

**STATEMENT OF
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**BEFORE THE COMMITTEE ON APPROPRIATIONS, SUBCOMMITTEE ON
TRANSPORTATION, HOUSING AND URBAN DEVELOPMENT, AND RELATED
AGENCIES**

MAY 12, 2011

Good morning, Chairman Murray, Ranking Member Collins, and Members of the Subcommittee. Thank you for the opportunity to discuss the Administration's Fiscal Year (FY) 2012 budget request for the Federal Aviation Administration (FAA).

FY 2012 Budget

The FAA's mission is to provide the safest, most efficient air transportation system in the world. We have proudly delivered on this promise for over 50 years, providing the world's leading aviation system and setting an unparalleled standard for safety and efficiency that is emulated globally. Since 2001, we have managed over 600 million airport operations, including more than 93 million successful flights on U.S. commercial aircraft, transporting over 6.5 billion passengers safely to their destinations. Commercial aviation fatality rates are at historic lows and the number of commercial air carrier accidents has decreased 83 percent since the mid-90s. In the last 10 years, 16 new runways have opened at large commercial airports. And we've put in place financial systems that have helped us better account for and save taxpayers' money. Despite our many successes, there is still more to be done.

The demand for FAA services has never been more complex or comprehensive. We are heading into a period of unprecedented challenge as we pilot the future of aviation into our skies and into space. We must work to stay ahead of changing technological, economic, social, environmental and energy needs of both our nation and our global partners. We are confident that the President's 2012 budget request will enable us to take aviation to the next level of safety, while providing the public, U.S. business, and our international partners with secure, convenient, and environmentally sustainable air travel.

Our vehicle for this transformation is the Next Generation Air Transportation System (NextGen), which will enable increased safety, capacity and efficiency while providing for a cleaner environment and bolstering America's continued economic growth. The next fifteen years promise to be a pivotal time in the history of air transportation, as the face of aviation is transformed around the world. Parts of NextGen are already on the ground and in cockpits, and are improving air travel for passengers and aviation professionals today. From flight decks to control towers, our system is already changing, delivering access through innovation. As we change, FAA remains deeply committed to providing the safest, most advanced and efficient aviation system in the world, and to ensuring air transportation is safe and efficient wherever U.S. citizens travel.

We must continue to fulfill our mission for the flying public, delivering a safe and efficient system that continues to set the global standard. We are working to promote an increased sense of professionalism and accountability, while fostering a culture of vigilance and safety. We also aim to support aviation's crucial role in our Nation's economic recovery, building on today's successes to meet tomorrow's growing demands. That means delivering on the promise and benefits of NextGen, offering economic and environmental efficiencies and technologies that support America's ability to shape international aviation standards and development around the world.

Operations

The FY 2012 request of \$9.8 billion funds the development of the performance-based navigation routes and procedures necessary to support NextGen, increased safety staffing, enhanced Information System Security protection, implementation of environmental and energy technologies, and appropriate staffing to improve safety and hazardous materials compliance. The request also supports annualization costs of new hires, adjustments for inflation, and maintenance and operating costs of National Airspace System (NAS) systems and equipment.

The FY 2012 request maintains our critical Aviation Safety inspector staff changes from recent years, while further increasing overall Aviation Safety staffing by 178 positions. The request, recognizing increasing flight operations and complexity, adds 100 new safety inspectors to

implement new flight procedures, operation methods, airmen qualifications, and Air Carrier Evaluation Program functions. These inspectors will also oversee the conformity of new designs and the production of new aircraft and aircraft parts. We must be responsive to innovation in our nation's market place while ensuring that safety always remains our top priority. We must certify new aircraft and new equipment as expeditiously as possible so as not to become a bottleneck in the industry's assembly line. The FY 2012 request enables FAA to perform additional rulemaking, certification, and outreach activities necessary to move NextGen forward.

As NASA retires the Space Shuttle, it will begin to utilize commercial space transportation systems to access the International Space Station (ISS). The FAA is solidifying our relationships with the Air Force and with NASA to ensure a seamless transition to a commercial space transportation model that provides access to the International Space Station (ISS) as we focus on the development of commercial human spaceflight systems.

