

Appendix 4.6-B

Noise Impact Calculations



Technical Report
Noise and Vibration
Draft

FTA Train Calculations



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank



Technical Report
Noise and Vibration
Draft

Attleboro Diesel



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

New Bedford/Fall River Modeled Noise Levels
Impact Ranges based upon various Existing Noise Levels

When Existing dba	Severe		Moderate		No Impact	
	<u>greater than</u> dBA	<u>closer than</u> feet	<u>between</u> dBA	<u>between</u> feet	<u>less than</u> dBA	<u>farther than</u> feet
60	63	115	58-63	115-225	58	225
61	64	100	59-64	100-200	59	200
62	64	100	59-64	100-200	59	200
63	65	75	60-65	75-175	60	175
64	65	75	60-65	75-175	60	175
65	66	65	61-66	65-150	61	150
66	67	55	62-67	55-135	62	135
67	67	55	62-67	55-135	62	135
68	68	50	63-68	50-115	63	115
69	69	45	64-69	45-100	64	100
70	69	45	64-69	45-100	64	100
71	70	40	66-70	40-65	66	65
72	71	30	66-71	30-65	66	65

Segment	MP	No-build	Build	Severe - closer than (feet)	Quantity Severe	Moderate - closer than (feet)	Quantity Moderate
Brock Street	4.30	63	65	65	3	150	8
Plain Street	4.60	59	62	100	8	200	14
Morton Street	5.20	69	70	30	0	65	0
North Easton Station	6.40	62	62	75	0	175	0
Elm Street (MP 7.60)	7.60	67	69	45	0	100	10
Oliver Street	7.80	58	63	75	0	175	2
Pond Street	7.90	58	61	75	0	175	8
Main Street	8.05	63	65	55	6	135	15
Bridge Street	8.40	58	61	100	2	200	15
Short Street	9.55	64	66	55	0	135	5
Depot Street/123	10.00	65	67	45	0	100	1
Purchase Street	10.20	61	64	75	0	175	2
Prospect Street	10.90	60	62	100	0	200	2
Raynham Station	14.10	63	63	65	0	150	0
Elm Street (MP 15.40)	15.40	57	61	100	4	200	3
Carver Street	15.80	60	64	100	1	200	1
Route 138	16.40	67	68	45	0	100	4
Britton Street	16.50	57	61	115	4	225	4
King Phillip Street	17.10	63	68	55	4	135	3
Longmeadow Road	18.90	67	69	45	0	100	2
Dean Street Station	19.20	52	55	150	0	300	0
Dean Street	19.40	65	69	50	0	115	2
Ingell Street	61.92	63	#REF!	55	0	135	0
Hart Street	62.43	65	#REF!	50	0	115	6
Total					32		107

School	Distance to Track (feet)	Leq (dBA)			Impact	
		Existing Background Noise	No-Build	Project Build		
Jones School	1,400					
Kimball School	1,400					
Unionville School	3,200					
Stonehill College	5,500					
Parkview School	2,300					
Easton Jr. High School	3,100					
Ames Highschool	3,100					
Holy Cross Seminary	4,000					
School building near Easton Center	1,700					
Southeastern Regional Vocational High School	750	61	62	50	62	No Impact
High School	3,200					
Pole School	2,000					
Summer Street School	600	65	66	51	66	No Impact



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

New Bedford/Fall River
Noise Modeling

Site #	Location	Milepost	M.A.S.	At-Grade Crossing?	Horn/Bell	locomotive	cars	trains/h r day	trains/h r night	Building Offset (ft.)	Quantity	Existing Leq (day)	trains per hour	Leq (night)	trains per hour	Existing Ldn ¹
1	Brock Street	4.30	70	Yes	Horn	1	8	2.47	0.33	75	20	58	2.47	59	0.33	65
2	Plain Street	4.60	70	Yes	Horn	1	8	2.47	0.33	75	10	60	2.47	55	0.33	62
3	Morton Street	5.20	70	Yes	Horn	1	8	2.47	0.33	100	5	67	2.47	65	0.33	72
North Easton Station				70	Station	Horn	1	8	2.47	1300	5					
4	Elm Street (MP 7.60)	7.60	70	Yes	Horn	1	8	2.47	0.33	75	10	65	2.47	63	0.33	70
5	Oliver Street	7.80	70	Yes	Horn	1	8	2.47	0.33	75	5	63	2.47	54	0.33	63
6	Pond Street	7.90	70	No	n/a	1	8	2.47	0.33	75	0	62	2.47	54	0.33	63
7	Main Street	8.05	70	No	n/a	1	8	2.47	0.33	75	5	64	2.47	59	0.33	66
8	Bridge Street	8.40	70	No	n/a	1	8	2.47	0.33	75	25	58	2.47	54	0.33	61
9	Short Street	9.55	70	Yes	Horn	1	8	2.47	0.33	100	20	63	2.47	60	0.33	67
10	Depot Street/123	10.00	70	Yes	Horn	1	8	2.47	0.33	75	5	67	2.47	61	0.33	69
11	Purchase Street	10.20	70	Yes	Horn	1	8	2.47	0.33	300	10	60	2.47	57	0.33	64
12	Prospect Street	10.90	70	Yes	Horn	1	8	2.47	0.33	100	2	55	2.47	56	0.33	62
Raynham Station				70	Station	Horn	1	8	2.47	1800	5					
13	Elm Street (MP 15.40)	15.40	70	Yes	Horn	1	8	2.47	0.33	75	5	58	2.47	53	0.33	61
14	Carver Street	15.80	70	Yes	Horn	1	8	2.47	0.33	75	3	56	2.47	56	0.33	62
15	Route 138	16.40	70	Yes	Horn	1	8	2.47	0.33	100	5	65	2.47	63	0.33	70
16	Britton Street	16.50	70	Yes	Horn	1	8	2.47	0.33	75	3	58	2.47	53	0.33	60
17	King Phillip Street	17.10	70	Yes	Horn	1	8	2.47	0.33	75	10	64	2.47	59	0.33	66
18	Longmeadow Road	18.90	70	Yes	Horn	1	8	2.47	0.33	75	5	61	2.47	63	0.33	69
Dean Street Station				40	Station	Bell	1	8	2.40	600	5					
19	Dean Street	19.40	40	Yes	Bell	1	8	2.40	0.44	n/a	2	65	2.40	61	0.44	68
20	Ingell Street	61.92	40	Yes	Bell	1	8	2.40	0.44	200	15	59	2.40	59	0.44	66
21	Hart Street	62.43	40	Yes	Bell	1	8	2.40	0.44	75	10	65	2.40	61	0.44	68

1: L_{dn} computed using: 10*LOG((15*10⁰(L_{eq,day}/10))+(9*10⁰(L_{eq,night}+10/10)))-13.8

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	63	54
Source 1	62	61	52
Source 2	58	58	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	
Dist. to receiver	distance (ft)	50	distance (ft)	50	
Daytime Hours (7 AM - 10 PM)	speed (mph)	30	speed (mph)	30	
	trains/hour	2.47	trains/hour	2.47	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	30	speed (mph)	30	
	trains/hour	0.33	trains/hour	0.33	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	Y	Y/N	Y	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

New Bedford/Fall River Modeled Noise Levels					Leq					Ldn					
Milepost	Crossing Type - Grade, Overhead, Underground, Station	Horn Noise	Speed Used	Building Offset (ft.)	Rail Project	Existing Road (Monitored)	Future No- Build	Build Condition	difference (Build - Existing) dbA	Rail Project	Existing (Monitored)	Future No-Build	Build Condition	difference (Build - Existing) dbA	
1 Brock Street	4.30	G	Yes	30	75	59	58	59	62	4	62	65	66	67	2
2 Plain Street	4.60	G	Yes	30	75	56	60	61	62	2	59	62	63	65	2
3 Morton Street	5.20	G	Yes	30	100	60	67	68	69	2	63	72	73	73	1
North Easton Station	6.40	Sta.	No		1,200	47	64	65	65	1	47	64	65	65	1
4 Elm Street (MP 7.60)	7.60	G	Yes	30	75	60	65	66	67	2	63	70	71	72	2
5 Oliver Street	7.80	G	Yes	30	100	59	63	64	65	2	61	63	64	66	3
6 Pond Street	7.90	UG	No	30	100	56	62	63	63	2	59	63	64	65	2
7 Main Street	8.05	OH	No	40	75	59	64	65	66	2	61	66	67	68	2
8 Bridge Street	8.40	OH	No	50	75	56	58	59	61	3	59	61	62	64	3
9 Short Street	9.55	G	Yes	70	100	59	63	64	65	2	61	67	68	69	2
10 Depot Street/123	10.00	G	Yes	70	75	60	67	68	69	2	63	69	70	71	2
11 Purchase Street	10.20	G	Yes	70	300	59	60	61	63	3	61	64	65	66	3
12 Prospect Street	10.90	G	Yes	70	100	55	55	56	58	4	58	62	63	64	2
Raynham Station	14.10	Sta.	No		1,600	46	65	66	66	1	46	65	66	66	1
13 Elm Street (MP 15.40)	15.40	G	Yes	70	100	56	58	59	61	3	59	61	62	63	3
14 Carver Street	15.80	G	Yes	70	75	59	56	57	61	5	61	62	63	65	3
15 Route 138	16.40	G	Yes	70	75	59	65	66	67	2	61	70	71	71	1
16 Britton Street	16.50	G	Yes	70	75	56	58	59	61	3	59	60	61	63	3
17 King Phillip Street	17.10	G	Yes	70	100	63	64	65	67	3	66	66	67	70	3
18 Longmeadow Road	18.90	G	Yes	30	300	63	61	62	66	5	66	69	70	71	2
Dean Street Station	19.20	Sta.	No		600	52	54	55	57	3	52	54	55	57	3
19 Dean Street	19.40	G	Yes	30	75	64	65	66	68	3	66	68	69	71	3
20 Ingell Street	61.92	G	Yes	30	100	#REF!	59	60	#REF!	#REF!	#REF!	66	67	#REF!	#REF!
21 Hart Street	62.43	G	Yes	30	75	#REF!	65	66	#REF!	#REF!	#REF!	68	69	#REF!	#REF!
22 High Street Freetown		G	Yes	30	250	#REF!	-	1	#REF!	#REF!	#REF!	57	58	#REF!	#REF!

New Bedford/Fall River Modeled Noise Levels					Leq					Ldn					
Milepost	Crossing Type - Grade, Overhead, Underground, Station	Horn Noise	Speed Used	Building Offset (ft.)	Rail Project	Existing Road (Monitored)	Future No- Build	Build Condition	difference (Build - Existing) dbA	Rail Project	Existing (Monitored)	Future No-Build	Build Condition	difference (Build - Existing) dbA	
1 Brock Street	4.30	G	Yes	30	75	59	58	59	62	4	62	62	63	65	3
2 Plain Street	4.60	G	Yes	30	75	56	60	61	62	2	59	58	59	62	4
3 Morton Street	5.20	G	Yes	30	100	60	67	68	69	2	63	68	69	70	2
North Easton Station	6.40	Sta.	No		1,200	47	64	65	65	1	47	61	62	62	1
4 Elm Street (MP 7.60)	7.60	G	Yes	30	75	60	65	66	67	2	63	66	67	69	3
5 Oliver Street	7.80	G	Yes	30	100	59	63	64	65	2	61	57	58	63	6
6 Pond Street	7.90	UG	No	30	100	56	62	63	63	2	59	57	58	61	4
7 Main Street	8.05	OH	No	40	75	59	64	65	66	2	61	62	63	65	3
8 Bridge Street	8.40	OH	No	50	75	56	58	59	61	3	59	57	58	61	4
9 Short Street	9.55	G	Yes	70	100	59	63	64	65	2	61	63	64	66	3
10 Depot Street/123	10.00	G	Yes	70	75	60	67	68	69	2	63	64	65	67	3
11 Purchase Street	10.20	G	Yes	70	300	59	60	61	63	3	61	60	61	64	4
12 Prospect Street	10.90	G	Yes	70	100	55	55	56	58	4	58	59	60	62	3
Raynham Station	14.10	Sta.	No		1,600	46	65	66	66	1	46	62	63	63	1
13 Elm Street (MP 15.40)	15.40	G	Yes	70	100	56	58	59	61	3	59	56	57	61	5
14 Carver Street	15.80	G	Yes	70	75	59	56	57	61	5	61	59	60	64	5
15 Route 138	16.40	G	Yes	70	75	59	65	66	67	2	61	66	67	68	2
16 Britton Street	16.50	G	Yes	70	75	56	58	59	61	3	59	56	57	61	5
17 King Phillip Street	17.10	G	Yes	70	100	63	64	65	67	3	66	62	63	68	6
18 Longmeadow Road	18.90	G	Yes	30	300	63	61	62	66	5	66	66	67	69	3
Dean Street Station	19.20	Sta.	No		600	52	54	55	57	3	52	51	52	55	4
19 Dean Street	19.40	G	Yes	30	75	64	65	66	68	3	66	64	65	69	5
20 Ingell Street	61.92	G	Yes	30	100	#REF!	59	60	#REF!	#REF!	#REF!	62	63	#REF!	#REF!
21 Hart Street	62.43	G	Yes	30	75	#REF!	65	66	#REF!	#REF!	#REF!	64	65	#REF!	#REF!
22 High Street Freetown		G	Yes	30	250	#REF!	-	1	#REF!	#REF!	#REF!	57	58	#REF!	#REF!

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	62	59	54
Source 1	58	56	51
Source 2	59	56	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	145	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	59	56	51
Source 1	56	53	48
Source 2	56	53	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	225	distance (ft)	225	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	60	56
Source 1	61	58	53
Source 2	59	57	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	75	distance (ft)	75	
Daytime Hours (7 AM - 10 PM)	speed (mph)	45	speed (mph)	45	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	45	speed (mph)	45	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	60	56
Source 1	61	58	53
Source 2	59	57	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	75	distance (ft)	75	
Daytime Hours (7 AM - 10 PM)	speed (mph)	45	speed (mph)	45	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	45	speed (mph)	45	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	59	54
Source 1	58	55	51
Source 2	59	56	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	59	56	51
Source 1	56	53	48
Source 2	56	53	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	225	distance (ft)	225	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	59	54
Source 1	59	56	51
Source 2	58	55	50
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	108	distance (ft)	108	
Daytime Hours (7 AM - 10 PM)	speed (mph)	50	speed (mph)	50	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	50	speed (mph)	50	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	59	56	51
Source 1	56	53	48
Source 2	56	53	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	225	distance (ft)	225	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	59	54
Source 1	58	55	51
Source 2	59	56	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	60	55
Source 1	59	57	52
Source 2	60	57	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	125	distance (ft)	125	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	59	54
Source 1	58	55	51
Source 2	59	56	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	58	55	50
Source 1	54	52	47
Source 2	55	52	47
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	275	distance (ft)	275	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	59	54
Source 1	58	55	51
Source 2	59	56	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	59	56	51
Source 1	56	53	48
Source 2	56	53	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS			
Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 225	distance (ft) 225	
Daytime Hours (7 AM - 10 PM)	speed (mph) 70	speed (mph) 70	
	trains/hour 3	trains/hour 3	
	locos/train 1	cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 70	speed (mph) 70	
	trains/hour 1	trains/hour 1	
	locos/train 1	cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	59	54
Source 1	58	55	51
Source 2	59	56	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	59	54
Source 1	58	55	51
Source 2	59	56	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	59	56	51
Source 1	56	53	48
Source 2	56	53	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	225	distance (ft)	225	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	59	54
Source 1	58	55	51
Source 2	59	56	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	59	56	51
Source 1	56	53	48
Source 2	56	53	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	225	distance (ft)	225	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	66	63	58
Source 1	63	60	55
Source 2	63	60	56
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	75	distance (ft)	75	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	66	63	58
Source 1	63	61	56
Source 2	62	60	55
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	55	distance (ft)	55	
Daytime Hours (7 AM - 10 PM)	speed (mph)	50	speed (mph)	50	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	50	speed (mph)	50	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	62	59	54
Source 1	59	57	52
Source 2	58	56	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	100	distance (ft)	100	
Daytime Hours (7 AM - 10 PM)	speed (mph)	50	speed (mph)	50	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	50	speed (mph)	50	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	66	64	59
Source 1	64	61	56
Source 2	63	60	55
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	50	distance (ft)	50	
Daytime Hours (7 AM - 10 PM)	speed (mph)	50	speed (mph)	50	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	50	speed (mph)	50	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank



Technical Report
Noise and Vibration
Draft

Attleboro Electric



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

New Bedford/Fall River Modeled Noise Levels
Impact Ranges based upon various Existing Noise Levels

When Existing dba	Severe		Moderate		No Impact	
	<u>greater than</u> dBA	<u>closer than</u> feet	<u>between</u> dBA	<u>between</u> feet	<u>less than</u> dBA	<u>farther than</u> feet
60	63	115	58-63	115-225	58	225
61	64	100	59-64	100-200	59	200
62	64	100	59-64	100-200	59	200
63	65	75	60-65	75-175	60	175
64	65	75	60-65	75-175	60	175
65	66	65	61-66	65-150	61	150
66	67	55	62-67	55-135	62	135
67	67	55	62-67	55-135	62	135
68	68	50	63-68	50-115	63	115
69	69	45	64-69	45-100	64	100
70	69	45	64-69	45-100	64	100
71	70	40	66-70	40-65	66	65
72	71	30	66-71	30-65	66	65

Segment	MP	No-build	Build	Severe - closer than (feet)	Quantity Severe	Moderate - closer than (feet)	Quantity Moderate
Brock Street	4.30	63	65	65	3	150	8
Plain Street	4.60	59	62	100	8	200	14
Morton Street	5.20	69	70	30	0	65	0
North Easton Station	6.40	62	62	75	0	175	0
Elm Street (MP 7.60)	7.60	67	68	45	0	100	10
Oliver Street	7.80	58	63	75	0	175	2
Pond Street	7.90	58	61	75	0	175	8
Main Street	8.05	63	65	55	6	135	15
Bridge Street	8.40	58	61	100	2	200	15
Short Street	9.55	64	66	55	0	135	5
Depot Street/123	10.00	65	67	45	0	100	1
Purchase Street	10.20	61	64	75	0	175	2
Prospect Street	10.90	60	62	100	0	200	2
Raynham Station	14.10	63	63	65	0	150	0
Elm Street (MP 15.40)	15.40	57	61	100	4	200	3
Carver Street	15.80	60	61	100	1	200	1
Route 138	16.40	67	68	45	0	100	4
Britton Street	16.50	57	61	115	4	225	4
King Phillip Street	17.10	63	68	55	4	135	3
Longmeadow Road	18.90	67	69	45	0	100	2
Dean Street Station	19.20	52	55	150	0	300	0
Dean Street	19.40	65	68	50	0	115	2
Ingell Street	61.92	63	#REF!	55	0	135	0
Hart Street	62.43	65	#REF!	50	0	115	6
Total					32		107

School	Distance to Track (feet)	Existing Background Noise	Leq (dBA)			Impact
			No-Build	Project	Build	
Jones School	1,400					
Kimball School	1,400					
Unionville School	3,200					
Stonehill College	5,500					
Parkview School	2,300					
Easton Jr. High School	3,100					
Ames Highschool	3,100					
Holy Cross Seminary	4,000					
School building near Easton Center	1,700					
Southeastern Regional Vocational High School	750	61	62	50	62	No Impact
High School	3,200					
Pole School	2,000					
Summer Street School	600	65	66	51	66	No Impact



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

New Bedford/Fall River
Noise Modeling

Site #	Location	Milepost	M.A.S.	At-Grade Crossing?	Horn/Bell	locomotive	cars	trains/h r day	trains/h r night	Building Offset (ft.)	Quantity	Existing Leq (day)	trains per hour	Leq (night)	trains per hour	Existing Ldn ¹
1	Brock Street	4.30	70	Yes	Horn	1	8	2.47	0.33	75	20	58	2.47	59	0.33	65
2	Plain Street	4.60	70	Yes	Horn	1	8	2.47	0.33	75	10	60	2.47	55	0.33	62
3	Morton Street	5.20	70	Yes	Horn	1	8	2.47	0.33	100	5	67	2.47	65	0.33	72
North Easton Station				70	Station	Horn	1	8	2.47	1300	5					
4	Elm Street (MP 7.60)	7.60	70	Yes	Horn	1	8	2.47	0.33	75	10	65	2.47	63	0.33	70
5	Oliver Street	7.80	70	Yes	Horn	1	8	2.47	0.33	75	5	63	2.47	54	0.33	63
6	Pond Street	7.90	70	No	n/a	1	8	2.47	0.33	75	0	62	2.47	54	0.33	63
7	Main Street	8.05	70	No	n/a	1	8	2.47	0.33	75	5	64	2.47	59	0.33	66
8	Bridge Street	8.40	70	No	n/a	1	8	2.47	0.33	75	25	58	2.47	54	0.33	61
9	Short Street	9.55	70	Yes	Horn	1	8	2.47	0.33	100	20	63	2.47	60	0.33	67
10	Depot Street/123	10.00	70	Yes	Horn	1	8	2.47	0.33	75	5	67	2.47	61	0.33	69
11	Purchase Street	10.20	70	Yes	Horn	1	8	2.47	0.33	300	10	60	2.47	57	0.33	64
12	Prospect Street	10.90	70	Yes	Horn	1	8	2.47	0.33	100	2	55	2.47	56	0.33	62
Raynham Station				70	Station	Horn	1	8	2.47	1800	5					
13	Elm Street (MP 15.40)	15.40	70	Yes	Horn	1	8	2.47	0.33	75	5	58	2.47	53	0.33	61
14	Carver Street	15.80	70	Yes	Horn	1	8	2.47	0.33	75	3	56	2.47	56	0.33	62
15	Route 138	16.40	70	Yes	Horn	1	8	2.47	0.33	100	5	65	2.47	63	0.33	70
16	Britton Street	16.50	70	Yes	Horn	1	8	2.47	0.33	75	3	58	2.47	53	0.33	60
17	King Phillip Street	17.10	70	Yes	Horn	1	8	2.47	0.33	75	10	64	2.47	59	0.33	66
18	Longmeadow Road	18.90	70	Yes	Horn	1	8	2.47	0.33	75	5	61	2.47	63	0.33	69
Dean Street Station				40	Station	Bell	1	8	2.40	600	5					
19	Dean Street	19.40	40	Yes	Bell	1	8	2.40	0.44	n/a	2	65	2.40	61	0.44	68
20	Ingell Street	61.92	40	Yes	Bell	1	8	2.40	0.44	200	15	59	2.40	59	0.44	66
21	Hart Street	62.43	40	Yes	Bell	1	8	2.40	0.44	75	10	65	2.40	61	0.44	68

1: L_{dn} computed using: 10*LOG((15*10⁰(L_{eq,day}/10))+(9*10⁰(L_{eq,night}+10/10)))-13.8

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	63	54
Source 1	62	61	52
Source 2	58	58	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY
Noise receiver land use category (1, 2 or 3) 2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS			
Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	
Dist. to receiver	distance (ft) 50	distance (ft) 50	
Daytime Hours (7 AM - 10 PM)	speed (mph) 30	speed (mph) 30	
	trains/hour 2.47	trains/hour 2.47	
	locos/train 1	cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 30	speed (mph) 30	
	trains/hour 0.33	trains/hour 0.33	
	locos/train 1	cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N Y	Y/N Y	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

New Bedford/Fall River Modeled Noise Levels					Leq					Ldn					
Milepost	Crossing Type - Grade, Overhead, Underground, Station	Horn Noise	Speed Used	Building Offset (ft.)	Rail Project	Existing Road (Monitored)	Future No- Build	Build Condition	difference (Build - Existing) dbA	Rail Project	Existing (Monitored)	Future No-Build	Build Condition	difference (Build - Existing) dbA	
1 Brock Street	4.30	G	Yes	30	75	58	58	59	62	3	61	62	63	65	3
2 Plain Street	4.60	G	Yes	30	75	56	60	61	62	2	59	58	59	62	4
3 Morton Street	5.20	G	Yes	30	100	60	67	68	69	2	63	68	69	70	2
North Easton Station	6.40	Sta.	No		1,200	47	64	65	65	1	47	61	62	62	1
4 Elm Street (MP 7.60)	7.60	G	Yes	30	75	60	65	66	67	2	63	66	67	68	2
5 Oliver Street	7.80	G	Yes	30	100	58	63	64	65	2	61	57	58	63	6
6 Pond Street	7.90	UG	No	30	100	56	62	63	63	2	59	57	58	61	4
7 Main Street	8.05	OH	No	40	75	58	64	65	65	2	61	62	63	65	3
8 Bridge Street	8.40	OH	No	50	75	56	58	59	61	3	59	57	58	61	4
9 Short Street	9.55	G	Yes	70	100	58	63	64	65	2	61	63	64	66	3
10 Depot Street/123	10.00	G	Yes	70	75	61	67	68	69	2	63	64	65	67	3
11 Purchase Street	10.20	G	Yes	70	300	58	60	61	63	3	61	60	61	64	4
12 Prospect Street	10.90	G	Yes	70	100	55	55	56	58	4	58	59	60	62	3
Raynham Station	14.10	Sta.	No		1,600	46	65	66	66	1	46	62	63	63	1
13 Elm Street (MP 15.40)	15.40	G	Yes	70	100	56	58	59	61	3	59	56	57	61	5
14 Carver Street	15.80	G	Yes	70	75	52	56	57	58	2	55	59	60	61	2
15 Route 138	16.40	G	Yes	70	75	58	65	66	67	2	61	66	67	68	2
16 Britton Street	16.50	G	Yes	70	75	56	58	59	61	3	59	56	57	61	5
17 King Phillip Street	17.10	G	Yes	70	100	63	64	65	67	3	66	62	63	68	6
18 Longmeadow Road	18.90	G	Yes	30	300	63	61	62	66	5	66	66	67	69	3
Dean Street Station	19.20	Sta.	No		600	52	54	55	57	3	52	51	52	55	4
19 Dean Street	19.40	G	Yes	30	75	63	65	66	68	3	66	64	65	68	4
20 Ingell Street	61.92	G	Yes	30	100	#REF!	59	60	#REF!	#REF!	#REF!	62	63	#REF!	#REF!
21 Hart Street	62.43	G	Yes	30	75	#REF!	65	66	#REF!	#REF!	#REF!	64	65	#REF!	#REF!
22 High Street Freetown		G	Yes	30	250	#REF!	-	1	#REF!	#REF!	#REF!	57	58	#REF!	#REF!



