MBTA's Bus Priority Vision

The vision for the next 5-7 years of **Bus Priority** investments

- Targets existing customers and delay
- Aligned with **Network Redesign**

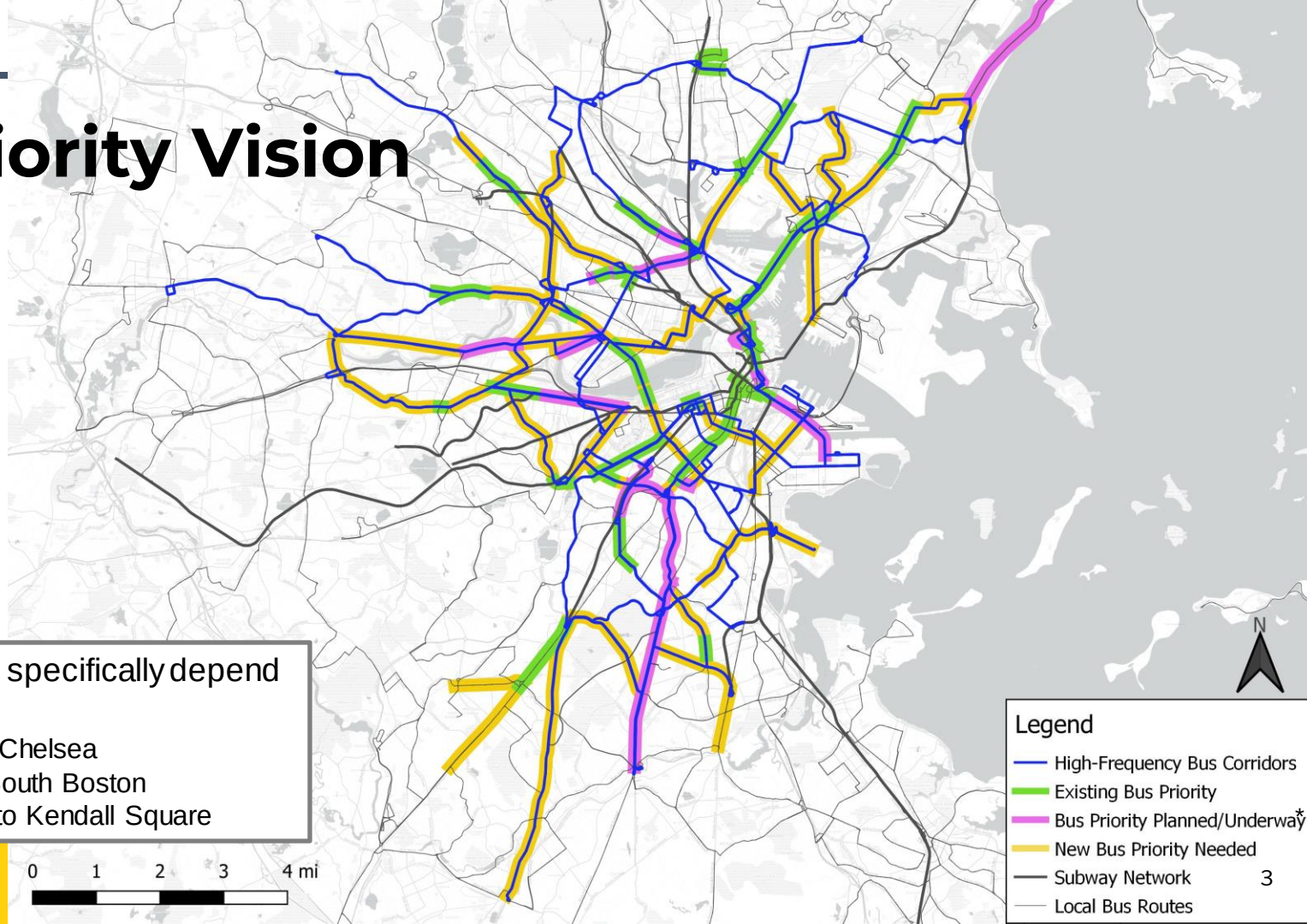
How We Identified Needs

Social Benefit
Where substantial time and cost savings are most impactful
Using: **Existing Bus and Passenger Delay**

Passenger Experience
Where present quality of service does not meet rider needs/expectations
Using: **Speed and Runtime Variability**

Service Levels
Where service frequency and ridership merit priority investments
Using: **Future BNRD Frequencies**

Bus Priority Vision



Three of 26 corridors specifically depend on BNRD

- 2nd Street, Chelsea
- D Street, South Boston
- Lechmere to Kendall Square

* Includes projects sponsored by the MBTA or others

Costs and Benefits

Costs

- 26 corridors
  - Cover 10-15% of the bus network; impact 80% of all bus riders
  - Target existing delay and service; only three corridors depend on BNRD
- 5-7+ years of implementation

Benefits

- Improves service to 220,000 daily riders
- Efficiencies equivalent to 80-90 buses saved at peak hour

Ridership figures in this slide are unlinked trips on referenced routes, typical weekday 2022
*Source: City of Cambridge, Transit Advisory Committee, January 2023

Corridor Profiles Table of Contents

Better Bus Project
Making transit better together

Identified Corridors (1 of 4)

Corridor	Length	Municipalities	BNRD Routes	Page
Blue Hill Ave to Lower Mills	2.9 mi	Boston	**T22, T23,** 18, 21, 24, 26	15
Blue Hill Ave to Washington St (Talbot Ave)	0.9 mi	Boston	**T22**	18
Broadway to Back Bay (via Berkeley St)	1.3 mi	Boston	**T9,** 11, 42	21
Central Sq to Arsenal St (via Western Ave)	2.4 mi	Boston, Cambridge	**T70,** 64	24
Downtown Chelsea	0.8 mi	Chelsea	**T104, T111, T116,** 112, 113	27
Forest Hills to Blue Hill Ave (Morton St)	1.8 mi	Boston	**T16, T31,** 21	30
Forest Hills to Stony Brook Park (Wash. St)	2.6 mi	Boston	30, 34, 34E, 35, 36, 40, 50, 51	33
Harvard Sq to Belmont St (via Mt Auburn St)	1.5 mi	Cambridge	**T71, T73**	36

Identified Corridors (2 of 4)

Corridor	Length	Municipalities	BNRD Routes	Page
Harvard Sq to Brookline Village	4.3 mi	Boston, Brookline, Cambridge	**T57, T66,** 64, 65, 86	39
Harvard Sq to Harvard Bridge (Mass Ave)	2.3 mi	Cambridge	**T1, T47, T70**	42
Harvard Sq to Linwood St (Mass Ave)	2.9 mi	Arlington, Cambridge	**T77,** 67, 83	45
Kenmore to Washington St (Brookline Ave)	1.5 mi	Boston, Brookline	**T12, T22, T28, T47, T66,** 60, 65, 85	48
Kenmore to Watertown Sq	5.9 mi	Boston, Newton, Watertown	**T57,** 52, 56, 58, 501, 504	51
Nubian Sq to LMA (via Malcolm X Blvd)	1.5 mi	Boston	**T12, T15, T22, T23, T28, T66,** 19, 38, 41, 45	56
Nubian to Harvard Bridge (via Mass Ave)	2.3 mi	Boston	**SL5, T1, T12,** 10, 14, 41, 42	59
Nubian to Mattapan (via Blue Hill Ave)	4.4 mi	Boston	**T22, T23, T28, T31,** 14, 19, 29, 44, 45	62

Identified Corridors (3 of 4)

Corridor	Length	Municipalities	BNRD Routes	Page
Roslindale Sq to Centre St (Belgrade Ave)	1.1 mi	Boston	14, 35, 36, 51	67
South Boston to Seaport (via Summer St)	0.6 mi	Boston	**T7**	70
Sullivan Sq to Ferry St (MA-99)	2.0 mi	Boston, Everett	**T109, T110,** 99, 113	73
UMass Boston to Grove Hall (via Columbia)	2.2 mi	Boston	**T8, T15, T16,** 17, 41	76
Union Sq to Tufts	2.7 mi	Somerville	**T96,** 80, 83, 87, 89, 90	79
Wonderland to Maverick	4.7 mi	Boston, Chelsea, Revere	**T104, T109, T116,** 99, 112, 119, 120, 426, 450	82
Woodlawn to Haymarket	4.5 mi	Chelsea, Everett	**T104, T111, T116,** 112, 113	85

Identified Corridors (4 of 4) - New Roadways

Corridor	Length	Municipalities	BNRD Routes	Page
Andrew to Summer St (D Street)	1.5 mi	Boston	**T12**	89
Lafayette Sq to Lechmere	1.7 mi	Cambridge	**T101, T70,** 64, 68, 85	91
Spring St to Everett Ave (2nd Street)	1.5 mi	Chelsea, Everett	**T104,** 112, 113	93

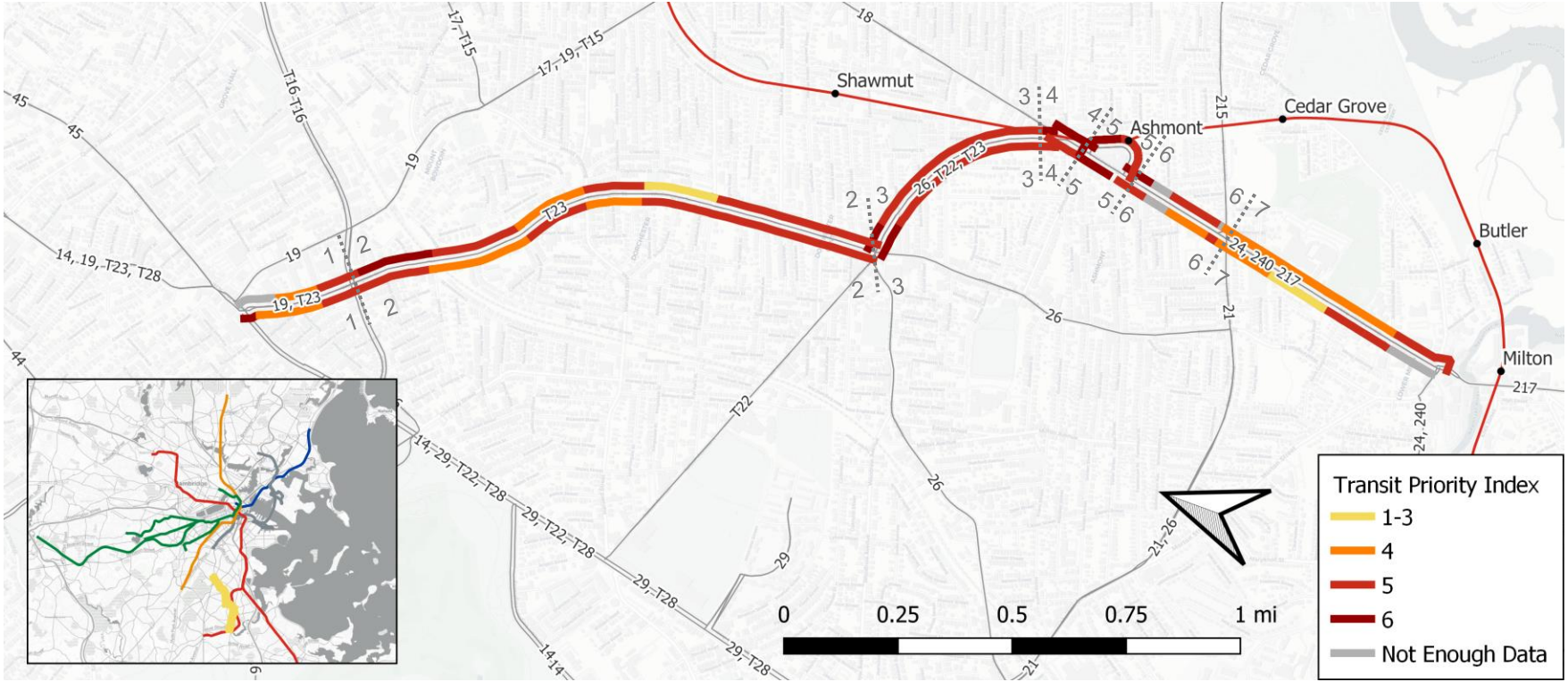
Corridor Profile Attributes

Attribute(s)	Description
Transit Priority Index	A 1 to 6 composite index formed from the service offering, social benefit, and passenger experience scores. A value of 6 represents the highest potential warrant for transit priority investment, and 1 the lowest.
Person-Hours of Delay	Aggregate amount of delay experienced by passengers traversing the segment over the course of a full day
Bus-Hours of Delay	Aggregate amount of delay experienced by buses traversing the segment over the course of a full day
Transit Criticality	OPMI Transit Criticality Metric formulated using 2015-17 Systemwide Passenger Survey Data. For more information: https://massdottracker.com/datablog/?p=1211
Future Development	Future planned development within 0.25 miles of the corridor. Information obtained from the MAPC MassBuilds Database. For more information: https://www.mapc.org/planning101/building-the-future-mapcs-massbuilds-shows-past-present-and-future-development/

Corridor Profiles

Better Bus Project
Making transit better together

Blue Hill Ave to Lower Mills



Blue Hill Ave to Lower Mills – Service and Customer Attributes

		BNRD Routes	Length (miles)	Person-Hours of Delay	Bus-Hours of Delay	Service Volume (Bus Trips)				Percentage of Riders			Transit Critical?
						Peak Hour BNRD	Peak Hour Increase	All Day BNRD	All Day Increase	Minority	Low-Income	Zero-Auto	
1	Blue Hill Ave to Columbia Rd	19, T23	0.3	33	1	10	+3	135	+33	47%	68%	38%	**153**
2	Columbia Rd to Talbot Ave	T23	1.2	114	4	8	+1	122	+20	59%	85%	47%	**191**
3	Washington St at Talbot Ave to Dorchester Ave	26, T22, T23	0.5	539	32	21	+0	280	+41	27%	35%	21%	83
4	Talbot Ave to Ashmont	18, 26, T22, T23	0.1	782	56	21	+0	283	-116	24%	31%	19%	74
5	Ashmont Station	18, 21, 24, 26, 215, 217, 240, T22, T23	0.2	3,183	206	68	+45	962	+702	14%	19%	11%	44
6	Ashmont to Gallivan Blvd	21, 24, 215, 217, 240	0.3	147	8	11	-4	142	-44	22%	35%	17%	74
7	Gallivan Blvd to Lower Mills	24, 217, 240	0.6	97	5	8	-2	85	-19	42%	69%	23%	**135**

Blue Hill Ave to Lower Mills – Development Attributes

		Customer Activity (Boardings + Alightings)	New Commercial Development		New Residential Development		Residential Density (Units per Acre)		Number of New Developments by Size (Sq Ft)		
			Additional Sq Ft	Percent Growth	New Units	Percent Growth	Existing	Projected	Small < 20k	Medium 20k – 50k	Large > 50k
1	Blue Hill Ave to Columbia Rd	2,525	23k	6%	281	32%	11.8	15.6	0	5	0
2	Columbia Rd to Talbot Ave	4,618	5k	1%	65	2%	15.2	15.5	1	2	0
3	Washington St at Talbot Ave to Dorchester Ave	5,356	55k	9%	202	10%	15.2	16.7	0	4	0
4	Talbot Ave to Ashmont	NA (no stops)	2k	1%	20	3%	11.6	11.9	0	1	0
5	Ashmont Station	50,020	6k	10%	85	14%	12.2	13.9	0	2	0
6	Ashmont to Gallivan Blvd	531	0	0%	0	0%	7.7	7.7	0	0	0
7	Gallivan Blvd to Lower Mills	411	0	0%	57	4%	4.9	5.1	0	1	0

Blue Hill Ave to Washington St (via Talbot Ave)

