

## Which transportation system management & operations options were analyzed?

A planning-level analysis identified which Transportation Systems Management & Operations (TSMO) strategies supported the project's need and should be further evaluated. Because of the constraints of the existing bridges, shoulders, and physical constraints of the roadway, it would not be possible to retrofit the corridor with enough TSMO strategies to fully address the capacity needs of the corridor. While TSMO strategies would not work as stand-alone alternatives, they could help achieve an acceptable level of improvement in operations in combination with widening.

### Proposed to be carried forward into NEPA



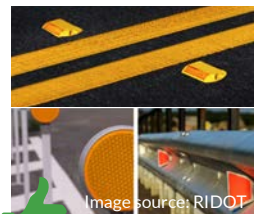
**Shoulder Lane Use**  
i.e. "Bus" or "Car on Shoulder"  
Shoulders are used as flexible travel lanes during rush hours



**Traveler Information**  
**Incident Management**  
**Road Weather Management**  
**Work Zone Management**



**Park and Ride**  
Provides parking for ride sharing and bus use



**Enhance Lane Markings**  
Improves driver experience



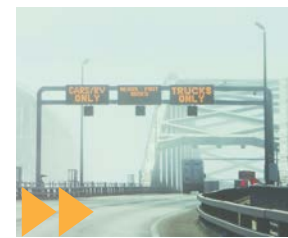
**Variable Speed Limit**  
Speeds adjusted to optimize traffic flow



**Accommodate Connected & Autonomous Vehicles**  
Uses technology to improve safety and operations

### Not reasonable for this project

*Why not? These managed lanes options (below) do not meet the Purpose & Need of the project without regional implementation. HOWEVER, any project constructed would be done in a manner not to preclude the implementation of a regional plan.*



**High Occupancy Vehicle Lanes**  
i.e. Carpool Lanes  
**High Occupancy Toll Lanes**  
Adds a lane for vehicles with more than 1 passenger or those willing to pay  
**Dedicated Truck Lanes**



**Congestion Pricing**  
Includes a toll that increases or decreases to control the number of vehicles



**Ramp Metering**  
Controls the number and pace of cars entering the freeway

*Why not? Some simulation models showed merging issues for general traffic.*



**Truck Platooning**  
Uses technology to allow multiple trucks to travel in a very tight formation