NY/NJ/PHL Airspace Redesign Project

Implementation Update

Note: This information was provided in the workshop during the 4 hour time frame in various media formats, including video, presentation boards, and handouts.

A compilation DVD providing historical video update and background information was handed out to participants.

Presented to: Congressional Staffers
Workshop Format

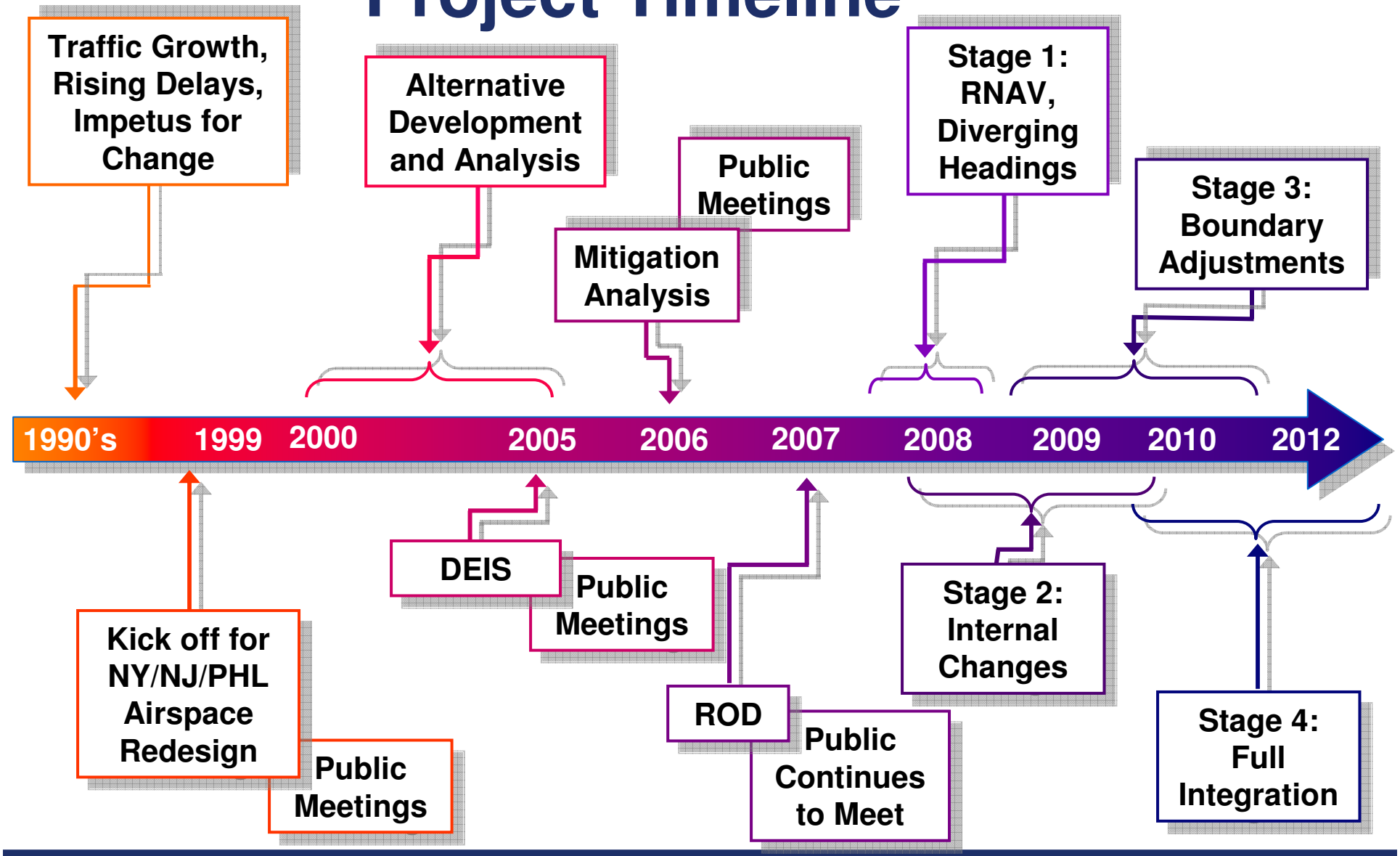
By: Steve Kelley
Manager Airspace Redesign

Date: February 20, 2009

Federal Aviation Administration

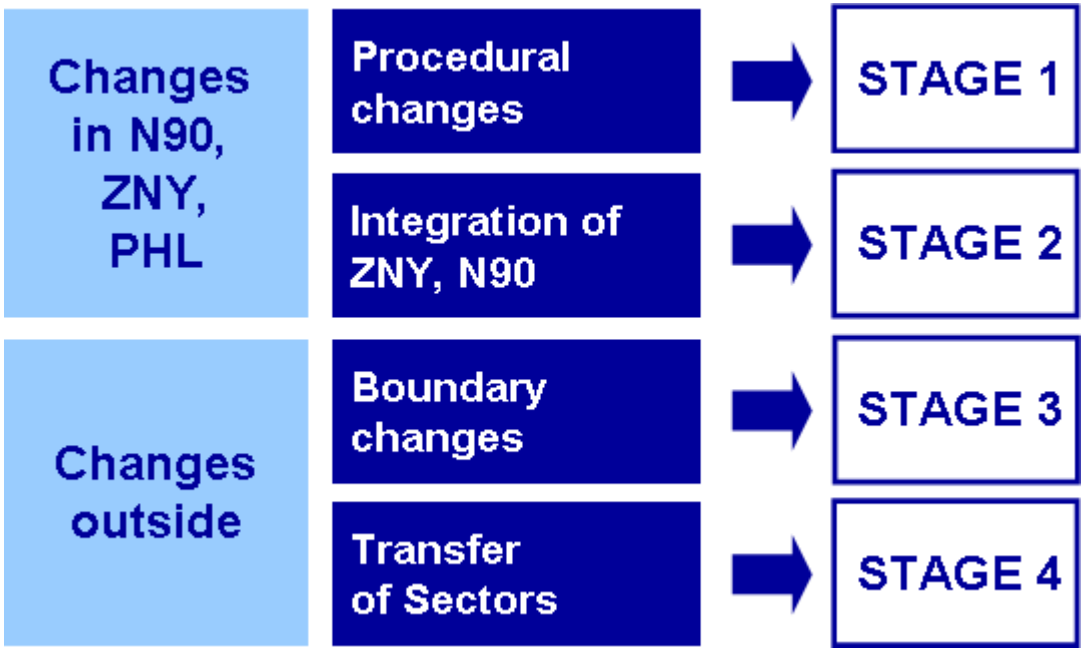
Video Update

Project Timeline



Implementation Overview

- **Implementation Plan began developed immediately following the signing of Record of Decision (ROD) (September 5, 2007).**
- **Initial changes to airspace were implemented on December 19, 2007**
- **Implementation approach was segregated into four stages in the ROD**
- **Each stage will take from 12 to 18 months and stages will overlap**