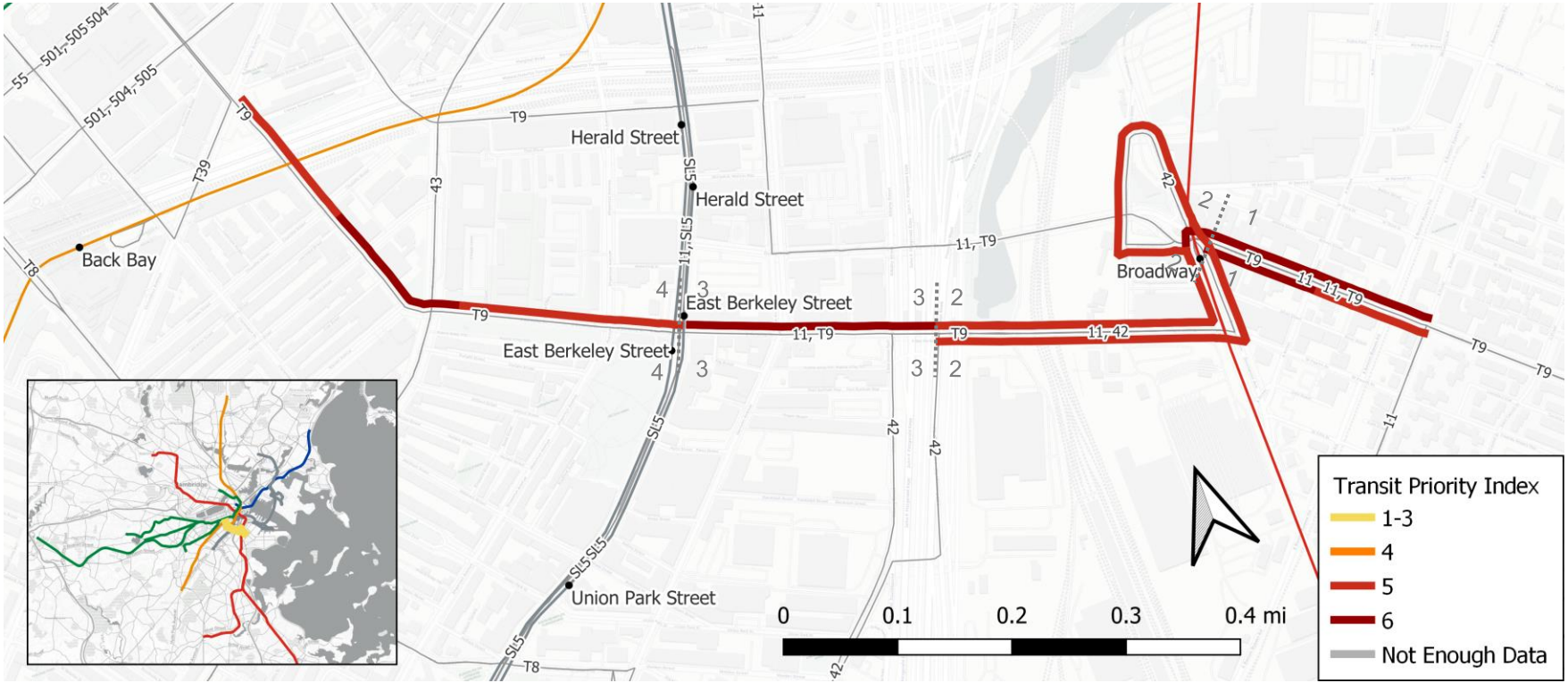
Blue Hill Ave to Wash. St (Talbot Ave) – Service and Customer Attributes

		BNRD Routes	Length (miles)	Person-Hours of Delay	Bus-Hours of Delay	Service Volume (Bus Trips)				Percentage of Riders			Transit Critical?
						Peak Hour BNRD	Peak Hour Increase	All Day BNRD	All Day Increase	Minority	Low-Income	Zero-Auto	
1	Talbot Ave	26, T22	0.9	73	4	8	+1	114	+31	66%	86%	51%	**203**

Blue Hill Ave to Wash. St (Talbot Ave) – Development Attributes

		Customer Activity (Boardings + Alightings)	New Commercial Development		New Residential Development		Residential Density (Units per Acre)		Number of New Developments by Size (Sq Ft)		
			Additional Sq Ft	Percent Growth	New Units	Percent Growth	Existing	Projected	Small < 20k	Medium 20k – 50k	Large > 50k
1	Talbot Ave	2,752	104k	11%	360	20%	9.3	11.1	0	8	0

Broadway to Back Bay (via Berkeley St)



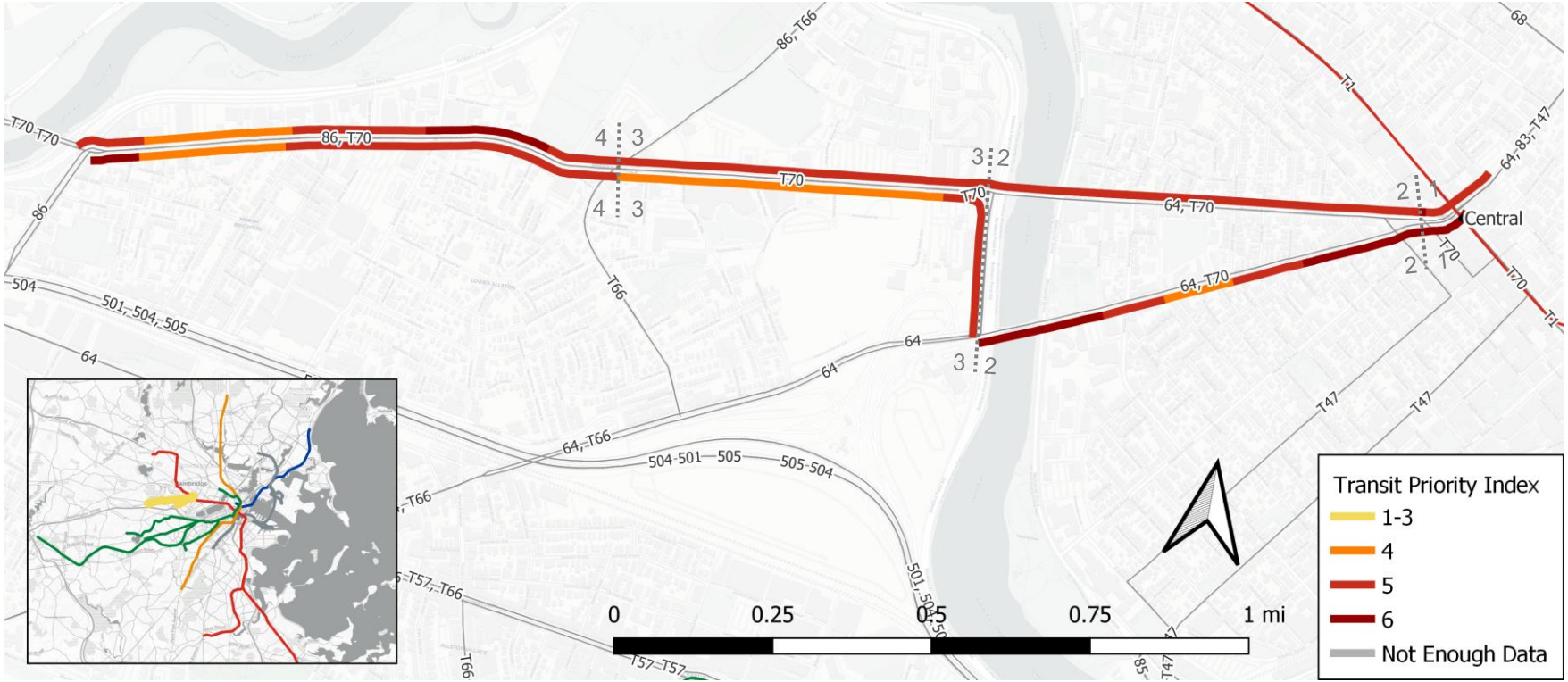
Broadway to Back Bay (via Berkeley St) – Service and Customer Attributes

		BNRD Routes	Length (miles)	Person-Hours of Delay	Bus-Hours of Delay	Service Volume (Bus Trips)				Percentage of Riders			Transit Critical?
						Peak Hour BNRD	Peak Hour Increase	All Day BNRD	All Day Increase	Minority	Low-Income	Zero-Auto	
1	B Street to Broadway Station	11, T9	0.2	578	18	10	+2	142	+54	11%	8%	21%	40
2	Broadway Station to Frontage Rd	11, 42, T9	0.3	143	8	16	-5	226	-25	14%	14%	25%	53
3	Frontage Rd to Washington St	11, T9	0.2	447	20	10	-3	142	-9	8%	6%	17%	31
4	Washington St to Columbus Ave	T9	0.5	45	1	8	0	113	+25	15%	11%	27%	54

Broadway to Back Bay (via Berkeley St) – Development Attributes

		Customer Activity (Boardings + Alightings)	New Commercial Development		New Residential Development		Residential Density (Units per Acre)		Number of New Developments by Size (Sq Ft)		
			Additional Sq Ft	Percent Growth	New Units	Percent Growth	Existing	Projected	Small < 20k	Medium 20k – 50k	Large > 50k
1	B Street to Broadway Station	1,907	714k	17%	299	28%	6.8	8.8	1	5	5
2	Broadway Station to Frontage Rd	6,264	0	0%	0	0%	2.2	2.2	0	0	0
3	Frontage Rd to Washington St	NA (no stops)	613k	25%	1,130	57%	14.1	22.2	0	3	3
4	Washington St to Columbus Ave	139	492k	35%	2,172	35%	38.6	52.4	0	6	6

Central Sq to Arsenal St (via Western Ave)



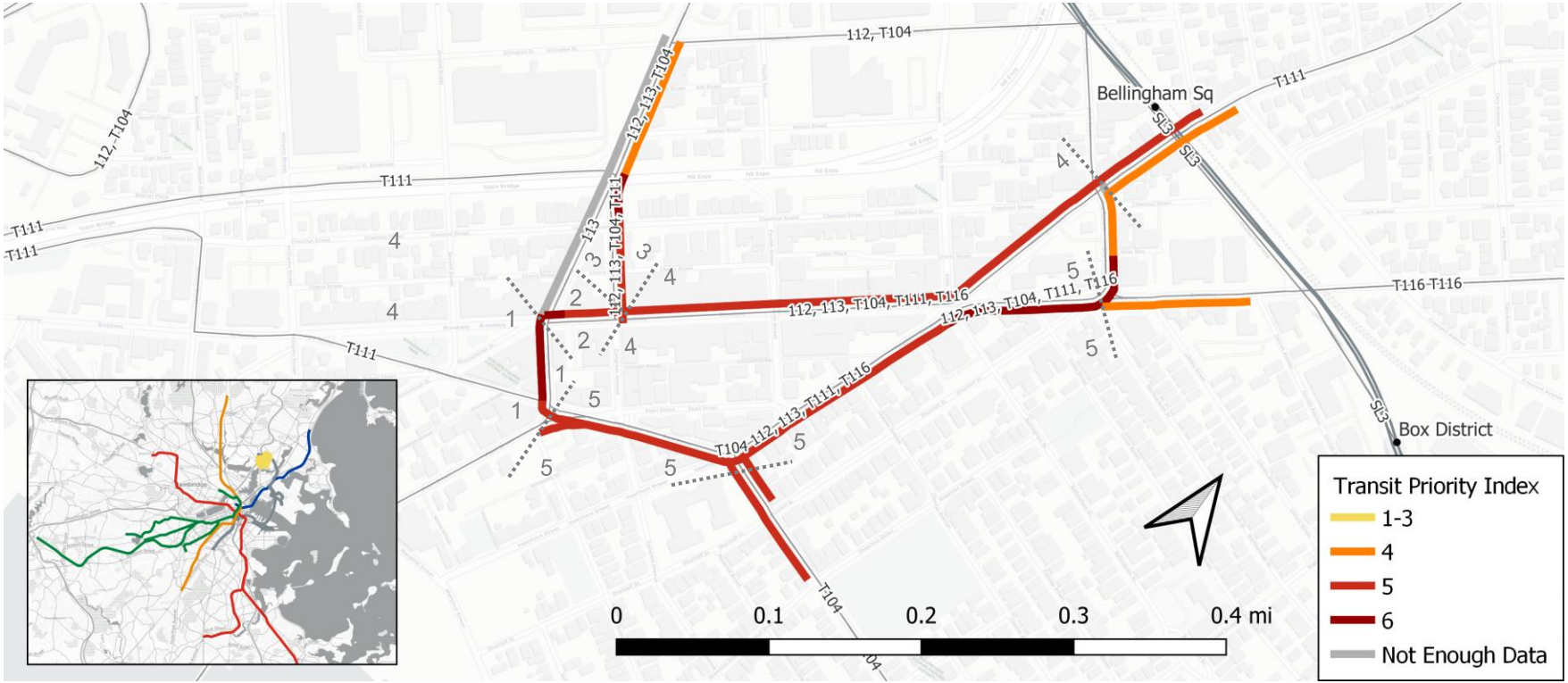
Central Sq to Arsenal St (via Western Ave)– Service and Customer Attributes

		BNRD Routes	Length (miles)	Person-Hours of Delay	Bus-Hours of Delay	Service Volume (Bus Trips)				Percentage of Riders			Transit Critical?
						Peak Hour BNRD	Peak Hour Increase	All Day BNRD	All Day Increase	Minority	Low-Income	Zero-Auto	
1	Central Sq	64, 83, T47, T70	0.1	88	3	20	+6	309	+146	16%	16%	20%	52
2	Central Sq to Soldiers Field Rd	64, T70	0.7	357	11	11	+3	158	+70	16%	15%	20%	51
3	Soldiers Field Rd to Harvard St	T70	0.6	49	2	8	+3	114	+49	21%	20%	25%	66
4	Harvard St to Arsenal St	86, T70	0.8	252	8	11	+2	157	+46	14%	13%	18%	45

Central Sq to Arsenal St (via Western Ave) – Development Attributes

		Customer Activity (Boardings + Alightings)	New Commercial Development		New Residential Development		Residential Density (Units per Acre)		Number of New Developments by Size (Sq Ft)		
			Additional Sq Ft	Percent Growth	New Units	Percent Growth	Existing	Projected	Small < 20k	Medium 20k – 50k	Large > 50k
1	Central Sq	1,121	42k	3%	121	3%	41.7	43.1	0	3	0
2	Central Sq to Soldiers Field Rd	755	20k	2%	300	10%	19.4	21.4	0	1	0
3	Soldiers Field Rd to Harvard St	494	1,550k	45%	250	210%	0.5	1.5	1	0	3
4	Harvard St to Arsenal St	2,439	604k	20%	742	51%	3.4	5.2	0	8	2

