

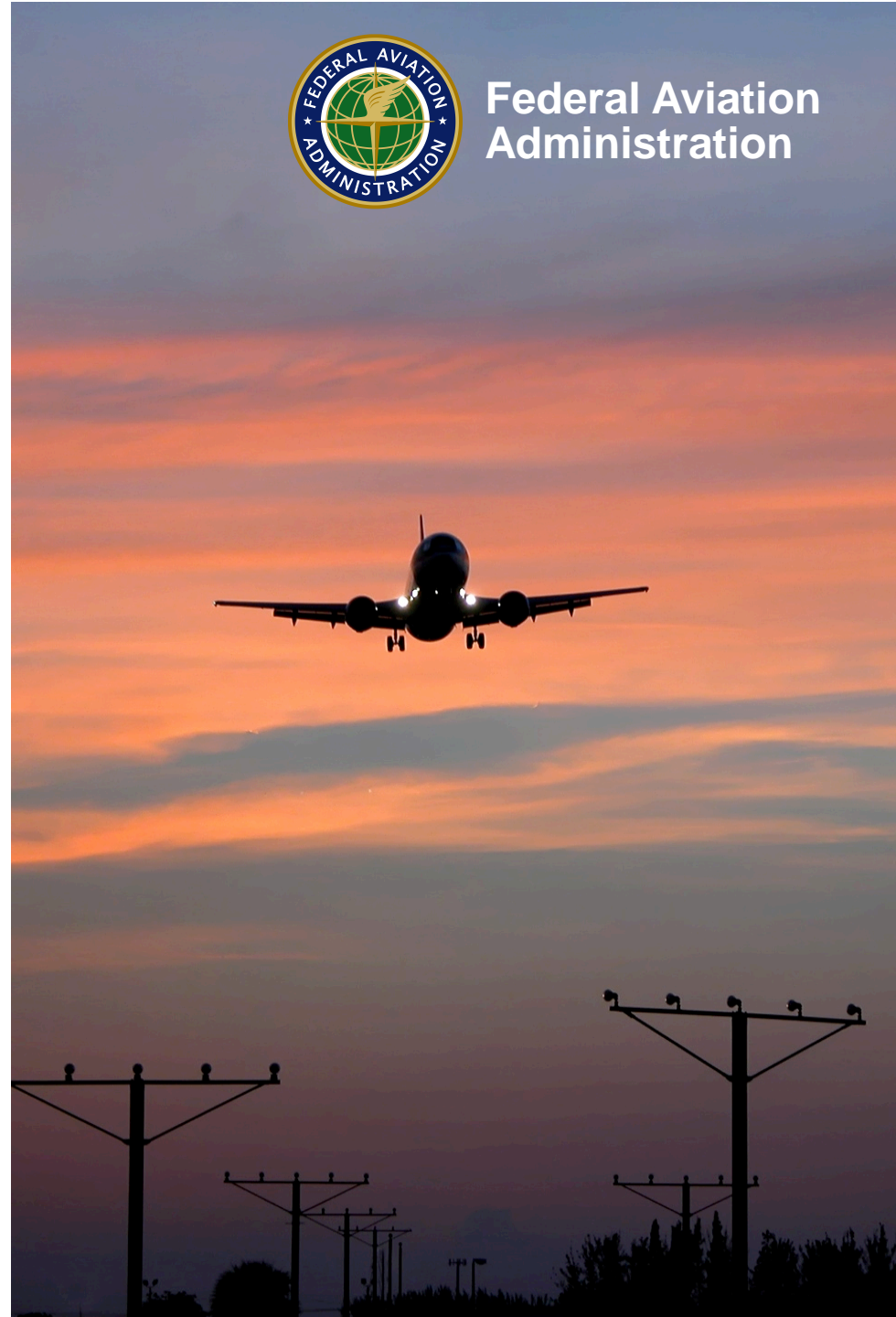


Federal Aviation
Administration

Northeast Corridor Initiative (NEC)

Presented to: NY Community Aviation Roundtable

Date: April 11, 2018



Northeast Corridor Initiative

- The Initiative was generated by the NextGen Advisory Committee (NAC).
- The NAC is a federal advisory committee of stakeholders, advising the FAA on NextGen
- The NAC identified the importance of modernizing air transportation in the Northeast Corridor

Focus on New York- $\approx 50\%$ of the delays emanate across the system from this area.

- If we don't have a ***North East regional focus***, we not are addressing the challenges in the National Airspace.

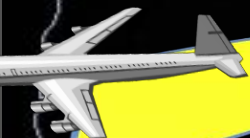


Core 30 Airports



Success for NE → Success for the Country

- 20% NAS passenger enplanements come from NE
- 18% U.S. international operations

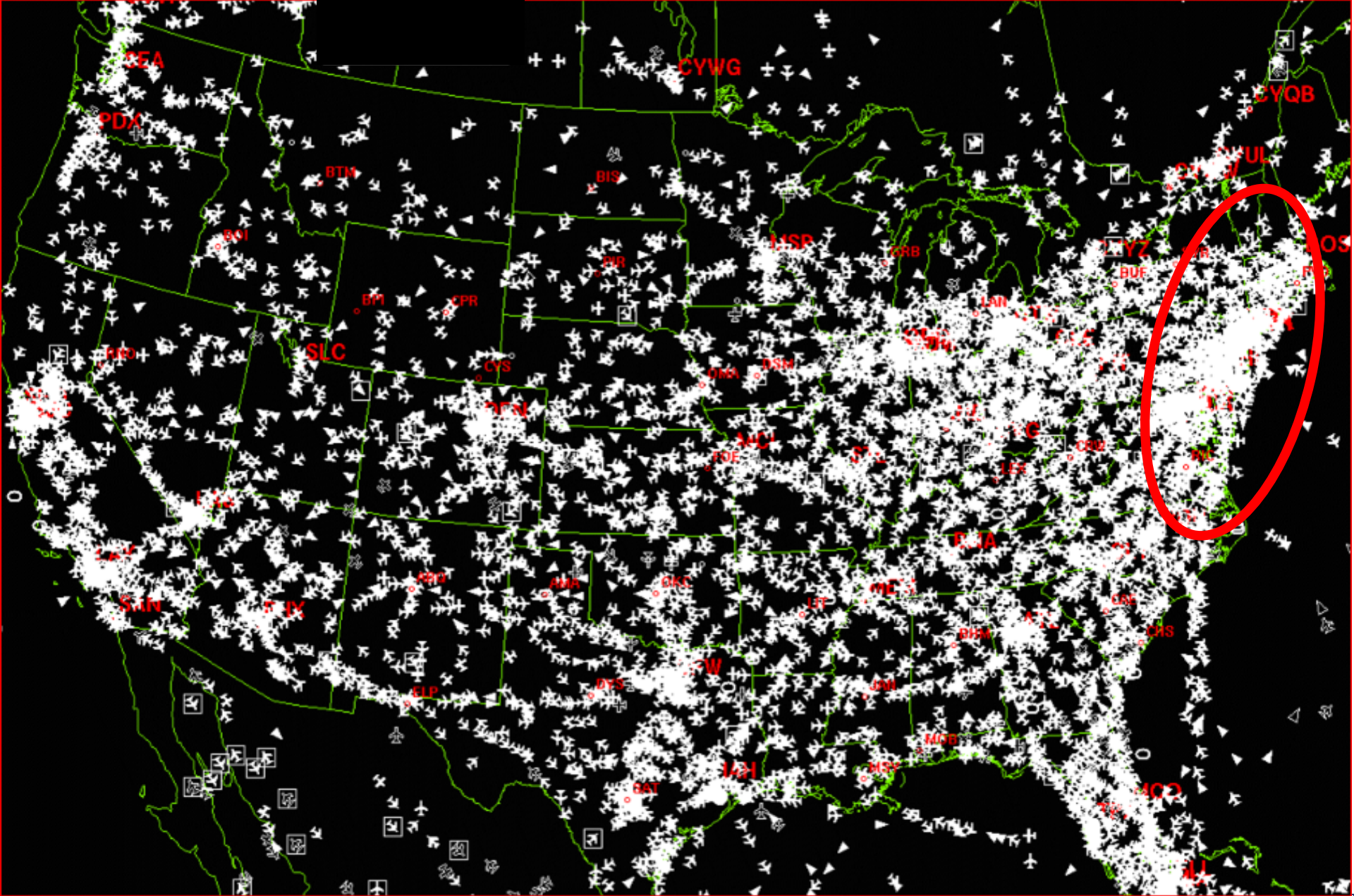


• \$70 B

- Impact of travel industry on NY in spending
- 473,795 jobs

• \$20 B

- Impact of travel industry on NJ in spending
- 211,203 jobs



Northeast Corridor Briefing

April 11, 2018



Federal Aviation
Administration

NAC Recommended Goals for NEC

Near-term goals:

- Improve execution of today's operation
 - Complete all scheduled Operations
 - Operate on time
 - Operate with predictability.

