



U.S. Department  
of Transportation

**Federal Aviation  
Administration**

# **FEDERAL AVIATION ADMINISTRATION**

## **BUDGET IN BRIEF**

**Fiscal Year 2001**







## TABLE OF CONTENTS

---

<b>OVERVIEW.....</b>	<b>1</b>
FY 2001 President’s Budget Request by Appropriation (Figure 1).....	1
Summary of Funds (Table 1).....	1
Build-Up of the FY 2001 Operations Budget (Table 2) .....	2
FAA Budget History FY 1992 to FY 2001 (Figure 2).....	5
FAA Employment Levels (Table 3).....	6
<b>OPERATIONS.....</b>	<b>7</b>
FY 2001 Budget Request by Major Object Class (Figure 3) .....	7
FY 2001 Budget and Staffing Request by Line of Business (Figure 4) .....	7
Average Daily Operations - 55 Selected Airports (Figure 5).....	8
Average Daily Aircraft Handled - 20 CONUS Centers (Figure 6).....	9
Dollar Resources by Line of Business (Table 4).....	13
Operations Budget by Major Object Class (Table 5).....	14
<b>GRANTS-IN-AID FOR AIRPORTS .....</b>	<b>15</b>
Airport Improvement Program Funding History (Figure 7) .....	15
<b>FACILITIES AND EQUIPMENT.....</b>	<b>17</b>
F&E Funding History Comparison (Figure 8) .....	17
FY 2001 Budget Request by Budget Activity (Figure 9) .....	17
F&E Activities by Budget Line Item (Table 6) .....	20
<b>RESEARCH, ENGINEERING, AND DEVELOPMENT.....</b>	<b>27</b>
R,E&D Funding History Comparison (Figure 10) .....	27
FY 2001 Budget Request by Budget Activity (Figure 11) .....	27
Summary of Request by Activity/Program (Table 7).....	29



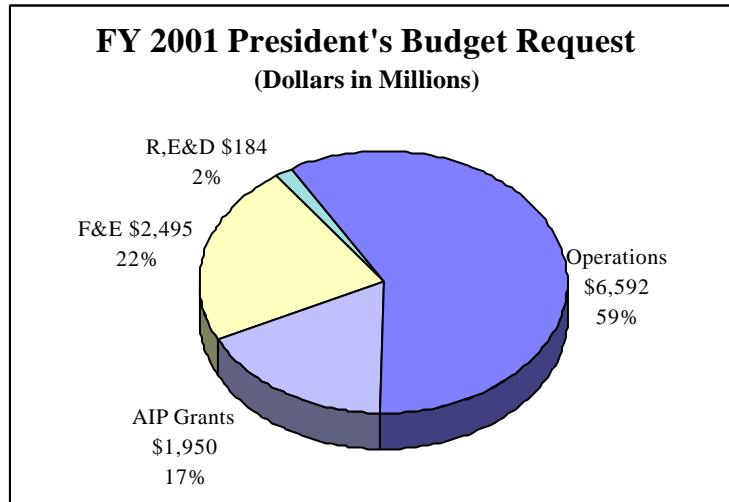
## TABLE OF CONTENTS

---

<b>AIRPORT AND AIRWAY TRUST FUND .....</b>	<b>31</b>
Operations Appropriation and Trust Fund Share (Figure 12).....	31
Amounts Available for Appropriation (Table 8) .....	32
<b>AMOUNTS AVAILABLE IN FY 2000 (Table 9) .....</b>	<b>34</b>
<b>SUMMARY OF OUTLAYS (Table 10).....</b>	<b>35</b>



## OVERVIEW



**Figure 1**

### Summary of Funds (Dollars in Millions)

Appropriation	FY 2000 Enacted	Change	FY 2001 Request
Operations	\$5,893.4	\$698.8	\$6,592.2
(General)	0.0	0.0	0.0
(Trust)	(5,893.4)	(698.8)	(6,592.2)
Grants-In-Aid Airports	1,895.6 <sup>1</sup>	54.4	1,950.0
Supplemental Proposal	-50.0	50.0	0.0
Facilities and Equipment	2,075.0	420.0	2,495.0
(Rescission Unobligated Balance)	-30.0	30.0	0.0
Research, Engineering, and Development	156.5	27.9	184.4
<b>Total</b>	<b>\$9,940.5</b>	<b>\$1,281.1</b>	<b>\$11,221.6</b>
(General)	0.0	0.0	0.0
(Trust)	(9,940.5)	(1,281.1)	(11,221.6)

**Table 1**

reduce the fatal accident rate on U.S. carriers 80% by 2007 and the upgrading of air traffic control automation to allow efficiencies through more direct flights.

The Federal Aviation Administration's FY 2001 President's Budget requests \$11.222 billion, an increase of \$1,281 million from the FY 2000 enacted level. This budget continues funding agency programs entirely from Airport and Airway Trust Fund resources derived from excise taxes and cost-based user fees.

The budget also assumes the collection of \$22 million in overflight fees for services provided by the FAA that will be used for the Essential Air Service (EAS) program.

The distribution to the left reflects the budget resources proposed in the FY 2001 budget request as compared to FY 2000 enacted levels.

In FY 2001, FAA will continue to focus on themes identified as the FAA strategic goals: safety, security, and system efficiency. The Administration's strong commitment to a safe, efficient, and modern aviation system will be continued, including initiatives to

<sup>1</sup> Reflects rescission of \$54.362 million per P.L. 106-113 for .38% Governmentwide across-the-board reduction



## OVERVIEW

---

### OPERATIONS

In FY 2001, the Administration is seeking \$6,592.2 million for FAA Operations, \$698.8 million, or 11.9 percent, above the level for FY 2000, and 44,039 employees, 331, or .7 percent below that estimated for the end of FY 2000. The staffing reflects a transfer from Operations to the Administrative Services Franchise Fund. Funding consists of \$6,592.2 million in new budget authority funded directly from the trust fund. As detailed in Table 2, increases of \$757.4 million are proposed, associated with bringing new equipment on-line and making it operational in the National Airspace System (NAS); funding growth in our field maintenance, security, flight standards, aircraft certification, and commercial space transportation staffs; replacing administrative systems; and improving the telecommunications and other infrastructures. The increases are offset by savings of \$58.6 million, primarily due to reductions for the EAS payment, one less day in FY 2001, and phase out of the contract tower cost sharing and Mid-America Aviation Resource Consortium programs. The budget also includes funding for mandatory pay adjustments and inflationary growth.

