



**Federal Aviation
Administration**

Next**GEN**

NEXTGEN ADVISORY COMMITTEE
NEXTGEN PRIORITIES
JOINT IMPLEMENTATION PLAN
2022 UPDATE

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EXECUTIVE SUMMARY

The Federal Aviation Administration (FAA) and the aviation stakeholder community have been collaborating on the successful implementation of NextGen in the National Airspace System (NAS) for more than a decade.

In 2009, through RTCA Task Force 5 and the subsequent creation of the NextGen Advisory Committee (NAC) in 2010, the FAA collaborated with stakeholders to develop a broad outline of the NextGen vision and lay out initial operational concepts. By 2013, with encouragement from The House Committee on Transportation and Infrastructure, FAA collaboration efforts with the NAC had matured to focus on joint NextGen implementation commitments. This led to the creation of the NextGen Joint Implementation Plan (NJIP) and the development of the NAC's NextGen priority focus areas of:

- Data Communications (Data Comm),
- Surface and Data Sharing,
- Multiple Runway Operations (MRO),
- Performance Based Navigation (PBN),
- and eventually a NAC-requested focus on the Northeast Corridor (NEC)

This *NextGen Priorities Joint Implementation Plan (NJIP) 2022 Update* is the result of an annual assessment of the milestones included in the original *NextGen Priorities Joint Implementation Plan CY2019–2021* published on June 25, 2019, with subsequent updates in 2020 and 2021. This *2022 Update* covers the timeframe since the last update was published on June 21, 2021. Since the *2021 Update*, FAA and NAC stakeholders continued experiencing program delays that impacted NJIP milestone dates as a direct result of ongoing barriers and budgetary challenges caused by the COVID-19 pandemic.

Despite these challenges, in July 2022 the FAA re-affirmed its commitment to completing the remaining milestones in the NJIP after a comprehensive assessment of near-term NextGen priorities. To assist with this assessment, the FAA issued NAC Task 22-1 requesting the NAC's advice on prioritization of select NextGen capabilities. The NAC's advice helped the FAA with internal, strategic conversations focused on how best to prioritize modernization capabilities moving forward, including committing to completing the remaining NJIP milestones. Given that many milestone dates are projected to extend beyond 2022, the NJIP will be updated annually until all current milestones are completed. By extending the current NJIP indefinitely, the FAA remains committed to the completion of all original milestones jointly agreed to with NAC stakeholders. As each NextGen focus area working group completes their respective NJIP milestones the working group will be sunset, as is now the case for MRO.

This *2022 Update* documents milestone date changes that have been reported, discussed, and agreed upon within each of the NAC focus area working groups and reported to the NAC.

Additionally, it documents completed milestones within each focus area. This information is current as of October 2022.

STATUS OF REMAINING MILESTONES

The table below documents the status of remaining NJIP milestones across the focus areas, as well as changes since the publication of the original NJIP in 2019.

Focus Area	Commitment	Original Date	2020 Update	2021 Update	2022 Update	Explanation
Multiple Runway Operations	N/A	-	-	-	-	All MRO milestones complete. Reference the <i>Summary of Accomplishments To Date</i> table for a comprehensive list of MRO completed milestones.
Performance Based Navigation	Implement select iTBO capabilities in NEC FAA Implementation: Improve departure scheduling from adjacent facilities for aircraft destined to PHL	Q4 CY2021	N/A	N/A	Q4 CY2024	Operational implementation will be phased, starting with departure scheduling from adjacent facilities for aircraft destined to PHL. EWR capability is interconnected with the EWR Airspace Initiative (scheduled for Q2 CY2023). Training and traffic management unit staffing are key considerations. The successful implementation of these operational improvements translates to reduced airborne holding and track miles flown inside the TRACON increasing efficiency and flight path predictability.
Surface and Data Sharing	FAA Implementation: TFDM program will achieve ISD (In-Service Division) for Build 1 to allow additional TFDM system deployments into the NAS	Q4 CY2020	TBD	TBD	Q3 CY2023	The TFDM program restarted deployment, implementation, and field training activities in 2022 after stopping these activities during the COVID-19 pandemic. With the program's completion of IOC in Q4 CY2022, the FAA will initiate the Independent Operational Assessment (IOA) on TFDM leading to the ISD.

