



DEAR BOSTONIANS,

Summer Street is a vital corridor to the City of Boston, connecting two of the city's largest employment hubs and the South Boston Neighborhood, providing critical port and maritime access, and hosting some of our largest hospitality venues. Summer Street is also a center for growth with thousands of new jobs and residents expected along the street in the years ahead. Safety, multimodal, and freight connectivity improvements are long overdue on Summer Street, with improvements first proposed in Go Boston 2030, the city's Transportation Vision and Action Plan, in 2017. With its long standing congestion and safety challenges, we know the street cannot support the Seaport's continued growth and economic vitality without changes that allow it to safely move more people and goods in a limited space.

A pilot approach allowed the City of Boston Streets Cabinet (Streets) and its partners at the Massachusetts Bay Transportation Authority (MBTA) to test potential changes, including reconfiguring the street, adjusting signal timing and adding a dedicated bus/truck lane to determine what would best support the complex and varied uses of the corridor. Throughout the pilot, we solicited feedback from residents, businesses, and other stakeholders, and collected extensive before-and-after data.

We found ways to improve safety and to encourage more sustainable transportation choices through the Seaport. The pilot saw a 43% increase in biking trips and 73% reduction in extreme speeding. We measured congestion and learned that the corridor can support a reallocation of road space and a reduction in general vehicle lanes without dramatically worsening travel times. However, the data and the feedback also demonstrated that the dedicated bus lane did not adequately serve its intended purpose. Use of temporary materials, lack of enforcement, and infrequent service resulted in marginal benefit for bus riders. Close to 2,500 people responded to the Summer Street Pilot survey, sharing in many cases their frustrations with blocked bus lanes, crosswalks, and congestion. We held multiple focus groups with stakeholders. Based on the analysis of this data and feedback, we have decided to remove the dedicated bus lane markings, though we will keep the successful safety improvements such as pedestrian-friendly signals and bike lanes.

The bus lane violation data also indicate a clear need to address the legal barriers to automated bus lane enforcement.

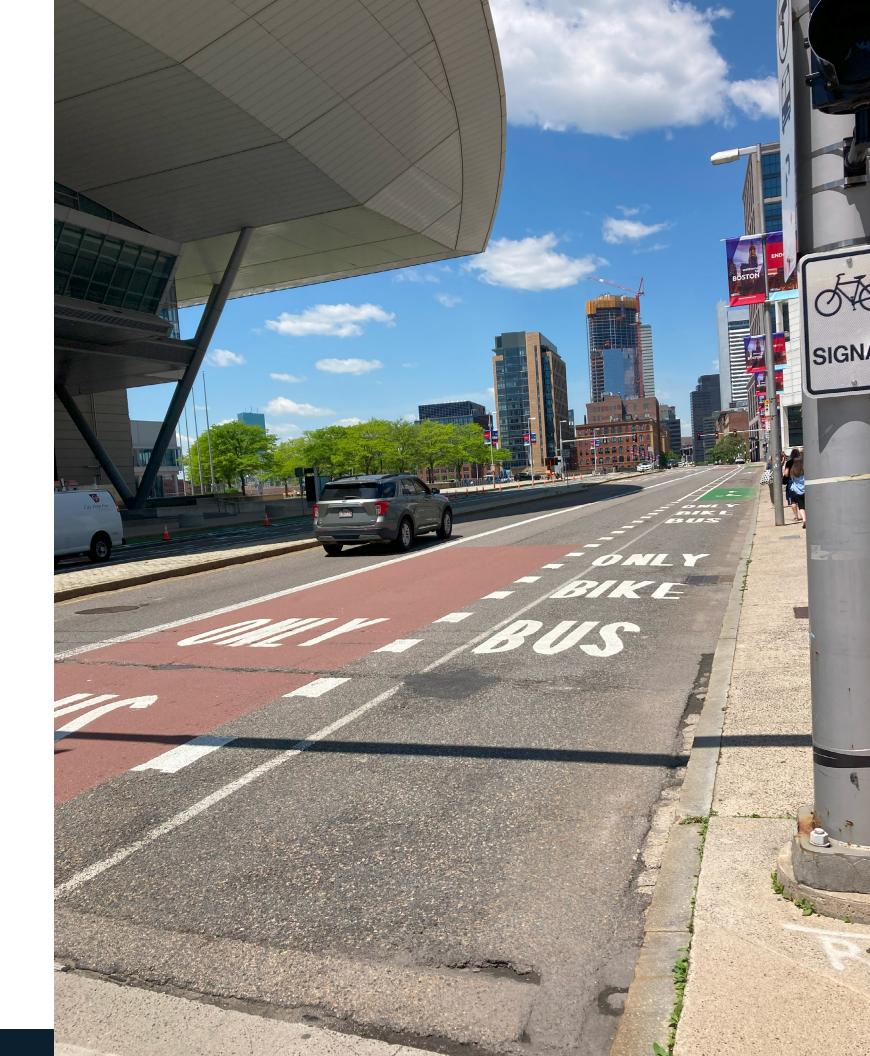
This pilot has taught us a great deal. Though we have determined that the current volume of transit does not support a dedicated bus lane, we know that through the Bus Network Redesign, there will be much more bus service on Summer Street in the future. As Summer St becomes an increasingly important transit corridor, we expect to revisit potential approaches to bus priority building on what was learned from this pilot to inform future designs.

Bus lanes remain an essential tool in our toolkit to connect our neighborhoods, support economic growth, and expand fast, reliable transit at low cost. We will continue to prioritize bus lanes along corridors with high bus ridership where supported by technical analysis and on-the-ground learning.

The City remains committed to improving Summer Street for everyone, especially those walking, biking, and riding transit to promote sustainable growth and a better quality of life in the Seaport, and are excited to continue the conversation with residents in the future.

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Jascha Franklin-Hodge Chief of Streets



EXECUTIVE SUMMARY

PILOT OVERVIEW

The Summer Street Pilot launched December 4, 2023 to improve mobility, safety, and connectivity along Summer Street between South Station and East First Street in South Boston. The pilot included a dedicated bus/truck lane, protected bike lanes, and signal timing changes to improve walkability and traffic operations. A pilot approach allows the City of Boston Streets Cabinet and Massachusetts Bay Transportation Authority (MBTA) to evaluate roadway changes, collect feedback, and iterate on the design before identifying a preferred, long-term configuration.

Summer Street is an important corridor connecting two of Boston's largest employment hubs - the Seaport and Downtown Boston. The Seaport is the fastest growing neighborhood in Boston attracting residents and visitors alike as a place to live, work, shop, and play. Enhancing walking, biking, and transit options is essential to support sustainable growth and manage increasing congestion in the area.

We chose Summer Street for the pilot because it was not meeting the needs of people walking, biking, riding transit, or driving. Bus service was often slow and unreliable. There were missing links in the bike network. Traffic congestion during peak hours slowed access to and from Conley Terminal and Marine Park. Drivers speeding during off-peak hours created multimodal conflicts and decreased the safety for everyone.

PILOT GOALS AND RESULTS

The Summer Street Pilot successfully encouraged more people to bike, providing South Boston with a safer, all ages and abilities bike connection - key for future growth. Despite significant noncompliance and safety-oriented signal adjustments that slowed traffic operations, the pilot saw marginal improvements to bus service. Vehicle traffic and congestion levels varied greatly by time of day, with some longer travel times during peak periods and in peak directions.

The biggest challenge with the pilot were the violations of the dedicated bus/truck lane, with drivers frequently using the exclusive lane to bypass traffic at busy intersections and at peak times.

The pilot demonstrated positive safety benefits for pedestrians, cyclists and drivers with limited negative impacts to general traffic. The temporary materials used for the bus lane, lack of enforcement, and increased signal delay at key intersections resulted in no clear benefit to bus riders. While these issues could be addressed in a future project, the current limited service and ridership levels along the corridor do not justify continuing the bus lanes in their current configuration.



ENABLE SUSTAINABLE MOBILITY



Bus Travel Time

Marginal transit travel time improvements to between Atlantic and Congress streets and the Convention Center and East First Street



Bike Volume

43% increase in all-day ridership



Station Activity

Bikes checked out and returned Bluebike stations within a 1/3-mile of the Summer Street Pilot study area

39% increase

20% systemwide increase



IMPROVE SAFETY FOR PEOPLE BIKING AND WALKING



Increased Protection

Traffic signal changes, including an exclusive walk and bike phase, and protected bike lanes reduce conflict between vehicles and people walking or biking to protect lives and prevent injury and death.



73% decrease in extreme speeding (over 40 mph)

26% to 8% vehicles traveling over 40 mph



ACCOMMODATE ECONOMIC ACTIVITY



Connection

Protected bike lanes make it easier for more people to connect and shop in the Seaport fostering more economic activity and vitality.



