



CMP Committee

November 10, 2020



AGENDA

1. **WELCOME AND INTRODUCTIONS** (5 min.)
2. **PURPOSE AND CHARGE OF THE CMP COMMITTEE** (10 min.)
3. **SUMMARY OF CMP CONSULTANT PROJECT** (10 min.)
BMC staff will provide a summary of the CMP consultant project and deliverables.
4. **DISCUSSION OF RECOMMENDATIONS FOR IMPLEMENTATION** (40 min.)
Attendees will discuss recommendations from the consultant project and how to implement them and if any need to be revised. The group will also discuss if any stakeholders are missing from the committee.
5. **NEXT STEPS** (10 min.)
 - Schedule next meeting

2. Purpose and Charge of the CMP Committee

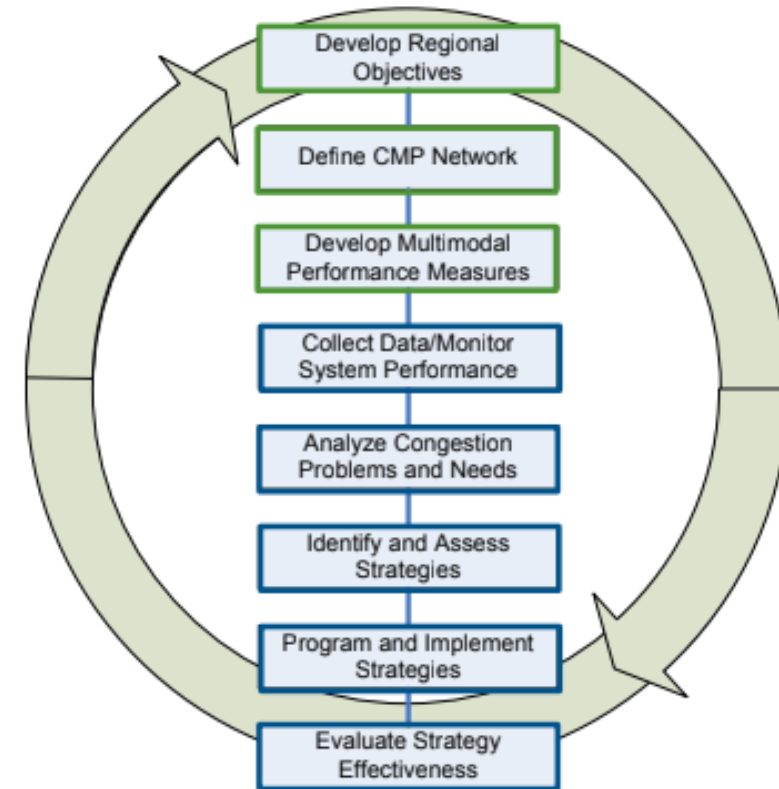
- Implement recommendations of the CMP consultant project
- Better integrate CMP into the regional transportation planning process

3. Summary of CMP Consultant Project

1. Develop Regional CMP Objectives
2. Define CMP Network
3. & 4. Proposed Performance Metrics and Data Collection and Management Plan
5. Development of a Process to Analyze Areas of Congestion and Associated Mobility Issues
6. Congestion Management Strategy Guide
7. Recommendations for Implementation
8. Process to Evaluate Strategy Effectiveness

Elements 1 – 4 are defined; elements 5 – 8 provide a process

Elements of the CMP



Source: FHWA Congestion Management Process Guidebook

1. Congestion Management Objectives



Enhance **access** to jobs and other opportunities



Improve **travel times** and reduce traveler delay on all modes of travel



Improve **freight reliability**



Reduce **traffic incidents** that contribute to traveler delays and loss of life or injury



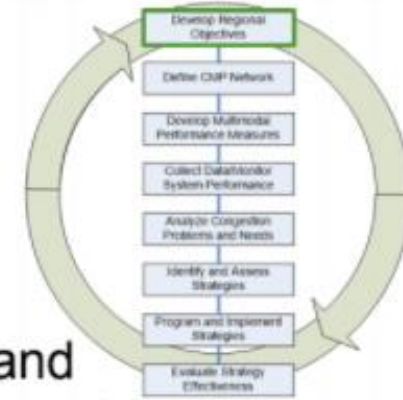
Improve **travel time reliability** (consistency and predictability of travel times) and resiliency for motorists and transit



Enhance **travel choices**, including access to transit, safe and convenient bicycling and walking, and other alternatives to driving alone

