Regional Concept for Transportation Operations:
An action plan to address transportation operations in Southeast Michigan

Talking Technology & Transportation (T3) Webinar
July 25, 2007

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What is RCTO?

- Provides a common vision
- Provides a business plan approach
  - Motivation (Why?)
  - Operations objective (What?)
  - An approach (How?)
  - Resource arrangements, relationships, and procedures
4.9 million people
233 local units of government
• 7 county road agencies
• 2 MDOT regions
• 227 law enforcement agencies
Infrastructure Realities

- Essential for quality of life and business
- More efficient
- Look at all pieces holistically
- Not enough investment
What do we operate?
22,800 miles of public road

4,884 miles of truck routes

140 million vehicle miles traveled daily

Over 3,500 bridges

Over 5,400 traffic signals

Over 138,000 crashes

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Other Investments

- Non-motorized
- Transit
- Drinking water
- Sewers
- Parks
- Schools
Sources of Congestion: National Summary

- Traffic Incidents (25%)
- Bottlenecks (40%)
- Bad Weather (15%)
- Work Zones (10%)
- Poor Signal Timing (5%)
- Special Events / Other (5%)

Traffic Congestion and Reliability: Linking Solutions to Problems, FHWA (July 2004)
Transportation Systems Management and Operations

- Sharing resources
- Preserving capacity
- Improving security, safety, reliability
- Collaborating, coordinating on regional operations
TSM&O Activities

- Congestion management
- Traffic incident management
- Traveler information
- Traffic signal coordination
- Road weather management
- Freight management
- Work zone traffic management
- Freeway/arterial management
- Communications network
Building Upon Past Successes

MDOT Freeway Courtesy Patrol

Michigan ITS Center

Southeast Michigan Snow & Ice Management
Purpose of an RCTO

- Sets direction, purpose
- Helps bridge differing perspectives, priorities, cultures
- Clarifies roles, responsibilities, resources
- Enhances credibility of operations needs
- Facilitates coordination
Elements of an RCTO

- Regional operations vision
- Operations objectives
- Physical improvements (approach)
- Relationships and procedures
- Resource arrangements
“Southeast Michigan will have reliable and managed transportation operations across jurisdictional, geographic and modal boundaries for both routine traffic operations and traffic incident management that saves lives, time, and money for its travelers.”
How Do We Achieve This?

• Identify, communicate expectations
• Unprecedented levels of coordination
• Promote regional partnerships/cooperation
• Achieving the vision through commitment
Top Stakeholder Suggestions

- Identify arterial streets as priority corridors
- Retime traffic signals regularly
- Disseminate operations information
- Clearing incidents quickly and safely
Criteria for Identifying Priority Corridors

- Initial recommendations provided during stakeholder interviews
- Other possible criteria:
  - Borders multiple communities
  - Evacuation routes
  - Alternatives (detours) to the freeway system
  - Functional classification/traffic volumes
National Traffic Signal Report Card by NTOC

- Traffic signals are not operating as efficiently as they could be;
- Poor signal progression leads to unnecessary delays;
- Frequent stops and starts also negatively impact the air we breath; and
- More fuel is consumed.
Clearing Incidents Quickly and Safety: 

Quick Clearance Laws Needed

- Driver Removal Law
- Authority Removal Law
- Hold Harmless Law
Disseminating Operations Information

VideoMonitor Website

http://metrocommute.com/cgi-bin/vmon/videonews-78zoom-1 - Microsoft Internet Explorer

MDOT MITS Center Control Room

SEMCOG
Balancing Team Members’ Goals

- Transportation agencies limited by mode and jurisdiction
- Enforcement agencies concerned with lowering crime statistics
- Public safety agencies concerned with crash scene management
Flexibility is Key!

- Many organizational structures
- Many budgeting approaches
- Many operational procedures
- Many ways of measuring performance
For More Information

- SEMCOG’s Web site
  [www.semcog.org/TranPlan/Operations/index.htm](http://www.semcog.org/TranPlan/Operations/index.htm)

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