Safety
Reduce Aviation and Commercial Space Transportation-Related Fatalities and Serious Injuries in Commercial and General Aviation.

Systemic Safety Approach
Mitigate risks and encourage infrastructure and behavior change by using a data-driven systemic safety approach to identify risks, enhance standards and programs, and evaluate effectiveness.

Initiative: Alaskan Satellite Telecommunication Infrastructure (ASTI)
The ASTI project will replace and/or upgrade system components to raise system availability to required levels (0.9999), reduce the frequency of system alarms and outages, and reduce the level of FAA maintenance.

Activity: ANG-E Support of Alaskan Satellite Telecommunications Infrastructure
Support activities to Achieve ORD at the ASTI Sites

Target: ANG-E Support of Alaskan Satellite Telecommunications Infrastructure
Review Full Deployment Acceptance Test Procedures (R-Series procedures) and Remote Site Checklists and provide approval recommendation.

Target: ANG-E Support of Alaskan Satellite Telecommunications Infrastructure
Based on test results, provide input to risk identification and mitigation, PTR prioritization and Harris Build Plan development.

Target: ANG-E Support of Alaskan Satellite Telecommunications Infrastructure
Schedule, coordinate and test multiple multiplexer and network monitoring system build releases at ZAN and of some network monitoring system tests at Harris in Melbourne, FL.

Initiative: Surface Safety Risk Reduction
AJI will utilize the surface safety metric to: Establish consensus among Runway Safety stakeholders on a policy to assess and quantify the risk in runway safety events. Address precursors, as well as latent risks by proactively providing event trend summaries and best practices to the field.

Activity: ANG Support of Runway Safety Technology Program Management Integration
ANG will continue developing the Runway Incursion Prevention Shortfall Analysis (RIPSA) to include Speech Recognition and Memory Aid research.

Target: ANG Support of Runway Safety Technology Program Management Integration
Deliver contract support and programmatic support to AJI as required.
Initiative: Enterprise and ANG Safety Management Systems

Conduct integrated safety assessment to determine NAS enterprise safety risk, and develop safety requirements for mitigating potential hazards and improving safety benefit of the NAS modernization.

Activity: Conduct Enterprise-level safety assessments on NAS services and update hazard Enterprise Architecture Tool capabilities

Develop NAS Safety Model and apply Enterprise Risk Framework methodologies to conduct integrated safety analyses on provision of ATM services and operational capabilities in the current and future NAS environment. Refine and implement the analytical capabilities of Hazard Enterprise Architecture Traceability Tool to support the Safety Risk Management (SRM) efforts for NAS system acquisitions in line with Enterprise-level NAS Safety Model.

Target: Conduct Service-Level Safety Assessment

Conduct Service-Level Safety Assessment (hazard) to determine hazard threads and to measure baseline safety risk associated with all ATM services in the current NAS.

Target: Incorporate Hazard Threads into Tool

Incorporate hazard threads from Service-Level Safety Assessment (hazard) into the Hazard Enterprise Architecture Traceability (HEAT) Tool.


Publish, implement, and promote the ANG Safety Management System Manual to provide guidance on Integrated Safety Risk Management and incorporate Risk Based Decision Making initiatives into ANG’s business.

Target: Publish Final Draft ANG SMS Manual

Complete final draft of ANG Safety Management System Manual.

Target: Gain Approval of SMS Manual

Obtain ANG-1 approval of draft ANG Safety Management System Manual.

Initiative: Enterprise Cyber Support for Current NAS

Develop Enterprise Cyber Security Threat Model to improve cyber risk management capability for the NAS.

Activity: Lead and manage FAA Cybersecurity Risk Model (CyRM) Work Group Activities

Collaborate with LOBs to develop and document domain specific Mission Level Service Threads risk assessments, enterprise cyber architecture, integrated cyber threat intelligence, and integration of cyber risk management into FAA processes and policies in support of the enterprise Cybersecurity Risk Model (CyRM) strategy.
Target: Integrating the CyRM Approach
Develop recommendations for integrating the CyRM risk management approach into appropriate agency policies, workflows, and processes. Develop a memo to policy owner with CyRM Workstream 3 recommendations. (Internal Working Coordination - ATO, AIT, AVS, ASH, ARP).

Target: Report of Interim Mission Essential Functions (MEF) and Mission Level Service Thread
For all three operating domains (NAS, Mission Support, and Research & Development), deliver a report of interim MEF and interim Mission Level Service Thread (MLST), to include detailed service thread level architecture, data flow and risk assessment to the mission. Present to the Cybersecurity Steering Committee (CSC). (Internal Work Coordination - ATO, AIT, AVS, ASH, ARP).

Target: Initial FAA Cyber Threat Intelligence Action Plan
Create an initial FAA Cyber Threat Intelligence (CTI) Action Plan to address the gaps identified in the CTI Recommendation Report for an FAA enterprise CTI Capability. (Internal Work Coordination - ATO, AIT, AVS, ASH, ANG, ARP).

Initiative: Safety Management System
Build on safety management principles to proactively address emerging safety risk by using consistent, data-informed approaches to make smarter, system-level, risk-based decisions.

Activity: ANG: Potential/Emerging Safety Issues
Facilitate potential safety/emerging issues through the appropriate FAA Safety Risk Management process.

Target: ANG: Potential/Emerging Safety Issues
Facilitate at least three FAA safety risk assessments and document the progress of the assessments in the Hazard Identification Risk Management, and Tracking (HIRMT) tool

Activity: ANG: U.S. State Safety Program Update
Revise the U.S. State Safety Program to align with International Civil Aviation Organization (ICAO) requirements outlined in Annex 19

Target: ANG: U.S. State Safety Program Update
Finalize the State Safety Program (SSP) and deliver to the FAA Safety Management System (SMS) Committee in preparation for external and internal coordination with appropriate stakeholders. Due September 30, 2019

Initiative: Data Standardization
Improve the collection, management, and integration of safety data on transportation-related fatalities and serious injuries, and their precursors, to enhance safety analysis across the agency.
Activity: ANG: Aviation Safety Data Governance Standardization Team
Establish agency-wide, aviation safety data governance requirements.

Target: ANG: Aviation Safety Data Governance Standardization Team
Deliver an agency-wide assessment of safety data governance standards and requirements to the FAA Safety Data and Analysis Team (SDAT) and the FAA Safety Management System (SMS) Executive Council.

Activity: ANG: Hazard Library Tactical Team
Provide the agency a centralized point of reference for hazard identification information and safety-related work products.

Target: ANG: Hazard Library Tactical Team
Release Hazard Library, populated with 14 CFR Part 121 hazard data and information, to the FAA Safety Data and Analysis Team (SDAT) and the FAA Safety Management System (SMS) Executive Council.

Infrastructure
Invest in Infrastructure to Ensure Safety, Mobility, and Accessibility and to Stimulate Economic Growth, Productivity and Competitiveness for American Workers and Businesses.

Project Delivery Planning  Environment Funding and Finance
Facilitate expanded infrastructure development, modernization, and construction in both rural and urban communities by fostering more efficient and collaborative planning and construction techniques, accelerating project approval, leveraging all sources of funding, and promoting innovative financing while maintaining environmental stewardship.

Initiative: NextGen
Support National Airspace System (NAS) modernization and evolution through infrastructure improvements, technology, information sharing, and community engagement.

Activity: Performance-Based Navigation
Develop additional procedures relying on Required Navigation Performance (RNP) to reduce the track miles and increase the efficiency for arrivals at multiple runway airports. The next Established on Required Navigation Performance (EoR) procedure to be developed will undergo modeling, simulation and analysis activities to study the use of EoR with a transition to an Instrument Landing System (ILS). In addition, the EoR program will coordinate all activities required to commence EoR Radius-to-Fix (RF) duals and triples operations at George Bush Houston Intercontinental Airport (IAH).

Target: Established in Required Navigation Performance (EoR) Operations
Commence EoR Duals and Triples operations at RF Launch Site George Bush Houston Intercontinental Airport (IAH).
Target: EoR Safety Analysis Report
Complete next Established on RNP (EoR) safety analysis to generic Landing System (xLS) capture (e.g. ILS, Global Navigation Satellite Landing [GLS] or MLS) and deliver EoR Safety Analysis Report.

