Regional Concept for Transportation Operations:

An action plan to address transportation operations in Southeast Michigan

Talking Technology & Transportation (T3) Webinar
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Tom Bruff,
Coordinator/Senior Engineer
Southeast Michigan Council of Governments

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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

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St. Clair
Macomb
Oakland
Livingston
Washtenaw
Wayne
City of Detroit
Monroe
4.9 million people
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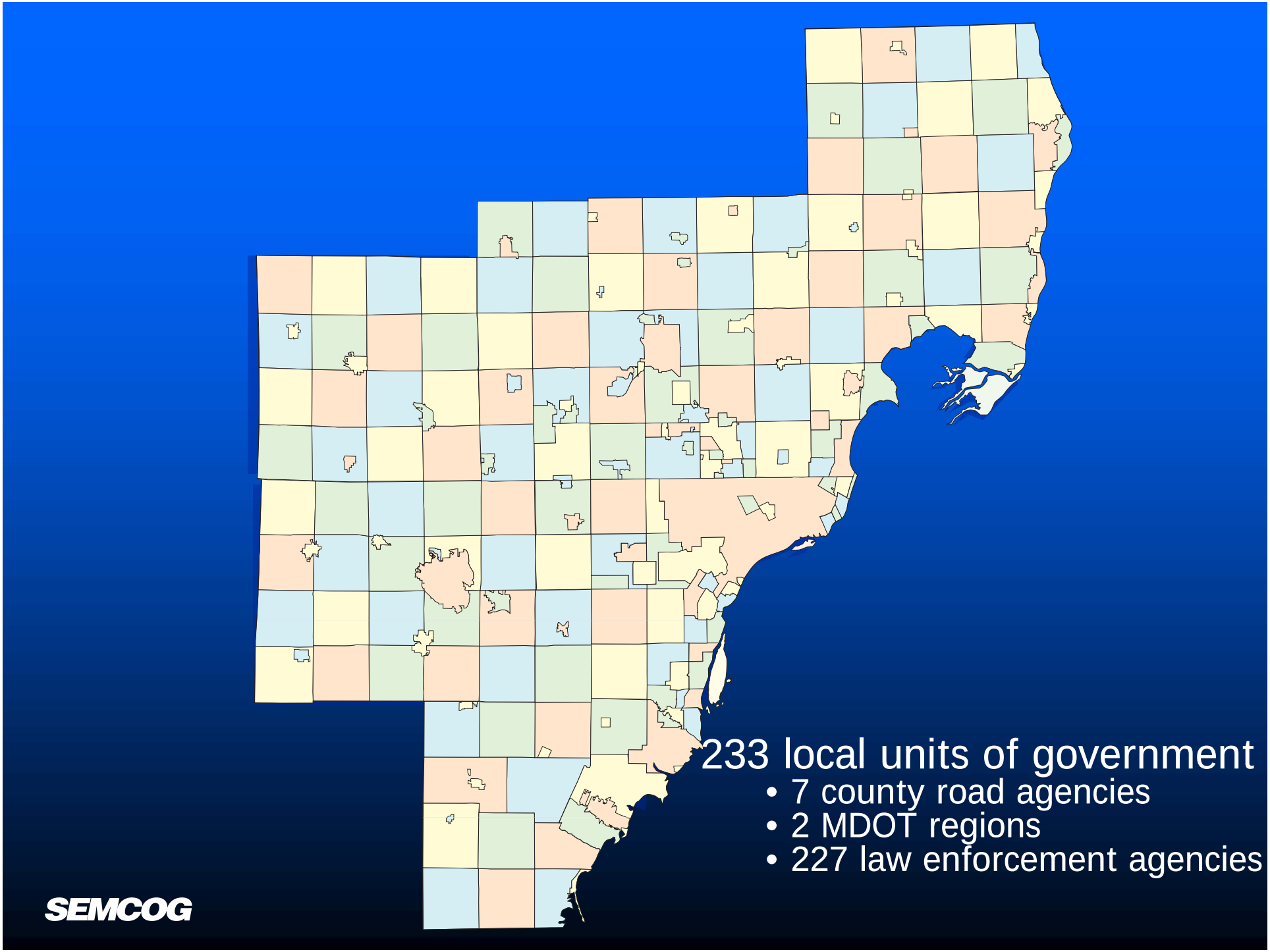
233 local units of government
• 7 county road agencies
• 2 MDOT regions
• 227 law enforcement agencies
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Infrastructure Realities

- Essential for quality of life and business
- More efficient
- Look at all pieces holistically
- Not enough investment

What do we operate?

