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Buzzards Bay Commuter Rail Extension Local Impacts Report

May 2015

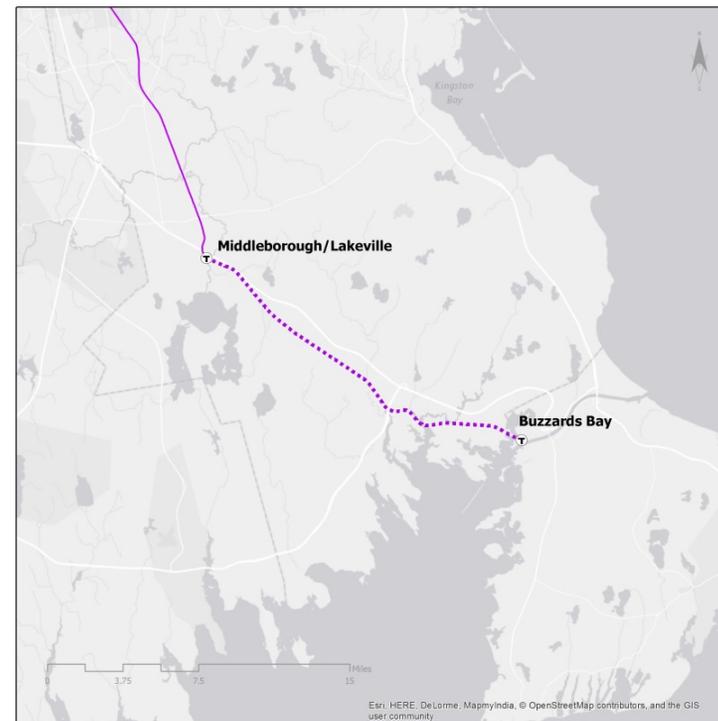


Scope Of Work Overview



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- Cape Cod Commission tasks:
 - Parking
 - Traffic Impacts
 - Local Economic Impacts
- Central Transportation Planning Staff Tasks
 - Statewide Financial and Transportation Impacts



Existing Conditions



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- Rail track is existing
- Rail platform is not desired length and height
- Parking facility is inadequate
- The Town of Bourne will vote May 19th on joining the MBTA assessment district
 - “Shall this (city, town) be added to the Massachusetts Bay Transportation Authority”



Assessment Estimates



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- A town can only be assessed if admitted through local referendum or if defined in the original legislation – (M.G.L 161A)
- Joining the MBTA assessment district service does not automatically result in rail service