**Table 2**

### **Build-Up of the FY 2001 Operations Budget (Dollars in Millions)**

FY 2000 Enacted .....	\$5,893.4
<u>Decreases</u>	<u>Increases</u>
Cost Savings:	Mandatory Increases:
One Less Day .....	Pay Increases .....
-17.1	+345.8
Lower GSA Rent Estimate.....	Non-Pay Increases .....
-2.5	+19.0
Transfer of EAS Payment .....	Total Mandatory Increases .....
-32.0	+364.8
Contract Tower Cost Sharing (CTCS).....	Discretionary Increases:
-5.0	NAS Handoff .....
Mid-America Aviation Resource Consortium (MARC) .....	+135.4
-2.0	Staffing Increases:
	Field Maintenance.....
	+6.4
	Certification/Flight Standards.....
	+8.5
	Security.....
	+5.8
	Safety Oversight and Assessment .....
	+5.8
	Information Security.....
	+25.2
	Training.....
	+15.2
	IPPS/DAFIS Replacement, Capitalization, and
	Cost Accounting System .....
	+29.5
	Next Generation E-Mail.....
	+10.0
	Runway Incursion Program .....
	+4.8
	Telecommunications Infrastructure.....
	+31.5
	Infrastructure Requirements.....
	+89.9
	Other .....
	+24.6
Total Savings .....	Total Increases .....
-58.6	+757.4
FY 2001 Request .....	\$6,592.2



## **OVERVIEW**

---

### **GRANTS-IN-AID FOR AIRPORTS**

The FY 2001 budget assumes \$1,950 million, equal to the FY 2000 enacted level, for airport improvement projects to enhance capacity, improve safety and security, and mitigate noise. Airport grant funding will continue to be supplemented by the passenger facility charges (PFC's). At the end of calendar year (CY) 1999, 314 airports had been approved to collect PFC's since the inception of the program. PFC collection in CY 1999 reached an estimated \$1,498 million. Collections are projected at \$1,550 million in CY 2000, and may approach \$1,400 million in CY 2001, assuming current statutory authority. A proposed legislative increase of the current \$3 PFC to \$5 would lead to significantly higher annual collections. Revenues from PFC's are an important source of capital for many airports. The FY 2001 budget assumes \$53 million for Administrative expenses related to this program, \$7 million for airport related research, and \$28 million for shortfalls in overflight fee collections to fund the EAS.

### **FACILITIES AND EQUIPMENT**

The FY 2001 request for Facilities and Equipment (F&E) is \$2,495 million, a 22 percent increase from the FY 2000 enacted level. Included in this request are capital needs contained in the FAA's Capital Investment Plan (CIP) to modernize and improve the NAS to accommodate demands for aviation services, maximize operational efficiency, constrain costs, and replace or modernize aging facilities. The budget continues funding to support major systems such as the en route and terminal automation programs, next generation weather radar, the oceanic automation program, communications, and satellite navigation.

### **RESEARCH, ENGINEERING, AND DEVELOPMENT**

For Research, Engineering, and Development (R,E&D), the budget requests \$184 million, an 18 percent increase from the FY 2000 enacted level. The R,E&D budget focuses on increased initiatives in information security, environment and energy, human factors, and aircraft safety. Funding increases for aircraft safety programs will be used to support the Safer Skies initiative.

### **EMPLOYMENT**

The FY 2001 budget request reflects a net increase of 561 employees from the FY 2000 estimate for all appropriations. Employment will be increased over the FY 2000 levels in several safety work forces. Included in the Operations request is a proposal to hire 202 new field maintenance staff, 64 certification/flight standards staff, 35 safety oversight and assessment staff, and 94 new security related staff. These increases will allow these critical staffing areas to better meet current and anticipated



## **OVERVIEW**

---

growth in aviation activity and the expected increase in the number and complexity of our air traffic control systems.

### **REFORM**

In FY 2001, to ensure the effective and efficient use of its resources, the FAA is continuing implementation of acquisition, financial, and personnel reforms. Procurement reform has enabled the FAA to pre-screen contractors ensuring that firms have the capabilities and experience to deliver technology systems that improve air traffic control. Personnel reform will result in a new pay-for-performance system that focuses employees on key agency goals. These combined efforts will allow the FAA to operate more like a business, modernize more quickly, and be more responsive to customers.

The budget also assumes collection of fees for services provided to aircraft that neither take off nor land in the United States (overflight fees), with the \$22 million from such overflight fees used to help fund the Payment for Air Carriers (EAS) program managed by the Office of the Secretary of Transportation (OST) in FY 2001.

### **FRANCHISE FUND**

The Administrative Services Franchise Fund was established by Public Law 104-205 to finance operations where the costs for goods and services provided are charged to internal and external users on a fee-for-service basis. This fund is expected to improve organizational efficiency and provide better support to our customers for services including accounting, payroll, international training, travel, aircraft maintenance, logistics, multi-media, and information technology services.

In FY 2001, there will be a major expansion of the franchise fund, as the activities of the FAA depot at the Mike Monroney Aeronautical Center in Oklahoma City become a franchise fund activity. This expansion will increase the efficiency of the depot by instituting a more rational and economic basis for procuring and distributing replacement parts and spares. Also added to the fund in FY 2001 will be aircraft maintenance. As with other franchise fund activities, the inclusion of the logistics depot and aircraft maintenance will allow the agency to achieve economies in performance by distributing fixed costs across a larger business base. This will, in time, lead to improved efficiency and reduced unit cost for the services performed.