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22,800 miles of public road
Over 3,500 bridges
4,884 miles of truck routes
Over 5,400 traffic signals
Over 138,000 crashes
140 million vehicle miles traveled daily
SQUARE LK RD
WEST
CROOKS RD
SOUTH
1,000 miles currently congested

Other Investments

- Non-motorized
- Transit
- Drinking water
- Sewers
- Parks
- Schools

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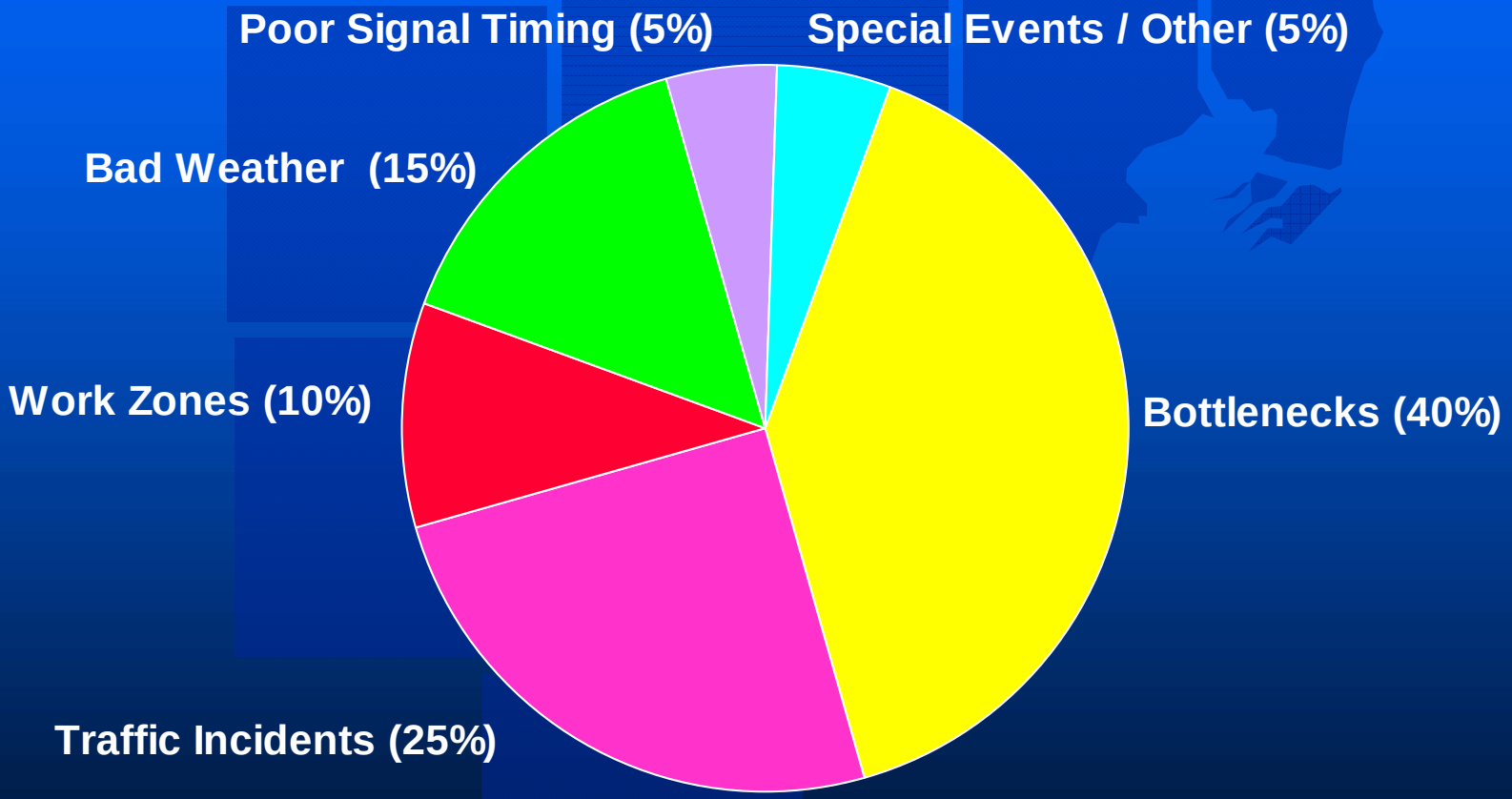
Sources of Congestion: National Summary