Focus Area	Commitment	Original Date	2020 Update	2021 Update	2022 Update	Explanation
Surface and Data Sharing	FAA Implementation: TFDM program will achieve IOC at 3 additional sites	Q1 CY2021	TBD	TBD	Q4 CY2023	The TFDM program restarted deployment, implementation, and field training activities in 2022 after stopping these activities during the COVID-19 pandemic. Upon receiving the ISD, the TFDM program will begin deploying to waterfall sites in 2023 leading to this milestone completion.
Surface and Data Sharing	FAA Implementation: TFDM program will achieve key site IOC for Build 2 at CLT (Charlotte Douglas International Airport)	Q2 CY2021	TBD	TBD	Q2 CY2024	The TFDM program restarted deployment, implementation, and field training activities in 2022 after stopping these activities during the COVID-19 pandemic. The TFDM program will resume implementation activities in CLT in 2023 leading to the IOC in 2024. These activities include incorporating results from Build 1 IOA into the Build 2 development and deployment.
Surface and Data Sharing	FAA Implementation: TFDM program will achieve ISD for Build 2 to allow additional deployments of the full TFDM capabilities into the NAS	Q3 CY2021	TBD	TBD	Q4 CY2024	The TFDM program restarted deployment, implementation, and field training activities in 2022 after stopping these activities during the COVID-19 pandemic. Upon completion of the Build 2 TFDM IOC at CLT, the FAA will initiate the Independent Operational Assessment (IOA) on TFDM leading to the ISD in 2024.
Surface and Data Sharing	FAA Implementation: TFDM program will achieve IOC at five (5) additional sites	Q4 CY2021	TBD	TBD	Q4 CY2025	The TFDM program restarted deployment, implementation, and field training activities in 2022 after stopping these activities during the COVID-19 pandemic. After receiving the Build 2 ISD decision, the TFDM program will commence deploying additional Build 2 sites.

Focus Area	Commitment	Original Date	2020 Update	2021 Update	2022 Update	Explanation
Surface and Data Sharing	Joint Industry / FAA: FAA and industry will review current and subsequent changes of the TFDM waterfall to insure industry alignment no later than Q1 CY2022 and continue through Q4 CY2022	N/A	N/A	Q1 CY2022 & Q4 CY2022	Q4 CY2022	This milestone allows FAA and industry to coordinate the TFDM waterfall to ensure industry understands the new post-COVID TFDM waterfall and can align industry plans to the waterfall. Note: Q1 CY2022 Milestone Complete
Surface and Data Sharing	Industry: Participate and provide input during recurring SWIFT meetings	Q2 CY2020, Q4 CY2020, Q2 CY2021, Q4 CY2021	TBD	Q2 CY2020, Q4 CY2020, Q2 CY2021, Q4 CY2021, Q2 CY2022, Q4 CY2022	Q4 CY2022	Industry was able to resume participation in SWIFT meetings virtually. Note: Q2 CY2020, Q4 CY2020, Q2 CY2021, Q4 CY2021, Q2 CY2022 milestones completed
Surface and Data Sharing	Industry: Collaborate with the FAA during all remaining CSIT visits (10 total)	Q2 CY2020 (2 milestones), Q4 CY2020 (2 milestones), Q2 CY 2021 (3 milestones), Q4 CY 2021 (3 milestones)	TBD date and # of CSIT visits	N/A	Q2 CY2023 (2 milestones), Q4 CY 2023 (3 milestones), Q4 CY 2024 (3 milestones)	Note: Two milestones were completed as of Q4 2022 (Charlotte and Seattle CSITs). During the COVID-19 pandemic, CSIT visits were suspended. The CSIT activities resumed in May 2022 with each CSIT event starting approximately two years prior to the IOC for each Build 2 site. Two milestones were completed as of Q4 CY2022 (Charlotte and Seattle CSITs).