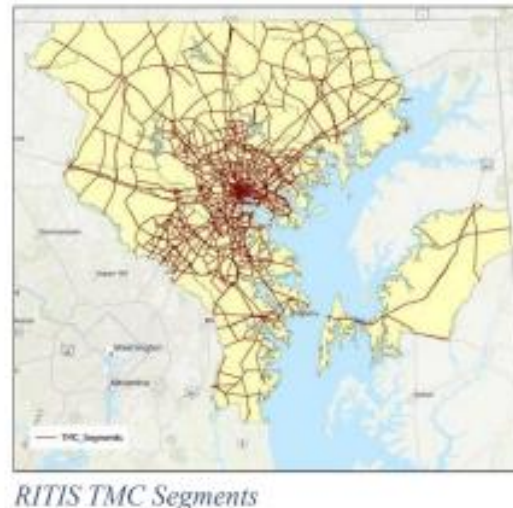


Enhance **inter-jurisdictional coordination** to optimize transportation system performance



2. Components of CMP Network

- Roadways
 - Maryland Centerlines
 - Probe Data Analytics Suite, within Regional Integrated Transportation Information System (RITIS)
 - Freight Network: National Highway Freight Network, SHA Truck Routes, Critical Urban Freight Corridors, Baltimore City Freight Network
- Transit
 - Local bus, commuter bus, statewide bus, regional bus, Metro, light rail, etc.)
 - Park and Ride Facilities
 - 100+ locations
 - Bike Facilities
 - Sidewalks
 - Compiled where available



3. Performance Metrics for Use in the CMP

Objective 1: Enhance access to jobs and other opportunities

1. Number of jobs accessible within a 30-minute drive
2. Number of jobs accessible within a 45-minute transit trip

Objective 2: Improve travel times and reduce traveler delay on all modes of travel

1. Travel time index (ratio of peak-period to off-peak travel time)
2. Duration of congested conditions (e.g., on typical weekdays, weekends)
3. Person hours of peak hour excessive delay
4. Average bus speeds
5. Anticipated growth in V/C ratio in peak period (base year to 2045)

Objective 3: Improve travel time reliability and resiliency for motorists and transit

1. Level of Travel Time Reliability (LOTTR)
2. Transit on-time performance
 - Bus
 - Rail

Objective 4: Improve freight reliability

1. Truck Travel Time Reliability (TTTR) Index

Objective 5: Enhance travel choices, including access to transit, bicycling, walking, and other non-SOV modes

1. Non-SOV mode share
2. Transit network extent and frequency Access to frequent transit (secondary)
3. Bicycle network extent
4. Bicycle Level of Traffic Stress (LTS)
5. Park and ride utilization

Objective 6: Reduce traffic incidents that contribute to traveler delays and loss of life or injury

1. Number of crashes
2. Number of pedestrian/bicycle crashes

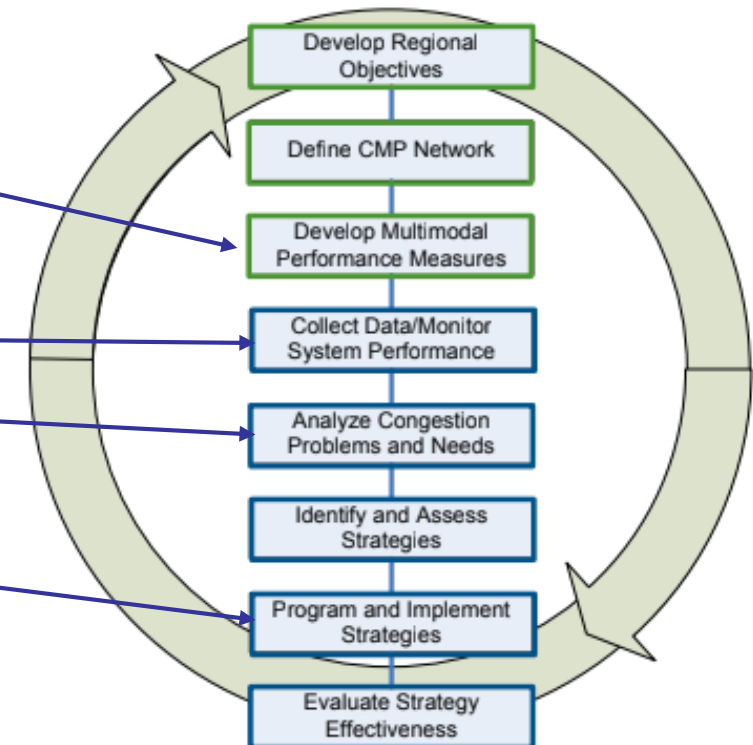
Objective 7: Enhance interjurisdictional coordination to optimize transportation system performance

