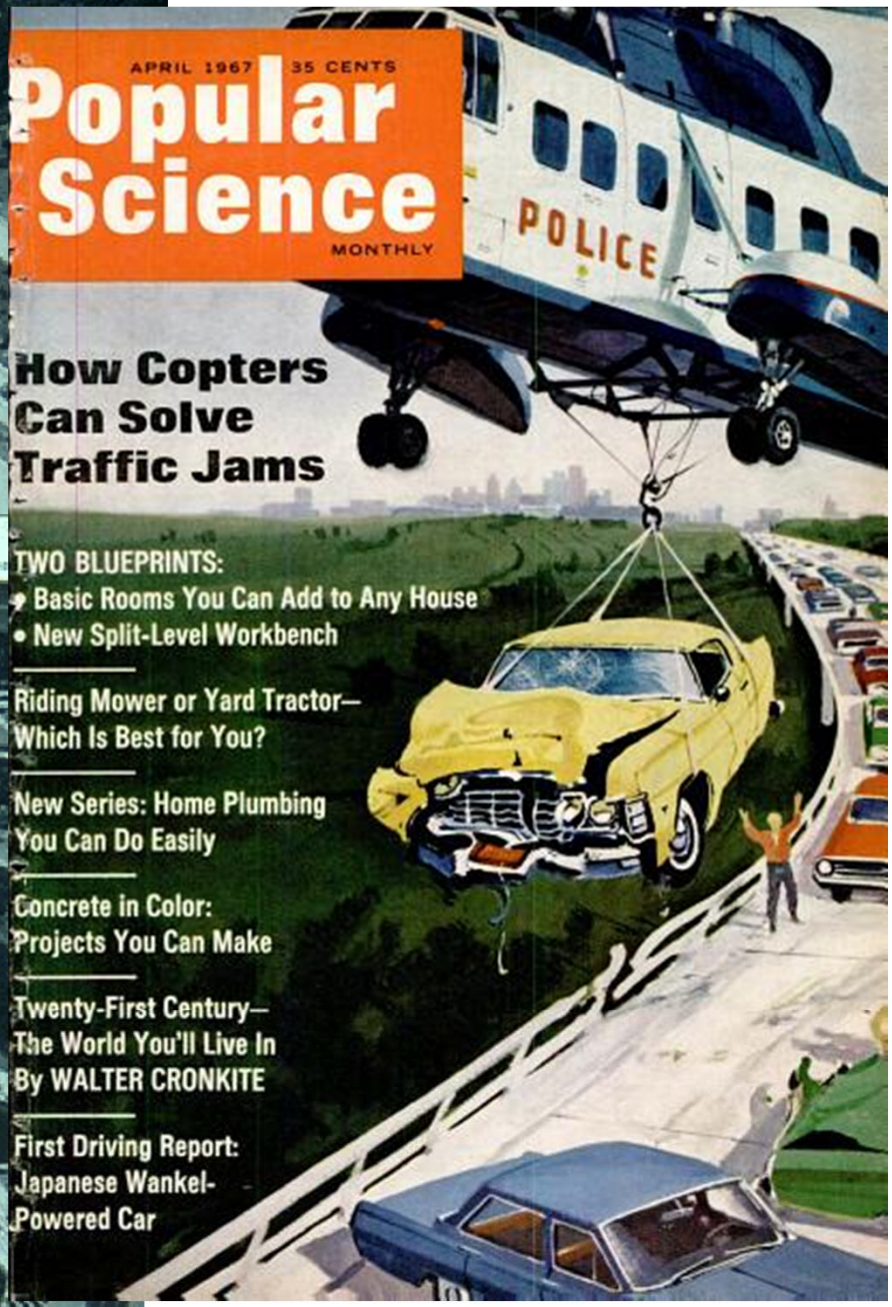
Overview

- Background & Context
- Wisconsin TIME Program
- Transportation Public Safety

A TYPICAL EXPRESS BOULEVARD INTERSECTION AND FEEDERS

Futurama Ph



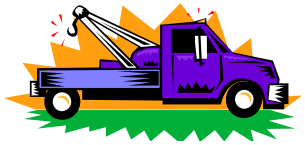


Evolving Traffic Incident Management as a National Initiative

- **Pre-1980**
  - Early National Highway Traffic Management Vision
  - NHTSA & the Emergency Medical System
  - Urban Freeway Traffic Management Systems (Detroit, LA)
- **1980's FHWA**
  - First USDOT "Incident Management" Handbook
  - Demonstration Project 86 Multidisciplinary Workshop
- **1990's**
  - National Incident Management Coalition Conferences
  - ITS Standards – "Incident Management Message Sets"
  - TRB & ITE Traffic Incident Management Committees
- **2000-2010**
  - USDOT Public Safety Advisory Group (2000)
  - First National TIM Conference (2002)
  - National TIM Coalition (2004)
  - National Unified Goal for TIM (2007)
  - National Multidisciplinary TIM Training Pilot (TRB SHRP)

