The Effect of Adopting the Next Generation Air Transportation System on Air Travel Performance

Online Appendix A: Grandfather FAA Websites

Ziyan Chu
Yale School of the Environment

Yichen Christy Zhou
Clemson University

March 2023

Index of the Grandfathered FAA Webpages

NextGen

- What is NextGen?
- NextGen Advisory Committee
- How NextGen Works
- General Aviation
- Working Together
- Where We Are Now
- Where We Are Headed
- NextGen by the Numbers
- NextGen Near You
- Equip ADS-B
- Library
- Frequently Asked Questions
- Performance Snapshots
- NextGen Programs

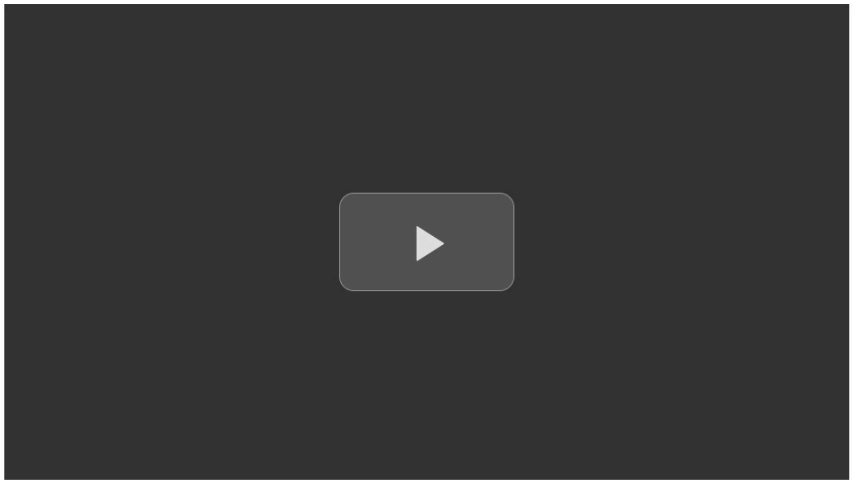
FAA Home ▸ NextGen ▸ What is NextGen?

What is NextGen?

NextGen is the FAA-led modernization of our nation's air transportation system. Its goal is to increase the safety, efficiency, capacity, predictability, and resiliency of American aviation. This overhaul brings together innovative technologies, capabilities, and procedures that improve how we fly from departure to arrival.

Airlines, general aviation operators, pilots, and air traffic controllers gain better information and tools that help passengers and cargo arrive at their destinations more quickly, while aircraft consume less fuel and produce fewer emissions. This transformation is being achieved through an ongoing rollout of improvements which began in 2007. NextGen remains on target to have all major components in place by 2025.

The modernization of the National Airspace System is one of the most ambitious infrastructure projects in U.S. history.



Top Tasks

- View NextGen technologies
- Working Together
- General Aviation
- View the most frequently asked questions
- Read the 2017 Joint Implementation Plan Update (PDF)

Page last modified: May 07, 2018 2:12:39 PM EDT

NextGen Priorities

Under the 2017 NextGen Advisory Committee Charter, the FAA is pleased to report the successful implementation of 157 priorities as of September 2017, advancing work at target locations and producing useful and measurable benefits to industry and the U.S. National Airspace System (NAS). The last NextGen Priorities Joint Implementation Plan, 2017-2019 (PDF) was published in October 2016 and contained FAA-industry agreed milestones through 2019 in four focus areas: Multiple Runway Operations, Surface Operations and Data Sharing, Data Communications, and Performance Based Navigation. The 2017 Joint Implementation Plan Update (PDF) includes a new NextGen Priority area, the Northeast Corridor (NEC), the busy airspace between Washington, D.C., and Boston that includes Philadelphia and New York City, and associated airspace.

In February 2017, the NextGen Advisory Committee (NAC) voted to make the Northeast Corridor a NextGen Priority. The FAA, together with the NAC is focused on implementing NextGen in the Northeast Corridor, recognizing that making continuous improvements to the system in the Northeast operationally benefits the entire U.S. aviation system. The commitments herein are focused on the near-term goal to improve the execution of today's operations, taking a continuous improvement approach and using agreed-upon metrics.

The FAA and industry agree to keep collaborating through the NAC to update the commitments each year and roll the plan forward biannually. The consensus of the FAA and stakeholders represented on the NAC is that successful implementation of these commitments will help shape the future of NextGen and contribute to its long-term viability.

Both the FAA and industry have identified specific commitments within each of the focus areas to increase safety, reduce aviation's impact on the environment, enhance controller productivity, and increase predictability, airspace capacity, and efficiency. The FAA and industry will continue to monitor joint progress and be agile and flexible to make necessary adjustments to commitments. The FAA also has a monitoring and oversight process (PDF) detailing FAA's continued engagement with the NAC. For additional information please see the Reference Guide. The FAA and industry are committed to jointly evaluating the effects of these commitments on the NAS, led by the work of a Joint Analysis Team (JAT). This helps the FAA and industry understand the value of implementations in this plan.

Previous reports can be viewed at: NextGen Priorities Joint Implementation Plan, 2014-2017 (PDF) and NextGen Priorities October 2015 Joint Implementation Plan Update (PDF), and NextGen Priorities Joint Implementation Plan 2017-2019 (PDF).

Recent Updates

As of August 31, 2018

Multiple Runway Operations

Completed: Wake Recategorization at DTW in Q1-2018

Completed: Wake Recategorization at PHX and SAT in Q3-2018

Data Communications

Completed: Departure Clearance Tower Service Initial Operating Capability at RNO in Q1-2018

Completed: Departure Clearance Tower Service Initial Operating Capability at CMH in Q2-2018

Completed: Departure Clearance Tower Service Initial Operating Capability at RSW in Q2-2018

Completed: Departure Clearance Tower Service Initial Operating Capability at CHS in Q2-2018

Completed: Departure Clearance Tower Service Initial Operating Capability at BUF in Q2-2018

Northeast Corridor

Completed: Procedures — Update the Minima for Existing Simultaneous Converging Instrument Approaches (SCIA) Procedure to PHL 9R and 17 in Q3-2018

Completed: Tools — Implement Surface Visualization Tool (SVT) (ZBW) in Q2-2018

Completed: Tools — Implement En Route Departure Capability (EDC) in Q2-2018

Completed: Procedures — Atlantic Coast Routes: Design Validation of Eastern Seaboard High-Altitude PBN Routes, Including SID/STAR Connectivity in Q2-2018

Completed: Procedures — Assessment for Early TBFM Pre-Departure Scheduling in Q2-2018

Completed: Procedures — Design and Testing for Vertical Climb Escape Route for TEB/HPN in Q1-2018

Completed: Procedures — Design PBN Arrival and Departure Procedures for NY Metro Area Airports from ZNY Oceanic in Q1-2018

Completed: Procedures — Participate in Design Activities Associated with the New PBN Arrival and Departure Procedures for the ZNY Oceanic Transition Sectors at ZNY in Q1-2018

Completed: Airports — JFK Runway 4R/22L Rehabilitation and Delay Reduction Taxiway Improvements in Q1-2018

Select a Focus Area

-- Focus Area --

Go

Multiple Runway Operations

To increase airport efficiency and reduce flight delays through the use of Multiple Runway Operations (MRO), the FAA and industry jointly commit to multiple projects nationwide. MRO capabilities improve access to runways and increase basic runway capacity and throughput by reducing aircraft separation standards. Improved access will enable more arrivals and/or departures during instrument meteorological conditions, which will increase efficiency and reduce flight delays.

View >

Performance Based Navigation

With the new PBN NAS Navigation Strategy (PDF), the FAA will deliver new routes and procedures that primarily use satellite-based navigation and onboard aircraft equipment to navigate with greater precision and accuracy. The FAA will continue to improve air traffic flow in metropolitan areas and increase use of time based flow management decision support tools. The FAA commits to implementing multiple capabilities nationwide.

View >

Surface Operations and Data Sharing

The FAA commits to implementing surface improvements through the development and deployment of Terminal Flight Data Manager (TFDM), by establishing a forum for meaningful engagement throughout the deployment, and by exchanging more data with additional stakeholders. The goal of these enhancements is to measurably increase predictability and provide actionable and measurable surface efficiency improvements.

View >

Data Communications

Data Communications (Data Comm) will provide direct digital communications services between pilots and air traffic controllers and enhance air traffic control information to airline operations centers. The capabilities will enhance safety by reducing communication errors, increasing controller productivity, increasing airspace capacity and efficiency while reducing delays, fuel burn and carbon emissions at towers nationwide. Data Comm is critical to the success of NextGen, enabling efficiencies not possible with the current voice system.

View >

Northeast Corridor

The Northeast Corridor (NEC) covers the most congested airports and airspace in the United States, and has a significant effect on the daily operations of the national aviation system. Nearly 50 percent of aviation delays in the entire U.S. National Airspace System (NAS) are attributable to the Northeast Corridor. The commitments in this report identify near-term initiatives that will enhance operations and are focused on the NAC's stated goal to improve execution of today's operations. Given the complex and compact nature of NEC operations, and its connection to the rest of the NAS, single operational improvements can have significant savings in time and during weather events. These enhancements establish a foundation and framework for longer-term effective implementation of NextGen using time-based management techniques and precise repeatable Performance Based Navigation procedures for a more predictable and efficient operation.

View >

Joint Analysis Team (JAT) Results

The Joint Analysis Team, a group of FAA and industry experts operating under the NextGen Advisory Committee, examines performance impacts and benefits that can be attributed to the implementation of NextGen capabilities.

View >

Page last modified: September 05, 2018 8:34:37 AM EDT

U.S. Department of Transportation
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591
(866) TELL-FAA ((866) 835-5322)

NextGen

- Delivering
- Partnering
- Measuring - Performance Snapshots
  - Airports
  - City Pairs
  - Metroplexes
  - National Airspace System Metrics
  - NextGen Portfolios
  - Performance Success Stories
  - Reference Guide
  - NextGen Priorities
    - Completion History
    - Joint Analysis Team (JAT)
- NextGen Works
- Phases of Flight
- Equip ADS-B
- Resources
- Community Involvement

FAA Home ▸ NextGen ▸ Measuring - Performance Snapshots ▸ NextGen Priorities ▸ Completion History

NextGEN Completion History

Back to NextGen Priorities – Joint Implementation Plan Milestones

The Completion History chart below provides an update on the completed NextGen Priorities by Calendar Year and quarter. The NextGen Priorities are: Multiple Runway Operations (MRO), Performance Based Navigation (PBN), Surface Operations and Data Sharing, and Data Communications.

Date	Data Communications	Multiple Runway Operations	Performance Based Navigation	Surface Operations & Data Sharing
Q2 2017		• **Wake Recategorization:** MIA	• **Established on Required Navigation Performance (EoR) Independent Operations Safety Analysis (RF Duals + Triples)** • **RNP 1 Departures:** (BUR, SNA)	• **Data Sharing: Flight Operator, American Airlines to provide data for Charlotte Surface Departure Management**
Q1 2017		• **Wake Recategorization:** MSP • **Amend Dependent Runway Separations (Runways > 4300'):** CVG; MEM; PHX; SDF	• **Metroplex — Charlotte** • **Metroplex — Las Vegas; Design Start** • **Advanced RNP-Advisory Circular 90-105; Assess Potential Demo Sites; Design Guidance** • **EoR Feasibility Assessment for Independent Duals and Triples Operations (RF and TF):** ATL (TF); CLT (TF); DEN (RF); DFW (TF); IAH (RF); SDF (TF) • **EoR SEA Review** • **New Vertical Guidance Criteria and Location Guidance** • **Boeing to Provide Data on their Utility and Usability for GYY OPD** • **JetBlue to Provide data on their Utility and Usability Data for BOS OPD**	
Q4 2016	• **Departure Clearance Tower Service Initial Operating Capability:** DAL; MCI; DFW; MDW; MKE; MSP; ORD; RDU; SJU • **Implementation Framework for non-VHF Digital Link (VDL) Mode 2 Media**	• **Wake Recategorization:** PHL • **Feasibility Assessment — Removal of Vertical Navigation Requirement for Simultaneous Independent Parallel Approaches** • **Joint Analysis Team Performance Analysis Participation**	• **Enhanced Flight Vision Systems (EFVS) Final Rule (IND TBD)** • **Metroplex — Atlanta** • **TBFM Decision Support Tools — Ground-Based Interval Management (GIMS-S):** 3 Sites • **TBFM Decision Support Tools — Integrated Departure Arrival Capability (IDAC):** 3 Sites • **Advanced RNP-Advisory Circular 90-105; Assess Potential Demo Sites; Design Guidance**	• **Data Sharing: Flight Operators to Provide 11 Data Elements** • **Identify Forum for On-Going Industry Engagement with FAA Throughout TFDM Deployment**