Focus Area	Commitment	Original Date	2020 Update	2021 Update	2022 Update	Explanation
Data Comm	FAA Pre-implementation: Baseline enhanced Data Comm services for En Route utilizing existing FANS (Future Air Navigation System) 1/A message set	Q3 CY2021	Q3 CY2022	Q3 CY2024	Q4 CY2029	<p>During the Data Comm NIWG (NextGen Integration Working Group) meeting on January 23, 2020, it was agreed to with industry to modify the milestone date, from CY2021 to CY2024, for baselining additional Data Comm services for En Route (Enhanced Services) utilizing the existing FANS 1/A message set.</p> <p>Extending the milestone to CY2024 allowed for additional time to field operational use of En Route Initial and Full Services, which reduces the implementation risk for follow-on capabilities, such as En Route Enhanced Services. The FAA is utilizing the additional time to formulate an acquisition strategy and identify funding to execute the new Data Comm baseline.</p> <p>There are additional delays to this milestone as a result of COVID-19 impacts to the Initial and Full Services deployment schedules, as well as resultant impacts to the FAA budget and funding for future enhanced Data Comm services.</p> <p>The current estimated completion date is December 2029, but this date may move further to the right based on continuing budget challenges.</p>
Data Comm	Industry: Baseline enhanced Data Comm services for En Route utilizing existing FANS 1/A message set	Q3 CY2021	Q3 CY2022	Q3 CY2024	Q4 CY2029	Reference the “FAA Pre-implementation: Baseline enhanced Data Comm services for En Route utilizing existing FANS (Future Air Navigation System) 1/A message set” milestone explanation above.

Focus Area	Commitment	Original Date	2020 Update	2021 Update	2022 Update	Explanation
Data Comm	FAA Implementation: IOC for Initial En Route Services at all 20 CONUS (Continental United States) Air Route Traffic Control Centers (ARTCC)	Q4 CY2021	Q4 CY2022	N/A	Q2 CY2025	<p>Latent avionics and air-to-ground network interoperability issues have had a major impact on the Data Comm Initial En Route services cost and schedule baseline. The program schedule was also impacted by the 35-day Government Shutdown.</p> <p>The program was able to achieve IOC at the first two key sites (ZKC and ZID) in November of 2019, IOA and ISD completion in January 2020, and 24-hour operations at ZDC. In March 2020, all site activities at the fourth site (ZTL) and beyond were paused due to restrictions imposed at the facilities as a result of COVID-19.</p> <p>The program restarted deployment and site implementation activities in Spring 2022. ZOA, ZMP, and ZMA went into 24-hour operations on April 23, June 2, and August 29, respectively. Six more sites are planned to be operational by the Spring of 2023.</p> <p>Operations budget cuts in FY 23 will further delay the last site IOC milestone and elongate the waterfall.</p>
Northeast Corridor	FAA Implementation: Implement Eastern Seaboard high altitude PBN routes (including SID/STAR (Standard Instrument Departure/Standard Terminal Arrival) connectivity) through ZBW, ZNY and ZDC airspace	Q4 CY2020	Q4 CY2021	TBD	Q4 CY2023	<p>Due to COVID-19, access to FAA air traffic facilities has been limited to those whose entry is deemed necessary to carry out mission critical activities. The implementation of the Eastern Seaboard high altitude PBN route structure requires extensive training for all five east coast Air Route Traffic Control Centers. We have achieved 85% completion of this initiative since February 2021.</p> <p>To conduct such training, a cadre of contract support personnel must be permitted access to each facility's training labs. As such, air traffic facilities were not able to safely conduct training until early 2021.</p>

Focus Area	Commitment	Original Date	2020 Update	2021 Update	2022 Update	Explanation
Northeast Corridor	FAA Implementation: Improve Arrival Time-Based Management (TBM) to PHL	Q4 CY2021	N/A	Q4 CY2023	Q4 CY2025	Due to the EWR Airspace initiative and COVID-19 impact to facilities, this has been re-planned. We are combining the PHL and EWR metering initiatives since it is anticipated to be the same facility after Q4 CY2023.
	FAA Implementation: Improve Arrival Time-Based Management (TBM) to EWR	N/A	N/A	Q4 CY2023	TBD	Operational implementation will be phased, starting with departure scheduling from adjacent facilities for aircraft destined to PHL. EWR capability is interconnected with the EWR Airspace Initiative (scheduled for Q2 CY2023). Training and traffic management unit staffing are key considerations. The successful implementation of these operational improvements translates to reduced airborne holding and track miles flown inside the TRACON increasing efficiency and flight path predictability.
Northeast Corridor	Industry: Continue to support ongoing design work and implementation of Eastern Seaboard high altitude PBN routes (including SID/STAR connectivity) through ZBW, ZNY and ZDC airspace	Q4 CY2020	Q4 CY2021	TBD	Q4 CY2023	Due to training requirements, the FAA milestone for implementation is being rescheduled, thus the industry milestone is similarly affected.

