

## **Appendix 4.6-B**

### **Noise Impacts for the Stoughton Diesel Alternative and Whittenton Electric Alternative**



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

# 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
<b>North Easton Station</b>	<b>6.40</b>	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
<b>Raynham Station</b>	<b>14.10</b>	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
<b>Dean Street Station</b>	<b>19.20</b>	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
<b>Total</b>					<b>32</b>		<b>107</b>

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					
<b>Southeastern Regional Vocational High School</b>	<b>750</b>	<b>61</b>	<b>62</b>	<b>50</b>	<b>62</b>	<b>No Impact</b>
High School	3,200					
Pole School	2,000					
<b>Summer Street School</b>	<b>600</b>	<b>65</b>	<b>66</b>	<b>51</b>	<b>66</b>	<b>No Impact</b>





**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 <sup>1</sup>
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
<b>North Easton Station</b>				70	<b>Station</b>	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
<b>Raynham Station</b>				70	<b>Station</b>	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
<b>Dean Street Station</b>				40	<b>Station</b>	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<sub>dn</sub> computed using: 10\*LOG((15\*10<sup>3</sup>(L<sub>eq,day</sub>/10))+(9\*10<sup>3</sup>(L<sub>eq,night</sub>+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
<b>North Easton Station</b>	<b>6.40</b>	<b>Sta.</b>	<b>No</b>		1,200	<b>47</b>	<b>64</b>	<b>65</b>	<b>65</b>	<b>1</b>	<b>47</b>	<b>61</b>	<b>62</b>	<b>62</b>	<b>1</b>
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
<b>Raynham Station</b>	<b>14.10</b>	<b>Sta.</b>	<b>No</b>		1,600	<b>46</b>	<b>65</b>	<b>66</b>	<b>66</b>	<b>1</b>	<b>46</b>	<b>62</b>	<b>63</b>	<b>63</b>	<b>1</b>
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
<b>Dean Street Station</b>	<b>19.20</b>	<b>Sta.</b>	<b>No</b>		600	<b>52</b>	<b>54</b>	<b>55</b>	<b>57</b>	<b>3</b>	<b>52</b>	<b>51</b>	<b>52</b>	<b>55</b>	<b>4</b>
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.**

<b>LAND USE CATEGORY</b>	
Noise receiver land use category (1, 2 or 3)	<b>2</b>

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

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

<b>SOURCE REFERENCE LIST</b>	
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.*

<b>LAND USE CATEGORY</b>	
Noise receiver land use category (1, 2 or 3)	<b>2</b>

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

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

<b>SOURCE REFERENCE LIST</b>	
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.**

<b>LAND USE CATEGORY</b>	
Noise receiver land use category (1, 2 or 3)	<b>2</b>

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

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

<b>SOURCE REFERENCE LIST</b>	
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.**

<b>LAND USE CATEGORY</b>	
Noise receiver land use category (1, 2 or 3)	<b>2</b>

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

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

<b>SOURCE REFERENCE LIST</b>	
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.**

<b>LAND USE CATEGORY</b>	
Noise receiver land use category (1, 2 or 3)	<b>2</b>

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

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

<b>SOURCE REFERENCE LIST</b>	
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.**

<b>LAND USE CATEGORY</b>	
Noise receiver land use category (1, 2 or 3)	<b>2</b>

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

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

<b>SOURCE REFERENCE LIST</b>	
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.*

<b>LAND USE CATEGORY</b>	
Noise receiver land use category (1, 2 or 3)	<b>2</b>

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

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

<b>SOURCE REFERENCE LIST</b>	
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.**

<b>LAND USE CATEGORY</b>	
Noise receiver land use category (1, 2 or 3)	<b>2</b>

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

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

<b>SOURCE REFERENCE LIST</b>	
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.**

<b>LAND USE CATEGORY</b>	
Noise receiver land use category (1, 2 or 3)	<b>2</b>

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

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

<b>SOURCE REFERENCE LIST</b>	
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)	<b>2</b>

