

**Massachusetts Bay
Transportation Authority**

Early Morning Pilot

December 10, 2018



- Pilot Policy Context
- Early Morning pilot metrics
- Additional service proposal

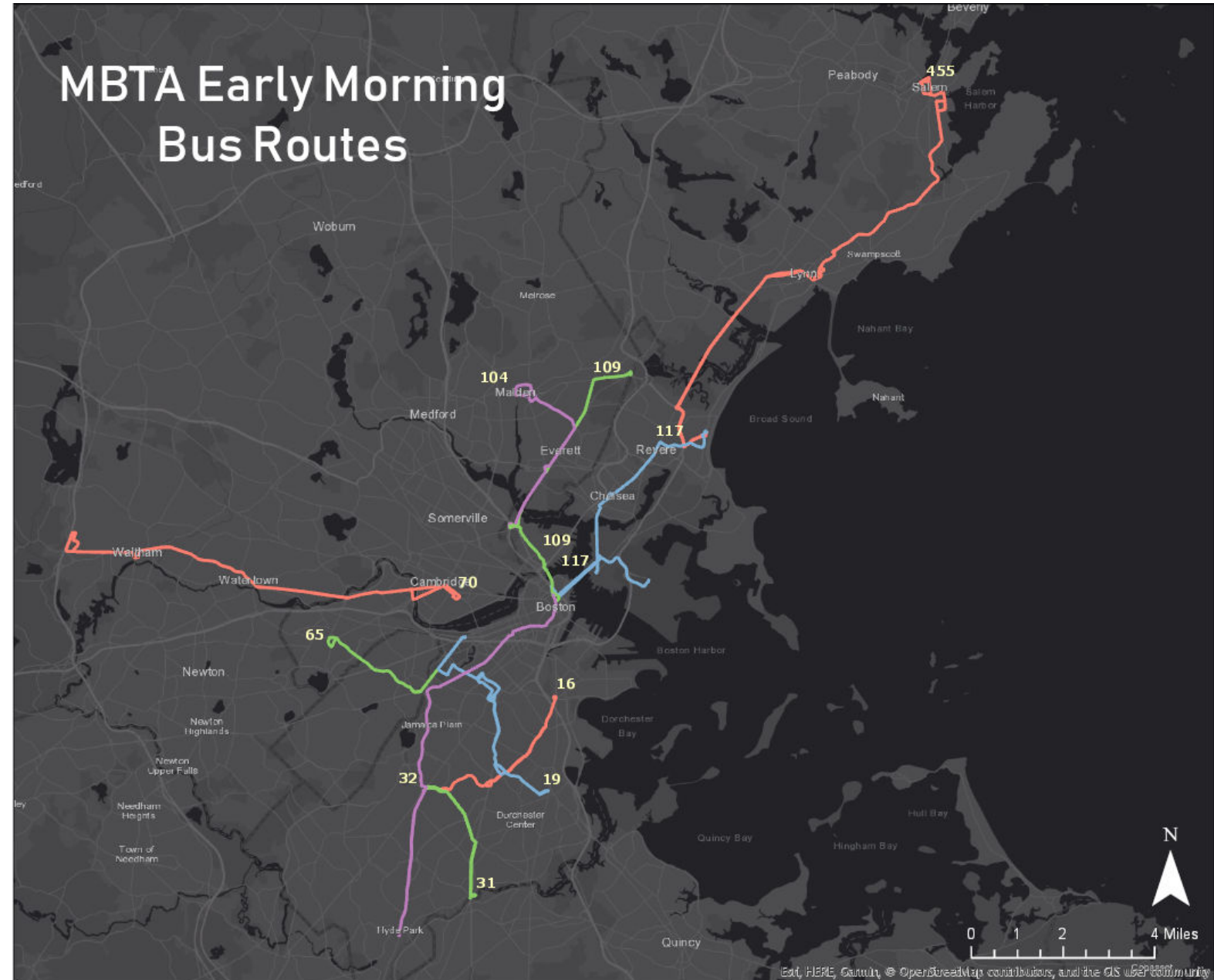


- Adopted by FMBC on March 27, 2017
- Required metrics
 - a. A projected operating subsidy per trip, comparable to the current average per trip subsidy on the most similar existing service
 - b. An amount of capital expenditure (if any) and identified sources for that spending
 - c. A ridership target for the pilot expressed as both total ridership over the pilot period and average daily ridership, including riders shifted from other forms of public transit and net new riders
 - d. Projected revenue (by day, by week, or by month, as appropriate) for the pilot service
 - e. The proportion of anticipated low-income and/or minority riders
 - f. A performance measure that best measures whether and by how much a pilot achieves the goals originally established for it
- No requirement for 11 months of data

