

Appendix 4.6-C

Noise Mitigation Calculations



Technical Report
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**Technical Report
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Location - Northeast Corridor	Land Use Category	2008/2009						Existing Ldn Trains Only	Calculated Ldn Trains & Monitor	Impact			Severe Impact		
		Existing Leq (daytime)	Existing Leq (night time)	Existing Ldn (day)	Existing Ldn (night)	Existing Ldn (d/n)	Existing Ldn (1n,2d)			Sound Level	Distance to Impact	Number of Residences	Sound Level	Distance to Impact	Number of Residences
							A	B	A + B						
Dedham															
Hooper Road		44	47.3	42.0	50.3	53.4	50.3	69.0	69.1	63.7	225	13	68.8	100	4
Westwood															
University Ave (Funeral Institute of the North East)							55.0	69.0	69.2	63.7	225.0	0	68.9	100	0
Canton															
I-95 - Industrail							60.0	69.0	69.5	64.0	225.0	0	69.2	100	0
Cedarcrest Road		48.8	50.2	46.8	53.2	56.4	53.2	64.0	64.3	60.4	425.0	47	65.8	150	2
Chapman Street							60.0	69.0	69.5	64.0	225.0	17	69.2	100	0
Norfolk Street		60.6	56.0	58.6	59.0	63.4	59.0	67.0	67.6	62.6	250.0	52	67.9	125	16
High Street							55.0	62.0	62.8	59.4	450.0	26	64.9	175	3
Sharon															
Rhodes Avenue							45.0	64.0	64.1	60.2	400.0	27	65.6	150	3
Upland Road (Route 27)							60.0	60.0	63.0	59.6	400.0	12	65.0	175	3
Flintlock Road - Deborah Sampson Park)		45.7	44.3	43.7	47.3	50.9	47.3	62.0	62.1	59.0	450.0	65	64.5	175	18
Chase Drive - Islamic Academy of N.E.							55.0	62.0	62.8	59.4	450.0	16	64.9	175	3
Burnt Bridge Road		44.2	-	42.2	#VALUE!	#VALUE!	42.2	67.0	67.0	62.2	275.0	4	67.5	125	2
Foxborough															
East Street		60.7	53.1	58.7	56.1	61.8	56.1	64.0	64.7	60.6	325.0	32	66.0	150	6
Summer Street							55.0	64.0	64.5	60.5	325.0	27	65.9	150	3
Mansfield															
Angell Street							55.0	67.0	67.3	62.4	275.0	45	67.6	125	18
Chauncy Street (Route 106)							65.0	62.0	66.8	62.0	275.0	12	67.3	125	2
Central Street / High Street		52.0	48.9	50.0	51.9	55.9	51.9	67.0	67.1	62.3	275.0	20	67.5	125	4
Old School Street		59.6	57.0	57.6	60.0	63.9	60.0	67.0	67.8	62.7	250.0	8	68.0	125	2
Otis Street							55.0	64.0	64.5	60.5	325.0	44	65.9	150	5
Gilbert Street (without Trains)	2	53.9	47.0	51.9	55.0	55.3	55.0	67.0	67.3	62.4	275.0	8	67.6	125	3
Gilbert Street (with Trains)	2	64.0	63.3	62.0	71.3	69.8	71.3								

45	residential cul-de-sac.
55	Low volume rural road.
55	Low volume urban road.
60	High volume rural road.
65	High volume urban road.

Estimated based on similar monitoring location.
Estimated based on previous monitoring data.
No Appropriate Data - Estimated based on FTA Guidelines (Table 5-7).

Location - Attleboro	Land Use Category	2008/2009						Impact			Severe Impact		
		Existing Leq (daytime)	Existing Leq (night time)	Existing Ldn (day)	Existing Ldn (night)	Existing Ldn (d/n)	Existing Ldn (1n,2d)	Sound Level	Distance to Impact	Number of Residences	Sound Level	Distance to Impact	Number of Residences
Mansfield													
Gilbert Street (without Trains)	2	53.9	47.0	51.9	55.0	55.3	55.0	55.3			61.2		
Gilbert Street (with Trains)	2	64.0	63.3	62.0	71.3	69.8	71.3	65.0			70.4		
Attleboro													
Richardson Avenue	2						55.0	55.3	425	3	61.2	150	1
Frontier Drive	2	46.8	39.9	44.8	47.9	48.2	47.9	52.7	575	18	59.1	225	6
Pleasant Street (Route 123)	2						60.0	57.8	175	0	63.4	75	0
Pike Avenue	2	55.8	50.2	53.8	58.2	58.0	58.2	56.8	200	1	62.5	75	0
Norton													
Union Road							55.0	55.3	425	1	61.2	150	0
Sturdy Street	2	46.5	41.1	44.5	49.1	48.8	49.1	53.1	575	36	59.4	225	5
Dean Street / S Worcester Street	2						55.0	55.3	300	9	61.2	100	2
Garrett Drive	2	39.8	42.7	37.8	45.7	48.8	45.7	52.2	675	22	58.8	225	3
Woodward Street	2						55.0	55.3	425	15	61.2	150	3
Taunton Avenue (Route 140)	2						60.0	57.8	275	1	63.4	125	0
Taunton													
Harvey Street	2						55.0	55.3	425	9	61.2	150	2
Jeffrey Lane	2	45.6	39.7	43.6	42.7	47.6	42.7	51.6	675	7	57.5	275	2
Crane Avenue South	2						55.0	55.3	425	10	61.2	150	2
Powder Horn Drive	2	48.3	40.9	46.3	43.9	49.5	43.9	51.8	675	75	58.6	225	21
Fremont Street	2						55.0	55.3	425	19	61.2	150	2
West Britannia Street	2						55.0	55.3	425	13	61.2	150	2
Edwards Avenue	2						45.0	52.0	675	26	58.7	225	6
Danforth Street	2						55.0	55.3	425	30	61.2	150	4
Hoton Street	2	48.4	41.4	46.4	44.4	49.8	44.4	51.9	675	35	58.7	225	7
Tremont Street (Route 140)	2						65	60.8	150	5	66.2	75	0
Winthrop Street	2						65	60.8	100	13	66.2	55	3
Webster Street	2	56.7	53.4	54.7	56.4	60.5	56.4	55.9	250	46	61.7	100	16
Weir St & Somerset Ave (Route 138)	2						65	60.8	100	11	66.2	55	2

45	residential cul-de-sac.
55	Low volume rural road.
55	Low volume urban road.
60	High volume rural road.
65	High volume urban road.