To be addressed in implementation plan

Goals for Today's Meeting: Discuss Recommendations for Implementation

- **Discuss Recommendations for Implementation**
 - Develop draft performance metrics for Objective 7: Enhance interjurisdictional coordination to optimize transportation system performance
 - Review recommendations from CMP Consultant Project
 - Performance Metrics and Data Collection and Management Plan
 - Process to Analyze Areas of Congestion and Associated Mobility Issues
 - Recommendations for Implementation
- **Discuss how local, BMC/BRTB, and state can use CMP project products**
- **Identify any missing stakeholders**
- **Identify next steps**

Elements of the CMP



Source: FHWA Congestion Management Process Guidebook

Performance Metric For Objective 7: Enhance Interjurisdictional Coordination to Optimize Transportation System Performance

- **BRTB/BMC's role** - Facilitate the coordination through the CMP Committee meetings and track progress toward the CMP objective focused on interjurisdictional coordination

Sample checklist for BRTB/BMC to track coordination activities:

Question	Yes	No
Has the CMP Committee met at least twice this year?		
Have at least 2/3 of jurisdictions participated in at least one CMP Committee meeting?		
Have interjurisdictional needs been identified through this forum?		
Have interjurisdictional projects or area-wide strategies been identified for consideration through corridor studies or projects proceeding to the TIP?		