Congestion

Repurposing a lane for buses/trucks had less impact than expected, with traffic volumes steady and frequent violations of the dedicated lane by drivers bypassing traffic.

PILOT FEEDBACK

2,500

people weighed in on the pilot sharing feedback mostly consistent with the pilot results



Bikers report feeling safer and more comfortable.

Walkers and transit riders have mixed feelings on how well the dedicated bus/truck lane and changes to traffic operations improved transit and walking conditions.



Drivers are most frustrated by the changes, often blaming the bus lane for congestion or queues rather than other traffic changes.

PATH FORWARD

Based on these results and feedback, the City will remove the dedicated bus lane markings, though will keep the successful safety improvements such as the signals and bike lane striping.

The City is committed to advancing safety improvements along Summer Street. The multimodal corridor improvements, including targeting signal timing changes, succeed in reducing conflict and increasing comfort for people walking, rolling, or bicycling. The City is also committed to improving the experience for transit riders in the Seaport and South Boston.

Through the Bus Network Redesign, we anticipate a much higher volume of bus traffic on Summer Street in the future, and we are now prepared to move quickly when bus frequencies increase to a level that supports a dedicated bus lane. The Streets Cabinet will re-engage the community at a future point when MBTA service frequency improves and will be conducting another community process about the cross-section design.

WHAT IS THIS PROJECT?

The City of Boston Streets Cabinet and Massachusetts Bay Transportation Authority (MBTA) launched a six-month evaluation period for the bus/truck lane pilot aimed at improving the traveling experience for all on Summer Street in South Boston.

SUMMER STREET MULTIMODAL CORRIDOR IMPROVEMENTS INCLUDED MORE THAN THE PILOT LANE:



to improve the reliability of bus service. Trucks are permitted to use the bus lane to accommodate heavy truck traffic from Massport.



2 IMPROVED PEDESTRIAN EXPERIENCE

with adjusted traffic signal timing at several key intersections.

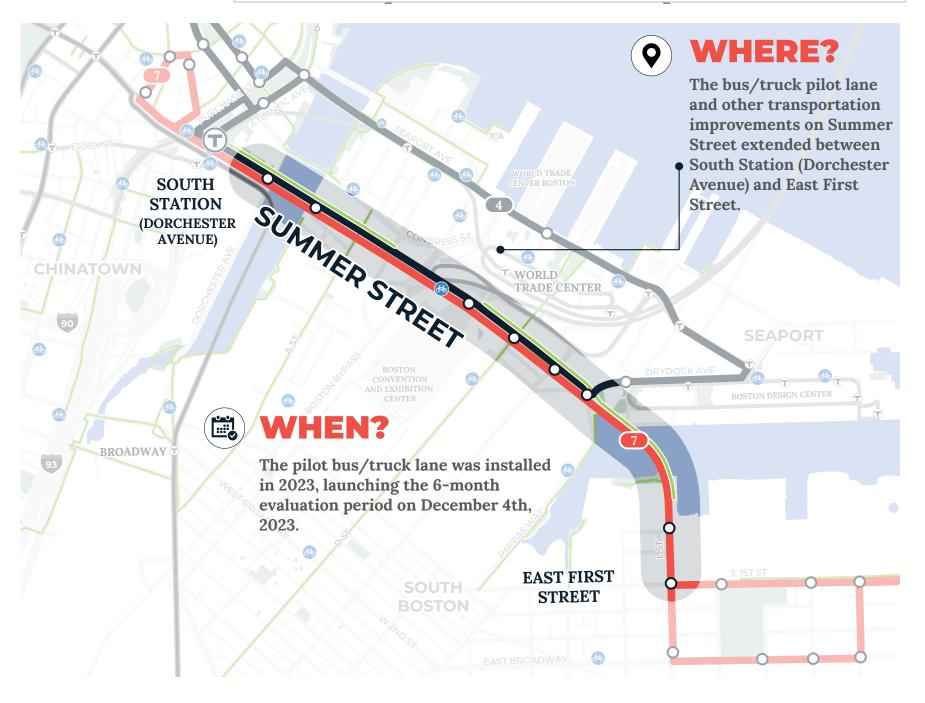


PROTECTED BIKE FACILITIES

for low-stress and safe connections between South Boston and Downtown Boston. Gaps were filled between existing infrastructure.



Summer Street Bus/Truck Pilot Program MBTA Bus - Route 7 MBTA Subway MBTA Silver Line Bicycle Infrastructure MBTA Silver Line Bluebike Station MBTA Bus Stop MBTA Bus Stop



MULTIMODAL CORRIDOR DETAILS

PILOT BUS/TRUCK LANE

The pilot included converting the outer lane in each direction to an exclusive bus/truck lane, with shared right-turns at most intersection locations. Corridor cross-section adjustments differed slightly along Summer Street between Dorchester Ave and East First Street depending on the width of the street in each intersection-tointersection segment. For example, at D Street an inbound right-turn lane and outbound left-turn lane is separate from the bus/truck lane headed through the intersection.

The pilot intentionally included temporary low-cost materials compared to other bus lanes installed across the city during the evaluation period, so as to allow future improvements or design changes to be completed more easily. Community members and stakeholders expressed that the lack of red paint along certain corridor segments caused confusion for drivers.



The corridor improvements implemented alongside the pilot also included reanalyzing the traffic signal operations and timings at every signalized intersection between Dorchester Avenue and East 1st Street to support longer and/or sometimes exclusive pedestrian bicycle phases where people could cross the street without conflict from vehicles. Rightturns on red were prohibited at all signalized intersections; based on feedback from stakeholders this caused additional delay to motor vehicles, however provided separation between turning vehicles and pedestrians. These changes are consistent with the most recent federal standards, called the Manual of Uniform Traffic Control Devices.





PROTECTED BIKE LANES

Curbside separated bike lanes in both directions were added concurrently between West Service Road Extension and Pappas Way/Drydock Ave to expand existing lanes installed in 2018 across the corridor and fill remaining gaps through the Seaport. The addition of the bike lane meant removing some on-street parking spaces in certain locations northwest of West Side Drive. Between W. Service Road Ext and West Side Drive, construction related to 400 Summer Street restricted right-of-way width to accommodate inbound separated bike lanes until construction ends.

MID-PILOT UPDATES

Midway through the 6-month pilot, in coordination with key stakeholders, the Streets Cabinet made several updates:

- Minor updates to signs and striping to help clarify rules
- Bus stop striping improvements to add clarity to stop locations
- Striping changes in coordination with Boston Convention & Exhibition Center (BCEC) to better accommodate pick up/drop offs
- Striping changes to Pumphouse Road / Summer Street in coordination with MassPort
- A new bus stop at Summer Steps

HOW HAS THIS WORKED IN OTHER AREAS OF THE CITY?

Bus/bike lane on BRIGHTON AVE resulted in:





increase of bus passengers during morning peak times



of bicyclists reported feeling safer in the shared bus/bike lane

Bus/bike lane on N. WASHINGTON ST resulted in:



supported a permanent



increase of bus passengers during evening peak times



Summer Street bus passengers did not see a significant reduction in travel time during average peak period trips (less than a minute during the AM and PM periods). Along with seasonal traffic patterns and signal timing adjustments, the pilot lanes contributed to increased congestion on the street. This does not pass our threshold to be made permanent at the moment.

20-25% reduction in travel time during peak congestion (7:30 AM to 8:30 AM), saving bus riders at least an hour each week on the AM bus

WHY THE SUMMER STREET PILOT?

Summer Street is a key corridor for the City Point, Fort Point, Seaport, and Downtown neighborhood populations to directly access jobs, shopping, dining, appointments, recreation, and their homes. As such, Summer Street serves many trip purposes at all times of the day.

Previous citywide and neighborhood planning efforts identified existing and future challenges to the function and experience of Summer Street.

PRE-PILOT PEAK PERIOD CONGESTION

Traffic congestion delayed Port of Boston traffic, BCEC access, and transit service. About 43% of Spring 2023 traffic on the Summer Street bridge over the Reserved Channel consisted of vehicles that did not start their trip in South Boston. Severe delay frequently presented on the Reserved Channel Bridge and heavy delay around Drydock Ave and in Fort Point, with slower speeds southeast of D Street in both directions. Prior to the pilot, a Fall 2023 AM rush-hour trip inbound to Downtown could take more than 27 minutes at 8am on the worst day.



