NYC LANDMARKS PRESERVATION COMMISSION

City Landmarks Preservation Review

Potential effects of the proposed project on archaeological and historic resources require review by the Environmental Review Department of the Commission as part of Section 106.

B.4. Indirect/Secondary and Cumulative Impacts

The preceding sections of the DEIS describe impacts that would occur as a direct result of implementation of one of the Build Alternatives. This section describes those impacts that may occur indirectly or only amount to a significant impact when combined with other projects or actions.

B.4.a. Indirect/Secondary Impacts

According the Council on Environmental Quality (40 CFR 1508.8), indirect impacts\(^{35}\) are those effects caused by the action and occurring later in time or farther removed in distance, but still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

In transportation projects, these impacts occur most frequently when a road or transit service is expanded or built, providing improved access to an area that subsequently experiences a change in use or intensity of use.

While each of the Build Alternatives have been designed to improve traffic operations as much as possible, due to the significant constraints in this area including dense development and limited capacity on abutting highway segments, the project is not expected to have an effect on population or development patterns in the area. In dense urban neighborhoods such as those within the Socioeconomic Study Area (Greenpoint, Williamsburg, East Williamsburg, Maspeth, West Maspeth, Sunnyside, and Long Island City) development is driven primarily by changes in zoning and the city-wide demand for housing, which is currently very high. These neighborhoods are also more dependent on transit than the highway network for daily commuting. While operational improvements to this 1.8 km (1.1 mi) segment of the BQE would have significant benefits for the local community, it is not expected to attract additional residents to the area. Development planned for the area will occur with or without improvements to the Kosciuszko Bridge. Therefore, it is expected that the project would have no indirect/secondary impacts.

B.4.b. Cumulative Impacts

According the Council on Environmental Quality (40 CFR 1508.7), cumulative impacts are

\(^{35}\) Note that, while CEQ defined “indirect effects” only, FHWA uses the terms indirect and secondary interchangeably with regard to these impacts. (See “Questions and Answers Regarding the Consideration of Indirect and Cumulative Impacts in the NEPA Process,” http://www.environment.fhwa.dot.gov/guidebook/qaimpact.asp.) This section will follow NYSDOT policy of using the phrase “indirect/secondary impacts”.
those impacts on the environment, which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

The cumulative effects of an action may be undetectable when viewed in the individual context of direct and even indirect impacts, but nevertheless when added to other actions can eventually lead to a measurable environmental change. Cumulative impacts are the net result of both the proposed project and the other improvements planned in, near, and around the project.

As described in Section II.C.1.w, a number of other projects, both public and private, are ongoing or planned for the area surrounding the Kosciuszko Bridge. These projects, many of which required or will require their own environmental reviews, have the potential, when combined with this project to have impacts on the community or environment. Based on a review of these projects, three areas of potential cumulative impact were identified and considered: traffic, air quality, and economics.

Several of the proposed projects in the area would, either by the nature of their function (e.g., Grand Avenue Bus Depot) or through the addition of new residents (e.g., Greenpoint/Williamsburg Waterfront Rezoning) would add vehicle trips to the local street network and the BQE. The Kosciuszko Bridge Project took these trips, and all other projected new trips, into account in their traffic study as described in Section II.C.1.w. Therefore, any potential cumulative traffic impacts have been incorporated into the direct impact analysis and need not be reviewed further. All traffic impacts associated with this project and mitigation measures proposed are described in Section III.C.2.b.

The incremental increase in vehicle trips described above, also have the potential to impact air quality in the area. However, the project’s air quality study, described in Section IV.B.3.h, was based on data provided by the project’s traffic study. Therefore any cumulative air quality impacts, at the microscale or mesoscale levels, were incorporated into the direct impact analysis.

