#### Update on New UPWP Operations Task

#### Presented to: BRTB Technical Committee

#### Eileen Singleton October 4, 2016





## **Overview of New Task**

At the request of the Technical Committee, BMC staff has prepared and BRTB has approved a new task in the FY 2017 Unified Planning Work Program under the Operations Planning project.

#### Purpose of new task:

Identify potential congestion management strategies for corridors that have significant operational issues.

Congestion management strategies include items such as:

- geometric improvements
- adaptive traffic signal control and other low-cost operational strategies that could reduce recurring as well as non-recurring congestion
- transportation system management strategies that manage demand and reduce single occupant vehicle usage





### **Actions for This Task**

- 1. Collect data on system performance to define the extent and duration of congestion and determine the causes of congestion. This task will use state-of-the-art tools, technologies and data (e.g., from ITS, CHART, I-95 Corridor Coalition Vehicle Probe Project suite, and corridor modeling);
- 2. Identify congestion management strategies. Possible congestion mitigation strategies could include geometric improvements, adaptive traffic signal control, and other low-cost operational strategies that reduce recurring and non-recurring congestion;
- **3.** *Implement selected strategies*, including development of an implementation schedule and identification of possible funding sources for each selected strategy; and
- **4. Evaluate effectiveness** of the implemented strategy using similar performance data as collected in Task 1.



#### **Draft Schedule**

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	FY201	7											FY201	.8		
Tasks	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
1. Identify corridor																
a. initial identification																
b. meet with jurisdiction/state																
2. Collect system perf data																
a. collect data																
b. develop and run corridor model																
c. meet with project team																
3. Identify congestion management strategies																
a. identify potential strategies																
b. run corridor model with potential strategies																
c. select best strategies																
d. develop costs for selected strategies																
e. meet with project team																
4. Implement selected strategies																
a. develop implementation schedule																
b. identify funding sources																
c. implement strategies																
5. Evaluate effectiveness																
a. collect data																
b. run corridor model																
c. prepare report on before/after																
d. meet with project team																
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### **Corridor Selection**

- Considerations for corridor selection includes:
  - level of congestion
  - need for study of the corridor
  - data availability
  - connection to projects in the TIP and LRTP
  - inclusion in previous corridor studies looking at alternatives that improve access to jobs
  - included in the projects submitted by the public during the public outreach process for *Maximize2040*
- Close coordination between staff, jurisdiction, SHA
- Replicate the process in each jurisdiction





## Pilot Corridor -MD 140 Baltimore County

- I-695 to
  Carroll
  County
  line
- Approx.
  10 miles





# Characteristics of MD 140 in Baltimore County

- ADT
  - Slightly decreased since 2012; will increase once development is complete
- Crashes
  - 379 crashes in 2015
- Peak congestion:
  - Increased in corridor from 2013 to 2015
    - AM and PM peak, peak direction
    - weekends, 8 AM to 6 PM
  - Will increase before roadway improvements are completed (Source: Traffic Impact Analysis, Foundry Row, Revised July 12, 2013)
- Various projects in LRTP, TIP, and priority letter
- Bus service on MD 140, metro in corridor
- Significant economic development taking place in the corridor
- Concerns about mobility on I-795





#### **Crashes in 2015**

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#### AM Peak Speed Southbound 2013 & 2015 (speed limit in most of corridor is 40 MPH)

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į	2015 (every weekday)		Southboun 2013	nd ♥ 3 (every weekday)			
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			- 5mi -			5mi -	W NORTHERN PKWY
_			10mi		_	10mi	PAINTERS MILL RD
			15mi			15mi	MD-128/BUTLER RD



#### PM Peak Speed Northbound 2013 & 2015 (speed limit in most of corridor is 40 MPH)

Congestion Sca	n - Using IN	RIX data				Switch to < 🗎 🛞
New search	6:00 AM 12:00	PM 6:00 PM 12:0	Data Type		50 50 mpl 40 mpl 50 mpt	Display options
	2013 (every weekday	)		♠ Northbound ♠ 2015 (every weekda	<u>ay)</u>	
MD-140 W NORTHERN PKWY OLD COURT RD PAINTERS MILL RD MD-128/BUTLER RD	4 PM 	5 Ρ	м	4 PM 	5 PM	





# Weekends from 8 AM to 6 PM, 2013 & 2015







#### **Planned Projects in the Corridor**

- Baltimore County projects in the long-range plan:
  - A. MD 140 from Garrison View Rd to north of Owings Mills Blvd, widen from 4 to 6 lanes, remove bottlenecks.
  - B. MD 140 / Painters Mill Rd intersection. Intersection improvements, additional left turn lane, parallel access roads east and west of MD 140
- Baltimore County projects in the TIP:
  - C. Phase 1: Garrison View Rd to Painters Mill Rd. Year of operation: 2017. Widen northbound MD 140 to provide a third through lane and 5-foot raised median, with 5-foot-wide ADA-compliant sidewalks.
  - D. Phase 2: Garrison View Road to north of Owings Mills Painters Mill Road. Year of operation: 2020. Widen southbound MD 140 to provide a third through lane, with addition of left and right turn lanes and added width to better accommodate bicycles.
- 2015 Priority Letter
  - E. Request for funding of new interchange on I-795 at Dolfield Blvd to alleviate congestion due to increased development nearby (Owings Mills Metro Center Transit Oriented Development and Foundry Row Shopping Center)

Baltimore Metropolitan Council



#### **Status and Next Steps**

- Received approval from Baltimore County of pilot corridor selection
- Identified Baltimore County and state representatives to work with staff
- Begin work







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