March 2023 vehicle delay map from "before" showing congestion and bicycle conditions

DISCONNECTED BIKE LANES & UNSAFE INTERSECTIONS

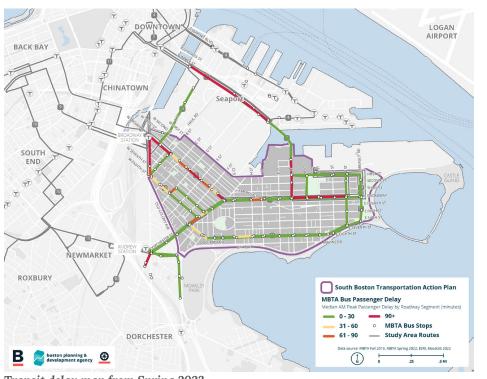
A lack of consistent bike lanes along the corridor forced people bicycling to mix with cars. Signal timing caused conflict between people walking, bicycling, and drivers turning at intersections. According to Boston's Vision Zero data, between March 2018 and March 2023, there were 37 reported crashes along Summer Street that resulted in at least one injury involving people bicycling or walking, accounting for 41% of the 90 fatal and injury crashes on this stretch of roadway.

HIGH VEHICLE SPEEDS

Multiple wide traffic lanes encouraged driving at high speeds when non-congested, creating an unsafe and uncomfortable environment for all road users. Vehicle speeds reached over 70 MPH during off-peak hours, and speeds exceeded 50 MPH even during peak hours. Approximately 1 in 4 vehicles were traveling over 40 MPH across the day.

FREQUENT DELAYS & OVERCROWDING

During the AM Peak, Route 7 faced the highest concentration of severe delays of any South Boston routeand some of the highest passenger delay among the city. Prior to the pilot, buses faced an average of over 2 minutes of delay on the 1.5-mile corridor, increasing travel times by over 50%. During the worst periods of congestion, riders faced 3-4 minutes of delay on Summer Street.



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[The 7] is constantly overwhelmed and puts the bus drivers and patrons in dangerous positions.

- South Boston resident

-77 ·

Transit delay map from Spring 2023

FUTURE GROWTH

There is a necessity to prepare for future expected growth in the Seaport and South Boston, prime the street for the MBTA's Bus Network Redesign implementation of the T7 with bus priority from Sullivan Square through Downtown and the Seaport, and align with Go Boston 2030.

PILOT PROGRAM GOALS

With these challenges in mind, the Summer Street Multimodal Corridor Pilot sought to achieve several important goals:



Enable Sustainable Mobility

with a focus on better conditions for buses and bikes



Improve Safety for People Bicycling and Walking

with a focus on improved infrastructure



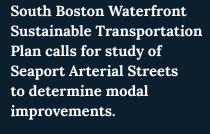
Accommodate Economic Activity

with improved Port/Maritime access and mobility options for people who live and work here.

PROJECT BACKGROUND



2016 2017 2018-2020 2021-2022 2023 2024



- Go Boston 2030 recommends bike lanes on Summer Street and bus priority for the North Station Seaport Rapid Bus; Go Boston 2030 was based on extensive community outreach including constituents and stakeholders throughout Boston and prioritization was weighted based on feedback received.
- MassPort convenes a meeting with Massachusetts Department of Transportation (MassDOT), Mass. Convention Center Authority, City of Boston, and consultants to discuss bus rapid transit options for South Boston with the group determining that a bus/truck lane on Summer Street should be studied.
- Design concepts for Summer Street bus/bike/truck lanes explored by MBTA, Boston Planning & Development Agency (BPDA) and Streets Cabinet and discussed with stakeholders
- Seaport Transit Strategic Plan launched by BPDA
- Streets Cabinet completes the successful one block inbound bus lane on Summer Street near Federal Reserve Building, saving up to 4 minutes during peak periods.
- Summer Street Crossroads
 Project in Fort Point completed
 by Public Works Department
- City of Boston allocates capital funding for Summer Street Phase 2 design work

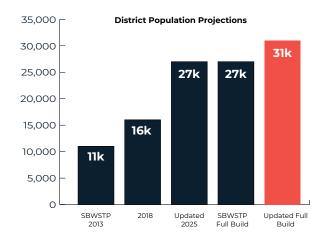
- Pilot explored in Seaport Transit Strategic Plan public and stakeholder meetings
- MassDOT awards grant to City of Boston for Summer Street Pilot to implement bus/truck lanes
- Streets Cabinet begins public engagement, including office hours, open houses, flyering, and civic association meetings
- Streets Cabinet conducts stakeholder meetings with MassPort, MassDOT, BCEC, and Marine Park Business Association
- Installation postponed during Sumner Tunnel closure
- Material shortage delays the full pilot lane installation
- Cypher Street closes to traffic in September for reconstruction
- Pilot officially launches
 December 4th; during the Pilot
 BTD made several adjustments
 to provide clarity and reliability
 improvements to specific
 elements of the pilot.

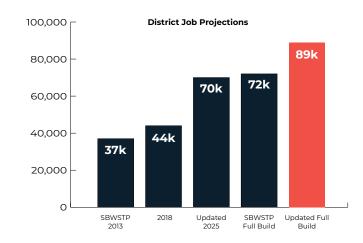
- Streets cabinet continues stakeholder and public engagement, including a community survey, stakeholder meetings, flyering, and civic association meetings
- Streets Cabinet makes adjustments to signage and roadway design in coordination with community stakeholders
- Pilot data collection
 period ends in June,
 with analysis of results
 presented at open houses
 during the summer
- Cypher Street reopens to traffic in July after reconstruction
- Decision to put pilot on hold in September

FUTURE GROWTH

ANTICIPATED RESIDENTIAL AND EMPLOYMENT GROWTH IN SOUTH BOSTON

By 2030, the South Boston Waterfront will have roughly **31,000 residents and 89,000 jobs**, putting pressure on the transportation network. This population is equivalent to Hyde Park and larger than Allston, Roslindale, Back Bay, or Mattapan. The amount of employment is second-only to Downtown and more than the Back Bay.

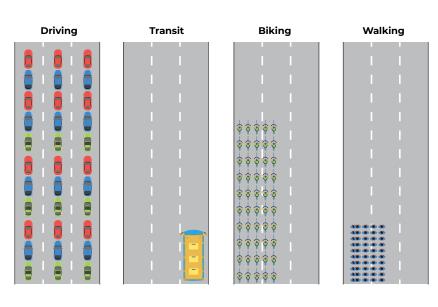




Within 1/3 mile of the Summer Street corridor, there are 8.7 million square feet of proposed development. Of these, over 8.2 million square feet (more than 94%) are already approved or under construction, including more than 1,500 residential and hotel units. This increase in development means over 78,000 likely new trips per day, with Summer Street as a major outlet for this travel. Most trips are projected to be by transit, biking, or walking, but to encourage this, will require bus reliability and safe infrastructure.

There is only so much available space on our roads and there is no additional roadway capacity on the highways.

50 people traveling on different modes take up a different amount of space. Using the space more efficiently will help our growing population navigate through the neighborhood quickly and safely.



MBTA'S BUS NETWORK REDESIGN WILL RESHAPE SOUTH BOSTON'S TRANSIT ROUTES

The MBTA is updating their bus network to better match service to where people live, work, learn, and play. In February 2023, the MBTA published the Bus Network Redesign Final Report. Phase I implementation of the redesigned network will begin December 2024, and continue over the following five years. The City of Boston is working in close coordination with the MBTA's Bus Network Redesign process.

T7 HIGH FREQUENCY ROUTE

The MBTA plans to transform Route 7 into a new High Frequency Bus Route, the T7, running from City Point to Sullivan Square via the Summer St corridor. The T7 is planned to run every 15 minutes or less all day, 7 days a week, with 8-minute headways during peak hours.

This route improves travel times and reduces the number of transfers needed for people going to/from South Boston or South Station to Downtown, North Station, and Charlestown. This means simpler access to all North Station's connecting commuter rail lines, the Orange Line, the Blue Line, and the new T109 and T101 routes from the MBTA. This improved route is a crucial missing regional transit connection, but it will only transform regional mobility with high-quality transit priority infrastructure.

BUS LANES CAN SUPPORT EXPANDED CAPACITY AT CHEAPER COST PER MILE THAN RAIL



Along with the T7, a new connection from Brookline Village to the Seaport via Roxbury Crossing, Nubian Square, Andrew Square, and D Street will operate at least every 15 minutes 7 days a week

Between now and 2030, there are limited options for additional transportation infrastructure in the Seaport to accommodate anticipated growth. Additional highway capacity would mean displacing buildings, a new tunnel under the harbor, or introducing some form of congestion pricing at the state level.

Bus lanes are a cost-effective method to expand capacity and increase reliability for a public transit route. Bus lanes are quicker and cheaper to install than rail, and can be altered significantly easier. Importantly, riders often are able to experience the benefits of bus lanes sooner: installation times can be as short as a couple of days of overnight work.