Q3 2016	• **Departure Clearance Tower Service Initial Operating Capability:** MCO; DTW; SJC; CLE; SMF; MIA; PIT; PHX; FLL; BWI; TPA; IAD; DCA; PDX; SEA; ABQ; STL • **Final Investment Decision (FID) for En Route Services**	• **Wake Recategorization:** ANC; LAX	• **Metroplex — Charlotte** • **Single Site Implementations:** BOS; GYY	• **Advanced Electronic Flight Strips:** LAS; SFO • **Plan to Deliver TFDM Capabilities to Key Sites as Early as Possible** • **Plan to Move Up the TFDM Build that Subsumes DSP within the Overall TFDM Waterfall** • **Restoration of Original FY 18-20 Funding for the TFDM Program and Contract Award** • **Data Sharing: Airports Select Four Initial Pilot Airports**
Q2 2016	• **Departure Clearance Tower Service Initial Operating Capability:** SAN; HPN; BNA; PHL; SNA; DEN; BUR; BOS; ONT; ATL; CLT; SFO; BDL; OAK	• **Wake Recategorization:** SFO	• **Established on Required Navigation Performance Authorization Required (EoR RNP AR- Widely Spaced Operations) National Standard**	• **FAA to Ingest 11 Data Elements Via TFMS Update** • **Advanced Electronic Flight Strips:** EWR
Q1 2016	• **Extend Departure Clearance Operational Trials:** EWR; MEM • **Departure Clearance Tower Service Initial Operating Capability:** MSY; AUS; SDF; EWR; SAT; JFK; LAX; LAS; IND; MEM; LGA; TEB	• **Wake Recategorization:** IND • **Assessment of Future Wake Recategorization Capabilities** • **Assessment to Implement Order 7110.308 and Dependent Parallel Operations (2500'—3600'):** BOS	• **Single Site Assessment of Las Vegas Basin:** Study Team	
Q4 2015	• **Assessment of Boeing 737 Flight Management Computer Issue**	• **Dependent Parallel Operations (2500'-3600'):** DAL; JFK; MEM; MSP; PDX; RDU; SEA • **Dual Independent Parallel Operations with Offset:** ORD • **Triple Independent Parallel Operations:** ORD • **Wake Recategorization:** DEN	• **Established on RNP (EoR) Track-to-Fix (TF) of Fly-By Approaches Safety Analysis**	
Q3 2015	• **Departure Clearance Tower Service Implementation:** SLC; HOU; IAH	• **Final Investment Decision for Wake Turbulence Mitigation for Departures** • **Dual Independent Parallel Operations with Offset:** DTW.		• **Airport Operators as Collaborative Decision Making Participants** • **Simplifying Application for System Wide Information Management Data** • **Time Based Flow Management "Wheels Up" Procedural Change Using New "Earliest Off Block Time" Data Element**
Q2 2015		• **Wake Recategorization Phase 1:** MDW; ORD	• **Metroplex:** Northern California • **Equivalent Lateral Spacing Operations (ELSO) National Standard**	
Q1 2015		• **Wake Recategorization Phase 1:** New York TRACON (EWR, JFK, LGA, ISP, HPN, TEB); CLT • **Safety Analysis for Wake Turbulence Mitigation for Arrivals — Procedures:** ATL	• **Established on Required Navigation Performance Authorization Required (EoR RNP AR — Widely Spaced Operations):** DEN	• **Advanced Electronic Flight Strips:** CLE • **System Wide Information Management (SWIM) Surface Visualization Tool (SVT) Deployment:** Boston TRACON, Chicago TRACON, Houston TRACON, Louisville TRACON, New York TRACON • **Feasibility Assessment for Terminal Flight Data Manager (TFDM) Program Departure Management**

Q4 2014	• **Final Investment Decision for En Route Services:** Initial Services • **Recorder Rule for Retrofit**	• **Safety Analysis of Order 7110.308 for Additional Airport:** SFO 19L, 19R • **Wake Recategorization Phase 1:** IAH, HOU	• **Single Site Assessment of Las Vegas Basin**	• **Feasibility Assessment for Electronic Flight Data for New York Advanced Electronic Flight Strips (AEFS)** • **Traffic Flow Management System (TFMS) & Time-Based Flow Management (TBFM) New Data Sharing via SWIM Subscription:** TBFM, TFMS
Q3 2014		• **Wake Recategorization Phase 1:** ATL, CVG • **Dual Independent Parallel Operations:** ATL • **Safety Analysis for Wake Turbulence Mitigation for Arrivals-Procedures:** PHL, DTW		• **Surface Surveillance Event Data Distribution to users via SWIM (ASDE-X/ASSC):** SFO

NextGEN

NextGen Priorities – Multiple Runway Operations

The efficiency of parallel runways, particularly those that are closely spaced, has been limited by the interplay of wake vortices with nearby aircraft. Multiple Runway Operations (MRO) capabilities improve access to these runways and can increase basic runway capacity and throughput by reducing separation between aircraft based on improved wake categorization standards. Improved access will enable more arrivals and/or departures during instrument meteorological conditions, which will increase efficiency and reduce flight delays. These commitments are a subset of the overall series of programs and activities the FAA has planned to address these issues.

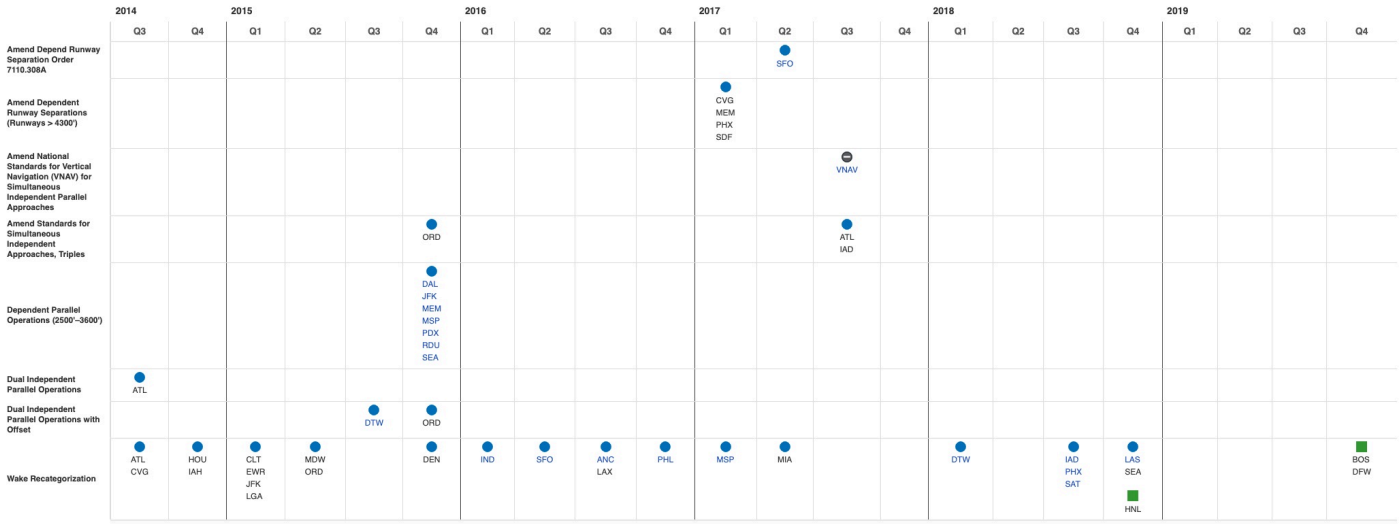
Select a Focus Area: Multiple Runway Oper — Go

Joint Analysis Team Findings

The Joint Analysis Team (JAT) performed the evaluation of Wake Recategorization (Wake Recat) implementations at Charlotte Douglass International Airport (CLT), O'Hare International Airport (ORD), and Chicago Midway International Airport (MDW). Full details on methodology and findings can be found in the JAT Performance Assessment of Wake ReCat report.

An additional study was performed on Wake Recat implementations at Indianapolis (IND) and Philadelphia (PHL). Full details on methodology and findings can be found in the Joint Analysis Team: Performance Assessment of Wake ReCat in Indianapolis and Philadelphia and Fuel Analysis for North Texas Metroplex (PDF) report.

Implementation Commitment



Implemented · On track · New/Revised · Delayed · Dependent · Removed

All dates are in calendar years.

Pre-Implementation Commitment

Implemented · On track · New/Revised · Delayed · Dependent · Removed

All dates are in calendar years.

Industry Commitments

Implemented · On track · New/Revised · Delayed · Dependent · Removed

All dates are in calendar years.

NextGEN

NextGen Priorities – Performance Based Navigation

The FAA is moving to a performance based navigation (PBN) National Airspace System (NAS) and has published the NAC-endorsed PBN NAS Navigation Strategy (PDF). With PBN, the FAA delivers new routes and procedures that primarily use satellite-based navigation and on-board aircraft equipment to navigate with greater precision and accuracy. PBN provides a basis for designing and implementing automated flight paths and redesigning airspace near obstacles for increased access. Benefits include shorter and more direct flight paths, improved airport arrival rates, enhanced controller productivity, increased safety due to repeatable and predictable flight paths, fuel savings, and a reduction in aviation's adverse environmental impact. These commitments are a subset of the overall series of PBN activities the FAA is planning to implement.

Select a Focus Area
Performance Based Nav
Go

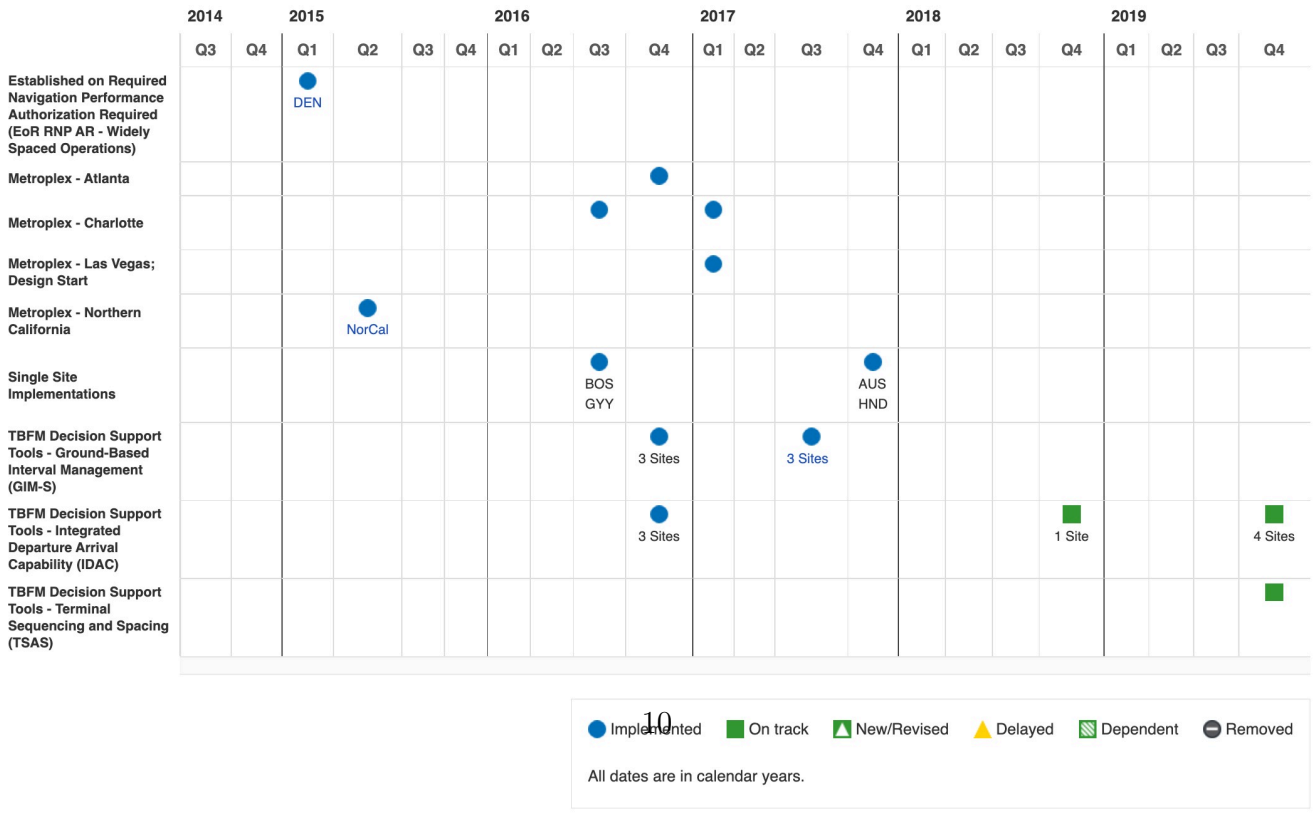
Joint Analysis Team Findings

The Joint Analysis Team (JAT) evaluated Performance Based Navigation (PBN) Metroplex implementation in North Texas and PBN Established on Required Navigation Performance (EoR) at Denver International Airport (DEN). Full details on methodology and findings can be found in the Joint Analysis Team: Performance Assessment of North Texas Metroplex and Established on RNP in Denver (PDF) report.