- Critical to improve operations during adverse weather

Timeframe: October 2017 – December 2021



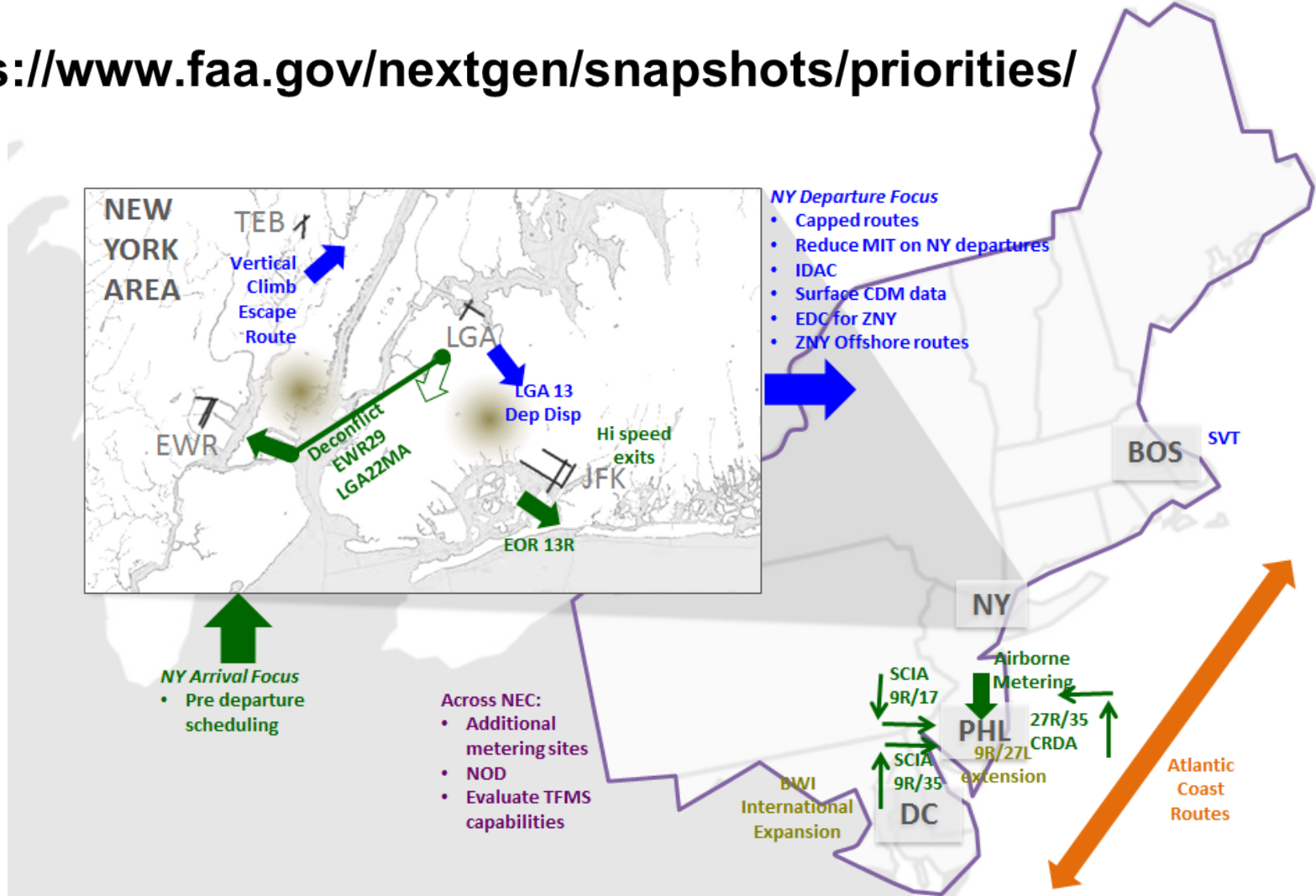
NEC Scope – What is included?

- **Airports**: build airport infrastructure on the airport surface, airport terminal buildings and air traffic towers that enable improved surface operations and airport throughput.
- **Airspace and Procedures**: design and evaluate operational procedures that improve efficiency of today's airspace/airport operation; and explore opportunities to deconflict traffic between close-in airports
- **Tactical Initiatives**: maximize and evolve the utilization of already deployed tools, routes and processes to improve movement of air traffic into, out of and within the NEC during periods of exceptionally high demand and severe weather.
- **Tools / Technology**: deploy new automation capabilities, decision support tools, and processes that enhance controller information and decision making such that operational performance is improved in all operating conditions



