

Improving Bus Speed & Reliability with Transit Signal Priority



City of Boston and MBTA partner with LYT and CTI to implement in order to **reduce travel time during peak hours by 27%**.

MBTA needed a solution that provided valuable visuals to prove transit signal priority works in their historic and highly populated community. LYT.transit provides perfectly timed green lights citywide with performance metrics to prove it. As described in the challenges, intelligent transit signal priority has been needed in Boston for some time due to increased population, aging infrastructure, and a need to reduce environmental effects.

With Boston's TSP Policy and customized ATMS system, MBTA looked to LYT for a pilot to prove the transit signal priority solution could work within their tailored means. This proof of concept concentrated on (1) can our modern system integrate with their existing systems

Challenges

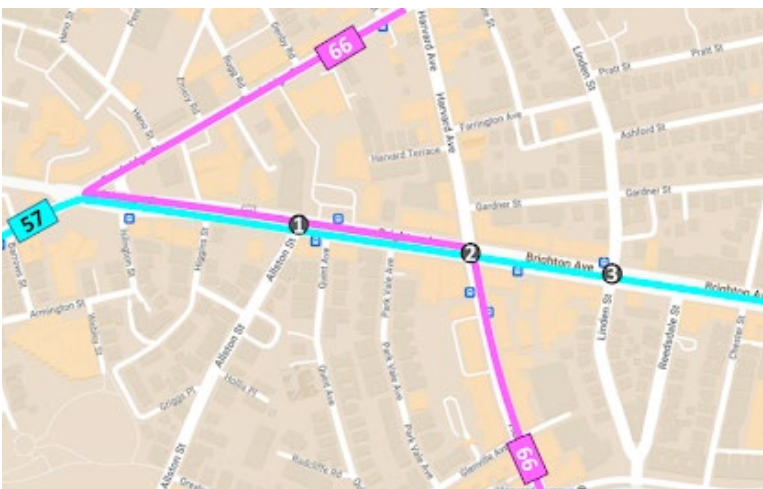
- Customized ATMS System Limiting Interoperability
- Challenges associated with adapting to new technology quickly
- Increasingly populous area with a historic landscape
- Previous TSP solutions purchased have not provided insight into proven functionality

Solution

[LYT.transit](#)

Results

- 21% reduction in daily red light delay, translating to over an hour of time saved daily
- 27% reduction in travel time during peak travel times
- Over 200 gallons of fuel saved per month
- 2 metric tons of CO2 saved per month
- 385 daily trips prioritized



MBTA Customer Success Story

and (2) once integrated, what lessons could be learned further improve bus priority in the City of Boston. The importance of the systems integrations is that it is a one to many approach. With a successful approval, all networked traffic signals can now receive intelligent TSP without new equipment at each intersection.

LYT.transit and the Travel Analytics Portal allows the MBTA and the City of Boston to witness in real-time their transit buses moving at the speed of LYT. With optimized green lights, transit buses are moving through the three intersections without the need to waste time, fuel, or emissions to get to their destination. All the while, through our solution, viewers can easily log in (single sign-on available) and see just how well TSP is working throughout the city.

“We received good results from LYT’s data, and we were able to validate those results using our own internal data sources. The results of the pilot were promising and we hope to expand TSP to more intersections in the future.”

Benjamin Silverstein, Transit Analyst, MBTA

Additionally, transit bus drivers directly benefit from on-time performance improvements since this guarantees their breaks and layover times. This leads to



This will add to the reliability benefits already felt by riders on Routes 57 and 66 every day, improve bus service for the community and bring riders to their destinations more quickly.”

Phillip Eng
General Manager and CEO, MBTA

higher job satisfaction that directly impacts the quality of public transit services. LYT.transit provides a comprehensive solution that addresses the critical challenges drivers face, from traffic unpredictability to tight schedules. By optimizing routes, saving time, and ensuring better break management, LYT.transit significantly enhances the daily experience of transit bus drivers, leading to a more efficient and happier workforce.

Results like these have been replicated at other peer agencies. They can be scaled across the MBTA service area by increasing LYT.transit’s footprint to more signalized intersections within the City of Boston. As entire routes are prioritized, the performance effects of LYT.transit are compounded as the time between bus stops is truncated, leading to higher ridership satisfaction and trust.

See the LYT in your city today! Schedule a personalized demo to see how LYT products can benefit your community with safe and efficient solutions.

Visit lyt.ai to learn more.

LYT.