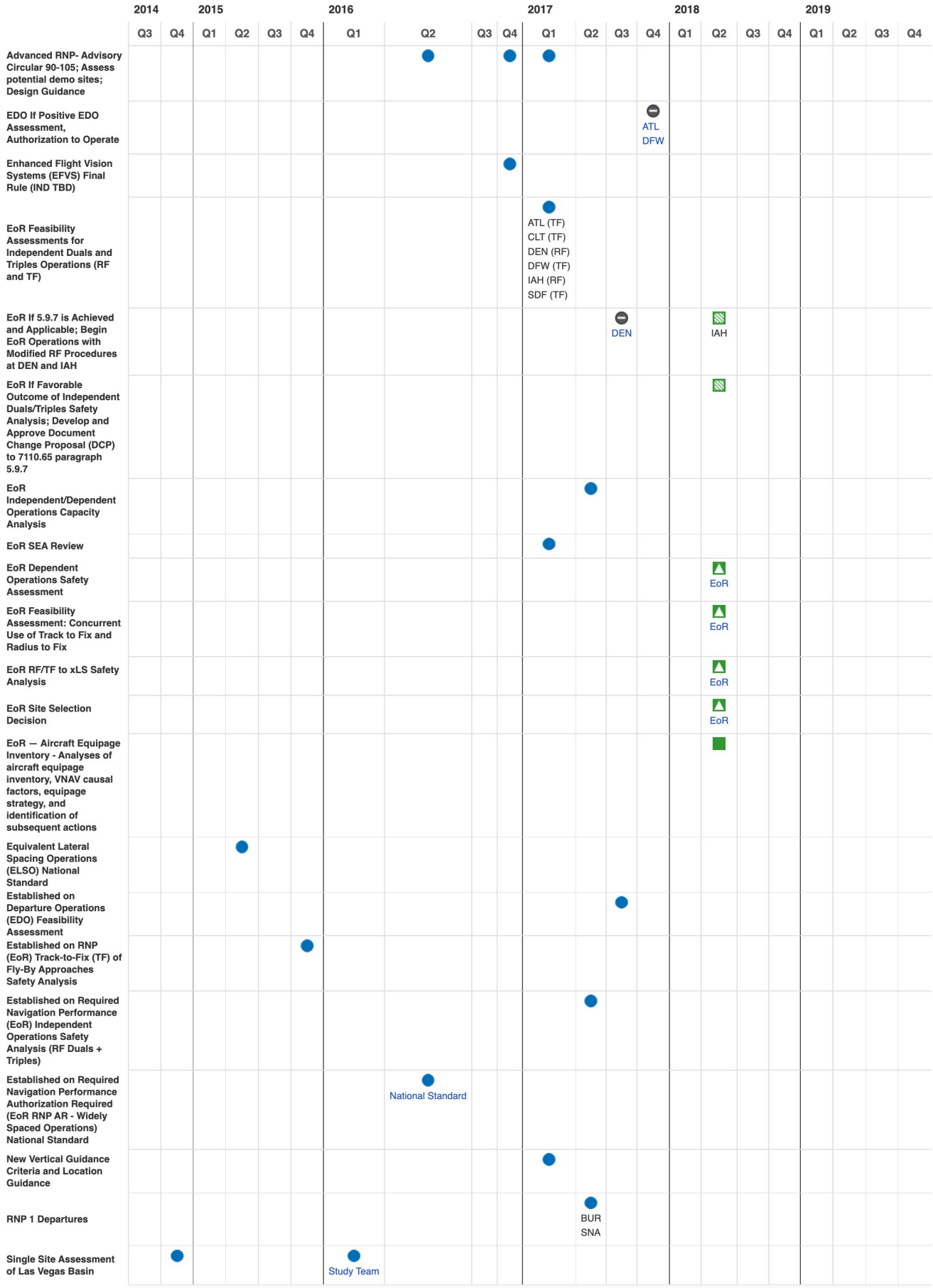
The JAT performed a follow-up study on the evaluation of fuel analysis for the North Texas Metroplex. Full details on methodology and findings can be found in the Joint Analysis Team: Performance Assessment of Wake ReCat in Indianapolis and Philadelphia and Fuel Analysis for North Texas Metroplex (PDF) report.

Additionally, the JAT evaluated Optimal Profile Descent (OPD) implementations at Boston Logan International Airport (BOS) and Gary/Chicago International Airport (GYY). Full details on methodology and findings can be found in the Joint Analysis Team: Performance Assessment of Boston/Gary Optimal Profile Descents and DataComm (PDF).

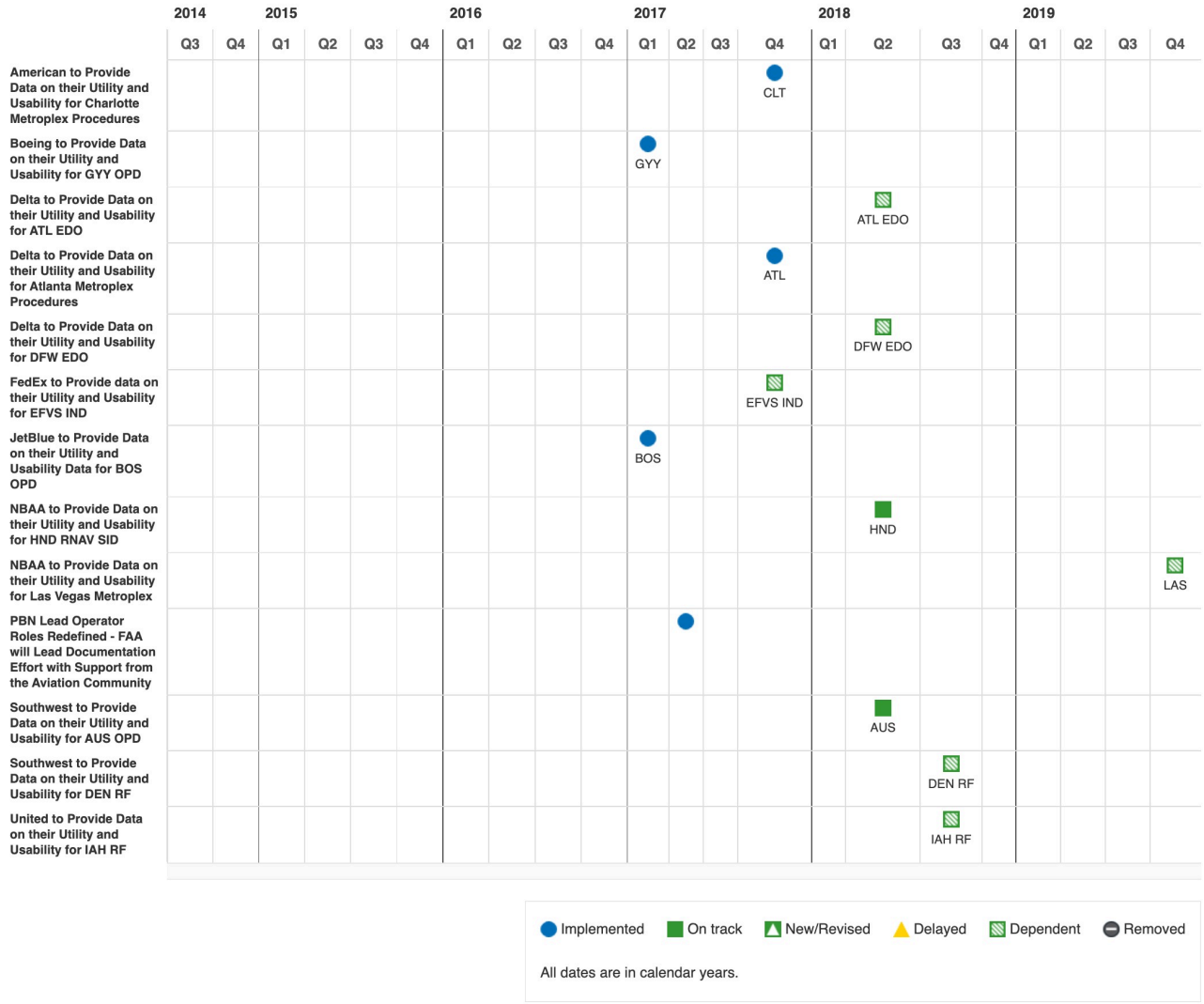
Implementation Commitment



Pre-Implementation Commitment



Industry Commitments



Page last modified: September 05, 2018 8:34:37 AM EDT

NextGen

- What is NextGen?
- NextGen Advisory Committee
- How NextGen Works
- General Aviation
- Working Together
- Where We Are Now
- Where We Are Headed
- NextGen by the Numbers
- NextGen Near You
- Equip ADS-B
- Library
- Frequently Asked Questions
- Performance Snapshots
  - Airports
  - City Pairs
  - Metroplexes
  - National Airspace System Metrics
  - NextGen Portfolios
  - Performance Success Stories
  - Reference Guide
- **NextGen Priorities**
  - Completion History
  - Joint Analysis Team (JAT)
- NextGen Programs

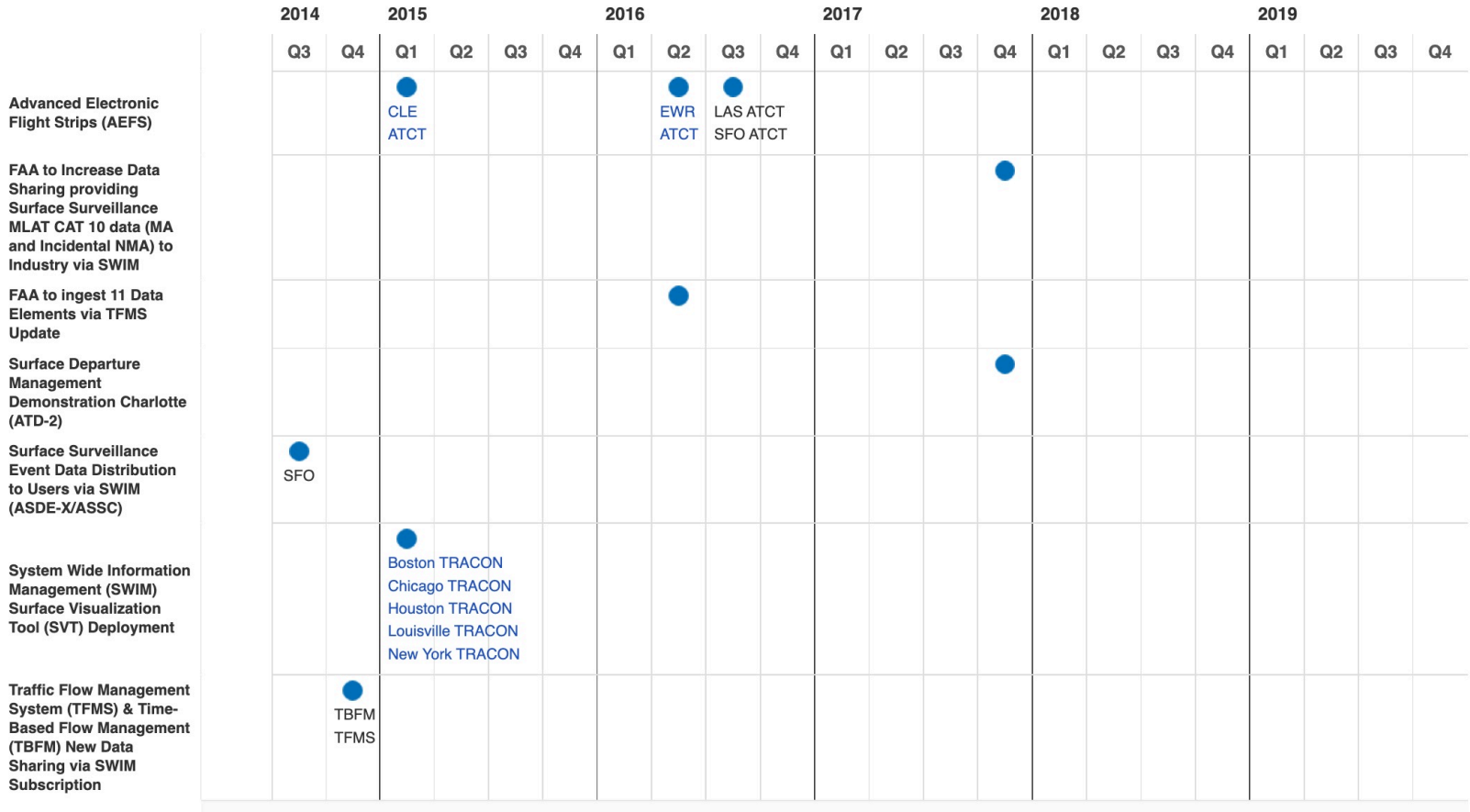
NextGEN

NextGen Priorities – Surface Operations and Data Sharing

Some of the greatest efficiencies can be gained while an aircraft is still on the ground and at the gate, and when connecting the surface to the enroute airspace. The FAA commits to implementing near-term surface improvements, sharing more data with stakeholders, and completing feasibility assessments of some other capabilities of interest. The goal of these enhancements is to measurably increase predictability and provide actionable and measurable surface efficiency improvements. These commitments are a subset of the overall series of programs and activities the FAA is planning to improve operations in these domains.

Select a Focus Area
Surface Operations and
Go

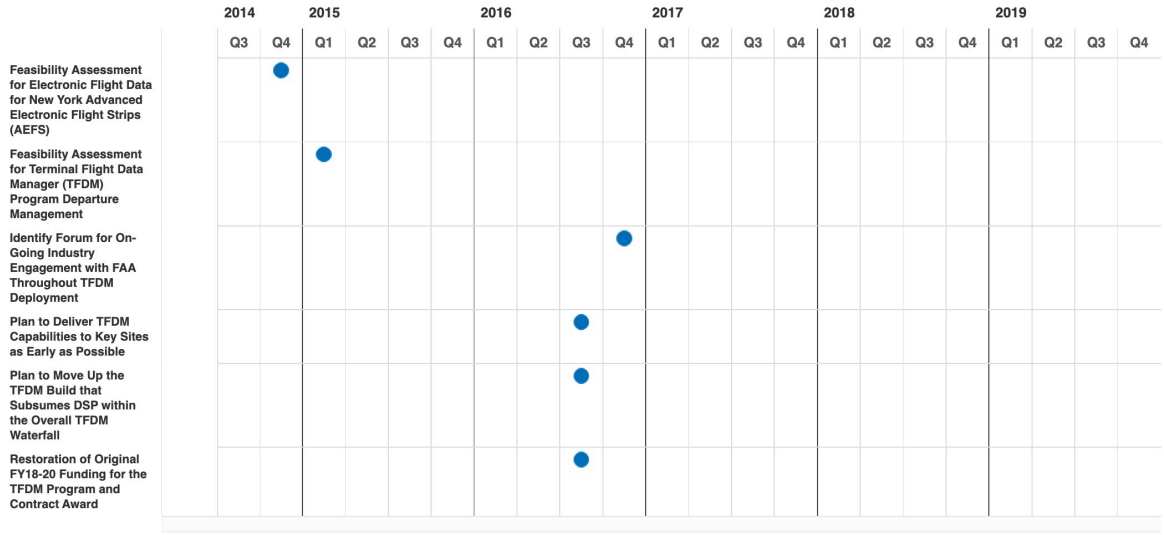
Implementation Commitment



Implemented | On track | New/Revised | Delayed | Dependent | Removed

All dates are in calendar years.

