

NextGen

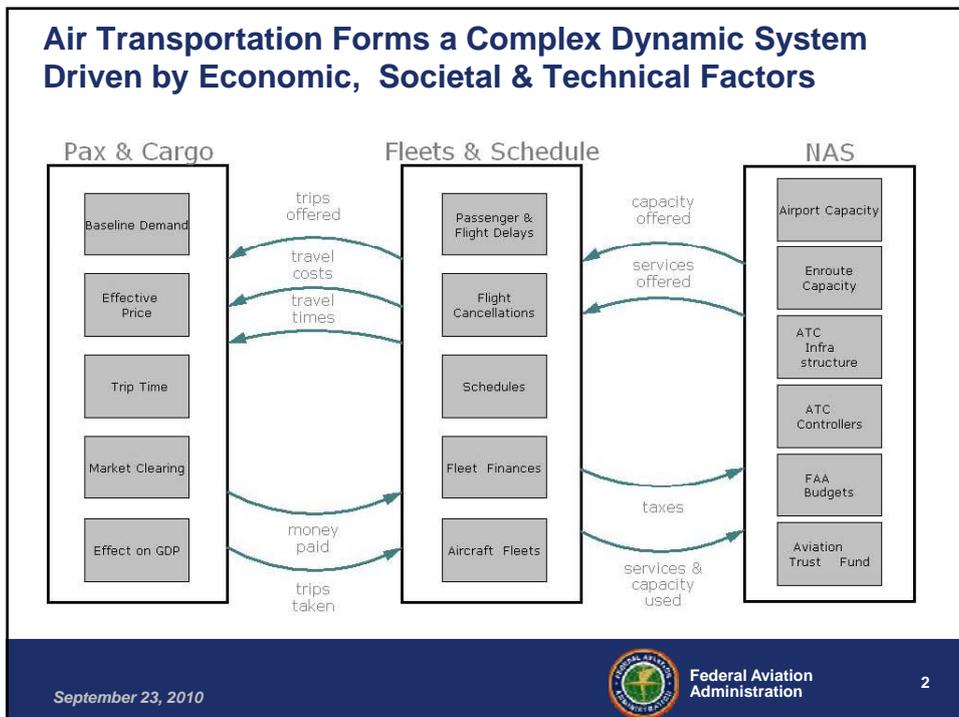
Next Generation Air Transportation System

International Council of the Aeronautical Sciences (ICAS) 2010

Implementing the Next Generation Air Transportation System in the U.S.

Presented by:
 Dr. Michael Romanowski,
 Director, NextGen Integration and Implementation
 Federal Aviation Administration (FAA)

September 23, 2010



What Does The System Look Like in 2018?

Gate-to-Gate

PHASES OF FLIGHT Mid-Term 2018

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Transition to NextGen: The Path is Extremely Complex