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	58	53
Source 1	56	53	49
Source 2	59	56	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	59	56	51
Source 1	54	52	47
Source 2	57	54	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	200	distance (ft)	200	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	60	55
Source 1	59	57	52
Source 2	60	57	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	70	distance (ft)	70	
Daytime Hours (7 AM - 10 PM)	speed (mph)	45	speed (mph)	45	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	45	speed (mph)	45	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	60	55
Source 1	59	57	52
Source 2	60	57	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	70	distance (ft)	70	
Daytime Hours (7 AM - 10 PM)	speed (mph)	45	speed (mph)	45	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	45	speed (mph)	45	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	58	53
Source 1	55	52	48
Source 2	59	56	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	225	distance (ft)	225	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	59	56	51
Source 1	53	51	46
Source 2	57	55	50
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	300	distance (ft)	300	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	58	53
Source 1	57	55	50
Source 2	58	56	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	100	distance (ft)	100	
Daytime Hours (7 AM - 10 PM)	speed (mph)	50	speed (mph)	50	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	50	speed (mph)	50	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	59	56	51
Source 1	53	51	46
Source 2	57	55	50
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	300	distance (ft)	300	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	58	53
Source 1	55	52	48
Source 2	59	56	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	225	distance (ft)	225	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	61	56
Source 1	58	55	50
Source 2	62	59	54
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	58	53
Source 1	55	52	48
Source 2	59	56	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	225	distance (ft)	225	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	58	55	50
Source 1	52	50	45
Source 2	56	54	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	350	distance (ft)	350	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	58	53
Source 1	55	52	48
Source 2	59	56	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	225	distance (ft)	225	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	59	56	51
Source 1	53	51	46
Source 2	57	55	50
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY
Noise receiver land use category (1, 2 or 3) 2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS			
Parameter	Source 1	Source 2	Source 3
Source Num.	Electric Loco. 1	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 300	distance (ft) 300	
Daytime Hours (7 AM - 10 PM)	speed (mph) 100	speed (mph) 100	
	trains/hour 3	trains/hour 3	
	locos/train 1	cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 100	speed (mph) 100	
	trains/hour 1	trains/hour 1	
	locos/train 1	cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	55	52	47
Source 1	49	47	42
Source 2	53	51	46
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	550	distance (ft)	550	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	58	53
Source 1	55	52	48
Source 2	59	56	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	225	distance (ft)	225	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	59	56	51
Source 1	53	51	46
Source 2	57	55	50
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	300	distance (ft)	300	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	58	53
Source 1	55	52	48
Source 2	59	56	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	225	distance (ft)	225	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	59	56	51
Source 1	53	51	46
Source 2	57	55	50
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	300	distance (ft)	300	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	66	63	58
Source 1	60	58	53
Source 2	64	62	57
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	100	distance (ft)	100	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	66	63	58
Source 1	62	59	54
Source 2	64	61	56
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	50	distance (ft)	45	
Daytime Hours (7 AM - 10 PM)	speed (mph)	50	speed (mph)	50	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	50	speed (mph)	50	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	62	60	55
Source 1	59	56	51
Source 2	60	57	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	80	distance (ft)	80	
Daytime Hours (7 AM - 10 PM)	speed (mph)	50	speed (mph)	50	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	50	speed (mph)	50	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	66	63	58
Source 1	62	59	54
Source 2	64	61	56
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	50	distance (ft)	45	
Daytime Hours (7 AM - 10 PM)	speed (mph)	50	speed (mph)	50	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	50	speed (mph)	50	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank



Technical Report
Noise and Vibration
Draft

Fall River Diesel



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

New Bedford/Fall River Modeled Noise Levels
Impact Ranges based upon various Existing Noise Levels

When Existing dba	Severe		Moderate		No Impact	
	<u>greater than</u> dBA	<u>closer than</u> feet	<u>between</u> dBA	<u>between</u> feet	<u>less than</u> dBA	<u>farther than</u> feet
60	63	115	58-63	115-225	58	225
61	64	100	59-64	100-200	59	200
62	64	100	59-64	100-200	59	200
63	65	75	60-65	75-175	60	175
64	65	75	60-65	75-175	60	175
65	66	65	61-66	65-150	61	150
66	67	55	62-67	55-135	62	135
67	67	55	62-67	55-135	62	135
68	68	50	63-68	50-115	63	115
69	69	45	64-69	45-100	64	100
70	69	45	64-69	45-100	64	100
71	70	40	66-70	40-65	66	65
72	71	30	66-71	30-65	66	65

Segment	MP	No-build	Build	Severe - closer than (feet)	Quantity Severe	Moderate - closer than (feet)	Quantity Moderate
Brock Street	4.30	63	65	65	3	150	8
Plain Street	4.60	59	62	100	8	200	14
Morton Street	5.20	69	69	30	0	65	0
North Easton Station	6.40	62	62	75	0	175	0
Elm Street (MP 7.60)	7.60	67	68	45	0	100	10
Oliver Street	7.80	58	62	75	0	175	2
Pond Street	7.90	58	64	75	0	175	8
Main Street	8.05	63	65	55	6	135	15
Bridge Street	8.40	58	63	100	2	200	15
Short Street	9.55	64	65	55	0	135	5
Depot Street/123	10.00	65	66	45	0	100	1
Purchase Street	10.20	61	64	75	0	175	2
Prospect Street	10.90	60	63	100	0	200	2
Raynham Station	14.10	63	63	65	0	150	0
Elm Street (MP 15.40)	15.40	57	62	100	4	200	3
Carver Street	15.80	60	64	100	1	200	1
Route 138	16.40	67	#REF!	45	0	100	4
Britton Street	16.50	57	#REF!	115	4	225	4
King Phillip Street	17.10	63	#REF!	55	4	135	3
Longmeadow Road	18.90	67	#REF!	45	0	100	2
Dean Street Station	19.20	52	55	150	0	300	0
Dean Street	19.40	65	#REF!	50	0	115	2
Ingell Street	61.92	63	#REF!	55	0	135	0
Hart Street	62.43	65	#REF!	50	0	115	6
Total					32		107

School	Distance to Track (feet)	Leq (dBA)			Impact	
		Existing Background Noise	No-Build	Project Build		
Jones School	1,400					
Kimball School	1,400					
Unionville School	3,200					
Stonehill College	5,500					
Parkview School	2,300					
Easton Jr. High School	3,100					
Ames Highschool	3,100					
Holy Cross Seminary	4,000					
School building near Easton Center	1,700					
Southeastern Regional Vocational High School	750	61	62	50	62	No Impact
High School	3,200					
Pole School	2,000					
Summer Street School	600	65	66	51	66	No Impact



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

New Bedford/Fall River
Noise Modeling

Site #	Location	Milepost	M.A.S.	At-Grade Crossing?	Horn/Bell	locomotive	cars	trains/h r day	trains/h r night	Building Offset (ft.)	Quantity	Existing Leq (day)	trains per hour	Leq (night)	trains per hour	Existing Ldn ¹
1	Brock Street	4.30	70	Yes	Horn	1	8	2.47	0.33	75	20	58	2.47	59	0.33	65
2	Plain Street	4.60	70	Yes	Horn	1	8	2.47	0.33	75	10	60	2.47	55	0.33	62
3	Morton Street	5.20	70	Yes	Horn	1	8	2.47	0.33	100	5	67	2.47	65	0.33	72
North Easton Station				70	Station	Horn	1	8	2.47	1300	5					
4	Elm Street (MP 7.60)	7.60	70	Yes	Horn	1	8	2.47	0.33	75	10	65	2.47	63	0.33	70
5	Oliver Street	7.80	70	Yes	Horn	1	8	2.47	0.33	75	5	63	2.47	54	0.33	63
6	Pond Street	7.90	70	No	n/a	1	8	2.47	0.33	75	0	62	2.47	54	0.33	63
7	Main Street	8.05	70	No	n/a	1	8	2.47	0.33	75	5	64	2.47	59	0.33	66
8	Bridge Street	8.40	70	No	n/a	1	8	2.47	0.33	75	25	58	2.47	54	0.33	61
9	Short Street	9.55	70	Yes	Horn	1	8	2.47	0.33	100	20	63	2.47	60	0.33	67
10	Depot Street/123	10.00	70	Yes	Horn	1	8	2.47	0.33	75	5	67	2.47	61	0.33	69
11	Purchase Street	10.20	70	Yes	Horn	1	8	2.47	0.33	300	10	60	2.47	57	0.33	64
12	Prospect Street	10.90	70	Yes	Horn	1	8	2.47	0.33	100	2	55	2.47	56	0.33	62
Raynham Station				70	Station	Horn	1	8	2.47	1800	5					
13	Elm Street (MP 15.40)	15.40	70	Yes	Horn	1	8	2.47	0.33	75	5	58	2.47	53	0.33	61
14	Carver Street	15.80	70	Yes	Horn	1	8	2.47	0.33	75	3	56	2.47	56	0.33	62
15	Route 138	16.40	70	Yes	Horn	1	8	2.47	0.33	100	5	65	2.47	63	0.33	70
16	Britton Street	16.50	70	Yes	Horn	1	8	2.47	0.33	75	3	58	2.47	53	0.33	60
17	King Phillip Street	17.10	70	Yes	Horn	1	8	2.47	0.33	75	10	64	2.47	59	0.33	66
18	Longmeadow Road	18.90	70	Yes	Horn	1	8	2.47	0.33	75	5	61	2.47	63	0.33	69
Dean Street Station				40	Station	Bell	1	8	2.40	600	5					
19	Dean Street	19.40	40	Yes	Bell	1	8	2.40	0.44	n/a	2	65	2.40	61	0.44	68
20	Ingell Street	61.92	40	Yes	Bell	1	8	2.40	0.44	200	15	59	2.40	59	0.44	66
21	Hart Street	62.43	40	Yes	Bell	1	8	2.40	0.44	75	10	65	2.40	61	0.44	68

1: L_{dn} computed using: 10*LOG((15*10⁰(L_{eq,day}/10))+(9*10⁰(L_{eq,nite}+10/10)))-13.8

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	63	54
Source 1	62	61	52
Source 2	58	58	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY
Noise receiver land use category (1, 2 or 3) 2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS			
Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	
Dist. to receiver	distance (ft) 50	distance (ft) 50	
Daytime Hours (7 AM - 10 PM)	speed (mph) 30	speed (mph) 30	
	trains/hour 2.47	trains/hour 2.47	
	locos/train 1	cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 30	speed (mph) 30	
	trains/hour 0.33	trains/hour 0.33	
	locos/train 1	cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N Y	Y/N Y	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

New Bedford/Fall River Modeled Noise Levels					Leq					Ldn					
Milepost	Crossing Type - Grade, Overhead, Underground, Station	Horn Noise	Speed Used	Building Offset (ft.)	Rail Project	Existing Road (Monitored)	Future No- Build	Build Condition	difference (Build - Existing) dbA	Rail Project	Existing (Monitored)	Future No-Build	Build Condition	difference (Build - Existing) dbA	
1 Brock Street	4.30	G	Yes	30	75	57	58	59	61	3	61	62	63	65	3
2 Plain Street	4.60	G	Yes	30	75	55	60	61	62	2	59	58	59	62	4
3 Morton Street	5.20	G	Yes	30	100	55	67	68	68	1	59	68	69	69	1
North Easton Station	6.40	Sta.	No		1,200	47	64	65	65	1	47	61	62	62	1
4 Elm Street (MP 7.60)	7.60	G	Yes	30	75	59	65	66	67	2	63	66	67	68	2
5 Oliver Street	7.80	G	Yes	30	100	55	63	64	65	2	59	57	58	62	5
6 Pond Street	7.90	UG	No	30	100	59	62	63	64	2	63	57	58	64	7
7 Main Street	8.05	OH	No	40	75	57	64	65	65	2	61	62	63	65	3
8 Bridge Street	8.40	OH	No	50	75	57	58	59	61	3	61	57	58	63	6
9 Short Street	9.55	G	Yes	70	100	55	63	64	65	2	59	63	64	65	2
10 Depot Street/123	10.00	G	Yes	70	75	57	67	68	69	1	61	64	65	66	2
11 Purchase Street	10.20	G	Yes	70	300	57	60	61	63	2	61	60	61	64	4
12 Prospect Street	10.90	G	Yes	70	100	55	55	56	58	4	59	59	60	63	4
Raynham Station	14.10	Sta.	No		1,600	46	65	66	66	1	46	62	63	63	1
13 Elm Street (MP 15.40)	15.40	G	Yes	70	100	57	58	59	61	3	61	56	57	62	6
14 Carver Street	15.80	G	Yes	70	75	57	56	57	60	4	61	59	60	64	5
15 Route 138	16.40	G	Yes	70	75	#REF!	65	66	#REF!	#REF!	#REF!	66	67	#REF!	#REF!
16 Britton Street	16.50	G	Yes	70	75	#REF!	58	59	#REF!	#REF!	#REF!	56	57	#REF!	#REF!
17 King Phillip Street	17.10	G	Yes	70	100	#REF!	64	65	#REF!	#REF!	#REF!	62	63	#REF!	#REF!
18 Longmeadow Road	18.90	G	Yes	30	300	#REF!	61	62	#REF!	#REF!	#REF!	66	67	#REF!	#REF!
Dean Street Station	19.20	Sta.	No		600	52	54	55	57	3	52	51	52	55	4
19 Dean Street	19.40	G	Yes	30	75	#REF!	65	66	#REF!	#REF!	#REF!	64	65	#REF!	#REF!
20 Ingell Street	61.92	G	Yes	30	100	#REF!	59	60	#REF!	#REF!	#REF!	62	63	#REF!	#REF!
21 Hart Street	62.43	G	Yes	30	75	#REF!	65	66	#REF!	#REF!	#REF!	64	65	#REF!	#REF!
22 High Street Freetown		G	Yes	30	250	#REF!	-	1	#REF!	#REF!	#REF!	57	58	#REF!	#REF!



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	57	54
Source 1	58	54	51
Source 2	57	53	50
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	100	distance (ft)	100	
Daytime Hours (7 AM - 10 PM)	speed (mph)	45	speed (mph)	45	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	45	speed (mph)	45	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	59	55	52
Source 1	57	53	50
Source 2	56	52	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	125	distance (ft)	125	
Daytime Hours (7 AM - 10 PM)	speed (mph)	45	speed (mph)	45	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	45	speed (mph)	45	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	59	55	52
Source 1	56	52	49
Source 2	56	52	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	200	distance (ft)	200	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	59	56
Source 1	59	55	52
Source 2	60	56	53
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	118	distance (ft)	118	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	59	55	52
Source 1	56	52	49
Source 2	56	52	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY
Noise receiver land use category (1, 2 or 3) 2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS			
Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 200	distance (ft) 200	
Daytime Hours (7 AM - 10 PM)	speed (mph) 70	speed (mph) 70	
	trains/hour 2	trains/hour 2	
	locos/train 1	cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 70	speed (mph) 70	
	trains/hour 1	trains/hour 1	
	locos/train 1	cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	59	56
Source 1	59	55	52
Source 2	60	56	53
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	118	distance (ft)	118	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	57	54
Source 1	58	54	51
Source 2	58	54	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	57	54
Source 1	58	54	51
Source 2	58	54	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	59	55	52
Source 1	56	52	49
Source 2	56	52	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	200	distance (ft)	200	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	57	54
Source 1	58	54	51
Source 2	58	54	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	57	54
Source 1	58	54	51
Source 2	58	54	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	59	55	52
Source 1	56	52	49
Source 2	56	52	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	200	distance (ft)	200	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	62	58	55
Source 1	59	55	52
Source 2	59	55	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	125	distance (ft)	125	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	57	54
Source 1	58	54	51
Source 2	58	54	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY
Noise receiver land use category (1, 2 or 3) 2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS			
Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 150	distance (ft) 150	
Daytime Hours (7 AM - 10 PM)	speed (mph) 70	speed (mph) 70	
	trains/hour 2	trains/hour 2	
	locos/train 1	cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 70	speed (mph) 70	
	trains/hour 1	trains/hour 1	
	locos/train 1	cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	57	54
Source 1	58	54	51
Source 2	58	54	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank



Technical Report
Noise and Vibration
Draft

Fall River Electric



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

New Bedford/Fall River Modeled Noise Levels
Impact Ranges based upon various Existing Noise Levels

When Existing dba	Severe		Moderate		No Impact	
	<u>greater than</u> dBA	<u>closer than</u> feet	<u>between</u> dBA	<u>between</u> feet	<u>less than</u> dBA	<u>farther than</u> feet
60	63	115	58-63	115-225	58	225
61	64	100	59-64	100-200	59	200
62	64	100	59-64	100-200	59	200
63	65	75	60-65	75-175	60	175
64	65	75	60-65	75-175	60	175
65	66	65	61-66	65-150	61	150
66	67	55	62-67	55-135	62	135
67	67	55	62-67	55-135	62	135
68	68	50	63-68	50-115	63	115
69	69	45	64-69	45-100	64	100
70	69	45	64-69	45-100	64	100
71	70	40	66-70	40-65	66	65
72	71	30	66-71	30-65	66	65

Segment	MP	No-build	Build	Severe - closer than (feet)	Quantity Severe	Moderate - closer than (feet)	Quantity Moderate
Brock Street	4.30	63	65	65	3	150	8
Plain Street	4.60	59	62	100	8	200	14
Morton Street	5.20	69	69	30	0	65	0
North Easton Station	6.40	62	62	75	0	175	0
Elm Street (MP 7.60)	7.60	67	68	45	0	100	10
Oliver Street	7.80	58	62	75	0	175	2
Pond Street	7.90	58	64	75	0	175	8
Main Street	8.05	63	65	55	6	135	15
Bridge Street	8.40	58	63	100	2	200	15
Short Street	9.55	64	65	55	0	135	5
Depot Street/123	10.00	65	66	45	0	100	1
Purchase Street	10.20	61	62	75	0	175	2
Prospect Street	10.90	60	63	100	0	200	2
Raynham Station	14.10	63	63	65	0	150	0
Elm Street (MP 15.40)	15.40	57	63	100	4	200	3
Carver Street	15.80	60	64	100	1	200	1
Route 138	16.40	67	#REF!	45	0	100	4
Britton Street	16.50	57	#REF!	115	4	225	4
King Phillip Street	17.10	63	#REF!	55	4	135	3
Longmeadow Road	18.90	67	#REF!	45	0	100	2
Dean Street Station	19.20	52	55	150	0	300	0
Dean Street	19.40	65	#REF!	50	0	115	2
Ingell Street	61.92	63	#REF!	55	0	135	0
Hart Street	62.43	65	#REF!	50	0	115	6
Total					32		107

School	Distance to Track (feet)	Existing Background Noise	Leq (dBA)			Impact
			No-Build	Project	Build	
Jones School	1,400					
Kimball School	1,400					
Unionville School	3,200					
Stonehill College	5,500					
Parkview School	2,300					
Easton Jr. High School	3,100					
Ames Highschool	3,100					
Holy Cross Seminary	4,000					
School building near Easton Center	1,700					
Southeastern Regional Vocational High School	750	61	62	50	62	No Impact
High School	3,200					
Pole School	2,000					
Summer Street School	600	65	66	51	66	No Impact



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

New Bedford/Fall River
Noise Modeling

Site #	Location	Milepost	M.A.S.	At-Grade Crossing?	Horn/Bell	locomotive	cars	trains/h r day	trains/h r night	Building Offset (ft.)	Quantity	Existing Leq (day)	trains per hour	Leq (night)	trains per hour	Existing Ldn ¹
1	Brock Street	4.30	70	Yes	Horn	1	8	2.47	0.33	75	20	58	2.47	59	0.33	65
2	Plain Street	4.60	70	Yes	Horn	1	8	2.47	0.33	75	10	60	2.47	55	0.33	62
3	Morton Street	5.20	70	Yes	Horn	1	8	2.47	0.33	100	5	67	2.47	65	0.33	72
North Easton Station				70	Station	Horn	1	8	2.47	1300	5					
4	Elm Street (MP 7.60)	7.60	70	Yes	Horn	1	8	2.47	0.33	75	10	65	2.47	63	0.33	70
5	Oliver Street	7.80	70	Yes	Horn	1	8	2.47	0.33	75	5	63	2.47	54	0.33	63
6	Pond Street	7.90	70	No	n/a	1	8	2.47	0.33	75	0	62	2.47	54	0.33	63
7	Main Street	8.05	70	No	n/a	1	8	2.47	0.33	75	5	64	2.47	59	0.33	66
8	Bridge Street	8.40	70	No	n/a	1	8	2.47	0.33	75	25	58	2.47	54	0.33	61
9	Short Street	9.55	70	Yes	Horn	1	8	2.47	0.33	100	20	63	2.47	60	0.33	67
10	Depot Street/123	10.00	70	Yes	Horn	1	8	2.47	0.33	75	5	67	2.47	61	0.33	69
11	Purchase Street	10.20	70	Yes	Horn	1	8	2.47	0.33	300	10	60	2.47	57	0.33	64
12	Prospect Street	10.90	70	Yes	Horn	1	8	2.47	0.33	100	2	55	2.47	56	0.33	62
Raynham Station				70	Station	Horn	1	8	2.47	1800	5					
13	Elm Street (MP 15.40)	15.40	70	Yes	Horn	1	8	2.47	0.33	75	5	58	2.47	53	0.33	61
14	Carver Street	15.80	70	Yes	Horn	1	8	2.47	0.33	75	3	56	2.47	56	0.33	62
15	Route 138	16.40	70	Yes	Horn	1	8	2.47	0.33	100	5	65	2.47	63	0.33	70
16	Britton Street	16.50	70	Yes	Horn	1	8	2.47	0.33	75	3	58	2.47	53	0.33	60
17	King Phillip Street	17.10	70	Yes	Horn	1	8	2.47	0.33	75	10	64	2.47	59	0.33	66
18	Longmeadow Road	18.90	70	Yes	Horn	1	8	2.47	0.33	75	5	61	2.47	63	0.33	69
Dean Street Station				40	Station	Bell	1	8	2.40	600	5					
19	Dean Street	19.40	40	Yes	Bell	1	8	2.40	0.44	n/a	2	65	2.40	61	0.44	68
20	Ingell Street	61.92	40	Yes	Bell	1	8	2.40	0.44	200	15	59	2.40	59	0.44	66
21	Hart Street	62.43	40	Yes	Bell	1	8	2.40	0.44	75	10	65	2.40	61	0.44	68

