

TABLE 4.5-2: FTA VIBRATION IMPACT CRITERIA			
Land Use Category	Vibration Impact Level for Frequent Events (VdB)/a/	Vibration Impact Level for Occasional Events (VdB)/b/	Vibration Impact Level for Infrequent Events (VdB)/c/
Category 1: Buildings where low ambient vibration is essential for interior operations	65	65	65
Category 2: Residences and buildings where people normally sleep	72	75	80
Category 3: Institutional land uses with primarily daytime uses	75	78	83
/a/ Frequent events are defined as more than 70 vibration events of the same source per day. /b/ Occasional events are defined as between 30 and 70 vibration events of the same source per day. /c/ Infrequent events are defined as fewer than 30 vibration events of the same source per day. SOURCE: Federal Transit Administration, <i>Transit Noise and Vibration Impact Assessment</i> , May 2006.			

Existing Noise and Vibration Levels

Monitored Ambient Noise Levels. The existing noise environment of the project area is characterized by vehicular traffic and noises typical to a dense urban area (e.g., sirens, horns, helicopters, etc.). Sound measurements were taken using a SoundPro DL Sound Level Meter between 8:00 a.m. and 9:30 p.m. on January 11, 2010 to determine existing ambient daytime and nighttime noise levels in the project vicinity. These readings were used to establish existing ambient noise conditions and to provide a baseline for evaluating construction and operational noise impacts. Noise monitoring locations are shown in **Figure 4.5-2**. As shown in **Table 4.5-3**, existing ambient sound levels ranged from 61.6 to 67.1 dBA L_{eq} during the AM peak hour period (7:30 to 9:30 a.m.). Off-peak ambient sound levels ranged from 54.7 to 66.2 dBA L_{eq} . Nighttime ambient noise levels ranged from 54.1 to 54.6 dBA L_{eq} .