

NY/NJ/PHL Metropolitan Area Airspace Redesign

Implementation Update

Presented to: Congressional Staffers

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Federal Aviation
Administration



Airspace Redesign Video
December 2009 Update

NY/NJ/PHL Metropolitan Area Airspace Redesign

**Stage 1:
Limited
dispersal
headings**

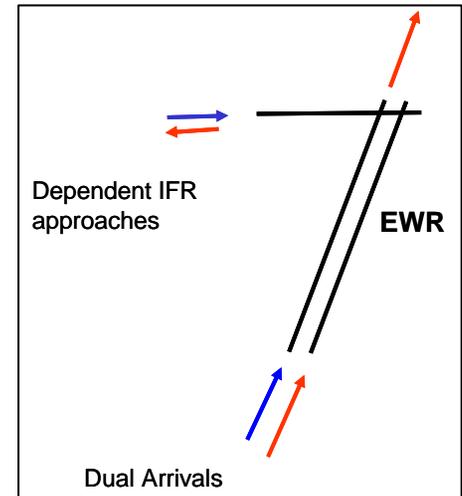
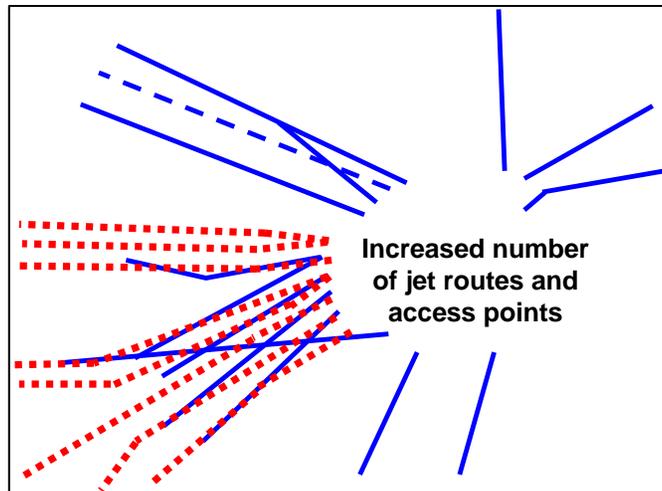
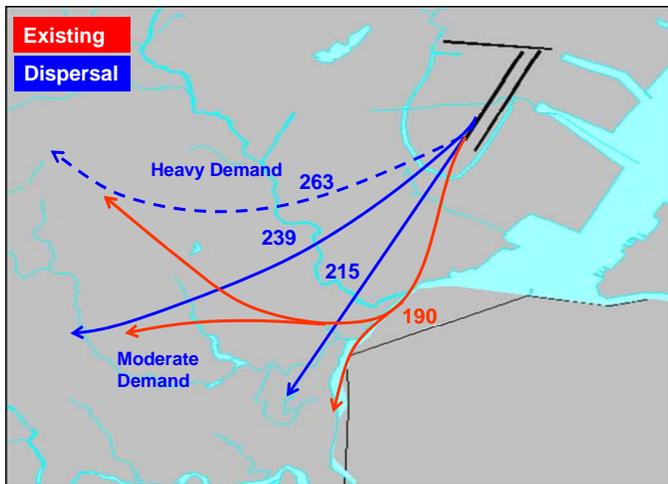
**Stage 1: Procedural
changes within
core facilities**

**Stage 2a: Integration
within core facilities,
westgate enhancements**
**Stage 2b: PHL Terminal
expansion**

**Stage 3: Boundary changes,
northgate enhancements**

**Stage 4:
Transfer
of sectors,
southgate
enhancements**

Oct 07 Apr 08 Oct 08 Apr 09 Oct 09 Apr 10 Oct 10 Apr 11 Oct 11 Sep 12



Legal Update

- **On June 10, 2009, the U.S. Court of Appeals for the District of Columbia Circuit issued a favorable opinion that dismissed or otherwise disposed of all claims against the FAA's Record of Decision (ROD) for the New York/New Jersey/Philadelphia Metropolitan Area Airspace Redesign Project.**
- **On August 19, 2009 Petitioners of the Project were denied a rehearing by the U.S. Court of Appeals for the D.C. Circuit.**
- **The U.S. Supreme Court was petitioned for certiorari on November 17, 2009.**
- **On January 19, 2010 the U.S. Supreme Court denied the hearing.**