Downtown Chelsea



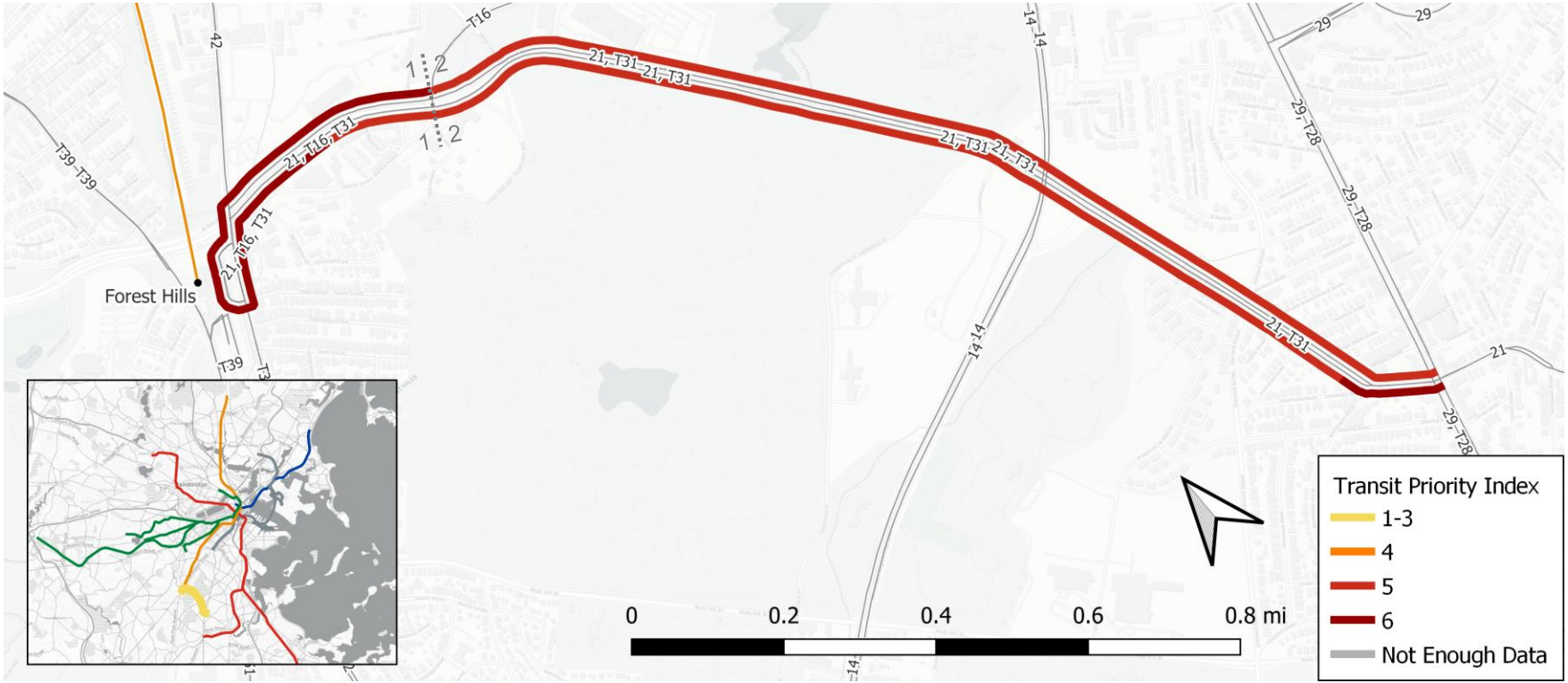
Downtown Chelsea – Service and Customer Attributes

		BNRD Routes	Length (miles)	Person-Hours of Delay	Bus-Hours of Delay	Service Volume (Bus Trips)				Percentage of Riders			Transit Critical?
						Peak Hour BNRD	Peak Hour Increase	All Day BNRD	All Day Increase	Minority	Low-Income	Zero-Auto	
1	Cross Street	112, 113, T104, T116	<0.1	151	8	30	+18	418	+287	29%	27%	21%	78
2	Broadway between Congress and Cross St	112, T104, T116	<0.1	7	1	18	+7	258	+127	29%	27%	20%	76
3	Third Street	112, 113, T104, T111	<0.1	23	1	24	+12	315	+151	58%	57%	42%	**157**
4	Washington Ave & Broadway from Fay Sq to Congress St	112, 113, T104, T111, T116	0.3	68	4	42	+18	573	+278	41%	42%	31%	**115**
5	Fay Sq to Cross St via Hawthorne	112, 113, T111, T116, T104	0.4	24	3	32	+12	442	+175	23%	23%	17%	63

Downtown Chelsea – Development Attributes

		Customer Activity (Boardings + Alightings)	New Commercial Development		New Residential Development		Residential Density (Units per Acre)		Number of New Developments by Size (Sq Ft)		
			Additional Sq Ft	Percent Growth	New Units	Percent Growth	Existing	Projected	Small < 20k	Medium 20k – 50k	Large > 50k
1	Cross Street	NA (no stops)	0	0%	0	0%	22.8	22.8	0	0	0
2	Broadway between Congress and Cross St	838	0	0%	0	0%	31.3	31.3	0	0	0
3	Third Street	1,775	0	0%	0	0%	10.7	12.6	0	1	0
4	Washington Ave & Broadway from Fay Sq to Congress St	4,205	0	0%	32	18%	19.4	19.4	0	0	0
5	Fay Sq to Cross St via Hawthorne	4,726	0	0%	0	0%	20.7	20.7	0	0	0

Forest Hills to Blue Hill Ave (via Morton St)



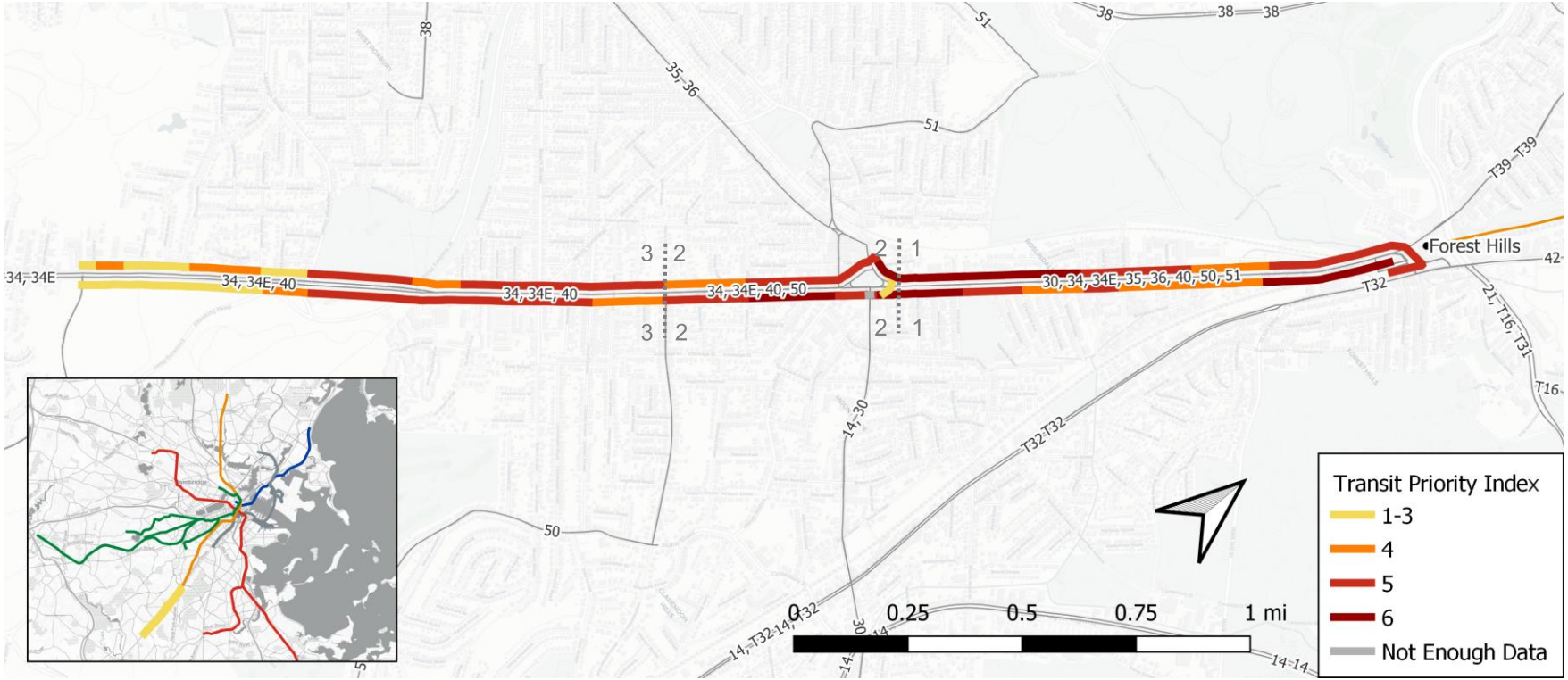
Forest Hills to Blue Hill Ave (Morton St) – Service and Customer Attributes

		BNRD Routes	Length (miles)	Person-Hours of Delay	Bus-Hours of Delay	Service Volume (Bus Trips)				Percentage of Riders			Transit Critical?
						Peak Hour BNRD	Peak Hour Increase	All Day BNRD	All Day Increase	Minority	Low-Income	Zero-Auto	
1	Forest Hills to Jewish War Vets Dr	21, T16, T31	0.4	308	13	21	+4	297	+63	20%	33%	18%	72
2	Jewish War Vets Dr to Blue Hill Ave	21, T31	1.4	219	9	13	-1	183	-4	31%	50%	24%	**105**

Forest Hills to Blue Hill Ave (Morton St) – Development Attributes

		Customer Activity (Boardings + Alightings)	New Commercial Development		New Residential Development		Residential Density (Units per Acre)		Number of New Developments by Size (Sq Ft)		
			Additional Sq Ft	Percent Growth	New Units	Percent Growth	Existing	Projected	Small < 20k	Medium 20k – 50k	Large > 50k
1	Forest Hills to Jewish War Vets Dr	18,970	374k	70%	454	23%	1.8	2.2	1	2	2
2	Jewish War Vets Dr to Blue Hill Ave	3,156	0	0%	0	0%	0.1	0.1	0	0	0

Forest Hills to Stony Brook Park (via Wash. St)



Forest Hills to Stony Brook Pk (Wash. St) – Service and Customer Attributes

		BNRD Routes	Length (miles)	Person-Hours of Delay	Bus-Hours of Delay	Service Volume (Bus Trips)				Percentage of Riders			Transit Critical?
						Peak Hour BNRD	Peak Hour Increase	All Day BNRD	All Day Increase	Minority	Low-Income	Zero-Auto	
1	Forest Hills to Irving Adams Park	30, 34, 34E, 35, 36, 40, 50, 51	1.2	428	22	23	-11	268	-67	5%	9%	4%	18
2	Irving Adams Park to Metropolitan Ave	34, 34E, 40, 50	0.5	188	10	12	-1	130	-15	13%	21%	10%	43
3	Metropolitan Ave to W Boundary Rd	34, 34E, 40	1.3	71	4	9	-1	101	-18	14%	19%	11%	44

Forest Hills to Stony Brook Park (Wash. St) – Development Attributes

		Customer Activity (Boardings + Alightings)	New Commercial Development		New Residential Development		Residential Density (Units per Acre)		Number of New Developments by Size (Sq Ft)		
			Additional Sq Ft	Percent Growth	New Units	Percent Growth	Existing	Projected	Small < 20k	Medium 20k – 50k	Large > 50k
1	Forest Hills to Irving Adams Park	22,139	51k	6%	56	3%	2.9	3.0	0	3	0
2	Irving Adams Park to Metropolitan Ave	2,951	0	0%	0	0%	13.7	13.7	0	0	0
3	Metropolitan Ave to W Boundary Rd	1,999	0	0%	101	5%	3.4	3.6	0	2	0

Harvard Sq to Belmont St (via Mt Auburn St)

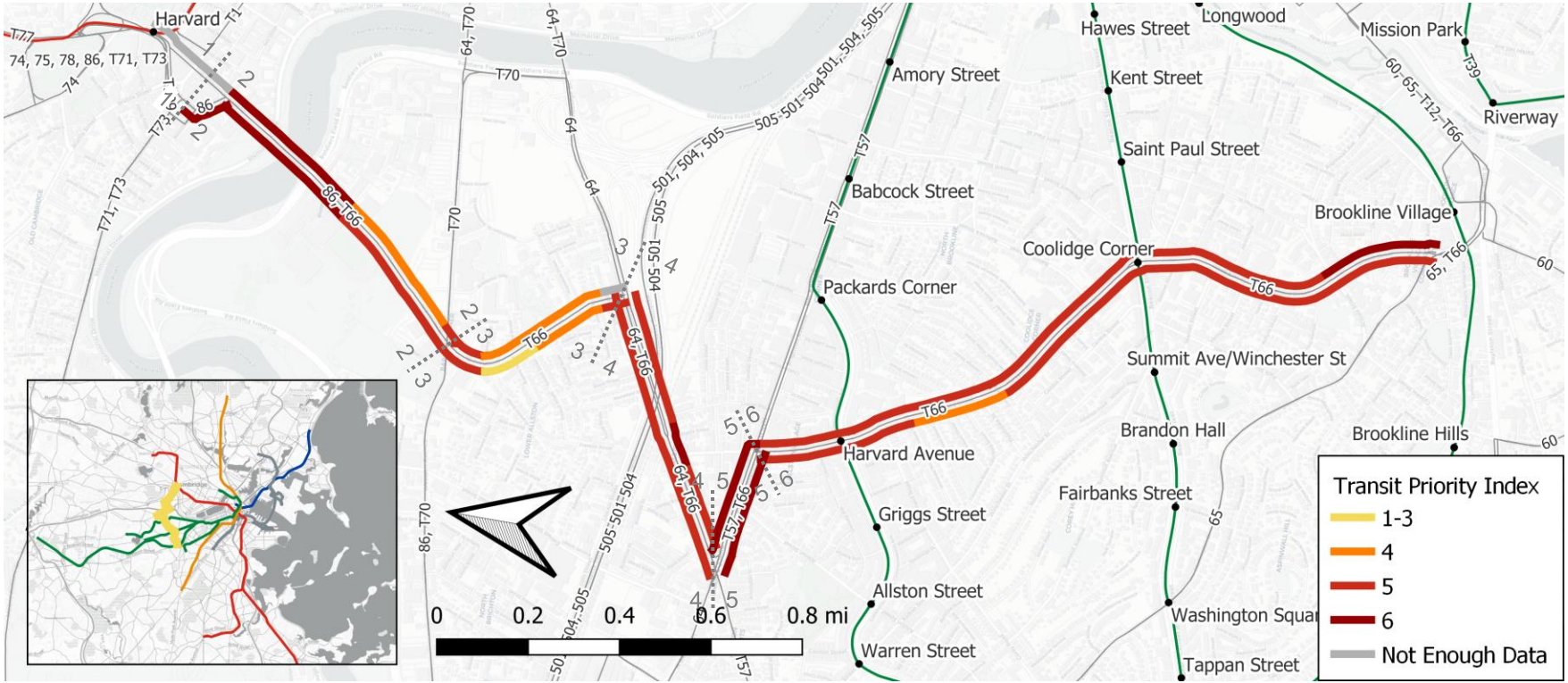
Harvard to Belmont St (via Mt Auburn St) – Service and Customer Attributes

		BNRD Routes	Length (miles)	Person-Hours of Delay	Bus-Hours of Delay	Service Volume (Bus Trips)				Percentage of Riders			Transit Critical?
						Peak Hour BNRD	Peak Hour Increase	All Day BNRD	All Day Increase	Minority	Low-Income	Zero-Auto	
1	Mt Auburn St	T71, T73	1.5	310	13	16	-2	228	+30	11%	12%	12%	35

Harvard Sq to Belmont St (via Mt Auburn St) – Development Attributes

		Customer Activity (Boardings + Alightings)	New Commercial Development		New Residential Development		Residential Density (Units per Acre)		Number of New Developments by Size (Sq Ft)		
			Additional Sq Ft	Percent Growth	New Units	Percent Growth	Existing	Projected	Small < 20k	Medium 20k – 50k	Large > 50k
1	Mt Auburn St	16,779	0	0%	0	0%	155.6	155.6	0	0	0