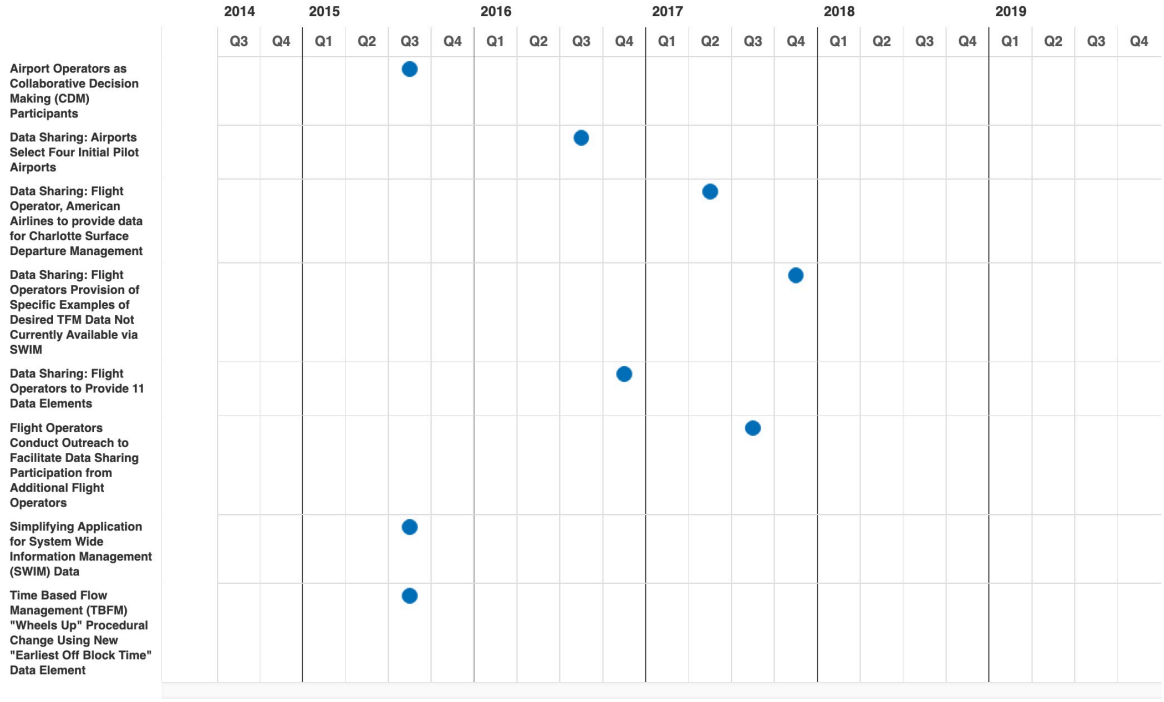
Pre-Implementation Commitment



Implemented | On track | New/Revised | Delayed | Dependent | Removed

All dates are in calendar years.

Industry Commitments



Implemented | On track | New/Revised | Delayed | Dependent | Removed

All dates are in calendar years.

Page last modified: September 05, 2018 8:34:37 AM EDT

NextGen

- What is NextGen?
- NextGen Advisory Committee
- How NextGen Works
- General Aviation
- Working Together
- Where We Are Now
- Where We Are Headed
- NextGen by the Numbers

NextGEN

NextGen Priorities – Data Communications

The Data Communications (Data Comm) program will provide data communications services between pilots and air traffic controllers as well as enhanced air traffic control information to airline operations centers. Data Comm will provide a direct link between ground automation and flight deck avionics for safety-of-flight clearances, instructions, traffic flow management, flight crew requests and reports. Data Comm is critical to the success of NextGen, enabling efficiencies not possible with the current voice system. These services will enhance safety by reducing communication errors, increase controller productivity by reducing communication time between controllers and pilots, and increase airspace capacity and efficiency while reducing delays, fuel burn and carbon emissions.

Select a Focus Area
Data Communications
Go

Joint Analysis Team Findings

The Joint Analysis Team (JAT) evaluated the impacts of Data Communications implementation. Full details on methodology and findings can be found in the Joint Analysis Team: Performance Assessment of Boston/Gary Optimal Profile Descents and DataComm (PDF).

Schedule and Stats

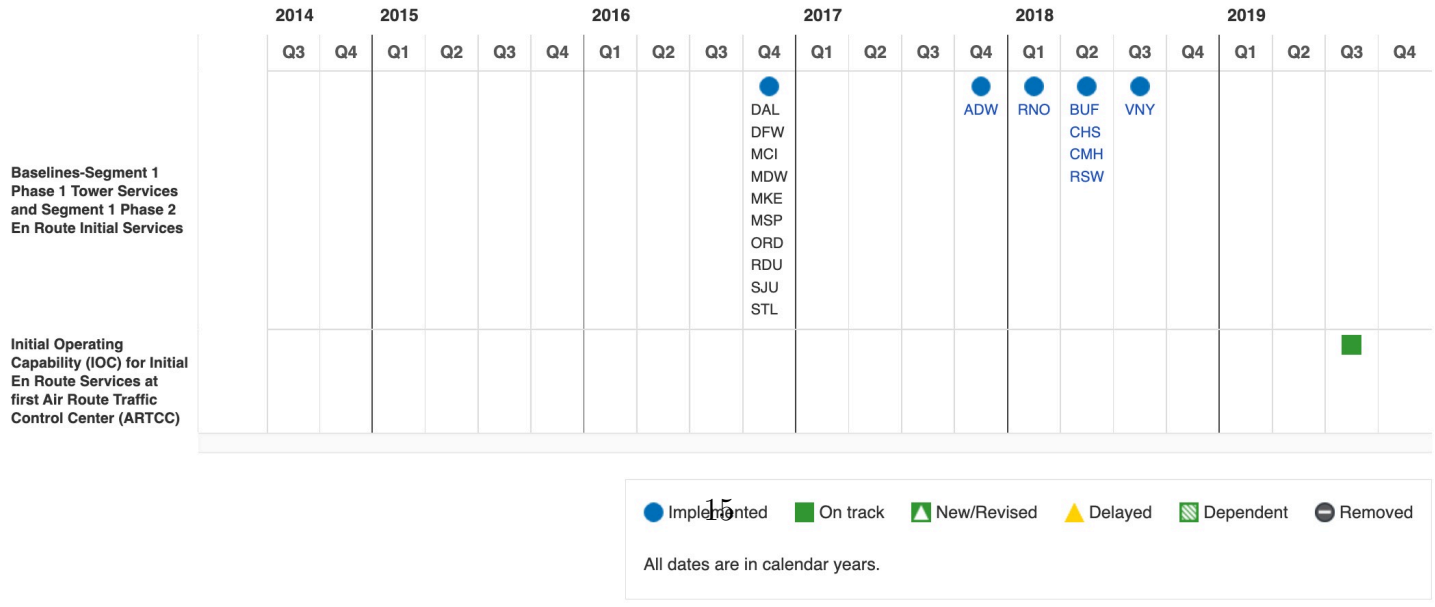
List of capabilities and their implementation status

NOTE: The site milestones in the table below represent accelerated challenge dates which are ahead of the baseline milestones for the program.

- **Key Sites (3 towers)**
- Group A (19 towers)
- Group B (15 towers)
- Group C (18 towers)
- Group D (7 towers)

Site Name	Site ID	ARTCC ID	IOC (CY)	Status
KS 1: Salt Lake City	SLC	ZLC	Q3 2015	●
KS 2: Houston Intcl	IAH	ZHU	Q3 2015	●
KS 3: Houston Hobby	HOU	ZHU	Q3 2015	●

Implementation Commitment

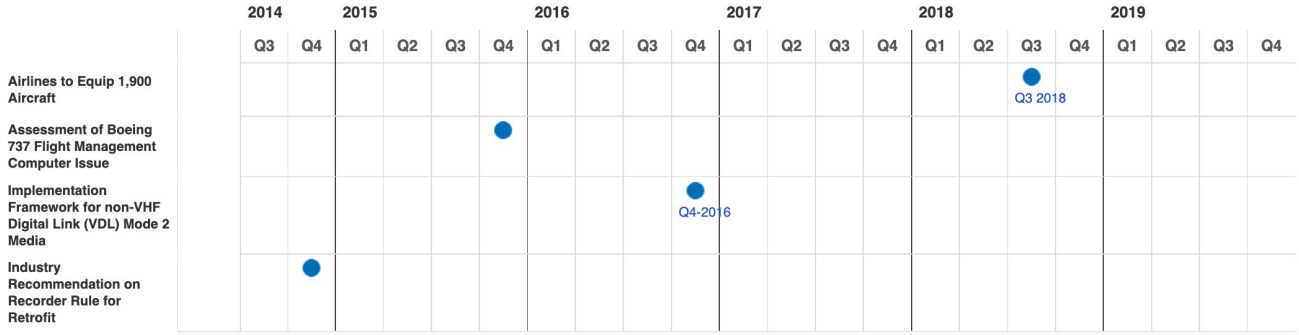


Pre-Implementation Commitment

Implemented | On track | New/Revised | Delayed | Dependent | Removed

All dates are in calendar years.

Industry Commitments



Implemented | On track | New/Revised | Delayed | Dependent | Removed

All dates are in calendar years.

Page last modified: September 05, 2018 8:34:37 AM EDT

NextGen

- What is NextGen?
- NextGen Advisory Committee
- How NextGen Works
- General Aviation
- Working Together
- Where We Are Now
- Where We Are Headed
- NextGen by the Numbers
- NextGen Near You
- Equip ADS-B
- Library
- Frequently Asked Questions
- Performance Snapshots
  - Airports
  - City Pairs
  - Metroplexes
  - National Airspace System Metrics
  - NextGen Portfolios
  - Performance Success Stories
  - Reference Guide
- **NextGen Priorities**
  - Completion History
  - Joint Analysis Team (JAT)
- NextGen Programs

NextGEN

NextGen Priorities – Data Communications

The Data Communications (Data Comm) program will provide data communications services between pilots and air traffic controllers as well as enhanced air traffic control information to airline operations centers. Data Comm will provide a direct link between ground automation and flight deck avionics for safety-of-flight clearances, instructions, traffic flow management, flight crew requests and reports. Data Comm is critical to the success of NextGen, enabling efficiencies not possible with the current voice system. These services will enhance safety by reducing communication errors, increase controller productivity by reducing communication time between controllers and pilots, and increase airspace capacity and efficiency while reducing delays, fuel burn and carbon emissions.

Select a Focus Area
Data Communications
Go

Joint Analysis Team Findings

The Joint Analysis Team (JAT) evaluated the impacts of Data Communications implementation. Full details on methodology and findings can be found in the Joint Analysis Team: Performance Assessment of Boston/Gary Optimal Profile Descents and DataComm (PDF).

Schedule and Stats

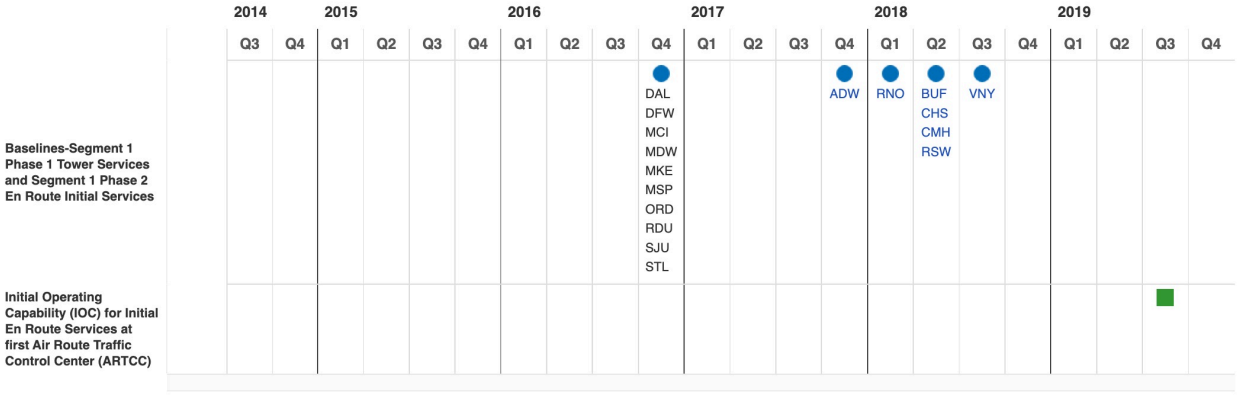
List of capabilities and their implementation status

NOTE: The site milestones in the table below represent accelerated challenge dates which are ahead of the baseline milestones for the program.