With sufficient compliance, riders experience less congestion through their ride, less delay with a steady flow through the lane, and more reliable service as buses can circulate and adhere to scheduled times without traffic hindering them.

The cost to install a bus lane is often 25 times cheaper than installing a rail system and can include such municipal upgrades such as new traffic lights, roadway improvements, stop relocation, and repainting lines. Bidirectional bus lane design and installation costs \$1 million per mile and up to \$20 million per mile for center running bus lanes. The 2022 Green Line Extension cost \$530 million per mile.

HOW WAS THIS PILOT EVALUATED?

The Streets Cabinet and MBTA monitored the performance of the Summer Street Pilot for six months from its launch in December 2023 through June 2024 via both quantitative and qualitative metrics. We evaluated changes in bus, truck, auto, bicycle, and pedestrian activity. In addition, community and business feedback was collected through a public survey, open houses, focus groups, and intercept interviews.

MONITORING PLAN

Data was collected prior to the pilot in the Fall and Winter 2023 and during the pilot in Winter 2024 and again in Spring 2024. The results of the pre-pilot data collection were compared with the data that was collected during and near the end of the pilot to determine the pilot's effectiveness.

MULTIMODAL TRAFFIC COUNTS

Multimodal traffics counts were conducted at every Summer Street intersection twice before the pilot and twice since the pilot launch by third-party vendors using strategically placed cameras and automated traffic recorders:

PRE-PILOT

POST-PILOT LAUNCH

Jan 26th & 31st 2023 October 25th & 26th 2023

Jan 24th & 25th 2024 May 1st & 2nd 2024

Several dates for counts aligned with a large event hosted at the Boston Convention and Exhibition Center, so that the Streets Cabinet could understand the impact of event activity. Traditional traffic counts capture:

- Vehicle, truck, bicycle, and pedestrian volumes by transportation mode for every 15 minutes of the day between 7am and 7pm
- Number of vehicles traveling at different speeds by direction (at two locations) for every hour of the day
- Average vehicle speed by hour
- Top vehicle speed recorded
- Number of vehicles, by classification, by direction for every hour of the day (to also help determine lane compliance)

LOCATION-BASED SERVICES DATA

Location-Based Services Data, including traffic speed, congestion level, and travel time information, is collected by several data brokers, such as Waze, Streetlight, TomTom, Google, and Inrix. Methodologies and available data vintages vary slightly between vendors. For example, Streetlight, Replica, and Inrix do not yet have linked origin-destination data covering dates since the pilot launched. A mix of these sources supported evaluation of changes in travel time across the pilot corridor.

The Streets Cabinet also coordinated with the MBTA to receive seasonal transit performance data between Fall 2019 and Spring 2024 to understand changes over time and seasonal variations for the following metrics:

- Ridership by direction
- Stop-level ons and offs
- Route and stop-to-stop runtime information for the median trip and worst 10% of trips, by time period
- Delay and reliability for the median trip and worst 10% of trips

OUTREACH & OBSERVATIONS

Three open houses, three neighborhood association meetings, conversations with six focus groups representing local non-resident stakeholders, and dozens of posters distributed throughout South Boston supported the project team in receiving feedback from the public on the pilot. See Engagement section for more details. Project team members conducted direct observation of the roadway on twenty-eight separate occasions.



ENFORCEMENT

On May 1st and 2nd, Boston Police Department officers conducted concentrated enforcement of the bus/truck lane to issue 51 tickets and multiple verbal warnings to drivers for violations.



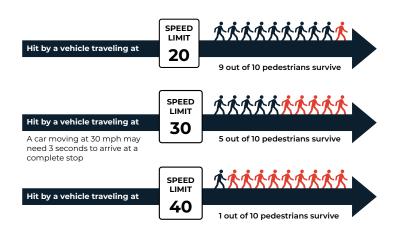
HOW DID THIS PILOT IMPROVE SAFETY?

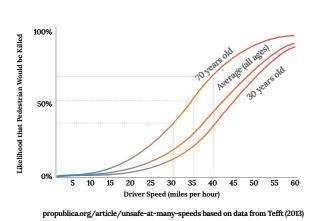
Vision Zero Boston prioritizes safety and takes a people-first approach to transportation and community building. Most trips in the City of Boston are made by people on foot, bike, or transit. Everyone, including those choosing to drive vehicles, benefits when our transportation systems are safer for the most vulnerable road users.

Vision Zero is not simply a proclamation - it is a proactive commitment to eliminating deaths and serious injuries on our streets. Thoughtful reallocation of road space by adding dedicated bike lanes, adding dedicated bus lanes, creating safer crossings, and other strategies can calm speeding traffic. For people walking, biking, and driving, the chance of being killed or severely injured in a crash greatly increases with vehicle speeds.

TRAFFIC CALMING AND PEDESTRIAN INJURY

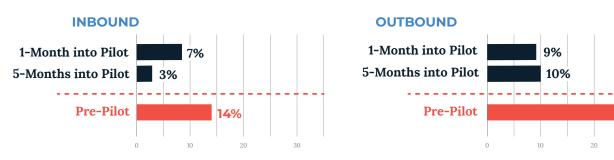
As bike and pedestrian volumes increase along Summer Street, safety is imperative. Traffic Calming uses roadway design to reduce speed and create safer streets. Reallocating space from general vehicle travel to other uses can improve safety for all modes of travel.





VEHICLE SPEEDS ON SUMMER STREET

Percentage of Vehicles Speeding Excessively (Over 40 mph)





Prior to the pilot, people frequently operated their vehicles dangerously, reaching speeds of more than 45 mph between Pappas Way and the Butler Freight Corridor (20 mph more than the City Speed Limit of 25 mph). One in four vehicle operators drove at excessive speeds, traveling over 40 mph. With the pilot implementation, this fell to one in fourteen (7%) in May.

NO TURN ON RED

To increase overall safety for people walking, bicycling, and driving, the City prohibited right turns at red lights along Summer Street at all signalized intersections. Right turns on red were already prohibited at Melcher Street.

When the option to turn right on red is available, people driving vehicles and trucks tend to encroach into both the crosswalk and bike infrastructure, impacting the safety and comfort of walking, wheeling, and cycling. People driving tend to look for gaps in traffic to their left and make movements without checking to their right for people bicycling or walking, creating many potential conflict points. Many people driving engage in a rolling stop to take advantage of a perceived gap in traffic, failing to come to a complete stop.

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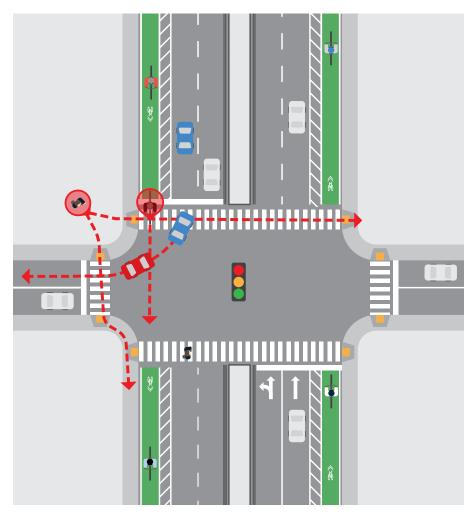
I can now safely cycle from South Boston to South Station (especially from bridge by Black Falcon to Expo Center) on Summer Street! I used to take a detour because there were no protected bike lanes along this intimidating route.

> - Survey Respondent, Summer Street Commuter

> > 77

ALLOWING RIGHT TURNS ON RED MAKE WALKING OR BIKING DANGEROUS BECAUSE

- ... drivers are looking left to judge gaps in traffic and not looking for pedestrians or cyclists coming from their right
- ... drivers encroach into crosswalk or bike lane while waiting for opportunity to turn
- ... drivers turning right on red tend to not come to complete stop, especially when traffic is light



BICYCLE ACTIVITY

Bicyclists did not have a consistent and comfortable bike connection along Summer Street prior to the pilot program. Gaps in bike facilities along the corridor forced people bicycling to mix with cars, many of which would exceed the 25 mph speed limit. Signal timing caused additional conflict between people walking, bicycling, and drivers turning at intersections.

These issues created an unsafe environment for people biking and walking along the corridor - in the last five years, there were 37 reported crashes involving bicyclists or pedestrians along Summer Street, accounting for 41% of the 90 total reported crashes on this stretch of the roadway. Summer Street is an important bike connection between South Boston and Downtown Boston, underscoring the need to address ongoing safety concerns and provide better biking and walking conditions.

IMPROVEMENTS TO BICYCLE FACILITIES

Several infrastructure and policy improvements were implemented as part of the Summer Street pilot program to improve biking conditions along the corridor:

Protected bike facilities between existing facilities to create a more consistent bike corridor: Curbside separated bike lanes in both directions were added between West Service Road Extension and Pappas Way/Drydock Ave to expand existing facilities installed in 2018 across the corridor and fill remaining gaps through the Seaport.