Harvard Sq to Brookline Village



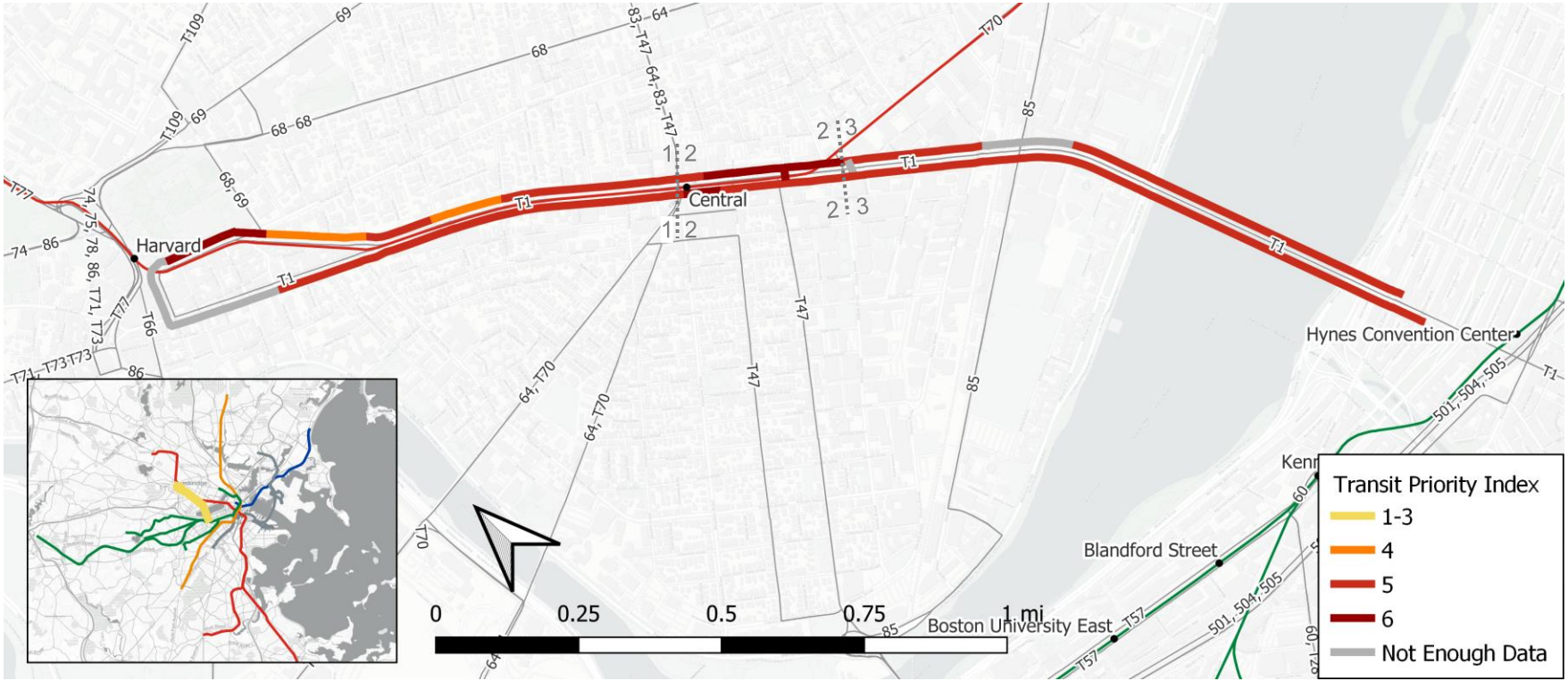
Harvard Sq to Brookline Village – Service and Customer Attributes

		BNRD Routes	Length (miles)	Person-Hours of Delay	Bus-Hours of Delay	Service Volume (Bus Trips)				Percentage of Riders			Transit Critical?
						Peak Hour BNRD	Peak Hour Increase	All Day BNRD	All Day Increase	Minority	Low-Income	Zero-Auto	
1	Harvard Sq to Bennett St	T66	0.2	1	0	9	-2	116	-30	40%	40%	55%	**135**
2	Bennett St to Western Ave	86, T66	0.8	739	25	11	-1	160	+14	21%	21%	29%	70
3	Western Ave to Cambridge St	T66	0.4	15	1	9	0	118	+21	40%	40%	55%	**135**
4	Cambridge St	64, T66	0.6	112	4	11	-6	162	-11	24%	24%	33%	81
5	Brighton Ave	T57, T66	0.3	1,831	69	18	+2	253	+43	22%	21%	29%	73
6	Harvard Ave	T66	1.7	167	5	8	0	117	+20	40%	40%	55%	**135**

Harvard Sq to Brookline Village – Development Attributes

		Customer Activity (Boardings + Alightings)	New Commercial Development		New Residential Development		Residential Density (Units per Acre)		Number of New Developments by Size (Sq Ft)		
			Additional Sq Ft	Percent Growth	New Units	Percent Growth	Existing	Projected	Small < 20k	Medium 20k – 50k	Large > 50k
1	Harvard Sq to Bennett St	2,241	148k	4%	40	4%	8.1	8.4	0	1	2
2	Bennett St to Western Ave	4,193	190k	8%	200	345%	0.2	0.8	1	0	2
3	Western Ave to Cambridge St	1,232	396k	114%	388	33%	5.9	7.8	0	4	1
4	Cambridge St	1,818	23k	2%	980	73%	8.2	14.2	0	5	0
5	Brighton Ave	5,392	0	0%	0	0%	25.6	25.6	0	0	0
6	Harvard Ave	6,124	173k	7%	336	4%	30.7	32.0	0	4	1

Harvard Sq to Harvard Bridge (via Mass Ave)



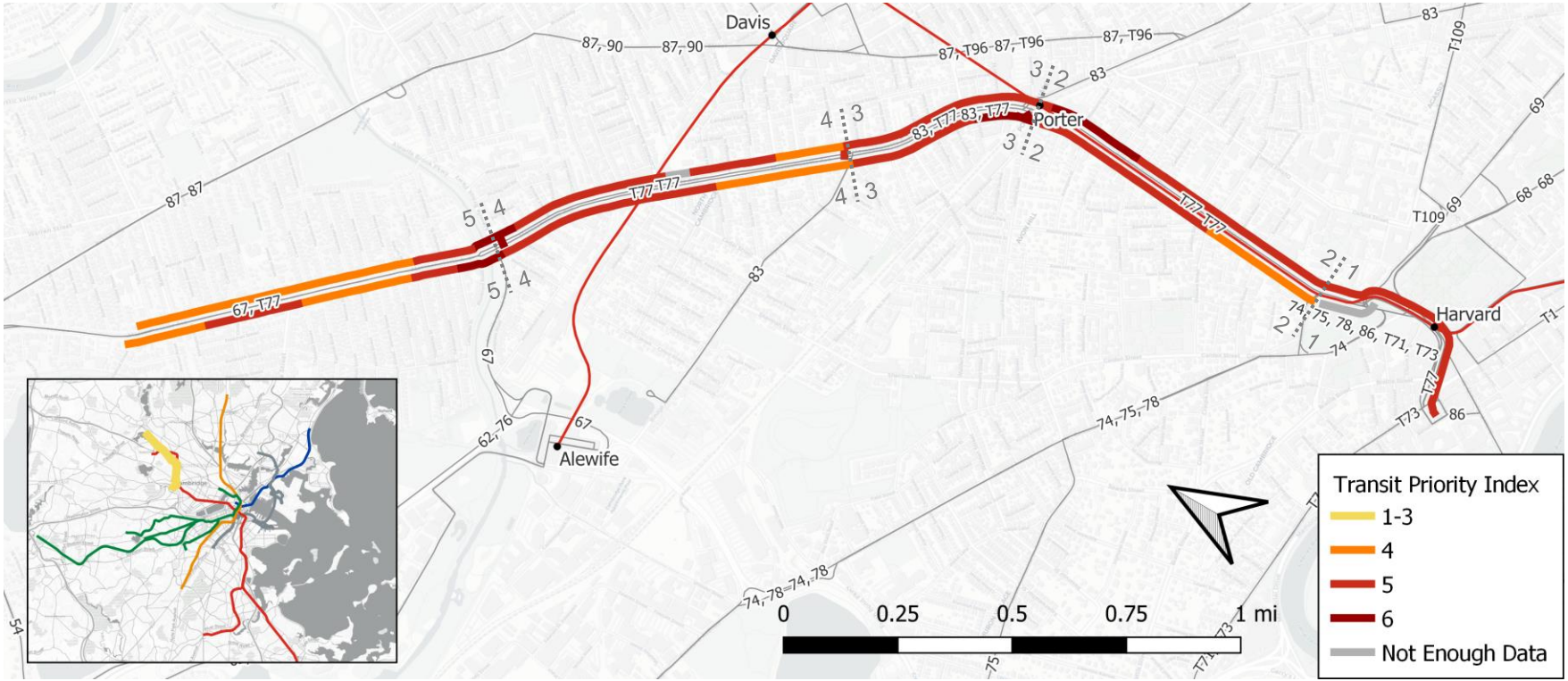
Harvard Sq to Harvard Bridge (Mass Ave) – Service and Customer Attributes

		BNRD Routes	Length (miles)	Person-Hours of Delay	Bus-Hours of Delay	Service Volume (Bus Trips)				Percentage of Riders			Transit Critical?
						Peak Hour BNRD	Peak Hour Increase	All Day BNRD	All Day Increase	Minority	Low-Income	Zero-Auto	
1	Dunster St to Central Sq	T1	0.9	56	12	9	0	133	+23	31%	34%	44%	**109**
2	Central Sq to Sidney St	T1, T47, T70	0.3	391	14	17	+8	238	+128	33%	35%	46%	**114**
3	Sidney St to Beacon St (over Harvard Bridge)	T1	1.0	280	8	9	0	133	+23	34%	37%	48%	**119**

Harvard Sq to Harvard Bridge (Mass Ave) – Development Attributes

		Customer Activity (Boardings + Alightings)	New Commercial Development		New Residential Development		Residential Density (Units per Acre)		Number of New Developments by Size (Sq Ft)		
			Additional Sq Ft	Percent Growth	New Units	Percent Growth	Existing	Projected	Small < 20k	Medium 20k – 50k	Large > 50k
1	Dunster St to Central Sq	5,219	0	0%	0	0%	37.6	37.6	0	0	0
2	Central Sq to Sidney St	10,500	3k	0%	111	4%	33.2	34.6	0	3	0
3	Sidney St to Beacon St (over Harvard Bridge)	3,341	34k	3%	0	0%	3.7	3.7	0	1	0

Harvard Sq to Linwood St (via Mass Ave)



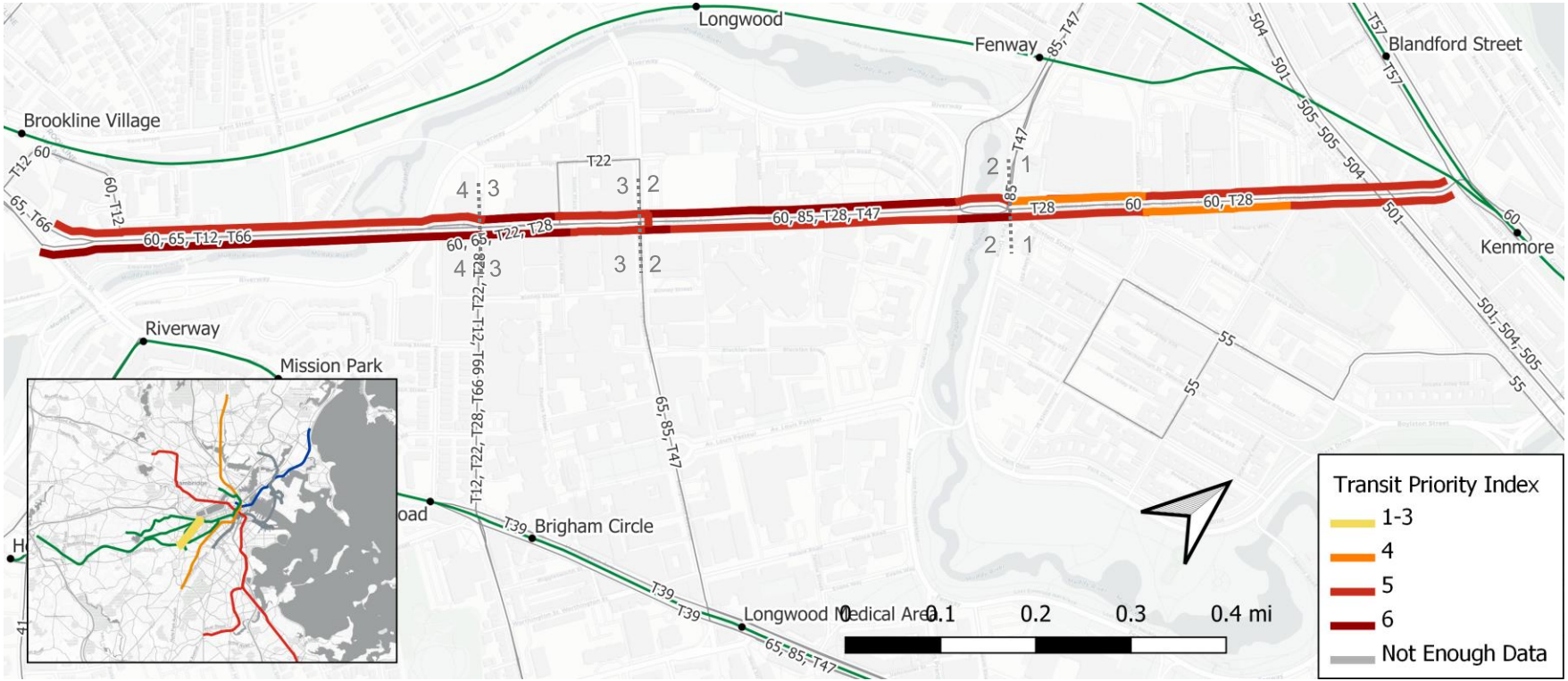
Harvard Sq to Linwood St (Mass Ave) – Service and Customer Attributes

		BNRD Routes	Length (miles)	Person-Hours of Delay	Bus-Hours of Delay	Service Volume (Bus Trips)				Percentage of Riders			Transit Critical?
						Peak Hour BNRD	Peak Hour Increase	All Day BNRD	All Day Increase	Minority	Low-Income	Zero-Auto	
1	Harvard Bus Tunnel to Waterhouse St	74, 75, 78, 86, T71, T73, T77	0.4	0	0	36	-3	507	+51	NA (no stops)	NA (no stops)	NA (no stops)	0
2	Waterhouse St to Somerville Ave (Porter Sq)	T77	0.7	87	5	8	-3	117	-34	23%	16%	22%	60
3	Somerville Ave (Porter Sq) to Rindge Ave	83, T77	0.4	290	15	12	-3	161	-27	23%	19%	28%	71
4	Rindge Ave to Alewife Brook Pkwy	T77	0.8	71	3	8	-1	117	+7	35%	24%	32%	91
5	Alewife Brook Pkwy to Linwood St	67, T77	0.8	186	9	10	-2	135	-34	15%	16%	15%	46

Harvard Sq to Linwood St (Mass Ave) – Development Attributes

		Customer Activity (Boardings + Alightings)	New Commercial Development		New Residential Development		Residential Density (Units per Acre)		Number of New Developments by Size (Sq Ft)		
			Additional Sq Ft	Percent Growth	New Units	Percent Growth	Existing	Projected	Small < 20k	Medium 20k – 50k	Large > 50k
1	Harvard Bus Tunnel to Waterhouse St	NA (no stops)	0	0%	0	0%	3.6	3.6	0	0	0
2	Waterhouse St to Somerville Ave (Porter Sq)	2,779	0	0%	0	0%	20.2	20.2	0	0	0
3	Somerville Ave (Porter Sq) to Rindge Ave	1,069	1k	0%	49	2%	19.1	19.6	0	1	0
4	Rindge Ave to Alewife Brook Pkwy	1,098	617k	56%	42	1%	16.9	17.1	1	1	1
5	Alewife Brook Pkwy to Linwood St	2,094	2k	0%	37	1%	15.6	15.8	0	1	0

Kenmore to Washington St (via Brookline Ave)



