

A nighttime photograph of an airport terminal and control tower. The control tower is illuminated and stands prominently in the upper center. The terminal building below is also lit up, with many windows glowing. The sky is a deep blue, and the overall scene is a busy airport at night.

# Industry Perspective on Enterprise Architecture

**2009 FAA Enterprise Architecture Conference**

**Sid Rudolph**  
**Director, Civil and Aviation Solutions Architecture**  
**Lockheed Martin – IS&GS**  
**June 23, 2009**

# Enterprise Architecture Considerations ...

National Airspace System  
Capital Investment Plan  
FY2010-2014

**Informs Business  
Planning &  
Investments**



Federal Aviation  
Administration



**Data Comm**

**ADS-B**

**Decision Support Tools**

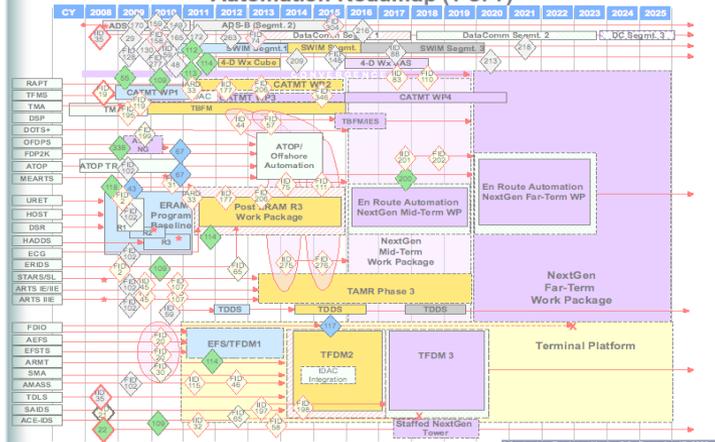
**SWIM**

**Accelerating NextGen Provides  
Near-Term Benefits in 2008, 2009**



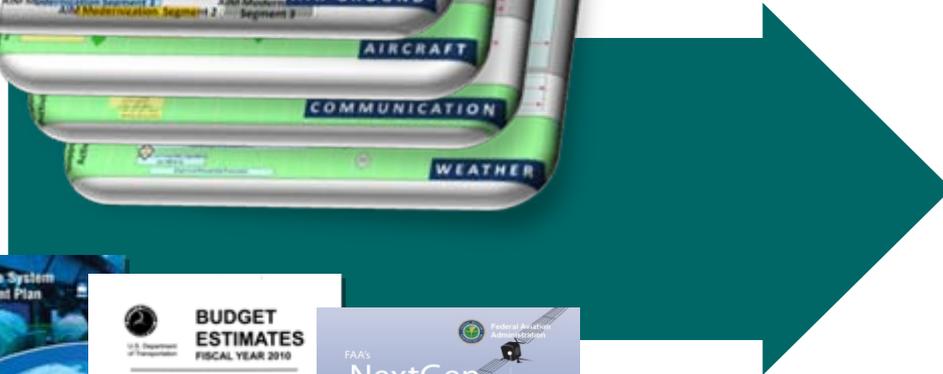
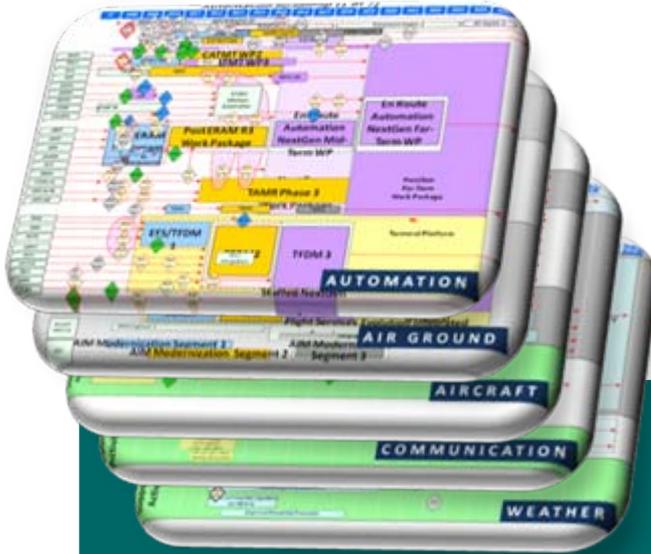
Federal Aviation  
Administration

