System Engineering Challenges & Opportunities in Delivering NextGen Capabilities

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Why do we need NextGen?

• 5,000 Planes in air at any time
• 1 Billion passengers per year
• More than 10 Million jobs
• More than 5% of GDP
# NextGen – A Transformation

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NextGen Operations Focused on Phase of Flight

Cross-Cutting Factors
- Environmental
- Safety
- Information Security
- Economic
- International
- Regulation

Enablers
- People
- Procedures
- Technology
- Data/Information
- Policy

Legend:
- Private Sector
- FAA (USG)
- Local entities

Domain

Time

Location
Complexity of Achieving Stakeholder Synergies

Right place, right time, right abilities!
NextGen Operations Focused on Operational Locations

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NextGen Complexity

- ADS-B
- SWIM
- DATA COMM
- Equipage
- NNEW
- NVS
- NextGen Facilities
- Automation Improvements
- RNAV/RNP

Just like real estate – It’s all about integration, integration, integration!
Questions?

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For more details visit www.faa.gov/nextgen