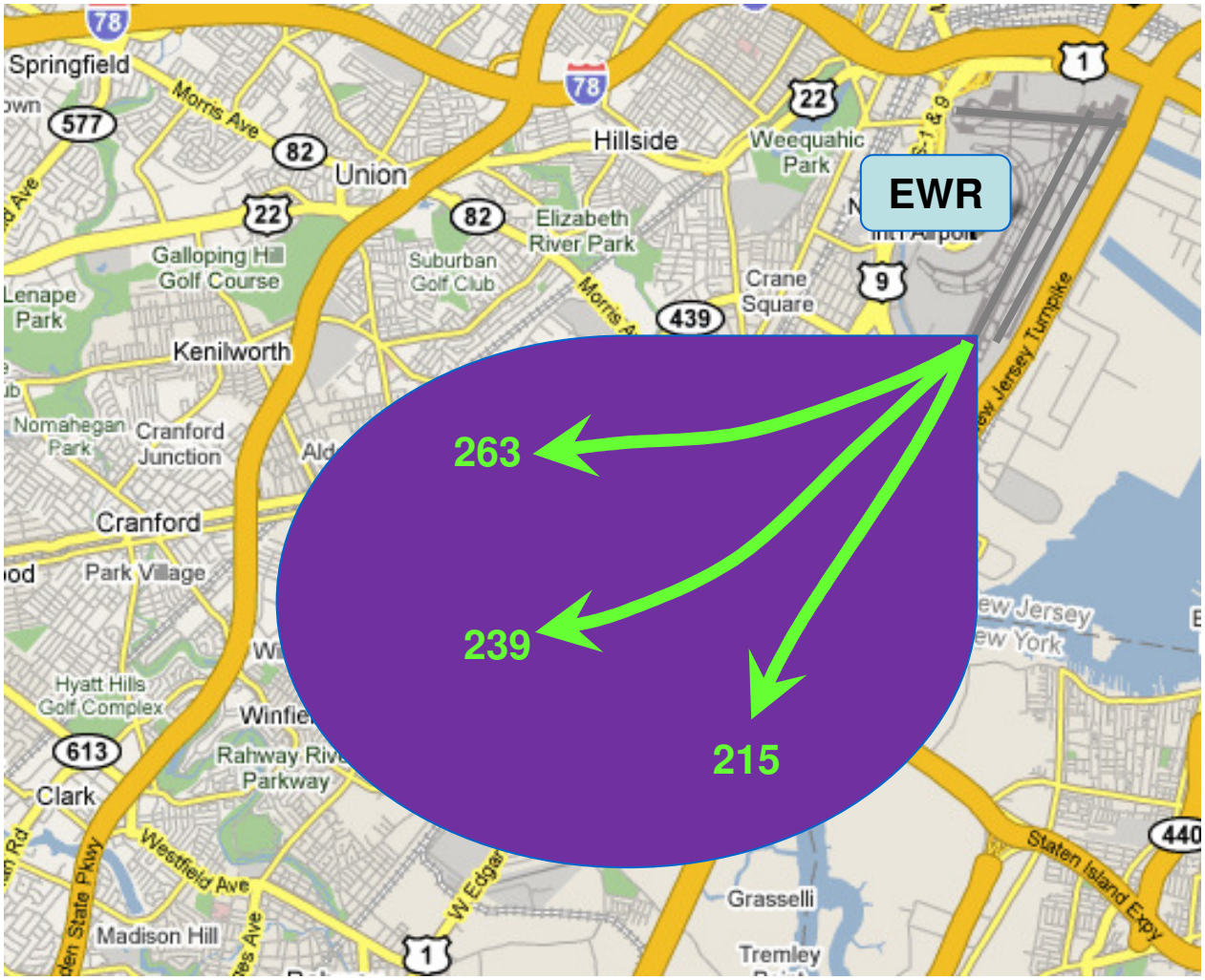


Stage 1: What We've Implemented

- **Dispersal headings implemented at both EWR and PHL on a limited basis**
- **Formal Standard Instrument Departure Procedures (SIDs) published at both locations in July of 2008**
- **RNAV overlay procedures**

Stage 1: How the Dispersal Headings Were Created

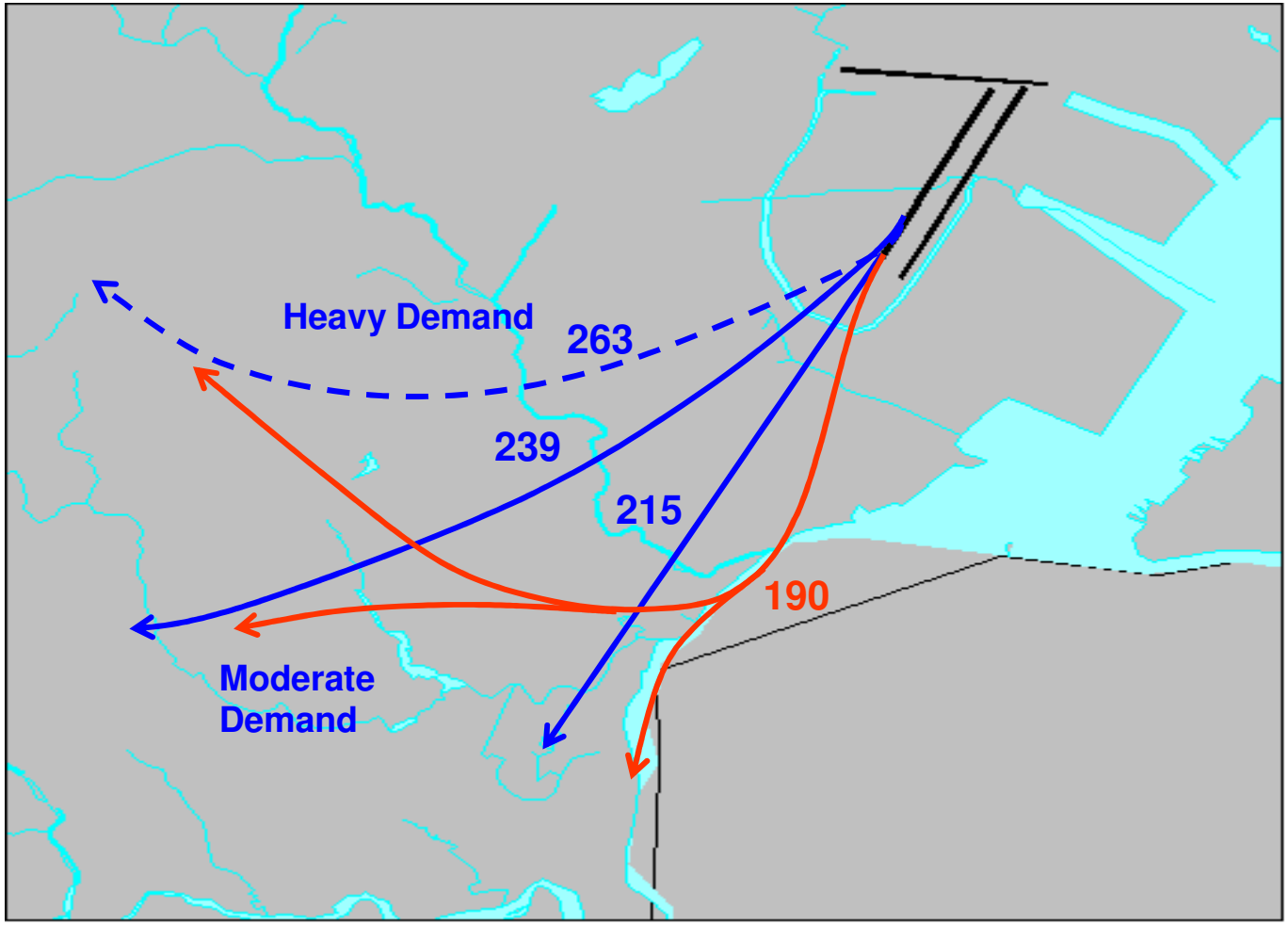
- **Considered *all* headings within an identified range**
- **Evaluated noise impact for every possible combination of headings**
- **Identified exact headings for minimal impact**