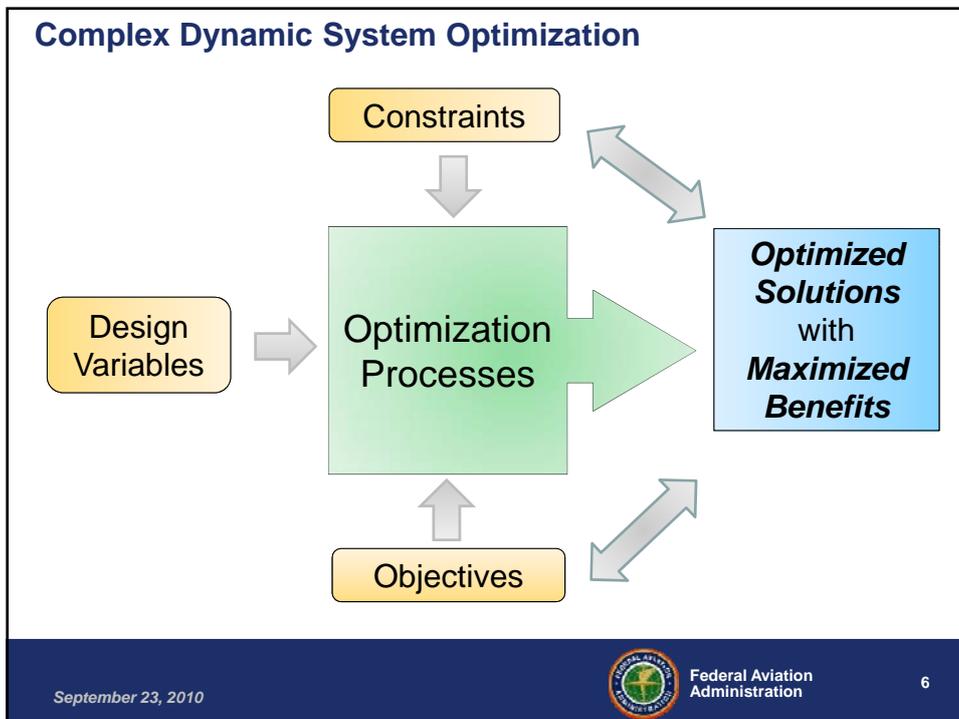
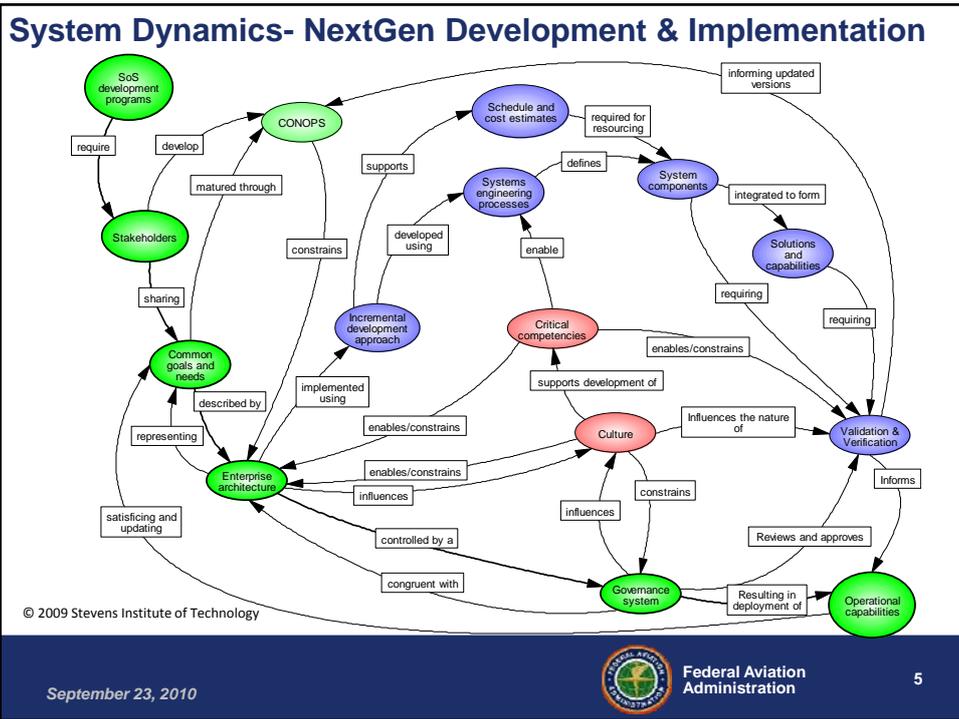
Simplified NAS

