Item #5A

2012
Congestion Management Process (CMP) Technical Report

Commuter Connections Subcommittee
July 17, 2012

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COG/TPB Staff

National Capital Region Transportation Planning Board (TPB)
Metropolitan Washington Council of Governments (COG)

Acknowledgements

Commuter Connections Subcommittee participants

all who provided input to this document,

especially for those who provided updates to the Ongoing State Local Jurisdictional Transportation Demand Management (TDM) Strategies

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COG/TPB Staff

Erin Morrow, worked on Chapter 3 and others

Daivamani Sivasailam, worked on Chapter 4

Background of the CMP

- A Congestion Management Process (CMP) is a requirement in metropolitan transportation planning
  - SAFETEA-LU and associated 2007 Federal regulations for metropolitan planning address CMP requirements
- Metropolitan long-range plans developed after July 1, 2007 must have a CMP
  - The official CMP component is wholly integrated into the CLRP to address the federal requirement

- 2006 Federal certification of the TPB process recommended demonstrating how the Congestion Management System (CMS, now CMP) was applied at critical stages of the metropolitan planning process, in the CLRP or a stand-alone document
- CMP Technical Reports were released in 2008 and 2010
- 2010 Federal Certification of the TPB Process commended the CMP for its detailed documentation efforts in the 2010 CMP Technical Report
- Preliminary Draft 2012 CMP Technical Report now ready for review

Connections between the CMP and the Commuter Connections Subcommittee

- TPB Technical Committee has responsibility for technical oversight of the CMP Technical Report, advised by:
  - ***Commuter Connections Subcommittee (regarding demand management)***
  - MOITS Policy Task Force and Technical Subcommittee (operations strategies, incident management and non-recurring congestion)
  - Travel Forecasting Subcommittee (travel monitoring)
- The CMP Report documents:
  - Strategies implemented by the CC Program
  - Strategy assessments conducted by the CC Program
- The CC Program is critical for addressing the federal CMP requirements regarding demand management
  - Implementing strategies
  - Evaluating the impact of strategies
  - Individual highway expansion projects can reference the already existing CC programs rather than having to create new programs to satisfy CMP requirements

Outline of the Report

- Executive Summary

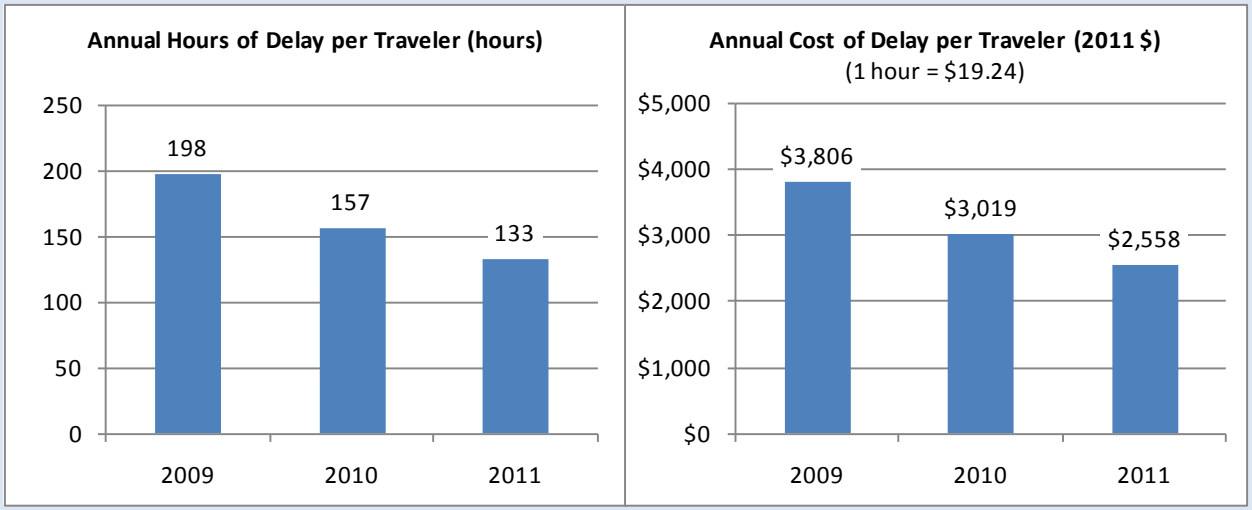
1. Introduction
2. State of Congestion
3. Consideration and Implementation of Congestion Management Strategies
4. Studies of Congestion Management Strategies
5. How Results of the CMP Are Integrated into the CLRP
6. Conclusions

