Federal Aviation Administration (FAA) Reauthorization: An Overview of Legislative Action in the 112th Congress

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Summary

Reauthorization of Federal Aviation Administration (FAA) programs has been an issue of considerable interest during the first session of the 112th Congress. The previous FAA authorization, Vision 100—Century of Aviation Reauthorization Act (P.L. 108-176, hereinafter referred to as "Vision 100") expired at the end of FY2007. Attempts to enact a successor law failed in the 110th and 111th Congresses. As a result, aviation trust fund revenue collections and aviation program authority continued under a series of short-term extensions. Most recently, following a two-week lapse in aviation trust fund revenue collections and expenditure authority, the Airport and Airway Extension Act of 2011, Part IV (P.L. 112-27) was enacted on August 5, 2011 extending FAA authorization through September 16, 2011.

The House and Senate have passed separate versions of multiyear FAA reauthorization legislation (see S. 223 and H.R. 658), and the Senate has requested a conference to resolve the differences between the House-passed and Senate-passed bills. Whereas the Senate bill only covers FY2010 and FY2011, the House bill would authorize FAA programs through FY2014. For FY2011, the only year the two bills overlap, the House-passed total authorization level for FAA is $2,082 million less than that specified by the Senate. Moreover, the House-passed bill calls for further reductions in authorized FAA funding for FY2012 through FY2014. While these levels reflect broader government-wide efforts to reduce deficit spending, they could pose considerable challenges to ongoing air traffic modernization efforts, and affect FAA's ability to address its future needs for controllers and technical specialists to operate and maintain the nation's air traffic system. The Senate bill proposes an increase in jet fuel tax for general aviation and a new jet fuel surcharge for fractionally owned aircraft, while the House bill does not include any changes to existing aviation taxes and fees. Neither bill includes proposals to increase the cap on passenger facility charges, and the House bill does not include the controversial provision passed by the House in the 111th Congress to bring non-aviation employees of express carriers under the National Labor Relations Act instead of the Railway Labor Act.

Key issues addressed in the FAA reauthorization bills include provisions intended to improve the management of and accelerate progress on the Next Generation Air Transportation System (NextGen); address FAA workforce and facility consolidation issues; improve the safety of air ambulance operations; improve runway safety; increase oversight of air carriers and foreign repair stations; integrate unmanned aircraft into the national airspace system; and address aircraft and airport noise and emissions. While there are many similarities in language between the House-passed and Senate-passed bills, particularly with respect to major issues affecting FAA, several important differences remain to be reconciled. Provisions that may be of particular interest during this process include

- significant differences in authorized funding levels and aviation fuel taxes between House and Senate versions;
- a labor provision in the House bill that would overturn recent regulations that make it easier for certain employees covered under the Railway Labor Act to unionize;
- provisions regarding the allocation of takeoff and departure slots at Reagan National Airport; and
- provisions in the House bill to end the Essential Air Service (EAS) program, which subsidizes air carrier service to small and isolated communities.

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Legislative Status

The last enacted multi-year FAA reauthorization measure, Vision 100—Century of Aviation Reauthorization Act (P.L. 108-176, hereinafter referred to as "Vision 100") expired at the end of FY2007. While various versions of a new multi-year FAA reauthorization were separately passed by the House and the Senate during the 110th and 111th Congresses, no agreement on a long-term FAA reauthorization has yet been reached. Since September 2007, federal aviation programs and aviation trust fund revenue collections have continued under a series of short term extensions (see **Table 1**). So far, there have been 21 extensions.

Controversy over provisions in the fourth extension bill offered during the 112th Congress led to a two-week partial shutdown of the FAA. Airport and Airway Extension Act of 2011, Part III (P.L. 112-21), enacted on June 29, 2011, extended authorizations until July 22, 2011. On July 22, 2011, the House passed the Airport and Airway Extension Act of 2011, Part IV (H.R. 2553) which would have extended authorization through September 16, 2011. The bill also included reforms to the Essential Air Service (EAS) program that would have modified community eligibility criteria for subsidized air carrier service.

Objections over the EAS provisions in the extension bill and over the Railway Labor Act provision in the House-passed multiyear FAA reauthorization bill (H.R. 658) led to a stalemate in the Senate regarding the measure. As a consequence, FAA authority to collect aviation trust fund revenues and expend money in the trust fund expired on July 22, 2011.

In response to the lapse in program expenditure and revenue collection authority, FAA halted work on a number of construction projects at airports and air traffic control facilities and furloughed almost 4,000 employees effective July 23, 2011. On August 5, 2011, the Senate reached an agreement and passed H.R. 2553 without amendment by unanimous consent. The measure was signed by the President later that day thus ending the partial shutdown of the FAA and the lapse in aviation trust fund revenue collection authority, including passenger ticket taxes, that had lasted almost two weeks.

Table 1. Federal Aviation Administration Extension Acts Since September 2007

Public Law	Title of Legislation	Length of FAA Extension
P.L. 110-92	H.J.Res. 52 Joint Resolution Continuing Appropriations for FY2008	Enacted: 9/29/2007 Expired: 11/16/2007
P.L. 110-116	H.R. 3222 Continuing Appropriations for Department of Defense for Fiscal Year ending Sept. 30, 2008	Enacted: 11/13/2007 Expired: 12/14/2007
P.L. 110-149	H.J.Res. 69 Joint Resolution Continuing Appropriations for FY2008	Enacted: 12/14/2007 Expired: 12/21/2007
P.L. 110-149	H.J.Res. 72 Continuing Appropriations for FY2008	Enacted: 12/21/2007 Expired: 12/31/2007

P.L. 110-161	H.R. 2764 Consolidated Appropriations Act, 2008	Enacted: 12/26/2007 Expired: 2/29/2008
P.L. 110-190	H.R. 5270 Airport and Airway Extension Act of 2008	Enacted: 2/28/2008 Expired: 6/30/2008
P.L. 110-253	H.R. 6327 Federal Aviation Administration Extension Act of 2008	Enacted: 6/30/2008 Expired: 9/30/2008
P.L. 110-330	H.R. 6984 Federal Aviation Administration Extension Act of 2008, Part II	Enacted: 9/30/2008 Expired: 3/31/2009
P.L. 111-12	H.R. 1512 Federal Aviation Administration Extension Act of 2009	Enacted: 3/30/2009 Expired: 9/30/2009
P.L. 111-69	H.R. 3607 Fiscal Year 2010 Federal Aviation Administration Extension Act	Enacted: 10/1/2009 Expired: 12/31/2009
P.L. 111-116	H.R. 4217 Fiscal Year 2010 Federal Aviation Administration Extension Act, Part II	Enacted: 12/16/2009 Expired: 3/31/2010
P.L. 111-153	H.R. 4957 The Federal Aviation Administration Extension Act of 2010	Enacted: 3/31/2010 Expired: 4/30/2010
P.L. 111-161	H.R. 5147 Airport and Airway Extension Act of 2010	Enacted: 4/30/2010 Expired: 7/3/2010
P.L. 111-197	H.R. 5611 Airport and Airway Extension Act of 2010, Part II	Enacted: 7/2/2010 Expired: 8/1/2010
P.L. 111-216	H.R. 5900 Airline Safety and Federal Aviation Administration Extension Act of 2010	Enacted: 8/1/2010 Expired: 9/30/2010
P.L. 111-249	H.R. 6190 Airport and Airway Extension Act of 2010, Part III	Enacted 9/30/2010 Expired 12/31/2010
P.L. 111-329	H.R. 6473 Airport and Airway Extension Act of 2010, Part IV	Enacted 12/22/2010 Expired 3/31/2011
P.L. 112-7	H.R. 1079 Airport and Airway Extension Act of 2011	Enacted 3/31/2011 Expired 5/31/2011
P.L. 112-16	H.R. 1893 Airport and Airway Extension Act of 2011, Part II	Enacted 5/31/2011 Expired 6/30/2011
P.L. 112-21	H.R. 2279 Airport and Airway Extension Act of 2011, Part III	Enacted 6/29/2011 Expired 7/22/2011
P.L. 112-27	H.R. 2553 Airport and Airway Extension Act of 2011, Part IV	Enacted 8/5/2011 Expires 9/16/2011

Source: CRS analysis of Legislative Information System (LIS) bill summary and status information.

On February 17, 2011, the Senate passed the FAA Air Transportation Modernization and Safety Improvement Act (S. 223), which would authorize FAA programs through FY2011. On April 1, 2011, the House passed the FAA Reauthorization and Reform Act of 2011 (H.R. 658), which would provide funding and revenue collection authorizations for FY2011 through FY2014. On April 7, the Senate inserted the text of S. 223 as an amendment in lieu of the House-passed language. The Senate passed its version of H.R. 658 by unanimous consent and has requested a conference to resolve the differences. This report discusses the major provisions in the Senate and House FAA Reauthorization bills. It is organized into seven major program areas:

- FAA budget and aviation system finance;
- airport financing;
- FAA management and organizational issues;
- NextGen air transportation system modernization;
- aviation safety;
- airline industry issues; and
- environmental and energy issues.

In several cases, provisions that appear in unrelated sections of proposed legislation have been rearranged in this report in order to discuss related items in an issue-driven or programmatic context. This report does not go into detail regarding the specific policy issues behind these legislative proposals.

FAA Budget and Aviation System Finance

Amid broader concerns over federal deficit reduction, wide differences in proposed funding levels exist between House-passed and Senate-passed FAA reauthorization legislation.

Proposed Funding Authorizations

FAA reauthorization legislation reflects larger bicameral and partisan divisions regarding federal budget reduction approaches. The Senate bill only encompasses the previous fiscal year (FY 2010) and the current fiscal year (FY2011). It would increase total authorized funding levels for the FAA by just under $500 million from FY2010 to FY2011 (see **Table 2**). In comparison to appropriated amounts for FY2010, the Senate-passed bill's proposed authorization levels are considerably greater for all accounts except Operations and Maintenance (O&M).

In contrast, House-passed H.R. 658 seeks considerable budget reductions compared to FY2010 appropriated amounts for all FAA accounts. Authorized totals for FY2011 would be $548 million below FY2010 enacted levels. For FY2011, the only year in which the House and Senate bills overlap, the House-passed bill specifies a total authorization level approximately $2 billion below the Senate-passed amount. Moreover, the House-passed bill calls for further reductions to all FAA accounts, setting flat funding levels for FY2012 through FY2014. These would reduce FAA's annual budget by about $1 billion compared to FY2010 enacted levels. These cuts are consistent with broader House budget initiatives but could prove challenging for the FAA to implement.

If significant cuts in authorized funding levels for FAA accounts are enacted, particular budget challenges may include maintaining adequate staffing levels for O&M, a function that is highly labor intensive, and keeping NextGen modernization efforts on schedule. Schedule slips in NextGen implementation may be of particular concern as these could have the unintended effect of costing FAA and aviation system users more in the long run if implementation delays translate to cost overruns and/or postpone implementation of cost-saving technologies. This could hinder efforts to improve air traffic system performance and reduce flight delays and cancellations.

Table 2. Proposed Reauthorization Funding Levels for FAA Accounts

($ in millions)

Account	FY2010	FY2011	FY2012	FY2013	FY2014
FAA Operations and Maintenance (O&M)					
Senate-Passed	9,336	9,620	—	—	—
House-Passed	—	9,403	9,168	9,168	9,168
Enacted	—	—	—	—	—
Appropriated	9,350	—	—	—	—
Airport Improvement Program (AIP)					
Senate-Passed	4,000	4,100	—	—	—
House-Passed	—	3,176	3,000	3,000	3,000
Enacted	—	—	—	—	—
Appropriated	3,515	—	—	—	—
Facilities and Equipment (F&E)					
Senate-Passed	3,500	3,600	—	—	—
House-Passed	—	2,700	2,600	2,600	2,600
Enacted	—	—	—	—	—
Appropriated	2,936	—	—	—	—
Research, Engineering, and Development (RE&D)					
Senate-Passed	200	206	—	—	—
House-Passed	—	165	147	147	147
Enacted	—	—	—	—	—
Appropriated	191	—	—	—	—
Totals					
Senate-Passed	17,036	17,526	—	—	—
House-Passed	—	15,444	14,915	14,915	14,915
Enacted	—	—	—	—	—
Appropriated	15,992	—	—	—	—

Source: CRS analysis of S. 223, H.R. 658, and P.L. 111-8 (FY2010 Appropriations).

Note: Table does not reflect enacted authorization amounts specified in short term extension acts.

Aviation System Finance

The aviation system has historically been funded in part by a designated trust fund, the airport and airways trust fund (AATF), and in part through budget authority received from the Treasury general fund. The general fund share of FAA appropriations has historically varied widely, ranging from a low of 0% in FY2000 to a high of 37% in FY1998. The general fund share tends to follow a cyclical trend, largely stemming from reduced trust fund revenues during economic slowdowns. It had hovered around 20% over the past 10 years, but has recently increased. The Congressional Budget Office (CBO) projects that the general fund share will peak at 33% of the FAA budget total in FY2011 before following a continuing downward trend over the next 10 years. These projections are based on steady increases to the FAA budget and do not reflect possible cost cutting measures as called for in H.R. 658. Reduced funding authority would likely accelerate the reduction in general fund share over the authorization period. CBO projects annual trust fund balances of about $10 billion and the health of the trust fund has not been raised as a particular concern in the FAA reauthorization debate.

Aviation trust fund revenues are derived from various sources, primarily taxes imposed on airline passengers, air cargo shipments, and aviation fuels, as shown in **Table 3**.

Table 3. Aviation Taxes and Fees

Tax or Fee	Existing Rate	House-Passed	Senate-Passed
Passenger Ticket Tax (domestic)	7.5%	No change	No change
Flight Segment Tax (domestic)	$3.70	No change	No change
Cargo Waybill Tax	6.25%	No change	No change
Frequent Flyer Tax	7.5%	No change	No change
General Aviation Gasoline[a]	19.3 cents/gallon	No change	No change
General Aviation Jet Fuel[a] (Kerosene)	21.8 cents/gallon	No change	35.9 cents/gallon
Commercial Jet Fuel[a] (Kerosene)	4.3 cents/gallon	No change	No change
International Departure/Arrivals Tax (indexed to CPI) (prorated Alaska/Hawaii to/from mainland United States)	$16.30 (Alaska/Hawaii = $8.20)	No change	No change
Fractional Ownership Surtax on general aviation jet fuel	NA	NA	14.1 cents/gallon

Source: Compiled by CRS from existing statutes and proposed legislation.

a. Does not include 0.1 cents/gallon for the Leaking Underground Storage Tank (LUST) trust fund.

Whereas the House-passed bill does not propose any changes to the exiting aviation tax and fee structure, the Senate-passed bills call for a 14.1 cents per gallon increase in general aviation jet fuel taxes and a new 14.1 cents per gallon surcharge on general aviation jet fuel purchased for fractionally-owned aircraft.

Spending Guarantee Mechanisms

Since the 1971 creation of the user-supported airport and airway trust fund there has been disagreement over the appropriate use of the trust fund's revenues. This led, beginning in 1976, to the enactment of a series of legislative mechanisms designed to ensure that federal capital spending for U.S. airports and airways (i.e., AIP and F&E) would be funded at their fully authorized levels.

