The Boston Silver Line, operated by the Massachusetts Bay Transportation Authority, began phase 1 operations on July 20, 2002 and phase 2 operations on December 17, 2004. Phase 1 (Washington Street) is a 2.2 mile route with 13 stops between Dudley Square and the Downtown Crossing. Phase 2 (Waterfront) is a 1.5-mile route that runs that serves three routes including Logan International Airport (SL1), the Boston Marine Industrial Park (SL2), and City Point (SL3). The two are segments are not connected; however there is a phase III that is proposed to connect the two around 2016. The Silver Line operates between 6AM and 12AM Monday through Saturday and 7AM to 12AM on Sundays. The service has headways of 10 minutes during peak travel periods and 15 minutes during off-peak.

The Silver Line offers a “Charlie Card” that fares are added onto. This card is simply tapped against a magnetic devise that automatically deducts the $1.25 fare. Payments on board can also be made, the MBTA offers monthly passes for $40.00, $0.60 per ride for students, and free fares for children under 11.

**BRT ELEMENTS**

In order to provide efficient and reliable service, the Boston Silver Line utilizes real time information signs at stops with information provided by automatic vehicle location, transit signal priority when needed, a dedicated lane for most of the route, the use of contra-flow lanes to ensure a more direct route, and the use of low floor vehicles for easier boarding. The buses contain a dual mode propulsion system consisting of electric traction while in the tunnel and diesel when above ground. The 60 ft. articulate bus-
es are able to hold 57 seated and 25 standing passengers. This allows the Silver Line to accommodate a capacity of 1,264 passengers an hour.

**BRT PERFORMANCE**
Ridership on the Silver Line Washington Street is over 15,000 per day and over 14,000 per day for Waterfront. The Silver Line Waterfront has seen an increase in ridership by 100% from 2005 to 2007. A survey conducted in November 2007 showed that 92% of the riders that answered the question rated the overall satisfaction of the service as average or excellent. The same survey showed that before the Silver Line 21% utilized the MBTA Bus 49, 14% used the subway, and 14% walked. The most valued service quality to 90.5% of riders was reliability. This survey also revealed that 67% of the riders utilize the service at least five days a week.

**BRT BENEFITS**
The single most beneficial capital investment was the contraflow lane, which enabled a shorter, more direct route bypassing congestion. The Silver Line had a direct and immediate benefit on air quality through the replacement of older diesel buses with lower-emission natural gas buses. The numerous land use changes in the corridor have strengthened the transit market, even as the presence of the Silver Line has encouraged transit-friendly development.

**BRT COSTS**
The system capital cost for the Silver Line Washington Street was $2.84 million per directional route mile, not including vehicle costs, or $5.77 million per directional route mile including vehicle costs. About half the total $27 million budget was used for 17 articulated CNG buses, the remainder for infrastructure and ITS. The system capital cost for the Silver Line Waterfront was approximately $625 million total. The largest contracted cost came from the $127 million it took to construct the Russia Wharf Tunnel.