Table 1 Existing Noise Levels from Vehicular Traffic in the Project Area and the Vicinity

Segment of Middlefield Road	Noise Level @ 50 Feet	
	(L_{eq}, dBA)	(L_{dn}, dBA)
From Willow Street to Charter Street	67.3	66.9
From Charter Street to Flynn Ave.	67.7	67.2
From Flynn Ave. to Douglas Ave.	67.6	67.2
From Douglas Ave. to MacArthur Ave.	67.5	67.0
From MacArthur Ave. to Hurlingame Ave.	67.5	67.1
From Hurlingame Ave. to Northside Ave.	67.3	66.9
From Northside Ave. to Pacific Ave.	67.1	66.7
From Pacific Ave. to Dumbarton Ave.	66.9	66.4
From Dumbarton Ave. to Berkshire Ave.	66.5	66.1
From Berkshire Ave. to 1st Ave.	66.8	66.4
From 1st Ave. to 2nd Ave.	66.8	66.3
From 2nd Ave. to 3rd Ave.	66.6	66.1
From 3rd Ave. to 4th Ave.	66.7	66.2
From 4th Ave. to 5th Ave.	66.8	66.4
From 5th Ave. to 6th Ave.	66.8	66.4
From 6th Ave. to 7th Ave.	66.4	66.0
From 7th Ave. to 8th Ave.	65.8	65.3
From 8th Ave. to 9th Ave.	68.0	67.6
From 9th Ave. to Encinca Ave.	67.7	67.3
From Encinca Ave. to Placitas Ave.	67.5	67.0
From Placitas Ave. to San Benito Ave.	67.4	67.0
From San Benito Ave. to Palmer Lane	67.6	67.2
From Palmer Lane to Holbrook Lane	68.5	68.1
From Holbrook Lane to Marsh Road	68.4	67.9
Notes: dB = A-weighted decibels; L_{eq} = equivalent noise level; L_{dn} = day-night average noise level. Source: FHWA 1978, AECOM in 2017		

Table 2 Existing Traffic Noise Levels and Construction Traffic Noise Levels

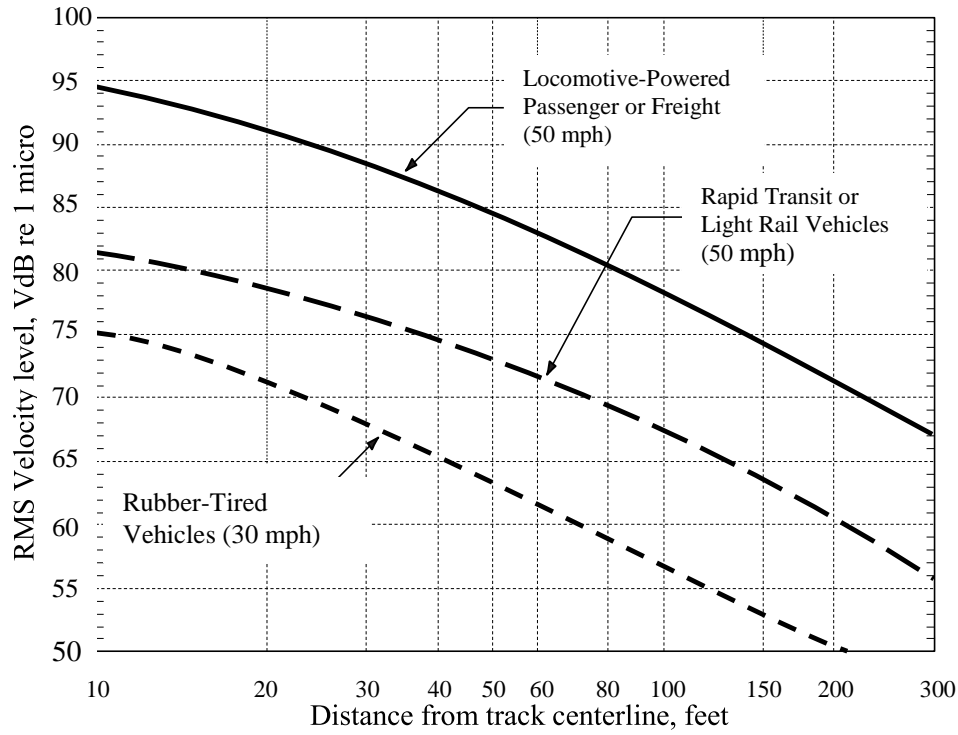| Segment of Middlefield Road	Noise Level (L_{eq}, dBA) @ 50 Feet		
	Existing	Existing + Construction	Construction Traffic Increase over Existing
From Willow Street to Charter Street	67.3	67.5	0.2
From Charter Street to Flynn Ave.	67.7	67.8	0.1
From Flynn Ave. to Douglas Ave.	67.6	67.8	0.1
From Douglas Ave. to MacArthur Ave.	67.5	67.6	0.1
From MacArthur Ave. to Hurlingame Ave.	67.5	67.6	0.1
From Hurlingame Ave. to Northside Ave.	67.3	67.4	0.2
From Northside Ave. to Pacific Ave.	67.1	67.3	0.2
From Pacific Ave. to Dumbarton Ave.	66.9	67.0	0.2
From Dumbarton Ave. to Berkshire Ave.	66.5	66.7	0.2
From Berkshire Ave. to 1st Ave.	66.8	67.0	0.2
From 1st Ave. to 2nd Ave.	66.8	66.9	0.2
From 2nd Ave. to 3rd Ave.	66.6	66.8	0.2
From 3rd Ave. to 4th Ave.	66.7	66.9	0.2
From 4th Ave. to 5th Ave.	66.8	67.0	0.2
From 5th Ave. to 6th Ave.	66.8	67.0	0.2
From 6th Ave. to 7th Ave.	66.4	66.6	0.2
From 7th Ave. to 8th Ave.	65.8	66.0	0.2
From 8th Ave. to 9th Ave.	68.0	68.1	0.1
From 9th Ave. to Encinca Ave.	67.7	67.9	0.1
From Encinca Ave. to Placitas Ave.	67.5	67.6	0.2
From Placitas Ave. to San Benito Ave.	67.4	67.6	0.2
From San Benito Ave. to Palmer Lane	67.6	67.7	0.1
From Palmer Lane to Holbrook Lane	68.5	68.6	0.1
From Holbrook Lane to Marsh Road	68.4	68.5	0.1
Notes: dB = A-weighted decibels; L_{eq} = equivalent noise level. Source: FHWA 1978, AECOM in 2017			

