

ES. EXECUTIVE SUMMARY

ES.1 INTRODUCTION

Opened in 1939, LaGuardia Airport (LGA or the Airport) has been operated by the Port Authority of New York and New Jersey (Port Authority) under a lease agreement with the City of New York since 1947.¹ LGA is a 680-acre airport situated in the northern part of the borough of Queens (Queens), New York City, New York. The Airport is located approximately 6 miles northeast of Midtown Manhattan in a densely developed metropolitan area consisting of airport, commercial, and residential areas. Other transportation facilities in the area include a parkway, interstate highways, rapid transit, and commuter rail facilities. LGA is bordered to the north by the East River (separating the Airport from Rikers Island and the borough of the Bronx); to the east by Flushing Bay (separating the Airport from the College Point neighborhood of Queens); to the south by Grand Central Parkway (GCP) and the East Elmhurst, Jackson Heights, and North Corona neighborhoods of Queens; and to the west by Bowery Bay and the Ditmars-Steinway neighborhood of Queens. The Airport's proximity to the East River and densely developed environs, as well as limited land availability in the area, pose challenges for Airport development.

Over the past 30 years, various agencies have conducted multiple studies to improve transit access to LGA. Agency reports include those directed by the Port Authority, Federal Aviation Administration (FAA), the New York City Department of Transportation (NYCDOT), and the Metropolitan Transportation Authority (MTA). These studies have included transit alternatives such as subway extensions, Long Island Rail Road (LIRR) spurs, people mover alternatives, bus transit, and ferry service. However, due to major obstacles, including issues raised during the environmental review process,² concern over community impacts,³ financial constraints, and the September 11 terrorists' attacks on the World Trade Center, several of the studies were discontinued. Nonetheless, an examination of all these studies demonstrates a continued regional interest in improved access to LGA.

In January 2015, New York Governor Andrew Cuomo convened an Airport Advisory Panel to address the deficiencies of LGA as a major transportation facility.⁴ In its report, the Airport Advisory Panel recommended that the redevelopment of LGA include "new ways to access the airport" including a future AirTrain.⁵ Consequently, one of

¹ Airport Advisory Panel, *A 21st Century Airport for the State of New York: The New LaGuardia— A Report to the Governor from the Airport Advisory Panel: Guiding Principles for a Comprehensive Airport Master Plan*, July 2015.

² In 1994, a Draft Environmental Impact Statement (EIS) was prepared for the Airport Access Program, which encompassed a new automated guideway transit line with service between Midtown Manhattan, LGA, and John F. Kennedy International Airport. After publication of the Draft EIS, the Port Authority concluded that due to issues raised during the environmental review process as well as financial constraints, construction of the entire proposed project was infeasible.

³ In 1998, the MTA initiated the LaGuardia Airport Subway Access Study; however, major obstacles arose, including concern over community impacts and challenges in integrating subway service that would be compatible with both New York City Transit (NYCT) system operating requirements and on-Airport constraints. Efforts to resolve these issues were suspended after the September 11 terrorists' attacks on the World Trade Center; therefore, the Study was discontinued without confirming a constructible or operable alternative.

⁴ Tishman, Dan et al., *A 21st Century Airport for the State of New York: The New LaGuardia, Guiding Principles for a Comprehensive Airport Master Plan*, Report by the Governor's Airport Advisory Panel, July 27, 2015, www.governor.ny.gov/sites/governor.ny.gov/files/atoms/files/Airport_Advisory_Panel_Final_Report_LGA.pdf (accessed April 4, 2018).

⁵ *Ibid.*

the guiding principles of the report is a “future rail connection” in response to LGA being the only major airport in the New York City region that is not accessible directly by rail.⁶

In accordance with the recommendation of Governor Cuomo’s Airport Advisory Panel, the Port Authority, as operator of the Airport, proposes the LGA Access Improvement Project to construct and operate a new automated people mover (APM or AirTrain) system to provide a reliable transit alternative for air passenger and employee access to the Airport. The Port Authority’s proposal for the LGA Access Improvement Project would connect two on-Airport stations at LGA with a transfer station at Willets Point. The off-Airport station would provide connections to the Mets–Willets Point stations of the LIRR Port Washington Branch and the New York City Transit (NYCT) Subway Flushing Line (7 Line). The off-Airport station would also provide a connection to a new off-Airport employee parking option located at Willets Point. The Port Authority’s proposal is hereinafter referred to as the Proposed Action.

The Port Authority intends to fund components of the Proposed Action in part by using Passenger Facility Charges (PFCs), which are funds collected directly from airport passengers as part of their airfare ticket purchase. Since 1992, the FAA has approved 45 separate PFC applications for the Port Authority totaling over \$5.5 billion. Per 14 Code of Federal Regulations (CFR) 158.25(a), the Port Authority has the right to impose and to use the PFC revenue on approved FAA projects at any airport it controls. Thus, the Port Authority combines the collection of PFCs and uses those collections for FAA-approved projects across the four commercial service airports it operates: JFK, LGA, Newark Liberty International Airport (EWR), and New York Stewart International Airport (SWF). In order to utilize the PFC revenue, an application to impose and use PFCs must first be approved by the FAA⁷ via the issuance of a Federal Agency Decision. The Federal Agency Decision, (that is, the review and approval of a future application for the Proposed Action) is a major federal action subject to the provisions of the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [U.S.C.] §§ 4321 to 4335) and the Council on Environmental Quality (CEQ) implementing regulations⁸ for NEPA (40 CFR Parts 1500–1508). Environmental review under NEPA must be completed prior to approval of the PFC use application. As such, the FAA is the lead federal agency⁹ preparing an EIS to comply with NEPA. Additionally, Executive Order (EO) 13807, *Establishing Discipline and Accountability in the Environmental Review Process for Infrastructure Projects*, commonly referred to as One Federal Decision, and the Memorandum of Understanding (MOU) implementing EO 13807 applied to major infrastructure projects where the lead federal agency would prepare an EIS, and multiple authorizations by federal agencies would be required to

⁶ Airport Advisory Panel, *A 21st Century Airport for the State of New York: The New LaGuardia—A Report to the Governor from the Airport Advisory Panel: Guiding Principles for a Comprehensive Airport Master Plan*, July 2015.

⁷ The PFC program allows the collection of PFCs for every eligible passenger at commercial airports controlled by public agencies. PFCs must fund FAA-approved projects that preserve or enhance safety, security, or capacity; reduce noise; or increase air carrier competition. The FAA may grant authority to impose a PFC only if the FAA finds, on the basis of an application submitted by the public agency, that the amount and duration of the PFC will not result in excess revenues. As of April 2006, the FAA has approved a PFC of \$4.50 per passenger (the maximum amount possible) at LGA, allowing up to approximately \$1.5 billion to be collected for, among other projects, the Central Terminal Building modernization planning and engineering, rehabilitation of Runway 4-22, and security enhancement projects for the physical protection of terminal building frontages.

⁸ The NEPA review documented in this Final EIS has been conducted under the regulations at 40 CFR Parts 1500-1508 in effect as of the issuance of the Notice of Intent on May 5, 2019. The Council on Environmental Quality issued a final rule to update the regulations implementing NEPA on July 16, 2020 (see 85 Federal Register 44303). These regulations, which take effect on September 14, 2020, apply to any NEPA process begun after that date.

⁹ A lead agency shall supervise the preparation of an environmental impact statement if more than one Federal agency either: (1) Proposes or is involved in the same action; or (2) Is involved in a group of actions directly related to each other because of their functional interdependence or geographical proximity.

proceed with construction. The FAA determined that the Proposed Action is a major infrastructure project¹⁰ that was subject to EO 13807. On January 20, 2021, EO 13990, *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*, was issued, which revoked EO 13807. Though no longer in effect, the majority of the effort for the EIS was completed under the One Federal Decision framework, as such, the documentation in this EIS is reflective of the framework that was in effect at the time it was conducted.

The FAA has identified and invited agencies with an interest in the project to serve as either cooperating or participating agencies.¹¹ The Cooperating Agencies¹² for this EIS are the National Park Service;¹³ US Army Corps of Engineers; US Environmental Protection Agency; New York State Department of Transportation; New York State Department of Environmental Conservation; and New York State Office of Parks, Recreation, and Historic Preservation. The Participating Agencies¹⁴ for this EIS are Federal Emergency Management Agency, Federal Highway Administration, Federal Railroad Administration, Federal Transit Administration, National Marine Fisheries Service, US Department of Interior, Metropolitan Transportation Authority,¹⁵ New York City Department of City Planning, New York City Department of Environmental Protection, New York City Department of Parks and Recreation, and New York City Department of Transportation.

The FAA has established a process to ensure compliance with the provisions of NEPA through FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*,¹⁶ the FAA Order 1050.1F Desk Reference,¹⁷ and FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*.¹⁸ The FAA will also comply with applicable special purpose laws, EOIs, and agency orders, including, but not limited to: Section 106 of the National Historic Preservation Act (NHPA); Section 7 of the Endangered Species Act; the Magnuson-Stevens Fishery Conservation and Management Act; Sections 10 and 14 of the Rivers and Harbors Act; Sections 401 and 404 of the

¹⁰ Major infrastructure projects subject to Executive Order 13807 were projects for which "multiple authorizations" by federal agencies will be required to proceed with construction, the lead federal agency has determined that it will prepare an EIS, and "the project sponsor has identified the reasonable availability of funds sufficient to complete the project."

¹¹ Cooperating and participating agencies are responsible for identifying, as early as practicable, any issues of concern regarding the potential environmental or socioeconomic impacts of the Proposed Action or any alternatives that could substantially delay or prevent an agency from granting a permit or other approval.

¹² According to the CEQ regulations (specifically 40 CFR 1508.5), "Cooperating Agency" means any federal agency, other than a lead agency, that has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposed project or project alternative. A state or local agency of similar qualifications or, when the effects are on lands of tribal interest, a federally recognized Native American tribe may, by agreement with the lead agency, also become a Cooperating Agency. CEQ also states that an agency may request the lead agency to designate it a Cooperating Agency (40 CFR 1501.6).

¹³ The National Park Service (NPS) requested formal Cooperating Agency status on November 30, 2020. The NPS submitted formal comments on the Draft EIS indicating a potential conversion of lands subject to Section 6(f) of the Land and Water Conservation Fund Act; approval of this conversion is considered a federal action that requires compliance with NEPA. Cooperating Agency status allows the NPS to jointly comply with NEPA regulations and be a signatory on the final Record of Decision (ROD) for the federal action of approving the Section 6(f) conversion.

¹⁴ Participating Agencies are those with an interest in the project, but act in an advisory capacity and will not be exercising any decision-making authority.

¹⁵ Includes the three separate agencies of the MTA which are providing input on this EIS, including the Long Island Rail Road, New York City Transit, and the MTA Bus Company.

¹⁶ US Department of Transportation, Federal Aviation Administration, Order 1050.1F, *Environmental Impacts: Policies and Procedures*, July 16, 2015.

¹⁷ US Department of Transportation, Federal Aviation Administration, Order 1050.1F Desk Reference, Version 2, February 2020.

¹⁸ US Department of Transportation, Federal Aviation Administration, Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*, April 28, 2006.

Clean Water Act; Section 4(f) of the US Department of Transportation (DOT) Act; Section 6(f) of the Land and Water Conservation Fund Act; DOT Order 5610.2(b), *Environmental Justice in Minority and Low-Income Populations*; EO 12898, *Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations*; EO 11990, *Protection of Wetlands*; DOT Order 5660.1A, *Preservation of the Nation's Wetlands*; EO 11988, *Floodplain Management*; and DOT Order 5650.2, *Floodplain Management and Protection*.

ES.2 PURPOSE AND NEED

ES.2.1 SUMMARY OF THE PURPOSE AND NEED

The Proposed Action is needed to address unpredictable and increasing travel times to and from LGA, while also addressing space constraints for employee parking. The Proposed Action would address the following:

- increasing and unreliable travel times between LGA and key locations within New York City;
- limited passenger and employee access to and from LGA, which is primarily via roadway access;
- traffic congestion on off-Airport roadways near the Airport, which contributes to Airport access travel times; and
- limited on-Airport options to provide adequate employee parking and areas for storage of equipment and materials for maintenance activities.

Today, regardless of transportation mode, passengers, employees, and visitors face increasing and unreliable travel times to and from LGA. Access to and from LGA is limited to on-road vehicles on surface roads and streets, such as the GCP, and lacks a direct rail connection to the NYCT subway system and the LIRR commuter rail. Travelers to the Airport who wish to use public transportation, including the subway or LIRR, must transfer to a bus to access the Airport. Overall, approximately 99 percent of passengers access the Airport via surface roads and streets. Because of congestion, travel times are unpredictable for automobiles, taxis, for-hire vehicles, and buses, and travel times vary between peak and non-peak periods of the day. Additionally, traffic volumes and consequent congestion and roadway travel times are expected to increase over time. As traffic levels, congestion, and delay increase on the roadway network around the Airport, travelers to the Airport will experience increased and more uncertain travel times, requiring LGA passengers to allow for extra time when planning their travel to and from the Airport.

Additionally, given land constraints, there are limited on-Airport options to provide adequate employee parking and areas for storage of equipment and materials needed to perform airfield maintenance activities. As activity increases, Airport property needs to be reserved for aviation uses that must be located adjacent to the air operations area (AOA).¹⁹ The Port Authority currently provides 1,500 parking spaces for employees in Lot P10, totaling approximately 560,000 square feet, directly adjacent to the AOA. Employee parking spaces are not required to be located near the AOA or on-Airport; therefore, a portion of these spaces could be provided elsewhere, leaving space available for other aviation support uses.

The purpose of the Proposed Action is to provide a time-certain transportation option that connects Airport passengers and employees to and from LGA, as travel times to and from the Airport continue to increase and become more unpredictable. Additionally, this transportation option should ensure adequate parking for Airport employees.

¹⁹ The AOA is the secure airfield that supports aircraft movement, aircraft parking, loading ramps, and safety areas.

FAA acknowledges the recent and ongoing impacts of the COVID-19 public health emergency and the resulting decline in aviation and transit travel demand. Airlines for America (A4A), the trade organization of the leading US passenger and cargo airlines, projects that recovery to 2019 passenger volumes could occur in 2023 using optimistic assumptions, but most likely won't occur until 2024 or later.²⁰ In addition, Airports Council International (ACI), the trade association of the world's airports, projects that domestic passenger activity may recover as early as 2023 and international passenger traffic may recover as early as 2024.²¹

Although it is impossible to precisely predict future changes to ridership that may result from COVID-19, the FAA believes that the future ridership analyses presented in the EIS represent a reasonable range of likely APM ridership. The ridership projections are based on pre-COVID-19 aviation and transit travel demand, LGA ground access patterns, and regional land use patterns that are still reasonably expected to resume as the economy recovers, even as leisure and business travels adapt to new norms after the COVID-19 public health emergency.²² The severity and duration of the contraction in aircraft operations and air travel due to the COVID-19 public health emergency are unknown at this time and cannot be precisely estimated until more certainty in regards to the re-opening of cities, states, and the United States is known. It is anticipated that passenger and airline activity in the short-term will be lower than forecast, but that passenger and airline activity will recover with long-term forecasts being realized later than anticipated. The Port Authority has been examining ways to improve transit access to LGA over the last 30 years. Although passenger and airline activity was down in 2020 and will likely take several years to recover to 2019 activity levels, the need for supplemental access and connections to the region's existing local transit system was identified by the Port Authority based on LGA passenger activity and roadway traffic congestion levels existing in 2017. Those activity levels are anticipated to be experienced at LGA prior to when the proposed project could be operational in late 2025.

ES.2.2 PROPOSED ACTION

The Proposed Action includes the following components:

- An aboveground, elevated fixed guideway APM system with three APM stations (two on-Airport and one off-Airport) connecting the Airport to the NYCT Subway 7 Line and the Port Washington Branch of the LIRR commuter rail. The APM system would include:
 - passenger walkway systems connecting the APM stations to passenger terminals, parking garages, public transportation, and ground transportation facilities;
 - connections to the Airport Central Hall, Airport parking garage connector, and existing subway and LIRR stations to support the APM walkway system connections, including elevators, escalators, and stairs (that is, vertical circulation cores) to garage levels, terminals, and mass transit;
 - an APM operations, maintenance, and storage facility (OMSF);
 - three traction power substations (TPSSs) to provide electrical power to the APM system;

²⁰ Airlines for America, "Tracking the Impacts of COVID-19," updated January 29, 2021.

