

NextGen Update

April 2015

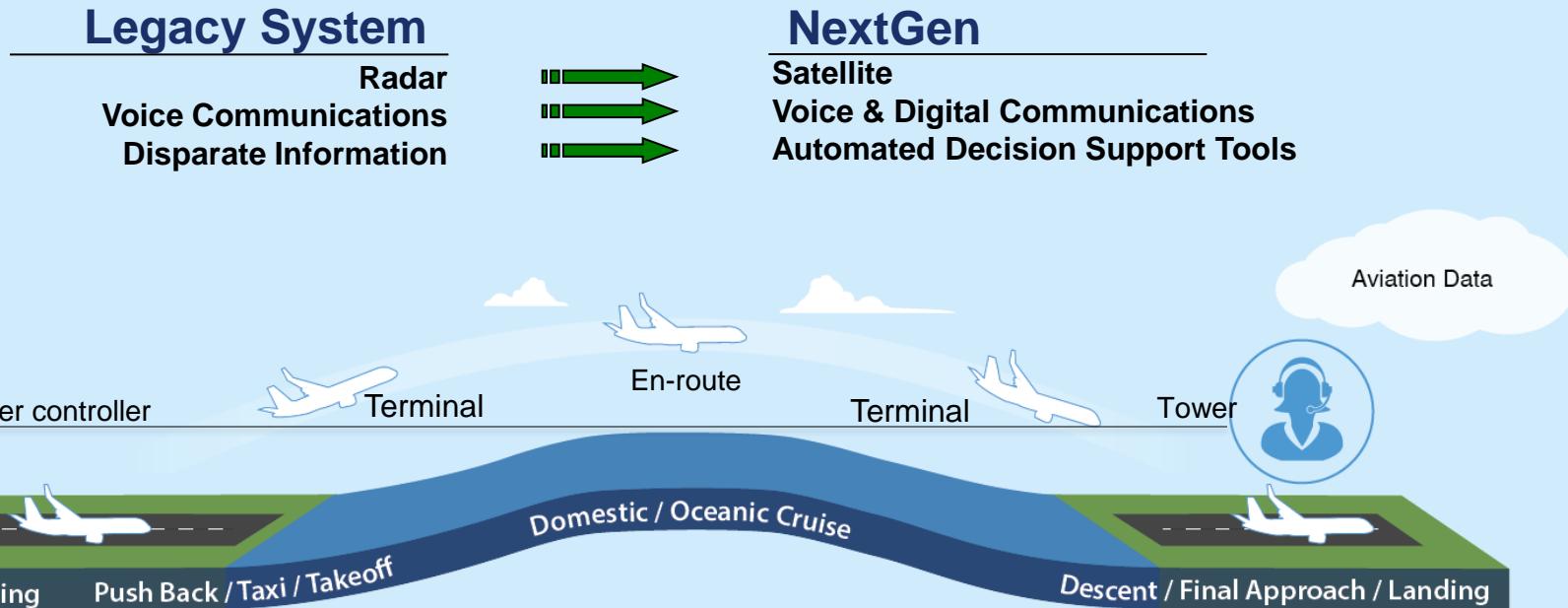


Aeronautics and Space Engineering Board

Presented by

Edward L. Bolton, Jr.
Assistant Administrator for NextGen
Federal Aviation Administration