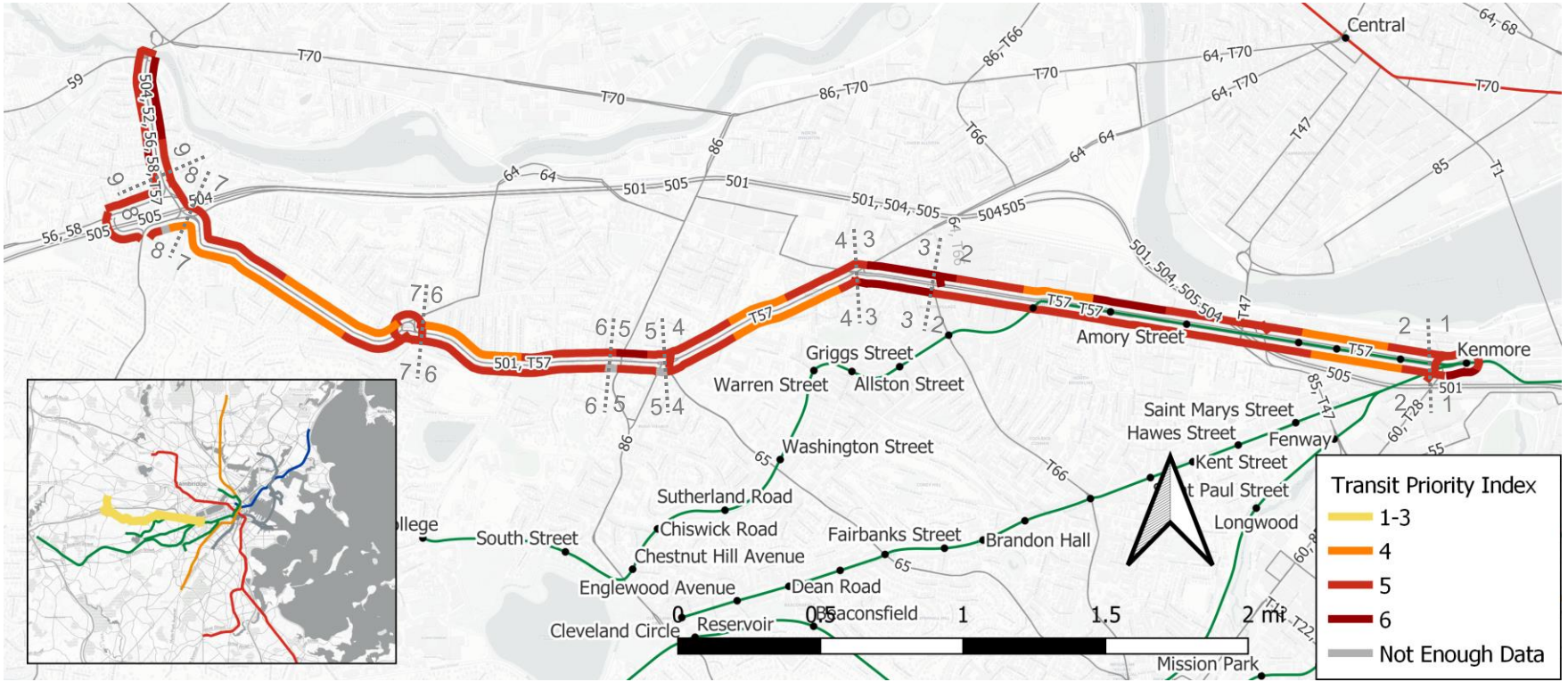
Kenmore to Wash. St (Brookline Ave) – Service and Customer Attributes

		BNRD Routes	Length (miles)	Person-Hours of Delay	Bus-Hours of Delay	Service Volume (Bus Trips)				Percentage of Riders			Transit Critical?
						Peak Hour BNRD	Peak Hour Increase	All Day BNRD	All Day Increase	Minority	Low-Income	Zero-Auto	
1	Commonwealth Ave to Park Dr	60, T28	0.5	18	2	11	-2	169	+37	14%	19%	11%	45
2	Park Dr to Longwood Ave	60, 85, T28, T47	0.4	516	32	21	+3	293	+84	18%	25%	15%	58
3	Longwood Ave to Francis St	60, 65, T22, T28	0.2	436	25	16	+10	216	+148	21%	28%	25%	74
4	Francis St to Washington St	60, 65, T12, T66	0.5	281	11	22	+17	319	+251	23%	30%	28%	81

Kenmore to Washington St (Brookline Ave) – Development Attributes

		Customer Activity (Boardings + Alightings)	New Commercial Development		New Residential Development		Residential Density (Units per Acre)		Number of New Developments by Size (Sq Ft)		
			Additional Sq Ft	Percent Growth	New Units	Percent Growth	Existing	Projected	Small < 20k	Medium 20k – 50k	Large > 50k
1	Commonwealth Ave to Park Dr	1,463	763k	21%	1,582	79%	11.0	19.7	1	2	3
2	Park Dr to Longwood Ave	3,673	730k	24%	0	0%	4.2	4.2	0	0	5
3	Longwood Ave to Francis St	1,775	1,984k	31%	0	0%	4.9	4.9	0	2	5
4	Francis St to Washington St	300	182k	6%	17	1%	14.8	14.9	0	1	1

Kenmore to Watertown Sq



Kenmore to Watertown Sq – Service and Customer Attributes

		BNRD Routes	Length (miles)	Person-Hours of Delay	Bus-Hours of Delay	Service Volume (Bus Trips)				Percentage of Riders			Transit Critical?
						Peak Hour BNRD	Peak Hour Increase	All Day BNRD	All Day Increase	Minority	Low-Income	Zero-Auto	
1	Kenmore Station	60, T28, T57	0.1	133	14	18	-4	264	+18	29%	40%	24%	92
2	Kenmore Station to Harvard Ave	85, T47, T57	0.7	261	9	10	+1	136	-5	42%	28%	39%	**109**
3	Harvard Ave to Cambridge St	T57, T66	0.3	3,681	138	18	+2	253	+43	23%	22%	30%	75
4	Brighton Ave to Washington St	T57	0.7	51	3	10	-1	135	+15	35%	32%	40%	**108**
5	Washington St to Chesnut Hill Ave	65, 501, T57	0.2	44	3	17	+6	205	+85	37%	26%	34%	97
6	Chestnut Hill Ave to Oak Sq	501, T57	0.8	51	4	14	-1	161	0	24%	16%	22%	62
7	Oak Sq to Newton Corner	64, 501, T57	1.0	60.5	3.4	14	-1	162	+1	19%	13%	18%	50

Kenmore to Watertown Sq – Service and Customer Attributes

		BNRD Routes	Length (miles)	Person-Hours of Delay	Bus-Hours of Delay	Service Volume (Bus Trips)				Percentage of Riders			Transit Critical?
						Peak Hour BNRD	Peak Hour Increase	All Day BNRD	All Day Increase	Minority	Low-Income	Zero-Auto	
8	Newton Corner Crossing Mass Pike	52, 56, 58, 501, 504, T57	0.2	265.0	19.2	22	+3	253	+55	10%	10%	10%	30
9	Newton Corner to Watertown St	56, 58, 504, T57	0.4	54.6	5.7	18	0	226	+30	15%	13%	14%	42

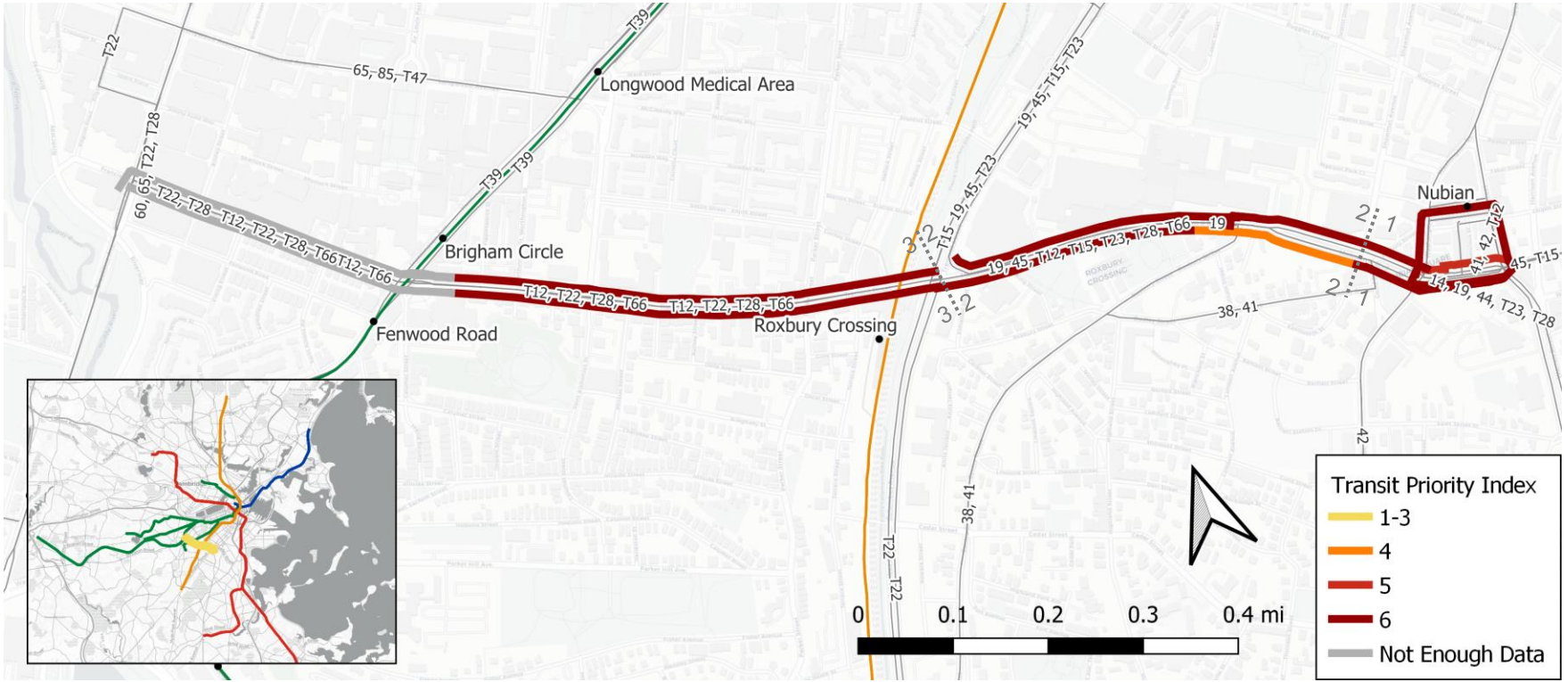
Kenmore to Watertown Sq – Development Attributes

		Customer Activity (Boardings + Alightings)	New Commercial Development		New Residential Development		Residential Density (Units per Acre)		Number of New Developments by Size (Sq Ft)		
			Additional Sq Ft	Percent Growth	New Units	Percent Growth	Existing	Projected	Small < 20k	Medium 20k – 50k	Large > 50k
1	Kenmore Station	19,098	1,541k	75%	400	21%	7.5	9.1	0	2	6
2	Kenmore Station to Harvard Ave	5,338	552k	17%	243	14%	6.0	6.9	0	1	2
3	Harvard Ave to Cambridge St	10,784	890k	78%	1,639	151%	10.4	26.1	0	5	2
4	Brighton Ave to Washington St	3,088	0	0%	71	5%	8.1	8.5	0	1	0
5	Washington St to Chestnut Hill Ave	899	14k	1%	83	6%	10.9	11.5	1	2	0
6	Chestnut Hill Ave to Oak Sq	4,406	33k	5%	65	3%	10.4	10.6	0	3	0
7	Oak Sq to Newton Corner	1,841	0	0%	0	0%	9.4	9.4	0	0	0

Kenmore to Watertown Sq – Development Attributes

	Customer Activity (Boardings + Alightings)	New Commercial Development		New Residential Development		Residential Density (Units per Acre)		Number of New Developments by Size (Sq Ft)		
		Additional Sq Ft	Percent Growth	New Units	Percent Growth	Existing	Projected	Small < 20k	Medium 20k – 50k	Large > 50k
Newton Corner Crossing Mass Pike	2,635	0	0%	0	0%	2.9	2.9	0	0	0
Newton Corner to Watertown St	3,673	2k	0%	24	1%	11.8	11.9	0	1	0

Nubian Sq to LMA (via Malcolm X Blvd)



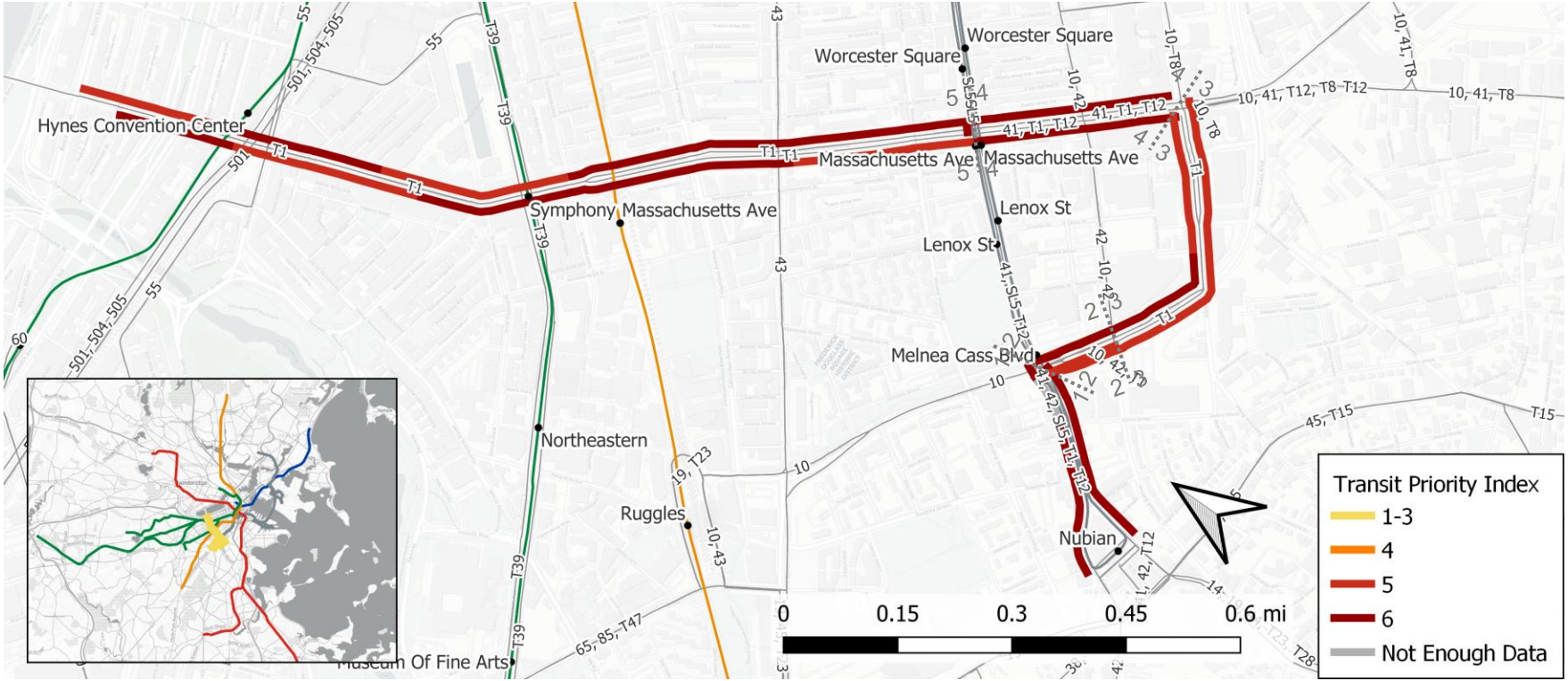
Nubian Sq to LMA (via Malcolm X Blvd) – Service and Customer Attributes

		BNRD Routes	Length (miles)	Person-Hours of Delay	Bus-Hours of Delay	Service Volume (Bus Trips)				Percentage of Riders			Transit Critical?
						Peak Hour BNRD	Peak Hour Increase	All Day BNRD	All Day Increase	Minority	Low-Income	Zero-Auto	
1	Nubian Station to Guild Row	14, 19, 38, 41, 44, 45, T12, T15, T23, T28, T66	0.1	4,460	271	48	+2	699	+128	13%	18%	11%	42
2	Guild Row to Columbus Ave	19, 38, 41, 45, T12, T15, T23, T28, T66	0.5	809	53	42	-1	652	+113	15%	20%	13%	48
3	Columbus Ave to Brookline Ave	T12, T22, T28, T66	0.6	141	6	30	+22	470	+373	39%	44%	54%	**136**

Nubian Sq to LMA (via Malcolm X Blvd) – Development Attributes

		Customer Activity (Boardings + Alightings)	New Commercial Development		New Residential Development		Residential Density (Units per Acre)		Number of New Developments by Size (Sq Ft)		
			Additional Sq Ft	Percent Growth	New Units	Percent Growth	Existing	Projected	Small < 20k	Medium 20k – 50k	Large > 50k
1	Nubian Station to Guild Row	32,517	160k	22%	629	253%	3.5	12.4	1	10	0
2	Guild Row to Columbus Ave	8,310	1,050k	90%	1,012	116%	6.1	13.3	0	6	2
3	Columbus Ave to Brookline Ave	5,530	12k	0%	791	35%	12.2	16.5	0	6	0

