Chapter 17: Public Health

17.1 Introduction

This chapter assesses the effect of the Proposed Actions on public health. As defined by the *City Environmental Quality Review (CEQR) Technical Manual*, public health is the organized effort of society to protect and improve the health and well-being of the population through monitoring; assessment and surveillance; health promotion; prevention of disease, injury, disorder, disability, and premature death; and reducing inequalities in health status. The goal of CEQR with respect to public health is to determine whether adverse impacts on human health may occur as a result of a proposed project and, if so, to identify measures to mitigate such effects.

As described in Chapter 1, "Project Description," the New York City Department of City Planning is proposing a series of land use actions (collectively, the "Proposed Actions"), including zoning map amendments, zoning text amendments (including mapping a special purpose district and designating a Mandatory Inclusionary Housing (MIH) area to ensure affordable housing is part of any future development), and changes to the City Map that would facilitate the implementation of a multi-year planning study conducted in the Parkchester, Van Nest, and Morris Park neighborhoods of the Bronx in partnership with local stakeholders, City agencies, and the Metropolitan Transportation Authority (MTA). The Proposed Actions would affect an approximately 46-block area primarily along main corridors – East Tremont Avenue, White Plains Road, Bronxdale Avenue, Eastchester Road, and Stillwell Avenue, located near the future Parkchester/Van Nest and Morris Park Metro-North Stations in Bronx Community Districts 9, 10, and 11 (the "Affected Area"). The 28-block area closest to the future Parkchester/Van Nest Station is generally bounded by Baker Avenue and Van Nest Avenue to the north, Silver Street to the east, East Tremont Avenue to the south, and St. Lawrence Avenue to the west. The approximately 18-block area closest to the future Morris Park Station is generally bounded by Pelham Parkway to the north, Marconi Street to the east, Williamsbridge Road to the south, and Tenbroeck Avenue to the west. The Proposed Actions are intended to leverage new planned Metro-North service to promote economic growth, facilitate the development of housing, including affordable housing, as well as guide investment in the public realm around stations to improve pedestrian safety and comfort.

The *CEQR Technical Manual* states that a public health assessment is not necessary for most projects. Where no significant adverse unmitigated impacts are found in other CEQR analysis areas – such as air quality, water quality, hazardous materials, or noise – no public health analysis is warranted. If, however, an unmitigated adverse impact is identified in any of these other CEQR analysis areas, the lead agency may determine that a public health assessment is warranted for that specific technical area. This assessment represents a distinct layer of inquiry; its criteria are informed by public health considerations

and are therefore different from the criteria that triggered the need to conduct a public health assessment.

17.2 Principal Conclusions

The Proposed Actions would not result in significant adverse public health impacts. As described in the relevant analyses of this EIS, the Proposed Actions would not result in unmitigated significant adverse impacts in the following technical areas that contribute to public health: water quality, hazardous materials, operational noise, operational air quality, or construction air quality. However, as described in Chapter 19, "Construction," the Proposed Actions could result in unmitigated construction noise impacts as defined by the *CEQR Technical Manual.*

The analysis presented in Chapter 19, "Construction," found that predicted noise levels due to construction-related activities would result in noise levels that may exceed the *CEQR Technical Manual* incremental noise impact criteria at receptors within and in the vicinity of the Affected Area. As such, a public health assessment for construction noise was conducted, and it was determined that the impacts related to construction noise would not generate a significant adverse public health impact.

17.3 Public Health Assessment

CONSTRUCTION NOISE

As described in Chapter 19, "Construction," the *CEQR Technical Manual* specifies that the construction noise analysis considers the potential for construction of a project to create high noise levels (the "intensity"), whether construction noise would occur for an extended period of time (the "duration"), and the locations where construction has the potential to produce noise ("receptors") in evaluating potential construction noise effects.

Construction noise associated with the Proposed Actions would be required to follow the requirements of the New York City Noise Control Code (NYC Noise Code) for construction noise control measures. Specific noise control measures will be described in noise mitigation plans required under the NYC Noise Code. These measures could include a variety of source and path controls. Even with these measures, the analysis presented in Chapter 19, "Construction," found that predicted noise levels due to construction-related activities would result in noise levels that may exceed the *CEQR Technical Manual* incremental noise impact criteria at receptors within and in the vicinity of the Affected Area. Therefore, the effect on Public Health from construction noise is evaluated below.

Assessment

Construction noise impacts thresholds used in Chapter 19, "Construction," are based on quality-of-life considerations. These differ from public health considerations, which employ distinct criteria that are appropriate in the public health context. Thus, pursuant to the public health assessment, significance is

assessed in terms of the magnitude of noise level and duration of exposure rather than incremental change in noise level. As stated in Chapter 20 of the *CEQR Technical Manual*, these criteria are appropriate because they more closely relate to public health concerns. Chronic noise exposure may raise blood pressure and has been suggested to contribute to myocardial infarctions, as well as to interfere with language development in children; prolonged exposure to levels about 85 dBA will eventually harm hearing. In addition, episodic and unpredictable exposure to short-term impacts of noise at high decibel levels may also affect health. Accordingly, it is appropriate to evaluate magnitude of noise level and duration of exposure when examining public health.

Although the *CEQR Technical Manual* thresholds for significant adverse impacts are predicted to be exceeded at certain locations during construction, the magnitude and duration of these exceedances would not constitute a significant adverse public health impact. As discussed above, the *CEQR Technical Manual* noise thresholds are based on quality-of-life considerations and not on public health considerations. An impact found pursuant to a quality-of-life framework does not imply that an impact will exist when the analysis area is evaluated in terms of public health. Because the buildings at all receptors would provide minimum 25 dBA window/wall attenuation, interior noise levels would be below ~~the health-based noise threshold of~~ 85 dBA, the level which prolonged exposure will eventually harm hearing, at all receptors. As such, residents at these receptors would not experience exterior levels of construction noise. Accordingly, neither the magnitude nor the duration of the construction noise ~~reaches the~~ would result in impacts to public health ~~impact threshold~~. Since these are the appropriate criteria for the Public Health assessment, it follows that the Proposed Actions would not result in significant adverse public health impacts due to construction noise.