



Minnesota's Approach to Advancing Traffic Incident Management

Project Process



Goals



Focus Areas

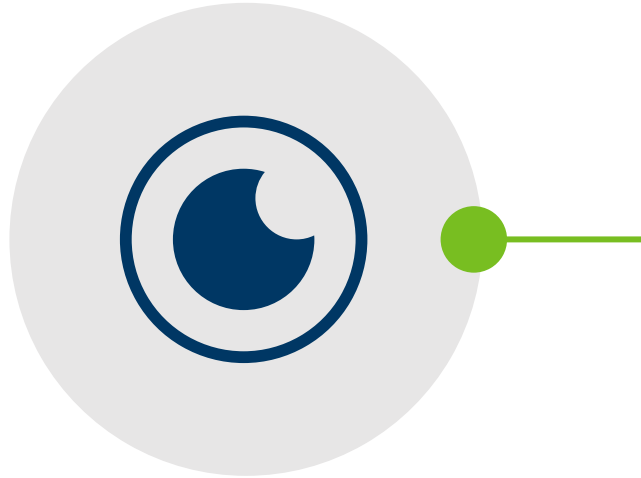


Refinement

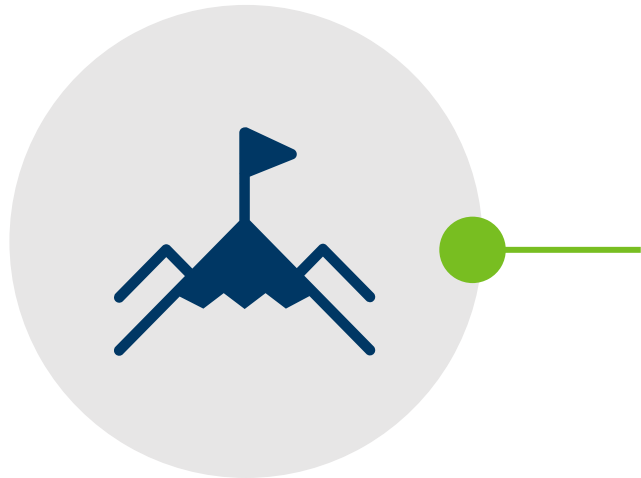


Findings

Vision & Mission



Support the vision of the Department of Public Safety (DPS) and the Minnesota Department of Transportation (MnDOT) to **enhance safety** and **transportation system reliability** through Traffic Incident Management (TIM) best practices and thorough data analysis.



Identify TIM program improvements and strategies that advance the mission of DPS and MnDOT. Utilize **data driven** approaches to identify effective countermeasures to **prevent serious injury and fatal crashes**.

Goal: Safety Culture



Goals



- Reduce responder exposure
- Reduce delay
- Reduce incident clearance time
- Reduce secondary crashes

Strategies



- Expand responder safety training
- Integrate emerging technology / NextGen TIM
- Enhance after-action reviews / Improve TIM collaboration
- Apply TSMO strategies

Focus Areas



Policy



Training



Data

Recommendations: Key Steps



Development



Implementation



Ongoing Effort

Focus Area: Training



- Kick Off Training Efforts and Expand Instructor Pool
- Develop Tiered Training
- Designate Training Staff
- Require TIM and ICS Training
- Identify Funding and Incentives
- Formalize Peer-to-Peer Collaboration
- Conduct Interagency Training



Designate Training Staff

Key Steps

- Develop policies requiring staff to be TIM trainers
- Conduct advanced TIM Train-the-Trainer sessions for identified staff
- Track progress in statewide database/dashboard
- Review list of trainers quarterly

Designate Training Staff



Identified Staff

- MSP field lieutenants
- MnDOT district representatives (2-3)
- MnDOT headquarters, as appropriate
- DPS, emergency communications, TMC, and/or FIRST (2-3)

Training Policy Considerations



- Require trainers to lead regional training teams
- Require trainers to conduct a certain number of classes by a deadline
- Provide guidance for marketing, scheduling, and documenting classes



Best Practices

Designate Training Staff



Virginia – TIM Training SOP

- 7 Virginia State Patrol (one per district) trainers
- 7 Virginia Fire Program (one per division) trainers
- Participate in two 4-hour classes within 18 months
- Reporting guidelines

Focus Area: Policy

- Adopt Quick Clearance Legislation
- Strengthen Open Roads Agreement
- Improve Standard Operating Procedures