The current mechanism dates back to 2000 and includes two spending guarantees. One makes it out-of-order in the House or Senate to consider legislation that fails to use all aviation trust fund receipts and interest annually. The second makes it out-of-order to consider any bill that provides any funding for RE&D or O&M if it fails to fully fund AIP and F&E at their authorized levels. These guarantees have been incorporated into the FAA extension bills, keeping them in effect.

The House-passed bill (Section 104) would amend the airport and airway trust fund guarantee that requires that the total amounts made available from the trust fund be equal to the level of receipts plus interest for the year. Under the House-passed bill, for FY2011, the amounts made available would equal 90% of the estimated level of receipts plus interest on the fund for the fiscal year. For FY2012 and each fiscal year thereafter, the guaranteed level would equal the sum of 90% of the estimated receipts plus interest for each respective year, plus the difference between the actual receipts and total amounts made available for obligation from two years before (i.e., FY2010 for FY2012, etc). The bill would retain the point-of-order enforcement mechanisms.

This change would have a number of possible implications. First, the change could lessen the demands on trust fund revenues for the first year of the reauthorization, perhaps allowing a modest accumulation in the unexpended balance of the trust fund during that year. Second, it would reduce the likelihood that overly optimistic revenue projections could lead to spending at rates that exceed the actual revenues accruing to the trust fund, at least in the first year of the bill. Finally, by limiting trust fund spending, the change could, in the minds of some, increase the likelihood that the general fund contribution percentage for the FAA budget would be set at a higher level.

The Senate-passed bill (Sec. 105) would extend the existing guarantees through 2011. For fiscal years 2012 and 2013, Section 809 of the bill amends 26 U.S.C. 9502(d) to restrict the amount made available for each fiscal year to 90% of the receipts of the Airport and Airway Trust Fund plus interest credited for the respective year as estimated by the Secretary of the Treasury. This would appear to provide for a building up of the unexpended balance in the trust fund. It could also be seen as making it less likely that the entire FAA budget could be funded from the trust fund in FY2012 or FY1013.

Airport Financing

The Airport Improvement Program (AIP) provides federal grants for airport development. AIP funding is usually limited to capital improvements related to aircraft operations. Commercial revenue-producing portions of airports and airport terminals are generally not eligible for AIP funding. AIP money cannot usually be used for airport operational expenses or bond repayments. AIP funds are distributed either as formula grants or as discretionary grants.[1]

The Passenger Facility Charge (PFC) program provides a source of non-federal funds intended to complement AIP spending. The PFC is a local tax imposed, with federal approval, by an airport on each boarding passenger. PFC funds can be used for a broader range of projects than AIP grants and are more likely to be used for "ground side" projects. PFCs can also be used for bond repayments.

The AIP and PFC programs are the sources of funds for airport capital development that have the most federal involvement. Other sources are bonds, state and local grants, and airport revenue.

AIP Funding

The AIP authorization for FY2007, the final year of funding under Vision 100, was $3.7 billion. The authorization levels under the extension acts were:$3.657 billion for 2008, $3.9 billion for FY2009, and $3.515 billion for FY2010. For FY2011, the partial year extensions are based on the assumption of a full-year authorization of $3.7 billion.

The amounts actually made available (the obligation limitation) through the appropriations process has been held at roughly $3.5 billion annually since FY2006. The House-passed bill (Section 101) would reduce AIP's authorization to $3.18 billion for FY2011 and to $3.0 billion annually for FY2012-FY2014. Section 104 of the Senate-passed bill would authorize AIP as follows: $4.0 billion for FY2010; $4.1 billion for FY2011.

Formula Funding (Entitlements)

The AIP program provides formula apportionments (referred to as entitlements) and discretionary grants to airports in the national system. Each year the apportioning formulas are satisfied first and the remainder of the year's authorization is available for discretionary grants. Consequently, the discretionary funds would bear the brunt of lower authorizations and benefit most from authorization increases. Neither the House- nor Senate-passed bill makes major changes in the structure or operation of the AIP entitlement formulas.

Primary Airport Entitlements

The House-passed bill does not include provisions altering the primary airport formulas. However, since the amounts authorized for AIP would be reduced with no adjustment of the

[1] For a detailed description of the AIP program, see CRS Report R40608, *Airport Improvement Program (AIP): Reauthorization Issues for Congress*, by Robert S. Kirk.

apportionment formulas, funding for discretionary grants would be curtailed. The Senate-passed bill does not include provisions altering primary airport formulas.

Virtual Primary Airports

A special rule enacted after the September 11, 2001, terrorist attacks allowed some airports (referred to as virtual primary airports) whose annual passenger boardings fell below the required minimum passenger levels needed to maintain their primary airport status to continue receiving their annual primary airport entitlements (generally $1 million vs. the GA entitlement, which is generally $150,000). Some have argued that airports that have lost their primary airport status due to the economic recession that began in 2007 should receive similar treatment.

The House-passed bill (Sec. 145) would allow airports that had more than 10,000 passenger boardings and scheduled passenger aircraft service in calendar year 2007, but in either or both years 2009 or 2010 had fewer than 10,000 boardings, to receive the amount apportioned to the airport sponsors in FY2007 for the years FY2011 and FY2012.

The Senate-passed bill (see Sec. 208(i)) includes a special rule for airports whose enplanements fell, during 2008 or 2009, below the 10,000 threshold needed to qualify for primary airport entitlements, but had met the threshold during 2007. If these airports' enplanements for 2010 or 2011 decrease below 10,000 the Secretary of Transportation may make apportionments to these airports based on the amount the airports received for FY2009 (2008 and 2009 entitlements were based on 2007 enplanement data). During markup an additional provision was added for FY2008-FY2011 for airports with fewer than an average of 10,000 enplanements in 2004-2006.

As of this writing, CRS has been unable to determine the number of airports that would be eligible under the Section 208(i) for virtual primary entitlements. However, the difference for an airport between primary and GA entitlement funding is usually $850,000, so the provisions could have a significant impact on entitlement spending as well as the amount left over for discretionary grants once all the required entitlement distributions are satisfied.

Study of Primary Airport Apportionment Based on Enplanement Ratio

The Senate-passed bill (Sec. 223) directs the FAA to complete a study on the feasibility and advisability of basing primary airport apportionments on the ratio of each airport's enplanements to the national total of enplanements. The current apportionment system is based on dollar amounts for each enplaned passenger that vary by airport size categories. Under the current system the smaller airport categories receive larger amounts per enplaned passenger. The House-passed bill does not include a similar provision

State Block Grant Program

The House-passed bill (Section 502) would amend the state block grant program by specifying that federal environmental requirements would apply to the program. The proposal specifies that any federal agency that grants approval (i.e., permit or license) to a state must consult with that state during the approval process. Further, the federal agency would be required to use any state-prepared environmental analysis associated with that approval. Section 209 of the Senate-passed bill includes similar language to that in the House bill. It also includes a pilot program for up to three additional states that is consistent with the existing program.

Puerto Rico Minimum Guarantee

The House bill (Section 143) reaffirms that airports in Puerto Rico are to receive apportionments according to 49 U.S.C. 47114, as do National Plan of Integrated Airport Systems (NPIAS) airports within the United States. The provision also ensures that airports in Puerto Rico may apply for project grants from the AIP discretionary fund. The Senate-passed bill does not address this issue.

United States Territory Minimum Guarantee

Section 217 of the Senate-passed bill would provide the Secretary of Transportation authority to raise the Territories' share of the total of primary and general aviation apportionments to 1.5%, if the total amounts flowing to the Territories through the normal apportionment process fall below that percentage. The House bill includes no provision regarding a United States Territory Minimum Guarantee.

Discretionary Funds

The discretionary fund includes the AIP funding that is not distributed under the apportioned entitlements as well as the forgone PFC revenues that are not directed to the small airport fund. Related PFC changes are discussed later in this report.

Minimum Discretionary Fund

49 U.S.C. 47115 requires that a minimum amount ($148 million plus any outstanding pre-January 1, 1997, letters of intent) remain available for the discretionary fund after all apportionments and set-asides are satisfied. If less money remains, the apportionments are reduced pro rata to provide funds to bring the discretionary funding up to the required level. Because AIP has been funded since FY2001 at sufficiently high levels, the minimum discretionary fund provision has not recently been a factor in AIP funding.

While the House-passed bill does not address this issue, Section 208(k) of the Senate-passed bill sets the minimum amount to be credited to the discretionary fund at $520 million per year and drops the letter of intent language.

Noise Set-aside

Section 208 (h) of the Senate-passed bill would provide for a flat $300 million annual discretionary set-aside for AIP noise program costs in place of the current 35% discretionary set-aside, while the House-passed bill does not address the noise set-aside.

Military Airport Program (MAP)

Section 147 of the House-passed bill adds consideration of whether or not a grant to the airport would be critical to the safety of commercial, military, or general aviation in trans-oceanic flights to MAP program selection considerations. The bill would raise the allowable number of general aviation airports that may be designated under MAP from one to three. Sections 212 and 220 of the Senate-passed bill would make changes similar to the House bill.

AIP Project Eligibility Changes

The House-passed bill makes a number of definitional and other changes that would impact AIP project eligibility. The bill includes provisions regarding eligibility of "revenue producing aeronautical support facilities" at nonprimary airports and the lowering of the passenger aircraft size required to meet the eligibility requirements for purchasing firefighting and rescue equipment. Glycol recovery vehicles would be made eligible. Terminal development is redefined to include development of an airport passenger terminal building, including gates and access roads and walkways servicing exclusively airport traffic that leads directly to or from the airport passenger terminal building. It also includes a provision regarding the construction of mobile refueler parking and clarifying definitions of general aviation airport and terminal development. The bill includes a provision regarding the relocation of airport-owned facilities. Under the bill, repaying borrowed money for terminal development under 49 U.S.C. 47119(a) is clarified as "airport development" and made eligible under certain circumstances. Projects to provide air conditioning, heating, or electric power from terminal facilities to parked aircraft to reduce energy use and "harmful emissions" would be eligible. Airport planning would be redefined to include "developing an environmental management system." The cost of environmental review of airport-proposed environmentally beneficial aircraft flight procedures would also be AIP eligible.

The Senate-passed bill (Sec. 205) strikes 49 U.S.C. 47110 (d), "Terminal Development Costs," and replaces it with a subsection that makes the relocation of airport-owned facilities allowable as an airport development project under certain conditions. Section 205 also appears to attempt to broaden the allowability of the use of non-primary entitlement funds for "facilities, as defined by Section 47102." Section 47102, however, does not appear to specifically define the term. Section 211 allows an airport operator to use AIP funds for the environmental review for environmentally-beneficial (mostly noise-related) aircraft flight procedures. Section 215 would make glycol (de-icing fluid) recovery vehicles eligible for AIP grants.

During markup of the bill by the Committee on Commerce, Science and Transportation, an amendment was agreed to allow bird-detecting radar systems to be an eligible part of AIP project costs under certain conditions. Accordingly, the provision was added to Section 205.

Section 222 of the Senate-passed bill would add, as an airport improvement policy under 49 U.S.C. 47101, that the AIP should be administered to improve the efficiency of airport buildings built or improved in airport projects, including measures designed to meet one or more of the criteria for being a high-performance green building.

AIP Grant Assurances

The House-passed bill (Sec. 136) would make two changes to AIP grant assurances under 49 U.S.C. 47107. It allows for the use of AIP entitlement funds to replace or move a facility at an airport if the cause of the need was beyond the owner's control, such as a new design standard that made the present facility deemed a safety hazard.

The second proposed change deals with the disposition of profits made from the sale of land that was originally acquired for a noise compatibility purpose but is no longer needed for that purpose. Current law requires that the federal share of the proceeds, proportional to the federal share of the original land acquisition cost, be deposited in the trust fund. The proposed change would allow the proceeds to be reinvested in another project for, in preferential order: (1) an approved noise

compatibility project at the airport; (2) an environmentally related project at the airport; (3) another eligible AIP project at the airport; (4) transfer to another airport for a noise compatibility project; or (5) payment to the trust fund.

Section 136 (d) of the House-passed bill eliminates the sunset provision for the "competition disclosure requirement," under 49 Section 47107 (s). Additionally, Section 815 prescribes the conditions under which a general aviation airport can use revenue from mineral extraction on the airport's property for transportation infrastructure projects beyond the normal AIP range of eligible projects, without violating revenue diversion restrictions.

The Senate-passed bill (Sec. 203) includes the first two provisions of the House bill, described above. The bill does not eliminate the competition disclosure requirement sunset provision. The provision includes two changes not contained in the House bill. The first allows the proceeds from disposing of land that was or will be acquired for an airport purpose (other than for a noise compatibility purpose) to be reinvested at the same airport or transferred to another airport prescribed by the Secretary of DOT (i.e., instead of being deposited in the fund). The second change clarifies that the leasing of land purchased with AIP funds for noise mitigation purposes shall not be considered disposal of the land under the assurance on acquiring land (49 U.S.C. 47107 (2). Section 224, as does Section 815 of the House bill, prescribes the conditions under which a general aviation airport can use revenue from mineral extraction on the airport's property for transportation infrastructure projects beyond the normal AIP range of eligible projects, without violating revenue diversion restrictions.

Federal Share

Under current law, the federal government share for AIP projects is as follows:

- 75% for large and medium hub airports (80% for noise compatibility projects);
- 95% for other airports;[2]
- "not more than" 95% for airport projects in states participating in the state block grant program; and
- 70% for projects funded from the discretionary fund at airports receiving exemptions under 49 U.S.C. Section 47134, the pilot program for private ownership of airports.

The House-passed bill (Sec. 138) would provide a special rule to allow airports recently classified as medium hubs (which would drop their federal share to 75%) to retain their eligibility for an up to 90% federal share for a two year transition period.

The bill also includes a special rule for "Economically Depressed Communities." The rule would maintain the 95% federal share for projects at airports that are receiving subsidized service under the Essential Air Service (EAS) program that meet one or more of the criteria established in 42 U.S.C. 3161(a) as determined by the Secretary of Commerce. 42 U.S.C. 3161(a) sets forth three criteria for eligibility: (1) the area has a per capita income of 80% or less of the national average;

[2] The temporary increase in share to 95% was established to provide relief to operators of small airports after the 9/11 terrorist attacks. The increase was to end on September 30, 2007, but has been continued under extension legislation. If the eventual multi-year reauthorization does not include a provision maintaining the 95% share, it will revert to 90%.

(2) the area has an unemployment rate that is, for the most recent 24-month period for which data are available, at least 1 percentage point greater than the national average unemployment rate; and (3) the area is an area that the Secretary of Commerce determines has experienced or is about to experience a special need arising from actual or threatened severe unemployment or economic adjustment resulting from severe short-term or long-term changes in economic conditions. Given the variety of eligibility criteria and the rural location of EAS airports it is likely that many EAS airports could retain their 95% federal share under the House bill. Non-EAS airports (smaller than medium hub) would revert to 90% federal share under the bill. Should the repeal of the EAS program be enacted, as has been proposed under Section 407 of the bill, the impact of the special rule would be limited to EAS airports in Alaska and Hawaii.