Focus Area	Commitment	Original Date	2020 Update	2021 Update	2022 Update	Explanation
Northeast Corridor	Industry: PANYNJ will begin to install non-federal GBAS at LGA and JFK	Q4 CY2020	TBD	Q1 CY2023	Q1 CY2023	No change from 2021 NJIP update. Delay from original Q4 2020 date related to COVID-19. Note: two total milestones
Northeast Corridor	Industry: Create additional BOS tower space for TFDM equipment to ensure surface metering	Q4 CY2021	N/A	TBD	Q4 CY2024	Due to COVID-19, the waterfall for the TFDM program is being redefined and while BOS implementation is expected in mid-2026, the date is subject to change. This industry milestone has been updated to reflect the work that will be completed by the end of 2024.
Northeast Corridor	Industry: Conduct Fly Quiet Program for EWR, TEB, JFK and LGA	N/A	N/A	N/A	Q4 CY2024	This industry milestone has been updated to reflect the work that will be completed by the end of 2024.

SUMMARY OF ACCOMPLISHMENTS TO DATE

Focus Area	<i>NextGen Priorities Joint Implementation Plan CY2019–CY2022</i> Completions: CY2019 through CY2022
Multiple Runway Operations	<p>CY2019</p> <p>FAA</p> <ul style="list-style-type: none"> ■ CWT separation standards: BOS ■ CWT separation standards: DFW ■ CSPO collision risk safety study for HUR ■ Operator guidance material on wake turbulence encounter reporting ■ CSPO feasibility and initial safety analysis for departures ■ CWT separation standards (5 sites): MSP; MIA; LAX; SCT; PHL (five total milestones) ■ Dynamic wake separation research ■ ORD wake encounter and mitigation analysis <p>Industry</p> <ul style="list-style-type: none"> ■ Provide input and review feasibility and initial safety analysis for CSPO departure concepts <p>CY2020</p> <p>FAA</p> <ul style="list-style-type: none"> ■ Analysis of use of RNAV (VNAV) (Vertical Navigation) approaches for 7110.308 at SFO ■ Reduced minimum radar separation (MRS) feasibility study ■ CSPO feasibility and initial safety analysis for arrival and departures ■ CWT separation standards at 4 sites: DTW; IAH; CVG; ANC (four total milestones) <p>Industry</p> <ul style="list-style-type: none"> ■ Wake turbulence encounter reporting ■ Provide input and review feasibility study of reduced minimum radar separation ■ CWT benefits analysis <p>CY2021</p> <p>FAA</p> <ul style="list-style-type: none"> ■ CWT separation standards at 3 sites: SDF; CLT; MEM (three total milestones)