1: L_{dn} computed using: 10*LOG((15*10⁰(L_{eq,day}/10))+(9*10⁰(L_{eq,night}+10)/10))-13.8

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	63	54
Source 1	62	61	52
Source 2	58	58	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	
Dist. to receiver	distance (ft)	50	distance (ft)	50	
Daytime Hours (7 AM - 10 PM)	speed (mph)	30	speed (mph)	30	
	trains/hour	2.47	trains/hour	2.47	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	30	speed (mph)	30	
	trains/hour	0.33	trains/hour	0.33	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	Y	Y/N	Y	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

New Bedford/Fall River Modeled Noise Levels					Leq					difference (Build - Existing)	Ldn				difference (Build - Existing)	
Milepost	Crossing Type - Grade, Overhead, Underground, Station	Horn Noise	Speed Used	Building Offset (ft.)	Rail Project	Existing Road (Monitored)	Future No-Build	Build Condition	dbA	Rail Project	Existing (Monitored)	Future No-Build	Build Condition	dbA		
1	Brock Street	4.30	G	Yes	30	75	57	58	59	61	3	61	62	63	65	3
2	Plain Street	4.60	G	Yes	30	75	55	60	61	62	2	59	58	59	62	4
3	Morton Street	5.20	G	Yes	30	100	55	67	68	68	1	59	68	69	69	1
North Easton Station		6.40	Sta.	No		1,200	47	64	65	65	1	47	61	62	62	1
4	Elm Street (MP 7.60)	7.60	G	Yes	30	75	59	65	66	67	2	63	66	67	68	2
5	Oliver Street	7.80	G	Yes	30	100	55	63	64	65	2	59	57	58	62	5
6	Pond Street	7.90	UG	No	30	100	59	62	63	64	3	63	57	58	64	7
7	Main Street	8.05	OH	No	40	75	57	64	65	65	2	61	62	63	65	3
8	Bridge Street	8.40	OH	No	50	75	57	58	59	61	3	61	57	58	63	6
9	Short Street	9.55	G	Yes	70	100	55	63	64	65	1	59	63	64	65	2
10	Depot Street/123	10.00	G	Yes	70	75	57	67	68	69	1	61	64	65	66	2
11	Purchase Street	10.20	G	Yes	70	300	51	60	61	62	1	55	60	61	62	2
12	Prospect Street	10.90	G	Yes	70	100	55	55	56	58	4	59	59	60	63	4
Raynham Station		14.10	Sta.	No		1,600	46	65	66	66	1	46	62	63	63	1
13	Elm Street (MP 15.40)	15.40	G	Yes	70	100	57	58	59	61	3	61	56	57	63	7
14	Carver Street	15.80	G	Yes	70	75	57	56	57	60	4	61	59	60	64	5
15	Route 138	16.40	G	Yes	70	75	#REF!	65	66	#REF!	#REF!	#REF!	66	67	#REF!	#REF!
16	Britton Street	16.50	G	Yes	70	75	#REF!	58	59	#REF!	#REF!	#REF!	56	57	#REF!	#REF!
17	King Phillip Street	17.10	G	Yes	70	100	#REF!	64	65	#REF!	#REF!	#REF!	62	63	#REF!	#REF!
18	Longmeadow Road	18.90	G	Yes	30	300	#REF!	61	62	#REF!	#REF!	#REF!	66	67	#REF!	#REF!
Dean Street Station		19.20	Sta.	No		600	52	54	55	57	3	52	51	52	55	4
19	Dean Street	19.40	G	Yes	30	75	#REF!	65	66	#REF!	#REF!	#REF!	64	65	#REF!	#REF!
20	Ingell Street	61.92	G	Yes	30	100	#REF!	59	60	#REF!	#REF!	#REF!	62	63	#REF!	#REF!
21	Hart Street	62.43	G	Yes	30	75	#REF!	65	66	#REF!	#REF!	#REF!	64	65	#REF!	#REF!
22	High Street Freetown		G	Yes	30	250	#REF!	-	1	#REF!	#REF!	#REF!	57	58	#REF!	#REF!



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	57	54
Source 1	58	54	51
Source 2	59	55	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	80	distance (ft)	75	
Daytime Hours (7 AM - 10 PM)	speed (mph)	45	speed (mph)	45	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	45	speed (mph)	45	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	59	55	52
Source 1	56	52	49
Source 2	57	53	50
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	105	distance (ft)	105	
Daytime Hours (7 AM - 10 PM)	speed (mph)	45	speed (mph)	45	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	45	speed (mph)	45	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	59	55	52
Source 1	53	49	46
Source 2	57	53	50
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	275	distance (ft)	275	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	59	56
Source 1	57	53	50
Source 2	61	57	54
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	59	55	52
Source 1	55	51	48
Source 2	57	53	50
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	175	distance (ft)	175	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	59	56
Source 1	58	54	51
Source 2	61	57	54
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	100	distance (ft)	100	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	57	54
Source 1	57	53	50
Source 2	59	55	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	125	distance (ft)	125	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	57	54
Source 1	55	51	48
Source 2	59	55	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	200	distance (ft)	200	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	59	55	52
Source 1	53	49	46
Source 2	57	53	50
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	275	distance (ft)	275	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	57	54
Source 1	55	51	48
Source 2	59	55	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	200	distance (ft)	200	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	55	51	48
Source 1	49	45	42
Source 2	53	49	46
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	525	distance (ft)	525	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	59	55	52
Source 1	54	50	47
Source 2	57	53	50
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	200	distance (ft)	200	
Daytime Hours (7 AM - 10 PM)	speed (mph)	80	speed (mph)	80	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	80	speed (mph)	80	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	59	56
Source 1	58	54	51
Source 2	61	58	54
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	108	distance (ft)	108	
Daytime Hours (7 AM - 10 PM)	speed (mph)	80	speed (mph)	80	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	80	speed (mph)	80	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	57	54
Source 1	56	52	49
Source 2	59	55	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	80	speed (mph)	80	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	80	speed (mph)	80	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	57	54
Source 1	57	53	50
Source 2	59	55	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	125	distance (ft)	125	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank



Technical Report
Noise and Vibration
Draft

New Bedford Diesel



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

New Bedford/Fall River Modeled Noise Levels
Impact Ranges based upon various Existing Noise Levels

When Existing dba	Severe		Moderate		No Impact	
	<u>greater than</u> dBA	<u>closer than</u> feet	<u>between</u> dBA	<u>between</u> feet	<u>less than</u> dBA	<u>farther than</u> feet
60	63	115	58-63	115-225	58	225
61	64	100	59-64	100-200	59	200
62	64	100	59-64	100-200	59	200
63	65	75	60-65	75-175	60	175
64	65	75	60-65	75-175	60	175
65	66	65	61-66	65-150	61	150
66	67	55	62-67	55-135	62	135
67	67	55	62-67	55-135	62	135
68	68	50	63-68	50-115	63	115
69	69	45	64-69	45-100	64	100
70	69	45	64-69	45-100	64	100
71	70	40	66-70	40-65	66	65
72	71	30	66-71	30-65	66	65

Segment	MP	No-build	Build	Severe - closer than (feet)	Quantity Severe	Moderate - closer than (feet)	Quantity Moderate
Brock Street	4.30	63	66	65	3	150	8
Plain Street	4.60	59	66	100	8	200	14
Morton Street	5.20	69	70	30	0	65	0
North Easton Station	6.40	62	62	75	0	175	0
Elm Street (MP 7.60)	7.60	67	68	45	0	100	10
Oliver Street	7.80	58	63	75	0	175	2
Pond Street	7.90	58	64	75	0	175	8
Main Street	8.05	63	65	55	6	135	15
Bridge Street	8.40	58	63	100	2	200	15
Short Street	9.55	64	65	55	0	135	5
Depot Street/123	10.00	65	67	45	0	100	1
Purchase Street	10.20	61	65	75	0	175	2
Prospect Street	10.90	60	63	100	0	200	2
Raynham Station	14.10	63	63	65	0	150	0
Elm Street (MP 15.40)	15.40	57	62	100	4	200	3
Carver Street	15.80	60	64	100	1	200	1
Route 138	16.40	67	69	45	0	100	4
Britton Street	16.50	57	66	115	4	225	4
King Phillip Street	17.10	63	#REF!	55	4	135	3
Longmeadow Road	18.90	67	#REF!	45	0	100	2
Dean Street Station	19.20	52	55	150	0	300	0
Dean Street	19.40	65	#REF!	50	0	115	2
Ingell Street	61.92	63	#REF!	55	0	135	0
Hart Street	62.43	65	#REF!	50	0	115	6
Total					32		107

School	Distance to Track (feet)	Existing Background Noise	Leq (dBA)			Impact
			No-Build	Project	Build	
Jones School	1,400					
Kimball School	1,400					
Unionville School	3,200					
Stonehill College	5,500					
Parkview School	2,300					
Easton Jr. High School	3,100					
Ames Highschool	3,100					
Holy Cross Seminary	4,000					
School building near Easton Center	1,700					
Southeastern Regional Vocational High School	750	61	62	50	62	No Impact
High School	3,200					
Pole School	2,000					
Summer Street School	600	65	66	51	66	No Impact



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

New Bedford/Fall River
Noise Modeling

Site #	Location	Milepost	M.A.S.	At-Grade Crossing?	Horn/Bell	locomotive	cars	trains/h r day	trains/h r night	Building Offset (ft.)	Quantity	Existing Leq (day)	trains per hour	Leq (night)	trains per hour	Existing Ldn ¹
1	Brock Street	4.30	70	Yes	Horn	1	8	2.47	0.33	75	20	58	2.47	59	0.33	65
2	Plain Street	4.60	70	Yes	Horn	1	8	2.47	0.33	75	10	60	2.47	55	0.33	62
3	Morton Street	5.20	70	Yes	Horn	1	8	2.47	0.33	100	5	67	2.47	65	0.33	72
North Easton Station				70	Station	Horn	1	8	2.47	1300	5					
4	Elm Street (MP 7.60)	7.60	70	Yes	Horn	1	8	2.47	0.33	75	10	65	2.47	63	0.33	70
5	Oliver Street	7.80	70	Yes	Horn	1	8	2.47	0.33	75	5	63	2.47	54	0.33	63
6	Pond Street	7.90	70	No	n/a	1	8	2.47	0.33	75	0	62	2.47	54	0.33	63
7	Main Street	8.05	70	No	n/a	1	8	2.47	0.33	75	5	64	2.47	59	0.33	66
8	Bridge Street	8.40	70	No	n/a	1	8	2.47	0.33	75	25	58	2.47	54	0.33	61
9	Short Street	9.55	70	Yes	Horn	1	8	2.47	0.33	100	20	63	2.47	60	0.33	67
10	Depot Street/123	10.00	70	Yes	Horn	1	8	2.47	0.33	75	5	67	2.47	61	0.33	69
11	Purchase Street	10.20	70	Yes	Horn	1	8	2.47	0.33	300	10	60	2.47	57	0.33	64
12	Prospect Street	10.90	70	Yes	Horn	1	8	2.47	0.33	100	2	55	2.47	56	0.33	62
Raynham Station				70	Station	Horn	1	8	2.47	1800	5					
13	Elm Street (MP 15.40)	15.40	70	Yes	Horn	1	8	2.47	0.33	75	5	58	2.47	53	0.33	61
14	Carver Street	15.80	70	Yes	Horn	1	8	2.47	0.33	75	3	56	2.47	56	0.33	62
15	Route 138	16.40	70	Yes	Horn	1	8	2.47	0.33	100	5	65	2.47	63	0.33	70
16	Britton Street	16.50	70	Yes	Horn	1	8	2.47	0.33	75	3	58	2.47	53	0.33	60
17	King Phillip Street	17.10	70	Yes	Horn	1	8	2.47	0.33	75	10	64	2.47	59	0.33	66
18	Longmeadow Road	18.90	70	Yes	Horn	1	8	2.47	0.33	75	5	61	2.47	63	0.33	69
Dean Street Station				40	Station	Bell	1	8	2.40	600	5					
19	Dean Street	19.40	40	Yes	Bell	1	8	2.40	0.44	n/a	2	65	2.40	61	0.44	68
20	Ingell Street	61.92	40	Yes	Bell	1	8	2.40	0.44	200	15	59	2.40	59	0.44	66
21	Hart Street	62.43	40	Yes	Bell	1	8	2.40	0.44	75	10	65	2.40	61	0.44	68

1: L_{dn} computed using: 10*LOG((15*10⁰(L_{eq,day}/10))+(9*10⁰(L_{eq,night}+10/10)))-13.8

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	63	54
Source 1	62	61	52
Source 2	58	58	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY
Noise receiver land use category (1, 2 or 3) 2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS			
Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	
Dist. to receiver	distance (ft) 50	distance (ft) 50	
Daytime Hours (7 AM - 10 PM)	speed (mph) 30	speed (mph) 30	
	trains/hour 2.47	trains/hour 2.47	
	locos/train 1	cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 30	speed (mph) 30	
	trains/hour 0.33	trains/hour 0.33	
	locos/train 1	cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N Y	Y/N Y	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

New Bedford/Fall River Modeled Noise Levels					Leq						Ldn				
Milepost	Crossing Type - Grade, Overhead, Underground, Station	Horn Noise	Speed Used	Building Offset (ft.)	Rail Project	Existing Road (Monitored)	Future No- Build	Build Condition	difference (Build - Existing) dbA	Rail Project	Existing (Monitored)	Future No-Build	Build Condition	difference (Build - Existing) dbA	
1 Brock Street	4.30	G	Yes	30	75	60	58	59	63	4	63	62	63	66	4
2 Plain Street	4.60	G	Yes	30	75	62	60	61	64	5	65	58	59	66	8
3 Morton Street	5.20	G	Yes	30	100	59	67	68	69	1	61	68	69	70	2
North Easton Station	6.40	Sta.	No		1,200	47	64	65	65	1	47	61	62	62	1
4 Elm Street (MP 7.60)	7.60	G	Yes	30	75	56	65	66	66	1	59	66	67	68	2
5 Oliver Street	7.80	G	Yes	30	100	59	63	64	65	2	61	57	58	63	6
6 Pond Street	7.90	UG	No	30	100	60	62	63	64	3	63	57	58	64	7
7 Main Street	8.05	OH	No	40	75	57	64	65	65	2	61	62	63	65	3
8 Bridge Street	8.40	OH	No	50	75	57	58	59	61	3	61	57	58	63	6
9 Short Street	9.55	G	Yes	70	100	54	63	64	65	1	58	63	64	65	2
10 Depot Street/123	10.00	G	Yes	70	75	59	67	68	69	2	63	64	65	67	3
11 Purchase Street	10.20	G	Yes	70	300	59	60	61	63	3	63	60	61	65	5
12 Prospect Street	10.90	G	Yes	70	100	56	55	56	59	4	60	59	60	63	4
Raynham Station	14.10	Sta.	No		1,600	46	65	66	66	1	46	62	63	63	1
13 Elm Street (MP 15.40)	15.40	G	Yes	70	100	57	58	59	61	3	61	56	57	62	6
14 Carver Street	15.80	G	Yes	70	75	57	56	57	60	4	61	59	60	64	5
15 Route 138	16.40	G	Yes	70	75	62	65	66	68	2	66	66	67	69	3
16 Britton Street	16.50	G	Yes	70	75	62	58	59	63	6	66	56	57	66	10
17 King Phillip Street	17.10	G	Yes	70	100	#REF!	64	65	#REF!	#REF!	#REF!	62	63	#REF!	#REF!
18 Longmeadow Road	18.90	G	Yes	30	300	#REF!	61	62	#REF!	#REF!	#REF!	66	67	#REF!	#REF!
Dean Street Station	19.20	Sta.	No		600	52	54	55	57	3	52	51	52	55	4
19 Dean Street	19.40	G	Yes	30	75	#REF!	65	66	#REF!	#REF!	#REF!	64	65	#REF!	#REF!
20 Ingell Street	61.92	G	Yes	30	100	#REF!	59	60	#REF!	#REF!	#REF!	62	63	#REF!	#REF!
21 Hart Street	62.43	G	Yes	30	75	#REF!	65	66	#REF!	#REF!	#REF!	64	65	#REF!	#REF!
22 High Street Freetown		G	Yes	30	250	#REF!	-	1	#REF!	#REF!	#REF!	57	58	#REF!	#REF!



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	60	55
Source 1	59	57	52
Source 2	60	57	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	125	distance (ft)	125	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	65	62	57
Source 1	62	59	54
Source 2	62	59	55
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	90	distance (ft)	90	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	59	54
Source 1	58	55	51
Source 2	59	56	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	59	56	51
Source 1	56	53	48
Source 2	56	53	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS			
Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	0
Dist. to receiver	distance (ft) 225	distance (ft) 225	
Daytime Hours (7 AM - 10 PM)	speed (mph) 70	speed (mph) 70	
	trains/hour 3	trains/hour 3	
	locos/train 1	cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 70	speed (mph) 70	
	trains/hour 1	trains/hour 1	
	locos/train 1	cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N N	Y/N N	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	59	54
Source 1	58	55	51
Source 2	59	56	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS				
Parameter	Source 1	Source 2	Source 3	
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3		0
Dist. to receiver	distance (ft) 150	distance (ft) 150		
Daytime Hours (7 AM - 10 PM)	speed (mph) 70	speed (mph) 70		
	trains/hour 3	trains/hour 3		
	locos/train 1	cars/train 8		
Nighttime Hours (10 PM - 7 AM)	speed (mph) 70	speed (mph) 70		
	trains/hour 1	trains/hour 1		
	locos/train 1	cars/train 8		
Jointed Track?	Y/N N	Y/N N		
Embedded Track?	Y/N N	Y/N N		
Aerial Structure?	Y/N N	Y/N N		
Barrier Present?	Y/N N	Y/N N		
Intervening Rows of Buildings	number 0	number 0		

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	60	55
Source 1	59	57	52
Source 2	60	57	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	125	distance (ft)	125	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	57	54
Source 1	58	54	51
Source 2	58	54	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	57	54
Source 1	58	54	51
Source 2	58	54	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	58	54	51
Source 1	54	50	47
Source 2	55	51	48
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	250	distance (ft)	250	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	59	56
Source 1	60	56	53
Source 2	61	57	54
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	105	distance (ft)	100	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	59	56
Source 1	60	56	53
Source 2	61	57	54
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	100	distance (ft)	105	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	60	56	53
Source 1	57	53	50
Source 2	57	53	50
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	175	distance (ft)	175	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	60	56	53
Source 1	57	53	50
Source 2	57	53	50
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	175	distance (ft)	175	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	57	54
Source 1	58	54	51
Source 2	58	54	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	57	54
Source 1	58	54	51
Source 2	58	54	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	66	62	59
Source 1	62	58	55
Source 2	63	59	56
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	75	distance (ft)	70	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	66	62	59
Source 1	63	59	56
Source 2	61	57	54
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	43	distance (ft)	43	
Daytime Hours (7 AM - 10 PM)	speed (mph)	40	speed (mph)	40	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	40	speed (mph)	40	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank



Technical Report
Noise and Vibration
Draft

New Bedford Electric



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

New Bedford/Fall River Modeled Noise Levels
Impact Ranges based upon various Existing Noise Levels

When Existing dba	Severe		Moderate		No Impact	
	<u>greater than</u> dBA	<u>closer than</u> feet	<u>between</u> dBA	<u>between</u> feet	<u>less than</u> dBA	<u>farther than</u> feet
60	63	115	58-63	115-225	58	225
61	64	100	59-64	100-200	59	200
62	64	100	59-64	100-200	59	200
63	65	75	60-65	75-175	60	175
64	65	75	60-65	75-175	60	175
65	66	65	61-66	65-150	61	150
66	67	55	62-67	55-135	62	135
67	67	55	62-67	55-135	62	135
68	68	50	63-68	50-115	63	115
69	69	45	64-69	45-100	64	100
70	69	45	64-69	45-100	64	100
71	70	40	66-70	40-65	66	65
72	71	30	66-71	30-65	66	65

Segment	MP	No-build	Build	Severe - closer than (feet)	Quantity Severe	Moderate - closer than (feet)	Quantity Moderate
Brock Street	4.30	63	65	65	3	150	8
Plain Street	4.60	59	66	100	8	200	14
Morton Street	5.20	69	70	30	0	65	0
North Easton Station	6.40	62	62	75	0	175	0
Elm Street (MP 7.60)	7.60	67	68	45	0	100	10
Oliver Street	7.80	58	63	75	0	175	2
Pond Street	7.90	58	64	75	0	175	8
Main Street	8.05	63	65	55	6	135	15
Bridge Street	8.40	58	63	100	2	200	15
Short Street	9.55	64	65	55	0	135	5
Depot Street/123	10.00	65	67	45	0	100	1
Purchase Street	10.20	61	65	75	0	175	2
Prospect Street	10.90	60	63	100	0	200	2
Raynham Station	14.10	63	63	65	0	150	0
Elm Street (MP 15.40)	15.40	57	62	100	4	200	3
Carver Street	15.80	60	63	100	1	200	1
Route 138	16.40	67	69	45	0	100	4
Britton Street	16.50	57	66	115	4	225	4
King Phillip Street	17.10	63	#REF!	55	4	135	3
Longmeadow Road	18.90	67	#REF!	45	0	100	2
Dean Street Station	19.20	52	55	150	0	300	0
Dean Street	19.40	65	#REF!	50	0	115	2
Ingell Street	61.92	63	#REF!	55	0	135	0
Hart Street	62.43	65	#REF!	50	0	115	6
Total					32		107

School	Distance to Track (feet)	Leq (dBA)			Impact	
		Existing Background Noise	No-Build	Project Build		
Jones School	1,400					
Kimball School	1,400					
Unionville School	3,200					
Stonehill College	5,500					
Parkview School	2,300					
Easton Jr. High School	3,100					
Ames Highschool	3,100					
Holy Cross Seminary	4,000					
School building near Easton Center	1,700					
Southeastern Regional Vocational High School	750	61	62	50	62	No Impact
High School	3,200					
Pole School	2,000					
Summer Street School	600	65	66	51	66	No Impact