The Senate-passed bill (Sec. 207) would provide for a 95% federal share for airports smaller than medium hub for the years FY2008, FY2009, FY2010, and FY2011. Block grant airports would also be provided with a 95% federal share. Section 204 would provide a special rule to allow airports recently classified as medium hubs (which would drop their federal share to 75%) to retain their eligibility for an up to 95% federal share for a two-year transition period.

Passenger Facility Charges (PFCs)

Key PFC issues include the cap on the amount airports can assess for a PFC and eligibility of airport projects for PFC funds. Additional issues include the contents of airport competition plans submitted to the FAA, streamlining of the PFC review process, and actions to address cases of PFC revenue diversion.

Increasing the PFC Cap

Neither the House- nor Senate-passed bill includes an increase in the PFC cap. However, the House-passed bill includes a provision (Section 116) requiring a study of the impacts on airports of accommodating connecting passengers. The study is to include a recommendation as to whether different levels of PFCs should be imposed on connecting passengers rather than originating passengers. Some have argued that the PFC structure favors large hub airports' PFC revenues because the costs to an airport of serving a connecting passenger are less than those of serving an originating passenger. The Senate-passed bill includes a provision to establish a pilot program that would eliminate the statutory ceiling on PFCs. This is discussed in further detail below.

Project Eligibility

The House-passed bill (Sec. 112) proposes a pilot program that would permit the use of PFC funds for eligible intermodal ground access projects at five airports. The projects do not have to be on property owned or controlled by the sponsoring airport. The PFC project cost share would be limited to the projected ratio of airport-bound passengers to the total number of passengers using the ground access facility.

The Senate-passed bill (Sec. 201) includes language that would make major changes to 49 U.S.C. Section 40117(d), which sets certain "limitations on approving applications." The bill would restrict the limitations to intermodal ground access projects, thereby freeing PFC applications for other types of projects from the limitations. The bill then also eliminates some of the current law limitations that would otherwise still apply to ground access projects. Among the limitations

eliminated for all PFC applications is the requirement that the Secretary of DOT find that the project will meet at least one of the goals to preserve or enhance capacity, safety, or security of the national air transportation system; reduce noise from an airport; or provide an opportunity for enhanced competition between or among air carriers and foreign air carriers. In addition, the bill would eliminate the precondition that for an airport to impose a fee above $3 the Secretary must find that the airport has made adequate provision for financing the airside needs of the airport, including runways, taxiways, aprons, and aircraft gates.

Competition Plans

Under current law no AIP or PFC project funding may be approved for a large or medium hub airport unless the airport has submitted a written competition plan to the FAA. The House-passed bill would drop "patterns of air service," and "airfare levels" compared to other large airports as information required in the competition plans. The Senate bill is silent on the competition plan requirement.

Passenger Facility Charge Pilot Program

The Senate-passed bill (Sec. 202) would establish a pilot program at up to six airports that would allow them to collect a PFC with no statutory ceiling on the fee. The fee, however, must be collected by the airport from the passenger. Under current law the PFCs are collected for the airports by the airlines during the ticketing process. Additionally, GAO would be required to conduct a study of alternative means of collecting PFCs. The House-passed bill does not include a provision to establish a PFC pilot program.

PFC Grant Streamlining and Revenue Diversion Provisions

Section 201 of the Senate-passed bill includes an extensive provision to streamline the PFC review and approval process. Instead of seeking approval on a project-by-project basis, for existing projects an airport would be required to submit to air carriers at the airport and to the FAA, and make available to the public, an annual PFC status report setting forth the airport's PFC revenues, spending, PFC funded projects, the next year's projected revenues, and a description of the consultation and public notice process. Once the status report is submitted no further action is required and implementation could continue. For new projects, the airport would have to provide for a notice and comment period for carriers operating at the airport and a public notice and comment period before filing the PFC status report. Once the report is filed, the airport could begin collecting the new PFC. Stakeholders could, however, file objections, and if the FAA agrees with an objection, the FAA could terminate the airport's authority to collect PFC revenues for the project. The proposal also provides that DOT may investigate whether a PFC is excessive or whether PFC revenue is being diverted to non-allowable uses. In the case of an airport found to have diverted revenue, the airport may not propose collection or use of a PFC unless DOT determines that the airport has taken corrective action to address the violation. The House bill does not include a provision similar to the Senate bill.

Other Airport-Related Provisions

Other airport-related issues addressed in FAA reauthorization legislation include airport privatization; the redevelopment of airport properties and conveyances of airport lands; airport

construction in cold-weather states; noise monitoring in New York, New Jersey, and the Philadelphia metropolitan area; solid waste recycling initiatives; measures to facilitate opportunities for disadvantaged small businesses at airports; and the eligibility of metropolitan Washington, DC airports for AIP and PFC grants.

Airport Privatization

The Airport Privatization Pilot Program allows the FAA to exempt five airports from federal requirements relating to the use of airport revenue. The requirement that airport revenue be expended for aviation purposes is seen as a major inhibitor of airport privatization. Since the program was enacted in 1996 (Section 149 of the Federal Aviation Reauthorization Act of 1996, P.L. 104-264), only one airport has been privatized, Stewart International Airport (New York). However, Stewart International has since been purchased by the Port Authority of New York and New Jersey and is again owned by a public entity. Efforts to privatize Chicago Midway were suspended after investors failed to obtain adequate financing, but these efforts could be revived should the financial environment improve. Supporters of privatization have argued that the current pilot program gives airlines effective veto power over privatization transactions. Current law requires that the airport sponsor may only recover from the sale or lease the amount that may be approved by at least 65% of the air carriers serving the airport; and by air carriers that account for 65% of the total landed weight at the airport for the year.

The House-passed bill (Sec. 158) would increase the number of airports allowed to participate in the Airport Privatization Pilot Program from five to ten. In the case of primary airports, the secretary of transportation must consult with each air carrier (domestic and foreign) serving the airport prior to approving an airport's participation in the program. In the case of a nonprimary airport, the Secretary must consult with 65% of the owners of aircraft based at the airport prior to approval. The Senate bill does not include this provision.

Pilot Program for Redevelopment of Airport Properties

Section 712 of the Senate-passed bill requires that within a year of enactment FAA is to establish a trial program at up to four public-use airports that have approved noise compatibility programs under 49 U.S.C. 47102. Under this trial program, the FAA may make grants from the discretionary noise set-aside funds under 49 U.S.C. 47117(e) or PFCs to support joint planning, engineering, and environmental permitting to facilitate the assembly and redevelopment of real property purchased with noise mitigation funds made available under the AIP or PFC programs. The trial program is to encourage compatible land uses and generate economic benefits to both the airport operator and the affected local jurisdiction. The House-passed bill does not include this provision.

Land Use and Conveyance Provisions in the Senate Bill

Section 218 of the Senate-passed bill, in regard to Merrill Field Airport in Anchorage, AK, releases, without monetary consideration, the municipality of Anchorage, AK, from all restrictions, conditions, and limitations on the use, encumbrance, or conveyance of specified land in the municipality. It also releases Anchorage from repayment of any outstanding grant obligations owed to FAA, for land subsequently conveyed for use by the state of Alaska for the construction or reconstruction of a federally subsidized highway project.

Section 219 of the Senate-passed bill releases the city of St. George, UT, from the terms and conditions of an August 28, 1973, deed of conveyance of land from the United States to the city. Any of the land sold by the city is to be for fair market value, and the proceeds are to be used for the development or improvement of a replacement public airport.

Section 728 requires the conveyance of certain federal land to Clark County, NV, for the Southern Nevada Supplemental Airport. The conveyed land is to be used for the development of flood mitigation infrastructure at the airport.

Section 434 would allow the development of land within the Las Vegas McCarran International Airport Environs Overlay District that falls outside the 65 decibel day-night average noise exposure map profile, to be used for transient lodging, including hotels; auditoriums; concert halls; and sports arenas. Additionally, Section 736 conveys federal land to the city of Mesquite, NV.

Priority Review of Cold Weather State Construction Projects

The House-passed bill (Sec. 155) would require FAA to schedule, to the maximum extent practicable, the review of projects in cold weather states as early as possible. Cold weather states are states in which the weather typically prevents major construction projects from being carried out before May 1. Section 724 of the Senate-passed bill is similar to the House provision.

Noise Monitoring of the New York/New Jersey/Philadelphia Airspace Redesign

Section 218 of the House-passed bill would require the Administrator of FAA, in conjunction with the Port Authority of New York and New Jersey and the Philadelphia International Airport, to monitor the noise impacts of the New York/New Jersey/Philadelphia Metropolitan Area Airspace Redesign. One year after completion of the redesign, the Administrator is to submit to Congress a report on the findings.

Section 726 of the Senate-passed bill would require FAA, in conjunction with the Port Authority of New York and New Jersey and the Philadelphia International Airport, to monitor the noise impacts of the airspace redesign and report to Congress not later than 270 days after the date of enactment and every 180 days thereafter until completion.

Solid Waste Recycling Plans

The House-passed bill (Sec. 134) requires that for any airport with a master plan to receive AIP funding, the plan must address the feasibility of solid waste recycling and minimizing the generation of solid waste at the airport. The Senate-passed bill (Sec. 714) includes language similar to the provision in House bill.

Airport Disadvantaged Business Enterprise Program

The Senate-passed bill (Sec. 715) would require the Secretary of Transportation to establish a program to eliminate barriers to small business participation in airport-related contracts and concessions by prohibiting excessive, unreasonable, or discriminatory bonding requirement for

any project funded under AIP or using passenger facility charge revenues under 49 U.S.C. Section 40117. Under the provision, the Secretary of Transportation must issue a final rule establishing the program one year after the date of enactment Also, not later than 180 days after the date of enactment, the Secretary shall issue final regulations to adjust the personal net worth cap used in determining whether an individual is economically disadvantaged, to correct for the impact of inflation since the cap was set at $750,000 in 1989. Thereafter, annually on June 30, the Secretary shall adjust the cap to account for changes in the Consumer Price Index of All Urban Consumers for the previous 12 months.

The House-passed version of the bill dropped the Airport Disadvantaged Business Enterprise Program, now in the Senate-passed bill. The House-passed bill does require in Section 822, that the DOT Inspector General submit a report to Congress on the number of new small business concerns owned and controlled by socially and economically disadvantaged individuals that participated in the programs and activities to be funded by this act.

Training Program for Certification of Disadvantaged Business Enterprises

The House-passed bill (Sec. 141) would require that, within a year of enactment, the Secretary of Transportation establish a training program for officials or agents of airport sponsors that are responsible for certifying that the airport owner or operator will meet its minority set-aside goal or who are responsible for determining whether or not a small business qualifies as being owned and controlled by socially or economically disadvantaged individuals.

Section 715 of the Senate-passed bill includes a similar provision. The Senate provision also authorizes such sums as may be necessary to carry out the provision and requires that the Secretary of DOT submit a report on the program within two years. It also would require, within 180 days of enactment, DOT to raise the person net worth cap used in determining whether an individual is economically disadvantaged for qualification purposes to reflect the impact of inflation on the $750,000 cap since 1989.

Metropolitan Washington Airports Authority

The House-passed bill (Sec. 151) would repeal 49 U.S.C. § 49108, which prevents the Metropolitan Washington Airports Authority from applying for AIP or PFC grants after October 1, 2008. Similarly, Section 718 of the Senate-passed bill would also repeal 49 U.S.C. § 49108.

FAA Management and Organizational Issues

Air Traffic Controller and Technical Workforce

Amid growing numbers of retiring controllers and the pending shift toward integrating NextGen technologies in the air traffic control environment, there is considerable policy interest in the staffing of air traffic facilities and the training of air traffic controllers and systems specialists to operate new NextGen systems. The mix of fully certified controllers and developmental controllers (i.e., controllers still completing on-the-job training to obtain full certification) has become a growing issue. More recently, late-night controller work schedules and staffing levels, particular at airport towers, have drawn media attention.

The House bill would require the National Academy of Sciences to carry out a study examining human factors, traffic activity, and air traffic control technology and to make recommendations on staffing standards for air traffic controllers. The bill also would require FAA to study the adequacy of training programs for air traffic controllers examining current training and required competencies as well as available training approaches and required competencies for NextGen operations. The House bill would also require FAA to complete a study of frontline manager staffing at air traffic control facilities.

The House-passed bill would also require a study looking at alternative training approaches for new controllers hired through the Collegiate Training Initiative (CTI), which provides undergraduate training designed to prepare students for a career as an air traffic controller. The bill also includes a provision authorizing FAA to place holders of control tower operator (CTO) certificates in FAA facilities, with the same compensation and benefits as developmental air traffic controllers, provided they meet all other applicable qualification requirements for given air traffic control specialist positions. This could make it easier for some CTI graduates, non-FAA controllers, and former military controllers to transition to air traffic controller positions at FAA. Under the provision, FAA could recover travel costs associated with certificating air traffic control specialists from institutions that provide the training.

The Senate bill would require a National Academy of Science study of the methods used for determining staffing levels for air traffic controllers, system specialists, and engineers. The Senate language also directs FAA to carry out a comprehensive review and evaluation of the FAA Academy, where newly hired controllers undergo initial training. The provision also directs the FAA to examine facility training of developmental controllers, who have graduated from the academy but are not yet fully qualified and certified to control air traffic on their own. The measure would require FAA to establish standards for the number of developmental controllers that can be accommodated at each FAA facility based on the available number of on-the-job instructors, the number and availability of classrooms and simulators, training requirements, and current levels of controllers already in training. The bill would also require a GAO study of FAA's program of training for airway transportation systems specialists that maintain ATC technology infrastructure. The report would examine current training curricula, training needs for maintaining proficiency in the latest technology, distribution and cost of in-house and vendor training, and recommendations for cost effective approaches for providing up-to-date training on the latest technologies. A provision of the bill would also require FAA to carry out a study of front-line manager staffing at air traffic facilities, taking into account factors such as facility type, traffic complexity, controller proficiency, and training requirements.

Facility Consolidation

The move toward NextGen technologies coupled with age and deterioration of existing FAA facilities poses both challenges and opportunities to update and integrate or consolidate FAA air traffic facilities. These efforts, however, are controversial because, in many cases, they involve closing facilities and relocating personnel. Therefore, there has been considerable interest in establishing processes for independent recommendations and/or reviews of FAA consolidation plans. In 2007, under the Bush Administration, FAA provided a legislative proposal outlining a process for evaluating and implementing facility and service consolidation in a manner designed to minimize political influence on the process, much like the military base realignment and closure (BRAC) process, on which it was modeled. The objective was to identify and implement

realignment and consolidation activities that would help reduce FAA capital, operating, maintenance, and administrative costs without adversely impacting system safety.

While neither the Senate-passed bill nor the House-passed bill would establish a commission with final decision authority over FAA facility consolidation, both bills seek to establish a process for reviewing FAA proposals.

The House-passed bill proposes to establish an Aviation Facilities and Services Board to review and make recommendations based on FAA consolidation proposals. Unless Congress specifically disapproves, FAA would be required to implement Board recommendations by initiating action within one year and completing recommended realignments and consolidations within three years after the Board issues its report and recommendations.