National Unified Goal

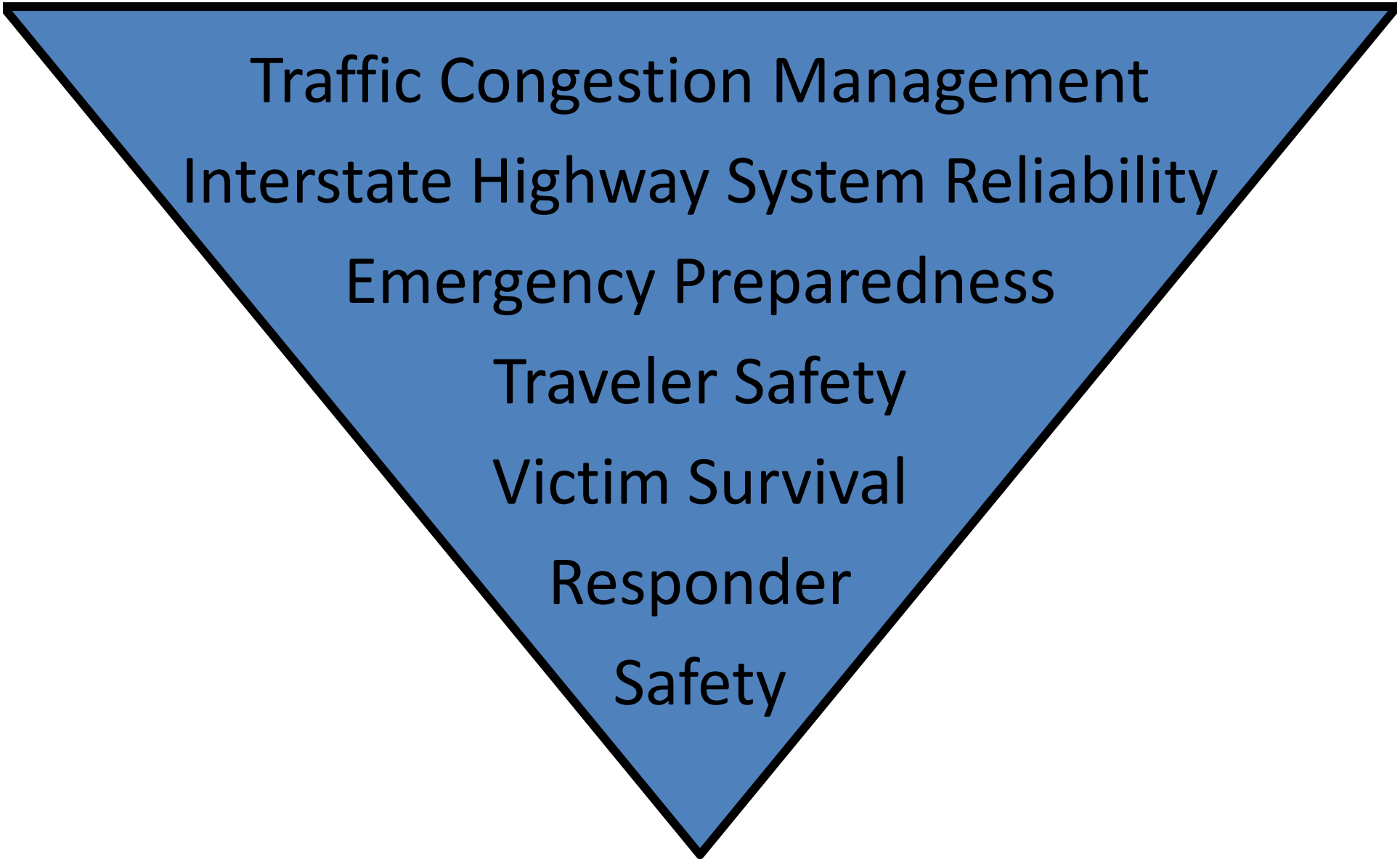
Responder Safety

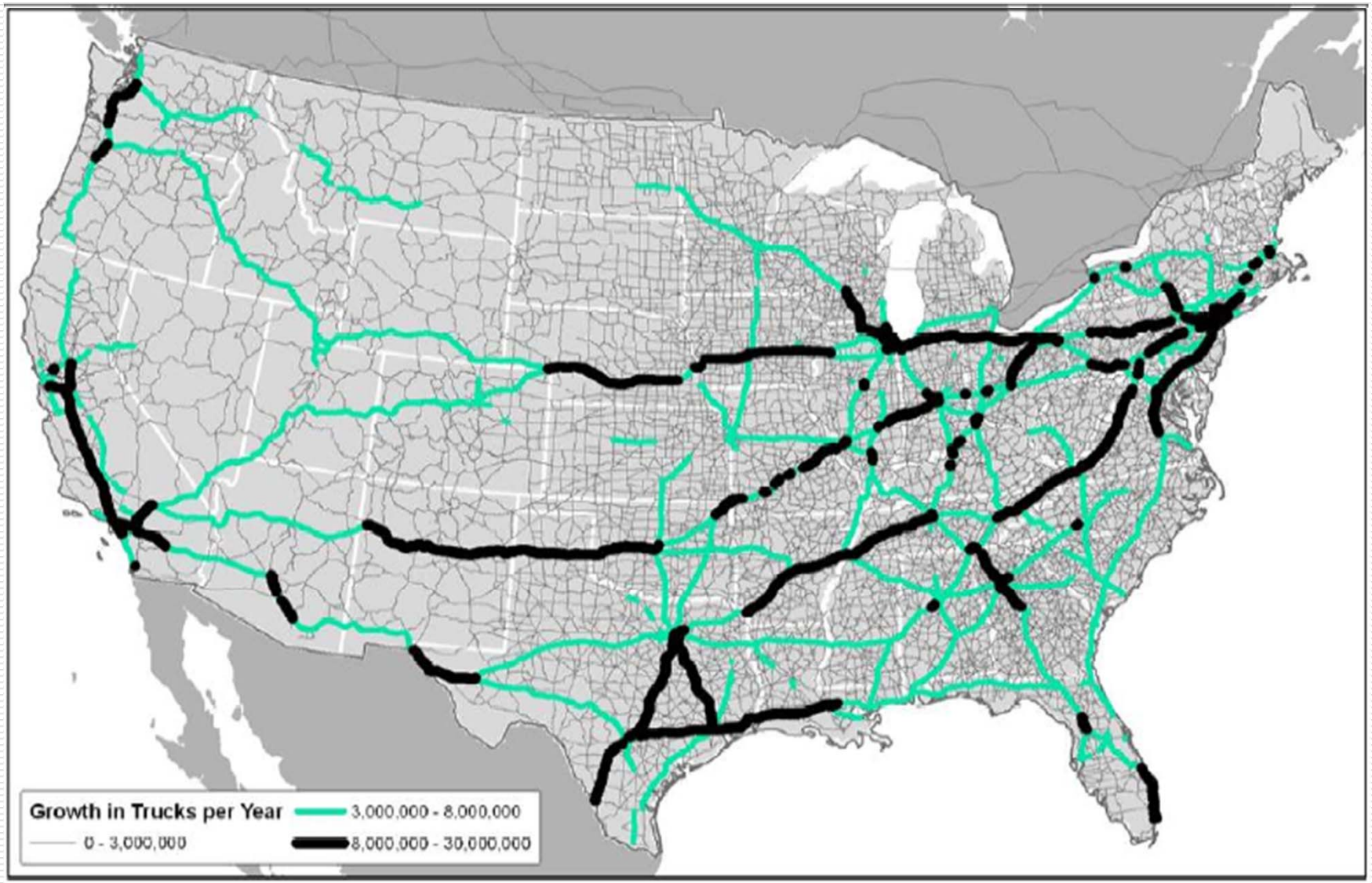


Safe Quick Clearance

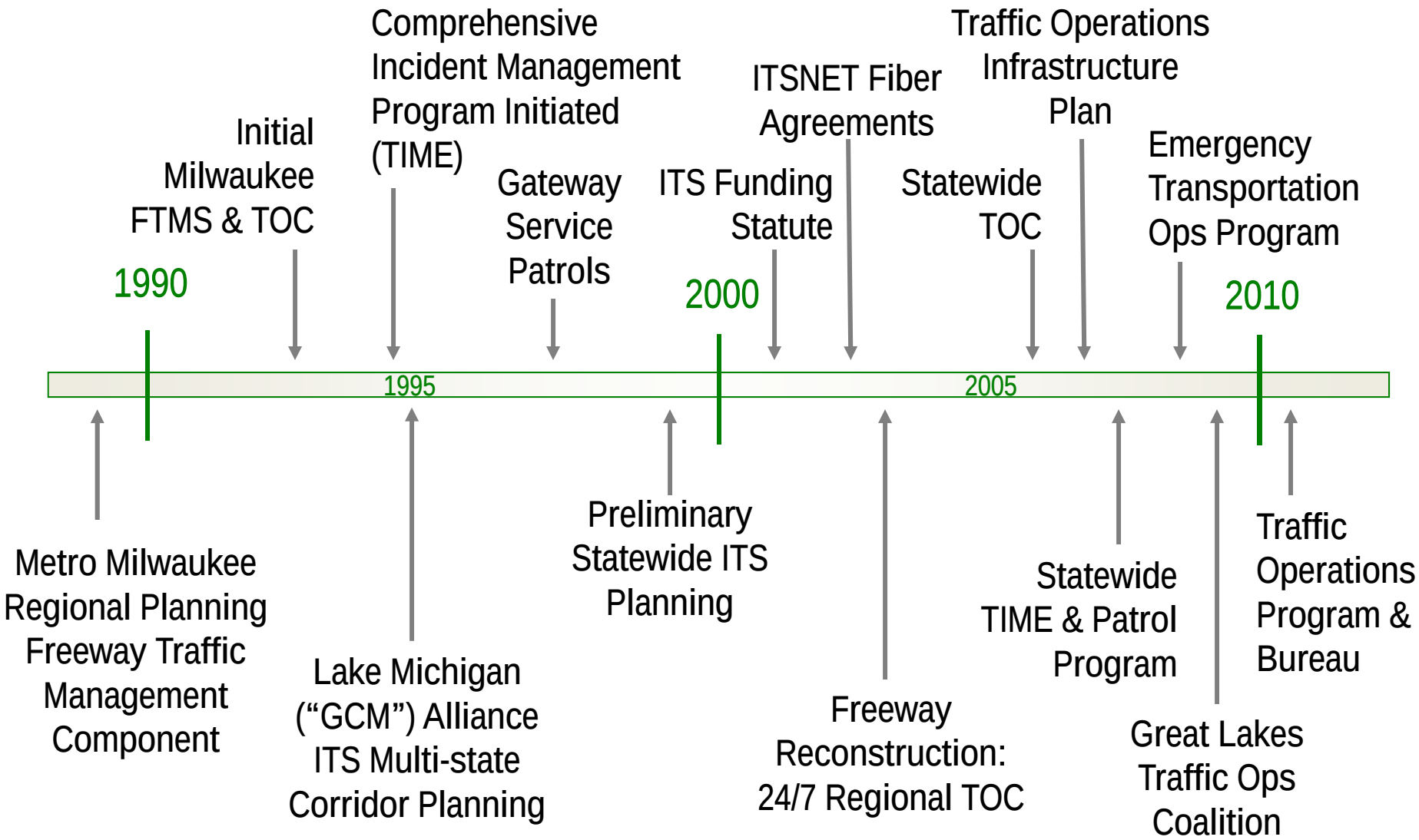
Prompt, Reliable, Interoperable Communications

The “Business Case” for TIM




Growth in Trucks per Year
0 - 3,000,000
3,000,000 - 8,000,000
8,000,000 - 30,000,000

Wisconsin Traffic Incident Management Enhancement (TIME) Program



Statewide Traffic Operations Center & Incident Notification System

Purpose: Provide law enforcement agencies and highway departments a mechanism for reporting transportation infrastructure problems and traffic incidents that occur on state-owned highways