Delivering Major NextGen Investments



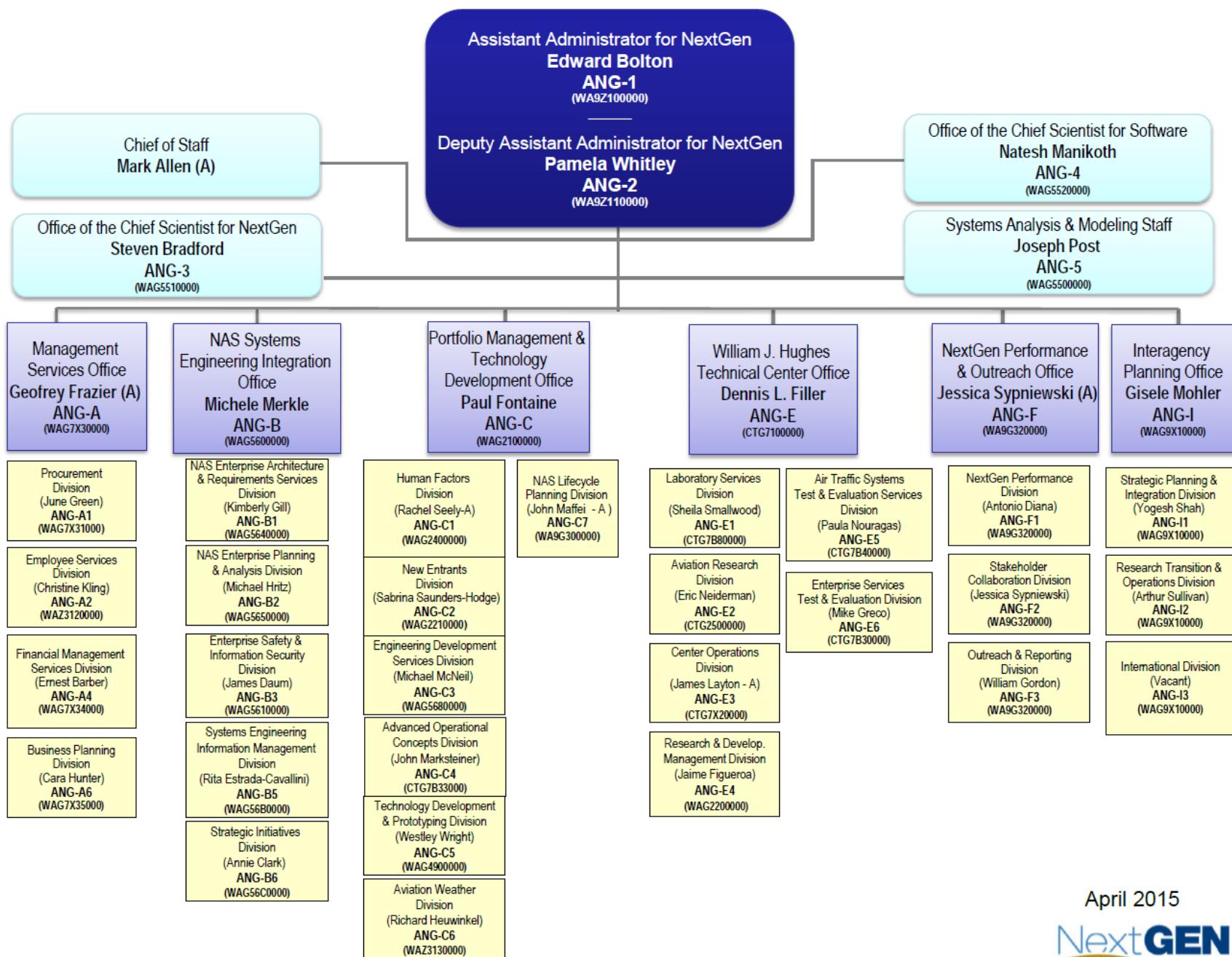
NextGen

Automatic Dependent Surveillance-Broadcast (ADS-B), System Wide Information Management (SWIM), Data Communications, National Airspace System (NAS) Voice System (NVS), Terminal Flight Data Manager (TFDM)

Foundational

En Route Automation Modernization (ERAM)