NAC NEC Initiatives for 1st 18 months

<https://www.faa.gov/nextgen/snapshots/priorities/>

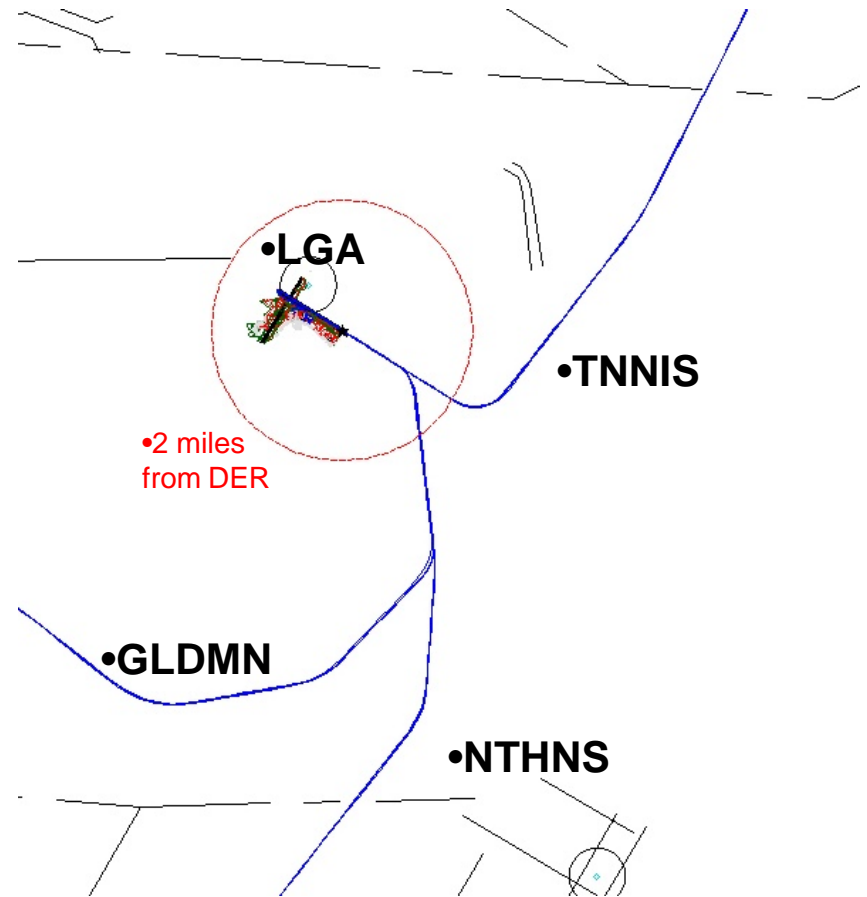


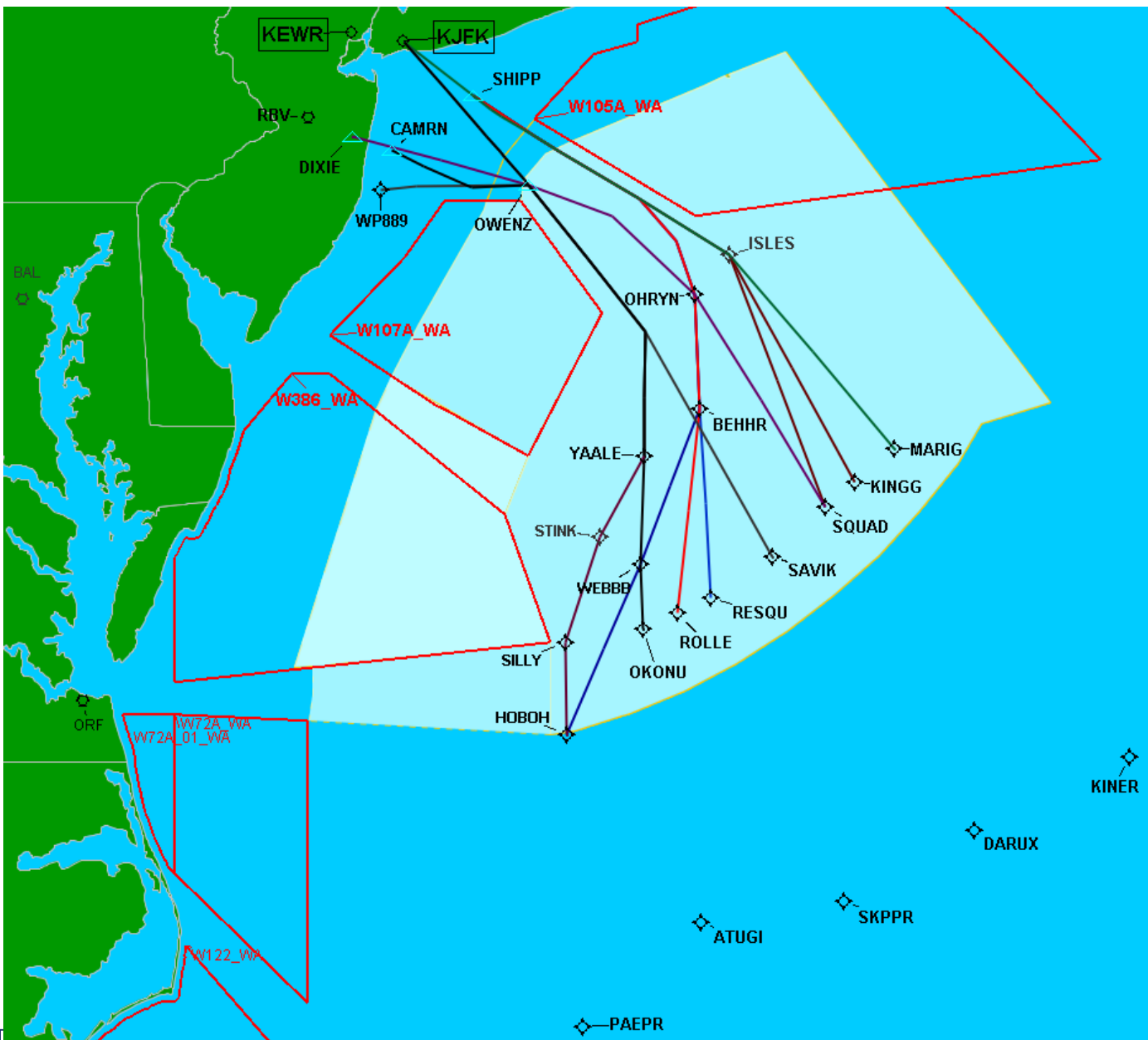
NEC Initiative: LGA13 departure dispersion using TNNIS, GLDMN, & NTHNS

Use of this initiative is limited to certain operational configurations

Benefits considerations

- Reduces average departure delay and improves schedule reliability
- Supports dispersion of Runway 13 departures to assist balancing of environmental effects
- Uses published procedures





NEC Initiative

ZNY Offshore
Airspace Redesign

Benefit Considerations

Improve airspace
efficiency in
constrained
offshore airspace



Atlantic Coast High Altitude Routes

Initiative Objective

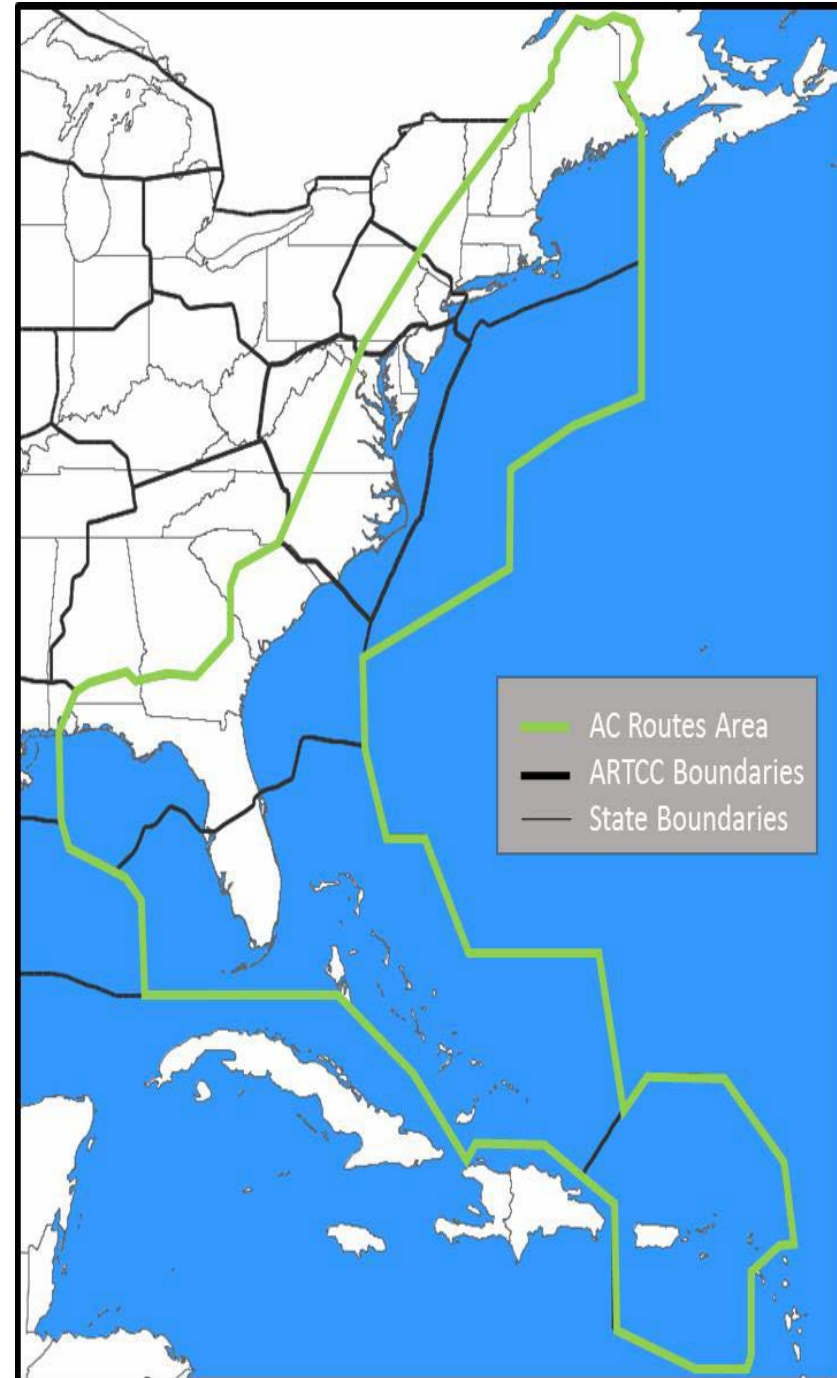
Design high altitude (Above 24000 ft) PBN Route structure to segregate flows and better manage traffic to/from major airports on east coast