²¹ Airports Council International, *ACI Advisory Bulletin: The impact of COVID-19 on the airport business*, December 8, 2020 (available at: <https://aci.aero/wp-content/uploads/2020/12/Advisory-Bulletin-The-impact-of-COVID-19-on-the-airport-business.pdf>).

²² FAA provided a preliminary briefing at the Transportation Research Board's Annual Meeting in January 2021 (see Appendix C.4). The initial recovery predictions provided in the briefing support FAA's assertion that passenger demand in the short-term will be lower than previously forecast but will recover. FAA is also expecting to publish a Final Terminal Area Forecast (TAF) in April 2021, which will include FAA's expected forecast recovery timeframe for LGA.

- Parking for Airport, APM, and MTA employees, as well as replacement Citi Field parking, located at the OMSF.
- Utilities infrastructure, both new and modified, to support the Proposed Action.
- A new Consolidated Edison (ConEdison) 27-kilovolt electrical industrial station located adjacent to the OMSF;
- Acquisitions of temporary and permanent easements on portions of certain parcels to facilitate construction of the Proposed Action; and
- Connected actions to allow construction of the Proposed Action, including:
 - temporary MTA bus storage/parking facility during construction of the OMSF;
 - relocation of Citi Field parking spaces temporarily displaced during construction;
 - Passerelle Bridge replacement to accommodate the proposed off-Airport APM station;
 - operational improvements to the Mets-Willets Point LIRR Station (new shuttle service) and supporting physical improvements; and
 - relocation of World's Fair Marina (Marina) facilities to accommodate the proposed APM guideway.

Exhibit ES-1 provides an overview of the Proposed Action, and **Exhibit ES-2** provides an overview of the connected actions sites.

The Proposed Action would not affect or change any airfield components, including the runways, taxiways, or aircraft arrival and departure procedures.

ES.2.3 TIMEFRAME OF THE PROPOSED ACTION

Construction of the Proposed Action is contingent upon project approvals, including the outcome of this NEPA process. The Draft EIS indicated that construction of the Proposed Action was expected to begin in August 2021 and was expected to be completed in November 2025. However, after publication of the Draft EIS, the Port Authority notified the FAA of several refinements to the anticipated construction schedule. The Port Authority plans to issue a design-build-operate-maintain (DBOM) contract for the Proposed Action, with a Notice to Proceed (NTP) now anticipated in March 2022. However, the Port Authority intends to issue an early works contract for a limited scope of on-Airport construction anticipated to begin in June 2021. Therefore, the FAA has modified the general phasing schedule for the construction of the Proposed Action as follows:

- Property acquisition would begin in the second quarter of 2021 and would conclude in the first quarter of 2022.
- The initial stages of construction, beginning in June 2021, would include on-Airport utility work and foundations for the APM guideway and stations.
- After issuance of the NTP anticipated in March 2022, the Port Authority's DBOM contractor would focus on connected actions, including replacement of the Passerelle Bridge, relocation of the Marina facilities, improvements to Mets-Willets Point LIRR Station, and relocation and installation of new utilities infrastructure.
- Remaining construction of the APM guideway and associated facilities would begin in April 2022 and conclude in December 2025. Construction activities during this timeframe would include the APM operating system and fixed facilities, consisting of the APM guideway, the three APM stations, and passenger walkways.
- Testing and commissioning of the APM operating system would begin in December 2024 and conclude in December 2025.
- Construction of the APM OMSF and Parking Structure would begin in April 2022 and conclude in summer 2025.



SOURCES: Nearmap, New York, July 2020 (aerial); Port Authority of New York and New Jersey, December 2019 (APM alignment, TPSS); Port Authority of New York and New Jersey, August 2020 (APM stations, OMSF and parking structure).

EXHIBIT ES-1



NORTH 0 700 ft

**EXHIBIT ES-2**

**CONNECTED ACTIONS –
SITE LOCATIONS**



NORTH

0

1,100 ft

The general sequence of construction developed for analysis in this EIS is based on concept-level information provided to the FAA by the Port Authority; however, the construction schedule is subject to change. For purposes of the EIS, FAA's Consultant Team for the EIS prepared a detailed construction schedule that identifies tasks and phasing for each construction activity by project component as extrapolated from the preliminary schedule provided by the Port Authority.

As the majority of the Proposed Action would be developed off-Airport in a densely developed metropolitan area, the Port Authority would coordinate construction phasing to minimize physical and operational impacts to existing non-Airport facilities. As such, this EIS includes potential impacts related to key stakeholders with property interests in the proposed area of construction.

The construction schedule provided by the Port Authority for the Proposed Action indicates the Proposed Action would be completed and the APM system would be operational in December 2025.

ES.2.4 REQUESTED FEDERAL ACTIONS

The federal action by the FAA is to provide determinations under 49 U.S.C. §§ 47106 and 47107 relating to the eligibility of the Proposed Action for federal funding under the Airport Improvement Program (AIP) and/or under 49 U.S.C. § 40117, as implemented by 14 CFR 158.25, to impose and use PFCs collected at LGA, EWR, JFK, and SWF for use at LGA for the Proposed Action to assist with construction of potentially eligible development items shown on the Airport Layout Plan (ALP).

In addition to FAA's federal action, several other federal and state agencies have approvals related to the Proposed Action. The Draft EIS indicated that the Proposed Action would require approvals by the US Army Corp of Engineers (USACE) under Section 10 Rivers and Harbors Act of 1899 and Section 404 of Clean Water Act. A joint application for the Department of the Army Permit and 404(b)(1) analysis was provided by the Port Authority to the USACE on August 12, 2020. However, in September 2020, the USACE determined that an individual Department of the Army permit was not required for the Proposed Action, and verified that the Proposed Action could be carried out in accordance with existing Department of the Army Nationwide General Permit Numbers 3 (Maintenance), 7 (Outfall Structure and Associated Intake Structure), 16 (Return Water from upland Contained Disposal Areas), 28 (Modifications of Existing Marinas), and 35 (Maintenance Dredging of Existing Basins).

Furthermore, the National Park Service (NPS) submitted formal comments on the Draft EIS indicating a potential conversion of lands subject to Section 6(f) of the Land and Water Conservation Fund Act (LWCF) Act; approval of this conversion is considered a federal action that requires compliance with NEPA.

Additional state permits, approvals, or licenses would also be required prior to implementation of the Proposed Action.

ES.3 ALTERNATIVES

An EIS discloses the environmental impacts that would result from implementation of the Proposed Action, the reasonable alternatives to the Proposed Action, and the No Action Alternative. The FAA has the responsibility to:

- rigorously explore and objectively evaluate all reasonable alternatives, and—for alternatives that were eliminated from detailed study—briefly discuss the reasons for their elimination;
- devote substantial treatment to each alternative considered in detail, including the proposed action, so that reviewers may evaluate the alternatives' comparative merits;

- include reasonable alternatives not within the jurisdiction of the lead agency;
- identify the no action alternative; and
- identify the agency's preferred alternative or alternatives.

Section ES.3 lists potential alternatives identified and considered, and it describes the process for screening the broader list of potential alternatives to determine which alternatives are reasonable. A two-step screening process was used to determine which alternatives would be carried forward for analysis of environmental consequences in the EIS.

ES.3.1 GENERAL DESCRIPTION OF ALTERNATIVES

As discussed in Section ES.1, the Port Authority, the MTA, and New York City agencies have conducted numerous studies over the last several decades to improve transit access to LGA. The alternatives presented in this EIS were originally identified through a literature review of those studies including a recent alternatives study²³ conducted by the Port Authority; a total of 18 alternatives were identified from these previous studies. These alternatives were then subsequently informed and expanded upon through the EIS scoping process, including identification of new alternatives from the FAA and the public. Comments received during scoping identified the same or similar alternatives as those identified in previous studies, as well as 27 new alternatives. Two additional alternatives were identified by the FAA following review of the scoping materials.

Ten groups of alternatives were developed comprising 47 unique alternatives. The screening process described in Section ES.3.2 was used to determine which of these potential alternatives were reasonable, consistent with FAA Orders 1050.1F and 5050.4B, and CEQ regulations (40 CFR 1502.14) for implementing NEPA. A full list of the alternatives and the results of the screening process are presented at the end of Section ES.3.2.

ES.3.1.1 NO ACTION ALTERNATIVE

Under the No Action Alternative, no supplemental access or improvements to existing access routes to LGA would occur. Therefore, Airport access would be generally consistent with existing conditions. Air passengers and employees would continue to access LGA using the same modes as they do today, which include automobiles (personal vehicles, rental cars, taxis, and for-hire vehicles), public buses, and shuttle buses. As a result of forecast²⁴ increases in air passenger volumes, the overall traffic volumes on roadways near LGA would increase over time, resulting in more traffic congestion.²⁵ This, in turn, would result in longer travel times to LGA and would increase the volatility and unpredictability of travel times for LGA passengers and employees. Employee parking would likely remain in the same location on-Airport.

²³ Port Authority of New York and New Jersey, *LGA Airport Access Improvement Project, Purpose and Objectives and Analysis of Alternatives Report*, October 2018.

²⁴ The Port Authority developed a passenger forecast for LGA as part of the AirTrain Ridership Forecast (Port Authority of New York and New Jersey, *AirTrain LGA, LGA Ground Access Mode Choice Model and AirTrain Ridership Forecast 2025-2045*, October 2018).

²⁵ The forecasts for LGA were prepared and submitted to FAA prior to the COVID-19 public health emergency. The severity and duration of the contraction in aircraft operations and air travel are unknown at this time and cannot be reasonably estimated until more certainty regarding the re-opening of cities, states, and the United States is known. However, over the long term, it is expected that demand and airline capacity will grow in line with the US Gross Domestic Product (GDP), a relationship that has been in place since before airline industry deregulation in 1978. Thus, it is anticipated that passenger and airline activity in the short term will be lower than forecast, but that passenger and airline activity will recover with long-term forecasts being realized later than stated in the passenger forecast for LGA.

Furthermore, in the absence of the LGA Access Improvement Project, design and implementation of two actions would be undertaken by others. The No Action Alternative includes (1) improvements to be undertaken by the New York City Department of Parks and Recreation (NYC Parks) to the Passerelle Bridge between the Mets-Willets Point Subway Station and the Mets-Willets Point LIRR Station; and (2) improvements to be undertaken by the MTA to reconfigure portions of the Mets-Willets Point LIRR Station to extend existing platforms to accommodate 12-car trains and to ensure Americans with Disabilities Act (ADA) compliance.

ES.3.1.2 DIVERSION OF AIR TRAFFIC AT LGA

These alternatives would reduce the number of passengers using LGA by diverting air traffic away from LGA, which would reduce roadway network traffic to and from LGA. Two alternatives were evaluated: use of other airports and use of trains and buses.

ES.3.1.3 USE OF OTHER MODES OF TRANSPORTATION TO LGA

Three non-bus or non-rail modes of transportation that may provide feasible connections to LGA were identified and evaluated: ferry service, helicopter service, and gondola service.

ES.3.1.4 TRANSPORTATION SYSTEMS MANAGEMENT

These alternatives would include strategies to improve travel time on the bus routes that provide access to LGA.²⁶ Improvements to these routes may include increased bus frequency, use of bus "queue jumpers" at select traffic signals (that is, short bus lane segments that have traffic signal priority, so that buses can bypass waiting queues of traffic), additional roadway sections of dedicated bus lanes, and express service for some of the buses. The Transportation Systems Management (TSM) alternatives included potential improvements to other bus service, such as increased frequency on routes from Corona and Flushing, new routes, modifications to Select Bus Service (SBS),²⁷ or improved transfers. Three TSM alternatives were identified and evaluated.

ES.3.1.5 TRANSPORTATION DEMAND MANAGEMENT

This alternative consists of measures to reduce travel demand and, consequently, congestion, mainly focusing on strategies to reduce private automobile travel to and from the Airport. Options under this alternative would include the promotion of public transit, walking, bicycling, and car pools and van pools using some combination of the following strategies:

- provide secure bicycle parking;
- provide priority and/or reduced-fee parking for car pools or van pools;
- reduce demand for, or encourage the more efficient use of, taxis and other on-demand car services;
- promote mobile phone applications that encourage shared rides at Airport taxi stands and for on-demand car service;

²⁶ The Metropolitan Transportation Authority is in the process of redesigning the Queens bus network; however, the project is currently on-hold due to the COVID-19 public health emergency.

²⁷ Select Bus Service (SBS) provides a complementary service to the subway system by connecting neighborhoods to subway stations and major destinations. To improve reliability and service along these high-ridership corridors, a combination of tools are implemented, including off-board fare payment, bus lanes, traffic signal priority, and longer spacing between stops.

- promote shared-ride services;
- promote bus and shuttle services; and
- increase on-Airport public parking rates.

For evaluation of this alternative, it was assumed that all strategies would be implemented.

ES.3.1.6 EMERGING TRANSPORTATION TECHNOLOGIES

These alternatives include emerging technologies for providing access to LGA. These are technologies that continue to evolve and may offer new transportation options in the future. Some of these technologies would require modifications to existing infrastructure, but others can be made available using existing or new rights-of-way. Two emerging transportation technologies alternatives were evaluated: transportation network companies (TNCs), such as Uber or Lyft; and autonomous vehicles.

ES.3.1.7 OFF-AIRPORT ROADWAY EXPANSION

These potential alternatives focus on improvements to the existing roadways that provide access to LGA. Five off-Airport roadway expansion alternatives were identified and evaluated.

ES.3.1.8 SUBWAY EXTENSION

These potential alternatives would result in an extension of an existing NYCT subway line(s) to LGA and would include construction of a new subway station serving the terminals at LGA. The technology would be the same as the existing subway line.

Each of the potential subway extension alternatives would include the following components:

- a new subsurface station at LGA that connects to Terminals B and C – including platforms, stairwells, elevators/escalators, passageway, station agent booths (control area), turnstiles, ventilation, and emergency access;
- connections – including passenger walkway systems connecting a subway station at LGA to passenger terminals, parking garages, public transportation, and ground transportation facilities; and
- subway – including an extension of or branch from an existing subway line(s), tracks, signals, switches, and interlocking systems.

Additionally, it is assumed each subway extension alternative would include:

- Airport employee parking within walking distance (0.25 miles) of an existing subway station where the subway extension would originate;
- utilities infrastructure, both new and modified, to support each alternative; and
- enabling projects to allow construction of each alternative, including utility relocation, demolition of certain existing facilities (such as station platforms, tracks, switching), changes to existing subway schedule times, and addition of operating rollingstock (that is, in-service passenger equipment cars) to accommodate extended tracks and additional station stops, while maintaining the current MTA schedule.

Service on any of the subway extension alternatives would be operated by NYCT, with storage and maintenance of rail vehicles at existing NYCT rail yards.²⁸ Additionally, any changes in subway service plans would be subject to MTA Board approval. Seven subway extension alternatives were identified and evaluated.

ES.3.1.9 FIXED GUIDEWAY

A fixed guideway alternative would result in a new transit system that would operate between an off-Airport station with connections to the New York City subway and/or commuter rail and the Airport on a dedicated alignment. The system would be independent of the existing MTA subway, rail, and bus systems. The type of technology could include APM, Personal Rapid Transit, or Group Rapid Transit.

- APMs are powered by electricity, operate on a fixed guideway, and are usually on an elevated alignment. The capacity of each car of an APM is dependent on the size of the car. APMs can be rubber-tire or steel wheel-steel rail APMs.
- PRT systems are small, automated vehicles or pod cars, powered by electric battery, that operate on a fixed guideway, which is typically elevated, but can operate underground or at ground level. There are many variants of PRTs, including those that are suspended from an overhead rail (steel wheels on steel rails) and those that operate on rails (rubber-tired or steel wheels). A pod generally has seating for four but could operate with only one passenger. Pods travel separately from other pods, rather than in trains. The cars serve stations and are on-call by passengers. Once boarded, the passenger inputs their destination and the car responds, traveling nonstop to the desired destination.
- A Group Rapid Transit system is similar to that of a Personal Rapid Transit system in how it operates and the type of infrastructure needed. The primary difference is the size of the automated vehicle. A Group Rapid Transit automated vehicle has space for up to 24 passengers, which is larger than the four-seat automated vehicle used for a Personal Rapid Transit system.²⁹

These technologies may include varied design specifications (for example, maximum vertical grades and turning radii, required support facilities, station size). A fixed guideway would be designed with the appropriate dimensions so that it would accommodate the range of technologies. Fixed guideway alternatives would need to include a yard for vehicle storage and a facility to maintain and repair vehicles.

