The Benefits of Regional Collaboration in Managing Network Transportation Operations

PIARC Technical Committee 1.4

Prepared by: Wayne Berman Office of Transportation Management Federal Highway Administration August 2006 Traffic Congestion: A National Problem

- 6 billion hours of person delay annually
- \$384 per person in wasted time and extra fuel in 2003
- A peak period trip takes 40% longer today than in 1982
- 59% of the major roads are congested during peak periods
- The average length of the peak period has grown to 7 hours from 4.5 hours in 1982.

What Do Our Customers Want?

- Traffic smoothly and safely
 - Be kept informed of conditions
- More mode choices
- Goods moved efficiently and quickly
- Incidents detected and cleared quickly
- Efficient evacuations
- Coordination of construction projects

Consistently across jurisdictional boundaries

How can we better deliver what our customers want?

 More investment in transportation infrastructure

 Application of advanced technologies to better manage traffic demand and traffic operations

 Unprecedented levels of institutional collaboration within a region What Does "Unprecedented levels of collaboration and coordination within a region" mean?

 Regional partnerships among managers with responsibility for day-to-day transportation operations

 Stronger and better linkages between planners and operations managers.

Activities that Benefit from Regional Collaboration

- Traffic Incident Management
- Emergency Response and Homeland Security
- Traffic Signal Coordination and Timing
- Traveler Information Services
- Work Zone Traffic Management
- Roadway Weather Management
- Freight Management
- Special Events

Benefits of Collaboration

- Well-developed <u>relationships</u> among key agencies and jurisdictions
- A <u>shared</u> vision among operators, planners, and public safety providers for regional transportation system performance
- Effective <u>allocation</u> of limited resources
- Information <u>sharing</u> (real-time and historical) on a regular basis
- <u>Coordination</u> of systems and organizational procedures that have a regional benefit

Success Story: The Washington State Traffic Incident Response Team

- A coalition of transportation, police, fire and emergency response agencies.
- Collaboration is continuous to develop and improve response planning
- Plan addresses incident detection, response, investigation, re-routing traffic, and clearance.
- Most major traffic incidents are cleared in less than 2 hours



Success Story: The Southeast Michigan Snow and Ice Management (SEMSIM) Partnership

- Four jurisdictions work together on winter road maintenance
- Collaboration facilitates information and resource sharing
- Decisions are made locally
- Common purchasing
- Standard use of technology
- Jurisdictions save money



Key Challenges

- Developing a shared understanding of the benefits of collaboration and coordination
- Inertia
- Overcoming the cultural differences between agencies, jurisdictions, etc.

Inertia

- Achieving institutional consensus on how to work together, but retain control
- Inertia

Need for technical guidance and tools Did I mention inertia?

A Final Thought

"Traffic Congestion is essentially a regional phenomenon requiring regional approaches to mitigate its impacts."

Anthony Downs, The Brookings Institute, "The Need for Regional Anti-Congestion Policies"