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Public Health

This chapter addresses the Proposed Project's effect on public health. As defined by the *2021 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.

Introduction

The *CEQR Technical Manual* states that a public health assessment is not necessary for most projects. Where no unmitigated significant adverse impact is found in other CEQR analysis areas related to public health—such as air quality, water quality, hazardous materials, or noise—no public health analysis is warranted. If, however, an unmitigated significant 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.

As described in the relevant analyses of this EIS, the Proposed Actions would not result in significant adverse impacts in any of the technical areas related to public health. The relevant analyses for the consideration of public health impacts are summarized and reviewed in this chapter.

Principal Conclusions

The Proposed Project would not result in any significant adverse public health impacts as defined by CEQR. The Proposed Project would not result in unmitigated significant adverse impacts in the areas of hazardous materials, water quality, air quality, noise, or construction.

Methodology

As noted above, the *CEQR Technical Manual* states that where no unmitigated significant adverse impact is found in other CEQR analysis areas related to public health—such as air quality, water quality, hazardous materials, or noise—no public health analysis is warranted. If, however, an unmitigated significant 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.

Assessment

As discussed in **Chapter 10, Hazardous Materials**; **Chapter 11, Water and Sewer Infrastructure**; **Chapter 15, Air Quality**; **Chapter 17, Noise**; and **Chapter 20, Construction**, the Proposed Project would not result in significant adverse impacts in these technical areas, and no mitigation is warranted. As such, the Proposed Project would not have the potential to result in public health impacts as defined by CEQR.

Hazardous Materials

Potential health exposures from hazardous materials in soil and dust include metals, hazardous compounds, or dust conditions that the public can be exposed to through ingestion, inhalation, or dermal contact. Health effects of exposure can lead to poisonings, gastroenteric illnesses, chronic illnesses, asthma, or respiratory complaints. The potential for health impacts associated with hazardous materials can be evaluated in terms of potential concentrations from the analysis in **Chapter 10, Hazardous Materials**.

As detailed in **Chapter 10, Hazardous Materials**, the Proposed Actions would include the placement of an (E)-Designation E-834 on the Development Site to ensure that supplemental testing for and remediation of hazardous materials, if necessary, are completed prior to future development. Under the (E)-Designation, the New York City Mayor's Office of Environmental Remediation (OER) would be authorized to require supplemental subsurface remedial investigation (RI) to further characterize specific areas of ground disturbance on the Development Site for contaminants relating to soil, groundwater, and soil vapor conditions. Subsurface contaminants would subsequently be addressed through the development and implementation of an OER-approved Remedial Action Work Plan (RAWP) and Construction Health and Safety Plan (CHASP). This would mitigate potential risk and exposure relating to the presence of hazardous materials in the subsurface, by implementing institutional and/or engineering controls, as necessary.

By implementing the OER-approved RAWP and CHASP, it is expected that no potential exposure or significant adverse impacts related to hazardous materials would occur during or after construction of the Proposed Project. With the absence of significant adverse impacts to hazardous materials, there is no potential for an adverse impact to public health.

Water Quality

Potential exposures to contaminated water (potable, non-potable, and recreational) from ingestion or secondary contact can cause infectious disease, neurologic effects, and kidney or other organ system effects, or cancers. The potential effects of a project's impact of water quality can be assessed from its potential to impact surrounding natural resources or water systems, as analyzed in **Chapter 9, Natural Resources** and **Chapter 11, Water and Sewer Infrastructure**.

As there are no wetlands or surface waters located at or adjacent to the Project Area, the Proposed Project would not result in direct effects to same. Flushing Bay is located approximately 120 feet to the north of the Project Area. Potential indirect impacts to Flushing Bay would be avoided through implementation of stormwater controls in accordance with all conditions of an approved Stormwater Pollution Prevention Plan, as required by New York City Department of Environmental Protection (NYCDEP) and the New York State Department of Environmental Coordination and would therefore not affect water quality with respect to public health.

