

Federal Aviation Administration

National Airspace System

Capital Investment Plan

Appendix A

Fiscal Years 2015 – 2019

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APPENDIX A

ALIGNMENT OF PROGRAMS TO STRATEGIC PRIORITIES

The Federal Aviation Administration (FAA) Administrator, in February 2014, established a new strategic framework to define where the agency will focus its efforts over the next five years. This framework includes high-level Strategic Priorities and related Performance Metrics that will help achieve the priorities. The Strategic Priorities and Performance Metrics support the Department of Transportation's (DOT) strategic plan. The Administrator has defined four Strategic Priorities as follows:

- Make Aviation Safer and Smarter
- Deliver benefits through technology and infrastructure
- Enhance global leadership
- Empower and innovate with the FAA's people

Performance Metrics are a tool the agency uses to track progress towards accomplishment of the Strategic Priorities. The Capital Investment Plan (CIP) programs have been aligned to the performance metrics. In the CIP Appendix B, a section titled "Relationship of Program to FAA Performance Metric" gives more specific information about how each program helps meet a Performance Metric.

Many FAA programs will support more than one performance metric; however the program linkages in the CIP (Appendix A and B) are aligned to a single metric for which a program's contribution is most significant. Only CIP programs with funding in any or all of the years Fiscal Year (FY) 2015-2019 are included in Appendix A, B, and C.

To provide a complete picture of FAA performance additional Performance Metrics are tracked by the FAA to achieve internal organizational performance objectives and these metrics are used in the CIP and the FAA business plan. The metrics are identified in the tables in this appendix.

Each program, listed under its performance metric includes the following information: FY 2015 Budget Line Item (BLI); CIP number; and CIP Program Name. BLI numbers with an X (i.e., 1A10X) are used to designate programs that are not funded in the FY 2015 President's Budget, but future funding is planned within the FY 16-19 timeframe. These programs are new starts or future extensions of existing programs. Appendix B will report the future year planned activities for these programs based on the planned funding.

For clarification, the following definitions generally describe the terms used in the CIP.

FAA STRATEGIC PRIORITY

The agency will use four strategic priorities as its organizing principle to focus efforts in the coming years.

PERFORMANCE METRIC

A quantifiable target for the desired improvement in performance, that will be accomplished in a specific timeframe. These metrics normally affect FAA customers, such as: "Reduce the commercial air carrier fatalities per 100 million persons on board by 24 percent over a 9-year period (2010-2018). No more than 6.2 in 2018."

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1. FAA STRATEGIC PRIORITY: MAKE AVIATION SAFER AND SMARTER

There is an imperative to be smarter about how we ensure aviation safety because the aviation industry is growing more complex. At the same time, we have more safety data than we have ever had before. This provides us with the opportunity to be more proactive about safety and constantly raise the bar.

- **Performance Metric 1:** Reduce the commercial air carrier fatalities per 100 million persons on board by 24 percent over 9 year period (2010-2018). No more than 6.2 in 2018.

FY 2015 BLI	CIP #	CIP Name
2A14A	W05.03-01	Wind Shear Detection Services – Work Package 1
2A18	M54.01-01	Airborne Collision Avoidance System X (ACAS X) – Segment 1
2B18A	C23.02-01	Voice Recorder Replacement Program – NAS Voice Recorder Program (NVRP)
2B18B	C23.01-01	Voice Recorder Replacement Program – New Requirements Safety & Audit
2D05	N04.03-00	Visual Nav aids – ALSIP Continuation
2D07	N04.01-00	Visual Nav aids – Visual Nav aids for New Qualifiers
2D12	N17.01-01	Runway Safety Area – Navigation Mitigation
2E03X	M12.01-04	Airbus Simulator Purchase – Advanced Fly-By-Wire Simulator – Additional Technology Refresh Projects
2E09X	M25.00-00	Independent Operational Assessment (IOA)
3A02	A17.01-02	Regulation and Certification Infrastructure System Safety (RCISS) – Segment 2
3A02X	A17.01-03	Regulation and Certification Infrastructure System Safety (RCISS) – Segment 3
3A07	A25.02-01	System Approach for Safety Oversight (SASO) – Phase 2a
3A07	A25.02-02	System Approach for Safety Oversight (SASO) – Phase 2b
3A08	A26.01-01	Aviation Safety Knowledge Management Environment (ASKME) – Segment 2
3A09A	G07A.02-01	Aviation Safety Information Analysis and Sharing (ASIAS)
3A09B	G07M.02-01	Systems Safety Management Transformation
3A12A	A35.01-01	Aerospace Medicine Safety Information System (AMSIS)
3A12X	M53.01-02	Aerospace Medical Equipment Needs (AMEN) – Technology Refresh Phase 2
4A09	G05A.02-05	AIM Modernization Segment 2
4A09X	G05A.02-06	AIM Modernization Segment 3

- **Performance Metric 2:** Reduce the general aviation fatal accident rate to no more than one (1) fatal accident per 100,000 flight hours by 2018.

