# UPDATE ON THE CONGESTION MANAGEMENT PROCESS (CMP)

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TPB Technical Committee
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National Capital Region
**Transportation Planning Board**

Agenda Item #5

# Introduction for the TPB Technical Committee

- The proposed December 18, 2024 TPB meeting agenda includes a general update on the Congestion Management Process (CMP) component of TPB's long-range planning process
  - Not limited to the recently completed 2024 CMP Technical Report
- Today we will brief you on the topics planned for this TPB update
- The emphasis is expected to be on the strategies involved in CMP, such as the Commuter Connections program and the Metropolitan Area Transportation Operations Coordination (MATOC) program

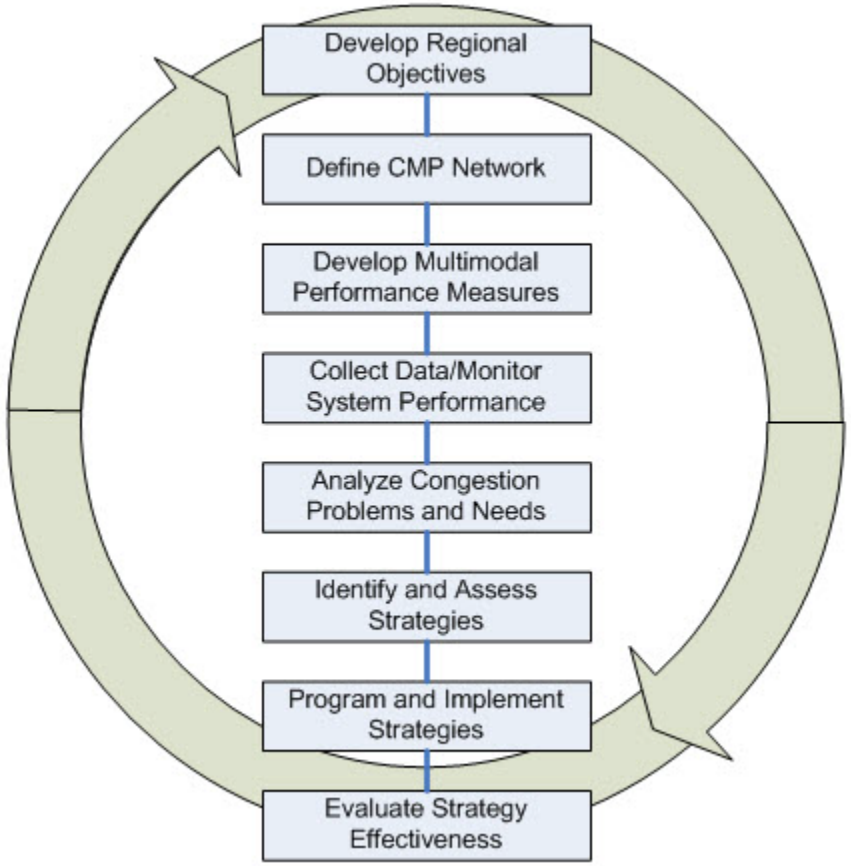
# Objectives for This Presentation

- Serve as a reminder to the TPB of the existence of the federal Congestion Management Process requirements
- Describe the variety of TPB and member agency activities that contribute to the region's compliance with this federal requirement
- Note the wealth of information compiled by TPB that is available for the reference of member agencies as they develop projects proposed for inclusion in Visualize 2050 and the Transportation Improvement Program

# What Is A CMP?

The transportation planning process in a TMA shall **address congestion management through a process** that provides for safe and effective integrated management and operation of the multimodal transportation system…**through the use of travel demand reduction…job access projects, and operational management strategies**.