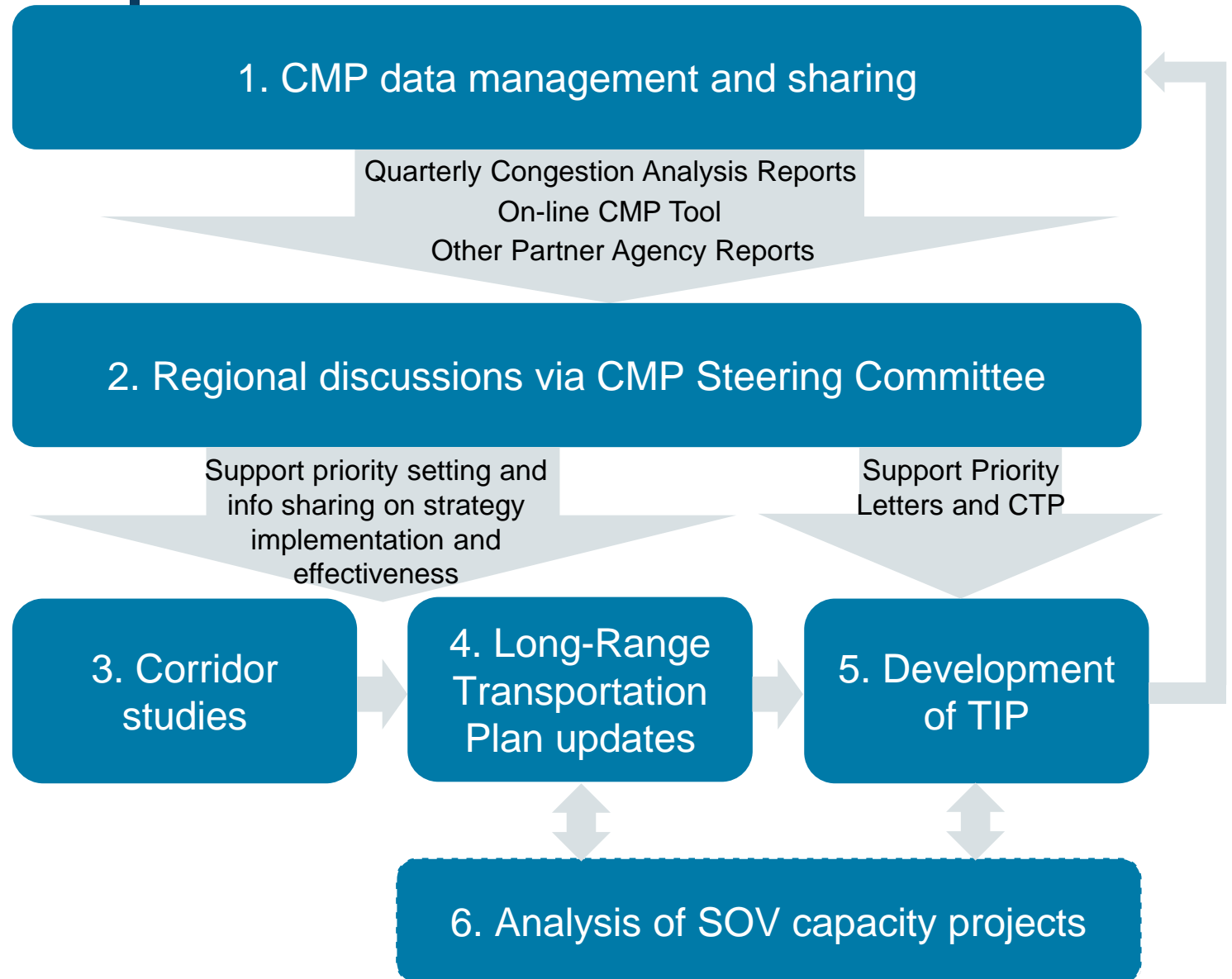
Recommendations for Implementation

1. CMP Data Management & Sharing	Local	BMC / BRTB	State
Quarterly Cong Reports		L	
Online CMP Tool		L	
Other reports	J	J	J

2. Regional Discussions	Local	BMC / BRTB	State
Priority setting	L	S	L
Priority letters and CTP	L	S	L

	Local	BMC / BRTB	State
3. Corridor Studies	J	J	J
4. LRTP Updates	L	S	L
5. Development of TIP	L	S	L
6. Analysis of SOV capacity projects	L	S	L

L = Lead; S = Support; J = Joint