Nubian to Harvard Bridge (via Mass Ave)



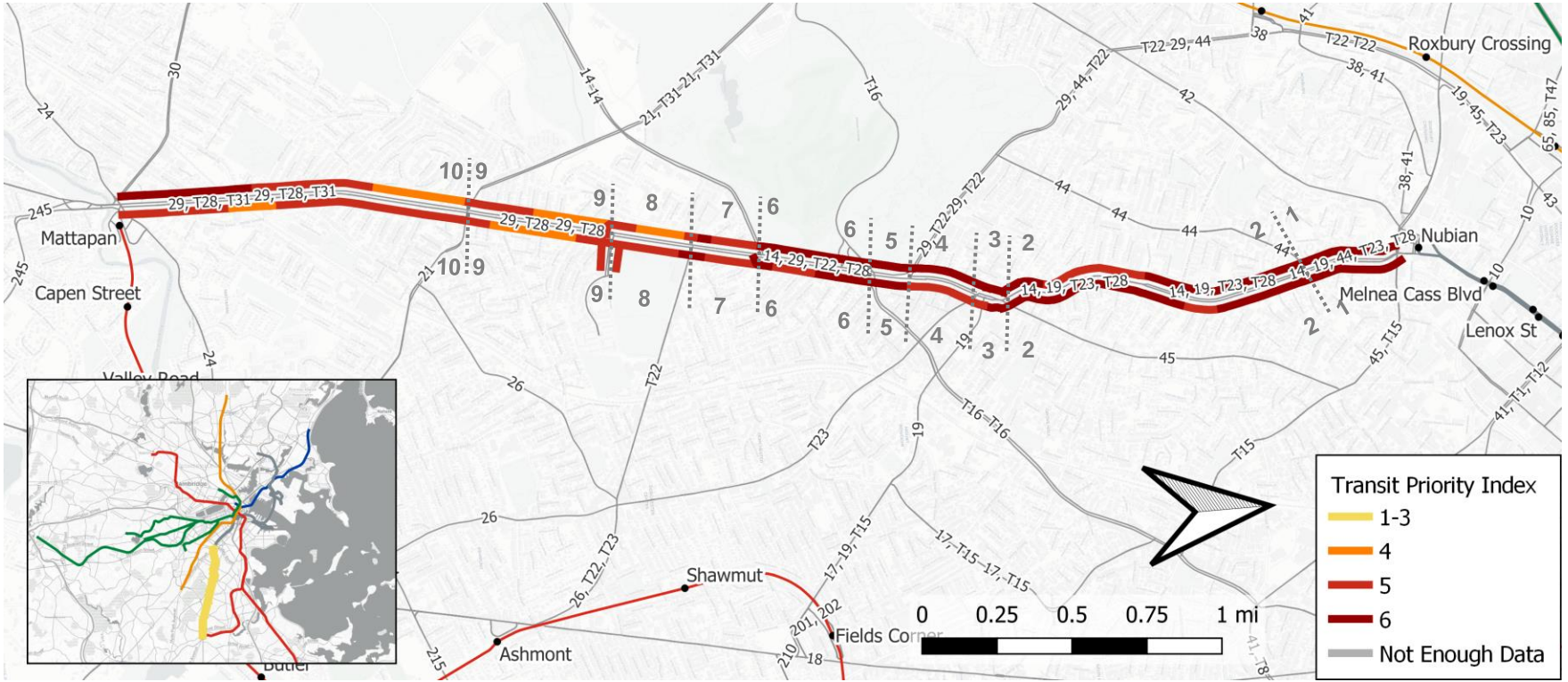
Nubian to Harvard Bridge (via Mass Ave) – Service and Customer Attributes

		BNRD Routes	Length (miles)	Person-Hours of Delay	Bus-Hours of Delay	Service Volume (Bus Trips)				Percentage of Riders			Transit Critical?
						Peak Hour BNRD	Peak Hour Increase	All Day BNRD	All Day Increase	Minority	Low-Income	Zero-Auto	
1	Nubian Station to Melnea Cass Blvd	41, 42, SL5, T1, T12	0.3	686	50	88	+58	1,304	+926	5%	8%	7%	20
2	Washington St to Harrison Ave	10, 42, T1	0.1	112	11	18	+5	262	+120	14%	15%	19%	47
3	Harrison Ave to Mass Ave (via Albany St)	T1	0.4	45	3	9	0	133	+24	30%	32%	42%	**104**
4	Albany St to Washington St	41, T1, T12	0.3	151	7	18	+10	265	+155	34%	37%	48%	**119**
5	Washington St to Beacon St	T1	1.2	476	15	9	0	133	+18	34%	37%	48%	**119**

Nubian to Harvard Bridge (via Mass Ave) – Development Attributes

		Customer Activity (Boardings + Alightings)	New Commercial Development		New Residential Development		Residential Density (Units per Acre)		Number of New Developments by Size (Sq Ft)		
			Additional Sq Ft	Percent Growth	New Units	Percent Growth	Existing	Projected	Small < 20k	Medium 20k – 50k	Large > 50k
1	Nubian Station to Melnea Cass Blvd	1,729	49k	5%	280	104%	3.6	7.4	0	5	0
2	Washington St to Harrison Ave	NA (no stops)	558k	36%	31	11%	4.2	4.6	0	1	2
3	Harrison Ave to Mass Ave (via Albany St)	1,066	66	0%	0	0%	2.4	2.4	1	0	0
4	Albany St to Washington St	5,277	1,648k	88%	62	2%	20.6	21.1	0	1	6
5	Washington St to Beacon St	10,010	1,798k	16%	1,345	15%	20.6	23.8	2	6	4

Nubian to Mattapan (via Blue Hill Ave)



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Nubian to Mattapan (via Blue Hill Ave) – Service and Customer Attributes

		BNRD Routes	Length (miles)	Person-Hours of Delay	Bus-Hours of Delay	Service Volume (Bus Trips)				Percentage of Riders			Transit Critical?
						Peak Hour BNRD	Peak Hour Increase	All Day BNRD	All Day Increase	Minority	Low-Income	Zero-Auto	
1	Nubian to Walnut Ave	14, 19, 44, T23, T28	0.3	615	23	22	+3	311	+68	20%	28%	16%	63
2	Walnut Ave to Georgia St	14, 19, T23, T28	1.1	442	15	19	+2	282	+39	23%	32%	19%	74
3	Georgia St to Washington St	14, 19, 45, T23, T28	0.1	773	33	22	+9	325	+193	26%	34%	23%	82
4	Washington St to Seaver St	14, 45, T28	0.2	220	10	13	0	190	+23	51%	67%	45%	**163**
5	Seaver St to Glenway St	14, 29, 45, T22, T28	0.2	1,342	66	21	+3	307	+77	25%	33%	21%	79
6	Glenway St to Am-Leg Hwy	14, 29, T22, T28	0.3	264	11	18	+2	266	+56	27%	36%	21%	85

Nubian to Mattapan (via Blue Hill Ave) – Service and Customer Attributes

		BNRD Routes	Length (miles)	Person-Hours of Delay	Bus-Hours of Delay	Service Volume (Bus Trips)				Percentage of Riders			Transit Critical?
						Peak Hour BNRD	Peak Hour Increase	All Day BNRD	All Day Increase	Minority	Low-Income	Zero-Auto	
7	Am-Leg Hwy to Talbot Ave	29, T22, T28	0.2	173	8	17	0	244	+34	31%	41%	24%	95
8	Talbot Ave to Morton St	29, T28	0.8	108	6	10	-1	133	+6	51%	68%	40%	**158**
9	Morton St to Mattapan Station	29, T28, T31	1.2	176	21	16	-2	245	+2	30%	40%	23%	94

Nubian to Mattapan (via Blue Hill Ave) – Development Attributes

		Customer Activity (Boardings + Alightings)	New Commercial Development		New Residential Development		Residential Density (Units per Acre)		Number of New Developments by Size (Sq Ft)		
			Additional Sq Ft	Percent Growth	New Units	Percent Growth	Existing	Projected	Small < 20k	Medium 20k – 50k	Large > 50k
1	Nubian to Walnut Ave	1,922	1k	0%	97	6%	11.8	12.5	0	3	0
2	Walnut Ave to Georgia St	10,326	11k	1%	111	5%	11.7	12.3	0	2	0
3	Georgia St to Washington St	NA (no stops)	0	0%	0	0%	13.4	13.4	0	0	0
4	Washington St to Seaver St	2,275	0	0%	0	0%	0.6	0.6	0	0	0
5	Seaver St to Glenway St	3,298	2k	1%	145	24%	1.2	1.5	0	2	0
6	Glenway St to Am-Leg Hwy	1,611	0	0%	100	14%	1.3	1.5	0	1	0

Nubian to Mattapan (via Blue Hill Ave) – Development Attributes

		Customer Activity (Boardings + Alightings)	New Commercial Development		New Residential Development		Residential Density (Units per Acre)		Number of New Developments by Size (Sq Ft)		
			Additional Sq Ft	Percent Growth	New Units	Percent Growth	Existing	Projected	Small < 20k	Medium 20k – 50k	Large > 50k
7	Am-Leg Hwy to Talbot Ave	2,484	0	0%	23	3%	1.1	1.2	0	1	0
8	Talbot Ave to Morton St	3,120	3k	0%	75	3%	9.9	10.2	0	3	0
9	Morton St to Mattapan Station	12,029	79k	7%	521	15%	10.1	11.7	0	7	1

Roslindale Sq to Centre St (Belgrade Ave)

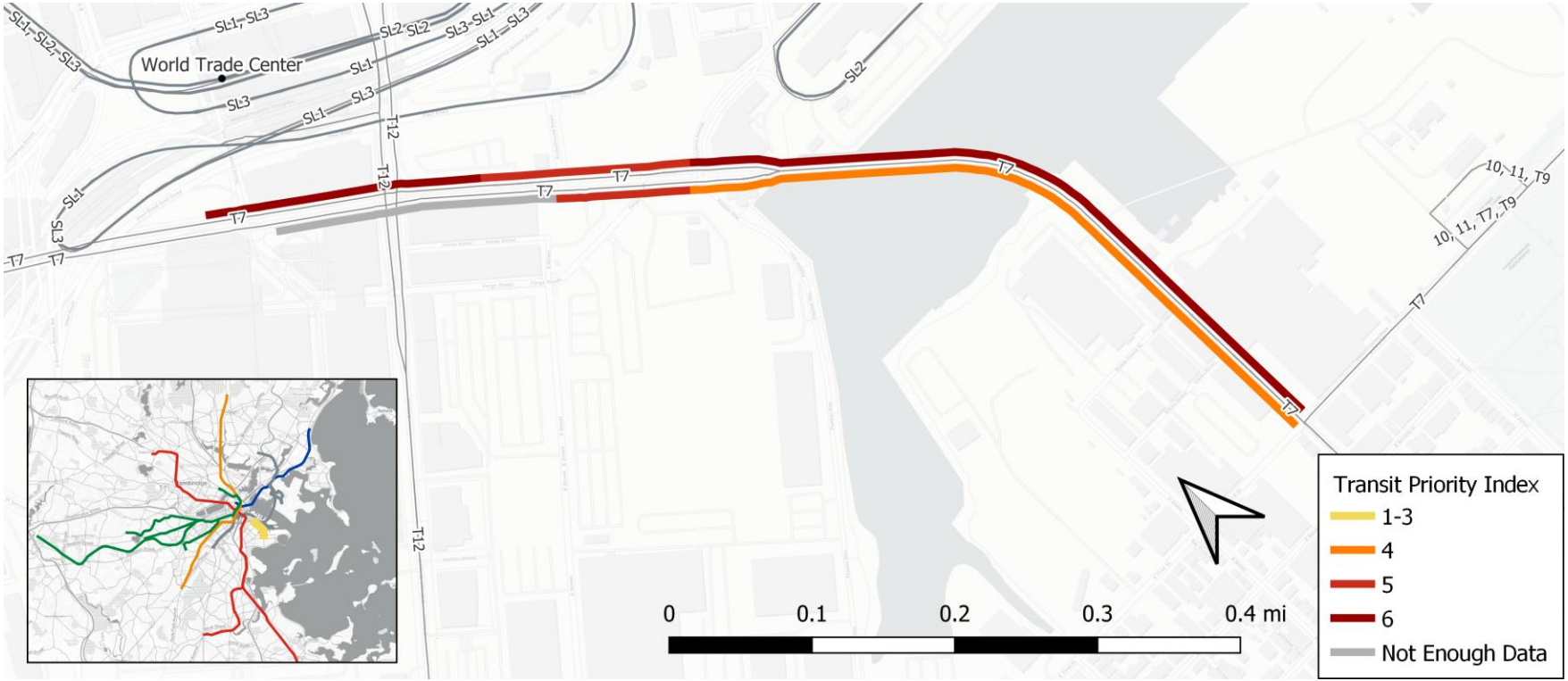
Roslindale Sq to Centre St (Belgrade Ave) – Service and Customer Attributes

		BNRD Routes	Length (miles)	Person-Hours of Delay	Bus-Hours of Delay	Service Volume (Bus Trips)				Percentage of Riders			Transit Critical?
						Peak Hour BNRD	Peak Hour Increase	All Day BNRD	All Day Increase	Minority	Low-Income	Zero-Auto	
1	Irving Adams Park to Robert Street	14, 35, 36, 51	0.2	66	6	12	-10	137	-72	11%	23%	8%	41
2	Robert St to Centre St	35, 36, 51	1.1	24	2	6	-8	88	-38	11%	21%	10%	42

Roslindale Sq to Centre St (Belgrade Ave) – Development Attributes

		Customer Activity (Boardings + Alightings)	New Commercial Development		New Residential Development		Residential Density (Units per Acre)		Number of New Developments by Size (Sq Ft)		
			Additional Sq Ft	Percent Growth	New Units	Percent Growth	Existing	Projected	Small < 20k	Medium 20k – 50k	Large > 50k
1	Irving Adams Park to Robert Street	965	0	0%	16	1%	10.1	10.3	0	1	0
2	Robert St to Centre St	2,133	83k	10%	57	2%	8.4	8.6	0	5	0

South Boston to Seaport (via Summer St)



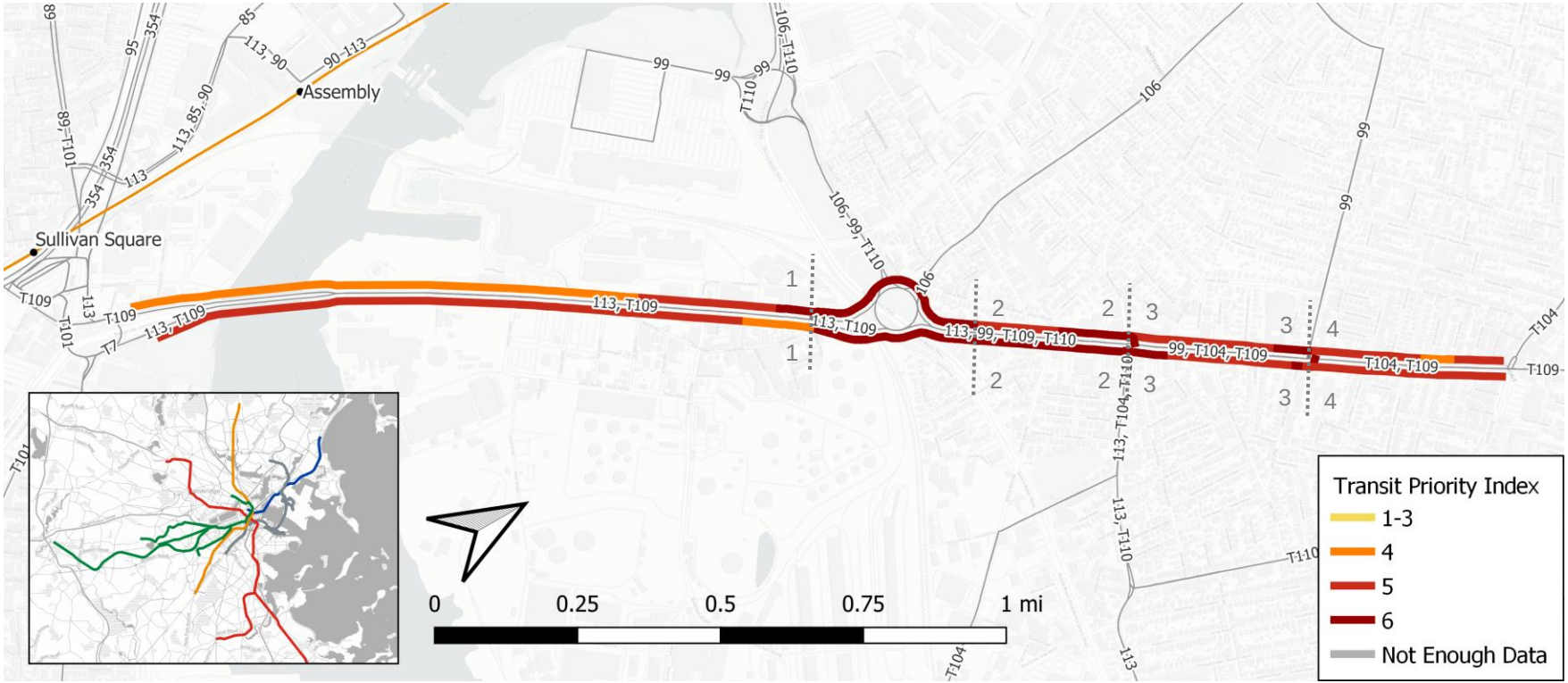
South Boston to Seaport (via Summer St) – Service and Customer Attributes

