

Weather Conference

NextGen Concept of Operations

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NextGen Transformation

From...  *To...*

Ground-based Navigation and Surveillance

Voice Radio Control

Disconnected Information Systems

Human-centric Air Traffic Control

Fragmented Weather Forecasting

Visibility Limited Airfield Parameters

Forensic Safety System

Inefficient security screening

Current aircraft environmental footprint

Satellite-based Navigation and Surveillance

Digital Data Exchange

Net-Centric Information Access

Automation Assisted Air Traffic Management

Integrated Probabilistic Weather Forecasting

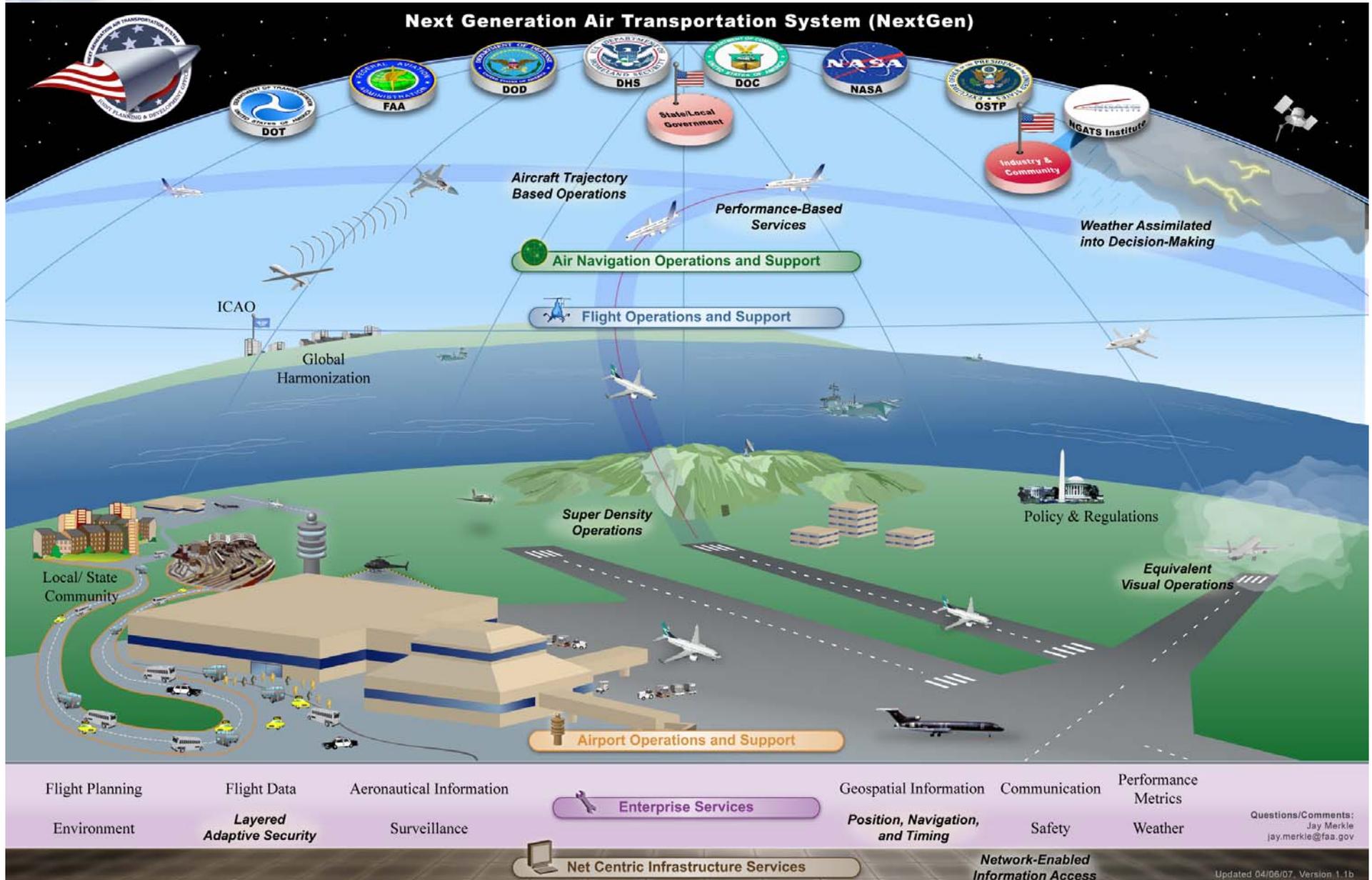
“Equivalent Visual” Operations

Prognostic Safety System

