

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
CATEGORICAL EXCLUSION/RECORD OF DECISION**

**REHABILITATION OF RUNWAY 4R-22L AND ASSOCIATED TAXIWAYS
JOHN F. KENNEDY INTERNATIONAL AIRPORT
JAMAICA, NEW YORK**

Introduction

This Federal Aviation Administration (FAA) Categorical Exclusion/Record of Decision (CATEX/ROD) sets out the FAA's consideration of environmental and other factors for the approval of a Pen and Ink change to the Airport Layout Plan (ALP) for John F. Kennedy International Airport (JFK).

Background

Runway (RW) 4R-22L is a principal arrival runway at JFK, accounting for 47% of all arrival traffic operations. The runway was constructed in the 1960's and has received incremental improvements over the years. RW 4R-22L was last rehabilitated and widened to 200 feet in 2002, and currently exhibits numerous pavement distresses such as longitudinal cracks, oxidation and raveling. By the end of 2016, approximately 80% of the runway pavement area will have a Pavement Condition Index (PCI) rating of fair to poor. Taxiways E and Z, entryway Taxiways to RW 4R-22L, will exhibit similar pavement wear and will also need to be rehabilitated.

Proposed Federal Actions

The proposed federal actions are:

1. Unconditional Approval of the JFK ALP pursuant to 49 U.S.C. §40103(b) and 49 U.S.C. §40107(a)(16), and determination of effects of each of the components comprising the Proposed Project as described within this CATEX/ROD, and in all associated materials upon the safe and efficient utilization of navigable airspace pursuant to 14 C.F.R. Parts 77 and 157 and 49 U.S.C. §44718.
2. Determination concerning funding through the Federal grant-in-aid program authorized by the Airport and Airway Improvement Act of 1982, as amended (recodified at 49 U.S.C. §47107) and/or approval of an application to use Passenger Facility Charges (PFCs) under 49 U.S.C. §40117 (this does not determine eligibility or availability of potential funds); and
3. Designation of controlled airspace and revised routing, including navigational aids and temporary changes to flight procedures as described within this CATEX/ROD, and in all associated materials (14 C.F.R. Part 71).

Purpose and Need

Based on the current pavement condition, the purpose and need of the project is to rehabilitate and maintain RW 4R-22L pavement and Taxiways E and Z pavement in good operational condition and to prolong the useful life of the runway and taxiways.

Project Description

The Proposed Project involves milling and overlay of RW 4R-22L, rehabilitation and widening of Taxiway Z to 82 feet from the edge of the Runway to the holdbar, and rehabilitation of the full length of Taxiway E. The widening of Taxiway Z is necessary to comply with FAA Design Standards for current aircraft operations; the widening will not change the type of aircraft that operate on the Taxiway. The project also includes modification of the existing storm drainage system, installation of new drainage systems, and replacement of lighting systems and fixtures and signage. Construction will require the full closure of RW 4R-22L as follows: full closure of the Runway from February 27, 2017 to June 1, 2017, reopening of the Runway with closure at night from June 14, 2017-September 6, 2017, and full closure of the Runway from September 6, 2017 to November 17, 2017. During the construction period, the periods of full closure will result in additional aircraft arrivals on JFK Runways 13R and 13L. The project does not involve any changes to the current RW 4R/22L ends, width, thresholds, or touchdown points.

To offset the impacts temporary runway closure would cause to airspace in the New York Metropolitan Area, the project also involves the implementation of two temporary changes to flight procedures. The first is a change to the Category II Approach Procedure to JFK Runway 13L that would change the Runway Visual Range from 1600 feet to 1200 feet to better accommodate arrivals. The second is the temporary implementation of an RNAV (GPS) approach to be used alongside the currently published approaches for arrivals to LaGuardia Airport's Runway 13. Once JFK RW 4R/22L is re-opened after the full construction period, all operations on the runway and surrounding airspace will resume in the same conditions as they were prior to closure. The project is further detailed in the attached October 2016 documented CATEX form.

Impact Analysis

This project qualifies for CATEX as follows: FAA 1050.1F Section 5-6.4.e, Section 5-6.4.k, Section 5-6.5i, and Section 5-6.4.m. However, even when proposed actions fall into established categorical exclusion categories, they are further examined to determine if any extraordinary circumstances exist that would prevent the proposed action from being classified as categorically excluded.

Temporary RNAV (GPS) Approach and Noise: During construction, there will be temporary changes to runway use due to the closure of RW 4R-22L. To mitigate impacts to the New York/New Jersey airspace and improve Enhanced Low Visibility Operations during construction, the FAA will amend the existing JFK 13L CAT II procedure from 1600' Runway Visual Range (RVR) to 1200' RVR for the construction period only. Individuals under the current approach patterns to Runways 13R and 13L can expect to have more aircraft fly over their residences or places of business during

the periods of RW 4R/22L closure at JFK. The increased use will be temporary and only occur during periods when the Runway is closed and flow conditions would have had those aircraft arriving to Runway 22L.

Since operational conditions at individual airports in the New York Metropolitan Area can affect how other airports need to operate, this project includes the implementation of a temporary RNAV (GPS) approach for arrivals to LaGuardia Airport's Runway 13. This procedure will enable additional expected arrivals on JFK Runways 13R and 13L during the construction period. While the construction could occur without this temporary procedure change, its implementation will allow for additional capabilities to manage the New York/New Jersey airspace. The Temporary RNAV (GPS) Approach is detailed in Attachment 2 of the documented CATEX form.

All work is expected to occur from February 2017 until expected completion in December 2017. Construction will require a full closure of JFK Runway 4R/22L from February 27, 2017 to June 1, 2017, nightly closures from June 14 to September 5, 2017 and another full closure from September 6, 2017 to November 17, 2017 for work within the Runway Safety Area. The runway will therefore be completely closed for less than six months in total.

A TARGETS noise screening analysis, which includes affected LaGuardia Airport (LGA) and JFK airspace was performed. The results of the noise analysis indicates that there would be no significant impact (an increase of 1.5 dB DNL in an area exposed to 65 dB DNL), nor any reportable noise increases (an increase of 3 dB DNL in an area exposed to noise between 60 and 65 dB DNL or an increase of 5 dB DNL in an area exposed to noise between 45 and 60 dB DNL). Individuals in coastal Connecticut and portions of Westchester County, New York under the proposed temporary procedure (as depicted in Attachment 2, Figures 1-5 of the documented CATEX form) can expect to have aircraft fly over their residences or places of business during some portions of the periods of the JFK RW 4R/22L closure. The increased use will be temporary and only occur during periods when the Runway is closed at JFK.

Additionally, to comply with Executive Order 12898, Environmental Justice for Low Income and Minority Populations, and DOT Order 5610.2(a), Environmental Justice in Minority and Low-Income Populations, the FAA identified potential environmental justice communities in the vicinity of LaGuardia Airport associated with the temporary RNAV (GPS) procedure. The environmental justice (EJ) component of the Aviation Environmental Design Tool (AEDT) was utilized to identify low income and minority census blocks that may be targeted for community outreach. Thresholds of significance for noise impacts were not met for this project, and since there were no communities within the study area that met secondary criteria relative to noise in EJ communities, the noise impact was not considered further.

Once the JFK Runway 4R/22L rehab construction is completed, the temporary LGA Runway 13 arrival procedure will be discontinued and operational conditions will reset

to pre-construction levels. The use of the procedure, as approved in this ROD, will not exceed six months in total length, as it will be discontinued when JFK Runway 4R/22L is placed into service during the interval between construction periods.

Given that the RNAV procedure could provide longer term efficiency benefits for LGA, JFK, Newark Liberty International Airport, and Teterboro Airport, the FAA will study making the procedure available for permanent use after the JFK RW 4R/22L rehabilitation is complete. The permanent procedure would be subject to a separate and independent NEPA analysis, to be conducted by the FAA. That analysis will consider operational and noise data observed during the temporary use of the procedure associated with the construction at JFK.

Community noise impacts during construction are the result of operating construction equipment and construction/delivery vehicles traveling to and from the site. The Proposed Project would have no perceptible increase in ambient noise levels at noise sensitive receptors in the area due to construction activities. Construction activities associated with the Proposed Project would temporarily increase the ambient noise levels in the immediate vicinity of the project area during periods of heavy construction. However, there are no sensitive receptors immediately adjacent to the Proposed Project site. Off-site impacts, from equipment and materials egress/ingress, are anticipated to be minimal, if any.

Stormwater: The taxiway widening is anticipated to increase impervious areas and may increase the amount of runoff to the current outfalls. Preliminary calculations and modeling indicate the necessity of upgrading the existing outfall pipes and replacing appurtenances at outlet structures 20 and 21. The proposed work will bring these outfalls into a state of good repair. Since there will be more than one acre of soil disturbance for the taxiway widening and outfall replacements, the Port Authority will prepare a Stormwater Pollution Prevention Plan in accordance with New York State Department of Environmental Conservation (NYSDEC) requirements.

Coastal Zone: Since the project is located in a coastal zone area, an application seeking concurrence from the New York State Department of State (NYSDOS) and the New York City Waterfront Revitalization Program (WRP) was submitted. The project would not adversely impact coastal zone resources and is consistent with the Waterfront Revitalization and Coastal Resources Act, as well as New York City's WRP. The concurrence from NYSDOS and WRP was received on June 14, 2016 and is included as part of Attachment 5 of the documented CATEX form. This concurrence demonstrates that the Proposed Project is consistent with all applicable Coastal Zone policies.

Floodplains: A small portion of the project lies within the Federal Emergency Management Agency (FEMA) effective 1% annual chance floodplain, and a larger portion is within the 0.2% annual floodplain. The work occurring to upgrade Outfalls 20 and 21 will take place in the FEMA effective 1% annual chance floodplains. Given

that the outfall upgrades are to existing outfalls, and no new structures are being installed, no new encroachment will occur. Coordination with the NYSDOS and the WRP, resulting in a coastal zone consistency determination, provide support that this project will not encroach upon floodplains or coastal resources. Furthermore, permit applications to NYSDEC and US Army Corps of Engineers (USACE), along with documentation provided in the wetlands section of the attached documented CATEX form, support that there will be no floodplain encroachment.

Wetlands: The Proposed Project involves impacts to delineated wetlands as a result of the replacement and upgrade of piping at Outfall 20 and Outfall 21. In addition to the piping, the concrete pad and the splashpad under the outfall piping, as well as the existing concrete support and riprap beneath the piping will also be replaced in their existing locations. The total area of tidal wetlands including open waters within the Outfall 20 project area is limited to approximately 738 square feet of littoral zone/intertidal shallows devoid of vegetation. The total area of tidal wetlands including open waters within the Outfall 21 project area is 2,761 square feet (1,186 square feet vegetated and 1,575 square feet open water). This work requires permits and/or approvals from the NYSDEC and the USACE. The Port Authority is seeking a Tidal Wetlands Permit, Section 401 Water Quality Certification, and Excavation and Fill in Navigable Waters from the NYSDEC and an authorization under the USACE Nationwide Permit No. 7 Outfall Structures and Associated Intake Structures for the replacement of the outfall pipes. No work will commence until all applicable permits are received.

Air Quality: There would be direct and indirect emissions due to the Proposed Project during construction. For a 2014 project at JFK, *Runway 4L/22R Improvements*, an air quality study confirmed that emissions of criteria air pollutants during construction were at much lower levels than Federal *de minimis* thresholds. The extent of the Proposed Project, *Rehabilitation of Runway 4R/22L and Associated Taxiways* at JFK, has a smaller footprint than the Runway 4L/22R project. The 2014, 4L/22R project involved a full-length (12,079 feet) replacement of an asphalt runway with concrete, as well as the reconfiguration or widening of 11 taxiways and 4 taxiway entrances, construction of roadways, parking facilities, and other associated improvements. (See Attachment 6 of the documented CATEX form for a description of the 4L/22R project). Whereas, the Proposed Project, *4R/22L Rehabilitation and Associated Taxiways* will result only in the in-kind replacement of a 8,400 foot asphalt runway surface, and the rehabilitation and widening of two taxiways. By comparison of the two projects, 4R/22L has 50% less total paved area and only two taxiway widenings compared to 4L/22R project's 11 taxiway widenings.

The 4L/22R project consumed a total of 287,750 tons of asphalt (not including the concrete used for the runway construction), whereas the entire paving budget for the Proposed Project, including the runway resurfacing and all associated work, will consume less than 100,000 tons of asphalt which is less than 35% of the amount of asphalt used for the 4L/22R project. The 4L/22R project produced a maximum of 2.17%

of emissions for the *de minimis* threshold for NOX, and significantly less than that for VOC, CO, SOx, PM10, and PM2.5. (See Attachment 6 of the documented CATEX form for the Air Quality Analysis Results Table).

Given this, combined with the Port Authority's plans to use similar types of equipment for implementation of the Proposed Project, it is reasonable to conclude that the construction emissions estimates for 2014, Runway 4L/22R project represent the upper limit of potential construction emissions impacts associated with the Proposed Project.

Extraordinary Circumstances Review

The Proposed Project and its associated impacts were considered to determine if any Extraordinary Circumstances, as established by FAA Order 1050.1F, Paragraph 5-2 (b), would be triggered, thus requiring discontinuation of consideration for a CATEX and preparation of an Environmental Assessment (EA). This analysis revealed that:

- a. There would be no potential for adverse effects on cultural resources protected under the National Historic Preservation Act. (54 U.S.C. 300101 et seq.) (FAA Order 1050.1F, Paragraph 5-2 (b)(1)).
- b. There would be no use of properties protected under section 4(f) of the Department of Transportation Act, previously 49 U.S.C. Section 303(c). (FAA Order 1050.1F, Paragraph 5-2 (b)(2)).
- c. There would be no impact to threatened or endangered species protected under the Endangered Species Act (16 U.S.C. § 1531 et seq.) or species protected under the Fish and Wildlife Coordination Act (16 U.S.C. 661-667e) or of concern under state law. (FAA Order 1050.1F, Paragraph 5-2 (b)(3)).
- d. There would be no impact to resources protected by the Fish and Wildlife Coordination Act, wetlands, floodplains, coastal zones, national marine sanctuaries, wilderness areas, farmlands, energy supply and natural resources, Wild and Scenic Rivers, or solid waste management. (FAA Order 1050.1F, Paragraph 5-2 (b)(4)).
- e. There would be no division, disruption, or inconsistency with any established community. (FAA Order 1050.1F, Paragraph 5-2 (b)(5)).
- f. There would be no increase in surface transportation and thus no increase in congestion from surface transportation. (FAA Order 1050.1F, Paragraph 5-2 (b)(6)).
- g. There would be no impact on noise levels for noise-sensitive areas. The noise modeling conducted confirms that there is no potential for significant noise impacts; (FAA Order 1050.1F, Paragraph 5-2 (b)(7)).

- h. There would be no impact on air quality or violation of standards under the Clean Air Act. (FAA Order 1050.1F, Paragraph 5-2 (b)(8)).
- i. There would be no impact on water quality. (FAA Order 1050.1F, Paragraph 5-2 (b)(9))
- j. There is no high degree of controversy on environmental grounds because there is no substantial dispute as to the size, nature, or effect of the proposed Federal action.(FAA Order 1050.1F, Paragraph 5-2 (b)(10)).
- k. There is no likelihood that the Proposed Project is inconsistent with Federal, State, Tribal, or local laws.(FAA Order 1050.1F, Paragraph 5-2 (b)(11)).and,
- l. There is no likelihood that the Proposed Project will create, directly, indirectly, or cumulatively, a significant impact on the human environment.(FAA Order 1050.1F, Paragraph 5-2 (b)(12)).

Public Involvement

In accordance with the Council on Environmental Quality (CEQ) regulations and FAA Order 1050.1F, there is no requirement for soliciting general public comment on Federal actions that meet the requirements for categorical exclusion. However, following completion of the Technical Advisory Committee (TAC) Meetings for the Port Authority Part 150 Studies at LGA on August 16, 2016 and JFK on August 17, 2016, a discussion of the Proposed Project and the connected airspace procedure modifications was held with the members of the TAC for each airport. The TACs are comprised of the Port Authority, the FAA, airport users, airport stakeholders, local elected officials, and the public.

The Environmental Justice/Community Outreach Screening Report, included as Attachment 9 of the documented CATEX form, identifies strategies for outreach to communities and notifications will be made to elected officials and community representatives identified in the report. Since there are no significant noise impacts associated with the temporary procedure, additional outreach beyond notifications is not warranted.

The Port Authority will place a notice of the FAA's Record of Decision in the Daily News (Queens), the Queens Courier, the Queens Chronical (3 south editions), the South East Queens Press, the Queens Ledger, and the Queens Times Ledger, along with Newsday (Long Island) and the Long Island Herald. Copies of the decision document will be accessible on the Port Authority's public website. In addition, the Port Authority will notify airport stakeholders of the decision, including the Queens Borough President and the JFK and LGA Part 150 Study Technical Advisory Committees.

Decision and Order

The FAA recognizes its responsibilities under the National Environmental Policy Act of 1969 (NEPA), its implementing Council on Environmental Quality (CEQ) regulations, and FAA’s own directives. Recognizing these responsibilities, I have carefully considered these objectives in relation to aeronautical and environmental factors at JFK Airport and used the environmental process to make a more informed decision.

This decision does not constitute a commitment of funds under the Airport Improvement Program (AIP), however, it does fulfill the environmental prerequisites for future AIP funding determinations associated with AIP-eligible project components. (49 U.S.C. §47107)

Having carefully considered aviation safety and the operational objectives of the Proposed Project, as well as being properly advised as to the anticipated environmental impacts of the proposal, under the authority delegated to me by the Administrator of the FAA, I find that the project is reasonably supported, and, I, therefore, direct that actions be taken to carry out the following

1. Unconditional Approval of the JFK ALP pursuant to 49 U.S.C. §40103(b) and 49 U.S.C. §40107(a)(16), and determination of effects of each of the components comprising the Proposed Project as described above, within this CATEX/ROD, and in all associated materials upon the safe and efficient utilization of navigable airspace pursuant to 14 C.F.R. Parts 77 and 157 and 49 U.S.C. §44718.
2. Determination concerning funding through the Federal grant-in-aid program authorized by the Airport and Airway Improvement Act of 1982, as amended (recodified at 49 U.S.C. §47107) and/or approval of an application to use Passenger Facility Charges (PFCs) under 49 U.S.C. §40117 (this does not determine eligibility or availability of potential funds); and
3. Designation of controlled airspace and revised routing, including navigational aids and temporary changes to flight procedures as described within this CATEX/ROD, and in all associated materials (14 C.F.R. Part 71).

Recommended:  10/27/16

Steven M. Urlass, Manager
Airports Division
Federal Aviation Administration
Eastern Region
Date

Approved:  10/27/16

Carmine Gallo, Regional Administrator
Federal Aviation Administration
Eastern Region
Date

Right of Appeal:

This CATEX/ROD constitutes a final order of the FAA Administrator and is subject to exclusive judicial review under 49 U.S.C. § 46110 by the U.S. Circuit Court of Appeals for the District of Columbia or the U.S. Circuit Court of Appeals for the circuit in which the person contesting the decision resides or has its principal place of business. Any party having substantial interest in this order may apply for review of the decision by filing a petition for review in the appropriate U.S. Court of Appeals no later than 60 days after the order is issued in accordance with the provisions of 49 U.S.C. § 46110. Any party seeking to stay implementation of the ROD must file an application with the FAA prior to seeking judicial relief as provided in Rule 18(a) of the Federal Rules of Appellate Procedure.

APPENDIX A. DOCUMENTED CATEX

The responsible FAA official should use this form for projects eligible for a categorical exclusion (CATEX) that have greater potential for extraordinary circumstances or that otherwise require additional documentation, as described in the Environmental Orders (FAA Order 1050.1F and FAA Order 5050.4B).

The responsible FAA official should review potentially affected environmental resources, review the requirements of the applicable special purpose laws, and consult with the Regional or Headquarters Airports Environmental staff about the type of information needed. The form and supporting documentation should be completed in accordance with the provisions of FAA Order 5050.4B, paragraph 302b. The CATEX cannot be approved until all information/documentation is received and all requirements have been fulfilled.

Name of Airport, LOC ID, and location

John F. Kennedy International Airport, JFK, Queens, New York

Project Title

Rehabilitation of Runway 4R-22L and Associated Taxiways

Give a brief, but complete description of the proposed project, including all project components, justification, estimated start date, and duration of the project. Include connected actions necessary to implement the proposed project (including but not limited to moving NAVAIDs, change in flight procedures, haul routes, new material or expanded material sources, staging or disposal areas). Attach a sketch or plan of the proposed project. Photos can also be helpful.

Runway 4R-22L is a principal arrival runway at John F. Kennedy International Airport, accounting for 47% of all arrival traffic operations. The runway was constructed in the 1960's and has received incremental improvements over the years. 4R-22L was last rehabilitated and widened to 200 feet in 2002, and currently exhibits numerous pavement distresses such as longitudinal cracks, oxidation and raveling. By the end of 2016, approximately 80% of the runway pavement area will have a Pavement Index Condition (PCI) rating of fair to poor. Taxiways E and Z, entryway taxiways to Runway 04R-22L, will exhibit similar pavement wear and must be rehabilitated as well. The Proposed Project will return Runway 4R-22L and taxiways E and Z to a "state of good repair" to extend their useful life.

The proposed runway rehabilitation will involve milling the runway and portions of adjacent taxiway pavement with 3 inches of asphalt concrete and overlaying it with 4 inches of asphalt concrete. The extent of the proposed project is included in Attachment 1. The proposed project will include the rehabilitation and widening of Taxiway Z from the edge of the runway to the holdbar, and the full length of Taxiway E. The new and rehabilitated taxiways' pavement will be constructed to Aircraft Design Group (ADG) Group VI standard width of 82 feet. Taxiway Z is 75 feet wide today, which is not ADG Group VI compliant. Taxiway pavement will consist of an 8-inch asphalt-concrete top course, 10-inch plant-mix macadam and 14-inch of dense aggregate base course. The shoulder will consist of 4-inch asphalt-concrete top course, 6-inch plant-mix macadam and 8-inch dense-graded aggregate base course. The erosion pavement will consist of 3-inch asphalt concrete top course, 4-inch plant-mix macadam and 6-inch dense-graded aggregate base course. The proposed project is depicted in Attachment 1.

The proposed work requires modification of existing storm drainage system and installation of new drainage systems. Preliminary calculations and modeling of existing utilities along with the

new proposed designs, in accordance with the Port Authority's Civil Engineering Design Guidelines for a 10-year return period, indicated the necessity of upgrading the existing outfall pipes and replacing appurtenances at outlet structures 20 and 21. Outfalls 20 and 21 have deteriorated due to age, weathering, and tidal activity. The roofs, walls and pipes exhibit significant corrosion, concrete spalling, cracking and delamination. The proposed work will bring these outfalls into a state of good repair. All necessary permits of the reconstruction of the outfalls will be obtained. Currently, Runway 4R-22L incorporates incandescent lighting systems. At the conclusion of this project, all lighting systems associated with this project, except for runway edge and threshold lighting, will be replaced with Light Emitting Diode (LED) fixtures. These lighting systems include runway and taxiway centerline lighting, taxiway edge lighting, and lighting for signage. Since LED fixtures require approximately a third of the energy consumption of their incandescent counter parts, smaller constant current regulators will further improve the efficiency of the system.

Wetlands are present at all of the stormwater outfalls, and therefore the work occurring at the outfalls requires permits and/or approvals from the New York State Department of Environmental Conservation (NYSDEC) and the United States Army Corps of Engineers (USACE). The Port Authority is seeking a Tidal Wetlands Permit, Section 401 Water Quality Certification and Excavation and Fill in Navigable Waters to the New York State Department of Environmental Conservation (NYSDEC), and an authorization under the USACE Nationwide Permit No. 7 Outfall Structures and Associated Intake Structures can be used for the replacement of the outfall pipes. The application to NYSDEC was submitted on June 16, 2016, and the application to USACE was submitted on March 18, 2016. No work will commence until all applicable permits are received. A Stormwater Pollution Prevention Plan (SWPPP) is required given that there will be more than one acre of soil disturbance for the taxiway widening and outfall replacements, and will be prepared in accordance with New York State Department of Environmental Conservation (NYSDEC) requirements. Since the project is located in a coastal zone area, an application seeking concurrence from the New York State Department of State (NYSDOS) for this project under the Coastal Zone Management Plan and the New York City Waterfront Revitalization Program (NYCDCP) was submitted. The application and concurrence from NYSDOS and NYCDCP is included in Attachment 5.

Excess soil generated will be reused to the extent possible. Any soil that cannot be reused must be disposed of in a facility permitted to accept contaminated soils. Waste material generated from asphalt milling will be recycled to the greatest extent possible. Project specifications will include reference to the provisions of Advisory Circular 150/5370-10 (July 21, 2014), Standards for Specifying Construction on Airports. No hazardous substances are expected to be encountered during the milling and grading operations of this project. If any stained soils are observed or if soils are found contaminated with petroleum products, all pertinent local, State, and Federal regulations regarding proper disposal will be complied with.

All work is expected to occur from February 2017 until expected completion in December 2017. Construction will require a full closure of Runway 4R/22L from February 27, 2017 to June 1, 2017, nightly closures from 00:00 to 07:00 from June 14 to September 5, 2017 and another full closure from September 6, 2017 to November 17, 2017 for work within the Runway Safety Area (RSA). The runway will therefore be completely closed for less than six months in total. It was determined that this staging would cause the least impact to airport operations. A landside construction area within the Aeronautical Operations Area will be created to improve construction efficiencies.

Runway 4R/22L hosts the only precision Category III approach at JFK, allowing aircraft to land in low visibility conditions. During construction, when the airspace flow conditions occur that would normally place the arrivals on Runway 4R/22L were it not closed, these arrivals will occur on Runway 13L. To provide improved capability to the New York/New Jersey Airspace due to the

loss of Runway 4R/22L (which is a CAT II/III Runway, allowing for arrivals in nearly all weather conditions), the FAA will amend the existing JFK 13L CAT II procedure from 1600' Runway Visual Range (RVR) to 1200' RVR for the period of full closure of Runway 4R/22L (February 27 to June 1 and September 6 to November 17) only.

Due to the proximity of the individual airports within the New York Metropolitan Area, operational conditions at one airport can affect how the other airports need to operate. When JFK is arriving the Instrument Landing System (ILS) Procedure on 13L, LaGuardia (LGA) Airport must also arrive to its Runway 13, which currently happens approximately 1-2% of the time in an average year. A potential increase in the use of the JFK ILS Procedure for arrivals to Runway 13L during the periods of Runway 4R/22L closure would require LGA to arrive Runway 13 more often until the construction is completed. Currently, LGA has two published arrival procedures to Runway 13, which are the Precision ILS/Localizer Approach and Visual Very High Frequency Omni Directional Range-Distance Measuring Equipment-H Approach. These procedures direct arrivals on a straight-in approach to LGA, which creates conflicts with airspace for both Teterboro Airport (TEB) and Newark Liberty International Airport (EWR), resulting in an effective shut down of operations for EWR or TEB, since both airports cannot run concurrent operations when LGA is landing Runway 13. To offset these impacts to the airspace, FAA will institute a temporary RNAV (GPS) approach is proposed to be used alongside the currently published approaches for arrivals to LaGuardia Airport's Runway 13.

A depiction of existing and proposed conditions for the temporary approach is included in FAA analysis presented in Attachment 2, and a TARGETS noise screening analysis, prepared by the FAA, is included in Attachment 3. The results of the noise modeling indicated that there would be no significant impact (an increase of 1.5 dB DNL in an area exposed to 65 dB DNL), nor any reportable noise increases (an increase of 3 dB DNL in an area exposed to noise between 60 and 65 dB DNL or an increase of 5 dB DNL in an area exposed to noise between 45 and 60 dB DNL). Given that the RNAV procedure could provide longer term efficiency benefits for LGA, JFK, EWR, and TEB, the FAA will study making the procedure available for permanent use after the 4R/22L rehabilitation is complete. The permanent procedure would be subject to a separate and independent NEPA analysis, to be conducted by the FAA. That analysis will consider operational and noise data observed during the temporary use of the procedure associated with the construction at JFK. The use of the procedure, as permitted by this Categorical Exclusion, will not exceed six months in total length, as it will be discontinued when Runway 4R/22L is placed into service during the interval between construction periods.

Give a brief, but complete, description of the proposed project area. Include any unique or natural features within or surrounding airport property.

The project is wholly located on airport property, on the airside. The project area extends along the entire length of the existing Runway 4R-22L and the associated taxiways. The study area for the TARGETS noise analysis, prepared by FAA, for the LGA Runway 13 RNAV temporary procedure includes affected LGA and JFK airspace. Twenty eight days of radar track data totaling 29,019 tracks were selected by FAA for the LGA analysis representing a range of temperature and wind conditions as well as being representative of the average runway use beginning April 17th, 2014. The dates selected for this project were April 17-23, 2014, July 17-23, 2014, October 25-31, 2014 and January 18-24, 2015. These dates represent average traffic counts and traffic flows through various seasons and peak travel times for LGA. There were no significant runway outages or significant conditions that would otherwise result in abnormal traffic counts or traffic flows. The study area and radar tracks were used to create a baseline noise exposure condition, upon which a comparison was drawn with the LGA Runway 13 RNAV temporary procedure. The FAA's full analysis and results are included in attachment 3.

Identify the appropriate CATEX paragraph(s) from Order 1050.1F (paragraph 5-6.1 through 5-6.6) or 5050.4B (tables 6-1 and 6-2) that apply to the project. Describe if the project differs in any way from the specific language of the CATEX or examples given as described in the Order.

FAA 1050.1F Section 5-6.4.e: Federal financial assistance, licensing, or Airport Layout Plan (ALP) approval for the following actions, provided the action would not result in significant erosion or sedimentation, and will not result in a significant noise increase over noise sensitive areas or result in significant impacts on air quality.

- Construction, repair, reconstruction, resurfacing, extending, strengthening, or widening of a taxiway, apron, loading ramp, or runway safety area (RSA), including an RSA using Engineered Material Arresting System (EMAS); or
- Reconstruction, resurfacing, extending, strengthening, or widening of an existing runway. This CATEX includes marking, grooving, fillets and jet blast facilities associated with any of the above facilities. (ARP, AST)

FAA 1050.1F Section 5-6.4.k (CATEX for Facility Siting, Construction, and Maintenance): Placing earthen fill into previously excavated land with material compatible with the natural features of the site, provided the land is not delineated as a wetland; or minor dredging or filling of wetlands or navigable waters for any categorically excluded action, provided the fill is of material compatible with the natural features of the site, and the dredging and filling qualifies for an U.S. Army Corps of Engineers nationwide or a regional general permit. (ATO, AST, ARP)

FAA Order 1050.1F Section 5-6.5i (Applicable to the temporary reduction in RVR for Runway 13L at JFK during construction): Establishment of new or revised air traffic control procedures conducted at 3,000 feet or more above ground level (AGL); procedures conducted below 3,000 feet AGL that do not cause traffic to be routinely routed over noise sensitive areas; modifications to currently approved procedures conducted below 3,000 feet AGL that do not significantly increase noise over noise sensitive areas; and increases in minimum altitudes and landing minima. For modifications to air traffic procedures at or above 3,000 feet AGL, the Noise Screening Tool (NST) or other FAA-approved environmental screening methodology should be applied.

FAA 1050.1F Section 5-6.4.m: (Applicable for the temporary LGA Runway 13 RNAV Procedure) Short-term changes in air traffic control procedures, not to exceed six months, conducted under 3,000 feet above ground level (AGL) to accommodate airport construction.

The circumstances one must consider when documenting a CATEX are listed below along with each of the impact categories related to the circumstance. Use FAA Environmental Orders 1050.1F, 5050.4B, and the Desk Reference for Airports Actions, as well as other guidance documents to assist you in determining what information needs to be provided about these resource topics to address potential impacts. Keep in mind that both construction and operational impacts must be included. Indicate whether or not there would be any effects under the particular resource topic and, **if needed**, cite available references to support these conclusions. Additional analyses and inventories can be attached or cited as needed.

5-2.b(1) National Historic Preservation Act (NHPA) resources

YES NO

<p>Are there historic/cultural resources listed (or eligible for listing) on the National Register of Historic Places located in the Area of Potential Effect? If yes, provide a record of the historic and/or cultural resources located therein and check with your local Airports Division/District Office to determine if a Section 106 finding is required.</p> <p>Click here to enter text if necessary</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Does the project have the potential to cause effects? If yes, describe the nature and extent of the effects.</p> <p>Click here to enter text if necessary</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Is the project area undisturbed? If not, provide information on the prior disturbance (including type and depth of disturbance, if available)</p> <p>Click here to enter text if necessary</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Will the project impact tribal land or land of interest to tribes? If yes, describe the nature and extent of the effects and provide information on the tribe affected. Consultation with their THPO or a tribal representative along with the SHPO may be required.</p> <p>Click here to enter text if necessary</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5-2.b(2) Department of Transportation Act Section 4(f) and 6(f) resources

YES NO

<p>Are there any properties protected under Section 4(f) (as defined by FAA Order 1050.1F) in or near the project area? This includes publicly owned parks, recreation areas, and wildlife or waterfowl refuges of national, state or local significance or land from a historic site of national, state or local significance.</p> <p>The Jamaica Bay unit of the Gateway National Recreation Area is located to the south of JFK. There will be no encroachment upon the National Recreation Area by construction activities from the proposed action.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Will project construction or operation directly or constructively “use” any Section 4(f) resource? If yes, describe the nature and extent of the use and/or impacts, and why there are no prudent and feasible alternatives. See 5050.4B Desk Reference Chapter 7.</p> <p>Click here to enter text if necessary</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

YES NO

Will the project affect any recreational or park land purchased with Section 6(f) Land and Water Conservation Funds? If so, please explain, if there will be impacts to those properties.

[Click here to enter text if necessary](#)

5-2.b(3) Threatened or Endangered Species

YES NO

<p>Are there any federal or state listed, endangered, threatened, or candidate species or designated critical habitat in or near the project area? This includes species protected by individual statute, such as bald eagles.</p> <p>The Endangered Species Act of 1973 (ESA), as amended, provides for the protection of certain plants and animals as well as the habitats in which they are found. In compliance with the ESA, agencies overseeing Federally-funded projects are required to obtain from the U.S. Fish and Wildlife Service (USFWS) information concerning any species listed, or proposed to be listed, which may be present in the area of the Proposed Project.</p> <p>The New York State Natural Heritage Program (NYSNHP) reports several occurrences of the state endangered peregrine falcon (<i>falco peregrinus</i>) within the general vicinity of the Airport. Within its range, this falcon prefers open country from tundra, savannah and sea coasts, to high mountains, as well as open forests and tall buildings. Nests are built on high ledges, usually 50 to 200 feet off the ground. Nesting season occurs from March through July.</p> <p>Peregrines occasionally nest on Joco Marsh (1/2 mile from the end of Runway 4R/22L) on an artificial nest platform installed for osprey. There are no known peregrine falcons nests or sightings within the area to be disturbed for the Proposed Project. The closest sighting occurred at Hangar 12 (now demolished) which was located over 15,000 feet from the project area. Habitats near the Airport, which may be used by peregrine falcons for hunting, include waterfowl concentration areas such as Jamaica Bay. These habitats are not located within the project area.</p> <p>Requests were sent to the United States Fish and Wildlife Service (USFWS) and the NYSDEC Natural Heritage Program (NHP) on 24 May 2016 for information on threatened, endangered and rare species known to occur within the project area.</p> <p>A response from the USFWS indicates that there are four species identified within the extent of the overall proposed and previously approved project areas (Attachment 8). Three birds including: piping plover (<i>Charadrius melodus</i>) (federal threatened), red knot (<i>Calidris canutus rufa</i>) (federal threatened), and roseate tern (<i>Sterna dougallii</i>) (federal endangered) and one flowering plant, seabeach amaranth (<i>Amaranthus pumilus</i>) (federal threatened), were identified for consideration. No critical habitat is listed within the project area. The USFWS did not identify any aquatic species designated for consideration within the project area.</p> <p>A response from the NYSDEC NHP indicates that there are three state-listed animals that have been documented on or within the vicinity of the proposed and previously approved project areas (Attachment 8). These species include upland sandpiper (<i>Bartramia longicauda</i>) (state threatened), northern harrier (<i>Circus cyaneus</i>) (state threatened), and short-eared owl (<i>Asio flammeus</i>) (state endangered).</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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<p>Does the project affect or have the potential to affect, directly or indirectly, any federal or state-listed, threatened, endangered or candidate species, or designated habitat? If yes, consultation between the FAA and the US Fish & Wildlife Service, National Marine Fisheries Service, and/or the appropriate state agency will be necessary. Provide a description of the impacts and how impacts will be avoided, minimized, or mitigated.</p> <p>The project area is generally comprised of disturbed land areas situated on or near operational runway areas at JFK. It is unlikely that the project areas provide functional habitat for these species; however, other common transient wildlife may utilize the area occasionally. All temporary disturbance to occur as a result of construction will be restored by returning the area to original grades and re-establishing vegetative cover. As such, we do not anticipate any impacts to aquatic life (e.g. fish, shellfish, crustaceans).</p> <p>Jamaica Bay and its environs support diamondback terrapin turtles that are neither Federal nor state special-status species. However, New York is considering adding them as a special concern species. Terrapins can be found in brackish waters of coastal salt marshes, tidal creeks, estuaries, bays, and coves. Females are typically found on beaches and in sand dunes when nesting. Port Authority wildlife staff reported isolated incidents in which terrapins were found in the vicinity of the Proposed Project. However, no terrapins have been observed on the taxiways, and no nesting activities have occurred in the vicinity of the Proposed Project. During construction, best practices would be used to deter the turtles from the construction site and prevent any disturbance to the turtles. Turtles found in the construction area would be relocated to another area and released near Jamaica Bay.</p> <p>Therefore, neither the Proposed Project nor the No-Build/No-Action would adversely impact any Federal-listed or state-listed endangered, threatened, or special concern species.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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5-2.b (4) Other Resources

Items to consider include:

a. Fish and Wildlife Coordination Act	YES	NO
<p>Does the project area contain resources protected by the Fish and Wildlife Coordination Act? If yes, describe any impacts and steps taken to avoid, minimize or mitigate impacts.</p> <p>Click here to enter text if necessary</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Wetlands and Other Waters of the U.S.	YES	NO
<p>Are there any wetlands or other waters of the U.S. in or near the project area?</p> <p>Wetlands are present at all of the storm water outfalls. Based on the current scope to replace the outfall pipes in kind and in place, the NYSDEC Permit 2-6500-00010/00004 issued to the Port Authority for the Maintenance of Waterfront Structures and an authorization under the USACE Nationwide Permit No. 7 Outfall Structures and Associated Intake Structures can be used for the replacement of the outfall pipes.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Has wetland delineation been completed within the proposed project area? If yes, please provide U.S. Army Corps of Engineers (USACE) correspondence and jurisdictional determination. If delineation was not completed, was a field check done to confirm the presence/absence of wetlands or other waters of the U.S.? If no to both, please explain what methods were used to determine the presence/absence of wetlands.</p> <p>The wetlands located at Outfalls 19, 20, and 21 were delineated. The application to USACE was submitted on March 18, 2016. No work will commence until all applicable permits are received.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<p>If wetlands are present, will the project result in impacts, directly or indirectly (including tree clearing)? Describe any steps taken to avoid, minimize or mitigate the impact.</p> <p>Yes, the Proposed Project does involve impacts to delineated wetlands as a result of the replacement of piping at Outfall 20 and Outfall 21. A map of wetlands in the vicinity of the Proposed Project is included in Attachment 4.</p> <p>The runway rehabilitation and taxiway construction will take place in upland areas and are not in jurisdiction of either the US Army Corps of Engineers (USACE) or the New York State Department of Environmental Conservation (NYSDEC).</p> <p>The scope of work for the rehabilitation of Runway 4R-22L also includes the replacement of the 48-inch piping at Outfall 20 and Outfall 21 with 60-inch piping in the same location. In addition to the piping, the concrete pad and the splashpad under the outfall piping will also be replaced in their existing locations. Outfall 20 is located in Head of Bay and Outfall 21 is located in Thurston Basin. The outfall replacement is expected to occur between March 2017 and November 2017 and will take approximately six weeks to complete. This action falls within the jurisdiction of the USACE and the NYSDEC. The purpose of this project is to replace the piping at Outfalls 20 and 21 which has deteriorated and must be replaced. In addition to the piping, the existing concrete support and riprap beneath the piping will also be replaced. The taxiway reconfiguration and taxiway widening is anticipated to increase impervious areas and may increase the amount of runoff to the current outfall. The current 48-inch piping would be undersized for the amount of potential increased drainage and, therefore, must be replaced with 60-inch piping.</p> <p>As part of the outfall rehabilitation work, a manhole to allow access for maintenance personnel will be constructed on Outfall 21. Security grates will be installed in the piping through a manhole. A flap gate or tide gate valve will be installed in a manhole to prevent backflow. All work for the outfalls will occur from the land within the work area.</p> <p>A total of 190 feet of piping will be removed and replaced at Outfall 20 and a total of 330 feet of piping will be removed and replaced at Outfall 21. 170 feet of the Outfall 20 piping is located in the tidal wetland area and 20 feet is located in the tidal wetland adjacent area. 130 feet of the Outfall 21 piping is located in the tidal wetland and 200 feet is located in the tidal wetland adjacent area. The total area of tidal wetlands including open waters within the Outfall 20 project area is limited to approximately 738 square feet of littoral zone/intertidal shallows devoid of vegetation. The total area of tidal wetlands including open waters within the Outfall 21 project area is 2,761 square feet (1,186 square feet vegetated and 1,575 square feet open water).</p> <p>The Port Authority is proposing to proceed with the project under the Department of the Army Nationwide General Permit Program, pursuant to 33 CFR Part 330, 3 - Maintenance - 7 - Outfall Structures and Associated Intake Structures and 33- Temporary Construction, Access and Dewatering. The Verification of Use Application was submitted on March 18, 2016.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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<p>Is a USACE Clean Water Act Section 404 permit required? If yes, does the project fall within the parameters of a general permit? If so, which general permit?</p> <p>The Port Authority is proposing to proceed with the project under the Department of the Army Nationwide General Permit Program, pursuant to 33 CFR Part 330, 3 - Maintenance - 7 - Outfall Structures and Associated Intake Structures and 33- Temporary Construction, Access and Dewatering. The Verification of Use Application was submitted on March 18, 2016.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>c. Floodplains</p>	<p>YES</p>	<p>NO</p>
<p>Will the project be located in, encroach upon or otherwise impact a floodplain? If yes, describe impacts and any agency coordination or public review completed including coordination with the local floodplain administrator. Attach the FEMA map if applicable and any documentation.</p> <p>A small portion of the project lies within the FEMA effective 1% annual chance floodplain, and a larger portion is within the 0.2% annual floodplain. The work occurring to upgrade Outfalls 20 and 21 will take place in the FEMA effective 1% annual chance floodplains. Given that the outfall upgrades are to existing outfalls, and no new structures are being installed, no new encroachment will occur. Attachment 7 depicts the FEMA effective FIRM. Coordination with the New York State Department of State and the New York City Waterfront Revitalization Program, resulting in a coastal zone consistency determination, provide support that this project will not encroach upon floodplains or coastal resources. Furthermore, permit applications to NYSDEC and USACE, support that there will be no floodplain encroachment.</p> <p>The proposed work will involve modification of existing storm drainage system and installation of new drainage systems. Preliminary calculations and modeling of existing utilities along with the new proposed designs, in accordance with the Port Authority's Civil Engineering Design Guidelines for a 10-year return period, indicated the necessity of upgrading the existing outfall pipes and replacing appurtenances at outlet structures 20 and 21.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>d. Coastal Resources</p>	<p>YES</p>	<p>NO</p>
<p>Will the project occur in or impact a coastal zone as defined by the State's Coastal Zone Management Plan? If yes, discuss the project's consistency with the State's CZMP. Attach the consistency determination if applicable.</p> <p>The project would not adversely impact coastal zone resources and is consistent with the Waterfront Revitalization and Coastal Resources Act (WRCRA), as well as New York City's Waterfront Revitalization Program (WRP). The applicable 44 New York State Department of State (DOS) coastal zone policies were analyzed.</p> <p>The consistency determination is available in Attachment 5.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<p>Will the project occur in or impact the Coastal Barrier Resource System as defined by the US Fish and Wildlife Service?</p> <p>Click here to enter text.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. National Marine Sanctuaries	YES	NO
<p>Is a National Marine Sanctuary located in the project area? If yes, discuss the potential for the project to impact that resource.</p> <p>Click here to enter text if necessary</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Wilderness Areas	YES	NO
<p>Is a Wilderness Area located in the project area? If yes, discuss the potential for the project to impact that resource.</p> <p>Click here to enter text if necessary</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Farmland	YES	NO
<p>Is there prime, unique, state or locally important farmland in/near the project area? Describe any significant impacts from the project.</p> <p>Click here to enter text.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Does the project include the acquisition and conversion of farmland? If farmland will be converted, describe coordination with the US Natural Resources Conservation and attach the completed Form AD-1006.</p> <p>Click here to enter text.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Energy Supply and Natural Resources	YES	NO
<p>Will the project change energy requirements or use consumable natural resources either during construction or operations?</p> <p>Click here to enter text.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Will the project change aircraft/vehicle traffic patterns that could alter fuel usage either during construction or operations?</p> <p>Click here to enter text.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. Wild and Scenic Rivers	YES	NO

<p>Is there a river on the Nationwide Rivers Inventory, a designated river in the National System, or river under State jurisdiction (including study or eligible segments) near the project?</p> <p>Click here to enter text.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Will the project directly or indirectly affect the river or an area within ¼ mile of its ordinary high water mark?</p> <p>Click here to enter text.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j. Solid Waste Management	YES	NO
<p>Does the project (either the construction activity or the completed, operational facility) have the potential to generate significant levels of solid waste? If so, discuss how these will be managed.</p> <p>Excess soil generated will be reused to the extent possible. Any soil that cannot be reused must be disposed of in a facility permitted to accept contaminated soils. Waste material generated from asphalt milling will be recycled to the greatest extent possible. Project specifications will include reference to the provisions of Advisory Circular 150/5370-10 (July 21, 2014), Standards for Specifying Construction on Airports. No hazardous substances are expected to be encountered during the milling and grading operations of this project. If any stained soils are observed or if soils are found contaminated with petroleum products, all pertinent local, State, and Federal regulations regarding proper disposal will be complied with.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

5-2.b(5) Disruption of an Established Community

	YES	NO
<p>Will the project disrupt a community, planned development or be inconsistent with plans or goals of the community?</p> <p>Click here to enter text if necessary</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Are residents or businesses being relocated as part of the project?</p> <p>Click here to enter text if necessary</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5-2.b(6) Surface Transportation

	YES	NO
<p>Will the project cause a significant increase in surface traffic congestion or cause a degradation of level of service provided?</p> <p>Click here to enter text if necessary</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<p>Will the project require a permanent road relocation or closure? If yes, describe the nature and extent of the relocation or closure and indicate if coordination with the agency responsible for the road and emergency services has occurred.</p> <p>Click here to enter text if necessary</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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5-2.b(7) Noise

	YES	NO
<p>Will the project result in an increase in aircraft operations, nighttime operations, or change aircraft fleet mix?</p> <p>Click here to enter text if necessary</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<p>Will the project cause a change in airfield configuration, runway use, or flight patterns either during construction or after the project is implemented?</p> <p>During construction, there will be temporary changes to runway use due to the closure of 4R-22L. Airlines will be asked to modify their schedules, and JFK's ground management system will be deployed to minimize ground delays. There will be two procedure changes implemented: Runway 4R/22L hosts the only precision Category III approach at JFK, allowing aircraft to land in low visibility conditions. To mitigate impacts to the New York/New Jersey airspace and improve Enhanced Low Visibility Operations during construction, the FAA will amend the existing JFK 13L CAT II procedure from 1600' Runway Visual Range (RVR) to 1200' RVR for the construction period only. Individuals under the current approach pattern to Runway 13L can expect to have more aircraft fly over their residences or places of business during the periods of Runway 4R/22L closure at JFK. The increased use will be temporary and only occur during periods when the Runway is closed and flow conditions would have had those aircraft arriving to Runway 22L. There will be a full closure of Runway 4R/22L from February 27, 2017 to June 1, 2017, nightly closures from 00:00 to 07:00 from June 14 to September 5, 2017 and another full closure from September 6, 2017 to November 17, 2017.</p> <p>In addition, a temporary RNAV (GPS) approach will be implemented for arrivals to LaGuardia Airport's Runway 13, which will be required to enable additional expected arrivals on JFK Runways 13R and 13L during the construction period. A depiction of existing and proposed conditions for the temporary approach is included in Attachment 2, and a TARGETS noise screening analysis is included in Attachment 3. The results of the noise modeling indicated that there would be no significant impact (an increase of 1.5 dB DNL in an area exposed to 65 dB DNL), nor any reportable noise increases (an increase of 3 dB DNL in an area exposed to noise between 60 and 65 dB DNL or an increase of 5 dB DNL in an area exposed to noise between 45 and 60 dB DNL). Individuals in coastal Connecticut and portions of Westchester County, New York under the proposed temporary procedure can expect to have aircraft fly over their residences or places of business during the periods of Runway 4R/22L closure at JFK; however aircraft already overfly these areas and there will be no aircraft introduced in areas where aircraft do not already fly. The increased use will be temporary and only occur during periods when the Runway is closed at JFK.</p> <p>Once the JFK Runway 4R/22L rehab construction is completed, the RVR for JFK 13L will return to 1600' and the temporary LGA Runway 13 arrival procedure will be discontinued and operational conditions will reset to pre-construction levels.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Does the forecast exceed 90,000 annual propeller operations, 700 annual jet operations or 10 daily helicopter operations or a combination of the above? If yes, a noise analysis may be required if the project would result in a change in operations.</p> <p>The proposed project will not cause an increase in aircraft operations.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<p>Has a noise analysis been conducted, including but not limited to generated noise contours, a specific point analysis, area equivalent method analysis, or other screening method. If yes, provide that documentation.</p> <p>A TARGETS noise screening analysis is included in Attachment 3. The results of the noise modeling indicated that there would be no significant impact (an increase of 1.5 dB DNL in an area exposed to 65 dB DNL), nor any reportable noise increases (an increase of 3 dB DNL in an area exposed to noise between 60 and 65 dB DNL or an increase of 5 dB DNL in an area exposed to noise between 45 and 60 dB DNL). Additionally, to comply with Executive Order 12898, Environmental Justice for Low Income and Minority Populations, and DOT Order 5610.2(a), Environmental Justice in Minority and Low-Income Populations, the FAA identified potential environmental justice communities in the vicinity of LaGuardia Airport associated with the temporary RNAV (GPS) procedure. The environmental justice (EJ) component of the Aviation Environmental Design Tool (AEDT) was utilized (see Attachment 9) to identify low income and minority census blocks that may be targeted for community outreach. Thresholds of significance for noise impacts were not met for this project, and since there were no communities within the study area that met secondary criteria relative to noise in EJ communities, the noise impact was not considered further. The report in Attachment 9 identifies strategies for outreach to communities, and notifications will be made to elected officials and community representatives identified in the report. However, since there are no significant noise impacts associated with the temporary procedure, additional outreach beyond notifications is not warranted at this time.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Could the project have a significant impact (DNL 1.5 dB or greater increase) on noise levels over noise sensitive areas within the 65+ DNL noise contour?</p> <p>Click here to enter text if necessary</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5-2.b(8) Air Quality

	YES	NO
<p>Is the project located in a Clean Air Act non-attainment or maintenance area?</p> <p>Click here to enter text.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<p>If yes, is it listed as exempt, presumed to conform or will emissions (including construction emissions) from the project be below <i>de minimis</i> levels (provide the paragraph citation for the exemption or presumed to conform list below, if applicable) Is the project accounted for in the State Implementation Plan or specifically exempted? Attach documentation. There would be direct and indirect emissions due to the Proposed Project during construction. An air quality study for the JFK Runway 4L/22R Improvements Project Environmental Assessment (which received an FAA Finding of No Significant Impact/Record of Decision on March 10, 2014) confirmed emissions of criteria air pollutants at much lower levels than the Federal <i>de minimis</i> thresholds during construction for that project. The extent of the Proposed Project, in regards to construction emissions, has a smaller footprint than the Runway 4L/22R project. The 4L/22R project involved a full-length (12,079 feet) replacement of an asphalt runway with concrete, along with the reconfiguration or widening of 11 taxiways and 4 taxiway entrances, along with the construction of roadways, parking facilities, and other associated improvements (see Attachment 6 for a description of the 4L/22R project). The Proposed Project will result in the rehabilitation of an 8,400 foot asphalt runway surface, and widening of two taxiways, vs the rehabilitation of an 11,351 foot runway surface in concrete and resurfacing or widening of over 15 taxiways. Given the reduced level of effort associated with the Proposed Project, it is reasonable to assume that the construction emissions estimates for Runway 4L/22R represent the upper limit of potential construction emissions impacts associated with the Proposed Project. Finally, the 4L/22R project consumed a total of 287,750 tons of asphalt (not including the concrete used for the runway construction), whereas the entire paving budget for the proposed project, including the runway resurfacing and all associated work, will consume less than 100,000 tons of asphalt which is less than 35% of the amount of asphalt used for the 4L/22R project. The 4L/22R project only produced a maximum of 2.17% of emissions for the <i>de minimis</i> threshold for NOX, and significantly less than that for VOC, CO, SOx, PM10, and PM2.5. The emissions result table is also included in Attachment 6.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Does the project have the potential to increase landside or airside capacity, including an increase of surface vehicles?</p> <p>Click here to enter text if necessary</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Could the project impact air quality or violate local, State, Tribal or Federal air quality standards under the Clean Air Act Amendments of 1990 either during construction or operations?</p> <p>Click here to enter text if necessary</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5-2.b (9) Water Quality

YES NO

<p>Are there water resources within or near the project area? These include groundwater, surface water (lakes, rivers, etc.), sole source aquifers and public water supply. If yes, provide a description of the resource, including the location (distance from project site, etc.).</p> <p>Click here to enter text if necessary</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Will the project impact any of the identified water resources either during construction or operations? Describe any steps that will be taken to protect water resources during and after construction.</p> <p>Click here to enter text if necessary</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Will the project increase the amount or rate of stormwater runoff either during construction or operations? Describe any steps that will be taken to ensure it will not impact water quality.</p> <p>Click here to enter text if necessary</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Does the project have the potential to violate federal, state, tribal or local water quality standards established under the Clean Water and Safe Drinking Water Acts?</p> <p>Click here to enter text if necessary</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Are any water quality related permits required? If yes, list the appropriate permits.</p> <p>The State Pollution Discharge Elimination System (SPDES) Permit for JFK will be in effect for the duration of the project (NYSDEC Permit # 2-6308-0019/00016 SPDES # NY-0008109), as will an Authorization under the USACE Nationwide Permit No. 7 Outfall Structures and Associated Intake Structures can be used for the replacement of the outfall pipes.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

5-2.b(10) Highly Controversial on Environmental Grounds

	YES	NO
<p>Is the project highly controversial? The term “highly controversial” means a substantial dispute exists as to the size, nature, or effect of a proposed federal action. The effects of an action are considered highly controversial when reasonable disagreement exists over the project’s risks of causing environmental harm. Mere opposition to a project is not sufficient to be considered highly controversial on environmental grounds. Opposition on environmental grounds by a federal, state, or local government agency or by a tribe or a substantial number of the persons affected by the action should be considered in determining whether or not reasonable disagreement exists regarding the effects of a proposed action.</p> <p>Click here to enter text if necessary</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5-2.b(11) Inconsistent with Federal, State, Tribal or Local Law

	YES	NO
<p>Will the project be inconsistent with plans, goals, policy, zoning, or local controls that have been adopted for the area in which the airport is located?</p> <p>Click here to enter text if necessary</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Is the project incompatible with surrounding land uses?</p> <p>Click here to enter text if necessary</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5-2 .b (12) Light Emissions, Visual Effects, and Hazardous Materials

a. Light Emissions and Visual Effects	YES	NO
<p>Will the proposed project produce light emission impacts?</p> <p>Click here to enter text if necessary</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Will there be visual or aesthetic impacts as a result of the proposed project and/or have there been concerns expressed about visual/aesthetic impacts?</p> <p>Click here to enter text if necessary</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Hazardous Materials	YES	NO

Does the project involve or affect hazardous materials? Click here to enter text if necessary	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Will construction take place in an area that contains or previously contained hazardous materials? If any stained soils are observed or if soils are found contaminated with petroleum products, all pertinent local, state and Federal regulations regarding proper disposal would be complied with.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If the project involves land acquisition, is there a potential for this land to contain hazardous materials or contaminants? Click here to enter text if necessary	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Will the proposed project produce hazardous and/or solid waste either during construction or after? If yes, how will the additional waste be handled? Click here to enter text if necessary	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5-2 .b (13) Public Involvement

	YES	NO
Was there any public notification or involvement? If yes, provide documentation. Following completion of the Technical Advisory Committee (TAC) Meetings for the Port Authority Part 150 Studies at LGA on August 16, 2016 and JFK on August 17, 2016, a discussion of the proposed project and the connected airspace procedure modifications was held with the members of the TAC for each airport. TACs provide input into the Part 150 study. The Part 150 Study will quantify existing and future aircraft noise exposure levels, assess land use impacts according to federal standards, and seek ways to minimize those impacts to the greatest extent practical within 14 CFR Part 150 guidelines. The TACs are comprised of the Port Authority, the FAA, airport users, airport stakeholders, local elected officials; and other community representatives.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

5-2 .b (14) Indirect/Secondary/Induced Impacts

YES NO

<p>Will the project result in indirect/secondary/induced impacts?</p> <p>Community noise impacts during construction are the result of operating construction equipment and construction/delivery vehicles traveling to and from the site. The Proposed Project would have no perceptible increase in ambient noise levels at noise sensitive receptors in the area due to construction activities. Construction activities associated with the Proposed Project would temporarily increase the ambient noise levels in the immediate vicinity of the project area during periods of heavy construction. However, there are no sensitive receptors immediately adjacent to the Proposed Project site. Off-site impacts, from equipment and materials egress/ingress, are anticipated to be minimal, if any.</p> <p>The construction phasing plan for the Proposed Action has been designed to minimize the impacts to landside and airside operations.</p> <p>The temporary airspace procedure changes (lowering the runway visual range for the CAT II procedure and the temporary LGA Runway 13 RNAV approach) will cause temporary changes in air traffic patterns. See Attachment 3. Noise of this Categorical Exclusion for further discussion.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>When considered with other past, present, and reasonably foreseeable future projects, on or off airport property and regardless of funding source, would the proposed project result in a significant cumulative impact?</p> <p>Click here to enter text if necessary</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Permits

List any permits required for the proposed project which have not been previously discussed. Provide details on the status of permits.

The following permits and approvals would be required prior to initiating construction.

- NYSDEC Tidal Wetlands Permit
- NYSDEC Use and Protection of Waters Permit
- NYSDEC Individual Water Quality Certificate
- Authorization under the USACE Nationwide Permit No. 3, 7, and 33 Outfall Structures and Associated Intake Structures for the replacement of the outfall pipes.
- Coastal Zone Management Consistency Evaluation from the New York State Department of State (Attachment 5)

The Port Authority will apply for all permits listed above in advance of project award and it is anticipated that the permits will be obtained in a timely fashion with no difficulty before the start of construction.

Environmental Commitments

List all measures and commitments made to avoid, minimize, mitigate, and compensate for impacts on the environment, which are needed for this project to qualify for a CATEX.

The project will follow the Port Authority's Sustainable Infrastructure Guidelines, which establish sustainable design requirements for infrastructure projects. Light Emitting Diode (LED) technology will be deployed for airfield lighting purposes, which will decrease electricity demand for the airfield. No construction will begin prior to receipt of all requisite permits. No work will commence until all applicable permits are received.

Preparer Information

Point of Contact: Nate Kimball

Address: 4 World Trade Center, 150 Greenwich Street

City: New York

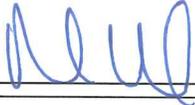
State: NY

ZIP code: 10006

Phone Number: 2124353783

Email Address: nkimball@panynj.gov

Signature: _____



Date: _____

9/12/16

Airport Sponsor Information and Certification

(may not be delegated to consultant)

Provide contact information for the designated sponsor point of contact and any other individuals requiring notification of the FAA decision.

Point of Contact: Edward C. Knoesel

Address: 4 World Trade Center, 150 Greenwich Street

City: New York

State: NY

ZIP code: 10006

Phone Number: 2124353747

Email Address: eknoesel@panynj.gov

Additional Name(s): Click here to enter text.

Additional Email Address(es): Click here to enter text.

I certify that the information I have provided above is, to the best of my knowledge, correct. I also recognize and agree that no construction activity, including but not limited to site preparation, demolition, or land disturbance, shall proceed for the above proposed project(s) until FAA issues a final environmental decision for the proposed project(s) and until compliance with all other applicable FAA approval actions (e.g., ALP approval, airspace approval, grant approval) has occurred.

Signature: _____



Date: _____

9/12/16

FAA Decision

Having reviewed the above information, it is the FAA's decision that the proposed project (s) or development warrants environmental processing as indicated below.

Name of Airport, LOC ID, and location

Project Title

[Click here to enter text.](#)

No further NEPA review required. Project is categorically excluded per (cite applicable 1050.1.F CATEX that applies)

An Environmental Assessment (EA) is required.

An Environmental Impact Statement (EIS) is required.

The following additional documentation is necessary for FAA to perform a complete environmental evaluation of the proposed project.

[Click here to enter text if necessary](#)

Name: STEVEN M. UZLASS
Responsible FAA Official

Title DIRECTOR

Signature 

Date 10/27/10

Attachment 1: Description of Proposed Project

**THE PORT AUTHORITY
OF NY & NJ**

CHIEF CIVIL ENGINEER

GUY ZUMMO
N.Y. PROFESSIONAL ENGINEER
LICENSE NO. 066915

No.	Date	Revision	Approved

ENGINEERING DEPARTMENT

**JOHN F. KENNEDY
INTERNATIONAL
AIRPORT**

**DISCIPLINE
CIVIL**

Title
**REHABILITATION OF RUNWAY 4R-22L
AND ASSOCIATED TAXIWAYS**

**PROJECT ELEMENTS
AND OUTFALL
LOCATIONS**

This drawing subject to conditions in contract. All inventions, ideas, designs and methods herein are reserved to Port Authority and may not be used without its written consent. All recipients of Contract documents, including bidders and those who do not bid and their prospective subcontractors and suppliers who may receive all or a part of the Contract documents or copies thereof, shall make every effort to ensure the secure and appropriate disposal of the Contract documents to prevent further disclosure of the information contained in the documents. Secure and appropriate disposal includes methods of document destruction such as shredding or arrangements with reuse handlers that ensure that third persons will not have access to the documents' contents either before, during or after disposal. Documents may also be retained for disposal purposes to the Contract Desk, 2 Montgomery Street, 1st Floor, Jersey City, NJ 07302 or the office of the Director of Procurement, 4 World Trade Center, 21st Floor, New York, NY 10001. It is a violation of law for any person to alter a document in any way, unless acting under the direction of a licensed professional engineer or registered architect. If this document bearing the seal of an engineer/architect is altered, the altering engineer/architect shall affix to the document their seal and the notation "altered by" followed by their signature and the date of such alteration, and a specific description of the alteration.

Designed by M.MUNDREAN

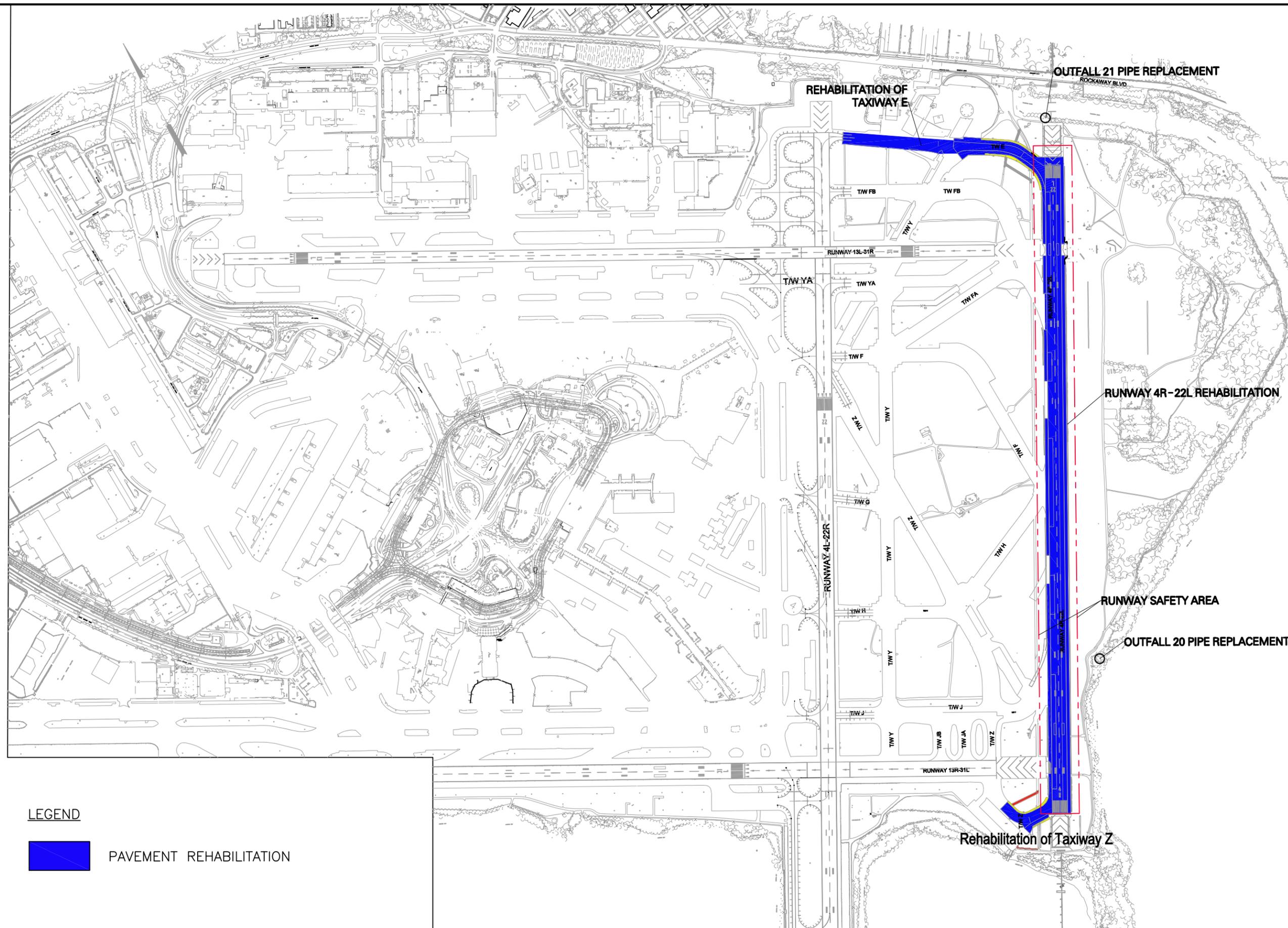
Drawn by M.MUNDREAN

Checked by R.MALEKI

Date 06/03/2016

Contract Number JFK-144.019

Drawing Number **SK01**
PID# 14024000



LEGEND

 PAVEMENT REHABILITATION

OUTFALL 21 PIPE REPLACEMENT
ROCKAWAY BLVD

REHABILITATION OF
TAXIWAY E

RUNWAY 4R-22L REHABILITATION

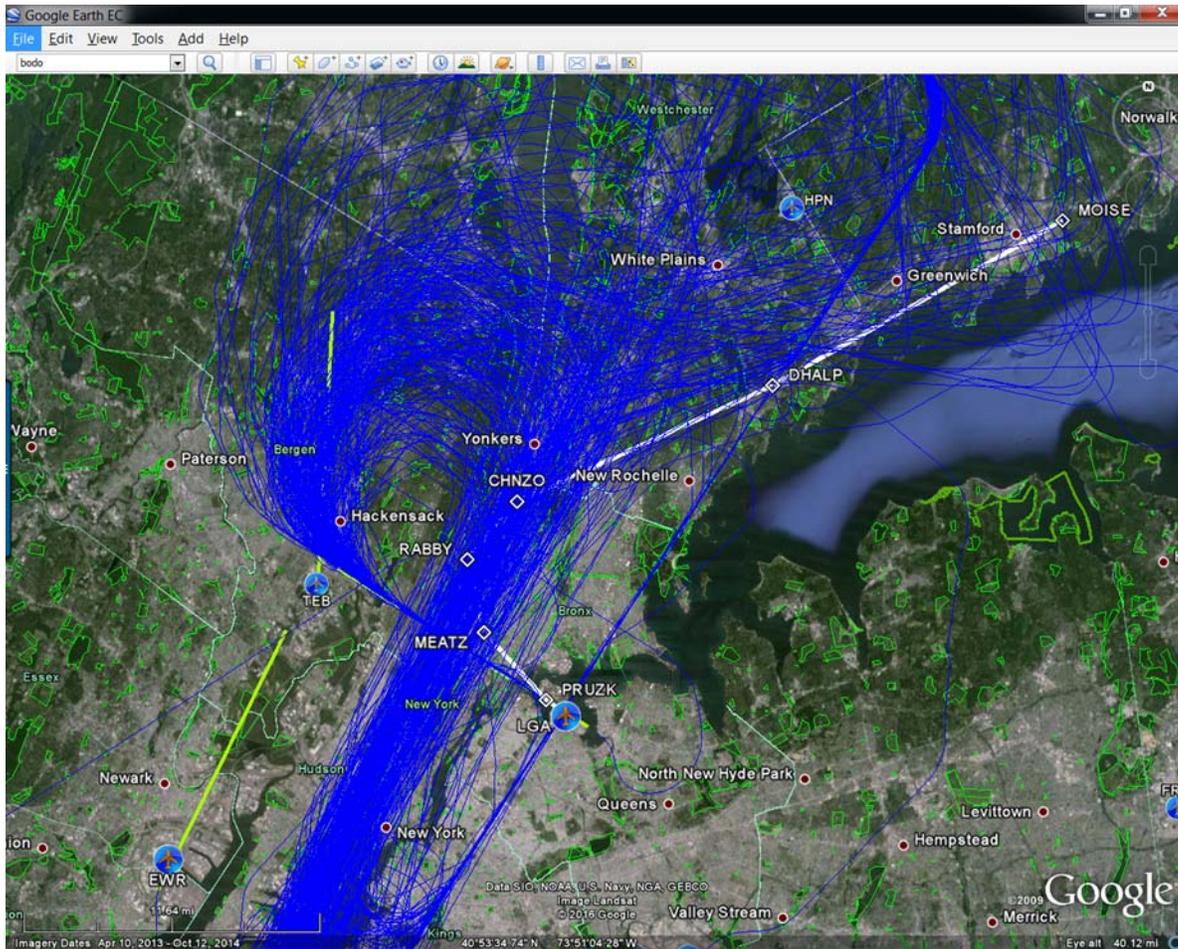
RUNWAY SAFETY AREA

OUTFALL 20 PIPE REPLACEMENT

Rehabilitation of Taxiway Z

Attachment 2: Temporary
LaGuardia Runway 13
RNAV-GPS Procedure

LGA Runway 13 RNAV (GPS) Offset Procedure Figures.



**Figure 1: No Action –Aircraft landing LGA Runway 13 (arrival tracks in blue)
Arrivals from the South [May 9, 2014]**

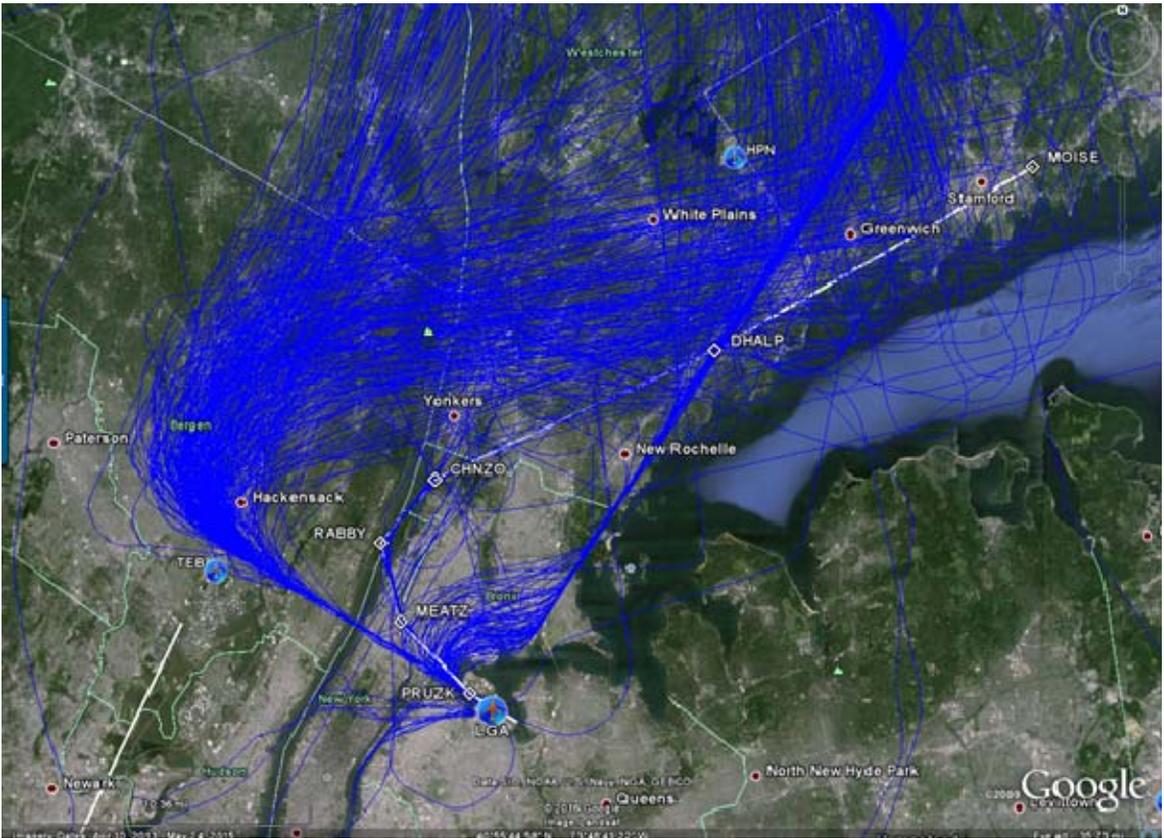


Figure 2: No Action – Aircraft landing LGA Runway 13 (arrival tracks in blue) on the existing LGA RWY 13 ILS or flying a visual approach to LGA RWY 13 Arrivals from the North [June 2015]

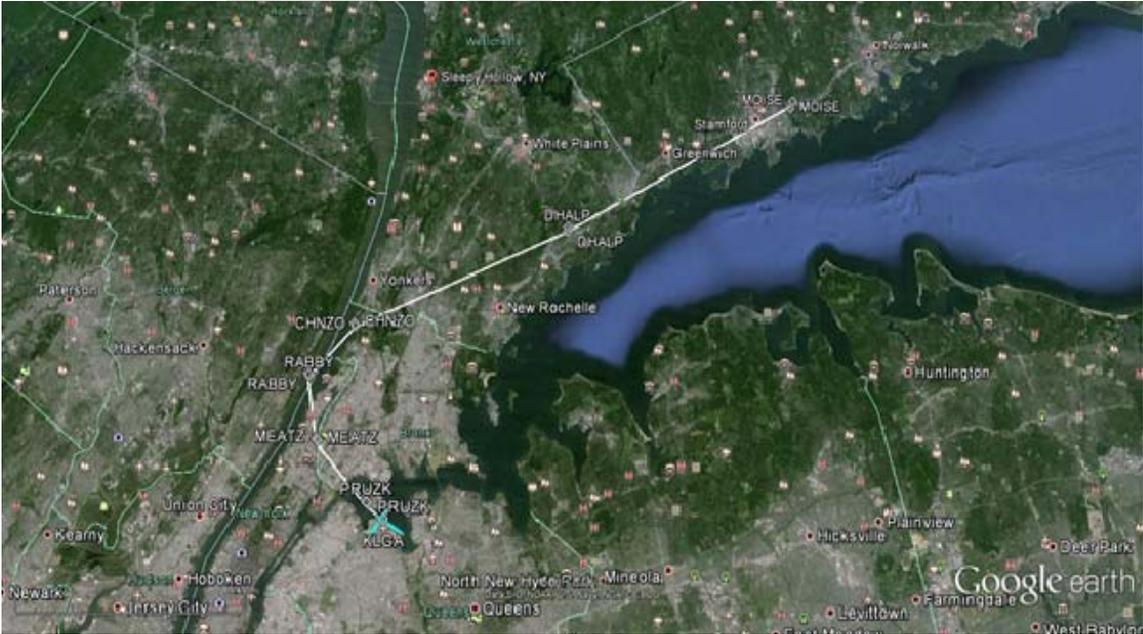


Figure 3: Proposed Project - LGA RWY 13 RNAV (GPS) offset (MOISE-DHALP-CHNZO-RABBY-MEATZ-PRUZZK)

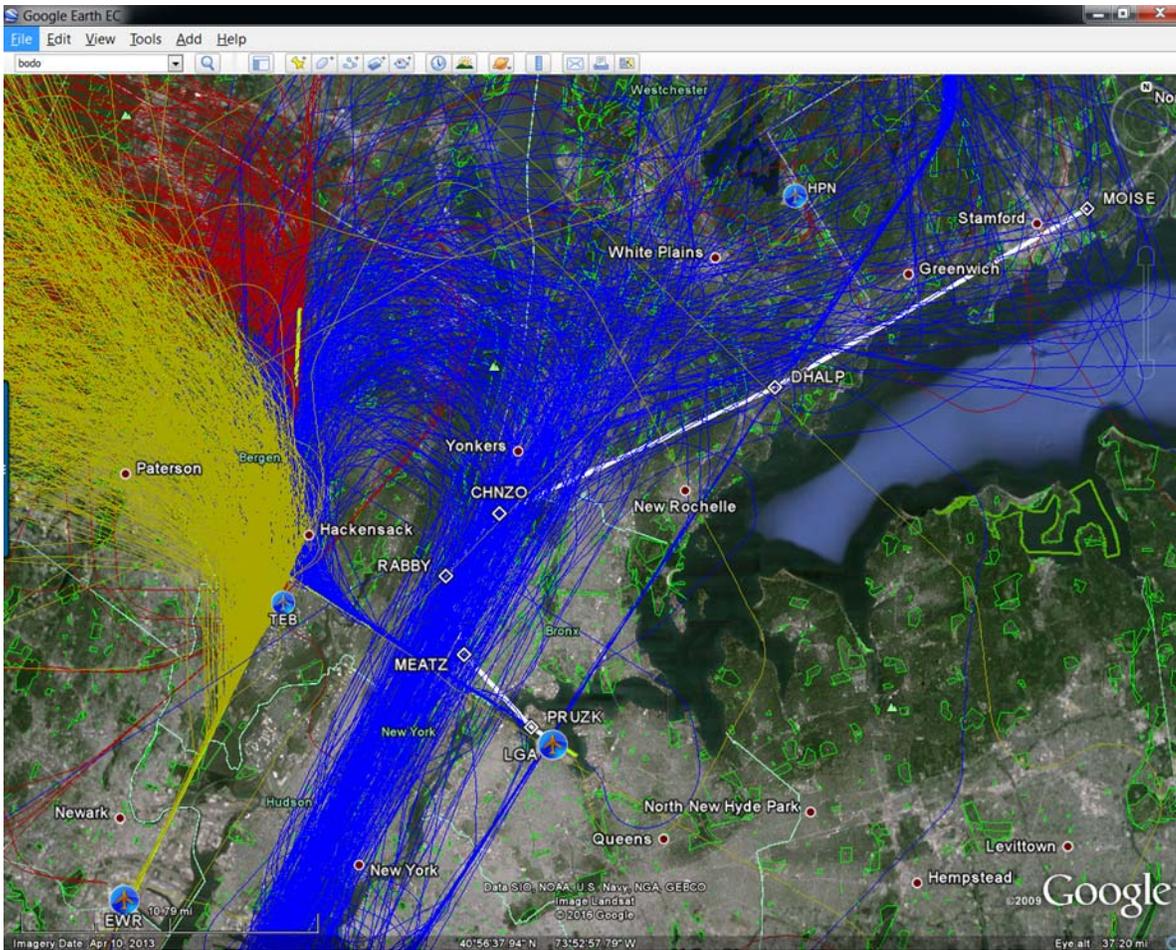


Figure 4: Arrival Traffic

(EWR arrivals in yellow, TEB arrivals in red, LGA arrivals in blue) [May 9, 2014]

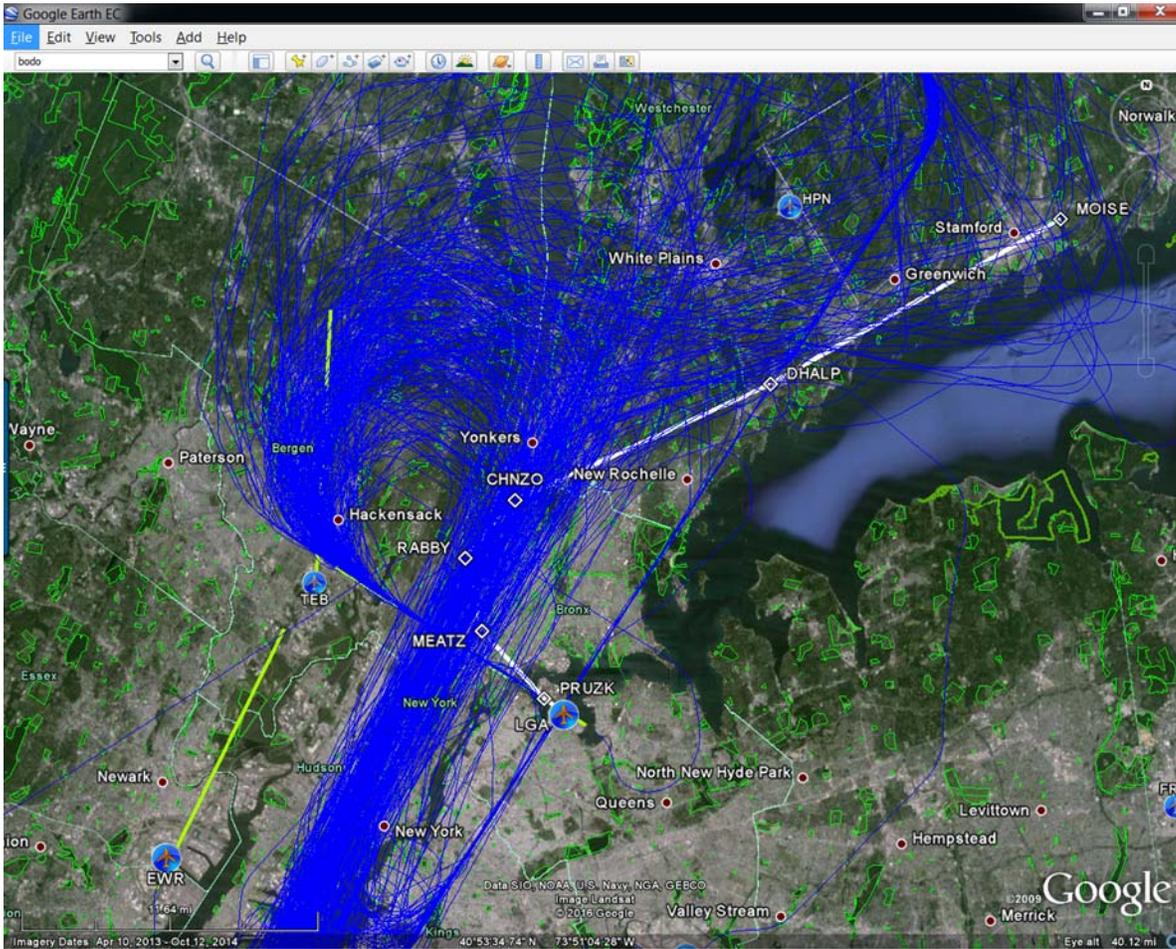


Figure 5: Current Flight Tracks and Proposed Arrival Procedure [May 09, 2014]

Attachment 3: FAA
TARGETS AEDT
Environmental Plug-in Report
for Temporary LGA Runway
13 RNAV-GPS Procedure

TARGETS
AEDT Environmental Plug-in Report

For

La Guardia Airport

LGA

New York, NY

Prepared by:

Name: Maryam Zavareh

FAA Office: ATO, AJV-114, Environmental Policy Team Office

Phone Number: 703-267-3813

Email Address: Maryam.CTR.Zavareh@faa.gov

Date: 1/12/16

La Guardia International Airport (LGA)

TARGETS Environmental Analysis Process

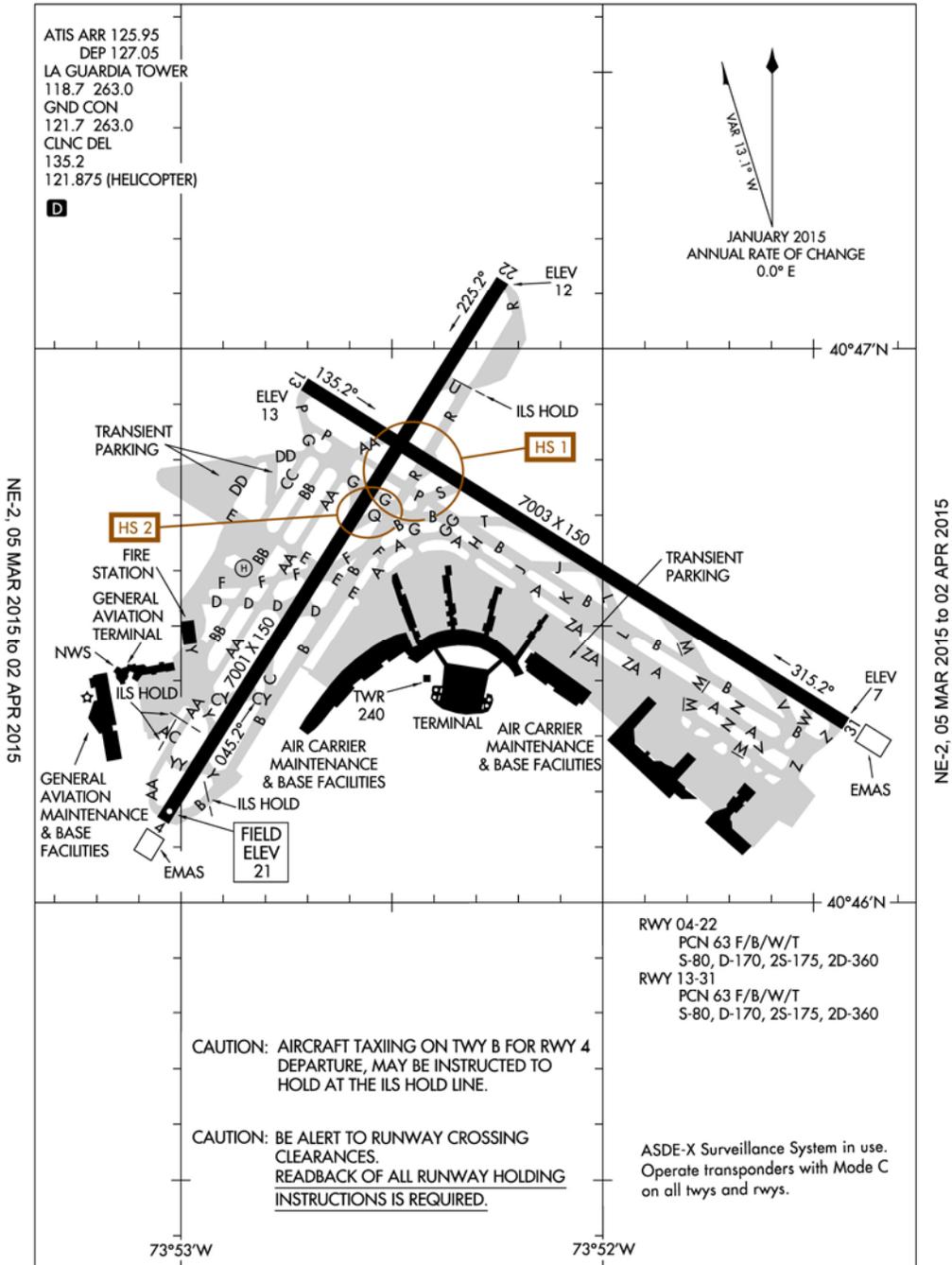
1. Purpose

The purpose of this report is to document the process used to analyze the noise impact of a proposed air traffic action at La Guardia International Airport (LGA). Figure 1-1 shows the airport diagram for LGA. This report shows the analysis of instrument flight procedure at LGA using the Terminal Area Route Generation, Evaluation, and Traffic Simulation (TARGETS) Aviation Environmental Design Tool (AEDT) Environmental Plug-In tool. Table 1-1 shows the procedure name and type. Figure 1-2 shows the RNAV instrument approach with respect to LGA.

15064
AIRPORT DIAGRAM

AL-289 (FAA)

LA GUARDIA (LGA)
 NEW YORK, NEW YORK



NE-2, 05 MAR 2015 to 02 APR 2015

NE-2, 05 MAR 2015 to 02 APR 2015

AIRPORT DIAGRAM
 15064

NEW YORK, NEW YORK
 LA GUARDIA (LGA)

Figure 1-1: Airport Diagram of LGA

Procedure Name	Procedure Type
LGA RNAV(GPS) RWY 13	RNAV Instrument Approach

Table 1-1: LGA Procedures to Be Modeled

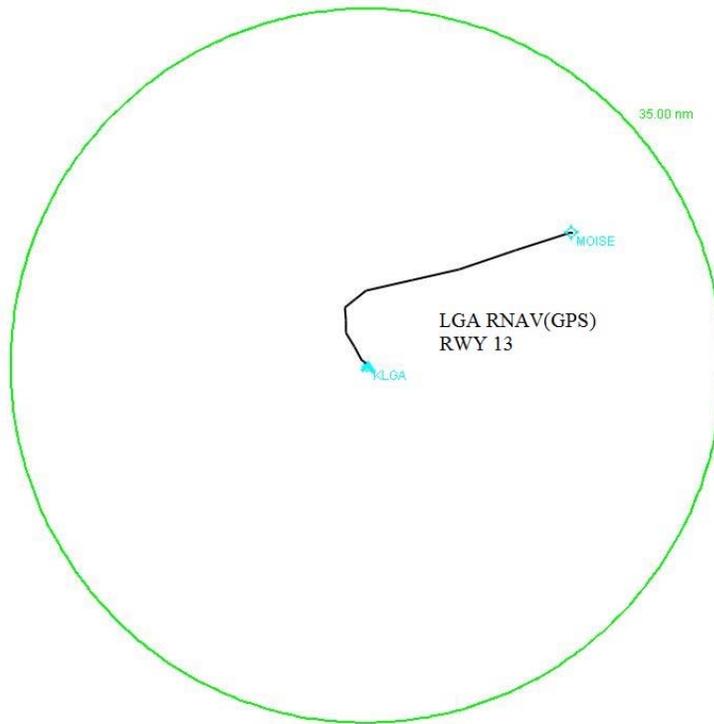


Figure 1-2: RNAV Instrument Approach at LGA

2. Methodology

Historic Radar Track Data for LGA is obtained from the FAA's Sector Design and Analysis Tool (SDAT) after concurrence of the dates to be used by the Environmental Specialist and Facility.

Twenty eight days of radar track data totaling 29,019 tracks were selected for the LGA analysis representing a range of temperature and wind conditions as well as being representative of the average runway use beginning April 17th, 2014. The dates selected for this project were April 17-23, 2014, July 17-23, 2014, October 25-31, 2014 and January 18-24, 2015. These dates represent average traffic counts and traffic flows through various seasons and peak travel times for LGA. There were no significant runway outages or significant conditions that would otherwise result in abnormal traffic counts or traffic flows.

Historical Radar Track Data (figures 2-1 and 2-2) is used to create a Baseline Noise Exposure, which provides lateral path definition, aircraft fleet mix, departure/arrival stream proportions for each runway, and day/night traffic ratios. A legend (Table 2-1) shows by color, the altitudes of the Track Data. The track data is then separated by aircraft category and the Average Annual Day (AAD). The AAD value is a product of the Environmental Plug-in Tool and is determined from the radar track data entered into the model. Daytime operations are defined as between the hours of 7 am and 10 pm local time. Nighttime operations are defined as between the hours of 10 pm and 7 am local time.

The noise modeling was run using 1600 annual ops but that the facility has indicated that they estimate only 1000 annual ops to use the proposed procedure. Therefore, this analysis is considered to be a conservative approach in the reporting of the impact of the proposed permanent use of LGA Rwy 13 RNAV (GPS) Y offset. After adjusting for the size of the flight track data, 123 jet tracks were assigned to the procedure to create the Alternative Noise Exposure. It should be noted that any tracks that ended over 8 nautical miles from the outside of the study boundary were not assigned to the procedure in order to avoid a systematic error in the emissions calculations. RNAV capability is determined by the Environmental Plug-in Tool based on the aircrafts equipment suffix.

The analysis does not take into account terrain. All calculations are based on "above field elevation" of the airport's reference elevation. The altitude controls of the RNAV procedure are used to simulate the vertical profile for each modeled aircraft flying the proposed procedure. When a range of altitudes is given for a particular waypoint, the lowest point of the range was used in order to model the most conservative environmental case. In the situation where any tracks do not reach the edge of the project's study boundary, the flight track will be extended on the current heading it is on while rising to a suitable altitude for each particular aircraft in the study. This extension of flight tracks is performed in to ensure the baseline vs alternative comparison remains a valid evaluation.

The TARGETS Environmental Plug-in uses 0.3-mile dispersion on either side of the centerline of a procedure as its default dispersion value. In cases where the flyability model tracks do not line up on the centerline of a procedure, the dispersion value is assigned using .3 miles on either side of the outside flyability tracks as the guideline. Where aircraft are vectored for the final approach, the historic vectoring patterns are used as the guide for the dispersion.

Once the Baseline and Alternative Scenarios are built, the TARGETS Environmental Plug-in Tool generates noise outputs. The noise output files for both the Baseline and Alternative Noise Exposures consist of a series of equally spaced grid points; each assigned a day-night average noise level (DNL) value. This data is then loaded back into TARGETS, which will generate three outputs: Baseline Noise Exposure, Alternative Noise Exposure, and the Noise Impact. The Noise Impact is a comparison between the Baseline and the Alternative Noise Exposures that depicts noise increase/decrease levels at

all affected locations per the TARGETS Environmental Plug-in Tool criteria. The noise increases (if any) are then depicted on an aerial photograph using Google Earth as well as on a Sectional Chart.

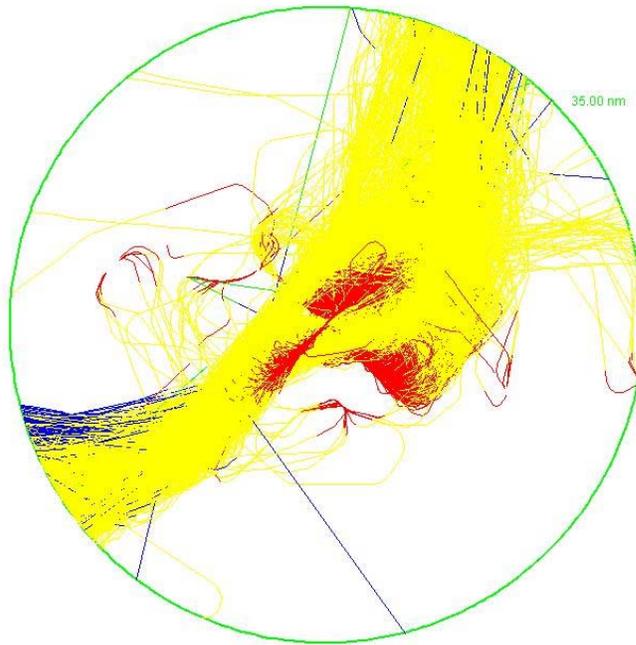


Figure 2-1: LGA Arrival Traffic Used in Analysis

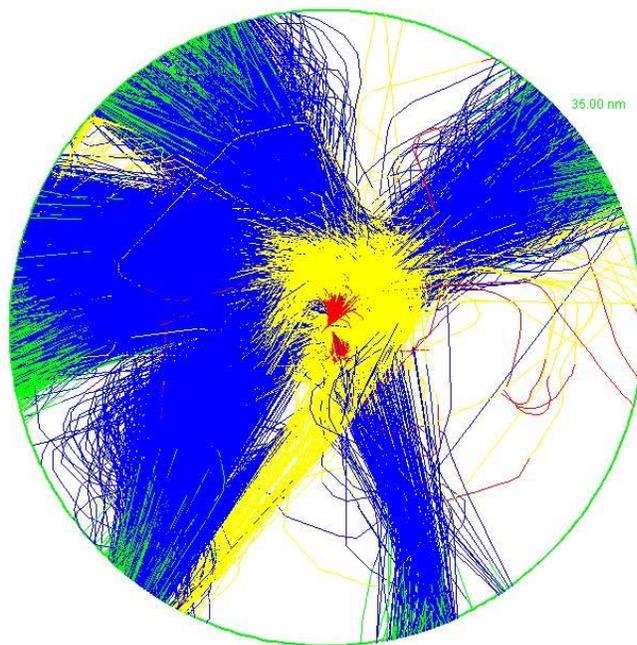


Figure 2-2: LGA Departure Traffic Used in Analysis

<i>Track Data Legend with Above Ground Level (AGL) and Mean Sea Level (MSL) Altitudes</i>		
<i>Airport: IAD</i>		<i>Field Elevation</i>
		<i>13</i>
<u>AGL Altitudes</u>	<u>MSL Altitudes</u>	<u>Legend Colors</u>
1000	1013	Red
2000	2013	
3000	3013	
4000	4013	Yellow
5000	5013	
6000	6013	
7000	7013	
8000	8013	
9000	9013	
10000	10013	
11000	11013	Blue
12000	12013	
13000	13013	
14000	14013	
15000	15013	
16000	16013	
17000	17013	
18000	18013	Green
Above	Above	

Table 2-1: Legend for Baseline Arrival and Departure Traffic

3. Baseline Noise Exposure

The baseline noise exposure is shown in Figure 3-1, which depicts the levels and locations of the noise produced by the historical radar track data for arrivals and departures. Table 3-1 is the legend for the baseline noise exposure figures.

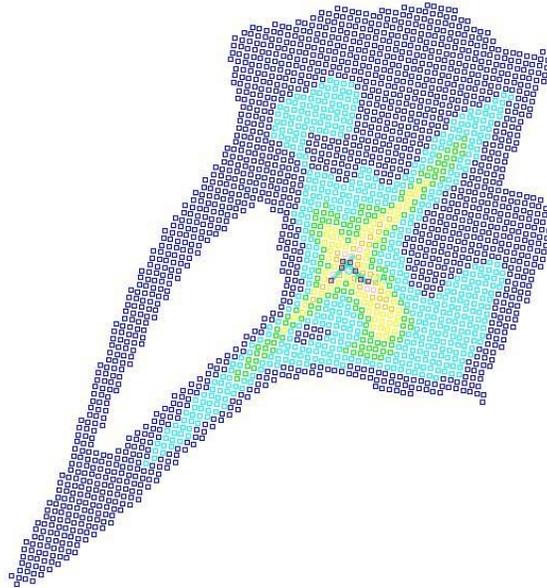


Figure 3-1: Baseline Noise Exposure in TARGETS

GEOMETRIC SHAPE	COLOR	DNL VALUE
SQUARE	BLUE	45–50 dB
SQUARE	LIGHT BLUE	50–55 dB
SQUARE	GREEN	55–60 dB
SQUARE	YELLOW	60–65 dB
SQUARE	ORANGE	65–70 dB
SQUARE	PINK	70–75 dB
SQUARE	RED	75 dB OR MORE

Table 2-1: Legend for Noise Exposure

4. Alternative Noise Exposure

The alternative noise exposure is shown in Figure 4-1, which depicts the levels and locations of the noise using the proposed procedures. Table 4-1 is the legend for the alternative noise exposure figures.

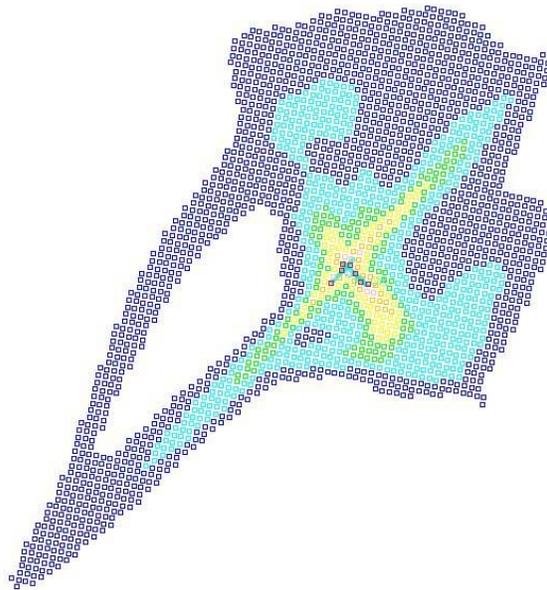


Figure 4-1: Alternative Noise Exposure for the Proposed Procedures in TARGETS

GEOMETRIC SHAPE	COLOR	DNL VALUE
SQUARE	BLUE	45–50 dB
SQUARE	LIGHT BLUE	50–55 dB
SQUARE	GREEN	55–60 dB
SQUARE	YELLOW	60–65 dB
SQUARE	ORANGE	65–70 dB
SQUARE	PINK	70–75 dB
SQUARE	RED	75 dB OR MORE

Table 3-1: Legend for Noise Exposure

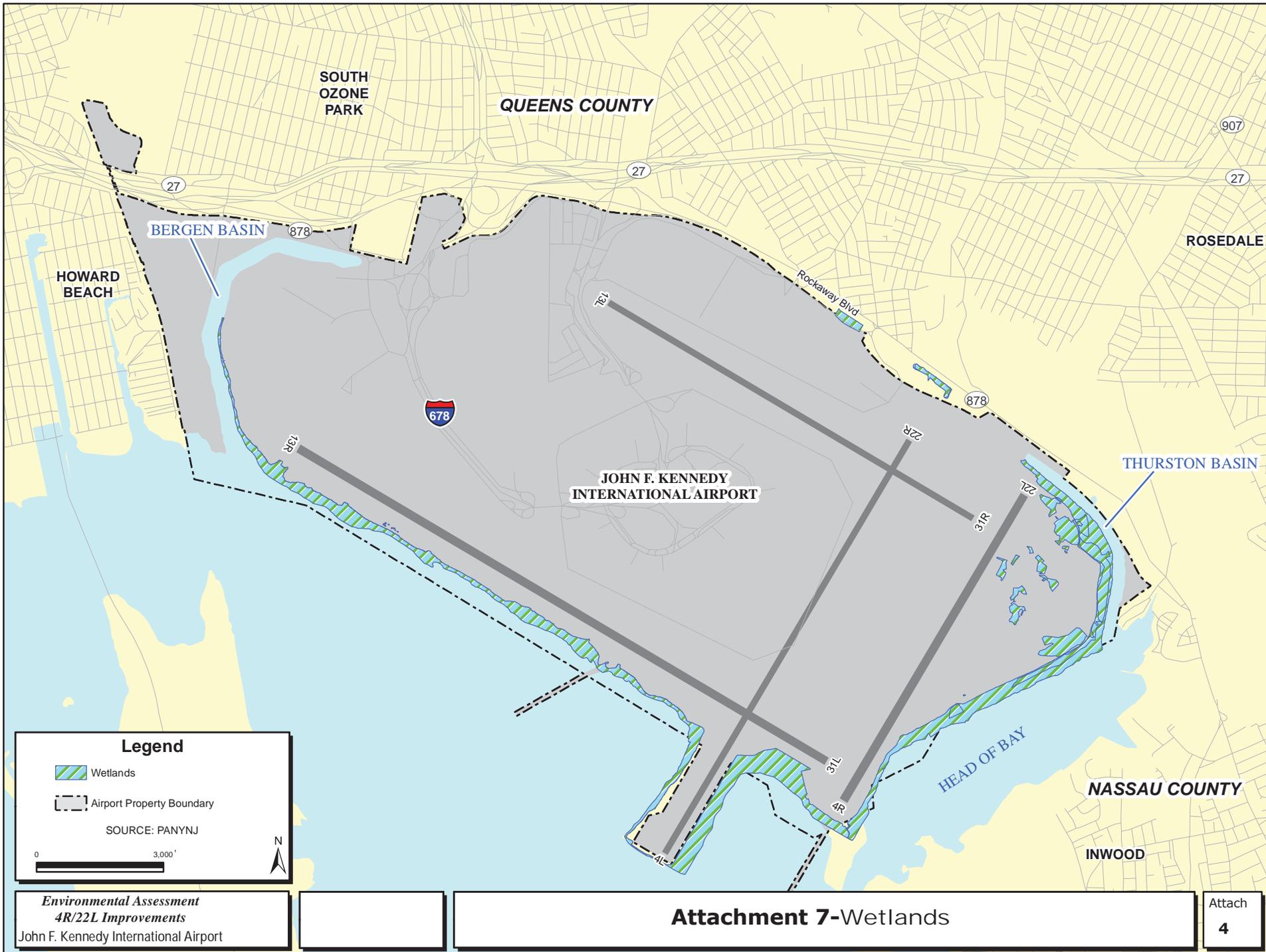
5. **Comparison of Baseline and Alternative Noise Exposure**

In the case of this procedure, the baseline and alternative noise exposures were generated by the TARGETS AEDT Environmental plug-in, and there are no increases or decreases in noise that reach the magnitudes indicated in FAA Order 1050.1 criteria (shown in Table 5).

GEOMETRIC SHAPE	COLOR	DNL DIFFERENCE
SQUARE	PURPLE	45-60 DB WITH A DECREASE OF 5.0 DB OR GREATER
SQUARE	BLUE	60-65 DB WITH A DECREASE OF 3.0 DB OR GREATER
SQUARE	GREEN	65 DB OR GREATER WITH A DECREASE OF 1.5 DB OR GREATER
OVAL	RED	65 DB OR GREATER WITH AN INCREASE OF 1.5 DB OR GREATER
OVAL	ORANGE	60-65 DB WITH AN INCREASE OF 3.0 DB OR GRTEATER
OVAL	YELLOW	45-60 DB WITH AN INCREASE OF 5.0 DB OR GREATER

Table 4: Legend for Noise Impact

Attachment 4: Wetlands



SOUTH
OZONE
PARK

QUEENS COUNTY

907

27

27

27

BERGEN BASIN

878

ROSEDALE

HOWARD
BEACH

Rockaway Blvd

678

878

JOHN F. KENNEDY
INTERNATIONAL AIRPORT

THURSTON BASIN

13R

22R

31R

22L

HEAD OF BAY

NASSAU COUNTY

INWOOD

31L

4R

Attachment 5: Coastal Zone
Management General
Concurrence – New York
State Department of State

STATE OF NEW YORK
DEPARTMENT OF STATE

ONE COMMERCE PLAZA
99 WASHINGTON AVENUE
ALBANY, NY 12231-0001
WWW.DOS.NY.GOV

ANDREW M. CUOMO
GOVERNOR

ROSSANA ROSADO
ACTING SECRETARY OF STATE

June 14, 2016

Marc Helman
Port Authority of New York & New Jersey
4 World Trade Center
150 Greenwich Street, 20th Floor
New York, NY 10007

Re: **F-2016-0269 (FA); and F-2016-0357**
Port Authority of New York & New Jersey
(PANYNJ), John F. Kennedy (JFK) International
Airport; Jamaica, Borough and County of
Queens, New York; Jamaica Bay - Head of Bay and
Thurston Basin; Outfalls 20 and 21 (located east of
Runway 4R-22L); *Rehabilitation of runway 4R-22L and
associated taxiways; Outfall improvements*
General Concurrence - No Objection to Funding;
General Concurrence - No objection to FAA approval;
General Concurrence/ Nationwide Permits

Dear Mr. Helman:

The Department of State (DOS) received the information you submitted regarding the above matter on March 15, 2016 and has completed its review. The Department of State has no objection to the use of federal funds for the proposed activities and has no objection to the federal authorization of the Port Authority of New York and New Jersey by the Federal Aviation Administration (FAA) to carry out the rehabilitation project.

The project includes construction and repair activities requiring United States Army Corps of Engineers (USACE) approval and which may be authorized under Nationwide Permits (NWPs) Nos. 3, 7, and 33. Pursuant to DOS' 2012 letter of agreement with the Corps regarding nationwide permits, individual consistency review and concurrence is not required for covered maintenance and temporary construction activities. The DOS has further reviewed the proposed rehabilitation of existing outfalls, consisting of activities which may be authorized under USACE nationwide permit No. 7, and has determined that this portion of the project activities meets the Department's general consistency concurrence criteria.

When communicating with us regarding this matter, please contact us at (518) 474-6000 and refer to our file #F-2016-0269 (FA) pertaining to the federal funding and file #F-2016-0357 pertaining to the federal permit actions and FAA authorization.

Sincerely,



Jeffrey Zappieri
Supervisor, Consistency Review Unit
Office of Planning and Development

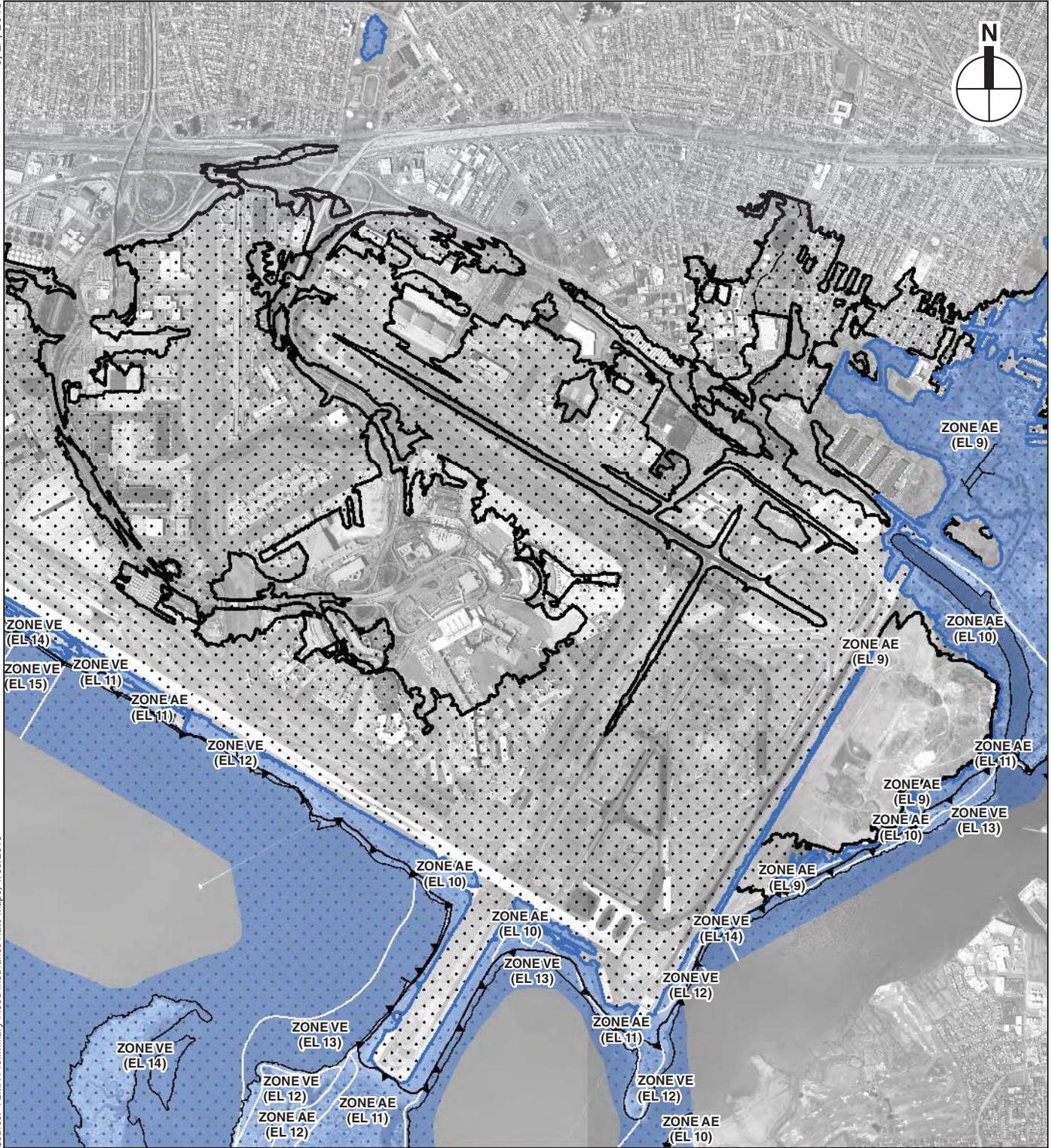
JZ/ts



Department
of State

Attachment 6: Description of
Previous 4L/22R Rehabilitation
Project and Air Quality
Analysis Results Table

Attachment 7: Floodplains



-  Special Flood Hazard Areas (100-Year Flood)
-  Other Flood Areas (500-Year Flood)
-  1% Annual Chance Floodplain Boundary
-  0.2% Annual Chance Floodplain Boundary
-  Limit of Moderate Wave Action
-  Boundary dividing Special Flood Hazard Area Zones and areas of different Base Flood Elevations, flood depths, and flood velocities

0 2,000 FEET



Attachment 8: Natural Resource Agency Consultation



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Long Island Ecological Services Field Office
340 SMITH ROAD
SHIRLEY, NY 11967
PHONE: (631)286-0485 FAX: (631)286-4003

Consultation Code: 05E1LI00-2016-SLI-0271

May 25, 2016

Event Code: 05E1LI00-2016-E-00262

Project Name: JFK Airport Rehabilitation of Runway 4R-22L and Associated Taxiways

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having

similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: JFK Airport Rehabilitation of Runway 4R-22L and Associated Taxiways

Official Species List

Provided by:

Long Island Ecological Services Field Office
340 SMITH ROAD
SHIRLEY, NY 11967
(631) 286-0485

Consultation Code: 05E1LI00-2016-SLI-0271

Event Code: 05E1LI00-2016-E-00262

Project Type: WASTEWATER PIPELINE

Project Name: JFK Airport Rehabilitation of Runway 4R-22L and Associated Taxiways

Project Description: The proposed project is approximately 154.8 acres and is located within the eastern portion of John F. Kennedy International Airport in Queens County, New York. The project includes taxiway and runway improvements and the replacement and upsizing of two existing stormwater outfalls.

Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: JFK Airport Rehabilitation of Runway 4R-22L and Associated Taxiways

Project Location Map:



Project Coordinates: The coordinates are too numerous to display here.

Project Counties: Queens, NY



United States Department of Interior
Fish and Wildlife Service

Project name: JFK Airport Rehabilitation of Runway 4R-22L and Associated Taxiways

Endangered Species Act Species List

There are a total of 4 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Birds	Status	Has Critical Habitat	Condition(s)
Piping Plover (<i>Charadrius melodus</i>) Population: except Great Lakes watershed	Threatened	Final designated	
Red Knot (<i>Calidris canutus rufa</i>)	Threatened		
Roseate tern (<i>Sterna dougallii dougallii</i>) Population: northeast U.S. nesting pop.	Endangered		
Flowering Plants			
Seabeach amaranth (<i>Amaranthus pumilus</i>)	Threatened		



United States Department of Interior
Fish and Wildlife Service

Project name: JFK Airport Rehabilitation of Runway 4R-22L and Associated Taxiways

Critical habitats that lie within your project area

There are no critical habitats within your project area.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Fish, Wildlife & Marine Resources
New York Natural Heritage Program
625 Broadway, 5th Floor, Albany, New York 12233-4757
Phone: (518) 402-8935 • **Fax:** (518) 402-8925
Website: www.dec.ny.gov



June 13, 2016

Michelle Wenelczyk
Langan
300 Kimball Drive, 4th Floor
Parsippany, NJ 07054

Re: JFK Airport Rehabilitation of Runway 4R-22L and Associated Taxiways (Langan Project No. 100593101)

Town/City: City Of New York. County: Queens.

Dear Michelle Wenelczyk:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to the above project.

Enclosed is a report of rare or state-listed animals and plants, and significant natural communities that our database indicates occur, or may occur, on your site or in the immediate vicinity of your site.

For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our database. We cannot provide a definitive statement as to the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

Our database is continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review or permit conditions. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, as listed at www.dec.ny.gov/about/39381.html.

Sincerely,

A handwritten signature in cursive script that reads "Andrea Chaloux".

Andrea Chaloux
Environmental Review Specialist
New York Natural Heritage Program



**The following state-listed animals have been documented
at your project site, or in its vicinity.**

The following list includes animals that are listed by NYS as Endangered, Threatened, or Special Concern; and/or that are federally listed or are candidates for federal listing.

For information about any permit considerations for your project, contact the Permits staff at the NYSDEC Region 2 Office. For information about potential impacts of your project on these species, and how to avoid, minimize, or mitigate any impacts, contact the Wildlife Manager.

A listing of Regional Offices is at <http://www.dec.ny.gov/about/558.html>.

The following species have been documented at the project site, or within 0.5 mile. Potential onsite and offsite impacts from the project may need to be addressed.

<i>COMMON NAME</i>	<i>SCIENTIFIC NAME</i>	<i>NY STATE LISTING</i>	<i>FEDERAL LISTING</i>
Birds			
Upland Sandpiper <i>Breeding</i>	<i>Bartramia longicauda</i>	Threatened	10924
Northern Harrier <i>Breeding</i>	<i>Circus cyaneus</i>	Threatened	1641
Short-eared Owl <i>Breeding</i>	<i>Asio flammeus</i>	Endangered	211

This report only includes records from the NY Natural Heritage database. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

Information about many of the listed animals in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org, and from NYSDEC at www.dec.ny.gov/animals/7494.html.



The following rare plants, rare animals, and significant natural communities have been documented at your project site, or in its vicinity.

We recommend that potential onsite and offsite impacts of the proposed project on these species or communities be addressed as part of any environmental assessment or review conducted as part of the planning, permitting and approval process, such as reviews conducted under SEQRA. Field surveys of the project site may be necessary to determine the status of a species at the site, particularly for sites that are currently undeveloped and may still contain suitable habitat. Final requirements of the project to avoid, minimize, or mitigate potential impacts are determined by the lead permitting agency or the government body approving the project.

The following animals, while not listed by New York State as Endangered or Threatened, are of conservation concern to the state, and are considered rare by the New York Natural Heritage Program.

COMMON NAME	SCIENTIFIC NAME	NY STATE LISTING	HERITAGE CONSERVATION STATUS
Dragonflies and Damselflies			
Needham's Skimmer	<i>Libellula needhami</i>	Unlisted	Vulnerable in NYS
Idlewild Pond, 2005-07-14: The habitat includes a freshwater manmade pond and marsh with cattail/reed and sedges/grasses.			14659

The following significant natural communities are considered significant from a statewide perspective by the NY Natural Heritage Program. They are either occurrences of a community type that is rare in the state, or a high-quality example of a more common community type. By meeting specific, documented criteria, the NY Natural Heritage Program considers these community occurrences to have high ecological and conservation value.

COMMON NAME	SCIENTIFIC NAME	NY STATE LISTING	HERITAGE CONSERVATION STATUS
Wetland/Aquatic Communities			
Low Salt Marsh			Uncommon Community Type
Jamaica Bay: This is a very large occurrence consisting of multiple patches with few exotic plant species, located in a protected bay within a National Park Service Wildlife Refuge and Recreation area. The occurrence is unhealthy; it is degrading quickly and is converting to mudflat. The surrounding landscape is heavily developed and contributes numerous detrimental inputs to the bay.			10248

The following plants are listed as Endangered or Threatened by New York State, and/or are considered rare by the New York Natural Heritage Program, and so are a vulnerable natural resource of conservation concern.

COMMON NAME	SCIENTIFIC NAME	NY STATE LISTING	HERITAGE CONSERVATION STATUS
Vascular Plants			
Fringed Boneset	<i>Eupatorium torreyanum</i>	Threatened	Imperiled in NYS
JFK Airport, 1995-08-07: Dry grassy airport margin. The whole area is disturbed. Plants scattered in sandy areas.			404

JFK Airport, 1995-08-07: Upper beach with scattered stone debris and drift material. Very dry with only a few scattered plants.

10360

This report only includes records from the NY Natural Heritage database. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

Information about many of the rare animals and plants in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org, from NatureServe Explorer at www.natureserve.org/explorer, and from USDA's Plants Database at <http://plants.usda.gov/index.html> (for plants).

Information about many of the natural community types in New York, including identification, dominant and characteristic vegetation, distribution, conservation, and management, is available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org. For descriptions of all community types, go to www.dec.ny.gov/animals/97703.html for Ecological Communities of New York State.

Attachment 9: FAA
Environmental
Justice/Community Outreach
Screening Report

Environmental Justice/Community Outreach
Screening Report

For

LaGuardia Airport

KLGA

New York, NY

Prepared by:

ATO, AJV-114

September 12, 2016

Overview:

AJV was tasked with identifying potential environmental justice (EJ) communities in the vicinity of LaGuardia Airport (LGA) associated with a proposal to make a temporary Instrument Approach Procedure into Runway 13 at LGA permanent. AVJ used the Aviation Environmental Design Tool (AEDT, version 2b) Census Environmental Justice capability to identify potential EJ populations in the vicinity of the proposed action, which is undergoing NEPA review. This analysis is not a replacement for a full environmental justice section of an Environmental Assessment or an Environmental Impact Statement but is ensuring environmental justice considerations are taken into account during public outreach.

The intent of this analysis is to quantitatively identify potential EJ populations based on readily available Census data using standard techniques. Where feasible, information specific to the proposed action (flight tracks, proposed procedures, etc.) have been incorporated. The information presented in this screening report should be verified through consultation with local sources. No efforts to determine potential impacts to EJ populations due to the proposed action were undertaken.

AEDT2b Environmental Justice Capability:

The AEDT EJ capability relies on U.S. Census demographic data to identify potential EJ communities that may be candidates for meaningful outreach in project communication and/or outreach activities. AEDT incorporates Census 5-year American Community Survey (ACS) data that includes low-income and minority information to the Block Group level. The AEDT EJ capability is currently under final development, and this analysis relies on both AEDT (for analysis) and with assistance from AEE ArcGIS (for graphics) as development continues.

Proposed Action:

The Air Traffic Organization (ATO) is proposing to add a temporary Instrument Approach Procedure into Runway 13 at LGA. This procedure will be used temporarily to allow for airspace management during construction occurring at John F Kennedy International Airport (JFK) in 2017. **Figure 1** presents the proposed procedure and a sample of existing arrivals.

Figure 1. LGA with Existing Arrival Tracks and Proposed Procedure

Decision Factors:

The following considerations were included in this analysis, and are shown on the accompanying slides:

- **Existing Air Traffic** – Sample LGA traffic for the period January 22-23, 2015. The data used was a subset of the data used in the AEDT Environmental Plug-in Screening Report in order to be consistent.
- **Procedures slated for publication (proposed action)**

- **Community demographics (including minority and low-income populations)** – Minority and low-income populations based U.S. Census data at the census block group level, using the AEDT EJ capability.
- **Changes in Noise Exposure** – Changes in noise exposure at U.S. Census block centroids at levels above DNL 1 dB but less than reportable or significant. This level of change to noise exposure was used because the noise screening showed no reportable or significant noise impacts. The level of DNL 1 dB was chosen in order to incorporate noise into this analysis even when the noise levels in FAA Order 1050.1F are not met. The use of this noise level is applicable for environmental justice/community outreach purposes only.

Methodology:

The first step in the process is to determine the study area to be used in the Environmental Justice calculations. The Study Area was determined by evaluating the areas of change between the existing tracks and the proposed procedure and constructing a polygon that incorporated these areas of change. **Figure 2** presents the study area for environmental justice purposes. The study area encompasses areas of Bronx, Nassau, New York, Putnam, Queens, and Westchester Counties in New York, Fairfield County in Connecticut, and Bergen and Hudson Counties in New Jersey.

Figure 2. Environmental Justice Study Area

Census Data

Within this study area, minority and low-income populations were identified. In order to identify minority and low-income population, the average minority and low-income populations within the study area were determined, and any census block group within the study area that has a minority or low-income % that is higher than the average of the study area were identified as potential EJ communities. Note that the data is presented by Census Block Group, and actual concentrations of potential EJ communities may not be uniformly distributed within the block group.

Low-Income

Within the Study Area, the average low-income population is 18.6%. For comparison using the same methodology, the average state level low-income population percentages are 15.6% for New York, 10.5% for Connecticut, and 10.7% for New Jersey. The county level low-income population percentages in the study area vary from 5.6% to 30.5% across the Study Area. **Figures 3 and 4** shows the census block groups that meet these criteria, shaded in yellow and labeled with the low-income percentage.

Figure 3. Census Block Groups with Low-Income Populations above 9.9%

Figure 4. Census Block Groups with Low-Income Populations above 9.9% (Zoom)

Minority

Within the Study Area, the average minority population is 64.1%. **Figures 5 and 6** show the census block groups that meet these criteria, shaded in orange and labeled with the minority percentage. For comparison using the same methodology, the average state level minority population percentages are 42.7% for New York, 30.2% for Connecticut, and 42.2% for New Jersey. The county level minority population percentages in the study area vary from 5.6% to 30.5% in the Study Area. The study area's minority population being much higher than the individual state and county levels was reviewed but seen as acceptable due to the uniqueness of the demographics of New York City.

Figure 5. Census Block Groups with Minority Populations above 52%

Figure 6. Census Block Groups with Minority Populations above 52% (Zoom)

Figures 7 and 8 present a composite view of the study area, and depict low-income (yellow), minority (orange), or both (blue). At the request of the environmental protection specialist on this project, **Figures 9 and 10** were created as well including the arrival tracks in the vicinity of the proposed procedure.

Figure 7. Census Block Groups that exceed Minority (orange), Low-Income (yellow) or both (blue)

Figure 8. Census Block Groups that exceed Minority (orange), Low-Income (yellow) or both (blue) (Zoom)

Figure 9. Census Block Groups that exceed Minority (orange), Low-Income (yellow) or both (blue) with Arrival Tracks

Figure 10. Census Block Groups that exceed Minority (orange), Low-Income (yellow) or both (blue) (Zoom) with Arrival Tracks

Noise Screening Analysis Results:

A noise screening analysis was performed on this procedure by AJV-114 and completed on March 30th 2016. This analysis indicated that there were no increases or decreases that meet the criteria put forth in FAA Order 1050.1F. The results from this analysis were then analyzed per our secondary criteria of noise impact for community outreach, which is to identify all potential EJ communities that experience a

noise increase of greater than DNL 1 DB. There were no communities within the Study Area that met these secondary criteria so the noise impact was not considered further. These secondary criteria are only to ensure that noise impacts are considered with respect to community outreach and should not be applied under any other circumstance.

Recommendation:

Based on this quantitative analysis, AJV recommends that any outreach efforts consider potential minority and low-income populations. Census data alone cannot identify all potential environmental justice communities; therefore outreach is recommended to occur to elected officials and community representatives to help address potential avenues for the distribution of information to EJ communities, identification of persons who can speak on behalf of EJ communities and where to locate potential public meetings. Effective communication methods include distributing flyers at the local community center, churches, or grocery stores, and posting information on vehicles, at bus stops, transit stations, and other locations frequented by riders. These additional qualitative factors should be considered prior to the initiation of public outreach.

Figure 1. Proposed RNAV Procedure

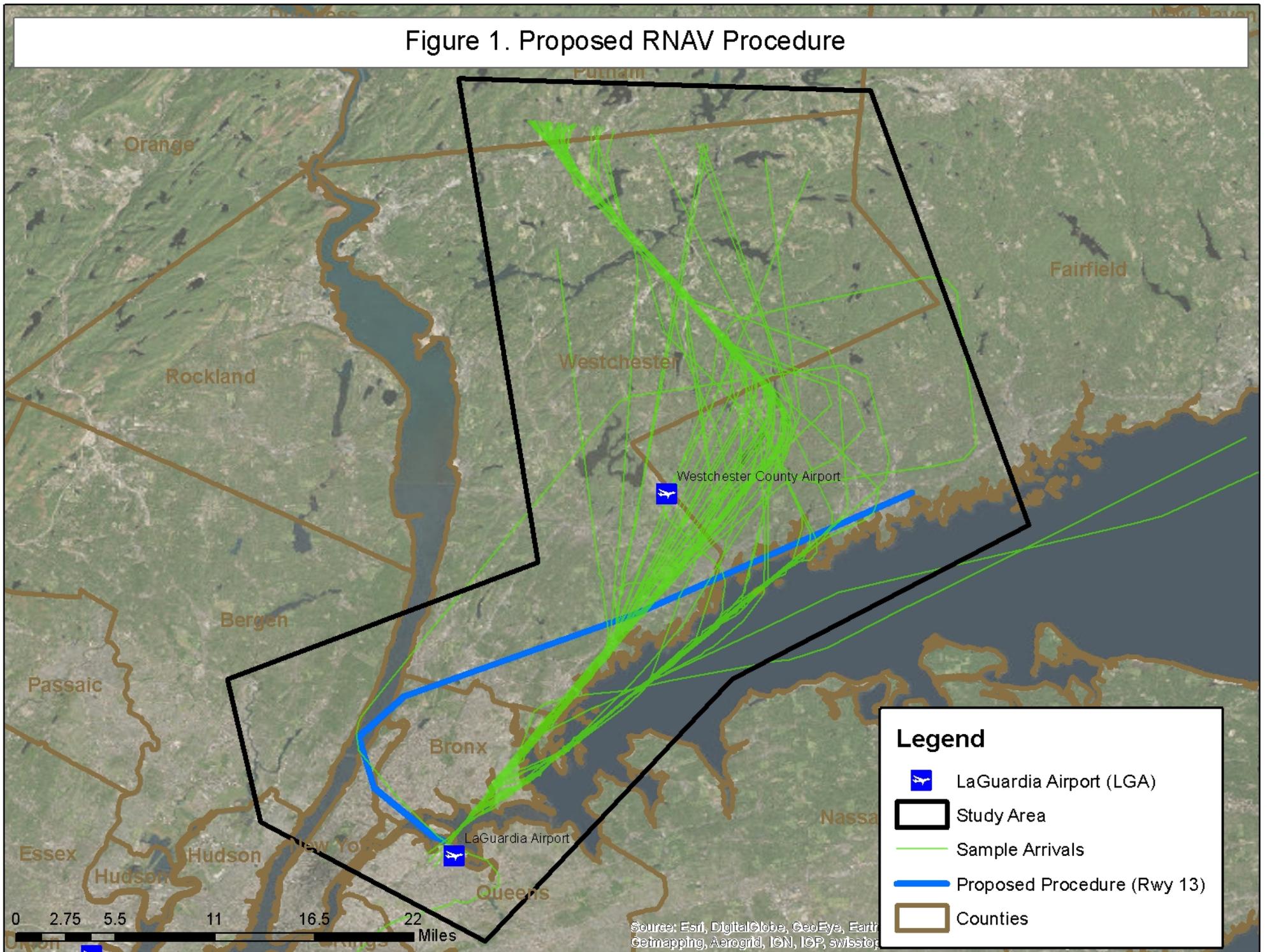


Figure 2. Environmental Justice Study Area

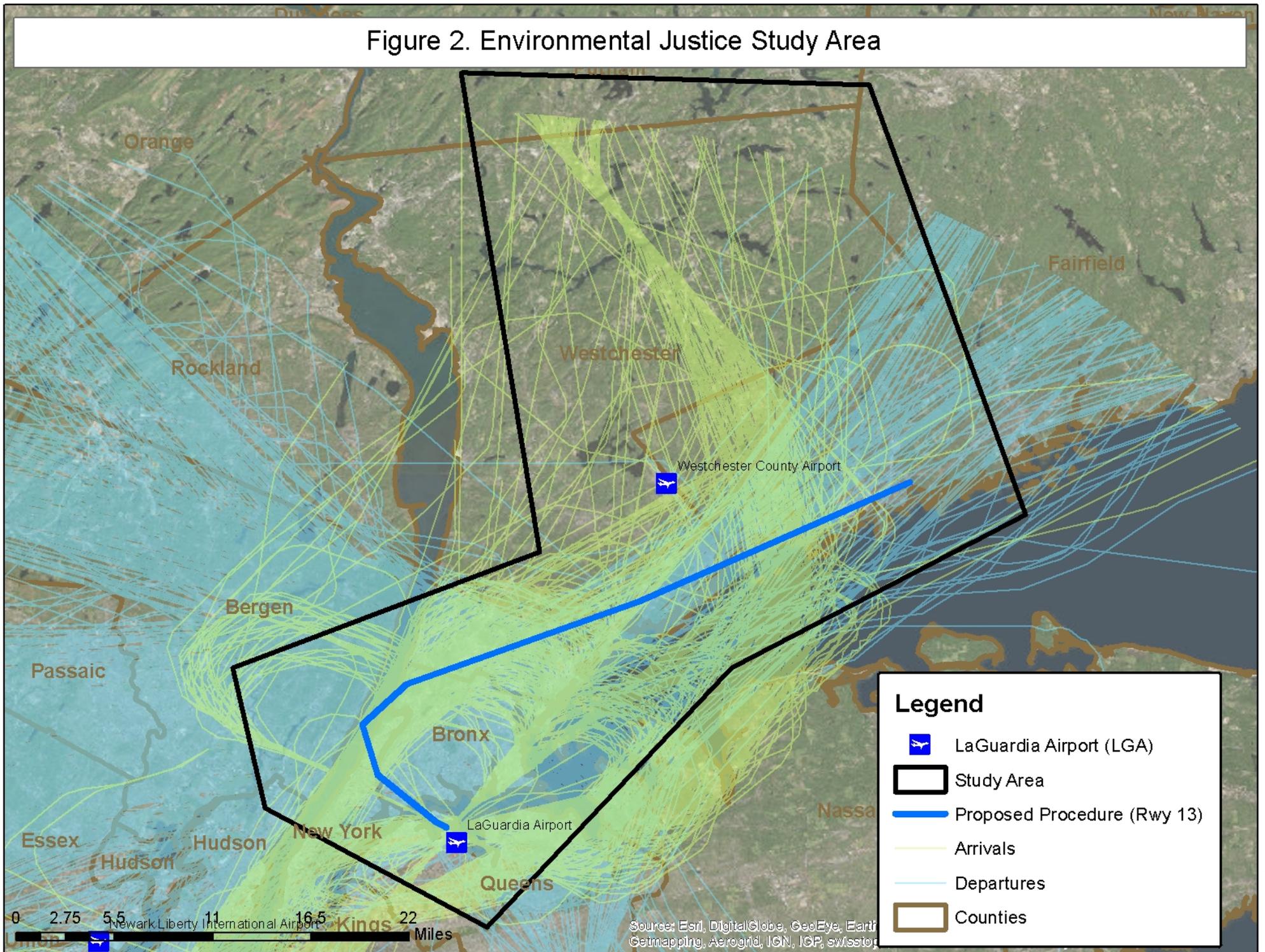


Figure 3. Census Block Groups Exceeding Low-Income (18.6%)

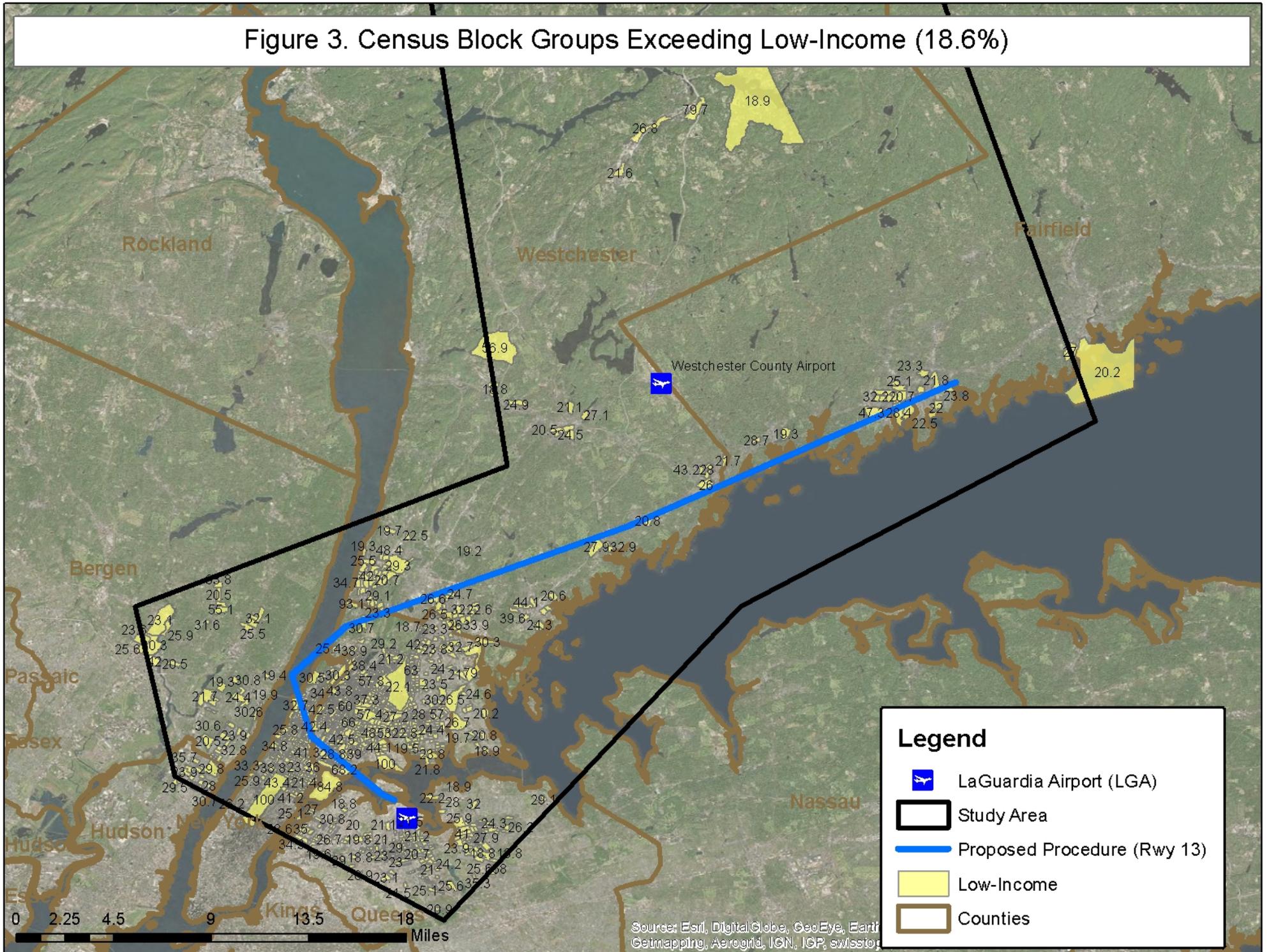


Figure 4. Census Block Groups Exceeding Low-Income (18.6%) Zoom

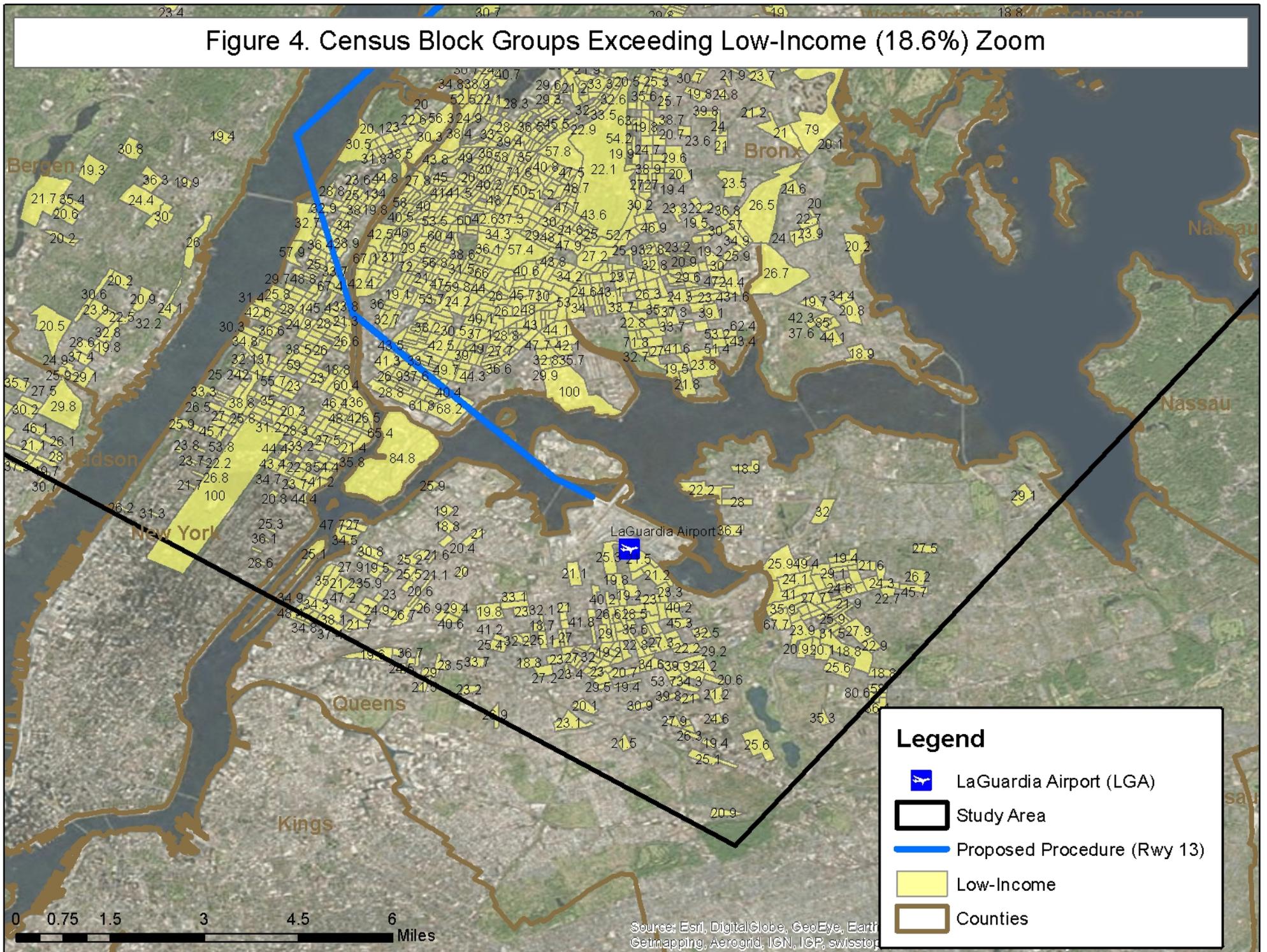
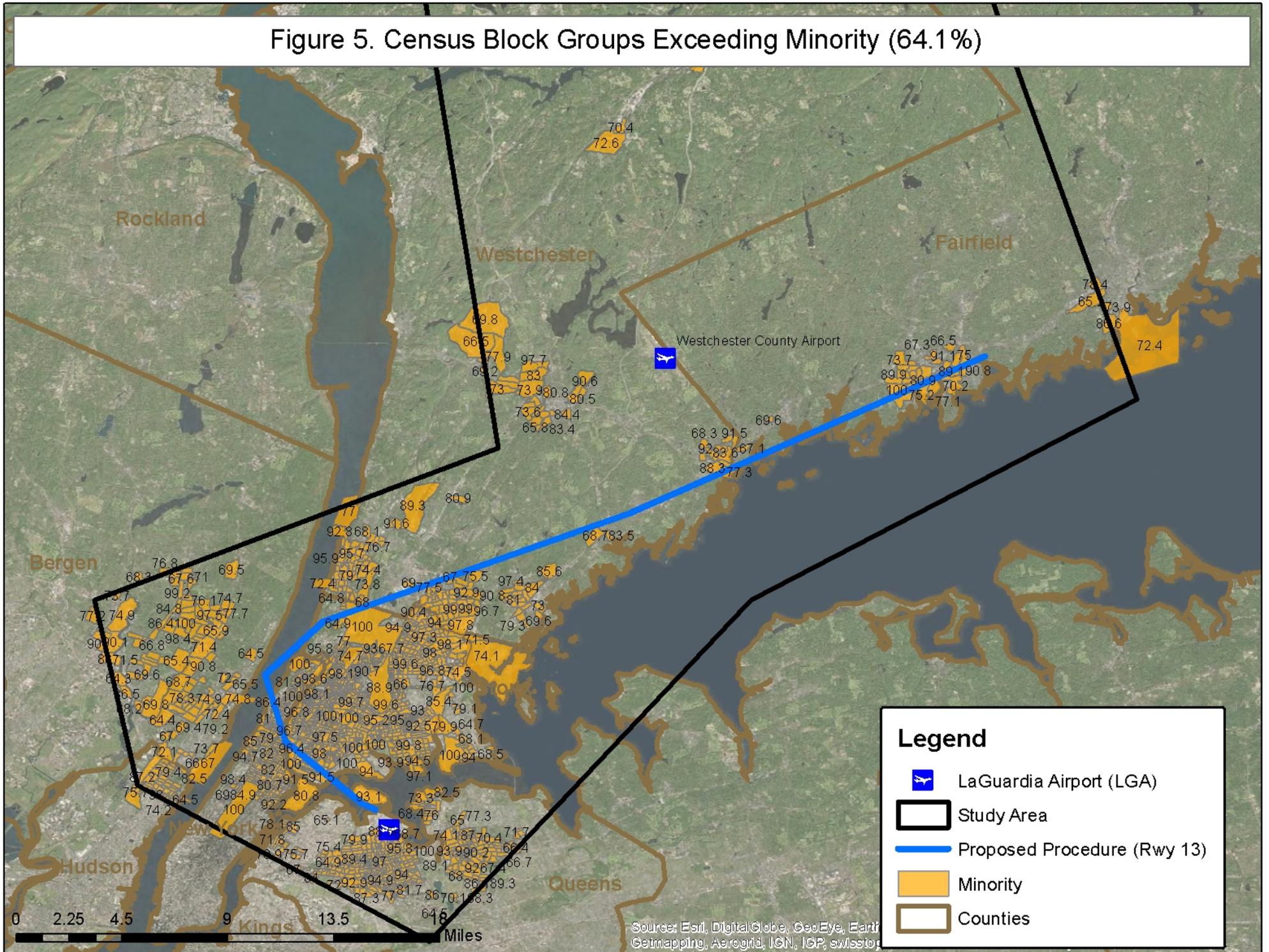


Figure 5. Census Block Groups Exceeding Minority (64.1%)



Legend

-  LaGuardia Airport (LGA)
-  Study Area
-  Proposed Procedure (Rwy 13)
-  Minority
-  Counties

Figure 6. Census Block Groups Exceeding Minority (64.1%) Zoom

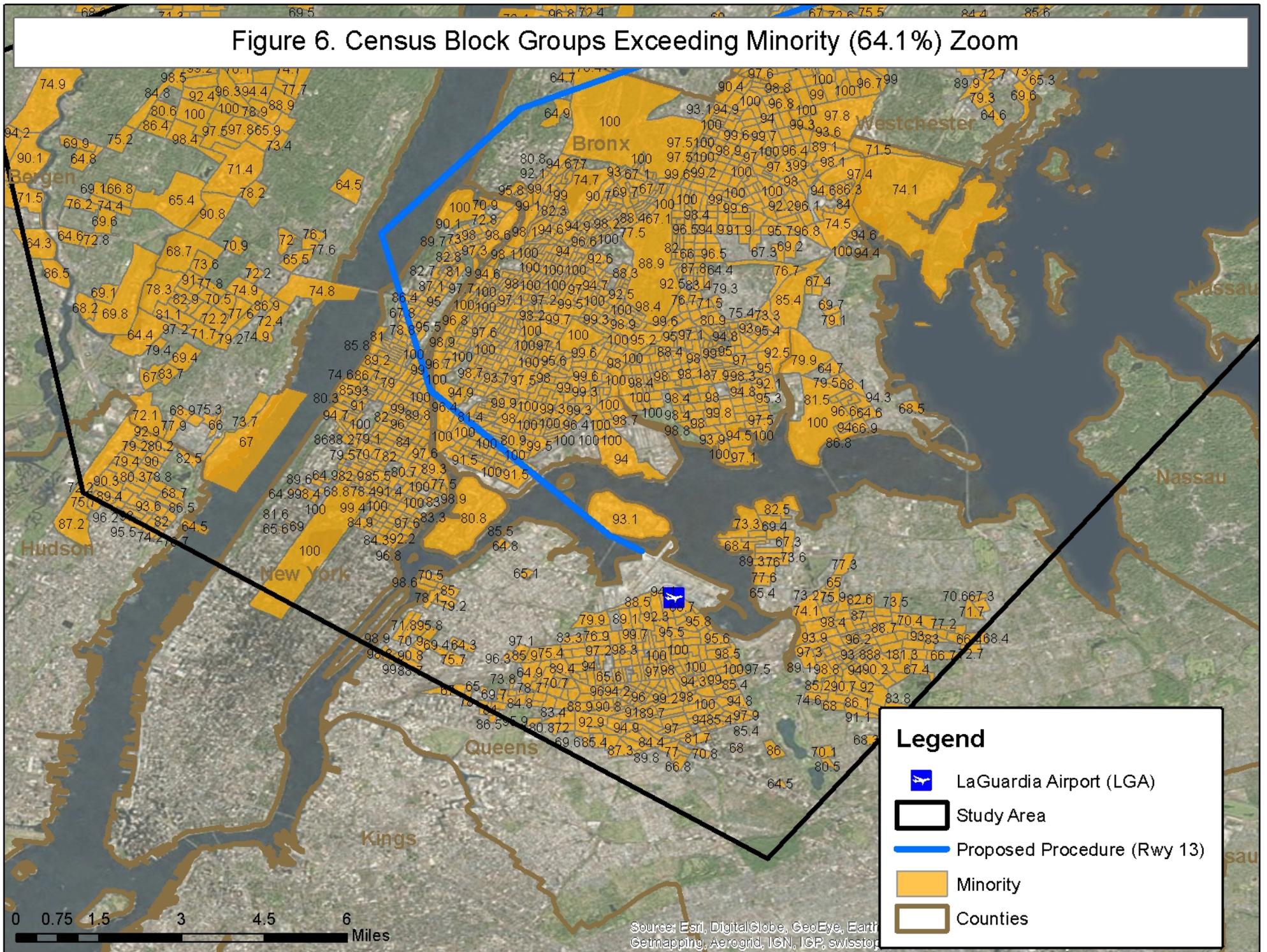


Figure 7. Census Block Groups Exceeding Minority (64.1%) & Low-Income (18.6%)

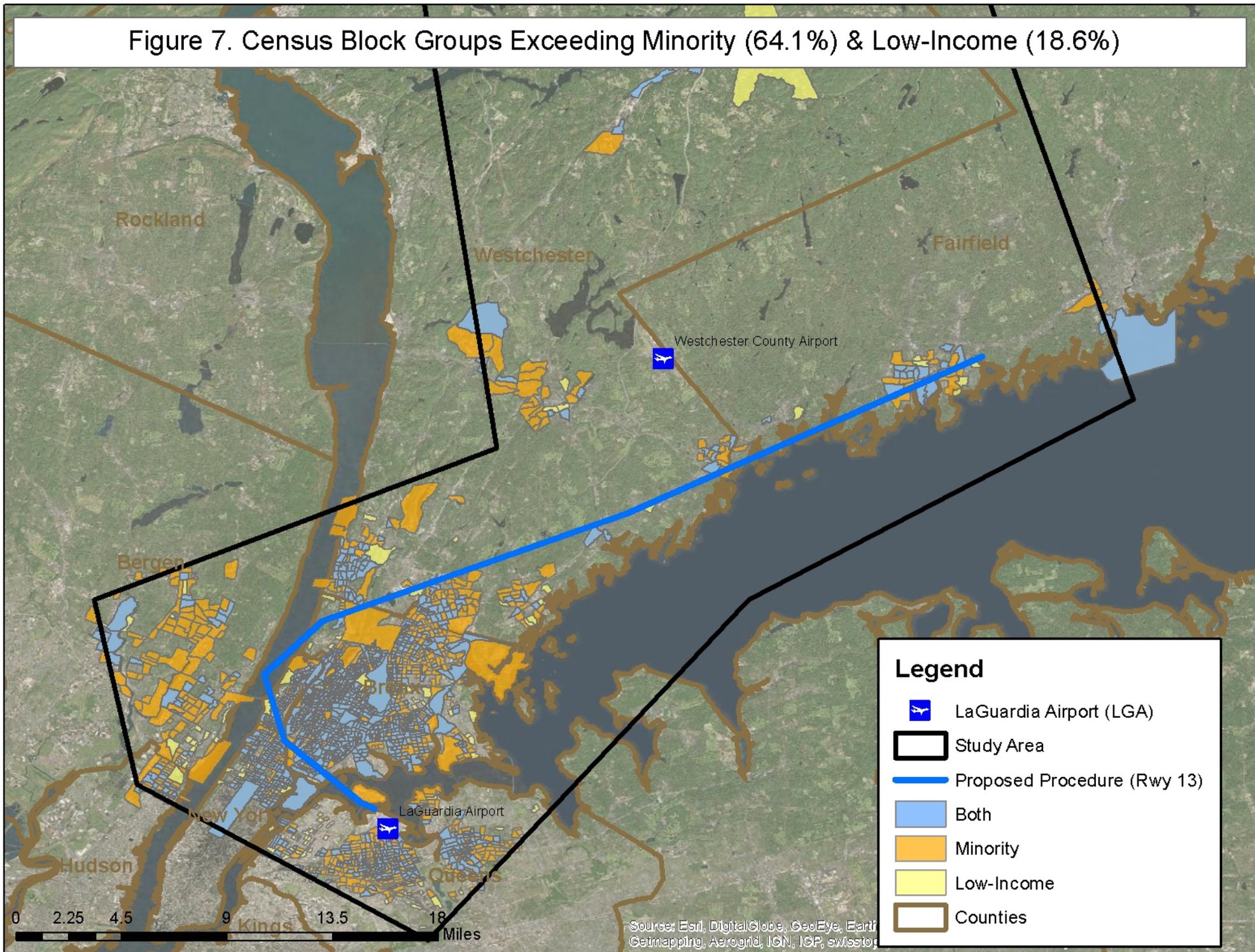


Figure 8. Census Block Groups Exceeding Minority (64.1%) & Low-Income (18.6%) Zoom

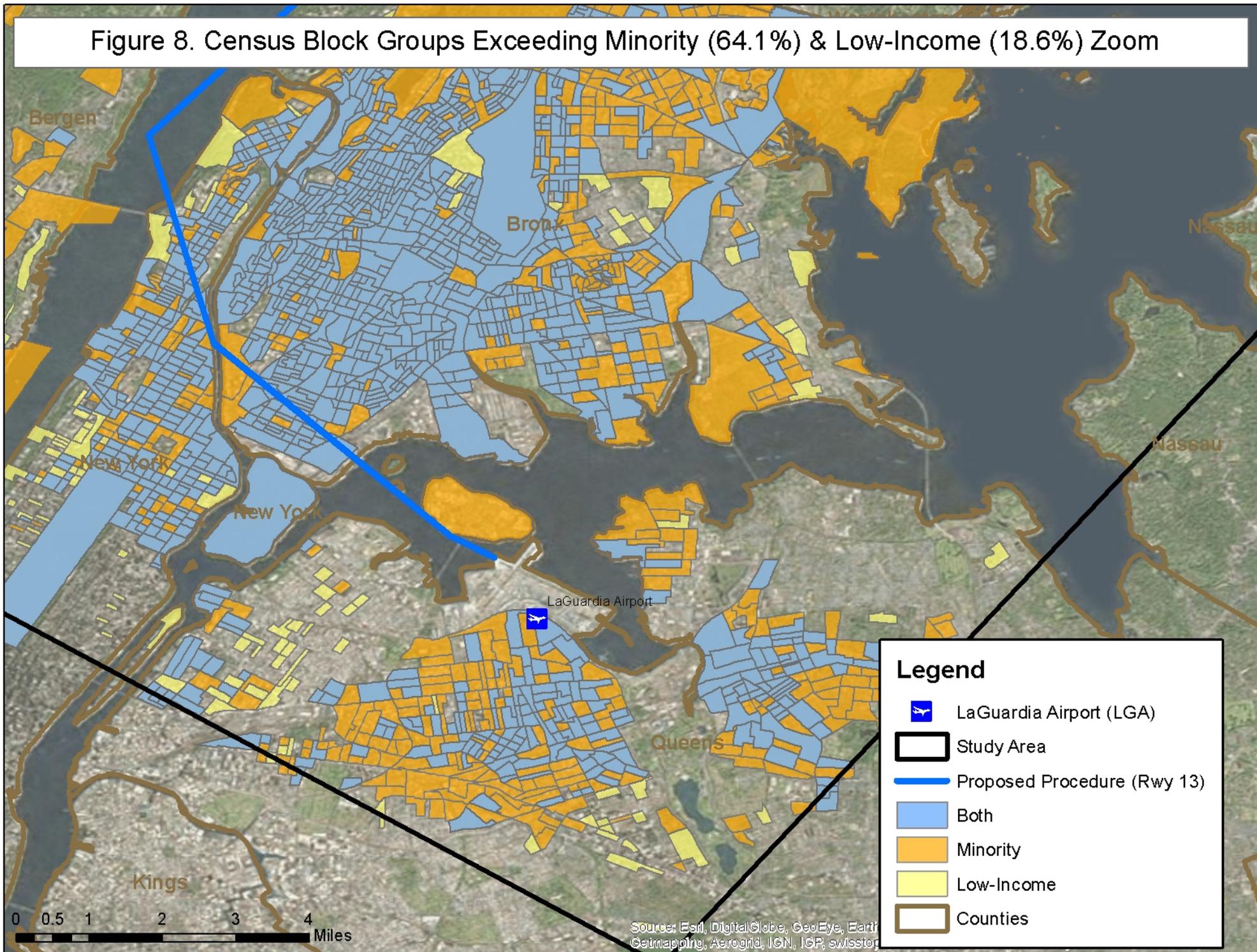


Figure 9. Census Block Groups Exceeding Minority (64.1%) & Low-Income (18.6%)

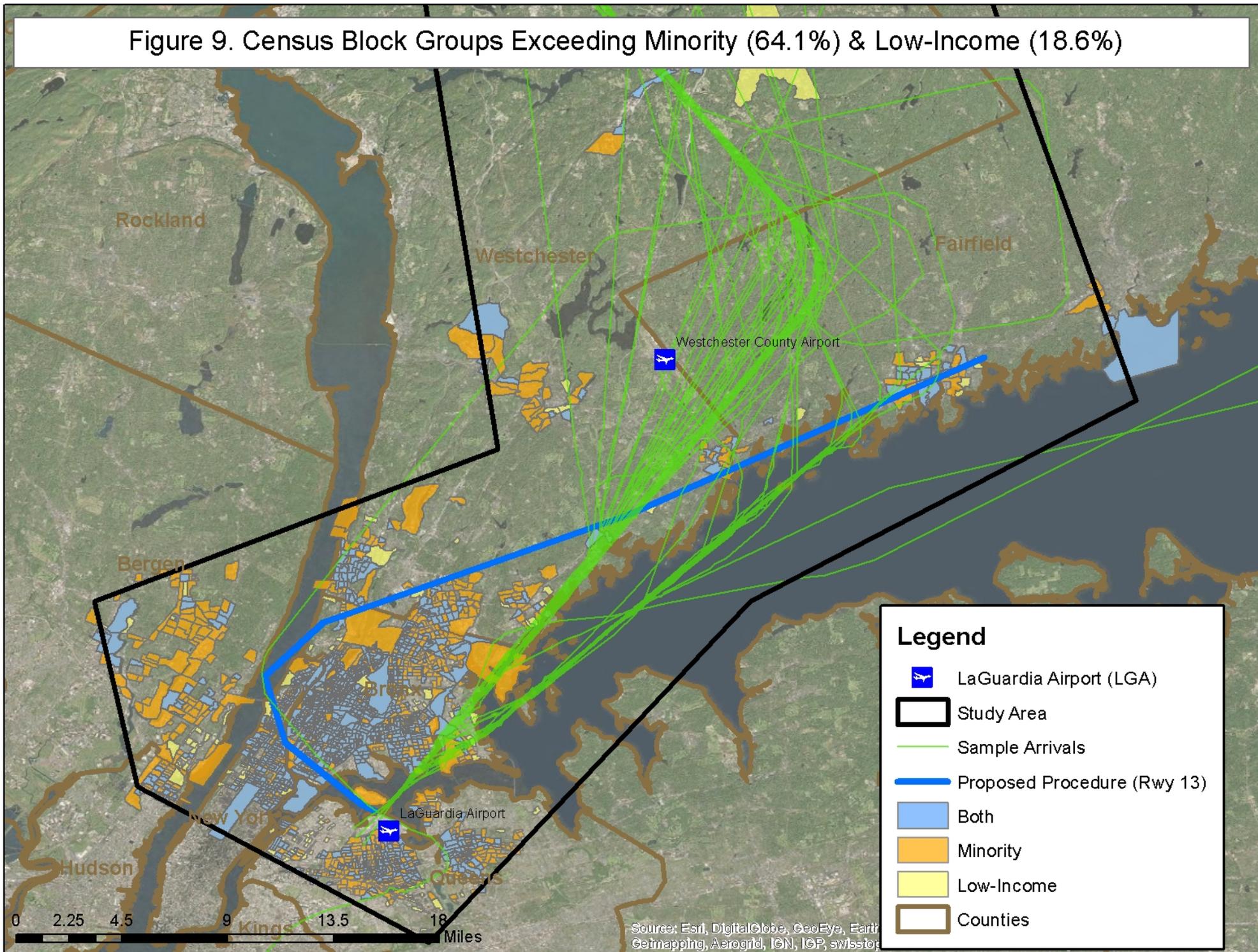


Figure 10. Census Block Groups Exceeding Minority (64.1%) & Low-Income (18.6%) Zoom