At the off-Airport terminal station, passengers would connect between the new fixed guideway system and existing subway, bus, or commuter rail trains for the remainder of their trips. Pedestrian bridges and vertical circulation would be provided to ensure a convenient transfer between the modes.

Each of the potential fixed guideway alternatives would include the following components:

- stations, including platforms, vertical circulation (such as stairwells, elevators, escalators), passageways, station agent booths (control area), and turnstiles;
- connections, including passenger walkway systems connecting the fixed guideway station at LGA to passenger terminals, parking garages, public transportation, and ground transportation facilities;

²⁸ Ricondo & Associates, Inc., *Summary of LGA Access Improvement Project EIS*, MTA Coordination Meeting, February 13, 2019.

²⁹ European Commission, *Guidelines for Implementers of Group Rapid Transit*, June 2010.

- an elevated fixed guideway system that would be above grade and would connect the Airport to the NYCT subway, bus, and/or the MTA commuter rail;
- an OMSF; and
- TPSSs.

Additionally, it is assumed each fixed guideway alternative would include the following components:

- Airport employee parking within walking distance (0.25 miles) of where the fixed guideway would originate;
- utilities infrastructure, both new and modified, to support each alternative; and
- enabling projects to allow construction of each alternative, including utility relocation, demolition of certain existing LIRR/subway station facilities (such as station platforms, tracks, switching).

Twenty fixed guideway alternatives were identified and evaluated.

ES.3.1.10 RAIL

Rail alternatives would result in the construction of a new rail line that would operate between an off-Airport station with connections to the New York City subway and/or commuter rail and the Airport on a dedicated alignment. The system would operate on separate tracks with separate rail cars from the existing NYCT subway and LIRR. Each of the rail alternatives would have direct access to LGA with no intermediate stops. Three rail alternatives were identified and evaluated.

ES.3.2 SCREENING OF ALTERNATIVES

A two-step screening process was used to comparatively evaluate the list of potential alternatives to determine which of them are reasonable and should be carried forward for detailed environmental impact analysis:

- Step 1 – Would the alternative meet the Purpose and Need of the Proposed Action?
 - Does the alternative provide a time-certain transportation option to LGA? For the response to be "yes," the alternative must provide access to LGA on a specific schedule and using a dedicated right-of-way (that is, it would operate 24 hours per day and 7 days per week, be exclusively used by the transportation mode, and be separate from and not be affected by or effect on-road transportation or traffic).
 - Does the alternative provide supplemental access to LGA? For the response to be "yes," the alternative can provide either a new mode of access to LGA or an increase in existing access (such as increased frequency of service or a modification in service that increases reliability).
 - Does the alternative provide the opportunity to reduce passenger vehicle trips to and from LGA on off-Airport roadways in the vicinity of the Airport without increasing roadway congestion? For the response to be "yes," the potential for a reduction in the number of vehicle trips on roadways in the vicinity of LGA must occur. This is primarily a reduction in the number of vehicles used by passengers or employees. In addition, the alternative cannot directly result in any increase in roadway congestion on off-Airport roadways in the vicinity of the Airport.
 - Does the alternative provide adequate replacement Airport employee parking to enable efficient use of on-Airport space? For the response to be "yes," the alternative must provide approximately 216,000 square

feet³⁰ of surface or structured parking located off-Airport within walking distance (0.25 miles) of an access point that has direct access³¹ to LGA. For any alternatives that require construction of an elevated OMSF, the parking is assumed to be included as part of that facility to reduce the footprint of development. For other alternatives where an elevated OMSF would not be required, the parking needs to be within walking distance of an access point for that alternative.

■ Step 2 – Would the alternative be reasonable to construct and operate?

— Can the alternative be implemented without a material effect to major infrastructure, transportation facilities, or utilities? For the response to be "yes," the alternative cannot result in a material effect to existing major transportation facilities (such as encroachment on a runway;³² permanent shifting of travel lanes on a major roadway;³³ temporary or permanent closure of travel lanes on a major roadway;³⁴ or a permanent reduction in subway, rail, or transit service), or existing major infrastructure (such as disrupting supply of power from power generating or distribution facilities), or existing major utilities (such as disrupting or relocating water or sewer lines). A major transportation facility is an existing runway, subway or rail line, or a roadway that is classified by the New York State Department of Transportation (NYSDOT) as a principal arterial, a minor arterial, or a major collector.³⁵ Major infrastructure includes electric power plants, electrical distribution facilities, water treatment plants, or wastewater treatment plants. A major utility is a sewer, water, or communications line that serves a large segment of population and cannot be easily replaced or relocated while continuing to provide uninterrupted service. The relocation or modification of major transportation facilities, infrastructure, or utilities would have a material effect if the relocation would result in disruption of services to large segments of the population. Additionally, such relocations or modifications

³⁰ The size of the parcel that accommodates parking is not required to be 216,000 square feet. The parcel needs to be of sufficient size to accommodate either 216,000 square feet of surface parking or 216,000 square feet of structured (for example, multi-level) parking. This square footage is based on the Port Authority need to free up space adjacent to the AOA in the existing employee Lot P10 to provide the flexibility required for efficient performance of routine maintenance activities.

³¹ Direct access is achieved when the transportation method does not require transfers to reach a destination.

³² Runway encroachment includes physically impacting an existing runway, violating runway approach or departure surfaces, or impacting runway safety areas as defined in FAA AC 150/5300-13A, *Airport Design*.

³³ A permanent shifting of travel lanes on a limited access roadway would temporarily affect drivers during construction when the travel lanes would shift. A permanent shifting of travel lanes on a non-limited access roadway could result in a permanent loss of street parking.

³⁴ A temporary closure of travel lanes would occur during the construction of support columns for an elevated gondola, subway, or fixed guideway system. Upon completion of construction, the roadway would have the same number of travel lanes that were in existence prior to the start of construction. A permanent closure of travel lanes would occur to accommodate the placement of support columns or to allow for the transition from an elevated subway or fixed guideway to an underground subway or fixed guideway. Replacement of lost travel lanes, if possible, would require additional widening of the roadway and potential taking of property to maintain the existing number of travel lanes and roadway capacity.

³⁵ With respect to roadway traffic, the *New York State Highway Design Manual* (Chapter 16, "Maintenance of Traffic") requires that a traffic study be completed in order to evaluate the potential traffic impacts of lane closures on traffic along major roadways. A project that would require continuous lane closures for three or more days on major roads would be considered "significant." For example, if an alternative required the closure of the BQE, up to 260,000 daily drivers would be affected. In addition, if such a closure or partial closure on any major roadway were to occur, a Traffic Management Plan (TMP) would be required. The TMP requires the evaluation of traffic mitigation measures for maintenance of traffic, including detours, off-peak closures, nighttime closures, etc. If the lane closure would result in significant traffic impacts, the New York State Department of Transportation would require that alternative means of construction be done or measures be enacted to mitigate the traffic impact. Given the lack of other roadways to accommodate such a large number of vehicles in the vicinity of LGA, there are very limited options to mitigate traffic affected by lane closures. Therefore, the FAA assumes that closure of major roadways during peak periods for three or more days is unreasonable.

would increase construction cost and may extend construction time in comparison to alternatives that do not affect these facilities. Therefore, the FAA determined that these types of impacts would constitute an alternative that is not practicable or feasible to implement.

- Can the alternative be implemented without affecting peak-hour subway, rail, and/or transit service during construction? For the response to be "yes," the construction of the alternative cannot result in disruption to subway, rail, and/or transit service during peak travel times for any rail or subway lines or significantly interfere with MTA subway and/or bus operations. Affecting peak-hour subway, rail, and/or transit service or extended disruption of transit service could affect the daily lives of large segments of the population. Additionally, these effects could increase construction cost and may extend construction time in comparison to alternatives that do not affect these elements. Therefore, the FAA determined that these types of impacts would constitute an alternative that is not practicable or feasible to implement.
- Is the alternative reasonable to construct given cost considerations? For the response to be "yes," the alternative cannot result in a cost that is more than two and a half times greater than the current \$2.05 billion estimated project cost. The costs being used for this analysis are based on the average costs³⁶ of other similar transportation projects.³⁷ The FAA has determined that a cost of more than two and a half times greater than the current estimated cost for the Port Authority's proposed alternative is not reasonable.³⁸
- Can the alternative provide access to identified locations throughout the New York metropolitan area? For the response to be "yes," the alternative must provide reasonable access to identified access points representative of the origin/destination locations for passengers and employees at LGA.³⁹ The origin/destination locations are transit stations selected based on annual ridership data.⁴⁰ The station with the greatest ridership was selected as the representative access point for the geographic area. When annual

³⁶ Costs are based on 2019 dollars and have been adjusted for the differences in construction costs where the transportation project is located in New York City. A survey of other recent transit projects was conducted to identify an average cost per mile. To provide a reasonable average cost per mile, only those projects that were constructed in densely developed urban areas with complex construction issues were chosen. The other transportation projects that were used for determining average costs include subway extensions in New York City (Q Line beneath Second Avenue), Los Angeles, San Francisco, and Seattle. A cost of \$976.0 million per mile for an elevated subway or fixed guideway was used, and a cost of \$1.09 billion per mile for an underground subway or fixed guideway was used. (CityLab, "Why It's So Expensive to Build Urban Rail in the U.S.," January 26, 2018.)

³⁷ To provide consistent cost comparisons for each alternative, costs are calculated on a straight, per-mile basis and only include construction of the actual transportation facility. Estimated costs do not include costs associated with land acquisition or modifications to other transportation facilities or utilities. Recognizing that the first screening criteria under Step 2 identified major utilities, roadways, etc. that would be impacted, addressing these impacts would result in cost increases. Since alternatives could be screened out based on those impacts, such additional costs do not need to be considered under this screening criteria as well.

³⁸ The FAA recognizes that a project that would cost twice as much as the Port Authority's preferred alternative is probably not practical, but to be conservative, the FAA has considered costs up to 2.5 times greater to potentially be reasonable.

³⁹ Port Authority of New York and New Jersey, *AirTrain LGA, LGA Ground Access Mode Choice Model and AirTrain Ridership Forecast 2025-2045*, October 2018. The identified access points are representative of the origin/destination of approximately 84 percent of the origin/destination locations for passengers and employees at LGA. The 84 percent is derived by adding the percentages of passengers and employees from the following areas: Bronx, Brooklyn, Manhattan, Queens, and Long Island. The remaining 16 percent of passengers and employees come from further points (such as Upstate New York, Staten Island, New Jersey, Pennsylvania, and Connecticut) and would likely experience similar access issues to those alternatives that are not able to meet the criterion based on the identified access points. See Table 2-4 in Chapter 2.

⁴⁰ Metropolitan Transportation Authority, Annual Ridership Report, 2017; Metropolitan Transportation Authority, Long Island Annual Ridership Report, 2018; Port Authority of New York and New Jersey, World Trade Center Station, <https://www.panynj.gov/path/wtc-station.html> (accessed on August 28, 2019).

ridership data were not available, representative access points were selected based on the largest number of transfers accessible at the location. Because it is not practical to require all passengers to travel to Manhattan to use the alternative to access LGA, the FAA considers alternatives that have limited geographic connectivity to be unreasonable.

Each alternative was first evaluated in Step 1 to determine whether the alternative could achieve the Purpose and Need. Alternatives that would not meet all elements of the Purpose and Need were determined to be unreasonable and, therefore, were eliminated from further consideration. Each alternative that met all elements of the Purpose and Need was moved to Step 2 of the screening process to determine whether or not it would be reasonable to construct and operate. Alternatives that did not pass all Step 2 evaluation metrics were eliminated. The exception is the No Action Alternative, which is retained pursuant to NEPA as implemented by the CEQ Regulations. **Table ES-1** provides a list of each of the alternatives considered and summarizes the results of the alternatives screening evaluation.

As shown in Table ES-1, only one of the alternatives (Alternative 9A) both met the Purpose and Need and was considered to be reasonable to construct and operate. This alternative is the Proposed Action. The Proposed Action and the No Action Alternative are analyzed in detail in this EIS.

In accordance with 40 CFR 1502.14(e), the FAA has identified the Proposed Action as its preferred alternative. The “agency’s preferred alternative,” as defined by CEQ is “the alternative which the agency believes would fulfill its statutory mission and responsibilities, giving consideration to economic, environmental, technical and other factors.”⁴¹ As disclosed in the Final EIS, the FAA has conducted a thorough and independent analysis of alternatives considering its statutory mission and responsibilities with regards to transportation policy and has concluded that the Proposed Action best meets the stated Purpose and Need and the Port Authority’s goals and objectives.

ES.4 IDENTIFICATION OF STUDY PARAMETERS

ES.4.1 STUDY AREAS

Two study areas were defined for the purposes of assessing the potential direct and indirect effects of the Proposed Action and the No Action Alternative on environmental resources:

- The **Direct Study Area** was identified as the limit of physical ground disturbance for components of the Proposed Action, including connected actions, for the purposes of assessing potential effects on environmental resources associated with construction. The Direct Study Area encompasses approximately 116 acres and includes the APM guideway along the southeast border of the Airport, following the GCP to the southern extent of Flushing Bay (including the Marina facilities and the Flushing Bay Promenade), to the Mets-Willets Point Subway and LIRR Stations. The Direct Study Area also includes the limits of physical ground disturbance for the APM guideway support columns, the APM stations, and the APM OMSF and Parking Structure, as well as the permanent and temporary stormwater outfalls, and the utility relocations for both the APM system and connected actions. Areas of connected actions within the Direct Study Area include the existing and proposed sites of the Marina facilities, the areas surrounding the Passerelle Bridge, improvements to the Mets-Willets Point LIRR Station along the LIRR right-of-way between 108th Street and College Point Boulevard, two options for two temporary Citi Field parking areas in Willets Point, and the temporary MTA bus storage/parking facility at the MTA/Tully Site. The Direct Study Area also includes the existing construction staging area known as Ingraham’s Mountain and the existing LGA employee parking Lot P10.

⁴¹ Council of Environmental Quality, *Forty Most Asked Questions Concerning CEQ’s National Environmental Policy Act Regulations*, 46 Federal Register 18026, March 23, 1981. (Number 4a).

