

S T A K E H O L D E R S G R O U P M E E T I N G



MAG

REGIONAL CONCEPT OF
TRANSPORTATION OPERATIONS

Maricopa Association
of Governments (MAG)
December 4, 2002



Presentation Agenda

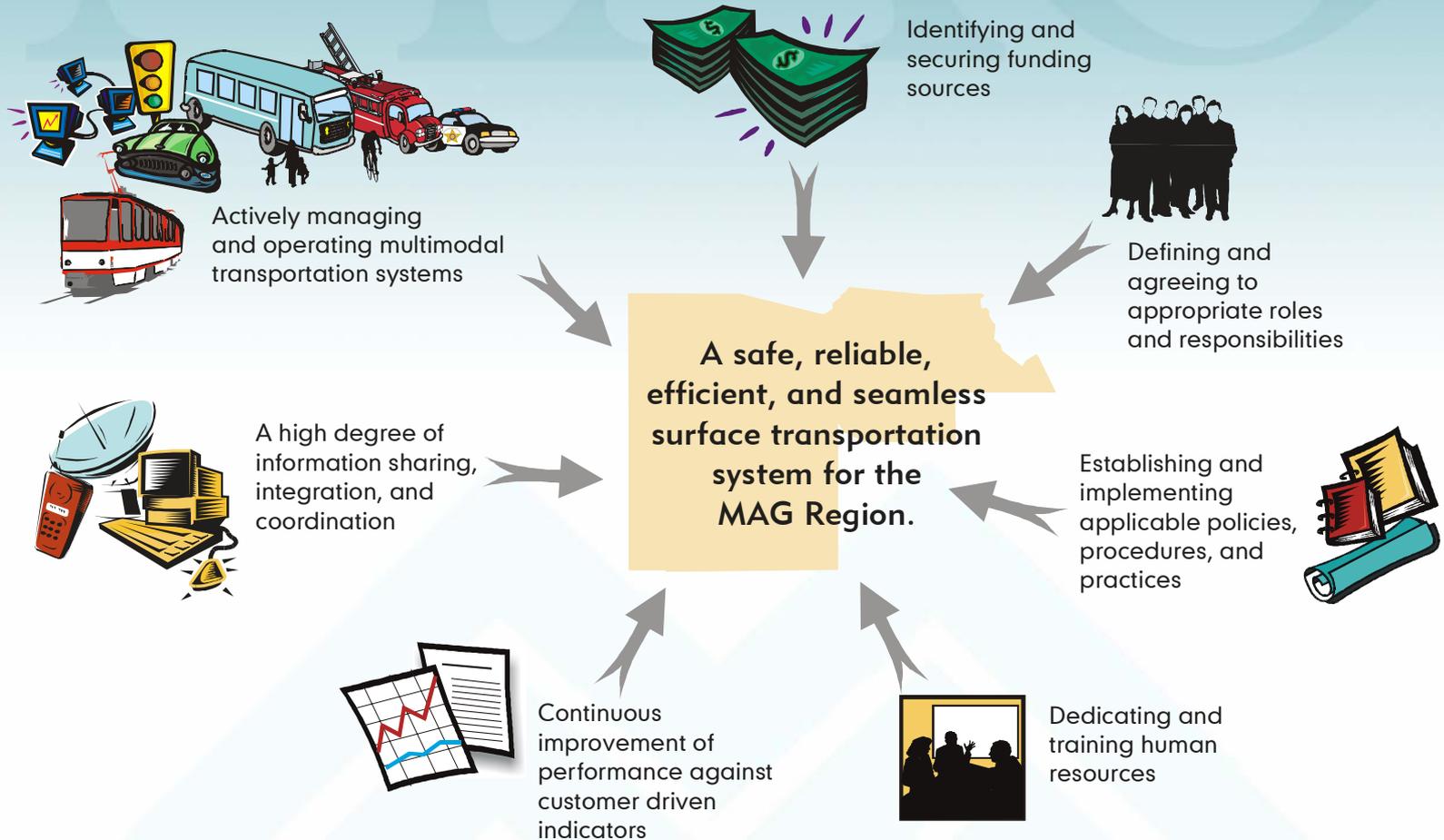
- Introduction/Welcome
- Notes of Previous Meeting
- Progress Report
- Distribution of TM #1
- Presentation of Draft TM #2
- Performance Measures in TM #3
- Outline of TM #4
- What's Next



Transportation Operations

- Transportation Operations is about “making the elements of the surface transportation system work better and together.”

MAG Regional Concept of Transportation Operations: Vision and Mission





Previous Meeting

- Minutes available on project website:

www.mag.maricopa.gov

- Comments on Previous Meeting Minutes?

