Caltrans

# Multimodal Integrated Corridor Management Workshop

Summary of Findings

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## Workshop Background

On December 5th and 6th, Caltrans hosted a workshop on Multimodal Integrated Corridor Management (MICM) at the District 7 office in Los Angeles. Caltrans assembled a full spectrum of MICM stakeholders and practitioners for the purpose of brainstorming opportunities, barriers, and ways to overcome barriers to implementing MICM in California.

## Attendees

The workshop attracted 53 attendees from public, private, and academic entities. Some organizations represented include: SANDAG; SCAG; LA County DPW; City of LA DOT; MTC; CCIT; UC Berkeley PATH; Dowling and Associates; Kimley-Horn and Associates; Cambridge Systematics; AC Transit; Caltrans Districts 3, 4, 5, 7, 8, and 12; and from Caltrans headquarters, the Divisions of Planning, Mass Transit, Traffic Operations, and Research and Innovation.

## Definition of Multimodal Integrated Corridor Management

MICM consists of the operational coordination of multiple transportation networks and cross-network connections comprising a corridor, and the coordination among institutions responsible for corridor mobility. All jurisdiction and transportation modes are included.

## Workshop Overview

Every day California's roadway users experience more than 500,000 average daily vehicle hours of delay. Caltrans, cities, counties, MPOs, CMAs, transit operators and others are all working diligently to reduce delay and improve mobility in corridors throughout California. In addition, Federal and State Government are sponsoring research to define ways to enhance our ability to move people and goods through congested corridors. The MICM workshop sought to bring together the MICM community to collaborate on MICM opportunities, barriers and ways to overcome barriers within California.

Attendees listened to MICM subject matter experts present local and international information on MICM. The group then split into four breakout groups to brainstorm their thoughts on MICM opportunities, barriers and ways to overcome barriers within California. Finally, the group reconvened for a panel discussion based on the themes and topics identified by the breakout groups. The remainder of this document focuses on the content generated by the breakout groups.

### Common Opportunities and Barriers

This section discusses the common opportunities and barriers which spanned the breakout discussions. An interesting observation of the breakouts was the interrelated nature of opportunities and barriers. Each opportunity invariably appeared as a barrier and vice versa. The interrelationship somewhat complicates the approach to unraveling the MICM knot. However, if the proper key opportunities/barriers are identified and actively pursued, California could see great gains in MICM in

the near term (less than five years). Caltrans and the broader MICM community must work together to identify the key opportunities and how to approach them effectively. The common opportunities and barriers from the MICM breakouts are as follows:

1. ***Organizational Opportunities***: Topics such as coordination and partnerships, leadership, ownership, responsibility, and accountability consistently rated very high in all of the breakouts. Workshop attendees seemed very agreeable to clearly defining owners and roles and responsibilities. Clearly defined owners and roles allow California to seek the proper balance (MICM recipe) across jurisdictions and modes to ensure overall enhanced mobility.
2. ***Information Opportunities***: This opportunity encompasses themes related to data, system monitoring and evaluation, performance measures, as well as information gathering and dissemination. Workshop attendees wanted to identify statewide standards for what information to measure, how to collect information, and how to report the information real time as well as long-term.
3. ***Funding Opportunities***: Without consistent, adequate funding and targeted, cohesive statewide MICM investment strategies, California is left with a collection of unimplemented good ideas. Some of the conversations surrounding financial opportunities and barriers called out the need for data in order to secure funding; however, the lack of funds inhibit the ability to deploy data-gathering elements which, in turn, hamper the MICM community from obtaining consistent and adequate funding: a vicious circle. Participants largely agreed that California needs to make a commitment to fund MICM data infrastructure and follow through with implementation. This investment provides the foundation for well-reasoned future MICM investments.

This list represents an initial analysis of information gathered at the workshop. The full results will be discussed and analyzed by Caltrans and the MICM community to identify and fully define the major opportunities and barriers to MICM within California.