	Estimated based on similar monitoring location.
	Estimated based on previous monitoring data.
	No Appropriate Data - Estimated based on FTA Guidelines (Table 5-7).

Location - Stoughton	Land Use Category	Previous Monitoring			2008/2009						Impact			Severe Impact		
		Existing Leq (daytime)	Existing Leq (night time)	Existing Ldn	Existing Leq (daytime)	Existing Leq (night time)	Existing Ldn (day)	Existing Ldn (night)	Existing Ldn (d/n)	Existing Ldn (1n,2d)	Sound Level	Distance to Impact	Number of Residences	Sound Level	Distance to Impact	Number of Residences
Canton Junction to Stoughton																
Canton																
Revere Street	2									0	11.5			17.3		
Washington Street	2									0	11.5			17.3		
Bolivar Street	2									0	11.5			17.3		
Pine Street	2									0	11.5			17.3		
Stoughton																
Cross Street	2									0	11.5			17.3		
Central Street	2									0	11.5			17.3		
Simpson Street	2									0	11.5			17.3		
School Street	2									0	11.5			17.3		
Brock Street	2	58.1	58.5	64.9	59.4	42.4	57.4	50.4	57.9	50.4	53.5	325	14	59.7	125	1
Plain Street	2	59.8	54.7	62.3	62.6		60.6		60.6	60.6	58.1	275	46	63.7	100	15
Morton Street	2&3	67.2	64.8	71.6	63.5	50.9	61.5	58.9	62.7	58.9	57.2	300	17	62.9	125	5
Easton																
Elm Street	2	65	63.3	70.0	61.8	48.8	59.8	56.8	60.9	56.8	56.1	375	68	61.9	150	16
Oliver Street	2	63.1	53.6	63.3			61.1	61.6		51.8	54.0	500	7	60.1	200	3
Pond Street	2	61.6	53.9	62.6	55.8	38.8	53.8	46.8	54.3	46.8	52.4	675	13	59.0	225	1
Main street	2	63.5	59	66.4			61.5	67		61.5	58.6	225	13	64.2	100	7
Bridge Street	2	58.1	54	61.3	57.3	44.2	55.3	52.2	56.4	52.2	54.1	500	115	60.2	200	34
Short Street	2	63.2	60.4	67.3	56.7	49.5	54.7	57.5	58.0	57.5	56.5	300	18	62.2	150	7
Depot Street/Route 123	2	67.2	61.2	69.2			65.2	69.2		65.2	61.0	150	2	66.3	75	0
Purchase Street	2	60.3	56.7	63.8	55.9	49.7	53.9	57.7	57.7	57.7	56.6	300	12	62.3	150	3
Prospect Street	2	54.5	56.2	62.4	60.9	54.8	58.9	62.8	62.8	62.8	59.4	225	3	64.9	100	0
Raynham																
Elm Street	2	58.4	52.7	60.5	55.5	52	53.5	55	59.1	55	55.3	425	68	61.2	150	16
Carver Street	2	56	55.8	62.2	62.9	57	60.9	60	64.9	60	57.8	275	2	63.4	125	1
Route 138	2	65.4	62.8	69.7			63.4	70.8		63.4	59.8	200	0	65.2	75	0
Britton Street	2	57.7	53	60.5	56.5		54.5		54.5	54.5	55.1	425	16	61.0	150	6
King Phillip Street	2	63.7	58.6	66.2	59.3	53.4	57.3	56.4	61.3	56.4	55.9	375	21	61.7	150	8
Taunton																
Longmeadow Street	2	61	62.8	69.0			59	70.8		59	57.2	300	18	62.9	125	3
Dean Street	2	65	61.3	68.5	68.8	61.7	66.8	64.7	70.1	64.7	60.6	150	10	66.0	75	2
Whittenton Variation																
Raynham																
Britton St / King Philip St										55	55.3	350	17	61.2	125	2
Taunton																
Redwood Drive										55	55.3	350	24	61.2	125	3
Third Avenue										65	60.8	75	0	66.2	50	0
Warren Street										55	55.3	175	18	61.2	75	0
Whittenton Var. on Attelboro Sec.																
Taunton																
West Britannia Street										55.0	55.3	175	3	61.2	75	0
Edwards Avenue										45.0	52.0	675	26	58.7	225	6
Danforth Street										55.0	55.3	425	30	61.2	150	4
Hoton Street										44.4	51.9	675	35	58.7	225	7
Tremont Street (Route 140)										65.0	60.8	150	5	66.2	75	0
Winthrop Street										65.0	60.8	125	19	66.2	50	3
Webster Street										56.4	55.9	250	46	61.7	100	16
Weir St & Somerset Ave (Route 138)										65.0	60.8	125	13	66.2	50	1

- 45 residential cul-de-sac.
- 55 Low volume rural road.
- 55 Low volume urban road.
- 60 High volume rural road.
- 65 High volume urban road.

- Estimated based on similar monitoring location.
- Estimated based on previous monitoring data.
- No Appropriate Data - Estimated based on FTA Guidelines (Table 5-7).