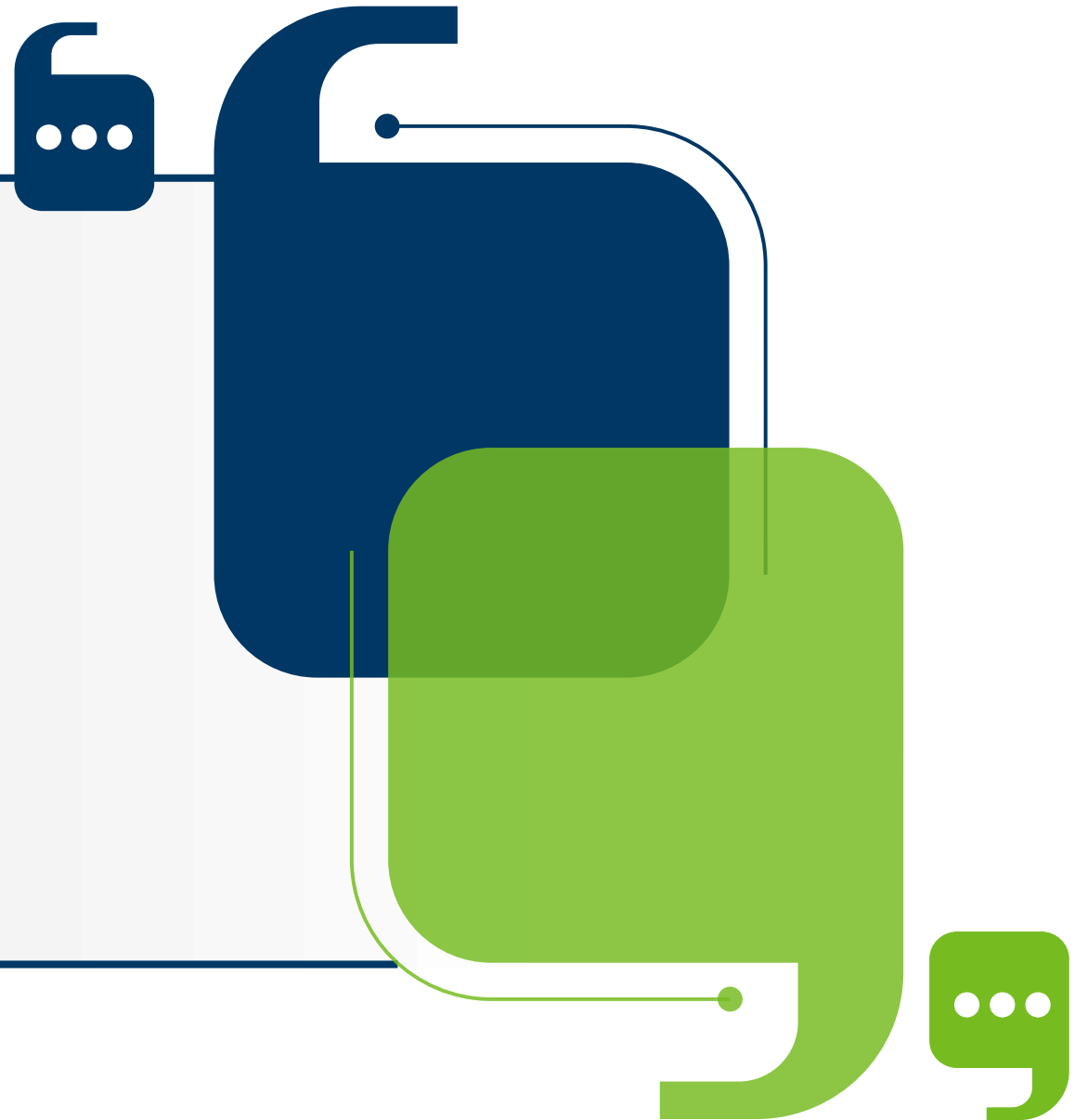
Focus Area: Data

- Incorporate Performance Measures in Crash Report
- Automate Performance Measures and After-Action Reports
- Plan Integrated Corridor Management (ICM) Strategies
- Implement Proactive Crash Reduction and Response Technology