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

New Bedford/Fall River
Noise Modeling

Site #	Location	Milepost	M.A.S.	At-Grade Crossing?	Horn/Bell	locomotive	cars	trains/h r day	trains/h r night	Building Offset (ft.)	Quantity	Existing Leq (day)	trains per hour	Leq (night)	trains per hour	Existing Ldn ¹
1	Brock Street	4.30	70	Yes	Horn	1	8	2.47	0.33	75	20	58	2.47	59	0.33	65
2	Plain Street	4.60	70	Yes	Horn	1	8	2.47	0.33	75	10	60	2.47	55	0.33	62
3	Morton Street	5.20	70	Yes	Horn	1	8	2.47	0.33	100	5	67	2.47	65	0.33	72
North Easton Station				70	Station	Horn	1	8	2.47	1300	5					
4	Elm Street (MP 7.60)	7.60	70	Yes	Horn	1	8	2.47	0.33	75	10	65	2.47	63	0.33	70
5	Oliver Street	7.80	70	Yes	Horn	1	8	2.47	0.33	75	5	63	2.47	54	0.33	63
6	Pond Street	7.90	70	No	n/a	1	8	2.47	0.33	75	0	62	2.47	54	0.33	63
7	Main Street	8.05	70	No	n/a	1	8	2.47	0.33	75	5	64	2.47	59	0.33	66
8	Bridge Street	8.40	70	No	n/a	1	8	2.47	0.33	75	25	58	2.47	54	0.33	61
9	Short Street	9.55	70	Yes	Horn	1	8	2.47	0.33	100	20	63	2.47	60	0.33	67
10	Depot Street/123	10.00	70	Yes	Horn	1	8	2.47	0.33	75	5	67	2.47	61	0.33	69
11	Purchase Street	10.20	70	Yes	Horn	1	8	2.47	0.33	300	10	60	2.47	57	0.33	64
12	Prospect Street	10.90	70	Yes	Horn	1	8	2.47	0.33	100	2	55	2.47	56	0.33	62
Raynham Station				70	Station	Horn	1	8	2.47	1800	5					
13	Elm Street (MP 15.40)	15.40	70	Yes	Horn	1	8	2.47	0.33	75	5	58	2.47	53	0.33	61
14	Carver Street	15.80	70	Yes	Horn	1	8	2.47	0.33	75	3	56	2.47	56	0.33	62
15	Route 138	16.40	70	Yes	Horn	1	8	2.47	0.33	100	5	65	2.47	63	0.33	70
16	Britton Street	16.50	70	Yes	Horn	1	8	2.47	0.33	75	3	58	2.47	53	0.33	60
17	King Phillip Street	17.10	70	Yes	Horn	1	8	2.47	0.33	75	10	64	2.47	59	0.33	66
18	Longmeadow Road	18.90	70	Yes	Horn	1	8	2.47	0.33	75	5	61	2.47	63	0.33	69
Dean Street Station				40	Station	Bell	1	8	2.40	600	5					
19	Dean Street	19.40	40	Yes	Bell	1	8	2.40	0.44	n/a	2	65	2.40	61	0.44	68
20	Ingell Street	61.92	40	Yes	Bell	1	8	2.40	0.44	200	15	59	2.40	59	0.44	66
21	Hart Street	62.43	40	Yes	Bell	1	8	2.40	0.44	75	10	65	2.40	61	0.44	68

1: L_{dn} computed using: 10*LOG((15*10⁰(L_{eq,day}/10))+(9*10⁰(L_{eq,night}+10/10)))-13.8

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	63	54
Source 1	62	61	52
Source 2	58	58	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY
Noise receiver land use category (1, 2 or 3) 2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS			
Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	
Dist. to receiver	distance (ft) 50	distance (ft) 50	
Daytime Hours (7 AM - 10 PM)	speed (mph) 30	speed (mph) 30	
	trains/hour 2.47	trains/hour 2.47	
	locos/train 1	cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 30	speed (mph) 30	
	trains/hour 0.33	trains/hour 0.33	
	locos/train 1	cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N Y	Y/N Y	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

New Bedford/Fall River Modeled Noise Levels					Leq					Ldn					
Milepost	Crossing Type - Grade, Overhead, Underground, Station	Horn Noise	Speed Used	Building Offset (ft.)	Rail Project	Existing Road (Monitored)	Future No- Build	Build Condition	difference (Build - Existing) dbA	Rail Project	Existing (Monitored)	Future No-Build	Build Condition	difference (Build - Existing) dbA	
1 Brock Street	4.30	G	Yes	30	75	59	58	59	62	4	62	62	63	65	3
2 Plain Street	4.60	G	Yes	30	75	62	60	61	65	5	65	58	59	66	8
3 Morton Street	5.20	G	Yes	30	100	58	67	68	69	1	61	68	69	70	2
North Easton Station	6.40	Sta.	No		1,200	47	64	65	65	1	47	61	62	62	1
4 Elm Street (MP 7.60)	7.60	G	Yes	30	75	56	65	66	66	1	59	66	67	68	2
5 Oliver Street	7.80	G	Yes	30	100	58	63	64	65	2	61	57	58	63	6
6 Pond Street	7.90	UG	No	30	100	61	62	63	65	3	63	57	58	64	7
7 Main Street	8.05	OH	No	40	75	57	64	65	65	2	61	62	63	65	3
8 Bridge Street	8.40	OH	No	50	75	57	58	59	61	3	61	57	58	63	6
9 Short Street	9.55	G	Yes	70	100	55	63	64	65	1	59	63	64	65	2
10 Depot Street/123	10.00	G	Yes	70	75	59	67	68	69	1	63	64	65	67	3
11 Purchase Street	10.20	G	Yes	70	300	59	60	61	63	3	63	60	61	65	5
12 Prospect Street	10.90	G	Yes	70	100	56	55	56	59	4	60	59	60	63	4
Raynham Station	14.10	Sta.	No		1,600	46	65	66	66	1	46	62	63	63	1
13 Elm Street (MP 15.40)	15.40	G	Yes	70	100	57	58	59	61	3	61	56	57	62	6
14 Carver Street	15.80	G	Yes	70	75	57	56	57	60	4	61	59	60	63	4
15 Route 138	16.40	G	Yes	70	75	62	65	66	68	2	66	66	67	69	3
16 Britton Street	16.50	G	Yes	70	75	62	58	59	63	6	66	56	57	66	10
17 King Phillip Street	17.10	G	Yes	70	100	#REF!	64	65	#REF!	#REF!	#REF!	62	63	#REF!	#REF!
18 Longmeadow Road	18.90	G	Yes	30	300	#REF!	61	62	#REF!	#REF!	#REF!	66	67	#REF!	#REF!
Dean Street Station	19.20	Sta.	No		600	52	54	55	57	3	52	51	52	55	4
19 Dean Street	19.40	G	Yes	30	75	#REF!	65	66	#REF!	#REF!	#REF!	64	65	#REF!	#REF!
20 Ingell Street	61.92	G	Yes	30	100	#REF!	59	60	#REF!	#REF!	#REF!	62	63	#REF!	#REF!
21 Hart Street	62.43	G	Yes	30	75	#REF!	65	66	#REF!	#REF!	#REF!	64	65	#REF!	#REF!
22 High Street Freetown		G	Yes	30	250	#REF!	-	1	#REF!	#REF!	#REF!	57	58	#REF!	#REF!



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	62	59	54
Source 1	57	55	50
Source 2	60	57	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	125	distance (ft)	125	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	65	62	58
Source 1	61	58	53
Source 2	63	60	56
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY
Noise receiver land use category (1, 2 or 3) 2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	75	distance (ft)	75	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	58	53
Source 1	56	53	49
Source 2	59	56	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	59	56	51
Source 1	53	51	46
Source 2	57	55	50
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	300	distance (ft)	300	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	58	53
Source 1	55	52	48
Source 2	59	56	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	225	distance (ft)	225	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	61	56
Source 1	58	55	50
Source 2	62	59	54
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	57	54
Source 1	55	51	48
Source 2	59	55	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	200	distance (ft)	200	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	57	54
Source 1	55	51	48
Source 2	59	55	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	200	distance (ft)	200	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	59	55	52
Source 1	53	49	46
Source 2	57	53	50
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	275	distance (ft)	275	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	59	56
Source 1	57	53	50
Source 2	61	57	54
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	59	56
Source 1	57	53	50
Source 2	61	57	54
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	60	56	53
Source 1	55	51	48
Source 2	59	55	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	225	distance (ft)	225	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	60	56	53
Source 1	55	51	48
Source 2	59	55	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	225	distance (ft)	225	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	57	54
Source 1	55	51	48
Source 2	59	55	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	200	distance (ft)	200	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	57	54
Source 1	55	51	48
Source 2	59	55	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	200	distance (ft)	200	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	66	62	59
Source 1	61	57	54
Source 2	64	60	57
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	65	distance (ft)	65	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	66	62	59
Source 1	63	59	56
Source 2	63	59	56
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	36	distance (ft)	36	
Daytime Hours (7 AM - 10 PM)	speed (mph)	40	speed (mph)	40	
	trains/hour	2	trains/hour	2	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	40	speed (mph)	40	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank



Technical Report
Noise and Vibration
Draft

Northeast Diesel



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

New Bedford/Fall River Modeled Noise Levels
Impact Ranges based upon various Existing Noise Levels

When Existing dba	Severe		Moderate		No Impact	
	<u>greater than</u> dBA	<u>closer than</u> feet	<u>between</u> dBA	<u>between</u> feet	<u>less than</u> dBA	<u>farther than</u> feet
60	63	115	58-63	115-225	58	225
61	64	100	59-64	100-200	59	200
62	64	100	59-64	100-200	59	200
63	65	75	60-65	75-175	60	175
64	65	75	60-65	75-175	60	175
65	66	65	61-66	65-150	61	150
66	67	55	62-67	55-135	62	135
67	67	55	62-67	55-135	62	135
68	68	50	63-68	50-115	63	115
69	69	45	64-69	45-100	64	100
70	69	45	64-69	45-100	64	100
71	70	40	66-70	40-65	66	65
72	71	30	66-71	30-65	66	65

Segment	MP	No-build	Build	Severe - closer than (feet)	Quantity Severe	Moderate - closer than (feet)	Quantity Moderate
Brock Street	4.30	63	70	65	3	150	8
Plain Street	4.60	59	69	100	8	200	14
Morton Street	5.20	69	72	30	0	65	0
North Easton Station	6.40	62	62	75	0	175	0
Elm Street (MP 7.60)	7.60	67	70	45	0	100	10
Oliver Street	7.80	58	69	75	0	175	2
Pond Street	7.90	58	68	75	0	175	8
Main Street	8.05	63	67	55	6	135	15
Bridge Street	8.40	58	67	100	2	200	15
Short Street	9.55	64	67	55	0	135	5
Depot Street/123	10.00	65	68	45	0	100	1
Purchase Street	10.20	61	66	75	0	175	2
Prospect Street	10.90	60	68	100	0	200	2
Raynham Station	14.10	63	63	65	0	150	0
Elm Street (MP 15.40)	15.40	57	66	100	4	200	3
Carver Street	15.80	60	68	100	1	200	1
Route 138	16.40	67	70	45	0	100	4
Britton Street	16.50	57	64	115	4	225	4
King Phillip Street	17.10	63	#REF!	55	4	135	3
Longmeadow Road	18.90	67	#REF!	45	0	100	2
Dean Street Station	19.20	52	55	150	0	300	0
Dean Street	19.40	65	#REF!	50	0	115	2
Ingell Street	61.92	63	#REF!	55	0	135	0
Hart Street	62.43	65	#REF!	50	0	115	6
Total					32		107

School	Distance to Track (feet)	Leq (dBA)			Impact	
		Existing Background Noise	No-Build	Project Build		
Jones School	1,400					
Kimball School	1,400					
Unionville School	3,200					
Stonehill College	5,500					
Parkview School	2,300					
Easton Jr. High School	3,100					
Ames Highschool	3,100					
Holy Cross Seminary	4,000					
School building near Easton Center	1,700					
Southeastern Regional Vocational High School	750	61	62	50	62	No Impact
High School	3,200					
Pole School	2,000					
Summer Street School	600	65	66	51	66	No Impact



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

New Bedford/Fall River
Noise Modeling

Site #	Location	Milepost	M.A.S.	At-Grade Crossing?	Horn/Bell	locomotive	cars	trains/h r day	trains/h r night	Building Offset (ft.)	Quantity	Existing Leq (day)	trains per hour	Leq (night)	trains per hour	Existing Ldn ¹
1	Brock Street	4.30	70	Yes	Horn	1	8	2.47	0.33	75	20	58	2.47	59	0.33	65
2	Plain Street	4.60	70	Yes	Horn	1	8	2.47	0.33	75	10	60	2.47	55	0.33	62
3	Morton Street	5.20	70	Yes	Horn	1	8	2.47	0.33	100	5	67	2.47	65	0.33	72
North Easton Station				70	Station	Horn	1	8	2.47	1300	5					
4	Elm Street (MP 7.60)	7.60	70	Yes	Horn	1	8	2.47	0.33	75	10	65	2.47	63	0.33	70
5	Oliver Street	7.80	70	Yes	Horn	1	8	2.47	0.33	75	5	63	2.47	54	0.33	63
6	Pond Street	7.90	70	No	n/a	1	8	2.47	0.33	75	0	62	2.47	54	0.33	63
7	Main Street	8.05	70	No	n/a	1	8	2.47	0.33	75	5	64	2.47	59	0.33	66
8	Bridge Street	8.40	70	No	n/a	1	8	2.47	0.33	75	25	58	2.47	54	0.33	61
9	Short Street	9.55	70	Yes	Horn	1	8	2.47	0.33	100	20	63	2.47	60	0.33	67
10	Depot Street/123	10.00	70	Yes	Horn	1	8	2.47	0.33	75	5	67	2.47	61	0.33	69
11	Purchase Street	10.20	70	Yes	Horn	1	8	2.47	0.33	300	10	60	2.47	57	0.33	64
12	Prospect Street	10.90	70	Yes	Horn	1	8	2.47	0.33	100	2	55	2.47	56	0.33	62
Raynham Station				70	Station	Horn	1	8	2.47	1800	5					
13	Elm Street (MP 15.40)	15.40	70	Yes	Horn	1	8	2.47	0.33	75	5	58	2.47	53	0.33	61
14	Carver Street	15.80	70	Yes	Horn	1	8	2.47	0.33	75	3	56	2.47	56	0.33	62
15	Route 138	16.40	70	Yes	Horn	1	8	2.47	0.33	100	5	65	2.47	63	0.33	70
16	Britton Street	16.50	70	Yes	Horn	1	8	2.47	0.33	75	3	58	2.47	53	0.33	60
17	King Phillip Street	17.10	70	Yes	Horn	1	8	2.47	0.33	75	10	64	2.47	59	0.33	66
18	Longmeadow Road	18.90	70	Yes	Horn	1	8	2.47	0.33	75	5	61	2.47	63	0.33	69
Dean Street Station				40	Station	Bell	1	8	2.40	600	5					
19	Dean Street	19.40	40	Yes	Bell	1	8	2.40	0.44	n/a	2	65	2.40	61	0.44	68
20	Ingell Street	61.92	40	Yes	Bell	1	8	2.40	0.44	200	15	59	2.40	59	0.44	66
21	Hart Street	62.43	40	Yes	Bell	1	8	2.40	0.44	75	10	65	2.40	61	0.44	68

1: L_{dn} computed using: 10*LOG((15*10⁰(L_{eq,day}/10))+(9*10⁰(L_{eq,night}+10)/10))-13.8

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	63	54
Source 1	62	61	52
Source 2	58	58	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	
Dist. to receiver	distance (ft)	50	distance (ft)	50	
Daytime Hours (7 AM - 10 PM)	speed (mph)	30	speed (mph)	30	
	trains/hour	2.47	trains/hour	2.47	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	30	speed (mph)	30	
	trains/hour	0.33	trains/hour	0.33	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	Y	Y/N	Y	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

New Bedford/Fall River Modeled Noise Levels					Leq					Ldn					
Milepost	Crossing Type - Grade, Overhead, Underground, Station	Horn Noise	Speed Used	Building Offset (ft.)	Rail Project	Existing Road (Monitored)	Future No- Build	Build Condition	difference (Build - Existing) dbA	Rail Project	Existing (Monitored)	Future No-Build	Build Condition	difference (Build - Existing) dbA	
1 Brock Street	4.30	G	Yes	30	75	67	58	59	67	9	69	62	63	70	8
2 Plain Street	4.60	G	Yes	30	75	67	60	61	68	8	69	58	59	69	11
3 Morton Street	5.20	G	Yes	30	100	67	67	68	70	3	69	68	69	72	4
North Easton Station	6.40	Sta.	No		1,200	47	64	65	65	1	47	61	62	62	1
4 Elm Street (MP 7.60)	7.60	G	Yes	30	75	64	65	66	68	3	66	66	67	70	4
5 Oliver Street	7.80	G	Yes	30	100	67	63	64	69	5	69	57	58	69	12
6 Pond Street	7.90	UG	No	30	100	64	62	63	66	5	68	57	58	68	11
7 Main Street	8.05	OH	No	40	75	61	64	65	66	3	65	62	63	67	5
8 Bridge Street	8.40	OH	No	50	75	62	58	59	64	6	66	57	58	67	10
9 Short Street	9.55	G	Yes	70	100	61	63	64	66	3	65	63	64	67	4
10 Depot Street/123	10.00	G	Yes	70	75	61	67	68	69	2	65	64	65	68	4
11 Purchase Street	10.20	G	Yes	70	300	61	60	61	64	4	65	60	61	66	6
12 Prospect Street	10.90	G	Yes	70	100	64	55	56	65	10	68	59	60	68	9
Raynham Station	14.10	Sta.	No		1,600	46	65	66	66	1	46	62	63	63	1
13 Elm Street (MP 15.40)	15.40	G	Yes	70	100	62	58	59	64	6	66	56	57	66	10
14 Carver Street	15.80	G	Yes	70	75	64	56	57	65	9	68	59	60	68	9
15 Route 138	16.40	G	Yes	70	75	64	65	66	68	3	67	66	67	70	4
16 Britton Street	16.50	G	Yes	70	75	59	58	59	62	4	63	56	57	64	8
17 King Phillip Street	17.10	G	Yes	70	100	#REF!	64	65	#REF!	#REF!	#REF!	62	63	#REF!	#REF!
18 Longmeadow Road	18.90	G	Yes	30	300	#REF!	61	62	#REF!	#REF!	#REF!	66	67	#REF!	#REF!
Dean Street Station	19.20	Sta.	No		600	52	54	55	57	3	52	51	52	55	4
19 Dean Street	19.40	G	Yes	30	75	#REF!	65	66	#REF!	#REF!	#REF!	64	65	#REF!	#REF!
20 Ingell Street	61.92	G	Yes	30	100	#REF!	59	60	#REF!	#REF!	#REF!	62	63	#REF!	#REF!
21 Hart Street	62.43	G	Yes	30	75	#REF!	65	66	#REF!	#REF!	#REF!	64	65	#REF!	#REF!
22 High Street Freetown		G	Yes	30	250	#REF!	-	1	#REF!	#REF!	#REF!	57	58	#REF!	#REF!



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	69	67	61
Source 1	66	63	58
Source 2	66	64	59
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	100	distance (ft)	100	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	10	trains/hour	10	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	69	67	61
Source 1	66	63	58
Source 2	66	64	59
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	100	distance (ft)	100	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	10	trains/hour	10	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	69	67	61
Source 1	66	63	58
Source 2	66	64	59
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	100	distance (ft)	100	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	10	trains/hour	10	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	66	64	59
Source 1	63	61	55
Source 2	64	61	56
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	10	trains/hour	10	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	69	67	61
Source 1	66	63	58
Source 2	66	64	59
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	100	distance (ft)	100	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	10	trains/hour	10	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	68	64	60
Source 1	64	61	57
Source 2	65	61	58
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	117	distance (ft)	117	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	65	61	58
Source 1	62	58	54
Source 2	62	59	55
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	175	distance (ft)	175	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	66	62	59
Source 1	63	59	55
Source 2	63	60	56
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	65	61	58
Source 1	62	58	54
Source 2	62	59	55
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	175	distance (ft)	175	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	65	61	58
Source 1	62	58	54
Source 2	62	59	55
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	175	distance (ft)	175	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	65	61	58
Source 1	62	58	54
Source 2	62	59	55
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	175	distance (ft)	175	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	68	64	60
Source 1	64	61	57
Source 2	65	61	58
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	120	distance (ft)	115	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	66	62	59
Source 1	63	59	55
Source 2	63	60	56
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	66	62	59
Source 1	63	59	55
Source 2	63	60	56
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	68	64	60
Source 1	64	61	57
Source 2	65	61	58
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	120	distance (ft)	115	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	67	64	60
Source 1	64	60	57
Source 2	64	61	57
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	125	distance (ft)	125	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	68	64	60
Source 1	64	61	57
Source 2	65	61	58
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	120	distance (ft)	115	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	59	55
Source 1	59	56	52
Source 2	60	56	53
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	250	distance (ft)	250	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	66	62	59
Source 1	63	59	55
Source 2	63	60	56
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	68	64	60
Source 1	64	61	57
Source 2	65	61	58
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	120	distance (ft)	115	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18



Technical Report
Noise and Vibration
Draft

Northeast Electric



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

New Bedford/Fall River Modeled Noise Levels
Impact Ranges based upon various Existing Noise Levels

When Existing dba	Severe		Moderate		No Impact	
	<u>greater than</u> dBA	<u>closer than</u> feet	<u>between</u> dBA	<u>between</u> feet	<u>less than</u> dBA	<u>farther than</u> feet
60	63	115	58-63	115-225	58	225
61	64	100	59-64	100-200	59	200
62	64	100	59-64	100-200	59	200
63	65	75	60-65	75-175	60	175
64	65	75	60-65	75-175	60	175
65	66	65	61-66	65-150	61	150
66	67	55	62-67	55-135	62	135
67	67	55	62-67	55-135	62	135
68	68	50	63-68	50-115	63	115
69	69	45	64-69	45-100	64	100
70	69	45	64-69	45-100	64	100
71	70	40	66-70	40-65	66	65
72	71	30	66-71	30-65	66	65

Segment	MP	No-build	Build	Severe - closer than (feet)	Quantity Severe	Moderate - closer than (feet)	Quantity Moderate
Brock Street	4.30	63	66	65	3	150	8
Plain Street	4.60	59	70	100	8	200	14
Morton Street	5.20	69	72	30	0	65	0
North Easton Station	6.40	62	62	75	0	175	0
Elm Street (MP 7.60)	7.60	67	70	45	0	100	10
Oliver Street	7.80	58	70	75	0	175	2
Pond Street	7.90	58	69	75	0	175	8
Main Street	8.05	63	68	55	6	135	15
Bridge Street	8.40	58	67	100	2	200	15
Short Street	9.55	64	68	55	0	135	5
Depot Street/123	10.00	65	68	45	0	100	1
Purchase Street	10.20	61	67	75	0	175	2
Prospect Street	10.90	60	69	100	0	200	2
Raynham Station	14.10	63	63	65	0	150	0
Elm Street (MP 15.40)	15.40	57	67	100	4	200	3
Carver Street	15.80	60	69	100	1	200	1
Route 138	16.40	67	70	45	0	100	4
Britton Street	16.50	57	69	115	4	225	4
King Phillip Street	17.10	63	#REF!	55	4	135	3
Longmeadow Road	18.90	67	#REF!	45	0	100	2
Dean Street Station	19.20	52	55	150	0	300	0
Dean Street	19.40	65	#REF!	50	0	115	2
Ingell Street	61.92	63	#REF!	55	0	135	0
Hart Street	62.43	65	#REF!	50	0	115	6
Total					32		107

School	Distance to Track (feet)	Leq (dBA)			Impact	
		Existing Background Noise	No-Build	Project Build		
Jones School	1,400					
Kimball School	1,400					
Unionville School	3,200					
Stonehill College	5,500					
Parkview School	2,300					
Easton Jr. High School	3,100					
Ames Highschool	3,100					
Holy Cross Seminary	4,000					
School building near Easton Center	1,700					
Southeastern Regional Vocational High School	750	61	62	50	62	No Impact
High School	3,200					
Pole School	2,000					
Summer Street School	600	65	66	51	66	No Impact



