

# Programming and Implementation of Strategies

## PROGRAMMING OF STRATEGIES

CMP strategies are implemented through the following methods:

- The CMP helps to generate studies for the Unified Planning Work Program (UPWP). For example, expressway and arterial bottleneck locations and congested corridors identified in the CMP data collection process have been selected to be the subjects of UPWP studies. Also, studies dealing with safety and operations at selected intersections are defined by applying criteria, including safety and congestion, to the entire list of intersections in the region in order to develop location priorities for detailed analysis.
- Recommendations from UPWP studies generated by the CMP are considered in project evaluations in the Long-Range Transportation Plan (LRTP) and the Transportation Improvement Program (TIP), in which improvements are recommended for funding. For example, GIS (Geographic Information Systems) analysis is conducted to identify which TIP projects contain CMP priority intersections, and this factor is included in the TIP prioritization process.
- CMP data are the primary source for the LRTP's needs assessment section. Specifically, freeway and arterial needs assessments are identified based on ranges of observed speeds and ranges of speed indexes developed by the CMP.

The congested corridors listed in Tables 7-1 and 7-2 have previously been studied by CTPS staff. Tables 7-3 and 7-4 (below) show the recommended strategies, which are based on a sample of past studies that, when implemented, could help relieve congestion for these corridors. The checklist displays the seven possible types of strategies that could be considered for each corridor. An X indicates that a strategy has already been studied.

The corridors displayed in Tables 7-3 and 7-4 have not been previously analyzed by MPO staff. Therefore, a quick analysis was conducted to see which of the seven strategies might be suitable for relieving congestion within those corridors. This was a preliminary analysis, and the suitable strategies may be subject to change depending on corridor conditions.

**Table 7-1  
Congestion Management Strategies Previously Analyzed for Congested Corridors: Arterial Roadways**

Corridor	Direction	From	To	Non-		Incident		Operations	Transit	Expansion
				TDM	motorized	Response*	ITS			
Alewife Brook Pkwy.	NB	Soldiers Field Rd. on-ramp	Route 2	X			X	X	X	X
Alewife Brook Pkwy.	SB	Route 2	Soldiers Field Rd. on-ramp	X			X	X	X	X
Route 107	NB	Route 16	Albert J. Brown Circle	X	X		X	X		
Route 107	SB	Albert J. Brown Circle	Route 16	X	X		X	X		
Route 114	EB	Palmer Ave.	Marblehead TL	X	X		X	X		
Route 114	WB	Marblehead TL	Palmer Ave.	X	X		X	X		
Route 129	EB	Route 1A	Ocean Ave.	X	X		X	X	X	
Route 129	WB	Ocean Ave.	Route 1A	X	X		X	X	X	
Route 1A	NB	Bell Circle	Oak Island Rd.	X	X		X	X		
Route 1A	SB	Oak Island Rd.	Bell Circle	X	X		X	X		
Route 1A	SB	Rotary	1st Bell Circle signal	X	X		X	X		
Route 28	NB	Highland Ave.	Assembly Sq. Mall	X	X			X		
Route 28	SB	Assembly Sq. Mall	Highland Ave.	X	X			X		
Route 3A	NB	Hingham TL	I-93 Interchange	X	X		X	X		
Route 3A	SB	I-93 Interchange	Hingham TL	X	X		X	X		
Route 60	EB	Newton St.	Trapelo Rd.	X			X	X		
Route 60	WB	Trapelo Rd.	Newton St.	X			X	X		
Route 3/3A	NB	Country Club Rd.	Billerica TL	X			X	X		X
Route 3/3A	SB	Billerica TL	Country Club Rd.	X			X	X		X

\*Incident responses were not addressed for these corridors as of February 2012.

(cont.)

**TABLE 7-1 (Cont.)  
Congestion Management Strategies Previously Analyzed for Congested Corridors: Arterial Roadways**

Corridor	Direction	From	To	Non- Incident		ITS	Operations	Transit	Expansion
				TDM	motorized Response*				
Route 138	NB	Park Ave.	I-93	X	X	X	X		X
Route 138	SB	I-93	Park Ave.	X	X	X	X		X
Route 4	NB	Route 2	Billerica TL	X	X	X	X		
Route 4	SB	Billerica TL	Route 2	X	X	X	X		
Route 109	EB	I-495	Birch St.	X		X	X	X	
Route 109	WB	Birch St.	I-495	X		X	X	X	

\*Incident responses were not addressed for these corridors as of February 2012.