The 2012 CMP Technical Report:

- *Compiles information from a wide range of metropolitan transportation planning activities, and*
- *Provides some additional CMP specific analyses, particularly I-95 VPP/INRIX data-based analyses*

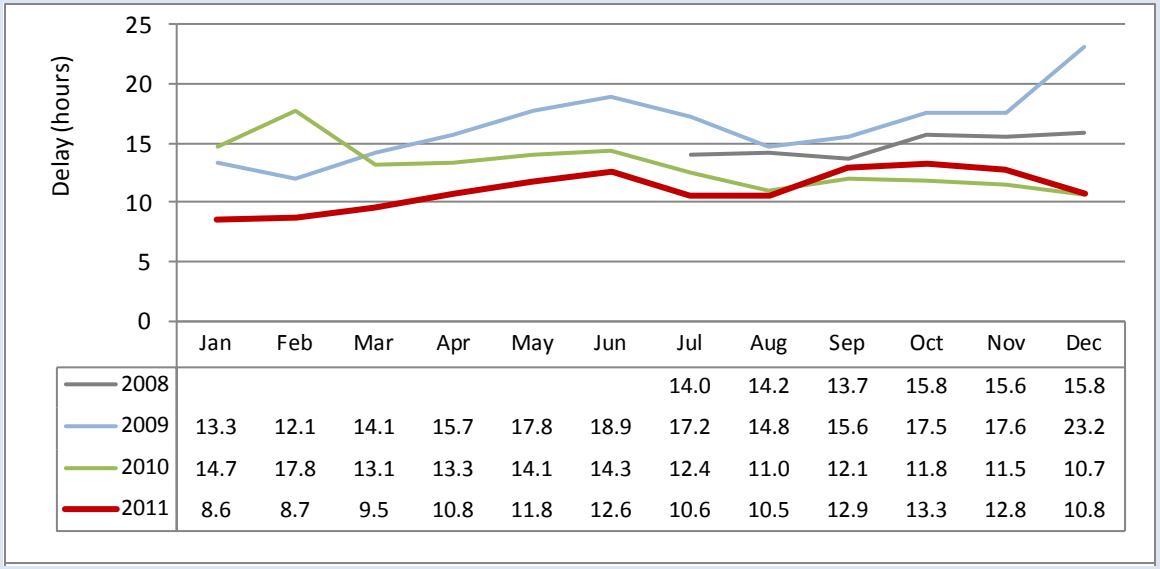
Key Findings (1/10)

- Freeway travelers in the Washington region on average experienced **decreasing** delays from 2009 to 2011



Key Findings (2/10)

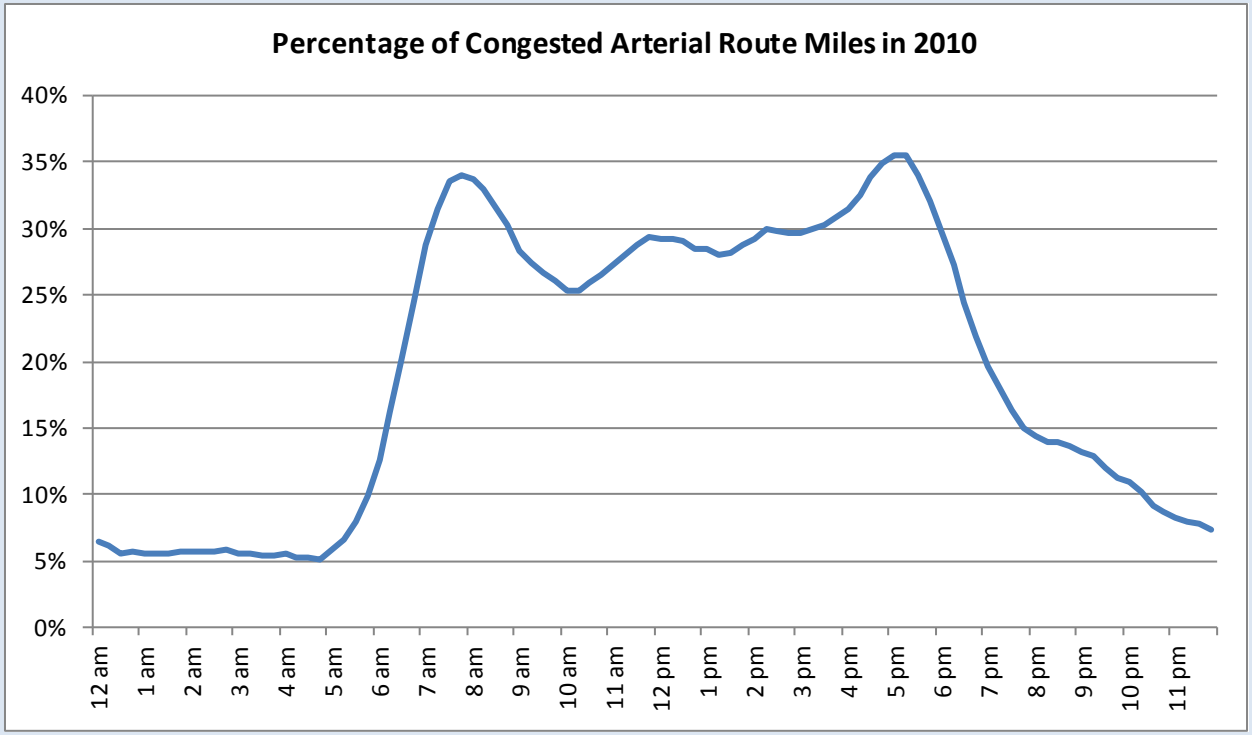
- Seasonal variation of congestion/delay:
  - Worst: June
  - Best: August/Dec – Feb, if no bad weather