WORK PLAN

Project Schedule

Tasks	2002						2003												
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Notice to Proceed		◆ 8/21																	
Kickoff Meeting		◆ 8/27																	
Task 1. Establish Mission and Vision for ITS Concept of Operations			■	■	■														
Task 2. Document Existing Policies and Practices in the Region			■	■	■	■													
Task 3. Identify Best Practices for Each System				■	■	■	■												
Task 4. Identify and Define Operational Goals and Performance Measures					■	■	■	■											
Task 5. Recommend Policies and Practices Needed to Achieve Operational Goals							■	■	■										
Workshop: Recommended Operations Policies and Practices									★ 2/12										
Task 6. Necessary Institutional Arrangements								■	■	■									
Workshop: Necessary Institutional Arrangements									★ 3/12										
Task 7. Identify Resources Required for Implementation								■	■	■	■								
Task 8. Develop a Multimedia Presentation										■	■	■							
Task 9. Develop a Memorandum of Understanding											■	■	■						
Task 10. Transportation Operations Manual												■	■	■					
Task 11. Final Report, Executive Summary and Presentations													■	■	■				
Deliverable: TRC Presentation																			◆ TBD
Deliverable: Management Committee Presentation																			◆ TBD
Deliverable: Regional Council Presentation																			◆ TBD



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Distribution of TM#1

- Minor comments were received on draft TM#1
- Comments incorporated
- Final TM#1 distributed today



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Tech Memo #2

- Scope and Purpose of Tech Memo #2
- Memo Contents
- Focus on Arterial – Freeway Operations
 - ◆ Interactive Discussion
- Questions and Answers



Memo #2 Scope and Purpose

- What are other locations doing to address issues we have here in the MAG Region?
- Based on our knowledge of national ITS implementations including recent AASHTO ITS Committee “State of the Practice” White Paper



Tech Memo #2 Contents

- Freeway-Arterial Management
 - ◆ Coordinated freeway-arterial management experience overview
 - ◆ Coordination of State and local jurisdiction's signals
 - ◆ Exchange of real time incident data
 - ◆ Shared and joint device control
 - ◆ Ramp meter operations



Tech Memo #2 Contents

- Freeway-Arterial Management (cont.)
 - ◆ Institutional agreements
 - ◆ Arterial management
 - Advanced signal timing approaches
 - Operations at jurisdictional boundaries
 - Emergency Vehicle Pre-Emption
 - Operating hours and procedures



Tech Memo #2 Contents

■ Incident Management

◆ Alternative route planning

- Institutional arrangements
- Hardware/systems
- Getting incident data to partners and the public
- Posting DMS and HAR messages
- Incident detection
- Data/information sharing
- Website and 511
- Media connections
- Roadway marker systems
- Cellular location system



Tech Memo #2 Contents

- Incident Management (cont.)
 - ◆ On-scene communications
 - ◆ Incident investigation
 - ◆ Overall incident management performance
 - ◆ Emergency management





Tech Memo #2 Contents

- Transit System Management
 - ◆ Traffic signal priority systems
 - ◆ Transit traveler information systems
- Advanced Traveler Information Systems
 - ◆ Summary of recent AZTech™ study





Freeway-Arterial Management

■ Vision

- ◆ Managing the transportation system as a whole
- ◆ Every agency has a similar level of data on congestion and incidents
- ◆ Every agency can send and receive data
- ◆ Every agency can respond to the data



Freeway-Arterial Management

- You asked:
 - ◆ How can we coordinate freeways and arterials?
 - ◆ How can signal systems be connected?
 - ◆ How can information be exchanged between partners?
 - ◆ What are the experiences of agencies that share device operations?



Freeway-Arterial Management

- Challenges
 - ◆ Arterial capacity for localized diversions
 - ◆ Signal operations
 - ◆ Staffing
- Opportunities
 - ◆ Arterial capacity for “regional” diversion
 - ◆ Increasing diffusion of web-enabled devices
 - ◆ 511



Freeway-Arterial Management

Discussion



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Tech Memo #3 - Performance Measures

- A few, good measures





Tech Memo #3 - Performance Measures

- Mobility (ADOT)
 - ◆ Average speed by time of day
 - ◆ Average speed by route
- Mobility (cities/county)
 - ◆ Peak hour average travel speeds between regional centers
 - ◆ % of cross-border traffic signals coordinated between cities





Tech Memo #3 - Performance Measures

- Safety
 - ◆ Accident Rate
 - ◆ Response time and clearance time for accidents
- Accessibility
 - ◆ Transit Service Coverage
 - ◆ Transit Service Frequency





Tech Memo #3 - Performance Measures

- Maintenance and Reliability
 - ◆ % of system uptime
 - ◆ Average time to resume service if system failed
- Multi-agency coordination
 - ◆ Availability of center-to-center communications
 - ◆ Availability of regional traffic operations agreements





Tech Memo #3 - Performance Measures

- Multi-agency coordination (continued)
 - ◆ % of emergency vehicle preemption signals operating according to regionally established standard
 - ◆ % of consistent and matching speed limits between cities for a given cross-section of road





Tech Memo #3 - Performance Measures

- Traveler Information Provision
 - ◆ Usage
 - ◆ Information quality





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Outline - Tech Memo #4 (cont.)

- Existing policies and procedures identified in Inventory Report
- New policies and procedures identified in Inventory Report
- New policies and procedures identified in Best Practices Report



Outline - Tech Memo #4

- New policies and procedures identified in Operational Goals Report
- Typical elements of a new policy or procedure





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What's Next

- Comments for TM #2
 - ◆ Provide by December 18, 2002
- Yahoo Groups dialogue
 - ◆ Performance Measures
 - ◆ Outline for TM#4
- Next Meeting
 - ◆ January 8, 2003. Will discuss TM #3: Performance Measures

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