Recommendations: Performance Metrics and Data Collection and Management Plan

- **Confirm Threshold, Data Collection Method, and Methodology for performance metrics**
 - Follow up at a future meeting with the CMP Committee with additional details

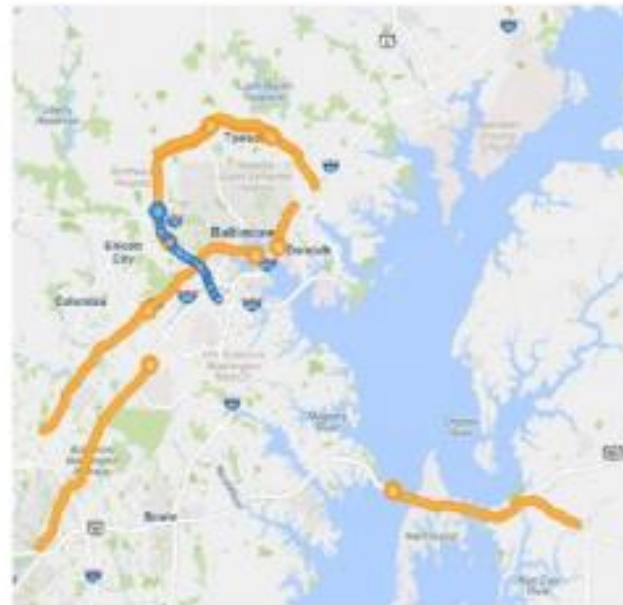
Recommendations: Process to Analyze Areas of Congestion and Associated Mobility Issues

- Ranking congestion problems for quarterly reports

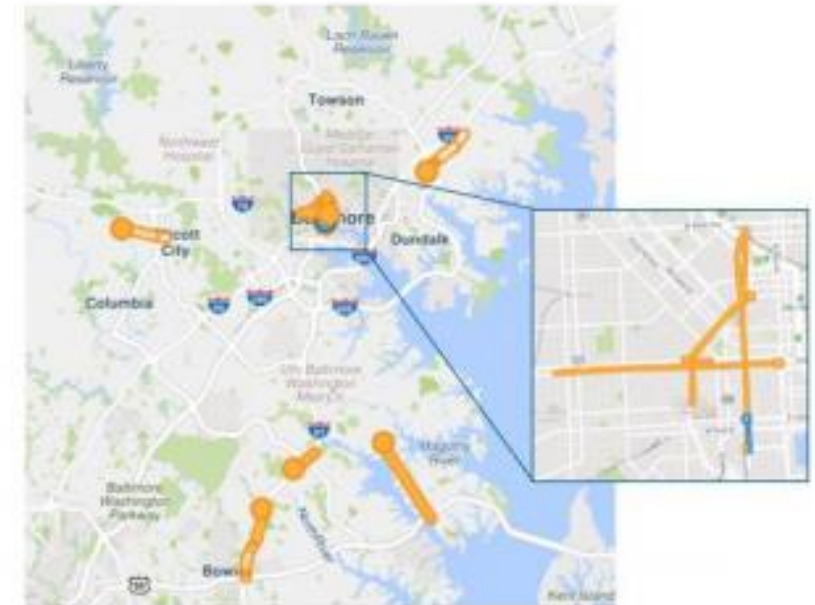
1. Modification to Bottleneck Ranking Method