This change increases the workload of FAA's Office of Commercial Space Transportation. In response, our FY 2012 budget includes \$5 million for the FAA Commercial Spaceflight Technical Center at the Kennedy Space Center in Florida and includes \$1.3 million to begin development and implementation of safety requirements for commercial human space flight. We also request \$5 million to establish a Low-Cost Access to Space Incentive program.

We must protect against persistent and organized threats that beset FAA systems every day, as hackers launch attacks that may compromise service to our users. We must also improve safety standards and compliance for hazardous materials transportation, while meeting an increased requirement for security investigations of new hires and existing staff. The budget request includes the enhancement of FAA's Cyber Security Management Center to increase information system security protection and increased staffing to more effectively support our intelligence activities and oversight of hazardous materials in air commerce.

The FY 2012 Operations request includes \$45 million in new cost savings. In the Air Traffic Organization, we expect the Flight Services contract to save FAA \$1.9 billion over its thirteen year lifespan and \$8 million in FY 2012. The Aviation Safety Organization expects to achieve

\$2.4 million in administrative efficiencies. Finally, our budget request incorporates base transfers that better align our resources with organizational functions.

Facilities & Equipment (F&E)

Our FY 2012 budget request of \$3.1 billion allows FAA to meet the challenge of improving the capacity and safety of the current NAS while keeping our comprehensive modernization and transformation efforts on track.

To spur job growth and initiate sound multi-year investments, the President's Budget includes a \$50 billion boost above current law spending for roads, railways and runways. As part of this initiative, our F&E request includes \$250 million in mandatory General Fund appropriations that will be used to advance NextGen and make near-term improvements in FAA's air traffic control infrastructure. \$200 million will be used to accelerate applied research, advance development, and implement engineering solutions for NextGen technologies, applications, and procedures while \$50 million will be used to upgrade existing capital infrastructure such as power systems and air traffic control centers and towers.

The F&E NextGen portfolio of \$1.14 billion in FY 2012 will continue our ongoing NextGen modernization activities. This includes nation-wide Automatic Dependent Surveillance – Broadcast (ADS-B) deployment, the data link communications services program, NextGen future facilities investment planning, and follow-on En Route Automation Modernization (ERAM) data side-position development for future NextGen capabilities.

The remainder of our investment – representing \$2 billion – will be in legacy areas, including our extensive infrastructure, power systems, information technology, navigational aids, and weather systems. In FY 2012, FAA plans to award four tower construction contracts. Funding is also requested to replace and upgrade aging aerospace medical equipment needed to perform research in pilot certification and performance, aircrew health, atmospheric and radiation risk data, and other medical areas to keep FAA in the forefront of aeromedical research.

Research, Engineering, and Development (RE&D)

The FY 2012 request of \$190 million supports FAA's continued work in both NextGen and other research areas such as fire research and safety, propulsion and fuel systems, advanced materials research, aging aircraft, and environment and energy.

The request supports our research to enable the use of "drop in" sustainable jet fuels for commercial aviation, reinforcing American leadership in clean technologies and enhancing energy supply security. It also supports developing alternatives to leaded aviation gasoline to lessen general aviation environmental impacts. Other environment and energy investments (\$35.8 million including NextGen) support a range of research activities, from improved science and modeling capabilities that characterize and quantify aviation's environmental impacts to maturing certifiable clean and quiet aircraft technologies via the continuous low energy, emission and noise (CLEEN) program and other vehicles.

FAA must meet our nation's growing need for Unmanned Aircraft Systems (UAS). Our RE&D request continues to support this critical area, providing \$3.5 million to develop minimum performance requirements for Ground Control Stations and to revise standards and guidance that address UAS crew resource management and training for both pilots and crewmembers.

Grants in Aid for Airports (AIP)

Airports remain the critical foundation of our nation's aviation system infrastructure. Our FY 2012 request provides the funding needed to ensure safety, capacity, and efficiency at our nation's airports through a combination of continued grant funding and an increase in Passenger Facility Charges (PFCs). Our FY 2012 request totals \$5.5 billion for the Airport Improvement Program, which includes \$2.4 billion from the Airport and Airway Trust Fund and \$3.1 billion in mandatory General Fund resources. The FY 2012 request will continue our focus on safety-related development projects, including runway safety area improvements, runway incursion reduction, aviation safety management, and improving infrastructure conditions.