- Federal Register Vol. 81, No.103, pp.34152, May 27, 2016.
- TAM: Transportation Management Areas



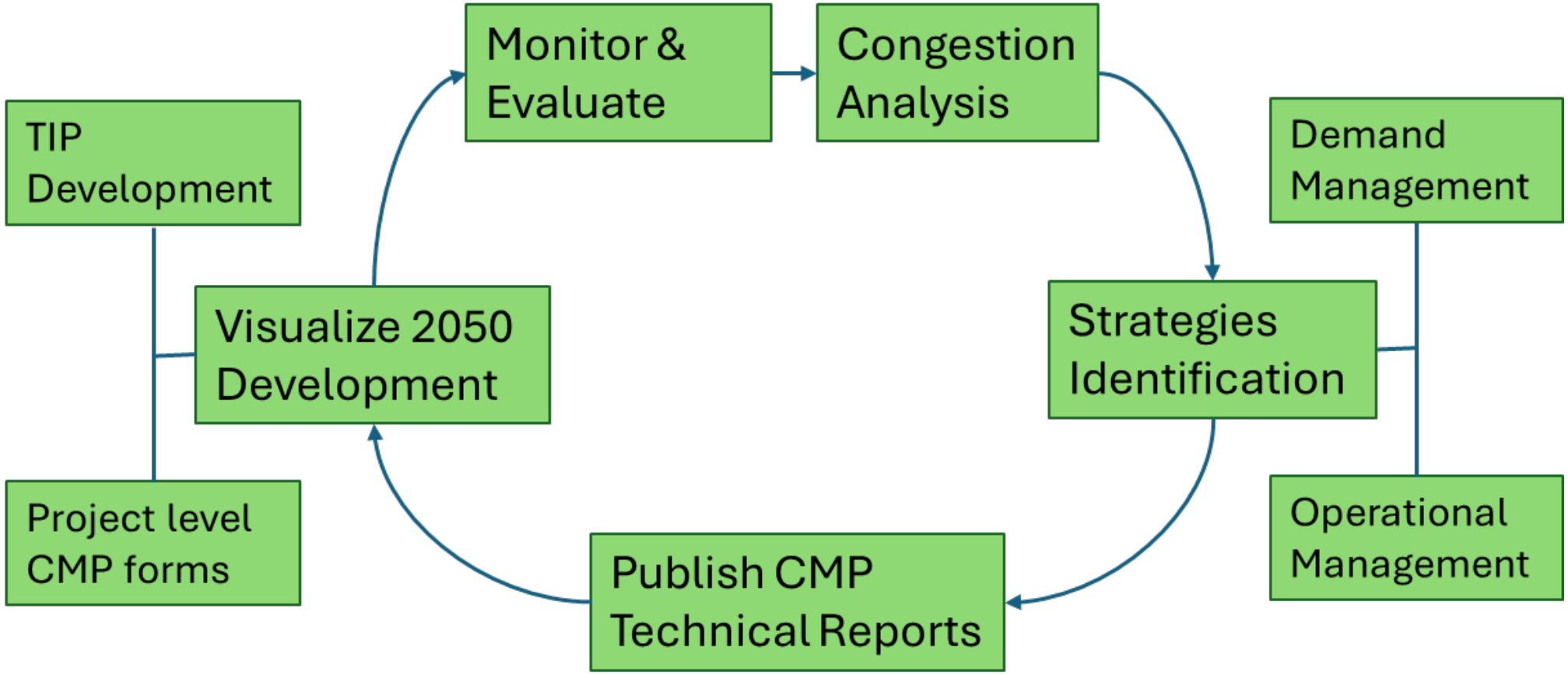
# TPB's Role As Described in *Visualize*

- Due to population and economic growth, congestion is forecasted to increase
- The TPB must continuously plan to move more people and goods through multimodal strategies and efficient management of the system, and providing connectivity for people and goods to destinations across the region
- Based on TPB analyses and other sources, the CMP provides information on trends and strategies for members' awareness

# Congestion Management Process Components

- Visualize 2045 contains CMP elements, and is the document that is approved by the board
  - TPB ensures that the plan includes alternatives to SOVs
  - The CMP informs the project selection process for the plan and TIP
- Agencies provide project-specific CMP information within Technical Inputs Solicitation
- Quarterly and biennial Technical Reports provide more data
- All are informing Visualize 2050 development