Benefits

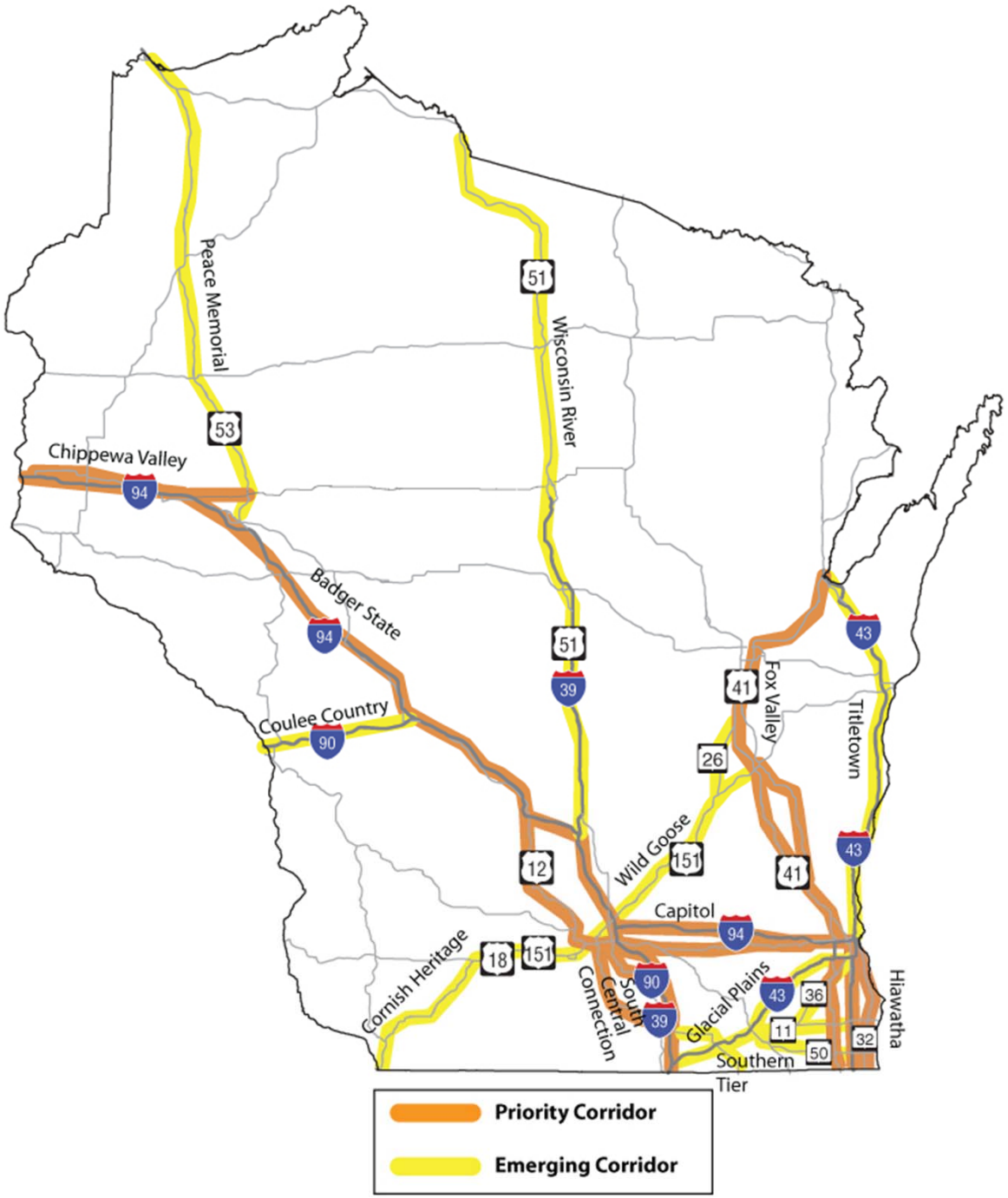
- Statewide consistent procedure and service 24/7
- Provides a single number for contacting WisDOT
- State EOC, Fusion Center, Amber Alert Connectivity
- Increased ability to track incidents and corresponding resource needs statewide
- 511 and Great Lakes Region traveler information

TIME
Traffic Incident Management Enhancement

Emergency Transportation Operations Program

TIME
Traffic Incident Management Enhancement

Traffic Operations Infrastructure Plan (TOIP)