System Operations and Performance
Enhance reliable and efficient movement of people and goods by promoting effective management and ensuring leadership in securing data and in sharing information across the transportation system.

Initiative: Stakeholder Engagement & Outreach
Enhance domestic and international stakeholder confidence in NextGen and engage stakeholders in NextGen through collaboration and messaging.

Activity: Stakeholder Collaboration
Enable and facilitate collaboration throughout the FAA, aviation community and interagency partners by sharing resulting actions, outcomes, and information.

Target: NextGen Management Board (NMB) Annual Work Plan
Develop NextGen Management Board (NMB) annual work plan in accordance with the NextGen governance structure.

Target: NextGen Executive Board (NEB) Annual Executive Summary
Provide an annual executive summary on NextGen Executive Board (NEB) accomplishments to the Senior Policy Committee. Execute NEB and NextGen Management Board (NMB) meetings and provide meeting summary reports.

Target: 80% of NextGen Priorities Joint Implementation Plan (OSI) NAC Recommendations
Achieve eighty (80) percent of NextGen priorities Joint Implementation Plan commitments, excluding industry-controlled milestone, with a calendar quarter of their scheduled dates and within 10% of the planned cost (OSI target).

Target: 80% of NextGen Priorities for the Northeast Corridor (NEC) (OSI)
Achieve eighty (80) percent of NextGen priorities for the Northeast Corridor (NEC) commitments, excluding industry-controlled milestone, with a calendar quarter of their scheduled dates. (OSI target).

Target: 90% of NextGen Priorities for the Northeast Corridor (NEC) (CSTI)
Achieve ninety (90) percent of NextGen priorities for the Northeast Corridor (NEC) commitments, excluding industry-controlled milestone, with a calendar quarter of their scheduled dates. (CSTI target).
**Activity: Outreach Division**
Effectively communicate NextGen initiatives in support of NAS modernization.

**Target: Stakeholder Engagement and Community Involvement**
Coordinate and collaborate to engage stakeholders and the community on the implementation of NextGen capabilities and report results.

**Target: Content Development and Communication**
Publish updated content on the FAA's digital media platforms and in internal or external publications targeted to NextGen stakeholders.

**Activity: ANG International Collaboration**
In aligning the NextGen International Strategy, by September 30th 2020, develop and submit a report on the feasibility of advancing NextGen’s Tier 2 partners (currently Australia, Brazil, UAE, South Korea) to Tier 1. The report will include a risk based analysis and prioritization of results. If a country is deemed feasible, develop a proposed FAA work plan and a potential Executive engagement.

**Target: Tier 1 Partners Engagement**
In coordination with our Tier 1 partners, attend established bilateral and multilateral meetings and events. Garner agreement to promote NextGen programs and policies into global plans and standards, promoting harmonization with NextGen.

**Target: Tier 2 Partners Engagement**
In coordination with the FAA international LOB/SOs, identify engagement opportunities for bilateral and/or multilateral meetings and/or events with Tier 2 partners pursuing ATM modernization that could be harmonized with NextGen and participate as necessary.

**Target: Tier 3 Partners Engagement**
In coordination with the Office of International Affairs (API), assess opportunities to pursue bilateral and/or multilateral meetings and/or events with Tier 3 partners to promote ATM modernization and participate if possible.

**Initiative: Separation Standards and Analysis**
Provide separation standards and analysis for U.S sovereign airspace and international airspace where FAA has delegated authority to provide air traffic services.

**Activity: Provide analytical studies and safety related monitoring services in support of separation reductions.**
Conduct and participate in Separation standards and transportation system analytical studies, reviews and meetings.
Target: ICAO
Provide ICAO-required airspace safety analyses. This applies to airspace and for operators in the Pacific for Pacific Approvals Registry and Monitoring Organization (PARMO)

Activity: Provide the Reduced Vertical Separation Minimum (RVSM) Regional Monitoring Agency (RMA) functions for two of the thirteen world-wide RMAs.

Conduct and participate in Separation standards and transportation system analytical studies, reviews and meetings

Target: Chair for the Regional Monitoring Agency (RMA) Coordination Group
Attend and serve as Chair for the Regional Monitoring Agency (RMA) Coordination Group (RMACG)/14, presenting details of the North American Approvals Registry and Monitoring Organization (NAARMO) and Pacific Approvals Registry and Monitoring Organization (PARMO) monitoring and safety analysis.

Target: Reduced Vertical Separation Minimum (RVSM)
Provide the Reduced Vertical Separation Minimum (RVSM) Regional Monitoring Agency (RMA) functions for two of the thirteen world-wide RMAs. Due: Monthly Updates to worldwide database.

Innovation
Lead in the Development and Deployment of Innovative Practices and Technologies that improve the Safety and Performance of the Nation's Aviation System.

Development of Innovation
Encourage, coordinate, facilitate, and foster world-class research and development to enhance the safety, security, and performance of the Nation's transportation system.

Initiative: Research and Development (R&D)
A vibrant aviation sector relies heavily on a safe, efficient, and economical aerospace system. To ensure FAA’s research activities align with these expectations, the FAA must characterize the value and role (to lead, contribute, or monitor) of its research. To determine appropriate level of research, the FAA will leverage the Research, Engineering & Development Advisory Committee to assess research landscapes within the aviation and broader R&D community. Assessment results will include identifying aviation drivers, issues, requirements, and influencing technologies and understanding the level of research investment the industry is making or is willing to make.

Activity: Research and Development Activity
Develop comprehensive view of R&D required to support vibrant aviation sector.

Target: Characterize the Aviation Landscape
Develop plan to characterize the aviation community's research landscape(s) and FAA’s role.
Target: First Draft of FAA’s R&D Landscape(s)
Provide the first draft of FAA’s R&D landscape(s) for review and input by the Research, Engineering & Development Advisory Committee/Subcommittees.

Target: Fee for Service Models
Explore the concept and provide recommendations for models the FAA could use to implement fee for service where applicable.

Activity: New Entrant Focused Research and Development
Conduct ongoing research and development efforts to support the safe and efficient integration of Unmanned Aircraft System (UAS) into the National Airspace System (NAS).

Target: Communication, Navigation, and (CNS) Requirement Engagement Plan
Develop a partner integration plan for working with industry on Communication, Navigation, and (CNS) requirements.

Target: Use Case Establishment for Information Exchange
For a selected new entrant, establish use cases for information exchanges between FAA and the operators to support industry led standards and technology development.

Initiative: Vulnerability Management Processes
Evolve mitigation strategies to safely secure FAA infrastructure to reduce cybersecurity risks by determining the likelihood of a security breach and potential impacts to networks and systems.

Activity: NAS Global Information Security Standards
Collaborate with ICAO, Eurocontrol, Single European Sky ATM Research (SESAR), and other international partners to plan and develop a cyber-security proof of concept to inform ICAO of requirements and policies needed to realize a global trust framework and to integrate the Cybersecurity concept of operations into the Global Air Navigation Plan.

Target: Concept Test Plan Draft
Complete an initial draft of the cyber global trust framework proof of concept test plan.

Target: Operational Scenarios
Develop two operational scenarios to support ICAO release next version of the Aviation Community Operational Resilient Network Services (ACORNS) concept of operation.

Initiative: ANG Aviation Research Initiative
Provide scientific solutions for current and future air transportation challenges that guide the development of aviation safety improvements.

Activity: Conduct Safety Research
Conduct, develop and apply research to identify and address aircraft safety issues before they emerge.
Target: Complete test and analysis for baseline fuselage panel
Complete test and analysis for baseline fuselage panel (from Arconic) using conventional material's and fabrication methods.

Target: Perform the second and final high-Reynolds number test campaign
Perform the second and final high-Reynolds number test campaign to determine the aerodynamic effect of artificial ice shapes of varying geometric fidelity on a scale model swept-wing in the F1 Wind Tunnel at ONERA, France.

Target: Complete Part 2 of the Safety Risk Assessment (SRA) methodology
Complete Part 2 of the Safety Risk Assessment (SRA) methodology for the Aircraft Systems Information Security Protection (ASISP) Program. Part 2 focuses on mitigation identification and evaluation, including the degree to which implementation of selected mitigation alternatives reduce initial risk from Part 1 analysis.

Target: Develop case studies to demonstrate Safety Oversight Management System (SOMS) methodology
Develop case studies to demonstrate Safety Oversight Management System (SOMS) methodology and its applicable use across AOV to conduct safety oversight activities.