Table 3 Operational Noise Levels Along Middlefield Road from Vehicular Traffic in the Project Area and Vicinity

Segment of Middlefield Road	Noise Level (L_{dn}, dBA) @ 50 Feet								
	Existing	2020 No Build	2020 No Build Increase over Existing	2020 Build	2020 Build Increase over Existing	2050 No Build	2050 No Build Increase over Existing	2050 Build	2050 Build Increase over Existing
From Willow Street to Charter Street	66.9	66.9	0.0	66.2	-0.7	67.9	1.1	67.2	0.3
From Charter Street to Flynn Ave.	67.2	67.2	0.0	66.6	-0.6	68.5	1.2	67.8	0.6
From Flynn Ave. to Douglas Ave.	67.2	67.2	0.0	66.6	-0.6	68.4	1.2	67.8	0.5
From Douglas Ave. to MacArthur Ave.	67.0	67.0	0.0	66.4	-0.6	67.3	0.2	66.3	-0.7
From MacArthur Ave to Hurlingame Ave.	67.1	67.1	0.0	66.4	-0.6	67.4	0.3	66.5	-0.6
From Hurlingame Ave to Northside Ave.	66.9	66.9	0.0	66.3	-0.5	67.3	0.4	66.3	-0.5
From Northside Ave. to Pacific Ave.	66.7	66.7	0.0	66.0	-0.7	66.9	0.2	65.9	-0.8
From Pacific Ave. to Dumbarton Ave.	66.4	66.4	0.0	65.7	-0.7	66.5	0.1	65.4	-1.0
From Dumbarton Ave to Berkshire Ave.	66.1	66.1	0.0	65.3	-0.8	66.2	0.1	65.0	-1.1
From Berkshire Ave. to 1st Ave.	66.4	66.4	0.0	65.6	-0.7	66.5	0.1	65.4	-1.0
From 1st Ave. to 2nd Ave.	66.3	66.3	0.0	65.6	-0.7	66.5	0.1	65.3	-1.0
From 2nd Ave. to 3rd Ave.	66.1	66.1	0.0	65.4	-0.8	66.3	0.2	65.1	-1.0
From 3rd Ave. to 4th Ave.	66.2	66.2	0.0	65.5	-0.8	66.4	0.1	65.2	-1.0
From 4th Ave. to 5th Ave.	66.4	66.4	0.0	65.6	-0.7	66.5	0.1	65.4	-1.0
From 5th Ave. to 6th Ave.	66.4	66.4	0.0	65.2	-1.2	66.8	0.4	65.2	-1.2
From 6th Ave. to 7th Ave.	66.0	66.0	0.0	64.8	-1.2	66.4	0.4	64.5	-1.5
From 7th Ave. to 8th Ave.	65.3	65.4	0.1	63.9	-1.4	65.7	0.4	63.5	-1.8
From 8th Ave. to 9th Ave.	67.6	67.6	0.1	66.8	-0.7	68.0	0.5	66.8	-0.7
From 9th Ave. to Encinca Ave.	67.3	67.4	0.1	66.5	-0.8	67.6	0.3	66.3	-1.0
From Encinca Ave. to Placitas Ave.	67.0	67.1	0.1	66.1	-0.9	67.3	0.3	65.9	-1.2
From Placitas Ave. to San Benito Ave.	67.0	67.1	0.1	66.1	-0.9	67.3	0.3	65.9	-1.1
From San Benito Ave. to Palmer Lane	67.2	67.2	0.1	66.3	-0.8	67.5	0.3	66.1	-1.1
From Palmer Lane to Holbrook Lane	68.1	68.1	0.1	67.4	-0.7	68.3	0.3	67.2	-0.8
From Holbrook Lane to Marsh Road	67.9	68.0	0.1	67.3	-0.7	68.2	0.2	67.0	-0.9
Notes: dB = A-weighted decibels; L_{eq} = equivalent noise level. Source: FHWA 1978, AECOM in 2017									

Figure 1: Generalized Ground-Surface Vibration Curves

Source: FTA 2006, adapted by AECOM in 2017