Focus Area	NextGen Priorities Joint Implementation Plan CY2019–CY2022 Completions: CY2019 through CY2022
	<ul style="list-style-type: none"> ■ Separation Standards from CSPO HUR (Closely Spaced Parallel Operations High Update Rate) into 7110.65 Order <p>CY2022</p> <p>FAA</p> <ul style="list-style-type: none"> ■ CWT separation standards at 5 sites: IND; ORD; ATL; EWR; DEN (five total milestones)
<p>Performance Based Navigation</p>	<p>CY2019</p> <p>FAA</p> <ul style="list-style-type: none"> ■ Implement Metroplex at LAS: 100% design complete ■ Implement Metroplexes at South/Central Florida, SID and STAR: 100% design complete ■ Implement Metroplex at CLE/DTW: Post-implementation phase complete (Completed early Q4 2019) ■ Joint analysis with industry on potential barriers that inhibit the consistent use of EoR (Established on Required Navigation Performance) procedures at six NSG (Navigation Service Group) 1–4 airports in the NAS (Completed early Q4 2019) (six total milestones) <p>Industry</p> <ul style="list-style-type: none"> ■ Provide input, validate data, review findings, and confirm conclusions to post implementation analyses for implemented PBN procedures: CLE / DTW <p>CY2020</p> <p>FAA</p> <ul style="list-style-type: none"> ■ Implement Metroplex at DEN: Implementation phase start ■ Implement Metroplex at DEN: Implementation phase complete ■ Implementation phase start of Las Vegas Metroplex ■ Implementation phase start of Florida Metroplex <p>Industry</p> <ul style="list-style-type: none"> ■ Provide input, validate data, review findings, and confirm conclusions to post implementation analyses for implemented PBN procedures: DEN <p>CY2021</p> <p>FAA</p> <ul style="list-style-type: none"> ■ Complete Implementation of Las Vegas Metroplex

Focus Area	NextGen Priorities Joint Implementation Plan CY2019–CY2022 Completions: CY2019 through CY2022
	<ul style="list-style-type: none"> ■ Post-implementation complete of Denver Metroplex ■ Implement Metroplex at LAS: Post-implementation phase complete ■ Implement Metroplexes at South/Central Florida, SID and STAR: Implementation phase complete <p>Industry</p> <ul style="list-style-type: none"> ■ Provide input, validate data, review findings and confirm conclusions to post-implementation analyses for implemented PBN procedures – LAS <p>CY2022</p> <p>FAA</p> <ul style="list-style-type: none"> ■ Implement select iTBO capabilities in DEN
<p>Surface and Data Sharing</p>	<p>CY2019</p> <p>FAA</p> <ul style="list-style-type: none"> ■ NASA ATD-2 interim technology transfer from Phase 2: Fused IADS (Integrated Arrival/Departure/Surface) at CLT <p>Industry</p> <ul style="list-style-type: none"> ■ Participate and provide input during recurring SWIFT meetings (two total milestones) ■ Review TFDM waterfall and denote airports that have a significant non-CDM (collaborative decision-making) flight operator presence <p>CY2020</p> <p>Industry</p> <ul style="list-style-type: none"> ■ Participate and provide input during recurring SWIFT meetings (two total milestones) <p>CY2021</p> <p>Industry</p> <ul style="list-style-type: none"> ■ NASA ATD-2 final technology transfer from Phase 3: Terminal departure IADS (Integrated Arrival/ Departure/Surface) at DFW/DAL (Dallas/Ft. Worth International Airport) ■ Participate and provide input during recurring SWIFT meetings (2 total milestones)

Focus Area	NextGen Priorities Joint Implementation Plan CY2019–CY2022 Completions: CY2019 through CY2022
	<p>CY2022</p> <p>FAA</p> <ul style="list-style-type: none"> ▪ Complete TFDM (Terminal Flight Data Manager) operational testing for Build 1 ▪ TFDM program achieve key site IOC (Initial Operating Capability) for Build 1 at CLE (Cleveland Hopkins International Airport) <p>Industry</p> <ul style="list-style-type: none"> ▪ Participate and provide input during recurring SWIFT meetings (two total milestones) ▪ Collaborate with the FAA during two CSIT visits (Charlotte and Seattle – two total milestones) <p>Joint</p> <ul style="list-style-type: none"> ▪ FAA and industry will review current and subsequent changes of the TFDM waterfall to ensure industry alignment no later than Q1 CY2022 and continue through Q4 CY2022 (one of two milestones complete)
<p>Data Comm</p>	<p>CY2019</p> <p>FAA</p> <ul style="list-style-type: none"> ▪ Deploy Tower services to an additional seven (7) towers: ADW; RNO; BUF; CHS; CMH; RSW; VNY (seven total milestones) ▪ Initial Operating Capability (IOC) at Kansas City and Indianapolis ARTCCs and 24x7 operations at Washington ARTCC (three total milestones) ▪ Recommendation for target equipage rates for follow-on capabilities ▪ Loadability solution for runway SID <p>Industry</p> <ul style="list-style-type: none"> ▪ Recommendation for regional jet equipage strategy ▪ Recommendation for target equipage rates for follow-on capabilities ▪ Airlines to equip 1,900 aircraft <p>Removed:</p> <p>Industry</p> <ul style="list-style-type: none"> ▪ Solution for full automation for the confirm assigned route capability ▪ Resolution of avionics/Pegasus 1 interoperability issue <p>CY2020</p>