Implementation of 2a

Integration Within Core Facilities with Westgate Departure Expansion

- **Collocate Defined Airspace (sectors)**
 - Integration between NY Terminal Approach Control and New York Center
 - Expanded Westgate allows all metro departures to reach altitude faster resulting in fuel savings
 - Integration into a single location will provide the maximum operational benefits
- **Location Alternatives under consideration**
 - Alternative 1 – Implement Stage 2a airspace at New York TRACON using terminal automation platform
 - Alternative 2 – Implement Stage 2a airspace at New York Center using a remote terminal automation platform
 - Alternative 3 – Implement Stage 2a airspace at New York Center using future automation platform (ERAM)
- **Alternatives are being considered based on:**
 - Change in Enroute Automation (ERAM) implementation dates
 - Employee involvement and impacts
 - Consideration of future technology (NextGen) activities
- **Implementation of Stage 2a is scheduled for the second quarter of 2011**



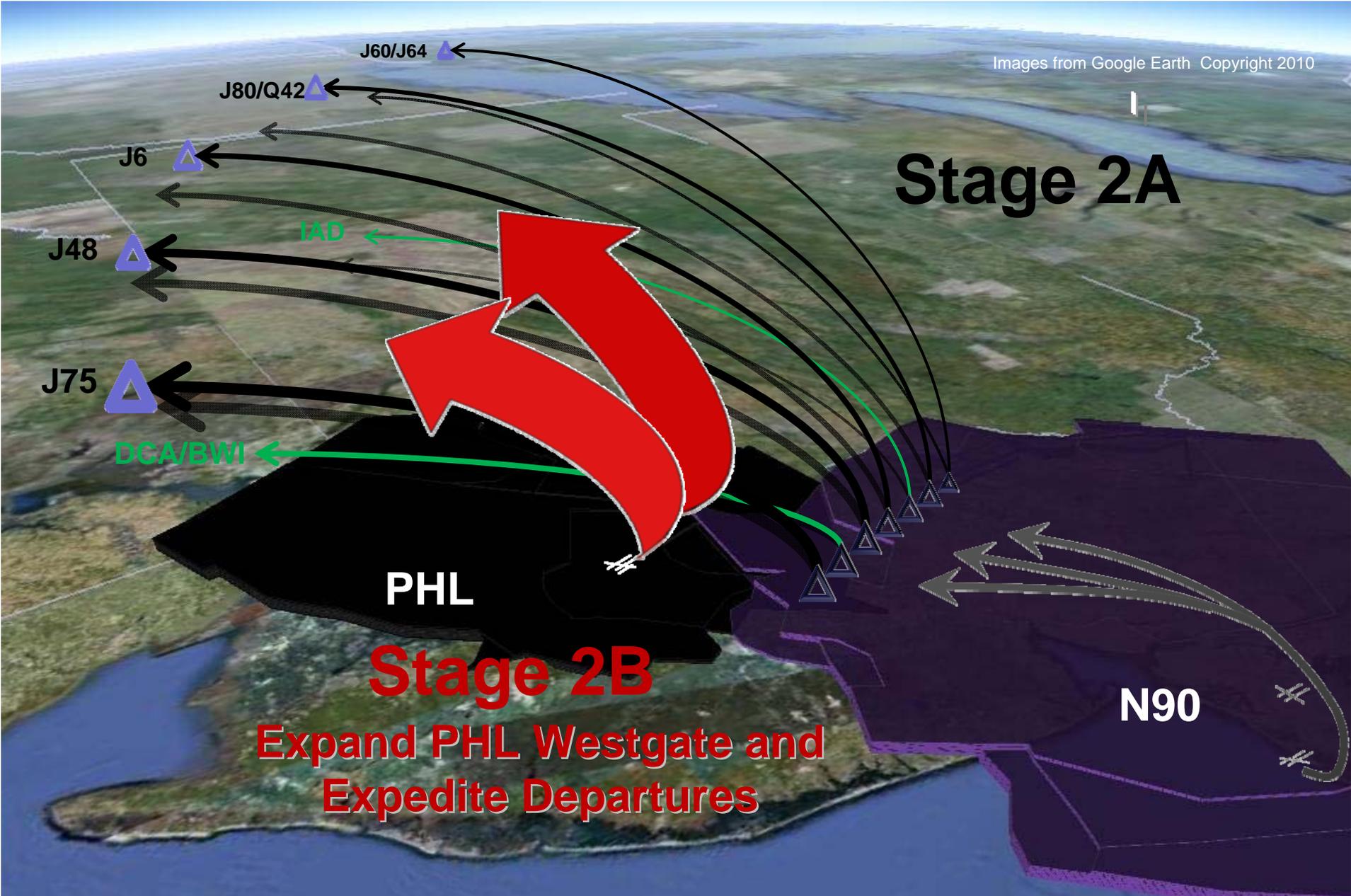
Implementation of Stage 2b PHL – Philadelphia International Airport Terminal Airspace



