

CDTA Transit Signal Priority Fact Sheet

What is TSP?

Traffic Signal Priority (TSP) also known as Transit Signal Priority, offers buses priority in real time by extending the green and limiting the red traffic signal phases at certain intersections along the NY Route 5 corridor. Priority is based on specific conditions, such as passenger load and schedule adherence.

Where is TSP?

There are 66 signalized intersections along the NY Route 5 corridor. TSP is equipped at 45 of these intersections covering both the east and west bound directions. Additional corridors, such as Wolf Road, Western and Washington Avenues, will be considered for TSP at a later date.

What routes will be offered TSP?

Although all of CDTA's fleet is equipped with TSP equipment, Route #905 vehicles will be the only buses programmed to activate TSP. Routes #1 and #355 will be considered at a later date.

How does it work?

The system will operate transparently and will be invisible to the driver. The buses will use GPS and odometer distance calculations to automatically request TSP as it travels along the Route 5 corridor. Other variables used for granting green extension include pedestrian activity, cycle lengths and the number of traffic signal phases just to name a few. As a result, the driver and passenger will be unable to detect TSP in action due to the complex set of variables used to calculate the exact priority for each bus. CDTA staff will gauge the effectiveness of TSP toward reducing travel times and improving on-time performance along the corridor by utilizing various reporting options.

Where does the bus request TSP?

On average, buses request TSP upon reaching 800 feet of the approaching intersection. At certain locations, the distance can be as large as 2000 feet and as small as 50 feet.

How do we know it is working?

Various reporting options will be available to CDTA for tracking the functionality and effectiveness of TSP. These reports will stem from our existing mobile data communications system, INIT-Innovations in Transportation, and from the central systems of the various municipalities where TSP is in operation. This includes the NYS DOT, the City of Albany and the City of Schenectady.

What impact, if any, will a signal outage have on the system?

If the traffic light is dark or in "flasher mode", then there will be no TSP priority received.

Will there be additional TSP installations along the route 5 corridor?

Traffic signal installations under consideration include the site of the Albany OTB and in front of the new Mansion Square Mall in Niskayuna. At both locations, TSP will be included as part of the final specifications for installation.