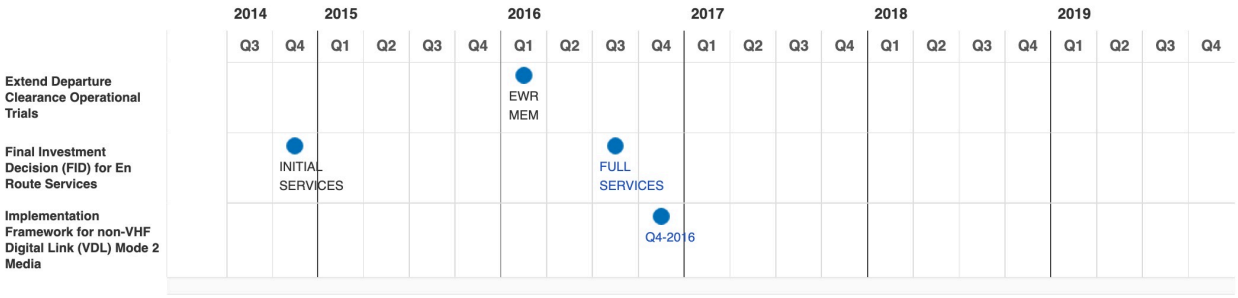
Key Sites (3 towers)
Group A (19 towers)
Group B (15 towers)
Group C (18 towers)
Group D (7 towers)

Site Name	Site ID	ARTCC ID	IOC (CY)	Status
New Orleans	MSY	ZHU	Q1 2016	
Austin	AUS	ZHU	Q1 2016	
San Antonio	SAT	ZHU	Q1 2016	
Los Angeles	LAX	ZLA	Q1 2016	
Las Vegas	LAS	ZLA	Q1 2016	
San Diego	SAN	ZLA	Q2 2016	
John Wayne	SNA	ZLA	Q2 2016	
Burbank	BUR	ZLA	Q2 2016	
Ontario	ONT	ZLA	Q2 2016	
San Francisco	SFO	ZOA	Q2 2016	
Oakland	OAK	ZOA	Q2 2016	
San Jose	SJC	ZOA	Q3 2016	
Sacramento	SMF	ZOA	Q3 2016	
Phoenix	PHX	ZAB	Q3 2016	
Albuquerque	ABQ	ZAB	Q3 2016	
Portland	PDX	ZSE	Q3 2016	
Seattle	SEA	ZSE	Q3 2016	
Dallas Love	DAL	ZFW	Q4 2016	
Dallas FTW (x2)	DFW	ZFW	Q4 2016	

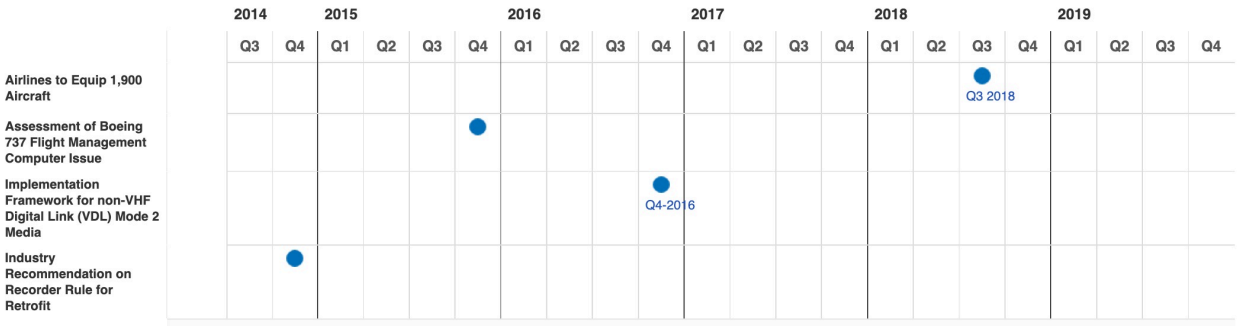
Implementation Commitment



Pre-Implementation Commitment



Industry Commitments



Page last modified: September 05, 2018 8:34:37 AM EDT

NextGen

- What is NextGen?
- NextGen Advisory Committee
- How NextGen Works
- General Aviation
- Working Together
- Where We Are Now
- Where We Are Headed
- NextGen by the Numbers
- NextGen Near You
- Equip ADS-B

NextGEN

NextGen Priorities – Data Communications

The Data Communications (Data Comm) program will provide data communications services between pilots and air traffic controllers as well as enhanced air traffic control information to airline operations centers. Data Comm will provide a direct link between ground automation and flight deck avionics for safety-of-flight clearances, instructions, traffic flow management, flight crew requests and reports. Data Comm is critical to the success of NextGen, enabling efficiencies not possible with the current voice system. These services will enhance safety by reducing communication errors, increase controller productivity by reducing communication time between controllers and pilots, and increase airspace capacity and efficiency while reducing delays, fuel burn and carbon emissions.

Select a Focus Area

Data Communications

Go

Joint Analysis Team Findings

The Joint Analysis Team (JAT) evaluated the impacts of Data Communications implementation. Full details on methodology and findings can be found in the Joint Analysis Team: Performance Assessment of Boston/Gary Optimal Profile Descents and DataComm (PDF).

Schedule and Stats

List of capabilities and their implementation status

NOTE: The site milestones in the table below represent accelerated challenge dates which are ahead of the baseline milestones for the program.

Key Sites (3 towers)

Group A (19 towers)

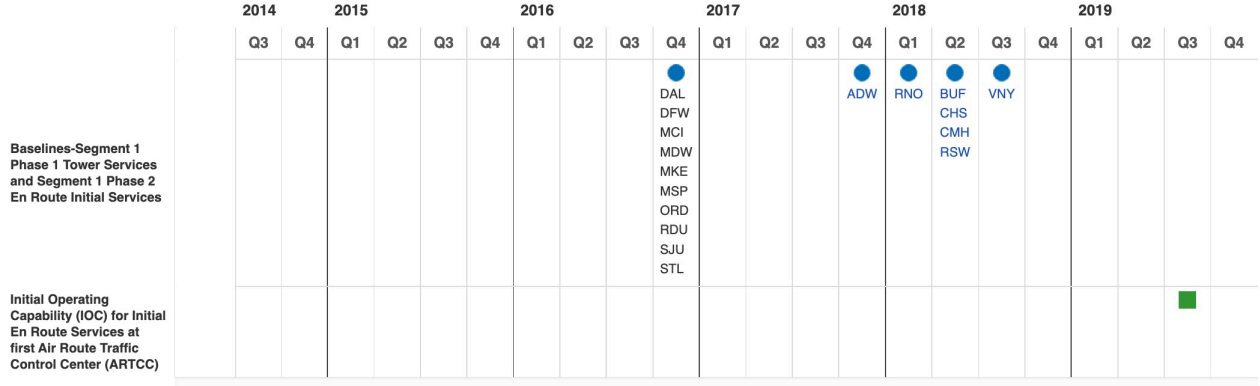
Group B (15 towers)

Group C (18 towers)

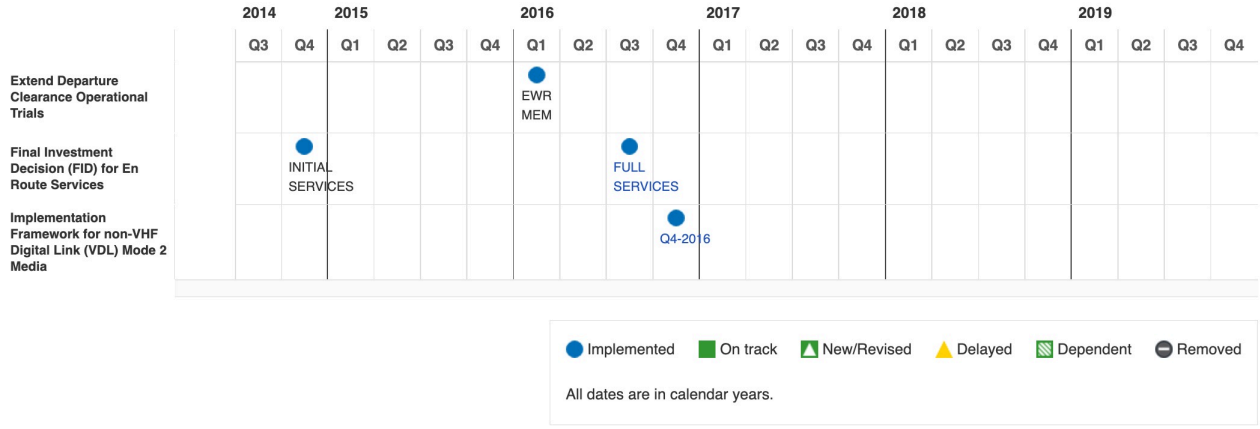
Group D (7 towers)

Site Name	Site ID	ARTCC ID	IOC (CY)	Status
Louisville	SDF	ZID	Q1 2016	●
Indianapolis	IND	ZID	Q1 2016	●
Memphis	MEM	ZME	Q1 2016	●
Nashville	BNA	ZME	Q2 2016	●
Denver	DEN	ZDV	Q2 2016	●
Atlanta	ATL	ZTL	Q2 2016	●
Charlotte	CLT	ZTL	Q2 2016	●
Orlando	MCO	ZJX	Q2 2016	●
Miami	MIA	ZMA	Q3 2016	●
Fort Lauderdale	FLL	ZMA	Q3 2016	●
Tampa	TPA	ZMA	Q3 2016	●
St. Louis	STL	ZKC	Q3 2016	●
San Juan	SJU	ZMA	Q4 2016	●
Kansas City	MCI	ZKC	Q4 2016	●
Minn-St. Paul	MSP	ZMP	Q4 2016	●

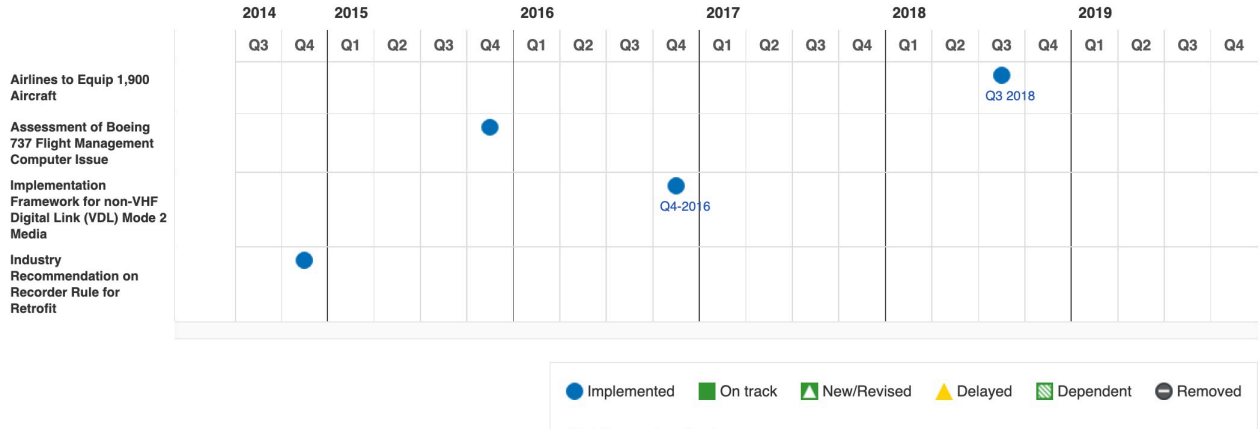
Implementation Commitment



Pre-Implementation Commitment



Industry Commitments



Page last modified: September 05, 2018 8:34:37 AM EDT

NextGen

- What is NextGen?
- NextGen Advisory Committee
- How NextGen Works
- General Aviation
- Working Together
- Where We Are Now
- Where We Are Headed
- NextGen by the Numbers
- NextGen Near You
- Equip ADS-B
- Library
- Frequently Asked Questions
- Performance Snapshots
  - Airports
  - City Pairs
  - Metroplexes
  - National Airspace System Metrics
  - NextGen Portfolios
  - Performance Success Stories
  - Reference Guide
- **NextGen Priorities**
  - Completion History
  - Joint Analysis Team (JAT)
- NextGen Programs

NextGEN

NextGen Priorities – Data Communications

The Data Communications (Data Comm) program will provide data communications services between pilots and air traffic controllers as well as enhanced air traffic control information to airline operations centers. Data Comm will provide a direct link between ground automation and flight deck avionics for safety-of-flight clearances, instructions, traffic flow management, flight crew requests and reports. Data Comm is critical to the success of NextGen, enabling efficiencies not possible with the current voice system. These services will enhance safety by reducing communication errors, increase controller productivity by reducing communication time between controllers and pilots, and increase airspace capacity and efficiency while reducing delays, fuel burn and carbon emissions.

Select a Focus Area
Data Communications
Go

Joint Analysis Team Findings

The Joint Analysis Team (JAT) evaluated the impacts of Data Communications implementation. Full details on methodology and findings can be found in the Joint Analysis Team: Performance Assessment of Boston/Gary Optimal Profile Descents and DataComm (PDF).

Schedule and Stats

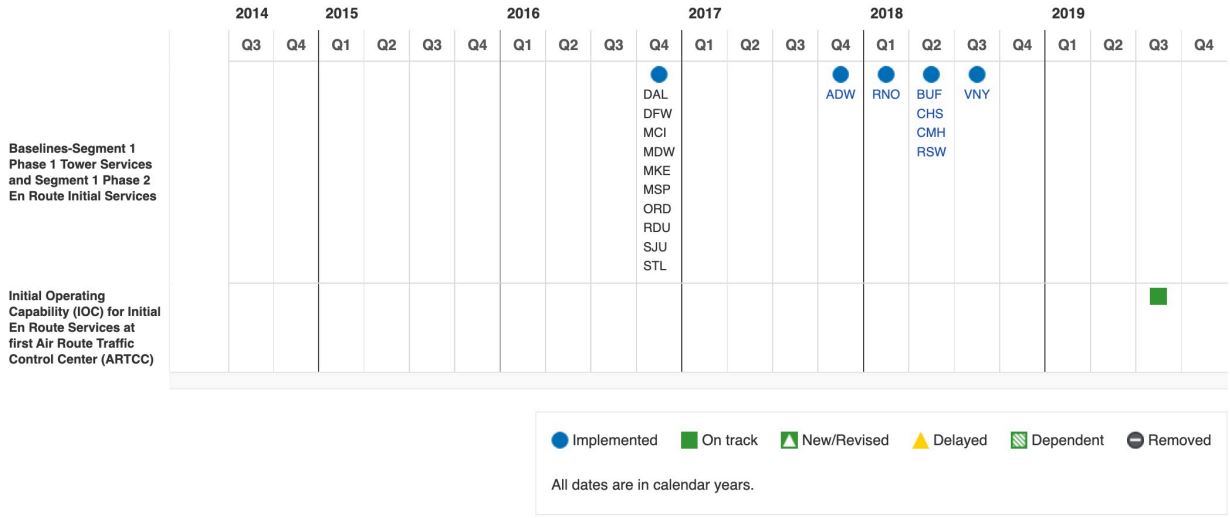
List of capabilities and their implementation status

NOTE: The site milestones in the table below represent accelerated challenge dates which are ahead of the baseline milestones for the program.