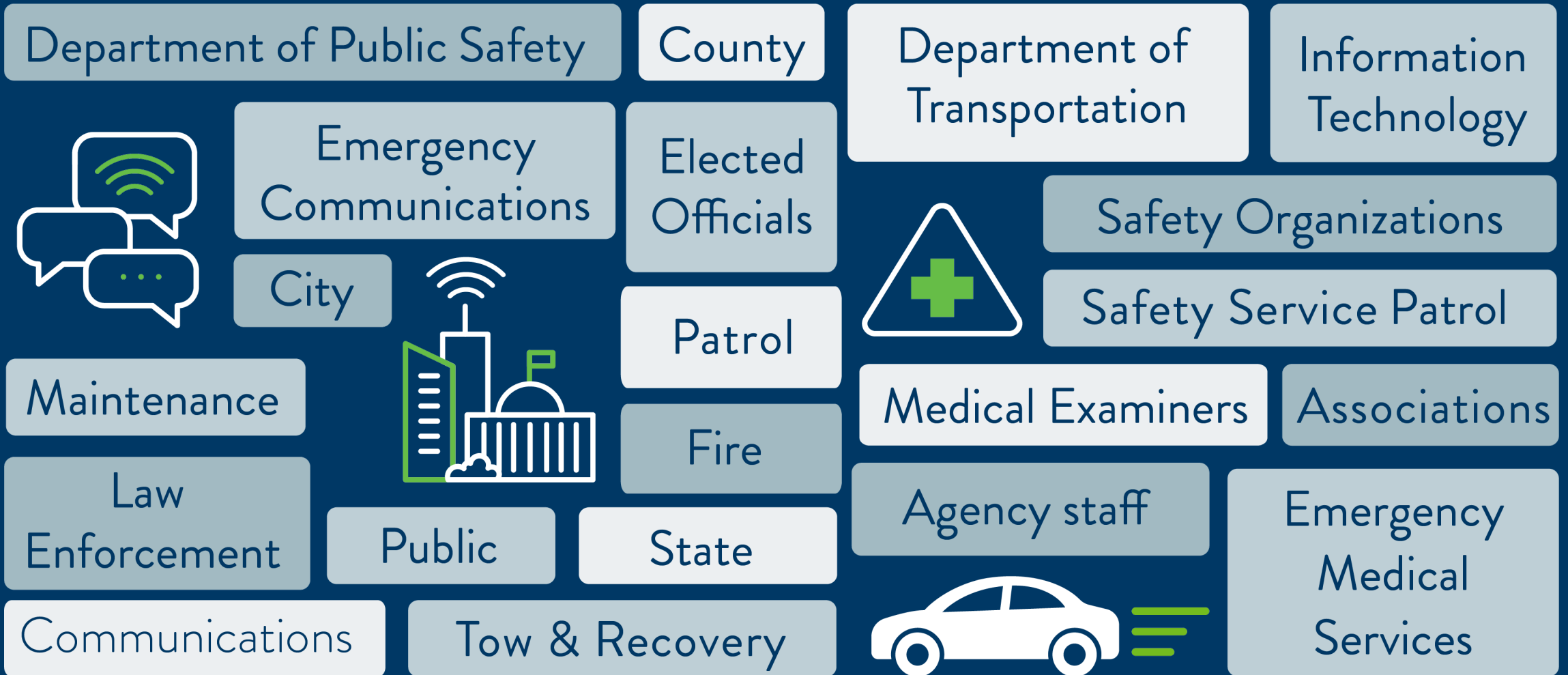


Agency Strategic Communications

Engage them early and often to improve education and awareness at every level within the agency and externally.



Partnering



Requirements for Achieving Outcomes



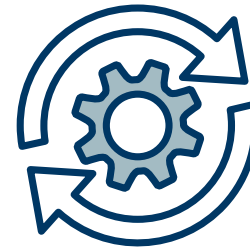
Engaging agency leadership



Performing ongoing accountability efforts



Identifying dedicated task managers



Analyzing and adapting



Facilitating regular engagement



Identifying additional resources

Level of Effort Estimates



Low (L):
0 hours



Medium (M):
300 hours



High (H):
1000+ hours

RECOMMENDATION	DEVELOPMENT	IMPLEMENTATION	ONGOING EFFORT
Adopt Quick Clearance Legislation			
Strengthen Open Roads Agreement			
Improve Standard Operating Procedures			
Kickoff Training Effort and Expand Instructor Pool			
Develop Tiered Training			
Designate Training Staff			
Require TIM and ICS Training			
Identify Funding and Incentives			
Formalize Peer-to-Peer Collaboration			
Conduct Interagency Training			
Incorporate Performance Measures into Crash Report			
Automate Performance Measures and After-Action Reports			
Plan Integrated Corridor Management Strategies			
Implement Proactive Crash Reduction and Response Technologies			
Engage Partners			