Focus Area	NextGen Priorities Joint Implementation Plan CY2019–CY2022 Completions: CY2019 through CY2022
	<p>FAA</p> <ul style="list-style-type: none"> ▪ Deploy Tower services to an additional three (3) towers: CVG, JAX, PBI <p>CY2021</p> <p>FAA</p> <ul style="list-style-type: none"> ▪ Tower Services IOC at CVG <p>CY2022</p> <p>FAA</p> <ul style="list-style-type: none"> ▪ Tower Services IOC at JAX and PBI ▪ 24x7 operations at Oakland, Minneapolis, and Miami ARTCCs
<p>Northeast Corridor</p>	<p>CY2019</p> <p>FAA</p> <ul style="list-style-type: none"> ▪ Expand consistent usage of defined and existing capping and tunneling for departures/arrivals to/from the NEC ▪ Improve airborne metering to PHL ▪ Conduct feasibility study to create process to reduce and/or eliminate passback Miles-in-Trail (MIT) for departures from NY ▪ Complete concept assessment to deconflict LGA/EWR/TEB when on LGA 13ILS ▪ Complete review/update adaptation for improving airborne metering to PHL ▪ Complete TBFM refresher training for metering to PHL ▪ Evaluate design alternatives to GLDMN/NTHNS RNAV SIDs to address noise concerns ▪ Conduct feasibility assessment of EoR simultaneous operations to JFK 13R RNP (Required Navigation Performance) and 13L ILS ▪ Complete concept analysis for TEB RW19 RNAV SID for overnight operations ▪ Conduct concept exploration of simultaneous operations on widely-spaced approaches to different airports ▪ Implement TBFM pre-departure scheduling at a selected airport (PIT to PHL) ▪ Determine viability and model ZDC airspace redesign alternatives (Completed early in Q1 CY2019) ▪ Conduct analysis to determine sequence of remaining airports to receive en route metering (Completed early Q2 CY2019) ▪ Evaluate LGA31 RNAV approach design alternatives that approximate LGA 31 EXPWY VIS approach and are usable for most operators

Focus Area	NextGen Priorities Joint Implementation Plan CY2019–CY2022 Completions: CY2019 through CY2022
	<ul style="list-style-type: none"> ■ Complete concept assessment for EWR 22L/29 arrival operations ■ Implement Converging Runway Display Aid (CRDA) application for PHL 27R/35 for RNAV Approaches ■ Benefits assessment for gate docking technologies to improve surface management ■ Joint Industry/FAA to assess opportunities to expand use of CDTI-assisted (Cockpit Display of Traffic Information) operations beyond CAVS (CDTI Assisted Visual Separation) (Completed early Q2 CY2019) ■ Joint Industry/FAA to complete EFVS (Enhanced Flight Vision System) benefits studies to determine requirements for reaching CAT II/III equivalent operations in NEC ■ Joint industry/FAA milestone to complete studies to analyze effects of mixed EFVS equipage aircraft operations in NEC ■ Joint Industry/FAA milestone to review the relevant information and recommend next steps of FIM <p>Industry</p> <ul style="list-style-type: none"> ■ Provide input and review concept assessment to deconflict LGA/EWR/TEB when on LGA 13 ILS ■ Provide input to the evaluation of alternatives to GLDMN/NTHNS RNAV SIDs to address noise concerns ■ Provide input and review feasibility assessment of EoR (Established on Required Navigation Performance) simultaneous operations using JFK 13 RNAV (RNP) and 13L ILS approaches ■ Provide input and review concept analysis for TEB RW19 RNAV SID for overnight operations ■ Identify and prioritize applications in the NY area for simultaneous operations on widely-spaced approached to different airports to expedite addressing deconfliction issues ■ Participate in concept exploration of simultaneous operations on widely-spaced approaches to different airports ■ Complete training of airspace user personnel to support TBFM pre-departure scheduling ■ Provide input on ZDC airspace redesign alternatives to reduce traffic management restrictions ■ Provide input to evaluation of designs for LGA31 RNAV approach that approximates the LGA31 EXPWY V15 approach and is usable for most operators ■ Work with FAA to mitigate climb gradient concerns to the GLDMN/NTHNS RNAV SIDs