		BNRD Routes	Length (miles)	Person-Hours of Delay	Bus-Hours of Delay	Service Volume (Bus Trips)				Percentage of Riders			Transit Critical?
						Peak Hour BNRD	Peak Hour Increase	All Day BNRD	All Day Increase	Minority	Low-Income	Zero-Auto	
1	Summer St	T7	0.8	101	3	8	-3	114	+19	6%	10%	19%	36

South Boston to Seaport (via Summer St) – Development Attributes

		Customer Activity (Boardings + Alightings)	New Commercial Development		New Residential Development		Residential Density (Units per Acre)		Number of New Developments by Size (Sq Ft)		
			Additional Sq Ft	Percent Growth	New Units	Percent Growth	Existing	Projected	Small < 20k	Medium 20k – 50k	Large > 50k
1	Summer St	659	4,013k	39%	1,841	80%	3.8	6.8	2	3	9

Sullivan Sq to Ferry St



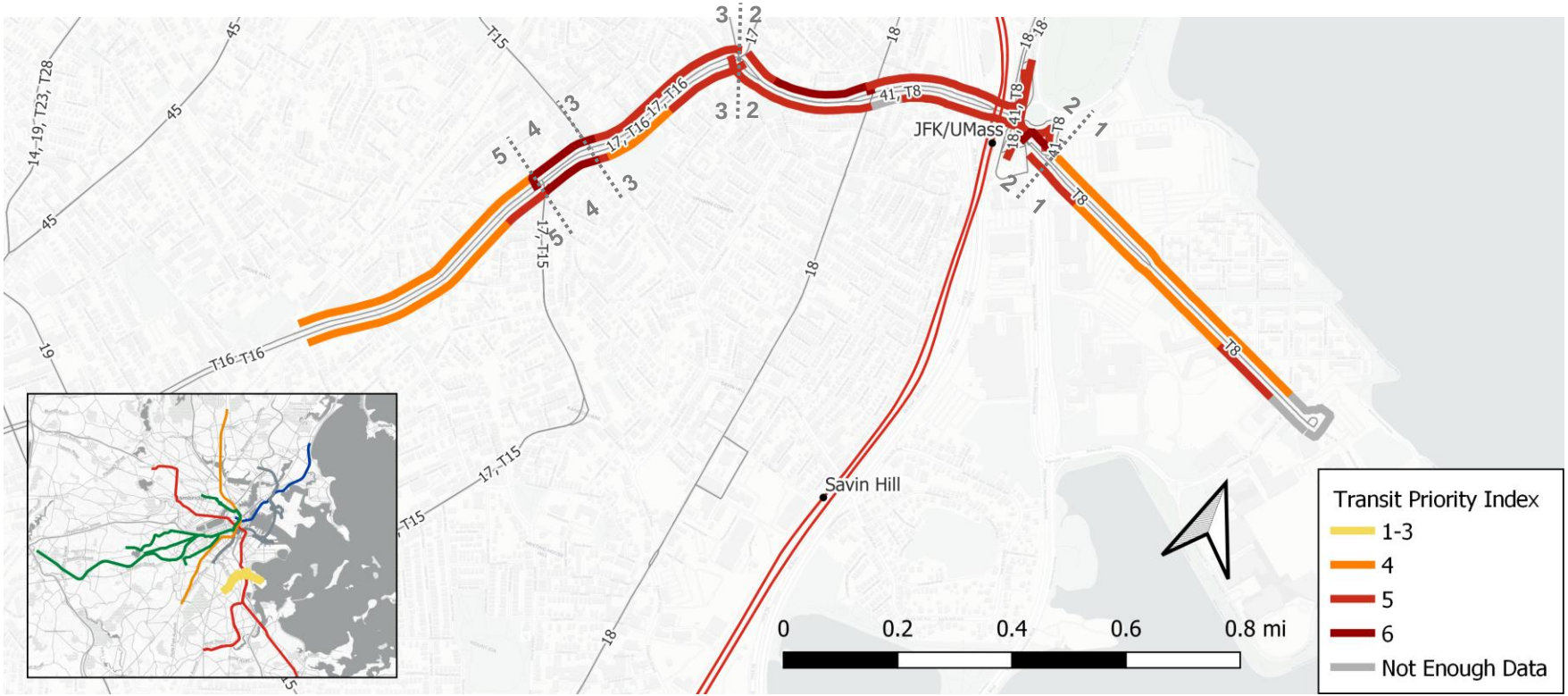
Sullivan Sq to Ferry St – Service and Customer Attributes

		BNRD Routes	Length (miles)	Person-Hours of Delay	Bus-Hours of Delay	Service Volume (Bus Trips)				Percentage of Riders			Transit Critical?
						Peak Hour BNRD	Peak Hour Increase	All Day BNRD	All Day Increase	Minority	Low-Income	Zero-Auto	
1	Sullivan Sq to Sweetser Circle	113, T109	1.1	82	3	11	+1	141	+36	24%	26%	24%	75
2	Sweetser Circle to Chelsea St	99, 113, T109, T110	0.3	311	15	20	+5	276	+111	15%	17%	15%	46
3	Chelsea St to Hancock St	99, T104, T109	0.3	155	9	17	+8	249	+48	24%	26%	24%	73
4	Hancock St to Ferry St	T104, T109	0.3	57	4	16	+9	228	+139	29%	31%	29%	89

Sullivan Sq to Ferry St – Development Attributes

		Customer Activity (Boardings + Alightings)	New Commercial Development		New Residential Development		Residential Density (Units per Acre)		Number of New Developments by Size (Sq Ft)		
			Additional Sq Ft	Percent Growth	New Units	Percent Growth	Existing	Projected	Small < 20k	Medium 20k – 50k	Large > 50k
1	Sullivan Sq to Sweetser Circle	1,088	577k	19%	1,253	216%	1.3	4.2	0	5	2
2	Sweetser Circle to Chelsea St	2,978	0	0%	0	0%	18.7	18.7	1	0	0
3	Chelsea St to Hancock St	1,722	0	0%	0	0%	21.3	21.3	0	0	0
4	Hancock St to Ferry St	746	0	0%	33	1%	21.7	21.9	0	1	0

UMass Boston to Grove Hall (via Columbia)



UMass to Grove Hall (via Columbia) – Service and Customer Attributes

		BNRD Routes	Length (miles)	Person-Hours of Delay	Bus-Hours of Delay	Service Volume (Bus Trips)				Percentage of Riders			Transit Critical?
						Peak Hour BNRD	Peak Hour Increase	All Day BNRD	All Day Increase	Minority	Low-Income	Zero-Auto	
1	Umass Boston to JFK/Umass	T8	0.7	8	1	8	+1	114	+35	25%	37%	26%	88
2	JFK/Umass to Mass Ave	41, T8	0.8	202	23	10	+3	139	+77	28%	33%	24%	85
3	Mass Ave to Dudley St	17, T16	0.3	143	6	11	+2	141	+23	34%	39%	26%	99
4	Dudley St to Hancock St	17, T15, T16	0.1	168	9	28	+12	383	+197	29%	33%	22%	84
5	Hancock St to Hamilton St	T16	0.5	14	1	8	+4	114	+68	50%	74%	51%	**175**

UMass Boston to Grove Hall (via Columbia) – Development Attributes

		Customer Activity (Boardings + Alightings)	New Commercial Development		New Residential Development		Residential Density (Units per Acre)		Number of New Developments by Size (Sq Ft)		
			Additional Sq Ft	Percent Growth	New Units	Percent Growth	Existing	Projected	Small < 20k	Medium 20k – 50k	Large > 50k
1	Umass Boston to JFK/Umass	750	4,821k	101%	2,580	3,486%	0.1	5.3	0	1	4
2	JFK/Umass to Mass Ave	3,923	333k	20%	1,638	73%	6.1	10.5	0	1	2
3	Mass Ave to Dudley St	1,762	0	0%	0	0%	14.8	14.8	0	0	0
4	Dudley St to Hancock St	1,243	7k	1%	108	5%	26.6	28.0	0	3	0
5	Hancock St to Hamilton St	1,085	44k	6%	300	11%	17.8	19.7	0	3	0

Union Sq to Tufts

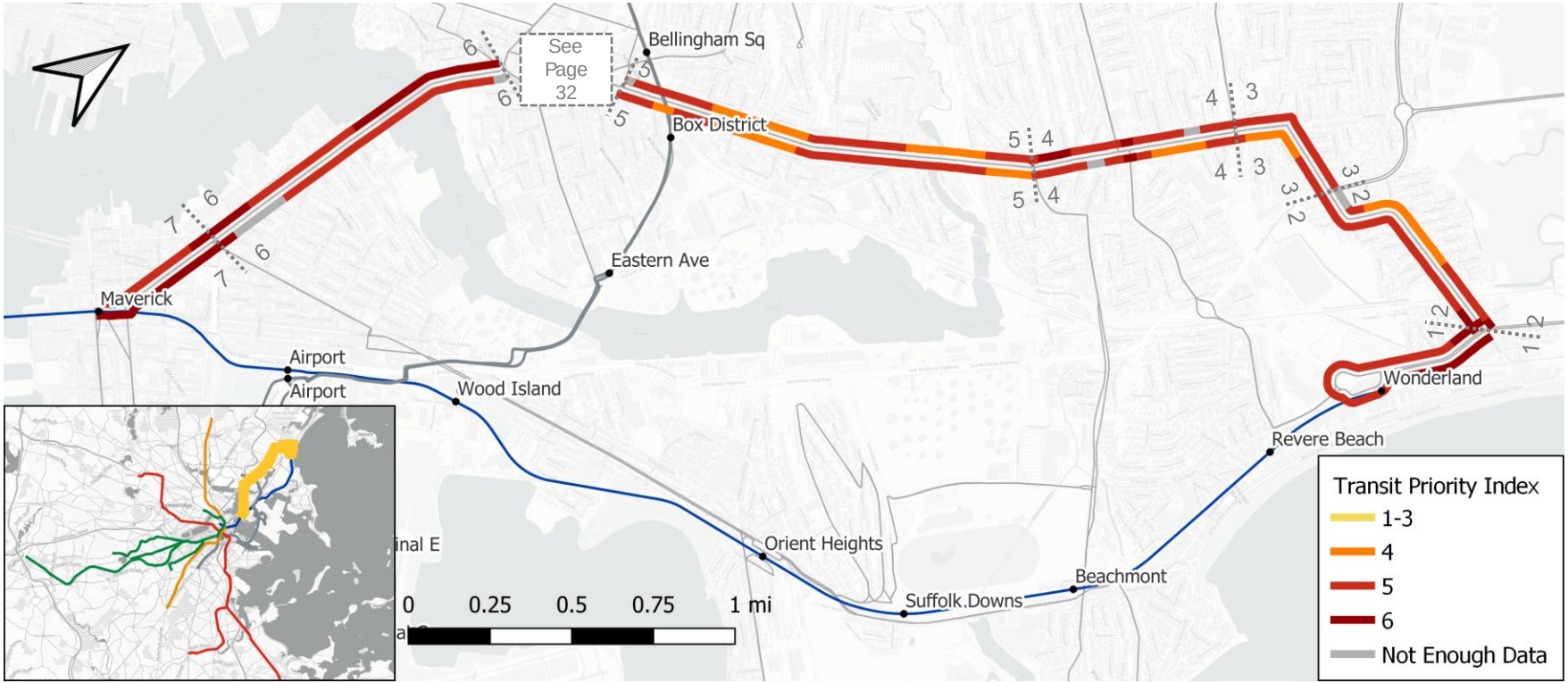
Union Sq to Tufts – Service and Customer Attributes

		BNRD Routes	Length (miles)	Person-Hours of Delay	Bus-Hours of Delay	Service Volume (Bus Trips)				Percentage of Riders			Transit Critical?
						Peak Hour BNRD	Peak Hour Increase	All Day BNRD	All Day Increase	Minority	Low-Income	Zero-Auto	
1	Union Sq to Park St	87, T96	0.5	16	1	11	+7	143	+100	25%	22%	35%	82
2	Park St to Wilson Sq	83, 87, T96	0.4	49	3	13	+7	186	+104	19%	16%	23%	58
3	Wilson Sq to Russell St	87, T96	0.7	8	1	10	+3	142	+39	21%	18%	29%	68
4	Davis Sq Area	80, 87, 89, 90, T96	0.4	128	10	26	+7	380	+131	9%	9%	14%	32
5	Highland Ave to Powderhouse Sq	80, 89, T96	0.4	34	2	14	+7	185	+111	15%	15%	18%	48
6	Powderhouse Sq to Professors Row	80, T96	0.3	8	1	10	+4	142	+68	15%	15%	17%	47

Union Sq to Tufts – Development Attributes

		Customer Activity (Boardings + Alightings)	New Commercial Development		New Residential Development		Residential Density (Units per Acre)		Number of New Developments by Size (Sq Ft)		
			Additional Sq Ft	Percent Growth	New Units	Percent Growth	Existing	Projected	Small < 20k	Medium 20k – 50k	Large > 50k
1	Union Sq to Park St	900	1,264k	65%	995	27%	18.9	24.0	0	7	5
2	Park St to Wilson Sq	1,200	98k	11%	0	0%	16.4	16.4	0	0	1
3	Wilson Sq to Russell St	617	21k	2%	15	1%	27.0	27.1	1	1	0
4	Davis Sq Area	10,871	0	0%	31	2%	19.6	20.0	0	1	0
5	Highland Ave to Powderhouse Sq	5,361	0	0%	0	0%	21.8	21.8	0	0	0
6	Powderhouse Sq to Professors Row	199	0	0%	0	0%	7.1	7.1	0	0	0

