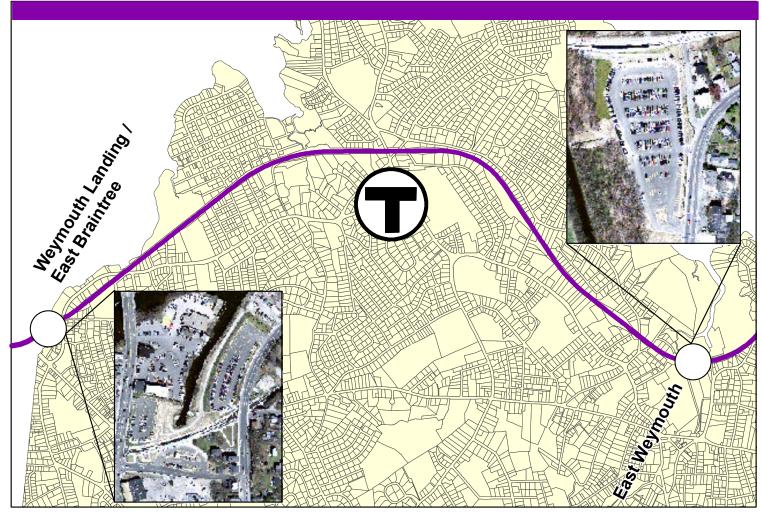
Town of Weymouth



Greenbush Commuter Rail Station Parking

Five - Year Anniversary Observations



Susan M. Kay Mayor Department of Planning and Community Develpment James F. Clarke Jr., Director Georgy Bezkorovainy, Engineer 11/15/2012



GREENBUSH COMMUTER RAIL LINE FIVE-YEAR ANNIVERSARY October 31, 2007-November 1, 2012

WEYMOUTH EXPERIENCE

The Weymouth Planning Department has been monitoring the ridership and parking activity at the following commuter rail stations:

- East Weymouth Station (Greenbush Line)
- Weymouth Landing Station (Greenbush Line)
- South Weymouth Station (Kingston/Plymouth Line)

Greenbush Line

Monitoring of the two Weymouth Greenbush Stations began with the start of the Greenbush Commuter Line service on 10/31/07. The following two observations have been performed consistently for five years:

- Number of passengers boarding a train. At Weymouth Landing, the 7:35 AM inbound (to Boston) train was monitored. Of the five peak period trains in the morning, this train carries the most passengers. In East Weymouth, the 8:17 AM inbound train was monitored; this is the second busiest train at the station.
- Lot occupancy was recorded between 8:20 and 8:35 AM, capturing the number of cars parked at the stations after the fourth morning inbound peak period train had departed.

Figures 1 and 2 show the station activity. The first point on the plots (Nov-07) represents the service's activity from 10/31 to 11/30/07. After that, each data point on the plots represents station activity during the next two months. The plots reveal the following:

- The lower line represents the number of passengers boarding the surveyed trains, while the higher plot shows the parking lot activity generated by the first four (4) commuter trains into Boston.
- On 11/15/08 the new MBTA parking fees¹ went into effect, and there was a noticeable drop in the number of cars parked in Weymouth Landing (see Figure 1). Passenger boardings were also affected at both stations, but there were no noticeable increases in the walking and drop-off categories. Commuters have not been parking on neighborhood streets.
- Ridership and lot occupancy have been slowly rising in Weymouth Landing since March 09 and in East Weymouth since September 09.

¹ The fee was increased from \$2 to \$4 per day.

A discussion on how the above trends compare with the MBTA estimates is offered in the Appendix. Other data that the Planning Department collected at the Greenbush stations is also presented in the Appendix.

Kingston/Plymouth Line

In 2007 the Planning Department anticipated that the following changes would occur at the South Weymouth Station as a result of the opening of the Greenbush Line:

- Ridership at the station would decrease.
- Fewer commuters would utilize the station to/from the north.

Accordingly, surveys were designed to document the "before" conditions and similar post-Greenbush surveys were performed to describe the "after" conditions. "After" surveys were performed in October 2008, 2009, 2010, 2011 and 2012. Table A summarizes the survey results at the South Weymouth Station.

The 8:06 AM commuter train² is the last major AM period train into Boston. "Before" surveys performed after this train departed showed that the lot was nearly full, averaging only 43 vacant spaces (8% vacancy rate). After the Greenbush Line began revenue service, the number of vacancies increased to 133 in 2008 (25% vacancy rate). October 2009 and 2010 surveys revealed that there were over 265 vacancies (+50% vacancy rate) in the lot at 8:15 AM. After 2010, the October surveys showed a steady growth in vacancies after 8:15 AM, peaking at 54% in October 2012.

The 4:47 PM train³ is the first rush hour outbound train that stops at the South Weymouth Station in the afternoon. "Before", the number of vacant spaces in the lot prior to the train's arrival was 31 (6% vacancy rate); after the start of Greenbush service, the vacancies increased to 127 (24% rate) in 2008. In October 2009 the vacancy rate increased to 48%, and in the subsequent years (2010 and 2011), the rate increased by another 1%-2%, peaking at 57% vacancy in 2012.