### **AIRPORT AND AIRWAY TRUST FUND (AATF)**

Section 9502 of Title 26, U.S.C., as amended, provides for the receipts received in the Treasury from the passenger ticket tax and certain other taxes paid by airport and airway users to be transferred to the

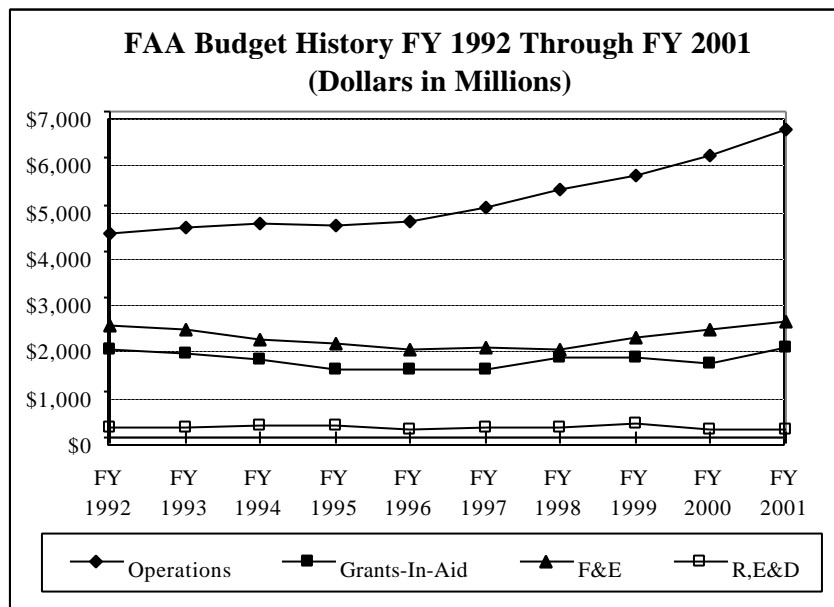




## OVERVIEW

Airport and Airway Trust Fund (AATF). In FY 2001, the FAA's capital and operational programs will receive all their funding from the AATF.

In FY 2000, total tax receipts of approximately \$9.0 billion are expected, plus \$.8 billion in interest that will accrue to the trust fund cash balance. The uncommitted balance in the trust fund, which was



\$7.3 billion at the end of FY 1999, is expected to remain at nearly the same level in FY 2000. Total revenues expected in FY 2001 are \$11.4 billion, which includes \$.8 billion in interest earned by the trust fund cash balance and \$.965 billion in proposed user fees. By the end of FY 2001, the trust fund uncommitted balance is expected to increase to \$7.6 billion.

**Figure 2**

### FY 2000 SUPPLEMENTAL PROPOSAL

The Administration is proposing supplemental legislation for FY 2000 that would (1) reduce the obligation limitation for Grants-In-Aid for Airports by \$50 million; (2) allow up to \$12.9 million from Airport Grants to be used to fund the EAS program; (3) clarify that administrative costs of the airports program incurred by the FAA Operations account in FY 2000 may be reimbursed by Airport Grants; and (4) allow the Secretary of Transportation to transfer unobligated balances from DOT accounts to FAA Operations in FY 2000 (after notification of the Appropriations Committees and if the source accounts first-year outlay rate equals or exceeds that of FAA Operations).



## OVERVIEW

**Table 3 FAA Employment Levels  
End-of-Year Employment**

	FY 1999 Actual	FY 2000 Enacted	FY 2001 Request
<i>Direct</i>	<b>48,289</b>	<b>48,031</b>	<b>47,760</b>
<i>Operations (by Line of Business)</i>	<b>45,226</b>	<b>44,370</b>	<b>44,039</b>
<b>Air Traffic Services (ATS)</b>	<b>35,192</b>	<b>34,789</b>	<b>34,179</b>
Controllers	17,639	17,784	17,784
Field Maintenance	8,182	8,128	8,330
Other	9,371	8,877	8,065 <sup>4</sup>
<b>Aviation Regulation &amp; Certification (AVR)</b>	<b>5,981</b>	<b>5,966</b>	<b>6,030</b>
Inspectors/Engineers/Pilots/NRS	3,861	3,811	3,829
Technical & Field Support	838	852	896
Other	1,282	1,303	1,305
<b>Civil Aviation Security (ACS)</b>	<b>1,136</b>	<b>1,155</b>	<b>1,221</b>
<b>Airports (ARP)</b>	<b>477</b>	<b>0</b> <sup>1</sup>	<b>0</b>
<b>Research &amp; Acquisitions (ARA)</b>	<b>573</b>	<b>581</b> <sup>2</sup>	<b>551</b>
<b>Commercial Space Transportation (AST)</b>	<b>31</b>	<b>34</b>	<b>69</b>
<b>Administration</b>	<b>1,289</b>	<b>0</b> <sup>2</sup>	<b>0</b>
<b>Human Resources</b>	<b>0</b>	<b>161</b> <sup>2</sup>	<b>0</b> <sup>3</sup>
<b>Financial Services</b>	<b>0</b>	<b>128</b> <sup>2</sup>	<b>0</b> <sup>3</sup>
<b>Region/Center Operations</b>	<b>0</b>	<b>994</b> <sup>2</sup>	<b>0</b> <sup>3</sup>
<b>Staff Offices</b>	<b>547</b>	<b>562</b>	<b>1,989</b> <sup>3</sup>
<i>Facilities and Equipment</i>	<b>2,699</b>	<b>2,762</b>	<b>2,804</b>
<i>Research, Engineering, and Development</i>	<b>361</b>	<b>411</b>	<b>411</b>
<i>Aviation Insurance Revolving Fund</i>	<b>3</b>	<b>3</b>	<b>3</b>
<i>Grants-in-Aid for Airports</i>	<b>0</b>	<b>485</b> <sup>1</sup>	<b>503</b>
<i>Reimbursable/Allocations</i>	<b>363</b>	<b>513</b>	<b>1,345</b>
Operations	184	300	275
Administrative Services Franchise Fund	158	158	1,015 <sup>4</sup>
Facilities and Equipment	21	55	55
Research, Engineering, and Development	0	0	0
<b>TOTAL END-OF-YEAR EMPLOYMENT</b>	<b>48,652</b>	<b>48,544</b>	<b>49,105</b>