Stage 1: Newark Departure Headings Runway 22L/R

Existing

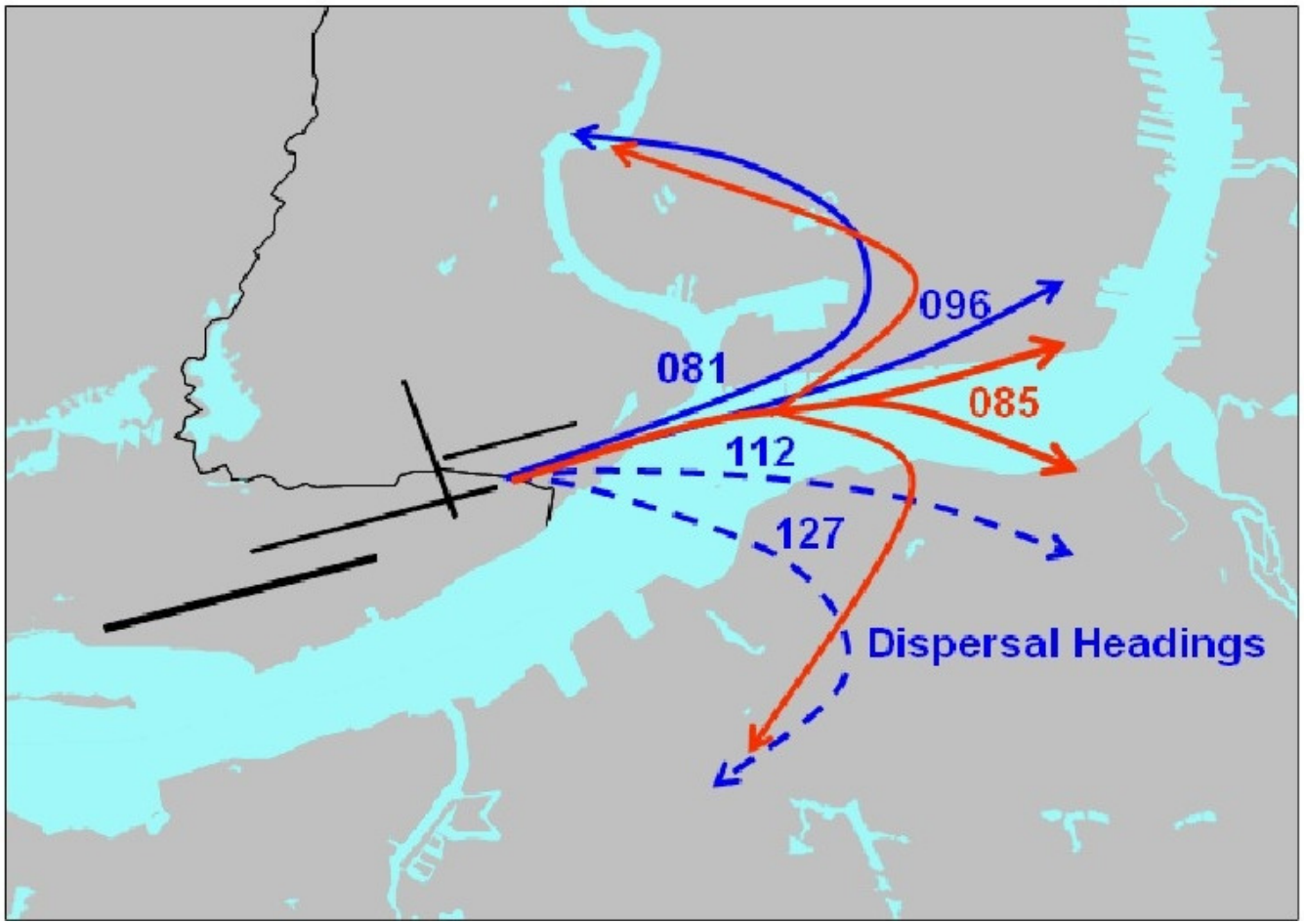
Dispersal



Stage 1: Philadelphia Departure Headings Runway 09R/L

Existing

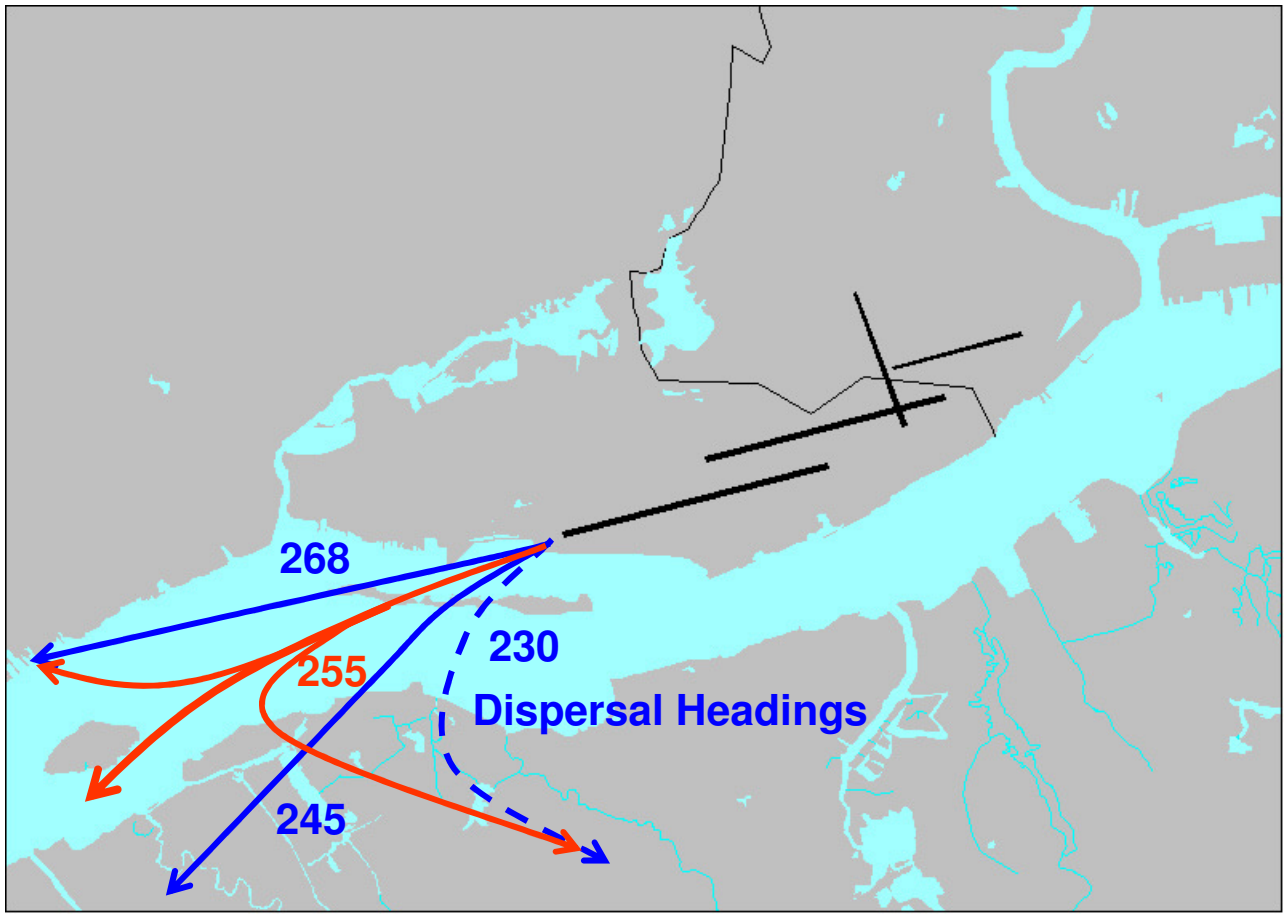
Dispersal



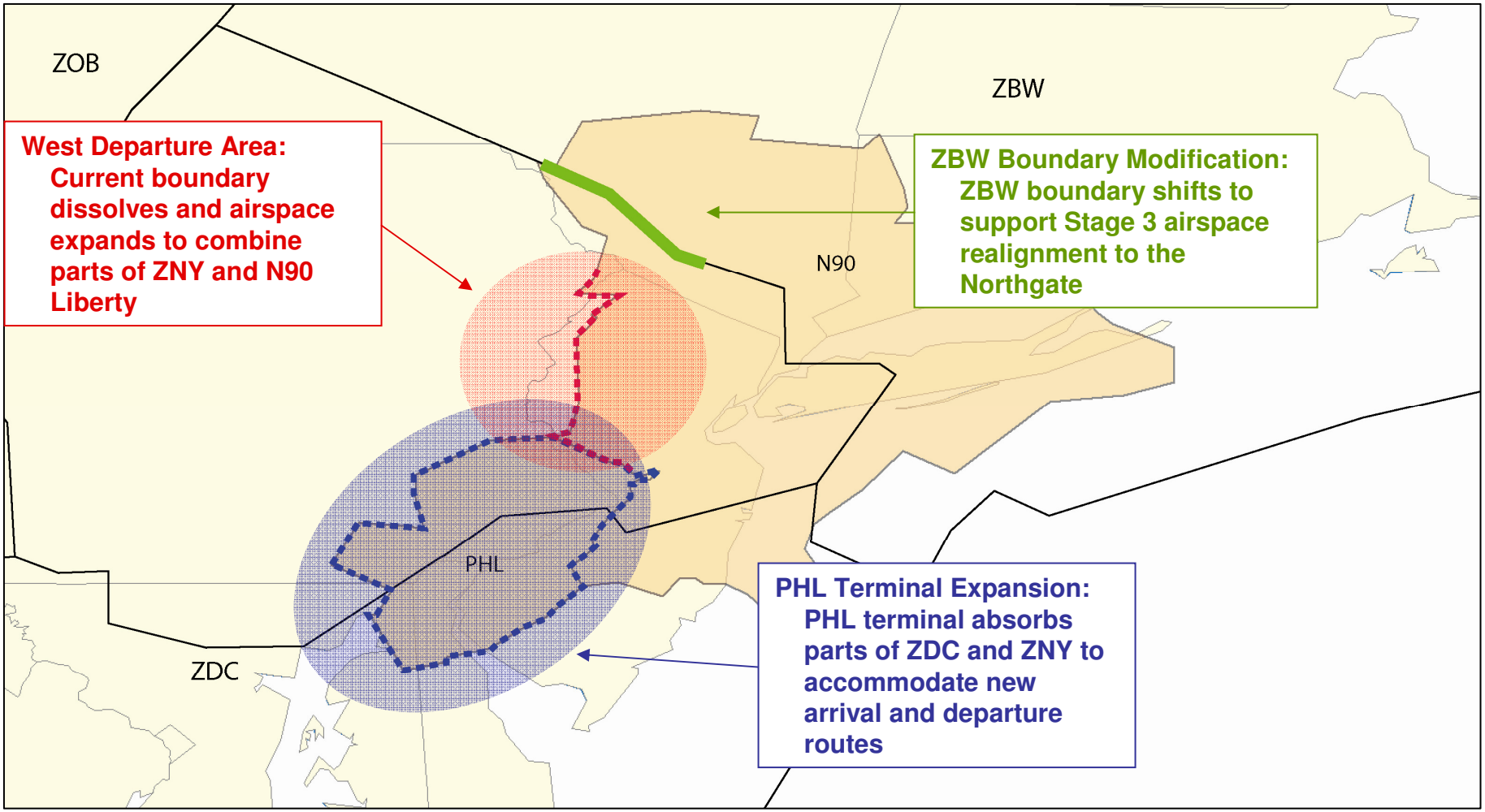
Stage 1: Philadelphia Departure Headings Runway 27L/R

