



## MEMORANDUM

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to Kelly Eagan, Project Manager, Caltrans District 3

from Joan Chaplick, Public Involvement Specialist, MIG, Inc.

re Caltrans District 3 Corridor System Management Plan (CSMP)  
Transit Performance Measurements Workshop – December 17, 2010

date 1/18/10

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### Workshop Participants

Jim Brown, SACOG  
Rosemary Covington, Sacramento Regional Transit  
Scott Ousley, El Dorado County Transit Authority  
Lindell Price, El Dorado County Advocate

### Participants from Project Team

Kelly Eagan, Caltrans District 3 Planning  
Dawn Cheser, Caltrans District 3 Planning  
Nieves Castro, Caltrans District 3 Planning  
Nick Compin, Caltrans District 3 Planning  
Joan Chaplick, MIG, Inc.  
Andi Nelson, MIG, Inc.

### Introduction

Joan Chaplick welcomed meeting participants and introduced the members of the project team in attendance. Joan reviewed the workshop agenda and asked participants to introduce themselves and identify their agency affiliation. Ms. Chaplick provided brief, opening remarks about the Caltrans District 3 Transit/Bicycle Performance Measures Project and project timeline.

Ms. Chaplick then introduced Kelly Eagan of Caltrans. Ms. Eagan reviewed the overall purpose of integrated multi-modal corridor management and provided background on Corridor System Management Plans (CSMPs). She confirmed that the desired outcome of the Transit/Bicycle Performance Measures Project is to improve mobility along the CSMP corridors by focusing on the integrated management of the entire transportation network, including select freeway and parallel roadways, transit, and bicycle components of the corridor. She explained the objective of the transit workshop is to identify one to two transit performance measures and identify potential data and reporting needs for these performance measures.

She reminded participants that Caltrans is aware of the range of measures that transit agencies monitor regularly and Caltrans did not intend to introduce any new requirements. Instead, Caltrans was seeking advice on what existing data and related measures could be used or adapted for inclusion in the CSMPs.

## Best Practices

Moving into the Best Practices portion of the workshop agenda, Ms. Chaplick reviewed the guiding principles for developing performance measures which emphasize stakeholder involvement. She briefly reviewed several case studies from local, regional, State, and nationwide examples. The examples suggest potential performance measures related to ridership, transit availability and accessibility, reliability, safety, and cost effectiveness. The case studies were intended to suggest potential measures that might be useful for this process.

## Discussion

Participants asked questions and commented throughout the meeting. The discussion opened with a variety of questions and participants commented that they were challenged by the meeting's purpose and outcomes. Transit agencies track significant data and regularly report on performance measures. Participants were not quite clear about why Caltrans needed to develop these measures and how they would be used. The request for clarity and a more specific response to the purpose and usage of the measures was expressed frequently throughout the meeting. Caltrans representatives reiterated that the measures were intended to help determine if mobility was improving on the corridor and could be used to inform future planning and funding decisions. They may be a catalyst for future project and funding partnerships.

It should be noted that the development of transit performance measures for corridor plans is a new activity and Caltrans recognizes that it needs the help of stakeholders to complete this effort. Stakeholders participating in the meeting expressed skepticism about the need for these measures or how their data could be adapted to respond specifically to corridor mobility determinations. They also were concerned that there might be unintended consequences related to how the measures might be used in the future, especially as it relates to project funding.

The group's discussion has been organized as follows to help identify and group the points of greatest interest and concern.

Workshop participants identified the following main question to answer during the workshop: "what is the productivity of the corridor?" One participant articulated that, "the goal of transit performance measures is to improve the capacity of the transit system."

## *Available Data*

Participants had several suggestions and comments related to available data sources.

- Potential transit ridership data sources include:
  - Sacramento Regional Transit maintains ridership data. They have bus and light rail data that is readily available and accurate; an automatic counter is used on all buses and light rails. Rail data, on the other hand, is less precise since data is collected using a manual counter.

- El Dorado County Transit maintains bus ridership data by bus route. The information is readily available and accurate; the commuter bus from Placerville to Downtown Sacramento may provide the most appropriate ridership data for corridor mobility. The transit agency, though, does not use automatic counters.
- Network Diagnostic Tool (NDT) Data is collected by all transit agencies. Smaller transit operators report NDT data to Caltrans. Larger transit operators collect different data including: time of day, ridership by route, etc.
- The following information is available and collected by most transit agencies: miles, hours, and passenger data.
  - Sacramento Regional Transit (RT) has data regarding when riders board and disembark. RT can also isolate data over time and by route. El Dorado County Transit Agency has NDT data including: number of passengers and passenger hours. The Agency does not have data showing when riders board and debark; their data is not as complex as Sacramento RT.

## **Challenges**

Participants recognized several challenges related to transit, performance measures, and available data.