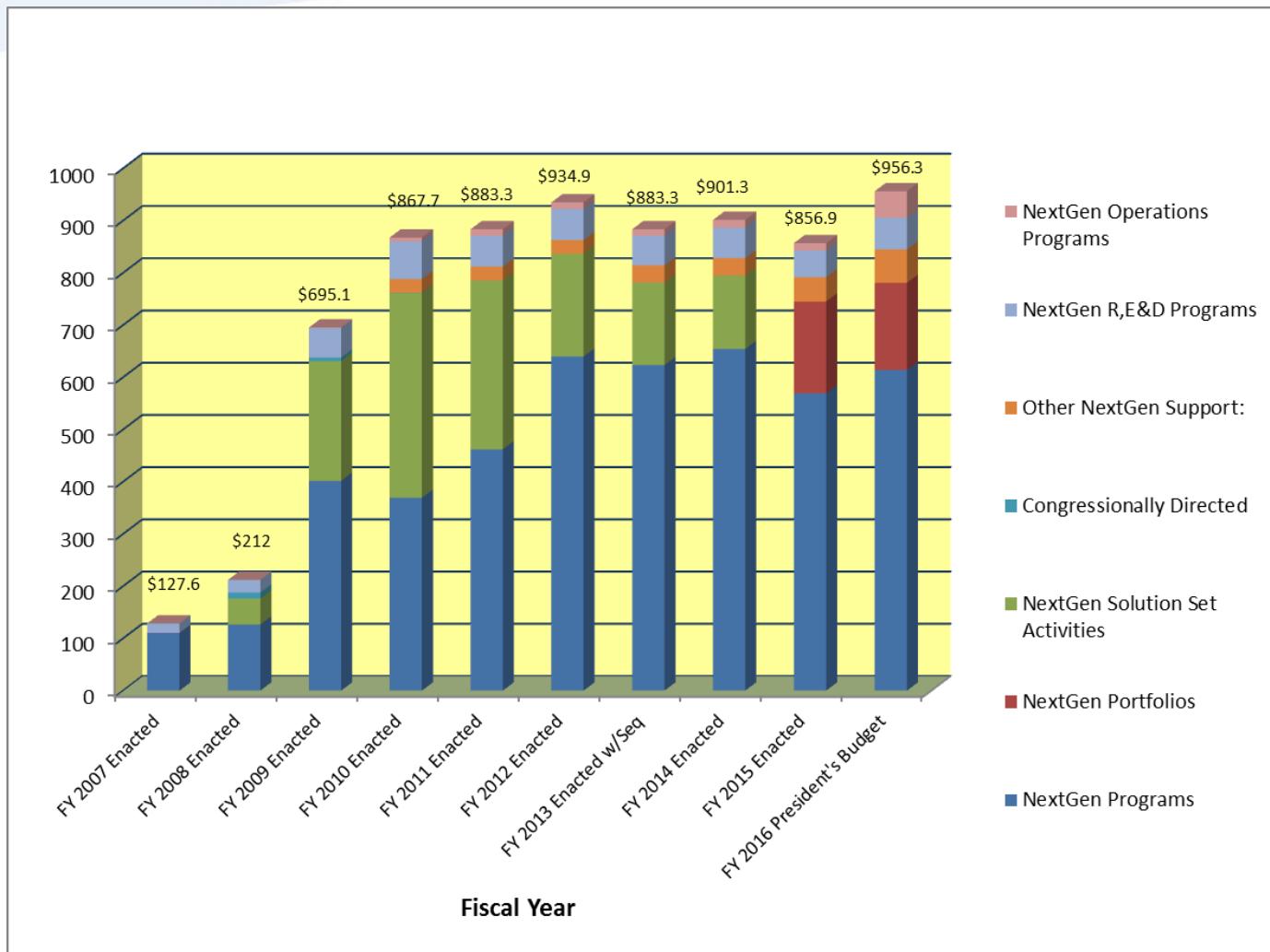
Terminal Automation Modernization/Replacement (TAMR)



April 2015

NextGEN

NextGen Budget Profile (FY 2007 – FY 2016)