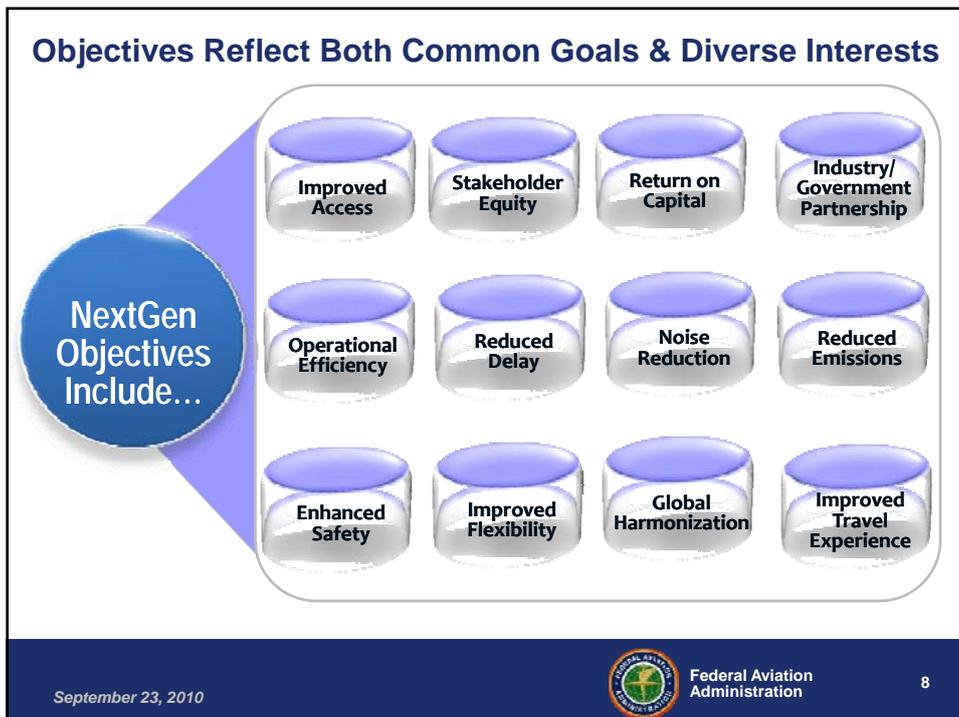
NextGen Facilities

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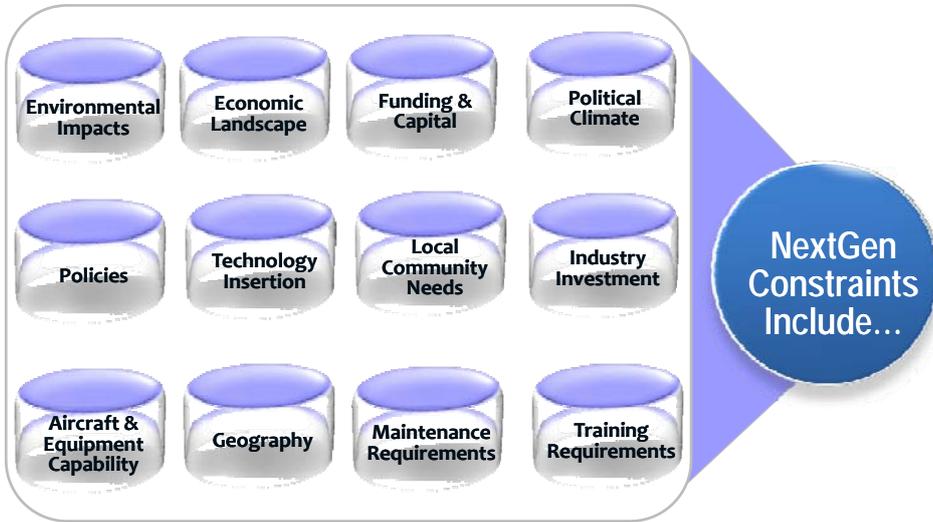
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Constraints Also Reflect Diverse Factors



