

**12681 Jefferson Boulevard Project****Construction Vibration**

Receptor: 12681 Jefferson Boulevard  
 Equipment: Large Bulldozer, Auger Drill Rig

Source PPV (in/sec)	0.089
Reference Distance (ft)	25
Ground Factor (N)	1
Distance (ft)	50
Vibration Level (in/sec)	<b>0.045</b>

Receptor: 12681 Jefferson Boulevard  
 Equipment: Loaded Trucks

Source PPV (in/sec)	0.076
Reference Distance (ft)	25
Ground Factor (N)	1
Distance (ft)	50
Vibration Level (in/sec)	<b>0.038</b>

Receptor: 12636 Beatrice Street  
 Equipment: Large Bulldozer, Auger Drill Rig

Source PPV (in/sec)	0.089
Reference Distance (ft)	25
Ground Factor (N)	1
Distance (ft)	50
Vibration Level (in/sec)	<b>0.045</b>

Receptor: 12636 Beatrice Street  
 Equipment: Loaded Trucks

Source PPV (in/sec)	0.076
Reference Distance (ft)	25
Ground Factor (N)	1
Distance (ft)	50
Vibration Level (in/sec)	<b>0.038</b>

**12681 Jefferson Boulevard Project**

Receptor: 12681 Jefferson Boulevard  
 Equipment: Small Dozer-Type Equipment

Source PPV (in/sec)	0.003
Reference Distance (ft)	25
Ground Factor (N)	1
Distance (ft)	50
Vibration Level (in/sec)	<b>0.002</b>

Receptor: 12681 Jefferson Boulevard  
 Equipment: Jackhammer

Source PPV (in/sec)	0.035
Reference Distance (ft)	25
Ground Factor (N)	1
Distance (ft)	50
Vibration Level (in/sec)	<b>0.018</b>

Receptor: 12636 Beatrice Street  
 Equipment: Small Dozer-Type Equipment

Source PPV (in/sec)	0.003
Reference Distance (ft)	25
Ground Factor (N)	1
Distance (ft)	50
Vibration Level (in/sec)	<b>0.002</b>

Receptor: 12636 Beatrice Street  
 Equipment: Jackhammer

Source PPV (in/sec)	0.035
Reference Distance (ft)	25
Ground Factor (N)	1
Distance (ft)	50
Vibration Level (in/sec)	<b>0.018</b>

**Sources**

California Department of Transportation (Caltrans), *Transportation and Construction Vibration Guidance Manual*,  
 Federal Transit Administration (FTA), *Transit Noise and Vibration Impact Assessment*, May 2006

**12681 Jefferson Boulevard Project****Construction Vibration**

Receptor: 12777 Jefferson Boulevard  
 Equipment: Large Bulldozer, Auger Drill Rig

Source PPV (in/sec)	0.089
Reference Distance (ft)	25
Ground Factor (N)	1
Distance (ft)	15
Vibration Level (in/sec)	<b>0.148</b>

Receptor: 12777 Jefferson Boulevard  
 Equipment: Loaded Trucks

Source PPV (in/sec)	0.076
Reference Distance (ft)	25
Ground Factor (N)	1
Distance (ft)	15
Vibration Level (in/sec)	<b>0.127</b>

Receptor: 12665 Village Lane  
 Equipment: Large Bulldozer, Auger Drill Rig

Source PPV (in/sec)	0.089
Reference Distance (ft)	25
Ground Factor (N)	1
Distance (ft)	130
Vibration Level (in/sec)	<b>0.017</b>

Receptor: 12665 Village Lane  
 Equipment: Loaded Trucks

Source PPV (in/sec)	0.076
Reference Distance (ft)	25
Ground Factor (N)	1
Distance (ft)	130
Vibration Level (in/sec)	<b>0.015</b>

**12681 Jefferson Boulevard Project**

Receptor: 12777 Jefferson Boulevard  
 Equipment: Small Dozer-Type Equipment

Source PPV (in/sec)	0.003
Reference Distance (ft)	25
Ground Factor (N)	1
Distance (ft)	15
Vibration Level (in/sec)	<b>0.005</b>

Receptor: 12777 Jefferson Boulevard  
 Equipment: Jackhammer

Source PPV (in/sec)	0.035
Reference Distance (ft)	25
Ground Factor (N)	1
Distance (ft)	15
Vibration Level (in/sec)	<b>0.058</b>

Receptor: 12665 Village Lane  
 Equipment: Small Dozer-Type Equipment

Source PPV (in/sec)	0.003
Reference Distance (ft)	25
Ground Factor (N)	1
Distance (ft)	130
Vibration Level (in/sec)	<b>0.001</b>

Receptor: 12665 Village Lane  
 Equipment: Jackhammer

Source PPV (in/sec)	0.035
Reference Distance (ft)	25
Ground Factor (N)	1
Distance (ft)	130
Vibration Level (in/sec)	<b>0.007</b>