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Moderate

<u>Location - Whittenton Variation</u>	<u>Distance to Impact</u>	<u>Number of Residences</u>	<u>Length</u>	<u>SF</u>	<u>Barrier Cost</u>	<u>Benefited Receptors</u>	<u>Cost Per Benefited Receptor</u>	<u>Barrier</u>	<u>Note:</u>
Raynham									
Britton St / King Philip St	350	17	3,000	45,000	\$ 1,125,000	28	\$ 40,179	No	
Taunton									
Redwood Drive	350	24	1,200	18,000	\$ 450,000	8	\$ 56,250	No	Western
			1,000	15,000	\$ 375,000	6	\$ 62,500	No	Eastern
Third Avenue	75	0	1,000	15,000	\$ 375,000	8	\$ 46,875	No	Western
			1,400	21,000	\$ 525,000	20	\$ 26,250	Yes	Eastern
Warren Street	175	18	1,000	15,000	\$ 375,000	5	\$ 75,000	No	
Whittenton Var. on Attelboro Sec.									
Taunton									
West Britannia Street	175	3	1,200	18,000	\$ 450,000	10	\$ 45,000	No	
Edwards Avenue	675	26	1,600	24,000	\$ 600,000	25	\$ 24,000	Yes	
Danforth Street	425	30	1,400	21,000	\$ 525,000	25	\$ 21,000	Yes	At grade crossing at Danforth - not feasible
Horton Street	675	35	1,400	21,000	\$ 525,000	25	\$ 21,000	Yes	
			2,200	33,000	\$ 825,000	50	\$ 16,500	Yes	Combined: Danforth-Horton - At grade crossing at Danforth
Tremont Street (Route 140)	150	5	1,300	19,500	\$ 487,500	12	\$ 40,625	No	At grade crossing at Tremont & Granite
Winthrop Street	125	19	1,000	15,000	\$ 375,000	13	\$ 28,846	Yes	Numerous at grade crossings - not feasible
Webster Street	250	46	800	12,000	\$ 300,000	15	\$ 20,000	Yes	Eastern - At grade crossings & other noise sources - may not be feasible
			800	12,000	\$ 300,000	15	\$ 20,000	Yes	Western - At grade crossings & other noise sources - may not be feasible
Weir St & Somerset Ave (Route 138)	125	13	1,000	15,000	\$ 375,000	10	\$ 37,500	No	At grade crossings & other noise sources - likely not feasible



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Location - New Bedford	Land Use Category	Previous Monitoring			2008/2009						Impact			Severe Impact		
		Existing Leq (daytime)	Existing Leq (night time)	Existing Ldn	Existing Leq (daytime)	Existing Leq (night time)	Existing Ldn (day)	Existing Ldn (night)	Existing Ldn (d/n)	Existing Ldn (1n,2d)	Sound Level	Distance to Impact	Number of Residences	Sound Level	Distance to Impact	Number of Residences
Weir Junction to Myricks Junction																
Taunton																
Ingell Street	2	58.5	59.4	65.7			56.5	67.4		56.5	56.0	375	8	61.8	125	2
Hart Street	2	64.5	60.7	67.9			62.5	68.7		62.5	59.2	225	20	64.7	100	4
Plain Street	2									55	55.3	425	46	61.2	150	15
Berkley																
<i>Cotley Street</i>	2				51.6	45.6	49.6	48.6	53.6	48.6	52.9	575	14	59.3	225	3
Padelford Street	2									55	55.3	425	5	61.2	150	2
Myricks Street (Route 79)	2									60	57.8	275	5	63.4	125	1
Lakeville																
Malbone Street	2									55	55.3	400	1	61.2	150	1
Howland Road	2									55	55.3	400	14	61.2	150	2
<i>Gunner's Way</i>	2				48.7	35.6	46.7	43.6	47.8	43.6	51.7	625	9	58.3	250	0
Freetown																
Chace Road	2									60	57.8	250	2	63.4	100	0
Chipaway Road	2									60	57.8	250	2	63.4	100	2
New Bedford																
<i>Welby Road</i>	2				51.8	44.1	49.8	52.1	52.8	52.1	54.1	450	22	60.2	175	0
Tarklin Place	2									52.1	54.1	450	0	60.2	175	0
Worcester Street	2									55	55.3	400	54	61.2	150	2
<i>Earle & Davis Streets</i>	2				55.6	47.6	53.6	55.6	56.5	55.6	55.6	325	9	61.4	150	1
Hayden/McFadden School	3									65	60.8	150	9	66.2	75	0
Purchase Street	2									65	60.8	100	12	66.2	50	3
End of Line																
Middleborough Secondary																
Taunton	2															
<i>Gatsby Street</i>	2				43.2	36	41.2	44	44.5	44	51.8			0.0		
<i>Middleboro Avenue</i>	2				65.1	54.6	63.1	62.6	64.9	62.6	59.3			64.8		

45	residential cul-de-sac.
55	Low volume rural road.
55	Low volume urban road.
60	High volume rural road.
65	High volume urban road.

	Estimated based on similar monitoring location.
	Estimated based on previous monitoring data.
	No Appropriate Data - Estimated based on FTA Guidelines (Table 5-7).