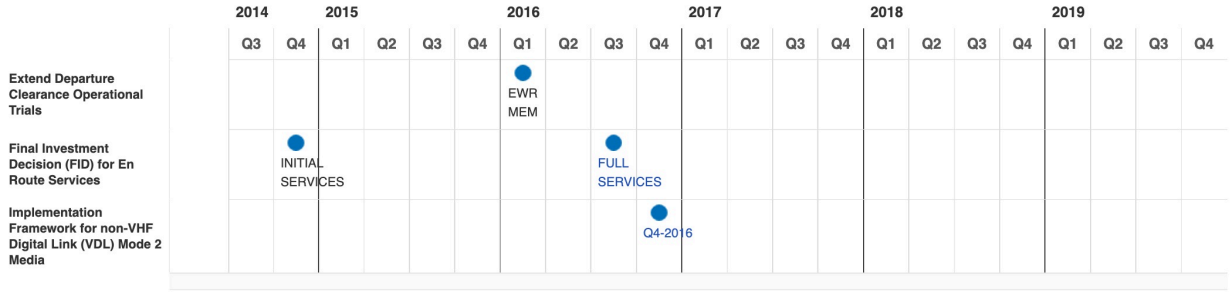
Key Sites (3 towers)
Group A (19 towers)
Group B (15 towers)
Group C (18 towers)
Group D (7 towers)

Site Name	Site ID	ARTCC ID	IOC (CY)	Status
Newark	EWR	ZNY	Q1 2016	
J F Kennedy	JFK	ZNY	Q1 2016	
LaGuardia	LGA	ZNY	Q1 2016	
Teterboro	TEB	ZNY	Q1 2016	
Westchester	HPN	ZNY	Q2 2016	
Philadelphia	PHL	ZNY	Q2 2016	
Boston	BOS	ZBW	Q2 2016	
Bradley	BDL	ZBW	Q2 2016	
Detroit	DTW	ZOB	Q2 2016	
Cleveland	CLE	ZOB	Q3 2016	
Pittsburgh	PIT	ZOB	Q3 2016	
Balt/Wash	BWI	ZDC	Q3 2016	
Dulles	IAD	ZDC	Q3 2016	
Reagan	DCA	ZDC	Q3 2016	
Raleigh/Durham	RDU	ZDC	Q4 2016	
Chicago Midway	MDW	ZAU	Q4 2016	
Chicago O'Hare	ORD	ZAU	Q4 2016	
Milwaukee	MKE	ZAU	Q4 2016	

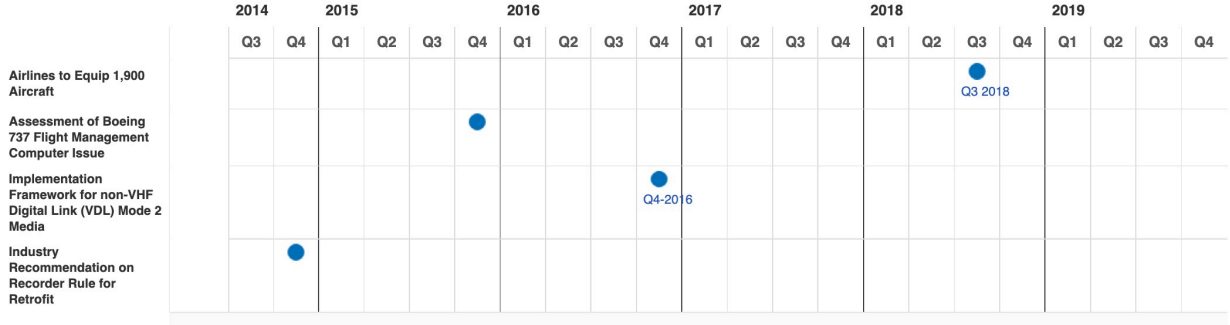
Implementation Commitment



Pre-Implementation Commitment



Industry Commitments



Page last modified: September 05, 2018 8:34:37 AM EDT

NextGen

- What is NextGen?
- NextGen Advisory Committee
- How NextGen Works
- General Aviation
- Working Together
- Where We Are Now
- Where We Are Headed
- NextGen by the Numbers
- NextGen Near You
- Equip ADS-B

NextGEN

NextGen Priorities – Data Communications

The Data Communications (Data Comm) program will provide data communications services between pilots and air traffic controllers as well as enhanced air traffic control information to airline operations centers. Data Comm will provide a direct link between ground automation and flight deck avionics for safety-of-flight clearances, instructions, traffic flow management, flight crew requests and reports. Data Comm is critical to the success of NextGen, enabling efficiencies not possible with the current voice system. These services will enhance safety by reducing communication errors, increase controller productivity by reducing communication time between controllers and pilots, and increase airspace capacity and efficiency while reducing delays, fuel burn and carbon emissions.

Select a Focus Area
Data Communications
Go

Joint Analysis Team Findings

The Joint Analysis Team (JAT) evaluated the impacts of Data Communications implementation. Full details on methodology and findings can be found in the Joint Analysis Team: Performance Assessment of Boston/Gary Optimal Profile Descents and DataComm (PDF).

Schedule and Stats

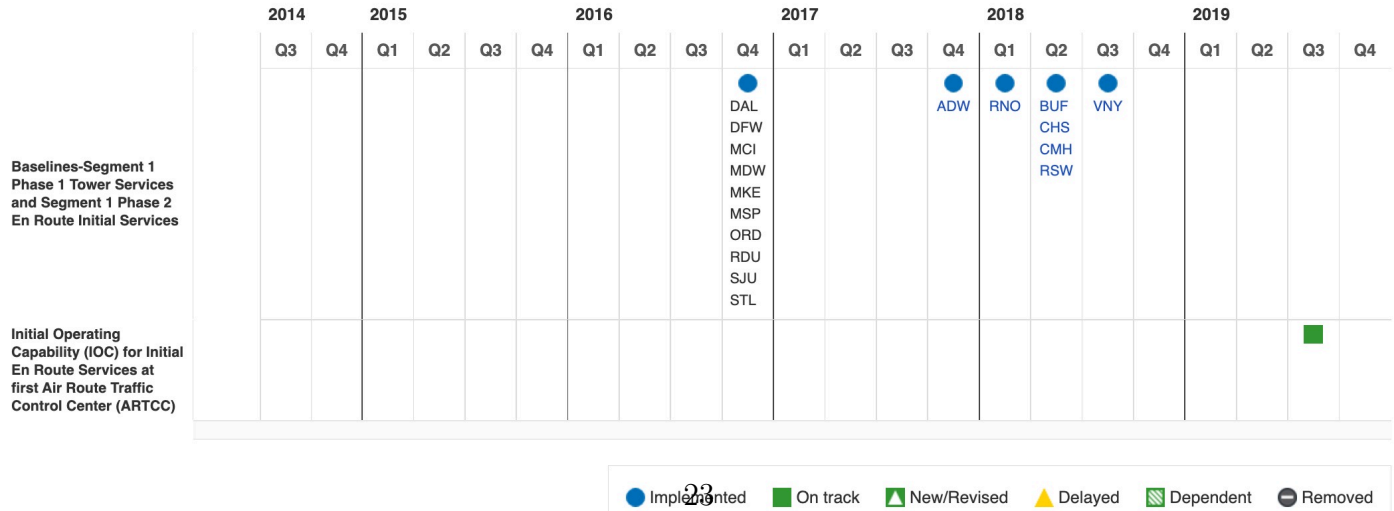
List of capabilities and their implementation status

NOTE: The site milestones in the table below represent accelerated challenge dates which are ahead of the baseline milestones for the program.

Key Sites (3 towers)
Group A (19 towers)
Group B (15 towers)
Group C (18 towers)
Group D (7 towers)

Site Name	Site ID	ARTCC ID	IOC (CY)	Status
Joint Base Andrews	ADW	ZDC	Q4 2017	●
Reno	RNO	ZOA	Q1 2018	●
Columbus	CMH	ZID	Q2 2018	●
Fort Myers	RSW	ZMA	Q2 2018	●
Charleston	CHS	ZJX	Q2 2018	●
Buffalo	BUF	ZOB	Q2 2018	●
Van Nuys	VNY	ZLA	Q3 2018	●

Implementation Commitment

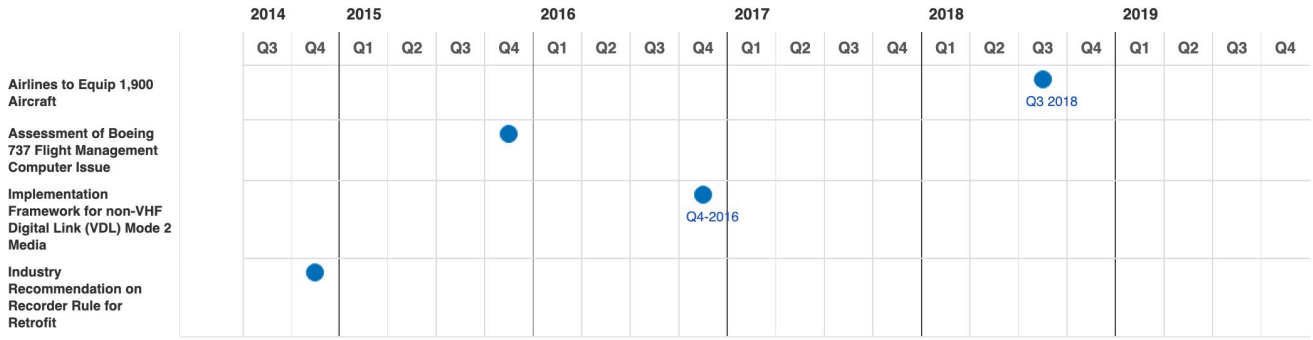


Pre-Implementation Commitment

Implemented | On track | New/Revised | Delayed | Dependent | Removed

All dates are in calendar years.

Industry Commitments



Implemented | On track | New/Revised | Delayed | Dependent | Removed

All dates are in calendar years.

Page last modified: September 05, 2018 8:34:37 AM EDT

NextGen

- What is NextGen?
- NextGen Advisory Committee
- How NextGen Works
- General Aviation
- Working Together
- Where We Are Now
- Where We Are Headed
- NextGen by the Numbers
- NextGen Near You
- Equip ADS-B
- Library
- Frequently Asked Questions
- Performance Snapshots
  - Airports
  - City Pairs
  - Metroplexes
  - National Airspace System Metrics
  - NextGen Portfolios
  - Performance Success Stories
  - Reference Guide
  - **NextGen Priorities**
    - Completion History
    - Joint Analysis Team (JAT)
- NextGen Programs

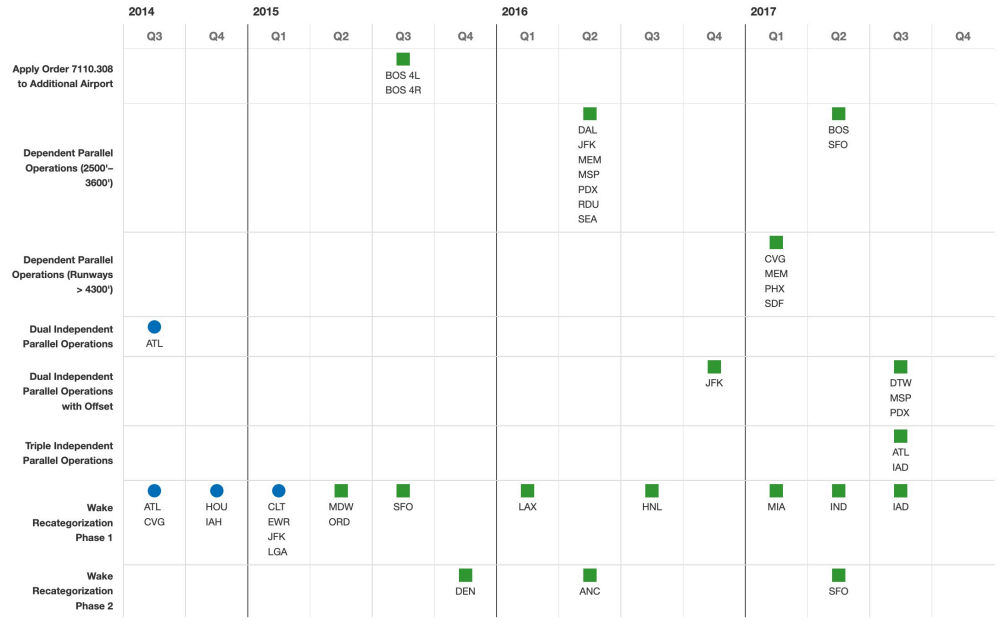
NextGEN

NextGen Priorities – Multiple Runway Operations

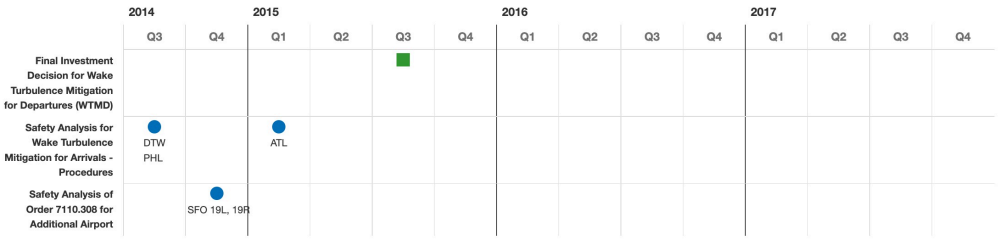
The efficiency of parallel runways, particularly those that are closely spaced, has been limited by the interplay of wake vortices with nearby aircraft. Multiple Runway Operations (MRO) capabilities improve access to these runways and can increase basic runway capacity and throughput by reducing separation between aircraft based on improved wake categorization standards. Improved access will enable more arrivals and/or departures during outside of visual meteorological conditions, which will increase efficiency and reduce flight delays. These commitments are a subset of the overall series of programs and activities the FAA has planned to address these issues.