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

New Bedford/Fall River
Noise Modeling

Site #	Location	Milepost	M.A.S.	At-Grade Crossing?	Horn/Bell	locomotive	cars	trains/h r day	trains/h r night	Building Offset (ft.)	Quantity	Existing Leq (day)	trains per hour	Leq (night)	trains per hour	Existing Ldn ¹
1	Brock Street	4.30	70	Yes	Horn	1	8	2.47	0.33	75	20	58	2.47	59	0.33	65
2	Plain Street	4.60	70	Yes	Horn	1	8	2.47	0.33	75	10	60	2.47	55	0.33	62
3	Morton Street	5.20	70	Yes	Horn	1	8	2.47	0.33	100	5	67	2.47	65	0.33	72
North Easton Station				70	Station	Horn	1	8	2.47	1300	5					
4	Elm Street (MP 7.60)	7.60	70	Yes	Horn	1	8	2.47	0.33	75	10	65	2.47	63	0.33	70
5	Oliver Street	7.80	70	Yes	Horn	1	8	2.47	0.33	75	5	63	2.47	54	0.33	63
6	Pond Street	7.90	70	No	n/a	1	8	2.47	0.33	75	0	62	2.47	54	0.33	63
7	Main Street	8.05	70	No	n/a	1	8	2.47	0.33	75	5	64	2.47	59	0.33	66
8	Bridge Street	8.40	70	No	n/a	1	8	2.47	0.33	75	25	58	2.47	54	0.33	61
9	Short Street	9.55	70	Yes	Horn	1	8	2.47	0.33	100	20	63	2.47	60	0.33	67
10	Depot Street/123	10.00	70	Yes	Horn	1	8	2.47	0.33	75	5	67	2.47	61	0.33	69
11	Purchase Street	10.20	70	Yes	Horn	1	8	2.47	0.33	300	10	60	2.47	57	0.33	64
12	Prospect Street	10.90	70	Yes	Horn	1	8	2.47	0.33	100	2	55	2.47	56	0.33	62
Raynham Station				70	Station	Horn	1	8	2.47	1800	5					
13	Elm Street (MP 15.40)	15.40	70	Yes	Horn	1	8	2.47	0.33	75	5	58	2.47	53	0.33	61
14	Carver Street	15.80	70	Yes	Horn	1	8	2.47	0.33	75	3	56	2.47	56	0.33	62
15	Route 138	16.40	70	Yes	Horn	1	8	2.47	0.33	100	5	65	2.47	63	0.33	70
16	Britton Street	16.50	70	Yes	Horn	1	8	2.47	0.33	75	3	58	2.47	53	0.33	60
17	King Phillip Street	17.10	70	Yes	Horn	1	8	2.47	0.33	75	10	64	2.47	59	0.33	66
18	Longmeadow Road	18.90	70	Yes	Horn	1	8	2.47	0.33	75	5	61	2.47	63	0.33	69
Dean Street Station				40	Station	Bell	1	8	2.40	600	5					
19	Dean Street	19.40	40	Yes	Bell	1	8	2.40	0.44	n/a	2	65	2.40	61	0.44	68
20	Ingell Street	61.92	40	Yes	Bell	1	8	2.40	0.44	200	15	59	2.40	59	0.44	66
21	Hart Street	62.43	40	Yes	Bell	1	8	2.40	0.44	75	10	65	2.40	61	0.44	68

1: L_{dn} computed using: 10*LOG((15*10⁰(L_{eq,day}/10))+(9*10⁰(L_{eq,night}+10)/10))-13.8

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	63	54
Source 1	62	61	52
Source 2	58	58	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY
Noise receiver land use category (1, 2 or 3) 2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS			
Parameter	Source 1	Source 2	Source 3
Source Num.	Diesel Loco. 2	Comm. Rail Cars 3	
Dist. to receiver	distance (ft) 50	distance (ft) 50	
Daytime Hours (7 AM - 10 PM)	speed (mph) 30	speed (mph) 30	
	trains/hour 2.47	trains/hour 2.47	
	locos/train 1	cars/train 8	
Nighttime Hours (10 PM - 7 AM)	speed (mph) 30	speed (mph) 30	
	trains/hour 0.33	trains/hour 0.33	
	locos/train 1	cars/train 8	
Jointed Track?	Y/N N	Y/N N	
Embedded Track?	Y/N Y	Y/N Y	
Aerial Structure?	Y/N N	Y/N N	
Barrier Present?	Y/N N	Y/N N	
Intervening Rows of Buildings	number 0	number 0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

New Bedford/Fall River Modeled Noise Levels					Leq					Ldn					
Milepost	Crossing Type - Grade, Overhead, Underground, Station	Horn Noise	Speed Used	Building Offset (ft.)	Rail Project	Existing Road (Monitored)	Future No- Build	Build Condition	difference (Build - Existing) dbA	Rail Project	Existing (Monitored)	Future No-Build	Build Condition	difference (Build - Existing) dbA	
1 Brock Street	4.30	G	Yes	30	75	61	58	59	63	5	64	62	63	66	4
2 Plain Street	4.60	G	Yes	30	75	67	60	61	68	8	70	58	59	70	12
3 Morton Street	5.20	G	Yes	30	100	67	67	68	71	4	70	68	69	72	4
North Easton Station	6.40	Sta.	No		1,200	47	64	65	65	1	47	61	62	62	1
4 Elm Street (MP 7.60)	7.60	G	Yes	30	75	65	65	66	68	3	67	66	67	70	4
5 Oliver Street	7.80	G	Yes	30	100	67	63	64	69	6	70	57	58	70	13
6 Pond Street	7.90	UG	No	30	100	65	62	63	67	6	69	57	58	69	12
7 Main Street	8.05	OH	No	40	75	62	64	65	67	3	66	62	63	68	6
8 Bridge Street	8.40	OH	No	50	75	63	58	59	65	7	67	57	58	67	10
9 Short Street	9.55	G	Yes	70	100	62	63	64	66	3	65	63	64	68	5
10 Depot Street/123	10.00	G	Yes	70	75	62	67	68	69	2	66	64	65	68	4
11 Purchase Street	10.20	G	Yes	70	300	62	60	61	65	5	66	60	61	67	7
12 Prospect Street	10.90	G	Yes	70	100	65	55	56	66	11	69	59	60	69	10
Raynham Station	14.10	Sta.	No		1,600	46	65	66	66	1	46	62	63	63	1
13 Elm Street (MP 15.40)	15.40	G	Yes	70	100	63	58	59	65	6	67	56	57	67	11
14 Carver Street	15.80	G	Yes	70	75	65	56	57	66	10	69	59	60	69	10
15 Route 138	16.40	G	Yes	70	75	64	65	66	68	3	68	66	67	70	4
16 Britton Street	16.50	G	Yes	70	75	65	58	59	66	9	69	56	57	69	13
17 King Phillip Street	17.10	G	Yes	70	100	#REF!	64	65	#REF!	#REF!	#REF!	62	63	#REF!	#REF!
18 Longmeadow Road	18.90	G	Yes	30	300	#REF!	61	62	#REF!	#REF!	#REF!	66	67	#REF!	#REF!
Dean Street Station	19.20	Sta.	No		600	52	54	55	57	3	52	51	52	55	4
19 Dean Street	19.40	G	Yes	30	75	#REF!	65	66	#REF!	#REF!	#REF!	64	65	#REF!	#REF!
20 Ingell Street	61.92	G	Yes	30	100	#REF!	59	60	#REF!	#REF!	#REF!	62	63	#REF!	#REF!
21 Hart Street	62.43	G	Yes	30	75	#REF!	65	66	#REF!	#REF!	#REF!	64	65	#REF!	#REF!
22 High Street Freetown		G	Yes	30	250	#REF!	-	1	#REF!	#REF!	#REF!	57	58	#REF!	#REF!



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	64	61	56
Source 1	58	56	51
Source 2	62	60	55
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	300	distance (ft)	300	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	10	trains/hour	10	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	70	67	62
Source 1	64	62	56
Source 2	68	66	61
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	120	distance (ft)	120	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	10	trains/hour	10	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	70	67	62
Source 1	64	62	56
Source 2	68	66	61
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	120	distance (ft)	120	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	10	trains/hour	10	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	67	65	60
Source 1	62	59	54
Source 2	66	63	58
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	175	distance (ft)	175	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	10	trains/hour	10	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	70	67	62
Source 1	64	62	56
Source 2	68	66	61
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	120	distance (ft)	120	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	10	trains/hour	10	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	69	65	62
Source 1	63	60	56
Source 2	67	64	60
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	125	distance (ft)	125	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	66	62	59
Source 1	60	57	53
Source 2	64	61	57
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	200	distance (ft)	200	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	67	63	60
Source 1	61	58	54
Source 2	65	62	58
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	175	distance (ft)	175	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	65	62	58
Source 1	60	56	52
Source 2	64	60	56
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	225	distance (ft)	225	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	66	62	59
Source 1	60	57	53
Source 2	64	61	57
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	200	distance (ft)	200	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	66	62	59
Source 1	60	57	53
Source 2	64	61	57
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	200	distance (ft)	200	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	69	65	62
Source 1	63	60	56
Source 2	67	64	60
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	125	distance (ft)	125	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	67	63	60
Source 1	61	58	54
Source 2	65	62	58
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	175	distance (ft)	175	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	67	63	60
Source 1	61	58	54
Source 2	65	62	58
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	175	distance (ft)	175	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	69	65	62
Source 1	63	60	56
Source 2	67	64	60
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	125	distance (ft)	125	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	68	64	61
Source 1	62	59	55
Source 2	66	63	59
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	69	65	62
Source 1	63	60	56
Source 2	67	64	60
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	125	distance (ft)	125	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	69	65	62
Source 1	63	60	56
Source 2	67	64	60
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	125	distance (ft)	125	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	67	63	60
Source 1	61	58	54
Source 2	65	62	58
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	175	distance (ft)	175	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	69	65	62
Source 1	63	60	56
Source 2	67	64	60
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	125	distance (ft)	125	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	7	trains/hour	7	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18



Technical Report
Noise and Vibration
Draft

Stoughton Diesel



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

New Bedford/Fall River Modeled Noise Levels
Impact Ranges based upon various Existing Noise Levels

When Existing dba	Severe		Moderate		No Impact	
	<u>greater than</u> dBA	<u>closer than</u> feet	<u>between</u> dBA	<u>between</u> feet	<u>less than</u> dBA	<u>farther than</u> feet
60	63	115	58-63	115-225	58	225
61	64	100	59-64	100-200	59	200
62	64	100	59-64	100-200	59	200
63	65	75	60-65	75-175	60	175
64	65	75	60-65	75-175	60	175
65	66	65	61-66	65-150	61	150
66	67	55	62-67	55-135	62	135
67	67	55	62-67	55-135	62	135
68	68	50	63-68	50-115	63	115
69	69	45	64-69	45-100	64	100
70	69	45	64-69	45-100	64	100
71	70	40	66-70	40-65	66	65
72	71	30	66-71	30-65	66	65

Segment	MP	No-build	Build	Severe - closer than (feet)	Quantity Severe	Moderate - closer than (feet)	Quantity Moderate
Brock Street	4.30	63	65	65	3	150	8
Plain Street	4.60	59	65	100	8	200	14
Morton Street	5.20	69	70	30	0	65	0
North Easton Station	6.40	62	62	75	0	175	0
Elm Street (MP 7.60)	7.60	67	68	45	0	100	10
Oliver Street	7.80	58	62	75	0	175	2
Pond Street	7.90	58	61	75	0	175	8
Main Street	8.05	63	67	55	6	135	15
Bridge Street	8.40	58	62	100	2	200	15
Short Street	9.55	64	66	55	0	135	5
Depot Street/123	10.00	65	69	45	0	100	1
Purchase Street	10.20	61	64	75	0	175	2
Prospect Street	10.90	60	66	100	0	200	2
Raynham Station	14.10	63	63	65	0	150	0
Elm Street (MP 15.40)	15.40	57	63	100	4	200	3
Carver Street	15.80	60	65	100	1	200	1
Route 138	16.40	67	69	45	0	100	4
Britton Street	16.50	57	63	115	4	225	4
King Phillip Street	17.10	63	65	55	4	135	3
Longmeadow Road	18.90	67	70	45	0	100	2
Dean Street Station	19.20	52	55	150	0	300	0
Dean Street	19.40	65	68	50	0	115	2
Ingell Street	61.92	63	#REF!	55	0	135	0
Hart Street	62.43	65	#REF!	50	0	115	6
Total					32		107

School	Distance to Track (feet)	Existing Background Noise	Leq (dBA)			Impact
			No-Build	Project	Build	
Jones School	1,400					
Kimball School	1,400					
Unionville School	3,200					
Stonehill College	5,500					
Parkview School	2,300					
Easton Jr. High School	3,100					
Ames Highschool	3,100					
Holy Cross Seminary	4,000					
School building near Easton Center	1,700					
Southeastern Regional Vocational High School	750	61	62	50	62	No Impact
High School	3,200					
Pole School	2,000					
Summer Street School	600	65	66	51	66	No Impact



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

New Bedford/Fall River
Noise Modeling

Site #	Location	Milepost	M.A.S.	At-Grade Crossing?	Horn/Bell	locomotive	cars	trains/h r day	trains/h r night	Building Offset (ft.)	Quantity	Existing Leq (day)	trains per hour	Leq (night)	trains per hour	Existing Ldn ¹
1	Brock Street	4.30	70	Yes	Horn	1	8	2.47	0.33	75	20	58	2.47	59	0.33	65
2	Plain Street	4.60	70	Yes	Horn	1	8	2.47	0.33	75	10	60	2.47	55	0.33	62
3	Morton Street	5.20	70	Yes	Horn	1	8	2.47	0.33	100	5	67	2.47	65	0.33	72
North Easton Station				70	Station	Horn	1	8	2.47	0.33	1300	5				
4	Elm Street (MP 7.60)	7.60	70	Yes	Horn	1	8	2.47	0.33	75	10	65	2.47	63	0.33	70
5	Oliver Street	7.80	70	Yes	Horn	1	8	2.47	0.33	75	5	63	2.47	54	0.33	63
6	Pond Street	7.90	70	No	n/a	1	8	2.47	0.33	75	0	62	2.47	54	0.33	63
7	Main Street	8.05	70	No	n/a	1	8	2.47	0.33	75	5	64	2.47	59	0.33	66
8	Bridge Street	8.40	70	No	n/a	1	8	2.47	0.33	75	25	58	2.47	54	0.33	61
9	Short Street	9.55	70	Yes	Horn	1	8	2.47	0.33	100	20	63	2.47	60	0.33	67
10	Depot Street/123	10.00	70	Yes	Horn	1	8	2.47	0.33	75	5	67	2.47	61	0.33	69
11	Purchase Street	10.20	70	Yes	Horn	1	8	2.47	0.33	300	10	60	2.47	57	0.33	64
12	Prospect Street	10.90	70	Yes	Horn	1	8	2.47	0.33	100	2	55	2.47	56	0.33	62
Raynham Station				70	Station	Horn	1	8	2.47	0.33	1800	5				
13	Elm Street (MP 15.40)	15.40	70	Yes	Horn	1	8	2.47	0.33	75	5	58	2.47	53	0.33	61
14	Carver Street	15.80	70	Yes	Horn	1	8	2.47	0.33	75	3	56	2.47	56	0.33	62
15	Route 138	16.40	70	Yes	Horn	1	8	2.47	0.33	100	5	65	2.47	63	0.33	70
16	Britton Street	16.50	70	Yes	Horn	1	8	2.47	0.33	75	3	58	2.47	53	0.33	60
17	King Phillip Street	17.10	70	Yes	Horn	1	8	2.47	0.33	75	10	64	2.47	59	0.33	66
18	Longmeadow Road	18.90	70	Yes	Horn	1	8	2.47	0.33	75	5	61	2.47	63	0.33	69
Dean Street Station				40	Station	Bell	1	8	2.40	0.44	600	5				
19	Dean Street	19.40	40	Yes	Bell	1	8	2.40	0.44	n/a	2	65	2.40	61	0.44	68
20	Ingell Street	61.92	40	Yes	Bell	1	8	2.40	0.44	200	15	59	2.40	59	0.44	66
21	Hart Street	62.43	40	Yes	Bell	1	8	2.40	0.44	75	10	65	2.40	61	0.44	68

1: L_{dn} computed using: 10*LOG((15*10⁰(L_{eq,day}/10))+(9*10⁰(L_{eq,night}+10)/10))-13.8

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	63	54
Source 1	62	61	52
Source 2	58	58	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	
Dist. to receiver	distance (ft)	50	distance (ft)	50	
Daytime Hours (7 AM - 10 PM)	speed (mph)	30	speed (mph)	30	
	trains/hour	2.47	trains/hour	2.47	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	30	speed (mph)	30	
	trains/hour	0.33	trains/hour	0.33	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	Y	Y/N	Y	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

New Bedford/Fall River Modeled Noise Levels					Leq					Ldn					
Milepost	Crossing Type - Grade, Overhead, Underground, Station	Horn Noise	Speed Used	Building Offset (ft.)	Rail Project	Existing Road (Monitored)	Future No- Build	Build Condition	difference (Build - Existing) dbA	Rail Project	Existing (Monitored)	Future No-Build	Build Condition	difference (Build - Existing) dbA	
1 Brock Street	4.30	G	Yes	30	75	57	58	59	61	3	60	62	63	65	3
2 Plain Street	4.60	G	Yes	30	75	61	60	61	64	4	64	58	59	65	7
3 Morton Street	5.20	G	Yes	30	100	60	67	68	69	2	63	68	69	70	2
North Easton Station	6.40	Sta.	No		1,200	47	64	65	65	1	47	61	62	62	1
4 Elm Street (MP 7.60)	7.60	G	Yes	30	75	59	65	66	67	2	62	66	67	68	2
5 Oliver Street	7.80	G	Yes	30	100	57	63	64	65	2	60	57	58	62	5
6 Pond Street	7.90	UG	No	30	100	56	62	63	63	2	59	57	58	61	4
7 Main Street	8.05	OH	No	40	75	61	64	65	66	3	64	62	63	67	5
8 Bridge Street	8.40	OH	No	50	75	57	58	59	61	3	60	57	58	62	5
9 Short Street	9.55	G	Yes	70	100	59	63	64	65	2	62	63	64	66	3
10 Depot Street/123	10.00	G	Yes	70	75	63	67	68	69	2	66	64	65	69	5
11 Purchase Street	10.20	G	Yes	70	300	59	60	61	63	3	62	60	61	64	4
12 Prospect Street	10.90	G	Yes	70	100	62	55	56	63	8	65	59	60	66	7
Raynham Station	14.10	Sta.	No		1,600	46	65	66	66	1	46	62	63	63	1
13 Elm Street (MP 15.40)	15.40	G	Yes	70	100	59	58	59	62	4	61	56	57	63	7
14 Carver Street	15.80	G	Yes	70	75	60	56	57	62	6	63	59	60	65	6
15 Route 138	16.40	G	Yes	70	75	63	65	66	68	3	65	66	67	69	3
16 Britton Street	16.50	G	Yes	70	75	59	58	59	62	4	61	56	57	63	7
17 King Phillip Street	17.10	G	Yes	70	100	59	64	65	66	2	62	62	63	65	3
18 Longmeadow Road	18.90	G	Yes	30	300	63	61	62	66	5	66	66	67	70	4
Dean Street Station	19.20	Sta.	No		600	52	54	55	57	3	52	51	52	55	4
19 Dean Street	19.40	G	Yes	30	75	61	65	66	67	2	64	64	65	68	4
20 Ingell Street	61.92	G	Yes	30	100	#REF!	59	60	#REF!	#REF!	#REF!	62	63	#REF!	#REF!
21 Hart Street	62.43	G	Yes	30	75	#REF!	65	66	#REF!	#REF!	#REF!	64	65	#REF!	#REF!
22 High Street Freetown		G	Yes	30	250	#REF!	-	1	#REF!	#REF!	#REF!	57	58	#REF!	#REF!



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	60	57	52
Source 1	57	55	50
Source 2	56	53	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	125	distance (ft)	125	
Daytime Hours (7 AM - 10 PM)	speed (mph)	45	speed (mph)	45	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	45	speed (mph)	45	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	64	61	57
Source 1	61	58	53
Source 2	61	59	54
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	100	distance (ft)	100	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	60	55
Source 1	59	57	52
Source 2	60	57	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	125	distance (ft)	125	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	62	59	54
Source 1	58	56	51
Source 2	59	56	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	145	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	60	57	52
Source 1	56	54	49
Source 2	57	54	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	200	distance (ft)	200	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	59	56	51
Source 1	56	53	48
Source 2	56	53	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	225	distance (ft)	225	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	64	61	57
Source 1	61	58	53
Source 2	61	59	54
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	100	distance (ft)	100	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	60	57	52
Source 1	56	54	49
Source 2	57	54	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	200	distance (ft)	200	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	62	59	54
Source 1	58	56	51
Source 2	59	56	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	145	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	66	63	58
Source 1	63	60	55
Source 2	63	60	56
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	75	distance (ft)	75	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	62	59	54
Source 1	58	56	51
Source 2	59	56	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	145	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	65	62	57
Source 1	61	58	54
Source 2	62	59	55
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	95	distance (ft)	90	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	59	54
Source 1	58	55	51
Source 2	59	56	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	60	55
Source 1	59	57	52
Source 2	60	57	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	125	distance (ft)	125	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	65	63	58
Source 1	62	59	55
Source 2	63	60	55
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	81	distance (ft)	81	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	59	54
Source 1	58	55	51
Source 2	59	56	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	62	59	54
Source 1	58	55	51
Source 2	59	56	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	145	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	66	63	58
Source 1	63	60	55
Source 2	63	60	56
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	75	distance (ft)	75	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	64	61	57
Source 1	61	58	53
Source 2	61	59	54
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	100	distance (ft)	100	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank



Technical Report
Noise and Vibration
Draft

Stoughton Electric



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

New Bedford/Fall River Modeled Noise Levels
Impact Ranges based upon various Existing Noise Levels

When Existing dba	Severe		Moderate		No Impact	
	<u>greater than</u> dBA	<u>closer than</u> feet	<u>between</u> dBA	<u>between</u> feet	<u>less than</u> dBA	<u>farther than</u> feet
60	63	115	58-63	115-225	58	225
61	64	100	59-64	100-200	59	200
62	64	100	59-64	100-200	59	200
63	65	75	60-65	75-175	60	175
64	65	75	60-65	75-175	60	175
65	66	65	61-66	65-150	61	150
66	67	55	62-67	55-135	62	135
67	67	55	62-67	55-135	62	135
68	68	50	63-68	50-115	63	115
69	69	45	64-69	45-100	64	100
70	69	45	64-69	45-100	64	100
71	70	40	66-70	40-65	66	65
72	71	30	66-71	30-65	66	65

Segment	MP	No-build	Build	Severe - closer than (feet)	Quantity Severe	Moderate - closer than (feet)	Quantity Moderate
Brock Street	4.30	63	65	65	3	150	8
Plain Street	4.60	59	66	100	8	200	14
Morton Street	5.20	69	70	30	0	65	0
North Easton Station	6.40	62	62	75	0	175	0
Elm Street (MP 7.60)	7.60	67	68	45	0	100	10
Oliver Street	7.80	58	62	75	0	175	2
Pond Street	7.90	58	61	75	0	175	8
Main Street	8.05	63	67	55	6	135	15
Bridge Street	8.40	58	62	100	2	200	15
Short Street	9.55	64	66	55	0	135	5
Depot Street/123	10.00	65	68	45	0	100	1
Purchase Street	10.20	61	65	75	0	175	2
Prospect Street	10.90	60	66	100	0	200	2
Raynham Station	14.10	63	63	65	0	150	0
Elm Street (MP 15.40)	15.40	57	62	100	4	200	3
Carver Street	15.80	60	65	100	1	200	1
Route 138	16.40	67	69	45	0	100	4
Britton Street	16.50	57	62	115	4	225	4
King Phillip Street	17.10	63	66	55	4	135	3
Longmeadow Road	18.90	67	69	45	0	100	2
Dean Street Station	19.20	52	55	150	0	300	0
Dean Street	19.40	65	68	50	0	115	2
Ingell Street	61.92	63	#REF!	55	0	135	0
Hart Street	62.43	65	#REF!	50	0	115	6
Total					32		107