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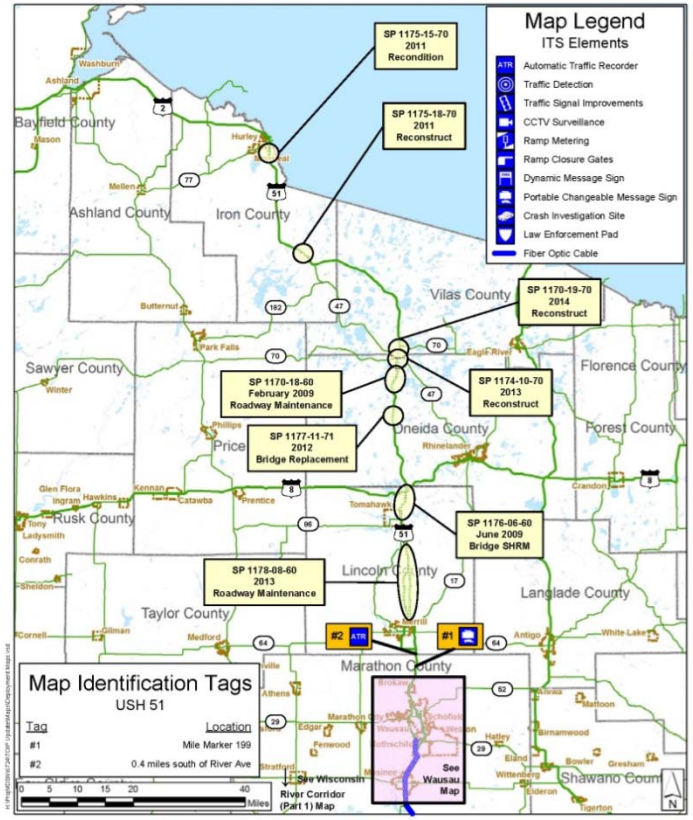
Traffic Incident Management Enhancement

TOIP Implementation Plan

- Serves as an implementation program for Priority and Emerging Priority corridors
- Other ITS devices were addressed and integrated for deployment
  - PCMS pads & expanded DMS
  - Ramp gates
  - Crash investigation sites
  - Law enforcement pads
- Identified construction projects to assist in implementing devices