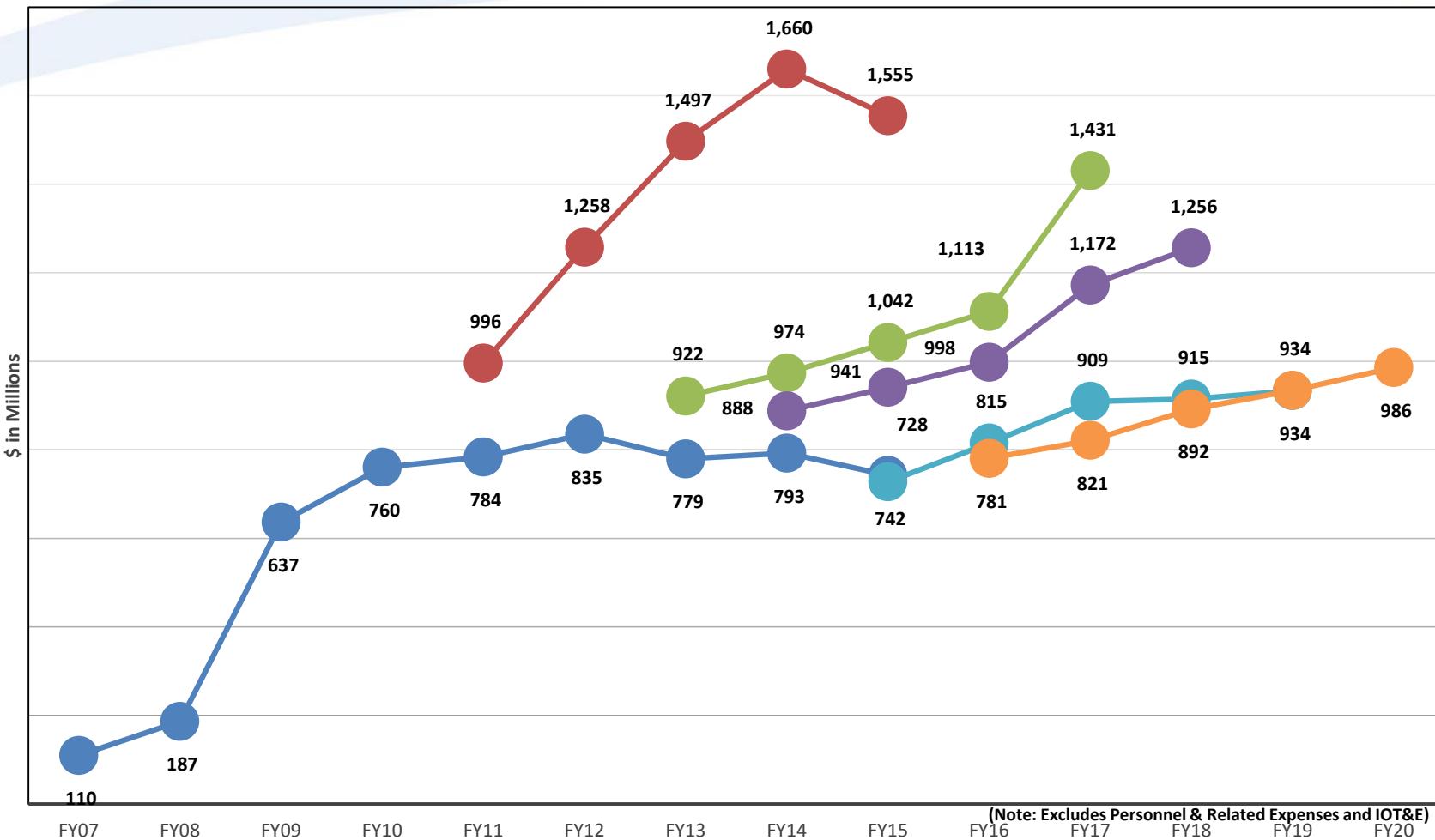


FAA

NextGEN

NextGen Facilities and Equipment

Funding Levels included in Capital Investment Plan (CIP)*



*Projection based on 2015 version of the FAA Capital Investment Plan



Enacted Funding Levels

FY11 CIP 5-Yr Plan

FY13 CIP 5-Yr Plan

FY14 CIP 5-Yr Plan

FY15 CIP 5-Yr Plan

FY16 CIP 5-Yr Plan

NextGen Program Assessments

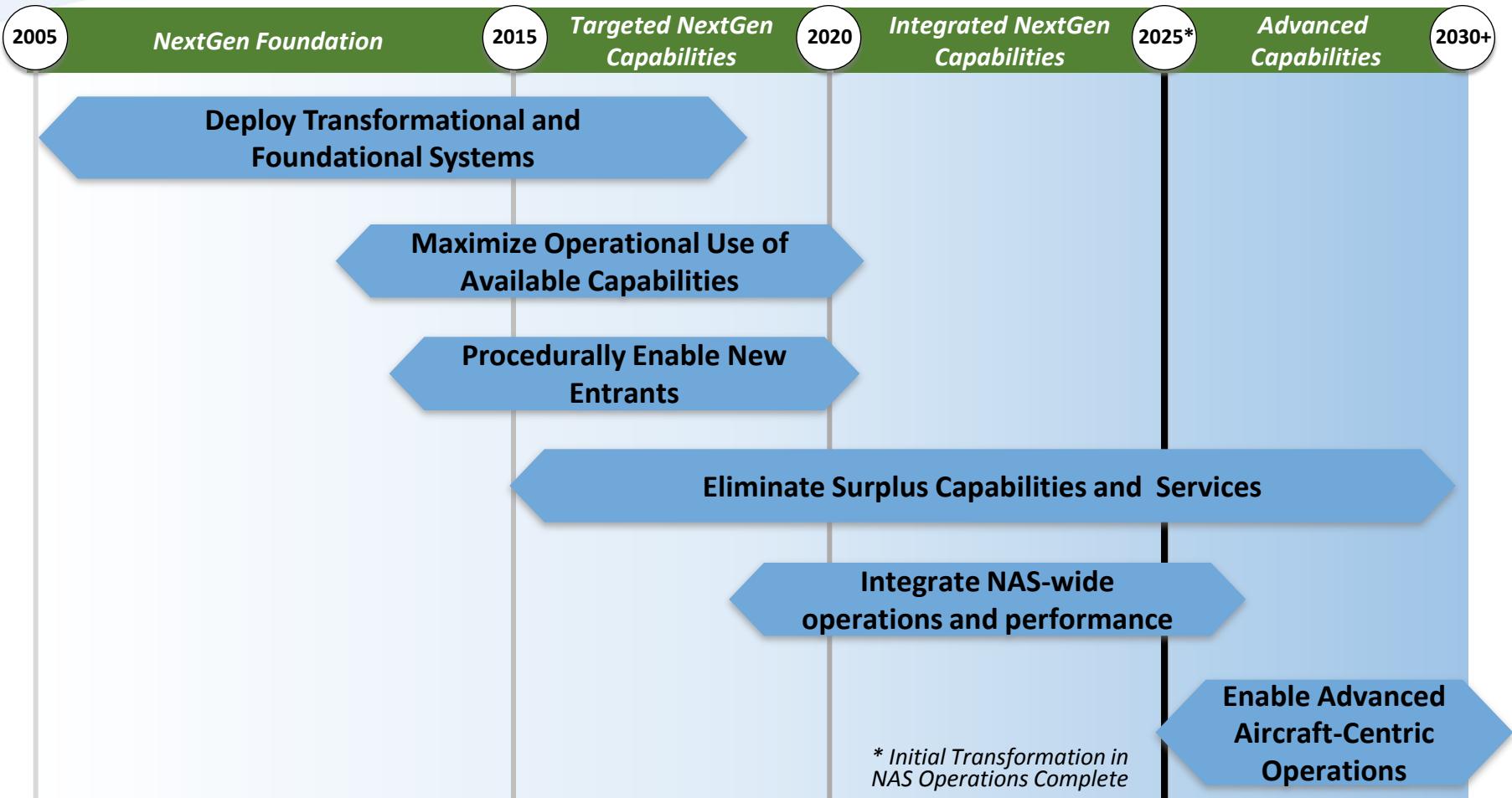
The image displays five distinct documents and logos arranged in a collage, all related to the NextGen program:

- MITRE** document: "NextGen Independent Assessment and Recommendations" dated October 2014. It includes the MITRE logo and the Federal Aviation Administration logo. The document is a white report with blue text and graphics.
- Federal Aviation Administration** document: "NEXTGEN PRIORITIES JOINT IMPLEMENTATION PLAN" dated December 22, 2014. It features the NextGEN logo and the Federal Aviation Administration logo. The document is a white report with blue text and graphics.
- Federal Aviation Administration** document: "OIG Analysis" dated August 2014. It features the NextGEN logo and the Federal Aviation Administration logo. The document is a white report with blue text and graphics.
- RTCA** document: "Approved by the NextGen Advisory Committee October 2014" for the "NextGen Integration Working Group Final Report". It includes the RTCA logo and the Federal Aviation Administration logo. The document is a white report with blue text and graphics.
- FAA** document: "NextGen benefits evaluation: McKinsey Study" dated December 22, 2014. It features the NextGEN logo and the Federal Aviation Administration logo. The document is a white report with blue text and graphics.

Logos for **FAA** and **NextGEN** are also present at the bottom of the collage.