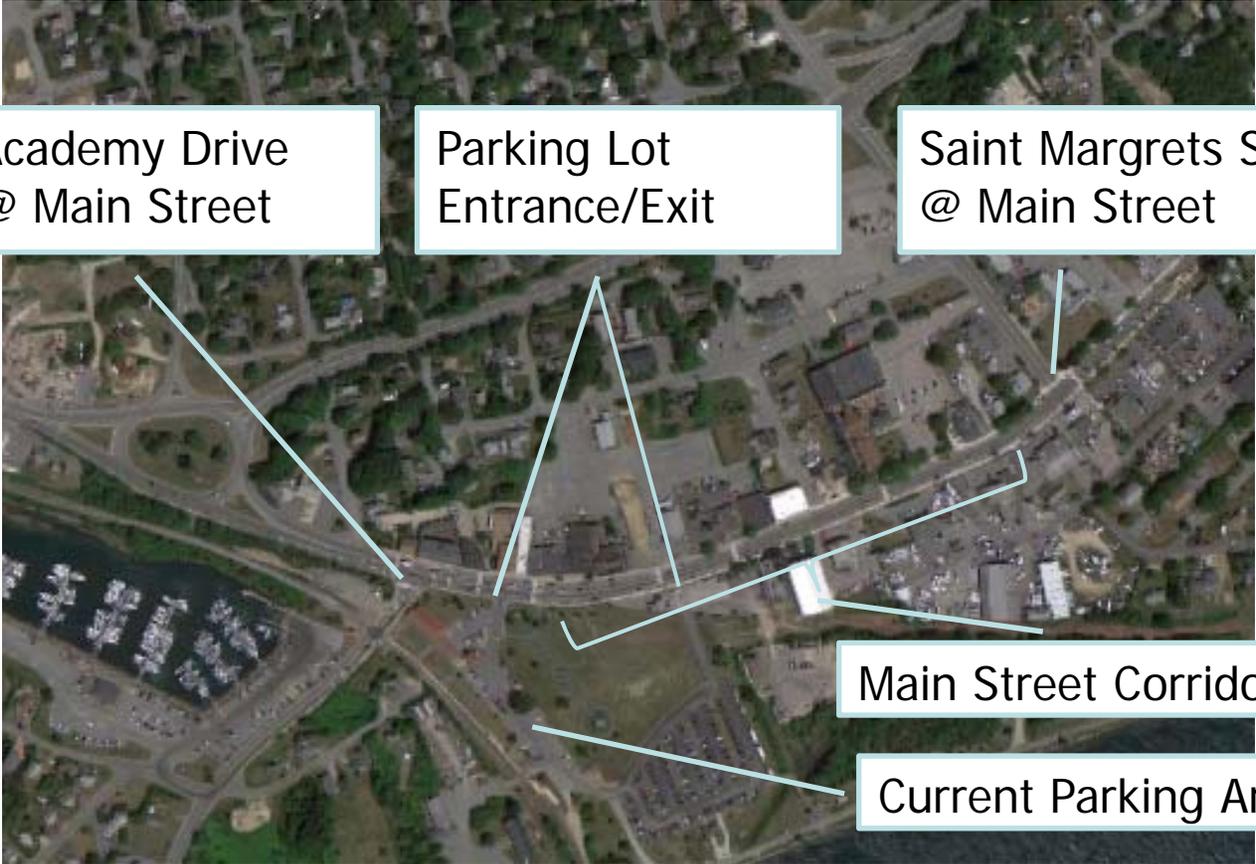
	<u>Bourne</u>	<u>Wareham</u>
Population estimate	19,806	22,339
Weight Factor	1	1
Percentage of total district population	0.0804%	0.0907%
Preliminary assessment	\$128,751	\$145,217
RTA Credit	(\$46,829)	(\$189,891)
Interim assessment amount	\$81,922	0
Paratransit credit impact	\$34	0
Estimated Net Assessment	\$81,956	0