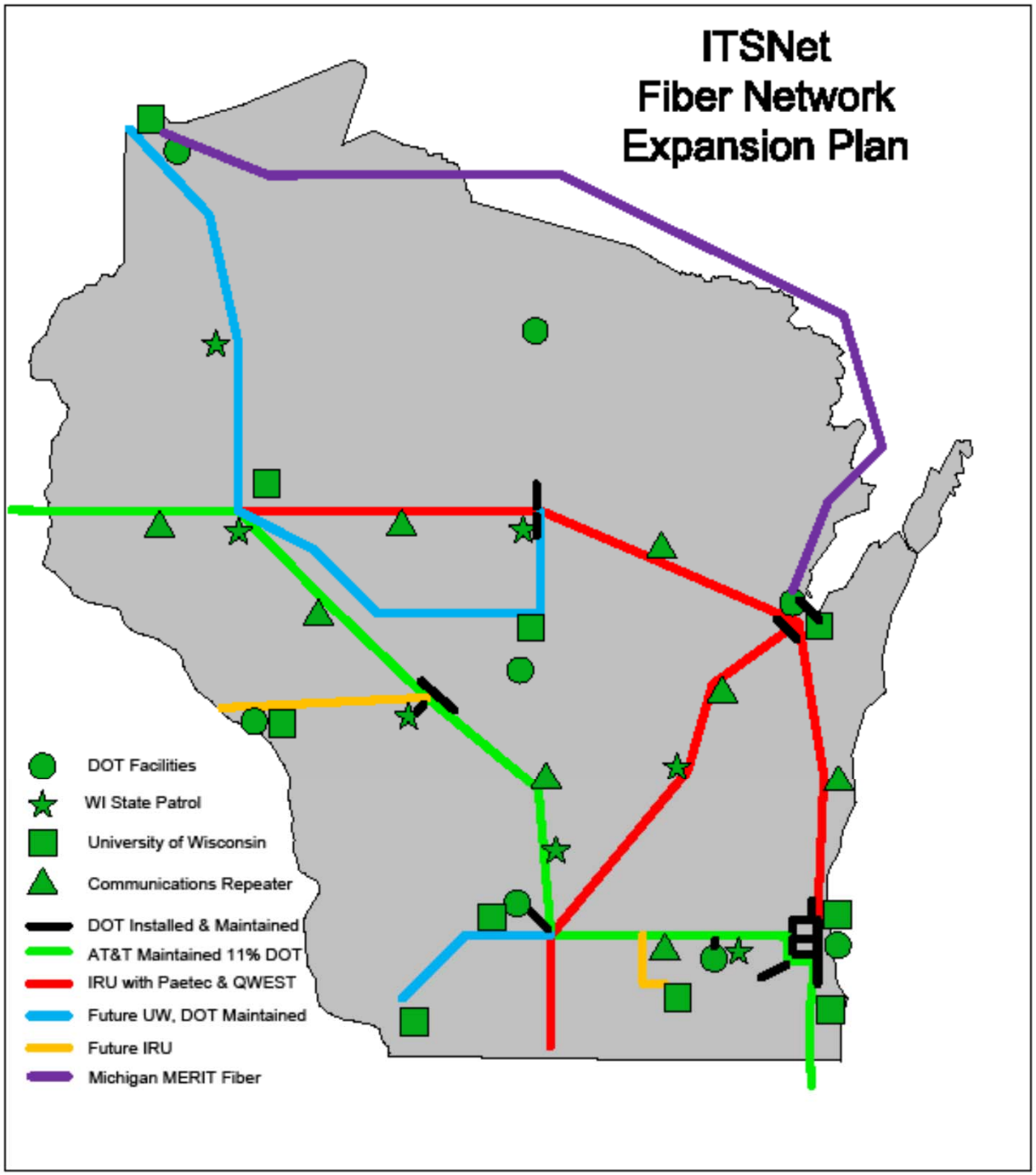


DRAFT Wisconsin River Corridor (Part 2) – TOIP Based ITS Deployment

Figure 9

Madison to Ironwood, Michigan

TIME
Traffic Incident Management Enhancement



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Regional TIME Meetings

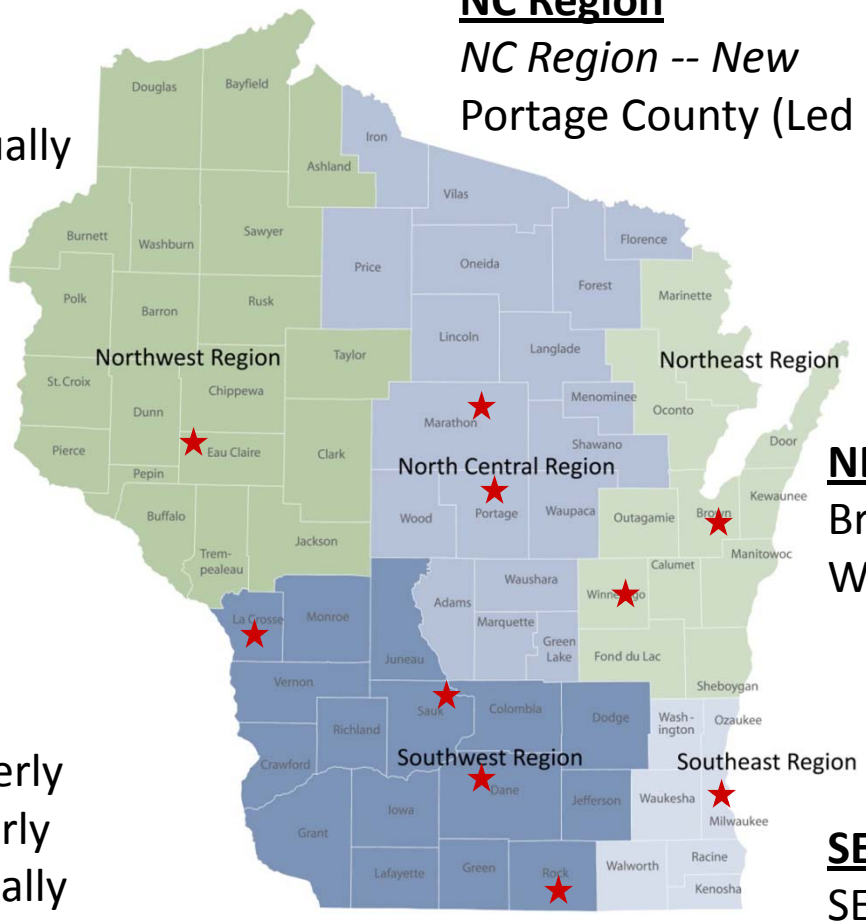
NW Region

Eau Claire -- Semi-Annually

NC Region

NC Region -- New

Portage County (Led by Sheriff's Dept)



NE Region

Brown County -- Quarterly

Winnebago County -- Quarterly

SW Region

La Crosse -- Quarterly

Madison -- Quarterly

Rock -- Semi-Annually

Wisconsin Dells -- Semi-Annually

SE Region

SE Region -- Bi-monthly

Typical Regional Meeting Agenda

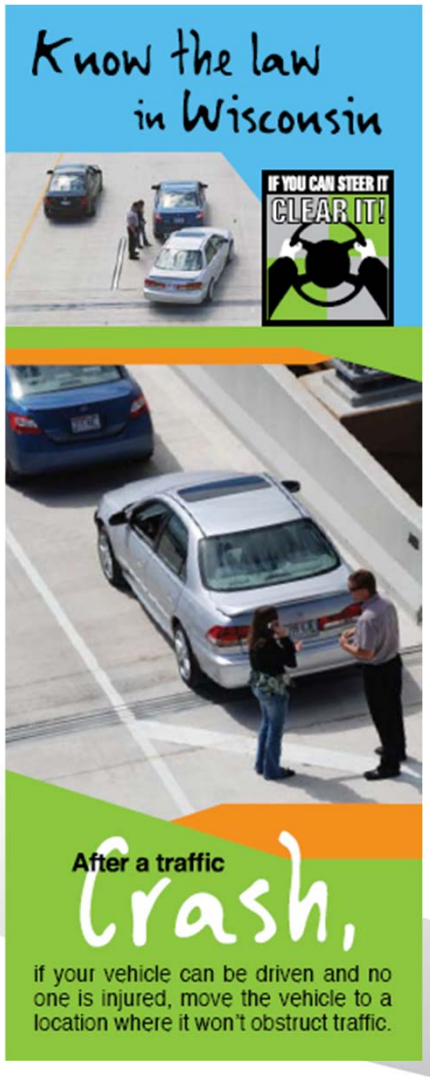
- Provide regular updates on:
  - TIM-related initiatives
  - Major construction projects
  - Upcoming special events
- Debrief traffic incidents
- Practical Applications of WisDOT's Emergency Traffic Control and Scene Management Guidelines: Good Practice or Lesson Learned
- "What's New in Traffic Incident Management"
  - Highlights TIM activities outside of Wisconsin
- Special Topics
  - Crash Investigation and Evidence Preservation
  - Hazardous Materials