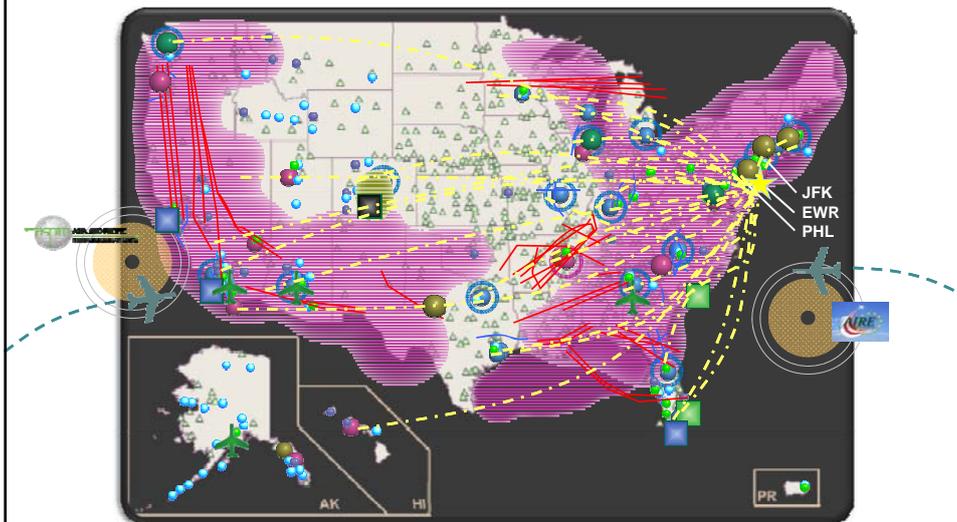
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NextGen Implementation is Advancing

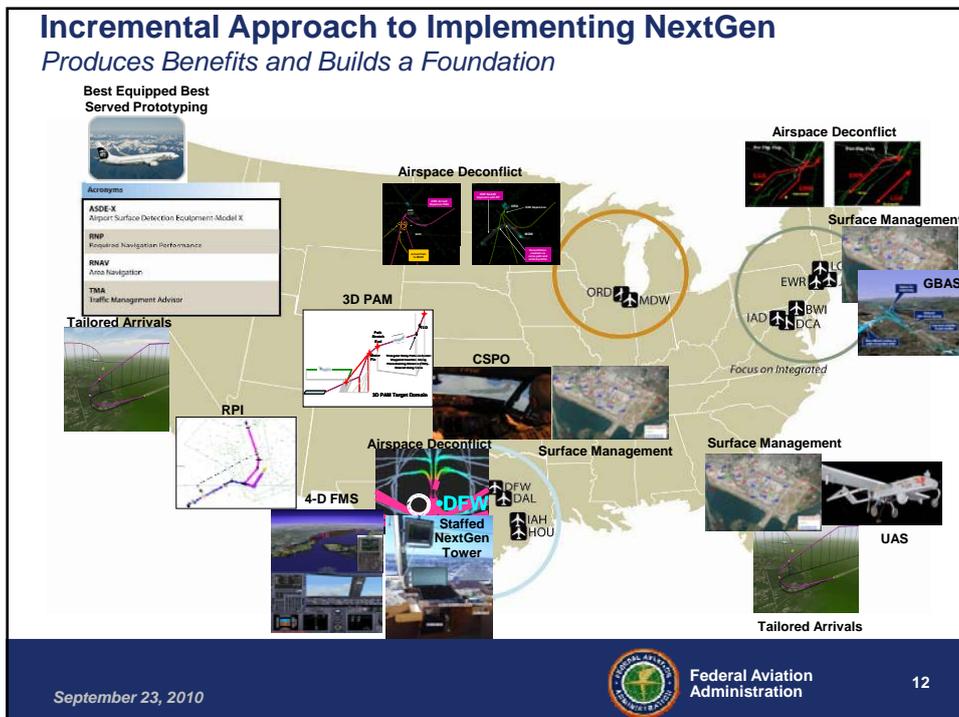
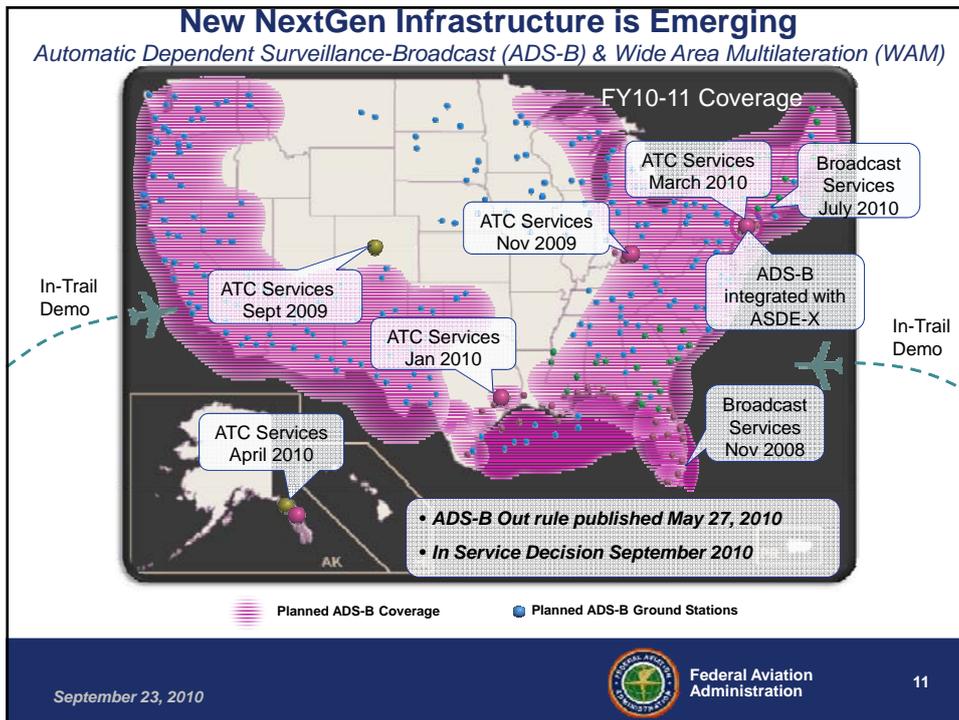