Building a Sustainable NAS for All

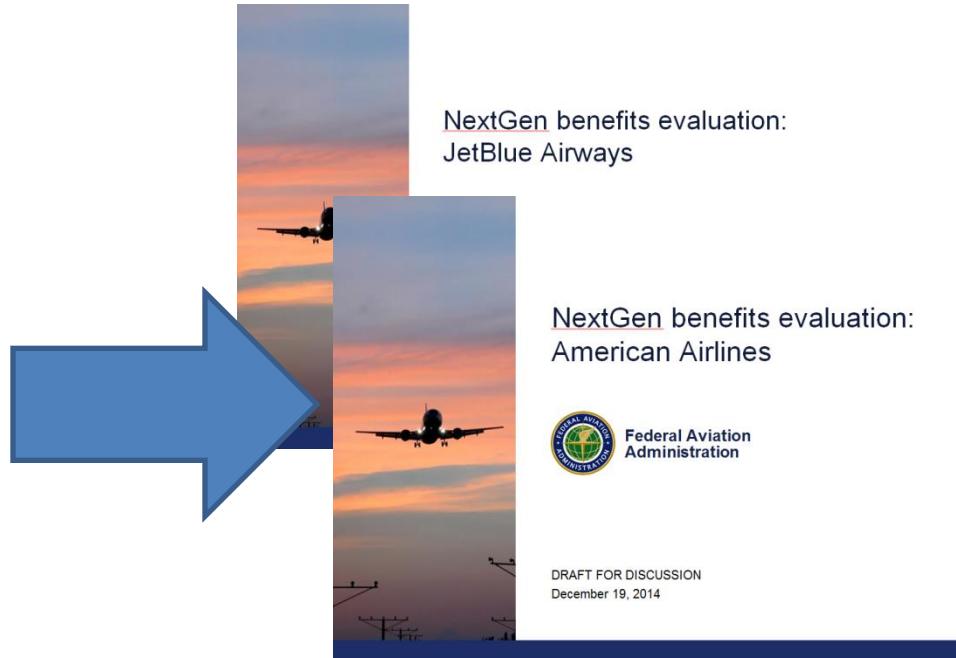
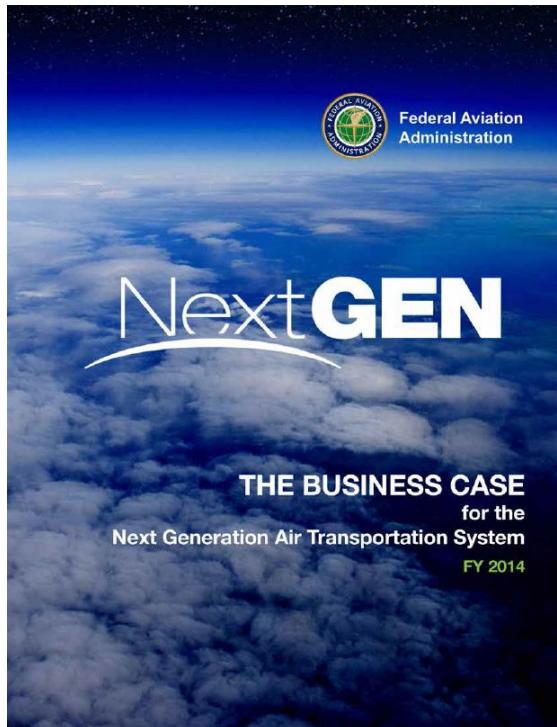
Focus Shifts Over Time