Northeast Corridor

Mid Atlantic States to New England

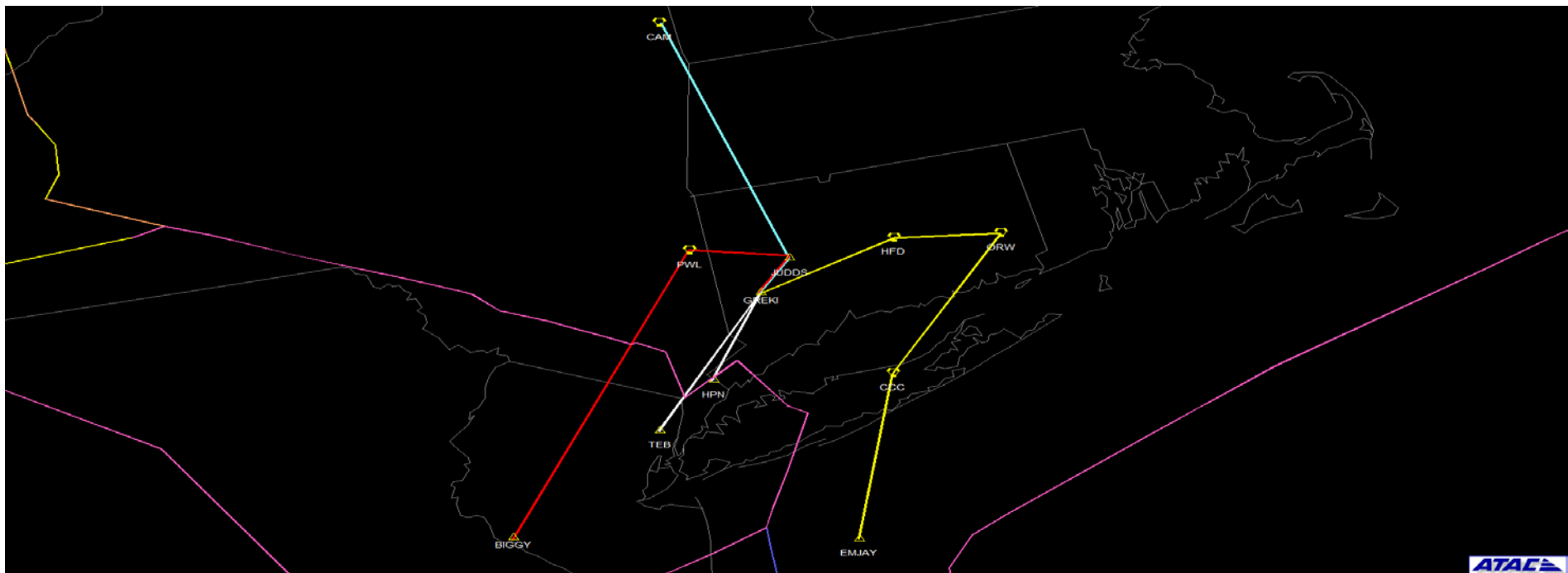
Florida Metroplex

Southern States to Puerto Rico



NEC Initiative: Vertical Climb Escape Route

High performance escape route during SWAP/other constraints for TEB/HPN departures that can perform climb



Thank you

We will continue to keep you and your communities updated



NAC NEC Initiatives for 1st 18 months

TACTICAL

- Conduct a feasibility study to create a process to reduce and/or eliminate passback MIT for departures from NEC
- Expand consistent usage of defined and existing capping and tunneling for departures/arrivals to/from the NEC (for example, PHL/ER/DUCT WEST, SERMN etc.) through required advisories
- Continue to develop the PERTI process using the Collaborative Decision Making process

AIRPORTS

- With CDM partnership, PANYNJ will exchange flight data with FAA/airlines for EWR, JFK, LGA. Improved surface management expected in particular at JFK with surface metering
- JFK - surface construction to relocate and build new high speed exits
- PHL – Runway 9R/27L Extension
- BWI – International Concourse E Extension

NAC NEC Initiatives for 1st 18 months

Tools & Technologies

- TBFM Pre-departure scheduling to PHL, EWR, BOS or LGA
- Improve Airborne Metering to PHL
- Conduct an analysis to determine the sequence of remaining airports to receive enroute metering
- Implement EDC for ZNY
- Implement TBFM IDAC for up to 4 NY Area Airports: EWR, LGA, JFK, TEB
- Better use of existing TFMS capabilities (such as RAPT, Improved Departure Viewer, Diversion Tracking Application, SAA, and other options) where already available
- Use BOS SWIM Visualization Tool at ZBW
- Expand number of operators sharing surface data with FAA to improve flow management
- Use NOD Prototype for Common Planning Coordination and Awareness between FAA and Users
- CRDA at PHL RWY27R/35 for RNAV approaches



NAC NEC Initiatives for 1st 18 months

Airspace & Procedures

- LGA - LGA13 departure dispersion using TNNIS, GLDMN, NTHNS
- All NY Metro's - ZNY Offshore Airspace Redesign
- East Coast – Atlantic Coast High Altitude Route Design
- TEB/HPN - Vertical Climb Escape Route for high performance biz jets during SWAP/other constraints).
- EWR - Modify LGA22 missed approach to deconflict with EWR29 RNAV GPS X (Feasibility analysis only)
- JFK – Feasibility of EoR for JFK 13R simos with 13L ILS
- PHL - Update minima for existing SCIA procedure to 9R/17
- PHL – Safety Assessment for SCIA's with RNAV for 9R/35
- All NY Metro's – Concept Exploration for simultaneous widely spaced (9000') approach paths to different airports.