FY 2015 BLI	CIP #	CIP Name
2C02	A34.01-01	Future Flight Services Program
2C04	M08.31-02	Weather Camera Program – Future Segments
2D03	N12.01-00	Wide Area Augmentation System (WAAS)

- **Performance Metric 3:** No fatalities, serious injuries, or significant property damage to the uninvolved public during licensed or permitted space launch and reentry activities.

1. FAA Strategic Priority: Safer and Smarter

FY 2015 BLI	CIP #	CIP Name
		Currently no Capital programs are required to support this Metric.

- **Performance Metric 4:** Reduce Category A & B (most serious) runway incursions at a rate of no more than 0.395 per million operations, and maintain or improve through FY 2018.

FY 2015 BLI	CIP #	CIP Name
1A01A	S09.02-00	Runway Incursion Reduction Program (RIRP) – ATDP
2B01	S09.01-01	ASDE-X –Technology Refresh & Disposition
2B12A	S11.01-02	Runway Status Lights (RWSL) – Implementation – Phase 1
2B12B	S11.01-03	Runway Status Lights (RWSL) – Prototype Sustainment

- **Performance Metric 5:** Reduce risks in flight by limiting the rate of the most serious losses of standard separation to 20 or fewer for every thousand (.02) losses of standard separation within the National Airspace System.

FY 2015 BLI	CIP #	CIP Name
1A01H	M08.32-03	Operational Analysis and Reporting System (OARS)

- **Performance Metric 6:** Utilize Continuous Diagnostics and Mitigation (CDM) capabilities to continuously enhance our ability to prevent, deter, detect, and respond to cyber attacks against the FAA's infrastructure for 95% of non-NAS IP-based systems and pilot CDM capabilities on a NAS IP-based system.

FY 2015 BLI	CIP #	CIP Name
3A06	M31.00-00	Information Systems Security

- **Performance Metric 7:** Exceed Federal Emergency Management Agency continuity readiness levels by 5 percent. (FAA Business Planning Metric)

FY 2015 BLI	CIP #	CIP Name
3A04	C18.00-00	Command & Control Communications (C3)

2. FAA STRATEGIC PRIORITY: DELIVER BENEFITS THROUGH TECHNOLOGY AND INFRASTRUCTURE

NextGen gives us the opportunity to redefine the National Airspace System for the future and prove that we can deliver benefits to the users of the system. We also need to safely integrate new types of user technologies into the airspace, as well as rebalance existing services and modernize our infrastructure, which will enable us to reduce our costs and become more efficient in the long run.

- **Performance Metric 1:** Sustain adjusted operational availability at 99.7 percent for the reportable facilities that support Core airports.

FY 2015 BLI	CIP #	CIP Name
1A05C	G06N.01-06	Alternative Positioning Navigation and Timing (APNT)
2A03	A01.12-02	En Route Communication Gateway (ECG) – Technology Refresh
2A04	W02.02-02	NEXRAD – Service Life Extension Program (SLEP) Phase 1
2A05	F06.01-00	ARTCC Modernization
2A07	C06.01-00	Communications Facilities Enhancement – Expansion
2A07	C06.03-01	Communications Facilities Enhancement – Air/Ground Communications RFI Elimination – Technology Refresh
2A08	S04.02-03	Long Range Radar Improvements – Infrastructure Upgrades/Sustain
2A09	C01.02-04	Voice Switching and Control System (VSCS) – Technology Refresh – Phase 3
2A09X	C01.02-05	Voice Switching and Control System (VSCS) – Technology Refresh – Level of Effort
2A11	C21.02-01	Next-Generation VHF and UHF A/G Communication System (NEXCOM) – Segment 2 – Phase 1 of 2
2A11X	C21.02-02	Next-Generation VHF and UHF A/G Communication System (NEXCOM) – Segment 2 – Phase 2 of 2
2A14X	W10.01-02	Juneau Airport Wind System (JAWS) – Technology Refresh
2B02	W03.03-02	Terminal Doppler Weather Radar (TDWR) – Service Life Extension Program (SLEP) –Phase 2
2B03	A04.01-01	Standard Terminal Automation Replacement System (STARS) – Technology Refresh (TAMR Phase 1)
2B03X	A04.01-03	Standard Terminal Automation Replacement System (STARS) – Technology Refresh Future Phases
2B05	A01.11-01	Flight Data Input/Output (FDIO) Replacement
2B06	F01.02-00	ATCT/TRACON Replacement
2B07	F01.01-00	ATCT/TRACON Modernization
2B08	C05.02-00	Voice Switches – Terminal Voice Switch Replacement (TVSR) II
2B10	S03.01-09	Terminal Radar (ASR) Program – ASR-9 SLEP, Phase 2
2B11B	S03.02-06	Terminal Radar (ASR) Program – ASR-11 – Mobile Airport Surveillance Radar (MASR)
2B14	A03.05-01	Integrated Display Systems (IDS) – Replacement
2B14X	A03.05-02	Integrated Display Systems (IDS) – Replacement – Technology Refresh
2B15A	M07.04-02	Remote Monitoring and Logging System (RMLS) – Technology Refresh
2B15B	M07.05-01	Automated Maintenance Management System (AMMS)
2B16A	S03.01-08	Terminal Radar (ASR) Program – Mode S SLEP – Phase 2