Stormwater Best Management Practices would be required in accordance with the NYCDEP Unified Stormwater Rule (USWR) guidelines, which includes requirements for bringing the Development Site into compliance with the allowable stormwater release rate. The Proposed Actions would not result in significant adverse impacts to water and sewer infrastructure.

With the absence of significant adverse impacts to natural resources and water infrastructure, there is no potential for an adverse impact to public health as a result of water quality impacts.

Air Quality

Potential health exposures from inhalation of air pollutants such as fine particles, carbon monoxide (CO), nitrogen dioxide (NO_2), and ozone can lead to the exacerbation of asthma symptoms and contribute to poor cardiovascular and respiratory health outcomes. Health effects may also occur from exposure to other pollutants from combustion and process emissions such as volatile organic compounds (VOCs). The potential for health impacts associated with air quality conditions can be evaluated from the results of the analysis detailed in **Chapter 15, Air Quality**.

As detailed in **Chapter 15, Air Quality**, the air quality analysis of the Proposed Actions addressed mobile sources; parking facilities; the Proposed Project's heating, ventilation, and air conditioning (HVAC); and hot water system emissions. Three industrial source facilities within 400 feet of the Development Site boundary will continue to operate until Willets Point Phase 3 project is built in 2039. However, the Proposed Project's sensitive land uses are located further than 400 feet from these facilities. As such, air quality impacts from industrial sources are not expected to be significant.

The mobile source analyses determined that Proposed Action-generated traffic resulting in concentrations of CO at the analyzed intersections would not result in any violations of National Ambient Air Quality Standards (NAAQS). Further, the 8-hour CO incremental concentrations and the 24-hour and annual incremental $PM_{2.5}$ concentrations were predicted to be below the City's *de minimis* criteria. As such, no significant adverse air quality impacts are expected from the Proposed Project's mobile sources.

Five parking garages and one surface lot are planned as part of the Proposed Project. The largest facilities are garages are in Areas of Development A and D. The Area of Development D garage would be a ~~9~~12-level, naturally ventilated parking facility. The largest garage in Area of Development

A would occupy the first two levels of the podium of the building. This garage would be mechanically ventilated with exhaust via louvers at each parking level, located on the Shea Road side of the building. The air quality analyses evaluated the impacts from these two largest garages and found that with respect to both CO and particulate matter ($PM_{2.5}$), the results were below CEQR *de minimis* thresholds and NAAQS. Accordingly, no significant adverse air quality impacts are expected from the Proposed Project's parking facilities.

The Applicant would commit to install electric HVAC and hot water systems. Therefore, no local emissions and no adverse air quality impacts are anticipated from these systems.

As the results of the air quality analyses demonstrated that the Proposed Actions would not generate any significant adverse air quality impacts, there is no potential for public health impacts related to air quality.

Noise

Prolonged exposure to high noise levels has the potential to decrease quality of life, raise blood pressure and myocardial infarctions. Chronic exposure to levels above 85 dBA will eventually harm hearing. Noise modeling results from **Chapter 17, Noise** assess whether there would be exceedances of allowable noise levels that may result in public health impacts.

As detailed in **Chapter 17, Noise**, the Proposed Project would introduce both new stationary and mobile sources of noise, as well as new sensitive noise receptors. The increase in noise due to mobile sources from the No-Action and With-Action conditions have been determined from proportional noise modeling at one intersection and one monitoring location within the study area. Mobile source noise levels would increase by up to 1.9 dBA in the With-Action condition as compared to the No-Action condition due to traffic generated by the Proposed Actions. Mobile source noise levels would increase up to 2.0 dBA for the With-Action condition compared to existing conditions due to forecast traffic growth in the No-Action condition and traffic generated by the Proposed Actions.

