

Appendix 4.1-H

Ridership and Trip Generation

SCR Trip Generation Summary

Alternative		AM Peak Hour Trips								PM Peak Hour Trips							
Station	PNR Entry	PNR Exit	KNR Entry	KNR Exit	Transit Entry	Transit Exit	Total Entry	Total Exit	PNR Entry	PNR Exit	KNR Entry	KNR Exit	Transit Entry	Transit Exit	Total Entry	Total Exit	
Stoughton Alternative																	
North Easton	239	31	27	27	0	0	266	58	27	234	26	26	0	0	53	261	
Easton Village	0	0	44	44	0	0	44	44	0	0	32	32	0	0	32	32	
E. Taunton North	160	20	18	18	0	0	178	38	12	128	14	14	0	0	26	142	
Dean St	41	17	20	20	0	0	61	37	11	24	12	12	0	0	24	37	
Freetown	81	9	17	17	0	0	98	26	5	45	9	9	0	0	14	54	

Alternative		AM Peak Hour Trips								PM Peak Hour Trips							
Station	PNR Entry	PNR Exit	KNR Entry	KNR Exit	Transit Entry	Transit Exit	Total Entry	Total Exit	PNR Entry	PNR Exit	KNR Entry	KNR Exit	Transit Entry	Transit Exit	Total Entry	Total Exit	
Attleboro Alternative																	
Barrowsville	143	32	59	59	0	0	202	91	12	93	35	35	0	0	47	129	
Taunton Depot/GATRA	237	78	62	62	10	10	309	150	59	184	47	47	9	9	115	241	
E. Taunton North																	
Fall River Depot	184	25	26	26	0	0	210	51	14	166	22	22	0	0	36	188	
Battleship Cove	0	0	34	34	0	0	34	34	0	0	25	25	0	0	25	25	
Kings Hwy	143	16	28	28	0	0	170	44	8	114	21	21	0	0	30	135	
Whales Tooth	146	16	44	44	11	11	201	71	10	120	35	35	11	11	56	166	

Alternative		AM Peak Hour Trips								PM Peak Hour Trips							
Station	PNR Entry	PNR Exit	KNR Entry	KNR Exit	Transit Entry	Transit Exit	Total Entry	Total Exit	PNR Entry	PNR Exit	KNR Entry	KNR Exit	Transit Entry	Transit Exit	Total Entry	Total Exit	
Stoughton Whittendon Alternative																	
Rayhnam	183	21	32	32	0	0	215	53	17	166	29	29	0	0	46	195	

SCR CTPS Ridership Estimates 2030 Alightings

				Average Daily Person Trips																
Location		Alternative		2030 Stoughton Local Electric																
Corridor				Daily Boardings	Parking Spaces Available	Mode of Access				Inbound Alightings				Outbound Alightings						
Station						Branch	Community	Walk/Bike	PNR	KNR	Other	Total	AM	MD	PM	NT	Total	AM	MD	PM
Stoughton																				
9	North Easton	Merge	Easton	750	999	180	520	50	0	50	30	20			700	40	90	530	40	
10	Easton Village	Merge	Easton	320	0	240	0	80	0	40	30	10			280	20	50	160	50	
11	Raynham	Merge	Raynham																	
12	Dean St	Merge	Taunton	410	999	250	120	40	0	50	30	10	10		360	60	120	120	60	
13	E. Taunton North			510		160	320	30	0	20	10	10			490	40	50	320	80	
14	Freetown	FR	Freetown	240	999	40	170	30	0						240	20	60	100	60	
15	Fall River Depot			740											740	80	170	440	50	
16	Battleship Cove			210											210	10	50	100	50	
17	Kings Hwy			460											460	40	80	280	60	
18	Whales Tooth			600											600	50	100	340	110	
Attleboro																				
9	Barrowsville	Merge	Norton																	
10	Taunton Depot/GATRA	Merge	Taunton																	
11	E. Taunton North	Merge	Taunton																	
12	Freetown																			
13	Fall River Depot	FR	Fall River																	
14	Battleship Cove	FR	Fall River																	
14	Kings Hwy	NB	New Bedford																	
15	Whales Tooth	NB	New Bedford																	
Stoughton - Whittenton Alternative																				
11	Raynham	Merge	Raynham	600	999	140	400	60	0	10	10	0	0	0	590	40	90	390	70	

Walk/Bike = Assumes a max of a 1 mile
 KNR = Kiss-and-Ride or drop-offs
 PNR = People using parking lot spaces
 Other = Transit access