TABLE ES-1 (1 OF 3) SUMMARY OF ALTERNATIVES SCREENING EVALUATION

ALTERNATIVE	PASS ALTERNATIVE TO THE NEXT STEP		RETAINED FOR FURTHER ANALYSIS IN THE EIS?
	STEP 1	STEP 2	
1 No Action Alternative ¹	Yes ²	Yes ²	Yes ²
2 Diversion of Air Traffic at LGA Alternatives	—	—	—
2A Use of Other Airports Alternative ¹	No		No
2B Use of Trains and Buses Instead of Air Travel Alternative	No		No
3 Use of Other Modes of Transportation to LGA Alternatives	—	—	—
3A Ferry Service Alternative ¹	No		No
3B Helicopter Service Alternative	No		No
3C Gondola Service Alternative	Yes	No	No
4 Transportation Systems Management (TSM) Alternatives	—	—	—
4A Modify the Q48 Bus Route and the Q23 Bus Route to enter LaGuardia Airport at 94th Street Alternative	No		No
4B Revise M60 Bus Route to Only Travel Between LGA and 125th Street Metro North Station Alternative	No		No
4C Provide Free Bus Service on the Q70 Bus Route Alternative	No		No
5 Transportation Demand Management Alternatives ¹	No		No
6 Emerging Transportation Technologies Alternatives	—	—	—
6A Transportation Network Companies Alternative ¹	No		No
6B Autonomous Vehicles Alternative ¹	No		No
7 Off-Airport Roadway Expansion Alternatives	—	—	—
7A Additional Traffic Lanes on Grand Central Parkway Alternative ¹	No		No
7B Dedicated Bus Lanes to Q70 Bus Route Alternative	No		No
7C Dedicated Bus Lanes from Roosevelt Avenue via Junction Boulevard and 94th Street Alternative	No		No
7D Dedicated Bus Route from Mets-Willets Point Subway Station via Roosevelt Avenue and Grand Central Parkway Alternative	No		No
7E Elevated Busway from Mets-Willets Point Subway Station via Roosevelt Avenue and Flushing Bay Promenade Alternative	No		No
8 Subway Extension Alternatives	—	—	—
8A From Astoria Boulevard Subway Station: Elevated Above Astoria Boulevard and Grand Central Parkway Alternative ¹	Yes	No	No
8B From Astoria-Ditmars Boulevard Subway Station: Elevated Above 31st Street and 19th Avenue Alternative ¹	Yes	No	No

TABLE ES-1 (2 OF 3) SUMMARY OF ALTERNATIVES SCREENING EVALUATION

ALTERNATIVE	PASS ALTERNATIVE TO THE NEXT STEP		RETAINED FOR FURTHER ANALYSIS IN THE EIS?
	STEP 1	STEP 2	
8C From Astoria-Ditmars Boulevard Subway Station: Tunnel Beneath 31st Street and 19th Avenue Alternative ¹	Yes	No	No
8D From Astoria-Ditmars Boulevard Subway Station: Elevated Above Ditmars Boulevard and Grand Central Parkway Alternative	Yes	No	No
8E From 36th Street Subway Station: Tunnel Beneath Steinway Street and Grand Central Parkway Alternative	Yes	No	No
8F From Roosevelt Avenue-Jackson Heights Subway Station: Elevated Above 82nd Street and Grand Central Parkway Alternative	Yes	No	No
8G From Mets-Willets Point Subway Station: Elevated Above Roosevelt Avenue and Flushing Bay Promenade Alternative	Yes	No	No
9 Fixed Guideway Alternatives	—	—	—
9A From Willets Point Station ³ via Roosevelt Avenue and Flushing Bay Promenade Alternative (Port Authority Proposed Alternative) ¹	Yes	Yes	Yes
9B From Willets Point Station ³ via Roosevelt Avenue and Grand Central Parkway Alternative ¹	Yes	No	No
9C From Willets Point Station ³ via Roosevelt Avenue and Flushing Bay Promenade with a Ferry Stop Alternative	Yes	No	No
9D From Willets Point Station ³ via Long Island Rail Road Right-of-Way and Flushing Bay Promenade Alternative ¹	Yes	No	No
9E From Willets Point Station ³ via Long Island Rail Road Right-of-Way and Grand Central Parkway Alternative ¹	Yes	No	No
9F From Willets Point Station ³ via 126th Street and Grand Central Parkway Alternative	Yes	No	No
9G From Willets Point Station ³ via 126th Street and Across Flushing Bay Alternative	Yes	No	No
9H From Willets Point Station ³ via 126th Street and Flushing Bay Promenade Alternative	Yes	No	No
9I From Northern Boulevard via Willets Point Station ³ , Roosevelt Avenue, and Flushing Bay Promenade Alternative	Yes	No	No
9J From Jamaica Station Transportation Hub via Van Wyck Expressway, Grand Central Parkway, and Flushing Bay Promenade Alternative ¹	Yes	No	No
9K From Woodside LIRR/61st Street-Woodside Subway Station via an Existing Rail Right-of-Way, Brooklyn Queens Expressway, and Grand Central Parkway Alternative ¹	Yes	No	No
9L From Roosevelt Avenue-Jackson Heights Subway Station via Broadway, Brooklyn Queens Expressway, and Grand Central Parkway Alternative ¹	Yes	No	No
9M From Woodside LIRR/61st Street-Woodside Subway Station and Roosevelt Avenue-Jackson Heights Subway Station via Roosevelt Avenue, Broadway, Brooklyn Queens Expressway, and Grand Central Parkway Alternative	Yes	No	No
9N From Astoria Boulevard Subway Station via Astoria Boulevard and Grand Central Parkway Alternative ¹	Yes	No	No
9O From Hunterspoint Avenue LIRR Station via Existing Rail Right-of-Way, 31st Street, Brooklyn Queens Expressway, and Grand Central Parkway Alternative	Yes	No	No

TABLE ES-1 (3 OF 3) SUMMARY OF ALTERNATIVES SCREENING EVALUATION

ALTERNATIVE	PASS ALTERNATIVE TO THE NEXT STEP		RETAINED FOR FURTHER ANALYSIS IN THE EIS?
	STEP 1	STEP 2	
9P From Sunnyside Yards via Existing Rail Right-of-Way, Steinway Street, and Grand Central Parkway Alternative	Yes	No	No
9Q From Northern Boulevard Subway Station via Broadway, Steinway Street, and Grand Central Parkway Alternative	Yes	No	No
9R Through Line Connecting Willets Point Station ³ , LaGuardia Airport, and Woodside LIRR/61st Street-Woodside Subway Station via Roosevelt Avenue, Grand Central Parkway, Brooklyn Queens Expressway, and an Existing Rail Right-of-Way Alternative	Yes	No	No
9S Through Line Connecting Woodside LIRR/61st Street-Woodside Subway Station and Roosevelt Avenue-Jackson Heights Subway Station via Broadway, Roosevelt Avenue, an Existing Rail Right-of-Way, Brooklyn Queens Expressway, and Grand Central Parkway Alternative	Yes	No	No
9T Through Line Connecting Willets Point Station ³ , LaGuardia Airport, and Astoria-Ditmars Boulevard Subway Station via Roosevelt Avenue, Grand Central Parkway, 19th Avenue, and 31st Street Alternative	Yes	No	No
10 Rail Alternatives	—	—	—
10A Underground from Sunnyside Yards via Brooklyn Queens Expressway and Grand Central Parkway Alternative	Yes	No	No
10B Underground from Midtown Manhattan via Tunnel Beneath East River Alternative	Yes	No	No
10C Underground from Upper East Side Manhattan via New Tunnel Beneath East River Alternative	Yes	No	No

NOTES:

– Not applicable

EIS – Environmental Impact Statement

LGA – LaGuardia Airport

LIRR – Long Island Rail Road

TSM – Transportation Systems Management

1 Alternative provided by the Port Authority of New York and New Jersey.

2 Required to be included per 40 CFR 1502.14(d).

3 For the alternatives that have the origin station between the Mets-Willets Point Subway Station (serving the 7 Line) and the Mets-Willets Point LIRR Station, this location is referred to as the Willets Point Station.

SOURCE: Ricondo & Associates, Inc., March 2020.

- The **General Study Area** was defined to encompass the overall area containing all components of the Proposed Action for purposes of assessing potential operational effects of the APM system on environmental resources. The General Study Area encompasses approximately 700 acres, which includes and expands the extent of the Direct Study Area. The General Study Area includes the Direct Study Area, as well as adjacent neighborhoods in Queens (East Elmhurst, North Corona, Corona, Willets Point, and Ditmars- Steinway), Citi Field, Flushing Meadows-Corona Park, and portions of LGA and Flushing Bay.

In order to fully assess the effects associated with construction and operation of the Proposed Action, the analyses of some resources require a larger study area extending beyond the study areas defined above, including Air Quality and Climate (defined as the region); Noise and Vibration, Socioeconomics, and Environmental Justice (Extended Study Area); and Surface Transportation/Traffic (Traffic Study Area). Study areas used for analyses of these resources are discussed in their respective sections of the EIS.

ES.4.2 ANALYSIS YEARS

The baseline year to assess existing environmental conditions is 2018, the last full year for which data were available at the time this analysis was initiated; however, more current data were used for resources in which they were available or collected. The assumed construction schedule indicates the Proposed Action would be completed and the APM system would be operational in December 2025. Many resource categories require the results of analyses to be presented in full calendar year increments. With the APM system scheduled to commence operation in December 2025, the first full year of operations would be 2026. Accordingly, 2026 was selected as the opening analysis year even though the system is projected to be operational for some part of 2025. The EIS also evaluates a future 5-year look ahead, identified as 2031 for the Proposed Action.

ES.4.3 RIDERSHIP FORECAST

Two studies were completed for the Proposed Action in order to assess potential ridership of the proposed APM. The first ridership study⁴² was prepared by the Port Authority in October 2018 for future years 2025⁴³ and 2045. A second ridership study⁴⁴ was prepared by the FAA's Consultant Team for the EIS to provide an independent analysis. Both studies identify the percentage of trips and annual passengers that may potentially shift from other current means of accessing LGA (also known as travel modes) to using the proposed APM. These two forecasts were used throughout the EIS to assess a range of impacts based on the projected ridership. The ridership forecast prepared for the EIS, which was finalized in August 2020, included development of an independent forecast for future years 2026 and 2031, corresponding to the future analysis years. **Table ES-2** identifies the projected daily and annual ridership for air passengers and employees under both forecasts for 2026 and 2031.

⁴² Port Authority of New York and New Jersey, *AirTrain LGA: LGA Ground Access Mode Choice Model and AirTrain Ridership Forecast 2025-2045*, October 2018.

⁴³ At the time the Port Authority developed its forecast, preliminary construction schedules indicated a potential opening of the system as early as 2025.

⁴⁴ RSG, *LaGuardia Access Improvement Project EIS Ridership Forecast and Forecast Review*, August 10, 2020.

TABLE ES-2 AVERAGE AUTOMATED PEOPLE MOVER PASSENGERS FORECAST

	PORT AUTHORITY		FAA	
	2026 ¹	2031 ¹	2026	2031
Daily APM Passengers				
Air Passengers	13,167	14,173	9,173	9,891
Employees	3,945	4,098	3,945	4,098
Total Daily APM Passengers	17,112	18,271	13,117	13,989
Annual APM Passengers (millions)				
Air Passengers	4.8	5.1	3.3	3.6
Employees	1.4	1.5	1.4	1.5
Total Annual APM Passengers (millions)	6.2	6.7	4.8	5.1

NOTES:

APM – Automated People Mover

FAA – Federal Aviation Administration

1 Port Authority forecasts for 2026 and 2031 were interpolated based on the Port Authority 2025 and 2045 forecasts using a straight-line method. Forecasts of inter-terminal rides were excluded from the forecasts presented here.

SOURCE: RSG, *LaGuardia Access Improvement Project EIS Ridership Forecast and Forecast Review*, August 10, 2020.

As shown in Table ES-2, it is estimated between approximately 3.3 and 4.8 million annual air passengers in 2026 and between approximately 3.6 and 5.1 million annual air passengers in 2031 would use the proposed APM. It is also projected that approximately 27 percent of Airport employees would use the APM, which would equate to approximately 1.4 million Airport employee passengers in 2026 and approximately 1.5 million Airport employee passengers in 2031. Therefore, the total projected annual APM passengers would be between approximately 4.8 and 6.2 million in 2026 and between approximately 5.1 and 6.7 million in 2031.

FAA acknowledges the recent and ongoing impacts of the COVID-19 public health emergency and the resulting decline in aviation and transit travel demand. A4A, the trade organization of the leading US passenger and cargo airlines, projects that recovery to 2019 passenger volumes could occur in 2023 using optimistic assumptions, but most likely won't occur until 2024 or later.⁴⁵ Similarly, ACI, the trade association of the world's airports, projects that domestic passenger activity may recover as early as 2023 and international passenger traffic may recover as early as 2024.⁴⁶ Although it is impossible to precisely predict future changes to ridership that may result from COVID-19, the FAA believes that the future ridership analyses presented in the EIS represent a reasonable range of likely APM ridership. The ridership projections are based on pre-COVID-19 aviation and transit travel demand, LGA ground access patterns, and regional land use patterns that are still reasonably expected to resume as the economy recovers, even as leisure and business travelers adapt to new norms after the COVID-19 public health emergency.

⁴⁵ Airlines for America, "Tracking the Impacts of COVID-19," updated January 29, 2021.

⁴⁶ Airports Council International, *ACI Advisory Bulletin: The impact of COVID-19 on the airport business*, December 8, 2020 (available at: <https://aci.aero/wp-content/uploads/2020/12/Advisory-Bulletin-The-impact-of-COVID-19-on-the-airport-business.pdf>).

ES.5 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

The affected environment and environmental consequences present the existing conditions and environmental impacts of implementing the Proposed Action for the environmental impact categories identified in FAA Order 1050.1F.

ES.5.1 AFFECTED ENVIRONMENT

The affected environment describes and documents the geographic areas potentially affected, directly or indirectly, by the Proposed Action; the applicable federal, state, and local regulations pertinent to the environmental subject matter; environmental resources that would not be affected by the Proposed Action; the methodologies used to establish existing conditions; and existing conditions for potentially affected resources.

The General Study Area encompasses approximately 700 acres and comprises land areas to the west and southeast of LGA, supporting a mix of open space and outdoor recreation, residential, commercial, industrial, manufacturing, transportation, and other land uses. Vegetation in the General Study Area comprises sparse shoreline species along Flushing Bay, with typical urban species inland. The General Study Area has limited terrestrial wildlife habitat, and that habitat is surrounded by developed infrastructure.

An Extended Study Area was identified to assess potential noise and socioeconomic, environmental justice, and children's environmental health and safety risks impacts associated with increased rail shuttle service on aboveground portions of the LIRR Port Washington Branch between the Mets-Willets Point LIRR Station and the LIRR Hudson Yards Western Rail in Manhattan. The entirety of the General Study Area and the majority of the Extended Study Area is in Queens County, which has the second-largest economy of the five New York City boroughs and is the most economically diverse with major employment in the health care, retail trade, manufacturing, construction, transportation, and film and television production sectors. In 2018, the median household income and per capita income in the General Study Area were lower than that of the Extended Study Area, the state, the City, and Queens County and substantially lower than New York County. The percentage of population below the federal poverty level in the General Study Area was lower than New York City but higher than the Extended Study Area, New York County, New York State, and Queens County. In 2018, the General Study Area accommodated approximately 16,500 housing units and approximately 46,400 residents, and the Extended Study Area accommodated approximately 100,000 housing units and approximately 258,000 residents. The number of persons per household in the General Study Area is higher than the Extended Study Area, the state, the City, Queens County, and New York County. Due to the comparatively higher minority population within the General Study Area and the Extended Study Area, ranging from 67 to 80 percent compared to approximately 45 percent for the state, the General Study Area and the Extended Study Area can each be characterized as a minority environmental justice population. In the General Study Area, approximately 23 percent of the population is under 18, and approximately 20 percent of the population is under 18 in the Extended Study Area. These rates are comparable to New York State (21 percent), New York City (21 percent), and Queens County (20 percent).

The main access to and from LGA is from the GCP, an eight-lane roadway that handles approximately 165,000 vehicles per day;⁴⁷ secondary access is provided from the Whitestone and Van Wyck Expressways. In 2018, a number of freeway segments and intersections in and around LGA operated at Levels of Service (LOS) of E or F (poor or failing) conditions.

⁴⁷ New York City Department of Transportation, 2015 New York City Screenline Traffic Flow, 2015.

A majority of the General Study Area lies within the New York City coastal zone boundary. The nearest surface water bodies are Flushing Bay and Flushing Creek, both of which are partially within the General Study Area and both of which have associated tidal wetlands. The Waterfront Revitalization Program of 1982 (WRP) sets forth five types of special area designations, two of which are present within the General Study Area: East River / Long Island Sound Special Natural Waterfront Area (SNWA) and Priority Marine Activity Zone (PMAZ). Approximately 360 acres of the General Study Area are located within the 100-year floodplain, with the majority of that acreage being on the north and east sides of the General Study Area, adjacent to Flushing Bay, Flushing Creek, and Bowery Bay.

The following publicly owned parks and recreation areas are located within the General Study Area: Flushing Meadows-Corona Park; Hinton Park and the Louis Armstrong Playground; and Overlook Park; and the GCP. The grassy medians and landscaped sections of the GCP are considered parkway under the jurisdiction of NYC Parks but would not be subject to DOT Section 4(f) per Federal Highway Administration (FHWA) guidance. Portions of Flushing Meadows-Corona Park have been improved with LWCF Act funds, including construction of the Playground for All Children, athletic field enhancements as a part of a multi-site, borough-wide ballfields project, and park bench improvements made through a City-wide program.