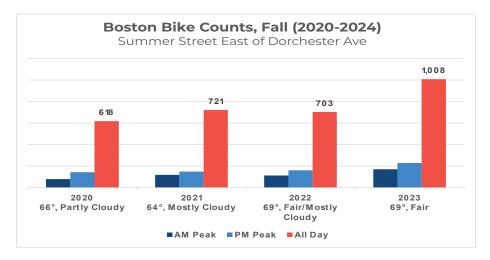
- New bicycle signals and adjusted signal phasing to improve cyclist safety at intersections
- **Elimination of vehicle right turn on reds** to reduce vehicle-cyclist conflicts

VOLUME

Bike volumes on Summer Street in Fort Point saw **over 43% increase in all-day ridership** since the implementation of the new bike lanes in Fall 2023 compared to the previous year. This surge in bike activity, both during peak hours and all-day, demonstrates how the pilot program addressed a latent demand for safe and dedicated bike infrastructure along the corridor. Additionally, from January 2023 to January 2024, all-day bike volumes on Summer Street at D Street saw a 77% increase.

43% increase in all-day ridership

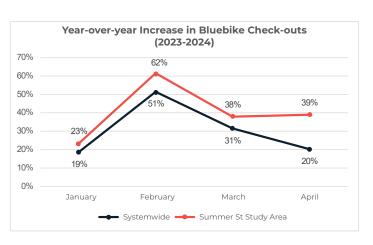




BLUEBIKE ACTIVITY

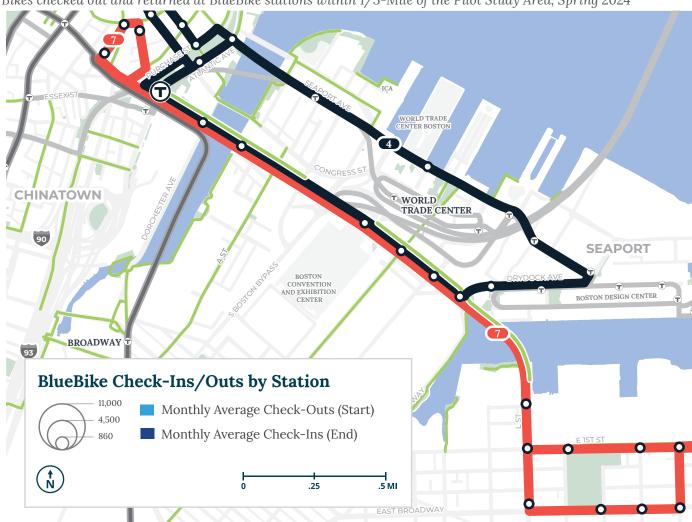
Bluebike activity increased systemwide since 2023 and station activity near the pilot lane increased at a higher rate than systemwide station activity. From April 2023 to April 2024, Bluebike activity at stations within a \square -mile of the Summer Street Pilot increased by 39%, compared to a 20% systemwide increase. During the 6-month pilot period, over 171,000 Bluebikes were checked in or out at stations within a 1/3-mile of the Summer Street pilot lane.

- SB Library and Lawn on D were among the stations near Summer Street that saw the highest increases.
- On an average Wednesday and Thursday in April 2024, all the Bluebikes at SB Library had been checked out by 9AM.



STATION ACTIVITY

Bikes checked out and returned at BlueBike stations within 1/3-Mile of the Pilot Study Area, Spring 2024



VEHICLE ACTIVITY

The Summer Street corridor faces several traffic-related challenges prior to the bus lane pilot that underscore a need for a design solution. The persistent congestion during peak hours and major events, creates delays for commuters, harbor businesses, and visitors. During off-peak hours, wide lanes encourage high-speeds, creating an unsafe environment for all road users.

Pilot evaluation metrics for vehicle activity focused on traffic volume, travel time, and lane violations. The pilot showed mixed impacts on vehicle activity, with minimal changes in overall traffic volume, varying effects of travel times, and overall challenges with lane compliance.

VOLUME

Truck and bus volumes remained relatively constant throughout the evaluation periods, with only minor fluctuations. AM and PM outbound traffic volumes remained largely unaffected by the road diet to introduce the pilot lane. This stability is evident in the total volume patterns observed along the corridor since January 2023.

Total Vehicle Volumes @ Pumphouse Rd Intersection

1-Year Before: 20,200 vehicles

2-Months Before: 19,800 vehicles

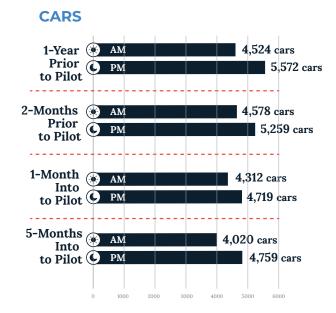
1-Month Into: 17,800 vehicles

• 5-Months Into: 17,800 vehicles

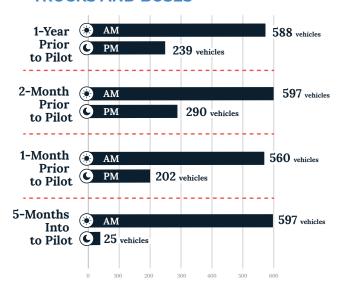


There is a higher concentration of truck traffic during morning hours compared to evening peak hours during each set of traffic counts. This pattern is likely attributed to drivers heading to Conley Terminal when it opens for the day.

Weekday Average During Peak Hours @ Pumphouse Rd Intersection







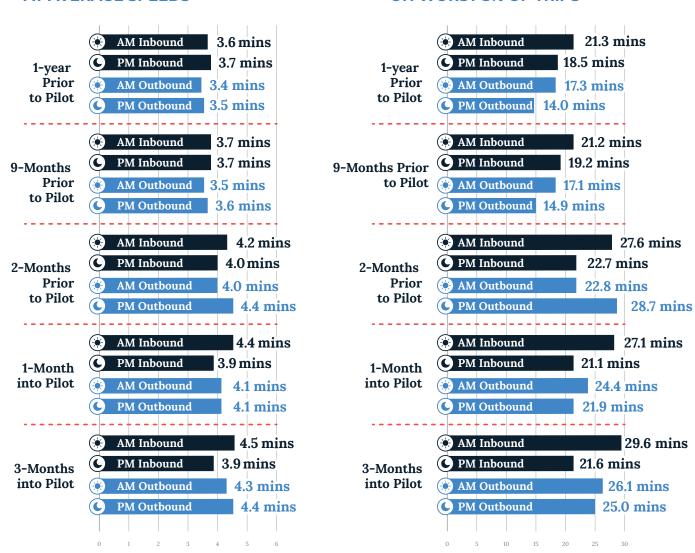
VEHICLE TRAVEL TIME

Implementation of the bus lane had mixed effects on vehicle travel times along the corridor. According to historical data from Streetlight, average travel times have slightly decreased since implementation of the bus lane, with some exceptions. While the data and public feedback offer mixed results, it is important to note that traffic outcomes vary by time of day and direction. The slight improvements in AM inbound travel times are encouraging, but the increases in PM outbound times indicate areas for potential refinement.

Weekday Average During Peak Hours, between Dorchester Avenue and East 1st Street

AT AVERAGE SPEEDS

ON WORST 5% OF TRIPS



Public feedback highlighted several concerns about travel time. Residents and commuters expressed frustration with congestion and long single-lane queues at intersections, sometimes requiring multiple light cycles during peak periods. Open house attendees noted that the pilot has increased traffic, especially affecting vehicles waiting behind left turns in the single general purpose lane. Additionally, residents complying with the pilot are frustrated by their inability to use the right lane on weekends, even with limited weekend bus service. Some suggested limiting the bus lane to specific hours, such as during morning and evening commutes. These concerns will be considered alongside other metrics and objectives in deciding future actions for the pilot program.

LANE VIOLATIONS

The effectiveness of the bus/truck lane was hindered by lack of compliance from general traffic. Some drivers reported confusion in interpreting new striping and signage, particularly when turning right onto Summer Street. Others deliberately ignore the rules, largely without consequence. Throughout the pilot, BCEC staff worked to keep the bike lanes clear of vehicle obstructions, including any short-term passenger loading, which occurred curbside along Summer Street prior to the pilot.

These high rates of non-compliance significantly impact the performance of the bus lanes. After a period of adjustment, enforcement efforts in May showed some improvement in the quantity of lane violations. However, consistent compliance remains a challenge. Traffic counts in May showed a decrease in violations, more than 85% of outbound pilot lane traffic in AM and PM consists of unauthorized vehicles.