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2008							14.0	14.2	13.7	15.8	15.6	15.8
2009	13.3	12.1	14.1	15.7	17.8	18.9	17.2	14.8	15.6	17.5	17.6	23.2
2010	14.7	17.8	13.1	13.3	14.1	14.3	12.4	11.0	12.1	11.8	11.5	10.7
2011	8.6	8.7	9.5	10.8	11.8	12.6	10.6	10.5	12.9	13.3	12.8	10.8

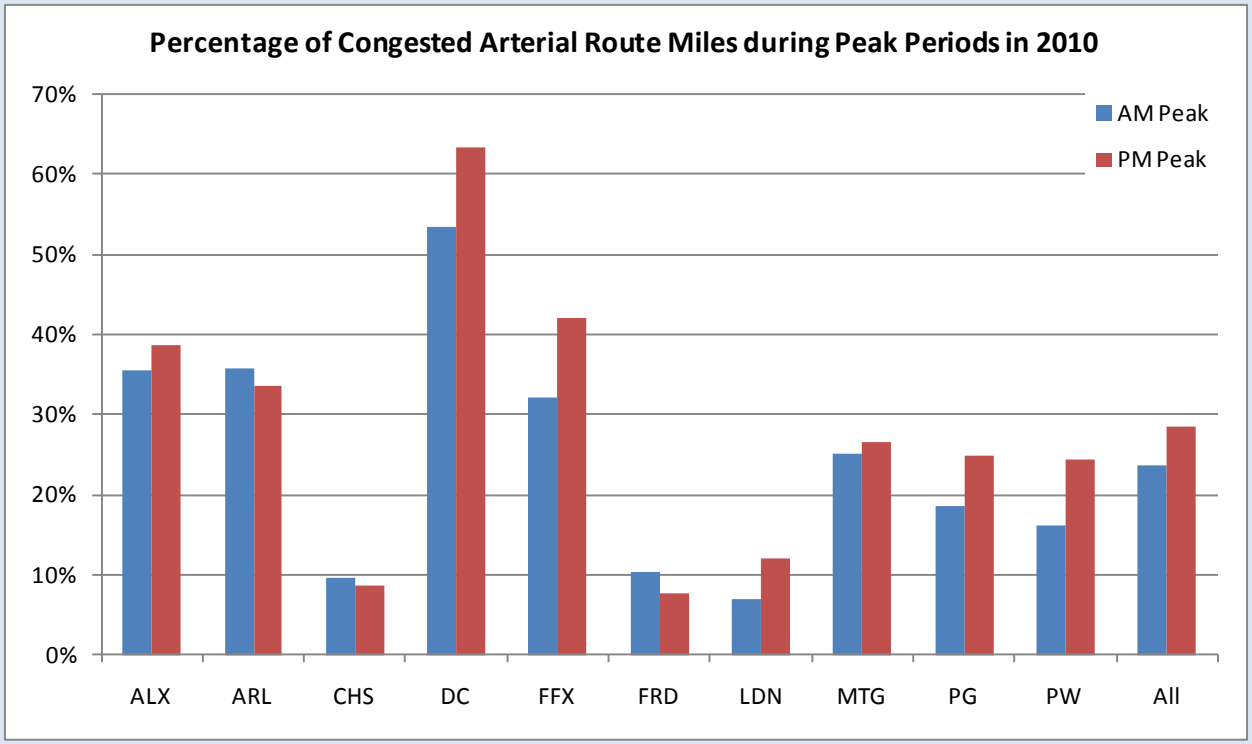
Key Findings (3/10)