Target: Release DARWIN Version 9.4
Release DARWIN Version 9.4 with enhanced auto-modeling to accommodate 3D production designs.

Target: Perform evaluations
Perform evaluations using a flight simulator on primary flight displays and flight control systems that provide automatic envelope protection on general aviation airplanes.

Target: Complete research on impact damage
Complete research on impact damage formation by a range of blunt sources on composite structures. These damage sources of interest include service vehicle collisions and other high energy, wide area, blunt impacts (HEWABI) that can damage composite structures without obvious visual indications on the exterior of the aircraft.

Target: Complete testing to evaluate improved fire suppression and fire detection systems
Complete testing to evaluate improved fire suppression and fire detection systems, including cargo compartment fires involving hazardous materials. This effort will include existing requirements for suppression and detection as well as systems for currently unprotected areas within the fuselage of commercial aircraft.
**Target: Develop new and revise existing aircraft materials flammability test methods**

Develop new and revise existing aircraft materials flammability test methods in response to revised FAA flammability requirements. This effort will consist of full scale and lab scale fire testing of existing and proposed new materials used in the construction of commercial aircraft and will result in new guidance and training materials as appropriate to improve standardization of test results.

**Activity: Conduct Human Factors Research**

Maintain and increase the efficiency and performance of the NAS by reducing the impact of human error.

**Target: Analytical Tools**

Develop at least one analytical tool for calculating ATC baseline metrics such as aircraft count, timing of handoffs, and deviation from flight plans. This tool will be created in the CASSIE environment.

**Target: Human Factors Handbook**

Produce a human factors handbook to guide the development and training of decision support tools (DSTs) in air traffic control. Literature reviews, part-task studies, and field studies will be conducted to develop and validate the guidance provided in the handbook.

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**Initiative: Enterprise Systems Engineering & Integration**

Develop and maintain Systems Engineering Guidance Material and conduct key NAS Enterprise Integration studies. Provide enterprise systems engineering expertise and conduct key NAS enterprise integration studies to realize the Future of the NAS vision.

**Activity: Sustain and Enhance the NAS Enterprise Architecture (EA)**

Update the planning artifacts within the NAS EA. This includes the yearly update to the NAS EA Roadmaps and NAS Segment Implementation Plan. It also includes the addition of new content to the Roadmaps and NSIP associated with Business and Technology Improvements.

**Target: Perform the Annual NAS EA Roadmap and NSIP Update**

Spearhead the NAS EA Roadmap and NAS Segment Implementation Plan (NSIP) annual update effort ending with their final publication on the NAS Systems Engineering Portal (SEP).

**Target: Post the Business & Technology (B&T) Roadmaps to the SEP**

Post Business & Technology (B&T) Roadmap data to the SEP for better visibility to NAS planners and decision-makers.

**Target: Refine the Process to Introduce B&T Improvements**

Refine the process for introducing B&T improvements into NSIP by socializing with key stakeholders.
Activity: Further Develop, Enhance, and Update NAS Enterprise Architecture Model

Apply scenario-based analysis to further develop and enhance the NAS Enterprise Architecture Model (EAM) to: 1) establish traceability back to the business drivers (operational improvements, concepts or operation, business and technology improvements), 2) document the plan for addressing the business drivers, 3) strengthen linkages between the NAS EAM and the NAS EA Roadmaps and NSIP, and 4) support the assessment of program artifacts and associated acquisition decisions.

Target: Revise & Publish the NAS Enterprise Architecture Model (EAM)

Revise the draft NAS Enterprise Architecture Model (EAM) change package from FY2018 based on input from operational and program subject matter experts. Publish revised products to the Systems Engineering Portal (SEP).

Target: Produce a Draft NAS EAM Change Package

Produce a draft NAS Enterprise Architecture Model (EAM) change package covering model changes related to four operational improvement increments. The package will include System Event Trace Diagrams (SV-10c), updates to the System Interface Description (SV-1), updates to the System Data Flows (SV-4), and updates to the System Data Exchange Matrix (SV-6). Publish the draft to the product section of the SEP to facilitate review. Final review and approval by the FAA Enterprise Architecture Board (FEAB) and Joint Resources Council (JRC) will be part of the yearly NAS EA update.

Activity: Continue to Update and Expand Enterprise Requirements

Develop NAS-level requirements to include in the Target NAS Requirements Document (TNRD) as updates to the System/Services Functionality Description (SV-4), results from performance studies and stakeholder feedback is received.

Target: Update the Target NAS Requirements Document

Update TNRD to include requirements not incorporated in 2018 version and to support alignment with the Current NAS RD.

Activity: Progressively Improve Acquisition Management System (AMS) Policy and Guidelines

Improve the AMS policy and guidelines related to data management to align with agency goals and objectives.

Target: Update the Solution ConOps and Functional Analysis Templates

Incorporate Business Process Modeling requirements into the Solution ConOps and Functional Analysis templates.

Target: Update the In-Service Decision Checklist and NAS CM Procedures

Assess and incorporate data perspective into the In-Service Decision (ISD) checklist and NAS Configuration Management (CM) policy/procedures.
Activity: Develop a Domain Strategy (Comm, Nav, Surveillance, etc)
Develop an Enterprise Domain Strategy to align with the domain roadmap that covers the current architecture and the evolution to the To Be architecture. The strategy will be the plan of how to transition the NAS from the As Is to the To Be architecture.

**Target: Develop an Enterprise Domain Strategy**
Complete at least one domain strategy for FY 19.

**Target: Document the Enterprise Domain Strategy**
Develop domain strategy document.

Activity: Aviation Internet Protocol Harmonization
Develop the draft RTCA Minimum Aviation Performance Standards (MASPS) for the ATN/IPS Technology. This Standard will support the Development, Validation and Certification of Avionics Equipment to support both Voice and Data Communications. The document will define the Transport, Network, Addressing and Naming, Security, Mobility, and Multi-link communication functions for the Aviation Internet Protocol Suite (IPS). Develop a Draft ATN/IPS MASPS Document.

**Target: Develop Aeronautical Telecommunication Network / Internet Protocol Suite (ATN/(IPS) Performance Requirements**
Establish System Performance Requirements including Mobility, Security and addressing Schemes for the IPS Protocol.

**Target: Prepare International Civil Aviation Organization (ICAO) Internet Protocol Suite (IPS) Standards and Recommended Practices (SARPS)**
Prepare a ICAO IPS SARPs and coordinate results with other Standards bodies completing complementary work.

Initiative: NAS Information Architecture & Governance
Develop a NAS information architecture, and enterprise information management governance system to achieve it.

Activity: Improve Access and Visibility to Systems Engineering Portal Data
Improve access and visibility to data and information hosted /stored within the NAS Systems Engineering Portal (SEP).

**Target: Gain Approval of SEP Build Plan**
Gain Management approval of the SEP Annual Build Plan

**Target: Cloud-based SEP Requirements**
Deliver prioritized high-level requirements for cloud-based SEP.
Target: Design Specifications and SEP Architecture
Deliver approved System Design Specifications and SEP Architecture.

Activity: Improve Access to and Quality of FAA Data Assets
Collaborate with data Stewardship Communities of Practice (SCoP) and the Office of the Chief Data Officer to baseline and catalog existing data assets within the respective domains to improve data access and expand data sharing. Identify data gaps, if any, and develop a roadmap and plan of action to address data shortfalls to improve data quality.

Target: Create Data Catalogue and Method to Collect Meta Data
Create data catalogue and a mechanism to collect associated meta data consistently across all established SCoPs (Airport, Airspace, Facilities, Finance, and Flight).

Target: Identify Data Shortfalls and Plan to Improve Data Quality
For each existing SCoP and Office of the Chief Data Officer, identify data shortfalls and develop a plan of action to improve data quality.

Initiative: NAS 2030 Trajectory Based Operations (TBO)
Ensure the successful development of Trajectory Based Operations (TBO) in the NAS. Work with stakeholders to ensure that all TBO activities, including acquisition activities, are well integrated throughout all phases of the project life cycle (Research, Development, Test, and Implementation)

Activity: Develop Graphical View of the Path to Trajectory Based Operations (TBO)
Develop a graphical view of the timing of operational changes and increment capabilities for the Path to TBO based on the 2019 NAS Segment Implementation Plan.