The Senate-passed bill would establish an Air Traffic Control Modernization Oversight Board to review and analyze the FAA's recommendations along with public comments regarding these recommendations. Based on this review and analysis, the Board would make its own recommendations for realignment of aviation facilities and services that would be submitted in a report to the President and to congressional oversight committees. The legislation would explicitly prohibit consolidation of any air traffic control facilities or regional offices until the board's recommendations are completed. The bill also contains a provision that would require the FAA to establish a process for including employees selected from collective bargaining units likely to be affected by air traffic modernization projects, including NextGen initiatives, in the planning, development, and implementation of such projects.

The Senate-passed bill would also require FAA to establish a task force to review conditions in existing air traffic control facilities. The task force would be charged with identifying facilities in need of remediation to correct conditions that may impact health and safety.

FAA Personnel Management System

In 1995, Congress authorized the Administrator of FAA to develop a new personnel management system for the agency's workforce. Section 347(a) of the Department of Transportation and Related Agencies Appropriations Act, 1996, provided for the development and implementation of this personnel management system following consultation with FAA employees and any non-governmental experts in personnel management systems employed by the Administrator.[3] The system was intended to provide for "greater flexibility in the hiring, training, compensation, and location of personnel."[4] As enacted originally, chapter 71 of Title 5 of the *U.S. Code*, relating to labor-management relations in most federal agencies, did not apply to the new personnel management system.[5] In March 1996, however, Congress amended section 347 to make chapter 71 applicable to this system.[6]

[3] P.L. 104-50, Sec. 347(a), 109 Stat. 436, 460 (1995).

[4] *Id*.

[5] *See* P.L. 104-50, Sec. 347(b), 109 Stat. 436, 460 (1995) (identifying provisions of Title 5, *U.S. Code*, that would be applicable to the new personnel management system).

[6] P.L. 104-122, Sec. 1, 110 Stat. 876 (1996).

In October 1996, Congress considered additional requirements for the FAA personnel management system. Section 253 of the Federal Aviation Reauthorization Act of 1996 amended Title 49 of the *U.S. Code* to add a new section involving consultation and negotiation with respect to the new system.[7] 49 U.S.C. Sec. 40122(a) provides, in relevant part:

> (1) Consultation and Negotiation—In developing and making changes to the personnel management system initially implemented by the Administrator of the Federal Aviation Administration on April 1, 1996, the Administrator shall negotiate with the exclusive bargaining representatives of employees of the Administration certified under section 7111 of title 5 and consult with other employees of the Administration.
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> (2) Mediation—If the Administrator does not reach an agreement under paragraph (1) with the exclusive bargaining representatives, the services of the Federal Mediation and Conciliation Service shall be used to attempt to reach such agreement. If the services of the Federal Mediation and Conciliation Service do not lead to an agreement, the Administrator's proposed change to the personnel management system shall not take effect until 60 days have elapsed after the Administrator has transmitted the proposed change, along with the objections of the exclusive bargaining representatives to the change, and the reasons for such objections, to Congress.

In the report that accompanied the Senate version of the 1996 Act, the Senate Committee on Commerce, Science, and Transportation indicated that "[i]n negotiating changes to the personnel system, the Administrator and the exclusive bargaining representatives would be required to use every reasonable effort to find cost savings and to increase productivity within each of the affected bargaining units, as well as within the FAA as a whole."[8] The House version of the act did not include a provision on consultation, negotiation, and mediation. The Senate provisions were incorporated into the final version of the legislation during conference.[9]

In 2005, a federal district court considered the impact of 49 U.S.C. Sec. 40122 on labor-management relations at FAA.[10] After reaching bargaining impasses with the FAA, the National Air Traffic Controllers Association ("NATCA") and the Professional Airways Systems Specialists ("PASS") sought the assistance of the Federal Service Impasses Panel ("FSIP"), an entity within the Federal Labor Relations Authority ("FLRA") that provides assistance with resolving negotiation impasses between federal agencies and unions. In 2004, unclear about whether it had the authority to resolve impasses involving the FAA in light of 49 U.S.C. Sec. 40122, FSIP declined to provide assistance.[11]

After reviewing the development of the FAA personnel management system and the enactment of 49 U.S.C. Sec. 40122, the district court concluded that complaints related to an agency's participation in FSIP's impasse resolution procedures could be deemed an unfair labor practice.[12] Consequently, the court declared that "[w]hen agency action constitutes an arguable unfair labor

[7] P.L. 104-264, Sec. 253, 110 Stat. 3213, 3237 (1996).

[8] S.Rept. 104-333, at 36 (1996).

[9] *See* H.Rept. 104-848, at 109 (1996).

[10] National Air Traffic Controllers Association v. Federal Service Impasses Panel, 2005 WL 418016 (D.D.C. 2005).

[11] *Id*. at 1-2.

[12] *Id*. at 4.

practice, jurisdiction rests exclusively with the Authority and the Courts of Appeals.... For these reasons, the [court] concludes that it is without jurisdiction and should defer to the FLRA."[13]

Although the FLRA did not address the matter, the U.S. Court of Appeals for the District of Columbia Circuit did review the district court opinion in February 2006. In *National Air Traffic Controllers Association v. Federal Service Impasses Panel*, the D.C. Circuit affirmed the district court decision, concluding that FSIP did not have a clear and specific statutory mandate to assert jurisdiction over the parties' bargaining impasses.[14] The court did observe, however, that the FAA's refusal to participate in proceedings before FSIP could form the basis of an unfair labor practice charge before the FLRA.[15]

On April 5, 2006, FAA announced formally that it had reached an impasse in its negotiations with NATCA regarding its agency-wide contract covering the air traffic controller workforce.[16] In accordance with 49 U.S.C. Sec. 40122(a)(2), the FAA Administrator indicated that the agency would send its last, best offer to Congress.[17] On June 5, 2006, FAA imposed a new labor contract on NATCA. FAA maintained that the new contract would save the government approximately $1.9 billion over five years through various measures, including the creation of a separate, lower pay scale for new employees.[18]

Section 601 of the House-passed bill appears to respond to the events involving NATCA and PASS in 2006. The section would amend 49 U.S.C. Sec. 40122(a) to allow for the involvement of FSIP if the Administrator and a bargaining representative fail to resolve issues in controversy arising from the negotiation of a term collective bargaining agreement. Under the amended 49 U.S.C. Sec. 40122(a)(2), FSIP would be permitted to assist the parties with issues in controversy by ordering binding arbitration by a private arbitration board that would consist of three members.[19] Each party would select one arbitrator from a list of not less than 15 arbitrators with federal sector experience provided by the director of the Federal Mediation and Conciliation Service ("FMCS"). The two arbitrators would then select a third arbitrator from the list. If the two arbitrators were unable to agree on the third person, the parties would select the third person by alternately striking names from the list until only one name remained.

The arbitration board would be required to give the parties a full and fair hearing, including the opportunity to present evidence in support of their claims in person, by counsel, or by another representative. The arbitration board would be required to render its decision within 90 days of its appointment. The arbitration board would have to take into consideration such factors as: the

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[13] *Id*.

[14] 437 F.3d 1256 (D.C. Cir. 2006).

[15] *Id*. at 1265.

[16] See FAA Declares Impasse in Controller Talks; Next Stop for Two Sides is Congress, Daily Lab. Rep. (BNA) No. 66, at A-5 (April 6, 2006).

[17] *Id*. H.R. 5449, a measure introduced by Representative Steven C. LaTourette on May 22, 2006, to repeal 49 U.S.C. Sec. 40122(a)(2), was defeated. The measure was considered under suspension of the rules and required a two-thirds vote to pass. The vote was 271-148. For additional information on the congressional consideration of H.R. 5449, *see FAA Imposes Labor Contract on NATCA Following 60-Day Congressional Review*, Daily Lab. Rep. (BNA) No. 111, at A-10 (June 9, 2006).

[18] FAA Imposes Labor Contract on NATCA Following 60-Day Congressional Review, supra note 15.

[19] For unresolved issues that arise during mid-term bargaining, the Federal Service Impasses Panel would provide assistance to the parties, but only to the extent allowable under 5 U.S.C. § 7119. 5 U.S.C. § 7119 does not provide explicitly for binding arbitration.

effect of its decisions on FAA's ability to attract and retain a qualified workforce; the effect of its decisions on the agency's budget; the effect of its decisions on other FAA employees; and any other factors whose consideration would assist the board in fashioning a fair and equitable award. The costs of the arbitration would be shared equally by the parties.

Upon reaching a voluntary agreement or at the conclusion of binding arbitration, the final agreement, except for those matters decided by an arbitration board, would be subject to approval by the head of the agency and, if requested by the bargaining representative, subject to ratification by such organization.

Section 313 of Senate-passed H.R. 658 would also amend 49 U.S.C. Sec. 40122(a) to allow for the involvement of FSIP if the Administrator and a bargaining representative fail to reach agreement. Under the amended 49 U.S.C. Sec. 40122(a)(2), FSIP would be permitted to assist the parties by ordering binding arbitration by a private arbitration board consisting of three members. Each party would select one arbitrator from a list of not less than 15 arbitrators with federal sector experience provided by the director of the FMCS. The two arbitrators would then select a third arbitrator from the list. If the two arbitrators were unable to agree on the third person, the parties would select the third person by alternately striking names from the list until only one name remained.

The arbitration board would be required to give the parties a full and fair hearing, including the opportunity to present evidence in support of their claims, and an opportunity to present their case in person, by counsel, or by another representative. The arbitration board would be required to render its decision within 90 days of its appointment. Unlike the House-passed measure, the Senate-passed bill would require the arbitration board to take into consideration only the effect of its decisions on the agency's budget and its ability to attract and retain a qualified workforce. The costs of the arbitration would be shared equally by the parties.

Upon reaching a voluntary agreement or at the conclusion of binding arbitration, the final agreement, except for those matters decided by an arbitration board, would be subject to approval by the head of the agency and, if requested by the bargaining representative, subject to ratification by such organization.

NextGen Air Transportation System Modernization

NextGen is an ambitious program to replace ground-based navigation and radar surveillance of aircraft with a system that guides and tracks aircraft using satellite-based global positioning system (GPS) capabilities. NextGen also encompasses FAA air traffic control equipment modernization, new digital communications capabilities, and advanced air traffic management tools and procedures. The target date for full implementation is 2025. The cost, complexity, and technical risk associated with this initiative have been a major focus of FAA reauthorization debate.

S. 223 and H.R. 658 differ considerably with respect to funding authorizations to support NextGen development. Primary funding for NextGen activities is derived from FAA's Facilities and Equipment (F&E) account. S. 223 would authorize the F&E account at $3,500 million in FY2010 and at $3,600 million in FY2011. In contrast, H.R. 658 proposes a four-year authorization in which F&E would be authorized $2,700 million in FY2011 and $2,600 each fiscal year for FY2012 through FY2014. In FY2011, the only year the two bills overlap, S. 223

proposes an authorized funding level that is $900 million above the amount specified in H.R. 658. S. 223 would also establish a specific Air Traffic Control System Modernization Account within the aviation trust fund. Under the proposal, the modernization account would be allocated $400 million annually in revenues derived from taxes levied on aviation jet fuels. H.R. 658 does not include a similar provision. While this would not increase the authorized amount for FAA's F&E account, it would establish a dedicated funding mechanism for modernization initiatives, principally NextGen. H.R. 658 does not include a similar provision.

Both H.R. 658 and S. 223, however, include numerous provisions intended to improve the management, oversight, and implementation of NextGen. H.R. 658 directs the Department of Transportation to give priority to funding NextGen infrastructure and technology demonstrations. It calls for creating an appointed position of Chief NextGen Officer within FAA that reports directly to the Administrator and has direct responsibility for implementing NextGen activities and budgets and coordinating NextGen implementation. Further, H.R. 658 calls for redesignating the Director of the Joint Planning and Development Office (JPDO), the FAA entity charged with designing and implanting the NextGen plan, to an appointed Associate Administrator position. Additionally, the bill would require agencies assisting FAA with NextGen implementation, such as the National Aeronautics and Space Administration (NASA) and the Department of Defense (DOD), to designate a senior official to coordinate and oversee the agency's NextGen activities. Both the Senate and House bills seek to include FAA employees in air traffic control modernization projects, and would require the FAA to track specific performance metrics to gauge NextGen progress and derived benefits.

Like H.R. 658, S. 223 would also establish a Chief NextGen Officer position within FAA, but does not specifically indicate whether this individual would report directly to the Administrator. S. 223 also seeks to establish a NextGen implementation office, headed by Chief NextGen Officer, to coordinate all NextGen related activities, both within FAA and across various government agencies.

In addition, S. 223 seeks to establish an Air Traffic Control Modernization Oversight Board, composed of FAA and aviation stakeholder representatives. It also would require FAA to conduct a facilities needs assessment detailing its proposed facility and service realignment plans to support the transition to NextGen. The oversight board would be responsible for reviewing the FAA plans as well as providing Congress with its own recommendations. As noted previously, FAA would not be permitted to move forward with facility realignments before the board completes its recommendations, unless a written agreement with all affected FAA employee bargaining representatives is reached for a specific facility realignment initiative.

S. 223 would also set specific deadlines for implementing precision navigational procedures, called Required Navigation Performance (RNP) procedures, that rely on NextGen navigation capabilities by 2014 at the 137 busiest commercial passenger airports, and by 2016 at other airports.

One specific issue of interest for users of FAA air traffic services has been the consideration of incentives or government aid for equipping aircraft with NextGen capabilities. Airlines and aircraft manufacturers and groups representing these entities have sought incentives for NextGen equipage as a means to accelerate the transition to NextGen and reduce some of the economic and technical risks assumed by acquiring aircraft technologies to support NextGen implementation. Their arguments for such an approach hinge on assertions that aircraft avionics are an integral component of NextGen infrastructure. Based on this position, various proposals have been

offered, such as a government operated NextGen infrastructure bank or government-backed loans. Direct government grants for equipment acquisition have also been suggested. FAA, meanwhile, has advocated a best-equipped, best-served strategy, pointing to cost-saving benefits to early adopters of NextGen technologies. S. 223 directs the FAA to issue a report identifying various incentive options for NextGen equipage. While H.R. 658 directs FAA to report on ways to accelerate NextGen technologies, it does not specifically address operator equipage. S. 223, on the other hand, includes language that would provide financial incentives for NextGen equipage through mechanisms such as grants from the FAA. FAA has already used similar mechanisms to fund a few recent demonstration projects using air carrier aircraft. S. 223 also includes a provision that would establish an equipage bank pilot program for public-use aircraft with participation limited to five states.