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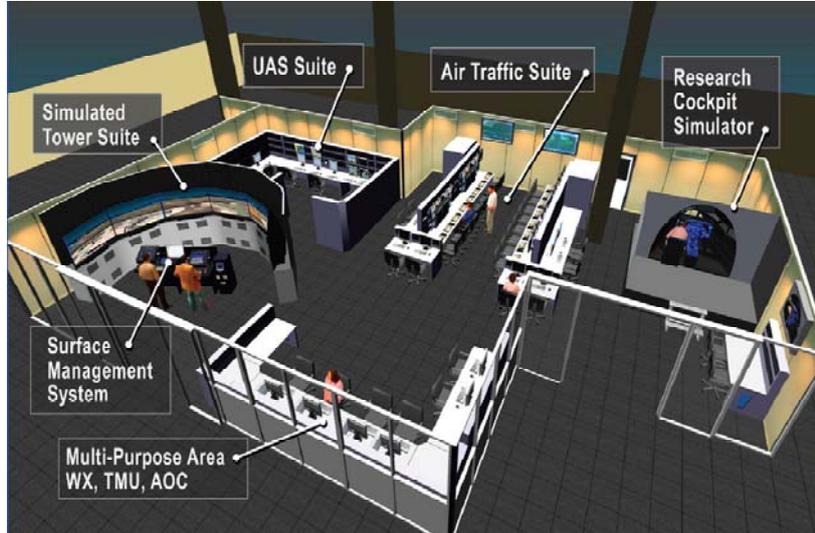
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New NextGen Integration and Evaluation Capability (NIEC)