Target: Develop Path to TBO Graphical View
Complete development of the Path to TBO Graphical View.

Activity: Estimate Arrival Benefits in Support of TBO Concept Development
Update the TBO shortfall analysis and develop initial benefits estimate for arrivals related TBO capabilities to concept development.

Target: Update TBO Shortfall Analysis
Update the TBO shortfall assessment with 2017 empirical data to provide a more accurate assessment of existing shortfall pools. Develop brief for ANG Executive team and key ATO stakeholders (AJT, AJM, AJR).

Target: Develop Benefit Analysis Plan for TBO Arrival Capabilities
Define benefit analysis plan for arrival related TBO capabilities, including modeling framework and scenarios.

Target: Develop Benefit Estimate for TBO Arrival Capabilities
Develop benefit estimate for the arrival related TBO capabilities at an initial site.
Target: Develop NAS-Wide Benefit Estimate for TBO Arrival Capabilities
For representative NAS sites, develop NAS-wide benefit estimates for arrival related TBO capabilities.

Activity: TBO Functional and Data Analysis
Complete prioritized TBO functional and data analyses.

Target: Complete Functional Analysis of TBO Scenarios
Complete functional analysis of TBO scenarios, insert these functions into the integrated NAS-level hierarchy, and deliver them for development of enterprise-level TBO functional requirements.

Target: Identify and Prioritize TBO Data Cataloguing and Metadata Capture
Engage with the TBO community to identify and prioritize data cataloging and metadata capture activities to support development of enterprise-level TBO functional data requirements and the enterprise data architecture.

Activity: NextGen Equippage
Collaborate with Industry through the NextGen Advisory Committee (NAC) to provide the investments (advanced communications, navigation and surveillance avionics) operators need to obtain maximum benefit from the integrated TBO capabilities that are throughout the NAS.

Target: NextGen Equippage Story
Present the NextGen Equipage Story to the NextGen Advisory Committee (NAC).

Target: Engagement Strategy Plan
Coordinate with AVS to develop an engagement strategy plan to communicate the NextGen Equipage Story to the regional air carriers.

Initiative: Future Technology Opportunities
Examines disruptive technology ideas that provide unique opportunities for the FAA.

Activity: Separation Management - Closely Spaced Parallel
Partner with AFS-400 to develop concepts and perform analyses that will improve capacity by reducing separation standards and enabling new operations in lower visibility conditions. This initiative will develop and refine procedures and perform the requisite analyses that enable operations for closely spaced parallel runways (runway centerlines spaced less than 4300 feet laterally) in reduced visibility weather conditions. Reduced separation procedures will include both dependent and simultaneous independent parallel instrument approaches to runways between 2,500 and 4,300 feet, paired approaches for runways spaced less than 2500 feet, and closely spaced parallel departures from runways between 2,500 and 4,300 feet.

Target: Paired Approach Human in the Loop Report
Complete Paired Approach (PA) pilot feasibility Human in the Loop technical report
Target: Paired Approach Collision Safety Limit Report
Complete Paired Approach (PA) collision safety limit technical report.

Activity: FF-ICE Concept and System Architecture
Flight and Flow Information for a Collaborative Environment (FF-ICE) Concept and System Architecture activities will be performed to support the development of International Civil Aviation Organization (ICAO) provisions and implementation guidance.

Target: Enhanced Concept of Operations Demo

Target: Enhanced System Architecture & Capabilities Demo

Activity: Aviation Weather Research Program
Demonstrate the scientific advances required for advanced weather forecast products required for NextGen.

Target: High Resolution Rapid Refresh model-based Graphical Turbulence Guidance
Complete and deliver initial High Resolution Rapid Refresh model-based Graphical Turbulence Guidance algorithm ready for independent quality assessment.

Target: Geostationary Operational Environmental Satellite System (GOES) -17 Weather Satellite Data
Integrate Geostationary Operational Environmental Satellite System (GOES) -17 weather satellite data, including the Geostationary Lightning Mapper data, into the Offshore Precipitation Capability (OPC).

Target: In-Cloud Icing and Large Drop Experiment (ICICLE) Flight Campaign
Conduct and complete In-Cloud Icing and Large Drop Experiment (ICICLE) flight campaign to collect data used to research in-flight and terminal area icing phenomena.

Target: Offshore Precipitation Capabilities (OPC)
Complete feasibility study for using Offshore Precipitation Capabilities (OPC) to fill in weather radar coverage gaps over the US Rockies.

Target: Mesoscale Analysis Tool
Complete initial prototype of a 3D Real-time Mesoscale Analysis tool, including cloud analysis.
Activity: Weather Technology in the Cockpit
Provide pilots with safe access to the NAS by analyzing and disseminating aeronautical and meteorological information to pilots and controllers through innovative systems.

**Target: Alaska Web Cameras and Hybrid Crowd Sourcing Demo**
Complete a demonstration using the Alaska web cameras and a hybrid crowd sourcing system that includes integrated edge detection software and humans as part of the crowd processing to produce visibility information.

**Target: Remote Oceanic Meteorological Information Operational (ROMIO) Demo**
Complete a benefits analysis of the Remote Oceanic Meteorological Information Operational (ROMIO) demonstration results.

Activity: Trajectory Based Operations Strategy
ANG-C will conduct activities to develop strategy and guide technology and capability development to support Trajectory Based Operations (TBO) and the vision for Full TBO in 2025. This will consist of an analysis of maturity and interdependencies between planned capabilities to generate recommendations for packaging or alignment of TBO investments. A second element will focus on updates to the appendix to the NextGen Segment Implementation Plan (NSIP).

**Target: Trajectory Based Operation Investments**
Complete draft recommendations on packaging and alignment of TBO investments

**Target: NextGen Segment Implementation Plan (NSIP) TBO Appendix**
Complete updated Trajectory Based Operation appendix for the NextGen Segment Implementation Plan (NSIP).

Activity: UAS Traffic Management (UTM) Data Exchange
Develop and implement the data exchange formats, infrastructure, and governance for UAS Operations in the NAS.

**Target: Unmanned Aircraft System (UAS) Traffic Management (UTM) Report**

**Target: FAA UAS Traffic Management (UTM) Enterprise Capabilities and UAS Volume Reservations (UVR) Demo**
Establish industry partnership agreement through FAA UAS Test Sites to conduct demonstration of initial FAA UAS Traffic Management (UTM) enterprise capabilities and UAS Volume Reservations (UVR).
Activity: Dynamic Airspace
Research and analysis for a toolset that allows dynamic reconfiguration of existing NAS automation infrastructure to meet the needs for changing demand and capacity in the NAS.

Target: Dynamic Airspace Functional Analysis
Complete Functional Analysis for Dynamic Airspace.

Target: Dynamic Airspace Functional Requirements
Complete Initial Functional Requirements for Dynamic Airspace.

Activity: Radio Technical Commission for Aeronautics (RTCA) Detect and Avoid (DAA) Minimum Operational Performance Requirements (MOPS)
Supporting the Aircraft Certification Service (AIR) and Unmanned Aircraft System Integration Office (AUS) in developing surveillance performance requirements for SC-228 Phase Two MOPS responsible for integration of UAS into the terminal environment. Additional surveillance sensors such as a ground based radar are within scope for the terminal environment, which require development of new surveillance sensors and associated tracking, filtering and correlation strategies. The terminal environment also requires more stringent accuracies from existing sensors due to the operational environment in the terminal.

Target: MOPS Surveillance Sensor Model Report
Complete version 1 report of surveillance sensor models deemed mature for Detect and Avoid Phase 2 MOPS.

Target: Airborne and Ground Based Radar Systems
Complete initial versions of tracker algorithms for both airborne and ground based radar systems suitable for DAA surveillance.

Activity: Enterprise Services Infrastructure (ESI) - Cloud
Enterprise Services Infrastructure (ESI) will provide the framework for evaluating NAS requirement allocation to enterprise (cloud) capabilities to support decisions regarding potential future NAS enterprise services. This includes information services, software (applications), and infrastructure support architectures.

Complete technical report documenting current command and control capabilities of NAS ground automation systems.