AM = Peak 3 hrs (6AM to 9AM)
 MD = Midday 6 hrs (9AM to 3PM)
 PM = Peak 3 hrs (3PM to 6PM)
 NT = Night 12 hrs (6PM to 6AM)

SCR CTPS Ridership Estimates 2030 Alightings

				Average Daily Person Trips															
Location		Alternative		2030 Attleboro Local Electric															
Corridor				Daily Boardings	Parking Spaces Available	Mode of Access				Inbound Alightings					Outbound Alightings				
Station						Walk/Bike	PNR	KNR	Other	Total	AM	MD	PM	NT	Total	AM	MD	PM	NT
Stoughton																			
9	North Easton	Merge	Easton																
10	Easton Village	Merge	Easton																
11	Raynham	Merge	Raynham																
12	Dean St	Merge	Taunton																
13	E. Taunton North																		
14	Freetown	FR	Freetown																
15	Fall River Depot																		
16	Battleship Cove																		
17	Kings Hwy																		
18	Whales Tooth																		
Attleboro																			
9	Barrowsville	Merge	Norton	680		270	310	100	0	40	30	10	0	0	640	80	150	320	90
10	Taunton Depot/GATRA	Merge	Taunton	1,350		360	590	110	290	250	180	30	0	40	1,100	100	220	660	120
11	E. Taunton North	Merge	Taunton																
12	Freetown			210		30	150	30	0						210	20	40	130	20
13	Fall River Depot	FR	Fall River	760	999	280	430	50	0						760	70	150	460	80
14	Battleship Cove	FR	Fall River	240	0	180	0	60	0						240	20	50	140	30
14	Kings Hwy	NB	New Bedford	470	999	120	300	50	0						470	40	90	280	60
15	Whales Tooth	NB	New Bedford	610	999	150	310	80	70						610	50	120	370	70
Stoughton - Whittenton Alternative																			
11	Raynham	Merge	Raynham																

Walk/Bike = Assumes a max of a 1 mile
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 Other = Transit access

AM = Peak 3 hrs (6AM to 9AM)
 MD = Midday 6 hrs (9AM to 3PM)
 PM = Peak 3 hrs (3PM to 6PM)
 NT = Night 12 hrs (6PM to 6AM)

SCR CTPS Ridership Estimates 2030 Boardings

				Average Daily Person Trips															
Location		Alternative		2030 Stoughton Local Electric															
Corridor				Daily Boardings	Parking Spaces Available	Mode of Access				Inbound Boardings					Outbound Boardings				
Station	Branch	Community	Walk/Bike			PNR	KNR	Other	Total	AM	MD	PM	NT	Total	AM	MD	PM	NT	
Stoughton																			
9	North Easton	Merge	Easton	750	xx	180	520	50	0	700	540	120	30	10	50	-	10	30	10
10	Easton Village	Merge	Easton	320	0	240	0	80	0	280	210	50	10	10	40	-	10	20	10
11	Raynham	Merge	Raynham																
12	Dean St	Merge	Taunton	410	999	250	120	40	0	360	220	100	30	10	50	-	10	30	10
13	E. Taunton North	Merge	Taunton	510	XX	160	320	30	0	490	400	60	20	10	20	-	-	10	10
14	Freetown	FR	Freetown	240	999	40	170	30	0	240	180	50	10	0	-	-	-	-	-
15	Fall River Depot																		
16	Battleship Cove																		
17	Kings Hwy																		
18	Whales Tooth																		
Attleboro																			
9	Barrowsville	Merge	Norton																
10	Taunton Depot	Merge	Taunton																
11	E. Taunton North	Merge	Taunton																
12	Freetown																		
13	Fall River Depot	FR	Fall River																
14	Battleship Cove	FR	Fall River																
14	Kings Hwy	NB	New Bedford																
15	Whales Tooth	NB	New Bedford																
Stoughton - Whittenton																			
11	Raynham	Merge	Raynham	600	999	140	400	60	0	590	430	120	30	10	10	-	-	10	-

Walk/Bike = Assumes a max of a 1 mile
 KNR = Kiss-and-Ride or drop-offs
 PNR = People using parking lot spaces
 Other = Transit access

AM = Peak 3 hrs (6AM to 9AM)
 MD = Midday 6 hrs (9AM to 3PM)
 PM = Peak 3 hrs (3PM to 6PM)
 NT = Night 12 hrs (6PM to 6AM)