Focus Area	<p align="center">NextGen Priorities Joint Implementation Plan CY2019–CY2022</p> <p align="center">Completions: CY2019 through CY2022</p>
	<ul style="list-style-type: none"> ■ Provide input and review concept assessment for EWR 22L/29 arrival operations ■ NBAA (National Business Aviation Association) will support design of northbound and southbound escape routes ■ PANYNJ (Port Authority of New York and New Jersey) will create new high speed exit on JFK runway 31R to reduce ROT (Runway Occupancy Time) ■ PANYNJ with industry will conduct a review of existing PBN procedures, determine operator issues, identify needed modifications and prioritize needed changes ■ Southwest Airlines commits to providing improved aircraft intent data via surface data elements ■ Joint Industry/FAA to assess opportunities to expand use of CDTI-assisted operations beyond CAVS ■ Joint Industry/FAA to complete studies to analyze effects of mixed EFVS equipage aircraft operations in the NEC ■ Joint Industry/FAA to complete EFVS benefits studies to determine requirements for reaching Cat II/III equivalent operations in NEC ■ Joint Industry/FAA milestone to review the relevant information and recommend next steps of FIM <p>CY2020</p> <p>FAA</p> <ul style="list-style-type: none"> ■ Implement ZNY offshore PBN routes (Completed early Q4 2019) ■ Conduct IDRP (Integrated Departure Route Program) prototype re-familiarization session ■ Conduct CRDA feasibility analysis for EWR 22L/11 to lower minima ■ Conduct CRDA feasibility analysis for EWR 4R/29 to lower minima ■ Conduct analysis to evaluate the impact and benefit of applying 7110.308 at EWR ■ Conduct operational analysis to identify enhancements to improve data driven TFM decision-making ■ Conduct FIM NEC-specific benefits study ■ Improved departure management for flights destined to LGA <p>Industry</p> <ul style="list-style-type: none"> ■ Support design and implementation of ZNY offshore PBN routes (Completed early Q4 2019) ■ Provide input and review CRDA feasibility analysis EWR 22L/11 to lower minima

Focus Area	NextGen Priorities Joint Implementation Plan CY2019–CY2022 Completions: CY2019 through CY2022
	<ul style="list-style-type: none"> ■ Provide input and review CRDA feasibility analysis for EWR 4R/29 to lower minima ■ Provide input and review of FAA evaluation of impact and benefit of applying 7110.308 at EWR ■ Provide input and review operational analysis to identify enhancements to improve data driven TFM decision-making ■ FedEx will provide improved aircraft intent data via surface data elements ■ Conduct assessment of additional PHL 27L high-speed exits ■ Conduct assessment of PHL 27R departure queue taxiway ■ Conduct assessment of PHL taxiway extension for end around operations ■ Conduct the assessment of DCA north end hold pads <p>CY2021</p> <p>FAA</p> <ul style="list-style-type: none"> ■ Implement Departure Spacing Program (DSP) enhancements ■ Implement PDRR/ABRR (Pre-Departure Reroutes/Airborne Reroutes) enhancements <p>Industry</p> <ul style="list-style-type: none"> ■ Evaluate the use of multi-route TOSs to communicate departure and arrival trajectory preferences from/to PHL and NY area airports <p>CY2022</p> <p>FAA</p> <ul style="list-style-type: none"> ■ Improved departure management for flights destined to LGA <p>Removed</p> <p>Industry</p> <ul style="list-style-type: none"> ■ Conduct GBAS (Ground Based Augmentation System) evaluation/assessment at BOS ■ PANYNJ will exchange flight data with FAA/airlines at EWR, JFK, LGA through CDM partnership