TIME
Traffic Incident Management Enhancement

Establish, reinforce and renew relationships

Move Over or Slow Down

For Stopped Emergency / Maintenance Vehicles



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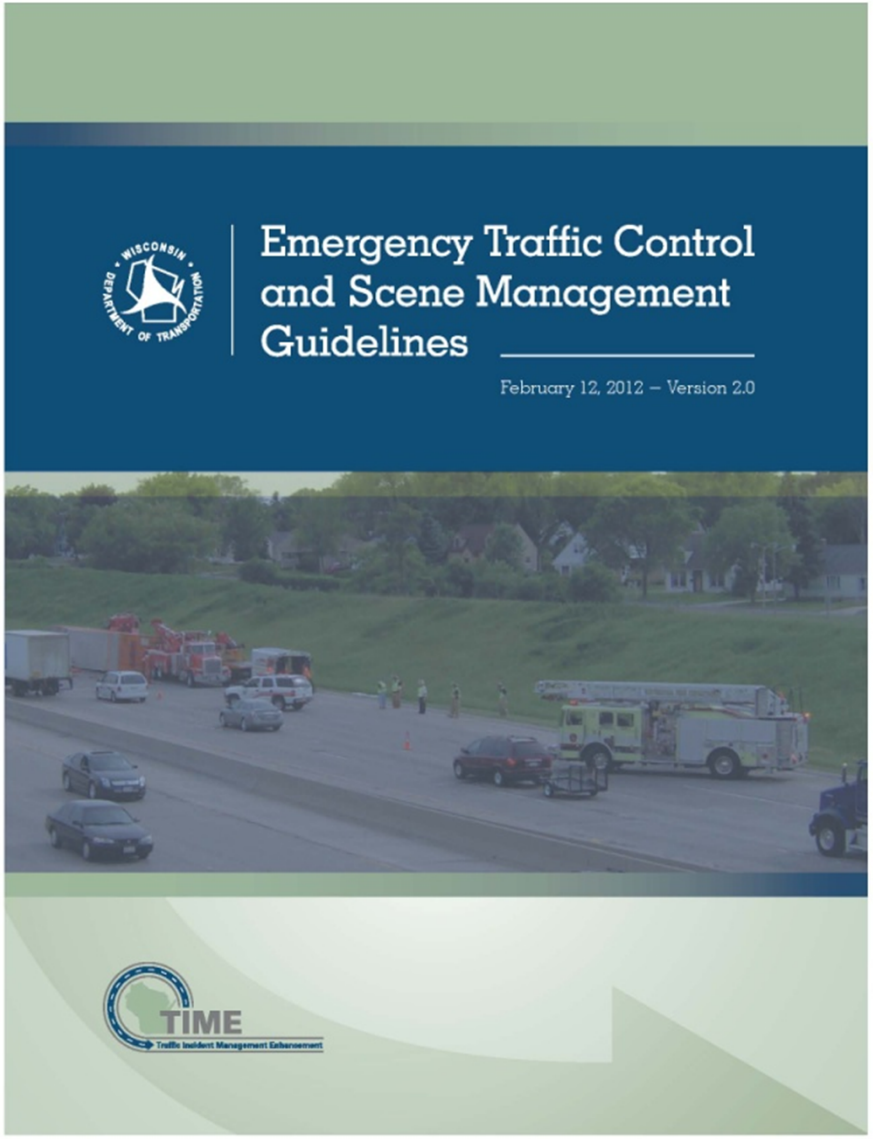
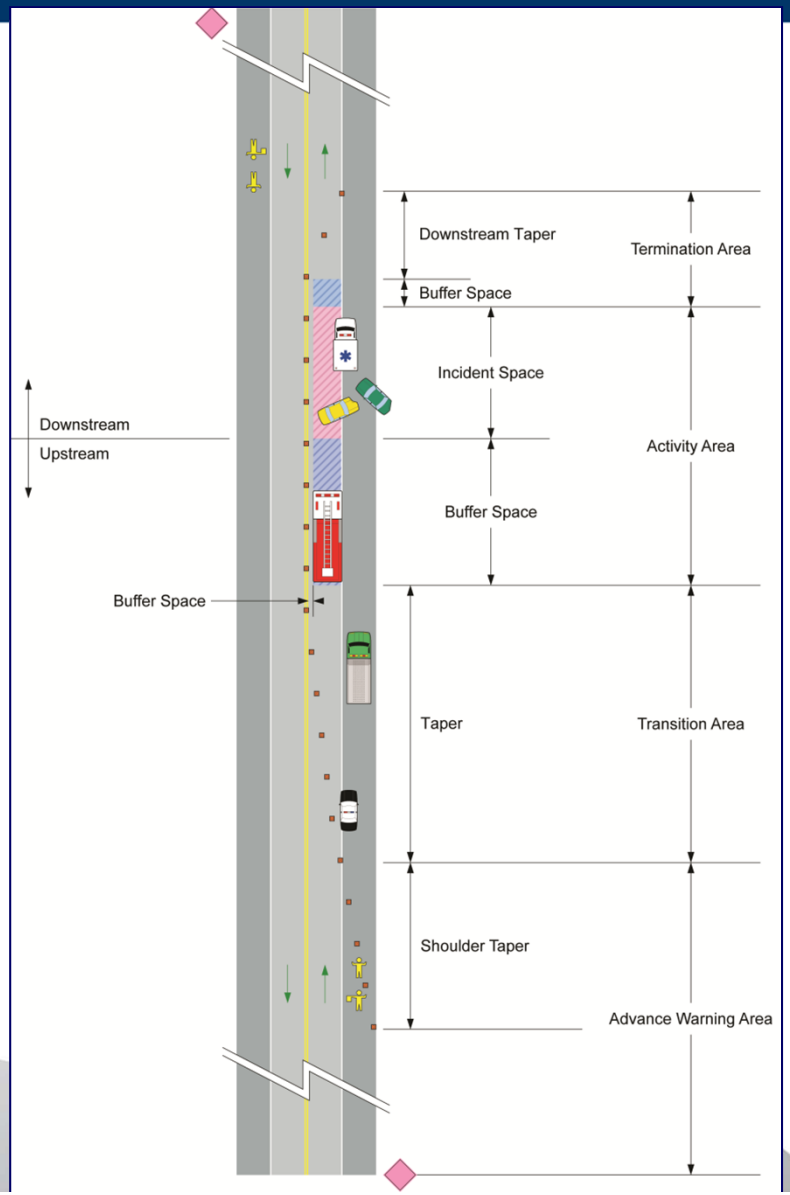
Traffic Incident Management Enhancement

WisDOT Emergency Traffic Control and Scene Management Guidelines



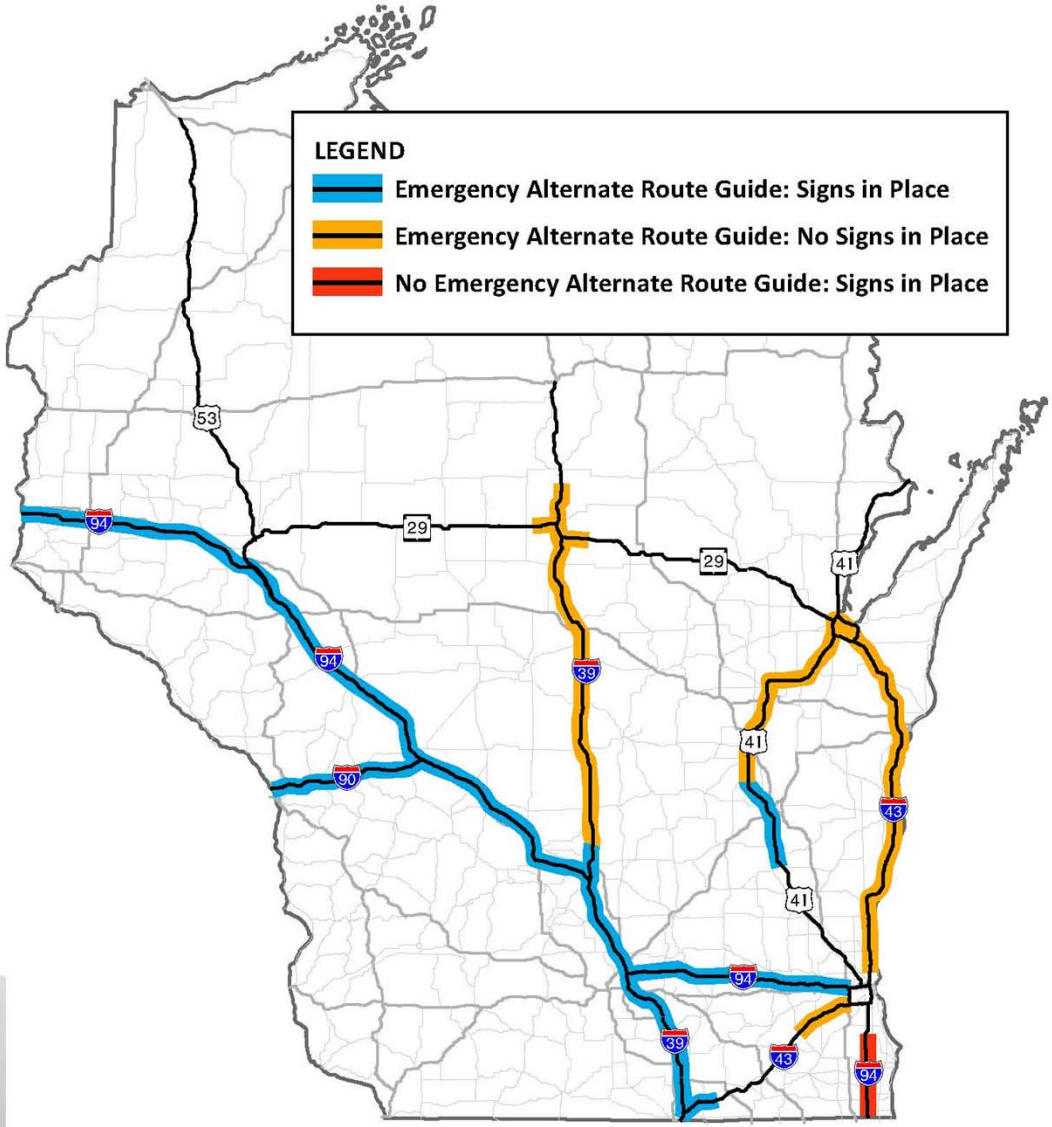


Multi-disciplinary TIM Training

- Coordinating Emergency Traffic Control and Scene Management Guidelines training efforts with the National TIM Responder Training Program
  - Recently identified as an FHWA Every Day Counts Initiative
- Goal: Highest number of trained responders
  - Continue to use a Train-the-Trainer approach
  - 45 sessions are scheduled between end of October 2012 and June 2013