**TABLE 7-2**  
**Congestion Management Strategies Previously Analyzed for Congested Corridors:**  
**Limited-Access Roadways and Expressway**

Corridor	Direction	From	To	TDM	Non- motorized	Incident Response*	ITS	Operations	Transit	Expansion
I-90	EB	Market St. overpass	Center St.	X	X		X	X		
I-90	WB	Center St.	Weston Border	X	X		X	X		X
I-93	SB	Braintree Split	Government Center	X			X	X		
I-93	NB	I-95	Braintree Split	X				X		X
I-93	SB	Braintree Split	I-95	X				X		X
I-95	NB	Winter St.	Route 3	X				X		X
I-95	NB	I-93	Route 30	X				X		
I-95	SB	Route 30	I-93	X				X		
Route 2	NB	Newtown Rd.	I-95	X			X	X		X
Route 2	SB	I-95	Newtown Rd.	X			X	X		X
Route 24	NB	Mazzeo Dr.	I-93	X					X	
Route 24	SB	I-93	Mazzeo Dr.	X					X	
Route 3	SB	Braintree Split	Exit 14	X			X	X		X
Route 3	NB	Exit 14	Braintree Split	X				X		X
Route 9	EB	Southborough	Brookline Ave.	X	X		X	X		X
Route 9	WB	Brookline Ave.	Southborough	X	X		X	X		X
Route 1/VFW Pkwy	NB	I-95	Centre St.	X	X		X	X	X	X
Route 1/VFW Pkwy	SB	Centre St.	I-95	X	X		X	X	X	X
I-95	NB	I-95/I-93 Split	Dedham St. overpass	X			X	X		
I-95	SB	Dedham St. overpass	Braintree Split	X			X	X		

\*Incident responses were not addressed for these corridors as of October 2012.

**TABLE 7-3**  
**Possible Solutions for Congested Corridors: Arterial Roadways**

<b>Corridor</b>	<b>Direction</b>	<b>From</b>	<b>To</b>	<b>TDM</b>	<b>Non- motorized</b>	<b>Incident Response</b>	<b>ITS</b>	<b>Operations</b>	<b>Transit</b>	<b>Expansion</b>
Route 119	NB	Pope Rd.	Route 2	X				X		
Route 119	SB	Route 2	Pope Rd.	X				X		
Route 127	EB	Essex TL	Route 128	X	X		X	X		
Route 127	WB	Route 128	Essex TL	X	X		X	X		
Route 140	NB	Maple St.	Foxborough TL	X	X		X	X		
Route 140	SB	Foxborough TL	Maple St.	X	X		X	X		
Route 145	EB	Boston TL	Revere TL	X	X	X	X	X		
Route 145	WB	Revere TL	Boston TL	X	X	X	X	X		
Route 16	EB	Concord St.	Capital St.	X	X		X	X		
Route 16	WB	Capital St.	Concord St.	X	X		X	X		
Route 1A	NB	Kingman St.	Market St.	X			X	X		
Route 1A	SB	Lynnway stop sign	Kingman St.	X			X	X		
Route 1A	NB	First signal	Hanson St.	X	X		X	X		
Route 203	EB	Harvard St.	I-93	X	X		X	X		
Route 203	WB	I-93	Harvard St.	X	X		X	X		
Route 203/ Jamaicaway	EB	Willow Pond Rd.	Forest Hills Rotary	X	X		X	X		
Route 203/ Jamaicaway	WB	Forest Hills Rotary	Willow Pond Rd.	X	X		X	X		