<sup>1</sup> Airports transferred to Grants-in-Aid for Airports

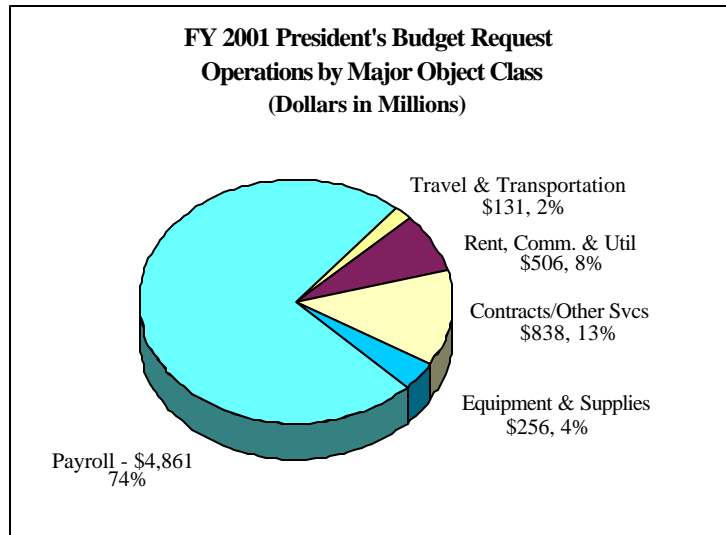
<sup>2</sup> Elimination of the Associate Administrator for Administration and subsequent redistribution of those resources to Staff Offices and other LOB's

<sup>3</sup> Human Resources, Financial Services, Chief Information Officer, and Region/Center Operations to be consolidated into Staff Offices

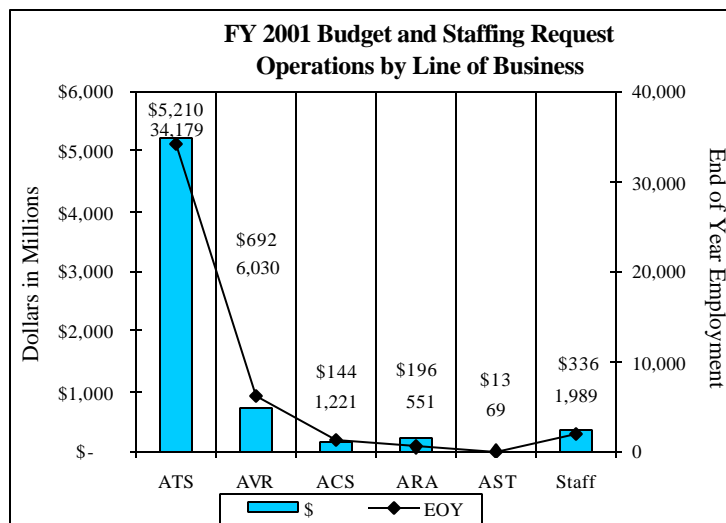
<sup>4</sup> Staffing will be transferred from Air Traffic Services to the Administrative Services Franchise Fund



## OPERATIONS



**Figure 3**



**Figure 4**

For FY 2001, the President's Budget requests \$6,592 million for FAA Operations, \$698.8 million more than provided in FY 2000. This increase recognizes the need to increase safety staffing, bring on-line and make fully operational new safety and capacity air traffic equipment being delivered to support the NAS, and make critical infrastructure investments necessary to fully implement such initiatives as acquisition and personnel reform and a cost accounting system. This requested level of \$6,592 million will be financed through both excise taxes and new user fees deposited to the trust fund.

In terms of safety staffing, the President's Budget for FY 2001 proposes to hire 202 new field maintenance staff, 64 new certification/flight standards staff, 35 safety oversight and assessment staff, and 94 security related staff. These essential increases will allow these critical staffing areas to better meet the current and anticipated growth in aviation activity and the expected increase in the number and complexity of our air traffic control systems.

The President's Budget also requests an increase of \$135.4 million based on new requirements to make operational the new equipment now being delivered to support the NAS. These funds will cover such expenses as utilities, operation and maintenance, telecommunications, training, and spare parts. Without these essential funds, new equipment being developed and delivered could not become operational and would have to be warehoused with no benefit to either aviation users or the FAA.



## OPERATIONS

Detailed information in support of this budget request is presented by line of business (LOB). Information on a separate "Administration" LOB is not provided since this LOB has been abolished with its responsibilities and staff transferred to other LOB's, predominantly Research and Acquisitions and Region and Center Operations. In addition, three new staff offices have been created--Human Resource Management, Financial Services, and Region/Center Operations.

### AIR TRAFFIC SERVICES -- \$5,210 million

Air Traffic Services (ATS) incorporates Air Traffic and Airway Facilities and is the operations and maintenance arm of the National Airspace System (NAS). Consisting of air traffic controllers, engineers and technicians, pilots and flight inspection personnel, business managers, and support staff, Air Traffic

