An Approach to Enhance the Albuquerque Region’s Congestion Management Process

Metropolitan Transportation Planning

T3 Webinar
September 18, 2007
Presentation Outline

◆ Overview of CMP and Mid-Region MPO experiences.
◆ A new approach.
◆ Analysis and challenges.
◆ Summary of findings from the WILMAPCO visit.
Albuquerque Metropolitan Planning Area (AMPA)

Regional Population
2004: 691,758
2030: 954,905

Regional Employment
2004: 379,443
2030: 521,526

Regional Area:
1,309 Square Miles

Transportation Management Area
CO maintenance area
Housing by Subarea
Existing 2004 and Projected Growth to 2030

- **East Mountains**: 3% of existing homes, 4% of new homes
- **Sandoval County**: 11% of existing homes, 29% of new homes
- **West of Rio Grande**: 24% of existing homes, 41% of new homes
- **Los Lunas**: 2% of existing homes, 7% of new homes
- **East of Rio Grande**: 61% of existing homes, 19% of new homes
Jobs by Subarea
Existing 2004 and Projected Growth to 2030

- **East Mountains**: 1% of existing jobs, 2% of new jobs
- **Sandoval County**: 7% of existing jobs, 19% of new jobs
- **West of Rio Grande**: 10% of existing jobs, 39% of new jobs
- **Los Lunas**: 2% of existing jobs, 5% of new jobs
- **East of Rio Grande**: 80% of existing jobs, 34% of new jobs
2004 Base Year Level of Service

Relatively Light Congestion - Overall

Key Commutes Identified

River Crossings Congested
2030 Level of Service

3867 Lane Miles ($6 Billion)

River Crossings Remain Congested

Key Commutes More Congested

Increased Auto Travel Times 99%
Systems Management & Operations

- Intelligent Transportation Systems (ITS) Implementation Plan
- Managed Lanes
  - High-Occupancy Vehicle (HOV) lanes
  - Transit Only
  - Reversible Lanes
- Ramp Metering
- Incident Management, Motorist Assistance
- Access Control Policies
Transportation Issues & Challenges

- Rapid Population Growth & Land Development Patterns
  - the “Land Use-Transportation Connection”
- Congested Roadways
- “Crossing the River”
- Transit service: quality & convenience
- Bicycle facilities and connectivity
- Pedestrian access
- Crashes and safety
- Air quality
- Limited transportation funding
Overview

- Early 2005 MPO recognized the need to restructure the CMP program.
- Technical and analytical capabilities were developed but the framework was inadequate.
- CMP has not been fully integrated into the programming and transportation decision making process at the regional and local level.
Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991.

Title III and VI of SAFETEA-LU, Sections 3005 and 6001
- Mandates Transportation Management Areas (TMAs) to incorporate CMP within the Metropolitan Transportation Planning process.

The Final Rule on Statewide and Metropolitan Transportation Planning (February 14, 2007)
- “The development of a congestion management process should result in multimodal system performance measures and strategies that can be reflected in the Metropolitan Transportation Plan and the Transportations Improvement Program.”
“The Congestion Management Process (CMP) shall be developed, established, and implemented as part of the metropolitan transportation planning process that includes coordination with transportation system management and operation activities”.

Source: 23-CFR450.320.C
Management & Operation and CMP in the Context of Metropolitan Transportation Planning Requirements

**Eight Planning Factors**
- Emphasize Preservation of Existing Transportation System
- Increase Safety
- Support Economic Vitality
- Increase Accessibility & Mobility
- Enhance Environment, Energy Conservation, Quality of Life, Consistency w/ Planned Growth
- Increase Security
- Increase Accessibility & Mobility
- Coordination with local elected officials

**Consultation with Federal, State & Tribal agencies**

**Coordination with State & Local transportation agencies**

**Public Participation**

**Coordination with local transportation agencies**

**Community Involvement**

**Air Quality Conformity**

**Fiscal Constraint**

**Environmental Justice**

**ADA, Title VI, Environmental Justice**

**Promote Efficient System Management & Operation (M&O)**

**Congestion Management Process (CMP)** *

* Required for TMAs
+ Required for nonattainment and maintenance areas

*Source: FHWA*
Mid-Region MPO CMP Goal

◆ To have a Congestion Management Process that is fully integrated into the transportation planning process:
  ✷ By developing a technical evaluation process through regional consensus that reflects regional objectives;
  ✷ By using the CMP performance measures to evaluate the performance of the Metropolitan Transportation Plan projects;
  ✷ By linking the CMP performance evaluation process to TIP project prioritization.
Analysis & Challenges

- CMP as a regionally accepted approach for managing congestion.
- Develop an operational and integrated CMP structure for the Albuquerque region.
- Provide information and analysis for better understanding the causes of congestion.
- Regional Markets.
- The “before and after” monitoring of implemented strategies.
- Define a project prioritization process that is regional accepted.
A new approach: Scope of Work

- Regionally accepted approach.
- Review definition of congestion:
  - CMP network.
  - CMP corridors or areas.
- Define methods to monitor & evaluate the transportation system (performance measures):
  - Causes of congestion.
  - Extent of congestion.
  - Duration of congestion.
- Definition of regional goals & objectives:
  - Regionally accepted.
  - Focus on transportation system management & operation.
  - Performance measures.
Cont... Scope of Work

➢ Develop Management & Operation strategies based on operation goals & objectives:
  ✷ CMP Toolbox.
  ✷ Intelligent Transportation Systems
  ✷ Prioritization Process (incremental steps)
    • Quantitative method to select and rank projects
  ✷ Evaluation of CMP strategies (before and after).

➢ Data Collection plan

➢ Develop an implementation schedule:
  ✷ Implementation responsibilities.
  ✷ Strategy funding sources.

➢ CMP products & Information Dissemination:
  ✷ Status reports (annual, bi-annual, etc.)
  ✷ CMP report.
How the visit to WILMAPCO came about

- To visit a successful CMP program.
- To see day to day operation of the CMP program.
- To attend an active CMP Subcommittee meeting.
- To learn from a developed and integrated “project prioritization process.”
Summary of Findings

- A CMP structure.
- An active CMP subcommittee.
- A prioritization process.
- A CMP “toolbox” of strategies.
- A “before and after” monitoring process.
Questions & Comments Welcome!

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