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

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.**

<b>LAND USE CATEGORY</b>	
Noise receiver land use category (1, 2 or 3)	<b>2</b>

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

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

<b>SOURCE REFERENCE LIST</b>	
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.**

<b>LAND USE CATEGORY</b>	
Noise receiver land use category (1, 2 or 3)	<b>2</b>

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

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

<b>SOURCE REFERENCE LIST</b>	
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)	<b>2</b>

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

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.**

<b>LAND USE CATEGORY</b>	
Noise receiver land use category (1, 2 or 3)	<b>2</b>

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

<b>NOISE SOURCE PARAMETERS</b>					
Parameter	Source 1		Source 2		Source 3
Source Num.	Diesel Loco.	<b>2</b>	Comm. Rail Cars	<b>3</b>	<b>0</b>
Dist. to receiver	distance (ft)	<b>81</b>	distance (ft)	<b>81</b>	
Daytime Hours (7 AM - 10 PM)	speed (mph)	<b>70</b>	speed (mph)	<b>70</b>	
	trains/hour	<b>3</b>	trains/hour	<b>3</b>	
	locos/train	<b>1</b>	cars/train	<b>8</b>	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	<b>70</b>	speed (mph)	<b>70</b>	
	trains/hour	<b>1</b>	trains/hour	<b>1</b>	
	locos/train	<b>1</b>	cars/train	<b>8</b>	
Jointed Track?	Y/N	<b>N</b>	Y/N	<b>N</b>	
Embedded Track?	Y/N	<b>N</b>	Y/N	<b>N</b>	
Aerial Structure?	Y/N	<b>N</b>	Y/N	<b>N</b>	
Barrier Present?	Y/N	<b>N</b>	Y/N	<b>N</b>	
Intervening Rows of Buildings	number	<b>0</b>	number	<b>0</b>	

<b>SOURCE REFERENCE LIST</b>	
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.**

<b>LAND USE CATEGORY</b>	
Noise receiver land use category (1, 2 or 3)	<b>2</b>

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

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

<b>SOURCE REFERENCE LIST</b>	
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.**

<b>LAND USE CATEGORY</b>	
Noise receiver land use category (1, 2 or 3)	<b>2</b>

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

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

<b>SOURCE REFERENCE LIST</b>	
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)	<b>2</b>

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

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
<b>North Easton Station</b>	<b>6.40</b>	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
<b>Raynham Station</b>	<b>14.10</b>	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
<b>Dean Street Station</b>	<b>19.20</b>	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
<b>Total</b>					<b>32</b>		<b>107</b>

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					
<b>Southeastern Regional Vocational High School</b>	<b>750</b>	<b>61</b>	<b>62</b>	<b>50</b>	<b>62</b>	<b>No Impact</b>
High School	3,200					
Pole School	2,000					
<b>Summer Street School</b>	<b>600</b>	<b>65</b>	<b>66</b>	<b>51</b>	<b>66</b>	<b>No Impact</b>