Task Managers and Resources

	MSP Metro Operations	MSP	RTMC Dispatch Communications Manager	MSP Statewide Communications Director	DPS Office of Traffic Safety	Traffic Records Coordinator	MSP CAD Manager	DPS Data/Research Analyst	RTMC TIM Specialist	RTMC Traffic Operations Director	MnDOT TSMO Director	MnDOT Speed Limit & BI Tools	MnDOT Traffic Safety Engineer	RTMC Freeway Operations Engineer	MnDOT Metro District Traffic Engineer
Adopt Quick Clearance Legislation	▲	●			▲				●	▲					
Strengthen Open Roads Agreement	▲	●			▲					▲					
Improve Standard Operating Procedures	▲	●			▲				●		▲				
Kickoff Training Effort and Expand Instructor Pool		●			▲				●	▲					
Develop Tiered Training		●			▲				●	▲					
Designate Training Staff		●			▲				●	▲					
Require TIM and ICS Training		●			▲				●	▲					
Identify Funding and Incentives		●			▲				●	▲					
Formalize Peer-to-Peer Collaboration		●			▲				●	▲					
Conduct Interagency Training		●			▲				●	▲					
Incorporate Performance Measures in Crash Report					▲	●	▲	▲	●			●	▲		
Automate Performance Measures and After-Action Reports		●				●	▲		●	▲	▲			▲	
Plan Integrated Corridor Management Strategies										▲	●				▲
Implement Proactive Crash Reduction and Response Technology			▲	▲					●	▲	●			▲	

● TASK MANAGER ▲ RESOURCE / ACCOUNTABILITY MANAGER

Blueprint



Executive Summary

MINNESOTA TRAFFIC INCIDENT MANAGEMENT

Enhancing traffic safety for responders and motorists statewide

EXECUTIVE SUMMARY

Existing business and model organizations have worked to enhance the safety of roadway users through a variety of means. Minnesota's efforts are a collaborative effort between the Minnesota Department of Transportation (MnDOT) and the Minnesota Department of Public Safety (MnPS) to enhance their safety efforts.

GOALS

- Reduce responder exposure
- Reduce incident duration
- Reduce travel delay

STRATEGIES

- Expand responder safety training
- Integrate responder safety training
- Integrate other sector training (Abuse)
- Apply transportation systems management and operations (TSMO) strategies

PARTNERS

Identifying and prioritizing partner organizations is critical to successful implementation of this strategy.

Department of Public Safety	County
Communication	Agency Staff
Emergency Communications	Blotter Callout
Maintenance	Department of Transportation
Medical Examiner	Safety Organizations
Safety Service Patrol	Emergency Medical Services
Information Technology	Fire
	Public
	Tow & Recovery
	Law Enforcement
	Associations

KEY FOCUS AREAS

- Policy
- Training
- Data

By being first to respond, you are helping.

Requirements for Achieving Outcomes

- Empower agency leadership
- Identifying dedicated task resources
- Facilitating regular engagement
- Prioritizing ongoing accountability efforts
- Accounting and budgeting
- Identifying essential resources

Early Deployment

The Minnesota State Highway Patrol was chosen for being both urban and rural road facilities, having ITS infrastructure, and steering committee members who are champion recommendations.

- Standard operating procedures enhancements
- Conduct two after-action reviews (AARs)
- Evaluate data aggregate AAR templates
- Formalize peer-to-peer (P2P) relationships
- Conduct one emergency training exercise



MINNESOTA TRAFFIC INCIDENT MANAGEMENT

Enhancing traffic safety for responders and motorists statewide

EXECUTIVE SUMMARY

Incident response and related congestion can have serious repercussions in terms of responder safety, public safety, the economy, and the environment. Traffic Incident Management (TIM) is a Transportation Systems Management and Operations (TSMO) strategy designed to improve the quick clearance of traffic incidents.

Minnesota Department of Public Safety (MnPS) and the Minnesota Department of Transportation (MnDOT) have developed this plan to enhance their TIM program to strengthen their safety culture.