Emergency Alternate Route Planning

- Emergency alternate route planning has occurred in all five WisDOT Regions
- A statewide emergency alternate route guide template has been developed based on best practices from around the state
- Developed guides for the majority of Interstate roadways in the state



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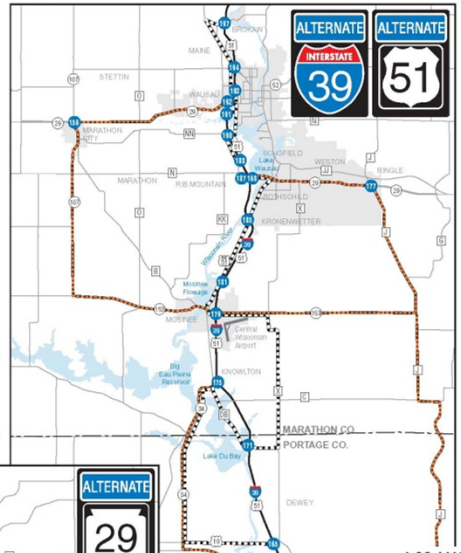
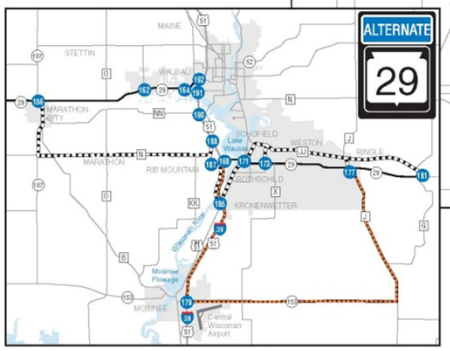
Traffic Incident Management Enhancement

I-39 / US 51 / WIS 29 CORRIDORS – MARATHON COUNTY
EMERGENCY ALTERNATE ROUTE OPERATIONS GUIDE



I-39 / US 51 MARATHON COUNTY Page 3

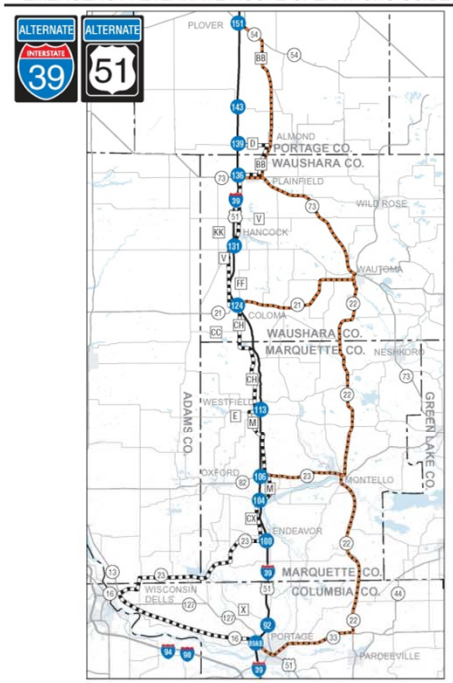
WIS 29 MARATHON COUNTY Page 57

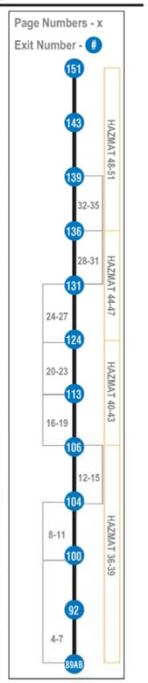


I-39 / US 51 MARATH

WIS 29 MARATHON COUNTY

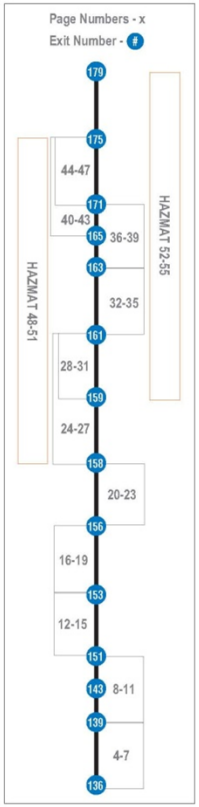
I-39 / US 51 CORRIDORS – MARQUETTE AND WAUSHARA COUNTIES
EMERGENCY ALTERNATE ROUTE OPERATIONS GUIDE





LEGEND: Alternate Route; HAZMAT Route; Interchange/ Exit Number; I-39 / US 51 Corridor

I-39 / US 51 CORRIDOR – PORTAGE COUNTY
EMERGENCY ALTERNATE ROUTE OPERATIONS GUIDE



Alternate Route; HAZMAT Route; Interchange/ Exit Number; I-39/US 51 Corridor

TIME Traffic Incident Management Enhancement

TIME Procurement List

- **Purpose** - to provide emergency responders a 'one stop shop' for purchasing TIM equipment such as:
  - Traffic control devices
    - Cones
    - Rollup signs
  - Safety vests

- By going though the WisDOT procurement process the items available through the contract are typically at a reduced rate

- Orders can be made by any incident response partner on an as needed basis by contacting the vendors directly

TIME
Traffic Incident Management Enhancement

Freeway Service Teams

Contracted Service Model

- Tow trucks used for quick removal of disabled vehicles
- Construction-funded
- Vehicles equipped with:
  - Traffic control devices
  - Fuel
  - Tools

Sheriff's Service Model

- Provide authority for quick removal of disabled vehicles
- Vehicles equipped with:
  - Push bumpers
  - Traffic control devices and CMS
  - Fuel
  - Tools

TIME
Traffic Incident Management Enhancement

Towing and Recovery

1. Recommended Minimum Standards for Call-Out Lists
2. Delayed Heavy-Duty Clearance/Recovery
3. Heavy-Duty Incentive Program

TIME Coalition

- **Mission:** Consistent with the National Unified Goal for traffic incident management, Wisconsin TIME Coalition members will work together and establish partnerships to:
  - Improve responder safety
  - Enhance the safe, quick clearance of traffic incidents
  - Support prompt, reliable, interoperable communications
- Partnering Agreement was signed on September 28, 2012 at the Governor's Conference on Highway Safety