2. FAA Strategic Priority: Benefits Through Technology

FY 2015 BLI	CIP #	CIP Name
2B16B	S03.01-11	Terminal Radar (ASR) Program – ASR-9 and Mode S SLEP – Phase 3 Planning
2B17	S13.01-01	Surveillance Interface Modernization (SIM)
2B19	S08.01-02	Precision Runway Monitor (PRM) – Replacement (PRMR)
2B20	W07.01-02	ITWS – Technology Refresh & Disposition
2C01	W01.03-01	Aviation Surface Weather Observation Network (ASWON) – Technology Refresh
2C03	F05.04-02	Alaska Flight Service Facility Modernization (AFSFM)
2D01A	N06.00-00	Very High Frequency Omni-Directional Range (VOR) Collocated with Tactical Air Navigation (VORTAC)
2D04A	N08.02-00	Runway Visual Range (RVR) – Replacement/Establishment
2D09	N04.04-00	Nav aids – Sustain, Replace, Relocate
2E01	F13.01-00	Fuel Storage Tank Replacement and Management
2E02	F12.00-00	FAA Buildings & Equipment Sustain Support – Unstaffed Infrastructure Sustainment
2E03A	M12.00-00	Aircraft Related Equipment (ARE) Program
2E04	F10.00-00	Airport Cable Loop Systems Sustained Support
2E05	C17.02-01	Alaskan Satellite Telecommunication Infrastructure (ASTI)
2E07	F11.01-01	Power Systems Sustained Support (PS3)
2E07X	F11.01-02	Power Systems Sustained Support (PS3) – Future Segments
3A03	M21.04-01	Logistics Center Support System (LCSS) – Segment 2
3A03X	M21.04-02	Logistics Center Support System (LCSS) – Technology Refresh
3A05	F24.01-02	Facility and Infrastructure Security Program – Two
3A10	M17.01-01	National Test Equipment Program
3A11	F31.01-01	Mobile Assets Management Program

- **Performance Metric 2:** Maintain an average daily capacity for Core airports of 58,166, or higher, arrivals and departures.

FY 2015 BLI	CIP #	CIP Name
1A01B	M08.28-00	System Capacity, Planning, and Improvements – ATDP
1A01C	M08.29-00	Operations Concept Validation and Infrastructure Evolution – ATDP
1A01D	M08.28-04	Major Airspace Redesign – ATDP
1A01E	M46.01-01	Strategy and Evaluation – ATDP
1A05A	G01S.02-01	ADS-B In Applications – Flight Interval Management
1A05B	G01A.01-01	Modern Procedures
1A05X	G06M.02-02	Wake Turbulence Re-Categorization
1A05X	G01A.02-02	Oceanic Tactical Trajectory Management
1A05X	G01A.01-07	NextGen Oceanic Capabilities
1A05X	G01A.01-06	Separation Automation System Engineering
1A06A	G06A.03-01	Terminal Flight Data Manager (TFDM)
1A06X	G02A.01-01	Surface Tactical Flow
1A06X	G02A.01-02	Surface Conformance Monitoring
1A07A	G05A.02-03	Flight Object