The budget proposes to lower funding for ongoing airport grants to \$2.4 billion by eliminating guaranteed funding for large and medium hub airports. The proposal is consistent with the

recommendation of the President's National Commission on Fiscal Responsibility and Reform to eliminate grants to large and medium hub airports. Our budget continues to support smaller commercial and general aviation airports that do not have access to additional revenue or other sources of capital. The reduction in AIP funding for larger airports is premised on an increase to Passenger Facility Charges (PFCs) of \$4.50 to \$7.00 per enplanement, providing these airports greater flexibility to generate their own revenue.

In addition, FAA requests a one-time appropriation of \$3.1 billion in mandatory General Fund resources for the Grants-in-Aid program. While regular AIP eligibility will be suspended for large and medium-hub airports, eligible airports in all size categories will be able to compete for the \$3.1 billion. Most of this funding will be used for runway construction and other airport improvement projects aimed at increasing overall system efficiency in the future.

Our request also includes \$101 million for Personnel & Related Expenses to support Safety Management Systems (SMS) training in the Office of Airports; improved joint use agreements between DOD and airports; data trend analysis; engineering support; field operations program / portfolio management/inspectors; and Information Systems Security (ISS) and privacy.

The budget also provides \$29.3 million for Airport Technology Research to support enhanced safety and pavement research efforts and conduct noise studies. In addition, the budget provides \$15 million for Airport Cooperative Research.

The American Recovery and Reinvestment Act provided resources to preserve and enhance safety, capacity and access while maximizing efficiency and operational performance. The FAA obligated 100 percent of the ARRA funds available for airport grants ahead of schedule. Work has been completed on 98 percent of 372 airport grant projects at 334 airport locations nationwide. We have improved runways and taxiways, modernized terminal buildings, and provided aircraft rescue and firefighting improvements at airports that serve millions of passengers every year. Our commitment to successfully implementing ARRA established FAA's place as a recognized leader in the Department of Transportation's (DOT) efforts to bring Americans back to work.

NextGen Implementation

The FY 2012 budget request reflects FAA's ongoing commitment to the implementation and deployment of innovative NextGen solutions. The application of these critical twenty-first century technologies represents a pivotal shift that will transform aviation. NextGen is already yielding immediate results for a safer America while working to maximize efficiencies to meet future demands. The investment in NextGen will reduce taxpayer and industry costs while safeguarding our world's precious environment and resources. We are working in cooperation with industry toward a shared vision, leveraging powerful technologies and setting new standards for the future of global aviation.

NextGen is our evolutionary blueprint for modernizing air transportation with revolutionary technologies. NextGen represents a wide-ranging transformation of the entire national air transportation system to meet future demand and support the economic viability of aviation while improving safety and protecting the environment. The application of critical twenty-first century solutions is already transforming aviation from a ground-based system of air traffic control to a satellite-based system of air traffic management. We continue to work in full partnership with industry, other agencies and departments, and our labor groups to achieve a shared vision, leveraging powerful technologies and setting new standards for the future of global aviation.

Our FY 2012 budget request bolsters FAA's NextGen investment to \$1,237 million, distributed among F&E programs (\$1,135 million), Research, Engineering & Development (\$77 million), and Operations activities (\$25 million).

The FAA continues to support RTCA NextGen Mid-Term Implementation Task Force recommendations. Our FY 2012 budget request further emphasizes our commitments in the areas of surface, metroplex, runway access, cruise, as well as some cross-cutting recommendations. As FAA moves forward on NextGen implementation, we will continue to evaluate and adjust our strategies, priorities and deployment timelines in full collaboration with aviation stakeholders.

We have also been working hard at our nation's airports to reduce delays and improve the environment with NextGen initiatives that help curb fuel burn and emissions by improving

surface efficiencies. We move forward with these initiatives knowing we might have to make adjustments due to new information, program interdependencies, realignment of priorities and other changes that can't always be anticipated as we pursue our mid-term operational vision.