Traffic Congestion and Reliability: Linking Solutions to Problems, FHWA (July 2004)

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Transportation Systems Management and Operations

- Sharing resources
- Preserving capacity
- Improving security, safety, reliability
- Collaborating, coordinating on regional operations

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TSM&O Activities

- ☑ Congestion management
- ☑ Traffic incident management
- ☑ Traveler information
- ☐ Electronic payment services (e.g., transit, parking, tolls)
- ☑ Emergency response and homeland security
- ☐ International Border Crossings
- ☑ 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

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Purpose of an RCTO

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

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Elements of an RCTO

- Regional operations vision
- Operations objectives
- Physical improvements (approach)
- Relationships and procedures
- Resource arrangements

Southeast Michigan RCTO

Vision

"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."

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Proposed Operations Network

How Do We Achieve This?

- Identify, communicate expectations
- Unprecedented levels of coordination
- Promote regional partnerships/cooperation
- Achieving the vision through commitment

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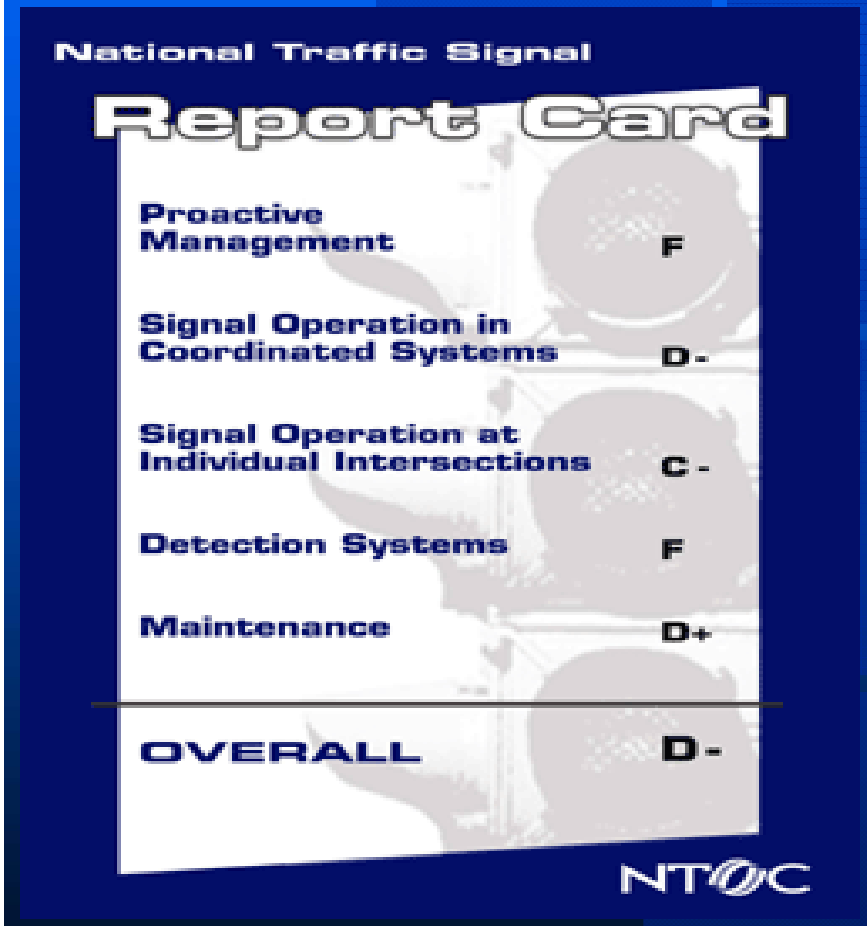
Top Stakeholder Suggestions

- 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.