Existing

Dispersal

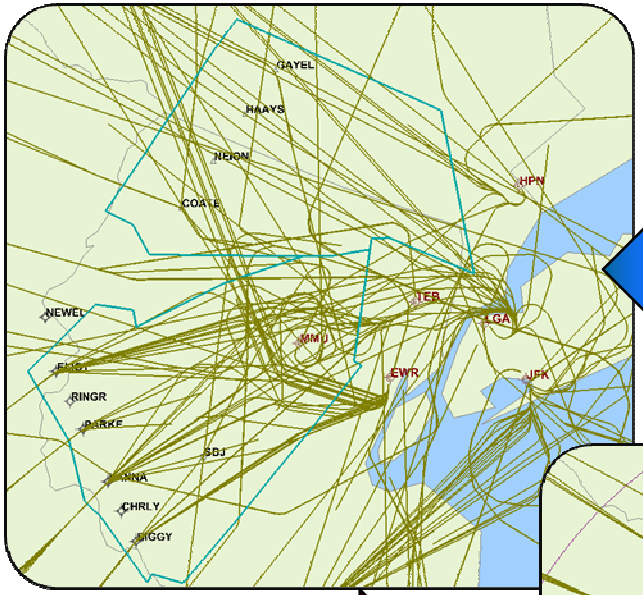


Stage 2: Minor Airspace Realignment



So, Why Human-In-The-Loop (HITLs)?
Why not just implement the design?

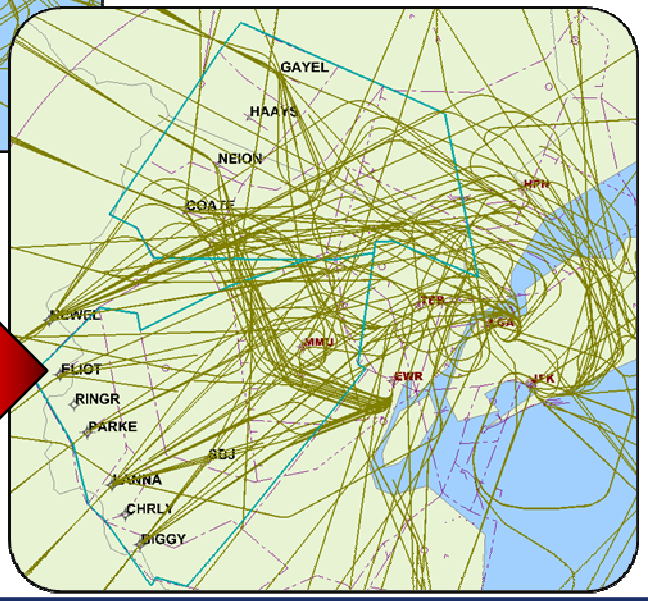
Potential airspace changes can be TRICKY! …even for the experts. A preferred design on paper may not work as well in practice.

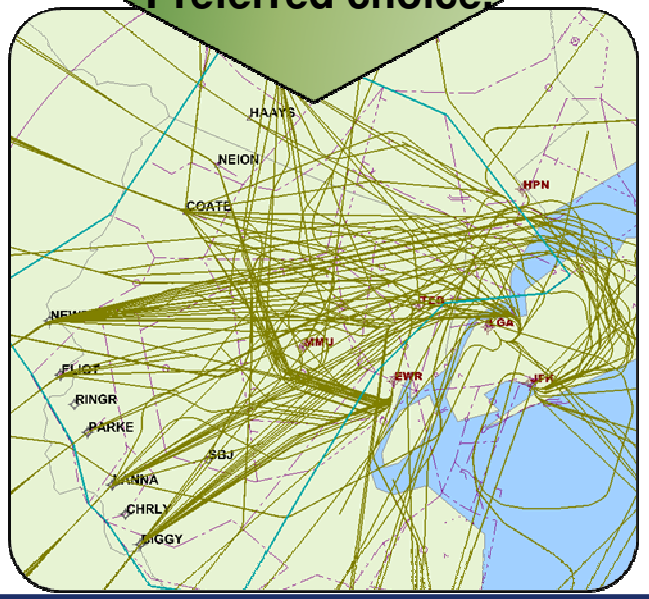


Current Airspace: Some vectoring

Potential alternative: Less vectoring than Current airspace. Nice straight path to fix. Preferred choice.

Potential alternative: LOTS of vectoring. Untenable traffic flows.

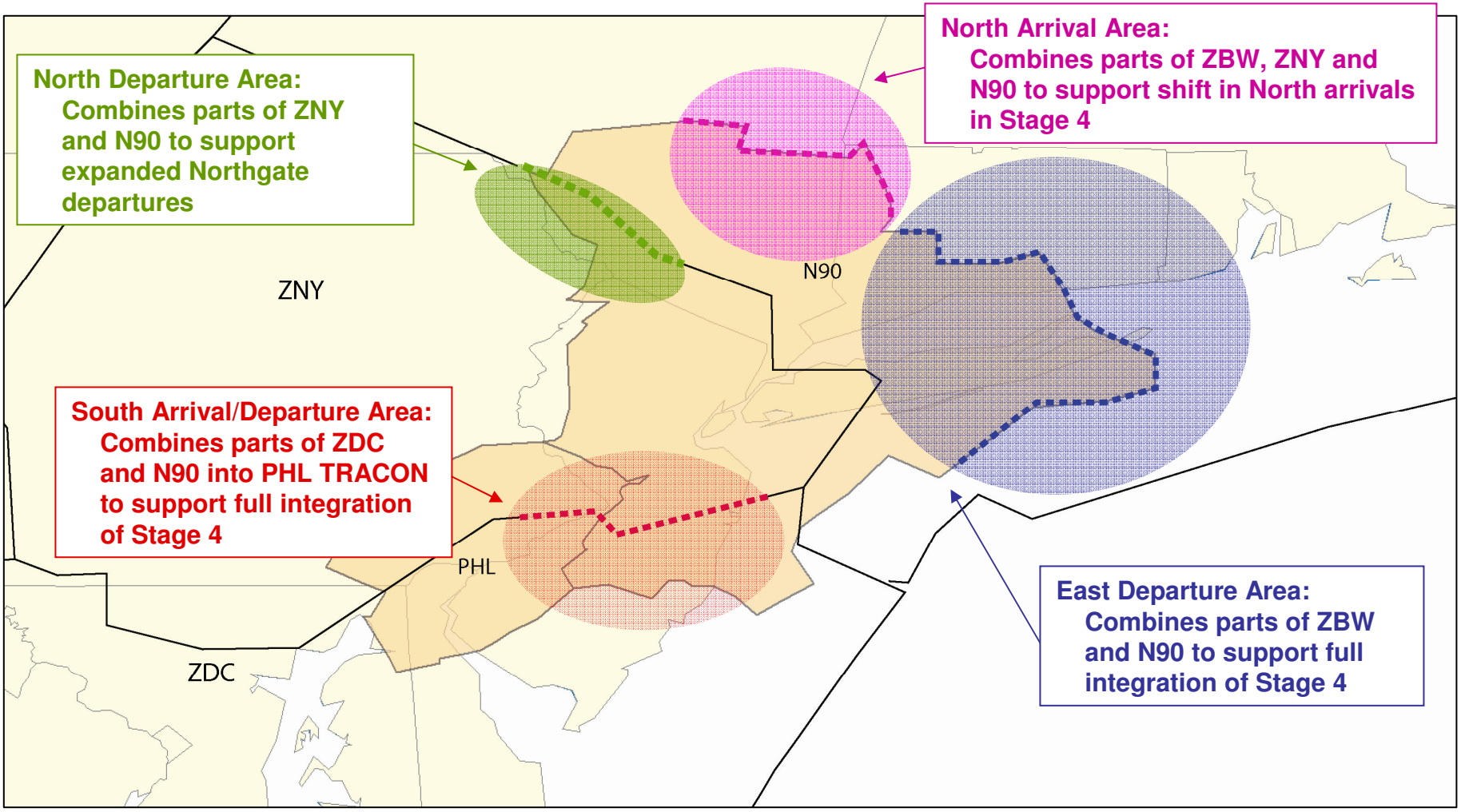




STAGE 2: 4/1/2008 – 10/1/2009

- **Expanding the Use of Terminal Separation Rules**
- **Expanding the West Gate for NY Departures**
- **Opening the West Gate for JFK Departures**
- **Allowing Stacked Departures at the Departure Fixes**
- **Providing Flexible Use of the Arrival Airways**
- **Establishing a New Arrival Route into PHL**

