



**Federal Aviation  
Administration**

**NextGen**

**Fiscal Year 2016 Business Plan**



# FY2016 ANG-NextGen Business Plan

March 04, 2016 03:02 PM

The Office of NextGen (ANG) provides leadership in planning and developing the Next Generation Air Transportation System (NextGen). NextGen is a transformative change in the management and operation of how we fly, which will reduce delays, save fuel and lower carbon emissions. This comprehensive initiative integrates new and existing technologies, including satellite navigation and advanced digital communications. Airports and aircraft in the U.S. National Airspace System (NAS) will be connected to NextGen's advanced infrastructure and will continually share information in real time to improve air transportation's safety, speed, efficiency and environmental impacts. The combined initiatives that make up NextGen will provide a better travel experience.

Our programmatic structure is broken down into three tiers:

- 1) Building on our existing foundation and upgrading our automation infrastructure;
- 2) Transforming the system. This includes six programs: Automatic Dependent Surveillance Broadcast (ADS-B), Collaborative Air Traffic Management (CATM), System Wide Information Management (SWIM), Common Support Services for Weather (CSS-Wx), NAS Voice System (NVS) and DataComm. These are designed to provide more real time information including aircraft location information, weather information, and general aeronautical information necessary for flight planning and air traffic management.
- 3) Implementation of new capabilities that provide both national improvements and location specific solutions.

The ANG Business Plan:

The ANG workload, both core and strategic efforts, link back to the FAA sub-initiatives. The Strategic Initiatives and Priorities are not intended to govern tactical or operational planning, as these tasks fall under each organization's business plan responsibilities. Rather, they are meant to provide a strategic direction for the FAA and its organizations. The organization-specific business plans list discrete and measurable initiatives and activities that each organization will undertake in FY 2016 in support of the Strategic Initiatives. ANG's business plan activities and activity targets are associated with each of the four FAA Strategic Priorities. ANG further delineates its activities and targets between those in support of the new strategic initiatives and those in support of core business initiatives.

FAA Strategic Initiatives (2014-2018)

ANG's core business plan is aligned with all four of the agency's strategic initiatives. These four strategic initiatives contain sub-initiatives which have supporting activities and targets. ANG's FY 2016 business plan contains over 460 activities and targets supporting the Priority Initiatives and sub-initiatives listed below.

- Risk-Based Decision Making
  - Improve standardization, data access, and modeling integration (ANG-B)
  - Enhance decision making process
  - Redefine oversight model for industry.
- NAS Initiatives
  - Focus to achieve the benefits of NextGen (ANG)
  - Integrate new user entrants (Unmanned Aircraft Systems/Commercial Space)
  - Right-size the NAS
- Global Leadership
  - Transform our internal structure
  - Develop an integrated, data-driven approach to international activities
  - Ensure global interoperability of NextGen
  - Place international resources strategically
- Workforce of the Future (AHR)
  - Leadership development
  - Skills identification
  - Skills development
  - Attracting talent

## Make Aviation Safer and Smarter

The FAA oversees the safety of the world's largest, most complex aviation system -- an aviation system that affects millions who fly for business and pleasure, to those that ship, receive, sell, and buy goods transported by air, to those that work in the industry who depend on travel and tourism for their livelihood.

ANG supports this by working with partners across the agency to promote continued operational safety (surveillance, oversight, education, inspections), establish safety rules and regulations (rulemaking), and certify the aviation competency of people (pilots) and organizations (individual airlines) and the airworthiness of aircraft and equipment.

We will continue to 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

## Strategic Objective: Risk-Based Decision Making

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.

---

## Strategic Initiative: Standardization, Access, and Integration

Improve standardization, data access, & modeling integration.

### Strategic Activity: Common Data Taxonomies

Establish common data taxonomies to be used consistently across the FAA, with industry, and internationally.

#### Activity Target 1:

Develop draft second tier of the FAA Hazard Taxonomy and submit to the FAA SMS Committee for approval. Due September 30, 2016

### Strategic Activity: Hazard Tracking Tool

Establish an agency-wide tool to track hazards and mitigation outcomes.

#### Activity Target 1:

Update the Hazard Identification Risk Management and Tracking (HIRMT) tool to accommodate LOB-specific data field requirements. Due September 30, 2016

## Strategic Initiative: Decision Making Process

Enhance decision making processes.

### Strategic Activity: FAA SMS Decision-Making and Governance Structure

Design and implement changes to the FAA SMS decision-making and governance structure including potential changes to the FAA SMS Executive Council roles and responsibilities.

#### Activity Target 1:

Update the FAA SMS Committee Charter and develop the FAA SMS Executive Council Charter to align with the Risk-Based Decision Making Strategic Initiative. Due April 30, 2016

## Strategic Initiative: RBDM Transition of Safety Management

Evolve the Safety Oversight Model.

### Strategic Activity: Safety Performance Management

Lead the agency effort to improve and manage SMS within AVS and FAA by including safety risk when making decisions.

#### Activity Target 1:

Deliver safety risk assessment report to the FAA SMS Committee on one FAA-level Significant Safety Issue (SSI). (Light Emitting Diodes (LED) Lighting in Aircraft Operations) Due September 30, 2016

#### Activity Target 2:

Deliver safety risk assessment report to the FAA SMS Committee on one FAA-level Planned NAS Change. (UAS Pathfinder - Focus Area: Beyond Visual Line of Sight in Rural/Isolated Areas) Due September 30, 2016

## Internal Work Objective: Enhance Information System Security

Continuously enhance the FAA's Cyber Security posture through provision of FAA-wide Information Security and Privacy Services that properly secure agency information and reduce risk to breach of Agency Information systems. In addition, AFN will collaborate with DOT to advance capabilities that protect against cyber threats. Successful accomplishment of this objective will be based upon assessment of risks to the system and effective response to those risks.

## Internal Work Initiative: Reduce Risk to Agency Internet Protocol (IP) Based Systems

Progressively improve the agency risk posture by implementing vulnerability management processes..

### Internal Work Activity: Vulnerability Management Processes

Continue to implement vulnerability management processes to address 80% of the high value threats and vulnerabilities exploited by attacks within 30 days.

#### Activity Target 1:

Continue to implement vulnerability management processes to address 80% of the IP high value threats and vulnerabilities identified in the DHS Cyber Hygiene Report within 30 days or as directed by AIS-1. Reported cumulative year-to-date. Due September 30, 2016

#### Activity Target 2:

Address 80% of IP based high value risks within 30 days. Continue to provide information to the Cybersecurity Steering Committee to assure consistent risk acceptance decisions. Visualize vulnerabilities on all IP based systems. (OSM/OSI) Due September 30, 2016

## **Internal Work Activity: Information Security Continuous Monitoring (ISCM), including Continuous Diagnostics and Mitigation (CDM)**

Provide near real-time information about the agency's hardware, software, and vulnerabilities. Update policy, plans and concept of operations to support ISCM.

### **Activity Target 1:**

Continue enhancements to the cybersecurity data visualization dashboard to include information about the Missions Support, R&D and NAS Domains. Due March 31, 2016

### **Activity Target 2:**

Complete Service Readiness Review (SRR) of the CMaaS (Continuous Monitoring as a Service) baseline. Deliver Baseline Report and recommendations to AIS-1 and the Cybersecurity Steering Committee. Due April 30, 2016

### **Activity Target 3:**

Ensure agency transition to FAA operations of CMaaS approved baseline. Due September 30, 2016

### **Activity Target 4:**

Modify the draft Information Security Continuous Monitoring (ISCM) Concept of Operations to incorporate comments received from external LOBs. Deliver to the Cybersecurity Steering Committee for approval. Due September 30, 2016

## **Internal Work Activity: Security and Privacy Response Service**

The Security and Privacy Response Service provides continuous monitoring of events and an immediate response to incidents and breaches. The incident response process initiates and coordinates appropriate responses and includes ownership of the incident management process and management of communication both internally and externally as required for incidents. The Office of Information Security and Privacy will enhance the Cyber Incident Response process for the FAA.

### **Activity Target 1:**

Lead the the planning and conduct an incident response exercise to validate FAA's Cyber Incident Response Process and include defined and documented criteria for escalating the incident status. This exercise should include at a minimum AIT, the NAS Cyber Operations (NCO) and Security and Hazardous Materials (ASH). Report findings to AIS-1 and the Cybersecurity Steering

Committee with recommended updates to FAA's security processes. Due June 30, 2016

## **Internal Work Activity: Security Compliance Service**

The Security Compliance Service monitors compliance with applicable requirements, tracks response through remediation, and communicates this information to the system owners. The service supports internal audits and external audit initiatives and reporting.

### **Activity Target 1:**

Complete the analysis of all FAA's FISMA reportable inventory systems for accuracy of identified FIPPS impact levels. Due September 30, 2016

## **Internal Work Initiative: Information Security and Privacy Services**

Continuously enhance the FAA's Cyber Security posture through provision of FAA-wide Information Security and Privacy Services that properly secure agency information and information systems.

## **Internal Work Activity: Security and Privacy Liaison Service**

The Security and Privacy Liaison Service provides relationship management between consumers and the Information Security and Privacy group. In addition, coordinates policies, awareness training, as well as situational awareness communications.

### **Activity Target 1:**

Resolve comments and finalize updates to FAA Order 1370.82a, Information Security Policy, in coordination with internal AIT organizations as well as external LOBs/SOs. Due March 31, 2016

### **Activity Target 2:**

Update FAA Cybersecurity Strategy 2016-2020. Due September 30, 2016

## **Internal Work Objective: Safety Management**

Build safety management practices to current and future air transportation safety challenges.

---

## **Internal Work Initiative: Safety & Information Security Services**

The ANG Safety Management System program mandated by FAA Order 8000.369 focuses on the assurance and maintenance of implemented and

compliant Safety Management System (SMS) processes.

### **Internal Work Activity: Support Services for Safety Management Systems (SMS)**

Continue the assurance and maintenance of implemented and compliant Safety Management Systems (SMS) processes.

#### **Activity Target 1:**

Conduct one SMS audit. Due August 31, 2016

#### **Activity Target 2:**

Hold an ANG Safety Stand-down Day with all ANG executive and division managers and staff as an SMS promotional activity. Due September 30, 2016

### **Internal Work Activity: Enterprise Safety**

Develop Enterprise Architecture products that will better describe NAS enterprise safety and help FAA safety stakeholders conduct Integrated Safety Management (ISM)

#### **Activity Target 1:**

Develop an HTV capability to be prototyped. Due February 28, 2016

#### **Activity Target 2:**

Prototype the HTV capability. Due September 30, 2016

### **Internal Work Initiative: Support FAA SIG Risk Based Decision Making (RBDM) for Planned Changes**

Risk Based Decision Making is the Administrator's Strategic Initiative for improving Safety. ANG is a co-chair of the Safety Collaboration Team (SCT) that is identifying the FAA planned changes and facilitating the completion of integrated safety analysis.

### **Internal Work Activity: Cross Organizational Safety Assessment**

Support the Risk Based Decision Making (RBDM) Sub-initiative for planned changes focusing on applying Integrated Safety Management (ISM).

#### **Activity Target 1:**

Complete at least two NextGen based integrated safety assessments for FAA planned changes. Due September 30, 2016

#### **Activity Target 2:**

Support development of FAA level guidance documentation on a cross-organizational safety

assessment process that is consistent with FAA Order 8040.4A for planned NAS changes. Due September 30, 2016

#### **Activity Target 3:**

Facilitate at least two cross organizational integrated safety assessments for FAA planned changes. Due September 30, 2016

## **Deliver Benefits Through Technology/Infrastructure**

NextGen is a significant undertaking for the United States. We are completely transforming the National Airspace System (NAS) and the way we manage aircraft in the system. This transition involves many varying components. We are transitioning to evolving digital and satellite technologies, we are acquiring and installing new infrastructure to enable that technology, and we are collaborating with industry and creating incentives for users to install equipment that will enable NextGen capabilities.

Our primary focus is on delivering benefits through technology and infrastructure. That is the heart of the Next Generation Air Transportation System. The work we do today will ensure that future generations continue to inherit the most efficient airspace possible due to the foundation we have laid with NextGen systems and improvements. NextGen was once primarily about the future, but we have progressed to the point that our focus is on delivering near-term benefits today.

### **Internal Work Objective: Deliver Benefits through Technology and Infrastructure - Deliver Capabilities**

Lay the foundation for the NAS of the future by achieving prioritized NextGen benefits, integrating new user entrants, and delivering more efficient, streamlined services.

### **Internal Work Initiative: Development of a NextGen Cyber Security Test Facility (CyTF)**

Continue development of the FAA Cyber Security Test Facility (CyTF) capabilities and collaborate with key stakeholders to identify, evaluate, prioritize, and implement FAA cyber initiatives to advance and strengthen FAA cyber posture.

## **Internal Work Activity: Advance and Strengthen FAA Cyber Posture**

Progressively improve FAA cyber posture by establishing additional CyTF capabilities and collaborating with key stakeholders to deliver cybersecurity benefits to the FAA. Use the CyTF, working across aviation domain partners, to conduct interoperability exercises and training and to identify, evaluate, integrate and test proposed ISS solutions. Work with ISS Stakeholders across the FAA to incorporate the use of ISS architecture and requirements for strategic planning.

