

Quarterly Report to Congress

Status of NY/NJ/PHL Metropolitan Airspace Redesign

August 17, 2004



Funds Expended to Date

➤	FY99	\$3.0M	} Portion of funds used for enabling projects in neighboring regions. From FY01 forward, Congressional language has fenced funds for NY/NJ/PHL Redesign only.	} Approximately 30% of funds used to pay for environmental contracts
➤	FY00	\$4.2M		
➤	FY01	\$8.5M		
➤	FY02	\$12.5M		
➤	FY03	\$8.5M		
➤	FY04	\$6.5M		
➤	Total through FY04: \$43.2M			



Background: Objectives of NY/NJ/PHL Redesign

- Increase Efficiency
 - Reduce Delays
 - Meet Projected Demands
 - Improve User Access to the System
 - Expedite Arrivals and Departures
 - Increase System Flexibility
 - Balance Workload
 - Accommodate Evolving Technologies
- Enhance Safety
 - Develop Operationally Viable Airspace
 - Reduce Complexity



Background: Purpose and Need

➤ Purpose

- Increase efficiency and reliability of the air traffic system through the adjustment of traffic flows in the New York/New Jersey and Philadelphia areas to accommodate new technologies and reduce delays

➤ Need

- Maintain Safety
- Respond to Increasing Aviation Growth
- Mitigate Mounting Delays



Background:

Commitment to Community

- As part of our commitment to neighboring communities, the following techniques to reduce aircraft noise and other potential environmental impacts are being considered:
 - Increase Altitudes
 - Disperse or Concentrate Tracks, where appropriate
 - Use Advanced Navigation
 - Reduce Flying Time
 - Overfly Less Noise-Sensitive Areas, where feasible



Progress to Date:

- Project charter and req'ts determination Complete
 - Problem definition
- Design process Complete
 - Concept development
 - Alternatives definition
- Scoping with communities Complete
- Operational analysis Complete
- Environmental analysis Ongoing
- Preparation of DEIS Ongoing
- Publication of DEIS
- Preparation and publication of FEIS
- Record of Decision
- Implementation



Progress to Date: Summary

- Sectorization and workload issues are being addressed.
- The operational analyses for the designed alternatives are complete. Additional operational refinements and analyses may be required.
- Baseline and Future No Action Alternatives preliminary noise analyses are complete. Noise analyses for other alternatives are underway.
- Analysis of the other twenty environmental categories is dependent upon results of noise modeling.



Detailed Discussion of Components

- Four alternatives
 - Future No Action (required by NEPA)
 - Modifications to Existing Flows
 - Ocean Routing
 - Integrated Design



Baseline and Future No Action Alternative

- Baseline: Used to compare alternatives against current conditions
 - Status
 - Complete
- Future No Action Alternative
 - Status
 - Operational modeling is complete
 - Validation is complete
 - Noise modeling is complete
 - Additional environmental analyses are ongoing



Modifications to Existing System

- Based on existing airspace boundaries
- Minor changes to existing routes
- Leverages new technologies, not dependent on ground-based navigational aids
- Status
 - Design is complete
 - Operational modeling is complete
 - Validation is ongoing
 - Noise modeling and additional environmental analyses to follow validation



Ocean Routing

- Based on proposal from New Jersey Citizens Against Aircraft Noise (NJCAAN) utilizing existing airspace boundaries
- Moves Newark (EWR) southbound departures over water
- Little or no change to other routes
- Status
 - Design is complete
 - Operational modeling is complete
 - Validation is complete
 - Noise modeling is ongoing
 - Additional environmental analyses to follow noise modeling



Integrated Airspace

- Based on expanded and integrated airspace
- Simplified arrival routes and increased departure routes
- Flexible and adaptable
- Status
 - Design is complete
 - Operational modeling is complete
 - Validation is ongoing
 - Noise modeling and additional environmental analyses to follow validation