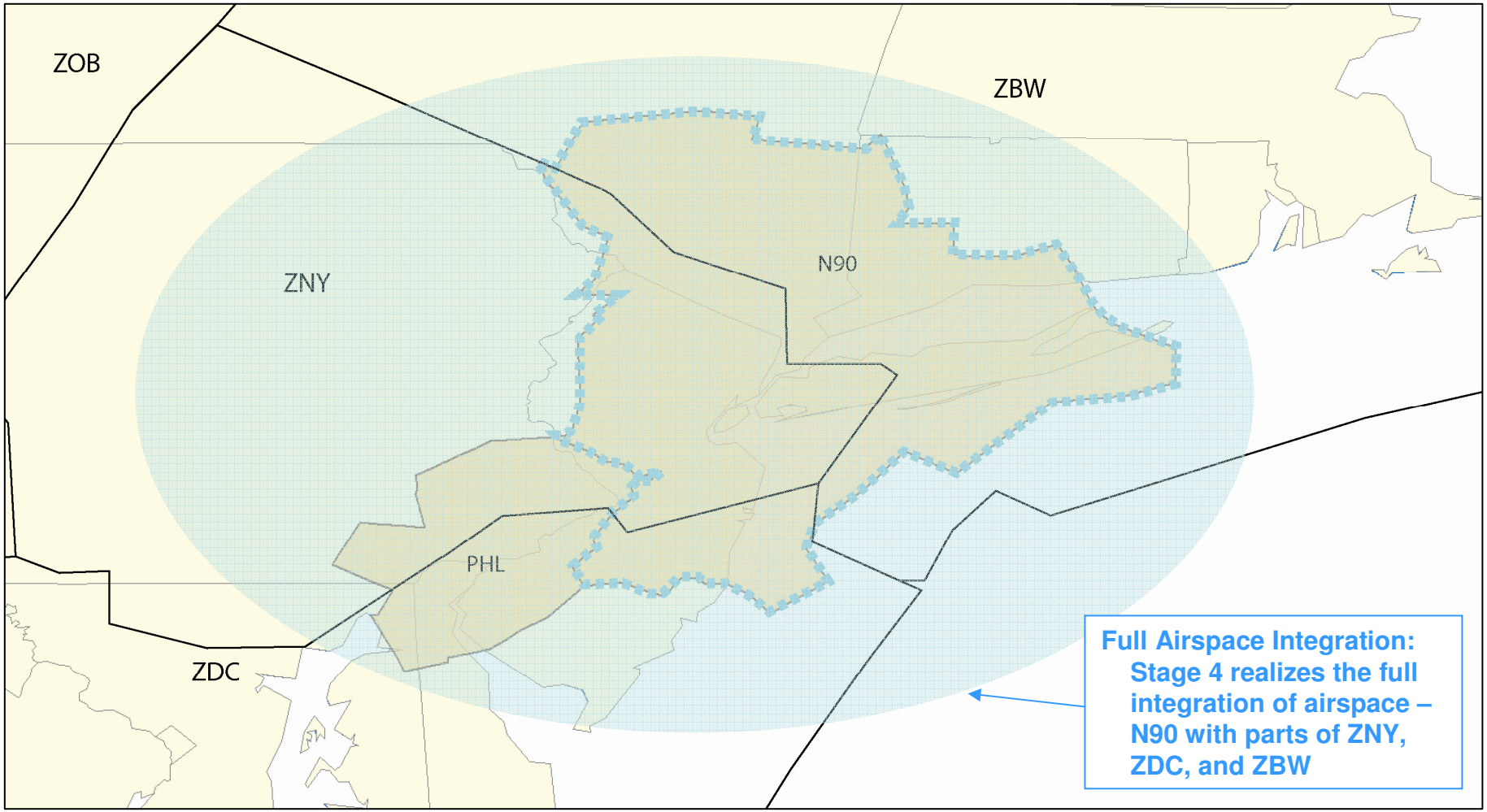
Stage 3: Major Airspace Realignment



STAGE 3: 5/11/2010 – 11/9/2011

- **Adding a Third Airway to the North Gate**
  - Integrate airspace - north airway redesign
  - Boundary shift with ZBW
  - Shift northbound J49 traffic
  - Redistribute traffic on new north routes
  - Resectorize routes
  - Develop implementation plan of mitigation strategies

Stage 4: Full Airspace Integration



STAGE 4: 3/10/2011 – 9/7/2012

- **Creating a New Jet Airway for Departures to the West**
- **Enabling Dependent Instrument Arrivals to the Parallel Runways at EWR and the Required Shift of the Arrival Streams into the NY/NJ Area**
- **Creating a South Gate for Departures Out of the NY/NJ Area**

A New Way of Doing Business

- **Arrival areas based on arrival direction and function – not airport specific**
- **Departure areas based on geographical demand**
- **Final Vector Positions as an Area of Specialization**
- **Advanced Automation tools used for Traffic Management Initiatives**
- **Least complex area may provide all initial facility training**

Next Steps

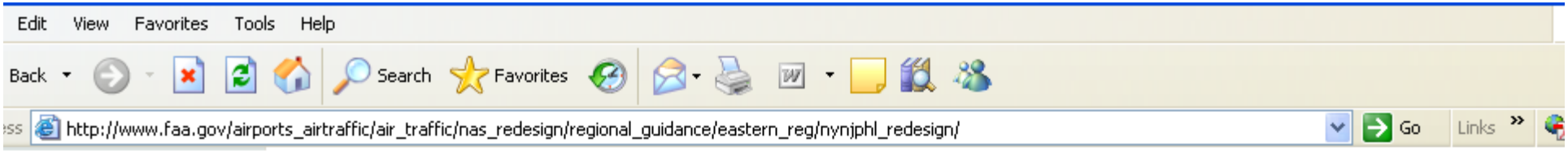
- **Continue to address and resolve legal and political challenges**
- **Develop Airspace design activities with adjacent facilities that enhance the benefits of integration and improve operational efficiencies**
- **Communicate implementation plans and decisions are reached.**

Questions?

How To Access the Noise Exposure Tables on the Project Website

How To Use the Noise Exposure Tables

- **Log on to: http://www.faa.gov/airports_airtraffic/air_traffic/nas_redesign/regional_guidance/eastern_reg/nynjphl_redesign**
- **Click on Noise Exposure Tables**
- **Go to the U.S. Census Bureau American FactFinder website**
- **Make sure Census 2000 appears in the box under "Select a year and program".**
- **Type your address in the appropriate boxes and click Go.**
- **In the last box, the census tract and block are identified for a particular address.**
- **Once you have identified a particular census tract and block, you can use the Noise Exposure Tables below to find the associated calculated noise exposure. The tables are split up by state and county. Noise was calculated for all populated census blocks in the study area. Therefore, not all counties within each state are listed.**



Written Re-evaluation (PDF, 8.81 MB) (7/31/2008)

Record of Decision (PDF) (9/05/2007)

- Record of Decision, Appendix A – Figures (PDF, 20.78 MB) (9/05/2007)
- Errata to the Record of Decision (PDF, 51.30 MB) (9/18/07)

Final Environmental Impact Statement (FEIS)

- Briefing to Congress (MS PowerPoint) (9/05/2007)
- Video - Airspace Redesign Project

Noise Mitigation & Operational Reports

The reports provide an overview of noise mitigation strategies for the preferred alternative.

