

## TRANSPORTATION SYSTEMS MANAGEMENT

Transportation systems management (TSM) involves managing and operating existing transportation facilities to maximize their capacity, building a safer and more efficient transportation system, and reducing the need for widening roadways or building new roadways to address congestion. VISION 2050 makes a number of TSM recommendations so that the Region's existing streets and highways are used as efficiently as possible.

### KEY RECOMMENDATIONS

#### ► Improve and expand freeway traffic management

Implement measures to improve the operational control, incident management, and advisory information on the regional freeway system. Some measures are already in place in some parts of the Region, and should be expanded and enhanced. Certain measures are not currently in use, or are not widely used, and should be considered for future implementation. The State Traffic Operations Center (STOC) in Milwaukee is essential to implementing freeway traffic management measures.

Operational control measures improve freeway operation during peak periods and incidents, by monitoring operating conditions and controlling traffic on and entering the freeway. Measures to expand and enhance include traffic detectors and freeway on-ramp meters. Measures to also consider include strategies that adjust the rate vehicles enter the freeway, lane use control to assist with incident management, active speed limit control in response to incidents, part-time shoulder use during rush hour, and lane restrictions for trucks during rush hour.

Incident management measures detect, confirm, and remove as quickly as possible incidents on freeways, and on freeway shoulders, including crashes, debris, and stopped vehicles. Examples include freeway service patrols, closed-circuit television cameras, freeway location reference markers, crash investigation sites, ramp closure devices, and alternate route designations.

Advisory information measures, described more on the next page, provide real-time information on current travel conditions to motorists.



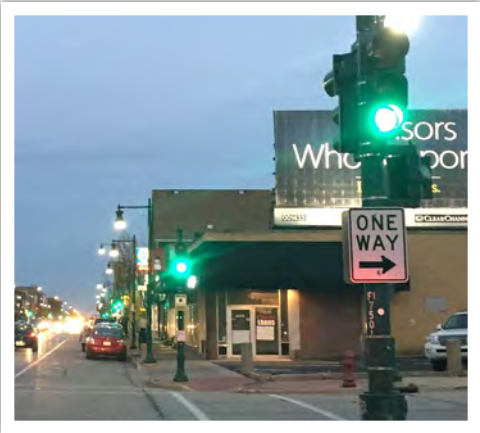
**Lane Use Control**

*Credit: WSP/Parsons Brinckerhoff*



**Part-Time Shoulder Use by Buses**

*Credit: Minnesota Department of Transportation*



**Traffic Signal Coordination**  
Credit: SEWRPC



**Bike Lane Striping Through an Intersection**  
Credit: Flickr User Sawyer Pangborn



**Parking Guidance Sign**  
Credit: City of Milwaukee

#### ► Enhance advisory information

Expand and enhance advisory measures that provide real-time information on current travel conditions to motorists. These measures include variable message signs (such as hybrid variable/static travel time signs), the WisDOT traveler information website ([www.511WI.gov](http://www.511WI.gov)), and partnerships to enable the exchange of traffic information and data that can be accessed via computers, mobile devices, and in-car navigation systems.

#### ► Improve and expand coordinated traffic signal systems

Improve existing coordinated traffic signal systems and expand such systems to all streets that are not currently coordinated and have traffic signals spaced every one-half mile or less. Coordinated traffic signal systems provide efficient progression of traffic along streets and highways, allowing motorists to travel through multiple signalized intersections without stopping. Approximately 1,200 of the 1,700 traffic signals in the Region are currently part of a coordinated signal system. Commission staff should work with State and local governments to document existing and planned arterial signals and develop recommendations for improving and expanding coordinated signal systems.

#### ► Improve arterial street and highway traffic flow at intersections

Implement intersection improvements to increase travel efficiency and improve safety on streets by adding two- or four-way stop control, roundabouts, or signalization; improving signal timing at individual signalized intersections; adding right-and/or left-turn lanes; adding bike lane pavement markings through intersections; or adding leading pedestrian intervals at signalized intersections.

#### ► Implement parking management and guidance systems in major activity centers

Reduce the congestion caused by drivers circling for parking in downtowns and other major activity centers by implementing or expanding parking management and guidance systems. These systems are currently in Downtown Milwaukee and at Bayshore Town Center in Glendale, and use digital signs to direct drivers to available parking spots.

► **Implement demand-responsive pricing for parking in major activity centers**

Improve parking availability and reduce traffic congestion in downtowns and other major activity centers by adjusting the price for on-street parking, parking lots, and parking garages throughout the day based on the parking demand in the area. If implemented correctly, at least one parking space on each block would be available at all times, allowing those who are willing to pay for premium parking spaces to do so, while parking rates on streets further from a destination are reduced. Motorists could access pricing information online and through smartphone apps, allowing them to find parking easier and faster.

### ADDITIONAL RECOMMENDATIONS

- Expand curb-lane parking restrictions as needed
- Develop and adopt access management standards
- Expand the use of emergency vehicle preemption
- Review and update regional transportation operations plan

## TRAVEL DEMAND MANAGEMENT

Travel demand management (TDM) involves using a series of strategies to encourage the use of alternative methods or times of travel, with the goal of reducing traffic congestion and vehicle emissions. VISION 2050 recommends that the State, local units of government, and private businesses pursue the following TDM strategies to encourage the use of alternative travel times or travel modes.

### KEY RECOMMENDATIONS

► **Enhance the preferential treatment for high-occupancy vehicles**

Continue and enhance the preferential treatment for high-occupancy vehicles (HOVs): transit vehicles, vanpools, and carpools. This involves providing queue bypass lanes for vanpools, carpools, and buses at metered freeway on-ramps, and providing preferential carpool and vanpool parking at businesses and destinations. Additional measures include transit signal priority systems and reserved bus lanes along congested surface arterial streets and highways, which are discussed in the *Public Transit* section.

► **Expand the network of park-ride lots**

Promote carpooling and the resultant more efficient use of the Region's transportation system by expanding the network of park-ride lots.



**Park-Ride Lot Served by Public Transit**  
Credit: SEWRPC