Allows Early Exploration & Assessment of Integrated System Dynamics & Interfaces



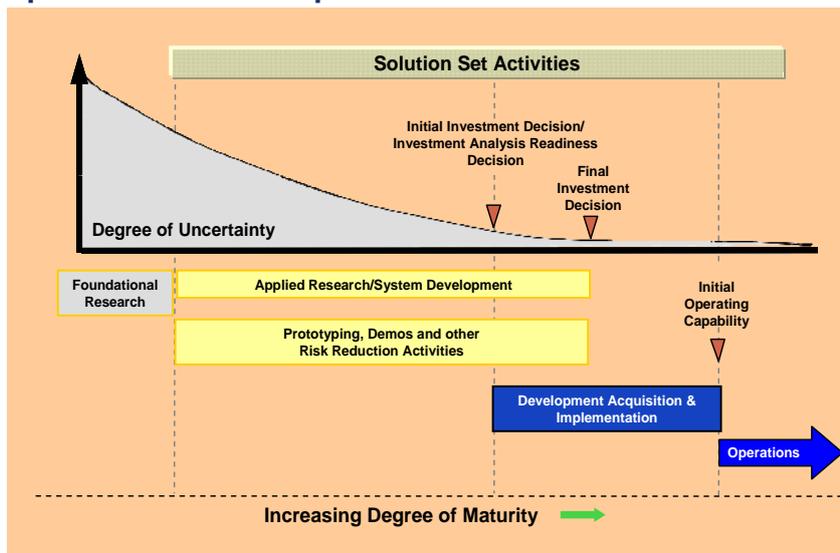
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NextGen Work Plan Matures Capabilities for Implementation and Operational Benefit



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NextGen Benefits

Significant Public Benefits & Improved Passenger Experience



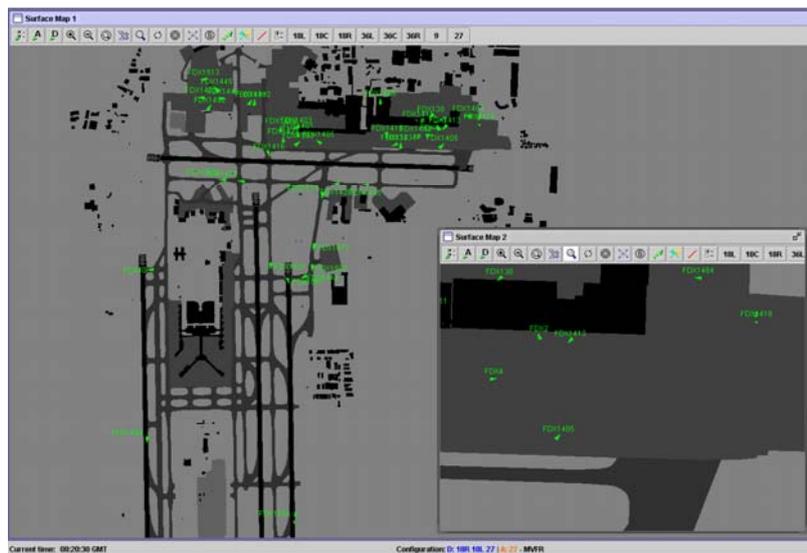
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Surface Traffic Management - Ripe for Optimization



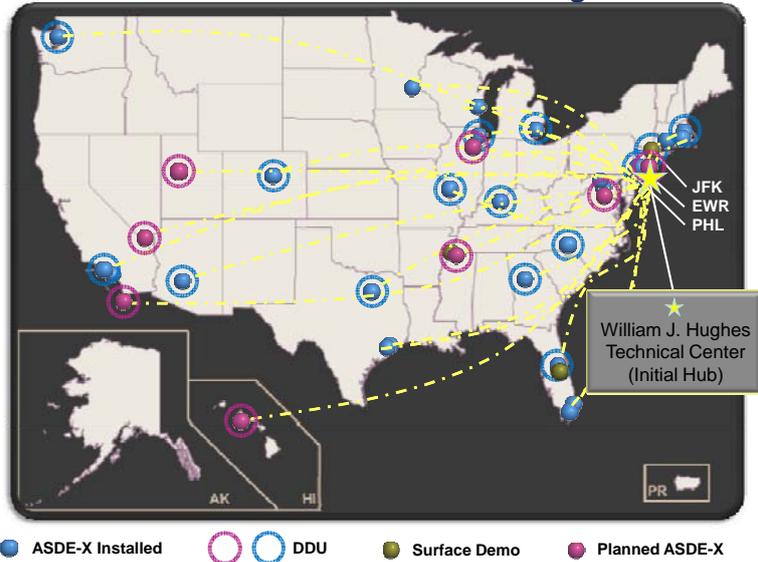
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Nationwide Data Dissemination Infrastructure Enables Surface Data Sharing