ACRONYM LIST AND AIRPORT CODES

Acronym	Definition
ARTCC	Air Route Traffic Control Centers
ATC	Air Traffic Control
ATD-2	Air Space Technology Demonstration
CAVS	Cockpit Display of Traffic Information (CDTI) Assisted Visual
CDTI	Cockpit Display of Traffic Information
CDM	Collaborative Decision-Making
CEDAR	Comprehensive Electronic Data Analysis and Reporting
CO2	Carbon Dioxide
CONUS	Continental United States
COVID-19	Coronavirus Disease 2019
CRDA	Converging Runway Display Aid
CSPO	Closely Spaced Parallel Runway Operations
CWT	Consolidated Wake Turbulence
CY20xx	Calendar Year 20xx
DCA	Ronald Reagan Washington National Airport
DCL	Departure Clearance
DSP	Departure Spacing Program
EDC	En Route Departure Capability
EFVS	Enhanced Flight Vision System
EoR	Established on Required Navigation Performance
EXPWY VIS	Expressway Visual
FAA	Federal Aviation Administration
FANS	Future Air Navigation System
FY20xx	Fiscal Year 20xx
GBAS	Ground Based Augmentation System
GPS	Global Positioning System
HUR	High Update Rate
IADS	Integrated Arrival/Departure/Surface
IDAC	Integrated Departure Arrival Capability
IDRP	Integrated Departure Route Program
ILS	Instrument Landing System
IMC	Instrument meteorological conditions
IOC	Initial Operating Capability
ISD	In-Service Division
iTBO	Initial Trajectory Based Operations
JAT	Joint Analysis Team
kg	Kilograms
MIT	Miles-in-Trail
MRS	Minimum Radar Separation
NAC	NextGen Advisory Committee
NAS	National Airspace System

Acronym	Definition
NASA	National Aeronautics and Space Administration
NBAA	National Business Aviation Association
NEC	Northeast Corridor
NIWG	NextGen Integration Working Group
NSG	Navigation Service Group
OPD	Optimized Profile Descent
PANYNJ	Port Authority of New York and New Jersey
PBN	Performance Based Navigation
PDRR/ABRR	Pre-Departure Reroutes/Airborne Reroutes
RECAT	Recategorization
RNAV	Area Navigation
RNP	Required Navigation Performance
ROT	Runway Occupancy Time
SCIA	Simultaneous Converging Instrument Approaches
SID	Standard Instrument Departure
STAR	Standard Terminal Arrival
SWIFT	SWIM Industry-FAA Team
SWIM	System Wide Information Management
TBFM	Time Based Flow Management
TFDM	Terminal Flight Data Manager
TFM	Traffic Flow Management
TRACON	Terminal Radar Approach Control Facilities
VNAV	Vertical Navigation

Airport	Definition
ADW	Joint Base Andrews (AFB)
ATL	Southeast Region, Atlanta Metroplex
BOS	Boston Logan International Airport
BUF	Buffalo Niagara International Airport
CHS	Charleston (SC) International Airport
CLE	Cleveland Hopkins International Airport
CLT	Charlotte Douglas International Airport
CMH	John Glenn Columbus International Airport
DEN	Denver International Airport
DFW	Dallas/Fort Worth International Airport
DTW	Detroit Metropolitan Wayne County Airport
EWR	Newark Liberty International Airport
HPN	Westchester County Airport
JFK	John F. Kennedy International Airport
LAS	Las Vegas Metroplex
LAX	Los Angeles International Airport
LGA	LaGuardia Airport
MIA	Miami International Airport
MSP	Minneapolis St. Paul International Airport
ORD	Chicago O'Hare International Airport
PHL	Philadelphia International Airport
PHX	Phoenix Sky Harbor International Airport
PIT	Pittsburgh International Airport
RNO	Reno-Tahoe International Airport
RSW	Southwest Florida International Airport (Ft. Myers)
SCT	Southern California TRACON
SFO	San Francisco International Airport
TEB	Teterboro Airport
VNY	Van Nuys Airport
ZBW	Boston Air Route Traffic Control Center
ZDC	Washington Air Route Traffic Control Center
ZID	Indianapolis Air Route Traffic Control Center
ZKC	Kansas City Air Route Traffic Control Center
ZNY	New York Air Route Traffic Control Center