**Automation Roadmap (1 of 7)**

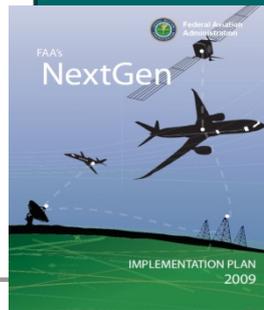
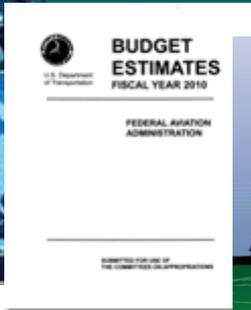
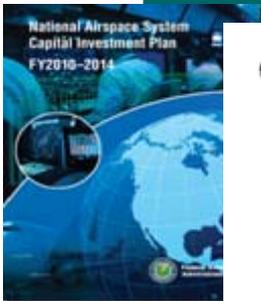


Information Systems Management 3.0 - December 17, 2008

# Informs Business Planning and Investments



**Industry Business  
Planning and  
Investments**



# Enterprise Architecture Considerations ...

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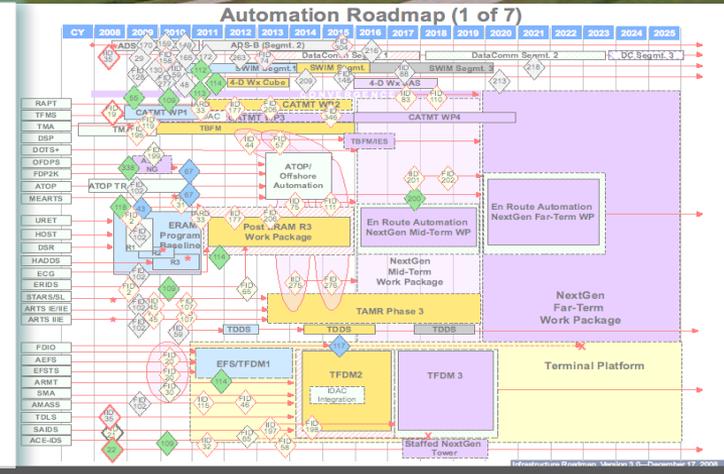
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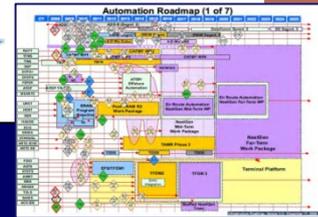
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**Guides Government -  
Industry Collaborative  
Efforts**

Federal Aviation  
Administration



# Guides Government-Industry Collaborative Efforts



## High Density Airports

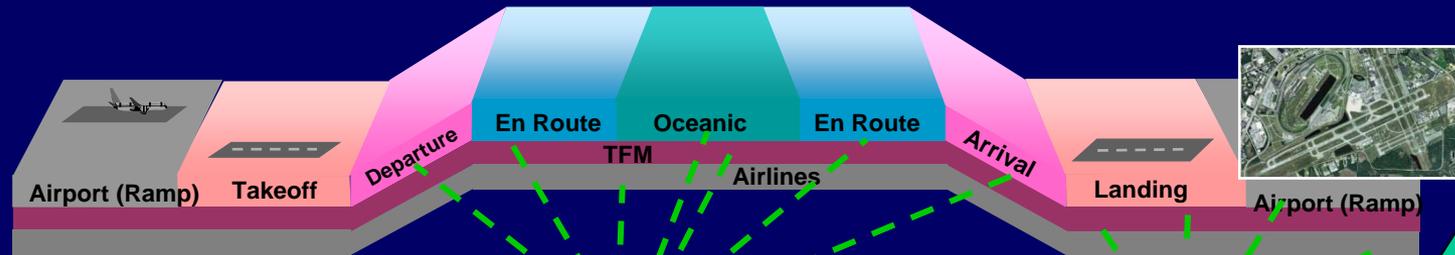
- Initial Surface Traffic Management

## Trajectory-Based Ops

- 4D Trajectory Management
- Time-Based Metering

## Flexible Terminals & Facilities

- Full Surface Situation Info
- Runway Safety Alerting
- Tower Data Link Taxi Clearance
- Wind and Wake Procedures



We must enable broad access to A/P Info!!