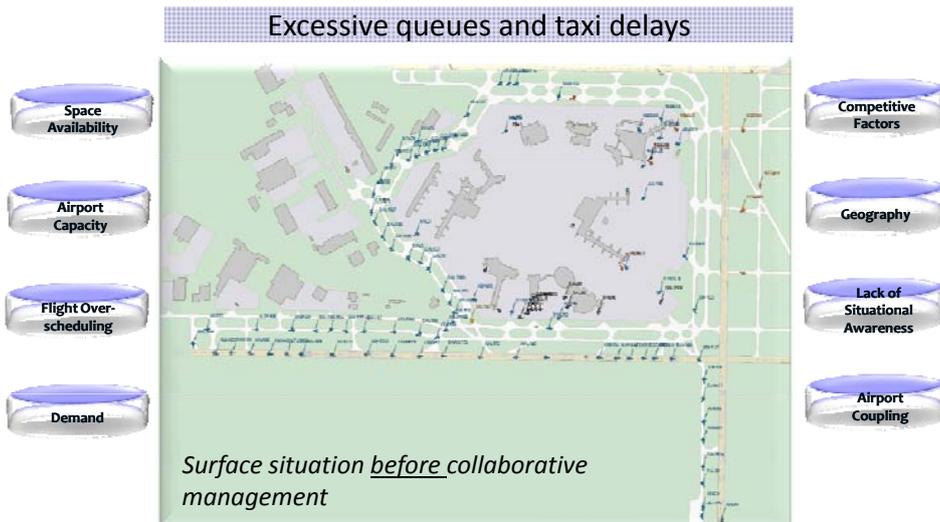
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Constraints & Operational Practices Led to Inordinate Delays at New York JFK



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Collaborative Departure Management

JFK Runway 31L/13R closed for reconstruction March 1 through June 28, 2010



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Collaborative Departure Management

Effective Optimization in Real Time by Operators, Airport Authority & FAA

Successful new management framework built upon NextGen concepts & technologies

Benefits

1. Reduced delays
2. Reduced fuel consumption
3. Reduced CO2 emissions
4. Improved passenger experience



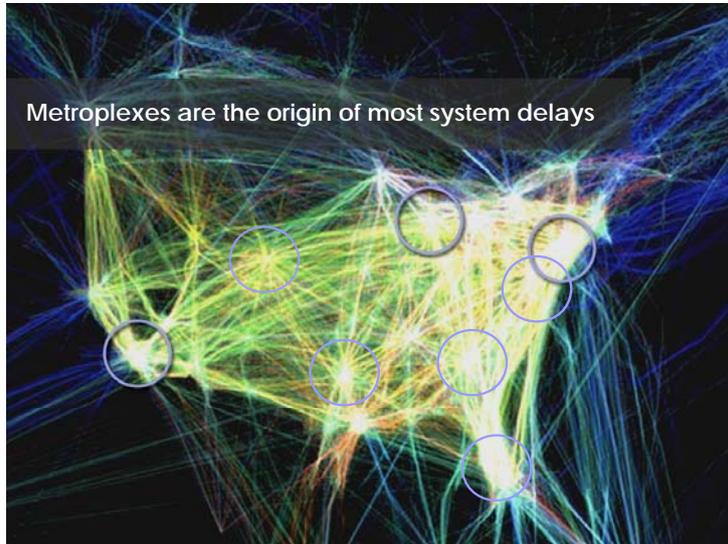
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Optimization Utilizing Metroplex Integrated Airspace and Procedures