Target: Current and Planned Cloud Architectures Technical Report
Complete technical report documenting the ability of current and planned cloud architectures to provide command and control services
Activity: Paired Approach Demonstration Stakeholder Demos

The Paired Approach (PA) procedure has the potential to more closely emulate the throughput that is achievable with visual approaches to closely spaced parallel runways. This program in partnership with industry and other FAA stakeholders will show the viability of using the proposed procedure in the future.

**Target: Demonstration Test Plan**
Provide demonstration test plan.

**Target: Paired Approach Demo**
Complete Paired Approach demonstration test flight.

Activity: Exploration of Northeast Corridor Traffic Management Solutions

ANG-C will support two pre-implementation Northeast Corridor (NEC) NextGen Advisory Committee (NAC) priorities through concept exploration and operational assessment activities. These activities will cover traffic flow management solutions to achieve the goal of deconflicting airports and improving throughput in the NEC.

**Target: Multiple Airport Route Separation (MARS) Concept**
Complete preliminary Concept of Operations for the Multiple Airport Route Separation (MARS) concept.

**Target: Northeast Corridor (NEC) Traffic Flow Management (TFM) Capabilities**
Complete draft document on assessment of current Northeast Corridor (NEC) traffic flow management (TFM) capabilities in order to determine focus areas for future TFM improvements in the NEC.

Initiative: New Entrants Integration

Unmanned Aircraft Systems support establishment of regulatory standards on UAS design and performance characteristics while operating in the NAS.

Activity: Conduct Unmanned Aircraft System (UAS) Research

Conduct ongoing research and development efforts to support the safe and efficient integration of Unmanned Aircraft System (UAS) into the National Airspace System (NAS).

**Target: Reserch Findings, Sensor and Error Model and Tracker Development Technical Report**
Complete technical report documenting the research findings, sensor and error model development and tracker development (research on alternate or enhanced fusion strategies).
Target: Ground Collision Severity Studies Technical Report
Complete technical report documenting the research findings of the Ground Collision Severity Studies project, to include the hazard severity of tested UAS to humans on the ground, and a repeatable test method to determine injury potential to humans.

Activity: Conduct Commercial Space Research
Conduct ongoing research and development efforts to support the safe and efficient integration of Commercial Space into the National Airspace System (NAS).

Target: Commercial Space Concept of Operations
Coordinate with ATO to deliver the Concept of Operations for Commercial Space Integration into the NAS to the Office of NextGen.

Initiative: NextGen Portfolio Management
Collaborate with stakeholders to continually improve NextGen planning and benefits delivery.

Activity: NextGen Portfolio Management
Collaborate with stakeholders to continually improve NextGen planning and benefits delivery. Ensure all funds are executed in accordance with Federal guidelines and FAA procedures.

Target: FY19 NAS Segment Implementation (NSIP) Validation
Complete validation of the FY19 NAS Segment Implementation (NSIP) changes and adjudicate all stakeholders comments.

Target: Project Level Agreement (PLA) Deliverable
Quarterly report status of Project Level Agreement (PLA) deliverable execution for all active PLAs. Ensure 100% tracking of all deliverables. 12/29/2018, 03/30/2019, 6/29/2019.

Activity: Reduced Weather Impact (RWI) - Weather Forecast Improvements
The Weather Forecast Improvements (WFI) program addresses the need to improve weather prediction and the use of weather information in the future NAS. National Weather Service (NWS) forecast models will be integrated into models that forecast weather impacts for aviation purposes. In today’s NAS, traffic managers and users must mentally interpret weather conditions and the potential impact of weather on ATC decisions. WFI will improve the accuracy of aviation weather information, to include the automated objective indication of the constraints placed on the NAS, and incorporate this data into collaborative and dynamic decision-making.

Target: NextGen Weather Processor Work Package 2 Concept of Operations
Deliver final NextGen Weather Processor Work Package 2 Concept of Operations.

Target: Common Support Services Work Package 2 Concept of Operations
Deliver final Common Support Services Work Package 2 Concept of Operations.
Target: Approach to Incorporation of Uncertainty into Generic Terminal Wind Translation Methodology Report
Complete report on the “Approach to Incorporation of Uncertainty into Generic Terminal Wind Translation Methodology”.

Target: Generic Terminal Wind Translation Methodology Report
Complete report on "Generic Terminal Wind Translation Methodology".

Activity: International Aviation Weather
Developing and coordinating harmonized requirements for production and dissemination of meteorological information supporting international air navigation.

Target: Meteorological Aerodrome Report (METAR) Reporting
Implement operational reporting of small hail and snow pellets in Meteorological Aerodrome Report (METAR) in support of de-icing hold over times.

Develop human factors guidance for developing, integrating, and training air traffic control decision-support tools (DSTs). The guidance will help developers design better DSTs and create training programs that lead to high human-system performance. The guidance will be based on literature reviews, interviews with subject-matter experts, and studies examining different DST design and training options.

Target: Human Factors Handbook
Complete and deliver a handbook that provides human factors recommendations for the successful development and integration of air traffic control decision-support tools including recommended training techniques to improve controllers’ understanding of how and when to use these tools.

Activity: Flightdeck/Maintenance/System Integration Human Factors (A11.f Requirement)
Develop human performance information that the FAA provides to the aviation industry for use in designing and operating aircraft, and training pilots and maintenance personnel.

Target: Air Carrier Training Department’s Current Crew Resource Management (CRM) Training Practices Survey
Provide survey of Air Carrier Training Department’s Current Crew Resource Management (CRM) Training Practices.

Target: Crew Resource Management (CRM) Report
Report on Crew Resource Management (CRM) training techniques and provide information that will be used by the FAA to augment specific CRM guidelines, principles, procedures, and tools that have been developed to improve CRM training and assessment across US airlines.
Support integration of air and ground capabilities to increase air transportation efficiency, capacity, and safety in the National Airspace System (NAS).

Target: Display Complexity Report
Complete final report on display complexity: Definitions, empirical findings, and recommendations for training and design.

Target: Voice Controls Report
Complete final report on recommendations for the design and evaluation of voice controls.

Activity: Enterprise Human Factors in PBN - Integrated NAS Design & Procedure Planning (1A12B0 Requirement)
Provide integrated guidance on human performance considerations to concept development, validation, and implementation teams.

Target: Contingency Operations Report
Report on contingency operations in a degraded NextGen environment.

Target: Human Factors Integration Report

Activity: NextGen Weather Processor (NWP) Meteorological Evaluation (MetEval)
Utilize operational baseline data and independent comparable reference data to assess meteorological accuracy and demonstrate quality of new and/or enhanced "high-value" NWP weather products and underlying meteorological algorithms. High-value products will include Vertically Integrated Liquid (VIL) and Echo Tops radar mosaics.

Target: NextGen Weather Processor (NWP) Meteorological Evaluation (MetEval) Plan
Deliver a Final NextGen Weather Processor (NWP) Meteorological Evaluation (MetEval) Plan.

Target: NextGen Weather Processor (NWP) Meteorological Evaluation (MetEval) Phase 1 Report
Deliver a draft NextGen Weather Processor (NWP) Meteorological Evaluation (MetEval) Phase 1 Report to include Vertically Integrated Liquid (VIL) and Echo Tops Mosaics.

Activity: Performance Based Navigation (PBN)- Metroplex
Ensure contract awards are completed and deliverables are received on time for the five phases of this project. Coordinate with AJV on completion of reports and documentation.
Target: Las Vegas Metroplex Design Phase
Complete the Las Vegas Metroplex Design Phase.

Activity: Wake Turbulence Enhancement Of Arrivals And Departures Support
Partner with ATO and AVS in domestic and international work groups looking at enhanced methods of providing wake turbulence mitigation utilizing available technology. Lead the development of wake turbulence mitigation separation standards, procedures, processes and enabling technology for near-term, mid-term and far-term NextGen era operations. Assess the performance of the current wake turbulence separation processes and utilize the assessments in the design of the NextGen era operations. Perform analysis, modeling, concept development, and data collection activities necessary to accomplish the NextGen - Wake Turbulence research agenda. Coordinate the wake turbulence mitigation development work with AJT, AFS-400, and AIR-100 as the research progresses. Provide technical leadership in discussions with ICAO, airports, air carriers, unions, and other stakeholders regarding wake mitigation separation standards, procedures, processes and enabling technology.

Target: New aircraft Type Wake Separation Recommendations Report
Complete report on New aircraft type wake separation recommendations for Boeing 777-X prior to the aircraft entering service in the NAS.