SWIM Enabled

## Reduce Weather Impact

- Trajectory-Based Weather Impact Evaluation

## Collaborative ATM

- Flight Plan Constraint Evaluation

*Integrated Airport Builds on the FAA's NextGen Implementation Plan & EA*





# Enterprise Architecture Considerations ...

**National Airspace System Capital Investment Plan FY2010-2014**  
**Informs Business Planning & Investments**

**Data Com Influences Industry Research and Development ADS-B**  
**Decision Support Tools SWIM**

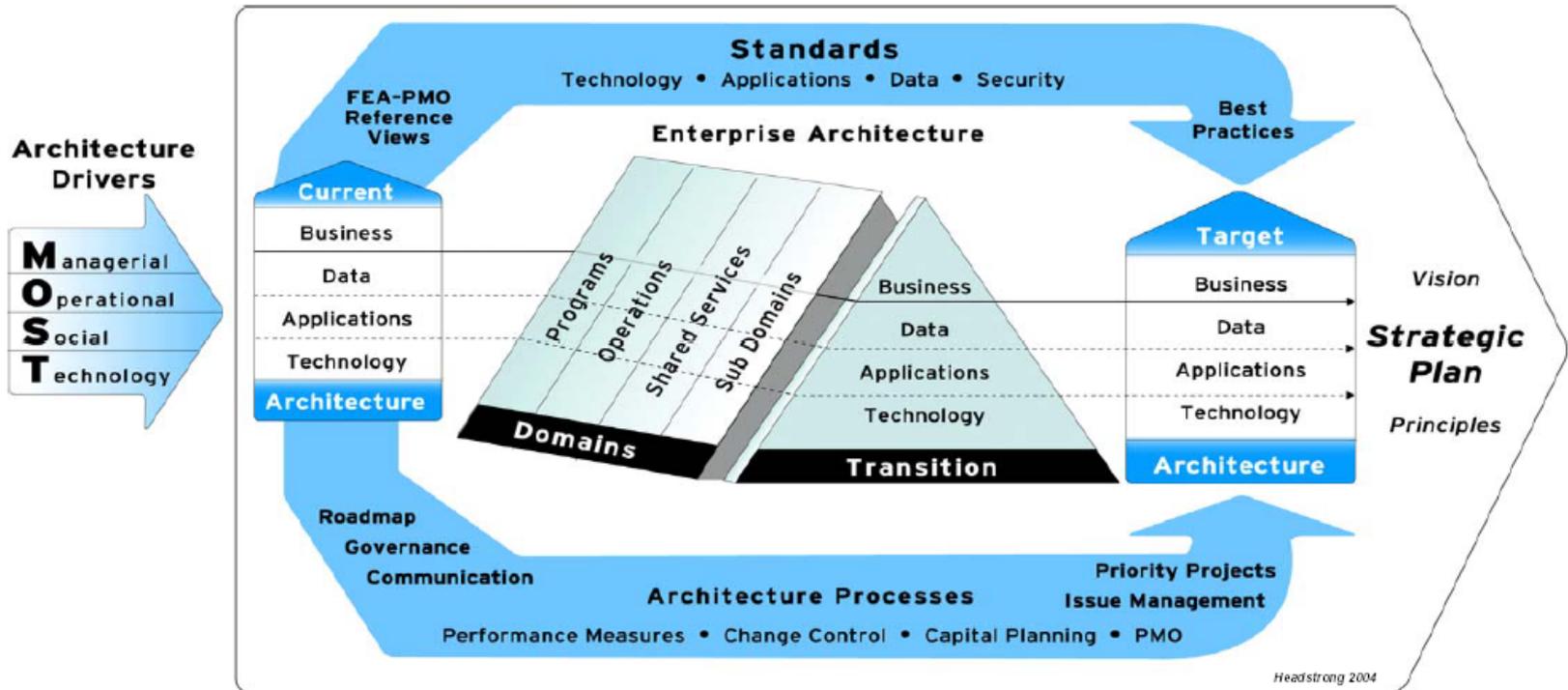
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**Automation Roadmap (1 of 7)**  
**Communicates NextGen Direction and Facilitates Aviation Industry Dialogue**

# **Communicates NextGen Direction**

- **Substantial Progress is Underway to Link with ...**
  - **Infrastructure and service roadmaps**
  - **Nextgen Implementation and Financial Planning**
  - **Supporting Activities (R&D, Demonstrations, Ops Trials)**
  
- **Other Areas of Consideration**
  - **Make Operational Views and Concepts Available**
  - **Cross Domain SWIM**
  - **Role of Flight Data Object and Trajectory Synchronization Across Domains**
  - **Opportunities for Reuse and Convergence**

# Enterprise Architecture Frameworks



Derived from the Practical Guide to Federal Enterprise Architecture, January 2001

## EA Program Planning

- Program Plan
- Roadmap
- Strategic Visioning
- Framework
- Tools

## Current Architecture Assessment

- Baseline EA Products
- Link Relationships
- Publish Baseline
- Validate Baseline

## Target Architecture Definition

- Business & Technology Drivers
- Target EA Products
- Map to Federal Reference Models

## Transition Planning

- Gap Analysis
- Transition Initiatives
- PMO
- Portfolio Management

## EA Process, Methods & Tools

- Governance
- Capital Mgmt.
- Communications
- Tool Integration
- Metrics
- Asset Mgmt.