

**A. INTRODUCTION**

SEQRA regulations require the consideration of the Proposed Project's potential to result in cumulative impacts (6 NYCRR 617.9(b)(5)(a)) and secondary impacts (6 NYCRR 617.9(b)(5)(d)). Secondary impacts are also known as induced growth, i.e., whether the Proposed Project would lead to growth outside the scope of the project elements.

**B. PRINCIPAL CONCLUSIONS AND IMPACTS**

The Proposed Project, taken in concert with other past, present, and reasonably foreseeable future action, would not result in significant adverse cumulative impacts, particularly because the intensity of its own adverse impacts would be minimal.

The Study Area comprises a densely developed corridor largely characterized by downtowns and surrounding residential areas, and that land use pattern is well established and would not be changed with the Proposed Project. Moreover, the Proposed Project, because it is an enhancement to existing transportation infrastructure serving a mature, mixed use community, would not typically lead to induced growth. Considering these factors, the Proposed Project would not lead to significant adverse secondary impacts.

**C. METHODOLOGY**

The assessment of the Proposed Project's potential to result in cumulative impacts considers the Proposed Project's direct impacts along with the impacts of other past, present, and reasonably foreseeable future actions. A list of such actions was developed through research and consultation with municipal and county planning officials within the Study Area jurisdictions. Assessment of the cumulative impact of the Proposed Project, along with all identified "No Build" projects is contained within each chapter of this DEIS as potential impacts of the Proposed Project are evaluated against the "Future Without the Proposed Project," which accounts for any changes in the environment attributable to the No Build projects.

The NEC FUTURE program, which is being led by FRA, is a comprehensive planning effort to determine the appropriate role for passenger rail along the Northeast Corridor, the 457-mile rail transportation system extending from Boston's South Station in the north to Washington D.C.'s Union Station in the south, and the infrastructure and service improvements necessary to achieve that role for passenger rail. The proposed Cross Harbor Freight Movement Project also was assessed under a Tier 1 EIS that included an alternative that would increase freight traffic throughout the LIRR system. However, there currently is no Tier 2 EIS funding for either the NEC FUTURE project or the Cross Harbor project. Because of the lack of funding, neither project may be considered reasonably foreseeable for the purpose of cumulative impacts analysis.

Cumulative impacts may result from the incremental consequences of an action when added to the impacts of other past, present, and reasonably foreseeable future actions. When an action would have no direct impact on a particular resource, it cannot contribute to cumulative impacts. When an action has any direct impact, even if that impact is negligible, it can contribute to cumulative impacts. **Table 14-1** summarizes the Proposed Project's potential to result in cumulative impacts. All cumulative impacts also are accounted for and described in detail herein under the analysis of 2040 build conditions for the various resources, insofar as those 2040 build conditions account for all past, present, and reasonably foreseeable future projects.

Construction of other planned LIRR projects (e.g., East Side Access, Double Track Project from Farmingdale to Ronkonkoma, etc.) would not contribute to cumulative impacts because: a) most construction would not occur at the same time as the Proposed Project, and any construction in or near the same location would be managed so as to not concentrate impacts in that location; and, b) these other planned projects are located mostly outside of the Study Area for the Proposed Project.

The assessment of the Proposed Project's potential to result in secondary impacts considers the impacts that are caused by the Proposed Project but are removed in time and/or place from the Proposed Project itself. The assessment is based upon the Proposed Project's potential to induce future growth and/or growth outside of the Study Area.

### **D. EXISTING CONDITIONS**

Existing conditions in terms of both cumulative and secondary impacts are the conditions for each individual resource as set forth in the preceding chapters of this DEIS.

### **E. POTENTIAL IMPACTS OF THE PROPOSED PROJECT**

#### **CUMULATIVE ADVERSE AND BENEFICIAL IMPACTS**

The analysis set forth in the preceding chapters assumes, for the analysis year 2040, the completion of reasonably foreseeable future projects, in addition to past and present actions. As a result of this methodology, cumulative impacts on every resource are considered in those preceding chapters. In summary of the conclusions of those chapters, the Proposed Project would result in cumulative impacts only as set forth for the following resources.

#### *VISUAL AND AESTHETIC RESOURCES*

The Proposed Project would result in changes to the viewshed in the immediate vicinity of the various project elements, notably six new parking decks in Mineola, Westbury, and Hicksville; new pedestrian overpasses at various locations through the Project Corridor; relocated overhead utilities; and retaining walls and sound attenuation walls. These elements would be seen by people located at land uses proximate to them, and they would represent a change of view. This change of view is considered an adverse impact. However, the adverse nature of the impact is minimal considering that the elements in question consist of transportation infrastructure in a transportation corridor, i.e., the new infrastructure is consistent with the current visual resource. None of the visual change associated with the Proposed Project would combine with visual change from No Build projects in a manner that would increase the overall visual impact to the communities within the Study Area. The Proposed Project would not result in significant adverse cumulative visual and aesthetic resource impacts.