Location - Fall River	Land Use Category	2008/2009	Impact			Severe Impact		
		Existing Ldn (1n,2d)	Sound Level	Distance to Impact	Number of Residences	Sound Level	Distance to Impact	Number of Residences
Myricks Junction to Fall River								
Berkley								
Grove Street	2	55	55.3	250	2	61.2	100	0
Mill street	2	45	52.0	400	9	58.7	125	5
Adams Lane	2	45	52.0	625	10	58.7	200	3
Freetown								
Richmond Road (Bryant to Beechwood)	2	60	57.8	250	5	63.4	125	1
Colonial Drive	2	45	52.0	625	13	58.7	200	1
Richmond Raod (Colonial to Forge)	2	60	57.8	250	4	63.4	125	2
Forge Road	2	55	55.3	400	23	61.2	150	6
Elm & Walnut Streets	2	55	55.3	400	12	61.2	150	3
<i>Simpson & Green Lanes</i>	2	44.2	51.8	625	20	58.7	200	5
High Street	2	55	55.3	400	26	61.2	150	3
Copicut Road	2	55	55.3	400	2	61.2	150	0
Fall River								
<i>Rolling Green Apartments</i>	2	46.8	52.4	625	73	59.0	200	13
North Main Street (FRCC to Route 79)	2	60	57.8	250	59	63.4	125	17
<i>Cory Street (west of RR)</i>	2	55.1	55.3	400	246	61.2	150	66
Durfee Street (Route 6A - I-195)	2	55.1	55.3	400	247	61.2	150	56

- Estimated based on similar monitoring location.
- Estimated based on previous monitoring data.
- No Appropriate Data - Estimated based on FTA Guidelines (Table 5-7).

Moderate

<u>Location - Fall River</u>	<u>Distance to</u>		<u>Length</u>	<u>SF</u>	<u>Barrier Cost</u>	<u>Benifited</u>	<u>Cost Per</u>		<u>Note:</u>
	<u>Impact</u>	<u>Residences</u>					<u>Receptors</u>	<u>Benifited</u>	
Myricks Junction to Fall River									
Berkley									
Grove Street	250	2	1,200	18,000	\$ 450,000	2	\$ 225,000	No	
Mill street	400	9	2,800	42,000	\$ 1,050,000	7	\$ 150,000	No	
Adams Lane	625	10	6,800	102,000	\$ 2,550,000	10	\$ 255,000	No	
			6,800	102,000	\$ 2,550,000	20	\$ 127,500	No	Combo: Grove-Beechwood
Freetown									
Richmond Road (Bryant to Beechwood)	250	5	1,600	24,000	\$ 600,000	4	\$ 150,000	No	
Colonial Drive	625	13	2,200	33,000	\$ 825,000	13	\$ 63,462	No	
			4,000	60,000	\$ 1,500,000	17	\$ 88,235	No	Combo: Beechwood-Colonial
Richmond Raod (Colonial to Forge)	250	4	1,200	18,000	\$ 450,000	4	\$ 112,500	No	
Forge Road	400	23	2,000	30,000	\$ 750,000	13	\$ 57,692	No	
			3,600	54,000	\$ 1,350,000	17	\$ 79,412	No	Combo: Richmond-Forge
Elm & Walnut Streets	400	12	2,200	33,000	\$ 825,000	7	\$ 117,857	No	
Simpson & Green Lanes	625	20	3,500	52,500	\$ 1,312,500	20	\$ 65,625	No	
High Street	400	26	2,600	39,000	\$ 975,000	10	\$ 97,500	No	
			4,000	60,000	\$ 1,500,000	30	\$ 50,000	No	Combo: Simpson-High
			8,400	126,000	\$ 3,150,000	47	\$ 67,021	No	Combo: Forge-High
Copicut Road	400	2	2,800	42,000	\$ 1,050,000	2	\$ 525,000	No	
Fall River									
Rolling Green Apartments	625	73	5,000	75,000	\$ 1,875,000	73	\$ 25,685	Yes	
North Main Street (FRCC to Route 79)	250	59	4,000	60,000	\$ 1,500,000	51	\$ 29,412	Yes	
Cory Street (west of RR)	400	246	3,200	48,000	\$ 1,200,000	80	\$ 15,000	Yes	Northeast Barrier: But numerous other noise sources and cross streets
			2,500	37,500	\$ 937,500	85	\$ 11,029	Yes	Southwest Barrier: But numerous other noise sources and cross streets
Durfee Street (Route 6A - I-195)	400	247	6,400	96,000	\$ 2,400,000	328	\$ 7,317	Yes	But numerous other noise sources and cross streets



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#	Location - Northeast Corridor	Land Use Category	2008/2009					Existing Ldn Trains Only	Calculated Ldn Trains & Monitor	Impact			Severe Impact			
			Existing Leq (daytime)	Existing Leq (night time)	Existing Ldn (day)	Existing Ldn (night)	Existing Ldn (d/n)			Existing Ldn (1n,2d)	Sound Level	Distance to Impact	Number of Residences	Sound Level	Distance to Impact	Number of Residences
							A	B	A + B							
	Dedham															
21	Hooper Road (Existing Sound Wall)		44	47.3	42.0	50.3	53.4	50.3	70.0	70.0	64.4	300	27	69.5	125	5
	Westwood															
	University Ave (Funeral Institute of the North East)							55.0	70.0	70.1	64.5	250	0	69.6	125	0
	Canton															
	I-95 - Industrail							60.0	70.0	70.4	64.7	250	1	69.8	125	0
20	Cedarcrest Road		48.8	50.2	46.8	53.2	56.4	53.2	66.0	66.2	61.6	400	45	67.0	175	10
	Chapman Street							60.0	70.0	70.4	64.7	250	21	69.8	125	5
19	Norfolk Street		60.6	56.0	58.6	59.0	63.4	59.0	69.0	69.4	63.9	275	58	69.1	125	16
	High Street							55.0	64.0	64.5	60.5	450	30	65.9	200	6
	Sharon															
18	Rhodes Avenue							45.0	66.0	66.0	61.5	375	24	66.8	175	7
	Upland Road (Route 27)							60.0	61.0	63.5	59.9	525	27	65.3	225	4
17	Flintlock Road - Deborah Sampson Park)		45.7	44.3	43.7	47.3	50.9	47.3	64.0	64.1	60.2	525	81	65.6	200	18
	Chase Drive - Islamic Academy of N.E.							55.0	64.0	64.5	60.5	450	16	65.9	200	4
16	Burnt Bridge Road		44.2	-	42.2	#VALUE!	#VALUE!	42.2	69.0	69.0	63.6	275	4	68.8	125	2
	Foxborough															
15	East Street		60.7	53.1	58.7	56.1	61.8	56.1	66.0	66.4	61.8	375	36	67.1	175	10
	Summer Street							55.0	66.0	66.3	61.7	375	37	67.0	175	6
	Mansfield															
14	Angell Street							55.0	69.0	69.2	63.7	275	45	68.9	125	18
	Chauncy Street (Route 106)							65.0	64.0	67.5	62.6	325	20	67.8	150	2
13	Central Street / High Street		52.0	48.9	50.0	51.9	55.9	51.9	69.0	69.1	63.7	275	20	68.9	125	4
12	Old School Street		59.6	57.0	57.6	60.0	63.9	60.0	69.0	69.5	64.0	275	8	69.2	125	2
	Otis Street							55.0	66.0	66.3	61.7	375	54	67.0	175	9
10	Gilbert Street (without Trains)	2	53.9	47.0	51.9	55.0	55.3	55.0	69.0	69.2	63.7	275	8	68.9	125	3
10	Gilbert Street (with Trains)	2	64.0	63.3	62.0	71.3	69.8	71.3								