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Clearing Incidents Quickly and Safety:

Quick Clearance Laws Needed

- Driver Removal Law
- Authority Removal Law
- Hold Harmless Law

MOVE IT

it's the law!

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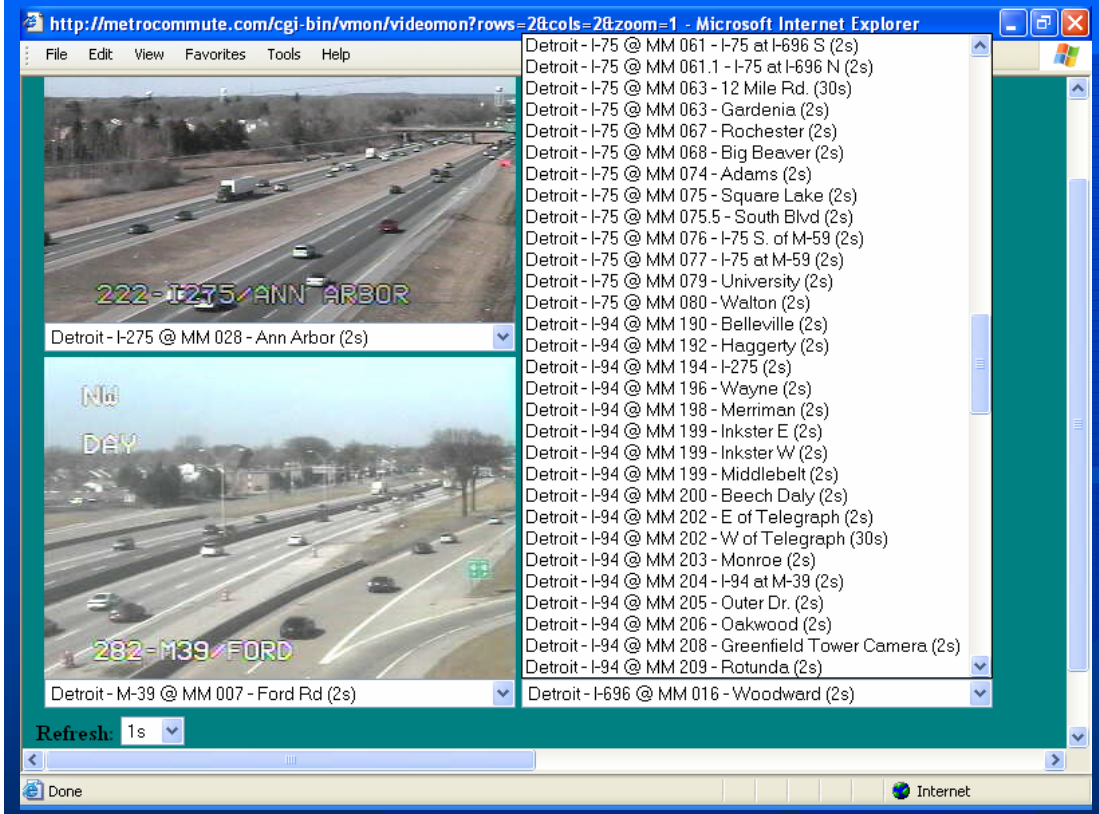
Disseminating Operations Information

VideoMonitor Website



MDOT MITS Center Control Room

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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
- Contact SEMCOG at 313-961-4266
  - Ms. Wei Chen, Transportation Engineer, wchen@semcog.org
  - Mr. Tom Bruff, Transportation Coordinator, bruff@semcog.org