Early Morning Pilot



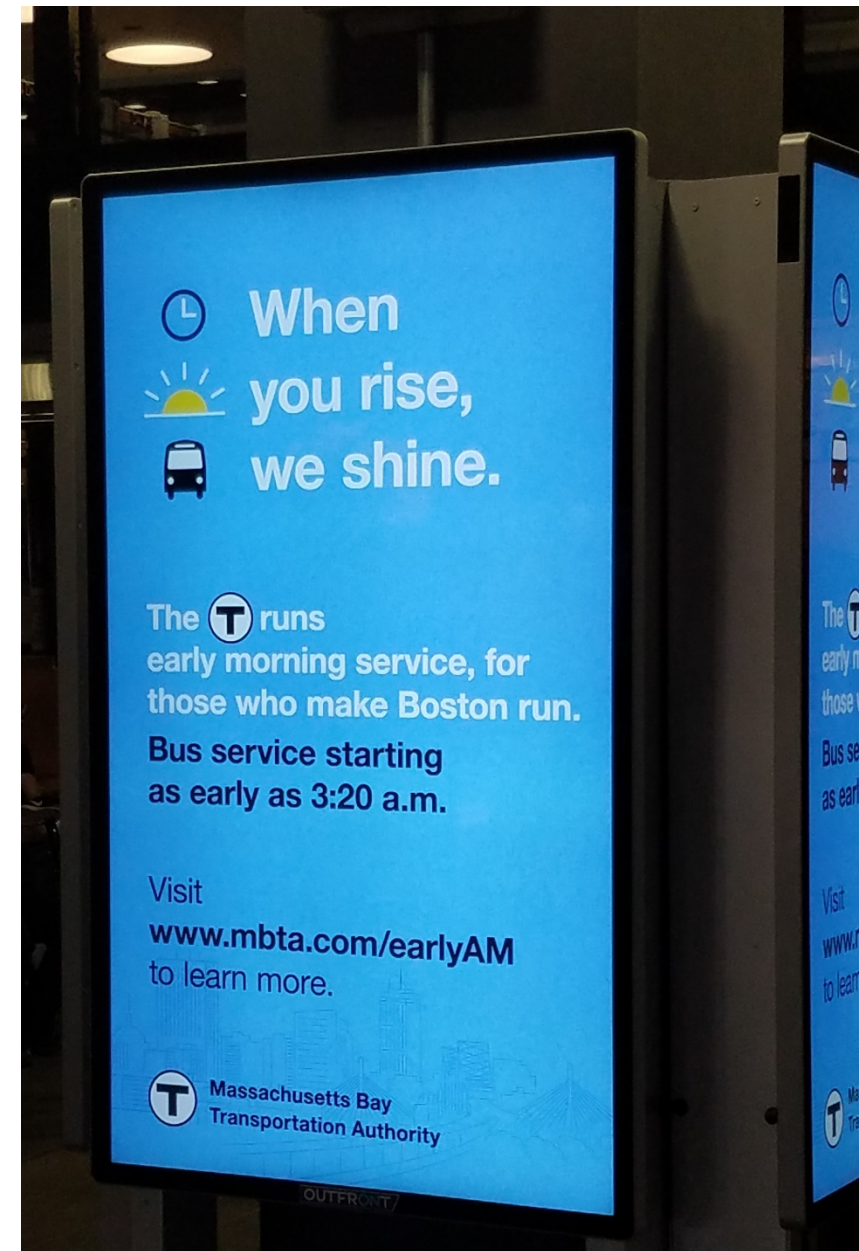
- Started April 1, 2018
- Service added to 10 bus routes
- Minor service change