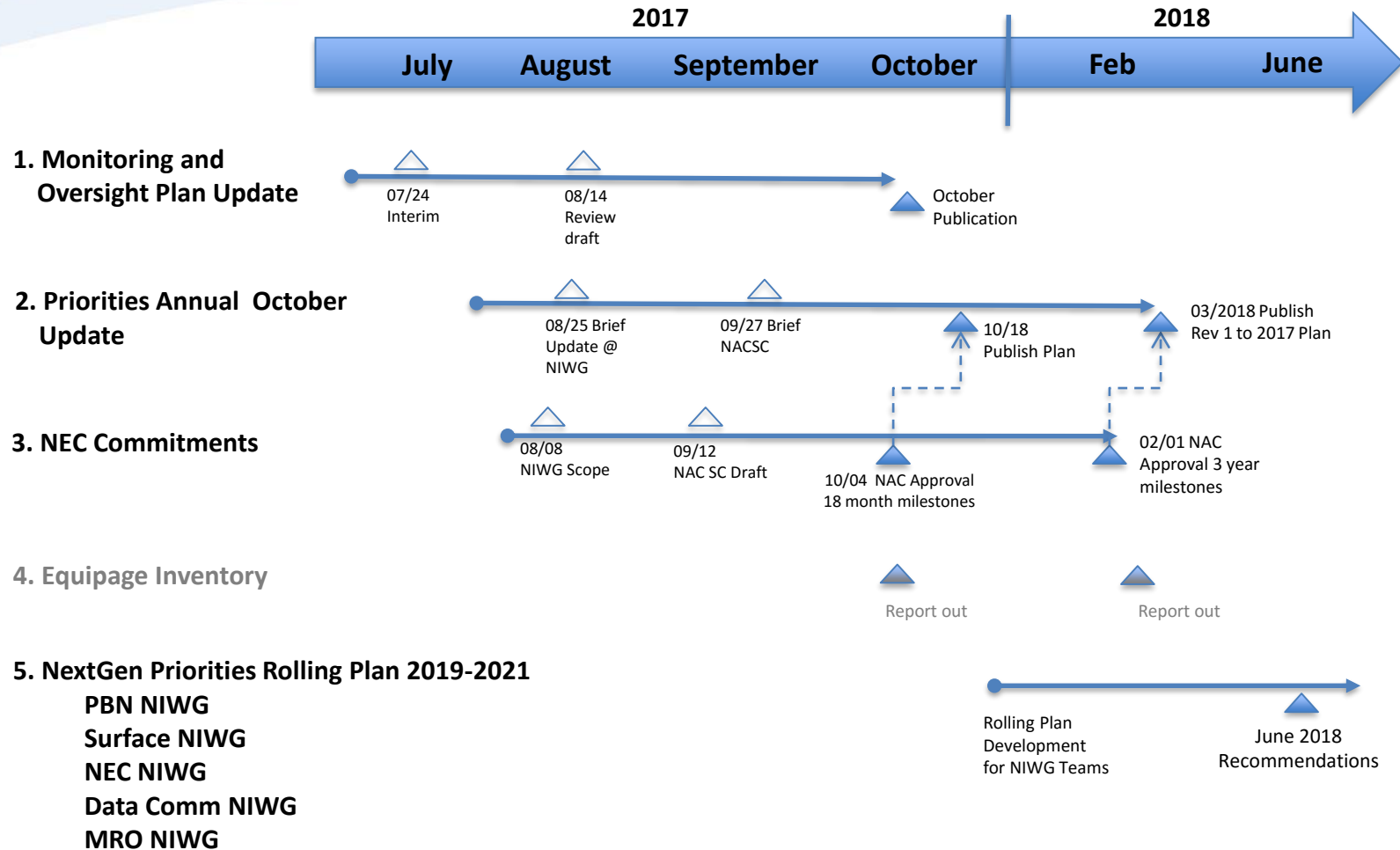


NextGen Priorities Plan Updates

October 4, 2017



NextGen Priorities Development



NextGen Priorities Annual Plan

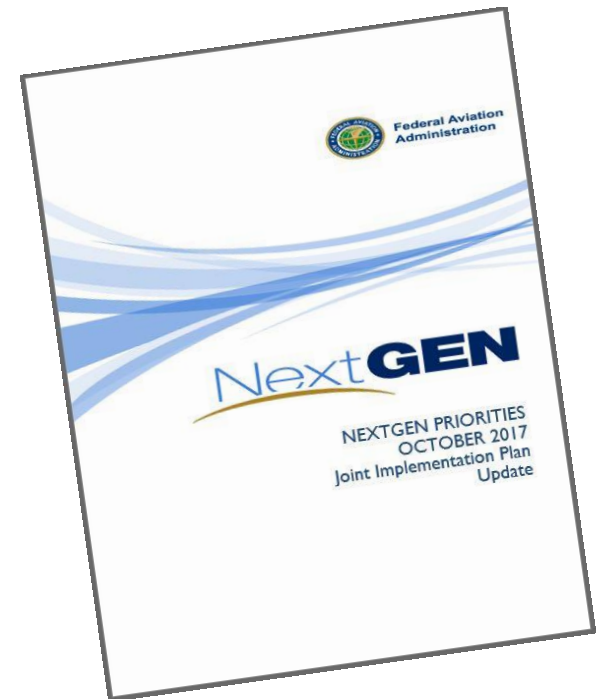
FY17 Update

Important Dates

- Milestone changes approved by the NAC SC Oct. 27th
- Seeking NAC endorsement on Changes Oct. 4th
- Deliver to Congress late Oct. 2017

Plan Content

- Executive Summary
- Background of Priorities
- Successes – Documenting milestone operational outcomes
- Changes – Detailing changes to existing milestones
- NEC Rolling Plan (incorporate after NAC)
- Appendix A – Milestone completion to date
- Appendix B – Milestone changes
- Appendix C – Goals and Priorities for Improving Operations in the Northeast Corridor Phase One
- Appendix D – Joint Implementation Commitments for Improving Operations in the Northeast Corridor Phase Two - Interim Report (incorporate after October 4th)



Copy of the updated annual plan can be found here post October 2017:

<https://www.faa.gov/nextgen/snapshots/priorities/>



Appendix B: NextGen Priorities Annual Plan

October 2017 Incorporated Updates

Focus Area	#	Implementation / *Preimplementation Commitment	Original Date	Change Date	Rationale
Data Comm	1	Tower Services Waterfall - Additional towers (RSW, CMH, CHS, BUF, RNO, ADW, and VNY) scheduled to all be operational by September 2019	N/A	Q4 2019	These additional seven sites were added due to early program implementation successes.
MRO	2	Amend National Standards for Vertical Navigation (VNAV) for Simultaneous Independent Parallel Approaches	Q3 2017	Removed	This milestone was removed due to industry concerns about the milestone. The VNAV issue will move to PBN.
	3	Wake RECAT	IAD Q3 2017 LAS, PHX Q4 2017	IAD, LAS, PHX Q3 2018	Operational impacts on air traffic at facilities Examine breaking out 757 into separate category
Surface	4	Data Sharing: Airports Supplement Actual In Block Time (AIBT), Actual Off Block Time (AOBT), Actual Take Off Time (ATOT), Actual Landing Time (ALDT)	Q3 2017	Removed	Correction to plan, airports to provide data was inadvertently added as milestones. Airport data sharing will be part of next steps with the four pilot airports.
	5	Data Sharing: Airports Additional Airports Providing Data	Q2 2018	Removed	
PBN	6	EoR - RF/TF to xLS Safety Analysis	Q2 2018	Dependent on Milestone #10	These milestones are now dependent on the analysis of aircraft equipage inventory and subsequent actions. (Milestone #10)
	7	EoR - Dependent Operations Safety Assessment	Q1 2019	Dependent on Milestone #10	
	8	EoR - Site Selection Decision	Q3 2017	Dependent on Milestone #10	
	9	EoR - Feasibility Assessment: Concurrent use of Track to Fix and Radius to Fix	Q4 2017	Dependent on Milestone #10	
	10	Aircraft Equipage Inventory - Analyses of Aircraft equipage inventory, VNAV causal factors, equipage strategy, and identification of subsequent actions	N/A	Q2 2018	Equipage inventory and causal analyses needed to develop an understanding of VNAV implications, mitigations and way forward.



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NextGen Priorities Quarterly Report

March 2018 NAC Meeting



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Next**GEN**

Data Comm



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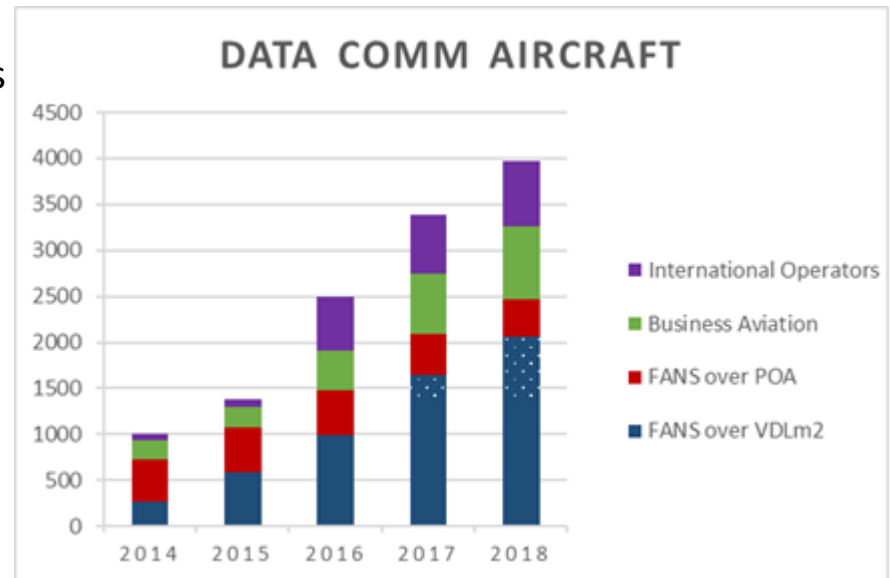
Data Comm – Update

- ✓ **Tower Services Waterfall – Q4 2016**
 - Completed challenge waterfall in December 2016
 - Seven additional towers (ADW, RNO, CMH, RSW, CHS, BUF, and VNY) to be added by end of FY19
 - ❖ ADW IOC on November 8, 2017
 - ❖ RNO IOC on February 20, 2018
- ✓ **Implementation Framework for non-VDL Mode 2 Media – Q1 2017**
 - Moving forward with agreed to framework
 - Affected operators working with their applicable Communications Service Provider (CSP) to investigate implementation options for VDL-0 in En Route
- **Initial Operating Capability (IOC) for Initial En Route Services at first Air Route Traffic Control Center (ARTCC) – Q3 2019**
 - Successfully completed transition to National Single Data Authority (NSDA) – October 21-22, 2017
 - ERAM software changes required to support En Route CPDLC are in integration and test
 - Continuing early ops evals, flight deck demos with stakeholders, and risk reduction events at ZKC
 - Working risk mitigation strategies to address packaging challenges in ERAM, operator readiness for En Route ops, and implementation risks in the NAS
- **Airlines goal is to equip 1,900 aircraft**
 - 4,139 Data Comm equipped aircraft as of February 28, 2018 (includes FANS/VDL Mode 2, FANS/VDL Mode 0, business jets, and international aircraft)
 - 1,757 aircraft have been equipped through the equipage initiative
- **Operational Summary**
 - Over 41,000 Data Comm ops per week – Passed 2 million Data Comm operations on January 1, 2018
 - Participation from 11 mainline US carriers, 43 international carriers, 40 business jet operators, and GA
 - 56 different aircraft types using Data Comm