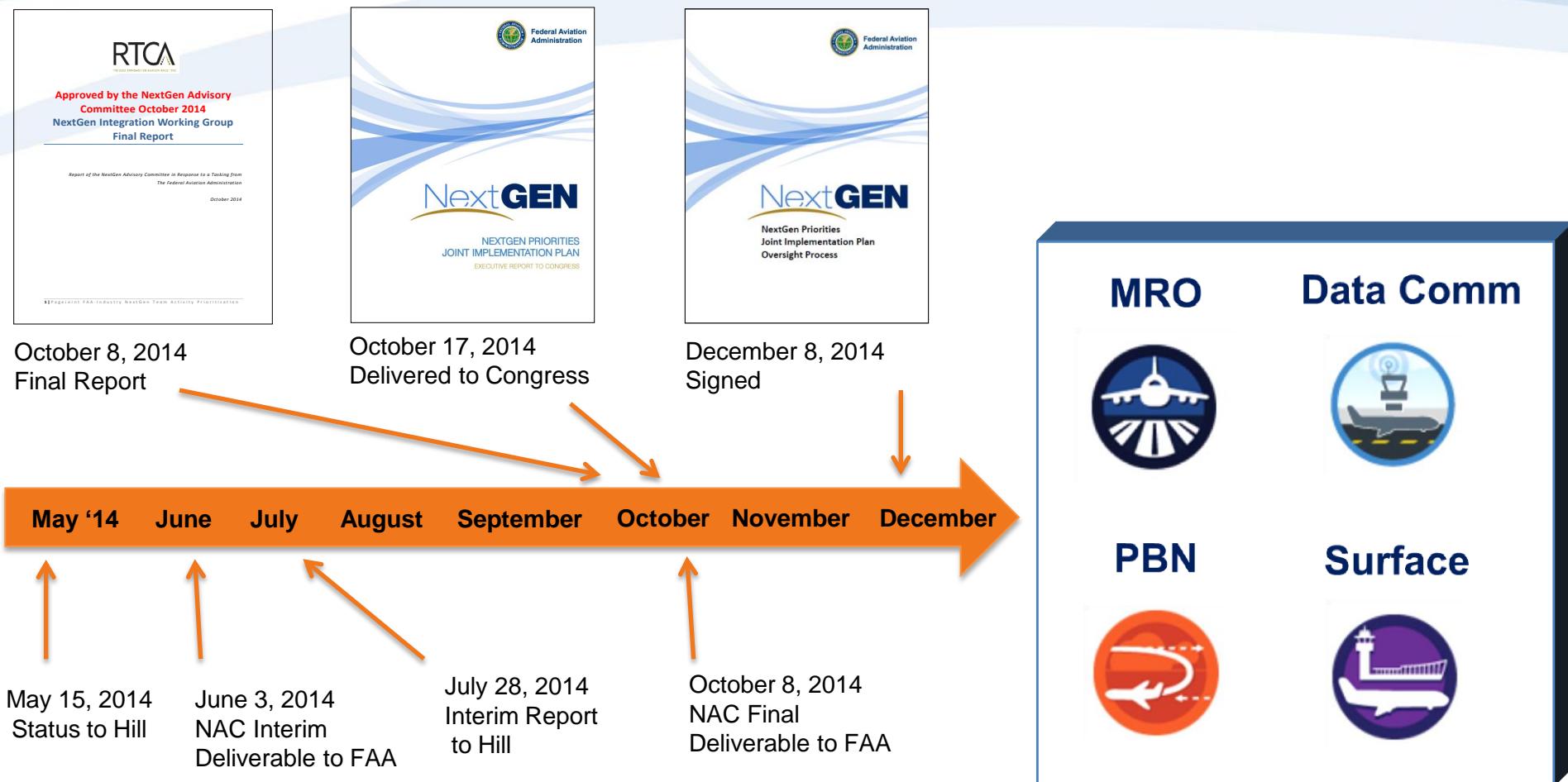
NextGen Benefits

(aka McKinsey Study)

- McKinsey/FAA team developed NextGen business cases tailored to each major U.S. carrier
- Derived from and consistent with overall NextGen Business Case



NextGen Priorities



NextGen Regional Benefits: Metroplex

Metroplex	Projected Annual Benefits		
	Fuel Savings (Gallons of fuel in millions)	Value of Fuel Savings (Fuel costs in millions)	Carbon Savings (Metric tons of carbon in thousands)
Houston*	3	\$9.20	31
North Texas	4.1	\$10.30	41
Northern California	2.3	\$6.50	23
D.C.	2.5	\$6.40	25
Atlanta	2.9	\$8.30	30
Charlotte	3.7	\$10.20	35
Southern California	3.4	\$10.10	34
Cleveland/Detroit	3.7	\$11.3	38.9
Phoenix	2	\$6.00	19
Denver	0.7	\$2.80	6.9
South/Central Florida	7.7	\$23.0	79.5
Total:	11	36	104.1
			363.5

Metroplexes listed in order of project phase completion

NextGen Priorities depicted in **green**. * Final number of procedures not determined.

NextGen Regional Benefits: Wake RECAT

Airport Name	Airport ID	Date Implemented	Study Completed	Observed Benefits			
				Avg. Taxi Time Savings (min)	Avg. Flight Time Savings (min)	Increase in Throughput	Estimated Annual Savings to Operators
Memphis	MEM	November 2012	Yes	0.9	0.7	3 - 5 %	\$ 5 million
Louisville	SDF	September 2013	Yes	0.6	--	3 - 5 %	\$ 1 million
Cincinnati	CVG	March 2014					
Atlanta	ATL	June 2014	Yes	1.1 - 1.6	0.5	4 - 5 %	\$17 million - \$24 million
Houston Intercontinental	IAH	December 2014					
Houston Hobby	HOU	December 2014					
NY Kennedy	JFK	March 2015					
NY LaGuardia	LGA	March 2015					
Newark	EWR	March 2015					
Charlotte	CLT	March 2015					
Total:							\$23 million - \$30 million