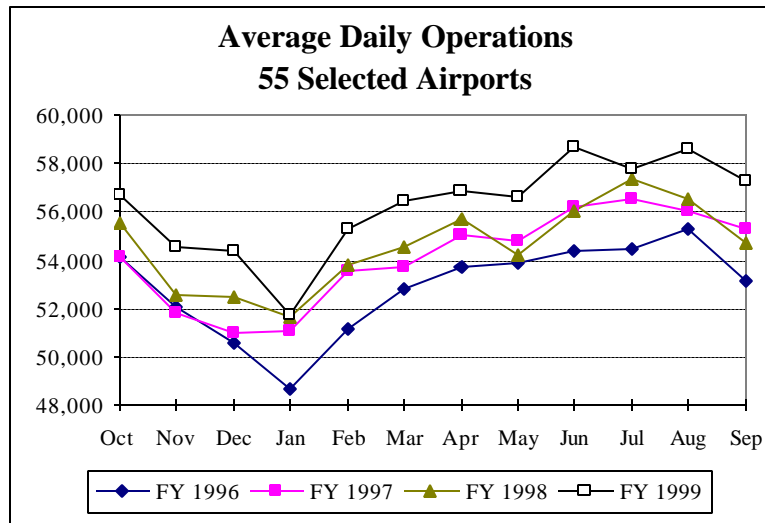


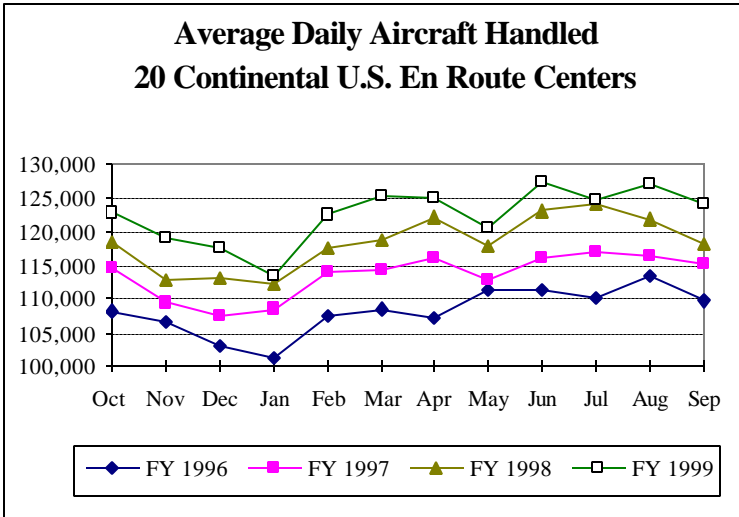
Figure 5

Services controls approximately 200,000 takeoffs and landings per day, provides 24 hours of air traffic control daily, operates and maintains 38,000 facilities, 11,000 terminal instrument flight procedures and 9,000 airway segments, conducts over 11,000 flight inspections per year nationally and internationally, assigns and protects more than 50,000 aeronautical radio frequencies used in air traffic control, and directs the modernization of the NAS infrastructure.

In FY 2001, the FAA will (1) increase its safety-critical maintenance work forces by hiring an additional 202 field maintenance staff; (2) bring on-line new safety and capacity air traffic control equipment; (3) make critical investments in the telecommunications infrastructure; and (4) provide funds critical to the support of NAS functions.



## OPERATIONS



**Figure 6**

There are six major Air Traffic Services subactivities:

The Air Traffic subactivity is responsible for safe and efficient control of air traffic 365 days a year, 24 hours a day, through the operation of 315 towers/terminal radar approach control (TRACON), 24 en route centers, and 182 contract towers. In addition, Air Traffic maintains a network of flight service stations, which provide flight and weather information and record flight plans (mostly for general aviation pilots). This subactivity requires \$3,277 million in FY 2001.

The Air Traffic System Requirements Service (ARS) subactivity ensures that Air Traffic Services' operational needs of today and tomorrow are satisfied through the timely and cost effective delivery and sustainment of quality products and services that fulfill the FAA mission. This organization develops comprehensive NAS requirements and manages a disciplined process to fulfill the operational needs of the Air Traffic Service. For FY 2001, this subactivity requires \$24 million.

The NAS Logistics subactivity is responsible for limited field maintenance; supply support for NAS equipment and agency aircraft; replenishment and repair of spares; procurement activities in the regions and at the Mike Monroney Aeronautical Center; the purchasing, leasing, and management of real estate including land, office space, and specialized facilities; and material and property management and administrative services to support the day-to-day operations of the agency. For FY 2001, this subactivity requires \$71 million.

The purpose of the Systems Maintenance subactivity is to provide for the maintenance, repair, and engineering of over 49,000 facilities and equipment comprising the NAS, including air traffic control equipment, navigation and landing aids, flight service facilities, and support of FAA plant facilities. For FY 2001, this subactivity requires \$1,390 million.

The Leased Telecommunications subactivity provides the critical Air Traffic Control telecommunications link in the process that begins with identification of a NAS requirement and ends with the commissioning



## OPERATIONS

---

and operation of a new NAS facility. It also provides FAA-wide telecommunication services. For FY 2001, this subactivity requires \$356 million.

The purpose of the Flight Inspection and Procedures subactivity is to promote and ensure aviation safety by providing in-flight investigation of air navigation aids and instrument flight procedures, developing and maintaining flight procedures, and conducting periodic flight checks of FAA facilities. For FY 2001, this subactivity requires \$93 million. The Washington Flight Program (Hangar 6) provides flight training and support to the agency. In addition, it provides transportation for the National Transportation Safety Board, the Federal Emergency Management Agency, the Secretary of Transportation, the FAA Administrator, and other Federal agencies.

### **AVIATION REGULATION AND CERTIFICATION -- \$692 million**

The mission of the Regulation and Certification (AVR) organization is to promote aviation safety. To fulfill this mission, AVR:

- Establishes safety standards governing the design and manufacture of aircraft, engines, and other aeronautical products; ensures operation and maintenance of aircraft and training of airmen and aviation mechanics; and certifies medical qualification of airmen and air traffic controllers.
- Monitors safety performance by conducting safety inspections and surveillance, initiates enforcement actions where appropriate, and participates in accident investigations.
- Issues and maintains certificates for design and manufacturing of aircraft and aircraft parts; certificates and provides licenses for air operators, air agencies, and airmen; issues medical certificates for airmen; records aircraft registrations; and appoints and monitors designees.
- Manages the FAA rulemaking program, which is the primary means by which safety standards and policy are drafted, opened to public comment, and finalized.
- Conducts aviation safety education and research.