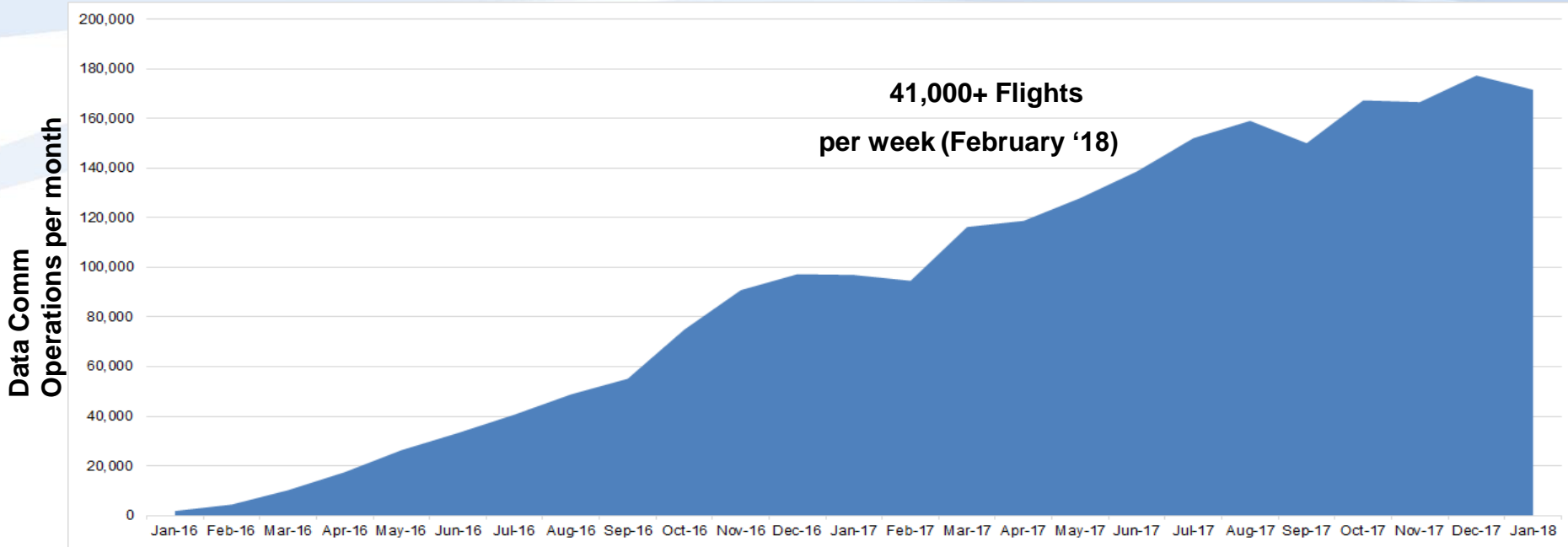


Avionics Status

- Initial service deployed with Future Air Navigation System (FANS) 1/A communications avionics
 - ✦ Integrated avionics functionality supports all Segment 1 Tower and En Route services
 - ✦ Leverages avionics in operation in the NAS and Ocean today
- Air-ground network is VHF Data Link (VDL) Mode 2
 - ✦ Program accommodating VDL Mode 0 radios for Tower Service
 - ✦ Establishing monitoring framework related to VDL Mode 0 in En Route airspace
- **Equipage Initiative**
 - No rulemaking required for Segment 1 services
 - Program includes a target of at least 1,900 Data Comm capable aircraft
 - 4,139 Data Comm equipped aircraft operating in the NAS (as of 28 Feb)
 - 1,757 of the 4,139 were equipped through the incentive (as of 28 Feb)
 - An additional 774 DoD aircraft are equipped with Data Comm capable avionics



Tower Service Ops Summary



11 US Mainline Air Carriers



56 Aircraft Types



43 International Air Carriers





Business Jet Operators



Data Comm Tower Benefits

As of February 2018 Data Comm has delivered benefits to:

 2,322,094 flights

 330.3M passengers

Air Carriers:

 11 US
43 Intl

Business Aviation:

 100+ Users

Different Aircraft:

 56 Types





Fast Facts:

 44,000+ minutes of radio time saved in December 2017

 10,000+ minutes of delay savings in August 2017

 Prevented 2,300+ readback errors in December 2017

 Reduced workload for ATC and pilots during busy clearance revision periods

 41,500+ operations a week

Results based on route-revised flights reporting on-time performance metrics.



Data Comm – Risks

- **Air-to-Ground interoperability**
 - Issue resolution between air and ground systems
 - Latent avionics issues – Pegasus 1
- **Training**
 - Development and acceptance of training materials
 - Timing of training to support initial En Route operations
 - Operator flight crew training to support waterfall
- **Operator support for the En Route waterfall**
 - Equipped aircraft needed to support Data Comm ARTCC site IOCs
 - Support for FAA air-to-ground interoperability site testing
- **Integration and test of the component subsystems**
 - ERAM/TDLS/DCNS/FTI/Aircraft
- **Site coordination**
 - Coordination across multiple facilities and with operators to support transition to Data Comm En Route Initial CPDLC Services

NextGEN

Performance Based Navigation



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Performance Based Navigation Commitments

Implementation and Pre-Implementation Commitments

- CY2017 Q4
 - + Single Site Implementations: HND, AUS – **Completed**
- CY2018 Q1
 - + None

Industry Commitments

- CY2017 Q4
 - + American to provide data on Charlotte Metroplex procedures – **Completed**
 - + Delta to provide data on Atlanta Metroplex procedures – **Completed**
 - + FedEx to provide data for EFVS IND – **Awaiting data**
- CY2018 Q1
 - + None



PBN Risk Management

- Aircraft equipage/capabilities
 - ✦ Nearly 100% equipage rate may be necessary for measurable benefits
- Operator business case for PBN benefits
- Deploying Air Traffic Control tools in alignment with operational needs
- Cultural issues/change management associated with transition to time based
- Training acceptance and application – controllers & pilots
- Community environmental concerns

NextGEN

Surface Ops & Data Sharing



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Surface Operations & Data Sharing

(Completed since October 2017)

- **All commitments for the current rolling plan are complete**
 - Surface Departure Management Demonstration Charlotte (ATD-2) – Q4 2017
 - Phase 1 of the NASA effort achieving significant early benefits ~ 95k lbs. of fuel savings since start of the operational demonstration in November 2017
 - FAA to Increase Data Sharing by providing additional Surface Surveillance data to Industry via SWIM – Q4 2017
 - Providing subscribers additional aircraft position information into the non-movement areas (where available)
 - Data Sharing: Flight Operators Provision of Specific Examples of Desired TFM Data Not Currently Available via SWIM – Q4 2017
 - Working within the SWIM Industry FAA Team (SWIFT) collaboration community to leverage available data
- TFDM program development continues on track to achieve IOC at PHX by January 2020 and CLT by March 2021
 - TFDM Terminal Publication (TTP): The success of TFDM metering depends on operators subscribing to TTP service via SWIM in order to receive important data including the Target Movement Area Entry Time for each flight.
 - TFDM will start publishing the data concurrent with the PHX IOC in 2020.



CDM User Status *(Provision of Surface Data Elements)*

TFM CDM Publishers

Airline	SWIM Consumer	SWIM Publisher	Status	Notes
American	Operational	Operational	Operational SWIM Consumer/Producer • Working on additional TFM R/R Apps	• In planning stage for standing up two additional TFM Req/Reply applications
Delta	Operational	Operational	Operational SWIM Consumer/Producer	
JetBlue	Operational	Operational	Operational SWIM Consumer/Prod • Became Operational Oct 2017	
United	Operational	Cutover at ACY	Feb 2017: SWIM Stakeholder Meeting Jun 2017: Started TFM R/R On-Ramping Sep 2017: Scheduled Dry Runs and Test Oct 2017: TFM Exit Briefing Completed Nov 2017: Cutover at ACY; OEX Pending	- Successful test at ACY, failover to OEX still needs modifications. United is working on updating their application to support alternate site failover process.
FedEx	Operational	In Development	Jan 2017: SWIM Stakeholder Meeting Jun 2017: Connected to FNTB for TFM R/R Dec 2017: Req/Rep Req's Discussion	• TFMS is developing a Business Engineering briefing and will provide to FedEx when complete
ForeFlight	Operational	Connected to FNTB	Nov 2017: Kick-Off w/ TFMS	• Intend to use Flight Create, Modify, Cancel (& possibly CTOP)
FlightPlan	Operational	Connected to FNTB	Nov 2017: Kick-Off w/ TFMS Dec 2017: Req's Meeting w/ TFMS	• Does not use FSM application but does have a business processes in place
SWA	Operational	Not Ready	Feb 2017: SWIM Stakeholder Meeting Mar 2017: Held TIM	• Not ready to support TFM Req/Reply
UPS	Operational	Not Started	Feb 2017: SWIM Stakeholder Meeting	• Using 3rd party client for consumer • Currently not pursuing TFM Req/Reply

NextGEN

Multiple Runway Operations



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Multiple Runway Operations Accomplishments