### **Activity Target 1:**

Deliver draft FAA threat model development cost estimate and schedule Report of Finding Due February 29, 2016

### **Activity Target 2:**

Deliver draft CyTF penetration testing Standard Operating Procedures. Due April 30, 2016

### **Activity Target 3:**

Deliver draft NextGen/NAS Information Security Architecture Concept of Operations. Due June 30, 2016

### **Activity Target 4:**

Use the CyTF to support FAA cyber exercises or testing. Due September 30, 2016

## **Internal Work Initiative: Demonstrations & Infrastructure Development**

The program objective is to prove concept feasibility, support validation and fast-time modeling, and provide data to support business case and investment decisions tied to the decision points in the National Airspace System (NAS) architecture and promote industry involvement. Demonstrations are also used to integrate current technology with transformational technology to achieve NextGen operational objectives as early as possible.

### **Internal Work Activity: Aircraft Access to System Wide Information Management (SWIM)**

In FY16, the Aircraft Access to SWIM (AAtS) project will complete the Security Risk Assessment and conduct the final demonstration necessary for this project's completion.

#### **Activity Target 1:**

Conduct Security Risk Management (SRM) Panel for Aircraft Access to System Wide Information

Management (SWIM) demonstrations. Due December 30, 2015

#### **Activity Target 2:**

Complete security protection layer demonstration of AAtS to SWIM utilizing Electronic Flight Bag (EFB). Due August 31, 2016

### **Internal Work Activity: Mini-Global Demonstration**

Phase II will culminate with a demonstration of the applicability of the global exchange models for Flight, Aeronautical and Weather information using the Flight Information Exchange Model (FIXM), aeronautical Exchange Model (AIXM), and Weather Exchange Model (WXXM) standards.

#### **Activity Target 1:**

Complete NextGen Single European Sky ATM Research Programme (SESAR) Interoperability Demonstration Project Management Plan. Due February 28, 2016

#### **Activity Target 2:**

Conduct Mini Global II Demonstration. Due August 31, 2016

### **Internal Work Activity: Demonstration & Infrastructure Development**

Conduct three demonstrations in collaboration between industry and the FAA to expedite emerging technology in order to validate NextGen concepts, aircraft technology, and ground system requirements.

#### **Activity Target 1:**

Conduct Aircraft Access to SWIM and Mini Global II demonstrations. Due September 30, 2016

#### **Activity Target 2:**

Complete one Human-In-The-Loop/Subject Matter Expert (HITL/SME) evaluation of emerging technology. Due August 30, 2016

### **Internal Work Activity: 4D Trajectory Demonstration**

Project is in planning stage. Will complete activities to inform and execute the demonstration slated for 2017 to include assessment of standards, system architecture and design plan, and a demonstration execution plan.

#### **Activity Target 1:**

Complete draft System Architecture and Design. Due March 31, 2016

**Activity Target 2:**

Complete draft demonstration execution plan. Due May 30, 2016

### **Internal Work Activity: Remote Towers Demonstration Project**

Team will conduct demonstration reviews and surveys in Leesburg to determine benefits of capability at a non-towered airport. In addition, a second site will be developed in Colorado using new technology with same capabilities.

**Activity Target 1:**

Select Remote Tower System (RTS) initial test site. Due December 31, 2015

**Activity Target 2:**

Commence site engineering and preparation activities at the initial test site. Due September 30, 2016

**Activity Target 3:**

Complete Passive Data Gathering Phase. Due February 28, 2016

**Activity Target 4:**

Develop FY16 Initial Integrated Work Plan. Due September 30, 2016

### **Internal Work Initiative: Closely Spaced Parallel Runways**

Research to find safe ways to recover lost capacity induced by the current aircraft-to-aircraft separation procedures required for simultaneous Instrument Meteorological Conditions (IMC) operations to closely spaced parallel runways.

### **Internal Work Activity: Separation Management - Closely Spaced Parallel Operations (CSPO)**

This activity 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, as well as paired approaches for runways spaced less than 2500 feet

**Activity Target 1:**

Complete Paired Approach Safety Analysis Inputs report. Due June 30, 2016

**Activity Target 2:**

Complete report on the effect of higher density altitudes on closely spaced parallel operations at higher elevation airports. Due September 30, 2016

### **Internal Work Initiative: Separation Management**

The Oceanic Tactical Trajectory Management (OTTM) project focuses on methods to promote strategic coordination between airspace users and ATCs in the Oceanic environment. The key objective is to use trajectory-based operations to improve fuel efficiency, system predictability, and performance by enabling airline operators to fly optimal flight paths while in the oceanic airspace.

### **Internal Work Activity: Separation Management - OTTM**

Proof of concept and coordination capabilities will be researched. This include Traffic Congestion Depiction, Flight Specific Likelihood Feedback, Pre-Oceanic Coordination Planner, Re-Profile Alert, and Controller 4D Trajectory Insight.

**Activity Target 1:**

Deliver prototype development and demonstration plan. Due September 30, 2016

### **Internal Work Initiative: Manage the Development of NAS EA Models and Requirements**

Update and maintain the enterprise architecture models and associated requirements to clearly articulate the future technical capabilities of the NAS and establish traceability to NAS programs.

### **Internal Work Activity: Maintain the NAS Requirements**

Update and maintain the enterprise requirements and establish traceability to NAS programs.

**Activity Target 1:**

Implement the recommended changes to the Dynamic Object Oriented Requirements System (DOORS) requirements database environment to support the improved requirements traceability process. Due May 31, 2016

**Activity Target 2:**

Improve the requirements traceability process and

document applicable changes in relevant policies and guidelines. Due September 30, 2016

**Activity Target 3:**

Update the enterprise requirements through stakeholder engagement. Due September 30, 2016

**Internal Work Activity: Ensure Consistency Between the NAS EA and Program Architectures and Other Technical Products required by the AMS.**

Work with ATO NAS Program Offices to assure sound development of AMS required products that are consistent with the NAS EA Model. Work with the NAS Enterprise Planning & Analysis Division (ANG-B2) to ensure that functional capabilities and interfaces associated with NextGen operational improvements, and NAS enterprise solutions and integration initiatives are captured in the NAS EA Model. Sound development of architecture products contributes to successful Systems Engineering during the investment analysis phase and ensures integration of program acquisitions across the NAS in support of NAS improvement planning.

**Activity Target 1:**

Review the functional analysis and system architecture documents produced by NAS programs in support of AMS decisions, to ensure compliance with requirements captured in the NAS EA Model. Due September 30, 2016

**Activity Target 2:**

Incorporate changes to the NAS EA Model in response to input from NAS programs (solution alternatives, baseline scope changes, etc.) seeking AMS decisions. Obtain TRB approval of the changes to the NAS EA Model concurrent with the approval of the corresponding investment decision for the programs. Due September 30, 2016

**Activity Target 3:**

Incorporate changes to the NAS EA models to capture the allocation of functional capabilities and interfaces based on NextGen operational improvements and increments, and on NAS Enterprise Solutions and Integration initiatives. Due September 30, 2016

**Internal Work Activity: Manage the Development of Systems Engineering Related Products Required by the AMS.**

Interact with NAS Program Offices to ensure integration and maintain traceability of NAS programs products.

**Activity Target 1:**

Ensure that 90% of NAS programs seeking Investment Analysis Readiness, Initial Investment, and Final Investment decisions have the necessary requirements documents and EA artifacts completed on time to support their respective decision points. Due September 30, 2016

**Activity Target 2:**

When applicable, determine if NAS programs seeking Final Investment Decision (FID) have documented traceability between their final requirements document and acquisition specification before approval of the Requirements Document. 90% of the time the final requirements document will meet this signature criteria. Due September 30, 2016

**Activity Target 3:**

Ensure program Systems Engineering artifacts required for AMS decision points are consistent with each other before they are submitted for approval by conducting TIMs with representative stakeholder organizations 95% of the time. Due September 30, 2016

**Internal Work Objective: Deliver Benefits through Technology and Infrastructure - Execute Programs**

Through these programs, we achieve our goal of delivering capabilities that translate into near-term benefits for the users of our airspace. We are focused on improving safety and providing more efficiency with better throughput, saving money, time and fuel, and reducing emissions too. We are focusing our efforts where our customers have placed value.

**Internal Work Initiative: Aeronautical Information Dissemination**

Provide pilots with safe access to the NAS by analyzing and disseminating aeronautical and meteorological information to pilots and controllers through innovative systems.

**Internal Work Activity: Weather Product Standards**

Establish Standards for weather products to be data linked to the cockpit.

**Activity Target 1:**

Deliver to AFS a set of 50-100 recommended exam questions covering topics in aviation weather with suitable reliability and content validity for inclusion in the General Aviation pilot exam. Due October 30, 2015

**Activity Target 2:**

Deliver recommendations on optimizing number of wind altitudes in a Flight Management System (FMS) to enhance performance in NextGen operations. Due May 30, 2016

## Internal Work Initiative: Unmanned Aircraft Systems

Support establishment of regulatory standards on UAS design and performance characteristics while operating in the NAS.

### Internal Work 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).

**Activity Target 1:**

Deliver feasibility report on communication systems based on RTCA's Minimum Operational Performance Standards (MOPS) for Command Non Payload Communication Systems (CNPC). Due June 30, 2016

**Activity Target 2:**

Complete a data collection and analysis report from Unmanned Aircraft System (UAS) Test Sites operations. Due September 30, 2016

**Activity Target 3:**

Finalize both the Project Management Plan (PMP) and the Concept of Operations for Unmanned Aircraft System (UAS) Pathfinder Focus Area One. Due July 31, 2016

**Activity Target 4:**

Define and initiate FY16 Unmanned Aircraft System (UAS) Center of Excellence (COE) research projects and corresponding FY16 funding to support the FAA's research objectives. Due September 30, 2016

## Internal Work Initiative: Weather Program

Demonstrate the scientific advances required for advanced weather forecast products required for NextGen.

### Internal Work Activity: Scientific Advances In Weather Forecast

Demonstrate the scientific improvements of advanced weather diagnoses and forecast capabilities required for the transition to NextGen.

**Activity Target 1:**

Conduct initial demonstration of global-scale, 0-36 hour probabilistic forecast of oceanic convection to support strategic planning of transoceanic flights. Due May 31, 2016

**Activity Target 2:**

Develop transfer package of "Nowcast" turbulence capability to National Weather Service (NWS) for operational implementation. Due August 31, 2016

**Activity Target 3:**

Complete initial evaluation of Alaska in-flight icing diagnosis capability. Due August 31, 2016

## Internal Work Initiative: Wake Turbulence Enhancement of Arrival And Departure Rates

Conduct Research to improve safety and increase throughput using wake turbulence monitoring, operational procedures, and controller tools.

### Internal Work Activity: Wake Turbulence Enhancement Of Arrivals And Departures Support

Support AJT in the domestic and international work groups looking at enhanced methods of providing wake turbulence mitigation utilizing available technology. Support the development of wake turbulence mitigation separation standards, procedures, processes and enabling technology for near-term, mid-term and far-term NextGen era operations. Assist in assessing the performance of the current wake turbulence separation processes and help utilize the assessments in the design of the NextGen era operations. Support the analysis, modeling, concept development, and data collection activities necessary to accomplish the NextGen - Wake Turbulence research agenda. Assist in the coordination of the wake turbulence mitigation development work with AJT and AFS-400 as the research progresses. Provide technical support in discussions with ICAO, airports, air carriers, unions, and other stakeholders regarding wake mitigation separation standards, procedures, processes and enabling technology.

**Activity Target 1:**

Complete assessment of feasible applications of dynamic pairwise wake separations in Air Traffic control. Due September 30, 2016

**Activity Target 2:**

Complete new aircraft analysis to define wake separation requirements for Bombardier C Series CS100/300 aircraft. Due July 31, 2016

## **Internal Work Initiative: Reduced Weather Impact (RWI) - Weather Forecast Improvements**

The Weather Forecast Improvements (WFI) program addresses both the need to improve weather predictions and how to make best use of that information. Sophisticated National Weather Service (NWS) forecast models will be portrayed on areas of constrained airspace that can then be interpreted for NAS impact and problem resolution. In today's NAS, traffic managers and users must mentally interpret weather conditions and the potential impact of weather on ATC decisions. This program will improve this process, and the accuracy of aviation weather information, to include an automated indication of the constraints placed on the NAS.

### **Internal Work Activity: Weather Forecast Improvements (WFI) program**

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.

**Activity Target 1:**

Develop Concept of Operations documents for space weather information to meet users' needs for global air navigation services. Due August 31, 2016

**Activity Target 2:**

Draft selection criteria for space weather information providers (e.g. global centers, regional centers) for endorsement by International Civil Aviation Organization (ICAO) Meteorology (MET) Panel. Due August 31, 2016

## **Internal Work Initiative: Trajectory Based Operations SD - New Air Traffic Management (ATM) Requirements**

The New ATM Requirements Program funds studies, analysis, prototype, and assessment work associated with the Research for Service Analysis (RSA) AMS Phase, and is aligned to the FAA Strategic Initiative to deliver benefits through technology and infrastructure. This initiative also performs concept maturity and technology development that will inform the baseline for a cost-effective replacement for the legacy terminal aircraft and weather surveillance radars required to support the FAA transformation of the nation's aviation systems.

### **Internal Work Activity: Multi-function Phased Array Radar (MPAR)**

Efforts pertaining to Phased Array Radar research and Advanced Technology Demonstrator development, will inform investment analysis for NextGen Surveillance and Weather Radar Capability.