The closest existing noise-sensitive building is the proposed residential use that will be introduced by the Willets Point development in the No-Action condition, located east of the Project Area. No-Action noise levels at this receptor would range from 69.9 to 72.9 dBA (L_{eq}). The Proposed Actions would result in an increase up to 1.9 dBA (L_{eq}) in noise, such that With-Action noise levels at this receptor due to stationary and mobile sources would range from 71.8 to 74.8 dBA (L_{eq}). Since noise levels would not increase by 3 dBA or more at this receptor, the Proposed Project would not result in a significant adverse noise impact due to mobile and stationary sources, and therefore would not affect public health.

Based on the noise modeling for new sensitive receptors, the With-Action noise conditions would require specific window/wall attenuation on certain facades of the proposed buildings (see **Chapter 17, Noise**). The required window/wall attenuation and an alternate means of ventilation to ensure an acceptable interior noise environment would be incorporated into the development agreement and/or amended lease. As the major noise contributor in the area is the noise from the elevated subway operations, the Proposed Actions are not anticipated to cause excessively high chronic noise exposure and therefore, are not expected to result in a significant adverse public health impact related to operational noise.

Problem Gambling

In 2013, New Yorkers authorized a constitutional amendment to permit full-service casinos in New York State. In 2022, State legislation established a Request-for-Proposal (RFP) process for up to three of these licenses to be awarded in downstate New York, including New York City. Casino gambling is legal in 47 states and at least 59 countries, in facilities ranging from small, local facilities, to regional destination "integrated resorts" that include live music and entertainment, hospitality programming, meeting and convention centers, and other diverse attractions. Over the past decade, the U.S. has seen a significant rise in the popularity of online gambling, driven by key regulatory changes. Various forms of online betting are legal in 30 states. In April 2024, the City of New York passed a zoning text amendment to permit gaming facilities, pursuant to the State RFP process, in certain commercial and manufacturing districts in the City.[1]

While most people gamble recreationally and responsibly, problematic gambling behavior is a serious issue for a small segment of the population (estimated at 0.7 percent of the New York State population).[2, 3, 4, 5] Problem gambling, also known as gambling disorder or addiction, is a recognized mental health diagnosis defined as any gambling behavior patterns that compromise, disrupt or damage personal, family, or vocational pursuits.[6,7] Furthermore, problem gambling is associated with other behavioral health concerns including mental health disorders and substance use disorders.[8] Numerous studies have identified the effect of problem gambling on physical health and behavioral health. Research suggests that problem gambling disproportionately affects disadvantaged groups: prevalence rates were found to be higher among Black, Native, and Asian Americans compared to White Americans.[9] Research suggests that increased accessibility, availability, and acceptability of gambling facilities have been linked to increased rates of problem gambling behavior.[10] Early onset of gambling during adolescence into early adulthood is associated with higher incidence and severity of gambling and a risk factor for gambling disorder later in life.[11] Examples of how gaming operators

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1 Gaming Facility Text Amendment: Overview - DCP (nyc.gov)

2 National Council on Problem Gambling. (2024). *FAQs: What is problem gambling?* Retrieved from https://www.ncpgambling.org/help-treatment/faqs-what-is-problem-gambling/

3 A. Price, M. Hilbrecht, and R. Billi (2021). *Charting a path towards a public health approach for gambling harm prevention*, Journal of public health. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7787930/

4 Latvala, T., et al. (2019*). Public health effects of gambling - debate on a conceptual model.* BMC public health, 19(1), 1077. https://doi.org/10.1186/s12889-019-7391-z

5 Office of Addiction Services and Supports (OASAS). (2020). *Gambling survey 2020*. New York State Office of Addiction Services and Supports. https://oasas.ny.gov/system/files/documents/2024/03/oasas_gambling_survey_2020.pdf

6 Health Resources in Action. (2024). *A Public Health Approach to Problem Gambling*. Retrieved from https://hria.org/2022/03/31/problemgambling/

7 Substance Abuse and Mental Health Services Administration. (2016). *Impact of the DSM-IV to DSM-5 Changes on the National Survey on Drug Use and Health*. Rockville, MD: Substance Abuse and Mental Health Services Administration (US). Table 3.38, DSM-IV to DSM-5 Gambling Disorder Comparison. Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK519704/table/ch3.t39/

8 Dowling NA, Cowlishaw S, Jackson AC, Merkouris SS, Francis KL, Christensen DR. Prevalence of psychiatric co-morbidity in treatment-seeking problem gamblers: A systematic review and meta-analysis. Aust N Z J Psychiatry. 2015 Jun;49(6):519-39. doi: 10.1177/0004867415575774. Epub 2015 Mar 3. PMID: 25735959; PMCID: PMC4438101.