- **Wake RECAT implementation**
 - Wake RECAT commitments are on course
 - DTW training is underway, implementation by end of March
 - Safety Panel was held in February; assessing operational improvements to current wake RECAT 2.0
- **Dependent Stagger Reduction**
 - New 7110.308C Order implemented for SFO using 1.0 NM separation
 - Updates Order in response to ALPA concerns and extends timeframe beyond original 90 days
- **Dynamic Wake Separations/Time Based Separations**
 - Assessment of capability for the NAS is on course
 - Analysis of wake and wind data is underway to assess feasibility, potential benefits, and operational impacts

Multiple Runway Operations Risks

- **Wake RECAT Implementation**
 - Risks
 - Operational Challenges with Large leading Small and helicopter operations at RECAT sites
 - Coordinating RECAT implementation when other programs are competing for resources
 - Mitigations
 - Executed Safety Risk Management Panel to assess hazards associated with potential RECAT changes that could address operational issues
 - Coordinating schedules with facilities for RECAT familiarization and training to accommodate competing priorities
 - Partnering with industry co-leads to allow for flexibility and coordinating when commitment locations/dates may need to change

Next**GEN**

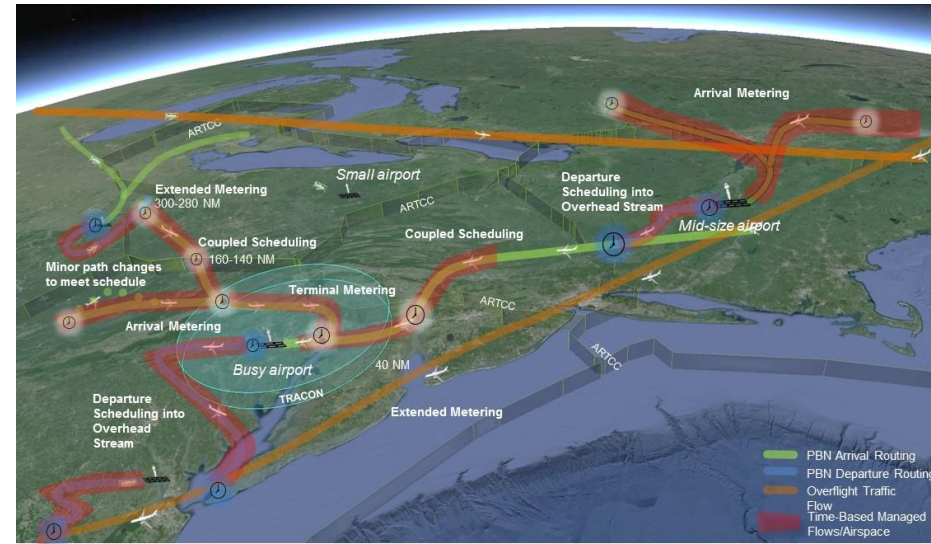
Northeast Corridor



FAA

Northeast Corridor

- NEC NIWG is overseeing the execution of numerous Items that will improve the flow of aircraft into and out of the NEC
- These Items lay the groundwork for the introduction of Trajectory-Based Operations in the NEC
- **Milestone Breakout (by type)**
 - ✦ Pre-Implementation: 18
 - ✦ Implementation: 8
 - ✦ Industry: 11



- **Milestone Breakout (by location)**
 - ✦ NEC: 12
 - ✦ NY Area Airports: 15
 - ✦ PHL/DC/BOS Area Airports: 10

Northeast Corridor Commitments

- Improved departure management from and arrival management to NEC airports through a combination of Procedures, Tactical Initiatives, Decision Support Tools (DSTs), and Airport Changes
 - ✦ **Procedures:** Designed new route structure to enhance airspace throughput in offshore airspace; Developed procedure to lower minima to increase arrival throughput
 - ✦ **Tactical Initiatives:** Increase the use of “capping/tunneling” to increase egress from NEC airports; reduce MIT passback
 - ✦ **DSTs:** Implement TBFM En Route Departure Capability at NY ARTCC and Integrated Arrival/Departure Capability at the 4 NY Towers to improve departure throughput
 - ✦ **Airports:** Rwy Extension/Taxiway Improvements at PHL; Relocate High-Speed Taxiways to decrease Rwy Occupancy Time at JFK

Northeast Corridor Accomplishments

- **Accomplishments**
 - ✦ Improved the flow of departures from PHL and NY Area airports via the implementation of the Integrated Departure Arrival Capability at these airports and the implementation of the En Route Departure Capability at NY Center
 - ✦ Enhanced traffic flow management demand projections in the NEC via the sharing of aircraft intent data (via surface data elements) by JetBlue and United Airlines
 - ✦ Modified procedures to lower the minima at PHL during Simultaneous Converging Instrument Approach operations.
 - ✦ New York Center has implemented redesigned airspace and completed designs for realigned offshore airways to enhance airspace throughput for all NY Metro traffic departing or arriving through offshore airspace.
 - ✦ 4 FAA and 2 Industry Milestones completed to date
- **Outlook**
 - ✦ 3 FAA Milestones and 3 Industry Milestones scheduled for Q1 CY18
 - ✦ These milestones focus on pre-implementation activities for Procedural changes and implementing taxiway changes at JFK
 - ✦ All Milestones on track
- **Developed a NEC Measurement Plan for Select Commitments through 2019**





NextGen Priorities Quick Look Joint Implementation Plan Commitments

3-Year Plan 2017 to 2019



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NextGen Priorities Rolling Plan CY 2018

Focus Area	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
MRO			<ul style="list-style-type: none"> Wake Recategorization (IAD, LAS, PHX) 	<ul style="list-style-type: none"> Wake Recategorization (DTW, HNL, SAT, SEA) Assessment of Time Based Separation Concept for Use
PBN		<ul style="list-style-type: none"> EoR If 5.9.7 is Achieved and Applicable; Begin EoR Operations with Modified RF Procedures at DEN and IAH EoR If Favorable Outcome of Independent Duals/Triples Safety Analysis; Develop and Approve Document Change Proposal (DCP) to 7110.65 paragraph 5.9.7 EoR Dependent Operations Safety Assessment EoR Feasibility Assessment: Concurrent Use of Track to Fix and Radius to Fix EoR RF/TF to xLS Safety Analysis EoR Site Selection Decision EoR — Aircraft Equipage Inventory - Analyses of aircraft equipage inventory, VNAV causal factors, equipage strategy, and identification of subsequent actions Delta to Provide Data on their Utility and Usability for ATL EDO (i) Delta to Provide Data on their Utility and Usability for DFW EDO (i) NBAA to Provide Data on their Utility and Usability for HND RNAV SID (i) Southwest to Provide Data on their Utility and Usability for AUS OPD (i) 	<ul style="list-style-type: none"> Southwest to Provide Data on their Utility and Usability for DEN RF United to Provide Data on their Utility and Usability for IAH RF 	<ul style="list-style-type: none"> TBFM Decision Support Tools - Integrated Departure Arrival Capability (IDAC)
Surface				
Data Comm	<ul style="list-style-type: none"> Baselines-Segment 1 Phase 1 Tower Services and Segment 1 Phase 2 En Route Initial Services (RNO) (*Baseline Q3 2019) 			
Totals	1 of 1 Complete	0 of 11 Complete	0 of 5 Complete	0 of 6 Complete

* Indicates early completion. Milestone baseline dates and early completion dates can be accessed here: www.faa.gov/nextgen/snapshots/priorities

NextGen Priorities Rolling Plan CY 2019

Focus Area	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
MRO				<ul style="list-style-type: none"> Wake RECAT (BOS, DFW)
PBN				<ul style="list-style-type: none"> TBFM Decision Support Tools - Integrated Departure Arrival Capability (IDAC) (4 sites) TBFM Decision Support Tools - Terminal Sequencing and Spacing (TSAS) NBAA to Provide Data on their Utility and Usability for Las Vegas Metroplex (LAS)
Surface				
Data Comm			<ul style="list-style-type: none"> Baselines-Segment 1 Phase 1 Tower Services and Segment 1 Phase 2 En Route Initial Services (BUF, CHS, CMH, RSW, VNY) (5 sites) Initial Operating Capability (IOC) for Initial En Route Services at first Air Route Traffic Control Center (ARTCC) 	<ul style="list-style-type: none"> Airlines to Equip 1,900 Aircraft
Totals	0 of 0 Complete	0 of 0 Complete	0 of 6 Complete	0 of 9 Complete

* Indicates early completion. Milestone baseline dates and early completion dates can be accessed here: www.faa.gov/nextgen/snapshots/priorities