While reliability has improved in most sections of the corridor, there are still non-compliance and lane violations that have hindered the ability to see substantial improvements. This is not unexpected without fully painted lanes and clear signage.

On non-event days one month into the pilot, close to 3,000 violations were observed between South Station and BCEC. Inbound lane violations peaked between 9 and 10am, with 86% of inbound traffic being non-compliant. Event days saw more violations outbound than inbound in this location: morning hours were particularly problematic, with over 40% of all vehicles violating the bus lane until around 10am.

Between Drydock Ave and Butler Freight Corridor, January 2024 counts revealed nearly 6,000 lane violations in a single non-event day, with over 3,400 in the outbound lane alone. On both event and non-event days, inbound lane violations peak between 7 and 8am, accounting for 41% and 33% of inbound traffic, respectively. Violation rates were slightly higher on the non-event day for both inbound and outbound traffic compared to event day in January.

What bus lanes? They'd would work much better if there weren't people blocking them.

- Route 7 Operator

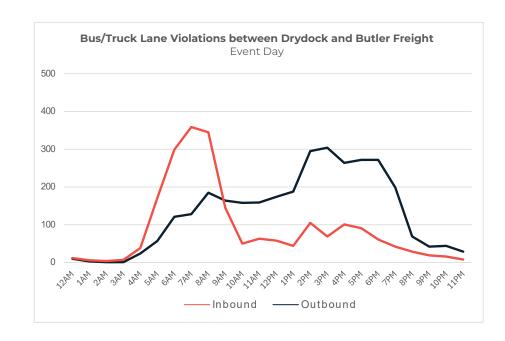
66

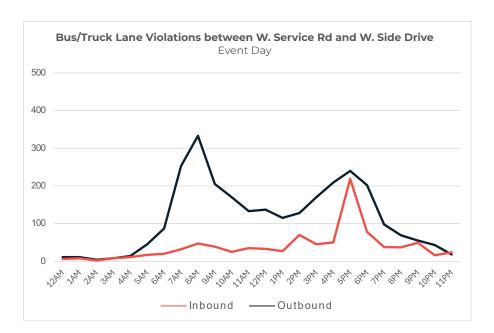
I often drive into the bus lane to go around a vehicle traveling the speed limit to get somewhere faster"

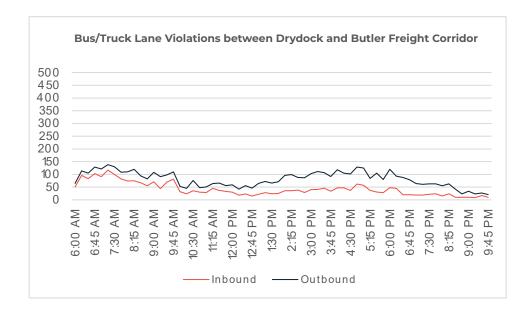
Left turns back up everything and cars [are] driving in the bus lane because they are tired of waiting for one car to turn left.

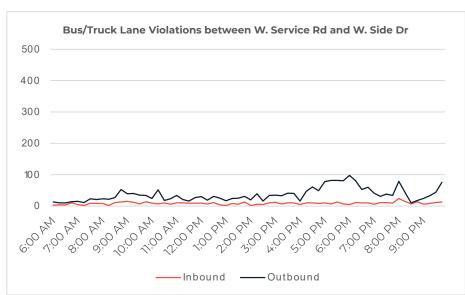
- Survey Respondent Summer Street Commuter

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MBTA BUS PERFORMANCE

The Summer Street corridor is currently served by MBTA Routes 7 and 4. More than 2,250 people rode the Route 7 bus on an average weekday in May 2024, including over 1,500 during the peak hour in the morning. Currently, Route 7 buses remain crowded and prone to delay – during the worst periods of congestion, riders face up to 10 minutes of delay on the 1.5-mile Summer Street corridor.

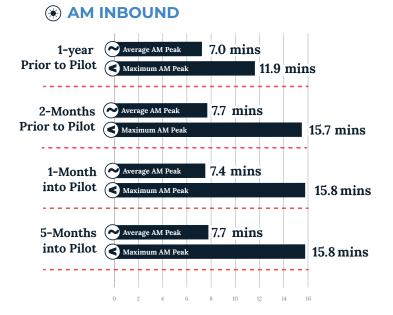
The Summer Street bus/truck lane aimed to address current reliability and delay issues along the corridor as well as prepare for future high-frequency service. The MBTA plans to transform Route 7 into a new High Frequency Bus Route, the T7, running from City Point to Sullivan Square every 15 minutes or less all day, 7 days a week, filling a crucial gap in regional transit and improving access especially for people going to/from the Seaport and South Boston to the rest of the region. **Under Bus Network Redesign**, the T7 will be a regional service combining four existing routes that serve over 5,000 riders daily, more than 200% of current Route 7 ridership.

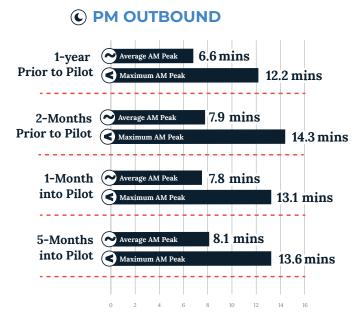
In order for the T7 to run as reliable, frequent service as planned, the route must be supported by high-quality transit priority infrastructure. It is part of a broader vision for a transit priority network in Greater Boston that will help buses get out of congestion and riders get to their destinations reliably and quickly.

BUS TRAVEL TIME

Weekday Average of MBTA Route 7 During Peak Hours



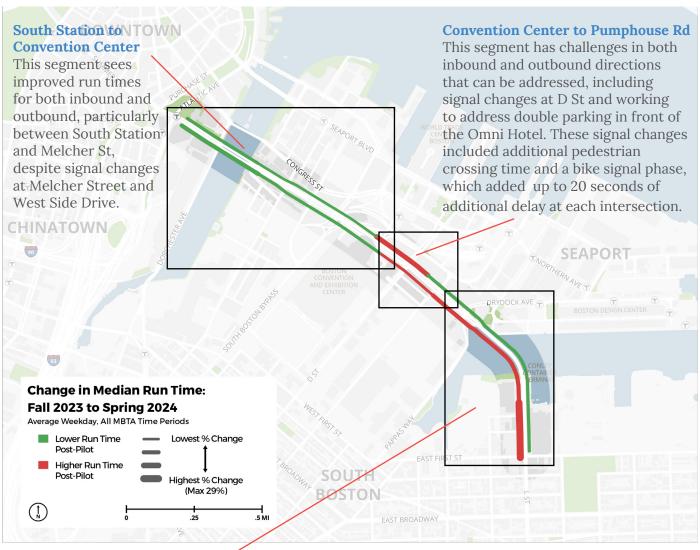




SEGMENT-LEVEL PERFORMANCE

Bus travel time impacts from the Summer St pilot bus lane varied widely by direction, time of day, and segment conditions. Although some segments saw improved performance, the lane faced issues like inconsistent striping and signage, low lane compliance, and signal timing changes for longer pedestrian and new bike phases, which, while enhancing safety, also increased signal delays.

- Typical inbound travel times along the corridor ranged from 6-8 minutes.
- Trip times are the least reliable in the inbound direction during the AM Peak, and the slowest trips can take up to 16 minutes.
- Despite segment-level travel time improvements, median Inbound travel times along the corridor as a whole have not improved due to significant delay near the Convention Center.
- Outbound PM travel times have improved slightly with the pilot lane.



Pumphouse Rd to East First St

This segment improves run time in the inbound, but has many challenges in the outbound including conflicting striping at Pumphouse and Summer St, merging conflicts, signal delays at Pappas Way, trucks crossing several lanes to access the Butler Freight Corridor, and more. This segment also had pedestrian and bike signal changes at Drydock Ave and Pumphouse Rd, which have added up to 20 seconds of new delay.

During peak hours in May 2024, bus riders typically waited an extra 3-4 minutes and up to 6 minutes during the worst times of delay.

CONGESTION

SIGNAL TIMING

The majority of changes to traffic signals along Summer Street implemented as part of the pilot were unrelated to the function of the new bus/truck lanes. The signal adjustments support the pursuit of Vision Zero, updating timing in the signal cycle as required for pedestrian, bicycle, and traffic safety, such as instituting no turns on red.

Signal timing changes at intersections like Melcher, Drydock, and D Street have added at least 12 more seconds of pedestrian and bike crossing time per cycle, creating longer intersection delay for both buses and vehicles. At five intersections, a new left-turn only phase in the signal cycle improved safety but also slowed down traffic flow.