45	residential cul-de-sac.
55	Low volume rural road.
55	Low volume urban road.
60	High volume rural road.
65	High volume urban road.

Estimated based on similar monitoring location.
Estimated based on previous monitoring data.
No Appropriate Data - Estimated based on FTA Guidelines (Table 5-7).



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#	Location - Attleboro	Land Use Category	2008/2009					Impact			Severe Impact			
			Existing Leq (daytime)	Existing Leq (night time)	Existing Ldn (day)	Existing Ldn (night)	Existing Ldn (d/n)	Existing Ldn (1n,2d)	Sound Level	Distance to Impact	Number of Residences	Sound Level	Distance to Impact	Number of Residences
	Mansfield													
9	Gilbert Street (without Trains)	2	53.9	47.0	51.9	55.0	55.3	55.0	55.3		8	61.2		3
9	Gilbert Street (with Trains)	2	64.0	63.3	62.0	71.3	69.8	71.3	65.0		8	70.4		3
	Attleboro													
	Richardson Avenue	2						55.0	55.3	375	3	61.2	150	1
8	Frontier Drive	2	46.8	39.9	44.8	47.9	48.2	47.9	52.7	500	18	59.1	200	4
	Pleasant Street (Route 123)	2						60.0	57.8	150	0	63.4	75	0
7	Pike Avenue	2	55.8	50.2	53.8	58.2	58.0	58.2	56.8	175	0	62.5	75	0
	Norton													
	Union Road							55.0	55.3	550	2	61.2	225	1
6	Sturdy Street	2	46.5	41.1	44.5	49.1	48.8	49.1	53.1	775	57	59.4	300	8
	Dean Street / S Worcester Street	2						55.0	55.3	250	7	61.2	100	2
5	Garrett Drive	2	39.8	42.7	37.8	45.7	48.8	45.7	52.2	900	34	58.8	300	7
	Woodward Street	2						55.0	55.3	550	24	61.2	225	3
	Taunton Avenue (Route 140)	2						60.0	57.8	350	3	63.4	150	1
	Taunton													
	Harvey Street	2						55.0	55.3	550	11	61.2	225	4
4	Jeffrey Lane	2	45.6	39.7	43.6	42.7	47.6	42.7	51.6	900	9	57.5	350	3
	Crane Avenue South	2						55.0	55.3	550	13	61.2	225	5
3	Powder Horn Drive	2	48.3	40.9	46.3	43.9	49.5	43.9	51.8	900	96	58.6	300	25
	Fremont Street	2						55.0	55.3	550	31	61.2	225	5
	West Britannia Street	2						55.0	55.3	550	20	61.2	225	3
	Edwards Avenue	2						45.0	52.0	900	44	58.7	300	9
	Danforth Street	2						55.0	55.3	550	42	61.2	225	13
2	Hoton Street	2	48.4	41.4	46.4	44.4	49.8	44.4	51.9	900	48	58.7	300	10
	Tremont Street (Route 140)	2						65	60.8	225	12	66.2	100	1
	Winthrop Street	2						65	60.8	100	13	66.2	50	3
1	Webster Street	2	56.7	53.4	54.7	56.4	60.5	56.4	55.9	225	42	61.7	75	11
	Weir St & Somerset Ave (Route 138)	2						65	60.8	100	11	66.2	50	1

45	residential cul-de-sac.
55	Low volume rural road.
55	Low volume urban road.
60	High volume rural road.
65	High volume urban road.

	Estimated based on similar monitoring location.
	Estimated based on previous monitoring data.
	No Appropriate Data - Estimated based on FTA Guidelines (Table 5-7).