Drivers of Our Future

Ongoing Progress

- Executing Programs
- Delivering Capabilities

Emerging Challenges

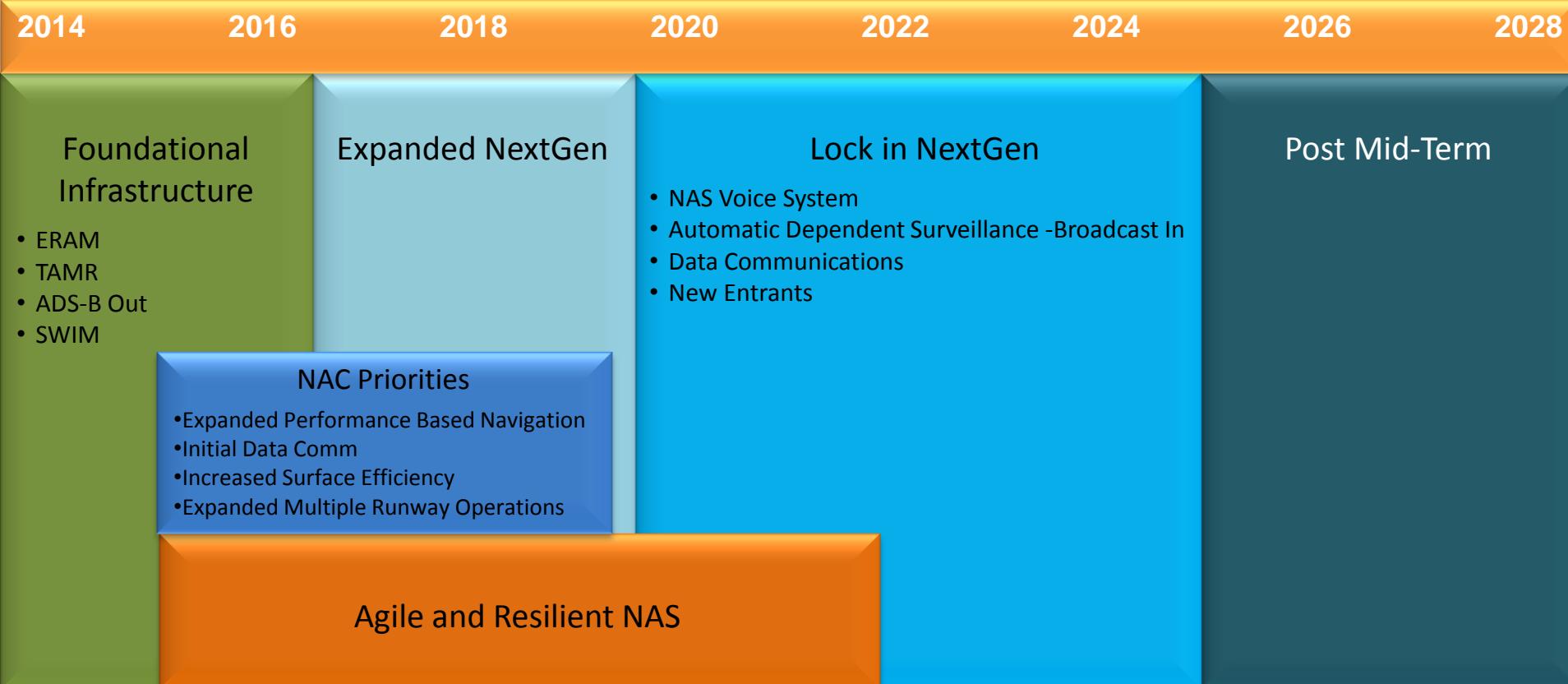
- New Entrants (Commercial Space, Unmanned Aircraft Systems)
- Cybersecurity
- International
- Interagency Planning Office
- Equipage
- Fiscal Uncertainty

Lessons Learned

- MITRE Report
- OIG Study
- DIG Report
- NAC Report
- 30-Day Report (Chicago Fire)
- Budget Process Review



Building the Future



NextGEN



FAA