9 A. A. Alegria, N. M. Petry, D. S. Hasin, S.-M. Liu, B. F. Grant, and C. Blanco (2009). *Disordered gambling among racial and ethnic groups in the US: Results from the National Epidemiologic Survey on alcohol and related conditions CNS spectrums*. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2737691/

10 O'Gilvie, P. J. (2022). *The impact of casino proximity on northeast urban communities: A literature review*. Humanities and Social Sciences Communications, 9(36). https://doi.org/10.1057/s41599-022-01055-1

11 Moreira D, Azeredo A, Dias P. Risk Factors for Gambling Disorder: A Systematic Review. J Gambl Stud. 2023 Jun;39(2):483-511. doi: 10.1007/s10899-023-10195-1. Epub 2023 Mar 8. PMID: 36884150; PMCID: PMC9994414.

have taken proactive approaches to address problem gambling behavior include partnerships with community-based providers, such as licensed mental health and substance use providers.

In the United States, current treatment options for problem gambling are similar to those available for substance use disorders, including individual, group, and therapy via Cognitive-Behavioral Therapy (CBT) and psychodynamic approaches, along with twelve-step programs such as Gamblers Anonymous and Gam-Anon. Systematic reviews of studies and clinical trials have found various forms of CBT and psychotherapy to be effective in reducing gambling behavior.[12,13] Twelve-step programs have been shown to achieve similar results to formal treatment programs.[14] Given the financial component of problem gambling, financial planning, counseling, or other interventions are typically included in treatment as well.[12] Financial wellness programs have been shown to help problem gamblers and their families restore financial control.[15]

In New York State, the State of New York Office of Addiction Services and Support (OASAS) certifies problem gambling treatment and prevention centers throughout the state.[16] Referrals to these resources can be accessed through a dedicated 24/7 phone number, 1-877-8-HOPENY.

In New York City, several targeted programs and services focus specifically on treating gambling addiction. These include the Center for Motivation and Change which offers comprehensive outpatient and residential treatment,[17] the Lower East Side Recovery Center which offers evidence-based treatment for problem gambling including special programs for concurrent substance use disorders,[18] and the SAFE Foundation, which operates a problem gambling treatment program combining therapy and financial counseling.[19] Financial counseling, including debt counseling and emergency resource referrals, is available for free through NYC Financial Empowerment Centers.[20] In addition, mental and behavioral health services are offered throughout New York City, including at NYC Health + Hospitals (H+H) facilities and at nonprofit organizations across the City.

It is expected that appropriate measures to address concerns regarding problem gambling will be addressed by all applicants as part of the gaming license Request for Applications (RFA) process overseen by the New York State Gaming Commission (the Commission). The RFA states in this regard that, "No applicant shall be eligible to receive a gaming license unless the applicant meets the following criteria and clearly states as part of an application that the applicant shall: …demonstrate to the commission how the applicant proposes to address problem gambling concerns…". The

[12] Gooding P, Tarrier N. (2009). A systematic review and meta-analysis of cognitive-behavioural interventions to reduce problem gambling: hedging our bets? Database of Abstracts of Reviews of Effects (DARE): Quality-assessed Reviews. York (UK): Centre for Reviews and Dissemination. Available from: https://www.ncbi.nlm.nih.gov/books/NBK77345/

[13] DARE: Quality-assessed Reviews (2005). Outcome of psychological treatments of pathological gambling: a review and meta-analysis. York (UK): Centre for Reviews and Dissemination. Available from: https://www.ncbi.nlm.nih.gov/books/NBK71415/