Traffic counts taken on Trotter Road at Route 18 showed that "before" 48% of the commuters had northerly origins or destinations. After the Greenbush Service, the attraction to/form the north decreased to a range of 32% to 37% in 2008. After 2009, northerly trips inched upward, generally staying below 40%.

CONCLUSIONS

The MBTA estimated that 260 commuters would be parking at the East Weymouth Station in 2010. In September 2008, this figure was exceeded for several weeks, but after the November 2008 parking fee increase, parking occupancy decreased and is now approaching 245.

 $^{^2}$ The 2007 and 2008 schedules listed this train at 8:03 AM and the 9:06 train at 9:03 AM.

³ The 2007 and 2008 schedules listed this train at 4:42 PM.

The MBTA estimated that in 2010, 222 commuters would be parking at the Weymouth Landing Station lots. So far, the actual numbers are well below that figure.

At the South Weymouth Station lot, the number of vacancies has increased since the start of the Greenbush Line. This is due, in part, to fewer Weymouth residents, who previously traveled south to access a commuter rail station, now using the Greenbush Line.

The decrease in the South Weymouth Station parking lot utilization is probably also attributed to the state of the Massachusetts economy. The utilization of the two Weymouth Greenbush Stations has been as follows:

- In the next several months after the parking fees were doubled in November 2008, there were no noticeable increases in the walking and drop-off categories. But in the next two years (2009-10), there were significant increases (54%) in these two modes.
- Ridership at both stations has shown a steady increase (25%) during the last three years.
- Parking lot occupancy has followed a different trend:
 - In East Weymouth, lot occupancy has shown a steady increase (21%) during the last 2 ¹/₂ years.
 - In Weymouth Landing, lot occupancy has been in the range of 120-150 vehicles during the last three years, but generally hovering around 140.

GREENBUSH COMMUTER RAIL LINE FIVE-YEAR ANNIVERSARY October 31, 2007-November 1, 2012

APPENDIX

East Weymouth Station

The East Weymouth Station has two access points: The parking lot, drop-off area and pedestrian access at Commercial Street; and the pedestrian/drop-off access at Wharf Street. All data presented in the main body of the report deal only with the East Weymouth Station and the adjacent parking lot. Table 1 shows all of the station activity generated by both the East Weymouth Station and the Wharf Street access. Table 1 shows the Planning Department's estimates of commuter station access characteristics on a 24-hour basis. Most commuters arrive in private vehicles, which are parked at the station. The highest number of parkers in East Weymouth was recorded in 2008, before the parking fee doubled. The number of parkers in East Weymouth has been relatively flat in 2009-2012, at around 90-94% of the MBTA estimate. There are 335 spaces in the East Weymouth Station lot.

The monitoring program shows that the utilization of the parking lot has exceeded the 2010 MBTA estimate in 2008 but fell below the estimate in 2009 after the parking fee was doubled. Drop-offs, walkers and total parkers remained relatively flat in 2010-2012.

Weymouth Landing Station

The three Weymouth Landing Station parking lots have a total of 290 parking spaces. Table 2 shows the Planning Department's estimates of the Weymouth Landing Station activity in 2008 - 2012.

The Weymouth Landing Station is operating below expectations, as documented by the monitoring program. The MBTA forecast shows that 370 (54% of the ridership) commuters are expected to walk each day to and from the station in 2010. So far, only 27% of this goal has been achieved. Parking was at 83% of the MBTA projections in 2008, and fell to 63-67% of the projections in 2009 - 2012. Drop-offs are also below projections.

Table A South Weymouth Commuter Lot Survey Before and After Greenbush Service

	Before Green-		October 2008		October 2009		October 2010		October 2011		October 2012	
	bush Service											1
Lot Condition	No. of Vacant	Percent Vacancy										
	Spaces	vacuncy	Spaces	vacuncy	Spaces	vacancy	Spaces	vacuncy	Spaces	vacuncy	Spaces	vacuncy
Parking Lot												
Occupancy	43	8%	133	25%	276	51%	266	50%	281	53%	289	54%
At 8:15 AM												
Parking Lot												
Occupancy	31	6%	127	24%	259	48%	266	50%	270	51%	303	57%
At 4:25 PM												
% of Commuters												
to/from the North	48%		36.7%		34.2%		37.0%		39.5%		36%	
7:40-8:10 AM												
% of Commuters												
to/from the North	48%		31.7%		39.0%		43.0%		39.2%		39.2%	
4:25-4:55 PM												