In compliance with Section 106 of the NHPA, the FAA consulted with the State Historic Preservation Office (SHPO), the Advisory Council on Historic Preservation (AChP), federally recognized Native American Tribes with an interest in the area, local governments, and other consulting and interested parties to develop the Area(s) of Potential Effects (APE); identify historic properties listed or eligible for listing in the National Register of Historic Places (NRHP); assess project effects; and determine avoidance, minimization, or mitigation efforts to resolve any adverse effects on historic properties. To evaluate the potential for direct or indirect effects, the FAA has established two separate APEs⁴⁸ for the Proposed Action. The APE-Archaeology was defined to assess the direct effects of the Proposed Action to below-ground archaeological resources and includes all locations where construction and operation of the Proposed Action may result in potential direct physical impacts. The APE-Archaeology was assessed as having low archaeological sensitivity. It was concluded that the APE-Archaeology has been heavily altered as a result of filling, grading, demolition of older buildings and facilities, and construction of the Airport, highways, buried utilities, signage and infrastructure, Citi Field, and other urban development. The APE-Architecture was defined for above-ground architectural resources and includes all locations where the Proposed Action may result in either direct or indirect effects. As such, the APE-Architecture extends beyond the actual construction limits to include those properties that may experience visual changes, changes in patterns of use, or changes in historic character associated with the construction or operation of the Proposed Action. The FAA (with SHPO concurrence) identified 12 historic properties as eligible for listing in the NRHP, as outlined in **Table ES-3**. Five of the properties are individually eligible for listing, and seven are eligible as a contributing element to the Flushing Meadows-Corona Park Historic District.

⁴⁸ Although not required, for the LGA Access Improvement Project, the APE-Archaeology corresponds to the Direct Study Area and the APE-Architecture corresponds to the General Study Area.

TABLE ES-3 IDENTIFIED HISTORIC PROPERTIES

NAME	NRHP ELIGIBILITY
105-19 Ditmars Boulevard	Individually Eligible
105-33 Ditmars Boulevard	Individually Eligible
106-18 27th Avenue	Individually Eligible
Flushing Meadows-Corona Park Historic District	Individually Eligible
Passerelle Bridge	Eligible – Contributing to Flushing Meadows-Corona Park Historic District
Pavilion on the Passerelle Bridge (over the LIRR)	Eligible – Contributing to Flushing Meadows-Corona Park Historic District
Main Gate Entrance	Eligible – Contributing to Flushing Meadows-Corona Park Historic District
Passerelle Buildings at Main Entrance	Eligible – Contributing to Flushing Meadows-Corona Park Historic District
Concrete Arches	Eligible – Contributing to Flushing Meadows-Corona Park Historic District
Paint Shed	Eligible – Contributing to Flushing Meadows-Corona Park Historic District
Maintenance Building	Eligible – Contributing to Flushing Meadows-Corona Park Historic District
Porpoise Bridge (Tidal Gate Bridge) – BIN 2270690 ¹	Individually Eligible and Key Contributing Element to Flushing Meadows-Corona Park Historic District

NOTES:

LIRR – Long Island Rail Road

NRHP – National Register of Historic Places

1 The Porpoise Bridge is both individually eligible and a key contributing element to the Flushing Meadows-Corona Park Historic District. It is currently slated for demolition and reconstruction as part of a separate, unrelated federal undertaking.

SOURCE: Richard Grubb & Associates, Inc., *Historic Architecture Reconnaissance Survey, LaGuardia Access Improvement Project*, October 2019.

In general, the noise setting within the Extended Study Area is dominated by transportation facilities. Areas around LGA are primarily influenced by aircraft operations (takeoffs and landings). Roadway noise within the Extended Study Area is generated by vehicles traveling on major freeways, including the GCP, the Brooklyn Queens Expressway, the Whitestone Expressway, and the Van Wyck Expressway, and on major arterials, including but not limited to Northern Boulevard, Queens Boulevard, Roosevelt Avenue, Junction Boulevard, and Astoria Boulevard. Noise from existing train operations, including the LIRR and the 7 Line, also contribute to the noise setting within the Extended Study Area. Noise-sensitive receptors within the Extended Study Area include residential uses, schools, places of worship, parks, and library uses in East Elmhurst, Elmhurst, Ditmars-Steinway, North Corona, Woodside, Sunnyside, and Jackson Heights. It should also be noted that construction activities associated with the [LaGuardia Redevelopment Program](#) would be ongoing and the associated noise and vibration of that construction was considered in this analysis.

The use, handling, and storage of hazardous materials, as well as existing contaminated sites, are present throughout the General Study Area. Activities associated with hazardous materials include Airport operations; LIRR operations; operations and maintenance of NYCT subway and commuter trains and buses; and industrial, automotive, manufacturing, and commercial businesses in the Willets Point area. Recognized environmental conditions within the General Study Area include non-indigenous (historic) fill; current and historical industrial operations, on-site solid and hazardous waste accumulation, ground water contamination, and vapor encroachment conditions within the Willets Point area; current industrial operations at and around the Marina facilities; current and historical railroad operations; and current and historical aviation operations at LGA.

The visual character of the General Study Area is a highly urbanized environment within New York City, characterized as a high ambient light environment that results in skylight, which is a brightening of the night sky over inhabited areas. Typical visual elements and sources of light emissions in the General Study Area include at-grade, elevated, and structural transportation infrastructure (the Airport; roadways, including the GCP; public transit rail and transit stations; parking facilities for the Airport and Citi Field), parks and associated points of interest (the Flushing Bay

Promenade, Citi Field, the Marina facilities, Passerelle Bridge, Flushing Meadows-Corona Park, and the National Tennis Center), residential areas, and industrial and commercial facilities.

The General Study Area includes portions of Flushing Bay and Flushing Creek (which flows into Flushing Bay). These waterways are saline surface waters that are suitable for secondary contact recreation, fishing, fish propagation, and fish survival.⁴⁹ In a highly urbanized watershed, such as the one present in the General Study Area, water quality and aquatic habitats are impaired as a result of development that results in irreversible changes to the watershed. Approximately 8.87 acres of aquatic resources, comprising 7.9 acres of tidal wetlands and 0.97 acres of freshwater wetlands, were delineated in Flushing Bay and Flushing Creek. Approximately 4.11 acres of aquatic resources were delineated at the Marina and approximately 4.66 acres of aquatic resources were delineated adjacent to the NYCT Corona Maintenance Facility. Approximately 0.1 acres of aquatic resources were delineated at the Flushing Meadows-Corona Park Site.

ES.5.2 ENVIRONMENTAL CONSEQUENCES

Environmental consequences describes the methodologies and significance thresholds⁵⁰ used to evaluate impacts; identifies the impacts due to construction and operation of the Proposed Action compared to the No Action Alternative; and identifies mitigation, avoidance, and minimization measures. The environmental consequences evaluation considers the direct, indirect, and cumulative effects of project implementation. Direct effects are those caused by the Proposed Action; they occur at the same time and place and include those that may result from physical disturbance of an environmental resource. Indirect effects are those caused by the Proposed Action but they are later in time or farther removed in distance but are still reasonably foreseeable, including growth-inducing and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air quality, noise, or water and visual resources. Cumulative effects are those effects that result from the incremental impact of the Proposed Action when added to other past, present, and reasonably foreseeable future actions.

Table ES-4 summarizes the environmental resource categories analyzed as part of this analysis; potential environmental impacts conclusions; and mitigation, avoidance, and minimization measures.

⁴⁹ New York City Department of Environmental Protection, *Flushing Bay Facility Plan Report*, August 2011.

⁵⁰ The FAA uses thresholds that serve as specific indicators of significant impact for some environmental resource categories. Quantitative significance thresholds do not exist for all environmental resource categories; however, consistent with the CEQ regulations, the FAA has identified factors that should be considered in evaluating the context and intensity of potential environmental impacts.

TABLE ES-4 (1 OF 13) SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

RESOURCE CATEGORY	IMPACT POTENTIAL	DISCUSSION	MITIGATION MEASURES
Air Quality	No significant impacts	Temporary effects during construction, but the change in emissions would not exceed <i>de minimis</i> thresholds; would result in a net overall reduction in operational emissions.	None required, but the Port Authority would implement best practices as identified in its <i>Sustainable Design Guidelines</i> . ¹ Contractors would be required to use ultralow sulfur diesel fuel, all off-road equipment would be required to be retrofitted with emission control devices using best available technologies, and diesel-powered generators would be limited to situations where commercial electric power may not be readily available. The Port Authority would also require that its contractor use construction equipment with engines that meet Tier 4 ¹ emission standards for all equipment greater than 100 horsepower (HP) and for 70 percent of equipment less than 100 HP. The Port Authority would require that a consultant independent of the Design-Build-Operate-Manager (DBOM) contractor and paid by the Port Authority monitor particulate matter within and at the perimeter of the active construction areas and verify adherence to construction equipment requirements for the duration of construction. Penalties would be imposed for non-compliance. The independent consultant would develop monthly reports on its monitoring findings that would be publicly accessible on a Port Authority webpage throughout the duration of construction. The reports will include any instances of exceedance and the corresponding corrective action.
Biological Resources	No significant impacts	Determinations by US Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) that the Proposed Action <i>may affect, but is not likely to adversely affect</i> special status species or Essential Fish Habitat (EFH).	Measures that would be used to mitigate the impacts of dredging and pile-driving in aquatic habitat include: <ul style="list-style-type: none"> ▪ A mechanical dredge with a closed environmental clamshell bucket; ▪ the use of turbidity curtains to control the dispersal of sediment into the water column; ▪ the use of less impactful vibratory or cushioned impact hammers for in-water pile-driving; ▪ observation of the fisheries' time-of-year restrictions, including dredging activities and associated construction noise impacts would be avoided between January 1 and May 31 when winter flounder eggs and larvae may be present in the General Study Area; ▪ monitoring for sediment plumes; ▪ dredged sediment would need to be handled, stored, and disposed of in accordance with all applicable, health, safety, and sediment and waste management plans and protocols; ▪ placement below gunwales, no free falling of buckets, no hosing of gunwales during dredging, and no barge overflow requirements; and ▪ bucket hoist speed restrictions. The replacement of trees along the Flushing Bay Promenade is stipulated in the Memorandum of Agreement (MOA) between the Port Authority and the City of New York (see Section 3.8.5). For all other areas, unless superseded by New York Highway Law, trees would be replaced in accordance with New York City Local Law 3 of 2010, and in coordination with NYC Parks Forestry division. This would include addressing restitution requirements, where tree restitution values and replacement trees would be calculated in accordance with the NYC Parks' New York City Tree Valuation Protocol, with prioritization given to new trees along the Promenade. This protocol provides appraisal methodology that assesses value based on size, condition, species, and location. In order to prevent potential impacts to any nesting migratory bird species, tree removal would be avoided to the extent practicable from April 1st to October 30th. If the construction schedule requires tree removal during this timeframe, the Port Authority would perform biological surveys. If construction would occur near potential horseshoe crab habitat either construction would be avoided during the spawning season (May 1 to July 15) or an ecologist would be on-site during construction to perform routine sweeps of the area and relocate horseshoe crabs as needed.
Climate	No significant impacts	Would not be a significant contributor to climate change as the Proposed Action would result in a net overall reduction in operational greenhouse gas emissions.	None required, but the Port Authority would implement best practices as identified in its <i>Sustainable Design Guidelines</i> . ¹ Besides the emission reduction measures discussed in air quality above, the Port Authority would require its contractors to ensure that at least 10 percent of their on-road vehicles used for the Proposed Action are zero emissions or low emitting. Additionally, adherence to the Port Authority's <i>Climate Resilience Design Guidelines</i> and the New York City Mayor's Office <i>Climate Resiliency Design Guidelines</i> would ensure the Proposed Action is constructed to protect against future sea level rise and flood events.

TABLE ES-4 (2 OF 13) SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

RESOURCE CATEGORY	IMPACT POTENTIAL	DISCUSSION	MITIGATION MEASURES
Coastal Resources	No significant impacts	<p>Construction of the Proposed Action would not cause an unacceptable risk to human safety or property, nor would construction of the Proposed Action cause adverse impacts to the coastal environment that cannot be mitigated. However, the Proposed Action would partially obstruct and contrast with views of Flushing Bay from <u>some</u> residences located along Ditmars Boulevard between LGA and Astoria Boulevard. The Proposed Action would have impacts to visual character and visual resources that would be <u>temporarily</u> inconsistent with <u>three New York City Waterfront Revitalization Program (WRP) coastal policies during construction. The Proposed Action would introduce visual elements that would partially affect views from residential areas along Ditmars Boulevard; however, the existing visual access and enjoyment of waterfront views from users of the park would remain and potentially be enhanced by improved connectivity for cyclists and pedestrians, creation of gathering areas, public safety improvements and improving crossings at entry points into Flushing Meadows-Corona Park, and beautification of entrances to the pedestrian bridges, and provision of improved signage and wayfinding at the park entrances.</u></p> <p>Existing coastal resources, including the <u>Special Natural Waterfront Area (SNWA)</u> and <u>Priority Marine Activity Zone (PMAZ)</u>, would be protected to the maximum extent practicable during construction of the Proposed Action, and they would be mainly consistent with applicable WRP policies.</p>	<p>To minimize the potential for stormwater-related impacts to coastal resources during construction, the Proposed Action would adhere to requirements of the New York State Department of Environmental Conservation (NYSDEC) State Pollution Discharge Elimination System (SPDES). During excavation and construction, any groundwater recovered during dewatering would be monitored, treated, and discharged to existing infrastructure in compliance with NYSDEC SPDES requirements, and Best Management Practices (BMPs) would be utilized. If dewatering is necessary, pumps would not be allowed to discharge directly into a waterway or wetland. BMPs would be incorporated into the Proposed Action design to minimize erosion and sedimentation during and after construction of the Proposed Action. WRP coastal resource policies address a breadth of environmental resources; therefore, additional mitigation measures identified in other environmental resource category sections would also be applicable to coastal resources, including:</p> <ul style="list-style-type: none"> ▪ biological resources mitigation measures and BMPs identified by the NMFS to mitigate potential impacts to biological resources within Flushing Bay; ▪ measures as identified in the MOA governing <u>Section 4(f) properties</u> between the Port Authority and New York City, <u>as well as a number of additional mitigation measures outside of the MOA</u>; ▪ historic resources mitigation measures are defined in the Section 106 MOA to resolve adverse effects to historic properties (the <u>executed Section 106 MOA</u> is included in <u>Appendix K.13 of the Final EIS</u>); and ▪ mitigation measures for effects to visual resources/character <u>would be adopted to complement the surrounding environment.</u>

TABLE ES-4 (3 OF 13) SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

RESOURCE CATEGORY	IMPACT POTENTIAL	DISCUSSION	MITIGATION MEASURES
Department of Transportation Act, Section 4(f) and Land and Water Conservation Fund Act, Section 6(f) Resources	<p>Results in physical use of Section 4(f) properties in Flushing Meadows-Corona Park. The Proposed Action would involve a physical use of Section 4(f) properties (portions of Flushing Meadows-Corona Park, as well as historic properties located within the park) and visual impacts to Section 4(f) properties. The Proposed Action would constitute a use, as defined under Section 4(f), and would result in a significant impact to Section 4(f) properties.</p> <p><u>Conversion of 0.5 acres of Section 6(f) obligated property and temporary non-conforming use during construction of 1.2 acres of Section 6(f) obligated property.</u></p>	<p>Temporary access restrictions to recreational resources and temporary visual and noise impacts during construction; permanent incorporation of Section 4(f) properties into a transportation facility; visual and light emissions effects during operation.</p> <p>NYC Parks, as the owner of the Section 4(f) properties, has indicated that the introduction of the APM guideway along the Flushing Bay Promenade would significantly detract from the use and enjoyment of the Promenade by park users because of its aesthetic effects, resulting in substantial impairment of the resource.</p> <p><u>Construction of the Proposed Action would result in conversion of approximately 21,000 square feet of Section 6(f) obligated property and a temporary non-conforming use of 52,000 square feet of Section 6(f) obligated property.</u></p>	<p><u>Section 4(f)</u></p> <p>Implementation of mitigation under the Proposed Action would enhance the Flushing Bay Promenade. Measures as identified in the MOA governing park resources between Port Authority and New York City include:</p> <ul style="list-style-type: none"> ■ improve the full length of the approximate 1.4-mile long Flushing Bay Promenade between 27th Avenue and 127th Place, including path enhancement, railing and walkway refurbishment, and landscaping; implementation of <i>de minimis</i> (minor) bulkhead/seawall repairs alongside the paths to make them safe for public use; provide irrigation; incorporate the maximum reasonable number of replacement trees along the Promenade/Marina area in conformance with the approved Promenade <u>Improvement Plan</u>; provide community amenities, including new public activity areas, installation of public art along the Promenade/Marina area, upgrades to guideway aesthetics, improvements to park access by the public, and improvements to lighting; and restore all areas disrupted by construction to a condition better than the documented condition at the commencement of construction and include improved visual and noise screening of the GCP adjacent to the Marina; ■ maintain access during construction to the pedestrian bridges over the GCP at 27th Avenue and 31st Drive, the Promenade walkway, and Pier 3 at the Marina facilities to the greatest extent possible; ■ develop a construction staging plan that takes into account the operations of the Marina Restaurant and Banquet Hall, the Gulf Gas Station, and Dunkin Donuts; ■ to the extent that interferences with business operations occur, the Port Authority would compensate for damages or losses incurred by the Marina Restaurant and Banquet Hall, the Gulf Gas Station, and Dunkin Donuts during construction directly based on the value of the lost operations; ■ develop a construction staging plan that minimizes impact on available parking during construction; if Citi Field parking is decreased during any time during construction, temporary replacement parking would be provided or the Port Authority would compensate the Mets for lost parking revenue; ■ replace parking spaces that would be permanently occupied at the Citi Field parking lot on a one-to-one basis in the proposed parking structure at the OMSF; and ■ after construction, restore those portions of the Citi Field parking lot that are to remain as ground surface parking, to NYC Park's specification and approval. <p><u>A Flushing Bay Promenade Community Advisory Committee (Community Advisory Committee) will meet regularly with the Port Authority and NYC Parks and will serve as a feedback forum and focus group to review design ideas, assist with community engagement, and serve as a liaison between the Port Authority and NYC Parks and the broader community.</u></p>

