Transit Priority

Enhances transit services by giving transit vehicles added importance in transportation system operations.

TSMO
MARYLAND TRANSPORTATION SYSTEMS MANAGEMENT & OPERATIONS

TRANSPORTATION NEEDS ADDRESSED

- Capacity & Demand
- Travel Time
- Environmental Impact
- Mobility
- Reliability
- Multimodality
- Economic Development

HOW WILL THIS HELP?

- Reduces transit travel time and improves the reliability of the transit system, which in turn can increase ridership.

- Increased ridership means that more people can travel the same route in fewer vehicles.

HOW DOES IT WORK?

- Transit signal priority (TSP) uses automated vehicle location technology to request signal timing changes to increase the opportunity for transit vehicles to get through signalized intersections without stopping.

- Implementation of transit priority requires collaboration between transportation and transit professionals to design, operate, and monitor system performance.

COST MAGNITUDE

CAPITAL COST

OPERATION AND MAINTENANCE COST

WHEN TO CONSIDER THIS STRATEGY

- CORRIDORS WITH HIGH TRANSIT USE

- CORRIDORS WITH BUS ROUTES THAT HAVE INSUFFICIENT TRAVEL TIMES OR SCHEDULE ADHERENCE

- CORRIDORS THAT WOULD MOST BENEFIT FROM A SHIFT FROM VEHICLE TO TRANSIT USE

CONSIDERATIONS

+ TSP WORKS IN CONJUNCTION WITH THE BUS STOP LOCATIONS TO OPTIMIZE EXPRESS BUS OPERATIONS. THE TRANSIT AGENCY SHOULD HAVE INPUT IN THE DESIGN OF THE FACILITY AND THE TSP SOFTWARE PROGRAMMING.

+ MANY TRANSIT OPERATIONS CROSS JURISDICTIONAL BOUNDARIES. MULTI-AGENCY COORDINATION MAY BE REQUIRED.

+ TSP REQUIRES SLACK IN SIGNAL TIMINGS TO ALLOW THE REALLOCATION OF GREEN TIME AND MAY NOT BE VIABLE FOR ALL SIGNALS ALONG A CORRIDOR.

COMPLIMENTARY STRATEGIES

- CONNECTED AND AUTOMATED VEHICLE TECHNOLOGY

- BUS ON SHOULDER

- SMART SIGNALS

- TRAFFIC SIGNAL COORDINATION

MDOT MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION