#### **Port Authority of New York and New Jersey**

Fly Quiet Programs LGA Roundtable Briefing

June 26, 2024













#### Agenda

- Background
- Status and Updates
- 2023 Award Winners
- Airport Statistics
- Q&A

PANYNJ Fly Quiet Programs

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## Background



#### **Background on PANYNJ Fly Quiet Programs**

- Recommended program management measure in the Part 150s for all four PANYNJ airports
- Establish new programs at JFK, LGA, and EWR Airports
- Enhance and support the existing TEB Quiet Flying Program

#### What is a Fly Quiet Program?

• A voluntary **collaboration** of Port Authority, Airlines, aircraft operators and FAA air traffic controllers that **encourages** them to use suggested quieter aircraft, noise abatement flight procedures, and preferential runways



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#### **Benchmarking and Development**

- Benchmarking conducted in 2022
  - Surveys and interviews of other airports with FQPs nationwide
  - Review of Part 150 comments, suggestions, and recommendations in the NCP Appendices
- Technical Focus Groups 2022-2023
  - Involving airlines, operators, airports and the FAA
  - Working together to develop the FQPs

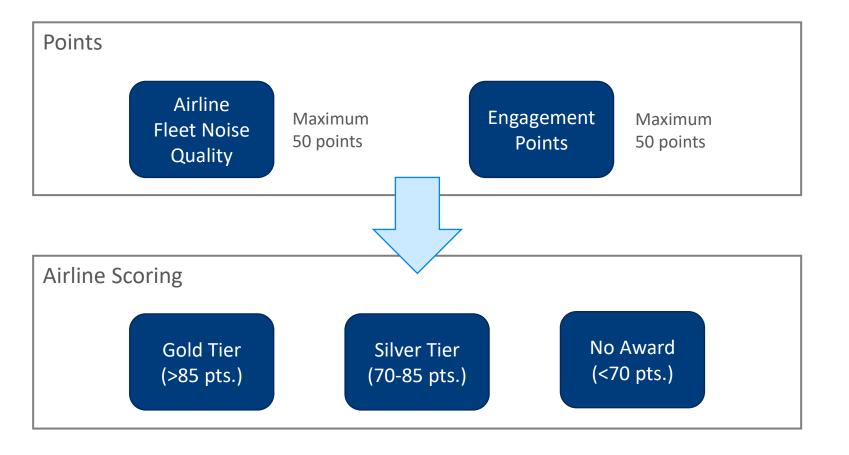
#### Airports interviewed and researched:

San Francisco Intl.
San Diego Intl.
Seattle-Tacoma Intl.
Aspen/Pitkin County
Teterboro Airport
Los Angeles Intl.
John Wayne Airport
O'Hare International
Jackson Hole Airport
Philadelphia Intl.

## **Status and Updates**



#### **Scoring System Overview**



A Database has been developed using ANOMS data to categorize airlines and determine scores based on airline fleet mix (i.e., Noise Stage data).

Top Tiers will be recognized in the FQP Annual Report:

✓ Awarded in each airline category (Air Carrier, Regional, Int'l., Cargo)

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✓ Scored on a scale of 0 to 100

### **Airline Scoring Details**

|               | Scoring Categories  | Max.<br>Points |
|---------------|---|----------------|
| Airline Fleet | <ul> <li>Fleet Noise Quality:</li> <li>Weighted average of an airline's operations and the certificated "Noise Stage" of each aircraft</li> <li>For airlines with minimum of 365 operations per year (operation is one arrival or one departure)</li> </ul> | 50             |
| Engagement    | Participate in FQP Focus Group annual virtual briefing(s) – includes 2022 and 2023  | 10             |
|               | Participate in Roundtable Meetings (for JFK and LGA only) > one hour attendance each meeting  • Up to four meetings per year, 2.5 points per meeting, 10 points maximum   | 10             |
|               | Access and review the FQP Dashboard Reporting site once per quarter  • Tracked four times per year, 2.5 points per login, 10 points maximum   | 10             |
|               | Provide copies of pilot training/educational materials on noise abatement and Fly Quiet along with the date(s) training was conducted   | 10             |
|               | Provide information/documentation on airline fleet noise reductions (vortex generators, etc. installed on the aircraft; pilot operating techniques; NADP training; etc.)  | 5              |
|               | Provide information/documentation on any annual airline sustainability practices/offsets/etc.   | 5              |
|               | Total:  | 100            |

#### **Airport-Wide Statistics for Annual FQP Report**

- Provide statistics on noise and operations that are reported airport-wide and are not a part of an airline's score:
  - Airport-wide fleet mix by Noise Stage
  - Runway use including late-night hours
  - Flight procedure use
- Recognizes the FAA's participation and role in runway selection and flight procedure selection

#### **FQP Technical Manual**

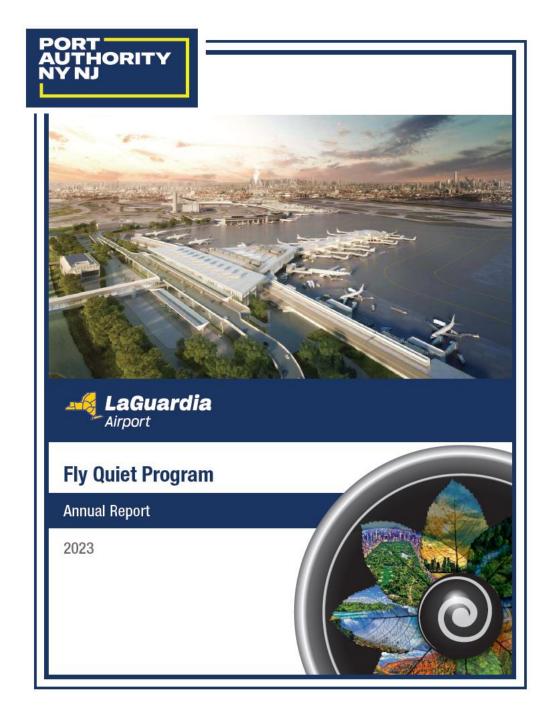
- A resource guide providing detailed technical information on score calculations and other program metrics
- Written for a technical audience (airlines, FAA, etc.) to provide:
  - FQP scoring methodology
  - Fleet noise calculations
  - Engagement points calculations
  - Runway and flight procedure use
  - Airline rankings and awards
- Will be posted to PANYNJ website by June 2024
  - Available for airlines, stakeholders, and the public to gain a full understanding of how the program and its metrics work

## **Awards for 2023**



#### **2023 Annual Reports**

- Separate report for each airport
- Based on annual data for Calendar Year 2023
- Brief, 10-page summary of Airline Awards and metrics
- Graphical, easy-to-read format

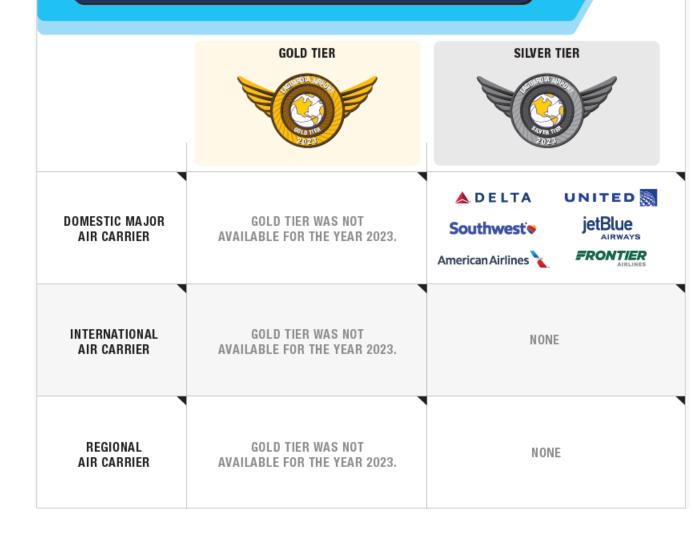


#### **LGA 2023 Award Winners**

- LGA FQP awarded <u>six</u> Silver Tier Airlines
- Gold Tier not available for year 2023 because:
  - Roundtable meeting participation was not available
  - Dashboard reports were not available for access



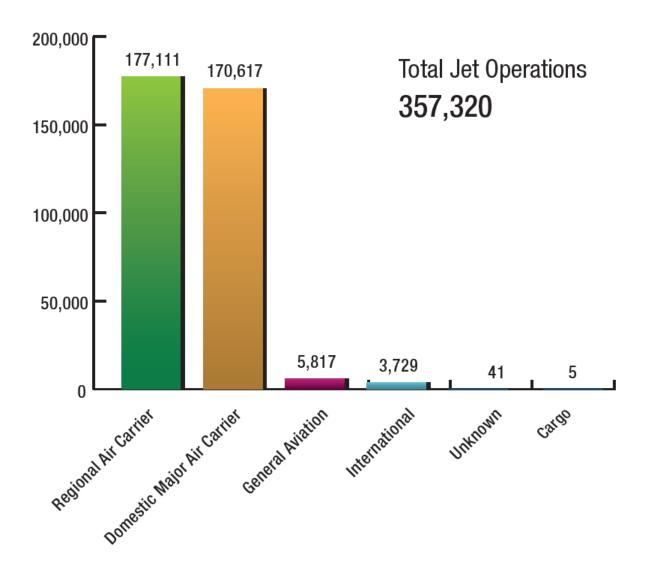
2023



## **Airport Statistics**

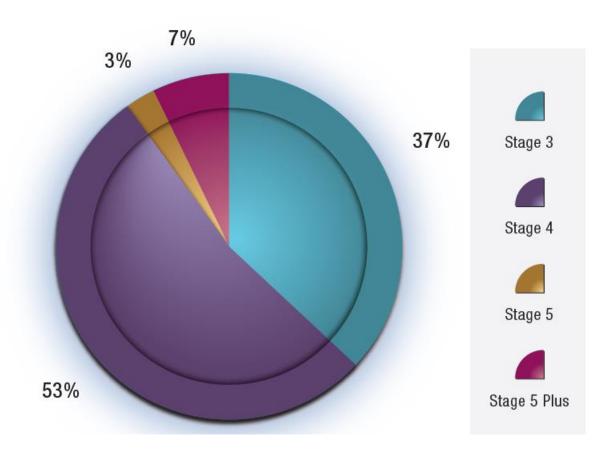


#### **Annual Airport Operations (By Airline Type)**



|   | Year | Total Jets |
|---|------|------------|
|   | 2022 | 350,535    |
| Γ | 2023 | 357,320    |
|   |      |            |

#### Airport-Wide Fleet Mix (By Noise Stage)



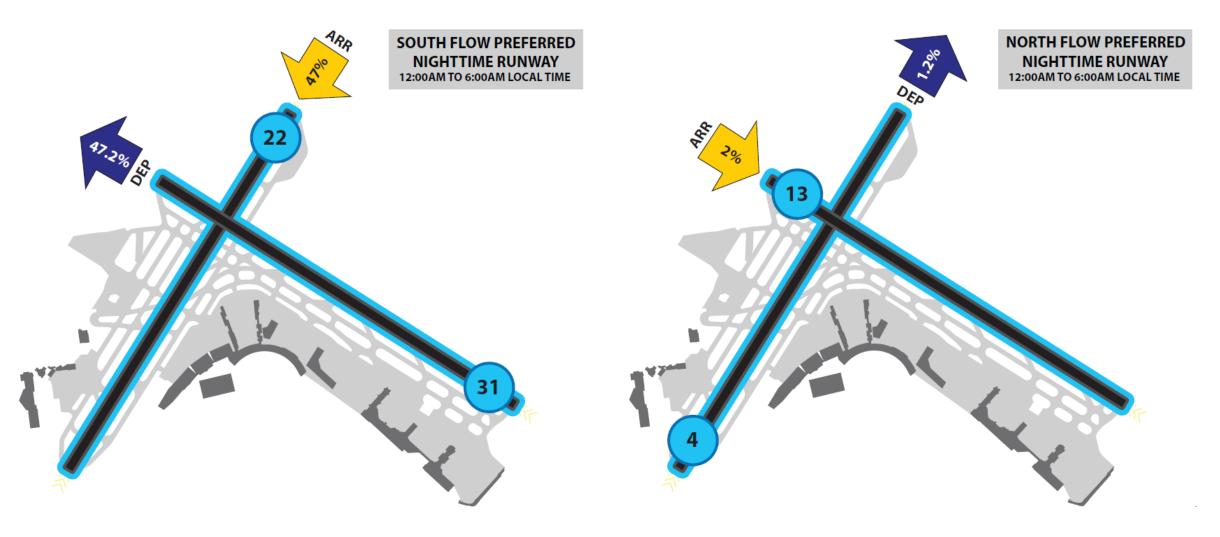
| r : | Staye S | Stage 4 | Stage 5   | Stage 5+      |
|-----|---------|---------|-----------|---------------|
| 2   | 34%     | 57%     | 2%        | 8%            |
| 3   | 37%     | 53%     | 3%        | 7%            |
|     |         |         | 5170 5170 | 0.70 0.70 270 |

- The chart above shows the percentage of operations flown by each Noise Stage Aircraft
- Noise Stage is a measurement of how loud an aircraft is, with Stage 3 generating the most noise and Stage 5 Plus being the quietest

#### **Late-Night Preferential Runway Use**

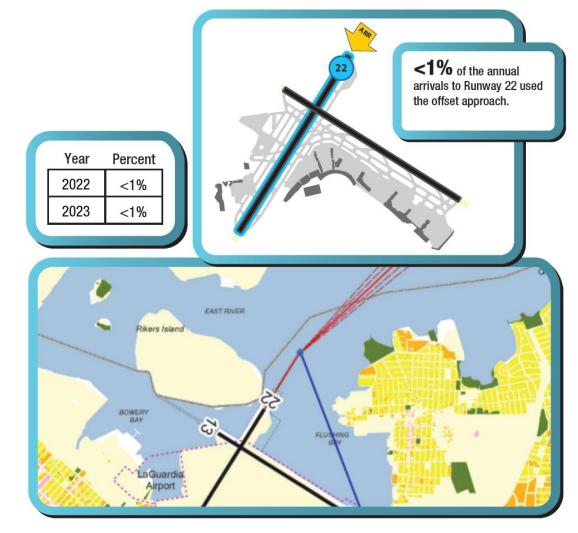
- "Late-night" hours are defined as 12AM-6AM local time
- The assignment of a runway to an individual aircraft operation depends on several factors:
  - Which runways are available for use
  - Wind direction
  - Weather conditions
  - Air traffic control operational needs
  - Runway length versus the weight of the aircraft

#### **Late-Night Preferential Runway Use**



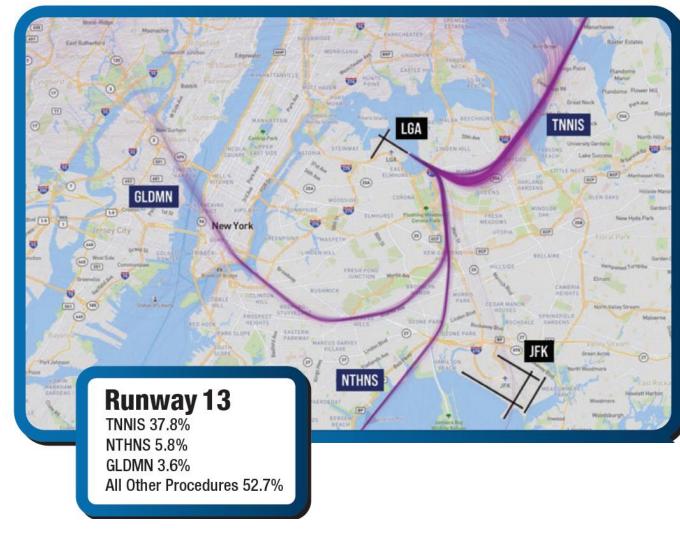
#### Flight Procedure Use – Runway 22 Approach

- Runway 22 RNAV "Offset" Approach
  - Aircraft approach the runway at an angle instead of lined up directly with the runway
- This flight procedure is an approved noise abatement measure from the Part 150 Noise Compatibility Program
- Flight procedures are assigned by FAA
   Air Traffic Control and depend on
   runway availability, wind, weather, air
   traffic at other airports, and other
   operational needs



#### Flight Procedure Use – Runway 13 Departures

- FQP monitors the use of each satellitebased navigation flight procedure for Runway 13: TNNIS, GLDMN, NTHNS
- "All other procedures" include the Whitestone climb and flights that are vectored by air traffic control instead of following satellite-based procedures
- Flight procedures are assigned by FAA
   Air Traffic Control and depend on
   runway availability, wind, weather, air
   traffic at other airports, and other
   operational needs



## Summary



#### **Current and Next Steps**

- Release 2023 FQP Reports (published in early June)
  - Website posting, roundtable briefing, airline Focus Group meeting
- Technical Manual (coming soon)
  - Will be published to PANYNJ website to provide detailed information on the scoring system and fleet noise quality methodology
- Future years
  - Publish FQP Annual Reports in April of the following year

## **Discussion**



# The Port Authority of New York and New Jersey LaGuardia Airport (LGA) Operations and Noise Complaints





#### Factors in Runway Selection

Runway Selection is determined by FAA based on the following criteria (in order of decreasing priority):

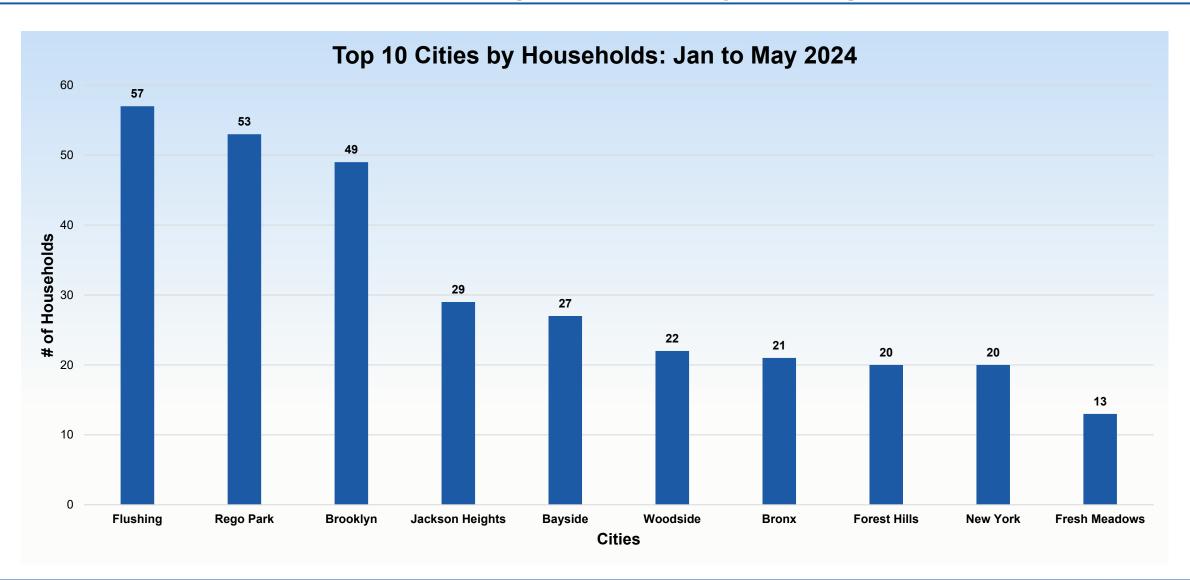
- Runway availability
- Prevailing wind and weather patterns
- Operational efficiency
- Community noise concerns

Flying into the wind provides the greatest margin of safety when landing or departing at any airport

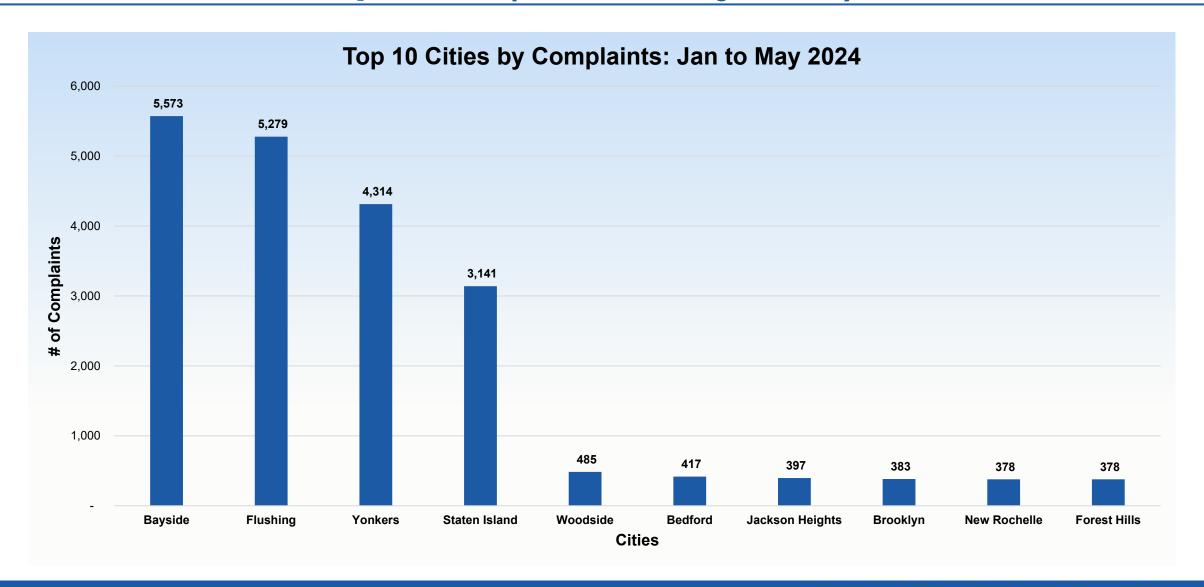
#### Operations By Runway for Past 13 Months

| Month      | Total<br>Operations | 4 Arr | 4 Dep | 13 Arr | 13 Dep | 22 Arr | <b>22</b> Dep | 31 Arr | 31 Dep | Unk<br>Arr | Unk<br>Dep |
|------------|---------------------|-------|-------|--------|--------|--------|---------------|--------|--------|------------|------------|
| May - 2023 | 32,727              | 3,673 | 3,206 | 1      | 8,588  | 9,182  | 4             | 3,483  | 4,575  | 4          | 11         |
| Jun - 2023 | 28,578              | 4,121 | 2,947 | 5      | 8,388  | 7,368  | 10            | 2,752  | 2,969  | 5          | 13         |
| Jul - 2023 | 27,439              | 1,681 | 1,541 | 21     | 8,556  | 10,294 | 157           | 1,687  | 3,487  | 5          | 10         |
| Aug - 2023 | 30,828              | 3,106 | 2,006 | 180    | 8,891  | 9,297  | 84            | 2,807  | 4,453  | 0          | 4          |
| Sep - 2023 | 28,359              | 7,233 | 2,946 | 2      | 8,464  | 4,102  | 122           | 2,817  | 2,661  | 1          | 11         |
| Oct - 2023 | 31,258              | 2,291 | 4,068 | 0      | 7,472  | 8,710  | 11            | 4,606  | 4,085  | 4          | 11         |
| Nov - 2023 | 29,943              | 2,077 | 5,175 | 64     | 4,508  | 7,493  | 5             | 5,319  | 5,290  | 1          | 11         |
| Dec - 2023 | 27,972              | 2,453 | 3,703 | 153    | 5,616  | 7,462  | 324           | 3,884  | 4,365  | 5          | 7          |
| Jan - 2024 | 27,206              | 3,064 | 4,138 | 256    | 4,361  | 5,840  | 10            | 4,430  | 5,089  | 3          | 15         |
| Feb - 2024 | 27,696              | 2,611 | 5,420 | 37     | 6,234  | 5,574  | 2             | 5,605  | 2,200  | 5          | 8          |
| Mar - 2024 | 29,844              | 3,959 | 4,104 | 200    | 6,475  | 6,102  | 23            | 4,653  | 4,311  | 5          | 12         |
| Apr - 2024 | 29,524              | 4,805 | 2,907 | 103    | 8,921  | 6,512  | 144           | 3,316  | 2,799  | 5          | 12         |
| May - 2024 | 30,700              | 3,857 | 2,497 | 103    | 10,935 | 9,281  | 95            | 2,071  | 1,833  | 8          | 20         |

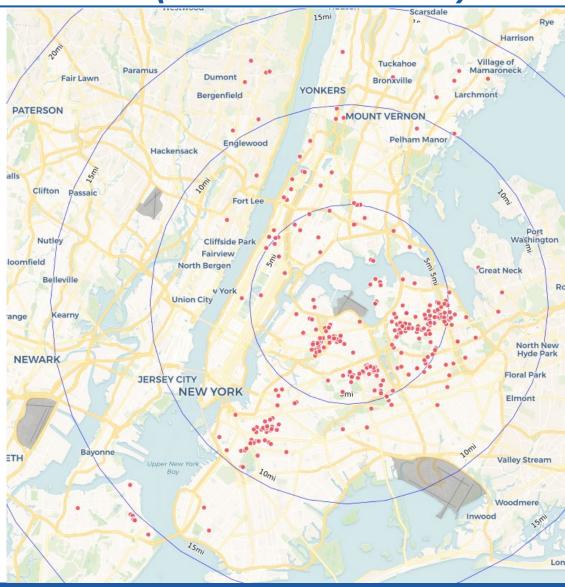
# Geographical Distribution of Noise Complaints – Number of Households (Jan to May 2024)



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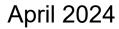


## Geographical Distribution of Noise Complaints by Households (Past 6 months)



- Showing all complaints collected via Port Authority Webform, Hotline, and 3<sup>rd</sup> party app
- Total of 849 household locations

#### **Brooklyn Complaints**



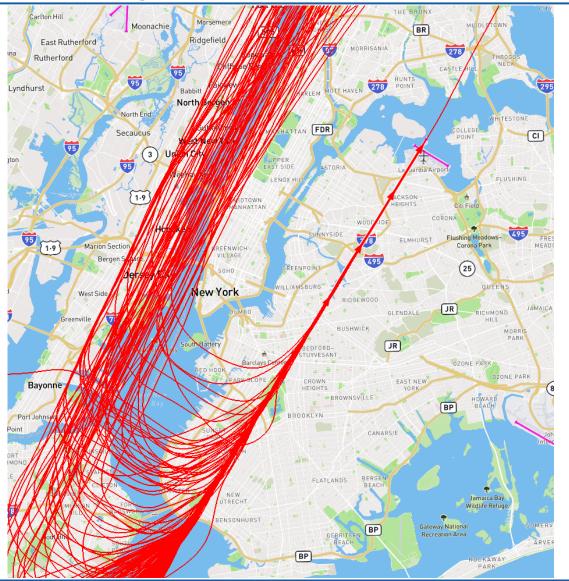


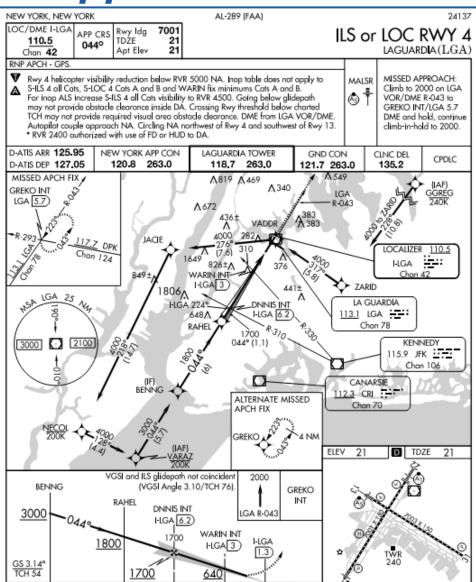
#### May 2024



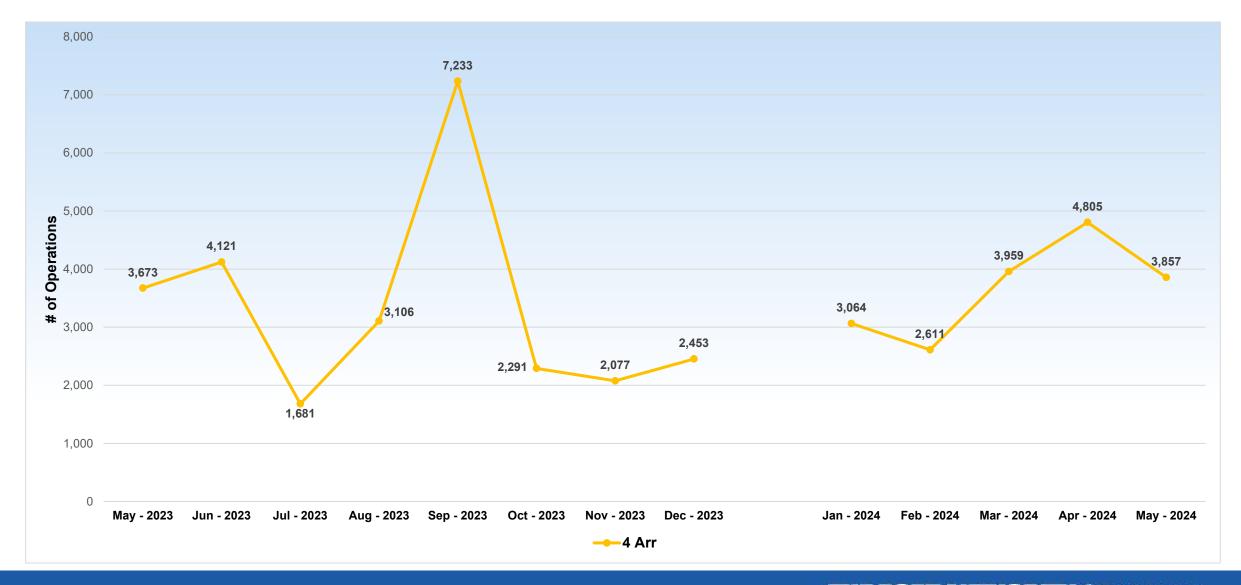
| Month      | Complaints | Households |
|------------|------------|------------|
| April 2024 | 84         | 21         |
| May 2024   | 174        | 21         |

#### Brooklyn Complaints – ILS Runway 4 Approach





#### Brooklyn Complaints – Runway 4 Arrival (Past 13 Months)



#### Helpful Links

- PA Aircraft Noise webpage <a href="https://aircraftnoise.panynj.gov/">https://aircraftnoise.panynj.gov/</a>
- Webtrak <a href="https://webtrak.emsbk.com/panynj4">https://webtrak.emsbk.com/panynj4</a>
- Submit a noise complaint <a href="https://aircraftnoise.panynj.gov/submit-a-noise-complaint/">https://aircraftnoise.panynj.gov/submit-a-noise-complaint/</a>
- Monthly Reports <a href="https://aircraftnoise.panynj.gov/reports/">https://aircraftnoise.panynj.gov/reports/</a>
- Noise information and FAQs <a href="https://aircraftnoise.panynj.gov/faqs/">https://aircraftnoise.panynj.gov/faqs/</a>