These critical improvements coincided with the other design changes and had an impact on intersection function and traffic flow changes seen during the pilot. As a result, travel time across the Seaport for passenger cars, commercial vehicles, and buses increased at times with higher pedestrian activity. Although some additional vehicle delay can be expected with Vision Zero measures to improve conditions for people walking, wheeling, or biking, the City is examining whether there can be any improvements to traffic flow at these intersections.

World Trade Center Ave

- Cycle length +20 seconds to support bike movement
- Exclusive pedestrian phase +4 seconds.
- Exclusive left turn phase created to separate turning and through traffic

Pumphouse Road

- Cycle length +10 seconds
- Exclusive bike movement phase added (12 seconds)
- Dual left-right approach lane replaced with exclusive right turn lane (with exception for trucks and buses)

Drydock Ave / Pappas Way

- Cycle Length +20 Seconds
- Exclusive pedestrian phase added (9 seconds)
- Exclusive bike movement phase added (12 seconds)
- Permissive left turn removed



Melcher Street

- Cycle length +10 seconds
- Leading pedestrian interval (LPI) +5 seconds for Summer Street EB bikes
- Southern leg pedestrian crossing removed

West Side Drive

- Cycle Length +10 seconds
- Removed inbound permissive left turn
- Added West Side
 Drive pedestrian
 crossing to phase 1

D Street

- Cycle length +20 Seconds
- Permissive outbound left turn replaced with exclusive outbound
- Left Turn and Bike phase (+18 seconds)
- Southbound left lane replaced with exclusive thru lane to prevent left turns into Bus/Truck Lane

Butler Freight Corridor

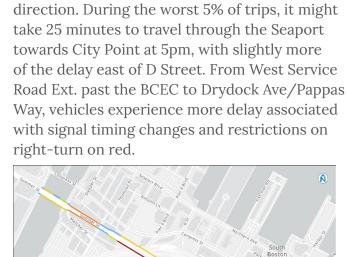
- Protected left turn phase added, permissive left turn removed.
- Time of Max Green increased during AM peak

VEHICLE DELAY

Severe traffic delay was frequent on Summer Street even before the pilot. Congestion concentrated in the morning around Melcher Street in both directions, after W. Service Road outbound, near Pumphouse Road in both directions, and over the Reserved Channel bridge in both directions. In the evening, there was heavy delay in both directions around Melcher Street and Pumphouse Road and heavy delay outbound between A Street and West Side Driver and after East First Street.

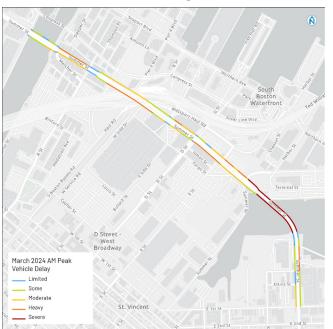
With traffic signal adjustments to add time to the walk phases made to be in compliance with the MUTCD and support the City's Vision Zero goals, delay increased modestly at different sections of the corridor. Average inbound travel times increased by less than two minutes during the AM peak, and average outbound travel times increased by less than one minute during the PM peak

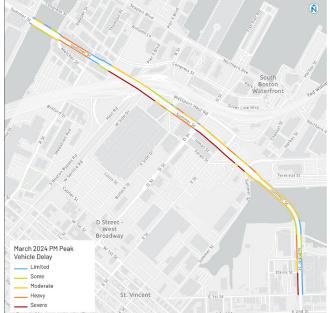
Notably, delay worsened at the intersection of Drydock Ave/Pappas Way and near World Trade Center Ave during the morning peak period and remained steady elsewhere. These are also locations where the bus is experiencing new delay. On the worst 5% of trips, during March 2024, it could take as much as 29 and a half minutes to travel through the Seaport to Downtown at 8am, with much more of the delay east of D Street than through Fort Point.



Similarly, during the evening peak period,

delay increased most notably in the outbound





CONSTRUCTION ACTIVITY

Between September 5, 2023 and the end of the pilot evaluation period, Cypher Street was closed to traffic as part of reconstruction activity.

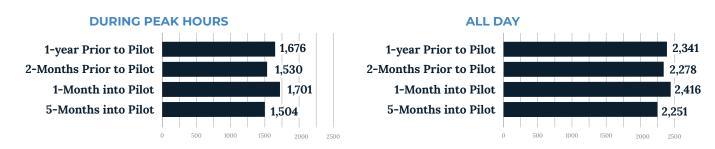
Between W. Service Road Ext and West Side Drive, construction related to 400 Summer Street restricted right-of-way width to accommodate inbound separated bike lanes until construction ends.

HISTORICAL TRANSIT PATTERNS

Community feedback during pre-pilot planning processes highlight the urgent need for transit improvements for South Boston residents commuting across the region. Residents often noted the lack of nearby rapid transit options, forcing reliance on the sometimes-unreliable MBTA bus routes. Historically, there was a concentration of passenger delay across the corridor, particularly during the AM peak, severely impacting the efficiency of bus service in the area. Residents consistently emphasized the overcrowding on Route 7 and long wait times for a bus with space for riders.

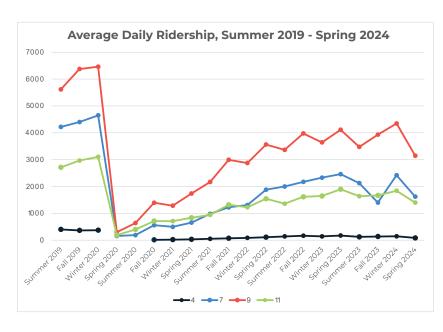
RIDERSHIP

Weekday Average of MBTA Route 7 During Peak Hours



MBTA data also shows the majority of riders use Route 7 during peak AM and PM periods: peak period ridership accounted for 70% of total ridership 5-months into the pilot.

While the pilot evaluation data provides valuable insights, the results should be interpreted with caution due to seasonal variations and ongoing changes in ridership trends making it difficult to draw definitive conclusions about the pilot's impact in isolation.



Routes 7, 9, and 11 serving South Boston exhibit seasonal ridership fluctuations in the years following the pandemic; Route 7 and 9 see fluctuations become larger over time. Weather conditions and school schedules may heavily influence bus usage patterns, affecting the number of commuters and modes chosen. All four routes experienced a decrease in ridership between Winter and Spring 2024, complicating the ability to draw definitive conclusions about the impact of the pilot lane on overall ridership patterns.

ENGAGEMENT TIMELINE

SPRING 2023

- Sixteen Hours of Virtual and In-Person Office Hours: 03/13; 03/15; 03/18; 03/29; 04/01; 04/06; 04/17l 04/20; 04/22)
- Three Open Houses: 04/13 at Hampton Inn; 04/19 at Tynan Elementary School; 05/01 at District Hall

SUMMER 2023

- Coordination with BCEC
- Three Civic Association Meetings Fort Point; City Point; Southie Bikes
- Pilot Informational Brochure and Flyers Distributed

FALL 2023

- Installation of bike lanes
- Adjustment of traffic signal phase timing
- Traffic counts conducted in October
- Installation of bus/truck lane markings and signage substantially complete by November

WINTER 2023-2024

• Began Dec. 4th, 2023

MARCH 2024

- Three Civic Association Meetings: West Broadway; City Point; Fort Point
- 3,000+ Postcard Mailers advertising the community survey
- BCEC Marquee advertisement of the community survey
- 200+ posters and 75+ postcards distributed to local businesses in South Boston to advertise survey and engagement opportunities

APRIL 2024

• Stakeholder Focus Group conversations with MassPort Planners, Hospitality Sector and Seaport TMA

MAY 2024

- Stakeholder Focus Group conversations with Bus Operators, MBTA service planners, BCEC
- Intercept surveying of Route 7 bus riders in South Boston and Downtown

JUNE 2024

- Stakeholder Focus Group conversations with truck drivers and maritime industry representatives and MassPort Planners
- Open House at CRISPR Therapeutics on 06/11
- Virtual Open House on 6/14

JULY 2024

• Open House at Tynan Elementary School on 07/08

HOW DID YOU WEIGH IN ON THE PILOT?

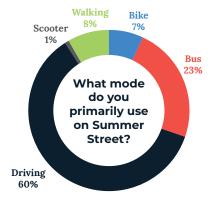
Extensive community engagement was conducted to gather feedback and insights from stakeholders and the community in support of the program evaluation. Over the course of the evaluation period, outreach included three open houses, six civic association meetings, conversations with six focus groups, and a public survey. Informational flyers and brochures were distributed throughout South Boston and along the Summer Street corridor.

FOCUS GROUPS, OPEN HOUSES, AND CIVIC ASSOCIATION MEETINGS

Focus groups and civic association meetings revealed mixed reactions to the pilot. Stakeholders expressed concerns about traffic congestion, safety issues, and operational challenges at specific intersections with heavier turning movements like D Street, Melcher Ave, Butler Freight Corridor, and Drydock Ave. However, some attendees supported safety improvements for vehicles and bicyclists and recognized potential benefits of the bus lane, especially with increased compliance.