Select a Focus Area
Multiple Runway Operati
Go

Implementation Commitment



Pre-Implementation Commitment



NextGEN

NextGen Priorities – Multiple Runway Operations

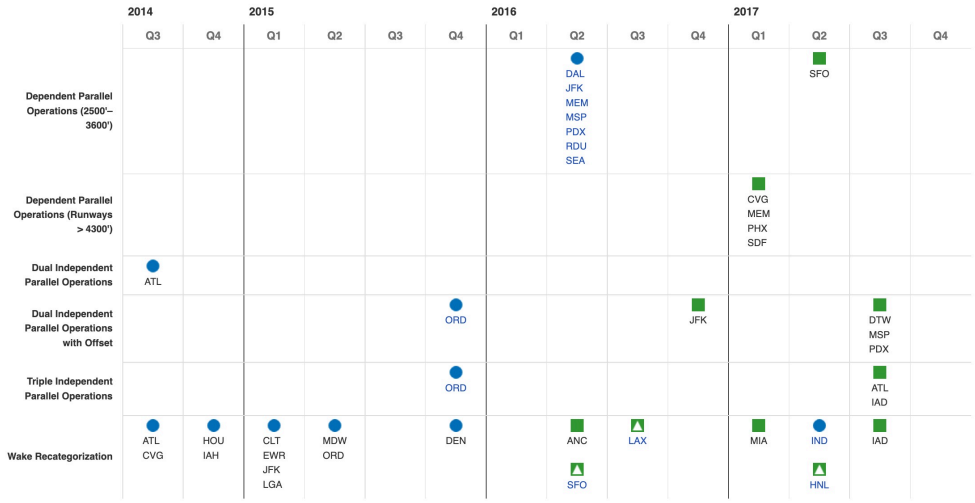
The efficiency of parallel runways, particularly those that are closely spaced, has been limited by the interplay of wake vortices with nearby aircraft. Multiple Runway Operations (MRO) capabilities improve access to these runways and can increase basic runway capacity and throughput by reducing separation between aircraft based on improved wake categorization standards. Improved access will enable more arrivals and/or departures during outside of visual meteorological conditions, which will increase efficiency and reduce flight delays. These commitments are a subset of the overall series of programs and activities the FAA has planned to address these issues.

Select a Focus Area

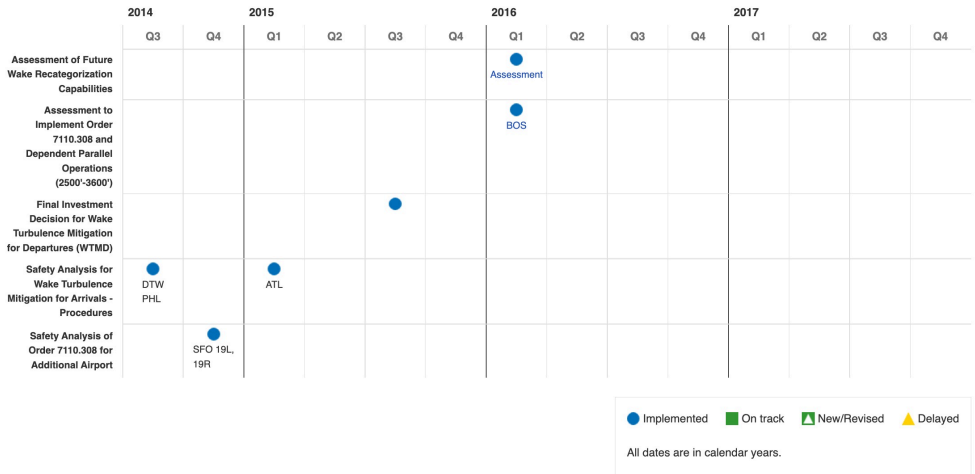
Multiple Runway Operati

Go

Implementation Commitment



Pre-Implementation Commitment



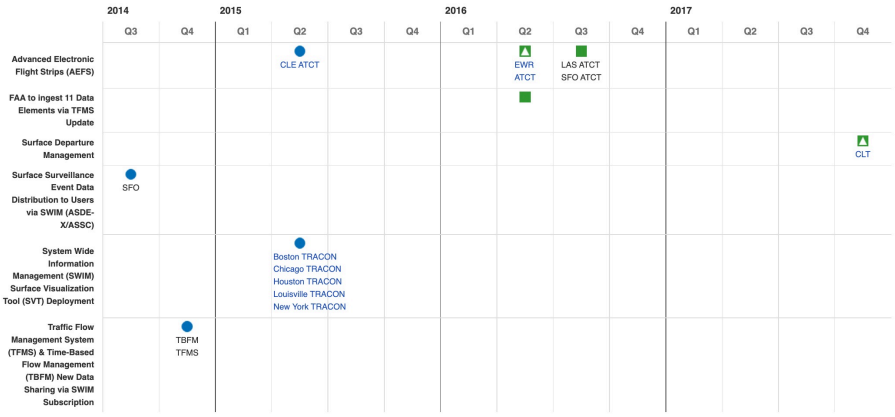
NextGEN

NextGen Priorities – Surface Operations and Data Sharing

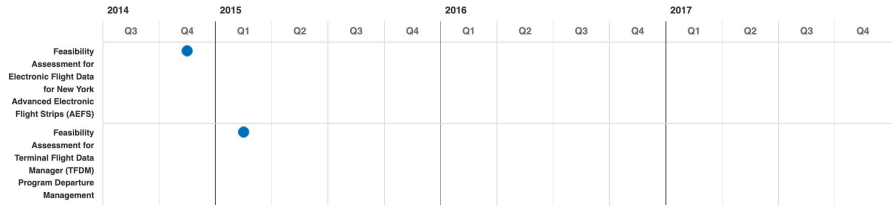
Some of the greatest efficiencies can be gained while an aircraft is still on the ground. The FAA commits to implementing near-term surface improvements, sharing more data with stakeholders, and completing feasibility assessments of some other capabilities of interest. The goal of these enhancements is to measurably increase predictability and provide actionable and measurable surface efficiency improvements. These commitments are a subset of the overall series of programs and activities the FAA is planning to improve operations in these domains.

Select a Focus Area: Surface Operations and | Go

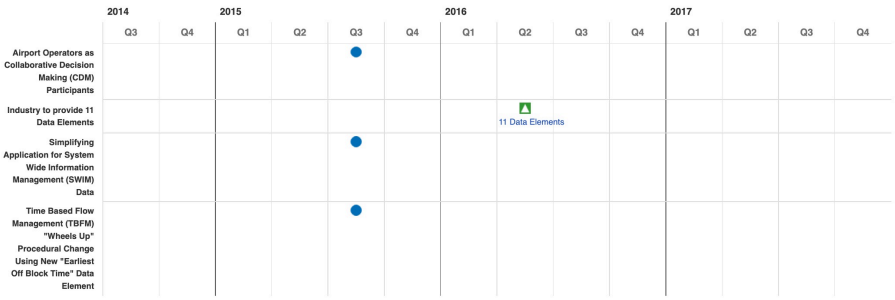
Implementation Commitment



Pre-Implementation Commitment



Industry Commitments



NextGen

- Delivering
- Partnering
- Measuring - Performance Snapshots
  - Airports
  - City Pairs
  - Metroplexes
  - National Airspace System Metrics
  - NextGen Portfolios
  - Performance Success Stories
  - Reference Guide
  - NextGen Priorities
- NextGen Works
- Phases of Flight
- Equip ADS-B
- Resources
- Community Involvement

FAA Home ▸ NextGen ▸ Measuring - Performance Snapshots ▸ Airports

NextGEN

Airports

Measuring the Performance of Airports

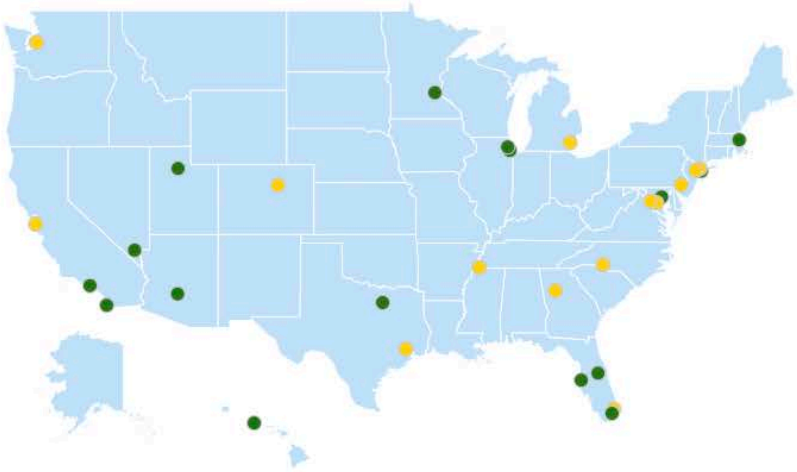
Select an Airport

-- Airport --

Go

Airport performance is crucial to air traffic controllers, airports, and airlines as they plan schedules and anticipate traffic levels. Airline operators, for example, prefer to set departure and arrival times, and the flight routes of their choice. Knowing how long an aircraft must wait to depart, operators can plan for the impacts to fuel burn, emissions, and the passenger experience. The FAA measures and reports on airport performance at locations where NextGen technologies have been implemented.

Airport Locations



● - The Marquee Location pages, highlighted with yellow dots, contain additional information to show how implemented NextGen capabilities are impacting operations at these airports and how they relate to the National Airspace System (NAS).

List of Airport Locations

Performance is reported based on efficiency and capacity at the FAA's Core 30 Airports. These are airports in major metropolitan areas with the highest volume of traffic. Complex, high-density operations are the breeding ground for traffic congestion and delays.

To identify areas where improvements can be made, the FAA measures an airport's daily capacity, as well as airlines' scheduled versus actual flight time performance. In addition to improvements from NextGen capabilities, a myriad of factors influence those metrics including weather, aircraft types, traffic volume, and runway conditions.

Most airport metrics in this section are available for fiscal years (FY) 2009–2016, while two of the efficiency metrics offer data for FY 2011–2016.

For more information please see the NextGen Operational Performance Assessment (PDF).

NextGen

- Delivering
- Partnering
- Measuring - Performance Snapshots
  - Airports
  - City Pairs
  - Metroplexes
  - National Airspace System Metrics
  - NextGen Portfolios
  - Performance Success Stories
  - Reference Guide
  - NextGen Priorities
- NextGen Works
- Phases of Flight
- Equip ADS-B
- Resources
- Community Involvement

FAA Home ▸ NextGen ▸ Measuring - Performance Snapshots ▸ Airports

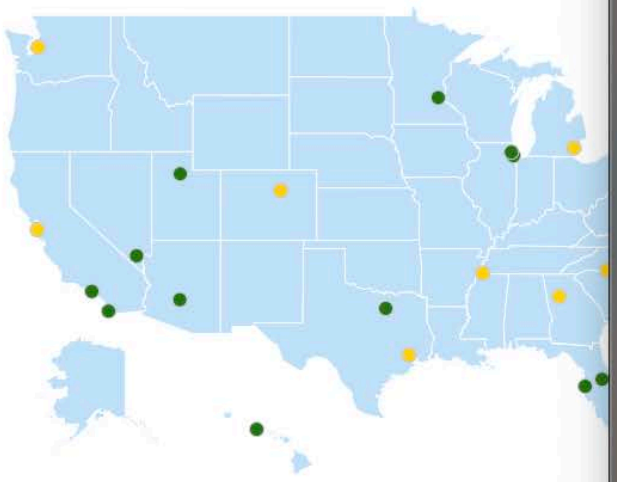
NextGEN

Airports

Measuring the Performance of Airports

Airport performance is crucial to air traffic controllers, airports, and airlines as they plan schedules and anticipate traffic levels. Airline operators, for example, prefer to set departure and arrival times, and the flight routes of their choice. Knowing how long an aircraft must wait to depart, operators can plan for the impacts to fuel burn, emissions, and the passenger experience. The FAA measures and reports on airport performance at locations where NextGen technologies have been implemented.

Airport Locations



- The Marquee Location pages, highlighted with yellow dots, contain additional information to s
capabilities are impacting operations at these airports and how they relate to the National Airspace

List of Airport Locations

Performance is reported based on efficiency and capacity at the FAA's Core 30 Airports. These are airports in major metropolitan areas with the highest volume of traffic. Complex, high-density operations are the breeding ground for traffic congestion and delays.