School	Distance to Track (feet)	Existing Background Noise	Leq (dBA)			Impact
			No-Build	Project	Build	
Jones School	1,400					
Kimball School	1,400					
Unionville School	3,200					
Stonehill College	5,500					
Parkview School	2,300					
Easton Jr. High School	3,100					
Ames Highschool	3,100					
Holy Cross Seminary	4,000					
School building near Easton Center	1,700					
Southeastern Regional Vocational High School	750	61	62	50	62	No Impact
High School	3,200					
Pole School	2,000					
Summer Street School	600	65	66	51	66	No Impact



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

New Bedford/Fall River
Noise Modeling

Site #	Location	Milepost	M.A.S.	At-Grade Crossing?	Horn/Bell	locomotive	cars	trains/h r day	trains/h r night	Building Offset (ft.)	Quantity	Existing Leq (day)	trains per hour	Leq (night)	trains per hour	Existing Ldn ¹
1	Brock Street	4.30	70	Yes	Horn	1	8	2.47	0.33	75	20	58	2.47	59	0.33	65
2	Plain Street	4.60	70	Yes	Horn	1	8	2.47	0.33	75	10	60	2.47	55	0.33	62
3	Morton Street	5.20	70	Yes	Horn	1	8	2.47	0.33	100	5	67	2.47	65	0.33	72
North Easton Station				70	Station	Horn	1	8	2.47	0.33	1300	5				
4	Elm Street (MP 7.60)	7.60	70	Yes	Horn	1	8	2.47	0.33	75	10	65	2.47	63	0.33	70
5	Oliver Street	7.80	70	Yes	Horn	1	8	2.47	0.33	75	5	63	2.47	54	0.33	63
6	Pond Street	7.90	70	No	n/a	1	8	2.47	0.33	75	0	62	2.47	54	0.33	63
7	Main Street	8.05	70	No	n/a	1	8	2.47	0.33	75	5	64	2.47	59	0.33	66
8	Bridge Street	8.40	70	No	n/a	1	8	2.47	0.33	75	25	58	2.47	54	0.33	61
9	Short Street	9.55	70	Yes	Horn	1	8	2.47	0.33	100	20	63	2.47	60	0.33	67
10	Depot Street/123	10.00	70	Yes	Horn	1	8	2.47	0.33	75	5	67	2.47	61	0.33	69
11	Purchase Street	10.20	70	Yes	Horn	1	8	2.47	0.33	300	10	60	2.47	57	0.33	64
12	Prospect Street	10.90	70	Yes	Horn	1	8	2.47	0.33	100	2	55	2.47	56	0.33	62
Raynham Station				70	Station	Horn	1	8	2.47	0.33	1800	5				
13	Elm Street (MP 15.40)	15.40	70	Yes	Horn	1	8	2.47	0.33	75	5	58	2.47	53	0.33	61
14	Carver Street	15.80	70	Yes	Horn	1	8	2.47	0.33	75	3	56	2.47	56	0.33	62
15	Route 138	16.40	70	Yes	Horn	1	8	2.47	0.33	100	5	65	2.47	63	0.33	70
16	Britton Street	16.50	70	Yes	Horn	1	8	2.47	0.33	75	3	58	2.47	53	0.33	60
17	King Phillip Street	17.10	70	Yes	Horn	1	8	2.47	0.33	75	10	64	2.47	59	0.33	66
18	Longmeadow Road	18.90	70	Yes	Horn	1	8	2.47	0.33	75	5	61	2.47	63	0.33	69
Dean Street Station				40	Station	Bell	1	8	2.40	0.44	600	5				
19	Dean Street	19.40	40	Yes	Bell	1	8	2.40	0.44	n/a	2	65	2.40	61	0.44	68
20	Ingell Street	61.92	40	Yes	Bell	1	8	2.40	0.44	200	15	59	2.40	59	0.44	66
21	Hart Street	62.43	40	Yes	Bell	1	8	2.40	0.44	75	10	65	2.40	61	0.44	68

1: L_{dn} computed using: 10*LOG((15*10⁰(L_{eq,day}/10))+(9*10⁰(L_{eq,night}+10)/10))-13.8

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	63	54
Source 1	62	61	52
Source 2	58	58	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	
Dist. to receiver	distance (ft)	50	distance (ft)	50	
Daytime Hours (7 AM - 10 PM)	speed (mph)	30	speed (mph)	30	
	trains/hour	2.47	trains/hour	2.47	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	30	speed (mph)	30	
	trains/hour	0.33	trains/hour	0.33	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	Y	Y/N	Y	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

New Bedford/Fall River Modeled Noise Levels					Leq					Ldn					
Milepost	Crossing Type - Grade, Overhead, Underground, Station	Horn Noise	Speed Used	Building Offset (ft.)	Rail Project	Existing Road (Monitored)	Future No- Build	Build Condition	difference (Build - Existing) dbA	Rail Project	Existing (Monitored)	Future No-Build	Build Condition	difference (Build - Existing) dbA	
1 Brock Street	4.30	G	Yes	30	75	58	58	59	61	3	60	62	63	65	3
2 Plain Street	4.60	G	Yes	30	75	62	60	61	64	4	64	58	59	66	8
3 Morton Street	5.20	G	Yes	30	100	61	67	68	69	2	63	68	69	70	2
North Easton Station	6.40	Sta.	No		1,200	47	64	65	65	1	47	61	62	62	1
4 Elm Street (MP 7.60)	7.60	G	Yes	30	75	60	65	66	67	2	62	66	67	68	2
5 Oliver Street	7.80	G	Yes	30	100	57	63	64	65	2	60	57	58	62	5
6 Pond Street	7.90	UG	No	30	100	56	62	63	63	2	59	57	58	61	4
7 Main Street	8.05	OH	No	40	75	62	64	65	66	3	64	62	63	67	5
8 Bridge Street	8.40	OH	No	50	75	57	58	59	61	3	60	57	58	62	5
9 Short Street	9.55	G	Yes	70	100	60	63	64	65	2	62	63	64	66	3
10 Depot Street/123	10.00	G	Yes	70	75	63	67	68	69	2	66	64	65	68	4
11 Purchase Street	10.20	G	Yes	70	300	60	60	61	64	3	62	60	61	65	5
12 Prospect Street	10.90	G	Yes	70	100	62	55	56	63	8	64	59	60	66	7
Raynham Station	14.10	Sta.	No		1,600	46	65	66	66	1	46	62	63	63	1
13 Elm Street (MP 15.40)	15.40	G	Yes	70	100	58	58	59	62	3	61	56	57	62	6
14 Carver Street	15.80	G	Yes	70	75	61	56	57	62	6	63	59	60	65	6
15 Route 138	16.40	G	Yes	70	75	62	65	66	68	2	64	66	67	69	3
16 Britton Street	16.50	G	Yes	70	75	58	58	59	61	4	61	56	57	62	6
17 King Phillip Street	17.10	G	Yes	70	100	60	64	65	66	2	62	62	63	66	4
18 Longmeadow Road	18.90	G	Yes	30	300	61	61	62	64	3	63	66	67	69	3
Dean Street Station	19.20	Sta.	No		600	52	54	55	57	3	52	51	52	55	4
19 Dean Street	19.40	G	Yes	30	75	63	65	66	68	3	66	64	65	68	4
20 Ingell Street	61.92	G	Yes	30	100	#REF!	59	60	#REF!	#REF!	#REF!	62	63	#REF!	#REF!
21 Hart Street	62.43	G	Yes	30	75	#REF!	65	66	#REF!	#REF!	#REF!	64	65	#REF!	#REF!
22 High Street Freetown		G	Yes	30	250	#REF!	-	1	#REF!	#REF!	#REF!	57	58	#REF!	#REF!



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	60	58	53
Source 1	57	54	49
Source 2	58	55	50
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	100	distance (ft)	100	
Daytime Hours (7 AM - 10 PM)	speed (mph)	45	speed (mph)	45	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	45	speed (mph)	45	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	64	62	57
Source 1	59	56	51
Source 2	63	60	55
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	125	distance (ft)	125	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	61	56
Source 1	58	55	50
Source 2	62	59	54
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	62	60	55
Source 1	57	54	49
Source 2	61	58	53
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	175	distance (ft)	175	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	60	57	52
Source 1	54	52	47
Source 2	58	56	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	250	distance (ft)	250	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	59	56	51
Source 1	53	51	46
Source 2	57	55	50
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	300	distance (ft)	300	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	64	62	57
Source 1	59	56	51
Source 2	63	60	55
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	125	distance (ft)	125	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	60	57	52
Source 1	54	52	47
Source 2	58	56	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	250	distance (ft)	250	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	62	60	55
Source 1	57	54	49
Source 2	61	58	53
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	175	distance (ft)	175	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	66	63	58
Source 1	60	58	53
Source 2	64	62	57
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	100	distance (ft)	100	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	62	60	55
Source 1	57	54	49
Source 2	61	58	53
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	175	distance (ft)	175	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	64	62	57
Source 1	59	56	51
Source 2	63	60	55
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY
Noise receiver land use category (1, 2 or 3) 2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	125	distance (ft)	125	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	58	53
Source 1	55	52	48
Source 2	59	56	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	225	distance (ft)	225	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	61	56
Source 1	58	55	50
Source 2	62	59	54
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	64	62	57
Source 1	59	56	51
Source 2	63	60	55
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	125	distance (ft)	125	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	58	53
Source 1	55	52	48
Source 2	59	56	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	225	distance (ft)	225	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	62	60	55
Source 1	57	54	49
Source 2	61	58	53
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	175	distance (ft)	175	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	61	56
Source 1	58	55	50
Source 2	62	59	54
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	66	63	58
Source 1	60	58	53
Source 2	64	62	57
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	100	distance (ft)	100	
Daytime Hours (7 AM - 10 PM)	speed (mph)	100	speed (mph)	100	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	100	speed (mph)	100	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank



Technical Report
Noise and Vibration
Draft

Whittenton Electric



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

New Bedford/Fall River Modeled Noise Levels
Impact Ranges based upon various Existing Noise Levels

When Existing dba	Severe		Moderate		No Impact	
	<u>greater than</u> dBA	<u>closer than</u> feet	<u>between</u> dBA	<u>between</u> feet	<u>less than</u> dBA	<u>farther than</u> feet
60	63	115	58-63	115-225	58	225
61	64	100	59-64	100-200	59	200
62	64	100	59-64	100-200	59	200
63	65	75	60-65	75-175	60	175
64	65	75	60-65	75-175	60	175
65	66	65	61-66	65-150	61	150
66	67	55	62-67	55-135	62	135
67	67	55	62-67	55-135	62	135
68	68	50	63-68	50-115	63	115
69	69	45	64-69	45-100	64	100
70	69	45	64-69	45-100	64	100
71	70	40	66-70	40-65	66	65
72	71	30	66-71	30-65	66	65

Segment	MP	No-build	Build	Severe - closer than (feet)	Quantity Severe	Moderate - closer than (feet)	Quantity Moderate
Brock Street	4.30	63	#REF!	65	3	150	8
Plain Street	4.60	59	#REF!	100	8	200	14
Morton Street	5.20	69	#REF!	30	0	65	0
North Easton Station	6.40	62	62	75	0	175	0
Elm Street (MP 7.60)	7.60	67	#REF!	45	0	100	10
Oliver Street	7.80	58	#REF!	75	0	175	2
Pond Street	7.90	58	#REF!	75	0	175	8
Main Street	8.05	63	#REF!	55	6	135	15
Bridge Street	8.40	58	#REF!	100	2	200	15
Short Street	9.55	64	#REF!	55	0	135	5
Depot Street/123	10.00	65	#REF!	45	0	100	1
Purchase Street	10.20	61	#REF!	75	0	175	2
Prospect Street	10.90	60	#REF!	100	0	200	2
Raynham Station	14.10	63	63	65	0	150	0
Elm Street (MP 15.40)	15.40	57	#REF!	100	4	200	3
Carver Street	15.80	60	#REF!	100	1	200	1
Route 138	16.40	67	#REF!	45	0	100	4
Britton Street	16.50	57	#REF!	115	4	225	4
King Phillip Street	17.10	63	#REF!	55	4	135	3
Longmeadow Road	18.90	67	#REF!	45	0	100	2
Dean Street Station	19.20	52	55	150	0	300	0
Dean Street	19.40	65	#REF!	50	0	115	2
Ingell Street	61.92	63	#REF!	55	0	135	0
Hart Street	62.43	65	#REF!	50	0	115	6
Total					32		107

School	Distance to Track (feet)	Existing Background Noise	Leq (dBA)			Impact
			No-Build	Project	Build	
Jones School	1,400					
Kimball School	1,400					
Unionville School	3,200					
Stonehill College	5,500					
Parkview School	2,300					
Easton Jr. High School	3,100					
Ames Highschool	3,100					
Holy Cross Seminary	4,000					
School building near Easton Center	1,700					
Southeastern Regional Vocational High School	750	61	62	50	62	No Impact
High School	3,200					
Pole School	2,000					
Summer Street School	600	65	66	51	66	No Impact



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

New Bedford/Fall River
Noise Modeling

Site #	Location	Milepost	M.A.S.	At-Grade Crossing?	Horn/Bell	locomotive	cars	trains/h r day	trains/h r night	Building Offset (ft.)	Quantity	Existing Leq (day)	trains per hour	Leq (night)	trains per hour	Existing Ldn ¹
1	Brock Street	4.30	70	Yes	Horn	1	8	2.47	0.33	75	20	58	2.47	59	0.33	65
2	Plain Street	4.60	70	Yes	Horn	1	8	2.47	0.33	75	10	60	2.47	55	0.33	62
3	Morton Street	5.20	70	Yes	Horn	1	8	2.47	0.33	100	5	67	2.47	65	0.33	72
North Easton Station				70	Station	Horn	1	8	2.47	0.33	1300	5				
4	Elm Street (MP 7.60)	7.60	70	Yes	Horn	1	8	2.47	0.33	75	10	65	2.47	63	0.33	70
5	Oliver Street	7.80	70	Yes	Horn	1	8	2.47	0.33	75	5	63	2.47	54	0.33	63
6	Pond Street	7.90	70	No	n/a	1	8	2.47	0.33	75	0	62	2.47	54	0.33	63
7	Main Street	8.05	70	No	n/a	1	8	2.47	0.33	75	5	64	2.47	59	0.33	66
8	Bridge Street	8.40	70	No	n/a	1	8	2.47	0.33	75	25	58	2.47	54	0.33	61
9	Short Street	9.55	70	Yes	Horn	1	8	2.47	0.33	100	20	63	2.47	60	0.33	67
10	Depot Street/123	10.00	70	Yes	Horn	1	8	2.47	0.33	75	5	67	2.47	61	0.33	69
11	Purchase Street	10.20	70	Yes	Horn	1	8	2.47	0.33	300	10	60	2.47	57	0.33	64
12	Prospect Street	10.90	70	Yes	Horn	1	8	2.47	0.33	100	2	55	2.47	56	0.33	62
Raynham Station				70	Station	Horn	1	8	2.47	0.33	1800	5				
13	Elm Street (MP 15.40)	15.40	70	Yes	Horn	1	8	2.47	0.33	75	5	58	2.47	53	0.33	61
14	Carver Street	15.80	70	Yes	Horn	1	8	2.47	0.33	75	3	56	2.47	56	0.33	62
15	Route 138	16.40	70	Yes	Horn	1	8	2.47	0.33	100	5	65	2.47	63	0.33	70
16	Britton Street	16.50	70	Yes	Horn	1	8	2.47	0.33	75	3	58	2.47	53	0.33	60
17	King Phillip Street	17.10	70	Yes	Horn	1	8	2.47	0.33	75	10	64	2.47	59	0.33	66
18	Longmeadow Road	18.90	70	Yes	Horn	1	8	2.47	0.33	75	5	61	2.47	63	0.33	69
Dean Street Station				40	Station	Bell	1	8	2.40	0.44	600	5				
19	Dean Street	19.40	40	Yes	Bell	1	8	2.40	0.44	n/a	2	65	2.40	61	0.44	68
20	Ingell Street	61.92	40	Yes	Bell	1	8	2.40	0.44	200	15	59	2.40	59	0.44	66
21	Hart Street	62.43	40	Yes	Bell	1	8	2.40	0.44	75	10	65	2.40	61	0.44	68

1: L_{dn} computed using: 10*LOG((15*10⁰(L_{eq,day}/10))+(9*10⁰(L_{eq,night}+10)/10))-13.8

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	63	63	54
Source 1	62	61	52
Source 2	58	58	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	2	Comm. Rail Cars	3	
Dist. to receiver	distance (ft)	50	distance (ft)	50	
Daytime Hours (7 AM - 10 PM)	speed (mph)	30	speed (mph)	30	
	trains/hour	2.47	trains/hour	2.47	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	30	speed (mph)	30	
	trains/hour	0.33	trains/hour	0.33	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	Y	Y/N	Y	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

New Bedford/Fall River Modeled Noise Levels					Leq					Ldn					
Milepost	Crossing Type - Grade, Overhead, Underground, Station	Horn Noise	Speed Used	Building Offset (ft.)	Rail Project	Existing Road (Monitored)	Future No- Build	Build Condition	difference (Build - Existing) dbA	Rail Project	Existing (Monitored)	Future No-Build	Build Condition	difference (Build - Existing) dbA	
1 Brock Street	4.30	G	Yes	30	75	#REF!	58	59	#REF!	#REF!	#REF!	62	63	#REF!	#REF!
2 Plain Street	4.60	G	Yes	30	75	#REF!	60	61	#REF!	#REF!	#REF!	58	59	#REF!	#REF!
3 Morton Street	5.20	G	Yes	30	100	#REF!	67	68	#REF!	#REF!	#REF!	68	69	#REF!	#REF!
North Easton Station	6.40	Sta.	No		1,200	47	64	65	65	1	47	61	62	62	1
4 Elm Street (MP 7.60)	7.60	G	Yes	30	75	#REF!	65	66	#REF!	#REF!	#REF!	66	67	#REF!	#REF!
5 Oliver Street	7.80	G	Yes	30	100	#REF!	63	64	#REF!	#REF!	#REF!	57	58	#REF!	#REF!
6 Pond Street	7.90	UG	No	30	100	#REF!	62	63	#REF!	#REF!	#REF!	57	58	#REF!	#REF!
7 Main Street	8.05	OH	No	40	75	#REF!	64	65	#REF!	#REF!	#REF!	62	63	#REF!	#REF!
8 Bridge Street	8.40	OH	No	50	75	#REF!	58	59	#REF!	#REF!	#REF!	57	58	#REF!	#REF!
9 Short Street	9.55	G	Yes	70	100	#REF!	63	64	#REF!	#REF!	#REF!	63	64	#REF!	#REF!
10 Depot Street/123	10.00	G	Yes	70	75	#REF!	67	68	#REF!	#REF!	#REF!	64	65	#REF!	#REF!
11 Purchase Street	10.20	G	Yes	70	300	#REF!	60	61	#REF!	#REF!	#REF!	60	61	#REF!	#REF!
12 Prospect Street	10.90	G	Yes	70	100	#REF!	55	56	#REF!	#REF!	#REF!	59	60	#REF!	#REF!
Raynham Station	14.10	Sta.	No		1,600	46	65	66	66	1	46	62	63	63	1
13 Elm Street (MP 15.40)	15.40	G	Yes	70	100	#REF!	58	59	#REF!	#REF!	#REF!	56	57	#REF!	#REF!
14 Carver Street	15.80	G	Yes	70	75	#REF!	56	57	#REF!	#REF!	#REF!	59	60	#REF!	#REF!
15 Route 138	16.40	G	Yes	70	75	#REF!	65	66	#REF!	#REF!	#REF!	66	67	#REF!	#REF!
16 Britton Street	16.50	G	Yes	70	75	#REF!	58	59	#REF!	#REF!	#REF!	56	57	#REF!	#REF!
17 King Phillip Street	17.10	G	Yes	70	100	#REF!	64	65	#REF!	#REF!	#REF!	62	63	#REF!	#REF!
18 Longmeadow Road	18.90	G	Yes	30	300	#REF!	61	62	#REF!	#REF!	#REF!	66	67	#REF!	#REF!
Dean Street Station	19.20	Sta.	No		600	52	54	55	57	3	52	51	52	55	4
19 Dean Street	19.40	G	Yes	30	75	#REF!	65	66	#REF!	#REF!	#REF!	64	65	#REF!	#REF!
20 Ingell Street	61.92	G	Yes	30	100	#REF!	59	60	#REF!	#REF!	#REF!	62	63	#REF!	#REF!
21 Hart Street	62.43	G	Yes	30	75	#REF!	65	66	#REF!	#REF!	#REF!	64	65	#REF!	#REF!
22 High Street Freetown		G	Yes	30	250	#REF!	-	1	#REF!	#REF!	#REF!	57	58	#REF!	#REF!



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	58	53
Source 1	57	54	49
Source 2	59	56	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	125	distance (ft)	125	
Daytime Hours (7 AM - 10 PM)	speed (mph)	60	speed (mph)	60	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	60	speed (mph)	60	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	58	53
Source 1	57	54	49
Source 2	59	56	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	125	distance (ft)	125	
Daytime Hours (7 AM - 10 PM)	speed (mph)	60	speed (mph)	60	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	60	speed (mph)	60	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	66	64	59
Source 1	64	61	56
Source 2	63	60	56
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	30	distance (ft)	30	
Daytime Hours (7 AM - 10 PM)	speed (mph)	35	speed (mph)	35	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	35	speed (mph)	35	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	59	54
Source 1	59	56	52
Source 2	57	55	50
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	55	distance (ft)	60	
Daytime Hours (7 AM - 10 PM)	speed (mph)	30	speed (mph)	30	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	30	speed (mph)	30	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	59	54
Source 1	59	56	52
Source 2	58	55	50
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	55	distance (ft)	56	
Daytime Hours (7 AM - 10 PM)	speed (mph)	30	speed (mph)	30	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	30	speed (mph)	30	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	59	56	51
Source 1	54	52	47
Source 2	57	54	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	200	distance (ft)	200	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	61	58	53
Source 1	56	53	49
Source 2	59	56	51
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	150	distance (ft)	150	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	59	56	51
Source 1	54	52	47
Source 2	57	54	49
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	200	distance (ft)	200	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	66	63	58
Source 1	61	58	53
Source 2	64	61	56
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	72	distance (ft)	70	
Daytime Hours (7 AM - 10 PM)	speed (mph)	70	speed (mph)	70	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	70	speed (mph)	70	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	66	63	58
Source 1	62	59	54
Source 2	64	61	56
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	50	distance (ft)	45	
Daytime Hours (7 AM - 10 PM)	speed (mph)	50	speed (mph)	50	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	50	speed (mph)	50	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	62	60	55
Source 1	59	56	51
Source 2	60	57	52
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	80	distance (ft)	80	
Daytime Hours (7 AM - 10 PM)	speed (mph)	50	speed (mph)	50	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	50	speed (mph)	50	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18

RESULTS

Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	66	63	58
Source 1	62	59	55
Source 2	63	60	55
Source 3			

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for each noise source below - see reference list for source numbers.