* Assessment values are estimates and do not represent exact amounts

Evaluated Locations



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Academy Drive
@ Main Street

Parking Lot
Entrance/Exit

Saint Margrets Street
@ Main Street

Main Street Corridor

Current Parking Area

Overview of Parking Assumptions



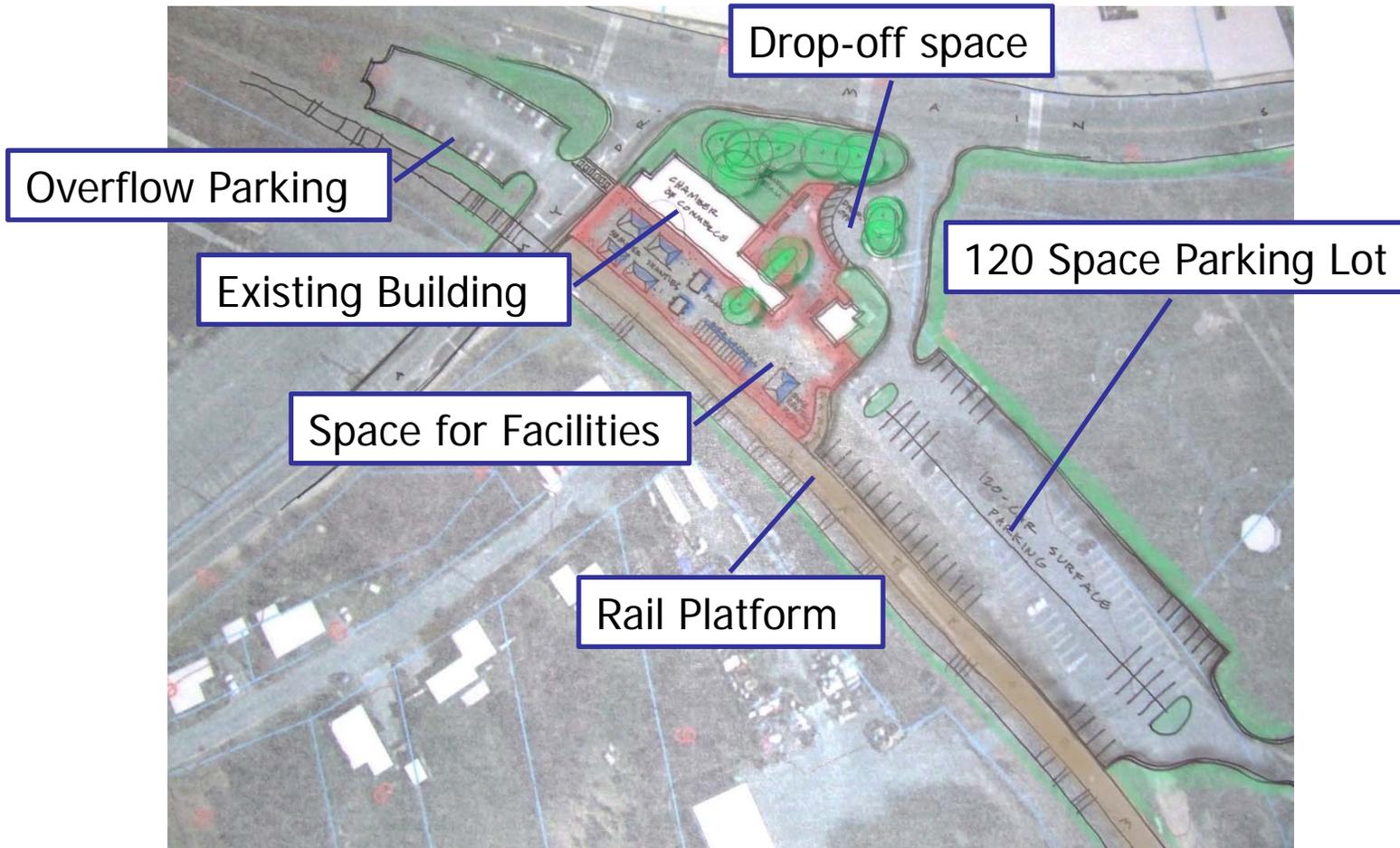
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- Two parking alternatives were created and analyzed assuming *800* inbound passengers per day
- Analysis was completed using July traffic volumes
- Peak Hour Factors assume that all traffic generated accesses in a 30 minute period in the morning and 15 minute period in the afternoon.
- Peak Hours were determined to be between 6am and 7am and 6pm and 7pm
- Poor correlation between ridership and parking demand

Parking Alternative One (120 spaces)