For FY 2001, AVR requests \$692 million to meet existing and anticipated workload requirements. Included in the request is funding to support a staffing increase of 64 for safety critical aircraft certification/flight standards staffing. In addition, funding increases are requested for NAS Handoff requirements and technical training program enhancements.



## OPERATIONS

---

### **CIVIL AVIATION SECURITY -- \$144 million**

The Associate Administrator for Civil Aviation Security (ACS) is responsible for ensuring the protection of the traveling public in commercial air transportation against terrorist and other criminal acts, and for determining on behalf of the U.S. Government that civil aviation is secure. This function is performed by ensuring that airports and air carriers implement required security measures and also ensuring the safe transportation of dangerous goods by air. Because terrorists may seek to destroy public confidence in the safety of air travel and disrupt this vital segment of the U.S. and world economies, the continued growth of commercial air transportation depends on the success of the aviation security mission. Protecting aviation's infrastructure--FAA facilities and equipment and the employees who run them--is also Security's responsibility. The Civil Aviation Security Program also assists in the interdiction of drugs and narcotics coming into the United States. The budget requests 94 new security related staff for dangerous goods/cargo security, the external domestic regulatory program, and the internal security program.

### **RESEARCH AND ACQUISITIONS -- \$196 million**

The Research and Acquisitions (ARA) line of business is entrusted with the primary responsibility of ensuring that the FAA has the research and technology base needed to provide a safe, secure, and efficient National Airspace System.

In this regard, ARA's operations appropriation funded activities are primarily mission support to the FAA's Facilities and Equipment, and Research, Engineering, and Development appropriations, which fund most of ARA's activities. ARA's major operations funded activities include operation and maintenance of the William J. Hughes Technical Center near Atlantic City, New Jersey; provision of procurement and contracting services for FAA's national and Headquarters programs; FAA-wide configuration management of the Acquisition Management System; facilities management and related administrative services for FAA Headquarters; monitoring of General Services Administration (GSA) rented space activities; and acquisition and operation of FAA's corporate information assets.

### **COMMERCIAL SPACE TRANSPORTATION -- \$13 million**

The Associate Administrator for Commercial Space Transportation (AST) ensures safety in the commercial space transportation industry through its process of issuing launch and reentry licenses and launch site and reentry site operator licenses and the development of the regulatory framework for this rapidly evolving industry. As the industry grows, the number of commercial launches and the number of non-federal launch sites are both increasing significantly, which in turn increases the workload associated with AST's mandated role of ensuring the safety of the public and of property. The FY 2001 request includes funding for mandatory pay and inflation increases over the FY 2000 funding level. The



## OPERATIONS

---

requested level also includes an increase of \$5.8 million, which is necessary to allow AST to perform safety oversight at commercial launch events, to evaluate applications and issue licenses for the increasing number of federal launch sites, and to provide assessments of complex new systems, such as reusable launch vehicles.

### **STAFF OFFICES -- \$336 million**

These independent offices, reporting directly to the Administrator and Deputy Administrator, are responsible for establishing, directing, and evaluating agency programs and policy. Their services include system safety, legal counsel, congressional liaison, public affairs, civil rights, policy, planning, international aviation, the Chief Information Officer, and the Administrator's and Deputy Administrator's executive staff. In addition, the budget request reflects the consolidation of financial services, human resource management, and region/center operations into the staff offices so that all administrative offices are grouped together and maximum flexibility is afforded the Administrator in allocating resources among these activities.

For FY 2001, the budget requests a staffing increase of 86 for staff offices. This increase in staffing is necessary to implement important initiatives in areas such as information security (17), implementation of a new Department-wide accounting system (10), capitalization activities (29), and alternative dispute resolution (15).





## OPERATIONS

**Table 4**

### FY 2001 Budget Resources Dollar Resources (Dollars in Millions)

	FY 1999 Actual	FY 2000 Enacted	FY 2001 Request <sup>1</sup>	Percent Change
Air Traffic Services	\$4,351	\$4,649	\$5,210	12.1%
Aviation Regulation and Certification	619	640	692	8.1%
Civil Aviation Security	120	131	144	9.9%
Airports	48	0 <sup>2</sup>	0	
Research and Acquisition	78	174 <sup>3</sup>	196	12.6%
Commercial Space Transportation	6	7	13	85.7%
Administration	264	0 <sup>3</sup>	0	
Financial Services	0	39 <sup>3</sup>	0 <sup>4</sup>	-100%
Human Resources	0	53 <sup>3</sup>	0 <sup>4</sup>	-100%
Region/Center Operations	0	95 <sup>3</sup>	0 <sup>4</sup>	-100%
Staff Offices	84	73	336 <sup>4</sup>	360.3%
Essential Air Service Payment	0	32	0	-100%
<b>TOTAL OPERATIONS</b>	<b>\$5,569</b>	<b>\$5,893</b>	<b>\$6,592</b>	<b>11.9%</b>

Totals may not add due to rounding

<sup>1</sup> Includes \$22 million in overflight fees.

<sup>2</sup> Airports transferred to Grants-in-Aid for Airports

<sup>3</sup> Elimination of the Associate Administrator for Administration and subsequent redistribution of those resources to Staff Offices and other LOB's

<sup>4</sup> Human Resources, Financial Services, Chief Information Officer, and Region/Center Operations to be consolidated into Staff Offices