Wonderland to Maverick



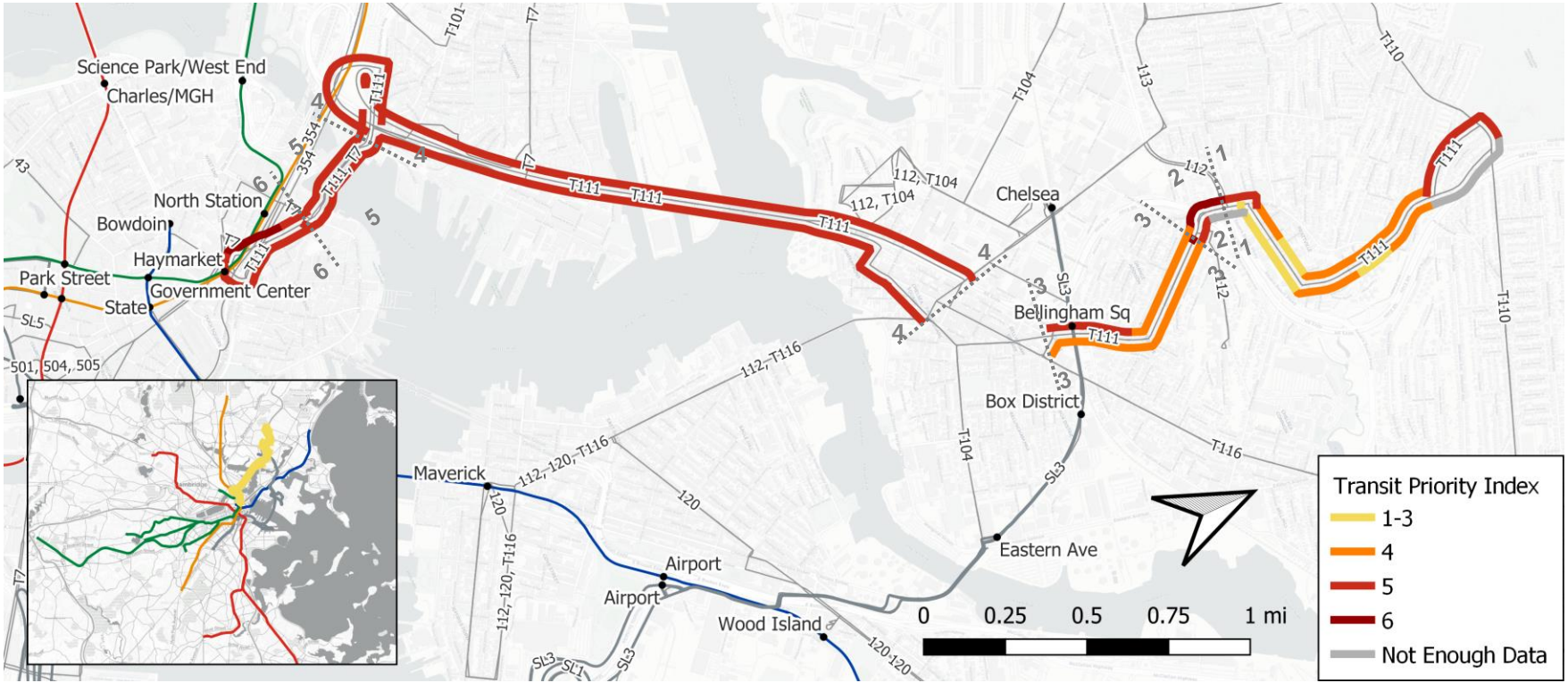
Wonderland to Maverick – Service and Customer Attributes

		BNRD Routes	Length (miles)	Person-Hours of Delay	Bus-Hours of Delay	Service Volume (Bus Trips)				Percentage of Riders			Transit Critical?
						Peak Hour BNRD	Peak Hour Increase	All Day BNRD	All Day Increase	Minority	Low-Income	Zero-Auto	
1	Wonderland to Revere St	426, 442, 450, 455, T116	0.3	1,099	55	21	+12	294	+199	13%	15%	9%	37
2	Revere St to Am-Leg Hwy	426, 450, T116	0.7	77	4	15	+7	211	+113	23%	23%	17%	62
3	Am-Leg Hwy to Cushman Rd	T116	0.4	13	1	8	+3	126	+74	53%	48%	39%	**139**
4	Cushman Rd to Beach St	119, T110, T116	0.6	317	21	12	+5	170	+98	28%	34%	29%	91
5	Beach St to City Hall	T116	1.3	75	3	8	-1	126	+22	29%	27%	21%	77
6	Park Sq to Central Sq	112, T116	1.0	209	9	10	+1	147	+34	29%	27%	22%	77
7	Central Sq to Maverick	112, 120, T116	0.4	774	30	13	-1	191	+23	21%	19%	19%	58

Wonderland to Maverick – Development Attributes

		Customer Activity (Boardings + Alightings)	New Commercial Development		New Residential Development		Residential Density (Units per Acre)		Number of New Developments by Size (Sq Ft)		
			Additional Sq Ft	Percent Growth	New Units	Percent Growth	Existing	Projected	Small < 20k	Medium 20k – 50k	Large > 50k
1	Wonderland to Revere St	15,083	5k	<1%	258	10%	9.6	10.5	2	2	0
2	Revere St to Am-Leg Hwy	998	1k	<1%	0	0%	6.0	6.0	1	0	0
3	Am-Leg Hwy to Cushman Rd	658	0	0%	0	0%	8.6	8.6	0	0	0
4	Cushman Rd to Beach St	2,729	0	0%	0	0%	11.6	11.6	0	0	0
5	Beach St to City Hall	3,757	0	0%	41	<1%	15.9	16.0	1	1	0
6	Park Sq to Central Sq	4,502	18k	<1%	188	3%	18.1	18.7	1	6	0
7	Central Sq to Maverick	8,605	254k	10%	556	10%	15.8	17.4	0	15	2

Woodlawn to Haymarket



Woodlawn to New Rutherford Ave – Service and Customer Attributes

		BNRD Routes	Length (miles)	Person-Hours of Delay	Bus-Hours of Delay	Service Volume (Bus Trips)				Percentage of Riders			Transit Critical?
						Peak Hour BNRD	Peak Hour Increase	All Day BNRD	All Day Increase	Minority	Low-Income	Zero-Auto	
1	Woodlawn to Revere Beach Pkwy	T111	1.0	14	2	12	+2	155	+20	60	63	46	**168**
2	Revere Beach Pkwy to Jefferson Ave	112, T111	0.1	78	4	14	+4	175	+40	50	50	37	**138**
3	Jefferson Ave to Fay Square	T111	0.7	21	1	12	-3	155	-16	60	63	46	**168**
4	Tobin Bridge	T111	2.4	449	15	12	-3	155	-16	60	63	46	**168**
5	Washington St Bridge	T7, T111	0.4	459	15	20	-6	268	-16	60	63	46	**168**
6	North End to Haymarket	T111	0.3	63	3	12	-2	154	-11	55	58	42	**155**

Woodlawn to New Rutherford Ave – Development Attributes

		Customer Activity (Boardings + Alightings)	New Commercial Development		New Residential Development		Residential Density (Units per Acre)		Number of New Developments by Size (Sq Ft)		
			Additional Sq Ft	Percent Growth	New Units	Percent Growth	Existing	Projected	Small < 20k	Medium 20k – 50k	Large > 50k
1	Woodlawn to Revere Beach Pkwy	3,045	3k	1%	36	1%	8.0	8.1	1	1	0
2	Revere Beach Pkwy to Jefferson Ave	309	0	0%	0	0%	13.0	13.0	0	0	0
3	Jefferson Ave to Fay Square	2,517	0	0%	0	0%	32.2	32.2	0	0	0
4	Tobin Bridge	658	238k	9%	5,397	335%	6.1	26.4	0	3	1
5	Washington St Bridge	NA (no stops)	7k	0%	69	4%	10.8	11.3	1	1	0
6	North End to Haymarket	10,896	2,308k	14%	1,318	24%	27.2	34.1	3	8	3

“New Roadway” Corridors

- These extended corridors are receiving MBTA bus service for the first time
- These corridors form important linkages within the BNRD network, and future planned development along them provides an opportunity for implementing physical forms of transit priority

Andrew to Summer St (via D St)

Andrew to Summer St (via D St) – All Attributes

		BNRD Routes	Length (miles)	Service Volume (Bus Trips)		New Commercial Development		New Residential Development		Residential Density (Units per Acre)		Number of New Developments by Size (Sq Ft)		
				Peak Hour BNRD	All Day BNRD	Added Sq Ft	Percent Growth	New Units	Percent Growth	Existing	Projected	Small < 20k	Medium 20k – 50k	Large > 50k
1	Andrew to Summer St (via D Street)	T12	1.6	8	113	3,787k	117	1,123	28	14.2	18.1	0	9	3

Lafayette Sq to Lechmere

Lafayette Sq to Lechmere – All Attributes

		BNRD Routes	Length (miles)	Service Volume (Bus Trips)		New Commercial Development		New Residential Development		Residential Density (Units per Acre)		Number of New Developments by Size (Sq Ft)		
				Peak Hour BNRD	All Day BNRD	Added Sq Ft	Percent Growth	New Units	Percent Growth	Existing	Projected	Small < 20k	Medium 20k – 50k	Large > 50k
1	Lafayette Sq to Galileo Galilei Way	T70	0.5	8	112	800k	22%	0	0%	4.7	4.7	1	0	4
2	Galileo Galilei Way to Galaxy Park	64, 68, 85, T70, T101	0.3	21	281	3,456k	93%	1,865	112%	8.2	17.3	1	1	5
3	Galaxy Park to Lechmere	T101	0.9	8	114	4,388k	55%	2,000	37%	21.5	29.4	1	6	14

Spring St to Everett Ave (via 2nd Street)

Spring St to Everett Ave (via 2nd Street) – Service and Customer Attributes

		BNRD Routes	Length (miles)	Service Volume (Bus Trips)		New Commercial Development		New Residential Development		Residential Density (Units per Acre)		Number of New Developments by Size (Sq Ft)		
				Peak Hour BNRD	All Day BNRD	Added Sq Ft	Percent Growth	New Units	Percent Growth	Existing	Projected	Small < 20k	Medium 20k – 50k	Large > 50k
1	Spring Street to Spruce St	T104	1.0	8	113	0	0%	0	0%	2.6	2.6	0	0	0
2	2nd Street to Mystic Mall Entrance	112, T104	0.2	14	193	0	0%	0	0%	6.4	6.4	0	0	0
3	Mystic Mall Entrance to Everett Ave	112, T104	0.1	15	213	0	0%	0	0%	2.3	2.3	0	0	0
4	Spruce St to Arlington St	112, 113, T104	0.1	12	161	0	0%	0	0%	1.4	1.4	0	0	0

Methodology

Better Bus Project
Making transit better together

Service Offering

- Reflects both the weekday peak service offering and the total number of scheduled weekday trips
- Aligns with conditions where investment in bus transit priority is prevalent across the industry
- Tiers 5 and 6 were identified as meriting potential inclusion in priority network

		Weekday Peak Hour Bus Trips (T)						
		T >= 24	T >= 16 & T < 24	T >= 12 & T < 16	T >= 8 & T < 12	T >= 4 & T < 8	T >= 2 & T < 4	T < 2
Ratio of Weekday All Day Bus Trips to Peak Hour Bus Trips (R)	R >= 14	**6**	**6**	**5**	**5**	4	3	2
	R >= 12 & R < 14	**6**	**5**	**5**	4	3	3	2
	R >= 10 & R < 12	**6**	**5**	**5**	4	3	3	2
	R >= 8 & R < 10	**5**	**5**	4	4	3	2	1
	R < 8	4	4	3	3	2	1	1

Service Offering

- For example, on a stretch of roadway on Malcolm X Blvd, there are a combined total of 650 daily trips and 44 trips in the peak hour
- The weekday peak hour bus trips (T) is great than 24, so the grade is in the left column
- The ratio of all day to peak hour bus trips is 650 / 44 = 14.8, so the grade is in the top row
- Top row, left column = Tier 6

		Weekday Peak Hour Bus Trips (T)						
		T >= 24	T >= 16 & T < 24	T >= 12 & T < 16	T >= 8 & T < 12	T >= 4 & T < 8	T >= 2 & T < 4	T < 2
Ratio of Weekday All Day Bus Trips to Peak Hour Bus Trips (R)	R >= 14	**6**	**6**	**5**	**5**	4	3	2
	R >= 12 & R < 14	**6**	**5**	**5**	4	3	3	2
	R >= 10 & R < 12	**6**	**5**	**5**	4	3	3	2
	R >= 8 & R < 10	**5**	**5**	4	4	3	2	1
	R < 8	4	4	3	3	2	1	1

Social Benefit

- An indicator of potential social benefits (customer & operator dollars per mile) from eliminating all excess revenue bus hours
- Customer time evaluated at $22.50 per passenger hour
- MBTA operations evaluated at $103.53 per revenue bus hour
- Tier 6 was identified as meriting potential inclusion in priority network

Social Benefits Tier	Maximum Weekday Benefits per Mile	Associated Level of Improvement
1	$0 - $14	N/A
2	$15 - $64	'Spot' applications of TSP, where warranted
3	$65 - $224	Local service with TSP and potentially other 'spot' treatments such as queue jumps
4	$225 - $599	Limited-stop service or 'BRT Light' with TSP and other 'spot' treatments
5	$600 - $2,749	Full BRT, potentially with exclusive lanes
6	**$2,750 +**	**Fully segregated BRT, potentially with grade separation**

Passenger Experience

- A passenger point of view represented by a combination of travel time and travel time variability measures
- Formulated to be indicative of a passenger's perceived need for remediation of service deficiencies
- Tier 5 and 6 were identified as meriting potential inclusion in priority network

Passenger Experience Tier	Interpretation
1	Superior quality of experience which is comparable to traveling on a grade-separated rapid transit system which maintains regular headways
2	High quality of service comparable to reliably operated bus rapid transit in dedicated lanes
3	Good quality of service comparable to a well-managed local bus service on a relatively uncongested street. Baseline for local bus service.
4	Fair quality of service comparable to a local service operating in congested traffic for at least some of the route
5	**Poor level of service operating substantially in congested traffic, without effective measures to mitigate irregularities in service**
6	**Poor passenger experience that travelers may consider walking to be preferable**

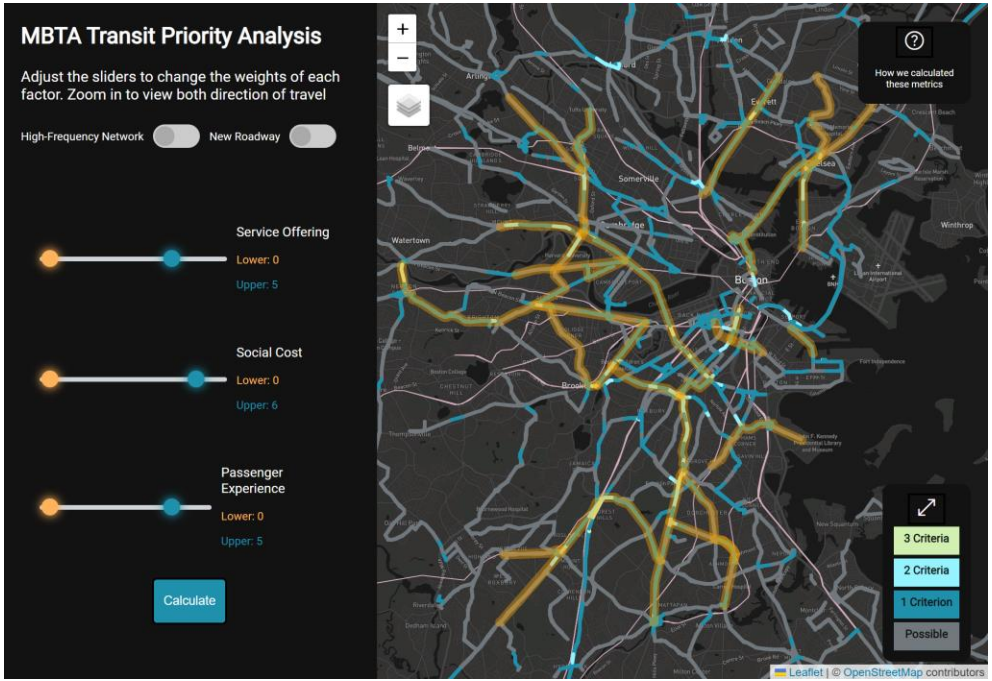
Segment Candidates for Corridor Formation

Segments were identified as meriting potential inclusion in a corridor if any of the following were true:

- Service offering tier 5 or 6
- Social cost tier 6
- Passenger experience tier 5 or 6

Source:

https://ibi-group.github.io/mbta-transit-priority-finder/



Corridor Formation

Corridors should be reasonably continuous, with:

- most segments meeting one of more of the criteria
- few instances of two or more adjacent segments not meeting any criteria
- one or more routes operating along the entire corridor length