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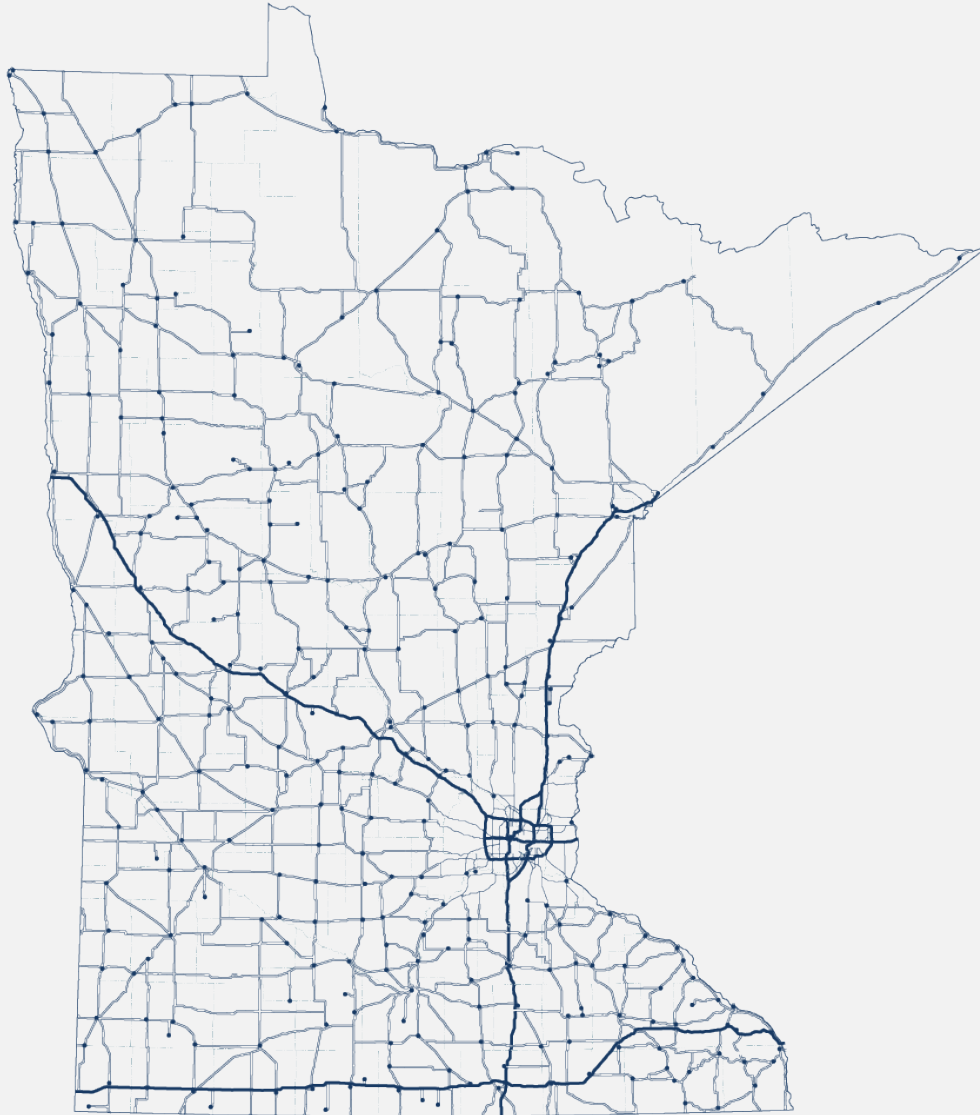
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KEY FOCUS AREAS

- Policy
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Early Deployment

- Minneapolis-St Paul Metro district
- Performance monitoring
 - ⊖ Incident clearance time
 - ⊖ Secondary crashes
 - ⊖ Delay
 - ⊖ Reliability
- Implement best practices



Early Deployment: Recommendations

- Standard operating procedures enhancements
- Conduct at least two AARs
- Evaluate real-time data aggregation tool AAR templates
- Formalize peer-to-peer relationships
- Conduct interagency training exercise

Multi-disciplinary Network

We are all in this together, we should be driving change collectively, ultimately saving the lives of responders and the public by instilling a safety culture.



Next Steps

- Discuss and outline tasks:
 - Evaluate data availability and usefulness
 - Develop an evaluation process for automating AAR reports
 - Use data analytics to identify secondary crashes
 - Track near misses via self-reporting (consider third party data)
 - Conduct peer exchange to discuss data analytics and staffing needs
 - Create statewide database and public dashboard
- Pursue other best practices
 - Towing
 - Emerging technologies/advanced warning
 - Coordination



Enhancing Traffic Safety for Responders and Motorists Statewide

Questions?



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