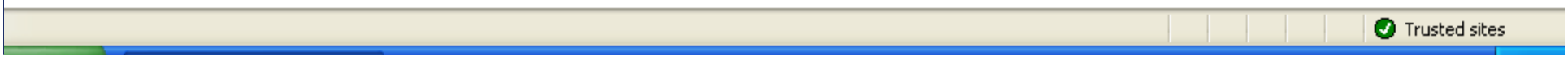
- Read the Noise Mitigation Report (PDF)
- Read the Operational Analysis of Mitigation of the NYNJPHL Airspace Redesign (PDF)
- Mitigation Public Meeting Displays
- Noise Exposure Tables
- Noise Mitigation Measures Table
- List of Libraries with the Noise Mitigation Report (PDF)
- Comments – The Comment Period Closed on May 11, 2007
- Dispersal Heading Video (WMV)

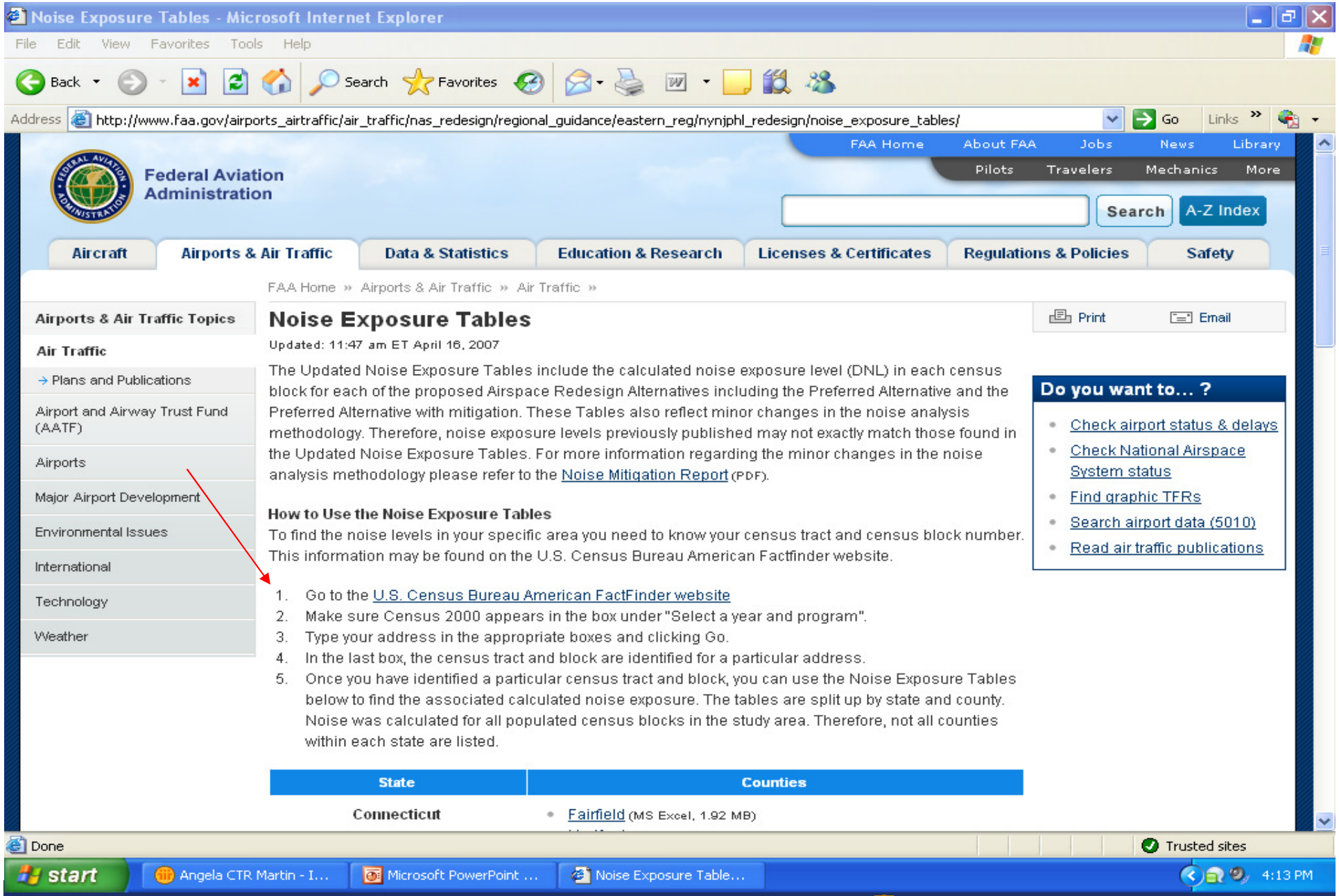
Preferred Alternative (3/23/2007)

FAA has identified the Preferred Alternative for this project which will be followed by five public meetings (one per state in the study area) to discuss noise mitigation strategies for that preferred alternative.

- Press Release
- Factsheet (Integrated Airspace Alternative)
- Briefing to Congress (PDF)
- Preferred Alternative
  - Video (ASX)
  - Audio (ASX)