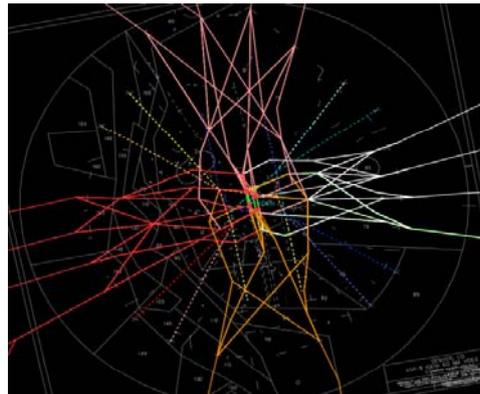
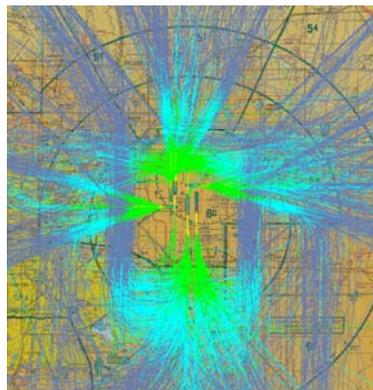
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Power of Performance-Based Navigation – a Key Tool to Optimize the Use of Airspace



Increased:

- Efficiency
- Predictability
- Utilization

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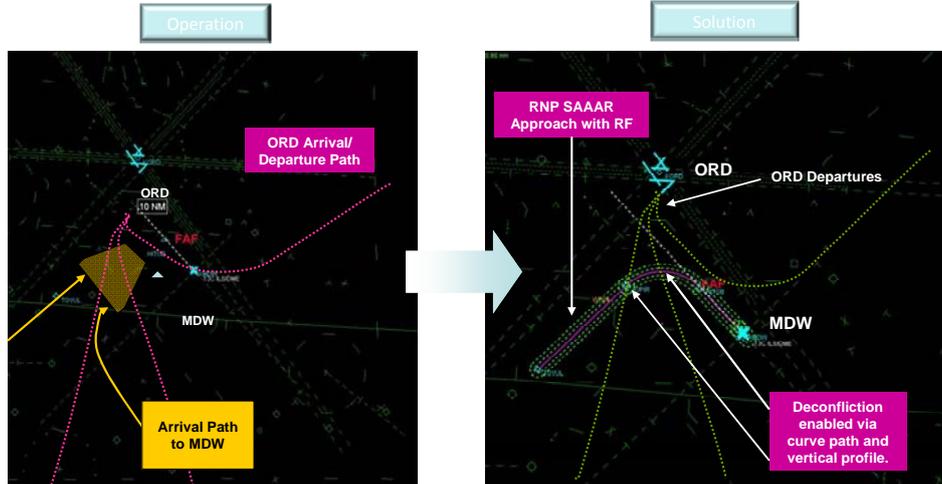


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Example of Metroplex Optimization

De-conflicting O'Hare & Midway Enables Greater Efficiency and Access



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FAA Implementing NextGen with Practical Optimization Approach



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NextGen Benefits

Significant Public Benefits & Improved Passenger Experience



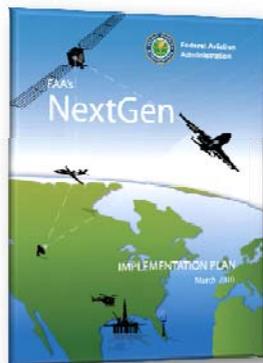
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Resources Available to Stay Informed



Next Gen Implementation Plan Summarizes:

- Target for NextGen - 2018
- Work accomplished
- NextGen benefits
- FAA's work plan through 2015

www.faa.gov/nextgen



Online:

- Overviews
- News
- Videos
- NextGen Documents
- And more...

Interactive Flash Map:

- NextGen Deployments
- NextGen Demos
- And more...

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