**Activity Target 1:**

Complete the report on En Route Automation Modernization (ERAM) integration assessment of Phased Array Radar data. Due February 29, 2016

**Activity Target 2:**

Complete the Advanced Technology Demonstrator System Requirements document. Due March 31, 2016

**Activity Target 3:**

Complete the Advanced Technology Demonstrator Master Test Plan. Due August 31, 2016

### **Internal Work Activity: Weather Transition**

The analysis and demonstration projects support the development of operational improvements (Requirements for weather information, Service Analysis to determine the feasibility of conceptual solutions) that will increase the number of arrivals and departures at major airports.

**Activity Target 1:**

Complete the Preliminary Performance Requirements document for Post-Bravo Collaborative Air Traffic Management (CATM), Improved Multiple Runway Operations (IMRO), On-Demand NAS Information (ODNI), Time Based Flow Management (TBFM). Due May 30, 2016

**Activity Target 2:**

Complete the Performance Requirements

## **Internal Work Initiative: Integrated NAS**

The Integrated National Airspace Design and Procedure Planning (INDP) program is currently conducting Performance Based Navigation (PBN) Initiatives safety analyses to allow for the future NAS-wide implementation of Established-on-RNP (Required Navigational Performance) Instrument Approach Procedures (IAPs). Established-on-RNP (EoR) will allow air traffic controllers to clear aircraft on an RNP final approach without providing standard radar separation between aircraft currently established on approaches to parallel runways. Facilitating the EoR concept of operation from a key developmental site to a NAS wide Document Changes Proposal (DCP) DCP is a major undertaking that involves modeling and simulating comprehensive scenarios of various simultaneous parallel runways operations and configurations.

### **Internal Work Activity: Collaborative Air Traffic Management (CATM) Flight & State Data Mgmt.- Integrated NAS**

Modeling, simulation and analysis activities for the Established on RNP (EoR) operations will continue to progress and begin to output analysis results. In addition, the program will begin activities leading up to operational demonstration of the EoR.

#### **Activity Target 1:**

Complete Concept Validation Report for the Established-on-RNP widely spaced independent operations. Due April 30, 2016

#### **Activity Target 2:**

Complete safety study report for the Established-on-RNP duals track to fix independent operations. Due July 30, 2016

## **Internal Work Initiative: Ground Based Augmentation System**

Ground Based Augmentation System: GBAS standards for GAST-D, a service type equivalent to ILS CAT-III, were baselined within an ICAO Navigation Systems Panel proposed amendment to the Annex 10 Standards and Recommended Practices (SARPs). Final work to complete validation of these requirements is underway within various ICAO ad-hoc groups. These requirements will have to be met by the vendor applicant for System Design Approval (SDA) of a GAST-D GBAS system.

### **Internal Work Activity: Complete prototype Ground Based Augmentation**

## **System (GBAS) approach services Type D Separation Management**

Support activities leading to an operational GBAS Approach Service Type D (GAST-D) (Category III (CAT-III capable)) Ground Based Augmentation System (GBAS) system in the NAS. These include extensive review of System Design Approval (SDA) documentation provided by the vendor applicant, as well as updates to existing FAA documents and procedures.

#### **Activity Target 1:**

Update existing GBAS Concept of Operations (CONOPS) documents to support GAST-D operations. Due July 31, 2016

#### **Activity Target 2:**

Complete initial system design approval artifacts. Due September 30, 2016

## **Internal Work Objective: Deliver benefits through technology and infrastructure - Advance Collaboration**

We can only succeed with continued collaboration. We do that internally with cross-agency coordination and integration. We do that internationally with global partners. And we do that with other partners in the aviation community who are investing in the future along with the FAA.

## **Internal Work Initiative: Air Traffic Systems Testing and Evaluation**

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

### **Internal Work Activity: Verification and Validation (V&V) of Strategies & Practices**

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.

#### **Activity Target 1:**

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. Due September 30, 2016

**Activity Target 2:**

Host the annual Verification & Validation (V&V) Summit. Due September 30, 2016

**Internal Work Activity: Test Protocol and Documentation**

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

**Activity Target 1:**

Deliver test documentation as specified in FY16 Project Scope Agreements with Program Management Organization (PMO) Sponsors (AJM-2) for acquisition programs (Surveillance Programs, Air Traffic Management Programs, Decision Support Programs, and Acquisition Support Programs). Due September 30, 2016

**Activity Target 2:**

Conduct Portfolio Review with Program Management Organization (PMO) Executive Leadership (AJM-2). Due August 31, 2016

**Activity Target 3:**

Maintain International Organization for Standardization (ISO) Certification by conducting biannual management reviews. Due September 30, 2016

**Activity Target 4:**

Maintain International Organization for Standardization (ISO) Certification by completing FY16 Quality Objectives. Due September 30, 2016

**Internal Work Initiative: Enterprise Services Testing & Evaluation**

Provide analytical studies and related safety monitoring services in support of separation reductions in U.S. Sovereign Airspace and international airspace where FAA has delegated authority to provide air traffic services and test, analyze and evaluate NAS/NextGen Systems/services to verify and validate that products meet specifications, satisfy requirements, and are operationally suitable and effective.

**Internal Work Activity: Separation Standards and Air Transportation Analytical Studies**

Conduct and participate in Separation Standards and Transportation System Analytical studies, reviews and meetings.

**Activity Target 1:**

Conduct annual review of the performance of Reduced Vertical Separation Minimum in North America (U.S., Canada, and Mexico). Cast against International Civil Aviation Organization (ICAO) Recommended Requirements at FAA hosted meetings. Due September 30, 2016

**Activity Target 2:**

Deliver safety assessment for the implementation of the climb descend procedure (CDP) in US Oceanic Airspace (Anchorage (ZAN), New York (ZNY), and Oakland (ZAK) Flight Information Regions (FIRs)). Due June 30, 2016

**Internal Work Activity: Test Protocol and Documentation**

Provide quality T&E and analysis products and services to ensure that current NAS and future air transportation systems are verified and validated using best practices and quality standards.

**Activity Target 1:**

Deliver test documentation as specified in FY16 Project Scope Agreements (PjSAs) with PMO Sponsors (AJM-3) for acquisition programs (Communications, Navigation, Flight Services, and Weather). Due September 30, 2016

**Activity Target 2:**

Conduct Portfolio Review with PMO Executive Leadership (AJM-3). Due August 31, 2016

**Activity Target 3:**

Maintain International Organization of Standardization (ISO) certification by conducting biannual management reviews. Due September 30, 2016

**Activity Target 4:**

Maintain ISO certification by completing FY16 Quality Objectives. Due September 30, 2016

**Internal Work Initiative: Continued Airworthiness Research**

Reduce the number of accidents associated with failure of aircraft structure, engines, and systems as a function of their continued operation and usage.

**Internal Work Activity: Conduct Continued Airworthiness Research**

The Continued Airworthiness Program promotes the development of technologies, procedures, technical data, and performance models to prevent accidents and mitigate accident severity related to civil aircraft failures as a function of their continued operations

and usage. The research will focus on five technical areas: Flight Controls and Mechanical Systems (FCMS), Maintenance and Inspections (M&I), Propulsion Systems (PS), Rotorcraft Systems (RS) and Structural Integrity Metallic (SIM).

**Activity Target 1:**

Develop a project plan and initiate research on using fuel cell systems for aerospace applications. Due March 31, 2016

**Activity Target 2:**

Install and flight test two independent angle-of-attach (AoA) systems on a test aircraft to compare the accuracy of a derived AoA system to the accuracy of a sensed AoA system. Due May 31, 2016

**Activity Target 3:**

Procure test articles supporting the pre-inspection, teardown, and post inspection of aged in-service component bonded repairs for use in developing training and advisory material for composite and metallic repairs. Due December 31, 2015

**Activity Target 4:**

Identify all bird strikes on rotorcraft that occurred from 1992-latest data available. Due June 30, 2016

**Activity Target 5:**

Prepare draft version of the annual update to the Metallic Materials Properties Development and Standardization (MMPDS) Handbook and derivative products. Due September 30, 2016

**Activity Target 6:**

Design a box-beam fixture in partnership with Boeing to help develop capabilities for structural integrity testing of wing-like structure. Due September 30, 2016

## **Internal Work Initiative: Aircraft Catastrophic Failure Prevention Research**

Reduce the number of accidents due to uncontained engine failures and propulsion system malfunctions.

### **Internal Work Activity: Conduct Aircraft Catastrophic Failure Prevention Research**

Develop data and methods for evaluating aircraft vulnerability to uncontained engines failures and provide analytical tools for engine containment systems and for protecting identified critical systems that may need shielding from uncontained engine debris.

**Activity Target 1:**

Coordinate the annual meeting of the LSDYNA Aerospace Users Group to help support industry use of impact analysis tools. Due February 29, 2016

**Activity Target 2:**

Develop a revised uncontained engine debris model that includes the Airbus A380 event and other events that were not included in the 1990's debris model. Due September 30, 2016

## **Internal Work Initiative: Aircraft Icing/Digital System Safety Research**

Reduce the number of accidents associated with aircraft icing and failures to software-based digital flight controls and avionics systems.

### **Internal Work Activity: Conduct Digital System Safety Research**

The Digital System Safety program will evaluate onboard network security and integrity, software development techniques and tools, and airborne-electronic-hardware (AEH) design techniques and tools.

**Activity Target 1:**

Identify potential assurance vulnerabilities on the use of newer technologies such as virtual machines in safety critical environment Due September 30, 2016

**Activity Target 2:**

Develop an embedded controller project plan for commercial-off-the-shelf (COTS) airborne electronic hardware Due February 29, 2016

### **Internal Work Activity: Conduct Aircraft Icing Research**

The Aircraft Icing program will develop new engineering tools to support improved means of compliance and new guidance material for engine and airframe certification and operations in super-large-droplet (SLD), mixed-phase, and ice crystal icing conditions.

**Activity Target 1:**

Complete processing of total water content (TWC) data from Cayenne flight campaign. Due January 31, 2016

**Activity Target 2:**

Conduct testing of artificial ice shapes in Wichita State University (WSU) Low to Moderate Reynolds Number Aerodynamic Tunnel. Due June 30, 2016

## **Internal Work Initiative: William J Hughes Technical Center Facility Operations**

Provide facility maintenance, environmental management, support services and engineering support for all properties located at the WJHTC.

### **Internal Work Activity: Environmental Management**

Maintaining an effective environmental management system (EMS) pursuant to executive orders 13423/13514 and providing technical direction, oversight and support to the FAA.

#### **Activity Target 1:**

Ensure 80% of external audit non-conformances are addressed. Due April 1, 2016

#### **Activity Target 2:**

Conduct an external EMS conformance audit. Due May 31, 2016

#### **Activity Target 3:**

Conduct an internal EMS audit Due July 29, 2016

#### **Activity Target 4:**

Conduct EMS Management Review. Due August 31, 2016

### **Internal Work Activity: Facility Operations and Maintenance**

Provide twenty-four hour facility maintenance, operations, improvements and support services for the WJH Technical Center Campus.

#### **Activity Target 1:**

Ensure all potable water testing is in accordance with the state of New Jersey Safe Drinking Water Act. Due September 30, 2016

#### **Activity Target 2:**

Ensure actions plans are completed on time for 95% of all Office of Security and Investigations security findings. Due September 30, 2016

#### **Activity Target 3:**

Provide performance assessments on facility maintenance and support services through annual program reviews. Due August 30, 2016

#### **Activity Target 4:**

Maintain ISO certification for the Technical Center Quality Management Systems (Laboratory Services Division, Test & Evaluation Services Divisions and the Center Operations Facilities

Operations and Engineering Branches). Due September 30, 2016

## **Internal Work Initiative: Hazardous Materials Safety Research**

Improve the safety of transporting hazardous materials by air.

### **Internal Work Activity: Hazardous Materials Safety Support**

Support the Office of Hazardous Materials Safety by conducting lithium battery fire tests.

#### **Activity Target 1:**

Prepare a draft report on the hazards to aircraft from flammable gases emitted by lithium batteries in thermal runaway. Due February 29, 2016

## **Internal Work Initiative: NAS & NextGen Laboratory Facilities and Services**

Provide a set of world class laboratory facilities and services to support research, engineering, development, test, evaluation and maintenance of air navigation, air traffic management, and future air transportation system capabilities.

### **Internal Work Activity: NextGen Laboratory Facilities**

Sustain the NextGen Integration and Evaluation Capability (NIEC) and the Florida Test Bed (FTB) to support NextGen programs.

#### **Activity Target 1:**

Perform a technical refresh on the simulation video recording capability in the NIEC. Due May 30, 2016

#### **Activity Target 2:**

Perform technical refresh of the Florida Test Bed voice communication. Due December 31, 2015

### **Internal Work Activity: NAS Air Traffic Control Laboratories**

Sustain and improve the William J. Hughes Technical Center NAS Laboratory Facilities.

#### **Activity Target 1:**

Assess performance of laboratory management support including engineering, configuration management, system design and installation, data management, and technical support services for NAS and NextGen programs through program reviews. Due September 30, 2016

**Activity Target 2:**

Select and prioritize NAS modernization projects for FY2016. Due November 20, 2015

**Activity Target 3:**

Complete 70% of the NAS modernization projects scheduled for completion in FY2016. Due September 30, 2016

**Internal Work Activity: Quality Management of Laboratory Services**

Continually improve laboratory services and ensure that they meet or exceed customer requirements.