Background




Noise Exposure Tables - Microsoft Internet Explorer
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Airports & Air Traffic Topics
Air Traffic
→ Plans and Publications
Airport and Airway Trust Fund (AATF)
Airports
Major Airport Development
Environmental Issues
International
Technology
Weather
Noise Exposure Tables
Print Email
Updated: 11:47 am ET April 16, 2007
The Updated Noise Exposure Tables include the calculated noise exposure level (DNL) in each census block for each of the proposed Airspace Redesign Alternatives including the Preferred Alternative and the Preferred Alternative with mitigation. These Tables also reflect minor changes in the noise analysis methodology. Therefore, noise exposure levels previously published may not exactly match those found in the Updated Noise Exposure Tables. For more information regarding the minor changes in the noise analysis methodology please refer to the Noise Mitigation Report (PDF).
How to Use the Noise Exposure Tables
To find the noise levels in your specific area you need to know your census tract and census block number. This information may be found on the U.S. Census Bureau American Factfinder website.
1. Go to the U.S. Census Bureau American FactFinder website
2. Make sure Census 2000 appears in the box under "Select a year and program".
3. Type your address in the appropriate boxes and clicking Go.
4. In the last box, the census tract and block are identified for a particular address.
5. Once you have identified a particular census tract and block, you can use the Noise Exposure Tables below to find the associated calculated noise exposure. The tables are split up by state and county. Noise was calculated for all populated census blocks in the study area. Therefore, not all counties within each state are listed.
Do you want to... ?
Check airport status & delays
Check National Airspace System status
Find graphic TFRs
Search airport data (5010)
Read air traffic publications
State
Counties
Connecticut
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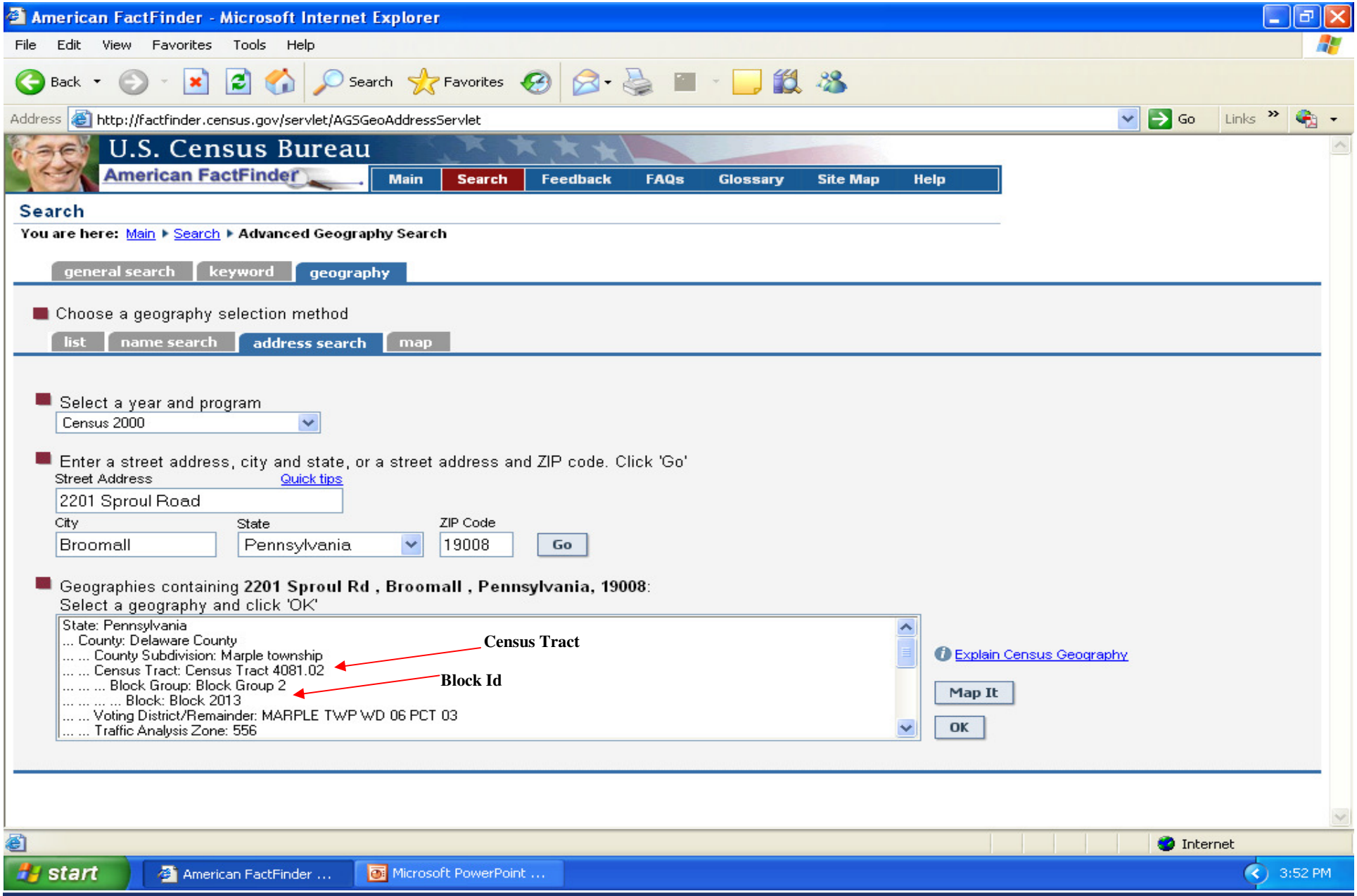
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American FactFinder
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Search
You are here: Main ▸ Search ▸ Advanced Geography Search
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Census 2000
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Street Address
Quick tips
2201 Sproul Road
City
Broomall
State
Pennsylvania
ZIP Code
19008
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... ... County Subdivision: Marple township
... ... Census Tract: Census Tract 4081.02
... ... Block Group: Block Group 2
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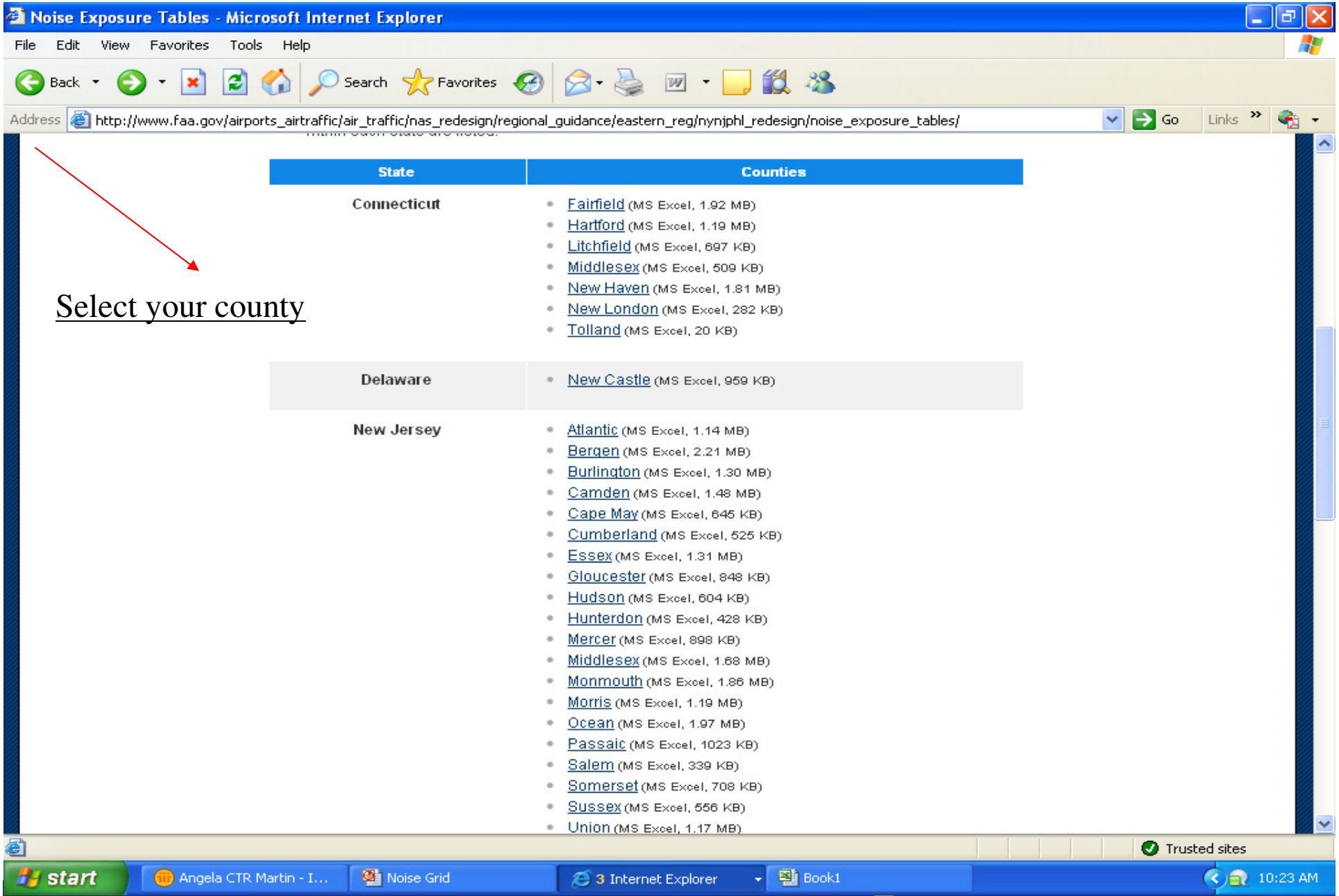
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Select your county
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Counties
Connecticut
Fairfield (MS Excel, 1.92 MB)
Hartford (MS Excel, 1.19 MB)
Litchfield (MS Excel, 697 KB)
Middlesex (MS Excel, 509 KB)
New Haven (MS Excel, 1.81 MB)
New London (MS Excel, 282 KB)
Tolland (MS Excel, 20 KB)
Delaware
New Castle (MS Excel, 959 KB)
New Jersey
Atlantic (MS Excel, 1.14 MB)
Bergen (MS Excel, 2.21 MB)
Burlington (MS Excel, 1.30 MB)
Camden (MS Excel, 1.48 MB)
Cape May (MS Excel, 645 KB)
Cumberland (MS Excel, 525 KB)
Essex (MS Excel, 1.31 MB)
Gloucester (MS Excel, 848 KB)
Hudson (MS Excel, 604 KB)
Hunterdon (MS Excel, 428 KB)
Mercer (MS Excel, 898 KB)
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Morris (MS Excel, 1.19 MB)
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Passaic (MS Excel, 1023 KB)
Salem (MS Excel, 339 KB)
Somerset (MS Excel, 708 KB)
Sussex (MS Excel, 556 KB)
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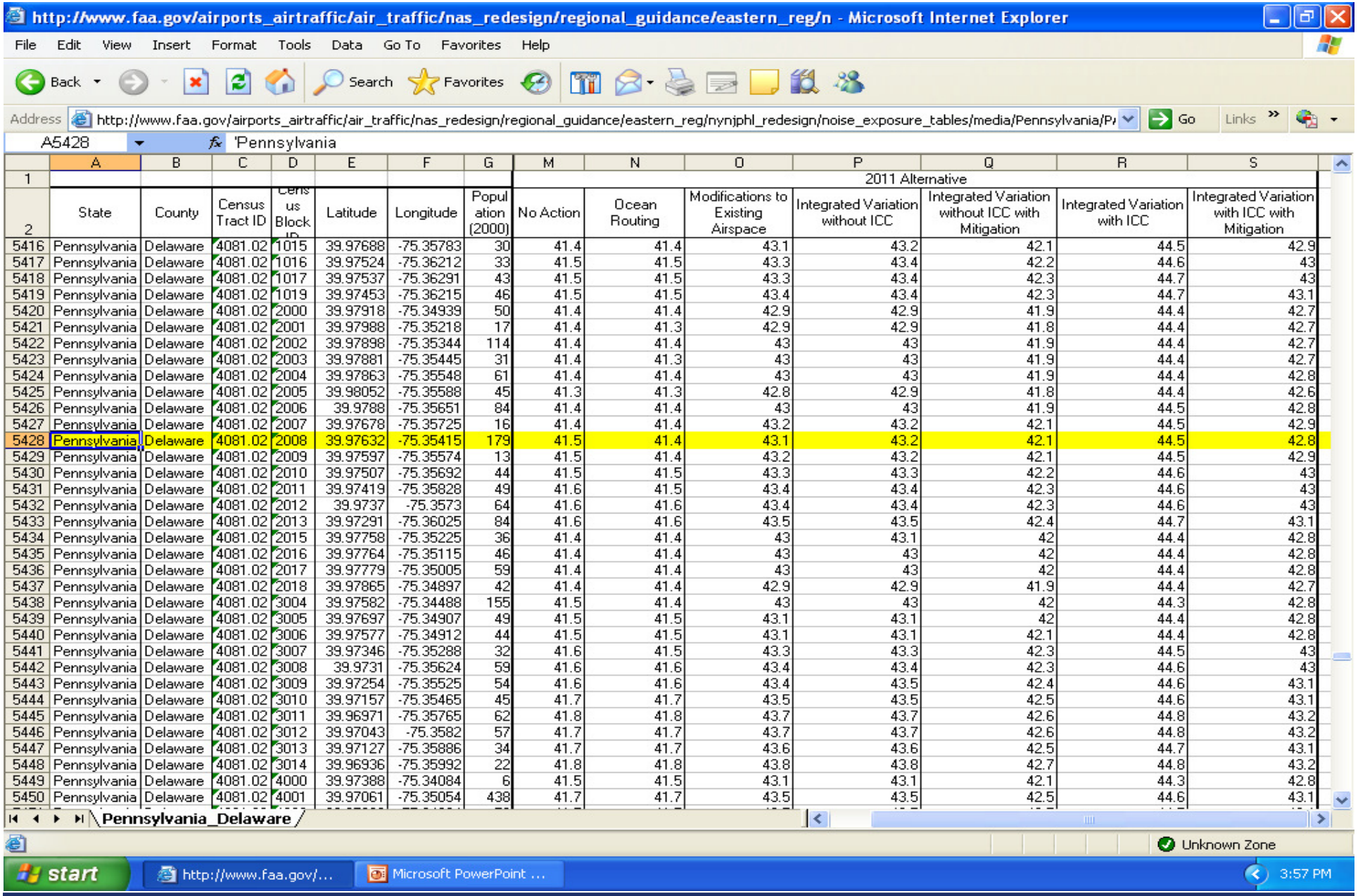