## OPERATIONS

Table 5

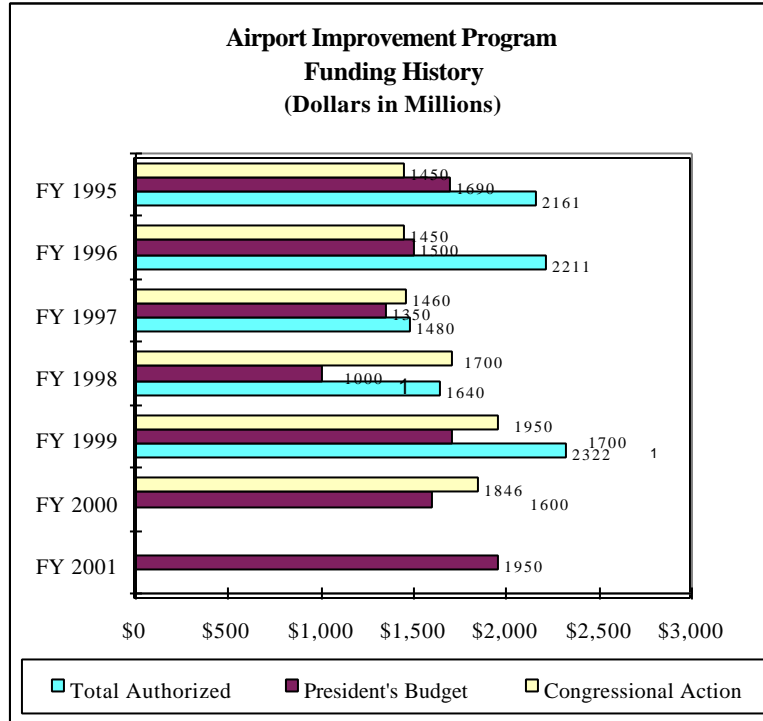
### FY 2001 Budget Obligations By Major Object Class (Dollars in Millions)

	FY 1999 Actual	FY 2000 Enacted	FY 2001 Request
11.1 Full-Time Permanent	\$3,058	\$3,269	\$3,492
11.3 Other Than Full-Time Permanent	28	29	30
11.5 Other Personnel Compensation	267	285	314
11.8 Special Personnel Services Payments	0	1	1
<b>11.9 Total Personnel Compensation</b>	<b>\$3,353</b>	<b>\$3,583</b>	<b>\$3,836</b>
12.1 Civilian Personnel Benefits	886	957	1,024
13.0 Benefits for Former Personnel	0	1	1
21.0 Travel and Transportation of Persons	91	93	111
22.0 Transportation of Things	21	22	20
23.1 Rental Payments to GSA	76	81	86
23.2 Rental Payments to Others	32	37	38
23.3 Communications, Utilities, and Miscellaneous	317	336	381
24.0 Printing and Reproduction	11	11	11
25.0 Other Services	660	625	828
26.0 Supplies and Materials	81	84	187
31.0 Equipment	39	29	67
32.0 Land and Structures	1	1	1
42.0 Insurance Claims and Indemnities	1	1	1
92.0 Essential Air Service Grants	0	32	0
<b>99.0 Subtotal Direct Obligations</b>	<b>\$5,569</b>	<b>\$5,893</b>	<b>\$6,592</b>
<b>99.0 Subtotal Reimbursable Obligations</b>	<b>62</b>	<b>72</b>	<b>74</b>
<b>99.99 Total Obligations</b>	<b>\$5,631</b>	<b>\$5,965</b>	<b>\$6,666</b>

Totals may not add due to rounding



## GRANTS-IN-AID FOR AIRPORTS



**Figure 7**

<sup>1</sup> Reflects a reduction of \$88 million for expired funds

The FY 2001 request is for \$1.95 billion for Airport Improvement grants to eligible airports to enhance capacity, emphasize safety and security needs, and mitigate noise. Airport funding is further augmented by continued implementation of PFC's. At the end of calendar year 1999, 314 airports were approved to collect PFC's totaling \$24 billion over the next 40 years. In addition, an increase of \$2 is proposed to the current \$3 cap on PFC's. The FY 2001 budget assumes \$53 million for Administrative expenses related to this program, \$7 million for airport related research, and \$28 million for shortfalls in overflight fee collections to fund the EAS.



(This page intentionally left blank)



## FACILITIES AND EQUIPMENT

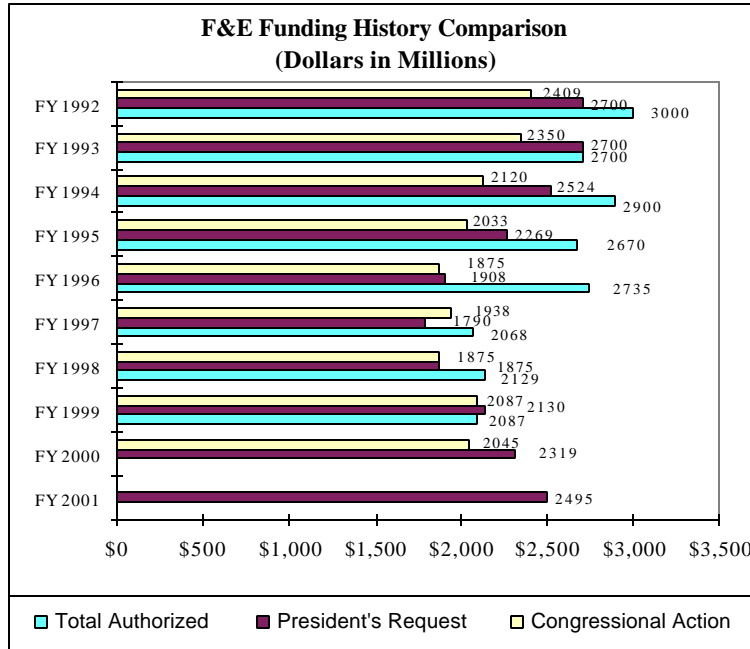


Figure 8

For FY 2001, \$2,495 million, a 22 percent increase (\$450 million) from FY 2000 as enacted, is requested in the Facilities and Equipment (F&E) appropriation to fund planned facility improvements, equipment development and procurement, and the necessary technical support for systems installation. The funding requested for FY 2001 supports the FAA's comprehensive Capital Investment Plan (CIP) to modernize and improve the NAS to accommodate demands for aviation services, maximize operational efficiency, constrain costs, and replace or modernize aging facilities. The FAA is committed to fulfilling its mission in a safe, secure, and efficient cost-effective manner.