*(cont.)*

**TABLE 7-3 (Cont.)  
Possible Solutions for Congested Corridors: Arterial Roadways**

Corridor	Direction	From	To	TDM	Non- motorized	Incident Response	ITS	Operations	Transit	Expansion
Route 27	NB	Depot St.	Canton St.	X			X	X		
Route 27	SB	Canton St.	Depot St.	X			X	X		
Route 28	NB	Presidents Dr.	Riverside Ave.	X	X		X	X		
Route 28	SB	Riverside Ave.	Presidents Dr.	X	X		X	X		
Route 28	NB	Third St.	Twin City Mall	X	X		X	X		
Route 28	SB	Twin City Mall	Third St.	X	X		X	X		
Route 30	EB	I-90	Route 9	X	X		X	X		
Route 37	NB	Route 139	I-93	X			X	X		
Route 37	SB	I-93	Route 139	X			X	X		
Route 62	EB	Bedford-Concord TL	Burlington TL	X				X		
Route 62	WB	Burlington TL	Bedford-Concord TL	X				X		
Route 99	NB	Dexter St.	Shute St.	X	X		X	X		
Route 99	SB	Shute St.	Dexter St.	X	X		X	X		
Memorial Dr.	EB	Soldiers Field Rd.	Longfellow Bridge	X			X	X		
Memorial Dr.	WB	Longfellow Bridge	Soldiers Field Rd.	X			X	X		
Mystic Valley Pkwy.	EB	Auburn St.	Main St.	X				X		
Mystic Valley Pkwy.	WB	Main St.	Auburn St.	X				X		
Storrow Dr.	EB	Memorial Dr.	Leverett Circle	X				X		
Storrow Dr.	WB	Leverett Circle	Memorial Dr.	X				X		

**TABLE 7-4**  
**Possible Solutions for Congested Corridors: Limited-Access Roadways and Expressways**

Corridor	Direction	From	To	Non-TDM motorized*	Incident Response*	ITS	Operations	Transit	Expansion
I-90	EB	Cambridge St. Overpass	Toll plaza	X		X	X		
I-90	WB	Toll plaza	Exit 17 (Newton/Watertown)	X		X	X		
I-93	NB	Leverett Circle	I-95	X			X		
I-93	SB	I-95	Leverett Circle	X			X		
I-93	NB	Government Center	Braintree Split	X		X	X		
I-95	SB	Route 3	Winter St.	X			X		X
Route 1A/ Route 60	NB	Logan on-ramp	U-turn	X			X		
Route 1A/ Route 60	SB	U-Turn	Logan on-ramp	X			X		
Route 2	EB	Lake St.	Alewife signal	X		X	X		
Route 2	WB	Alewife signal	Lake St.	X		X	X		
Route 1	NB	City Square	Chelsea off-ramp	X			X		
Route 1	SB	Chelsea off-ramp	City Square	X			X		
Route 1	NB	I-93	Route 99 on-ramp	X		X	X		
Route 1	SB	Lowell St.	I-93	X		X	X		
Storrow Dr.	WB	Leverett Circle	Memorial Dr.	X			X		

\*Nonmotorized responses and incident responses were not addressed for these corridors as of October 2012.

## **STRATEGY IMPLEMENTATION**

Currently, the Boston Region MPO has no dedicated funding for the design and construction of recommendations that result from CMP-recommended studies funded through the UPWP. Instead, many elements of the CMP-defined UPWP studies have been implemented or progressed to design and construction by implementing agencies that have that authority. Typically, recommendations are of the management and operations type for arterial corridors, intersections, and freeway bottlenecks, many of them multimodal according to MassDOT's highway design manual, including principles of "complete streets" and livability. Short-term recommendations are often implemented through municipal or agency maintenance funds. Long-term recommendations are considered by implementing agencies for design and construction according to their priorities and in combination with other considerations.

A good way to promote the implementation of CMP recommendations is to "educate" the stakeholders, the decision makers, and members of the public about this process. The basis of the implementation of the Boston Region MPO's Congestion Management Process is the newly-formed CMP Committee in which stakeholders and staff have begun to collaborate and critique each other's recommendations about what solutions are best for the region. Once a consensus is reached, it will be easier to advocate for these projects to decision makers in the MPO and across the region.

In 2012, the Boston Region MPO Congestion Management Committee was formed. It consists of the following MPO members:

- MassDOT
- Massport (Chair)
- Regional Transportation Advisory Council (RTAC)
- City of Boston
- City of Everett
- City of Woburn