SCR CTPS Ridership Estimates 2030 Boardings

				Average Daily Person Trips															
Location		Alternative		2030 Attleboro Local Electric															
Corridor				Daily Boardings	Parking Spaces Available	Mode of Access			Inbound Boardings					Outbound Boardings					
Station	Branch	Community	Walk/Bike			PNR	KNR	Other	Total	AM	MD	PM	NT	Total	AM	MD	PM	NT	
Stoughton																			
9	North Easton	Merge	Easton																
10	Easton Village	Merge	Easton																
11	Raynham	Merge	Raynham																
12	Dean St	Merge	Taunton																
13	E. Taunton North	Merge	Taunton																
14	Freetown	FR	Freetown																
15	Fall River Depot																		
16	Battleship Cove																		
17	Kings Hwy																		
18	Whales Tooth																		
Attleboro																			
9	Barrowsville	Merge	Norton	680		270	310	100	0	640	460	120	40	20	40	30	10	-	-
10	Taunton Depot	Merge	Taunton	1350		360	590	110	290	1,100	810	210	60	20	250	40	20	150	40
11	E. Taunton North	Merge	Taunton																
12	Freetown																		
13	Fall River Depot	FR	Fall River	760	999	280	430	50	0	760	510	140	40	70	-	-	-	-	-
14	Battleship Cove	FR	Fall River	240	0	180	0	60	0	240	180	50	10	0	-	-	-	-	-
14	Kings Hwy	NB	New Bedford	470	999	120	300	50	0	470	350	90	20	10	-	-	-	-	-
15	Whales Tooth	NB	New Bedford	610	999	150	310	80	70	610	450	120	30	10	-	-	-	-	-
Stoughton - Whittenton																			
11	Raynham	Merge	Raynham																

Walk/Bike = Assumes a max of a 1 mile
 KNR = Kiss-and-Ride or drop-offs
 PNR = People using parking lot spaces
 Other = Transit access

AM = Peak 3 hrs (6AM to 9AM)
 MD = Midday 6 hrs (9AM to 3PM)
 PM = Peak 3 hrs (3PM to 6PM)
 NT = Night 12 hrs (6PM to 6AM)

SCR Trip Generation Calculations (Alightings)

SLE																								
Stations	Daily Boardings	Mode of Access				Inbound Alightings										Outbound Alightings								
		Walk/Bike	PNR	KNR	Other	AM-Total	AM W/B	AM PNR	AM KNR	AM other	PM-Total	PM W/B	PM PNR	PM KNR	PM other	AM-Total	AM W/B	AM PNR	AM KNR	AM other	PM-Total	PM W/B	PM PNR	PM KNR
North Easton	750	24%	69%	7%	0%	20	5	13	1	0	0	0	0	0	27	6	18	2	-	355	85	234	24	0
Easton Village	320	75%	0%	25%	0%	20	15	0	5	0	0	0	0	0	13	10	-	3	-	107	80	0	27	0
E. Taunton North	510	31%	63%	6%	0%	7	2	4	0	0	0	0	0	0	27	8	16	2	-	214	67	128	13	0
Dean St	410	61%	29%	10%	0%	20	12	6	2	0	7	4	2	1	40	25	11	4	-	80	49	22	8	0
Freetown	240	17%	71%	13%	0%	0	0	0	0	0	0	0	0	0	13	2	9	2	-	67	11	45	8	0

ALE																								
Stations	Daily Boardings	Mode of Access				Inbound Alightings										Outbound Alightings								
		Walk/Bike	PNR	KNR	Other	AM	AM W/B	AM PNR	AM KNR	AM other	PM	PM W/B	PM PNR	PM KNR	PM other	AM	AM W/B	AM PNR	AM KNR	AM other	PM	PM W/B	PM PNR	PM KNR
Barrowsville	680	40%	46%	15%	0%	20	8	9	3	0	0	0	0	0	54	21	23	8	0	214	85	93	32	0
Taunton Depot	1350	27%	44%	8%	21%	121	32	50	10	26	0	0	0	0	67	18	28	5	14	442	118	184	36	95
Fall River Depot	760	37%	57%	7%	0%	0	0	0	0	0	0	0	0	0	47	17	25	3	0	308	114	166	20	0
Battleship Cove	240	75%	0%	25%	0%	0	0	0	0	0	0	0	0	0	13	10	0	3	0	94	70	0	23	0
Kings Hwy	470	26%	64%	11%	0%	0	0	0	0	0	0	0	0	0	27	7	16	3	0	188	48	114	20	0
Whales Tooth	610	25%	51%	13%	11%	0	0	0	0	0	0	0	0	0	34	8	16	4	4	248	61	120	33	28