- Most transit agencies in the region need Multivariate testing (MVTs) on transit.
  - MVTs on all transit vehicles would make data gathering and transmission to Caltrans easier for transit agencies.
- Participants noted that it is a challenge to provide data to Caltrans for the purpose of the transit performance measurements; it will take resources (time and money that agencies do not have) to report data in a standard format across agencies.
  - Transit agencies currently report data in a format that includes multiple corridors and is not limited to one stretch of road as it would be if data was provided to Caltrans for the purpose of transit performance measures.
  - Transit agencies count ridership; but it is difficult to determine which and how many riders travelled specifically on the corridor. The agencies would need to make some assumptions of what percentage of riders travelled the corridor.

## **Transit Agency Needs**

Participants expressed a number of transit agency needs to support Caltrans' development and assessment of transit performance measures.

- In order to identify the appropriate data to assess transit mobility along the corridor, Caltrans needs to define the corridor's parameters and provide a specific definition of corridor. Then, agencies can determine the transit ridership within the corridor.
  - *Follow-up response from Caltrans:* Several participants requested clarification regarding corridor limits and overall corridor system management. The corridor limits include a combination of distinct parallel and /or adjacent surface transportation networks (e.g., freeway, arterial, transit, and rail

networks) that serve a particular travel market or markets and that are affected by similar transportation needs and mobility issues. Caltrans worked with local agency staff to identify these networks.

Caltrans recognizes that CSMP boundaries may need to be refined and adjusted. It is important that bus, car, and truck system owners and operators agree upon corridor boundaries and key goods and service areas.

- Transit agencies need Caltrans data that is collected on roadside characteristics, so that they can provide the appropriate and parallel data to assess transit performance measures.
- Agency representative requested Caltrans clarify the following: Is Caltrans ultimately interested in the throughput of people from one point to another? Or the total number of passengers on transit?
  - *Follow-up response from Caltrans:* Several participants requested clarification regarding Caltrans data needs and ultimate goal for CSMPs. Caltrans is interested in measuring the mobility of people through the corridor regardless of travel mode.

## **Opportunities**

Participants suggested several methods to improve and measures for Caltrans to determine corridor mobility.

### **Potential Performance Measures**

- Measure the vehicle hours of service provided in the corridor; ridership per hour over time.
- Measure the passenger trips per hour, which includes people and hours spent.
- Determine if people are able to access transit.
- Determine the resources it would take for transit in the region to get X% of market share of a specific corridor.

### **Other Methods**

- Assess the Park-n-Ride lot capacity.
  - Assessing the parking lot capacity will help to determine the capacity of rail systems, transit, etc. This could answer the following question: does a transit agency have the capacity to meet the need for transit in this area?
  - Transit agencies do not collect this data, but Caltrans has historically collected parking lot data.
  - It is important to measure parking lot capacity during peak hours.
- Develop a formula that is uniform for all transit agencies and corridors to estimated, as accurately as possible, the data (ridership, passenger trip hours, etc.) in each corridor.
  - The formula would aim to determine the proportion of riders and hours on each corridor. The formula would take existing ridership, hours, and miles into account, and, using a mathematical equation, distill it for each specific corridor.

- o Participants suggested Caltrans develop this formula and ask transit agencies to review it. Jim Brown of SACOG offered a potential SACOG modeling tool to help develop the formula.
- One participant suggested that transit performance measures may not be the most effective way to develop partnerships and identify funding opportunities.
  - o *Follow-up response from Caltrans:* I would like to articulate Caltrans' current CSMP goal to explain why Caltrans needs multi-modal performance measures. CSMPs were the first attempt to move the concept of Integrated Corridor Management (ICM) from theory into practice. During the development of the first CSMPs, Caltrans and partner agencies identified and implemented strategies to enhance mobility in the corridors. The first CSMPs measured performance for vehicular travel on the State Highway System.
 

Today, Caltrans' goal is go one step further and partner with all system owner/operators to coordinate all transportation modes and service deliveries. Caltrans believes that partnering will ensure the increased mobility in the corridors for: the State Highway System, parallel roadways, bicycles, and public transit. Based on our experience, transit performance measures for the CSMP corridors will ensure increased mobility in the corridors independent of mode.

By working together to monitor the corridors, system operators will identify projects (operational or capacity) that can be jointly funded and have the ability to improve the mobility of people/goods. The 50-year vision of integrated corridor management goes further. By investing and modifying corridor infrastructure through (detection, bus lanes, aux lanes, CMS, etc.) and completing the ITS architecture, all system owner/operators can share technologies and a space at the TMC to manage the corridors real-time.
- One participant suggested, instead of developing and implementing performance measures, work to meet transit needs that are identified in the MTP 2035 and other existing policy documents in the region. Transit project needs are included in these documents, and, potentially, do not need to be identified again through performance measurement.
- Develop and implement a parallel performance measure system for vehicles and transit in the CSMPs. Participants noted that there is transit data available to support this.

## Summary and Next Steps

Joan thanked the participants for their ideas and suggestions. Workshop participants will be informed of upcoming advancements and, possibly, asked to review draft action items in the near future. If there were any questions, comments, or ideas, they were encouraged to contact Kelly Eagan, the Caltrans Project Manager.