NOISE SOURCE PARAMETERS					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	1	Comm. Rail Cars	3	0
Dist. to receiver	distance (ft)	48	distance (ft)	50	
Daytime Hours (7 AM - 10 PM)	speed (mph)	50	speed (mph)	50	
	trains/hour	3	trains/hour	3	
	locos/train	1	cars/train	8	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	50	speed (mph)	50	
	trains/hour	1	trains/hour	1	
	locos/train	1	cars/train	8	
Jointed Track?	Y/N	N	Y/N	N	
Embedded Track?	Y/N	N	Y/N	N	
Aerial Structure?	Y/N	N	Y/N	N	
Barrier Present?	Y/N	N	Y/N	N	
Intervening Rows of Buildings	number	0	number	0	

SOURCE REFERENCE LIST	
Source	Number
Electric Loco.	1
Diesel Loco.	2
Comm. Rail Cars	3
RRT/LRT	4
AGT, Steel Wheel	5
AGT, Rubber Tire	6
Monorail	7
Maglev	8
Automobiles	9
City Buses	10
Commuter Buses	11
Rail Yard or Shop	12
Layover Tracks	13
Bus Storage Yard	14
Bus Op. Facility	15
Bus Transit Center	16
Parking Garage	17
Park & Ride Lot	18



Technical Report
Noise and Vibration
Draft

Horn Calculations



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank



Technical Report
Noise and Vibration
Draft

Attleboro-Suburban



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

FRA Grade Crossing Noise Model

User Input	
Noise Situation (Pick from List)	2
Horn Lmax (dBA) @ 100 feet	104
Horn Location on Locomotive(Pick from List)	1
Non Train Noise Environment (pick from list)	2
Shielding (Pick from List)	4
Length of Impact Area (pick from list)	1
Existing Train Speed (mph)	100
Future Train Speed (mph)	100
Number of Existing Trains in one Direction	0
Number of Future Trains in one Direction	19
Existing Number of Day Trains (7 am to 10 p.m.)	0
Future Number of Day Trains (7 am to 10 p.m.)	16
Existing Number of Night Trains (10 p.m. to 7 am)	0
Future Number of Night Trains (10 p.m. to 7 am)	3
Existing Average Number of Cars	8
Future Average Number of Cars	8
Existing Average Number of Locomotives	1
Future Average Number of Locomotives	1

Noise Situation	
Horns Existing and Future	1
Horns in Future Only	2
No Horns Existing and Future	3

Horn Location on Locomotive		
National Average (50% front, 50% middle)	1	
All Front Mounted	2	
All Middle Mounted	3	
User Defined	80 % front mounted horns	4

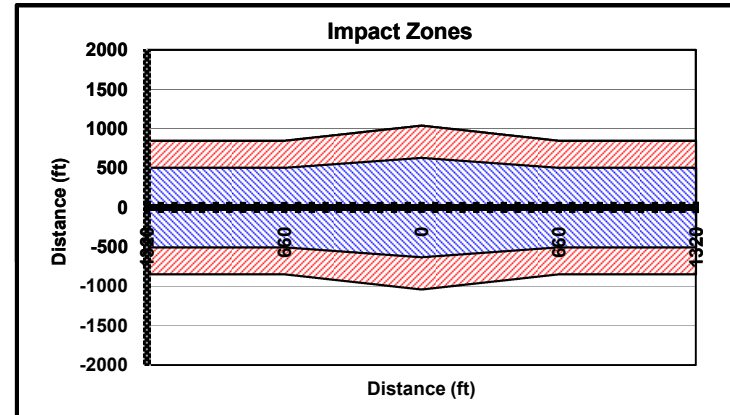
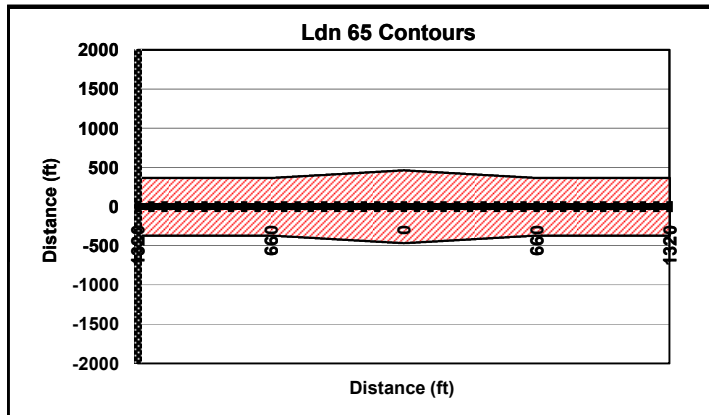
Non Train Noise Environment		
Urban	1	
Suburban	2	
Rural	3	
User Defined Ldn =	50 dBA	4

Shielding	
Dense Urban	1
Light Urban	2
Dense Suburban	3
Light Suburban	4
Rural	5
No Shielding	6

Length of Impact Area	
1/4 mile	1
20 seconds	2
15 seconds	3

Ldn 65 Contours Numeric Output (in feet)	
Existing 65 Ldn Contour at X-ing	0
Future 65 Ldn Contour at X-ing	464
Existing 65 Ldn Contour at 1/2 zone length	0
Future 65 Ldn Contour at 1/2 zone length	366
Zone Length	1320
1/2 Zone Length	660

Impact Zones Numeric Output (in feet)	
Impact Distance at X-ing	1040
Severe Impact Distance at X-ing	631
Impact Distance at 1/2 zone length	847
Severe Impact Distance at 1/2 zone length	504
Zone Length	1320
1/2 Zone Length	660





**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank



Technical Report
Noise and Vibration
Draft

Attleboro - Urban



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

FRA Grade Crossing Noise Model

User Input	
Noise Situation (Pick from List)	2
Horn Lmax (dBA) @ 100 feet	104
Horn Location on Locomotive(Pick from List)	1
Non Train Noise Environment (pick from list)	1
Shielding (Pick from List)	2
Length of Impact Area (pick from list)	1
Existing Train Speed (mph)	50
Future Train Speed (mph)	50
Number of Existing Trains in one Direction	0
Number of Future Trains in one Direction	19
Existing Number of Day Trains (7 am to 10 p.m.)	0
Future Number of Day Trains (7 am to 10 p.m.)	16
Existing Number of Night Trains (10 p.m. to 7 am)	0
Future Number of Night Trains (10 p.m. to 7 am)	3
Existing Average Number of Cars	8
Future Average Number of Cars	8
Existing Average Number of Locomotives	1
Future Average Number of Locomotives	1

Noise Situation	
Horns Existing and Future	1
Horns in Future Only	2
No Horns Existing and Future	3

Horn Location on Locomotive		
National Average (50% front, 50% middle)	1	
All Front Mounted	2	
All Middle Mounted	3	
User Defined	80 % front mounted horns	4

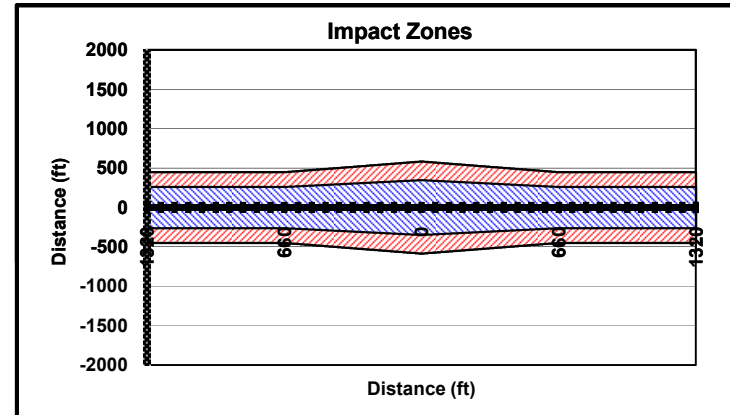
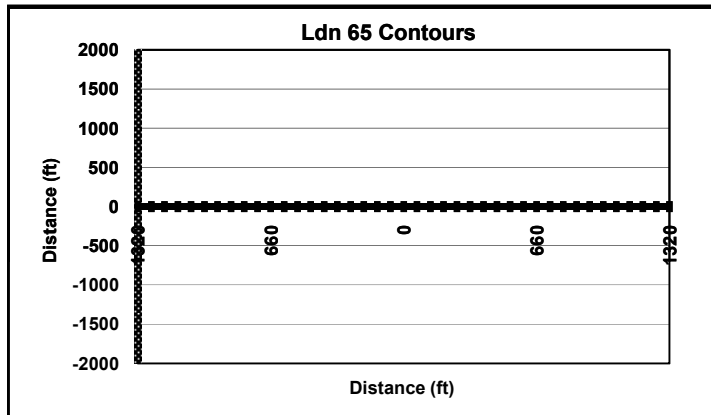
Non Train Noise Environment		
Urban	1	
Suburban	2	
Rural	3	
User Defined Ldn =	50 dBA	4

Shielding	
Dense Urban	1
Light Urban	2
Dense Suburban	3
Light Suburban	4
Rural	5
No Shielding	6

Length of Impact Area	
1/4 mile	1
20 seconds	2
15 seconds	3

Ldn 65 Contours Numeric Output (in feet)	
Existing 65 Ldn Contour at X-ing	0
Future 65 Ldn Contour at X-ing	0
Existing 65 Ldn Contour at 1/2 zone length	0
Future 65 Ldn Contour at 1/2 zone length	0
Zone Length	1320
1/2 Zone Length	660

Impact Zones Numeric Output (in feet)	
Impact Distance at X-ing	584
Severe Impact Distance at X-ing	348
Impact Distance at 1/2 zone length	448
Severe Impact Distance at 1/2 zone length	261
Zone Length	1320
1/2 Zone Length	660





**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank



Technical Report
Noise and Vibration
Draft

Fall River - Suburban



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

FRA Grade Crossing Noise Model

User Input	
Noise Situation (Pick from List)	2
Horn Lmax (dBA) @ 100 feet	104
Horn Location on Locomotive(Pick from List)	1
Non Train Noise Environment (pick from list)	2
Shielding (Pick from List)	4
Length of Impact Area (pick from list)	1
Existing Train Speed (mph)	100
Future Train Speed (mph)	100
Number of Existing Trains in one Direction	0
Number of Future Trains in one Direction	10
Existing Number of Day Trains (7 am to 10 p.m.)	0
Future Number of Day Trains (7 am to 10 p.m.)	9
Existing Number of Night Trains (10 p.m. to 7 am)	0
Future Number of Night Trains (10 p.m. to 7 am)	1
Existing Average Number of Cars	8
Future Average Number of Cars	8
Existing Average Number of Locomotives	1
Future Average Number of Locomotives	1

Noise Situation	
Horns Existing and Future	1
Horns in Future Only	2
No Horns Existing and Future	3

Horn Location on Locomotive	
National Average (50% front, 50% middle)	1
All Front Mounted	2
All Middle Mounted	3
User Defined	80 % front mounted horns
	4

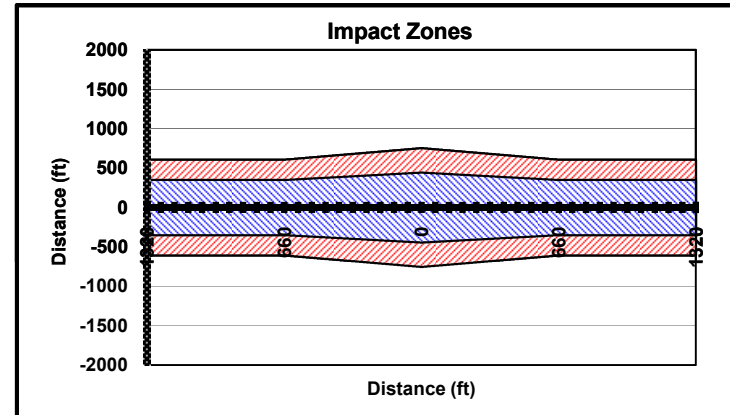
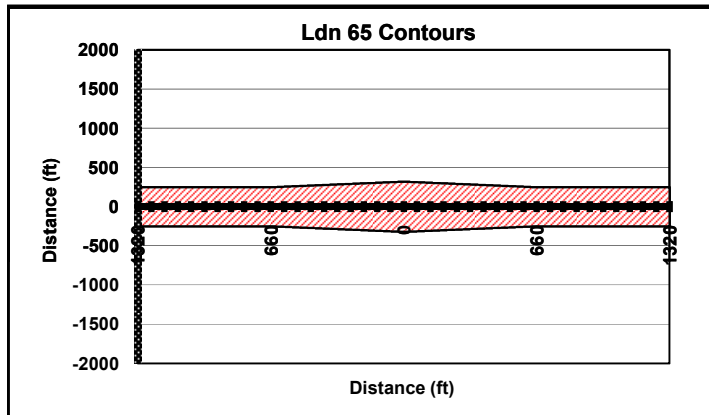
Non Train Noise Environment	
Urban	1
Suburban	2
Rural	3
User Defined Ldn =	50 dBA
	4

Shielding	
Dense Urban	1
Light Urban	2
Dense Suburban	3
Light Suburban	4
Rural	5
No Shielding	6

Length of Impact Area	
1/4 mile	1
20 seconds	2
15 seconds	3

Ldn 65 Contours Numeric Output (in feet)	
Existing 65 Ldn Contour at X-ing	0
Future 65 Ldn Contour at X-ing	320
Existing 65 Ldn Contour at 1/2 zone length	0
Future 65 Ldn Contour at 1/2 zone length	248
Zone Length	1320
1/2 Zone Length	660

Impact Zones Numeric Output (in feet)	
Impact Distance at X-ing	754
Severe Impact Distance at X-ing	444
Impact Distance at 1/2 zone length	607
Severe Impact Distance at 1/2 zone length	350
Zone Length	1320
1/2 Zone Length	660





**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank



Technical Report
Noise and Vibration
Draft

Fall River - Urban



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

FRA Grade Crossing Noise Model

User Input	
Noise Situation (Pick from List)	2
Horn Lmax (dBA) @ 100 feet	104
Horn Location on Locomotive(Pick from List)	1
Non Train Noise Environment (pick from list)	1
Shielding (Pick from List)	2
Length of Impact Area (pick from list)	1
Existing Train Speed (mph)	80
Future Train Speed (mph)	80
Number of Existing Trains in one Direction	0
Number of Future Trains in one Direction	10
Existing Number of Day Trains (7 am to 10 p.m.)	0
Future Number of Day Trains (7 am to 10 p.m.)	9
Existing Number of Night Trains (10 p.m. to 7 am)	0
Future Number of Night Trains (10 p.m. to 7 am)	1
Existing Average Number of Cars	8
Future Average Number of Cars	8
Existing Average Number of Locomotives	1
Future Average Number of Locomotives	1

Noise Situation	
Horns Existing and Future	1
Horns in Future Only	2
No Horns Existing and Future	3

Horn Location on Locomotive	
National Average (50% front, 50% middle)	1
All Front Mounted	2
All Middle Mounted	3
User Defined 80 % front mounted horns	4

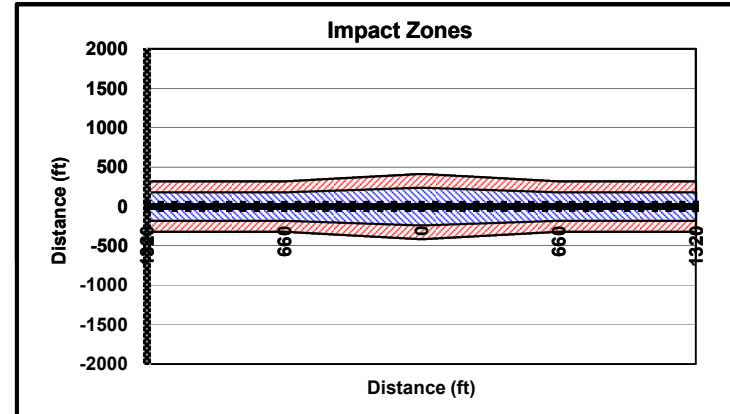
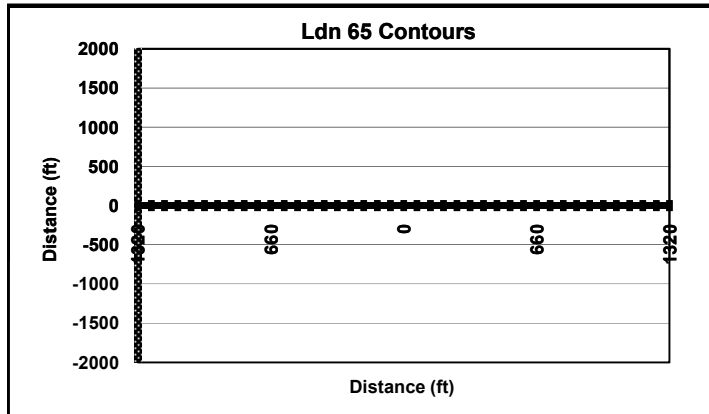
Non Train Noise Environment	
Urban	1
Suburban	2
Rural	3
User Defined Ldn = 50 dBA	4

Shielding	
Dense Urban	1
Light Urban	2
Dense Suburban	3
Light Suburban	4
Rural	5
No Shielding	6

Length of Impact Area	
1/4 mile	1
20 seconds	2
15 seconds	3

Ldn 65 Contours Numeric Output (in feet)	
Existing 65 Ldn Contour at X-ing	0
Future 65 Ldn Contour at X-ing	0
Existing 65 Ldn Contour at 1/2 zone length	0
Future 65 Ldn Contour at 1/2 zone length	0
Zone Length	1320
1/2 Zone Length	660

Impact Zones Numeric Output (in feet)	
Impact Distance at X-ing	414
Severe Impact Distance at X-ing	240
Impact Distance at 1/2 zone length	319
Severe Impact Distance at 1/2 zone length	180
Zone Length	1320
1/2 Zone Length	660





**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank



Technical Report
Noise and Vibration
Draft

Northeast - Suburban



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

FRA Grade Crossing Noise Model

User Input	
Noise Situation (Pick from List)	1
Horn Lmax (dBA) @ 100 feet	104
Horn Location on Locomotive(Pick from List)	1
Non Train Noise Environment (pick from list)	2
Shielding (Pick from List)	3
Length of Impact Area (pick from list)	1
Existing Train Speed (mph)	100
Future Train Speed (mph)	100
Number of Existing Trains in one Direction	63
Number of Future Trains in one Direction	82
Existing Number of Day Trains (7 am to 10 p.m.)	53
Future Number of Day Trains (7 am to 10 p.m.)	69
Existing Number of Night Trains (10 p.m. to 7 am)	10
Future Number of Night Trains (10 p.m. to 7 am)	13
Existing Average Number of Cars	8
Future Average Number of Cars	8
Existing Average Number of Locomotives	1
Future Average Number of Locomotives	1

Noise Situation	
Horns Existing and Future	1
Horns in Future Only	2
No Horns Existing and Future	3

Horn Location on Locomotive	
National Average (50% front, 50% middle)	1
All Front Mounted	2
All Middle Mounted	3
User Defined	80 % front mounted horns
	4

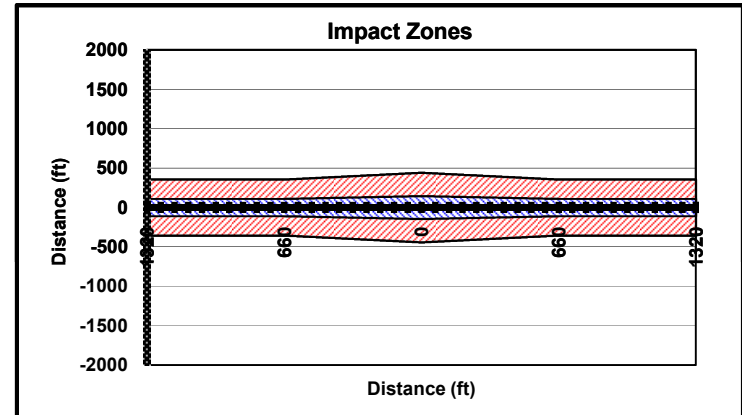
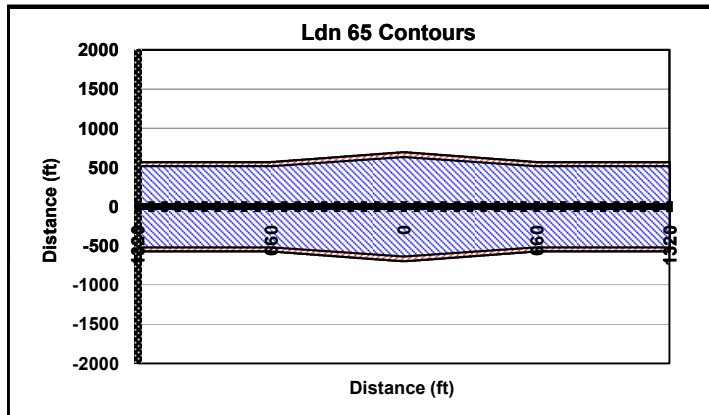
Non Train Noise Environment	
Urban	1
Suburban	2
Rural	3
User Defined Ldn =	50 dBA
	4

Shielding	
Dense Urban	1
Light Urban	2
Dense Suburban	3
Light Suburban	4
Rural	5
No Shielding	6

Length of Impact Area	
1/4 mile	1
20 seconds	2
15 seconds	3

Ldn 65 Contours Numeric Output (in feet)	
Existing 65 Ldn Contour at X-ing	635
Future 65 Ldn Contour at X-ing	696
Existing 65 Ldn Contour at 1/2 zone length	517
Future 65 Ldn Contour at 1/2 zone length	569
Zone Length	1320
1/2 Zone Length	660

Impact Zones Numeric Output (in feet)	
Impact Distance at X-ing	441
Severe Impact Distance at X-ing	146
Impact Distance at 1/2 zone length	354
Severe Impact Distance at 1/2 zone length	110
Zone Length	1320
1/2 Zone Length	660



FRA Grade Crossing Noise Model

User Input	
Noise Situation (Pick from List)	1
Horn Lmax (dBA) @ 100 feet	104
Horn Location on Locomotive(Pick from List)	1
Non Train Noise Environment (pick from list)	2
Shielding (Pick from List)	3
Length of Impact Area (pick from list)	1
Existing Train Speed (mph)	100
Future Train Speed (mph)	100
Number of Existing Trains in one Direction	44
Number of Future Trains in one Direction	63
Existing Number of Day Trains (7 am to 10 p.m.)	37
Future Number of Day Trains (7 am to 10 p.m.)	53
Existing Number of Night Trains (10 p.m. to 7 am)	8
Future Number of Night Trains (10 p.m. to 7 am)	11
Existing Average Number of Cars	8
Future Average Number of Cars	8
Existing Average Number of Locomotives	1
Future Average Number of Locomotives	1

Noise Situation	
Horns Existing and Future	1
Horns in Future Only	2
No Horns Existing and Future	3

Horn Location on Locomotive		
National Average (50% front, 50% middle)	1	
All Front Mounted	2	
All Middle Mounted	3	
User Defined	80 % front mounted horns	4

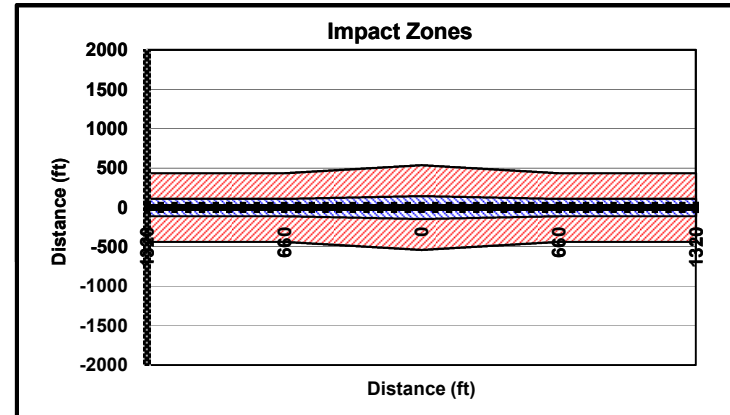
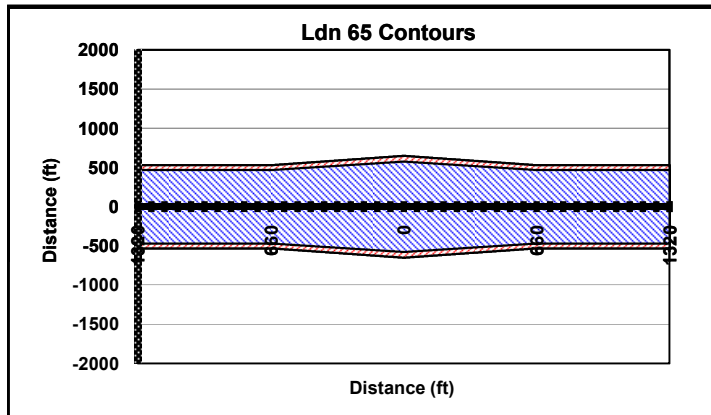
Non Train Noise Environment		
Urban	1	
Suburban	2	
Rural	3	
User Defined Ldn =	50 dBA	4