FY 2011 promises to be every bit as productive as last year. Design and implementation teams will focus on streamlining arrival and departure traffic at clustered metroplex airports. Our work on Data Communications is setting the stage for the delivery of a NextGen technology that the 2009 RTCA task force identified as a priority. And the report of our ADS-B In rulemaking committee, due in September, will give us an indication of which cockpit-based ADS-B applications may be most important to the aviation community.

Our FY 2012 budget includes \$9 million in the Operations account for thirty new Aviation Safety staff to support the certification and oversight of NextGen systems and procedures. They will play a pivotal role in the implementation of several NextGen initiatives including efficient aircraft designs, revolutionary cockpits, data link communications, new interactive instrumentation, Safety Management System (SMS), and Aviation Safety Information Analysis and Sharing (ASIAS). This will enable AVS to review, process, and certify new NextGen-related technology applications from aircraft manufacturers and operators, as well as evaluate the safety aspects of changes in the airspace system proposed by the ATO. We also are striving to streamline our own internal processes to ensure that the NextGen capabilities emerging from our test beds and research centers begin producing operator benefits as quickly and safely as possible. The new policies, standards, and guidance produced by these additional staff will facilitate the transition of maturing NextGen research and development towards implementation.

ADS-B is a proven centerpiece component of NextGen, evolving from a radar-based system to a sophisticated satellite-derived aircraft location data system. Future ADS-B applications will provide surveillance, like radar, but will offer greater precision and additional services, such as weather and traffic information for pilots. In 2010, we successfully integrated ADS-B into all four air traffic control automation platforms at key sites across the country. Our ADS-B technology deployed in the Gulf of Mexico has opened up 250 thousand square miles of new, positively controlled airspace in the Gulf, in an area where radar cannot reach.

We cleared the way to begin integrating ADS-B into FAA air traffic control facilities nationwide, and to train both our workforce and users. We have issued our ADS-B Out rule requiring aircraft operating in most controlled airspace to be equipped to broadcast their position to the ADS-B network by the start of 2020. This rule allows manufacturers to start mass-producing certified ADS-B avionics, which we believe will drive prices down, addressing a key concern of the operators.

Our budget request includes \$285 million for our continued rollout of ADS-B. This will ensure that our deployment of the ground infrastructure that will support ADS-B surveillance remains on time and on budget. We are installing more than 800 ground transceiver stations nationwide, and 330 ground transceiver stations have been installed to date. Of these, 260 are operationally providing services in the NAS. FAA plans to complete the ADS-B network in 2013.

The budget designates \$200 million from the president's \$50 billion "Up-Front Boost" in support of NextGen research, so we can stay on the forefront of the technology. We have enjoyed success in our early efforts to leverage surface data sharing in support of collaborative surface traffic management at select locations. We must continue developing innovative programs to manage air traffic and provide better weather data to general aviation and commercial carriers alike.

The FAA has already produced a significant number of Performance Based Navigation (PBN) routes and procedures, exceeding our fiscal year 2010 goal. Our FY 2012 request also includes \$26 million to improve performance based GPS-based precision approach and departure procedures, better known as Area Navigation/Required Navigation Performance (RNAV-RNP), at airports across the country. Performance-based navigation offers our airline industry better routes, added capacity, improved on-time performance and lower fuel bills. Our country benefits from reduced airspace congestion, more efficient air travel, reduced emissions and a reduced dependency on oil.

There is a strong business case for NextGen that many companies have already embraced. They are already seeing fuel savings. Fuel represents about 40 percent of an airline's total expenses, on average, and the cost of jet fuel has increased significantly in the last six months. Southwest

Airlines started using the precision procedures at a dozen airports this year and estimates it will save \$60 million per year in fuel when it uses NextGen arrival procedures at airports across the country. Helicopters in the Gulf of Mexico have benefited from ADS-B technology, saving up to ten minutes and 96 pounds of fuel each flight. Airlines flying over the Pacific are taking advantage of a combination of improved capabilities to save 200 to 300 gallons per flight. This represents a significant return on their investment, while justifying ours.