COMMUNITY SURVEY

The survey was also mailed to over 3,000 abutters and local businesses and intercept surveying at bus stops occurred on multiple dates. BCEC also advertised the public survey on their marquee sign in April and May 2024. The City collected 2,475 responses from people commuting to work, doctor's appointments, grocery shopping, running errands, and otherwise traveling on Summer Street.



Pedestrians, cyclists, and bus riders were more likely to be satisfied with the overall experience of the newly implemented bus/truck lane on Summer Street and rate the experience a 10. **Drivers** expressed mixed opinions, with many calling for alternative solutions to address traffic congestion and safety concerns.



Drivers expressed skepticism about the necessity of the bus lane and called for alternative solutions to address traffic congestion and safety concerns. Most drivers reported new challenges since the start of the pilot. On a scale from 1 to 5, 55% of drivers responded with a 1 about the clarity of signage since the pilot was implemented. Suggestions for improvement offered by respondents included:

- Restricting the bus lane to peak traffic hours
- Stricter enforcement
- Increasing bus frequency



to pedestrians

Pedestrians reported that they mainly feel that crosswalks and traffic signals adequately protect their safety on Summer Street but expressed mixed sentiments about sidewalk conditions and some existing challenges while walking along the corridor:

Notable locations where respondents pointed to safety concerns:

specific mentions of intersections at Drydock/Pappas Way,

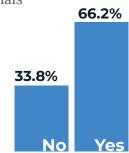
• From pedestrians: Intersections such as Summer and D St, Fargo St, and Pappas Way, where vehicles often fail to yield

• From cyclists: Around intersections and bridges, with

• From drivers: The area around BCEC

BCEC, and crossings onto Pappas Way

- Narrow sidewalks and uneven surfaces
- Malfunctioning pedestrian signals
- Inadequate enforcement for speeding cars and disregard for traffic signals



Do you feel that Summer Street crosswalks and traffic signals adequately protect your safety when walking along or across Summer Street?



Bike commuters feel safer and have faster travel times since the implementation of the pilot, but cyclists are still seeing challenges:

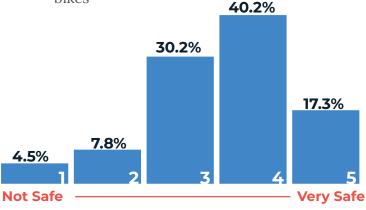
Having a protected bike lane

is crucial to my ability to ride

- Survey Respondent, Summer Street Commuter

along this route. I feel much

- 64% of bike commuters reported experiencing conflicts while sharing the road with other vehicles on Summer Street
- Lack of enforcement often results in drivers parking and stopping in bus lanes and cyclists reported drivers responding aggressively to those on bikes



How safe do you feel while bicycling or scootering along Summer Street since the implementation of the pilot project?



Bus riders reported noticeable improvements in reliability, with faster travel times and consistent arrival schedules, but there are concerns about the lack of enforcement, resulting in cars frequently violating the bus lane rules, and inadequate bus service, which leads to longer commute times and overcrowding.

PATH FORWARD

Moving more people more efficiently in a growing neighborhood like the Seaport will require reallocating space to transit, freight, walking, and biking.

The Summer Street Pilot was an important first step for supporting sustainable growth in the fastest growing neighborhood in Boston and soon to be the second largest employment hub. With additional transit service coming to Summer Street as part of the MBTA Bus Network Redesign, refining the corridor cross-section and bus/truck lane design to further reduce transit and truck travel times and address operational challenges remains a priority. In the short term, the bus/truck lane pilot will end, reverting to two general-purpose travel lanes in each direction. The Streets Cabinet will re-engage the South Boston community when MBTA service frequency improves and will conduct another community process at that point.

SUMMARY OF NEAR-TERM POST-PILOT CHANGES

Protected bike lanes (no change)

The pilot enhanced existing bike lanes and added bike connections where they were missing to provide an all, ages, and abilities bike connection. The protected bike lanes are here to stay with minimal to no changes to the current configuration.



Exclusive pedestrian and bicycle phases (no change)Signal timing prior to the pilot was non-compliant with federal standards

(MUTCD and ADA) and federal policies. Changes to lengthen the crossing time and provide additional walk time will remain in effect unless Streets reduces crossing distances through treatments like curb extensions or bus bulbs at bus stops.



No right on red (no change)

As bike and pedestrian volumes increase along Summer Street with new development, safety is imperative.



Dedicated bus/truck lane (remove and reevaluate at a later date)

Remove bus/truck lane and return to general travel lane between Dorchester Avenue and East 1st Street.



Enforcement of Transit Priority throughout the City
Continue to explore policy mechanisms for automated enforcement and explore posts and rumble strips design options to discourage bus lane violations.



Streets will continue to engage the community and its partners on a future, long-term, vision for Summer Street while targeted post-pilot improvements are underway. The multimodal corridor improvements, including targeting signal timing changes, succeed in reducing conflict and increasing comfort for people walking, rolling, or bicycling.

Streets is also committed to improving the experience for transit riders in the Seaport and South Boston and will re-engage the community at a future point when MBTA service frequency improves to conduct another community process about the cross-section design. To achieve the pilot goals to the fullest requires more capital intensive transit and public realm improvements, such as physical separation of the bus/truck lane, curb extensions, wider sidewalks, and signal upgrades. These changes require a more detailed analysis of tradeoffs, because treatments like floating bus stops and bike lanes are hard to accommodate in constrained right-of-ways with dedicated turn lanes.

LANE EVALUATION

The City of Boston evaluates the success of dedicated bus lanes by assessing the benefits they provide to bus riders, while also considering the impact on other road users and overall traffic safety. This comprehensive framework enables us to balance all roadway needs effectively, while prioritizing safety and leveraging data-driven insights to optimize traffic flow.

Leading up to the Orange Line shutdown in August 2022, the MBTA and City of Boston installed a bus/bike lane on Huntington Avenue to speed up Route 39 service in anticipation of the route absorbing significant Orange Line ridership during the shutdown. Afterward, the City made the bus/bike lanes permanent and conducted an evaluation to determine if further improvements were needed. Analysis showed that the shared bus/bike lanes significantly improved service for bus riders, saving up to two minutes per trip during rush hours and benefiting nearly 5,000 daily riders. This added up to 125 hours saved weekly for bus riders. Alongside these improvements in transit efficiency, the impact on drivers was minimal, with average travel times increasing by less than 45 seconds. Additionally, the project enhanced traffic safety along the corridor.

In contrast, the implementation of the bus/truck lane on Summer Street resulted in only about 15 seconds of time savings for buses. Although the changes to traffic signal timing were not directly related to the bus lane, they caused approximately 90 seconds of delay for people driving.

ENFORCEMENT

Dedicated bus/ truck lanes only work if there are no cars in them. Police enforcement of dedicated bus lanes is costly and time consuming with potential risks surrounding police confrontation and discomfort, as well as enforcement bias. Several major American cities, including New York, Chicago, and Los Angeles are all using automated camera enforcement to issue lane violation tickets in real-time via cameras mounted on buses. The Massachusetts Legislature requires the City of Boston to post and affix tickets, and would need to approve a new bill, currently under consideration, to remove the current legal barriers to automated enforcement. Streets is committed to addressing the legal barriers to automated enforcement in coordination with elected officials, and pilot automated enforcement to address persistent bus lane violations across Boston.

APPENDIX

The City of Boston Streets Cabinet has worked extensively to create and make public the data which was used to inform the decision making process around the Summer Street Bus Lane Pilot Program. Major data points, vehicle counts, and engagement feedback is available via the QR code below. You can also find the link to the data through the project website at: https://www.boston.gov/summerstreetpilot. This data includes:

VISUALS AND DATA

- AM and PM peak block-by-block vehicle volumes
- Traffic delay maps by vehicle type
- Hour-by-hour vehicle volumes over four observation days at the two Automatic Traffic Recorder (ATR) sites
- Recorded speed by hour at the two ATR sites
- MBTA ridership and runtime data for the Route 7 and other neighborhood routes

OUTREACH AND ENGAGEMENT

- Business Stakeholder Feedback
- Observation Log including Dates, Times, and Pictures
- Public Engagement material, feedback, and notes for community survey and open houses
- Full Summary of Outreach Survey Findings

BACKGROUND RESEARCH AND PROJECT CONTEXT

- Previous city planning efforts and interagency coordination
- Corridor engineering plans
- Transportation Action Plan Agreements of neighboring developments

FIND MORE PHOTOS HERE