Shielding	
Dense Urban	1
Light Urban	2
Dense Suburban	3
Light Suburban	4
Rural	5
No Shielding	6

Length of Impact Area	
1/4 mile	1
20 seconds	2
15 seconds	3

Ldn 65 Contours Numeric Output (in feet)	
Existing 65 Ldn Contour at X-ing	577
Future 65 Ldn Contour at X-ing	649
Existing 65 Ldn Contour at 1/2 zone length	468
Future 65 Ldn Contour at 1/2 zone length	529
Zone Length	1320
1/2 Zone Length	660

Impact Zones Numeric Output (in feet)	
Impact Distance at X-ing	537
Severe Impact Distance at X-ing	146
Impact Distance at 1/2 zone length	434
Severe Impact Distance at 1/2 zone length	110
Zone Length	1320
1/2 Zone Length	660





**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank



Technical Report
Noise and Vibration
Draft

New Bedford - Rural



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

FRA Grade Crossing Noise Model

User Input	
Noise Situation (Pick from List)	2
Horn Lmax (dBA) @ 100 feet	104
Horn Location on Locomotive(Pick from List)	1
Non Train Noise Environment (pick from list)	3
Shielding (Pick from List)	4
Length of Impact Area (pick from list)	1
Existing Train Speed (mph)	100
Future Train Speed (mph)	100
Number of Existing Trains in one Direction	0
Number of Future Trains in one Direction	10
Existing Number of Day Trains (7 am to 10 p.m.)	0
Future Number of Day Trains (7 am to 10 p.m.)	9
Existing Number of Night Trains (10 p.m. to 7 am)	0
Future Number of Night Trains (10 p.m. to 7 am)	1
Existing Average Number of Cars	8
Future Average Number of Cars	8
Existing Average Number of Locomotives	1
Future Average Number of Locomotives	1

Noise Situation	
Horns Existing and Future	1
Horns in Future Only	2
No Horns Existing and Future	3

Horn Location on Locomotive		
National Average (50% front, 50% middle)	1	
All Front Mounted	2	
All Middle Mounted	3	
User Defined	80 % front mounted horns	4

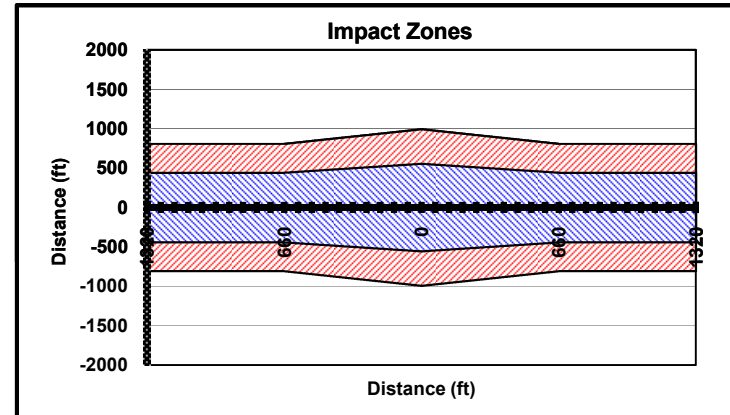
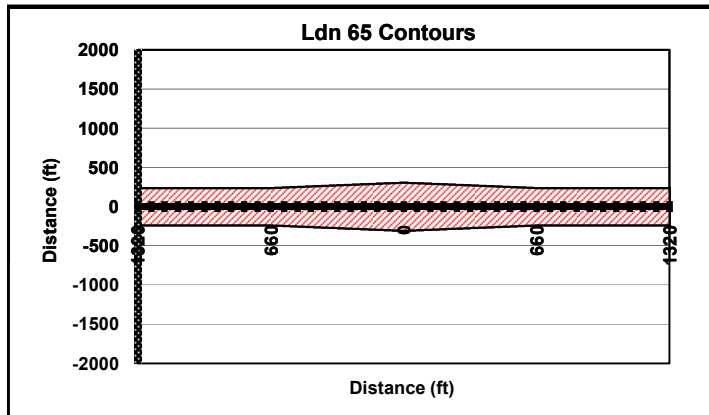
Non Train Noise Environment		
Urban	1	
Suburban	2	
Rural	3	
User Defined Ldn =	50 dBA	4

Shielding	
Dense Urban	1
Light Urban	2
Dense Suburban	3
Light Suburban	4
Rural	5
No Shielding	6

Length of Impact Area	
1/4 mile	1
20 seconds	2
15 seconds	3

Ldn 65 Contours Numeric Output (in feet)	
Existing 65 Ldn Contour at X-ing	0
Future 65 Ldn Contour at X-ing	307
Existing 65 Ldn Contour at 1/2 zone length	0
Future 65 Ldn Contour at 1/2 zone length	237
Zone Length	1320
1/2 Zone Length	660

Impact Zones Numeric Output (in feet)	
Impact Distance at X-ing	993
Severe Impact Distance at X-ing	556
Impact Distance at 1/2 zone length	808
Severe Impact Distance at 1/2 zone length	442
Zone Length	1320
1/2 Zone Length	660





**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank



Technical Report
Noise and Vibration
Draft

New Bedford – Urban



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

FRA Grade Crossing Noise Model

User Input	
Noise Situation (Pick from List)	2
Horn Lmax (dBA) @ 100 feet	104
Horn Location on Locomotive(Pick from List)	1
Non Train Noise Environment (pick from list)	1
Shielding (Pick from List)	2
Length of Impact Area (pick from list)	1
Existing Train Speed (mph)	70
Future Train Speed (mph)	70
Number of Existing Trains in one Direction	0
Number of Future Trains in one Direction	10
Existing Number of Day Trains (7 am to 10 p.m.)	0
Future Number of Day Trains (7 am to 10 p.m.)	9
Existing Number of Night Trains (10 p.m. to 7 am)	0
Future Number of Night Trains (10 p.m. to 7 am)	1
Existing Average Number of Cars	8
Future Average Number of Cars	8
Existing Average Number of Locomotives	1
Future Average Number of Locomotives	1

Noise Situation	
Horns Existing and Future	1
Horns in Future Only	2
No Horns Existing and Future	3

Horn Location on Locomotive	
National Average (50% front, 50% middle)	1
All Front Mounted	2
All Middle Mounted	3
User Defined	80 % front mounted horns
	4

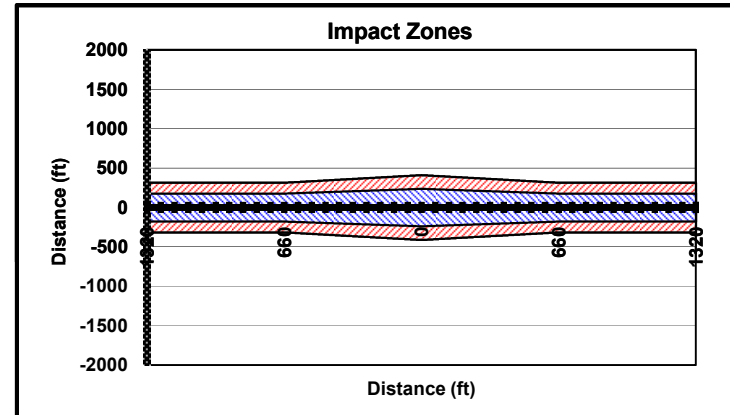
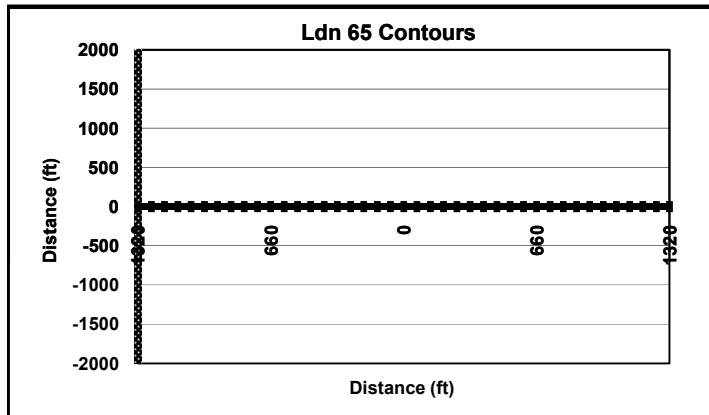
Non Train Noise Environment	
Urban	1
Suburban	2
Rural	3
User Defined Ldn =	50 dBA
	4

Shielding	
Dense Urban	1
Light Urban	2
Dense Suburban	3
Light Suburban	4
Rural	5
No Shielding	6

Length of Impact Area	
1/4 mile	1
20 seconds	2
15 seconds	3

Ldn 65 Contours Numeric Output (in feet)	
Existing 65 Ldn Contour at X-ing	0
Future 65 Ldn Contour at X-ing	0
Existing 65 Ldn Contour at 1/2 zone length	0
Future 65 Ldn Contour at 1/2 zone length	0
Zone Length	1320
1/2 Zone Length	660

Impact Zones Numeric Output (in feet)	
Impact Distance at X-ing	410
Severe Impact Distance at X-ing	238
Impact Distance at 1/2 zone length	314
Severe Impact Distance at 1/2 zone length	177
Zone Length	1320
1/2 Zone Length	660





**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank



Technical Report
Noise and Vibration
Draft

Stoughton - Suburban



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

FRA Grade Crossing Noise Model

User Input	
Noise Situation (Pick from List)	2
Horn Lmax (dBA) @ 100 feet	104
Horn Location on Locomotive(Pick from List)	1
Non Train Noise Environment (pick from list)	2
Shielding (Pick from List)	3
Length of Impact Area (pick from list)	1
Existing Train Speed (mph)	100
Future Train Speed (mph)	100
Number of Existing Trains in one Direction	0
Number of Future Trains in one Direction	19
Existing Number of Day Trains (7 am to 10 p.m.)	0
Future Number of Day Trains (7 am to 10 p.m.)	16
Existing Number of Night Trains (10 p.m. to 7 am)	0
Future Number of Night Trains (10 p.m. to 7 am)	3
Existing Average Number of Cars	8
Future Average Number of Cars	8
Existing Average Number of Locomotives	1
Future Average Number of Locomotives	1

Noise Situation	
Horns Existing and Future	1
Horns in Future Only	2
No Horns Existing and Future	3

Horn Location on Locomotive	
National Average (50% front, 50% middle)	1
All Front Mounted	2
All Middle Mounted	3
User Defined	80 % front mounted horns
	4

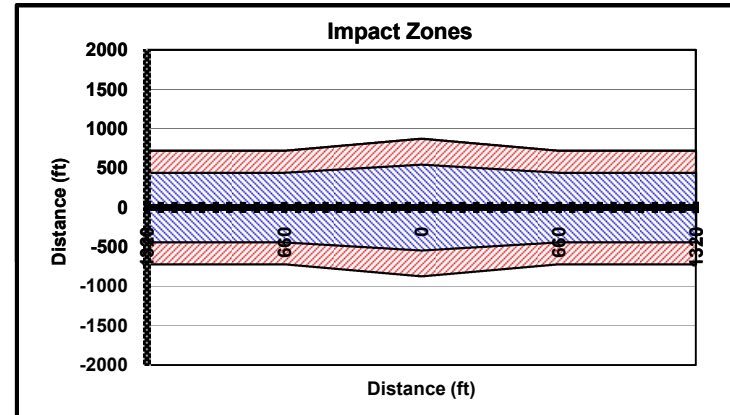
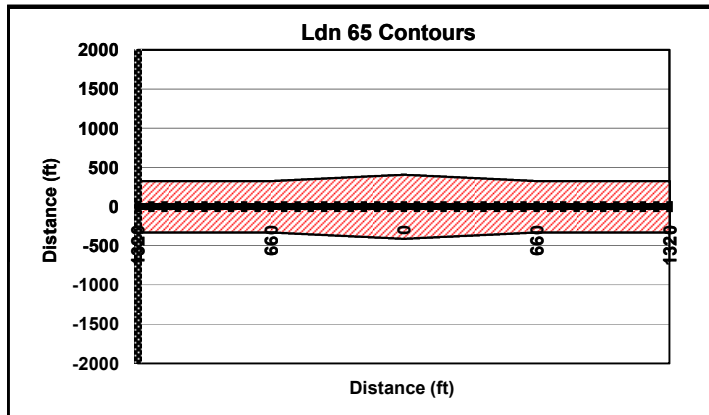
Non Train Noise Environment	
Urban	1
Suburban	2
Rural	3
User Defined Ldn =	50 dBA
	4

Shielding	
Dense Urban	1
Light Urban	2
Dense Suburban	3
Light Suburban	4
Rural	5
No Shielding	6

Length of Impact Area	
1/4 mile	1
20 seconds	2
15 seconds	3

Ldn 65 Contours Numeric Output (in feet)	
Existing 65 Ldn Contour at X-ing	0
Future 65 Ldn Contour at X-ing	408
Existing 65 Ldn Contour at 1/2 zone length	0
Future 65 Ldn Contour at 1/2 zone length	327
Zone Length	1320
1/2 Zone Length	660

Impact Zones Numeric Output (in feet)	
Impact Distance at X-ing	873
Severe Impact Distance at X-ing	545
Impact Distance at 1/2 zone length	720
Severe Impact Distance at 1/2 zone length	442
Zone Length	1320
1/2 Zone Length	660





**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank



Technical Report
Noise and Vibration
Draft

Whittenton - Suburban



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

FRA Grade Crossing Noise Model

User Input	
Noise Situation (Pick from List)	2
Horn Lmax (dBA) @ 100 feet	104
Horn Location on Locomotive(Pick from List)	1
Non Train Noise Environment (pick from list)	2
Shielding (Pick from List)	3
Length of Impact Area (pick from list)	1
Existing Train Speed (mph)	60
Future Train Speed (mph)	60
Number of Existing Trains in one Direction	0
Number of Future Trains in one Direction	19
Existing Number of Day Trains (7 am to 10 p.m.)	0
Future Number of Day Trains (7 am to 10 p.m.)	16
Existing Number of Night Trains (10 p.m. to 7 am)	0
Future Number of Night Trains (10 p.m. to 7 am)	3
Existing Average Number of Cars	8
Future Average Number of Cars	8
Existing Average Number of Locomotives	1
Future Average Number of Locomotives	1

Noise Situation	
Horns Existing and Future	1
Horns in Future Only	2
No Horns Existing and Future	3

Horn Location on Locomotive	
National Average (50% front, 50% middle)	1
All Front Mounted	2
All Middle Mounted	3
User Defined	80 % front mounted horns
	4

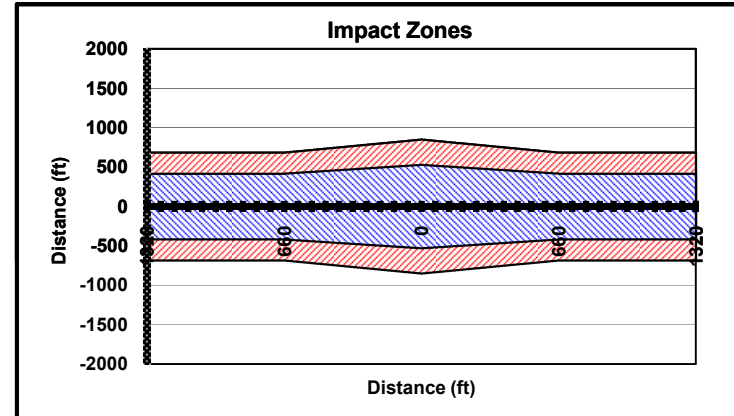
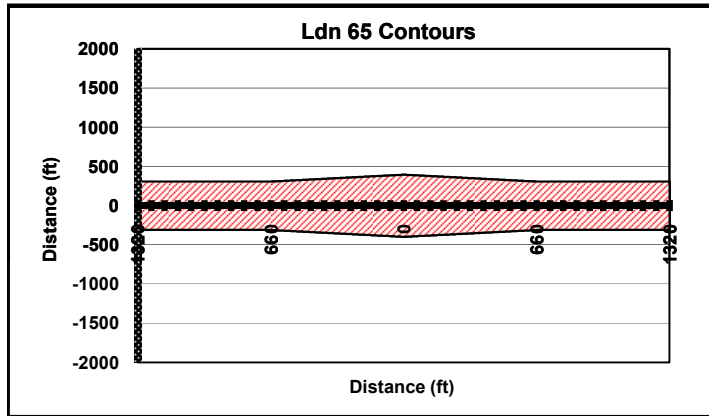
Non Train Noise Environment	
Urban	1
Suburban	2
Rural	3
User Defined Ldn =	50 dBA
	4

Shielding	
Dense Urban	1
Light Urban	2
Dense Suburban	3
Light Suburban	4
Rural	5
No Shielding	6

Length of Impact Area	
1/4 mile	1
20 seconds	2
15 seconds	3

Ldn 65 Contours Numeric Output (in feet)	
Existing 65 Ldn Contour at X-ing	0
Future 65 Ldn Contour at X-ing	396
Existing 65 Ldn Contour at 1/2 zone length	0
Future 65 Ldn Contour at 1/2 zone length	308
Zone Length	1320
1/2 Zone Length	660

Impact Zones Numeric Output (in feet)	
Impact Distance at X-ing	850
Severe Impact Distance at X-ing	529
Impact Distance at 1/2 zone length	684
Severe Impact Distance at 1/2 zone length	418
Zone Length	1320
1/2 Zone Length	660





**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank



Technical Report
Noise and Vibration
Draft

Whittenton - Urban



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

FRA Grade Crossing Noise Model

User Input	
Noise Situation (Pick from List)	2
Horn Lmax (dBA) @ 100 feet	104
Horn Location on Locomotive(Pick from List)	1
Non Train Noise Environment (pick from list)	1
Shielding (Pick from List)	2
Length of Impact Area (pick from list)	1
Existing Train Speed (mph)	70
Future Train Speed (mph)	70
Number of Existing Trains in one Direction	0
Number of Future Trains in one Direction	19
Existing Number of Day Trains (7 am to 10 p.m.)	0
Future Number of Day Trains (7 am to 10 p.m.)	16
Existing Number of Night Trains (10 p.m. to 7 am)	0
Future Number of Night Trains (10 p.m. to 7 am)	3
Existing Average Number of Cars	8
Future Average Number of Cars	8
Existing Average Number of Locomotives	1
Future Average Number of Locomotives	1

Noise Situation	
Horns Existing and Future	1
Horns in Future Only	2
No Horns Existing and Future	3

Horn Location on Locomotive	
National Average (50% front, 50% middle)	1
All Front Mounted	2
All Middle Mounted	3
User Defined	80 % front mounted horns
	4

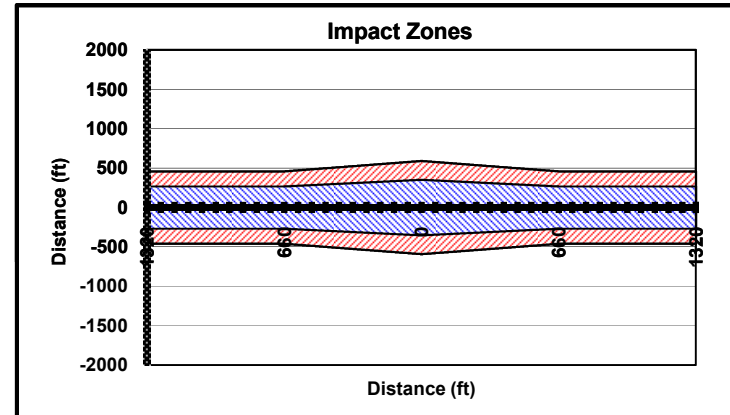
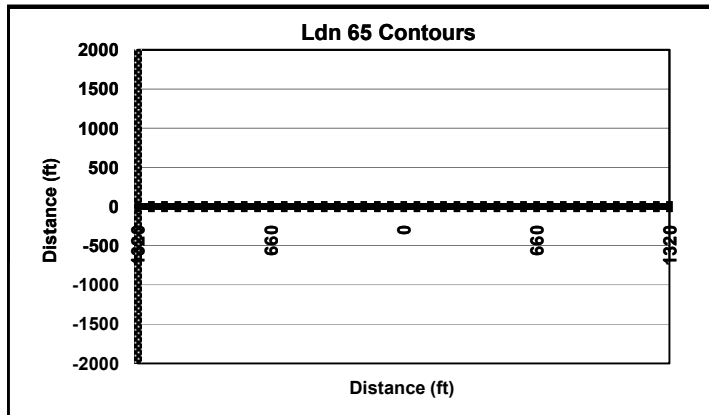
Non Train Noise Environment	
Urban	1
Suburban	2
Rural	3
User Defined Ldn =	50 dBA
	4

Shielding	
Dense Urban	1
Light Urban	2
Dense Suburban	3
Light Suburban	4
Rural	5
No Shielding	6

Length of Impact Area	
1/4 mile	1
20 seconds	2
15 seconds	3

Ldn 65 Contours Numeric Output (in feet)	
Existing 65 Ldn Contour at X-ing	0
Future 65 Ldn Contour at X-ing	0
Existing 65 Ldn Contour at 1/2 zone length	0
Future 65 Ldn Contour at 1/2 zone length	0
Zone Length	1320
1/2 Zone Length	660

Impact Zones Numeric Output (in feet)	
Impact Distance at X-ing	590
Severe Impact Distance at X-ing	353
Impact Distance at 1/2 zone length	458
Severe Impact Distance at 1/2 zone length	268
Zone Length	1320
1/2 Zone Length	660





**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank



Technical Report
Noise and Vibration
Draft

Layover Facilities



**Technical Report
Noise and Vibration
Draft**

This Page Intentionally Left Blank

Layover Facilities Sound Levels and Impacts

<u>Layovers:</u>	Noise Exposure @ 50' (Ldn)			Existing Noise Exposure (Ldn)			Moderate Impact				Severe Impact			
	Leq - day	Leq - night	Ldn	Comp. Field	FTA Table 5-7	Use	Ldn	Delta	Distance	Number of Impacts	Ldn	Delta	Distance	Number of Impacts
	Boston Midday - Cold Storage	73.4	73.4	79.8	-	55+50+60 60	60	57.8	22.0	375		63.4	16.4	225
Freetown - ISP Site	73.4	73.4	79.8	45 - 55	50	50	53.4	26.5	575	0	59.6	20.2	325	0
Fall River - Weaver's Cove Site	73.4	73.4	79.8	55 - 60	50 - 55	55	55.3	24.5	475	0	61.2	18.6	275	1
Fall River - Weaver's Cove Site West	73.4	73.4	79.8	55 - 60	50 - 55	55	55.3	24.5	475		61.2	18.6	275	
New Bedford - Church Street Site	73.4	73.4	79.8	55	50 - 55	55	55.3	24.5	475	0	61.2	18.6	275	0
New Bedford - Wamsutta Site	73.4	73.4	79.8	65	55 - 60	60	57.8	22.0	375	0	63.4	16.4	225	0

A Source Reference Level of 109 dBA at 50 from the center of the site for layover tracks was used (FTA Guidelines - Table 5-5).

All facilities are assumed to have one train idling per hour (day and night).

109 - Source Reference Level at 50 from Center of Site for Layover Tracks (FTA Guidelines - Table 5-5)