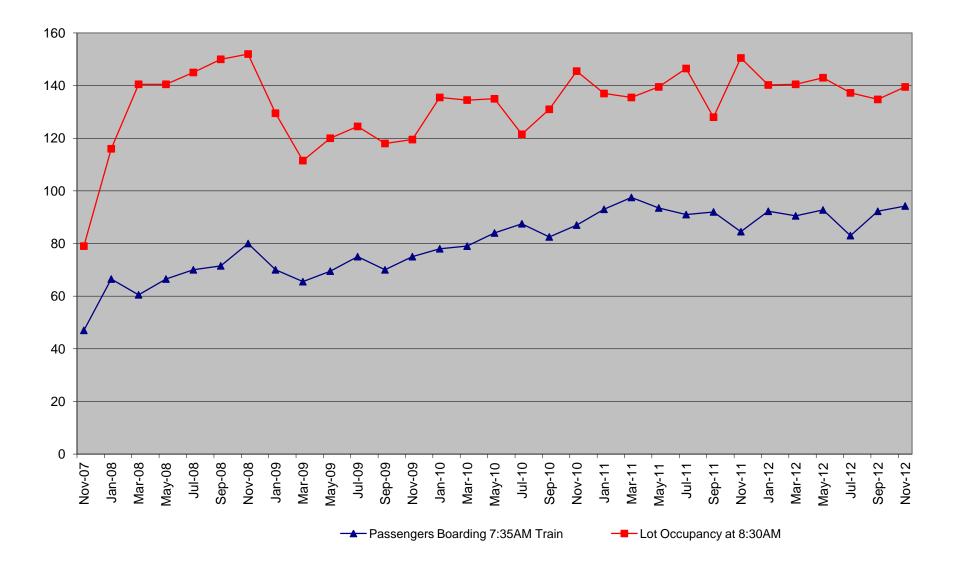
Table 1 East Weymouth Station

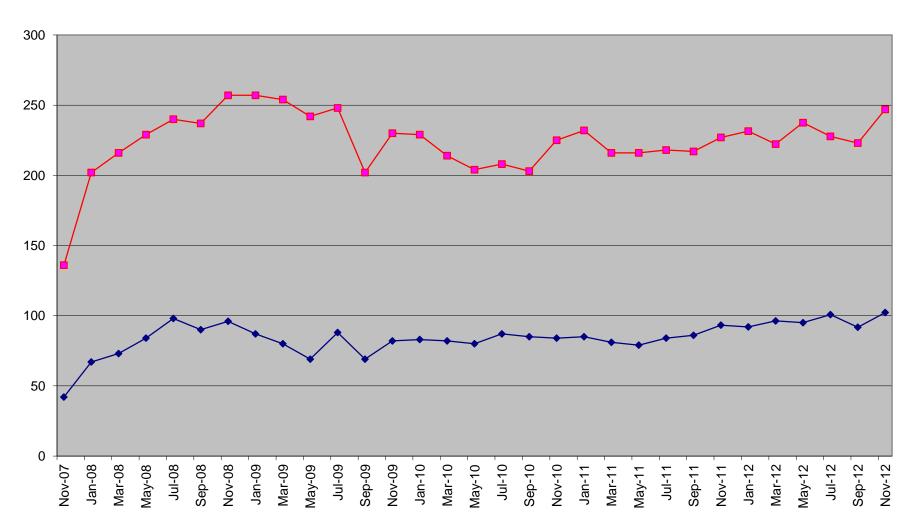
	Es	timates b	y Planning	Departmo	ent	MBTA	Percent					
Category						Estimates			Achieved			
	10/08	10/09	10/10	10/11	10/12	2010	10/08	10/09	10/10	10/11	10/12	
Drop-offs	39	50	60	62	66	70	56%	71%	85%	89%	94%	
Walkers, Bikes, Scooters	48	59	74	77	79	160	30%	37%	46%	48%	49%	
Total Boarding Passengers	440	380	395	400	415	490	90%	78%	81%	82%	85%	
Total Parkers	320	245	235	235	243	260	123%	94%	90%	90%	93%	

Table 2 Weymouth Landing Station

	Es	timates b	y Planning	Departmo	ent	MBTA Estimates	Percent Achieved				
	10/08	10/09	10/10	10/11	10/12	2010	10/08	10/09	10/10	10/11	10/12
Drop-offs	32	40	45	50	50	70	46%	57%	64%	71%	71%
Walkers, Bikes, Scooters	68	95	100	100	100	370	18%	26%	27%	27%	27%
Total Boarding Passengers	300	290	300	310	315	690	43%	42%	43%	45%	46%
Total Parkers	185	140	140	141	148	222	83%	63%	63%	64%	67%
Parkers from Weymouth	71%	82%	76%	72%	72%	70%					
Parkers from Braintree	29%	18%	24%	28%	28%	30%					
Walkers from Weymouth		50%	50%	54%	57%	50%					
Walkers from Braintree		50%	50%	46%	43%	50%					

Figure 1- Weymouth Landing Commuter Rail Station Ridership and Parking Lot Occupancy (Capacity of Lot = 290)





----- Passengers Boarding 8:17AM Train