Target: Safe Wake Turbulence Separations Analysis
Complete analysis framework for a repeatable methodology to recommend safe wake turbulence separations for UAS as leading and following aircraft in the NAS.

Initiative: NAS / Global Standards
Collaborate with industry to establish Standards for Aviation Community.

Activity: Global Standards- FIXM
Collaborate with industry to establish Standards for Aviation Community.

Target: FIXM Messaging
Complete recommendations documentation on FIXM Messaging to include implementation of the solution and analysis of alternatives.

Target: FIXM Release Core Version 4.2 Update
Release draft Core Version 4.2 of Flight Information Exchange Model (FIXM) to include updates from Flight and Flow Information for Collaborative Environment (FF-ICE) requirements.

Initiative: Management of FAA's Research & Development Programs
Lead the development, review and alignment of FAA's annual research and development (R&D) program to provide a scientific and technological basis for continued evolution of a safe, efficient and environmentally sustainable aviation infrastructure.
Activity: Manage the planning and coordination of the R&D Portfolio
Manage the planning and coordination of the R&D Portfolio

Target: 2019 NARP
Prepare 2019 NARP for LOB Concurrence.

Target: Tech Transfer Report
Submit final Tech Transfer Report for executive review and approval.

Target: Annual Modal Research Plan
Submit Annual Modal Research Plan (AMRP) to OST-R.

Target: Research Engineering & Development Executive Board (REB)
Coordinate the Research Engineering & Development Executive Board (REB) 2021 Portfolio Reviews.

Target: REDAC
DRAFT the responses to R,E&D Advisory Committee (REDAC) FY2021 portfolio recommendations.

Target: COE congressional report
Submit final COE congressional report executive review and approval.

Initiative: NAS & NEXTGEN Laboratory Facilities and Services
Provide a set of world class laboratory facilities and services to support research, engineering and development, test and evaluation and maintenance of air navigation, air traffic management, and future air transportation system capabilities

Activity: WJHTC Laboratory Facilities
Sustain, maintain and improve the WJHTC NAS laboratory facilities

Target: Implement additional capabilities into the simulation infrastructure
Implement additional capabilities into the simulation infrastructure to support Human Factors Research into Information Display Optimization. Due: July 30th, 2019

Target: NAS automation systems
Enhance the simulation infrastructure with capabilities added to the baseline NAS automation systems.

Target: Implement intelligent agent-based capability
Implement intelligent agent-based capability for En Route controllers to the TGF simulation platform.
Target: Rotorcraft cockpit simulator.
Upgrade visual system to the rotorcraft cockpit simulator.

Target: Space and Infrastructure Master Plan projects
Initiate 70% of planned Space and Infrastructure Master Plan projects scheduled for FY2019.

Target: Maintain ISO certification
Maintain ISO certification by meeting or exceeding customer requirements by maintaining a customer feedback response rating of 3.5 or higher.

**Initiative: NAS Test and Evaluation**
Test, analyze and evaluate systems/services to verify and validate that products meet specifications, satisfy requirements, and are operationally suitable and effective.

**Activity: Develop, socialize and implement Verification and Validation (V&V) Strategies and practices to improve delivery of NAS systems/services.**
Conduct independent assessments of test work products and acquisition work products requiring Verification and Validation (V&V), based on established standards, in support of organizational and acquisition program objectives

Conduct ninety percent (90%) independent review of the William J. Hughes Technical Center’s (WJHTC’s) test work products for projects following the Test & Evaluation (T&E) Handbook.

Target: Verification & Validation (V&V) Summit
Host the Annual Verification & Validation (V&V) Summit.

**Activity: Provide Test and Evaluation (T&E) services to support implementation of National Airspace System (NAS) systems/services.**
Provide quality Test and Evaluation (T&E) and analysis products and services to ensure that current National Airspace Systems (NAS) and future air transportation systems are verified and validated using best practices and quality standards.

Target: Portfolio Review
Prepare for Portfolio Review with Program Management Organization (PMO) Executive Leadership (AJM-2, AJM-3).
Target: Deliver test documentation

Target: Bi-Annual ISO Management Reviews
Maintain International Organization for Standardization (ISO) Certification by conducting biannual management reviews.

Activity: Catalog Internal Enterprise Services
Catalog Internal Enterprise Services; Update Acquisition Management System (AMS) to reflect ANG's current role in the process.

Target: Catalog of ANG Enterprise Services
Develop a catalog of ANG Enterprise Services through internal ANG collaboration.

Initiative: WJHTC Operations and Infrastructure
Modernization of Technical Center infrastructure to ensure facilities operate efficiently and effectively.

Activity: Design and engineer facility improvements to WJHTC
Design and engineer facility improvements to WJHTC.

Target: Construction phase of Building 303 Electrical Switchgear and Chiller No. 2 and No. 3 replacement.
Complete 15% construction phase of Building 303 Electrical Switchgear and Chiller No. 2 and No. 3 replacement.

Target: Building 316 Substation Replacement Project Phase II
Building 316 Substation Replacement Project Phase II. Complete 25% construction by September 30, 2019. Work includes replacement of Electrical Substations 7, 9, and replacement of Substation 11 Medium Voltage Switches.

Deployment of Innovation
Accelerate and expand the deployment of new technologies and practices by reducing barriers to innovation and actively promoting innovations that enhance the safety and performance of the Nation's transportation system.
Initiative: Remote Towers
Using innovative Public, Private, Partnerships, the FAA will work with commercial vendors to support certification of their Non-Federal Remote Tower Systems. Once certified, these systems will potentially provide more cost effective solutions to traditional brick and mortar towers, especially for smaller rural communities.

Activity: Overarching Remote Towers
Develop a strategy for long term Remote Tower integration into the NAS and continue the evaluation and assessment of remote towers projects at Leesburg and Fort Collins.

Target: Planning for Remote Towers at Northern Colorado Regional Airport
Complete system optimization, airport information collection, and Safety Risk Assessment planning for Remote Towers at Northern Colorado Regional Airport.

Target: Conduct Safety Risk Management Panel (SRMP)
Conduct Safety Risk Management Panel (SRMP) to identify potential safety risks in order to enter Combined Positions and Failure Mode Analysis.

Target: Initial Safety Risk Assessment
Complete initial Safety Risk Assessment for Remote Towers at Northern Colorado Regional Airport.

Activity: Develop Draft Standards and Advisory Circulars for Remote Towers
Work with AJW and ATO to develop a documented process to achieve the Type Certification of Remote Tower systems.

Target: Remote Tower Operational Requirements Document
Deliver Remote Tower Operational Requirements Document for the provision Airport Traffic Control Tower Services with a Remote Tower system.

Initiative: Wake Recategorization
In the past the degree to which two aircraft needed to be separated was based on aircraft weight. This capability replaces that model with newly approved wake turbulence categories that group aircraft more optimally based on their wake turbulence characteristics and the current fleet mix for U.S. airports.

Activity: Wake Recategorization
Evaluate concepts, shortfalls, benefits, and operational impacts of wake mitigation concepts that incorporate environmental effects of winds in determining dynamic wake separation requirements.

Target: Wake Recategorization
Complete assessment of dynamic and time based wake separation concepts for use in the NAS.
Target: Wake Recategorization
Complete safety study of CSPO with High Update Rate Surveillance.

Target: Wake Recategorization
Provide guidance material to operators about wake turbulence encounter reporting in the NAS.

Target: Wake Recategorization
Perform feasibility and initial safety analysis for CSPO departure concepts.

Accountability
Serve that Nation with Reduced Regulatory Burden and Greater Efficiency, Effectiveness and Accountability.

Regulatory Reform
Reduce current regulatory burdens and bureaucracy to ensure a safe, efficient, accessible, and convenient transportation system for people and commerce.

Initiative: EEO/Diversity and Inclusion Action Committee (EAC)
Utilize the EEO/Diversity and Inclusion Action Committee (EAC) to create, oversee and support a diverse and inclusive workplace.

Activity: ANG Ensure a Diverse and Inclusive Workforce

• ANG will complete activities that will foster a diverse and inclusive workplace and improve the Reasonable Accommodation interactive process.

• Assist in development of a diverse workforce at all levels. Increase the representation of Persons with Targeted Disabilities (PWTD), Hispanics, and Women in the workforce as compared to the civilian labor workforce (CLF).