**Activity Target 1:**

Perform self-assessment of the Laboratory's Quality Management System through a minimum of 15 internal audits. Due August 31, 2016

**Activity Target 2:**

Complete and pass an independent external surveillance audit of the NAS Laboratory services, procedures and processes. Due August 31, 2016

**Activity Target 3:**

Meet or exceed customer requirements by maintaining a customer feedback response rating of 3.5 or higher. Due September 30, 2016

**Internal Work Activity: Research Laboratory Facilities at WJHTC**

Support research and development at the WJHTC's Simulation Facilities, Airborne Laboratories, and R&D Human Factors Laboratory.

**Activity Target 1:**

The R&D Human Factors Laboratory will demonstrate a distributed human-in-the-loop simulation capability with the NIEC to further research and development experimental configuration possibilities. Due June 30, 2016

**Activity Target 2:**

Meet or exceed all customer requirements for flight testing and aircraft modifications. Expect to perform over 400 flight hours to meet these demands. Due September 30, 2016

**Activity Target 3:**

Conduct an integrated weather demonstration that shows weather radar in the B-737-800 simulator fully coordinated with the window visual system. Due September 30, 2016

**Internal Work Initiative: Propulsion and Fuel System Safety**

Reduce the number of accidents associated with the failure of aircraft engines, components, and fuel systems.

**Internal Work Activity: Conduct Propulsion and Fuel Systems Research**

Develop technologies, procedures, test methods, and criteria to enhance the airworthiness, reliability, and performance of civil turbine and piston engines, propellers, fuels, and fuel management systems.

**Activity Target 1:**

Conduct zoneless deterministic analysis to enhance capabilities of the probabilistically-based damage tolerance design code called DARWIN. Due April 30, 2016

**Activity Target 2:**

Assess results of the NASA Vehicle Integrated Propulsion Research (VIPR-3) program to help determine extent of additional data points necessary to establish operational performance guidelines. Due September 30, 2016

**Internal Work Initiative: Structural Safety/Advanced Materials**

Reduce the number of accidents due to structural failure by assessing the safety implications of new and present day composites, alloys, and other materials, and associated structures and fabrication techniques.

**Internal Work Activity: Conduct Structural Safety Research**

Perform research to evaluate analysis and test procedures used by the industry to meet crashworthiness regulations.

**Activity Target 1:**

Identify data gaps for current ditching standards and requirements compared to current FAA certification requirements. Due September 30, 2016

**Activity Target 2:**

Analyze existing aircraft crash parameters and identify gaps in data where additional input/analysis is necessary to develop and validate the systematic characterization of airframe crash response based on size, geometry and configuration. Due September 30, 2016

**Internal Work Activity: Conduct Advanced Materials Research**

Investigate damage tolerance and fatigue issues of composite structures, including the assessment of impact damage threats (e.g., in-flight hail, ground vehicle collisions), and fatigue effects of composite materials on structural strength.

**Activity Target 1:**

Refine analytical models to enhance accuracy of crack arrest capability predictions for varying laminate and fastener configurations Due September 30, 2016

**Activity Target 2:**

Characterize amine blush phenomena and critical parameters that effect the adhesive bonding of composites. Due September 30, 2016

**Internal Work Initiative: System Planning & Resource Management**

Develop annual FAA's research and development (R&D) plan to ensure the continued capacity, safety, and efficiency of aviation in the United States, considering emerging technologies and forecasted needs of civil aeronautics; and to provide the highest degree of safety in air travel.

**Internal Work Activity: The 2016 National Aviation Research Plan (NARP)**

Develop the 2016 National Aviation Research Plan (NARP) to Congress with the FY 2017 President's Budget.

**Activity Target 1:**

Release 2016 National Aviation Research Plan (NARP), Review Version 2 (Informal Office of the Secretary of Transportation (OST)/Office of Management and Budget (OMB) and continued ANG executive review). Due November 30, 2015

**Activity Target 2:**

Release 2016 National Aviation Research Plan (NARP), Version 4 to AOA for clearance. Due January 30, 2016

**Internal Work Activity: FY 2016 Research, Engineering & Development (RE&D) Portfolio**

Formulate, coordinate, and obtain approval of the FAA's FY 2017 Research, Engineering & Development (RE&D) portfolio.

**Activity Target 1:**

Release the Research and Development (R&D) Portfolio Development Process Guidance Document (GD) to the Research, Engineering &

Development Executive Board (REB) for their review and approval. Due October 30, 2015

**Activity Target 2:**

Distribute final Research and Development (R&D) Portfolio Development Process Guidance Document (GD). Due November 30, 2015

**Activity Target 3:**

Conduct meeting to present and obtain REB approval of the FY 2018 Program Planning Team (PPT) Research and Development (R&D) portfolios. Due February 29, 2016

**Internal Work Activity: RE&D Advisory Committee (REDAC) Recommendations on the FY 2018 Portfolio**

Obtain recommendations on the FY 2017 R&D portfolio from the FAA RE&D Advisory Committee (REDAC) and manage process to develop FAA responses to their recommendations.

**Activity Target 1:**

Hold Summer/Fall full RE&D Advisory Committee (REDAC) and Subcommittee meetings to obtain strategic R&D guidance/recommendations. Due October 30, 2015

**Activity Target 2:**

Draft a response to REDAC on their guidance/recommendations. Due January 29, 2016

**Activity Target 3:**

Hold Winter/Spring full REDAC and Subcommittee meetings to obtain recommendations on FAA's proposed FY 2018 portfolio. Due April 30, 2016

**Activity Target 4:**

Develop response to Spring REDAC recommendations on FAA's proposed FY 2018 portfolio. Due May 31, 2016

**Internal Work Activity: 2015 Federal Laboratory Technology Transfer Report**

Provide report to Department of Transportation (DOT) on FY 2015 achievements of the FAA Technology Transfer Program for inclusion in Department of Commerce Federal Laboratory Technology Transfer Report for FY 2015.

**Activity Target 1:**

Complete draft report on FAA Tech Transfer FY 2015 accomplishments. Due October 30, 2015

**Activity Target 2:**

Release the FY 2015 Tech Transfer Report for final review and approval. Due January 31, 2016

### **Internal Work Activity: Center of Excellence (COE) for ATO Technical Training & Human Performance**

Establish the FAA Center of Excellence for ATO Technical Training & Human Performance

**Activity Target 1:**

Conduct the Technical Training and Human Performance (TT/HP) Center of Excellence (COE) competition and complete executive summaries of the proposal evaluations. Due May 31, 2016

**Activity Target 2:**

Coordinate with OST, AGI and APA to announce new COE for Technical Training and Human Performance selection. Due June 30, 2016

**Activity Target 3:**

Coordinate with ATO to define the FY 16 COE TT/HP projects and corresponding funding levels. Due September 30, 2016

### **Internal Work Activity: Conduct Outreach Activities**

Develop and strengthen the knowledge of aviation and the Technical Center's capabilities by performing outreach activities through the information center, aviation education program, speaker series program, as well as others.

**Activity Target 1:**

Develop and strengthen the knowledge of aviation and the Technical Center's capabilities by performing outreach activities through the information center, aviation education program, speaker series program, as well as others. Due September 30, 2016

**Activity Target 2:**

Conduct at least six meetings with academia, industry and other government through outreach activities to discuss common areas of technical interest. Due September 30, 2016

### **Internal Work Activity: Program Performance Measurement**

Establish and operate a collaborative performance measures framework to collect and disseminate the cost, schedule, and technical progress of the Improved Aircraft Safety research portfolio.

**Activity Target 1:**

Establish and maintain collaborative performance measures framework as requested by ANG senior management Due March 31, 2016

**Activity Target 2:**

Collect, review and disseminate 4 quarterly status reports. (Recurring quarterly) Due September 30, 2016

### **Internal Work Initiative: System Safety Management**

Support promotion and expansion of safety information sharing, safety risk management initiatives efforts, and prevent, reduce, or mitigate the number of accidents in the terminal area.

### **Internal Work Activity: Conduct System Safety Management Research**

Develop an infrastructure that enables the free sharing and analysis of de-identified safety information; methodologies, research studies, and guidance material that provide aviation safety inspectors, aircraft certification engineers, analysts, and managers the capabilities of systematically assessing potential safety risks and applying proactive solutions to reduce aviation accidents and incidents. The Terminal Area Safety research program develops training solutions and identifies effective technologies to mitigate the key causes of fatal accidents in the terminal area.

**Activity Target 1:**

Develop advanced analytical capabilities for monitoring metrics and precursors to occurrences, incidents, and/or accidents. Due August 31, 2016

**Activity Target 2:**

Apply the stall model process to create a representative stall model for a t-tail regional jet aircraft. Due August 31, 2016

**Activity Target 3:**

Complete data analysis of the fourth experiment to refine motion criteria. Due June 30, 2016

### **Internal Work Initiative: William J Hughes Technical Center Building and Plant Support**

Modernization of Technical Center infrastructure to ensure facilities operate efficiently and effectively.

### **Internal Work Activity: Facility Infrastructure Upgrades**

Design and engineer facility improvements to ensure the ongoing operations of the WJH Technical Center.

**Activity Target 1:**

Complete construction for Building 316 Roof Replacement. Due May 31, 2016

**Activity Target 2:**

Complete construction for Replacement of Aerial Distribution Switches 1 and 2. Due September 30, 2016

**Activity Target 3:**

Complete construction for Phase 1 (Elevator Banks A and B) of Elevator Refurbishments in Building 300. Due September 30, 2016

**Activity Target 4:**

Complete design for construction of Main Electrical Substation Upgrades (Switchgear Enclosure). Due August 31, 2016

## Internal Work Initiative: Fire Safety and Research

Reduce the number of accidents associated with on-board aircraft fires and mitigate the effects of a post-crash ground fire.

### Internal Work Activity: Conduct Fire Research

Develop technologies, procedures, test methods, and material performance criteria that can prevent accidents caused by hidden cabin or cargo compartment in-flight fires and fuel tank explosions, and improve survivability during a post-crash fire.

**Activity Target 1:**

Determine the effectiveness of Class C cargo compartments to suppress fire involving lithium batteries. Due September 30, 2016

**Activity Target 2:**

Determine effect of fuel/oxygen ratio on combustion inhibition by flame retardants and the production of toxic combustion products. Due June 30, 2016

**Activity Target 3:**

Determine the impact on survivability of using non-low heat release paneling materials in the lower portion of aircraft seats. Due June 30, 2016

## Internal Work Initiative: NextGen - Alternative Fuels for General Aviation

Address the use of alternative and renewable fuels for GA to lessen aviation environmental impacts to air and water quality.

### Internal Work Activity: Conduct NextGen - Alternative Fuels Research for General Aviation

Investigate fuels for general aviation aircraft that lower or eliminate lead while maintaining the airworthiness of aircraft engines and airframe fuel management systems.

**Activity Target 1:**

Complete Phase 1 laboratory and rig, fit-for-purpose, fuel testing, and baseline engine performance/detonation testing. Due September 30, 2016

**Activity Target 2:**

Develop Phase 2 engine and aircraft performance and operability test methods. Due March 31, 2016

## Internal Work Initiative: ATC/Tech Ops Human Factors

Delivery of research and development (R&D) products that incorporate the human-centric perspective, roles, responsibilities and capabilities as they relate to air traffic control.

### Internal Work Activity: Common Information Requirements

The overall objective of this project is to provide human factors guidance on the design and potential implementation of a common set of functions, information elements, user interfaces, and interactions across Air Route Traffic Control Center (ARTCC) and Terminal Radar Approach Control (TRACON) controller workstations. This guidance will take the form of a set of requirements and implementation recommendations that will make the workstations in both domains more similar in functionality and design.

**Activity Target 1:**

Complete report on En Route/TRACON Common Information Requirements. Due June 30, 2016

### Internal Work Activity: N90 Training Standards

Provide On-the-Job Training Instructors (OJTIs) with enhanced instructional skill training to address their needs as professional instructors. Draft a set of training standards, to define behavioral benchmarks for use in evaluating trainee progress at various levels/hours/stages throughout the training route to

certification, and provide training to support the roll-out and introduction of the standards.

**Activity Target 1:**

Provide draft training standards to AJI. Due June 30, 2016

**Internal Work Activity: Minimum Information Requirements for Unmanned Aircraft Systems (UAS) Cockpit Display of Traffic Information (CDTI) Displays and Alerting: For Detect and Avoid**

Support development of system requirements for the pilot interface for UAS control stations to provide the necessary information for the pilot to respond to impending loss of well-clear separation with other aircraft.

**Activity Target 1:**

Conduct Human in The Loop (HITL) simulation. Due February 28, 2016

**Activity Target 2:**

Provide quick look report showing preliminary results from HITL simulation. Due May 30, 2016

**Internal Work Activity: Briefing Strips for RNAV and RNP Arrival and Departure Procedures**

Conduct research to examine the need for, and potential content of, RNAV and RNP Arrival and Departure Procedures. This work builds off previous work in the development of Instrument Approach Procedure (IAP) briefing strips.

**Activity Target 1:**

Report on findings of IAP briefing strips assessment and the potential applicability to RNAV/RNP approach and departure procedures. Due September 30, 2016

**Internal Work Initiative: Operations Concept Validation and Modeling**

Develop and validate operational concepts that will increase capacity and improve efficiency and throughput.