Example: LGA13 Departures



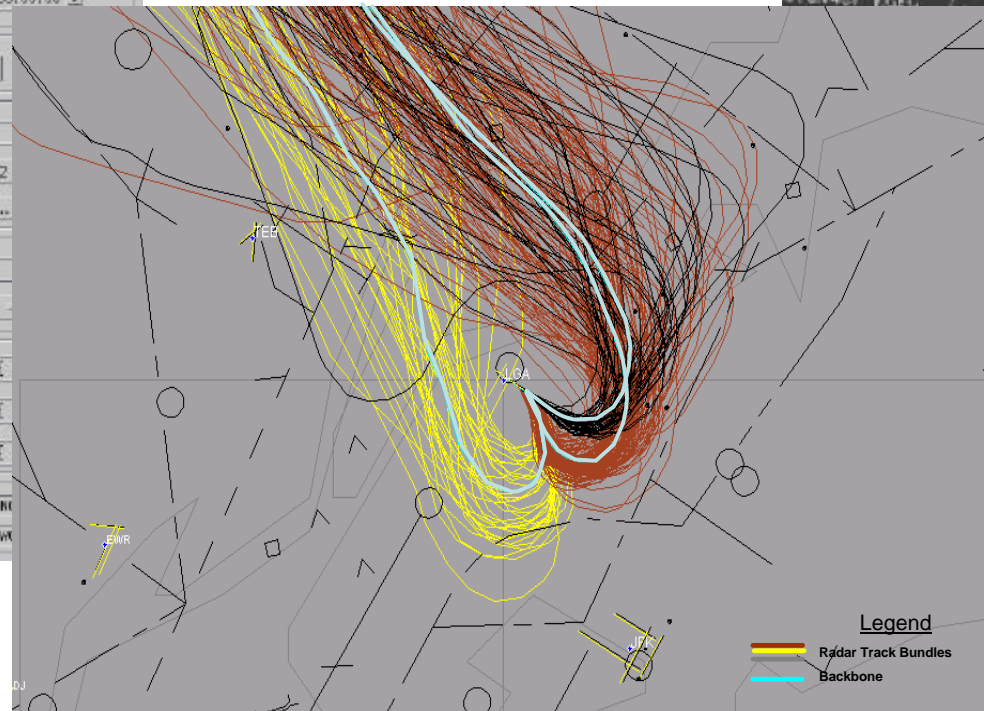
File Options View Find Simulation Recording Help

Status
Day: 1 Time: 10:00
Speed: 0.00
Aircraft: 2 of 59

Controls
▶ ⏪ ⏹ ⏩ ⏸
01:09:59:59

Run Mode
Stop

Aircraft
Name: []
Locate: 0.2
Show Logic...
Airport
Name: []
Range: Z
Other
Sector: []
Route: []
Waypoint: []
Cursor
Latitude: []
Longitude: []



Example: Vertical Profiles

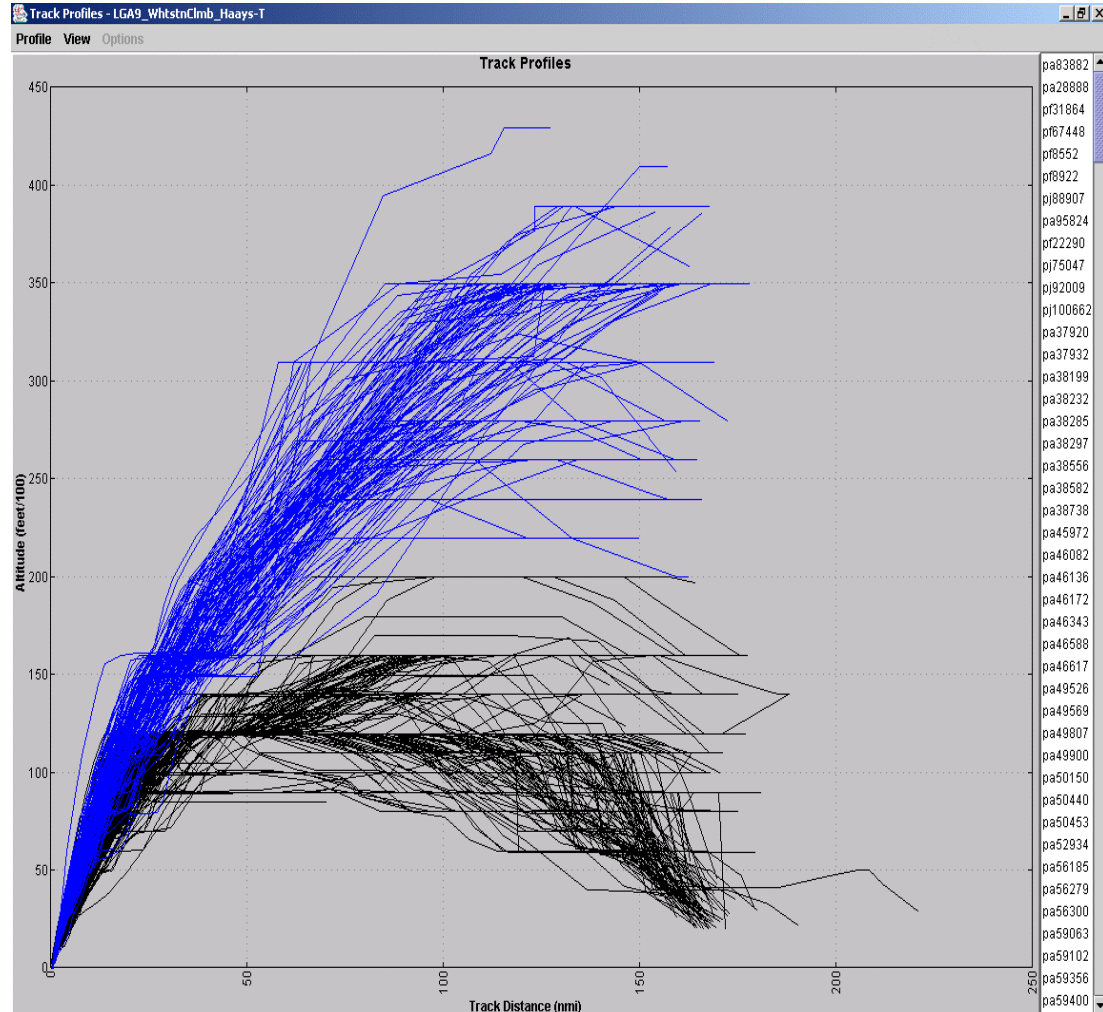
Example:

LGA-Rwy 13
Departures

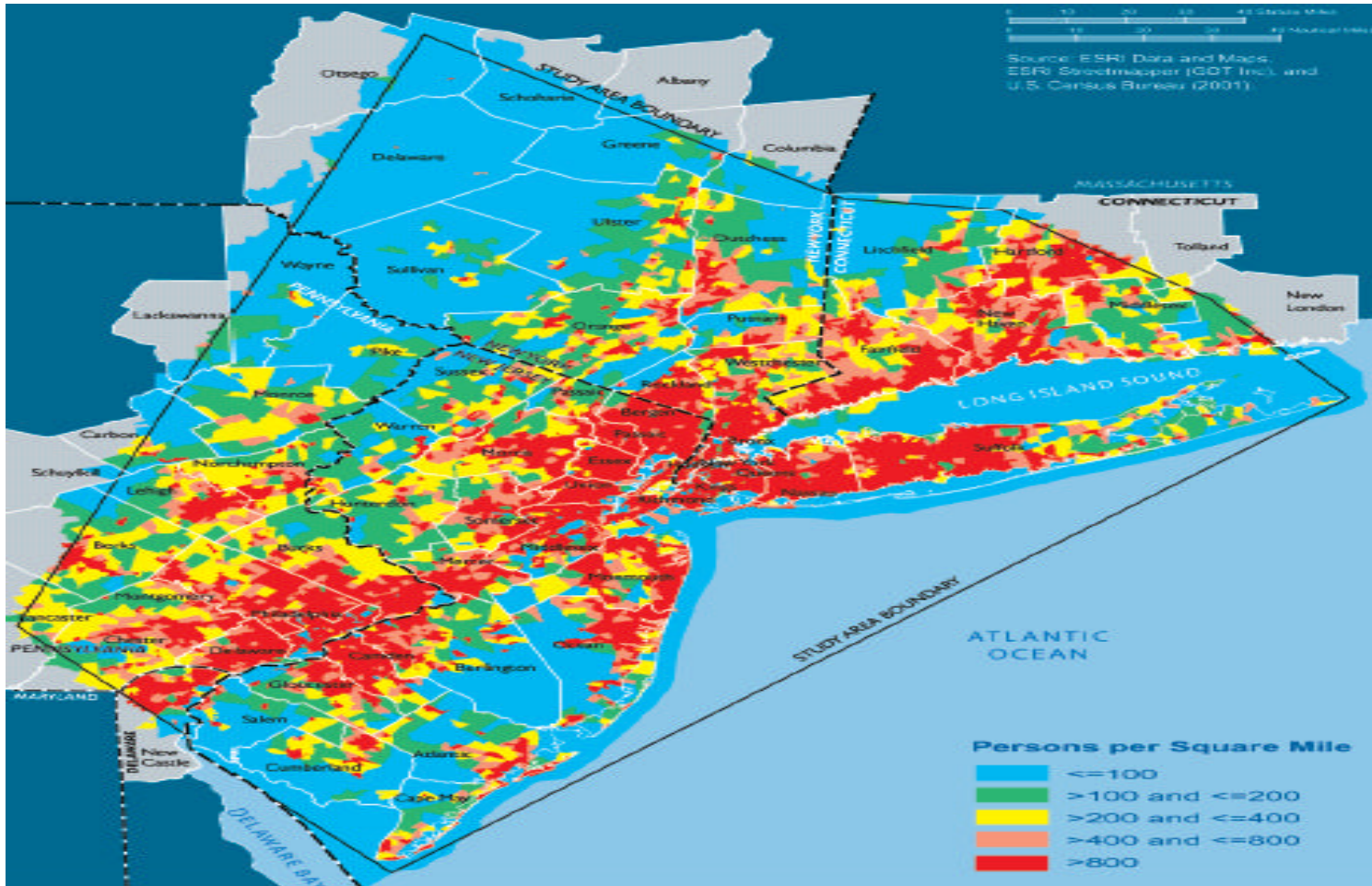
- 3-D Procedure Variation
- 2-Bundles

Legend

 Radar Track Bundles



Population Density Map



Questions ?



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