PHL is Surrounded by Four Busy Facilities



Stage 2A



Stage 2B

Expand PHL Westgate and Expedite Departures



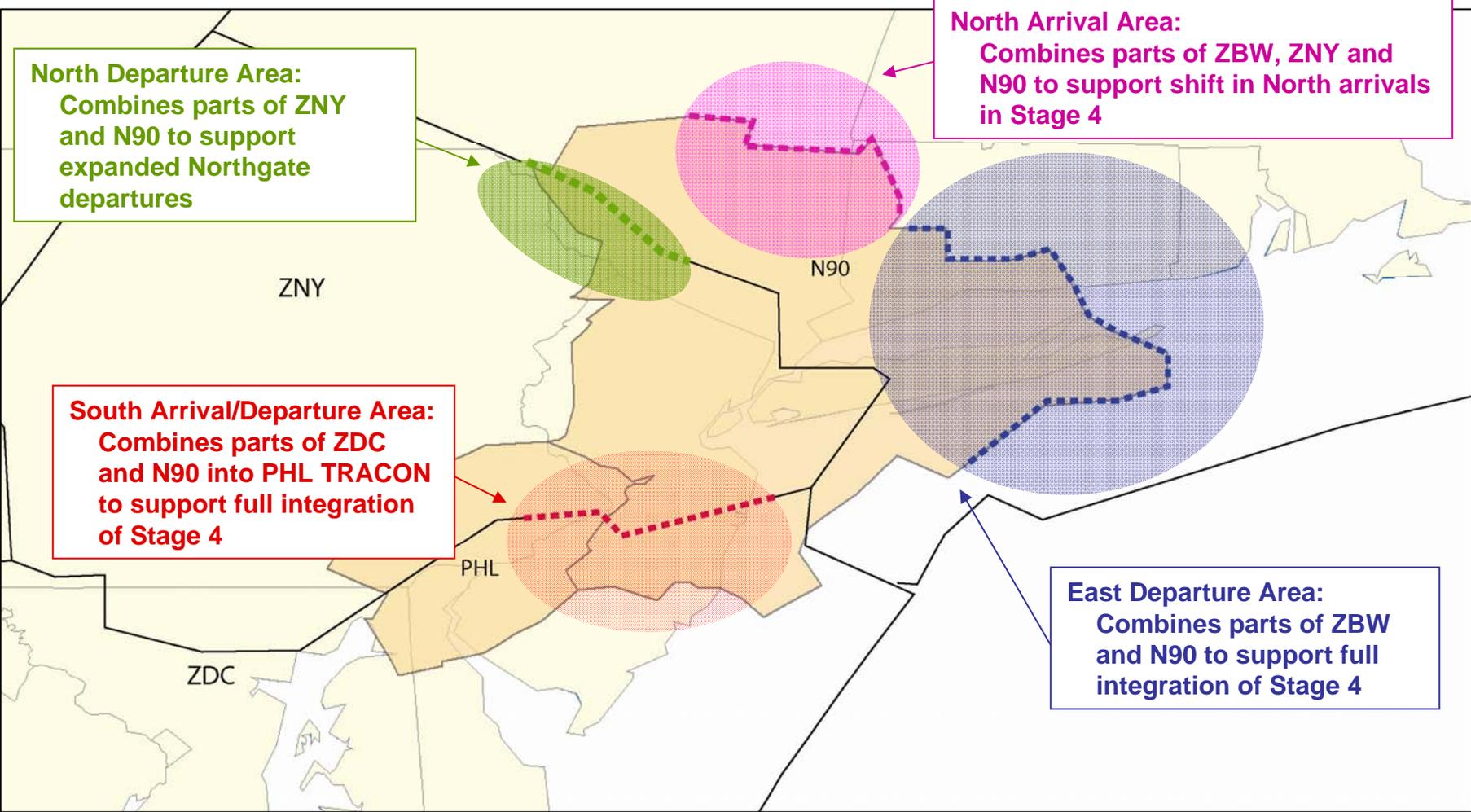
Testing designs for Stage 2b

Philadelphia (PHL) Terminal Expansion

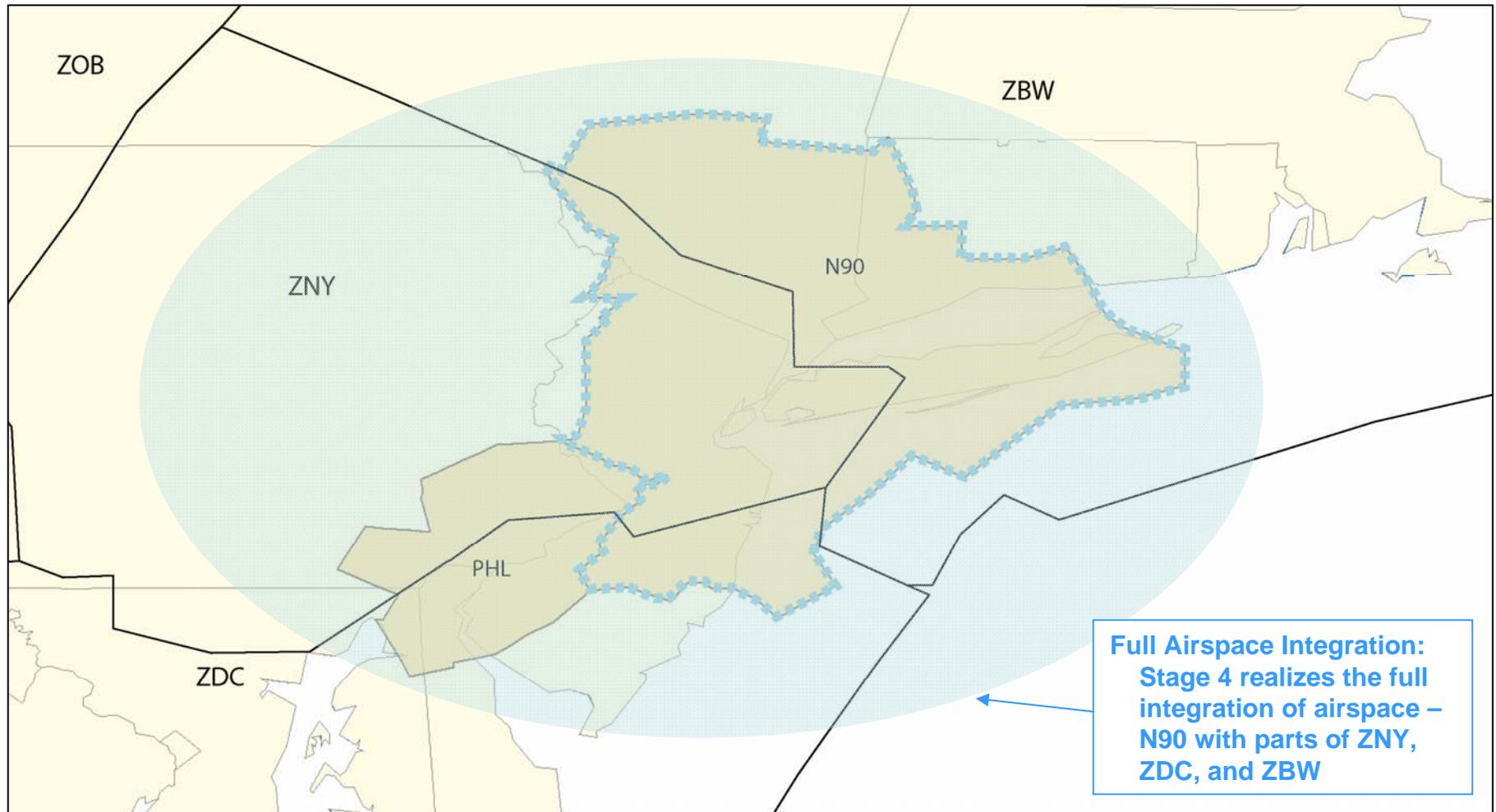
- **Testing is accomplished through Human-in-the-Loop (HITL) simulations**
 - HITL is a high fidelity tool which will assist in the development and evaluation of an airspace design for implementation.
 - Delivers an assessment of the operational impacts of a proposed design with respect to the ability of Air Traffic Controllers to manage traffic under various scenarios, such as bad weather conditions and increased traffic volumes.
 - We have 6 different designs for testing for Philadelphia Terminal Expansion
 - From the experiment we will develop the most operationally advantageous design for implementation
 - HITL experiments will take place the weeks of April 26 and May 10, 2010
 - Note: Dates for simulation were adjusted to accommodate additional coordination and improved employee participation
- **Results of the Human-In-The-Loop Simulations and recommendations will be reported in June of 2010**



Stage 3: Major Airspace Realignment



Stage 4: Full Airspace Integration



Opportunities

- **Implementation Choices, Locations, and Impacts**
- **Airspace Integration (defined by function not geography)**
- **Enroute Automation Modernization (ERAM)**
- **Continued coordination and integration with NextGen activities**

Next Steps

- **Schedule Stage 2a**
 - Implementation date for Westgate is the second quarter of 2011
 - Work with employees on decision location
- **Complete Stage 2b**
 - PHL Human-In-The-Loop Simulations – April/May of 2010
 - Recommendation for implementation of this stage – June 2010
- **Continue planning for Stage 3 and 4 Implementation**
 - Preliminary Stage 3 Design Meetings scheduled for later this year



Questions?