Switch from using “Base Impact” to using “Total Delay” for ranking to account for volume using the segment

2. Separate Rankings for Freeways and Non-Freeway Roadways



Existing Congestion Analysis Report,
Quarter 4, 2019

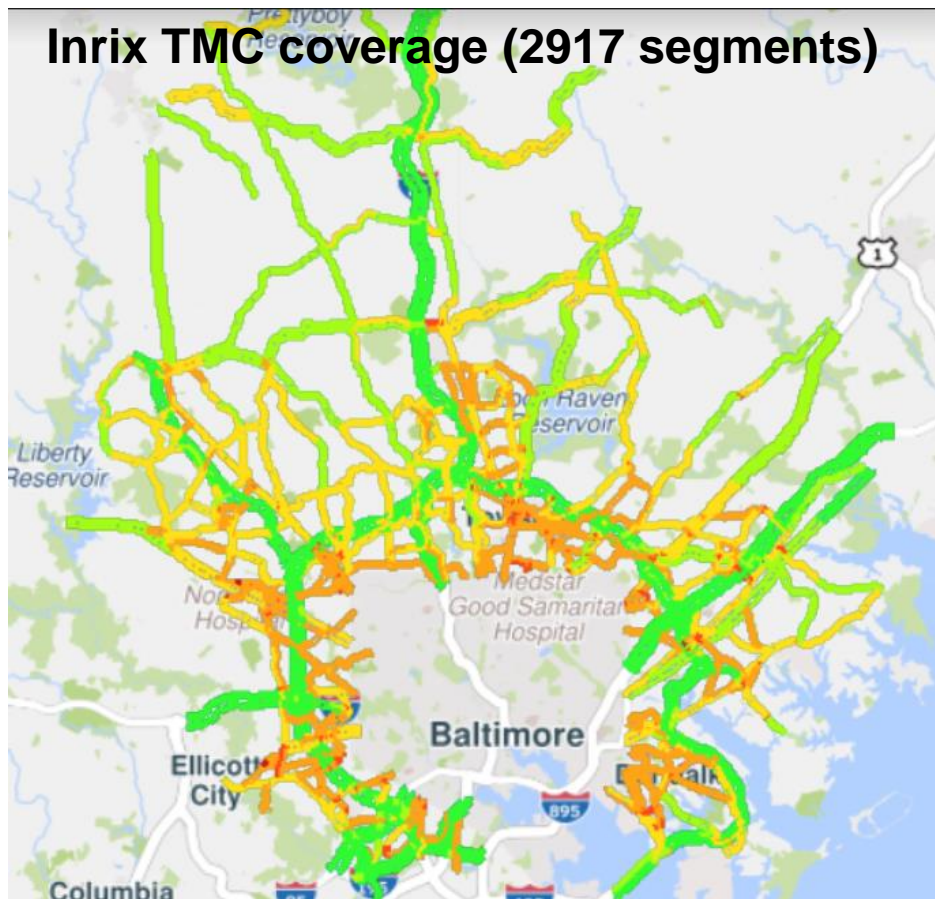


Analysis of Non-Freeway Segments,
Quarter 4, 2019

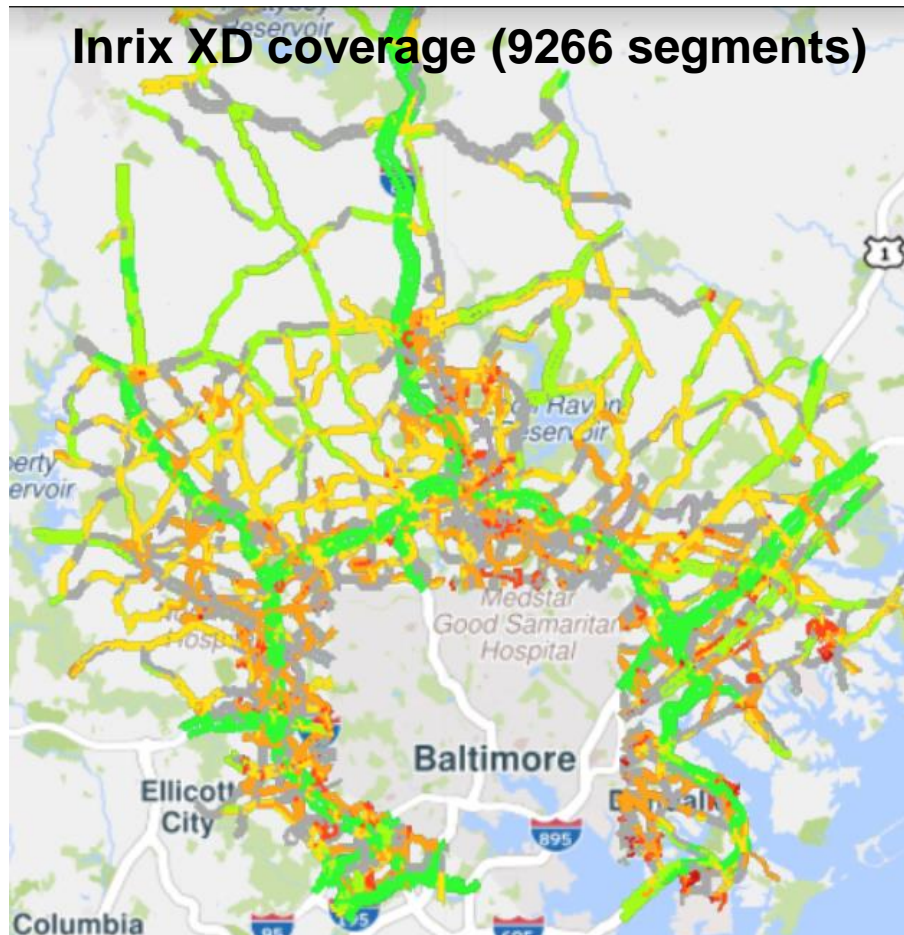
Difficulty Splitting Freeway vs Non-Freeway Data

- Difficult to accurately select freeway and non freeway roads in RITIS
- Bottleneck reports use Inrix TMC data; Inrix XD coverage is more robust for non-freeway roads (see maps below)

<input checked="" type="checkbox"/>	Select All
<input type="checkbox"/>	Interstate
<input type="checkbox"/>	US Route
<input type="checkbox"/>	State Route
<input type="checkbox"/>	Parkway
<input type="checkbox"/>	Turnpike
<input type="checkbox"/>	Expressway
<input type="checkbox"/>	Frontage
<input type="checkbox"/>	Interchange