**Internal Work Activity: Improve Efficiency, Ops Concept Validation Modeling**

Develop and validate operational concepts/methods that will expand capacity, improve efficiency and throughput by satisfying future growth in demand and reducing transit times.

**Activity Target 1:**

Develop Unmanned Aircraft System (UAS) Concept White Sheet for Modified Instrument Flight Rules (IFR). Due April 30, 2016

**Activity Target 2:**

Define Data Requirements for Space Vehicle Operations. Due September 30, 2016

**Internal Work Initiative: NextGen Interagency Initiatives**

Lead the early collaboration and coordination of key NextGen interagency initiatives.

**Internal Work Activity: Interagency Coordination**

Lead the early collaboration and coordination of key NextGen interagency initiatives that require collaboration and consensus among federal partners at the Departments of Defense, Commerce, and Homeland Security, the Federal Aviation Administration, the National Aeronautics and Space Administration, the White House Office of Science and Technology Policy, and the Office of the Director of National Intelligence. Initiatives include Research Transition Teams (RTTs), cyber security and weather research that requires interagency coordination.

**Activity Target 1:**

Provide final End-of-Year Report of Research Transition Teams (RTT) progress to the NextGen Executive Board. Due September 30, 2016

**Activity Target 2:**

Provide End-of-Year Report of FY16 Interagency Core Cyber Team (ICCT) multiagency cyber collaboration and cyber exercises. Brief proposed recommendations for cyber work plan for FY17 to NextGen Executive Board. Due September 30, 2016

**Activity Target 3:**

Initiate development of the Ceiling to Visibility Research-to-Operations (R2O) Plan. Brief progress to the NextGen Executive Weather Panel (NEWP). Due June 30, 2016

**Activity Target 4:**

Brief IPO FY16 End-of-Year Report and report Proposed FY17 Work Plan to NextGen Executive Board. Due September 30, 2016

**Internal Work Activity: ANG International Programs**

Provide leadership, share best practices, and support air traffic modernization on behalf of the FAA at major

international events and with key international partners and emerging modernization programs. Brief foreign delegations on NextGen programs.

**Activity Target 1:**

Chair the United States-Japan Future Air Transportation Systems (FATS) Working Group meetings. Contribute to/finalize meeting report. Due August 31, 2016

**Activity Target 2:**

Submit NextGen Coordination Plan updates for sections 1, 2, 3 and 4 of the United States/European Union Memorandum of Understanding (MOU). Due September 30, 2016

**Activity Target 3:**

Provide NextGen expertise and leadership to International Civil Aviation Organization (ICAO) panels, technical working groups, and for the ICAO Assembly. Write or submit post-meeting reports detailing effects on US Government policies. Due September 30, 2016

## **Internal Work Initiative: NextGen Status Report**

Lay the foundation for the NAS of the future by achieving prioritized NextGen benefits, integrating new user entrants, and delivering more efficient, streamlined services. Focus to achieve the benefits of NextGen Focus to achieve the benefits of NextGen

### **Internal Work Activity: Portfolio Management Reviews (PfMRs)**

Provide monthly updates on the status of programs.

**Activity Target 1:**

Conduct PfMR reviews (2 total in FY16). Due September 30, 2016

**Activity Target 2:**

Track and report monthly Portfolio status (Green/Yellow/Red). Due September 30, 2016

### **Internal Work Activity: Project Level Agreement (PLA) Reviews**

Provide PLA status to ANG-1, ANG-2, and other senior leadership.

**Activity Target 1:**

Report monthly status of PLA Development (Signed/Under Review by PMO/Draft). Due September 30, 2016

**Activity Target 2:**

Report bi-monthly status of milestones of signed PLAs. Ensure 100% tracking of all milestones. Due September 30, 2016

## **Internal Work Initiative: TBO/UAS Integration Demonstration**

Conduct demonstration(s) and which serve to further mature TBO concept(s) aimed to identify the system (e.g. hardware, software, and data) requirements in integrating Four-Dimensional Trajectory (4DT) operations into the National Airspace System (NAS) using UAS as a platform within Class A airspace.

### **Internal Work Activity: Trajectory Based Operation/Unmanned Aircraft System (TBO/UAS) Integration Demonstration**

Provide a plan for how the TBO/ UAS Pseudo Human-in-the-Loop (HITL) and Flight Trial will be prepared and conducted. This plan will include objectives, activities, schedule, dependencies, project risk/ risk mitigation strategies, roles and responsibilities, data collection and demonstration requirements. This document will also define in detail how to conduct the TBO UAS Pseudo-HITL and Flight Trial taking into consideration any feedback and lessons learned from Stakeholders and Subject Matter Expert (SME) and information obtained from previous demonstration activities.

**Activity Target 1:**

Complete Trajectory Based Operation/Unmanned Aircraft System (TBO/UAS) Final Report. Due June 30, 2016

## **Internal Work Initiative: Stakeholder Confidence**

Increase stakeholder confidence in NextGen through engagement and strategic messaging.

### **Internal Work Activity: NextGen Metrics**

Provide context about the performance of NextGen capabilities at specific locations.

**Activity Target 1:**

Winter 2015 NextGen Performance Snapshots (NPS) Release. Due January 31, 2016

**Activity Target 2:**

Spring 2016 NextGen Performance Snapshots (NPS) Release. Due May 31, 2016

**Activity Target 3:**

Summer 2016 NextGen Performance Snapshots (NPS) Release. Due September 30, 2016

**Activity Target 4:**

Work with internal and external stakeholders to develop reporting tools and identify metrics. Due September 30, 2016

**Activity Target 5:**

Report through NextGen Performance Snapshots (NPS) the four Joint Analysis Teams' Metrics work. Due September 30, 2016

**Internal Work Activity: Communication and Outreach**

Inform and promote enthusiasm for NextGen advances and benefits among stakeholders and the traveling public through electronic, print and social media.

**Activity Target 1:**

Establish status and deployment schedule information for NextGen Implementation Plan (NGIP) publication by collaborating with NextGen program and portfolio managers and the ATO Program Management Office. Due October 31, 2015

**Activity Target 2:**

Working through the NextGen program and portfolio managers and the ATO Program Management Office, review and provide comments on NextGen Implementation Plan (NGIP) Draft One. Due November 30, 2015

**Activity Target 3:**

Working through the NextGen program and portfolio managers and the ATO Program Management Office, provide comments and resolve comments on NextGen Implementation Plan (NGIP) Draft Two. Due December 21, 2015

**Activity Target 4:**

Provide all final comments and clearances necessary for the NextGen Organization to submit the final NextGen Implementation Plan (NGIP) for Office of Management and Budget (OMB) review thirty days after the President's budget submission. Due March 23, 2016

**Internal Work Initiative: Industry and Internal Collaboration**

Facilitate cross-agency engagement to remove policy and tactical barriers to implementing NextGen.

**Internal Work Activity: Cross-Agency Engagement**

Facilitate cross-agency engagement to remove policy and tactical barriers to implementing NextGen.

**Activity Target 1:**

Provide NextGen Integration Working Group (NIWG) monthly status reports. Due September 30, 2016

**Activity Target 2:**

Hold regular NextGen Management Board meetings. Due September 30, 2016

**Internal Work Activity: Industry Collaboration**

Lead collaboration efforts with industry to identify risks, remove roadblocks and assist FAA and industry leadership decision-making to implement Priorities commitments.

**Activity Target 1:**

Issue NextGen Advisory Committee (NAC) tasking for Performance Based navigation (PBN) Strategy. Due April 30, 2016

**Activity Target 2:**

Issue NextGen Advisory Committee (NAC) tasking for a rolling plan. Due July 31, 2016

**Activity Target 3:**

Deliver NextGen Integration Working Group (NIWG) Quarterly Oversight and Monitoring Reports to NextGen Advisory Committee (NAC) Sub-Committee (SC) on four NextGen Priority focus areas. Due September 30, 2016

**Internal Work Activity: Aviation Community Engagement**

Engage with the aviation community to ensure a climate conducive to effective NAS-wide use of NextGen capabilities.

**Activity Target 1:**

Develop products and support coordination of FAA's participation in Air Traffic Controller Association (ATCA) annual conference. Due November 30, 2015

**Activity Target 2:**

Provide Automatic Dependent Surveillance (ADS-B) equipage information to stakeholders at the National Business Aviation Association (NBAA) Conference. Due November 30, 2015

**Activity Target 3:**

Provide Automatic Dependent Surveillance (ADS-B) equipage information to stakeholders at Sun N Fun Fly-in. Due April 30, 2016

**Activity Target 4:**

Provide Automatic Dependent Surveillance (ADS-B) equipage information to stakeholders at EAA AirVenture Fly-in. Due July 31, 2016

**Activity Target 5:**

Make quarterly updates to Equip Automatic Dependent Surveillance (ADS-B) website. DUE: January 31, 2016, April 30, 2016, July 31, 2016 and September 30, 2016 Due September 30, 2016

**Activity Target 6:**

Publish at least two articles on Automatic Dependent Surveillance (ADS-B) equipage in FAA Safety Briefing magazine. DUE: April 30, 2016 and September 30, 2016 Due September 30, 2016

### **Internal Work Activity: NextGen Advisory Committee (NAC) Recommendations**

The four areas of NextGen capabilities identified by the NAC as priority: Increasing use of Performance Based navigation (PBN), making multiple runway operations more efficient, improving surface operations, and implementing Data Communications.

**Activity Target 1:**

Achieve 80% of the FAA's commitments to Congress in response to the NAC recommendations within a calendar quarter of their scheduled dates. Due September 30, 2016

**Activity Target 2:**

Achieve 90% of the FAA's commitments to Congress in response to the NAC recommendations within a calendar quarter of their scheduled dates. Due September 30, 2016

### **Internal Work Initiative: Key Accomplishments for the FAA WJHTC**

Provide key Research and Development, Test and Evaluation and Facility Operations to support the mission of the FAA and ANG.

#### **Internal Work Activity: Key activities in support of the FAA and ANG's mission.**

Provide high quality products and services to ensure new technologies, procedures, research, test and evaluation and operations activities are completed in a timely and efficient manner.

**Activity Target 1:**

Complete 85% of the T&E initiatives in ANG-E's FY16 Business Plan. Due September 30, 2016

**Activity Target 2:**

Complete 80% of Facility Operations Initiatives in ANG-E's FY16 Business Plan. Due September 30, 2016

**Activity Target 3:**

Complete 85% of the R,E&D initiatives in ANG-E's FY16 Business Plan. Due September 30, 2016

### **Internal Work Objective: Workforce of the Future**

Prepare FAA's human capital for the future, by identifying, recruiting, and training a workforce with the leadership, technical, and functional skills to ensure the U.S. has the world's safest and most productive aviation sector.

---

### **Internal Work Initiative: Workforce Development and Recruitment**

Maintain a highly skilled workforce

#### **Internal Work Activity: Recruitment - NextGen Pathways Program**

Recruit and hire Student Interns to assist in the agencies succession planning goals.

**Activity Target 1:**

Recruit a minimum of 5 new students into the NextGen Pathways Student Internship Program. Due September 30, 2016

**Activity Target 2:**

Convert 30% of the program participants to full-time permanent employees, without further competition, after successful completion of the program. Due September 30, 2016

#### **Internal Work Activity: Laboratory Workforce**

Provide a trained workforce to support and maintain the WJHTC laboratories to ensure skills and competencies of all Laboratory Services personnel are current.

**Activity Target 1:**

Develop a workforce training plan in the areas of management, system maintenance, simulation and modeling and other competencies needed to support the WJH Technical Center laboratories and equipment for FY2016. Due November 30, 2015

**Activity Target 2:**

Provide workforce training, in accordance with the funded training plan, in the areas of management,

system maintenance, simulation and modeling and other competencies needed to support the WJH Technical Center laboratories and equipment for FY2016. Due September 30, 2016

## **Internal Work Objective: Business Services**

Improve analytical capabilities, visibility, access and discovery of information and data that support NextGen decision making.

---

### **Internal Work Initiative: ANG Financial Reporting In Accordance With Federal Budget Process**

Lead the formulation of the ANG Congressional Budget justification and provide updates throughout the development process as required. Ensure all funds are executed in accordance with federal guidelines and FAA procedures.

#### **Internal Work Activity: Budget Formulation**

Provide guidance and lead development of the FY17 President's budget.

##### **Activity Target 1:**

Conduct annual Mini-Capital Investment Team (CIT) Reviews. Assess the "lessons learned" from Mini-CIT Reviews to identify potential areas for improvement. Due June 30, 2016

##### **Activity Target 2:**

Facilitate timely submission of the FY 2016 Major IT Business case (formerly OMB Exhibit 300 & 55). Due September 30, 2016

##### **Activity Target 3:**

Facilitate timely submission of the following FY18 Formulation documents: White Sheets. Resource Planning Documents (RPD) and Congressional responses, and other requirements. Due September 30, 2016

#### **Internal Work Activity: Financial Management Oversight of NextGen Investment Portfolio**

Provide guidance and lead financial management of NextGen Investment Portfolio.