TABLE ES-4 (4 OF 13) SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

RESOURCE CATEGORY	IMPACT POTENTIAL	DISCUSSION	MITIGATION MEASURES
Department of Transportation Act, Section 4(f) and Land and Water Conservation Fund Act, Section 6(f) Resources (continued)			<p>Beyond what is stipulated in the MOA between the Port Authority and the City of New York, the Port Authority and NYC Parks agree that the following improvements that were identified by members of the public would be included in the Promenade Improvement Plan:</p> <ul style="list-style-type: none"> ▪ addressing community concerns regarding cleanliness; ▪ improved connectivity for cyclists and pedestrians to both the local community and the rest of Flushing Meadows-Corona Park, in coordination with other NYC Parks efforts; ▪ creation of dedicated bicycle and pedestrian lanes on the Promenade pathway, if deemed feasible in consultation with NYC DOT, including other improvements for bikers and pedestrians such as bike racks and distance markers; ▪ creation of gathering areas, including group seating areas with picnic tables, shaded areas, playground areas, and/or a zen garden/quiet area; ▪ public safety improvements along the Promenade and improving crossings at entry points into the Flushing Meadows Corona Park; and ▪ replacement of drinking fountains. <p>The specific locations and design details for all of the elements of the Promenade Improvement Plan, whether identified in the MOA between the Port Authority and the City of New York or through the community input meetings, will be developed in consultation between the Port Authority, NYC Parks, the Community Advisory Committee, and through additional public engagement meetings. Detailed design plans will also be subject to review and approval by the NYC Public Design Commission. The Port Authority would implement the Promenade Improvement Plan as soon as practicable, with all improvements to be completed no later than 12 months after revenue service begins for the Proposed Action, as stated in the MOA between the Port Authority and the City of New York (see Section 3.3.h of the MOA).</p> <p>Furthermore, the Port Authority would set aside funds for enhanced upkeep and maintenance for the Promenade (that is, enhanced over the usual NYC Parks upkeep) for a minimum of 10 years, commencing upon the completion of measures identified in the Promenade Improvement Plan. This would include funding for both staff and equipment to provide for maintenance of landscaped areas, removal of trash to keep the Promenade in a clean state and regular upkeep of any new amenities developed as part of the Promenade Improvement Plan.</p> <p>Additionally, a separate Section 106 MOA to avoid, minimize, and mitigate adverse effects to historic properties would be implemented (see Appendix K.13 of the Final EIS).</p> <p><u>Section 6(f)</u></p> <p>Under Section 6(f), NPS requires that land conversions be replaced by lands of equal value, location, and recreation usefulness. The Port Authority would have up to one year from the issuance of a favorable record of decision to identify replacement property that meets LWCF conversion requirements in accordance with the current Statewide Comprehensive Outdoor Recreation Plan. Replacement property cannot be in public ownership, currently used for recreational purposes, and cannot have received federal funding. Appraisals for both the existing Section 6(f) properties and the replacement properties would be conducted prior to conversion.</p>

TABLE ES-4 (5 OF 13) SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

RESOURCE CATEGORY	IMPACT POTENTIAL	DISCUSSION	MITIGATION MEASURES
Hazardous Materials, Solid Waste, and Pollution Prevention	No significant impacts	Construction of the Proposed Action may result in impacts due to the presence of hazardous materials, disturbance of a contaminated site, generation of an appreciably different quantity or type of hazardous waste, or adversely affecting human health and the environment. With incorporation of mitigation measures, impacts would be less than significant.	<p>Construction activities would be performed in accordance with the following measures:</p> <ul style="list-style-type: none"> ■ To avoid potential impacts on the community and construction workers, excavation and other construction work involving soil disturbance would be performed under a Construction Environmental Management Plan and a Construction Health and Safety Plan. ■ Groundwater testing would be performed to ensure compliance with proper regulatory discharge requirements, either New York City Department of Environmental Protection (NYCDEP) sewer discharge parameters or NYSDEC surface water discharge parameters. Groundwater may require pre-treatment prior to discharge. ■ Any suspect asbestos-containing material (ACM), lead-based paint, and polychlorinated biphenyls- (PCB-) containing materials encountered during demolition or excavation would be properly tested and characterized for the potential for hazardous materials and disposed in accordance with applicable regulations. <u>Any ground disturbance to facilitate construction of the temporary Citi Field replacement parking areas within the Willets Point Brownfield Cleanup Program (BCP) site would also be conducted in accordance with applicable remedial requirements and with appropriate coordination and any necessary reporting to NYSDEC.</u> ■ Construction of an underground stormwater recharge basin beneath the OMSF to manage stormwater runoff from the OMSF project area, prevent flooding and downstream erosion, and improve water quality within Flushing Creek. ■ In order to protect water quality and habitats in Flushing Creek, two new outfalls into Flushing Creek would be constructed to accommodate and treat stormwater runoff from the OMSF project area and the temporary MTA bus storage and parking area. These are catchment areas from which stormwater runoff is not currently treated. Runoff from redeveloped impervious surfaces would discharge into existing drainage systems and the new outfalls. The outfall for the temporary MTA bus storage and parking area would be temporary and removed following construction of the Proposed Action. ■ All materials to be disposed (for example, miscellaneous debris, contaminated soil, and excess fill) would be properly tested and characterized for the potential for hazardous materials and disposed of off-site in accordance with applicable federal, state, and local requirements. ■ All stockpiled materials would be handled in accordance with the NYSDEC Stormwater Management Design Manual, a Soil Management Plan, of specific and industry-standard BMPs, such as securely covering with tarps or plastic sheeting, to prevent dust or run-off.

TABLE ES-4 (6 OF 13) SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

RESOURCE CATEGORY	IMPACT POTENTIAL	DISCUSSION	MITIGATION MEASURES
Historic, Architectural, Archaeological, and Cultural Resources	Adverse effect to historic resources in Flushing Meadows-Corona Park; no adverse effect to historic resources located along Ditmars Boulevard; upon implementation of mitigation the impacts would be less than significant	Would result in an adverse effect to Flushing Meadows-Corona Park Historic District, including four of its contributing elements (the Passerelle Bridge; the Pavilion on the Passerelle Bridge over the LIRR; Main Gate Entrance; and the Passerelle Buildings at Main Entrance). The Passerelle Bridge and the Pavilion on the Passerelle Bridge over the LIRR would be demolished.	Measures to minimize and mitigate the adverse effects have been identified in consultation with the SHPO, ACHP, Port Authority, and NYC Parks and other consulting parties in an effects resolution document. As adverse effects are unavoidable, the FAA, SHPO, and ACHP, in consultation with the Port Authority and NYC Parks have <u>executed a Section 106 MOA</u> to resolve the adverse effects. The <u>Section 106 MOA</u> addresses the anticipated effects of the undertaking, defines procedures to respond to project changes and unanticipated discoveries, and sets forth measures that will be implemented to avoid, minimize, and mitigate adverse effects on historic properties. The <u>executed Section 106 MOA (see Appendix K.13)</u> includes: <ul style="list-style-type: none"> ▪ Historic American Buildings Survey (HABS) documentation and records archiving; ▪ National Register Nomination Registration Form for Flushing Meadows-Corona Park Historic District; ▪ protection of historic properties provisions during construction, including vibration monitoring/action plan; ▪ architectural design and historic preservation considerations for new construction and preserved elements, including the Pavilion on the Passerelle Bridge over the LIRR Canopy, the Main Gate Entrance; and the Passerelle Buildings at Main Entrance; ▪ context-sensitive designs for the proposed Willets Point APM Station and related improvements, consistent with the significance and character-defining features of the Flushing Meadows-Corona Park Historic District, the contributing Passerelle Bridge, the Pavilion on the Passerelle Bridge (over the LIRR), the Main Gate Entrance, and the Passerelle Buildings at Main Entrance; ▪ the restoration or replication of flag poles and flags, lighting devices, and original fiberglass pedestrian benches; ▪ Conditions Assessment and Report for the Unisphere, a <u>designated New York City landmark</u> located inside the Flushing Meadows-Corona Park; ▪ dismantling and storage of the existing Main Gate Entrance structure and its constituent parts for rehabilitation and reinstallation in its original location; ▪ rehabilitation of the exterior envelope of the Passerelle Buildings at Main Entrance to maintain their historical integrity in conjunction with planned alterations to be undertaken to the building's ramp in order to achieve <u>Americans with Disabilities Act (ADA)</u> compliance; ▪ interpretive/educational displays at select sites; and ▪ an Unanticipated Discovery Plan.
Land Use	<u>No significant impacts</u>	<u>Would be consistent with and would not conflict with applicable land use plans, policies, and regulations. The Proposed Action would be temporarily inconsistent with a limited number of policies of the WRP during construction. An inconsistency by itself does not automatically result in a significant impact and given the limited number of inconsistencies, the FAA has determined that the Proposed Action would not have a significant land use impact.</u>	<u>None required.</u>

TABLE ES-4 (7 OF 13) SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

RESOURCE CATEGORY	IMPACT POTENTIAL	DISCUSSION	MITIGATION MEASURES
Natural Resources and Energy Supply	No significant impacts	Consumption of natural resources and energy would occur during construction and operation of the Proposed Action; however, the Proposed Action would not cause a significant shortage of area supplies or resources.	<p>None required, but the Port Authority would implement best practices as identified in its <i>Sustainable Design Guidelines</i>.¹ Additionally, the Port Authority is committed to pursuing community solar, pending final feasibility assessment. The Port Authority intends to prioritize offering community solar to zip codes adjacent to LGA, as well as low- and moderate-income households and small/minority businesses.</p>
Noise, Vibration, and Noise-Compatible Land Use	No significant impacts; construction noise and vibration impacts; operational noise impacts	<ul style="list-style-type: none"> ▪ Temporary noise impacts during construction to 1,063 residential units within the East Elmhurst and North Corona neighborhoods, a new middle school currently under construction, and 2 parks (Hinton Park and Flushing Meadows-Corona Park). ▪ Vibration-related annoyance impacts during construction to 136 residential and hotel units and 2 parks (Hinton Park and Flushing Meadows-Corona Park). <p>Moderate operational noise impacts along the LIRR Port Washington Branch to 571 residential and hotel units when compared to the No Action Alternative.</p>	<p>Construction of the Proposed Action would adhere to the rules defined in the New York City Noise Code, which requires the adoption of a noise control mitigation plan prior to commencement of construction activities. The following noise control measures defined in Title 15, Chapter 28: Citywide Construction Noise Mitigation of The Rules of the City of New York would be incorporated into the noise control mitigation plan for the Proposed Action, as applicable:</p> <ul style="list-style-type: none"> ▪ All construction equipment operating on a site shall be equipped with the appropriate manufacturer's noise reduction devices, including, but not limited to a manufacturer's muffler (or equivalently rated material) that is free of rust, holes, and exhaust leaks. ▪ Noise from construction devices with internal combustion engines shall be mitigated by ensuring that the engine's housing doors are kept closed, and by using noise-insulating material mounted on the engine housing that does not interfere with the manufacturer's guidelines for engine operation or exhaust. ▪ Portable compressors, generators, pumps, and other such devices shall be covered with noise-insulating fabric to the maximum extent possible that does not interfere with the manufacturer's guidelines for engine operation or exhaust and shall further reduce noise by operating the device at lower engine speeds during the work to the maximum extent possible. ▪ Vehicle engine idling onsite shall be limited to no longer than three minutes while parking, standing, or stopping, as per New York City Administrative Code §§ 24 to 163. ▪ Quieter back-up alarms on construction equipment shall be used whenever practical. ▪ Strategically positioning construction vehicles as to minimize operation near receptors and avoiding tailgate slamming to the extent possible. ▪ Noise pathway controls, including noise barriers and enclosures free from gaps and holes, should be placed as close as possible to construction areas. Construction of noise barriers and enclosures should follow rules and guidelines detailed in Title 15, Chapter 28: Citywide Construction Noise Mitigation of The Rules of the City of New York. <p>Construction noise would be minimized by including specifications in the construction contracts that require contractors to implement a program to minimize construction noise at areas of noise impacts. The contractor would ultimately be responsible for identifying and selecting the construction methods used to build the Proposed Action. Nevertheless, source control measures related to the use of impact equipment, such as during pile driving, that may be incorporated into the noise control mitigation plan for the Proposed Action include:</p> <ul style="list-style-type: none"> ▪ Selection of pile driving equipment would consider noise impacts in addition to structural, geotechnical, and pile friction requirements and ground conditions. ▪ Impact pile drivers would be equipped with a well-maintained exhaust muffler in order to mitigate the amount of noise escaping out with the diesel exhaust. ▪ Pre-augered or pre-trenched pile holes to reduce pile driving holes would be used, where practical. ▪ Quieter alternative methods to pile driving, including the use of drilled caissons, would be considered whenever possible.