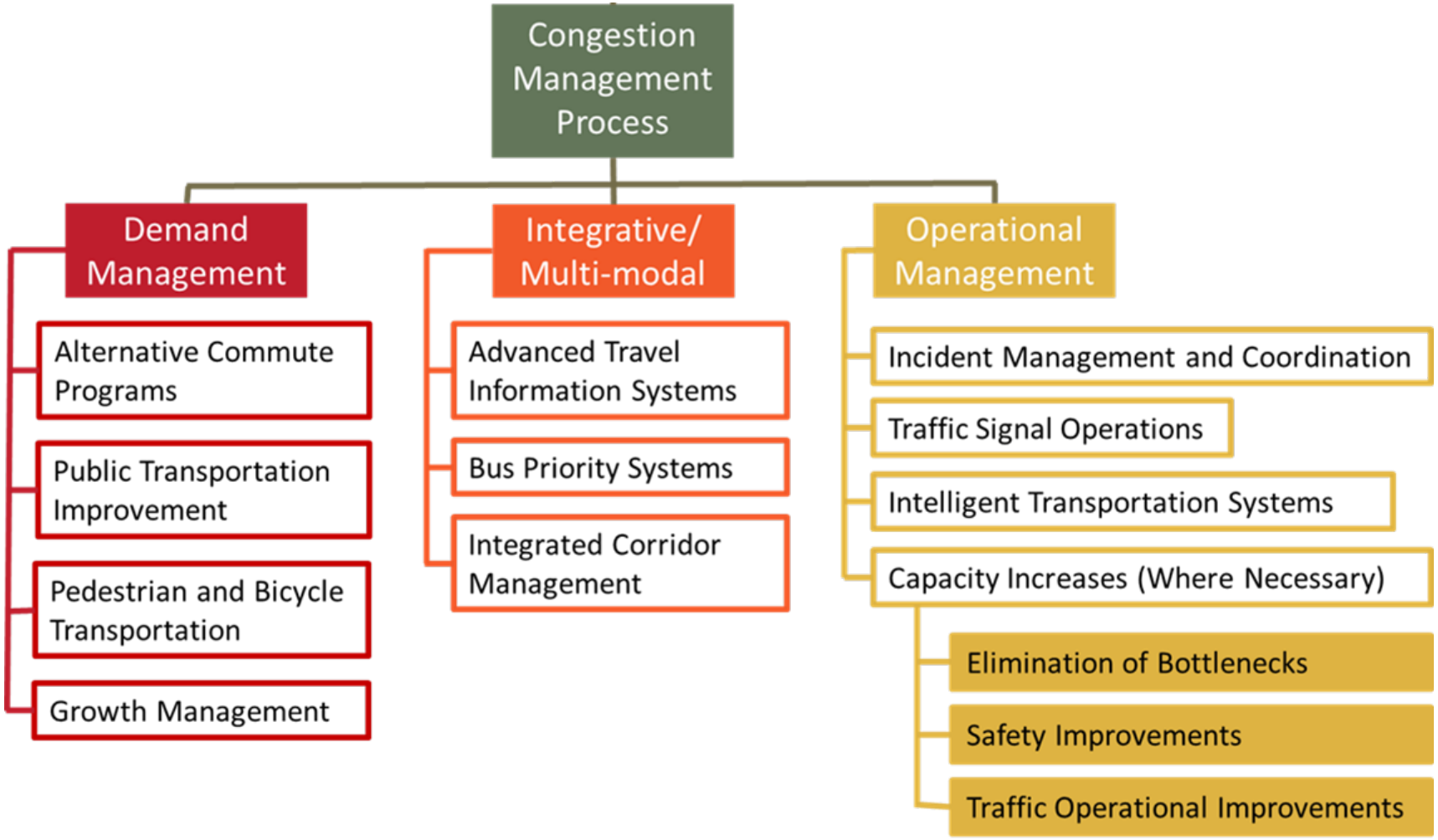
# National Capital Region Transportation Plan & CMP



# CMP Components of *Visualize*

| Component | TPB Role | Documentation |
|---|---|---|
| 1. Monitoring and evaluating transportation system performance | Monitor system performance and identify benefits that various congestion management strategies may have. | Travel monitoring and trends reports |
| 2. Defining and analyzing strategies | Leveraging accurate and reliable data, the TPB and regional partners collaboratively establish priority strategies (both demand management and operations management) to alleviate congestion | The TPB's congestion management strategies can be found online at: Major CMP Strategies. |
| 3. Compiling project-specific congestion management information | Compile information on implementation agencies' consideration of CMP strategies | Through the TPB's Technical Inputs Solicitation for projects, sponsors can indicate whether the need for their project stems from recurring or non-recurring congestion, and describe CMP strategies considered |
| 4. Implementing strategies | Commuter Connections program promotes and implements regional demand management; TPB members implement the strategies and submit projects, programs, and policies to the TPB for inclusion in the NCRTP and TIP | TPB members implement regionally significant projects, programs, and policies that reflect the CMP strategies included in the NCRTP and TIP |