## Breakout Group Results

The attendees were divided into four breakout groups to discuss the opportunities, barriers, and ways to overcome barriers. Each group brainstormed opportunities and then refined the raw brainstorm results into similarly-themed groups so they could be prioritized. Each group then took the top three opportunities and brainstormed barriers to the opportunity and ways to overcome the barriers. A summary of the findings from each group follows. The detailed results may be downloaded from the Caltrans MICM website (http://www.dot.ca.gov/research/modal/micm.htm).

### Breakout Group 1 Summary

Opportunities (In order of priority as assigned by the group) and their top barriers.

1. Investment Strategies
    a. Lack of Leadership - Changing priorities
    b. [We] don't "sell" the issues
    c. More private involvement

   d. Political wants hamper sound investment decision
2. Information Gathering and Dissemination
   a. No support for information
   b. Lack of funding
   c. Disconnect between systems
   d. Local area resistance to sharing [information]
3. Coordination
   a. No incentive to work together
   b. Lack of vision
   c. Tough decisions [are avoided]
   d. Institutional barriers [hamper coordination]
4. Public Frustration
5. Land Use and Planning
6. Policy Initiatives
7. Mobility Options

Ways to overcome barriers. Group 1 brainstormed high level approaches to overcome the breadth of barriers discussed above.

1. Educate on the true costs [of delay]
2. ID self-interest
3. Environmental Stewardship
4. Grass Roots Activism
5. Educate the youth

## Breakout Group 2 Summary

Opportunities (In order of priority as assigned by the group) and their top barriers.

1. Multi-agency Coordination
   a. Too much politics
   b. Institutional barriers
   c. Lack of a champion
   d. Lack of resources
2. Traffic Control
   a. Technical Issues
   b. Education
   c. Funding
   d. Competing External Interests
3. System Monitoring, Evaluation, and Performance Analysis
   a. Data
   b. Funding
   c. Maintenance
   d. Cost/benefit

   e. Stakeholder Issues
4. Traveler Information
5. Emergency Response
6. Improve Transit
7. Parking

Ways to overcome barriers. Group 2 brainstormed high level approaches to overcome the breadth of barriers discussed above.

1. Education and Training
2. Completing the system
3. Maintaining the system
4. Data Reliability
5. Identify a champion
6. Find seed money
7. Provide incentive funds for participants
8. Outreach to agencies that can participate
9. Showcase success (start small)

## Breakout Group 3 Summary

Opportunities (In order of priority as assigned by the group) and their top barriers.

1. Data
   a. Lack of traffic detection/data archives
   b. Incomplete instrumentation
   c. Incompatible data systems (Freeway, arterials, transit, rail)
   d. Complexity and expense (time and money) of detailed simulation modeling
   e. Bad or inaccurate date
   f. No money/funding
   g. Difficult to get loop detector projects funded (not enough SHOPP funds)
   h. Lack of expertise (analysis and tools)
   i. Information Sharing: challenges associated with obtaining access to real-time data
   j. Caltrans and local agencies cannot share or analyze data well at a corridor level
2. Partnerships
   a. Each agency has its own "agenda" and does not "play nice" with others - cannot get consensus and agree on lead agency
   b. Local agencies wrongly think that Caltrans wants to divert freeway traffic onto the local roads
   c. Competing concerns
   d. Need to demonstrate benefit for each network in balance with corridor benefits
   e. Lack of incentives to cooperate
   f. Lack of seeing the "whole picture" – modal self-interests
   g. Politics

   h. Local Interests [competing with statewide need]
   i. Funding
3. Traveler Info
   a. Not a high enough priority among all parties
   b. Traveler info presented will not be robust enough to change traveler behavior
   c. Access to multimodal real-time data
   d. More CMS needed, not enough
   e. Difficult to get Caltrans SHOPP funding for this type of project for freeways
   f. Funding
4. Education and Outreach
   a. Drivers need to be taught how to ride transit to provide link between traveler info and mode shift
   b. Not a high enough priority among all parties
   c. Need to spend more resources on innovative way to get communities involved from the grass roots level
   d. Funding
   e. Turf wars
   f. Politics
5. Incident / Emergency Response
6. Transit
7. Performance Measures
8. Funding
9. TSM/TDM
10. Efficiency
11. Land Use and Focused/Smart Growth
12. Environment and Quality of life

Ways to overcome barriers. Group 3 brainstormed high level approaches to overcome the breadth of barriers discussed above.