Alaska Airlines has long been a NextGen pioneer and is the only U.S. carrier to fully equip its entire fleet for high performance GPS-based procedures. This allows aircraft to navigate precisely through mountainous terrain in low visibility conditions. The company estimates it would have cancelled 729 flights last year into Juneau alone due to bad weather if it were not for the GPS-based approaches. Alaska Airlines saved \$7.5 million last year by making these flights, safely transporting passengers to their respective destinations without diversions or ground holds.

The FAA will maintain an ongoing focus on top priorities for the development and implementation of NextGen. The detailed planning that supports NextGen -- including the National Airspace System Enterprise Architecture (EA) and the NextGen Segment Implementation Plans (NSIP) -- enable cost effective decisions for NextGen projects. Cross program dependencies are captured on EA Roadmaps, which assist planners in assessing impacts and developing alternative plans. The NSIP documents linkages among programs and promotes coordination and risk management to support cost-effective investments in NextGen.

As we move forward with NextGen, our goal is to reach the next level of safety and prepare our workforce for the future. We will continue to work closely with industry to implement new technologies and procedures that are sustainable. And we want to work with other countries to establish uniform standards around the globe.

The Airport and Airway Trust Fund

The Airport and Airway Trust Fund provides all of the funding for FAA's airport improvement, facilities and equipment, and research and development activities, as well as a share of FAA's operations. As of the end of last fiscal year, the Trust Fund had a cash balance of approximately \$9.4 billion, of which \$770 million remains uncommitted. The AIR-21 formula for calculating

Trust Fund appropriations safeguards the future solvency of the Trust Fund by ensuring that expenditures will not exceed projected revenue. If revenue forecasts are accurate, the uncommitted balance will remain relatively stable for FY 2012.

Reauthorization

We are grateful for the considerable efforts Congress has made to prepare an FAA Reauthorization Bill. As you already know, the current and eighteenth extension expires on May 31. The budgetary and operational uncertainties of repeated extensions make running the FAA much more difficult, which makes the passage of a multi-year bill vital. Most notably, delaying a multi-year reauthorization has produced several hurdles for managing and funding the Airport Improvement Program.

While the Administration supports the enactment of a multiyear reauthorization bill, the funding levels in the House-passed bill for FAA operations and air traffic modernization represent significant reductions from levels proposed by the Administration. While we will never reduce our commitment to safety, if funding were appropriated at the levels proposed in the bill, the safe and efficient movement of air traffic in the air and on the ground would be degraded - today and in the future. In addition, the administrative funding levels for the Airport Improvement Program in the House bill, if enacted, will seriously undermine the Administration's ability to execute congressionally mandated airport programs.

The Administration looks forward to working with Congress to craft final legislation that will provide adequate funding authorization for infrastructure investment, enhance the efficiency and safety of the national airspace, accelerate and streamline implementation of NextGen, and advance research and sustainable technologies to improve efficiencies and reduce environmental impacts.

Safety

Safety is FAA's primary mission and our 2012 budget request reflects this most important of strategic objectives. We have identified and mitigated many of the major risks in the system and we will continue to act on the remaining safety challenges and keep air travelers safe.

Approximately 49 percent of our FY 2012 budget will be required to maintain and improve the agency's safety programs. Our day-to-day operations in the four key programs of Air Traffic, Aviation Safety, Airports, and Commercial Space Transportation contribute toward a reduction in air transportation related injuries and fatalities.

The FAA continues to address concerns over capacity and safety with increased vigilance and professionalism. The flying public must have the highest confidence that the airplanes they board are properly designed, produced, operated, and maintained. They must know that their pilots and air traffic controllers are qualified, trained for their mission, and fit for duty. This year we continue to take aviation safety to a new level, making aggressive effort to take advantage of the latest research on fatigue to create a rule on pilot flight, duty and rest. Our landmark proposal combats fatigue among commercial pilots by setting new flight time, duty and rest requirements based on fatigue science. Additional rulemaking proposals will be put forward this year, such as redefining requirements for pilot certification and qualifications, flight crewmember training, leadership and professional development.

