

This section assesses the potential for noise and vibration impacts from operation of the proposed 68th Street/Hunter College Subway Station Improvement Project. (Construction-related noise and vibration impacts are discussed in Chapter 13: Construction Impacts.)

7.1 NOISE

7.1.1 METHODOLOGY

Because the project is proposed to be funded by the FTA, the noise analyses were conducted according to FTA guidelines published as Transit Noise and Vibration Impact Assessment (2006). Additionally, the CEQR Technical Manual was consulted for information specific to projects located in New York City.

According to FTA's Transit Noise and Vibration Impact Assessment guidelines, in many instances it is possible to determine that a project would not have the potential for a significant noise impact simply from its proposed physical characteristics, and therefore no further analysis is necessary. According to these guidelines, noise generated by subways is generally not concern for surface receptors. A General Noise Assessment would be appropriate if the project included certain ancillary subway facilities such as ventilation plants. The screening guidelines in the CEQR Technical Manual indicate that a noise analysis would be appropriate if the project would: (1) generate any mobile or stationary sources of noise; and/or (2) be located in an area with existing high ambient noise levels.

7.1.2 EXISTING CONDITIONS

Existing noise levels in the project area are dominated by traffic noise.

7.2 IMPACTS AND MITIGATION

The Proposed Project and the Proposed Project *with Option E1* include a louvered ventilation fan to provide ventilation for the proposed Elevator Machine Room within the subway station. The louvered fan would ventilate to the light well located between the sidewalk and Thomas Hunter Hall. The adjacent basement room in Thomas Hunter Hall is a battery backup system for the Main Telephone Switch Room for Hunter College. Although noise specifications for the ventilation fan would be determined as the design details are finalized, no impacts from the fan are anticipated because of the existing urban noise environment.

The Proposed Project and the Proposed Project *with Option E1* do not include the introduction of new noise sources at the 68th Street/Hunter College Station, such as tunnel ventilation facilities, and would not increase the frequency of train traffic through the station. Future operational noise levels are expected to remain as they are today. No significant adverse impacts to ambient noise levels from operation of the Proposed Project and the Proposed Project *with Option E1* are anticipated.

Street Stair Options

The Proposed Project would place a new subway entrance adjacent to a building with institutional uses and a new subway entrance within a commercial space. The new subway entrances would not provide a line-of-sight path for train noise to surface receptors and any noise emanating from

the new stairs is not expected to increase current ambient levels. Noise from passengers using the subway entrances is not expected to elevate existing noise levels.

The Proposed Project *with Option E1* would place a new subway entrance adjacent to a building with institutional uses and a new subway entrance adjacent to a building with ground floor retail uses. The new subway entrances would not provide a line-of-sight path for train noise to surface receptors and any noise emanating from the new stair is not expected to increase current ambient levels. Noise from passengers using the subway entrances is not expected to elevate existing noise levels.

7.3 VIBRATION

FTA guidelines regarding screening for vibration analyses indicate that transit projects that do not involve vehicles, such as a station rehabilitation, do not have potential for vibration impact unless the track system will be modified (e.g., tracks moved or switches modified). Operation of the Proposed Project would not modify the tracks at the station or result in other sources of vibration. No further analysis was conducted and no significant adverse impacts from vibration are anticipated. Analysis of vibration due to construction of the Proposed Project is provided in Chapter 13.

Street Stair Options

The Proposed Project and the Proposed Project *with Option E1* would not change vibration levels in the area.