**Table 14-1  
Summary of Potential Cumulative Impacts**

Resource	Potential Adverse Impacts <sup>1</sup>	Potential Cumulative Impacts
Land Use, Community Character, and Public Policy	No Adverse Impact	No Cumulative Impact
Socioeconomic Conditions	No Adverse Impact	No Cumulative Impact
Environmental Justice	No Adverse Impact	No Cumulative Impact
Visual and Aesthetic Resources	Adverse Impact – The construction of new retaining walls, parking decks, utility poles, and pedestrian overpasses, would change the view from sensitive receptors.	Minimal Cumulative Impact – other past, present, and reasonably foreseeable future actions are expected to be consistent visually with existing development.
Natural Resources	No Adverse Impact	No Cumulative Impact
Contaminated Materials	No Adverse Impact	No Cumulative Impact
Infrastructure and Utilities	No Adverse Impact	No Cumulative Impact
Transportation	Adverse Impact – The short-term closure of north-south roadways during construction of grade separations would present a transportation impact. In the long term, the Proposed Project would confer a beneficial impact as queuing at grade crossings would be eliminated.	Minimal Cumulative Impact – because the direct impact to transportation would be only short-term, the Proposed Project would make no persistent contribution to cumulative impacts, and in the operational phase would confer a benefit.
Air Quality	Adverse Impact – Construction activities that require the use of heavy machinery would present a short-term adverse air quality impact due to the combustion of fuel by this machinery. In the long term, the Proposed Project would confer a beneficial impact as idling at grade crossings would no longer occur and as more people opt for the more operationally flexible and reliable transit system.	Minimal Cumulative Impact – because the direct impact to air quality would be only short-term, the Proposed Project would make no persistent contribution to cumulative impacts, and in the operational phase would confer a benefit.
Noise and Vibration	Adverse Impact – In the short term, construction activities would result in noise and vibration impacts to sensitive receptors proximate to the Project Corridor. In the long term, the Proposed Project would confer a beneficial impact as noise associated with idling vehicles, crossing gate bells, and train horns would cease; the Proposed Project would confer a benefit in terms of vibration, as minimization measures would reduce vibration below existing conditions in virtually all places within the Project Corridor..	Minimal Cumulative Impact – because the direct impact in terms of noise would only be short-term, the Proposed Project would make no persistent contribution to cumulative impacts, and in the operational phase would confer a benefit. Increased vibration from construction also would be short-term only and would not present a significant contribution to cumulative impacts; in the operational phase, decreased vibration would constitute a long term benefit,
Safety and Security	No Adverse Impact	No Cumulative Impact
Electromagnetic Fields	No Adverse Impact	No Cumulative Impact
Climate Change/Sustainability	Adverse Impact – Construction activities that require the use of heavy machinery would present an increase in greenhouse gases. In the long term, the Proposed Project would confer a beneficial impact as idling at grade crossings would no longer occur and as more people opt for the less greenhouse gas-productive transit system.	Minimal Cumulative Impact –the Proposed Project would result in long-term cumulative reductions in GHG emissions by providing improved transit service within the region.
<b>Notes:</b> <sup>1</sup> The potential adverse impacts of the Proposed Project are addressed in greater detail in the DEIS chapters for each individual resource.		

### *TRANSPORTATION*

Short-term construction activities would require the closure of north-south roadways at grade crossings, and the diversion of traffic to other roadways that cross the LIRR Main Line tracks. Because these construction activities would be staggered geographically through the Project Corridor, because closures would be of limited duration (between six and nine months each), and because traffic diversions would present only a minor impact considering the proximity of other available crossings, they would result in adverse but not significant adverse impacts.

Construction work for other projects that may coincide with the construction of the Proposed Project, such as the Post Avenue Bridge rehabilitation project (Westbury) and the Hicksville North Siding and station improvement projects, would be considered when determining a construction schedule for the Proposed Project. LIRR would ensure that contractor work plans would avoid construction overlap within close geographic proximity in order to minimize construction-related impacts to transportation.

The Proposed Project's long-term contribution to cumulative impacts would be minimal, and taken in concert with other past, present, and reasonably foreseeable future actions, cumulative impacts to transportation would not be considered significant. In the long term, the Proposed Project would confer a beneficial impact in terms of transportation as queuing at grade crossings would no longer be necessary and north-south traffic would be facilitated. The additional parking provided by the Proposed Project would offset a cumulative projected parking deficit within the Study Area associated with the East Side Access Project. The Proposed Project, combined with the other LIRR projects described above, would result in a cumulative benefit to the regional rail system. The Proposed Project would not result in significant adverse cumulative transportation impacts.