**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 <sup>1</sup>
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
<b>North Easton Station</b>				70	<b>Station</b>	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
<b>Raynham Station</b>				70	<b>Station</b>	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
<b>Dean Street Station</b>				40	<b>Station</b>	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<sub>dn</sub> computed using: 10\*LOG((15\*10<sup>0</sup>(L<sub>eq,day</sub>/10))+(9\*10<sup>0</sup>(L<sub>eq,night</sub>+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	#REF!	58	59	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	
2	Plain Street	4.60	G	Yes	30	75	#REF!	60	61	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	
3	Morton Street	5.20	G	Yes	30	100	#REF!	67	68	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	
<b>North Easton Station</b>		<b>6.40</b>	<b>Sta.</b>	<b>No</b>		1,200	<b>47</b>	<b>64</b>	<b>65</b>	<b>65</b>	<b>1</b>	<b>47</b>	<b>61</b>	<b>62</b>	<b>62</b>	<b>1</b>
4	Elm Street (MP 7.60)	7.60	G	Yes	30	75	#REF!	65	66	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	
5	Oliver Street	7.80	G	Yes	30	100	#REF!	63	64	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	
6	Pond Street	7.90	UG	No	30	100	#REF!	62	63	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	
7	Main Street	8.05	OH	No	40	75	#REF!	64	65	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	
8	Bridge Street	8.40	OH	No	50	75	#REF!	58	59	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	
9	Short Street	9.55	G	Yes	70	100	#REF!	63	64	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	
10	Depot Street/123	10.00	G	Yes	70	75	#REF!	67	68	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	
11	Purchase Street	10.20	G	Yes	70	300	#REF!	60	61	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	
12	Prospect Street	10.90	G	Yes	70	100	#REF!	55	56	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	
<b>Raynham Station</b>		<b>14.10</b>	<b>Sta.</b>	<b>No</b>		1,600	<b>46</b>	<b>65</b>	<b>66</b>	<b>66</b>	<b>1</b>	<b>46</b>	<b>62</b>	<b>63</b>	<b>63</b>	<b>1</b>
13	Elm Street (MP 15.40)	15.40	G	Yes	70	100	#REF!	58	59	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	
14	Carver Street	15.80	G	Yes	70	75	#REF!	56	57	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	
15	Route 138	16.40	G	Yes	70	75	#REF!	65	66	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	
16	Britton Street	16.50	G	Yes	70	75	#REF!	58	59	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	
17	King Phillip Street	17.10	G	Yes	70	100	#REF!	64	65	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	
18	Longmeadow Road	18.90	G	Yes	30	300	#REF!	61	62	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	
<b>Dean Street Station</b>		<b>19.20</b>	<b>Sta.</b>	<b>No</b>		600	<b>52</b>	<b>54</b>	<b>55</b>	<b>57</b>	<b>3</b>	<b>52</b>	<b>51</b>	<b>52</b>	<b>55</b>	<b>4</b>
19	Dean Street	19.40	G	Yes	30	75	#REF!	65	66	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	
20	Ingell Street	61.92	G	Yes	30	100	#REF!	59	60	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	
21	Hart Street	62.43	G	Yes	30	75	#REF!	65	66	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	
22	High Street Freetown		G	Yes	30	250	#REF!	-	1	#REF!	#REF!	#REF!	#REF!	#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.**

<b>LAND USE CATEGORY</b>	
Noise receiver land use category (1, 2 or 3)	<b>2</b>

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

<b>NOISE SOURCE PARAMETERS</b>					
Parameter	Source 1		Source 2		Source 3
Source Num.	Electric Loco.	<b>1</b>	Comm. Rail Cars	<b>3</b>	<b>0</b>
Dist. to receiver	distance (ft)	<b>125</b>	distance (ft)	<b>125</b>	
Daytime Hours (7 AM - 10 PM)	speed (mph)	<b>60</b>	speed (mph)	<b>60</b>	
	trains/hour	<b>3</b>	trains/hour	<b>3</b>	
	locos/train	<b>1</b>	cars/train	<b>8</b>	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	<b>60</b>	speed (mph)	<b>60</b>	
	trains/hour	<b>1</b>	trains/hour	<b>1</b>	
	locos/train	<b>1</b>	cars/train	<b>8</b>	
Jointed Track?	Y/N	<b>N</b>	Y/N	<b>N</b>	
Embedded Track?	Y/N	<b>N</b>	Y/N	<b>N</b>	
Aerial Structure?	Y/N	<b>N</b>	Y/N	<b>N</b>	
Barrier Present?	Y/N	<b>N</b>	Y/N	<b>N</b>	
Intervening Rows of Buildings	number	<b>0</b>	number	<b>0</b>	

<b>SOURCE REFERENCE LIST</b>	
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)	<b>2</b>