vs

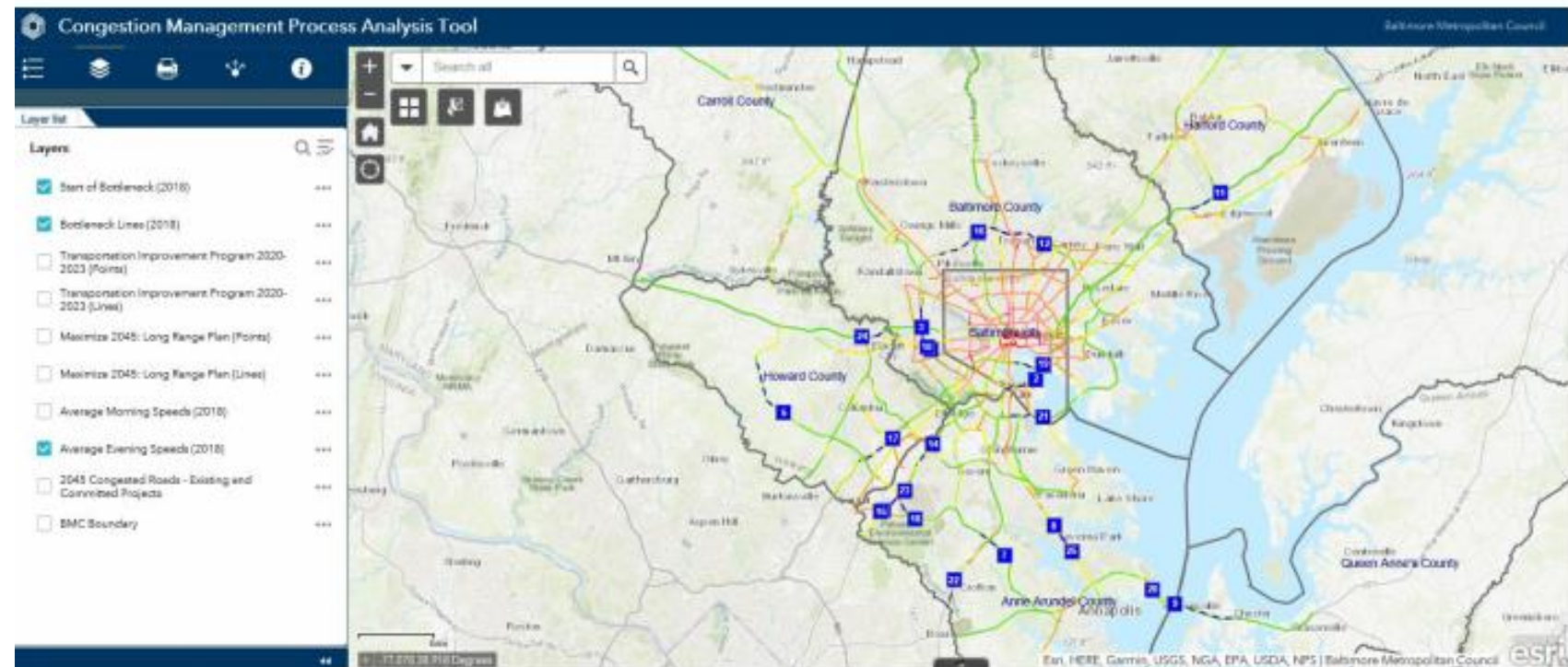


Recommendations: Process to Analyze Areas of Congestion and Associated Mobility Issues

- Integrate CMP performance metrics into the [BMC on-line CMP tool](#)

Use as key analytic tool for regional analysis of congestion and mobility issues, and to support identification of needs by local governments and partners

- Incorporate CMP performance metrics
- Update annually



Recommendations: Process to Analyze Areas of Congestion and Associated Mobility Issues

- Identify priority congested roadway corridors

1. Identify top freeway and non-freeway bottlenecks
 - Rank the top 15 bottlenecks in each category (freeways and non-freeways) using an annual analysis of the data from the PDA Suite
2. Conduct additional analyses to characterize congestion issues
 - Whether the bottleneck appeared seasonally or across all quarters
 - Primary times of day of congestion
 - Ranking of bottleneck in terms of congestion from the individual driver's perspective
3. Identify travel options
 - Transit routes and frequencies
 - Bicycle network extent
 - Park and ride lot utilization
 - Other data as available (e.g., bus speeds)
4. Prepare corridor profile



Recommendations: Process to Analyze Areas of Congestion and Associated Mobility Issues

- Identify priority multimodal needs

1. Map key multimodal performance metrics across the region
 - Level of travel time reliability (LOTTR)
 - Bus speeds
 - Transit on-time performance
 - Bicycle level of traffic stress
 - Park and ride lot utilization

2. Identify deficiencies (based on thresholds, examples below)
 - *Transit on-time performance:* In relation to MDOT MTA goals: Core bus - 80%; Light rail/Metro subway - 95%; MARC train - 93%
 - *Park and ride lot utilization:* Over 85% (oversubscribed), under 15% (underutilized)

Analyze freight corridors (special analysis)

- Map travel time index (TTI) and truck travel time reliability (TTTR) index on key goods movement routes
- Can be done every 3-4 years



CMP Role in the Long-Range Transportation Plan and Transportation Improvement Program (TIP)

For Long-Range Plan

- Update project submittal form
 - Restructure the CMP strategy checklist in the form to align with the 7 types of strategies as recommended in the CMP Strategy Guidebook (e.g., addition of Bicycle/pedestrian/micromobility strategies)
- Revisit the CMP objectives and performance metrics
- Provide additional information for the System Performance Report
- Inform updates to regional performance targets