The FAA's implementation of a Safety Management System (SMS) is a critical component of our overall approach to safety. SMS is a systematic and continuous management process based on proactive identification of hazards and analyses of their risk. SMS gives us the wherewithal to gather information that takes safety to the next level. Our Aviation Safety Information Analysis and Sharing (ASIAS) team gathers crucial safety information from various data sources and uses sophisticated analysis tools to detect trends, identify precursors, and assess risks. We are pushing the science of advanced data analysis, developing cutting edge tools to find emerging threats, as well as identifying previously undiscovered risks that are buried in terabytes of safety information.

Aviation safety inspectors, engineers and other staff increases are key to leveraging standardized SMS processes to implement an integrated, risk-based method of oversight while supporting FAA's efforts in rulemaking, certification, and outreach activities that will move NextGen forward.

The FAA will continue to work on focus areas for reducing aviation related injuries and fatalities, such as the air tour industry and in Helicopter Emergency Medical Services (HEMS). The HEMS weather tool will be enhanced in 2012 to provide additional altitude and location specific data to increase safety. The FAA will collaborate with NASA to develop measurement technology and forecast capability of the high ice water content conditions that represent a critical safety hazard.

The FAA places a high priority on initiatives to reduce runway incursions and excursions. We continue to implement ambitious training programs for pilots, controllers and airport operators. We will implement solutions through technologies and advanced programs such as Runway Status Lights, Airport Surface Detection Equipment, Engineered Materials Arresting Systems, improved runway safety areas, and others. The Runway Incursion Reduction Program remains a catalyst for acquisition of promising safety technologies that have reached a level of maturity appropriate for transition and implementation into the NAS.

The FAA's mandate for aviation safety includes leading the world safely into an exciting new era where international spaceports, commercial space transportation and orbital tourism are already becoming a reality. Last year, there were four licensed launches, bringing the overall total to over 200, without any fatalities, serious injuries or property damage to the public. Our FY 2012 budget request allows us to maintain a spotless industry record for safety in the rapidly developing industry of commercial human space flight. The FAA will develop safety requirements, policies, processes and procedures to address and safeguard this burgeoning industry.

The FAA's 2012 budget supports continued aviation safety research, focusing on critical areas such as unmanned aircraft systems, fire and structural safety, human factors, and airworthiness. It further supports enhanced safety and pavement airport technology research. Weather systems research continues in naturally occurring atmospheric hazards including turbulence, severe convective activity, aircraft icing, and restricted visibility.

State of Good Repair

As good stewards of our aviation system, we apply asset management principles proactively to maintain and modernize our airport runways. We recognize the safety benefits of ensuring that pavement, marking and lighting at airports identified in the National Plan of Integrated Airport Systems (NPIAS) meet current safety and design standards.

Airport infrastructures, particularly airfield facilities, are exposed to constant heavy use and harsh environmental conditions. Runways, taxiways, and aprons are designed to withstand the heavy equipment that operates on them, but even so these facilities require frequent maintenance and rehabilitation in order to remain in good working condition. Runways and taxiways must be kept clear of snow, ice, and ponding water that can jeopardize aircraft directional control or braking action. Chemicals and plowing, as well as freeze-thaw cycles, all take a toll on runways, taxiways, and other paved areas. The smallest bit of broken asphalt or concrete can represent a major safety hazard to aircraft.

We have had a target to ensure that 93 percent of runways are in good condition for the past several years, and we have exceeded that goal, most recently reaching 97.2 percent. AIP grants and PFC funding will continue to support this goal by funding airport pavement and lighting system rehabilitation projects, treatments to minimize hydroplaning in wet conditions, obstruction removal in runway approach zones, perimeter fencing to prevent wildlife entry, and aircraft firefighting equipment. By continuing to surpass this target, we are not only achieving the goal of a state of good repair, but we are also contributing to our overall primary goal of safety.