##### **Activity Target 1:**

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: 1/29/2016, 4/29/2016, 7/29/2016. Due July 29, 2016

##### **Activity Target 2:**

Provide the status of ANG resources (DUE: MONTHLY, NLT 20th business day following the end of the prior month), Due September 30, 2016

##### **Activity Target 3:**

Provide the status of ANG payroll, and obligation (DUE: MONTHLY, NLT 15th business day of the following month) to the Directorates. Due September 30, 2016

##### **Activity Target 4:**

Deliver status of the NextGen Investment Portfolio, Program Management Assessment (PMA), and Project Level Agreements (PLAs). DUE: MONTHLY NLT 20th business day following the end of the prior month. Due September 30, 2016

##### **Activity Target 5:**

Deliver labor distribution status reports and analysis for the NextGen organization. The LDR reports represent the current labor distribution charging practices for a given quarter. DUE: NLT 30th business day following the end of the quarter. 2/12/2016, 5/12/2016, 8/12/2016. Due August 12, 2016

### **Internal Work Initiative: Operational Efficiency and Effectiveness**

Implement process improvements and best practices to enhance ANG financial management and service delivery.

#### **Internal Work Activity: Process Improvement**

Provide Operating Procedures for ANG Financial Management.

##### **Activity Target 1:**

Continue to enhance and deploy automated financial reporting capability via the WEB, as well as accompanying user manuals to the ANG directorates. Due March 31, 2016

### **Internal Work Initiative: Forecasting and Planning Branch**

Develop, manage and implement acquisition strategy for ANG-A.

## **Internal Work Activity: Forecasting; Acquisition Planning; Acquisition Support**

Develop, manage and implement acquisition strategy for ANG-A.

### **Activity Target 1:**

Update, validate, deliver and post the ANG Contracts Registry Master Spreadsheet. DUE: 10/10/2015, 1/10/2016, 4/10/2016 and 7/10/2016. Due July 10, 2016

### **Activity Target 2:**

Develop, socialize and approve Maturity Roadmap for Enterprise-level Forecasting, Planning and Reporting capability. Due May 13, 2016

### **Activity Target 3:**

Develop and coordinate detailed action plan for initial phase of Maturity Roadmap; execute initial development efforts. 6/30/2016, 9/30/2016 Due September 30, 2016

### **Activity Target 4:**

Report status of FY16 ANG procurement activities Monthly, by the 30th of each month. Due September 30, 2016

## **Internal Work Activity: Contracts Records Management**

Develop, manage and implement IT Tool strategy for ANG-A1.

### **Activity Target 1:**

Develop and document the framework for A1 IT Environment. Due December 31, 2015

### **Activity Target 2:**

Develop IT Tool for A1 Contract Management and Reporting. Due April 30, 2016

### **Activity Target 3:**

Test and train on the Contract Management Tool. Due September 30, 2016

## **Internal Work Activity: Program Level Budget Formulation; Execution; Financial Analysis, Management & Executive Contract Reporting**

Financial Analysis and Executive Contractual Reporting for all ANG-A1 managed contracts.

### **Activity Target 1:**

Provide ANG-A1 Contract Status Report which includes summary watch list items to ANG Senior

Management, electronically, by the 30th of each month. DUE: Monthly Due September 30, 2016

### **Activity Target 2:**

Coordinate/participate in quarterly in-person ANG-A1 Contract Status Report meeting with each Directorate. DUE: 12/30/2015, 3/30/2016, 06/30/2016, 09/30/2016 Due September 30, 2016

### **Activity Target 3:**

Execute Memorandum of Understanding (MOU) with all Lines of Business (LOBs) supported from SE2020 budget Line Item (BLI). Due March 30, 2016

## **Internal Work Initiative: Support Contracts Branch**

Perform Contract Oversight and Administration, Task Order (TO) Development, and TO management for the Support Contracts Branch.

## **Internal Work Activity: Manage existing Contracts within ANG-A1**

Manage existing contracts.

### **Activity Target 1:**

Identify and execute contract options in a timely manner to ensure no gaps in service. DUE: Monthly Due September 30, 2016

### **Activity Target 2:**

Identify and execute modifications to existing scope or funding contract in a timely manner to ensure no gaps in service. DUE: Monthly Due September 30, 2016

### **Activity Target 3:**

Conduct Program Management Reviews (PMRs) to manage and oversee contracts. DUE: 12/30/2015, 3/30/2016, 6/30/2016, 9/30/2016 Due September 30, 2016

## **Internal Work Initiative: ANG Strategic and Core Business Plan**

Develop and maintain the ANG Strategic and Core Business Plan

## **Internal Work Activity: ANG FY17 Business Plan**

Build the ANG FY17 Business Plan.

### **Activity Target 1:**

Prepare implementation plan for FY 17 business planning framework. Due April 30, 2016

**Activity Target 2:**

Complete formulation phase of FY 17 business plan Due August 31, 2016

**Internal Work Activity: FY 2016 Business Plan Governance**

Facilitate governance for ANG business plan.

**Activity Target 1:**

Prepare and distribute comprehensive monthly performance and assessment report. DUE: Monthly Due September 30, 2016

**Activity Target 2:**

Conduct and/or provide Monthly Performance Report (MPR) briefing to ANG Leadership, beginning February 2016. Due September 30, 2016

**Activity Target 3:**

Prepare FY 15 End of Year (EOY) report. Due February 28, 2016

**Activity Target 4:**

Conduct monthly Planners meetings. Due September 30, 2016

**Internal Work Activity: Performance Management**

Lead ANG's performance management activities.

**Activity Target 1:**

Prepare guidance for quarterly program management reviews. DUE: 45 days prior to quarterly Performance Management Review (PMR) meetings. Due September 30, 2016

**Activity Target 2:**

Prepare Performance Management Review (PMR) briefing materials. DUE: 14 working days prior to PMR meetings. Due September 30, 2016

**Activity Target 3:**

Facilitate Performance Management Review (PMR) meetings DUE: Quarterly Due September 30, 2016

**Activity Target 4:**

Prepare and distribute to each directorate status of Performance Management Review (PMR) actions. DUE: 5 days after PMR meetings. Due September 30, 2016

**Internal Work Initiative: Systems Engineering Contracts Branch**

Perform Contract Oversight and Administration Task Order (TO) development and TO management for Partnership Contract Branch.

**Internal Work Activity: SE2020/SE2025 Contracts Management**

Perform Contract Oversight and Administration Task Order (TO) development and TO management for Partnership Contract Branch.

**Activity Target 1:**

Streamline key administration and management processes to ensure FY16 award of new task orders, modifications, resume and invoice approvals follows or exceeds the established time frame. The cycle time for processing modifications, approving resumes and invoices, new task orders will be conducted based upon comparative data to prior years (FY14 and FY15 cumulative). 01/30/2016, 04/30/2016, 07/30/2016, 09/30/2016. Due September 30, 2016

**Activity Target 2:**

Develop and execute marketing plan to increase awareness and knowledge of SE2020/SE2025. Initial Plan - 12/30/2015, Quarterly Status Updates Due: 12/30/2015, 03/30/2016, 06/30/2016, 09/30/2016. Due September 30, 2016

**Activity Target 3:**

Improve customer response rate in SE2020 SBC Performance Based Contract Monitoring System (PBCM). Achieve 50% improvement in response over FY15. Due January 4, 2016

**Internal Work Initiative: Partnership Contract Management**

Perform Contract Oversight and Administration Task Order (TO) development and TO management for Partnership Contract Branch.

**Internal Work Activity: Development of FY 2017 CAASD Performance Based Work Plan (PBWP)**

Develop and Award the FY 2017 Product Based Work Plan (PBWP) for the Center for Advanced Aviation System Development (CAASD), Federally Funded Research and Development Center (FFRDC).

**Activity Target 1:**

Award FY 2017 Performance Based (PBWP). Planned milestones: (1) Federal Executive Board (FEB) approval of Work Plan Strategy, due March 31, 2016; (2) FEB approval of PBWP, due September 15, 2016; and (3) FY 2017 PBWP

placed on the CAASD contract, due September 30, 2016 Due September 30, 2016

**Activity Target 2:**

Initiate the 2017 - 2021 CAASD Long Range Plan budget exhibit for OST and OMB submission. It highlights CAASD activities supporting FAA Strategic Initiatives 2014 - 2018. Due September 30, 2016

**Internal Work Activity: Execution of FY 2016 Product Based Work Plan (PBWP)**

Execute the FY 2016 Center for Advanced Aviation System Development (CAASD) Product Based Work Plan (PBWP) as approved by the Federally Funded Research and Development Center (FFRDC) Executive Board.

**Activity Target 1:**

Conduct Quarterly Performance Review Boards (QPRBs) of the CAASD FY 2016 Work Plans. Due January 31, 2016; May 31, 2016; and August 31, 2016. Complete FY 2016 First Half Semi-annual Program Performance Evaluations. Due August 31, 2016

**Activity Target 2:**

Ensure on time delivery of at least 90% of CAASD contract products. Submit monthly Receipt and Acceptance (R&A) status reports to Outcome Managers and Technical Liaison Officers within 10 work days of the following month. Publish final FY 2015 deliverables R&A status report. Due July 31, 2016

**Internal Work Objective: Optimize Agency Resources**

Optimize the use and management of FAA resources to improve accountability and enhance operational efficiency through improved management of FAA acquisitions, effective management of financial resources, and support of non-AFN workforce planning. Successful accomplishment of this objective is measured through effective management of Agency acquisitions, continuous improvement of acquisition management policies and practices, and favorable financial system audit results.

---

**Internal Work Initiative: Small Business Development**

Provide direct procurement opportunities to small business, thereby promoting small business development and good corporate citizenship.

**Internal Work 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.

**Activity Target 1:**

Award at least 25 percent of the total ANG direct procurement dollars to small businesses. Due September 30, 2016

**Internal Work Objective: Support Sustainability and Environmental Objectives**

In accordance with the Energy Independence and Security Act of 2007 (EISA). AFN will support agency sustainability goals to reduce the FAA's carbon footprint. Accomplishment of this objective will be demonstrated by successful implementation or execution of the majority of the initiatives and activities linked to this objective.

---

**Internal Work Initiative: Fleet Management**

Reduce FY2016 agency petroleum consumption by government fleet vehicles by 20% from the FY2005 baseline, a maximum consumption of 2,190,194 gasoline-equivalent units. In accordance with the Energy Independence and Security Act of 2007 (EISA) federal agencies must achieve at least a 20% reduction in annual petroleum consumption through 2015, and each year thereafter relative to a FY2005 baseline.

**Internal Work Activity: Fleet Management - ANG**

In accordance with the EISA Section 142 support the Agency to achieve a 20% decrease in vehicle fleet petroleum consumption over the FY-2005 baseline.

**Activity Target 1:**

The FY-16 ANG target is not to exceed the maximum petroleum consumption of 11,386 gasoline gallon equivalents (GGEs). Due September 30, 2016

**Internal Work Objective: Performance Based Navigation (PBN) - Metroplex**

Optimize airspace and PBN procedures to improve efficiency an average of 10% across core airports by 2018.

---

## Internal Work Initiative: Performance Based Navigation (PBN) -Metroplex

As a direct response to RTCA's Task Force 5 Final Report, NextGen will provide oversight and contractual guidance to awards for study and design procedures. Benefits analyses for improving procedures and implementation activities will be conducted.

### Internal Work Activity: Performance Based Navigation (PBN) - Metroplex

Ensure contract awards are completed and deliverables are received on time for the design and study phases of this project. Coordinate with regions on Safety Management and with AJV on completion reports.

#### Activity Target 1:

Complete Northern California post implementation phase. Due March 31, 2016

#### Activity Target 2:

Complete Washington DC post implementation phase. Due March 31, 2016

#### Activity Target 3:

Deliver Charlotte pre-implementation contract. Due September 30, 2016

#### Activity Target 4:

Complete Denver design and procedure development phase. Due December 30, 2015

#### Activity Target 5:

Cleveland/Detroit Design Phase 50% Completion memo. Due December 30, 2015

#### Activity Target 6:

Complete Florida design and procedure development phase. Due June 30, 2016

#### Activity Target 7:

Complete Initial evaluation of North Las Vegas site. Due December 30, 2015

## Internal Work Objective: Integrated Arrival/Departure

IADS Research Transition Plan coordinated with NASA and industry.

---

## Internal Work Initiative: Improved Surface/TFDM - Surface Tactical Flow

Collaborate with NASA to accomplish the NextGen Integrated Working Group (NIWG) departure management recommendation and to document the

Integrated Arrival/Departure (IADS) Research Transition Plan.

## Internal Work Activity: NextGen Integrated Working Group (NIWG) demonstration

Coordinate the NextGen Integrated Working Group (NIWG) demonstration planning activities.

#### Activity Target 1:

Deliver an updated Investment Analysis Decision Support (IADS) Research Transition Team (RTT) plan. Due May 30, 2016

#### Activity Target 2:

Deliver a safety assessment for Airspace Technology Demonstration 2 (ATD-2) for Charlotte Douglas International Airport. Due September 30, 2016

## Internal Work Objective: Deliver Benefits Through Technology and Infrastructure

Lay the foundation for the NAS of the future by achieving prioritized NextGen benefits, integrating new user entrants, and delivering more efficient streamlined services.

---

## Internal Work Initiative: Improve NAS Software Assurance

Partner with stakeholders across the FAA to develop plans and practices to improve NAS software assurance.

### Internal Work Activity: Improve NAS Software Assurance

Implement methods and practices to improve NAS software assurance.