# Congestion Management Strategies



# CMP and Commuter Connections

- The Commuter Connections Program is the centerpiece of the region's Transportation Demand Management (TDM) efforts that are essential to satisfy federal CMP requirements
- Commuter Connections Program Background:
  - Mission: Encourage commuters in the National Capital Region to try and adopt the use of alternatives to the single-occupant automobile
  - Structure: A network of nearly 30 transportation organizations - including COG, local governments, state DOTs (i.e., program funders), and federal agencies – working to achieve the mission
  - Strategy: Transportation Demand Management (TDM) implementation through various programs and services

50 YEARS 1974-2024 COMMUTER CONNECTIONS. A SMARTER WAY TO WORK

# Commuter Connections Programs

- Core Programs: Ridematching, Guaranteed Ride Home
- Commuter Resources: Commuter Calculator, Maps
- Regional Events Promoting Alternative Modes: Car-Free Day, Bike-to-Work Day
- Regional Mass Marketing and Employer Outreach
- Monitoring and Evaluation






# Commuter Connections Monitoring and Evaluation



- The CMP relies on the Commuter Connections Program's robust monitoring and evaluation activities
  - Feedback from program participants is gathered via surveys, analyzed and published into reports
  - Insights on regional commute trends are gathered through the triennial State of the Commute survey

| Measure | Daily Reductions |
|---|---|
| Vehicle Trips | 119,500 |
| Vehicle Miles of Travel | 2,168,000 |
| Nitrogen Oxides (NOx) | 0.4 Tons |
| Volatile Organic Compounds (VOC) | 0.3 Tons |

# Operations Management: the CMP and MATOC

- The Metropolitan Area Transportation Operations Coordination (MATOC) Program is the centerpiece of the region's operations management, and is critical to the CMP
  - A joint operations program between DDOT, MDOT, VDOT, & WMATA to improve inter-agency information sharing and coordination
  - Partnering with DOT Operations and Traffic Incident Management
  - MATOC's mission is to provide situational awareness of transportation operations in and around the National Capital Region (NCR)
  - Develop tools and processes that enables operating agencies and the traveling public to make better decisions
  - MATOC is not command and control, it is advisory in nature and serves as a decision support function
  - Evaluation showed a 10:1 benefit-cost ratio for MATOC operations