Whittenton LE																								
Stations	Daily Boardings	Mode of Access				Inbound Alightings										Outbound Alightings								
		Walk/Bike	PNR	KNR	Other	AM-Total	AM W/B	AM PNR	AM KNR	AM other	PM-Total	PM W/B	PM PNR	PM KNR	PM other	AM-Total	AM W/B	AM PNR	AM KNR	AM other	PM-Total	PM W/B	PM PNR	PM KNR
Raynham	600	23%	67%	10%	0%	7	2	4	1	0	0	0	0	0	27	6	17	3	-	261	61	166	26	0

Notes:

1. Mode split based on CTPS ridership estimates
2. Peak hour adjustment factor of 0.67 used to reduce CTPS peak period (3-hours) ridership to peak hour ridership
3. Park and ride ridership converted to vehicles with vehicle occupancy factor of 1.05 .

SCR Trip Generation Calculations (Boardings)

SLE																									
Station	Daily Boardings	Mode of Access				Inbound Boardings										Outbound Boardings									
		Walk/Bike	PNR	KNR	Other	AM-Total	AM W/B	AM PNR	AM KNR	AM other	PM-Total	PM W/B	PM PNR	PM KNR	PM other	AM-Total	AM W/B	AM PNR	AM KNR	AM other	PM-Total	PM W/B	PM PNR	PM KNR	PM other
North Easton	750	24%	69%	7%	0%	362	87	239	24	0	20	5	13	1	0	-	-	-	-	-	20	5	13	1	0
Easton Village	320	75%	0%	25%	0%	141	106	0	35	0	7	5	0	2	0	-	-	-	-	-	13	10	0	3	0
E. Taunton North	510	31%	63%	6%	0%	268	84	160	16	0	13	4	8	1	0	-	-	-	-	-	7	2	4	0	0
Dean St	410	61%	29%	10%	0%	147	90	41	14	0	20	12	6	2	0	-	-	-	-	-	20	12	6	2	0
Freetown	240	17%	71%	13%	0%	121	20	81	15	0	7	1	5	1	0	-	-	-	-	-	-	0	0	0	0

ALE																									
Stations	Daily Boardings	Mode of Access				Inbound Boardings										Outbound Boardings									
		Walk/Bike	PNR	KNR	Other	AM	AM W/B	AM PNR	AM KNR	AM other	PM	PM W/B	PM PNR	PM KNR	PM other	AM	AM W/B	AM PNR	AM KNR	AM other	PM	PM W/B	PM PNR	PM KNR	PM other
Barrowsville	680	40%	46%	15%	0%	308	122	134	45	0	27	11	12	4	0	20	8	9	3	0	-	0	0	0	0
Taunton Depot	1350	27%	44%	8%	21%	543	145	226	44	117	40	11	17	3	9	27	7	11	2	6	101	27	42	8	22
Fall River Depot	760	37%	57%	7%	0%	342	126	184	22	0	27	10	14	2	0	-	0	0	0	0	-	0	0	0	0
Battleship Cove	240	75%	0%	25%	0%	121	90	0	30	0	7	5	0	2	0	-	0	0	0	0	-	0	0	0	0
Kings Hwy	470	26%	64%	11%	0%	235	60	143	25	0	13	3	8	1	0	-	0	0	0	0	-	0	0	0	0
Whales Tooth	610	25%	51%	13%	11%	302	74	146	40	35	20	5	10	3	2	-	0	0	0	0	-	0	0	0	0

Whittenton LE																									
Stations	Daily Boardings	Mode of Access				Inbound Boardings										Outbound Boardings									
		Walk/Bike	PNR	KNR	Other	AM-Total	AM W/B	AM PNR	AM KNR	AM other	PM-Total	PM W/B	PM PNR	PM KNR	PM other	AM-Total	AM W/B	AM PNR	AM KNR	AM other	PM-Total	PM W/B	PM PNR	PM KNR	PM other
Raynham	600	23%	67%	10%	0%	288	67	183	29	0	20	5	13	2	0	-	-	-	-	-	7	2	4	1	0

- Notes:
1. Mode split based on CTPS ridership estimates
 2. Peak hour adjustment factor of 0.67 used to reduce CTPS peak period (3-hours) ridership to peak hour ridership
 3. Park and ride ridership converted to vehicles with vehicle occupancy factor of 1.05 .