NextGen Priorities Rolling Plan CY 2018

Focus Area	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
Northeast Corridor	<ul style="list-style-type: none"> ■ Tools — Implement En Route Departure Capability (EDC) (ZNY) (*Q4-17) ■ Tools — TBFM Integrated Departure/Arrival Capability (IDAC) for Metro NY Airports (*Q4-17) ■ Tools — Training and Operating Agreements to Support EDC at ZNY (*Q4-17) ■ Procedures — Design PBN Arrival and Departure Procedures for NY Metro Area Airports from ZNY Oceanic ■ Procedures — Design and Testing for Vertical Climb Escape Route for TEB/HPN ■ Tools — NAS Operations Dashboard (NOD) Trial ■ Airports — JFK Runway 4R/22L Rehabilitation and Delay Reduction Taxiway Improvements (i) ■ Procedures — NBAA to Participate in Design and Testing for Vertical Climb Escape Route for TEB/HPN (i) ■ Procedures — Participate in Design Activities Associated with the New PBN Arrival and Departure Procedures for the ZNY Oceanic Transition Sectors (i) 	<ul style="list-style-type: none"> ■ Tools — Implement Surface Visualization Tool (SVT) (ZBW) ■ Tools — Implement TBFM IDAC(*Q4-17) ■ Procedures — Atlantic Coast Routes: Design Validation of Eastern Seaboard High-Altitude PBN Routes, Including SID/STAR Connectivity ■ Tools — Assessment for Early TBFM Pre-Departure Scheduling ■ Procedures — Atlantic Coast Routes: Participate in Design Activities, Including SID/STAR Connectivity (i) ■ Tools — NAS Operations Dashboard (NOD) Trial (i) 	<ul style="list-style-type: none"> ■ Procedures — Update the Minima for Existing Simultaneous Converging Instrument Approaches (SCIA) Procedure to PHL 9R and 17 ■ Tools — NAS Operations Dashboard (NOD) Trial Study 	<ul style="list-style-type: none"> ■ Procedures — Implement Simultaneous Converging Instrument Approaches (SCIA) to PHL 9R and 17 ■ Procedures — Environmental Review for the Use of Dispersal Headings for LGA 13 Departures ■ Procedures — Feasibility Study for the Modified Missed Approach for LGA 22 ■ Procedures — Safety Assessment of SCIA Operations with RNAV for PHL 9R and 35 ■ Airports — BWI International Terminal Improvements and Additional New Gates (i) ■ Airports — PHL Runway 9R/27L Extension (i) ■ Procedures — Participate in Community Engagement for Dispersal Headings for LGA 13 Departures (i) ■ Procedures — Participate in Feasibility Study for the Modified Missed Approach for LGA 22 (i) ■ Procedures — Provide Expertise to Support the Safety Assessment of Simultaneous Converging Instrument Approaches (SCIA) Operations with RNAV for PHL 9R and 35 (i) ■ Tactical — Airspace Users to Complete Training to Support Capping and Tunneling for Departures/Arrivals to/from the NEC
Totals	3 of 9 completed	1 of 6 completed	0 of 2 completed	0 of 10 completed

* Indicates early completion. Milestone baseline dates and early completion dates can be accessed here: www.faa.gov/nextgen/snapshots/priorities

NextGen Priorities Rolling Plan CY 2019

Focus Area	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
Northeast Corridor	<ul style="list-style-type: none"> ■ Tactical — Consistent Usage of Defined and Existing Capping and Tunneling for Departures/Arrivals to/from the NEC ■ Tools — Converging Runway Display Aid (CRDA) Dependent Converging Instrument Approaches (DCIA) Application for PHL 27R and 35 for RNAV Approaches ■ Tools — Implement TBFM Pre-Departure Scheduling at a Selected Airport ■ Tools — Improve Airborne Metering ■ Tactical — Feasibility Study to Create a Process to Reduce and/or Eliminate Passback Miles-in-Trail for NY Departures ■ Tools — Complete TBFM Refresher Training for Metering to PHL ■ Tools — Determine the Sequence of Additional Airports to Receive En Route Metering ■ Tools — Review/Update Adaptation for Improving Airborne Metering to PHL ■ Airports — PANYNJ to Exchange Flight Data with FAA/Airlines (i) ■ Procedures — Contribute to Associated Community Engagement Activities for the New PBN Arrival and Departure Procedures for JFK and EWR from ZNY Oceanic (i) ■ Tools — Education of Airspace Users to Support TBFM Pre-Departure Scheduling (i) 	<ul style="list-style-type: none"> ■ Procedures — Concept Exploration of Simultaneous Operations on Widely-Spaced Approaches to Different Airports ■ Procedures — Feasibility Assessment of EoR Simultaneous Operations to JFK 13R RNP and 13L ILS ■ Procedures — Participate in the Concept Exploration of Simultaneous Operations on Widely-Spaced Approaches to Different Airports (i) ■ Procedures — Participate in the Feasibility Assessment of EoR Simultaneous Operations to JFK 13R RNP and 13L ILS (i) 	<ul style="list-style-type: none"> ■ N/A 	<ul style="list-style-type: none"> ■ N/A
Totals	0 of 11 Complete	0 of 4 Complete		

* Indicates early completion. Milestone baseline dates and early completion dates can be accessed here: www.faa.gov/nextgen/snapshots/priorities

NextGen Priorities Rolling Plan CY 2017

Focus Area	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
MRO	<ul style="list-style-type: none"> Amend Dependent Runway Separations (Runways > 4300') CVG, MEM, PHX, SDF(4 sites) Wake RECAT MSP Joint Analysis Team Performance Analysis Participation IND, PHL (i) 	<ul style="list-style-type: none"> Amend Depend Runway Separation Order 7110.308A SFO Wake RECAT MIA Benefits Assessment to Upgrade RECAT Sites to Phase II 	<ul style="list-style-type: none"> Amend Standards for Simultaneous Independent Approaches, Triples ATL, IAD (2 sites) 	
PBN	<ul style="list-style-type: none"> Metroplex CLT Metroplex LAS Design Start Advanced RNP Advisory Circular 90-105; Assess Potential demo sites; Design Guidance EoR Feasibility Assessments for Independent Duals and Triples Operations (TF @ ATL, CLT, DFW, SDF) (RF @ DEN, IAH) EoR SEA Review New Vertical Guidance Criteria and Location Guidance Boeing to provide data on their utility and usability GYY (i) JetBlue to provide data on their utility and usability BOS (i) 	<ul style="list-style-type: none"> EoR Independent/Dependent Operations Capacity Analysis Established on Required Navigation Performance (EoR) Independent Operations Safety Analysis (RF Duals + Triples) RNP 1 Departures BUR, SNA (2 sites) PBN Lead Operator Roles Redefined - FAA will Lead Documentation Effort with Support from the Aviation Community(i) 	<ul style="list-style-type: none"> TBFM Decision Support Tools - Ground-Based Interval Management (GIM-S) (3 sites) Established on Departure Operations (EDO) Feasibility Assessment 	<ul style="list-style-type: none"> Single Site Implementations AUS. HND (2 sites) American to Provide Data on their Utility and Usability for CLT Metroplex Procedures (i) Delta to Provide Data on their Utility and Usability for ATL Metroplex Procedures (i) FedEx to Provide data on their Utility and Usability for EFVS IND (i)
Surface		<ul style="list-style-type: none"> Data Sharing: Flight Operator, American Airlines to provide data for Charlotte Surface Departure Management (i) 	<ul style="list-style-type: none"> Flight Operators Conduct Outreach to Facilitate Data Sharing participation from Additional Flight Operators (i) 	<ul style="list-style-type: none"> FAA to Increased Data Sharing providing Surface Surveillance MLAT CAT 10 data (MA and Incidental NMA) to Industry via SWIM Surface Departure Management Demonstration Charlotte (ATD-2) Data Sharing: Flight Operators Provision of specific examples of desired TFM data not currently available via SWIM (i)
Data Comm				<ul style="list-style-type: none"> Baselines-Segment 1 Phase 1 Tower Services and Segment 1 Phase 2 En Route Initial Services (ADW) (*Baseline Q3 2019)
NEC				<ul style="list-style-type: none"> Tools — JetBlue to Provide Improved Aircraft Intent Data via Surface Data Elements Tools — United Airlines to Provide Improved Aircraft Intent Data via Surface Data Elements
Totals	14 of 14 Complete	9 of 9 Complete	7 of 7 Complete	8 of 11 Complete