MATOC
Metropolitan Area Transportation Operations Coordination

# MATOC's Situational Awareness Mission

## *Input*

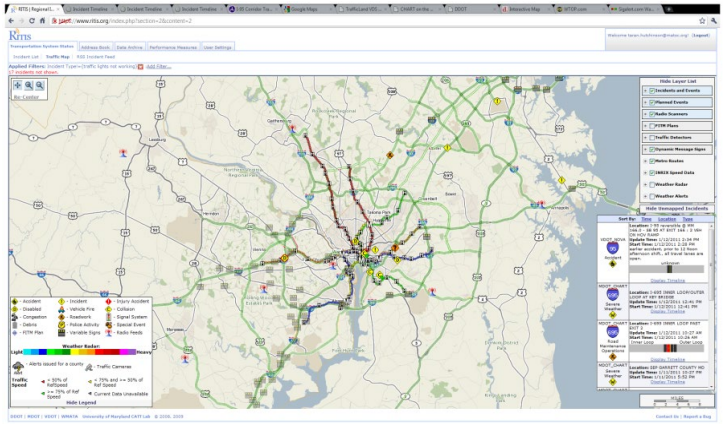

Traffic Cameras


Media Broadcasts

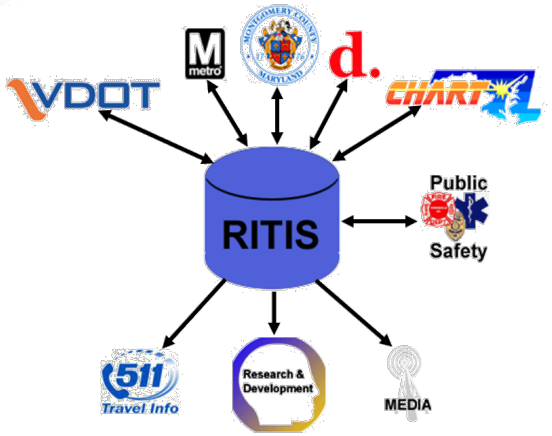
Scanners
(Public Safety / Media / Agency/Traffic Spotters)

Incoming Messaging Feeds
(Agency / Media / Social Media)

## *Fusion*

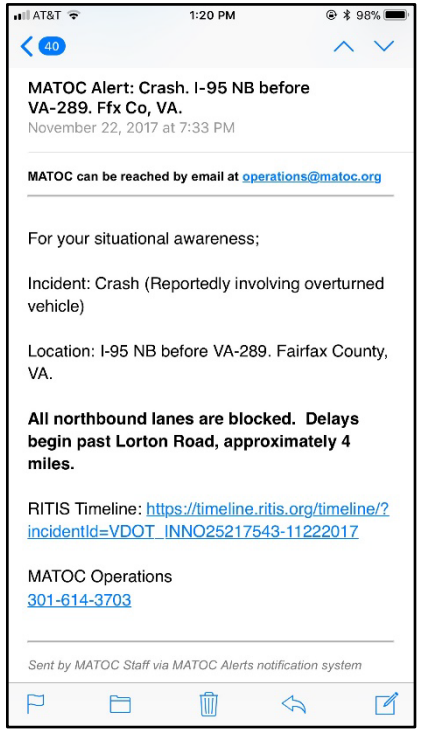


RITIS - Regional Integrated Transportation Information System




MATOC Staff Monitoring

## *Notifications*




MATOC
Metropolitan Area Transportation Operations Coordination

# Selected Congestion Management Strategies














# Modal and Integrative CMP Strategies

- Transit Systems – critical to car-free or car-light living and equity
  - Bus priority and BRT systems
- Pedestrian and Bicycle Transportation – every trip is a trip not taken in a motor vehicle
- Micromobility – shown to help underserved communities
- Integrated Corridor Management – looking at all aspects and all modes
- Land Use Strategies – avoiding car-dependent land uses

# Selected TPB Priority Strategies and the CMP

- Bring Jobs and Housing Closer Together
- Expand Bus Rapid Transit and Transitways
- Move More People on Metrorail and Commuter Rail
- Expand Express Highway Network
- Improve Walk and Bike Access to Transit
- Complete the National Capital Trail Network
- Apply Safety Strategies to Design and Operate Safer Infrastructure
- Reduce Travel Times on all Public Transportation Bus Services
- Implement Transportation System Management Operations Measures

# Trends

- Traffic congestion has worsened on average during both morning and evening peak hours
  - Comparing 2013 to 2023 on 18 major corridors around the region
- Varying impacts across corridors
  - The impact varies significantly across corridors, with some experiencing improvements and others significant slowdowns
  - Improvements in corridors where priced lanes were implemented
- Potential shift in commuter behavior
  - Commuter behavior may have shifted, with a larger increase in congestion observed during the evening peak hour potentially reflecting a change in work schedules or trip patterns

# Key CMP Observations

1. Commuter Connections and other travel demand management strategies remain crucial for congestion mitigation
2. MATOC continues to play an important role in coordination and communicating incident information during both typical travel days and special events
3. Walking and bicycling continue to grow in the region in part due to increasing connectivity in the bicycle and pedestrian network
4. 2023 saw a mix of travel trends coming out of the COVID-19 pandemic, with A.M. peak congestion remaining lower, but P.M. peak congestion matching pre-pandemic conditions

# Outlook

- The Congestion Management Process remains a federally-required component of metropolitan transportation planning
- CMP guidance and findings are consistent with and supportive of TPB's travel demand reduction and management goals
- TPB has information resources for member agencies at www.mwcog.org/congestion

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