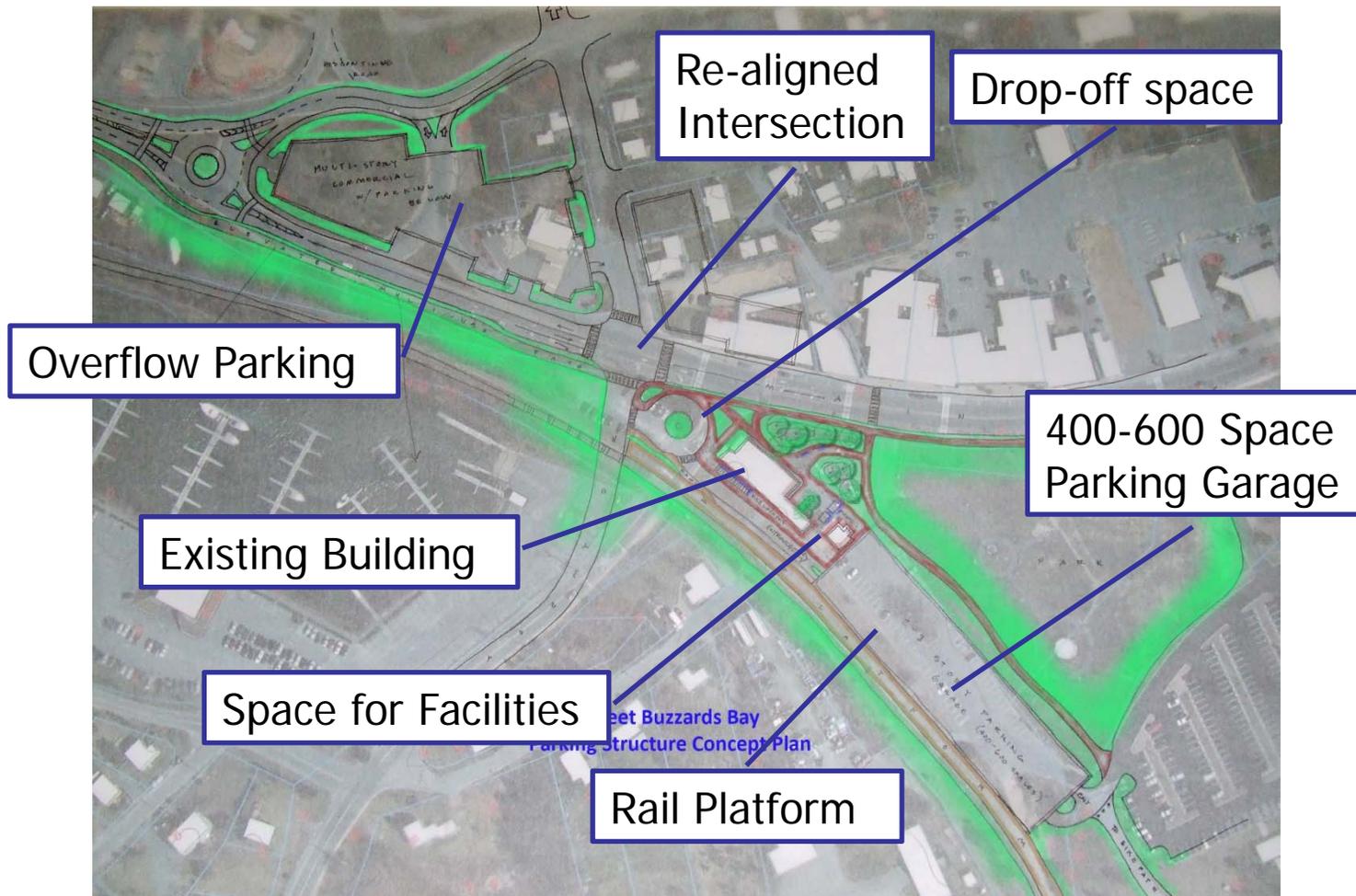
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Parking Alternative Two (400-600 Spaces)



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Parking Alternative One Intersection Impacts



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Location/ Movement	6am to 7am 2024 no build	6pm to 7pm 2024 no build	6am to 7am LOS Build at 120 spaces*	6pm to 7pm LOS Build at 120 spaces**	4pm to 5 pm LOS Build at 120 spaces**
Academy Drive (Total Intersection)	A	B	A	B	B
EB Left/Through on Main Street at St. Margaret's	A	A	A	A	A
SB Left/Right on St. Margaret's at Main Street	B	C	C	F	E
WB Left/ Through on Main Street at Parking lot Entrance/ Exit (Two access points)	A	A	A	B	A
NB Left/Right on Parking lot Entrance/Exit at Main Street (Two access points)	B	D	C	F	D

*Morning impacts are for 30 minute period

**Afternoon are for 15 minute period

Parking Alternative One Roadway Segment Impacts



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Location/ Movement	6am to 7am 2024 no build	6pm to 7pm 2024 no build	6am to 7am LOS Build at 120 spaces*	6pm to 7pm LOS Build at 120 spaces**	4pm to 5pm LOS Build at 120 spaces**
Between Academy and St. Margret's on Main Street	C (0.17 v/c)	E (0.35 v/c)	D (0.32 v/c)	F (0.69 v/c)	E (0.38 v/c)

- V/C represents vehicle to capacity ratio
- LOS rating is based on of V/C ratio and reduction in speed
- Low LOS ratings are not uncommon for Main Street districts

*Morning impacts are for 30 minute period

**Afternoon are for 15 minute period

Economic Impacts



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If commuter rail is extended to Buzzards Bay, the impact could effect:

- Local businesses
- Property values and revenues
- Demand for new residential and commercial development

The methods used to estimate the impact include:

- Literature and Case Studies Review
- Models, such as REMI and IMPLAN, were not used because they are not designed for this local level of analysis but rather large regions or statewide analyses. Neither of these consider impacts on property values or taxes.