TABLE ES-4 (8 OF 13) SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

RESOURCE CATEGORY	IMPACT POTENTIAL	DISCUSSION	MITIGATION MEASURES
Noise, Vibration, and Noise-Compatible Land Use (continued)			<p>In addition to the mitigation measures, the Port Authority contracts would require contractors to avoid, minimize, or eliminate construction related impacts, when practicable. Noise control measures would be developed by the Port Authority, who would work with community representatives to develop a plan to minimize construction noise impacts to residences located southeast of the project, such as those along Ditmars Boulevard. Mitigation measures may include use of sound-insulated fencing, acoustic blankets around stationary equipment, drilled caissons instead of driving piles, and vibratory pile drivers where ground conditions permit, and time-of-day restrictions for equipment that would result in the highest noise levels in the surrounding community. Even with these mitigation measures, it is anticipated that some construction noise impact would be unavoidable. For this reason, a construction noise hotline would be established so that residents in the neighborhoods near the project can call to leave complaints that the Port Authority would respond to by investigating the source of the issues and resolving those issues with the Port Authority's contractor. Additionally, as part of the plan to minimize construction noise, the Port Authority would require <u>that a consultant, independent of the DBOM contractor and paid for by the Port Authority, monitor construction noise throughout the project's construction in the neighborhoods near the project during the relevant stages of construction of the Proposed Action.</u> Once major construction is completed in a given area, the noise monitors in that location would likely be removed, with the exception of those locations closest to any ongoing major construction activity. <u>The location of noise monitors would be determined in coordination with local stakeholders.</u> The data collected would be used to investigate complaints and aid in identifying if the construction noise exceedances have been rectified. <u>Furthermore, the independent consultant, would develop reports every month on its monitoring findings that would be publicly accessible on a Port Authority webpage throughout the duration of construction.</u> The reports will include any instances of exceedance and the corresponding corrective action.</p> <p>Construction vibration would be minimized by including specifications in the project's construction contracts requiring the Port Authority's contractor to implement a program to minimize construction vibration at impacted areas. <u>The Port Authority has committed to conducting pre-construction surveys of structures that would experience vibration-related annoyance impacts during construction, including the Marina Restaurant and Banquet Hall, the Gulf Gas Station, identified historic properties (see Section 3.10.6), and residential buildings shown on Exhibit 3.13-8, to assess the condition of buildings and foundations prior to construction, as well as to monitor construction vibration during the relevant stages of construction of the Proposed Action. Structures that have potential to be impacted by vibration would be assessed to set appropriate vibration criteria to avoid any damage to the structure. The contractor would not be able to exceed that criteria and would need to use foundation types, equipment, and construction techniques that limit vibration to within acceptable levels.</u> Vibration would be monitored by a consultant, independent of the DBOM contractor and paid for by the Port Authority, in the vicinity of active work areas throughout construction. <u>The location of vibration monitors would be determined in coordination with local stakeholders. Work would be stopped if the level is exceeded until it can be mitigated.</u> The same hotline for noise would be used for construction vibration complaints as well, and the monitoring data collected would aid in determining the validity of complaints and their resolution. It is anticipated that no construction vibration damage thresholds would be exceeded if the construction specifications are adhered to by the contractor; however, <u>to the extent that a building is damaged as a direct result of Proposed Action construction, the Port Authority would pay the property owner for the costs of necessary repairs as determined by an engineer's assessment paid for by the Port Authority.</u> All damage claim assessments would utilize the pre-construction surveys as a baseline for the analysis. <u>Furthermore, the independent monitoring consultant, would develop reports every month on its monitoring findings that would be publicly accessible on a Port Authority webpage throughout the duration of construction.</u> The reports will include any instances of exceedance and the corresponding corrective action.</p>

TABLE ES-4 (9 OF 13) SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

RESOURCE CATEGORY	IMPACT POTENTIAL	DISCUSSION	MITIGATION MEASURES
Socioeconomics (including Surface Transportation / Traffic and Public Transportation), Environmental Justice, and Children's Environmental Health and Safety Risks	<u>Traffic:</u> Significant impacts to 5 intersections <u>Environmental Justice:</u> Significant impacts to minority environmental justice population remain after incorporation of all mitigation measures	Environmental justice populations would: <ul style="list-style-type: none"> ▪ disproportionately experience high and adverse noise and vibration impacts during construction; and ▪ disproportionately experience high and adverse effects due to Section 4(f) and visual impacts as a result of operation of the Proposed Action. 	<u>Socioeconomics</u> <u>Mitigation would include the measures defined in the MOA between the Port Authority and City of New York:</u> <ul style="list-style-type: none"> ▪ <u>Maintain access during construction to the pedestrian bridges over the GCP at 27th Avenue and 31st Drive, the Flushing Bay Promenade walkway, and Pier 3 at the Marina facilities, to the greatest extent practicable with limited closures during nighttime hours. At least one of the two pedestrian bridges would be open at all times during construction to maintain pedestrian access from the local community to the Promenade.</u> ▪ <u>Develop a construction staging plan that takes into account the operations of the Marina Restaurant and Banquet Hall, the Gulf Gas Station, and Dunkin' Donuts, that allow the businesses to continue operating through most construction activities and coordinates construction times to minimize interference with operations or provide advanced notice of disruptive activities such as pile driving activities. Parking availability and delivery access would need to be maintained during hours of operations for each facility.</u> ▪ <u>Certain construction activities would take place at the Marina Restaurant and Banquet Hall, the Gulf Gas Station, and Dunkin' Donuts sites, and the Port Authority would compensate for business impacts based on the value of the lost operations attributable to project construction at or directly adjacent to the sites. The detailed methodology for compensation is to be determined through further coordination between the Port Authority and the business operators; however, it will generally entail a comparison of projected and actual revenue during regular operations (that is, unaffected by the COVID-19 public health emergency) and how revenue might be impacted during the Proposed Action construction. For example, if construction of the Proposed Action requires a temporary closure of the business, the Port Authority would provide full compensation of revenue based upon average (of recent years) revenues during regular operations during the relevant time period.</u> <u>Environmental Justice Populations</u> Specific mitigation measures to reduce impacts to minority environmental justice populations include: <ul style="list-style-type: none"> ▪ <u>The Port Authority, working closely with NYC Parks, convened a Flushing Bay Promenade Community Advisory Committee, which comprises interested stakeholders and community members who will serve in an advisory role throughout the design and construction of the improvements to the Flushing Bay Promenade and the Ditmars Boulevard entrances to the two pedestrian bridges at 27th Avenue and 31st Drive.</u> ▪ <u>Improve the Ditmars Boulevard entrances to the two pedestrian bridges at 27th Avenue and 31st Drive over the GCP that provide access to the Promenade and Marina.</u> ▪ <u>Commitments from the Port Authority to go beyond its current policies for minority/women-owned business enterprises (MWBEs) and focus on using as many local, Queens-based firms as possible. To facilitate achievement of this goal, the Port Authority would utilize existing programs and hire an MWBE specialist from the local community. The MWBE specialist would run programming to provide access to resources, help certify local businesses, improve capacity of businesses, and connect businesses with contractors throughout the duration of design, construction, and commissioning of the Proposed Action.</u>

TABLE ES-4 (10 OF 13)

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

RESOURCE CATEGORY	IMPACT POTENTIAL	DISCUSSION	MITIGATION MEASURES
Socioeconomics (including Surface Transportation / Traffic and Public Transportation), Environmental Justice, and Children's Environmental Health and Safety Risks (continued)			<ul style="list-style-type: none"> ▪ Development of a scholarship program tailored to the local community and construction and operational needs of the Proposed Action. The scholarships would include guaranteed paid summer internships and job offers with the Port Authority or the Port Authority's contractor upon graduation. In addition, the Port Authority would require the contractor to develop and implement a demand led workforce development program targeting local residents (first preference given to residents in the General Study Area and secondary preference given to residents within the borough of Queens) for construction, operations, maintenance, and management careers in support of the Proposed Action. This would include, but not be limited to, the expansion of the Council for Airport Opportunity (CAO) LaGuardia Career Center in partnership with Elmcor Youth and Adult Activities and Neighborhood Housing Services of Queens CDC, Inc. The Port Authority and its contractor would work closely with the construction trades unions and affiliated direct entry organizations to fund local candidates to complete pre-apprenticeship programs for trade construction opportunities and fund training programs to better prepare local candidates for these positions. The Port Authority and its partners would fund new classes of pre-apprenticeship programs throughout the construction of the Proposed Action, on an as-needed basis as determined by and in coordination with the Building & Construction Trades Council of Greater New York (BCTO). The classes funded by the Port Authority and its partners would prioritize training local residents to give them direct entry into union apprentice jobs. The Port Authority's contractor, in partnership with local community organizations, would monitor, track, and report status of local candidates participating in the workforce development program. Furthermore, the Port Authority would work with the contractor to ensure that the workforce development program offers placement into the program for both scholarship graduates and other members of the local community. ▪ The Port Authority would continue to support an aviation-focused STEM program run in partnership with the Queens Public Library for up to 100 students annually during construction. Furthermore, the Port Authority would support a STEM program in partnership with Elmcor Youth and Adult Activities for up to 75 students annually during construction. ▪ The Port Authority would make \$2 million available for community beautification projects within the affected community and identified by the Community Board from the Queens Community Board 3's Capital Budget Priorities and Requests Register. ▪ The Port Authority would hire independent contractors to monitor air quality, noise, and vibration and to prepare monthly reports that would be publicly accessible on a Port Authority webpage. ▪ The Port Authority would prepare and publicly disseminate reports approximately every 6 months to detail its implementation of the mitigation measures. ▪ The Port Authority would provide \$7.5 million for enhanced upkeep and maintenance for the Flushing Bay Promenade. ▪ The Port Authority would establish and administer a fund to be used by the local community in consultation with the East Elmhurst Corona Civic Association to sponsor programming at other neighborhood parks, such as Hinton Park, the Louis Armstrong Playground, the Helen Marshall Playground, Overlook Park, and other public open green spaces in the neighborhood. The Port Authority would provide up to \$75,000 during each year of construction of the Proposed Action and Promenade improvements. ▪ The Port Authority is committed to pursuing community solar, pending a final feasibility assessment. The Port Authority intends to prioritize offering community solar to zip codes adjacent to LGA, as well as low- and moderate-income households and small/minority businesses.

TABLE ES-4 (11 OF 13)

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

RESOURCE CATEGORY	IMPACT POTENTIAL	DISCUSSION	MITIGATION MEASURES
Socioeconomics (including Surface Transportation / Traffic and Public Transportation), Environmental Justice, and Children's Environmental Health and Safety Risks (continued)			<ul style="list-style-type: none"> ▪ Mitigation measures that would be implemented to offset potential impacts to resource categories that would experience adverse impacts to or result in disproportionately high and adverse effects to environmental justice populations are specified in Sections 3.5.5 (Biological Resources), 3.8.5 (Department of Transportation Act, Section 4(f) and Section 6(f) of the Land and Water Conservation Fund Act), 3.9.5 (Hazardous Materials, Solid Waste, and Pollution Prevention), 3.10.6 (Historic, Architectural, Archaeological, and Cultural Resources), 3.13.5 (Noise, Vibration, and Noise-Compatible Land Use), 3.14.5.4 (Surface Transportation/Traffic), 3.15.5 (Visual Effects), and 3.16.5 (Water Resources).
Visual Effects	Significant impacts remain after incorporation of all mitigation measures	<ul style="list-style-type: none"> ▪ Temporary light emissions and visual effects from construction would not be significant. ▪ Light emissions due to operation of the APM would be significant. ▪ The Proposed Action would have a significant impact to the visual character in the General Study Area. The Proposed Action would partially obstruct and contrast with views of Flushing Bay from approximately <u>55 properties and 100</u> residential units overlooking the GCP. 	<p>Traffic</p> <p>To the extent practicable, measures would be undertaken to limit the potential impacts due to construction of the Proposed Action on surface transportation/traffic, including:</p> <ul style="list-style-type: none"> ▪ <u>Enacting a Traffic Monitoring Plan to address traffic issues during construction in coordination with the relevant agencies.</u> ▪ Truck deliveries of bulk materials to the staging areas and hauling of material from the staging areas to the construction site would be scheduled during off-peak hours to avoid the peak commuter and Airport traffic periods on designated haul routes. ▪ Short-term lane closures would occur during periods of low-traffic activity. If longer-term lane closures occur, detour routes would be established. ▪ Impacts to bicycle and pedestrian paths would be minimal. ▪ Staff from key departments such as the Port Authority, New York Police Department, <u>NYCDOT, and NYC Parks</u> would collaborate on proactive decision-making as well as assessing and addressing traffic congestion as a result of construction via a Project Task Force. <p>To address significant off-Airport traffic impacts to 5 intersections, mitigation measures would include installation of traffic signals and adjustments to traffic signal timing.</p> <p>To limit the potential impacts due to construction of the Proposed Action on public transportation, the Port Authority would coordinate with the MTA to establish the procedural and technical requirements, specific and appropriate for the anticipated work.</p> <p>Potential mitigation measures for effects to visual resources/character <u>would</u> be adopted to complement the surrounding environment. Design guidelines applicable to the major design features of the Proposed Action would support integration of the Proposed Action components into the existing setting of the General Study Area. Examples of design elements include:</p> <ul style="list-style-type: none"> ▪ Use of specific materials, colors, or finishes and landscaping to integrate structures, including the APM guideway, with the surroundings. ▪ Minimize the number of columns and structures along the Flushing Bay Promenade by maximizing the span between columns in this area. ▪ Minimize the bulk of the APM guideway structure to preserve openness along the Flushing Bay Promenade, to the extent feasible. <p>Consultation with local jurisdictions to identify and integrate design features into the final design of the Proposed Action should be considered.</p>

TABLE ES-4 (12 OF 13)

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

RESOURCE CATEGORY	IMPACT POTENTIAL	DISCUSSION	MITIGATION MEASURES
Visual Effects (continued)			<p>The Port Authority has developed a program to compensate owners of properties identified as significantly impacted in this resource category to the extent they have been impacted. The compensation to property owners for visual impacts directly attributed to the Proposed Action and not attributed to other factors would begin when the construction of the length of guideway between the 27th Avenue and 31st Drive pedestrian bridges is completed. It is anticipated that the compensation to property owners would be completed by the start of AirTrain revenue service.</p> <p>The Port Authority would retain, at its expense, both an independent, licensed, New York State Certified Real Estate appraiser with a minimum of 10 years of experience working with comparable properties in the Borough of Queens and an independent, New York State licensed real estate broker with a minimum of 10 years of experience in the East Elmhurst neighborhood to each prepare an estimate of the diminution in property value, if any, related to visual impacts of the Proposed Action. The Port Authority would compensate each property owner for an amount equal to the average of the two estimates. The total amount of compensation awarded to the owners of the 55 properties identified as significantly impacted in this resource category, as shown in Exhibit 3.15-23, is anticipated to be approximately \$4 million. The compensation process would not commence until the construction described above is complete. Property owners receiving compensation would not be able to seek further compensation for visual impacts from the Port Authority.</p> <p>To further offset visual impacts, the Port Authority would make an additional \$2 million available for community beautification projects in the vicinity of the 55 properties referenced above. Recommended project(s) should be identified by the Community Board from the Queens Community Board 3's Capital Budget Priorities and Requests Register after completion of construction for the length of guideway between the 27th Avenue and 31st Drive pedestrian bridges and by the start of AirTrain revenue service. These projects would also need to be approved within the same timeframe by both the Port Authority and the City agency with jurisdiction over the recommended project (for example, NYCDOT or NYC Parks).</p>
Water Resources	No significant impacts	Would permanently impact 0.068 acres of aquatic resources within Flushing Bay to relocate the Marina facilities. Impervious surfaces would increase by 7.8 acres during construction, although the permanent increase in impervious surfaces would be 2.2 acres.	<p>The Port Authority would adhere to applicable environmental permits and BMPs. Implementation of these BMPs would partially mitigate impacts to existing wetland areas. In order to offset unavoidable permanent impacts, additional mitigation in the form of compensatory mitigation or the purchase of wetland credits at an approved mitigation bank would be pursued, if required, under the permit approval process.</p> <p>The Proposed Action would meet all applicable federal, state, and local regulations and requirements related to floodplains, surface waters, and groundwater. Compliance with these requirements includes implementation of construction and operational measures to prevent exceedance of significance thresholds for floodplains, surface waters, and groundwater. These measures include:</p> <ul style="list-style-type: none"> ▪ elevating and/or floodproofing buildings and structures to the extent practicable for flood hazard protection; ▪ minimizing fill placed in floodplains; ▪ incorporating control measures during construction to minimize erosion and sedimentation, such as temporary seeding and mulching and use of temporary silt fencing, and to maintain existing drainage patterns and infrastructure; ▪ incorporating best practices during construction to minimize accidental and flood-induced spills of hazardous materials and to properly store and dispose of hazardous materials and waste; and ▪ implementing post-construction Stormwater Management Practices (SMPs) to manage and treat runoff from new and redeveloped impervious cover.

TABLE ES-4 (13 OF 13)**SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES****NOTES:**

1 Tier 4 emissions standards refer to exhaust emissions standards for nonroad compression-ignition engines as identified in 40 CFR 1039.101.

ACHP – Advisory Council on Historic Preservation

EIS – Environmental Impact Statement

ACM – Asbestos-Containing Material

GCP – Grand Central Parkway

ADA – Americans with Disabilities Act

HABS – Historic American Buildings Survey

APM – Automated People Mover

HP – Horsepower

BCP – Brownfield Cleanup Program

LGA – LaGuardia Airport

BCTC – Building & Construction Trades Council of Greater New York

LIRR – Long Island Rail Road

BMP – Best Management Practice

LWCF Act – Land and Water Conservation Fund Act

CAO – Council for Airport Opportunity

MOA – Memorandum of Agreement

CFR – Code of Federal Regulations

MTA – Metropolitan Transportation Authority

DBOM – Design-Build-Operate-Maintain

MWBE – Minority/Women-Owned Business Enterprises

DOT – Department of Transportation

NMFS – National Marine Fisheries Service

EFH – Essential Fish Habitat

NYCDEP – New York City Department of Environmental Protection

1 Port Authority of New York and New Jersey, *Sustainable Building Guidelines*, January 1, 2017.

NYCDOT – New York City Department of Transportation

SOURCE: Ricondo & Associates, Inc., February 2021.