### *AIR QUALITY*

Short-term construction activities would require the use of heavy diesel-powered equipment and their resultant emissions. In concert with other past, present, and reasonably foreseeable future actions, this would constitute an adverse cumulative impact. Other past, present, and reasonably foreseeable future actions also have used and may use heavy machinery, although the fact that the Study Area is fully developed limits the number of projects undertaken there, and therefore the use of heavy machinery. In any event, the air quality impacts of this use of heavy machinery, like that related to the Proposed Project, would be temporary. Cumulatively, the air quality impacts of all of these projects, taken together with the Proposed Project, are not significant due to their limited intensity and duration. Contributing more substantially to air quality concerns within the Study Area are other sources of air pollutants, including trucks, passenger vehicles, manufacturing facilities, and others. The contribution of the use of heavy machinery for the Proposed Project to Study Area air quality concerns would not be significant.

Compared to the Future Without the Proposed Project, air quality with the Proposed Project would be improved in the Study Area because the elimination of grade crossings would eliminate the need for queuing and the associated idling time. Because the Proposed Project would not result in short-term significant adverse cumulative impacts, and because the Proposed Project would contribute toward improved air quality in the long term, it would not result in any adverse cumulative impacts to air quality.

### *NOISE AND VIBRATION*

Noise levels within the Study Area would decrease with the Proposed Project due to the construction of sound attenuation walls, which would lead to the reduction in train-generated noise levels. In addition, noise levels in the vicinity of grade crossings where warning horns are currently sounded are predicted to decrease due to the proposed grade separation. In the Future Without the Proposed Project, increased rail activity associated with East Side Access would result in increased noise levels within the Study Area. However, in the Future With the Proposed Project, sound attenuation walls would be constructed on grade or on top of retaining walls to eliminate the predicted noise impacts and, as noted, improve noise levels compared to Existing Conditions. Thus, the Proposed Project is providing a cumulative benefit by mitigating increased noise associated with cumulative impacts. Since the Proposed Project would provide an alternative source of transportation for many of the other planned projects as well as to other destinations in the area, it should reduce the numbers of auto trips in the region and the noise levels associated with them. Therefore the Proposed Project would not contribute to cumulative impacts and rather would provide a beneficial overall effect.

### *CLIMATE CHANGE/SUSTAINABILITY*

Construction activities would present a short-term impact to climate change due to use of heavy fossil fuel-powered machinery and the associated production of greenhouse gases. Other past, present, and reasonably foreseeable future actions also have used and may use heavy machinery, although the fact that the Study Area is fully developed limits the number of projects taken there, and therefore the use of heavy machinery. In any event, the climate change impacts of this use of heavy machinery, like that related to the Proposed Project, are of a temporary nature. Cumulatively, the climate change impacts of all of these projects, taken together with the Proposed Project, is not significant due to their limited intensity and duration.

In the long term, the Proposed Project would confer a beneficial impact as idling at grade crossings would no longer occur and as more people opt for the less greenhouse gas-productive transit system instead of their automobiles. In the long term, the Proposed Project would not contribute to any adverse impacts in terms of climate change. Because of the short-term nature of adverse impact in terms of climate change as well as its long-term benefit, the Proposed Project would not result in significant adverse cumulative impacts.

### **SECONDARY IMPACTS**

As stated above, secondary impacts are those induced or caused by the Proposed Project but are removed in time and/or place. An example of such an impact is a new roadway into an undeveloped area that spurs later development of surrounding areas. The Study Area for the Proposed Project comprises a continuous 9.8-mile rail corridor surrounded by nearly completely developed land. The Proposed Project would not create new access to undeveloped areas, but rather would support and improve existing mobility and projected growth within the Study Area and from the Study Area to New York City. Because the areas surrounding the Proposed Project are developed, any additional development spurred by the Proposed Project would necessarily be redevelopment or infill development. Improvements within the Project Corridor would not result in any particular development, although it would make any transit-oriented development (TOD) that may be contemplated more feasible by rendering transit services more flexible and reliable. Because the Proposed Project would not serve specific land development, and is located in a densely developed area and therefore would not stimulate specific development or any specific

## **Long Island Rail Road Expansion Project**

---

changes in land use patterns, and therefore would not result in secondary impacts. However, the Proposed Project would support projected growth as anticipated by several regional and local planning agencies. Any growth that would occur in the future would be subject to local land use controls and review under SEQRA. The Proposed Project, which strengthens the transit system, provides an alternative transportation mode to the single-occupancy vehicle, thus reducing the potential for additional congestion on Long Island's roadway network.

The East Side Access project would result in an increase in the number of riders and trains accessing the LIRR Main Line. The Proposed Project, by improving flexibility and providing more consistent bi-directional service, would make travel for these riders and trains more efficient and reliable, and less prone to delay. With this increased number of riders and trains, the Proposed Project still would not stimulate development or any changes in land use patterns, and therefore would not result in induced growth

### **F. MITIGATION**

Since the Proposed Project would not result in any significant adverse impacts relating to secondary growth, no mitigation is required. Cumulative impacts would be mitigated through implementation of the measures enumerated in the DEIS chapters for each individual resource.

\*