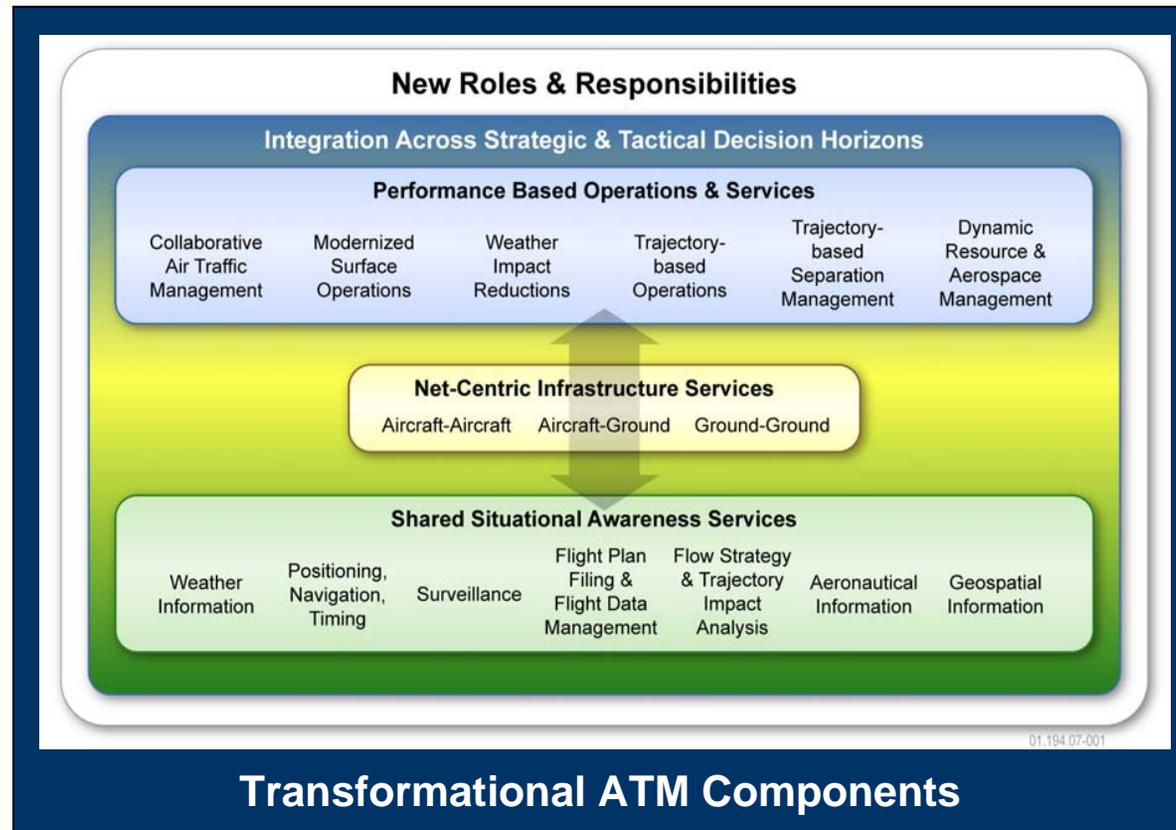
Integrated Security Risk Management

Much reduced aircraft environmental footprint

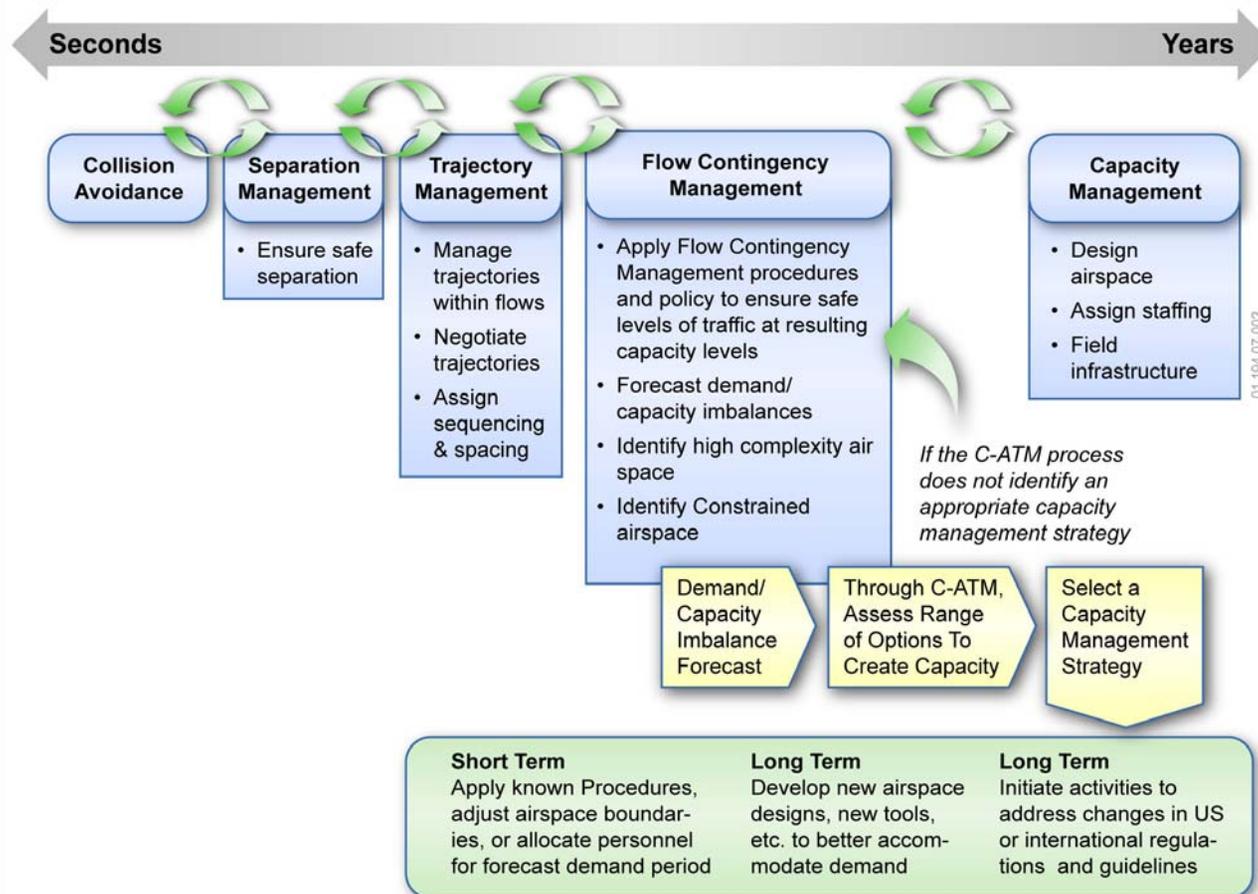
High Level Concept Graphic



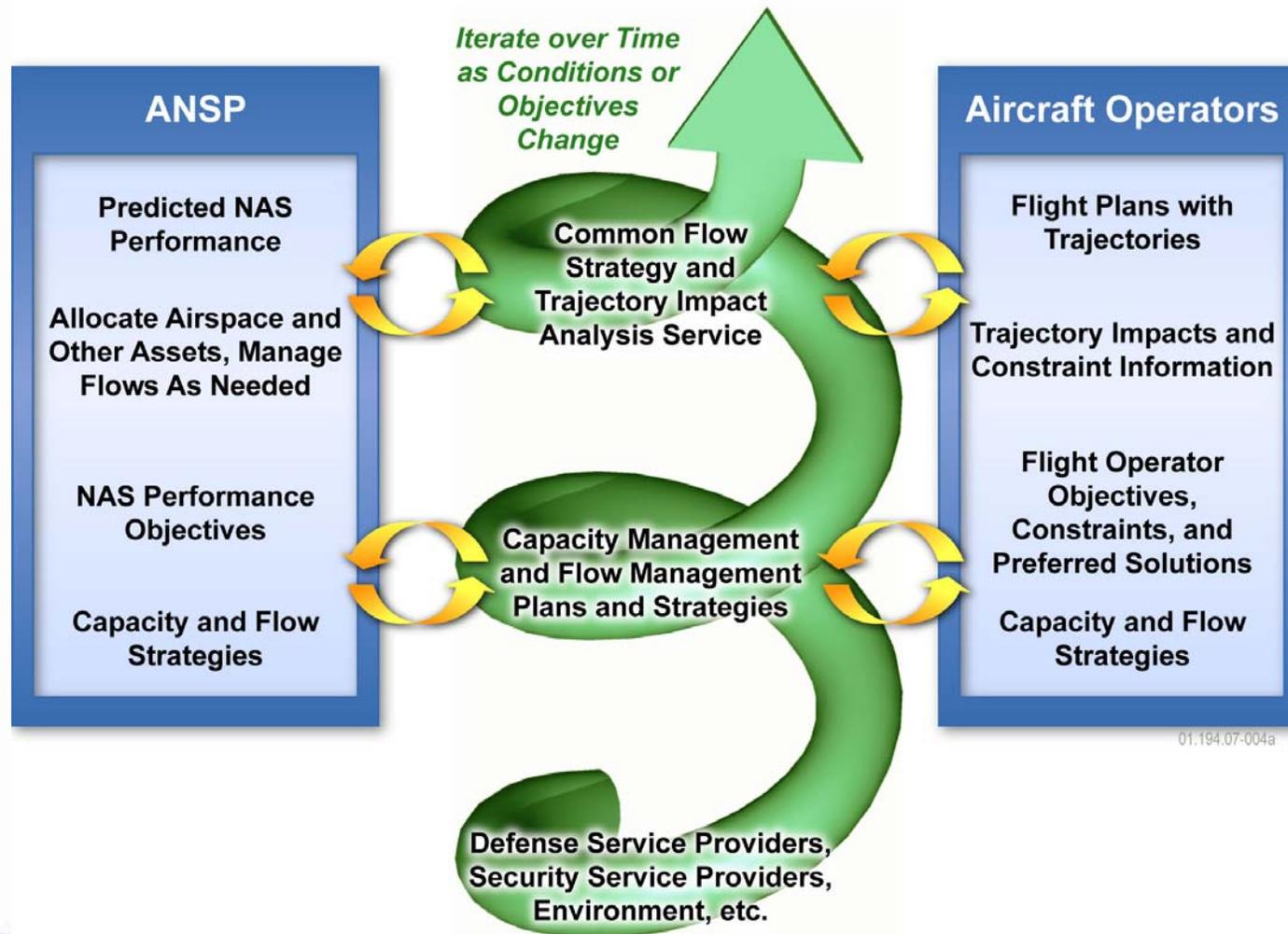
System-Wide Transformation – The Key is “Transformation”



ATM Decisions—Interactive and Integrated Across Time Horizons



Collaborative ATM Among ANSP & Operators



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Highlights

- Single Authoritative Source
- Enabled by Net Centric Operations/SWIM
 - Infrastructure progressing
 - “Wx Integrated into Decision Making” applications lagging





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Weather Operational Node Connectivity Diagram (Operational View – 2)