1. Funding
   a. Have everyone contribute – matching requirement
   b. Categoricals (% off the top before local and state split)
   c. Protect data funding in SHOPP and STIP
   d. State is missing funding opportunities because we don't have data
   e. Keep ITS and detection elements in capital projects
2. Partnerships
   a. Who is in charge of what? Needs to be clearly defined
   b. Get them to see beyond the "what's in it for me" mentality to see the bigger picture
   c. Give them [locals] "love" money [in order to participate]
   d. Ensure the priorities of the partnership are also the priorities of the constituency
   e. Partner representatives need to have authority [to make decisions]

   f. Need a strong, highly-placed champion
   g. Establish a framework for decision-making (committee, TAC not enough)
3. Traveler Info
   a. Educate local officials on benefits and outcomes
   b. Real-time "George Jetson"/HUD solutions
   c. Require education on "how you can travel" (start in kindergarten)
   d. Need to speed up media response and allow Districts to talk to media
   e. Simplify the process
   f. Promote the regional sharing of information
   g. Needs to be a heightened requirement of MPO's

## Breakout Group 4 Summary

Opportunities (In order of priority as assigned by the group) are listed below.

1. Institutional Integration
2. Mobility Solutions
3. ROI
4. Multimodal Coordination
5. Partnering
6. Quality of life
7. Traveler information - providing informed choices for public

Group 4 identified barriers spanning the MICM opportunities and focused on approaches to overcome the top three barriers.

1. Leadership & Accountability
   a. Collective assignment of "corridor manager"
   b. Authorize and empower "corridor manager"
   c. Coordination between "corridor managers"
   d. Champions within organizations
   e. Leaders across organizations
   f. Collaborative organizations recognizing this is important
   g. Agency agreements/consensus for leadership
   h. Common goals across organizations
   i. Define governance structure
   j. Limit veto power but have consensus rule
   k. Clearly defined meaning of "consensus"
   l. Consensus on performance measures
   m. Board of directors/collaborative group for corridor management accountability
   n. Each region defines corridor management structure
   o. Open communication
2. Funding
   a. Adopt user-based fees

   b. More balanced funding-redistribution
   c. Transportation impact fees
   d. Provide incentive for other modal transit
   e. Expand and redistribute funding for multi-modal
   f. Public-private partnership
   g. Be more efficient
   h. Less planning and engineering, more operations
   i. Budget for operations when budgeting for capital expenditures
   j. Dedicate a funding source for operations
3. Performance Measures
   a. ID performance requirements
   b. Determine what we all value from MICM
   c. Set up framework to monitor and show performance
   d. Create accountability
   e. Create a mechanism for capturing performance info
   f. Define and determine "real-time" needs
   g. Be able to archive data
   h. Push envelope to get more efficient, cost-effective ways to get info/data
   i. Make performance measures meaningful and easy to understand
   j. PMs need to be tied back to goals of operations
   k. Tie PMs to investment decisions
   l. PMs should be the common language
4. Common Goals & Objectives
5. Operations Management
6. Resistance to Change
7. Legacy Institutions & Systems
8. Business Models
9. Lack of Prioritized MICM Implementation Strategies

## Next Steps

The MICM workshop marks the initiation of an ongoing process for Caltrans. Some of the tasks and activities which lie in the near future include:

- Caltrans Planning and Traffic Operations Workshop – January 2008
- Caltrans Spring Workshop – DRI intends to use the information and feedback gathered at the MICM workshop to foster the relationships created, further the body of MICM knowledge within California, and continue to break down barriers to successful MICM implementation.
- Establish an MICM Community – In addition to workshops and periodic meetings, DRI will create opportunities for parties to collaborate and further MICM within California on their own via the creation of online communities for MICM topics. Visit the Caltrans MICM website to learn more

about how this concept will evolve in the coming year (http://www.dot.ca.gov/research/modal/micm.htm)