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<u>Location - Attleboro</u>	<u>Moderate</u>				<u>Benefited</u>		<u>Cost Per</u>		<u>Note:</u>
	<u>Distance to Impact</u>	<u>Number of Residences</u>	<u>Length</u>	<u>SF</u>	<u>Barrier Cost</u>	<u>Benefited Receptors</u>	<u>Benefited Receptor</u>	<u>Barrier</u>	
Attleboro									
Richardson Avenue	375	3	400	6,000	\$ 150,000	3	\$ 50,000	No	
Frontier Drive	500	18	1,600	24,000	\$ 600,000	18	\$ 33,333	No	Very Close
			2,100	31,500	\$ 787,500	21	\$ 37,500	No	
Pleasant Street (Route 123)	150	0	400	6,000	\$ 150,000	2	\$ 75,000	No	
Pike Avenue	175	0	1,400	21,000	\$ 525,000	7	\$ 75,000	No	
Norton									
Union Road	550	2	1,000	15,000	\$ 375,000	2	\$ 187,500	No	
Sturdy Street	775	57	3,200	48,000	\$ 1,200,000	50	\$ 24,000	Yes	At grade Crossing - John Bryson Scott BLVD - not feasible
Dean Street / S Worcester Street	250	7	1,200	18,000	\$ 450,000	6	\$ 75,000	No	Northern
			2,200	33,000	\$ 825,000	8	\$ 103,125	No	Southern
Garrett Drive	900	34	2,800	42,000	\$ 1,050,000	34	\$ 30,882	No	Very Close
Woodward Street	550	24	1,600	24,000	\$ 600,000	15	\$ 40,000	No	
Taunton Avenue (Route 140)	350	3	400	6,000	\$ 150,000	1	\$ 150,000	No	
Taunton									
Harvey Street	550	11	1,000	15,000	\$ 375,000	5	\$ 75,000	No	
Jeffrey Lane	900	9	1,000	15,000	\$ 375,000	9	\$ 41,667	No	
Crane Avenue South	550	13	1,000	15,000	\$ 375,000	10	\$ 37,500	No	
Powder Horn Drive	900	96	3,400	51,000	\$ 1,275,000	96	\$ 13,281	Yes	
Fremont Street	550	31	800	12,000	\$ 300,000	3	\$ 100,000	No	Northern
			2,000	30,000	\$ 750,000	20	\$ 37,500	No	Southern
West Britannia Street	550	20	1,200	18,000	\$ 450,000	10	\$ 45,000	No	
Edwards Avenue	900	44	1,600	24,000	\$ 600,000	25	\$ 24,000	Yes	
Danforth Street	550	42	1,400	21,000	\$ 525,000	25	\$ 21,000	Yes	At grade crossing at Danforth - not feasible
Horton Street	900	48	1,400	21,000	\$ 525,000	25	\$ 21,000	Yes	
			2,200	33,000	\$ 825,000	50	\$ 16,500	Yes	Combined: Danforth-Horton - At grade crossing at Danforth
Tremont Street (Route 140)	225	12	1,300	19,500	\$ 487,500	12	\$ 40,625	No	At grade crossing at Tremont & Granite
Winthrop Street	100	13	1,000	15,000	\$ 375,000	13	\$ 28,846	Yes	Numerous at grade crossings - not feasible
Webster Street	225	42	800	12,000	\$ 300,000	15	\$ 20,000	Yes	Eastern - At grade crossings & other noise sources - may not be feasible
			800	12,000	\$ 300,000	15	\$ 20,000	Yes	Western - At grade crossings & other noise sources - may not be feasible
Weir St & Somerset Ave (Route 138)	100	11	1,000	15,000	\$ 375,000	10	\$ 37,500	No	At grade crossings & other noise sources - likely not feasible



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Location - Stoughton	Land Use Category	Previous Monitoring			2008/2009						Impact			Severe Impact		
		Existing Leq (daytime)	Existing Leq (night time)	Existing Ldn	Existing Leq (daytime)	Existing Leq (night time)	Existing Ldn (day)	Existing Ldn (night)	Existing Ldn (d/n)	Existing Ldn (n,2d)	Sound Level	Distance to Impact	Number of Residences	Sound Level	Distance to Impact	Number of Residences
Canton Junction to Stoughton																
Canton																
Revere Street	2									0	11.5			17.3		
Washington Street	2									0	11.5			17.3		
Bolivar Street	2									0	11.5			17.3		
Pine Street	2									0	11.5			17.3		
Stoughton																
Cross Street	2									0	11.5			17.3		
Central Street	2									0	11.5			17.3		
Simpson Street	2									0	11.5			17.3		
School Street	2									0	11.5			17.3		
Brock Street	2	58.1	58.5	64.9	59.4	42.4	57.4	50.4	57.9	50.4	53.5	275	5	59.7	100	1
Plain Street	2	59.8	54.7	62.3	62.6		60.6		60.6	60.6	58.1	350	51	63.7	125	17
Morton Street	2&3	67.2	64.8	71.6	63.5	50.9	61.5	58.9	62.7	58.9	57.2	400	24	62.9	150	8
Easton																
Elm Street	2	65	63.3	70.0	61.8	48.8	59.8	56.8	60.9	56.8	56.1	475	98	61.9	175	25
Oliver Street	2	63.1	53.6	63.3			61.1	61.6		51.8	54.0	650	9	60.1	250	4
Pond Street	2	61.6	53.9	62.6	55.8	38.8	53.8	46.8	54.3	46.8	52.4	900	13	59.0	300	3
Main street	2	63.5	59	66.4			61.5	67		61.5	58.6	300	21	64.2	125	11
Bridge Street	2	58.1	54	61.3	57.3	44.2	55.3	52.2	56.4	52.2	54.1	650	144	60.2	250	52
Short Street	2	63.2	60.4	67.3	56.7	49.5	54.7	57.5	58.0	57.5	56.5	400	27	62.2	175	12
Depot Street/Route 123	2	67.2	61.2	69.2			65.2	69.2		65.2	61.0	225	2	66.3	100	1
Purchase Street	2	60.3	56.7	63.8	55.9	49.7	53.9	57.7	57.7	57.7	56.6	400	20	62.3	175	4
Prospect Street	2	54.5	56.2	62.4	60.9	54.8	58.9	62.8	62.8	62.8	59.4	300	6	64.9	125	0
Raynham																
Elm Street	2	58.4	52.7	60.5	55.5	52	53.5	55	59.1	55	55.3	550	98	61.2	225	25
Carver Street	2	56	55.8	62.2	62.9	57	60.9	60	64.9	60	57.8	350	5	63.4	150	1
Route 138	2	65.4	62.8	69.7			63.4	70.8		63.4	59.8	250	0	65.2	125	0
Britton Street	2	57.7	53	60.5	56.5		54.5		54.5	54.5	55.1	550	26	61.0	225	6
King Philip Street	2	63.7	58.6	66.2	59.3	53.4	57.3	56.4	61.3	56.4	55.9	475	31	61.7	175	8
Taunton																
Longmeadow Street	2	61	62.8	69.0			59	70.8		59	57.2	400	27	62.9	150	6
Dean Street	2	65	61.3	68.5	68.8	61.7	66.8	64.7	70.1	64.7	60.6	225	24	66.0	100	6
Whittenton Variation																
Raynham																
Britton St / King Philip St										55	55.3	325	16	61.2	125	2
Taunton																
Redwood Drive										55	55.3	325	22	61.2	125	3
Third Avenue										65	60.8	75	0	66.2	25	0
Warren Street										55	55.3	150	14	61.2	50	0
Whittenton Var. on Attelboro Sec.																
Taunton																
West Britannia Street										55.0	55.3	150	2	61.2	50	0
Edwards Avenue										45.0	52.0	600	23	58.7	200	6
Danforth Street										55.0	55.3	375	26	61.2	150	4
Hoton Street										44.4	51.9	600	32	58.7	200	5
Tremont Street (Route 140)										65.0	60.8	150	5	66.2	75	0
Winthrop Street										65.0	60.8	100	13	66.2	50	3
Webster Street										56.4	55.9	225	42	61.7	75	11
Weir St & Somerset Ave (Route 138)										65.0	60.8	100	11	66.2	50	1