#### Activity Target 1:

Establish a Software Engineering Community of Practice to share information, best practices and lessons learned among federal FAA Software Engineers, Computer Scientists and Computer Specialists. Due December 31, 2015

#### Activity Target 2:

Increase the level of security hardening in the NAS. Provide enhanced security tools for NAS security hardening. Due September 30, 2016

## Internal Work Initiative: NextGen Enterprise Risk Management

Establish a comprehensive framework for identifying, analyzing, and managing NextGen related enterprise risks.

### **Internal Work Activity: Mitigate Identified Risks**

Implement responses to the identified NextGen enterprise risks.

#### **Activity Target 1:**

Actively mitigate (plans developed and implementation of plans underway) at least 6 of the identified enterprise risks. Due December 31, 2015

#### **Activity Target 2:**

Create response plans for the remaining 10 identified enterprise risks. Due March 31, 2016

## **Internal Work Objective: Strategic Technologies**

Research and implement, where practical, new technologies and concepts as best practices to improve the implementation of Systems Engineering activities throughout the system development life cycle.

---

### **Internal Work Initiative: Model Based Systems Engineering**

Partner with stakeholders to determine which systems engineering activities (e.g. requirements analysis, validation & verification, functional analysis and allocation, performance analysis and trade studies, system architecture specification, etc.) can benefit from the application of rigorous visual modelling principles and best practices and implement a proof of concept.

### **Internal Work Activity: Further the use of Model Based Systems Engineering**

Identify candidate Systems Engineering activities for a Model Based Systems Engineering approach and implement a proof of concept.

#### **Activity Target 1:**

Work with stakeholders to define how MBSE can be implemented in the FAA, and develop an implementation strategy. Due December 31, 2015

#### **Activity Target 2:**

Implement at least one concept for MBSE at the FAA. Due September 30, 2016

## **Internal Work Objective: Systems Engineering Information Management**

Progressively improve visibility, access, and discovery of products, information, and data to further enable a workforce dedicated to architecting the evolution of the NAS and providing Systems Engineering leadership in delivering the future Aviation System.

---

### **Internal Work Initiative: Manage and Evolve Information Management Tools, Systems, and other Information Assets**

Progressively improve visibility, access and discovery of information and data supporting systems engineering, enterprise architecture and planning knowledge and decisions associated with evolving the NAS and NextGen.

### **Internal Work Activity: Manage and Evolve the NAS Systems Engineering Portal (SEP)**

Manage and evolve the NAS Systems Engineering Portal (SEP) features and capabilities to support technical collaboration, integration, and information sharing of products and services.

#### **Activity Target 1:**

Implement the updated access/role-based permission model to effectively manage user rights, improve security and identify opportunities for customizing the user experience. Due February 29, 2016

#### **Activity Target 2:**

Deploy automated infrastructure roadmap diagramming solution. Due August 30, 2016

#### **Activity Target 3:**

Demonstrate the ability to exchange data using a web services technology approach between the Corporate Work Plan toolset and the NAS SEP. Due September 30, 2016

#### **Activity Target 4:**

Identify and prototype a business intelligence solution that allows users to design reports and conduct analysis. Due September 30, 2016

### **Internal Work Activity: Provide Quality Data Management**

Provide data quality management for systems engineering information platforms improving access, visibility, and discovery of data and information.

**Activity Target 1:**

Document a database management process for the NAS Systems Engineering Portal (SEP). Due March 31, 2016

**Activity Target 2:**

Update ANG tools management processes to reflect FAA Enterprise Information Management policy and processes. Due June 30, 2016

**Activity Target 3:**

Establish a NAS SEP Community of Practice (CoP) to identify authoritative data sources and improve data quality within the NAS SEP. Due September 30, 2016

**Internal Work Initiative: Implement Knowledge Management**

Implement knowledge management processes and structures that directly support ANG-B's strategic knowledge requirements.

**Internal Work Activity: Implement the ANG-B Knowledge Management Strategic Plan**

Implement the ANG-B knowledge management strategic plan to identify, capture, store and share critical corporate knowledge for the directorate.

**Activity Target 1:**

Identify the top three approved ANG-B knowledge management priorities. Due November 30, 2015

**Activity Target 2:**

Pilot top three approved ANG-B knowledge management priorities. Due September 30, 2016

**Internal Work Objective: Deliver Benefits Through Technology and Infrastructure - Focus to Achieve the Benefits of NextGen**

Lay the foundation for the NAS of the future by achieving prioritized NextGen benefits, integration new user entrants, and delivering more efficient, streamlined services.

---

**Internal Work Initiative: Operational Impact Analysis**

Conduct operational performance assessments of NextGen-related technologies and procedures as they become available in the NAS.

**Internal Work Activity: NAC Priorities Evaluation**

Conduct operational performance assessments of four initiatives in the NextGen Priorities Joint Implementation Plan, in collaboration with industry, and as promised to the NextGen Advisory Committee.

**Activity Target 1:**

Complete an Analysis of Wake ReCat at Charlotte. Due March 31, 2016

**Activity Target 2:**

Complete an analysis of North Texas (NTX). Due July 31, 2016

**Activity Target 3:**

Complete an analysis of Wake ReCat at Chicago. Due May 31, 2016

**Activity Target 4:**

Complete an analysis of the EoR procedure at Denver. Due July 31, 2016

**Internal Work Activity: Annual NextGen Performance Assessment**

Prepare an annual report consolidating the various NextGen operational performance assessments conducting during FY 2016.

**Activity Target 1:**

Develop an analysis plan for the 2016 Operational Performance Assessment. Due November 30, 2015

**Activity Target 2:**

Complete the draft 2016 NextGen Performance Assessment Annual Report and submit to ANG for review. Due September 30, 2016

**Internal Work Initiative: NextGen Cost-Benefit Analysis**

Complete the 2015 update to the Business Case for NextGen, a report documenting the cost-benefit analysis, and in 2016 again update the costs and benefits estimates.

**Internal Work Activity: NextGen Business Case**

Complete the 2015 update to the Business Case for NextGen, a report documenting the cost-benefit

analysis, and in 2016 again update the costs and benefits estimates.

**Activity Target 1:**

Complete the draft 2015 NextGen Business Case Report and submit to ANG for review. Due November 30, 2015

**Activity Target 2:**

Update the NextGen cost estimates, incorporating the 2016 CIP. Due June 30, 2016

**Activity Target 3:**

Update the NextGen benefits estimates, incorporating the 2016 CIP, TAF, and NSIP. Due July 31, 2016

**Internal Work Activity: Develop and Enhance Fast-Time Modeling Capabilities**

Enhance the System-Wide Analysis Capability (SWAC) and Airfield Delay Simulation Model (ADSIM+) capabilities to address agency and NextGen modeling and analysis needs.

**Activity Target 1:**

Model dynamic, stochastic assignment of shorter approach procedures for RNP-equipped aircraft; model variable minimum separation standards in the oceanic region based on aircraft equipage for the SWAC model. Due September 30, 2016

**Activity Target 2:**

Model the impact to airport capacity of aircraft surface movement, wake vortex re-categorization, and decreased separation due to aircraft equipage for the ADSIM+ model. Due September 30, 2016

**Internal Work Activity: Perform Benefit Analyses in Support of NextGen Programs**

Perform benefit analyses in support of ANG and PMO programs to assist senior FAA leaders in making informed investment decisions.

**Activity Target 1:**

Complete preliminary benefits modeling and analysis in support of the Reduced Oceanic Separation initiative. Due May 30, 2016

**Activity Target 2:**

Complete preliminary Ground-Based Augmentation System (GBAS) benefit analysis. Due August 31, 2016

**Internal Work Objective: Promote Sound Strategic Technical Decisions with Proactive Engineering Analysis**

Promote sound strategic technical decisions with proactive engineering analysis by engaging partner organizations and ensuring the EA and Roadmaps support and reflect those decisions.

---

**Internal Work Initiative: Conduct Enterprise Planning**

Conduct Enterprise Planning through representation of key FAA strategies, capability implementations and infrastructure investments in the NAS EA Roadmaps.

**Internal Work Activity: Re-Baseline the NAS Enterprise Architecture**

Obtain Technical Review Board (TRB), FAA Enterprise Architecture Board (FEAB) and Joint Resources Council (JRC) approval and re-baselining of the calendar year 2016 NAS Enterprise Architecture (EA)

**Activity Target 1:**

Obtain TRB, FEAB and JRC approval and re-baselining of the CY2016 NAS Enterprise Architecture. Due January 31, 2016

**Activity Target 2:**

Incorporate updates in FY2016 to develop and build out of CY2017 Draft NAS Enterprise Architecture to support NextGen implementation and enterprise level architectural decisions. Due September 30, 2016

**Internal Work Activity: Update and Improve the NAS EA Roadmaps**

Update and improve the NAS EA Roadmaps

**Activity Target 1:**

Extend the business view of NAS improvements from operational improvements only to include Business and Technology Improvements by building a set of Business and Technology Roadmaps Due September 30, 2016

**Internal Work Activity: Evolve the NAS Segment Implementation Plan (NSIP)**

Evolve the NSIP from NextGen to NAS focused; and provide oversight and support to the annual NAS EA / NSIP update.

**Activity Target 1:**

Oversee the NSIP update; develop associated NSIP products (e.g. NSIP Executive Summary and appendices) and other supplemental documentation. Due January 29, 2016

**Activity Target 2:**

Publish NSIP Lite. Due March 31, 2016

**Activity Target 3:**

Extend the implementation view of NAS improvements from operational improvements only to include Business and Technology Improvements by increasing the scope of NSIP data. Due September 30, 2016

**Activity Target 4:**

Develop the NAS EA/NSIP management plan. Due September 30, 2016

**Internal Work Activity: NextGen Integrated Master Schedule**

Update the NextGen Integrated Master Schedule (IMS) to build out the Bravo Schedules as the increment system moves into implementation.

**Activity Target 1:**

Complete establishing all known links between the NextGen and Program Management Office (PMO) schedules in the Corporate Work Plan (CWP). Due September 30, 2016

**Internal Work Activity: Develop a NAS Enterprise Architecture Commercial Space Integration Roadmap**

Continue development of the Commercial Space Integration roadmap to represent its implementation strategies and infrastructure investments in the NAS EA.

**Activity Target 1:**

Publish a draft Commercial Space Integration roadmap to the NAS Systems Engineering Portal. Due February 29, 2016

**Activity Target 2:**

Incorporate FY2016 updates to the Commercial Space Integration roadmap. Due September 30, 2016

**Internal Work Initiative: Conduct Enterprise Analysis**

Conduct Enterprise Analysis through development of key NAS Enterprise Solutions and conduct of key NAS Enterprise Integration.

**Internal Work Activity: Develop an Enterprise Analysis Framework**

Develop an Enterprise Analysis framework to establish objectives, processes and products of NAS Enterprise Capabilities and NAS Enterprise Integration.

**Activity Target 1:**

Develop a draft NAS Enterprise Analysis Framework. Due January 31, 2016

**Internal Work Activity: Conduct Enterprise Integration Studies and Analysis**

Conduct Enterprise Integration Studies and Analysis (Driven by Vision/Key Strategies) to establish a plan for the implementation of new technologies, processes and products into the NAS Enterprise.

**Activity Target 1:**

Develop a draft ATC Surveillance Concept of Operations to support development of an Enterprise Surveillance Solution. When developed, the Enterprise Surveillance Solution will identify a plan for the efficient consolidation and replacement of legacy surveillance radars and beacon systems to provide the necessary coverage for NAS operations. Due August 31, 2016

**Activity Target 2:**

Deliver a Draft NextGen Resiliency, Contingency and Continuity Report based on an evaluation of planned NextGen capabilities. Due September 30, 2016

**Internal Work Activity: Identify, Develop, and Integrate Enterprise Capabilities**

Identify and develop Enterprise Capabilities and integrate them into the NAS Enterprise Architecture.

**Activity Target 1:**

Develop NAS Vision Document which identifies key changes that NextGen will bring to the NAS in the post-midterm timeframe Due July 1, 2016

**Activity Target 2:**

Identify Key Enterprise Integration and Analysis Issue Report based on an evaluation of enterprise-level cross-cutting issues. Due September 30, 2016

## Internal Work Objective: Partner with Stakeholders to Develop Enterprise Solutions

Promote strategic technical decisions with proactive engineering analysis; and become a key, sought-after partner in working towards enterprise solutions

---

### Internal Work Initiative: Partner with Stakeholders to Develop Enterprise Solutions

Become a key, sought-after partner in working towards enterprise solutions.

#### Internal Work Activity: NAS Subject Matter Expertise

Develop NAS Subject Matter Experts (SMEs) within ANG-B.

##### Activity Target 1:

Develop a Draft Subject Matter Expert (SME) team framework for establishing SME team goals; SME team activities, products and processes; and SME team oversight. Due December 31, 2015

##### Activity Target 2:

Obtain ANG-B management approval of a final SME team framework. Due April 30, 2016

##### Activity Target 3:

Implement approved SME team framework. Due July 31, 2016

#### Internal Work Activity: NAS Domain Specific Studies and Analyses

Conduct customer driven, domain specific Subject Matter Expert Studies and Analyses.