Economic Competitiveness

NextGen remains our most critical investment to ensure our economic competitiveness on the global market. NextGen involves the total overhaul of our National Airspace System to make air travel more convenient and dependable while ensuring our stakeholders have the safest and most secure flights possible. Technological advancement and integration of new systems, new procedures, aircraft performance capabilities, engines, airframes, renewable fuel technologies, new supporting infrastructure, and new ways to do business as the Air Transportation System

will keep the U.S. globally competitive. We have partnered with industry in our CLEEN technology program to develop new technologies to reduce aircraft noise, emissions, and fuel burn, and to advance sustainable alternative aviation fuels.

The NextGen portfolio of investments focuses on the implementation and integration of key NextGen transformational technologies. The capabilities these technologies provide begin a shift of information flow from the ground to the cockpit. These include: Automatic Dependent Surveillance-Broadcast (ADS-B), System Wide Information Management (SWIM), Data Communications, NextGen Network-Enabled Weather (NNEW), Collaborative Air Traffic Management Technologies (CATMT), Time-Based Flow Management (TBFM) and NAS Voice Switch (NVS).

Our NextGen efforts further include supporting Performance-Based Navigation (RNP/ RNAV) between select metropolitan areas. Deployed over a three-to-four year period, these high-altitude performance-based routes will provide increased efficiency and flexibility to the aircraft using them, as well as significant savings in fuel costs and usage.

We have already seen the benefits of implementing ADS-B in the Gulf of Mexico. For one major helicopter operator in the Gulf, only fourteen percent of their flight hours in 2009 were flown by instrument flight rules (IFR). But in 2010, the first full year ADS-B was available, the percentage went up to nearly 21 percent. And just in the first two months of this year, 36 percent of flight hours were IFR. This means that this very important airspace is more accessible, more of the time thanks to NextGen innovation.

NextGen will also provide numerous benefits for the general aviation community by facilitating better access to airports, and providing more complete weather and traffic information. In addition, even those aircraft that are not fully equipped will benefit from the improved traffic flow that NextGen will achieve.

Implementation of NextGen technologies and capabilities, with the resulting benefits to economic growth in large and small communities around the nation, is essential if the U.S. is to

maintain its global aviation leadership. Timely and effective progress on NextGen helps the U.S. aviation sector sustain this position.

Environmental Sustainability

Environmental protection and addressing the energy challenge are vital elements to sustaining the future of United States air transportation viability and global leadership. We are continuing efforts to reduce greenhouse gas emissions, improve water use efficiency, prevent pollution, and improve building energy consumption.

Environmental pressures on the national and international aviation system will continue to increase as growth in aviation activity returns. FAA supports DOT's environmental sustainability outcomes to reduce carbon emissions, improve energy efficiency, and reduce dependence on oil. We are reducing transportation-related pollution and impacts on the ecosystems while increasing the use of environmentally sustainable practices in the transportation sector.

We are committed to managing aviation's growth while reducing the negative impacts of aviation noise and air emissions. Through increased efforts on the Continuous Lower Energy, Emissions, and Noise (CLEEN) initiative, FAA will develop and mature clean and quiet technologies and advance alternative fuels. The Commercial Aviation Alternative Fuel Initiative (CAAFI) is moving forward to qualify and approve new aviation alternative fuels for operational use. And by the end of this year we should have approval for a renewable biofuel for commercial aircraft made from plants, algae or other sustainable sources. These alternative jet fuels are "drop-in fuels." There's no need to change the engines or equipment. The source would be renewable and would reduce greenhouse gases.

Sustainable alternative jet fuels offer benefits for both our environment and our economy. They can help stabilize supply and the cost volatility in the jet fuel market. In 2010, U.S. airlines spent \$36 billion on jet fuel. This represents \$21 billion more than in 2000 even though the airlines consumed three billion gallons less.

The budget request supports identifying and exploring advances in communication, navigation and surveillance technology to advance aircraft arrival and departure, surface movements, and en

route/oceanic procedures for reduced noise, fuel burn, and engine emissions. It also supports updating and enhancing the Voluntary Airport Low Emissions (VALE) Program so that airports located in non-attainment or maintenance areas for National Ambient Air Quality Standards will have continued opportunities to reduce air emissions.