- 45 residential cul-de-sac.
- 55 Low volume rural road.
- 55 Low volume urban road.
- 60 High volume rural road.
- 65 High volume urban road.

- Estimated based on similar monitoring location.
- Estimated based on previous monitoring data.
- No Appropriate Data - Estimated based on FTA Guidelines (Table 5-7).



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<u>Location - Stoughton</u>	<u>Moderate</u>				<u>Cost Per</u>		<u>Barrier</u>	<u>Note:</u>
	<u>Distance to Impact</u>	<u>Number of Residences</u>	<u>Length</u>	<u>SF</u>	<u>Barrier Cost</u>	<u>Benifited Receptors</u>		
Canton								
Brock Street	275	5	600	9,000	\$ 225,000	5	\$ 45,000	No At grade Crossing at Brock
Plain Street	350	51	1,200	18,000	\$ 450,000	25	\$ 18,000	Yes
Morton Street	400	24	2,000	30,000	\$ 750,000	16	\$ 46,875	No
Easton								
Elm Street	475	98	1,600	24,000	\$ 600,000	27	\$ 22,222	Yes Sothern Only
			4,200	63,000	\$ 1,575,000	44	\$ 35,795	No Longer
Oliver Street	650	9	400	6,000	\$ 150,000	1	\$ 150,000	No At Grade Crossing at Oliver
Pond Street	900	13	1,000	15,000	\$ 375,000	10	\$ 37,500	No
Main street	300	21	1,200	18,000	\$ 450,000	15	\$ 30,000	Yes
Bridge Street	650	144	500	7,500	\$ 187,500	15	\$ 12,500	Yes Northwestern
			1,600	24,000	\$ 600,000	30	\$ 20,000	Yes Combined: Main-Bridge(Northwestern)
			2,200	33,000	\$ 825,000	45	\$ 18,333	Yes Eastern - Baldwin
			2,400	36,000	\$ 900,000	35	\$ 25,714	Yes Western
Short Street	400	27	1,000	15,000	\$ 375,000	6	\$ 62,500	No
Depot Street/Route 123	225	2	400	6,000	\$ 150,000	1	\$ 150,000	No
Purchase Street	400	20	3,000	45,000	\$ 1,125,000	25	\$ 45,000	No
Prospect Street	300	6	1,600	24,000	\$ 600,000	6	\$ 100,000	No
Raynham								
Elm Street	550	98	1,600	24,000	\$ 600,000	10	\$ 60,000	No
Carver Street	350	5	400	6,000	\$ 150,000	1	\$ 150,000	No
Route 138	250	0	500	7,500	\$ 187,500	1	\$ 187,500	No
Britton Street	550	26	500	7,500	\$ 187,500	2	\$ 93,750	No
King Philip Street	475	31	1,200	18,000	\$ 450,000	9	\$ 50,000	No
Taunton								
Longmeadow Street	400	27	1,800	27,000	\$ 675,000	21	\$ 32,143	No Very Close
Dean Street	225	24	3,000	45,000	\$ 1,125,000	35	\$ 32,143	No Eastern - Very Close
			2,000	30,000	\$ 750,000	18	\$ 41,667	No Western