The T runs early morning service for those who make Boston run



- Marketing effort included:
 - Seat drops on existing first trips
 - Digital panels in stations in multiple languages
 - Static ads in stations and on buses in multiple languages
 - Outreach to community and neighborhood organizations
 - Online ads
 - Website with promotional video
 - www.mbta.com/earlyam



Early Morning Metrics



- a. A projected operating subsidy per trip
(Based on 8 months of data and operating expenses)

Early Morning Pilot		Comparisons	
Operating subsidy per trip	\$1.46	Operating subsidy per trip for all weekday early morning time period	\$1.62
Operating subsidy per new trip	\$3.86	Operating subsidy per trip for all local bus	\$2.55

- b. An amount of capital expenditure (if any) and identified sources for that spending
 - No anticipated capital expenditure
 - Additional 18,000 miles per year on bus fleet—an increase of 0.07%

Early Morning Pilot Initial Estimates vs Actuals



c. Ridership Projections

	Initial Ridership Projection	Ridership Data (8 months of data)
Passengers per week	1900	1791
New Trips	1200	907
Diverted trips from later trips	700	884

d. Pilot budget and actual spending

Budget line items	Budget	Actuals
Operating Costs	\$500,000	Running on budget
Marketing Campaign	\$80,000	\$81,000
Additional service on The RIDE	\$500,000	No increase in Early Morning usage
Operating Revenues	\$62,000	\$47,800 (new trips annual estimate)

Early Morning Pilot Route Demographics



e. Demographics of riders of routes with additional service, not exclusively on Early Morning trips

Route	Low-Income	Minority
16	50%	74%
19	34%	67%
31	58%	93%
32	43%	76%
65	28%	28%
70	36%	35%
104	56%	56%
109	61%	38%
117	55%	60%
455	60%	52%
All Bus	42%	48%
System-wide	29%	34%

Pilot specific performance measures



- Goal was to provide new mobility, especially for work trips, and to reduce over-crowding during a time when resources could be added.

f. Performance measures

- Ridership on new trips: Boardings on additional trips above median boardings for all first bus trips in early morning time period
- Reduce crowding: Measure max load on previous first trips and new first trips

Median Boardings for Early Morning Time Period

	Inbound	Outbound	All trips
Weekday	25.9	10.1	18.15
Sat	12.1	6.1	8.6
Sun	20.4	10.35	13.6

APC Data Jan-Nov 2018



- Overall boardings on Early Morning pilot trips higher than median boardings on first trips in the early morning period across all bus routes.
- Crowding reduced on previous trips, but exists on some new first trips.

New Early Morning Trips	Average Inbound Boardings
16 weekday	11.4*
19 weekday	40.8
31 weekday	35.5
31 Sunday	26.5
32 weekday	34.5
65 weekday	23.2
70 weekday	38.3
104/109 weekday	60.5
109 Saturday	46
117 Saturday	67
455 Saturday	36
455 Sunday	61

APC Data Jan-Nov 2018

* Second trip boardings is 49

Early Morning - New Service Proposal



- Based on the results of crowding evaluation of the Early Morning service and existing first trips of the day
- Proposal to add additional trips to 104/109, 116, 455, 111
- Total of 15.3 service hours a week, approximate cost of \$50,000 annually

Route	Day	Change	Reason
104/109	Weekday	Add trips to 104/109 at 5am, shift existing trips, improve from every 20 to every 15 minutes on each route.	First 104 trip max load of 64 passengers
109	Sunday	Add new short 109 for three trips between 5:30-6:30am	First trip max load 64 passengers
116	Weekday	Add new inbound trip at 4:45am	First trip max load 60 passengers
455	Sunday	Add 5:40am short trip from Central Square, Lynn to Wonderland	First trip max load 57 passengers
111	Sunday	Add 5:25am inbound trip	First trip max load 56 passengers



- Ask FMCB to approve moving the Early Morning pilot service into regular service in April 2019 at the conclusion of the pilot period.
- Add the additional 15.3 service hours per week, subject to regular quarterly review process.