Economic Impacts



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- Nationally, transit investments do have a positive return on investment in terms of business sales and personal income
- Historic patterns matter
- Transit Oriented Development (TOD) maximizes benefits



Transit Oriented Development



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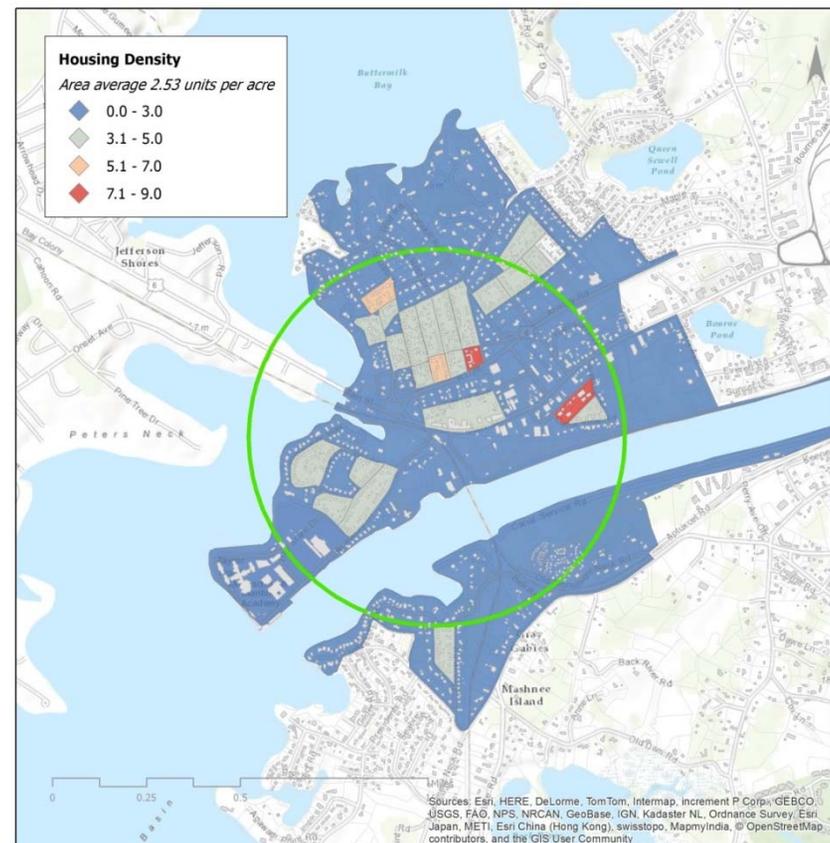
- Those communities that have seen the greatest investment are those that focused mixed use, high density development around the transit station
 - Concord, MA – mixed use project around historic train station
 - Brockton, MA – transit center and police substation adjacent to rail station; spurred private 64-unit housing development
 - Canton, MA – economic development overlay district with higher density and reduced parking led to five new housing developments (207 units)

Transit Oriented Development



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- A critical mass of residents within the TOD will result in maximum economic benefits
 - Gross housing density > 8 units per acre within ½ mile of the station
 - Currently, there is an estimated gross housing density of 2.53 units per acre



TOD Case Studies – Home Values



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- In Buffalo New York it was found that homes within a one quarter mile radius can increase value by approximately \$1300-\$3000.
- Within one quarter to a half mile, it was determined in an analysis of multiple studies over two decades that average housing value premiums increased 6.4% in Philadelphia, 6.7% in Boston, 10.6% in Portland, 17% in San Diego, 24% in Chicago, 24% in Dallas, and 45% in Santa Clara County.

Buzzards Bay Commuter Rail Extension - Local Impacts Report



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- **For a copy of the full report please contact Cape Cod Commission Transportation Staff or access online at**
 - http://www.capecodcommission.org/resources/transportation/CCC_BuzzardsBayCommuterRail_LocalImpactReport.pdf