Finally, construction of any of the Build Alternatives would result in significant positive economic impacts as described in Section IV.B.2, through the creation of jobs associated with construction and construction services (e.g., construction supplies and food and beverage service). The Build Alternatives are estimated to create 11,000 to 16,000 on-site and off-site jobs during the construction period. Other projects planned for the area would similarly create new jobs. Although estimates were not made of the employment benefits of these projects, they, combined with the Kosciuszko Bridge Project, would only enhance employment opportunities in the local area.

**B.5. Relationship Between Short-Term Uses of Man’s Environment and the Maintenance and Enhancement of Long-Term Productivity**

Short and long term effects associated with large scale transportation improvement projects like the Kosciuszko Bridge project are unavoidable. Construction impacts produce short-term results, while the maintenance and enhancement of the project produce long-term productivity. The effects of both short term uses and long term uses are detailed below.
B.5.a. Short-term

The construction impacts as a result of the No Build Alternative would be minimal, but the routine maintenance and construction required to keep the bridge operating are significant when compared to the other Build Alternatives. However, because this alternative does not require any new construction, its short-term effects are minor.

The Rehabilitation Alternatives would produce fewer short-term effects during construction than the Bridge Replacement Alternatives. The short term effects would largely be a result of the construction associated with noise, air quality, energy consumption, and traffic congestion. To compensate for the short-term effects, these alternatives would improve the local economies in Brooklyn and Queens by providing jobs during construction.

The Bridge Replacement Alternatives would create greater construction impacts than the Rehabilitation Alternatives because of the new construction associated with these alternatives. The short-term impacts would result from the construction associated with the replacement bridge and temporary structures, as well as the traffic and pedestrian safety and access included in the alternatives. Evidenced by the Environmental Performance Commitments (EPCs), which are explained later in this section, NYSDOT’s aim is to reduce these construction impacts as much as possible, while maintaining safety and efficiency.

B.5.b. Long-term

Transportation systems are an integral part of economic growth and productivity and have the ability to improve the quality of life in urban areas, especially in concentrated metropolitan centers such as New York City. Given the significant role the city plays in the region’s economy, it follows that its transportation systems must conveniently, efficiently, and safely provide access for its residents and commuters. Its ability to effectively improve the quality of life as well as provide the aforementioned access to commuters and local residents is essential to economic growth and productivity.

Each of the proposed alternatives would result in improvements to the city’s economy, the existing roadway safety conditions, and local and regional access. The alternatives would also provide reductions in travel time, fuel consumption, congestion on local roads, and air pollutants.

B.6. Any Irreversible and Irretrievable Commitments of Resources Which Would be Involved in the Proposed Action

The loss of certain irretrievable resources such as energy, labor, and funds are an unavoidable result of construction associated with transportation projects like the Kosciuszko Bridge Project. However, the loss of these resources far outweighs the consequences of conserving them because these resources are widely available and conform with economic growth incentives provided by the government. Furthermore, their expenditure would not interfere with their availability for other projects. These materials are considered irretrievable because their reuse in an activity other than the proposed project is unlikely.

NYSDOT has dedicated itself to minimizing the loss of irretrievable resources by setting up EPCs to establish a set of standards for the utilization of materials, energy, emissions, and wastes among others. The purpose of these commitments is to minimize the effects of construction associated with the alternatives and to make the construction process as efficient
as possible, thus reducing the demand for the irretrievable resources. Their purpose in regards to green design and sustainability is similar – to minimize the demand of resources during and after construction.

The proposed improvements would reduce future traffic congestion and fuel consumption which would translate into energy consumption and air pollutant reductions in the project’s study area. The potential improvements provided by the proposed alternatives are far more beneficial both locally and regionally than the preservation of irretrievable resources which would inevitably be used for another project.

B.7. Adverse Environmental Impacts that Cannot be Avoided or Mitigated

Increased fuel demand and consumption and the stresses caused by increased use of the bridge and its roadways are examples of the unavoidable impacts that could result from the proposed alternatives. These impacts cannot be avoided regardless of mitigation measures provided in the alternatives. However, the benefits to be gained from the proposed alternatives and roadway improvements far outweigh the unavoidable adverse impacts that might occur as a result of this project.