TIME
Traffic Incident Management Enhancement

Wisconsin Department of Transportation
MAPSS Performance Dashboard

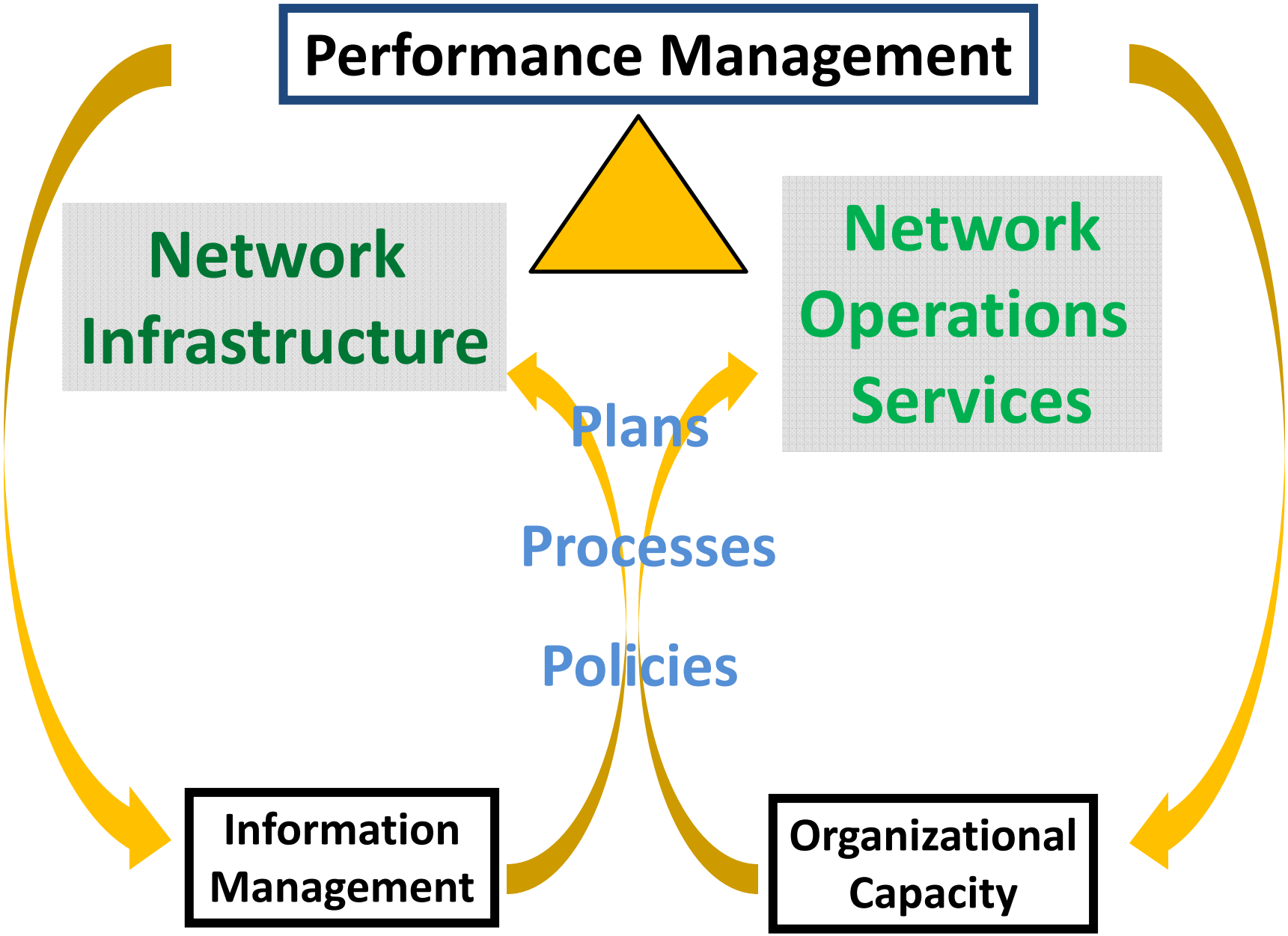
Mobility – Accountability – Preservation - Safety – Service

www.mapss.wi.gov

Mobility: Delivering transportation choices that result in efficient trips and no unexpected delays.

Urban freeway congestion Calendar year 2011	Percent of urban freeway with serious congestion	**15.2**	Reduce percent		↓	The measure is based on the percent of urban freeway miles at a mid-level of service (LOS D) or worse (a lower number is better).
Transit availability Calendar year 2011	Percent of population served by transit	**55.0**	Increase percent		↔	This is a new measure so historic data is not available.
Bicycle accommodation Calendar year 2011	Percentage of state highways with bicycle accommodation	**64.8**	100 percent, except where prohibited		↑	Increasing bicycle accommodations is mostly due to the paving of shoulders.
Incident response Calendar year 2011	Average time to clear major highway incident	**4h 37m**	Decrease average time		↔	Benchmarks are being developed to evaluate incident response (a lower number is better).
Winter response State fiscal year 2011	Average time to bare/ wet pavement after snow/ice event	**1h 49m**	2h 00m	✓	↑	The department is implementing best practices using a Maintenance Decision Support System (a lower number is better).

System Management & Operations Program Components

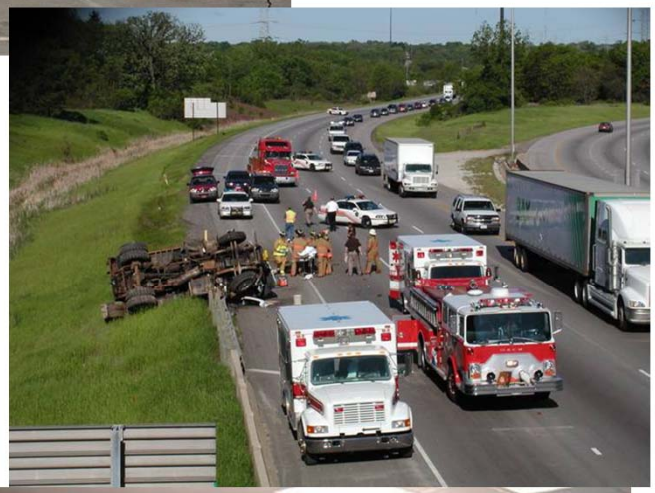


WISDOT TIME Program: Lessons Learned

- Trusting Relationships are Fundamental
  - Transportation Public Safety Community has emerged
  - Sustainability is hard work
- Opportunism is Necessary
  - Offer immediate value to partners

    (work zone info, push bumpers, free training/debriefing, data/video, etc.)
  - Leverage crises: executive engagement "windows"
- Program is Foundational
  - Define TIM within a Traffic Operations Program & Organization
  - Recognize the "event continuum": work zone…incident…disaster

Traffic Incident Management Program Elements



1. **Strategic Program Planning Process**
2. **ETO/TIM Operations & Response Plans**
3. **Partnership Agreements**
4. **Guidelines & Laws**

   Scene Management Guidelines,

   Move Over, Steer It/Clear It, etc.
5. **Services, Tools, & Systems**

   Patrols, Crash Reconstruction,

   Traffic Management Teams,

Emerging Transportation Public Safety Alignments (Wisconsin "Joint Systems & Operations")

Law Enforcement

Criminal Investigation

Drug Enforcement & Interdiction

Highway Operations

Traffic Control (Devices)

Highway & Traffic Design

Construction Operations

Work Zone Operations

Traffic Enforcement Safety Engineering

Speed Management

Crash Reconstruction

Emergency Transportation Ops & Traffic Incident Management

Traveler Warning Traffic Management

Joint Communications Network Management & Interoperability

Commercial Vehicle Enforcement Commercial Vehicle Routing

For Additional Information

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