H.R. 658 does, however, seek to impose a readiness verification that the necessary ground infrastructure has been deployed and is properly working before FAA requires aircraft to equip with Automated Dependent Surveillance-Broadcast (ADS-B) In technologies. ADS-B In is a component of NextGen which will enable aircraft to receive traffic, weather, and other flight information. The House bill does not require such a verification before FAA requires aircraft to equip with ADS-B Out avionics that broadcast aircraft position to ground stations for air traffic control surveillance. S. 223, in contrast, would require FAA to verify readiness before mandating either ADS-B Out or ADS-B In and would accelerate the timeline for ADS-B equipage by requiring all aircraft to equip with ADS-B Out by 2015 and with ADS-B In by 2018. Under current FAA plans, ADS-B Out will be mandatory for many airspace users by 2020 while no specific requirements for ADS-B In equipage have been announced. Aviation users have been seeking greater assurance that their investments in both ADS-B Out and ADS-B In will be cost beneficial, a determination that depends largely on the FAA's ability to establish firm technical standards and deploy necessary ground infrastructure.

Aviation Safety

Several aviation safety issues are addressed in pending FAA reauthorization legislation. Significant safety issues include runway safety measures, the safety of air ambulance operations, oversight of air carriers, regulations and oversight of aviation maintenance providers and certificated repair stations (particularly repair stations located outside the United States), safety issues pertaining to operations of unmanned aircraft in the national airspace system, and changes to flight and duty time limits to address concerns over pilot fatigue.

Additionally, the Senate-passed bill includes several provisions pertaining to pilot training, pilot records, pilot fatigue, and airline safety programs. These issues, primarily addressing concerns over pilot training and selection and flight operations among regional air carriers, were largely addressed in legislation enacted during the 111th Congress (see The Airline Safety and Federal Aviation Administration Extension Act of 2010, P.L. 111-216).[20] Similar provisions in the Senate bill under consideration in the 112th Congress are not included in the discussion below.

[20] Details of the enacted provisions are summarized in CRS Report R40410, *Federal Aviation Administration (FAA) Reauthorization: An Overview of Legislative Action in the 111th Congress*, coordinated by Bart Elias.

Runway Safety

Runway incursions—events where aircraft, vehicles, or pedestrians stray onto active runways and pose a collision hazard to landing or departing aircraft—remain a central safety concern. FAA's major technology initiatives to mitigate runway incursions include the deployment of advanced surface radar capabilities (Airport Surface Detection Equipment, Model X or ASDE-X) and controller alerting to warn of impending incursions (the Airport Movement Area Safety System or AMASS) at busy airports. However, ASDE-X has been scaled back and delayed. Also, the utility of the AMASS system has been questioned by the National Transportation Safety Board (NTSB) because it does not convey warning information directly to pilots, potentially limiting the system's ability to mitigate collisions. The NTSB has recommended that FAA develop systems that provide direct warnings to pilots. FAA recently approved the use of electronic flight bags, portable computers for pilot use, with moving maps to improve pilot situation awareness while taxiing. While useful for orienting and navigating in the airport environment, these devices currently do not present information regarding other aircraft and vehicles in the airport environment. To provide direct incursion mitigation tools for pilots, FAA has deployed runway status lights (RWSLs) at some airports to warn taxiing aircraft that it is unsafe to cross an active runway, and final approach runway occupancy signal (FAROS) lights to warn landing aircraft if the runway ahead is occupied.

The House-passed bill contains a provision that would require FAA to submit a report to Congress detailing its plan to install systems to alert controllers, flight crews, or both of potential runway incursions by December 31, 2011. The FAA would be required to integrate the plan into its annual NextGen Implementation Plan document. The bill would also require FAA to develop a strategic plan for runway safety within six months of enactment. The plan would be required to specifically address the effects of expected increases in air traffic on runway safety risk, and include specific goals to improve runway safety; near-term and long-term actions for reducing the number of runway incursions and their severity; a timeline and a list of resources needed for implementing these actions; and details of a continuous process for monitoring progress toward achieving stated runway safety goals. The bill also would direct the FAA's Air Traffic Organization (ATO) to evaluate ASDE-X for its potential contribution to NextGen, accelerate ASDE-X implementation, and evaluate airport surveillance technologies and associated collaborative management software for potential application in NextGen surface management.

The Senate-passed bill contains language similar to the House-passed bill directing FAA to develop a plan reducing runway incursions at all commercial service airports. The plan is to include actions such as improving airport lighting, signage, and runway markings. The Senate bill would also require FAA to develop a process for tracking and investigating operational errors and runway incursions within one year of enactment. It also directs the Surface System Program Office to evaluate the potential contributions of ASDE-X and surface management software to the NextGen initiative.

Safety of Air Ambulance Operations

The safety of air ambulance operations, particularly helicopter emergency medical service (HEMS) flights, has been in the spotlight over the past few years in response to increased accidents in this growing industry. NTSB and other aviation safety experts are advocating the mandatory use of formal flight dispatch procedures and risk management practices among helicopter air ambulance operators as well as mandatory installation of terrain warning systems

on HEMS aircraft. NTSB also found that many air ambulance accidents occur when patients are not on board. Present regulations allow air ambulances to operate under a less stringent set of rules with regard to weather minimums and pilot duty times when not carrying patients.

Both the House-passed and Senate-passed bills would require air ambulance flights to be operated under commercial flight rules, codified in 14 CFR Part 135, whenever medical personnel are on board. Currently, air ambulance operators are only required to operate under these regulations when medical patients are on board. Ferry flights and flights to pick up patients can be conducted under less stringent general aviation regulations contained in 14 CFR Part 91. Both the House-passed and Senate-passed bills include exemptions to Part 135 weather reporting requirements at destinations until FAA certifies that accurate and reliable portable ground-based weather measuring and reporting systems are available.

Both bills would require air ambulance operators to provide annual operations and safety data to the FAA. In addition, the House-passed bill would require FAA to study low-altitude aircraft weather observation technology and the feasibility of requiring night-vision goggles for helicopter emergency medical service pilots. The Senate-passed bill would require FAA to study and develop rulemaking on available cockpit voice and flight data recorders for helicopters and fixed-wing aircraft used for emergency medical service operations

Maintenance Providers and Repair Stations

Concerns over the potential safety implications of a variety of air carrier maintenance practices have been raised by some aviation safety experts and some Members of Congress. Two overarching concerns that have been identified are the safety of maintenance work outsourced to third-party repair stations, especially repair stations located outside the United States, and the use of non-certificated maintenance providers for routine and extensive repair work and FAA oversight of these non-certificated maintenance providers.

With regard to airline maintenance, both bills include provisions that would restrict the use of non-certified maintenance providers, allowing only airline employees or employees of FAA-certified repair stations to carry out substantial and routine maintenance and complete required inspections of aircraft used in airline service. Air carriers would also be required to provide complete lists of their non-certificated maintenance providers, whose activities would be restricted to non-routine, non-substantial maintenance and repair work under this provision.

Both bills would also require FAA to inspect foreign repair stations that work on U.S. air carrier aircraft or components installed on such aircraft at least two times annually. FAA would be required to certify to Congress that these inspections have been carried out. The bills would also extend the requirement for drug and alcohol testing programs to safety-critical positions at foreign repair stations working on air carrier aircraft or components. Drug testing programs are already required for safety-critical maintenance personnel working for airlines and repair stations servicing air carrier aircraft within the United States.

Extending these requirements to repair stations in foreign countries may be complicated by specific privacy laws and rights in other countries that may limit the FAA's authority to impose drug and alcohol testing programs that are comparable to existing programs in the United States. Concerns have also been raised that the provision may threaten an aviation safety agreement

between the United States and the European Union (EU).[21] Under that agreement, FAA, the European Aviation Safety Agency (EASA) and aviation safety oversight organizations from EU member countries work collaboratively to certify and inspect repair stations. The legislative language requires that the programs be consistent with applicable laws of countries where repair stations are located. While the bills also seek international standards for alcohol and controlled substance testing, consensus agreements and uniform application of these standards internationally may be difficult to achieve.

Air Carrier Oversight

In addition to concerns over maintenance outsourcing, there has been increasing interest in safety oversight of airline maintenance and flight operations. These issues have largely emerged following the investigation of FAA whistleblower allegations that safety oversight of airline operations were compromised by FAA oversight practices resulting in failures to comply with required safety checks and maintenance actions. The allegations have raised policy questions regarding FAA oversight of air carriers and programs to encourage airlines and airline employees to come forward with information regarding possible regulatory violations and safety deficiencies.

Provisions in the House-passed bill seek to improve FAA's Voluntary Disclosure Reporting Program (VDRP), which allows airlines to self-disclose safety violations with certain protections established to promote safety rather than seek regulatory enforcement action against the airlines. The language would require FAA inspectors to verify that air carrier solutions to correct safety violations reported under the VDRP are comprehensive and fully implemented. The bill would also require that inspectors confirm that violations reported by the airline under the VDRP had not been previously discovered by an FAA inspector or previously disclosed by the airline. The bill would require FAA to establish a process for FAA supervisory inspectors to review and approve VDRP disclosures after they have been initially reviewed by an inspector. The provision also calls for an Inspector General review of the VDRP, including an assessment of whether it is improving the detection and correction of safety violations and compliance with regulations.

The bill also calls for a monthly headquarters-level review of the Air Transportation Oversight System (ATOS) database to identify trends in regulatory compliance and corrective actions. The FAA would be required to report quarterly to congressional oversight committees regarding the results of these reviews.

The House-passed bill also contains language that would prohibit former FAA inspectors from working in private sector positions representing air carriers over which they had oversight or inspection responsibility for a period of two years after holding such a position at the FAA. The bill would limit the length of time a principal supervisory inspector would be allowed to oversee the operations of a single air carrier to five years or less.

The Senate-passed bill would similarly require FAA to take such action as it deems necessary to ensure that, under the VDRP program, FAA inspectors fully evaluate corrective actions proposed by the air carrier before accepting the voluntary disclosure, verify corrective actions are taken within the proposed timeframe, and carry out inspections to assess whether these corrective

[21] Daniel Michaels, "Airline Rule Threatens Pact With EU." *The Wall Street Journal,* May 22, 2009.

actions adequately remedy the disclosed problem. The measure would also require a second level supervisory review of all air carrier VDRP submissions to ensure that the problem had not been previously identified by an FAA inspector or disclosed by the airline in the past five years. The Senate bill calls for a GAO study of VDRP, identifying whether it has demonstrated benefits with respect to uncovering problems that may have otherwise gone undetected, and its possible role in reducing violations and improving regulatory compliance.

The Senate bill also directs FAA to establish a national review team to conduct periodic reviews of FAA air carrier oversight and report annually on its findings to congressional oversight committees, and directs the DOT OIG to monitor and report on the effectiveness of the review teams. The bill authorizes the FAA to hire an additional 200 safety inspectors. It also requires a headquarters' level review within FAA of the ATOS database on a monthly basis to ensure that trends in regulatory compliance issues are adequately identified and corrective actions taken. The headquarters' review team would be required to submit internal FAA reports on a monthly basis as well as quarterly reports to congressional oversight committees. The bill would also require FAA to develop and implement a plan to ensure safety enforcement consistency within nine months of enactment, and make periodic reviews and updates to that plan as needed.

The Senate-passed bill would similarly require the FAA to take such action as it deems necessary to ensure that, under the VDRP program, FAA inspectors fully evaluate corrective actions proposed by the air carrier before accepting the voluntary disclosure, verify corrective actions are taken within the proposed timeframe, and carry out inspections to assess whether these corrective actions adequately remedy the disclosed problem. The measure would also require a second level supervisory review of all air carrier VDRP submissions to ensure that the problem had not been previously identified by an FAA inspector or disclosed by the airline in the past five years. The Senate bill calls for a GAO study of VDRP, identifying whether it has demonstrated benefits with respect to uncovering problems that may have otherwise gone undetected, and its possible role in reducing violations and improving regulatory compliance.

The Senate-passed bill would require all air carriers to establish a Safety Management System (SMS) that includes an Aviation Safety Action Program (ASAP); a Flight Operations Quality Assurance (FOQA) program; a Line Operational Safety Audit (LOSA) program; and a Flight Crew Fatigue Risk Management program. While many of these aspects of an SMS have been implemented at major airlines, their use is not as prevalent among regional and commuter air carriers. Additionally, the bill would require major airlines to collaborate and conduct operational oversight of their regional and commuter air carrier partners through periodic safety audits; training, maintenance, and inspection programs; and mechanisms for the exchange of safety-related information. In developing regulations for SMS, the FAA would be required to assess the merits and feasibility of using cockpit voice recorder (CVR) data in airline safety oversight practices. Historically, CVR use has been limited to accident investigations. A separate provision of the bill would generally protect ASAP, FOQA, and LOSA data from discovery in judicial proceedings, and exempt any such data acquired by FAA or another federal entity from Freedom of Information Act disclosure requirements. FAA would, however, be allowed to disclose such information to carry out its safety mission, to explain a need for change in policy or regulations, correct a condition that compromises safety, or to carry out a criminal investigation or prosecution. NTSB would be allowed to reference such data in issuing safety recommendations.

The Senate-passed bill would also require FAA to conduct at least one random, unannounced on-site inspection of regional carriers that have an established contract to provide service with another air carrier to ensure compliance with FAA safety standards. The bill would also prohibit

FAA inspectors from accepting positions representing air carriers before FAA that they were responsible for inspecting and overseeing for a period of three years after leaving the FAA.

Both the House-passed and Senate-passed bills would establish an Aviation Safety Whistleblower Investigation Office within the FAA that would be responsible for looking into complaints, allegations, and information submitted by FAA certificate holders and employees to access whether violations of FAA orders, regulations, standards, or federal laws pertaining to aviation safety may have occurred. The investigation office would be responsible for referring suspected criminal violations to the DOT OIG. The office may issue recommendations to the FAA based on its investigative findings, and would be required to submit annual reports to Congress

Unmanned Aircraft Systems

Growing interest in the use of unmanned aerial vehicles (UAVs), or unmanned aerial systems (UASs) is spurring considerable debate over how to accommodate these unmanned systems and keep them safely separated from other air traffic. FAA and other federal agencies face a wide variety of complex issues related to integrating unmanned aircraft into the National Airspace System, including reliable technologies for detecting, sensing, and avoiding other aircraft; radio frequency spectrum needs for unmanned aircraft operations; technologies and procedures for systems safety; and training and certification requirements for unmanned aircraft operators.

The House-passed bill includes a provision requiring FAA to develop a comprehensive plan within nine months of enactment to safely integrate commercial unmanned aircraft systems (UASs) in the national airspace system. The bill further specifies that this integration is to be completed as soon as possible, but not later than September 30, 2012, and authorizes such sums as may be necessary to carry out the implementation plan.

The House-passed bill further requires the Secretary of Transportation to determine if certain UASs can be safely operated in the national airspace system before completion of the integration plan, and to establish requirements for safe operation of such aircraft. The bill also requires the Secretary of Transportation to issue guidance within nine months of enactment regarding public unmanned aircraft, such as those operated by federal or state and local entities. The guidance is to expedite certification or authorization of public-use UASs; provide for collaboration with public agencies to allow for incremental expansion of UAS operations as technologies mature; and facilitate the capability of public agencies to develop and use test ranges to fly UASs. The bill also includes a provision directing FAA, in coordination with other federal agencies, to develop methods and technologies for assessing risk and preventing design and maintenance related failures of unmanned aircraft systems that could pose risks to other aircraft; a better understanding of human factors issues related to unmanned aircraft systems safety; and dynamic simulation models for assessing the integration of all types of UASs into the national airspace system without causing any degradation of existing levels of safety among all system users. The bill specifies slightly more that $6 million per year for FY2009 through FY2012 for unmanned aircraft system research.