[14] Skinner, W., & Brown, D (2021). From Twelve Steps to First Steps: An Integrative Approach to Care Pathways for Gambling Disorder. Available from: https://cdspress.ca/wp-content/uploads/2023/11/8_CHAPTER-EIGHT_Skinner_FINAL.pdf

[15] Marlatt, G., & Donovan, D (2005). Relapse Prevention, Second Edition: Maintenance Strategies in the Treatment of Addictive Behaviors. Guilford Press. Available from https://books.google.com/books?id=Sj-NZMIF-QcC&dq=%22problem+gambling%22+%22financial+counseling%22+review&lr=&source=gbs_navlinks_s

[16] OASAS Provider and Program Search (2024). Retrieved from https://webapps.oasas.ny.gov/providerDirectory/

[17] Center for Motivation and Change (2024). https://motivationandchange.com/ Accessed August 2024.

[18] Lower East Side Recovery Center (2024). https://www.lesc.org/we-offer/problem-gambling/ Accessed August 2024.

[19] The SAFE Foundation (2024). https://www.thesafefoundation.org/problem-gambling-treatment. Accessed August 2024.

[20] New York City Department of Consumer and Worker Protection (2024). Retrieved from https://www.nyc.gov/site/dca/consumers/get-free-financial-counseling.page

Proposed Project would include access to support services concerning problem gambling, including project-specific partnerships in addition to the available services mentioned above.

Construction

Air Quality

Based on the emission intensity analysis and in consultation with NYC Department of Environmental Protection (DEP), construction of two Areas of Development—Area of Development A, with the highest emissions, and Area of Development B, with the closest residential receptors—were selected for dispersion modeling, as detailed in **Chapter 20, Construction**. The results of the quantitative on-site construction analysis indicate that the Proposed Project would not exceed annual NO_2, 24-hour PM_{10}, and 1-hour and 8-hour CO NAAQS. In addition, incremental concentrations of $PM_{2.5}$ would not exceed the City's *de minimis* criteria. Construction-related trips at the off-site intersections would be less than the Project-generated trips under the With-Action operating conditions and would not be expected to significantly impact air quality levels. Therefore, no significant adverse construction air quality impacts are anticipated from the Proposed Project and there would be no potential for a related public health impact.

Noise

As discussed in **Chapter 20, Construction**, detailed construction noise modeling was performed at one receptor located to the east of the Development Site, as part of Willets Point Phase 2 (Receptor R04). Construction is predicted to result in noise level increases more than 5.0 dBA up to approximately 8.7 dBA for 9 months at residential receptors in Willets Point Phase 2 during limited periods of time. This proposed residential building in the Willets Point Project Phase 2 Development will have insulated glass windows with OITC rating of 35 and alternate means of ventilation, thereby improving the window/wall attenuation provided by the building façade and allowing for the maintenance of a closed-window condition as presented in the Willets Point Phase 2 Development Project FSSEIS, February 23, 2024. Therefore, maximum interior noise levels during construction would be in the mid- to high-40s dBA for the peak months of construction, and low-40s dBA during most of the construction period, which is no more than approximately 3 dBA greater than the recommended noise level threshold for residential use according to the CEQR Technical Manual noise exposure criteria. For most of the construction period, interior noise levels due to construction would be in the low-40s dBA in Willets Point Phase 2 development. Noise levels in the mid-40s dBA are comparable to typical noise levels in a residential building setting.

Per New York City Noise Control Code regulations, the Proposed Project would be required to prepare a Construction Noise Mitigation Plan, which may identify more control measures that would further reduce construction noise levels. Also, the construction management team has committed that no noise intensive equipment would be operating during game time (for Citi Field and for the future soccer stadium) or after 10 PM. Therefore, the predicted levels of construction noise were determined not to rise to the level of a significant adverse impact at any noise receptors and there would be no potential for a related public health impact.