##### Activity Target 1:

Deliver the Airborne Access to SWIM (AAtS) technology transfer package. (This deliverable will be comprised of the AAtS products which have been generated to date by the FAA and will be transferred to Industry to support their continued development and implementation of this capability.) Due May 30, 2016

##### Activity Target 2:

Develop draft Air-Ground ATN/IPS Minimum Operational Performance Standards (MOPS) to support all future A-G Communications Systems including, Data Comm Baseline 2, NextGen SATCOM, SWIM and AeroMACS. Due September 30, 2016

## Enhance Global Leadership

The Global Leadership strategic initiative will deliver an internal governance structure that allows us to make better FAA-wide decisions about how we engage globally using an integrated data-informed approach. We will make decisions about our international activities and programs based on our ability to enhance U.S. influence and better target our resources to shape global standards and assist countries to improve aviation safety, efficiency, and environmental sustainability.

Of course, a large component of NextGen's success is dependent on our international partnerships. Our modernization efforts will only go so far if we are not harmonized and interoperable on a global scale. Our relationship across borders strives to do just that - to harmonize and create a seamless airspace. We place great value in the work we do with others, and our existing agreements, such as the ones with Single European Sky ATM Research (SESAR) and Eurocontrol, have been effective in moving global modernization forward. We are pleased with the progress made thus far, and we look forward to continued collaboration.

### Strategic Objective: Global Leadership

Improve safety, air traffic efficiency, and environmental sustainability across the globe through an integrated, data-informed approach that shapes global standards and enhances collaboration and harmonization.

---

### Strategic Initiative: Ensure Efficient Global ATS to Support U.S. Economy

Proactively manage air transportation across international boundaries in a manner that is operationally efficient and seamless, with fully harmonized procedures and technologies utilizing the best practices of the industry.

#### Strategic Activity: International NextGen Enhancement

Working with the European Union and the International Civil Aviation Organization (ICAO), develop a minimum path for NextGen/Single European Sky ATM Research (SESAR), and overall Air Traffic Management (ATM) Transformation.

##### Activity Target 1:

Establish the United States position/understanding of the use of standards bodies to streamline and cost-effectively deliver ICAO Standards and Recommended Practices (SARPs) and guidance material. Begin coordinating position with like-minded partners. Due November 30, 2015

**Activity Target 2:**

Conduct initial kick-off meeting with SESAR Deployment Manager to identify areas of NextGen/SESAR Deployment which are expected to have risk associated with standards and procedures. Due February 29, 2016

**Activity Target 3:**

Update harmonization report with SESAR in preparation for 39th ICAO Assembly. Due September 30, 2016

**Activity Target 4:**

Work with like-minded partners to establish agreed upon 'minimal path' in the Global Air Navigation Plan (GANP) to meet safety and global efficient objectives. Due March 31, 2016

**Activity Target 5:**

Obtain ICAO Air Traffic Management Requirements and Performance Panel (ATMRPP) approval of the US/EU 'minimal path' to meet NextGen goals so it can be adopted at the Assembly and included in the GANP. Due September 30, 2016

functional skills to ensure the safest and most productive aviation sector.

---

**Strategic Initiative: Attracting Talent**

Operate efficient and effective hiring processes and conduct consistent corporate on-boarding.

**Strategic Activity: Strategic Workforce Planning**

Review the encumbered core compensation positions report from the Federal Payroll and Processing System (FPPS) on a quarterly basis to identify positions which are vacant and/or projected to be vacant within 90 days.

**Activity Target 1:**

Provide current and projected vacancies for core compensation positions to AHR, via KSN, no later than (NLT) 30 days after posting of the quarterly FPPS report. Due September 30, 2016

**Internal Work Objective: Hiring Persons with Targeted Disabilities (PWTB)**

Support the DOT Strategic Objective to build a capable, diverse, and collaborative workforce of highly-skilled, innovative, and motivated employees by increasing the hiring of PWTB for eligible positions to 3 percent by 2018. In FY 2016, ACR in collaboration with the FAA LOBs/SOs will ensure that at least 2.33% of all FAA new hires are PWTB.

---

**Internal Work Initiative: Hiring PWTB**

The FAA line of businesses and staff offices (LOBs/SOs) will work collaboratively to support the DOT goal to increase the representation of PWTB in the workforce by ensuring that at least 2.33% of all FAA new hires are PWTB. Each year, FAA will increase incrementally the percentage of PWTB hires by .33% per year to reach the 3% DOT hiring goal by 2018.

**Internal Work Activity: Hiring PWTB**

In FY 16, the Office of Civil Rights in collaboration with the FAA LOBs/SOs will ensure that at least 2.33% of all FAA new hires are PWTB.

**Activity Target 1:**

The head of each LOB/SO will issue a memorandum (key language will be provided by ACR) directed to their managers promoting the PWTB hiring goal. Due January 31, 2016

**Activity Target 2:**

Each LOB/SO will report to ACR their total hiring

**Empower and Innovate with the FAA's People**

The FAA is embarking on a major strategic transformation that can only be accomplished if it has a workforce that is prepared with the skills and mindsets to drive this change. Strong change leadership is required from all levels of the agency to communicate the vision, implement the priority initiatives, and ensure sustained impact from the transformation.

The movements toward risk-based decision making and transforming the NAS through right-sizing, acceleration of NextGen benefits, and integrating new user entrants require new technical and functional skills, and a cultural shift in how the agency works.

We support the office of Human Resources (AHR) in the preparation of FAA's human capital for the future, by identifying, recruiting, and training a workforce with the leadership, technical, and functional skills to ensure the U.S. has the world's safest and most productive airspace system.

**Strategic Objective: Workforce of the Future**

Prepare FAA's Human Capital for mission-critical transformational changes by identifying, recruiting and training a workforce with the leadership, technical and

projections for FY 16, and identify the estimated number of PWTD hires required to meet their 2.33% hiring goal. Due April 30, 2016

**Activity Target 3:**

Managers with hiring authority from each LOB/SO will participate in one consultation session held by the National People with Disabilities Program Manager to establish hiring initiatives. Due June 30, 2016

**Internal Work Objective:  
Alternative Dispute Resolution  
(ADR)**

Encourage the FAA workforce to engage in the ADR process as a method to resolve disputes in the EEO Complaint Process at the lowest possible level to avoid the cost, delay, and unpredictability of the traditional adjudicatory processes.

---

**Internal Work Initiative: ADR  
Engagement**

Encourage workforce to resolve disputes in an amicable way by utilizing the ADR process.

**Internal Work Activity: ADR Engagement**

ACR, in coordination with the LOBs/SOs, will ensure that 70% of all managers engage in mediation when requested by employees.

**Activity Target 1:**

Assist Agency effort with ADR engagement by ensuring that 70% of all managers engage in mediation when requested by employees. Due September 30, 2016

**Internal Work Objective:  
EEO/Diversity and Inclusion  
Action Committee (EAC)**

The EAC oversees and supports the FAA efforts to create a diverse and inclusive workplace that ensures equal opportunity for all its employees.

---

**Internal Work Initiative: EAC**

In collaboration with the LOBs/SOs, ACR will identify recommendations and strategies regarding EEO and diversity efforts within the FAA workplace.

**Internal Work Activity: EAC**

Identify recommendations and strategies regarding EEO and diversity efforts within the FAA workplace.

**Activity Target 1:**

Analyze and present demographic data in comparison to the civilian labor force statistics to the EAC; and identify strategies and actions for improving groups with lower than expected participation rates. Due November 30, 2015

**Activity Target 2:**

Support Agency efforts to implement and/or revise performance evaluation methods to the managers EEO performance standard. Due September 30, 2016

**Activity Target 3:**

Identify and track Diversity and Inclusion initiatives through the EAC Workgroups. Due September 30, 2016

**Internal Work Objective:  
Congressional Correspondence  
FAA Milestones**

Per direction of the Secretary of Transportation, all Congressional letters sent directly to the FAA must be answered within 30 calendar days of entry into the FAA Correspondence Control Management System (CCMS). DOT Congressional letters assigned to the FAA for response must be returned back to the Secretary of Transportation within 5 business days.

---

**Internal Work Initiative: FAA  
Congressional Correspondence  
Response**

Per direction of the Secretary of Transportation, all Congressional letters sent directly to the FAA must be answered within 30 calendar days of entry into the FAA Correspondence Control System (CCMS).

**Internal Work Activity: FAA  
Congressional Correspondence  
Response**

Per direction of the Secretary of Transportation, all Congressional letters sent directly to the FAA must be answered within 30 calendar days of entry into the FAA Correspondence Control Management System (CCMS).

**Activity Target 1:**

90% of all Congressional letters sent directly to the FAA must be answered within 30 calendar days of entry into the FAA Correspondence Control Management System (CCMS). Due September 30, 2016

## Internal Work Objective: Equal Employment Opportunity (EEO) Training

Assist Agency efforts to create a FAA culture in which managers and employees understand their role in creating and maintaining an inclusive workplace by providing training on EEO laws, FAA policies, and appropriate workplace behavior.

---

### Internal Work Initiative: EEO Training

Increase workforce competency of EEO laws, FAA policies and appropriate workplace behavior through EEO Training.

#### Internal Work Activity: EEO Training Requirements for FAA Workforce

Increase workforce competency of EEO laws, FAA policies and appropriate workplace behavior.

##### Activity Target 1:

Monitor and report monthly on the completion of NO FEAR training to ensure 100% completion rate by 09/30/2016. Due September 30, 2016

##### Activity Target 2:

Ensure that 60% of management complete at least one EEO training course. Due September 30, 2016

##### Activity Target 3:

Ensure that 10% of employees complete at least one EEO training course. Due September 30, 2016

## Internal Work Objective: Enhance Organizational Excellence

In support of the Administrator's Workforce of the Future Strategic Initiative, AFN will capitalize on its integrated shared services model to recruit, build, sustain, and enhance a dedicated, flexible, engaged, knowledgeable and skilled workforce. AFN will build new work environments and provide employee training and tools that equip and empower all AFN employees to better serve the agency. Successful achievement will be demonstrated through successful implementation or execution of initiatives and activities linked to this objective.

---

### Internal Work Initiative: Strong Acquisition Workforce

Ensure FAA has the staffing and skill mix to successfully manage NextGen and other major acquisitions by implementing and annually updating FAA's Acquisition

Workforce Strategy and training, developing and certifying personnel in key acquisition professions.

### Internal Work Activity: Implement and Annually Update FAA's Acquisition Workforce Strategy

ANG will support AFN in the annual update of the FAA's Acquisition Workforce Strategy before LOB coordination and external publication.

##### Activity Target 1:

Contribute information to be published in the annual update of FAA's Acquisition Workforce Strategy and coordinate final draft with ANG leadership, once received from AFN. Due September 30, 2016

### Internal Work Activity: Train and Certify FAA's Acquisition Workforce

ANG will train, develop, and certify agency personnel in key acquisition professions.

##### Activity Target 1:

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. Due September 30, 2016

## Internal Work Objective: Workforce of the Future

Empower and innovate with the FAA's people. Prepare FAA's human capital for the future, by identifying, recruiting, and training a workforce with the leadership, technical, and functional skills to ensure the U. S. has the world's safest and most productive aviation sector.

---

### Internal Work Initiative: Implement ANG-B Workforce Development Roadmap

Continue implementation of the items on the Systems Engineering & Integration Office's Workforce Development Roadmap.

#### Internal Work Activity: Skills Development

Develop or acquire training specified on ANG-B's Workforce Development Roadmap

##### Activity Target 1:

Provide at least one leadership development training (e.g., Negotiating & Influencing, Conflict

Management, Communications, Team Building, Leading Teams, etc.) for employees. Due March 30, 2016

**Activity Target 2:**

Develop a strategy for blended learning and implement an improved version of the course titled Systems Engineering at the FAA (including both an intro and more advanced course). Due April 30, 2016

**Activity Target 3:**

Develop and implement a stakeholder engagement plan in order to facilitate improved partnerships and better collaboration. Due July 31, 2016

**Activity Target 4:**

Develop an Information Management (to include safety and information security) course. Due September 30, 2016

**Internal Work Initiative: Operational Efficiency and Effectiveness**

Ensure consistent use and application of ANG Onboarding Program.

**Internal Work Activity: Implementation of ANG Onboarding Program**

Ensure ANG managers are following OnBoarding Process to ensure consistent experience for new employees.

**Activity Target 1:**

Develop internal mechanism/procedure(s) to notify managers of responsibilities on onboarding checklist as they are due (e.g., KSN or "Just in Time" ticklers). Due November 30, 2015

**Activity Target 2:**

Develop tool(s) to assess helpfulness of notifications, level of manager engagement, and quality of employee experience Due March 30, 2016

**Internal Work Initiative: ANG's Employee Engagement Index**

ANG Group STI for Improving the Employee Engagement Index in 2016.

**Internal Work Activity: ANG's Employee Engagement Index**

Raise ANG's Employee Engagement Index score from 70% to 72% for FY16.

**Activity Target 1:**

Raise ANG's Employee Engagement Index score from 70% to 72% for FY16. Due September 30, 2016

**Internal Work Objective: Records Management**

Implement process improvements and best practices to enhance ANG service delivery.

---

**Internal Work Initiative: Records Management**

Implement ANG Records Management Program

**Internal Work Activity: Records Management**

Ensure ANG is in compliance with agency Records Management policies.

**Activity Target 1:**

Deliver Biennial Records Inventory training Due December 20, 2015

**Activity Target 2:**

Complete Biennial Inventory of ALL Records. Due June 30, 2016

**Activity Target 3:**

Complete Annual Inventory of Vital Records. Due June 30, 2016