The Senate-passed bill includes a provision requiring FAA to develop a plan for accelerating the integration of UASs into the National Airspace System within one year of enactment. Under the plan, the FAA would be required to establish a test project examining UAS integration at two test sites by 2012. Under the plan, the FAA would be required to create a safe, non-exclusionary airspace designation for cooperative manned and unmanned aircraft; establish certification, flight standards, and air traffic requirements for the test sites; dedicate funding for UAS certification,

flight standards, and air traffic requirements; encourage the leveraging and coordination of research with NASA and DOD; address both military and civilian UAS operations; ensure that UAS operations are incorporated into the NextGen system implementation plan; and verify the safety of UAS vehicles and navigational procedures before integrating them into the NAS.

The bill also calls for FAA to work in conjunction with other federal agencies to develop technologies and methods to assess the risk and improve the safety of manufactured UASs, and conduct research on human factors aspects of UAS operations. The bill also calls for an assessment by the National Academy of Sciences of UAS technologies and human factors, and directs FAA to establish three two-year test projects in sparsely populated areas designed to accelerate the safe integration of UASs into the NAS. The Senate bill would also requires FAA to develop a UAS "roadmap," update its policy statement regarding UASs, and issue proposed rulemaking on issuing airworthiness certificates and experimental certificates for UAS systems operated for compensation or hire. The Senate-passed bill includes language that would restrict FAA from regulating recreational model aircraft weighing less than 55 pounds that are flown in direct visual line-of-sight of the operator under rules intended for unmanned aircraft.

Pilot Fatigue

Reducing incidents caused by fatigue across all modes of transportation by establishing working hour limits for transportation operators based on fatigue research, circadian rhythms, and sleep and rest requirements has been a long-standing priority of the National Transportation Safety Board (NTSB). While existing federal regulations include flight time and rest requirements for flight crews that vary depending on the type of commercial flight operation being conducted, these regulations have often been criticized as not adequately reflecting scientific knowledge regarding human fatigue, alertness, and sleep needs. In airline operations, pilot organizations, through collective bargaining, have been able to negotiate schedules that provide longer rest periods than the minimum required under FAA regulations. However, there is still concern that airline pilots' rest periods do not adequately allow for the time associated with transportation to and from the airport and for circadian disruption associated with crossing time zones.

The House-passed bill would require FAA to issue regulations to include various flight assignments not flown under commercial flight rules (e.g., ferry flights or return-to-service test flights) to count toward pilots' flight time for the purposes of determining maximum allowable flight hours and establishing crew rest requirements. The House-passed bill would exempt air ambulance and all-cargo operations flown under commuter and on-demand (Title 14 CFR Part 135) rules from any changes to flight time limitations and rest requirements, leaving these categories of operations under the existing regulations pertaining to flight time and rest requirements.

The Senate-passed bill would require FAA to issue regulations on airline pilot flight and duty times that reflect the best available scientific information. FAA would also be required to establish regulations requiring the airlines to implement FAA-approved fatigue risk management plans, and update these plans every two years. The bill also would require the National Academy of Sciences to conduct a study examining the effect of pilots' commuting, sometimes long distances, to their duty assignments on fatigue. Similar requirements were enacted during the 111th Congress as part of the Airline Safety and Federal Aviation Administration Extension Act of 2010 (P.L. 111-216, Sec. 212), however regulatory actions mandated under these provisions have not yet been completed.

Miscellaneous Safety-Related Provisions

The Senate-passed bill would require FAA, in consultation with OSHA, to establish milestones for completing the work begun under the August 2000 MOU, and would require FAA to initiate development of a policy statement setting forth circumstances under which OSHA requirements may be applied to crewmembers onboard an aircraft. While the House passed more extensive provisions requiring occupational safety and health standards for flight attendants in the 111th Congress, these provisions were not included in House-passed H.R. 658. Airlines oppose OSHA involvement out of concern that having multiple regulatory agencies overseeing safety issues could cause additional confusion and burdens to the industry. The House-passed bill would require a GAO study of FAA activities addressing new technologies for dealing with smoke in the cockpits of commercial aircraft. The House-passed bill would specifically prohibit FAA from restricting the carriage of compressed oxygen and other oxidizing gases onboard aircraft in Alaska when aviation provides the only practical means of shipment. The House-passed bill would also prohibit FAA from restricting the transport of lithium batteries in a manner more restrictive than allowed under International Civil Aviation Organization (ICAO) technical instructions.

Airline Industry Issues

FAA reauthorization legislation addresses several airline industry issues. Significant issues include airline labor issues related to the formation of labor unions; takeoff and landing slot controls at Washington Reagan National Airport; possible changes to or elimination of the Essential Air Service (EAS) program for small communities; plus an array of airline consumer protection or passenger rights issues.

Industry Labor Issues

In May 2010, the National Mediation Board (NMB) promulgated a new rule concerning election procedures under the Railway Labor Act. Under the new rule, the NMB will certify a collective bargaining representative for a craft or class of employees based on a majority of valid ballots cast in a representation election.[22] The NMB's previous rule required that a majority of eligible voters in the craft or class of employees cast valid ballots in favor of representation.[23] Thus, under the NMB's old rule, it was possible for a representative that received a majority of votes to be denied certification because not all eligible voters in the craft or class of employees actually voted in the election.[24] The NMB observed that the new rule "will provide a more reliable measure/indicator of employee sentiment in representation disputes and provide employees with

[22] *See* Representation Election Procedure, 75 Fed. Reg. 26,062 (May 11, 2010) (to be codified at 29 C.F.R. pts. 1202, 1206). 29 C.F.R. pt. 1202.4, as revised, now states, in relevant part: "Except in unusual or extraordinary circumstances, in a secret ballot the Board shall determine the choice of representative based on the majority of valid ballots cast."

[23] *See id*.

[24] *See* Representation Election Procedure, 74 Fed. Reg. 56,750, 56,752 (proposed Nov. 3, 2009) (to be codified at 29 C.F.R. pts. 1202, 1206) ("[U]nder current election procedures, the Board determines that the failure or refusal of an eligible voter to participate in an NMB-conducted election is the functional equivalent of a 'no union' vote.").

clear choices in representation matters."[25] Section 903 of the House-passed bill would invalidate the new rule. The Senate-passed bill does not do so.

Washington Reagan National Airport Slot Controls

The total number of flights that can be handled in a given period of time at Washington Reagan National Airport is set by federal statute (landings and takeoffs are referred to in industry parlance as slots). This system has existed for over two decades, although the statutory limitations on the number of slots available have been modified over that period by congressional action, especially since 2000.

Flights at Reagan National are further restricted by what are known as perimeter rules. These rules, which date to the opening of Dulles Airport in the early 1960s, were designed to move most long-distance airline traffic to the new airport. Again, these perimeter rules have been modified over time. At present, flights of 1,250 miles or less are referred to as being within the perimeter. Prior to congressional action in 2000, all slots for flights arriving or departing Reagan National were required to operate within the perimeter. Since 2000, Reagan National has accommodated additional flights, using newly created slots providing service to destinations outside the perimeter, so-called beyond perimeter slots.

Many Members of Congress and their constituents were long unhappy with the perimeter restrictions, wishing to be able to fly to more distant locations from Reagan National. In 2000, and again in 2003, Congress acceded to this view in a limited fashion, allowing the aforementioned beyond perimeter slots. In the same pieces of legislation, Congress also added additional slots for service within the perimeter, thereby increasing the absolute number of flights allowed per day at the airport.

Certain other Members of Congress, Washington metro area local governments, and local residents living near the airport or in its flight paths have opposed increased traffic at Reagan National for any reason. Although this opposition focuses primarily on the noise impacts of additional traffic, opponents of increased flights have also cited other reasons to hold this view.

In February 2007, the Government Accountability Office (GAO) produced a study that suggested that additional flights could be handled at Reagan National.[26] Although the operator of the airport, the Metropolitan Washington Airports Authority, agreed that additional capacity could be added, it did not support additional slots.

The House-passed bill (Sec.423) provides for 10 new beyond perimeter slots. New beyond perimeter slots are to be created by reducing existing within perimeter slot allocations by an equal number.

The Senate passed bill (Sec. 737) provides for 24 beyond perimeter slots. Incumbent carriers granted these beyond perimeter slots must, under certain conditions, give up an equal number of

[25] Representation Election Procedure, 75 Fed. Reg. at 26,062.

[26] U.S. Government Accountability Office, *Reagan National Airport: Update on Capacity to Handle Additional Flights and Impact on Other Area Airports*, GAO-07-352, February 28, 2007, p. 31, http://www.gao.gov/search?q=GAO-07-352.

within-perimeter service slots. Following an impact study of the direct effects of the additional slots, that finds no deleterious effects of the change, DOT may grant up to an additional 8 slots.

Essential Air Service Program

The Essential Air Service Program (EAS) is a DOT-managed program that provides subsidies to air carriers for providing service between selected small communities and hub airports. The program was originally established in 1978 as part of airline deregulation to ensure a minimum level of air service to smaller communities that might otherwise lose service because of economic factors. Over time the scope of the EAS program has been modified by statute and regulation.

Vision 100 included several mechanisms and incentives designed to move communities out of the standard EAS program. Communities have not sought to participate in these incentive regimes, however, suggesting that the incentives themselves may need to be reconsidered if they are to be effective. Vision 100 created a trial program that would have required community financial participation as a condition for continued access to EAS funding in some instances. Each annual appropriations bill since passage of Vision 100, however, has prevented the use of any appropriated funds to implement the cost-sharing trial program.

The bill passed by the House and the approved Senate bill include different provisions with regard to the EAS program.

As passed by the House the bill would phase out the program over three years, scheduling the EAS in the contiguous states to sunset on October 1, 2013. Only Alaska and Hawaii would be eligible for EAS subsidies afterwards. Aside from the $50 million in annual overflight fee collections for the EAS program through FY2013, the House bill will gradually decrease the annual appropriation from the airport and airway trust fund—$97.5 million for FY2011, $60 million for FY2012, and $30 million for FY2013.

Other provisions in the EAS section of the legislation include a repeal of the never-used EAS Local Participation Program; a provision allowing the Secretary to incorporate financial incentives in EAS contracts based on carrier performance; an 18-month deadline for issuance of Revised Guidance for the program and a two-year timeframe for the Secretary to submit a report on implementation of the revised guidelines.

The bill passed by the Senate would extend the EAS program but add more restrictions. Specifically, it would limit EAS subsidies to airports that are 90 miles or more from the nearest medium or large hub, an increase from the current limit of 70 miles. The bill would also limit EAS subsidies to locations that have 10 or more enplanements per day, except in Alaska. However, the FAA administrator would be able to waive both the distance requirement and the minimum enplanements requirement.

The Airport and Airway Extension Act of 2011, Part IV (P.L. 112-27), like the Senate bill provision, increases the minimum distance for EAS eligibility from 70 miles to 90 miles from the nearest medium or large hub, except in Alaska. The provision gives the Secretary of Transportation authority to waive this restriction in cases where geographic characteristics pose undue difficulties in accessing the nearest medium or large hub. The act also includes a cap of $1,000 on the per-passenger subsidy rate, regardless of distance. Under existing law, a per-passenger subsidy cap of $200 also applies to otherwise eligible airports located less than 210 miles from a medium or large hub. The per-passenger subsidy caps do not apply to Alaska.

Airline Passenger Rights Issues

Historically, since the deregulation of aviation in 1978, DOT's role in consumer protection has been limited. The main power DOT has to protect consumers is its authority to take action against air carriers for "deceptive trade practices." The definition and interpretation of deceptive trade practices can significantly impact the scope of DOT's enforcement authority. Beginning in 2009, a broader use of this authority began emerging from the regulatory process.

DOT Regulatory Action on Airline Passenger Rights

On December 18, 2009, DOT issued a final rule, "Enhancing Airline Passenger Protections."[27] The rule addresses some of the passenger rights issues included in the House and Senate bills and the rule's provisions are therefore briefly summarized below for context. The rule cites the DOT's authority "and responsibility under 49 U.S.C. Section 41712, in concert with 49 U.S.C. Sections 40101(a)(4), 40101(a)(9), and 41702 to protect consumers from unfair or deceptive practices and to ensure safe and adequate service in air transportation," to address passenger rights issues through regulation. The final rule includes the following mandates:

- Air carriers are required to develop and implement a contingency plan for lengthy tarmac delays.
- Each contingency plan must include an assurance that, for domestic flights, the air carrier will not allow a tarmac delay to exceed three hours unless the pilot-in-command determines there is a safety-related or security-related impediment to deplaning passengers, or Air Traffic Control has advised the pilot-in-command that deplaning would significantly disrupt airport operations.
- For international flights, air carriers must commit to a set number of on-tarmac hours, but the number of hours is determined by the air carrier and set forth in its plan.
- Air carriers' contingency plans must include assurance that adequate food and potable water will be provided no later than two hours after the aircraft leaves the gate.
- Air carrier plans must include assurance of operable lavatory facilities and adequate medical attention.
- Under the rule, any chronically delayed flight scheduled by an air carrier is considered an unfair and deceptive practice and an unfair method of competition within the meaning of 40 U.S.C. Section 41712.
- Air carriers must designate employees to monitor the impacts of flight delays and cancellations, respond to consumer complaints, and tell consumers where and how to file complaints.
- Air carriers must display flight delay information for each domestic flight they operate on their websites.

[27] Department of Transportation, "Enhancing Airline Passenger Protections," 74 *Federal Register* 68982-69004, December 30, 2009.

- Air carriers must adopt customer service plans and audit their own compliance with the plans.
- Air carriers are prohibited from applying changes to their contracts of carriage retroactively.

A further rulemaking, announced April 20, 2011, will add a number of consumer protections, including the following:

- Baggage fees must be reimbursed for lost bags.
- Additional fees must be prominently disclosed on airline websites.
- The ban on lengthy tarmac delays is expanded to foreign airlines' operations at U.S. airports. A four-hour limit on tarmac delays is placed on international flights.

As the reauthorization process continues, some observers would argue that many of the following passenger rights provisions are moot given the DOT action. Others, however, may wish to change the scope of the DOT rule. In addition, because the authority of DOT to issue and implement the rule could be challenged in court, some may wish to codify the changes and reduce the likelihood of a successful court challenge.

Airline and Airport "Emergency Contingency Plans" for Tarmac Delays

The House-passed bill (Sec. 423) would require, no later than 90 days after the date of enactment, that both air carriers and operators of large or medium hub airports submit to DOT an emergency contingency plan for each of these airports. The plans must describe how the airline plans to provide food, water, restroom facilities, cabin ventilation, and access to medical treatment for passengers on aircraft that are on the ground for extended time without access to the terminal and how they plan to share facilities and make gates available at the airport during an emergency.