To identify areas where improvements can be made, the FAA measures an airport's daily capacity, as well as airlines' scheduled versus actual flight time performance. In addition to improvements from NextGen capabilities, a myriad of factors influence those metrics including weather, aircraft types, traffic volume, and runway conditions.

Most airport metrics in this section are available for fiscal years (FY) 2009–2016, while two of the efficiency metrics offer data for FY 2011–2016.

For more information please see the NextGen Operational Performance Assessment (PDF).

Select an Airport

- ✓ -- Airport --
- ATL - Hartsfield-Jackson Atlanta International Airport
- BOS - Boston - General Edward Lawrence Logan Airport
- BWI - Baltimore/Washington International Thurgood Marshall Airport
- CLT - Charlotte Douglas International Airport
- DCA - Ronald Reagan Washington National Airport
- DEN - Denver International Airport
- DFW - Dallas/Fort Worth International Airport
- DTW - Detroit Metropolitan Wayne County Airport
- EWR - Newark Liberty International Airport
- FLL - Fort Lauderdale-Hollywood International Airport
- HNL - Honolulu International Airport
- IAD - Washington Dulles International Airport
- IAH - Houston - George Bush Intercontinental Airport
- JFK - New York - John F. Kennedy International Airport
- LAS - Las Vegas - McCarran International Airport
- LAX - Los Angeles International Airport
- LGA - New York - LaGuardia Airport
- MCO - Orlando International Airport
- MDW - Chicago Midway International Airport
- MEM - Memphis International Airport
- MIA - Miami International Airport
- MSP - Minneapolis-St. Paul International/Wold-Chamberlain Airport
- ORD - Chicago O'Hare International Airport
- PHL - Philadelphia International Airport
- PHX - Phoenix Sky Harbor International Airport
- SAN - San Diego International Airport
- SEA - Seattle-Tacoma International Airport
- SFO - San Francisco International Airport
- SLC - Salt Lake City International Airport
- TPA - Tampa International Airport

NextGen

- Delivering
- Partnering
- Measuring - Performance Snapshots
  - Airports
  - City Pairs
  - Metroplexes
  - National Airspace System Metrics
  - NextGen Portfolios
  - Performance Success Stories
  - Reference Guide
  - NextGen Priorities
- NextGen Works
- Phases of Flight
- Equip ADS-B
- Resources
- Community Involvement

FAA Home ▸ NextGen ▸ Measuring - Performance Snapshots ▸ Airports

NextGEN

Hartsfield-Jackson Atlanta International Airport

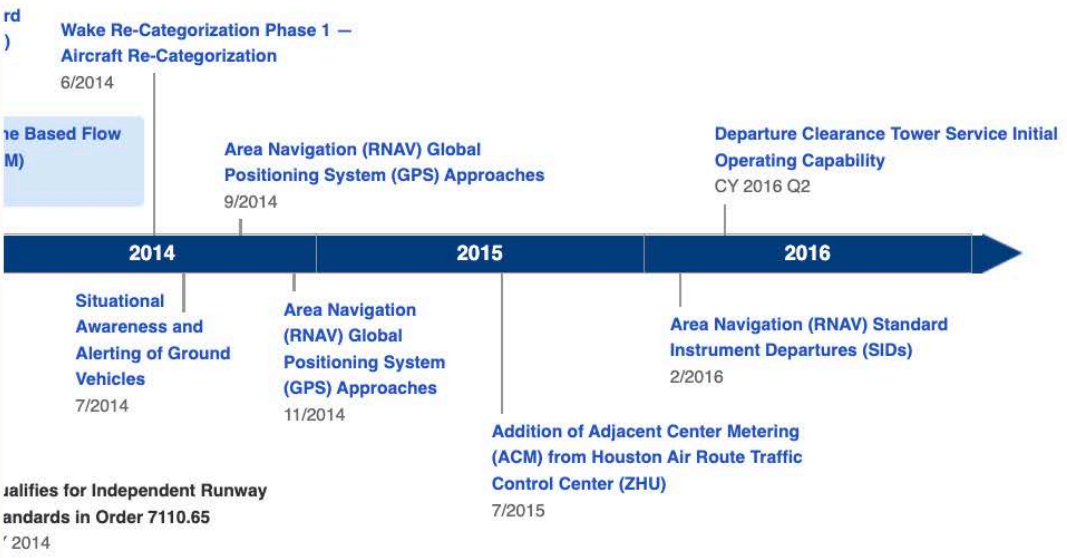
Hartsfield-Jackson Atlanta International Airport (ATL)

- Busiest airport in the world.
- Passenger traffic increased 1.9 percent in 2014 to 96.2 million.
- 12th busiest airport in terms of cargo volume, with 601,269 metric tons of freight and mail passing through its facilities in 2014.
- Primary hub for Delta Air Lines.

Select an Airport: ATL - Hartsfield-Jackson — Go

All airport information shown above is reported by calendar year.

NextGen Capabilities



- Featured capabilities have extended descriptions.

This timeline reflects programmatic milestones and excludes capabilities implemented across the National Airspace System.

Information as of September 29, 2016.

Equivalent Lateral Spacing Operations (ELSO)

What is ELSO?

Departure routes from a runway must diverge by a minimum angle to ensure safe separation between departures. Equivalent Lateral Spacing Operations (ELSO) refers to the reduction of this minimum made possible by more precise aircraft navigation, which can create opportunities to add diverging departure routes without reducing safety. Since less separation is often required for successive departures that diverge, controllers can sequence departures so as to reduce the time between takeoffs. This can increase the number of takeoffs that a runway can accommodate during busy periods, and, by extension, reduce the time that aircraft spend in line waiting to depart.

Performance Based Navigation

How is ELSO used in Atlanta?

How did it impact operations?

What is the value of this improvement?

Where else is it implemented?

Additional information available on the NextGen Portfolio pages.

Scorecard

View as Charts

The following metrics summarize performance over a large set of diverse operations at this location. As such, their purpose is to reflect general trends as experienced by aircraft operators and passengers, without regard to their underlying drivers. For this reason, metric values should not be compared to operational impacts attributed to specific NextGen capabilities, where these are provided.

All Information below is in Fiscal Years (October 1 - September 30).

Reportable Hours for ATL
07:00 - 22:59 local time

Efficiency | Capacity

Performance Indicator (FY)	2009	2010	2011	2012	2013	2014	2015	2016
Average Gate Arrival Delay *Minutes per Flight*	10.2	5.5	4.4	0.5	3.7	4.0	0.2	-0.6
Average Number of Level-offs per Flight *Counts per Flight*	[1]	[1]	2.8	2.6	2.7	2.5	2.5	2.5
Distance in Level Flight from Top of Descent to Runway Threshold *Nautical Miles per Flight*	[1]	[1]	36.4	34.6	35.6	34.3	34.8	32.9
Effective Gate-to-Gate Time *Minutes per Flight*	128.0	126.9	124.3	118.8	119.6	122.3	120.6	120.9
Taxi-In Time *Minutes per Flight*	11.4	11.7	11.1	10.4	9.2	9.3	8.9	8.4
Taxi-Out Time *Minutes per Flight*	22.2	21.8	21.0	19.5	18.5	17.8	17.6	17.1

[1] Consistent data for the time period prior to FY 2011 are not available.

As described by the International Civil Aviation Organization (ICAO), *efficiency addresses the operational and economic cost-effectiveness of gate-to-gate flight operations from a single-flight perspective. In all phases of flight, airspace users want to depart and arrive at the times they select and fly the trajectory they determine to be optimum.*

NextGen

- Delivering
- Partnering
- Measuring - Performance Snapshots
  - Airports
  - City Pairs
  - Metroplexes
  - National Airspace System Metrics
  - NextGen Portfolios
  - Performance Success Stories
  - Reference Guide
  - NextGen Priorities
- NextGen Works
- Phases of Flight
- Equip ADS-B
- Resources
- Community Involvement

FAA Home ▸ NextGen ▸ Measuring - Performance Snapshots ▸ Airports

NextGEN

Baltimore/Washington International Thurgood Marshall Airport

Baltimore-Washington International Thurgood Marshall Airport (BWI) is the 23rd busiest airport in North America in terms of passenger traffic, which decreased 0.8 percent in 2014 to 22.3 million. The number of operations decreased 5.6 percent in 2013 to 245,121. In 2014, BWI was the 36th busiest airport in terms of cargo volume with 105,153 metric tons moving through its facilities — a decrease of 3.5 percent from the previous year. Southwest Airlines is the airport's largest carrier in average daily domestic flights.

Several NextGen capabilities and enabling improvements have been implemented including Airport Surface Detection Equipment-Model X, External Surface Data Release, Expanded Low-Visibility Operations Using Lower Runway Visual Range Minima, Performance Based Navigation procedures, basic rerouting, Optimized Profile Descents, and an Equivalent Lateral Spacing Operation Standard.

All airport information shown above is reported by Calendar Year (CY).

Select an Airport

BWI - Baltimore/Washi

Go

Scorecard

View as Charts

The following metrics summarize performance over a large set of diverse operations at this location. As such, their purpose is to reflect general trends as experienced by aircraft operators and passengers, without regard to their underlying drivers. For this reason, metric values should not be compared to operational impacts attributed to specific NextGen capabilities, where these are provided.

All Information below is in Fiscal Years (October 1 - September 30).

Reportable Hours for BWI
06:00 - 22:59 local time

Efficiency | Capacity

Performance Indicator (FY)	2009	2010	2011	2012	2013	2014	2015	2016
Average Gate Arrival Delay *Minutes per Flight*	2.8	3.1	4.2	0.6	4.1	5.6	2.1	1.0
Average Number of Level-offs per Flight *Counts per Flight*	[1]	[1]	3.7	3.6	3.7	3.8	3.6	3.2
Distance in Level Flight from Top of Descent to Runway Threshold *Nautical Miles per Flight*	[1]	[1]	49.0	47.9	49.1	49.5	47.1	44.3
Effective Gate-to-Gate Time *Minutes per Flight*	120.3	121.8	123.3	118.6	121.9	126.2	129.0	130.5
Taxi-In Time *Minutes per Flight*	5.5	5.9	5.8	5.7	6.2	5.9	6.7	6.5
Taxi-Out Time *Minutes per Flight*	13.0	13.1	13.0	12.7	13.7	13.5	14.2	13.9

[1] Consistent data for the time period prior to FY 2011 are not available.

As described by the International Civil Aviation Organization (ICAO), *efficiency addresses the operational and economic cost-effectiveness of gate-to-gate flight operations from a single-flight perspective. In all phases of flight, airspace users want to depart and arrive at the times they select and fly the trajectory they determine to be optimum.*

NextGen

- Delivering
- Partnering
- Measuring - Performance Snapshots
  - Airports
  - City Pairs
  - Metroplexes
  - National Airspace System Metrics
  - NextGen Portfolios
  - Performance Success Stories
  - Reference Guide
  - NextGen Priorities
- NextGen Works
- Phases of Flight
- Equip ADS-B
- Resources
- Community Involvement

FAA Home ▸ NextGen ▸ Measuring - Performance Snapshots ▸ Airports

NextGEN

Orlando International Airport

Orlando International Airport (MCO) experienced a 2.7 percent increase in passengers in 2014 to reach 35.7 million. The number of operations decreased 0.5 percent from 2013 to 290,331. In 2014, 172,869 metric tons of cargo passed through MCO's facilities, an increase of 1.3 percent from the previous year. Southwest Airlines is the airport's largest carrier of passengers.

Several NextGen capabilities and enabling improvements have been implemented including Airport Surface Detection Equipment-Model X, External Surface Data Release, Performance Based Navigation procedures, basic rerouting, an Equivalent Lateral Spacing Operation Standard, Adapted for Time Based Flow Management use, and Expanded Low-Visibility Operations Using Lower Runway Visual Range Minima.

All airport information shown above is reported by Calendar Year (CY).

Select an Airport

MCO - Orlando Interna

Go

Scorecard

View as Charts

The following metrics summarize performance over a large set of diverse operations at this location. As such, their purpose is to reflect general trends as experienced by aircraft operators and passengers, without regard to their underlying drivers. For this reason, metric values should not be compared to operational impacts attributed to specific NextGen capabilities, where these are provided.

All Information below is in Fiscal Years (October 1 - September 30).

Reportable Hours for MCO
07:00 - 21:59 local time

Efficiency | Capacity

Performance Indicator (FY)	2009	2010	2011	2012	2013	2014	2015	2016
Average Gate Arrival Delay *Minutes per Flight*	1.9	1.5	2.6	0.5	2.8	5.8	3.8	2.9
Average Number of Level-offs per Flight *Counts per Flight*	[1]	[1]	2.7	2.7	2.8	2.8	2.8	2.7
Distance in Level Flight from Top of Descent to Runway Threshold *Nautical Miles per Flight*	[1]	[1]	38.6	38.7	39.7	39.9	39.7	37.1
Effective Gate-to-Gate Time *Minutes per Flight*	150.9	150.7	150.4	149.0	154.6	159.1	160.0	159.6
Taxi-In Time *Minutes per Flight*	7.0	7.6	7.7	7.6	7.8	7.7	8.2	8.9
Taxi-Out Time *Minutes per Flight*	13.1	13.3	13.6	13.5	13.9	14.2	14.6	14.9

[1] Consistent data for the time period prior to FY 2011 are not available.

As described by the International Civil Aviation Organization (ICAO), *efficiency addresses the operational and economic cost-effectiveness of gate-to-gate flight operations from a single-flight perspective. In all phases of flight, airspace users want to depart and arrive at the times they select and fly the trajectory they determine to be optimum.*