	A	B	C	D	E	F	G	M	N	O	P	Q	R	S
1								2011 Alternative						
2	State	County	Census Tract ID	Census Block ID	Latitude	Longitude	Population (2000)	No Action	Ocean Routing	Modifications to Existing Airspace	Integrated Variation without ICC	Integrated Variation without ICC with Mitigation	Integrated Variation with ICC	Integrated Variation with ICC with Mitigation
5416	Pennsylvania	Delaware	4081.02	1015	39.97688	-75.35783	30	41.4	41.4	43.1	43.2	42.1	44.5	42.9
5417	Pennsylvania	Delaware	4081.02	1016	39.97524	-75.36212	33	41.5	41.5	43.3	43.4	42.2	44.6	43
5418	Pennsylvania	Delaware	4081.02	1017	39.97537	-75.36291	43	41.5	41.5	43.3	43.4	42.3	44.7	43
5419	Pennsylvania	Delaware	4081.02	1019	39.97453	-75.36215	46	41.5	41.5	43.4	43.4	42.3	44.7	43.1
5420	Pennsylvania	Delaware	4081.02	2000	39.97918	-75.34939	50	41.4	41.4	42.9	42.9	41.9	44.4	42.7
5421	Pennsylvania	Delaware	4081.02	2001	39.97988	-75.35218	17	41.4	41.3	42.9	42.9	41.8	44.4	42.7
5422	Pennsylvania	Delaware	4081.02	2002	39.97898	-75.35344	114	41.4	41.4	43	43	41.9	44.4	42.7
5423	Pennsylvania	Delaware	4081.02	2003	39.97881	-75.35445	31	41.4	41.3	43	43	41.9	44.4	42.7
5424	Pennsylvania	Delaware	4081.02	2004	39.97863	-75.35548	61	41.4	41.4	43	43	41.9	44.4	42.8
5425	Pennsylvania	Delaware	4081.02	2005	39.98052	-75.35588	45	41.3	41.3	42.8	42.9	41.8	44.4	42.6
5426	Pennsylvania	Delaware	4081.02	2006	39.9788	-75.35651	84	41.4	41.4	43	43	41.9	44.5	42.8
5427	Pennsylvania	Delaware	4081.02	2007	39.97678	-75.35725	16	41.4	41.4	43.2	43.2	42.1	44.5	42.9
5428	Pennsylvania	Delaware	4081.02	2008	39.97632	-75.35415	179	41.5	41.4	43.1	43.2	42.1	44.5	42.8
5429	Pennsylvania	Delaware	4081.02	2009	39.97597	-75.35574	13	41.5	41.4	43.2	43.2	42.1	44.5	42.9
5430	Pennsylvania	Delaware	4081.02	2010	39.97507	-75.35692	44	41.5	41.5	43.3	43.3	42.2	44.6	43
5431	Pennsylvania	Delaware	4081.02	2011	39.97419	-75.35828	49	41.6	41.5	43.4	43.4	42.3	44.6	43
5432	Pennsylvania	Delaware	4081.02	2012	39.9737	-75.3573	64	41.6	41.6	43.4	43.4	42.3	44.6	43
5433	Pennsylvania	Delaware	4081.02	2013	39.97291	-75.36025	84	41.6	41.6	43.5	43.5	42.4	44.7	43.1
5434	Pennsylvania	Delaware	4081.02	2015	39.97758	-75.35225	36	41.4	41.4	43	43.1	42	44.4	42.8
5435	Pennsylvania	Delaware	4081.02	2016	39.97764	-75.35115	46	41.4	41.4	43	43	42	44.4	42.8
5436	Pennsylvania	Delaware	4081.02	2017	39.97779	-75.35005	59	41.4	41.4	43	43	42	44.4	42.8
5437	Pennsylvania	Delaware	4081.02	2018	39.97865	-75.34897	42	41.4	41.4	42.9	42.9	41.9	44.4	42.7
5438	Pennsylvania	Delaware	4081.02	3004	39.97582	-75.34488	155	41.5	41.4	43	43	42	44.3	42.8
5439	Pennsylvania	Delaware	4081.02	3005	39.97697	-75.34907	49	41.5	41.5	43.1	43.1	42	44.4	42.8
5440	Pennsylvania	Delaware	4081.02	3006	39.97577	-75.34912	44	41.5	41.5	43.1	43.1	42.1	44.4	42.8
5441	Pennsylvania	Delaware	4081.02	3007	39.97346	-75.35288	32	41.6	41.5	43.3	43.3	42.3	44.5	43
5442	Pennsylvania	Delaware	4081.02	3008	39.9731	-75.35624	59	41.6	41.6	43.4	43.4	42.3	44.6	43
5443	Pennsylvania	Delaware	4081.02	3009	39.97254	-75.35525	54	41.6	41.6	43.4	43.5	42.4	44.6	43.1
5444	Pennsylvania	Delaware	4081.02	3010	39.97157	-75.35465	45	41.7	41.7	43.5	43.5	42.5	44.6	43.1
5445	Pennsylvania	Delaware	4081.02	3011	39.96971	-75.35765	62	41.8	41.8	43.7	43.7	42.6	44.8	43.2
5446	Pennsylvania	Delaware	4081.02	3012	39.97043	-75.3582	57	41.7	41.7	43.7	43.7	42.6	44.8	43.2
5447	Pennsylvania	Delaware	4081.02	3013	39.97127	-75.35886	34	41.7	41.7	43.6	43.6	42.5	44.7	43.1
5448	Pennsylvania	Delaware	4081.02	3014	39.96936	-75.35992	22	41.8	41.8	43.8	43.8	42.7	44.8	43.2
5449	Pennsylvania	Delaware	4081.02	4000	39.97388	-75.34084	6	41.5	41.5	43.1	43.1	42.1	44.3	42.8
5450	Pennsylvania	Delaware	4081.02	4001	39.97061	-75.35054	438	41.7	41.7	43.5	43.5	42.5	44.6	43.1