- 4,600 route miles of arterials were scanned for the first time, **more than a quarter** of which were always congested from 7:00 AM to 6:30 PM on a workday in 2010 (not necessarily the same set of arterials always congested)



Key Findings (4/10)

- **Arterial congestion unevenly distributed** in the region, with more congestion in dense urban areas where there is an emphasis on streets as accessibility in addition to mobility



Key Findings (5/10)

- The TPB's **Regional Transportation Priorities Plan (RTPP)** has taken a performance-based transportation planning approach…
  - The CMP supports the RTPP by monitoring congestion and providing strategies that could improve the mobility of the transportation systems

Key Findings (6/10)

- *The **Commuter Connections** program remains the centerpiece to assist and encourage people in the Washington region to use alternatives to the single-occupant automobile.* The **transit system** in the Washington region serves as a major alternative to driving alone – transit mode share is among the highest in the country

Key Findings (7/10)

- This region has enhanced efforts in regional transportation operations coordination:
  - Enhanced MATOC program
    - More staff covering longer time period
    - Dedicated website www.MATOC.org
  - New Regional Incident Coordination (RIC) program
  - New public website for incidents information www.capitalregionupdates.gov

Key Findings (8/10)

- Variably Priced Lanes (VPLs) provide options to travelers
  - The Intercounty Connector is open between I-270 and I-95
  - I-495 Express Lanes will open on the Beltway (VA side) in 2013
  - I-95 (Virginia) Express Lanes are in the CLRP

Key Findings (9/10)

- Bike Sharing and Car Sharing programs are growing
  - Capital Bikeshare
    - Now: covers DC and Arlington
    - Future: City of Alexandria, Montgomery County, and Prince George's County
  - Car sharing
    - 800+ Zipcar cars
    - More providers: Car2Go, Hertz On Demand

Key Findings (10/10)

- Congestion management strategies of Management, Operations, and Intelligent Transportation Systems (MOITS) provide essential ways to make most of the existing transportation facilities

Recommendations

1. Continue to enhance the CMP to help support the Regional Transportation Priorities Plan (RTPP), and other **performance-based planning and programming processes**
2. *Continue the **Commuter Connections** program*
3. Continue and enhance the **MATOC program** and support agency/jurisdictional transportation management activities including the Regional Incident Coordination (RIC) Program

Recommendations (Cont'd)

4. Capacity increasing projects should consider **variable pricing** and other management strategies
5. Encourage implementation of congestion management programs for **major construction projects**
6. Continue to **encourage transit** in the Washington region and explore transit priority strategies

Recommendations (Cont'd)

7. Continue to encourage access to **non-auto travel modes**
8. Continue to explore Integrated Corridor Management (ICM) systems and Active Traffic Management (ATM) strategies
9. Continue and enhance providing real-time, historical, and multimodal traveler information
10. Continue and enhance the **arterial congestion monitoring program**

Recommendations (Cont'd)

11. Continue and enhance frequently updated congestion reporting with a **standardized procedure** in calculating performance measures and more **trip-based** assessments
12. Continue to conduct **Geographically-focused Household Travel Surveys** to collect mode choice information

Review Schedule

- Committee presentations
  - MOITS, June 12, 2012 and July 10, 2012
  - ***Commuter Connections, July 17, 2012***
  - Travel Forecasting Subcommittee, July 20, 2012
  - TPB Tech, September 7, 2012 (proposed)
- DEADLINE for comments by CC participants: August 17, 2012
- Please send comments to COG/TPB staff Wenjing Pu: wpu@mwcog.org

Proposed Priorities for Commuter Connections Committee Review

- Executive Summary (pages 7 – 30)
- Commuter Connections Program (pages 126-131)
- TERM evaluations (pages 182-183; 222-228)
- Analyses of INRIX data (pages 50 – 77)