Airport operators also would be required to submit an emergency plan describing how the airport operator will provide for the sharing of the use of the airport's facilities and make gates available during an emergency. In the case of airports used for foreign transportation, the airport is to describe how the airport will provide for the use of the terminal to the maximum extent practicable for the processing of passengers arriving at the airport on such flights and in the cases of excessive tarmac delay.

The Senate-passed bill (Sec. 401) would require that not later than 60 days after the date of enactment, each air carrier and airport operator submit a proposed contingency plan to DOT for review and approval. DOT is to establish minimum standards for these plans to ensure that these plans address long tarmac delays and provide for the health and safety of passengers and crew. The air carrier plans are to require each air carrier at a minimum to provide essential services, including adequate food, potable water, restroom facilities, cabin ventilation, cabin temperatures, and medical treatment.

Regarding the right to deplane, the plan is to provide passengers with the right to deplane and return to the terminal (when this can be done safely) if three hours have elapsed since they have boarded and the aircraft doors have been closed; or three hours have elapsed after the aircraft has landed and the passengers have been unable to deplane. The offer to deplane must be repeated at least once every three hours thereafter. Exceptions are allowed if the pilot determines that the

aircraft will depart or unload within less than 30 minutes or that permitting a passenger to deplane would jeopardize passenger safety or security. These requirements also apply to diverted flights. After the plan has been reviewed by DOT, it is to be made available to the public. Air carriers would be required to report any flight delayed on the tarmac for over three hours to the Office of Consumer Protection at DOT within 30 days.

The airport operator would also be required to submit a proposed contingency plan describing how the operator will provide for the deplanement of passengers following a long tarmac delay, will provide for the sharing of facilities, and make gates available for use by aircraft experiencing delays. Civil penalties may be assessed on any air carrier or airport operator that does not submit, obtain approval of, or adhere to a contingency plan submitted under the bill. Each air carrier or airport would be required to submit a contingency plan and must ensure public access to the approved plans via their Internet website or by other means determined by DOT.

Advisory Committee for Aviation Consumer Protection

Section 404 of the Senate-passed bill would require the Secretary of DOT to establish a four-member committee for aviation consumer protection to advise the Secretary in carrying out passenger service improvements. The House-passed bill contains no similar provision.

Monthly Air Carrier Reports on Customer Service and Flight Delay History

The House-passed bill (Sec. 422) would require airlines to file monthly reports on flights that are diverted from their scheduled destination to another airport and on flights that depart from the originating airport gate but are cancelled before takeoff. The data must be compiled in a single monthly report and be made available on the DOT website.

The Senate-passed bill (Sec. 425) would require air carriers, on a monthly basis, to publish and update on the Internet website of the air carrier, a list of chronically delayed flights operated by the carrier and to share the list with each entity that is authorized to book passenger air transportation (e.g., travel agents or websites), for inclusion on the Internet website of the entity.

Air carriers or entities described above would need to prominently disclose on their Internet websites, at the time of ticket booking, the following: (1) the on-time performance for the flight if the flight is a chronically delayed flight and (2) the cancellation rate for the flight if the flight is a chronically canceled flight. A chronically delayed flight is defined as one that has not been on-time at least 40% of the time in the last three months, and a chronically canceled flight as one whose departures have been canceled at least 30% of the time for the last three months.

Expansion of DOT Airline Consumer Complaint Investigations

The House-passed bill (Sec. 424) would require that, subject to the availability of appropriations, the Secretary of DOT is to investigate consumer complaints regarding flight cancellations; compliance with federal regulations regarding the overbooking of seats on flights; lost, damaged, or delayed baggage (and problems with air carrier claim procedures); problems with refunds for unused or lost tickets; incorrect or incomplete information on fares, discount fare conditions and availability, overcharges, and fare increases; rights of frequent flier mile holders; and deceptive or misleading advertising. The Senate-passed bill also includes this provision (see Sec. 403), with

the additional requirement that DOT is to provide, in an annex to its budget request, an estimate of the resources needed to investigate all such claims received by DOT in the previous year.

Consumer Complaint Hotline Telephone Number

The House-passed bill (Sec. 425) would require DOT to establish a consumer complaint hotline telephone number for use by airline passengers. The Secretary of Transportation would need to notify the public of the telephone number. Air carriers using aircraft of 30 seats or more would need to include on their websites, ticket confirmations, or boarding passes the hotline number; the email address, telephone number, and mailing address of the air carrier; and the email address, telephone number and mailing address of the Aviation Consumer Protection Division of the Department of Transportation. The Senate-passed bill (Sec. 401) also includes a hotline provision. The bill, however, is less prescriptive concerning the means used to publicize the hotline telephone number, simply leaving it up to the Secretary of Transportation to publicize the number.

Musical Instruments

Section 424 of the House-passed bill would require air carriers to permit passengers to stow a musical instrument in the aircraft passenger compartment in a closet, baggage or cargo stowage compartment without charge, if the instrument can be stowed in accordance with the requirements for carriage of carry-on baggage or cargo set forth by the Administrator of the FAA and there is space for such stowage on the aircraft. For instruments too large to be stowed in a closet, baggage or cargo stowage compartment the instrument may be stowed in a seat if it fits and the passenger pays for the seat. An instrument may be treated as checked baggage if the sum of the length, width, and height, including the case does not exceed 150 inches, if its weight does not exceed 165 pounds, and it can be stowed in accordance with the requirements for the stowage of baggage or cargo. Section 713 of the Senate-passed bill is similar to the House bill.

Disclosure of the Operating Air Carrier Name for Each Flight Segment

The Senate-passed bill (Sec.406) would declare it an unfair or deceptive practice for any air carrier, ticket agent, or other person offering to sell tickets for air transportation not to disclose the name of the air carrier providing the air transportation. If the flight has more than one segment it shall be an unfair or deceptive practice not to name the air carrier providing the air transportation for each flight segment. For Internet offers, the disclosure must be on the first display screen of the website.

P.L. 111-216, The Airline Safety and Federal Aviation Administration Extension Act of 2010, in Section 210 incorporates the provision of Senate-passed H.R. 1586 requiring disclosure of the name of an air carrier providing air transportation for each flight segment. The provision declares any failure to disclose such information an unfair or deceptive practice. For Internet offers, the provision requires that the disclosure be on the first display screen of the website and in a format that is easily visible to a viewer. The House-passed bill does not include a similar provision.

Disclosure of Passenger Fees

The Senate-passed bill (Sec. 405) would require the Secretary of Transportation to complete a rulemaking that requires each air carrier operating in the United States to make available to the

public and to the Secretary a list of all passenger fees and charges (other than airfare) that may be imposed by the air carrier. The lists are to include fees for checked baggage or oversized baggage; meals, beverages, or other refreshments; seats in exit rows, seats with additional space, or other preferred seats in any given class of travel; purchasing tickets from an airline ticket agent or travel agency; or any other good, service, or amenity provided by the air carrier, as required by the Secretary. The Secretary may require air carriers to make available the information on their Internet websites, to travel agencies, and in advertising. The Secretary shall also require air carriers to update the information as necessary but no less frequently than every 90 days, unless there has been no increase. The House-passed bill does not include a provision on this issue.

Notification Requirements in Regard to Passenger Taxes and Fees

The Senate-passed bill (Sec. 407) requires the Office of Aviation Consumer Protection and Enforcement of the Department of Transportation to establish rules to ensure that all consumers are able to easily and fairly compare airfares and charges when buying tickets, including all taxes and fees.

The bill would also make it an unfair or deceptive practice for an air carrier or ticket agent to sell a ticket for air transportation unless they display all tax and fee information in reasonable proximity to the price listed for the ticket and provide information on the said taxes and fees including the amounts and a description of each before requiring the purchaser to provide any personal information.

The taxes and fees covered by the provision include all taxes and fees, charges and surcharges included in the price of the ticket. Among these charges are fuel surcharges, surcharges relating to peak or holiday travel, baggage fees, seating assignment fees, and operational services that are charged when the ticket is purchased. Additionally, Section 807 of the Senate-passed bill specifies that if taxes are disclosed separately, the inclusion of non-tax costs in the amounts attributed to taxes is prohibited.

The House-passed bill does not include any provisions addressing this issue.

Denied Boarding Compensation

The House-passed bill (Sec. 428) would require that, not later than six months after enactment and every two years thereafter, the Secretary of DOT shall evaluate the amount provided for denied-boarding compensation and issue a regulation to adjust such compensation as necessary. The Senate bill does not include this provision.

Delayed Baggage Compensation

The House-passed bill (Sec. 429) would require GAO to conduct a study to (1) examine delays in the delivery of checked baggage to passengers and (2) make recommendations for establishing minimum standards to compensate passengers in the case of unreasonable delays in checked baggage delivery. GAO is to consider the additional fees for checked baggage that are now imposed by some air carriers and how the additional fees should improve an air carrier's baggage performance. Results are to be reported 180 days after enactment. The Senate bill does not include this provision.

Study of European Union Rules for Passenger Rights

The House-passed bill (Sec. 511) would require GAO to conduct a study to evaluate and compare the regulations of the European Union and the United States on compensation offered to passengers who are denied boarding or whose flights are cancelled or delayed. The Senate bill does not include this provision.

Insecticide Use on Passenger Aircraft

Section 425 of the House-passed bill would require the Secretary of Transportation to establish a public Internet website that lists countries that may require an air carrier to treat an aircraft passenger cabin with insecticides. Air carriers or ticket agents selling tickets in the United States for a foreign destination listed in the DOT website shall disclose on their own website or through other means that the destination country may require the carrier to treat the cabin with insecticides. The Senate-passed bill does not include this provision.

Prohibitions Against Cell Phone or Other Voice Communication Devices

Section 433 of the House-passed bill requires the FAA to conduct a study on the impact of the use of cell phones for voice communications in an aircraft during a flight in scheduled passenger air transportation where currently permitted by foreign government in foreign air transportation. The Senate-passed bill does not include this provision.

Smoking Prohibition

The House-passed bill (Sec. 401) would amend the smoking prohibition set forth in 49 U.S.C. 41707. It would clarify that the prohibition applies to passenger flights, both international and domestic. It would also broaden the coverage to include nonscheduled intrastate, interstate, or international flights if a flight attendant is a required crewmember of the aircraft. The Senate bill does not include this provision.

Study of Air Quality in Aircraft Cabins

Section 564 of the Senate-passed bill would require FAA to initiate, within one year of enactment, a study of air quality in aircraft cabins that assesses bleed air quality on the full range of commercial aircraft operating in the United States; identifies oil-based contaminants, hydraulic fluid toxins, and other air toxins that appear in cabin air and their quantity and prevalence; determines the specific amount and duration of toxic fumes present in aircraft cabins that constitute a health risk to passengers; develops a reporting standard for smoke and fume events in aircraft cabins; identifies the potential health risks from exposure to toxic fumes during flight; and determines the extent to which the installation of sensors and air filters on commercial aircraft would provide a public health benefit. The House-passed bill does not contain a provision regarding this issue.

Seat Dimension Disclosure to Facilitate Use of Child Safety Seats

Section 408 of the Senate-passed bill would require FAA to prescribe regulations for posting on air carrier websites the maximum child safety seat dimensions that will fit into a seat on an aircraft. The House-passed bill does not address this issue.

Environmental and Energy Issues

Aviation and airport operations have air quality, water quality, waste, and community noise impacts.[28] Within the context of FAA reauthorization, both H.R. 658 and S. 223 include provisions intended to address issues associated with environmental impacts, and to assist airport operators with complying with local, state, and federal regulations related to those impacts. Those provisions include requirements for

- research into technology or processes that could reduce noise, air emissions, and energy use;
- grants and procedural changes to assist airports in meeting environmental compliance requirements; and
- changes to address airport and aircraft air and noise emissions (including modifications to the Air Tour Management Program).

In addition to the categories listed above, the proposals also include provisions regarding airport sustainability practices.[29] Section 221 of the Senate bill directs FAA to establish a 15-member airport sustainability planning working group. Among other functions, it would develop "best practices and metrics for the sustainable design, construction, planning, maintenance, and operation of an airport." The Senate-passed bill specifies that no funds may be authorized to carry out the provision. Under H.R. 658 (Sec. 510), FAA may implement, to the extent practicable, sustainable practices to incorporate energy-efficient design, equipment, systems, and other measures in the construction and major renovation of air traffic control facilities to reduce energy consumption at, improve the environmental performance of, and reduce the cost of maintenance for those facilities.

Both H.R. 658 and S. 223 include provisions intended to address waste generation at airports (House, Sec. 134, "Solid Waste Recycling Plans," Senate, Sec. 714, "Recycling Plans for Airports"). The Senate bill would amend the definition of "airport planning"[30] to include planning to minimize the generation of solid waste in a manner consistent with applicable state and local recycling laws. Both bills would also amend the list of conditions under which an airport improvement grant application may be approved.[31] Under those conditions, airports required to

[28] For additional background see CRS Report RL33949, *Environmental Impacts of Airport Operations, Maintenance, and Expansion*, by Linda Luther.

[29] For information regarding sustainability programs, see the Sustainability Aviation Guidance Alliance (SAGA) website at http://www.airportsustainability.org/. SAGA is a coalition of representatives from FAA, Airports Council International-North America (ACI-NA), the Airport Consultants Council (ACC), the American Association of Airport Executives (AAAE), the Air Transport Association (ATA), and consultants who represent the participating associations.

[30] 49 U.S.C. § 47102 (5).

[31] 49 U.S.C. § 47106 (a).

have an airport master plan must address (in the master plan) factors such as the feasibility of solid waste recycling at the airport and minimizing the generation of solid waste at the airport.

Environmental-Related Research Programs and Funding

Under "Title X—Federal Aviation Research and Development Reauthorization Act of 2011," H.R. 658 includes the following environmental-related research and development requirements (except where noted otherwise, research funding would be from amounts made available under the Research and Development section of the Airport and Airway Trust Fund):[32]

- **Airport cooperative research program (Sec. 1007)**—would permanently authorize the Airport Cooperative Research Program (ACRP).[33] A funding source for the ACRP is not designated in the bill.
- **Interagency research initiative on aviation and the environment (Sec. 1010)—**directs the FAA Administrator, in coordination with NASA, to establish a research initiative to assess the potential affects of aviation on the environment and to evaluate approaches to address those impacts.
- **Aviation fuel research and development program (Sec. 1011)—**would require FAA, in coordination with NASA, to continue to study technologies that would allow the use of unleaded gasoline in piston-engine aircraft (currently, piston-engine aircraft—mostly general aviation aircraft—use leaded gasoline).
- **Research program on alternative jet fuel technology for civil aircraft (Sec. 1012)—**would establish a research program to conduct research into the development of jet fuels from alternative sources such as coal, natural gas, biomass, ethanol, butanol, and hydrogen.
- **Review of FAA's energy- and environment-related research programs (Sec. 1013)—**would require FAA to contract with the National Research Council to assess the adequacy of FAA's energy- and environment-related research programs. Among other requirements, the review must assess whether such FAA research programs are properly coordinated with NASA, the National Oceanic and Atmospheric Administration (NOAA), and other relevant agencies.