• Provide EEO training to managers and employees.

• Managers engage in the mediation/facilitation process

Target: Reasonable Accommodations (RA)/Reasonable Accommodations Management System (RAMS)Training

Ninety percent (90%) of all new managers and supervisors must complete Reasonable Accommodations (RA) and Reasonable Accommodations Management System (RAMS) training within one year of newly appointed supervisory position. This goal will be tracked on a bi-monthly basis through the EEO Action Committee (EAC) for Diversity and Inclusion.

Target: Reasonable Accommodations
Ensure 90% of ANG reasonable accommodation requests are processed within 25 business days or less.
Target: Improve Participation/Outreach
Develop strategies to improve the representation of Persons with Targeted Disabilities (PWTD), Hispanics, and Women by providing resources and data analysis to LOB/SOs to increase the workforce as compared to the civilian labor workforce (CLF) and/or MD-715, Part J). These strategies will address hiring, training, career progression opportunities and will be deployed and tracked through the EAC Workgroups.

Target: EEO Training
Monitor the delivery of EEO training to 70% of ANG managers and 20% of ANG employees.

Target: Mediation
Ensure that 75% of all ANG managers engage in mediation when requested by employees.

Mission Efficiency and Support
Support mission requirements by efficiency and effectively planning for and managing human capital, finances, procurement, sustainable operations, information technology, emergency preparedness, and other mission support services.

Initiative: Contracting Opportunities for Small Businesses
Support small businesses and job creation by providing opportunities for small businesses to attain FAA contracts and purchase orders, with special emphasis on procurement opportunities for socially and economically disadvantaged small businesses (including 8(a) certified firms), service-disabled veteran-owned small businesses, and women owned small businesses.

Activity: Awarding of Procurement Dollars (ANG)
Award procurement dollars to small businesses, with special emphasis on procurement opportunities for small disadvantaged businesses, service-disabled veteran-owned small businesses, and women owned small businesses.

Target: Awarding of Procurement Dollars Target
Award at least 25 percent of the total ANG direct procurement dollars to small businesses.

Initiative: Strong Acquisition Workforce
Ensure FAA has the staffing and skill mix to successfully manage NextGen and other major acquisitions by implementing training, developing and certifying personnel in key acquisition professions.

Activity: Train and Certify FAA’s Acquisition Workforce (ANG)
ANG will train, develop, and certify agency personnel in key acquisition professions.
**Target: Attain and maintain certification requirements Target**

Ninety percent of program managers managing ACAT 1-3 programs and/or major acquisition programs as defined by FAA and OMB Circular A-11 will attain/maintain certification requirements in accordance with AMS policy.

**Initiative: Operations/Cost Benefits Analysis and Reporting**

Conduct post-implementation assessments and future costs benefit analyses of NextGen capabilities to inform stakeholders and future decision making. Provide context about the performance of NextGen capabilities at specific locations, illustrating how post-implementation benefits justify further investments in NextGen.

**Activity: Perform Analysis of Recent Operational Improvements**

Analyze, interpret, and, as necessary, project future performance impacts and benefits from NextGen operational improvements deployed in prior fiscal year.

**Target: Status of NAS Improvements Deployed in FY18**

Assess status of NAS improvements deployed in FY18, and identify those that are mature for operational assessment. Deliver a plan for assessment of the corresponding performance impacts and benefits based on their implementation and use in the field.

**Target: NextGen Benefit Estimate Update**

Update achieved NextGen benefit estimate based on implemented capabilities through the end of FY17.

**Target: FY18 Operational Improvements Report**

Deliver report on the performance impacts and benefits from select operational improvements deployed in FY18. If applicable, incorporate industry feedback through NextGen Advisory Committee (NAC).

**Activity: Support of Operational Improvements in the NAS**

Conduct impact, cost, or benefit analyses in support of operational improvements in the NAS.

**Target: New Entrant Impact Analysis**

Conduct an impact analysis of at least one new entrant (e.g. UAS or SVO) incorporating a range of future growth scenarios.

**Target: NAS Operational Improvement Cost or Benefit Analysis**

Conduct at least one cost or benefit analysis of operational improvements in the NAS. For example, an avionics blue sky scenario or Northeast Corridor (NEC) initiative scenario.

**Initiative: Contract Administration/Management (Organizational Efficiency)**

Perform Contract Oversight and Administration for ANG-A Managed Contracts.
Activity: Forecasting; Acquisition Planning; Acquisition Support
Develop, manage and implement acquisition strategy to improve contract award process.

Target: ANG 3-Year Procurement Forecast
Develop an ANG 3-Year Procurement Forecast to ensure readiness for future procurements.

Target: Quarterly Procurement Forecast Reports

Target: Plan and Manage All Procurement Related activities
Plan and manage all procurement related activities towards ANG-A led contract awards to support proactive contract management communication with the appropriate stakeholder at the appropriate time (Due: Monthly).

Activity: Administer Contracts within ANG-A1
Proactively administer contracts to provide improved communication and customer service.

Target: Execute Memorandum of Understanding (MOU)
Execute Memorandum of Understanding (MOU) with all Lines of Business (LOBs) supported from the Systems Engineering and Development Support Budget Line item (BLI).

Target: Automate Receipt and Acceptance of Contract Deliverables

Target: Develop FY20 Work Plan
Develop FY20 work plan with all Lines of Business (LOBs) supported from the CAASD Budget Line Item (BLI).

Target: Track and manage the Enterprise Management Budget Line Item (BLI)
Track and manage the Enterprise Management Budget Line Item (BLI) to support proactive planning for a new BLI and ensure standardization across the Division. (Due: 12/31/2018, 3/31/2019, 6/30/2019, 9/30/2019)

Target: Track and Manage Key Administration and Management Processes
Track and manage key administration and management processes of FY19 award of new task orders, modifications, resumes, invoices, contract options and Program Management Reviews (PMRs) - report progress quarterly in the Contract Status Report to support proactive task order management. Actions from this activity provide input to the Contract Status Report (Due: 12/31/2018, 3/31/2019, 6/30/2019, 9/30/2019).
Target: Provide ANG-A1 Contract Status Report to ANG Senior Management
Provide ANG-A1 Contract Status Report to ANG Senior Management, by the 30th of each month to support monthly reporting and accountability for customers utilizing active contracts. (Due: Monthly)

Initiative: Financial Management and Organizational Planning (Organizational Efficiency)
Implement improvements to enhance NextGen financial management. Ensure all funds are executed in accordance with Federal guidelines and FAA Procedures; Develop/Maintain ANG Strategic/Core Business Plan.

Activity: ANG Business Planning
Lead ANG leadership and planners in the coordination and development of the upcoming fiscal year’s Business Plan to establish FY20 priorities and linkages to work units.

Target: ANG’s Business Plan Framework
Facilitate leadership review and update of ANG’s Business Plan Framework to establish upcoming Fiscal Year Objectives and Initiatives.

Target: Conduct ANG Business Plan Kickoff
Conduct ANG Business Plan Kickoff to deliver upcoming Fiscal Year Business Plan development guidance, requirements and timelines to ANG Planners.

Target: Upcoming Fiscal Year ANG Business Plan
Gain ANG Leadership approval of upcoming Fiscal Year ANG Business Plan for submission to APO via Business Plan Builder.

Activity: Budget Formulation, Execution and Planning
Lead development of annual budget submissions (OST, OMB and President’s) and execute enacted budget in accordance with Agency policy and regulations.

Target: Timely Delivery of Annual Budget Submissions
Collaborate across ANG Directorates to ensure timely delivery of annual budget submissions in accordance with FAA timelines and provide a monthly assessment of F&E, OPS and R,E&D budget obligation rates (Due monthly).

Target: Perform Fund Certification Activities
Perform fund certification activities within 3 business days of receipt of obligating documents that comply with FAA policy and regulations for 85% of randomly selected transactions, averaged over the fiscal year. (The statistical analysis is conducted once every quarter. DUE: 10/29/2018, 1/29/2019, 4/29/2019 & 7/29/2019).

Activity: Financial Reporting
Compile, assess, and allocate human and financial resources for the ANG organization to provide information on how resources are allocated across business plan activities.
Target: FY19 Resource Program Management Review (RPMR)
Conduct initial fiscal Resource Program Management Review (RPMR) for all directorates to capture personnel and fiscal resources allocated in executing FY19 Business Plan priorities.