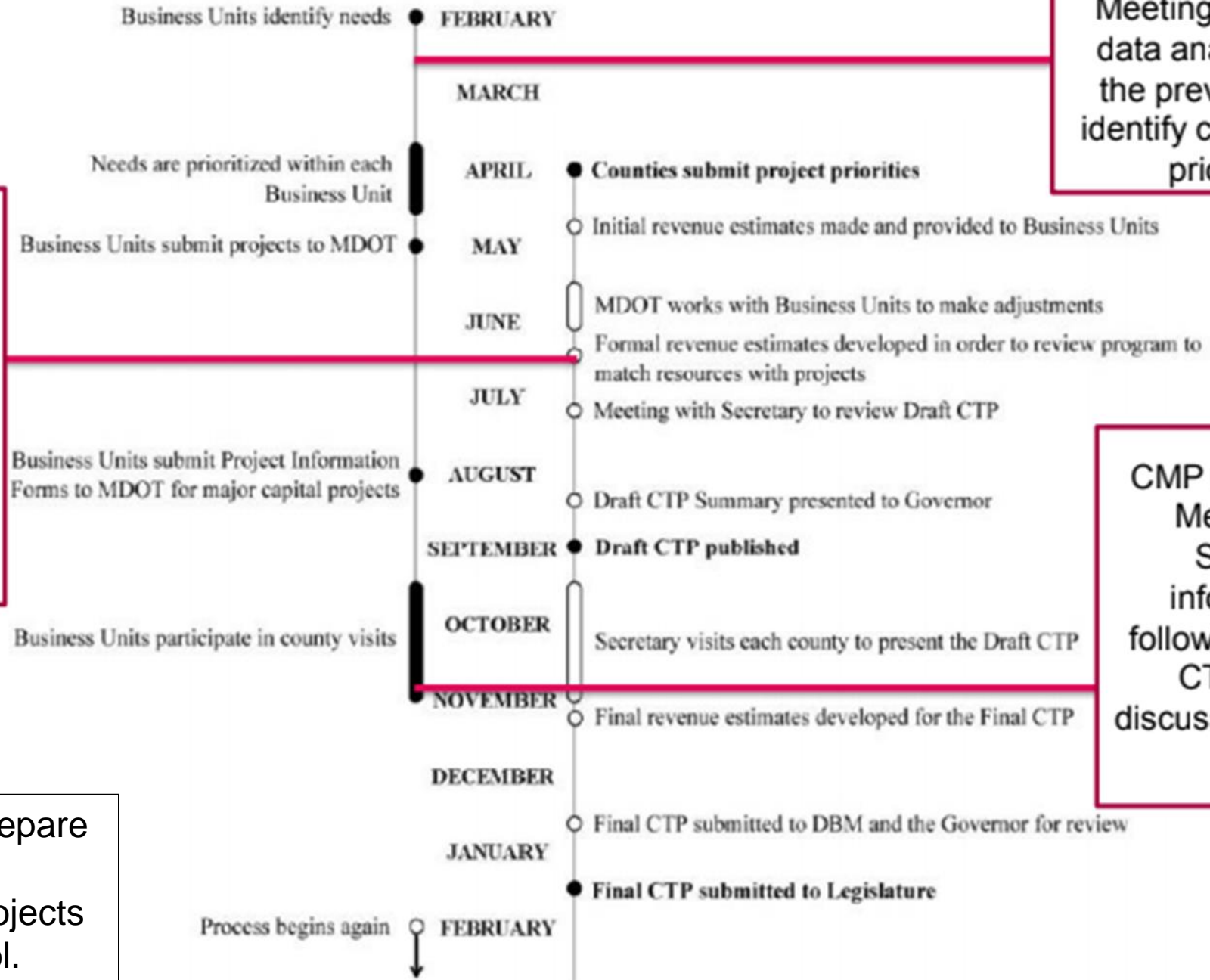
For TIP

- Capture CMP strategies in the TIP
 - For a project that addresses mobility goals, identify which CMP objectives it addresses and categories of CMP strategies associated with it
- Track CMP strategies
 - Compare each project in the TIP with the project as described in the LRTP; consider supplemental components/strategies that can be added to a project



Proposed CMP Committee Schedule

CMP Committee Meeting 2: Discussion forum for effective strategies, priorities prior to development of draft CTP



CMP Committee Meeting 1: Review data analysis from the previous year; identify collaborative priorities

CMP Committee Meeting 3: Sharing information following the Fall CTP Tour; discussion for next year

- When do jurisdictions prepare priority letters?
- Will add priority letter projects to BMC Online CMP Tool.

Other Items

- **Include other stakeholders? Current members:**
 - Local transportation, public works, transit, emergency management
 - State transportation, transit, planning, police
 - FHWA
- **Process for integrating in CTP process**
 - Regional tour meeting
 - Coordinating priority letter projects
- **Identify a chair and vice chair for CMP Committee**

5. Next Steps

- **Summary of Action Items**
 - Continue discussion how local, BMC/BRTB, and state will use CMP project products
- **Schedule next meeting**

For More Information

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