In addition, we are working to mitigate noise impacts for thousands of people exposed to a day/night sound level (the energy-averaged sound level metric used by the aviation industry to determine the impact of noise) equal to or greater than 65 decibels through ongoing noise compatibility efforts. These efforts include the purchase and relocation of residences and businesses, the soundproofing of residences and buildings used for educational or medical purposes, the purchase and installation of noise barriers or monitors, recommended land use planning, and public outreach.

Organizational Excellence

The FY 2012 budget request provides for a motivated, well-trained, and dynamic workforce that possesses the vital resources and reliable data necessary to support the continued success of FAA's mission for safety and efficiency. It further includes enhanced cost control measures to ensure savings that can be effectively managed to fund mission critical initiatives.

One of the key challenges we face is building the workforce of the future to meet the transition to NextGen. Effecting this transition will involve a systematic approach to getting the right number of people with the right skills, experience and competencies in the right jobs at the right time.

We will continue to ensure adequate numbers of safety staff. Workforce planning for mission critical and key occupations will benefit our managers as they make staffing decisions to achieve program goals based on a rigorous analysis of their organization's activities, workforce and expected technological advances. The flying public will benefit from a better prepared and well trained workforce.

The FAA is delivering programs that build leadership capabilities, support professional development and promote continuous learning at executive, manager and employee levels. The development of our executive corps is grounded in creating a culture of accountability and

professionalism. Building stronger leadership within the agency helps us to achieve strategic goals and manage people and resources effectively while driving continuous improvement.

Part of our organizational excellence goal is to protect agency IT assets from cyber-attacks, to ensure alignment between IT investment and agency business needs, and provide certain enterprise-wide shared services. The FAA's Cyber Security Management Center (CSMC) is a core component of our overall Information Security Services. The CSMC is tasked with protecting our information infrastructure using advanced cyber defense strategies. The CSMC works to enhance our architecture to include cyber security, to harden individual systems and networking elements, improve recover rate times, and enhance boundary protection by completing remediation of vulnerabilities, improved information sharing, and systemic monitoring of systems.

The budget request supports activities to remediate moderate vulnerabilities identified for our information systems that support Human Resources, Finance, Security/Safety, and Air Traffic services. In the last few years, we have focused on high risk vulnerabilities. Now the focus is on remediating the moderate vulnerabilities. The request will cover contracts that will conduct information system assessments, certifications, recertifications, and risk mitigation activities. The funding will allow FAA to handle risks to its information systems sooner, which will save out-year dollars and prevent higher and more costly system vulnerabilities and remediations.

The FY 2012 budget request supports continued efforts to manage our acquisitions responsibly so we deliver programs on time and on budget. In addition, we are implementing a Real Property Asset Management Plan to ensure timely disposition of assets are measured by the number of days to process inactive assets. Since 2000, FAA has removed more than \$341 million in real property assets from our portfolio.

Conclusion

Despite a challenging economic environment, 713 million passengers flew on U.S. airlines in 2010. We anticipate stronger growth this year, with a projected increase of 3.5 percent. Economic indicators project that we are rapidly approaching a historic milestone of carrying one billion passengers on U.S. airlines annually within the next decade. To offer additional

perspective, that increase represents an additional 300 million passengers per year, roughly equal to the entire population of the United States.

In this age of global competition, we have a clear opportunity to invest now in America's future even as we prepare our world class aviation system to meet the demands of that future. NextGen technologies offer our nation a worthy opportunity for investment in safety and innovation. Delaying infrastructure investment means the long term cost to our system, passengers and environment will far exceed the cost of a timely deployment today. NextGen technologies are an investment in aviation's continued viability, and will produce economic benefits for decades – far beyond their cost. Our nation and airline industry will yield immediate and measurable financial returns that will bolster America's future economic stability and continued growth, as we continue to meet the challenge of giving the world new ways to fly.

Our nation's continued economic recovery demands a cautious and well-considered fiscal policy. We have to invest carefully in America's future where we can be certain of reliable returns.

Aviation is a growth industry worthy of that investment, representing a key element of our country's economy. The FAA is already delivering on the promise of tomorrow, and we are grateful that Congress continues to recognize our ongoing mission of safety and modernization as a national priority.

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