NYC Parks – New York City Department of Parks and Recreation

NYSDEC – New York State Department of Environmental Conservation

OMSF – Operations, Maintenance, and Storage Facility

PCB – Polychlorinated Biphenyls

PMAZ – Priority Marine Activity Zone

SHPO - State Historic Preservation Office

SNWA – Special Natural Waterfront Area

SPDES – State Pollution Discharge Elimination System

USFWS – US Fish and Wildlife Service

WRP – New York City Waterfront Revitalization Program of 1982

ES.5.2.1 CUMULATIVE IMPACTS

Cumulative impacts to environmental resources result from the incremental effects of a proposed action when combined with other past, present, and reasonably foreseeable future actions in the area, regardless of the entity (in other words, federal or non-federal) or person that would carry out those actions. In some cases, individually minor but collectively significant actions occurring over a defined period of time can cause cumulative impacts. In accordance with NEPA,⁵¹ past, present, and reasonably foreseeable future projects were identified within the immediate vicinity of the Proposed Action. Significance findings in Table ES-4 for each resource category include consideration of cumulative impacts.

ES.5.2.2 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

An irreversible or irretrievable commitment of resources refers to impacts on or losses to resources that cannot be recovered or reversed. Examples include permanent conversion of wetlands and loss of cultural resources, soils, wildlife, agricultural production, or socioeconomic conditions. The losses are permanent. Irreversible is a term that describes the loss of future options. It applies primarily to the impacts of use of nonrenewable resources, such as minerals or cultural resources, or to those factors, such as soil productivity, that are renewable only over long periods of time. Irretrievable is a term that applies to the loss of production, harvest, or use of natural resources.

Construction of the Proposed Action would require a commitment of resources, which would be short-term, temporary increases in the consumption of energy in the form of electricity and transportation-related fuels, as well as supplies of natural resources, including water, sand, asphalt, aggregate, wood, and cement. Additionally, the Proposed Action would require the commitment of construction labor, which is generally nonrenewable and irretrievable. However, commitment of these resources would not be considered significant. The demand for nonrenewable resources, such as petroleum products or typical construction materials, would not exceed current or future supplies and, therefore, would not constitute an irreversible or irretrievable commitment of resources. However, construction of the Proposed Action would result in the irreversible loss of the Passerelle Bridge, a contributing element to the Flushing Meadows-Corona Park Historic District, and the Pavilion on the Passerelle Bridge (over the LIRR). While the Main Gate Entrance and the Passerelle Buildings at Main Entrance would be adversely affected by the Proposed Action, these resources would not be lost. Construction of the Proposed Action would also result in conversion of approximately 0.5 acres of Section 6(f) obligated property and impact 0.068 acres of aquatic resources, which would be irretrievably lost.

The Proposed Action would increase electricity usage at LGA by approximately 24 percent over 2018 consumption and it may also include on-site renewable energy using solar photovoltaic (PV) arrays, if the Port Authority determines they are technically feasible and the FAA determines they do not interfere with aircraft operations at LGA. Solar PV arrays could potentially offset a portion of the energy needs of the Proposed Action.⁵² The Proposed Action would increase natural gas consumption at LGA by approximately 4 percent and would increase potable water demand by approximately 1.1 percent.

⁵¹ The Council on Environmental Quality issued a final rule to update the regulations implementing NEPA on July 16, 2020 (see 85 Federal Register 44303). These regulations, which took effect on September 14, 2020, apply to any NEPA process begun after that date. Pursuant to 14 CFR 1506.130, an agency may apply the updated regulations to ongoing activities and environmental documents started before September 14, 2020. The FAA determined that the Final EIS would be completed under the regulations in effect as of the issuance of the Notice of Intent on May 5, 2019.

⁵² To provide a conservative assumption, any reduction in nonrenewable energy use associated with on-site solar generation was not accounted for in the analyses.

The Proposed Action would impact the visual character of the General Study Area. The Proposed Action would partially obstruct and contrast with views of Flushing Bay from the residences, which would be an irretrievable impact to those residents.

ES.6 COORDINATION AND PUBLIC NOTIFICATION

ES.6.1 AGENCY AND PUBLIC INVOLVEMENT PROGRAM

A public and agency consultation process was employed throughout the preparation of this EIS. The FAA considered all comments received as part of the consultation process and has incorporated comments as appropriate into the development of the Draft EIS. The FAA also considered all comments received on the Draft EIS in preparation of this Final EIS. Coordination and public notification efforts included the following:

- **Pre-Scoping** – A pre-scoping process was conducted to provide the opportunity for public and agency participation in developing the scope of the EIS. The FAA held an initial interagency meeting on August 23, 2018, and the FAA and the FAA's Consultant Team for the EIS held a series of meetings with federal, state, and local resource agencies on February 12 and 13, 2019, and April 17, 2019.
- **Notice of Intent** – Publication of the Notice of Intent in the *Federal Register* on May 3, 2019, formally announced the FAA's intent to prepare an EIS for the proposed project and initiated the environmental review process. The FAA published notices in local newspapers between May 3 and May 9, 2019.
- **Native American and Tribal Consultation** – As part of Section 106 consultation, the FAA identified and initiated consultation with 13 Native American Tribes as regular consulting parties and entities with a demonstrated interest in historic preservation. Four tribes, Delaware Nation; Delaware Tribes of Indians; Shinnecock Indian Nation; and Stockbridge-Munsee Community, Band of Mohican Indians; committed to consulting with the FAA for the Proposed Action.
- **Scoping** – Scoping is an initial step in the NEPA process where agencies and the public are provided an opportunity to review and comment on the scope of the EIS. As part of the scoping process, the FAA elected to hold one agency scoping meeting on June 5, 2019, and two public scoping meetings on June 5 and 6, 2019. Scoping comments were solicited over a 46-day period from May 3, 2019, to June 17, 2019. All comments were reviewed and considered in preparation of the EIS.
- **Elected Officials Briefing** – The FAA briefed elected officials on February 14, 2019 and November 12, 2019.
- **Community Leaders Meetings** – The FAA convened three meetings with community leaders on April 15 and 16, 2019 and on November 13, 2019 to provide information on the Proposed Action and the EIS process and to address concerns related to the Proposed Action.
- **Consulting Parties Meetings** – The FAA held Section 106 Consulting Parties meetings to discuss the Proposed Action, the EIS, and Section 106 processes, and the role of Consulting Parties on September 18, 2019; November 14, 2019; January 15, 2020; February 25, 2020; and May 5, 2020.⁵³
- **Public Information Sessions** – Although not required under NEPA or One Federal Decision, the FAA held two public information sessions on January 14 and 15, 2020, to inform the public of the FAA's alternatives screening criteria and analysis.

⁵³ Due to COVID-19, the May 5, 2020 Consulting Parties meeting was held telephonically during two question and answer sessions.

ES.6.2 ONE FEDERAL DECISION

As Lead Federal Agency for the environmental review necessary to approve this project, the FAA determined that an EIS is required for the project; that other federal agencies would be required to approve the project; and that the LGA Access Improvement Project is a major infrastructure project within the meaning of EO 13807, *Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects* (referred to as One Federal Decision).⁵⁴

EO 13807 and the MOU implementing EO 13807, required that the FAA, as the Lead Agency for the Proposed Action, and all Cooperating and Participating Agencies agree to a Permitting Timetable in advance of the development of the EIS. The Permitting Timetable identifies the actions and associated milestones for applicable environmental reviews, authorizations, and application submittals for each agency. The official Permitting Timetable was made available to the public online through the Federal Permitting Dashboard (www.permits.performance.gov/) on May 31, 2019.

The MOU implementing EO 13807 required that the Lead Agency request separate written concurrence on each of three enumerated concurrence points from all Cooperating Agencies whose authorization is required for the project. The three concurrence points for this EIS included:

- **Concurrence Point 1 – Purpose and Need Statement.** A preliminary draft of the Purpose and Need statement was distributed to the Cooperating and Participating Agencies on March 22, 2019. Resolution of comments and a final concurrence on the Purpose and Need of the Proposed Action was achieved on April 5, 2019.
- **Concurrence Point 2 – Alternatives to be Carried Forward for Analysis.** A preliminary draft of the alternatives screening process and evaluation was distributed to the Cooperating and Participating Agencies on September 20, 2019. Resolution of comments and a final concurrence on the Alternatives to be Carried Forward for Analysis was achieved on October 7, 2019.
- **Concurrence Point 3 – Identification of the Preferred Alternative.** The preliminary Administrative Draft EIS was distributed to the Cooperating and Participating Agencies on June 1, 2020, to document the FAA's rationale for selecting the Preferred Alternative. Concurrence on the Identification of the Preferred Alternative (the Proposed Action) was achieved on June 16, 2020.

ES.6.3 PUBLICATION OF THE DRAFT EIS

In accordance with NEPA, a public comment period of no less than 45 days for the Draft EIS was established. The Notice of Availability (NOA) announcing the availability of the Draft EIS and advertising the public workshops and hearings was published in the *Federal Register* on August 21, 2020.

ES.6.3.1 PUBLIC WORKSHOPS AND HEARINGS

As a part of the Draft EIS process, the FAA held two public workshops (September 22 and 23, 2020) and three public hearings (September 22, 23, and 24, 2020). Due to the ongoing public health emergency associated with COVID-19 and FAA's responsibility to protect the health and safety of the community, all workshops and hearings were held virtually. Recordings of the public workshops are available on the project website at <https://www.lgaaccesseis.com/>.

⁵⁴ On January 20, 2021, EO 13990, *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*, was issued, which revoked EO 13807. Though no longer in effect, the majority of the effort for the EIS was completed under the One Federal Decision framework, as such, the documentation in this EIS is reflective of the framework that was in effect at the time it was conducted.

The public workshops, facilitated by a third-party moderator, were held by the FAA to afford interested parties the opportunity to review the findings of the environmental analysis completed for the Proposed Action and to speak with the FAA and staff from FAA's Consultant Team for the EIS about the Proposed Action and the Draft EIS. During the workshop, attendees were presented with two pre-recorded videos followed by a moderated question and answer session. A total of 130 questions were submitted during the two public workshops. Comments received at the workshops were not treated as public comments on the Draft EIS.

Three public hearings, presided over by a public hearing officer, were held to fulfill public notice and comment requirements of NEPA and other applicable special purpose laws. During the virtual hearings, attendees were presented with two pre-recorded videos followed by oral comments from the public. Similar to in-person public hearings, each speaker was allowed 3 minutes to provide comments; no responses to comments or questions were provided during the public hearings. A total of 131 speakers provided comments during the three public hearings.

ES.6.3.2 COMMENTS RECEIVED ON THE DRAFT EIS

The original deadline for the FAA to receive comments was 5:00 p.m. Eastern Time, Monday, October 5, 2020; however, in response to requests from the public to extend the comment period by an additional 45 days, the FAA was able to accommodate a 15-day extension of the comment period. With the extension, comments had to be received by 5:00 p.m. Eastern Time, Tuesday, October 20, 2020.

The FAA encouraged all interested parties to provide comments concerning the scope and content of the Draft EIS. The FAA received a total of 4,228 comment submissions⁵⁵ on the Draft EIS;⁵⁶ comprising letters, emails, website forms, voicemails, and public hearing statements, including 87 comments received after the close of the comment period extension deadline (October 20th). Of these, 3,465 comment submissions were considered form letters.⁵⁷ Written comments were received from 2 federal agencies, 1 local agency, 4 elected officials, 33 individuals representing local organizations, and 4,046 individuals. Additionally, 131 individuals submitted comments during the public hearings and 11 individuals submitted comments via the project hotline.

All comments received on the Draft EIS have been considered in the Final EIS. The FAA has assessed and considered public and agency comments on the Draft EIS. Due to the large number of comment submissions received and the similarity of many comments as well as the use of form letters, the FAA elected to categorize and group similar comments for response. This enabled the FAA to efficiently prepare responses to similar comments and reduce repetition of comment responses. Copies of all comments submitted on the Draft EIS, responses to comments received on the Draft EIS, and an index of comments received are included in Appendix S.

⁵⁵ A comment submission is defined as an instance of an individual expressing thoughts on the Proposed Action via written or oral media. A single comment submission may include statements on many topics.

⁵⁶ The total number of comment submissions is inclusive of duplicate and repetitive comment submissions from the same individuals. Additionally, some commenters submitted "corrected" comments to replace earlier submissions; at the request of the commenters, the "draft" comment submissions are not included in Appendix S. FAA also received three blank emails that were not counted as formal comment submissions.

⁵⁷ In the context of this EIS, a form letter is a template letter that provides comment verbiage for a commenter to use. Form letter comments use the exact same verbiage or have minor variations in verbiage that do not change the essence of the form letter. The FAA identified 11 separate form letters (or minor variations thereof) that were used to provide comments on the Draft EIS.

ES.7 FINAL EIS

The Draft EIS has been revised as necessary to address any inconsistencies or reflect updated information since publication of the Draft EIS. Additionally, as part of the EIS process, the FAA must take into consideration all comments received on the Draft EIS and respond to the substantive comments in the Final EIS.⁵⁸ As such, the Final EIS includes revisions to reflect comments received, issues raised through the public involvement and public workshop and hearing process, as well as all other applicable considerations.⁵⁹ Additionally, the Final EIS has been updated with relevant information added in response to comments, new/updated information not available when the Draft EIS was released in August 2020, or to reflect modifications to the Proposed Action. Some of these updates include:

- modifications to the construction schedule to reflect that most construction activity associated with the Proposed Action would not commence until March 2022, based on updated information provided by the Port Authority since the issuance of the Draft EIS;
- identification of the conversion of 0.5 acres of Land and Water Conservation Fund (LWCF) Act obligated property, as the APM guideway would impact 7 parking spaces in Citi Field parking lot, which are obligated under Section 6(f) of the LWCF Act as identified in comments from the US Department of Interior (USDOI) on the Draft EIS;
- a shift in the finger pier related to the relocation of the boat lift at the Flushing Bay Marina to avoid a recently constructed New York City Department of Environmental Protection (NYCDEP) wetland mitigation site in Flushing Bay in response to updated coordination between the Port Authority and the New York State Department of Environmental Conservation (NYSDEC), which results in a reduction in jurisdictional wetland impacts;
- expanded mitigation measures from those identified in the Draft EIS developed based on public comments and discussions with the Port Authority and found to be reasonable by the FAA; and
- additional updates to analyses and clarifications of text.

In consideration of the changes and revisions to the analysis, the FAA finds that there are no substantial changes to the Proposed Action or significant new circumstances or information relevant to environmental concerns and bearing on the Proposed Action or its impacts. Modifications to the text that was contained in the Draft EIS are indicated in the Final EIS by underlined text.

The FAA will file the Final EIS with the USEPA, which will then issue a NOA for the Final EIS in the *Federal Register*. In accordance with 40 CFR 1506.10, the FAA may issue a Record of Decision (ROD) for the Proposed Action after a minimum of 30 days have elapsed from publication of the NOA for the Final EIS in the *Federal Register*.

⁵⁸ US Department of Transportation, Federal Aviation Administration, Order 1050.1F, *Environmental Impacts: Policies and Procedures*, 7-1.2(e), July 16, 2015.

⁵⁹ US Department of Transportation, Federal Aviation Administration, Order 1050.1F, *Environmental Impacts: Policies and Procedures*, 7-1.2(g), July 16, 2015.

ES.8 APPROVAL DECLARATION

After careful and thorough consideration of the facts contained herein, and following consideration of the views of those Federal agencies having jurisdiction by law or special expertise on environmental impacts described, the undersigned finds that the proposed Federal action is consistent with existing national environmental policies and objectives as set forth in section 101(a) of the National Environmental Policy Act of 1969.

DAVID A FISH Digital signature of DAVID A FISH
Date: 2021.03.13 10:57:23 -05'00'

APPROVED: _____

03/13/2021

David Fish
Director, Office of Airports
Federal Aviation Administration
Eastern Region

Date

DISAPPROVED: _____

Date

David Fish
Director, Office of Airports
Federal Aviation Administration
Eastern Region

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