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Location - New Bedford	Land Use Category	Previous Monitoring			2008/2009						Impact			Severe Impact		
		Existing Leq (daytime)	Existing Leq (night time)	Existing Ldn	Existing Leq (daytime)	Existing Leq (night time)	Existing Ldn (day)	Existing Ldn (night)	Existing Ldn (d/n)	Existing Ldn (1n,2d)	Sound Level	Distance to Impact	Number of Residences	Sound Level	Distance to Impact	Number of Residences
Weir Junction to Myricks Junction																
Taunton																
Ingell Street	2	58.5	59.4	65.7			56.5	67.4		56.5	56.0	325	8	61.8	125	2
Hart Street	2	64.5	60.7	67.9			62.5	68.7		62.5	59.2	200	17	64.7	75	4
Plain Street	2									55	55.3	375	51	61.2	150	17
Berkley																
<i>Cotley Street</i>	2				51.6	45.6	49.6	48.6	53.6	48.6	52.9	775	22	59.3	300	6
Padelford Street	2									55	55.3	550	7	61.2	225	3
Myricks Street (Route 79)	2									60	57.8	350	13	63.4	150	1
Lakeville																
Malbone Street	2									55	55.3	525	2	61.2	200	1
Howland Road	2									55	55.3	525	24	61.2	200	6
<i>Gunner's Way</i>	2				48.7	35.6	46.7	43.6	47.8	43.6	51.7	825	9	58.3	275	1
Freetown																
Chace Road	2									60	57.8	325	2	63.4	150	0
Chipaway Road	2									60	57.8	325	18	63.4	150	6
New Bedford																
<i>Welby Road</i>	2				51.8	44.1	49.8	52.1	52.8	52.1	54.1	600	43	60.2	225	0
Tarklin Place	2									52.1	54.1	600	2	60.2	225	0
Worcester Street	2									55	55.3	525	83	61.2	200	10
<i>Earle & Davis Streets</i>	2				55.6	47.6	53.6	55.6	56.5	55.6	55.6	450	32	61.4	200	2
Hayden/McFadden School	3									65	60.8	125	8	66.2	75	0
Purchase Street	2									65	60.8	75	20	66.2	50	4
End of Line																
Middleborough Secondary																
Taunton																
<i>Gatsby Street</i>	2				43.2	36	41.2	44	44.5	44	51.8			0.0		
<i>Middleboro Avenue</i>	2				65.1	54.6	63.1	62.6	64.9	62.6	59.3			64.8		

45	residential cul-de-sac.
55	Low volume rural road.
55	Low volume urban road.
60	High volume rural road.
65	High volume urban road.

	Estimated based on similar monitoring location.
	Estimated based on previous monitoring data.
	No Appropriate Data - Estimated based on FTA Guidelines (Table 5-7).



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<u>Location - New Bedford</u>	<u>Moderate</u>				<u>Cost Per</u>			<u>Note:</u>
	<u>Distance to Impact</u>	<u>Number of Residences</u>	<u>Length</u>	<u>SF</u>	<u>Barrier Cost</u>	<u>Benifited Receptors</u>	<u>Benifited Receptor</u>	
Weir Junction to Myricks Junction								
Taunton								
Ingell Street	325	8	900	13,500	\$ 337,500	8	\$ 42,188	No
Hart Street	200	17	1,000	15,000	\$ 375,000	12	\$ 31,250	No
Plain Street	375	51	2,000	30,000	\$ 750,000	13	\$ 57,692	No
Berkley								
<i>Cotley Street</i>	775	22	2,800	42,000	\$ 1,050,000	19	\$ 55,263	No
Padelford Street	550	7	1,000	15,000	\$ 375,000	4	\$ 93,750	No
Myricks Street (Route 79)	350	13	1,600	24,000	\$ 600,000	9	\$ 66,667	No
Lakeville								
Malbone Street	525	2	400	6,000	\$ 150,000	1	\$ 150,000	No
Howland Road	525	24	5,200	78,000	\$ 1,950,000	16	\$ 121,875	No
<i>Gunner's Way</i>	825	9	2,800	42,000	\$ 1,050,000	16	\$ 65,625	No
Freetown								
Chace Road	325	2	2,200	33,000	\$ 825,000	6	\$ 137,500	No
Chipaway Road	325	18	2,200	33,000	\$ 825,000	10	\$ 82,500	No
New Bedford								
<i>Welby Road</i>	600	43	3,200	48,000	\$ 1,200,000	43	\$ 27,907	Yes
Tarklin Place	600	2	1,000	15,000	\$ 375,000	2	\$ 187,500	No
Worcester Street	525	83	3,200	48,000	\$ 1,200,000	83	\$ 14,458	Yes
<i>Earle & Davis Streets</i>	450	32	4,000	60,000	\$ 1,500,000	32	\$ 46,875	No
Hayden/McFadden School	125	8	1,000	15,000	\$ 375,000	8	\$ 46,875	No
Purchase Street	75	20	1,000	15,000	\$ 375,000	5	\$ 75,000	No



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Location - Fall River	Land Use Category	2008/2009	Impact			Severe Impact		
		Existing Ldn (1n,2d)	Sound Level	Distance to Impact	Number of Residences	Sound Level	Distance to Impact	Number of Residences
Myricks Junction to Fall River								
Berkley								
Grove Street	2	55	55.3	200	0	61.2	75	0
Mill street	2	45	52.0	350	8	58.7	100	3
Adams Lane	2	45	52.0	825	13	58.7	275	6
Freetown								
Richmond Road (Bryant to Beechwood)	2	60	57.8	325	5	63.4	150	2
Colonial Drive	2	45	52.0	550	9	58.7	175	0
Richmond Raod (Colonial to Forge)	2	60	57.8	200	2	63.4	100	1
Forge Road	2	55	55.3	475	26	61.2	125	5
Elm & Walnut Streets	2	55	55.3	525	15	61.2	200	3
Simpson & Green Lanes	2	44.2	51.8	825	26	58.7	275	7
High Street	2	55	55.3	525	30	61.2	200	6
Copicut Road	2	55	55.3	525	4	61.2	200	0
Fall River								
Rolling Green Apartments	2	46.8	52.4	650	75	59.0	200	13
North Main Street (FRCC to Route 79)	2	60	57.8	250	59	63.4	100	5
Cory Street (west of RR)	2	55.1	55.3	400	246	61.2	150	66
Durfee Street (Route 6A - I-195)	2	55.1	55.3	350	218	61.2	125	38

- Estimated based on similar monitoring location.
- Estimated based on previous monitoring data.
- No Appropriate Data - Estimated based on FTA Guidelines (Table 5-7).