2. FAA Strategic Priority: Benefits Through Technology

FY 2015 BLI	CIP #	CIP Name
1A07B	G08M.01-01	International Harmonization Demonstration
1A07X	G05A.02-01	Common Status & Structure Data
1A07X	G05A.02-02	Advanced Methods
1A07X	G05M.02-01	Collaborative Information Management (CIM)
1A07X	G05A.02-08	Flight Object Exchange Services (FOXS)
1A07X	G05A.04-01	Dynamic Airspace
1A09A	G06N.01-02	Closely Spaced Parallel Runway Operations
1A09B	G06A.01-02	Wake Turbulence Mitigation for Arrivals (WTMA)
1A09X	G06N.01-01	Ground Based Augmentation System
1A10A	G04W.02-01	Weather Observation Improvements
1A10B	G04W.03-01	Weather Forecast Improvements
1A10C	G06A.02-01	Surface/Tower/Terminal Systems Engineering
1A10D	G06N.01-03	NextGen Navigation Engineering
1A10E	G01M.02-02	New ATM Requirements
1A10X	G05M.03-01	Information Management
1A12C	G05A.02-04	Concept Development for Integrated NAS Design & Procedure Planning
2A01	A01.10-01	En Route Automation Modernization (ERAM)
2A02A	G01A.01-05	ERAM System Enhancements and Technology Refresh
2A02B	G01A.01-04	ERAM Sector Enhancements
2A02X	G01A.01-08	ERAM System Enhancements Future Segment
2A12C	G05C.01-06	System Wide Information Management (SWIM) – Common Support Services Weather (CSS-Wx)
2A15B	G05A.01-01	Strategic Flow Management Application
2A15C	G05A.01-02	Strategic Flow Management Engineering Enhancement
2A16	G02A.01-06	Time Based Flow Management (TBFM) Work Package 3
2A16	G02A.01-07	Time Based Flow Management (TBFM) Technology Refresh
2A16X	G02A.01-08	Time Based Flow Management (TBFM) Work Package 4
2A19	G01C.01-05	Data Communications – Segment 1 Phase 1
2A19	G01C.01-06	Data Communications – Segment 1 Phase 2
2A19X	G01C.01-08	Data Communications – ATN Gateway
2B04A	A04.07-01	Terminal Automation Modernization – Replacement (TAMR) – Phase 3, Segment 1
2B04B	A04.07-02	Terminal Automation Modernization – Replacement (TAMR) – Phase 3, Segment 2
2B13	G03C.01-01	NAS Voice System – Segment 1/2
2D02	N03.01-00	Instrument Landing Systems (ILS)
2D04B	N08.03-01	Enhanced Low Visibility Operations (ELVO)
2D06	N09.00-00	Sustain Distance Measuring Equipment (DME)

2. FAA Strategic Priority: Benefits Through Technology

- **Performance Metric 3:** Achieve a NAS on-time arrival rate of 88 percent at Core airports.

FY 2015 BLI	CIP #	CIP Name
1A07X	G05A.02-09	Airspace Resource Management System (ARMS)
2A06	A05.01-12	TFM Infrastructure – Technology Refresh
2A06	A05.01-13	TFM Infrastructure – Field/Remote Site Technology Refresh
2A10	A10.03-00	Advanced Technologies and Oceanic Procedures (ATOP)
2A13A	G02S.03-01	ADS-B NAS Wide Implementation – Baseline Services and Applications (Service Volume)
2A13X	G02S.01-02	ADS-B NAS Wide Implementation – Future Segments
2A15A	G05A.05-02	Collaborative Air Traffic Management Technologies (CATMT) – Work Package 3
2A15X	G05A.05-03	Collaborative Air Traffic Management Technologies (CATMT) – Work Package 4
2D10	N04.02-00	Visual Nav aids – Replace Visual Approach Slope Indicator (VASI) with Precision Approach Path Indicator (PAPI)
4A08	M03.02-00	CIP Systems Engineering & Technical Assistance – MITRE

- **Performance Metric 4:** Improve NAS energy efficiency by 16% as measured relative to the base year of FY 2001 (revenue ton per kilometer).

FY 2015 BLI	CIP #	CIP Name
1A08	G06M.02-01	Environmental Management System & Noise/Emission Reduction

- **Performance Metric 5:** Optimize airspace and Performance Based Navigation (PBN) procedures to improve efficiency an average of 10 percent across Core airports by 2018. (FAA Business Planning Metric)

FY 2015 BLI	CIP #	CIP Name
1A12A	G05N.01-01	NextGen Performance Based Navigation (PBN) – Metroplex Area Navigation (RNAV)/Required Navigation Performance (RNP)
2D01B	N06.01-01	VOR – Minimum Operating Network (MON) Implementation Program

- **Performance Metric 6:** Improve throughput at Core airports during adverse weather by 14 percent by 2018. (FAA Business Planning Metric)

FY 2015 BLI	CIP #	CIP Name
2A17	G04W.03-02	Weather Forecast Improvements – NextGen Weather Processor (NWP), Work Package 1