Target: Final FY19 Resource Program Management Review (RPMR)
Conduct final fiscal Resource Program Management Review (RPMR) for all directorates to estimate personnel and fiscal resources required to execute FY20 Business Plan priorities.

Initiative: Enabling Employee Services (Invest in ANG’s Workforce)
Enable an agile, productive and effective workforce. Provide resources and a work environment that anticipate and fulfill employee needs, foster a people-first and mission-always culture, and lead to enhanced performance and mission success.

Activity: Records Management
Improve the accuracy and completeness of ANG Office File Plans to increase accessibility and reusability of our records.

Target: FY18 ANG Records Management Completeness and Accuracy
Follow-up on FY18 ANG Records Management Completeness and Accuracy Assessment and assist completion and closure of mitigation plans. Also ensure that Office File Plans (OFPs) are updated to reflect mitigation plan actions and include all latest and current ANG vital records.

Target: ANG-wide Completeness and Accuracy Assessment Report
Design, develop, and rollout targeted trainings/workshops that target recommendations and gaps identified in ANG-wide Completeness and Accuracy Assessment Report from September 2018.

Target: Automation of ANG Office File Plans (OFPs) and other Records Management
Gather, define, and determine feasibility of, requirements to automate certain Records Mgmt. workflows and processes, including ANG Office File Plans (OFPs), if appropriate.

Activity: ANG Workspace & Facilities Intake System
Provide the ANG workforce at HQ with an electronic intake process for workspace and facilities related requests.

Target: Design a KSN-based system
Determine the technical requirements that will be necessary to design a KSN-based system to intake requests, provide statuses and generate reports.
**Target: Launch Intake System**
Begin development of ANG Workspace & Facilities Intake system.

**Initiative: Workforce Development & Recruiting (Invest in ANG’s Workforce)**
Maintain a highly skilled workforce. Recruit and develop workforce to meet future demands and challenges and fulfill technical and managerial needs.

**Activity: Leadership Development**
Ensure that ANG leaders have the skill mix necessary to successfully manage the ANG workforce.

**Target: Individual Development Plans (IDPs)**
Achieve 75% participation rate on active individual development plans (IDPs) by direct reports of middle managers (i.e., Frontline Managers) covering FY19. Successful participation is evidenced by having a signed and approved IDP, with plans to meet at least twice annually with the manager to review progress, and completing at least 50% of activities in the IDP.

**Target: Middle Manager Development Curriculum**
Provide an assessment of completion progress and impact of the middle manager development curriculum. (Due November 15, 2018 and April 15, 2019 (the April 15, 2019 report will include high-level program observations and lessons learned)).

**Target: Leadership Development Curriculum**
Design and develop a leadership development curriculum for non-managers with a specific focus on identifying and developing high-potential and emerging leaders in the non-manager employee workforce.

**Activity: Workforce Training**
Implement a training curriculum for all ANG employees, aimed at providing them with the foundational knowledge needed to enhance their awareness of the enterprise.

**Target: Creating Effective Briefings**
Collaborate with FLLI to conduct two deliveries of Creating Effective Briefings (created in FY 18) with offerings available to all of ANG.

**Target: Personal Effectiveness Curriculum**
Design and develop a personal effectiveness curriculum to enhance effective writing, communication, and analytical/critical-thinking skills.
Activity: Innovation Booster Campaign
Design, develop, and implement practices and programs that boost innovation, foster collaboration, and support enhanced communication.

Target: Launch Targeted Initiative
Launch a targeted initiative to distribute recurring tips, articles, and interactive learning activities that foster enhanced communication and collaboration by developing skills in applying active listening, questioning, and mindfulness techniques and methods.

Target: Tech Talks Speaker-Series
Design, develop, and implement a "Tech Talks" speaker-series targeted to ANG but promoted and accessible FAA-wide. Bring-in 4-6 internal and external (i.e., other agencies or industry) speakers over the year in partnership with AOC.

Target: Promotional Campaign
Design, develop, and implement a promotional campaign and materials focused on creating awareness around ANG innovation. Refresh campaign materials (e.g., wall/facility skins, posters, and communications) quarterly (Due: December 31, 2018; March 31, 2019; June 30, 2019; and September 30, 2019).

Activity: Workforce Recruitment - Job Analysis Tool Development
Ensure that ANG managers are provided with the knowledge and training necessary to develop an effective Job Analysis Tool (JAT).

Target: Modules Design and Development of Job Analysis Tools (JAT)
Collaborate with AHR to design and develop the modules of a Job Analysis Tools (JAT) workshop.

Target: Launch ANG Job Analysis Tool (JAT)
Launch ANG JAT repository on KSN to provide ANG managers with access to recently developed JATs.

Target: Job Analysis Tools Workshops
Collaborate with AHR to conduct three deliveries of Job Analysis Tools workshops with offerings available to ANG managers and support personnel (1-HQ and 2-WJHTC). (First workshop due by 3/30/19.)

Activity: Workforce Recruitment - Interviewing Candidates
Ensure that ANG managers are provided with the knowledge, tools and training necessary to conduct effective interviews.
Target: Design and Develop an Interview Guide
Collaborate with ANG organizations and FAA LOBs to design and develop an Interview Guide incorporating leading practices that will assist ANG hiring managers in conducting effective interviews.

Target: Interview Guide Informational Sessions
Promote availability of Interview Guide to ANG managers and host two informational sessions (1-HQ and 1-WJHTC). (First session due by 6/30/19.)

Activity: Recruitment - NextGen Pathways Program
Recruit and hire student Interns to assist in the agencies succession planning goals.

Target: Recruit Students
Subject to position availability, recruit new students into the NextGen Pathways student internship program.

Target: Convert to Full--time Permanent Employees
Subject to position and funding availability, convert program participants to full-time permanent employees without further competition, after successful completion of the program.

Initiative: 1: Shared Services
Initiative Description: AHR will work internally and in collaboration with DOT and other federal agencies on efforts to establish shared service models for the delivery of crucial processes and systems to improve customer service.

Activity: Business Partner Review
Refine model for delivery of HR activities across the agency to improve the efficient utilization of resources.

Target: Review, Staff Performance - ANG-A
Complete initial review of LOB/SO staff performing HR functions and time spent. Document recommendations for further process improvement analysis across various HR disciplines. (AHR-100) (ALL LOB/SOs)

Initiative: WJH Technical Center Facility Operations
Provide facility maintenance, environmental management, support services and engineering support for all properties located at the WJHTC.
Activity: Provide Facility Operations and Maintenance and Support Services enabling stakeholders to meet their mission requirements in a safe, secure and efficient way

Provide twenty four hour facility, emergency management preparation/response operations, and maintenance services for the WJH Technical Center Campus

Target: Gap Analysis of Safety Programs/Policies
Complete a Gap Analysis of Safety Programs/Policies to identify areas of opportunities for improvement to ensure customer safety is met.

Target: Facility Security Committees
Organize (2) Facility Security Committees to discuss emergency planning, training, communication and implementation. Review local and nationally identified threats and prepare actions on how to respond. Conduct (1) Facility Specific Operations-Based Exercise on violence in the workplace.

Target: Order 3900.55B Occupational Safety and Health
Review and update Order 3900.55B Occupational Safety and Health based on the Gap Analysis and area of opportunities for improvement identified.

Target: ISO and EMS quality management certifications
Maintain ISO and EMS quality management certifications for the Laboratory Services, Test and Evaluation, and Center Operations Divisions.

Initiative: FAA WJHTC Management and Support
Provide key Research and Development, Test and Evaluation, Laboratory Services and Facility Operations to support the mission of the FAA and ANG.

Activity: Conduct key activities in support of the FAA and ANG's mission
Provide key research and development, test and evaluation and laboratory and facility services

Target: Complete 90% of the T&E and Separation Standards targets in ANG-E's FY-19 Business Plan
Complete 90% of the T&E and Separation Standards targets in ANG-E's FY-19 Business Plan

Target: Laboratory and Facility Operations targets
Complete 90% of Laboratory and Facility Operations targets in ANG-E's FY-19 Business Plan

Target: Research and Development targets
Complete 90% of the Research and Development targets in ANG-E's FY-19 Business Plan