Under "Title VI—Aviation Research," S. 223 also includes several environmental-related research requirements. Like the House bill, S. 223 would permanently authorize the Airport Cooperative Research Program (Sec. 601). Unlike the House bill, the Senate bill specifies funding amounts for the program. Not more than $15 million per year for FY2010 and FY2011 may be appropriated for the program. The Senate bill also specifies that not less than $5 million shall be used for "research activities related to the airport environment, including reduction of community exposure to civil aircraft noise, reduction of civil aviation emissions, or addressing water quality issues."

[32] 49 U.S.C. § 48102 (a).

[33] The ACRP was authorized as a four-year pilot program under Vision 100 (49 U.S.C. §44511(f)). Funds for the program were previously authorized under the Airport and Airway Trust Fund Authorizations, under the Airport Planning and Development and Noise Compatibility Planning and Programs. In the House-passed bill, the ACRP is explicitly not allowed to receive funding from this source.

Also similar to the House bill, S. 223 would establish research programs related to developing alternative fuel technology (from natural gas, biomass, and other renewable sources) for civilian aircraft (Sec. 603). The Senate bill differs in that it more specifically establishes a research program to develop jet fuel using "clean coal" (Sec. 604).[34]

Section 602 of S. 223 ("Reduction of noise, emissions, and energy consumption from civilian aircraft") would establish a research program related to reducing civilian aircraft energy use, air emissions, and source noise through grants or other measures. The program would include participation of educational and research institutions or private sector entities that have existing facilities and experience developing and testing noise, emissions and energy reduction engine and aircraft technology, and developing alternative fuels. The Senate-passed bill would establish a "Consortium for Continuous Low Energy, Emissions, and Noise" (CLEEN) to perform research in coordination with NASA and other relevant agencies. Performance objectives of the program, to be reached no later than January 1, 2016, include certifiable aircraft technology that reduces fuel burn 33 percent; certifiable engine technology that reduces nitrogen oxide emissions by 60%; and certifiable aircraft technology that reduces noise levels by 32 Effective Perceived Noise in decibels (EPNdb) cumulative.

Additional environmental-related research and development requirements specified under Title VI of S. 223 include the following:

- **Pilot program for zero emission airport vehicles (Sec. 609)**—would establish a pilot program under which certain public-use airports may use funds[35] to acquire and operate zero emission vehicles. Program participants may qualify for funds only if the airport is located in an air quality non-attainment area.[36] The federal share of the costs of a project carried out under the program would be 50%.
- **Reduction of emissions from airport power sources (Sec. 610)**—would amend the "Airport ground support equipment emissions retrofit pilot program"[37] to establish a program under which certain airports would be encouraged to assess their energy requirements, including heating and cooling, base load, back-up power, and power for on-road airport vehicles and ground support equipment, to identify opportunities to reduce harmful emissions, and to increase energy efficiency at the airport. Grants for such an assessment would be available under the Airport and Airway Trust Fund Authorizations.[38]

Also, Section 216 of S. 223 ("Research improvement for aircraft") would amend existing "Facility, Personnel, and Research" requirements with regard to "improved aircraft, aircraft engines, propellers, and appliances"[39] to require the Administrator to conduct or

[34] Unless noted otherwise, all research projects authorized under Title VI of the Senate-passed bill are funded through grants made available under the Research and Development section of the Airport and Airway Trust Fund (49 U.S.C. § 48102(a)).

[35] Available under the Airport Improvement requirements at 49 U.S.C. § 47117 or the airport planning and development and noise compatibility planning and programs of the Airport and Airway Trust Fund Authorizations at 49 U.S.C. § 48103.

[36] As defined under the Clean Air Act, 42 U.S.C. § 7501(2).

[37] 49 U.S.C. § 47140.

[38] 49 U.S.C. § 48103.

[39] 49 U.S.C. § 44504(a).

supervise research to "support programs designed to reduce gases and particulates emitted."

Grants and Procedural Changes to Assist with Environmental Compliance

The House-passed bill would amend the state block grant program[40] to specify that federal, state, and local environmental requirements, including the National Environmental Policy Act (NEPA, 42 U.S.C. Sec. 4321 *et seq*.),[41] would apply to the program (Sec. 502). The House-passed bill specifies that any federal agency that must grant some form of approval (i.e., a permit or license) to a state must consult with that state during the approval process. Further, the federal agency would be required to use any state-prepared environmental analysis associated with that approval. The Senate-passed bill also includes provisions that would similarly amend the state block grant program (under Sec. 209). Unlike the House bill, S. 223 would establish a pilot program for up to three states that do not participate in the block grant program.

Also related to NEPA compliance, Section 503 of H.R. 658 would amend current law specifying "expedited, coordinated environmental review" processes[42] to included airport capacity improvement projects and certain NextGen environmental efficiency projects. Further, under Sec. 504, the House bill would amend current requirements that allow FAA to accept funds from an airport sponsor to hire additional staff or obtain the services of consultants to expedite the processing, review, and completion of environmental activities associated with an airport development project.[43] The proposal would allow FAA to accept funds to hire additional staff to conduct "special environmental studies" related to a federally funded airport project; conduct studies or reviews to support noise compatibility measures approved under the Part 150[44] requirements; or conduct studies or reviews to support environmental mitigation specified in a project's final decision and delineated at the completion of the NEPA process. The Senate bill includes provisions essentially identical to House bill Sec. 504, under "Airport funding of special studies or reviews" (Sec. 210).

The House-passed bill (Sec. 506, "Grant eligibility for assessment of flight procedures") would amend the existing noise compatibility program requirements[45] to allow grants to airport operators to assist them in completing environmental review[46] and assessment activities for proposals to implement flight procedures. Further, the proposal would allow a project sponsor to

[40] 49 U.S.C. § 47128.

[41] Among other provisions, NEPA requires airport operators to consider the environmental impact of any proposed action that may require federal funding or approvals. It also requires them to look at all reasonable alternatives to meet a given project's purpose and need, before final decisions are made. For more information, see FAA's "NEPA Implementing Instructions for Airport Projects," Order 5050.4B, April 28, 2006, available at http://www.faa.gov/airports/resources/publications/orders/environmental_5050_4/.

[42] 49 U.S.C. § 47171.

[43] 49 U.S.C. § 47173.

[44] Airport Noise Compatibility Planning requirements are specified under 14 C.F.R. Part 150 and are, hence, commonly referred to as "Part 150" requirements.

[45] 49 U.S.C. § 47504.

[46] Generally, "environmental review" requirements refer to environmental review requirements specified under the NEPA regulations. However, they may apply more broadly to any review, study, or analysis required by any other environmental law applicable to a given project.

provide FAA with funds to hire additional staff as necessary to expedite completion of the environmental review necessary to implement flight procedures. The Senate bill includes provisions essentially identical to the House bill under "Grant eligibility for assessment of flight procedures" (Sec. 211).

Unlike the House-passed bill, Sec. 213 of S. 223 would establish a trial program to provide grants for up to six environmental mitigation demonstration projects. Eligible projects would include those that would measurably reduce or mitigate aviation impacts on noise, air quality, or water quality in the vicinity of the airport. The federal share of the projects would be 50% of the project costs, up to $2.5 million, and would be apportioned under the AIP.

Requirements to Address Aircraft and Airport Air Emissions and Noise

In 1990, Congress mandated a phase out of non-Stage 3 aircraft over 75,000 pounds by December 31, 1999.[47] This has allowed Stage 1 and Stage 2 aircraft *under* 75,000 pounds, primarily corporate and private-use aircraft, to continue to operate. In 2006, non-Stage 3 aircraft represented a relatively small number of all operational turbojet aircraft under 75,000 pounds (approximately 1,330 or 13%). However, at some airports, particularly smaller commercial and general aviation airports, their use makes a disproportionate contribution to noise exposure contours. As a result, several airports have sought to ban or restrict access to such aircraft. Those efforts have generally been prohibited by FAA.

Both the House and Senate bills would prohibit the operation of aircraft under 75,000 pounds, not complying with Stage 3 noise levels, with certain explicit exceptions. Under Sec. 508 of H.R. 658, the prohibition would take effect December 31, 2016. Under Sec. 710 of S. 223, the prohibition would take effect two years earlier, December 31, 2014.

The following sections of the House proposal also deal with issues associated with airport and aircraft noise or air emissions:

- **Determination of Fair Market Value of Residential Properties (Sec. 507)**—specifies that, in approving the use of noise compatibility funds for the acquisition of residential real property, the FAA must ensure that the property appraisal disregards any decrease or increase in the fair market value of the real property caused by the project for which the property is to be acquired.
- **Aircraft Departure Queue Management Pilot Program (Sec. 509)**—funds a pilot program at five public-use airports that would be required to develop and test new air traffic flow management technologies to better manage the flow of aircraft on the ground and reduce ground holds and idling times for aircraft to decrease emissions and increase fuel savings. Not more than $2.5 million may be expended under the trial program at any single public-use airport.[48]

[47] Airport Noise and Capacity Act of 1990 (P.L. 101-508).

[48] Funded under 49 U.S.C. § 48101(a), "Air navigation facilities and equipment, General authorization of appropriations."

- **Sense of Congress (Sec. 511)**—states the sense of the Congress with respect to the European Union (EU) directive extending the EU's emission trading proposal to international civil aviation. The bill specifies that, by not working through the International Civil Aviation Organization in a consensus-based fashion, the EU directive is inconsistent with the Convention on International Civil Aviation; and that it is antithetical to building international cooperation to address greenhouse gas emissions from aircraft.
- **Aviation Noise Complaints (Sec. 512)**—requires that each owner or operator of a large hub airport post to the airport's website, a telephone number to receive aviation noise complaints related to the airport. Annually after implementation, any owner or operator that receives complaints from 25 individuals, must submit a report to the Administrator regarding the number of complaints received and a summary of the nature of the complaints. Also, FAA must make that information available to the public by electronic means.

Under Sec. 104, S. 223 amends the Airport and Airway Trust Fund Authorizations to include a total of $4.0 and $4.1 billion for airport planning and development and noise compatibility planning and programs for FY2010 and FY2011, respectively.

Section 712 of S. 223 would create a pilot program for the redevelopment of property purchased with noise mitigation funds or passenger facility charge funds, to encourage airport-compatible land uses. The trial program would involve up to four airport operators that have submitted a noise compatibility program to FAA. The federal share of the allowable costs of a project carried out under the pilot program shall be 80%. Provisions in this section would also amend the list of allowable noise compatibility measures[49] to include land use planning that will prevent the introduction of additional incompatible land uses.

The Air Tour Management Program

The National Parks Air Tour Management Act of 2000 (Title VIII, P.L. 106-181, hereinafter "Air Tour Act") regulates commercial air tours over most units of the National Park System. It requires the FAA and the National Park Service (NPS) to create management plans for air tours at individual park units and within a half-mile of their boundaries (as well as for air tours over tribal lands). The purpose of a plan is to mitigate or prevent any significant adverse impacts of commercial air tours to natural and cultural resources, visitor experiences, and adjacent tribal lands.

The Air Tour Act final rule[50] requires air tour operators to apply for authority to fly over national park and adjacent tribal lands. The FAA received applications for commercial air tours at more than 100 of the 394 park units, and has granted interim operating authority to all applicants. An application triggers development of an Air Tour Management Plan (ATMP) by the FAA and NPS for each unit where there is no existing plan.[51] Development of an ATMP requires an environmental review under the National Environmental Policy Act of 1969 (NEPA, 42 U.S.C.

[49] 49 U.S.C. § 47504(a)(2).

[50] Federal Aviation Administration, "Air Tour Act," 67 *Federal Register* 65661, October 25, 2002.

[51] The FAA provides ATMP information on its website at http://www.faa.gov/about/office_org/headquarters_offices/arc/programs/air_tour_management_plan/more_tour_management_plan.cfm.

Sec.Sec.4321-4370f). The FAA and NPS are currently developing ATMPs for several park units, but none have been completed to date. A January 2006 GAO report concluded that the delay in implementing the Air Tour Act has limited the ability of tour operators to make major business decisions. GAO further concluded that Congress may wish to consider amending the Air Tour Act to give the agencies discretion in determining which park units may need ATMPs.[52]

The House and Senate-passed versions of H.R. 658 contain provisions seeking to expedite and streamline agency actions, in part because of the slow progress in completing ATMPs. The House-passed version would provide that, in lieu of an ATMP, the NPS Director and FAA Administrator could enter into a voluntary agreement with a commercial air tour operator that would govern commercial air tours over a park unit. Park units with 50 or fewer annual air tour flights would be exempted from the requirement for an ATMP or voluntary agreement, although the NPS Director could disallow an exemption. Among other provisions, the bill would establish reporting requirements for commercial air tour operators, and could provide for more interim operating authority because interim conditions have prevailed for longer than had been anticipated.

Some of the air tour provisions in the House- and Senate-passed versions of H.R. 658 are similar, although many of them differ. For instance, the Senate version would allow for development of a voluntary agreement to govern air tours over national park units, but would not exempt parks with 50 or fewer annual flights from the requirement to develop an ATMP or a voluntary agreement. Both versions would allow the agencies to modify interim operating authority, but only the Senate-passed version would allow an air tour operator that obtains operating authority for commercial air tours to transfer that authority to another air tour operator. Both versions would establish reporting requirements for commercial air tour operators, but the Senate-passed version seeks to rescind the operating authority of a commercial air tour operator that does not file a report and to require the Inspector General of the Department of Transportation to audit the reports. Also, only the Senate version would authorize the Secretary of the Interior to assess a fee on commercial air tour operators, and the Secretary is to collect sufficient revenue to pay the costs of developing ATMPs.

[52] The report, including information on agency actions on GAO recommendations, is available on the GAO website at http://www.gao.gov/new.items/d06263.pdf.

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Key CRS Policy Staff and Areas of Expertise

The table below provides a quick reference for congressional staff seeking to identify experts to contact regarding specific issues or aspects of FAA reauthorization legislation.

Name	Areas of Expertise	Division	Telephone
Bart Elias	Next Generation Air Traffic System (NGATS)	RSI	7-7771
	FAA Facilities and Equipment (F&E)		
	FAA Management and Operations		
	Airport and Airspace Demand and Capacity Analysis		
	Aviation Safety		
	Aircraft Noise Policy and Quiet Aircraft Technology		
Bob Kirk	FAA Financing and Aviation Taxes	RSI	7-7769
	Airport and Airways Trust Fund (AATF)		
	Airport Improvement Program (AIP)		
	Airport Finance		
Rachel Tang	Airport Management and Airline Issues	RSI	7-7875
	Essential Air Service and Small Community Air Service Development Programs		
Linda Luther	Airport Environmental Issues	RSI	7-6852
Carol Hardy Vincent	Air Tour Management Program	RSI	7-8651
	Aviation Impacts on National Parks		
Jim McCarthy	Aircraft Emissions	RSI	7-7225
Brent Yacobucci	Aviation Fuels	RSI	7-9662
	Alternative Fuels for Aircraft and Ground Support Vehicles		
Jon Shimabukuro	Labor Law and Policy	ALD	7-7990
	FAA Labor Relations		
Todd Tatelman	Aviation Law (Domestic and International)	ALD	7-4697