- **Performance Metric 7:** Organizations throughout the agency will continue to implement cost efficiency initiatives. FY 2014 Target: 90 percent of targeted savings. (FAA Business Planning Metric)

FY 2015 BLI	CIP #	CIP Name
1A01G	M08.46-01	Unified Contracting System (UCS)
1A01I	S14.01-01	Next Generation Surveillance and Weather Radar Capability (NSWRC)
1A01X	M08.48-01	Strategic Initiatives Analysis and Validation
1A02 / 1A03	F14.00-00	System Support Laboratory Sustained Support

2. FAA Strategic Priority: Benefits Through Technology

FY 2015 BLI	CIP #	CIP Name
1A04	F16.00-00	William J. Hughes Technical Center Building and Plan Support
1A09X	G03M.04-02	Enhanced Service Small Communities (ESSC)
1A11	G03M.02-01	NextGen Laboratories at WJHTC
1A12B	G05N.01-02	NextGen Performance Based Navigation (PBN) – NAV Lean
2A12A	G05C.01-01	System-Wide Information Management (SWIM) – Segment 1
2A12B	G05C.01-04	System Wide Information Management (SWIM) – Segment 2A
2A12X	G05C.01-05	System-Wide Information Management (SWIM) – Segment 1 Technology Refresh
2A12X	G05C.01-08	NextGen – System-Wide Information Management (SWIM) – Segment 2B
2B11A	S03.02-05	Terminal Radar (ASR) Program – ASR-11 – Technology Refresh, Segment 2
2B11X	S03.02-07	Terminal Radar (ASR) Program – ASR-11 – Technology Refresh, Segment 3
2D08	A14.02-02	Instrument Flight Procedures Automation (IFPA) – Technology Refresh, Segment 1
2D08X	A14.02-03	Instrument Flight Procedures Automation (IFPA) – Technology Refresh, Segment 2
2E06	F26.01-01	Decommissioning – Real Property Disposition
2E08	F13.04-02	Energy Cost Savings – Energy Management and Compliance
3A01	F13.02-00	Environmental Cleanup / HAZMAT
3A13	M20.01-04	National Airspace System (NAS) Training - Equipment Modernization – Training Simulators – Tower Simulation System
3B01	F18.00-00	Aeronautical Center Infrastructure Modernization
3B02	M10.00-00	Distance Learning
4A01A	M03.03-01	CIP Systems Engineering & Development Support – SE2020
4A01B	M08.01-00	Provide ANF/ATC Support (Quick Response)
4A02	M08.06-00	Program Support Leases
4A04	F19.00-00	Aeronautical Center Lease
4A05A	M22.00-00	NAS Integration Support Contract (NISC)
4A05B	M03.01-02	Configuration Management Automation (CMA)
4A06	M02.00-00	Technical Support Services Contract (TSSC)
4A10	G08M.04-01	Cross Agency NextGen Management

- **Performance Metric 8:** Maintain 90 percent of major system investments within 10 percent variance of current baseline total budget at completion. (FAA Business Planning Metric)

FY 2015 BLI	CIP #	CIP Name
1A01F	M47.01-01	Dynamic Capital Planning
4A07	M08.14-00	Resource Tracking Program (RTP)

3. FAA STRATEGIC PRIORITY: ENHANCE GLOBAL LEADERSHIP

Aviation is a global industry. We have to continue our heritage as world leaders in aviation and set the safety standard for others to measure against. We need to be at the table to shape international standards to improve aviation safety and efficiency around the world.

4. FAA STRATEGIC PRIORITY: EMPOWER AND INNOVATE WITH THE FAA’S PEOPLE

The FAA’s employees are the ultimate driver behind our success, and we need to have the best and the brightest talent with the appropriate leadership and technical skills to transform the FAA and the aviation system.

- **Performance Metric 1:** Achieve a total workplace injury case rate of no more than 1.88 per 100 employees for the FAA.

FY 2015 BLI	CIP #	CIP Name
2B09	F13.03-00	NAS Facilities OSHA & Environmental Standards Compliance

- **Performance Metric 2:** Achieve a 90% success rate in the areas of financial management and human resources management: Receive annual Unqualified Audits with no material weaknesses; Maintain the competitive status of all FAA employees within the federal personnel system; Improve the “effective leadership” index score on the OPM Employee Viewpoint survey by 8 percent; Improve the “talent management” index score on the OPM Employee viewpoint survey by 8 percent. (FAA Business Planning Metric)

FY 2015 BLI	CIP #	CIP Name
2D11	N12.03-01	GPS Civil Requirements
4A03	M05.00-00	NAS Regional/Center Logistics Support Services