**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.	<b>1</b>	Comm. Rail Cars	<b>3</b>	<b>0</b>
Dist. to receiver	distance (ft)	<b>30</b>	distance (ft)	<b>30</b>	
Daytime Hours (7 AM - 10 PM)	speed (mph)	<b>35</b>	speed (mph)	<b>35</b>	
	trains/hour	<b>3</b>	trains/hour	<b>3</b>	
	locos/train	<b>1</b>	cars/train	<b>8</b>	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	<b>35</b>	speed (mph)	<b>35</b>	
	trains/hour	<b>1</b>	trains/hour	<b>1</b>	
	locos/train	<b>1</b>	cars/train	<b>8</b>	
Jointed Track?	Y/N	<b>N</b>	Y/N	<b>N</b>	
Embedded Track?	Y/N	<b>N</b>	Y/N	<b>N</b>	
Aerial Structure?	Y/N	<b>N</b>	Y/N	<b>N</b>	
Barrier Present?	Y/N	<b>N</b>	Y/N	<b>N</b>	
Intervening Rows of Buildings	number	<b>0</b>	number	<b>0</b>	

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)	<b>2</b>

**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.	<b>1</b>	Comm. Rail Cars	<b>3</b>	<b>0</b>
Dist. to receiver	distance (ft)	<b>55</b>	distance (ft)	<b>60</b>	
Daytime Hours (7 AM - 10 PM)	speed (mph)	<b>30</b>	speed (mph)	<b>30</b>	
	trains/hour	<b>3</b>	trains/hour	<b>3</b>	
	locos/train	<b>1</b>	cars/train	<b>8</b>	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	<b>30</b>	speed (mph)	<b>30</b>	
	trains/hour	<b>1</b>	trains/hour	<b>1</b>	
	locos/train	<b>1</b>	cars/train	<b>8</b>	
Jointed Track?	Y/N	<b>N</b>	Y/N	<b>N</b>	
Embedded Track?	Y/N	<b>N</b>	Y/N	<b>N</b>	
Aerial Structure?	Y/N	<b>N</b>	Y/N	<b>N</b>	
Barrier Present?	Y/N	<b>N</b>	Y/N	<b>N</b>	
Intervening Rows of Buildings	number	<b>0</b>	number	<b>0</b>	

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)	<b>2</b>

**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.	<b>1</b>	Comm. Rail Cars	<b>3</b>	<b>0</b>
Dist. to receiver	distance (ft)	<b>55</b>	distance (ft)	<b>56</b>	
Daytime Hours (7 AM - 10 PM)	speed (mph)	<b>30</b>	speed (mph)	<b>30</b>	
	trains/hour	<b>3</b>	trains/hour	<b>3</b>	
	locos/train	<b>1</b>	cars/train	<b>8</b>	
Nighttime Hours (10 PM - 7 AM)	speed (mph)	<b>30</b>	speed (mph)	<b>30</b>	
	trains/hour	<b>1</b>	trains/hour	<b>1</b>	
	locos/train	<b>1</b>	cars/train	<b>8</b>	
Jointed Track?	Y/N	<b>N</b>	Y/N	<b>N</b>	
Embedded Track?	Y/N	<b>N</b>	Y/N	<b>N</b>	
Aerial Structure?	Y/N	<b>N</b>	Y/N	<b>N</b>	
Barrier Present?	Y/N	<b>N</b>	Y/N	<b>N</b>	
Intervening Rows of Buildings	number	<b>0</b>	number	<b>0</b>	

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.**

<b>LAND USE CATEGORY</b>	
Noise receiver land use category (1, 2 or 3)	<b>2</b>

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

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

<b>SOURCE REFERENCE LIST</b>	
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.**

<b>LAND USE CATEGORY</b>	
Noise receiver land use category (1, 2 or 3)	<b>2</b>

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

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

<b>SOURCE REFERENCE LIST</b>	
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.*

<b>LAND USE CATEGORY</b>	
Noise receiver land use category (1, 2 or 3)	<b>2</b>

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

<b>NOISE SOURCE PARAMETERS</b>					
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	

<b>SOURCE REFERENCE LIST</b>	
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.*

<b>LAND USE CATEGORY</b>	
Noise receiver land use category (1, 2 or 3)	<b>2</b>

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

<b>NOISE SOURCE PARAMETERS</b>					
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	

<b>SOURCE REFERENCE LIST</b>	
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