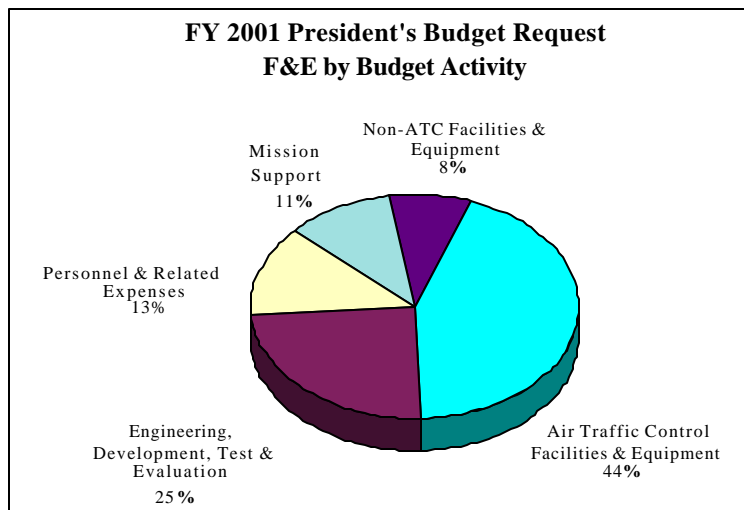


Figure 9

The F&E budget consists of five activities that fund the FAA's effort to modernize and improve air traffic control systems and facility improvements. Summaries of these activities follow.

### Major FY 2001 Programs (\$ in Millions)

Standard Terminal Automation Replacement System .....	\$178.7
Explosive Detection Systems .....	97.5
Terminal Air Traffic Control Facilities - Replace .....	105.0
Terminal Digital Radar (ASR-11) .....	108.2
ARTCC Building Improvements/Plant Improvements .....	58.0
Free Flight Phase I .....	170.8
Wide Area Augmentation System .....	111.0
Air Traffic Control Beacon Interrogator - Replace .....	77.6



## **FACILITIES AND EQUIPMENT**

---

### **ENGINEERING, DEVELOPMENT, TEST, AND EVALUATION, Activity 1**

To maintain an acceptable level of service in the face of the growing volume of traffic, the current system must be enhanced. In FY 2001, funding is requested to continue development of en route automation that will provide benefits to the users. For FY 2001, funding is requested for the Standard Terminal Automation Replacement System (STARS) for initial use in terminal radar approach control facilities and to develop the final system capability. Also in FY 2001, funding is requested in Activity 1 to continue systems engineering, software development, and integration activities to achieve initial operational capabilities of the Wide Area Augmentation System (WAAS) operating system, Free Flight Phase 1 and 2 development and deployment, and aeronautical data link applications.

### **PROCUREMENT AND MODERNIZATION OF AIR TRAFFIC CONTROL FACILITIES AND EQUIPMENT, Activity 2**

Initiatives in this activity will reduce delays and improve safety at congested airports. The funding requested will continue the implementation of state-of-the-art automation equipment that will provide en route controllers the capability to better handle the increases in air traffic volume. In FY 2001, three TRACONs (Potomac, Atlanta, and Northern California) will continue acquisition of equipment and fund construction and system engineering support to provide FAA and users benefits from consolidation and restructured airspace. Also in FY 2001, funding is requested for terminal digital radar (ASR-11) to replace aging analog radars and beacon systems with digital radar systems needed for future automation systems. In addition, Activity 2 WAAS funding will support the continued development of standards, certification, facilities, and procedures for the operational use of the WAAS in the NAS. Work will continue on the development of WAAS precision approach procedures including completing obstacle clearance surveys to enable Category I approaches. The FAA will work with DOD to ensure that civil frequencies required by the aviation community are provided.

Other programs funded in this activity include the modernization and improvement of existing buildings and plant equipment which house and support NAS navigation, communications, surveillance, and visual/electronic landing systems. Also funded under this activity is the removal of leaking fuel storage tanks, site cleanup, and disposal of tanks, engine generators, and associated electrical equipment.

### **PROCUREMENT AND MODERNIZATION OF NON-AIR TRAFFIC CONTROL FACILITIES AND EQUIPMENT, Activity 3**

This activity includes general facility support requirements that apply to a wide range of FAA installations. A national program has been established to ensure that all FAA facilities meet existing and future Federal, state, and local environmental regulations for the cleanup of hazardous substances resulting from FAA activities. Funds requested will assess the severity of the problem and, if



## **FACILITIES AND EQUIPMENT**

---

environmental damage has occurred, feasibility studies will be conducted to determine the extent of contamination and the best technology to be used for cleanup. In addition, the FY 2001 request will purchase and install FAA certified explosive detection systems and other advanced technology screening devices. Also, funding is requested for facility and information security to provide a safe, secure, and efficient global aerospace system that contributes to national security.

### **FACILITIES AND EQUIPMENT MISSION SUPPORT, Activity 4**

This activity includes system engineering and integration and transition engineering support contracts that provide technical and management support in all phases of CIP implementation schedules.

### **PERSONNEL AND RELATED EXPENSES, Activity 5**

Funding for all personnel compensation, benefits, travel, and related expenses associated with F&E programs are budgeted under one consolidated activity. These funds directly support FAA personnel who are primarily responsible for NAS equipment installation and implementation.



## FACILITIES AND EQUIPMENT

**Table 6 F&E Activities by Budget Line Item**  
(Dollars in Thousands)

FY 2000 Enacted	FY 2001 Request	TITLE	FY 2000 Enacted	FY 2001 Request
<i>ACTIVITY 1. Engineering, Development, Test, and Evaluation</i>				
<i>A. En Route Programs</i>				
1A01	1A01	Aviation Weather Services Improvements	\$23,862.0	\$15,400.0
1A02	1A02	Oceanic Automation System	27,000.0	51,970.0
1A03	1A03	Next Generation Very High Frequency (VHF) Air/Ground (A/G) Communications System	6,100.0	12,300.0
1A04	1A04	En Route Automation Program	6,000.0	14,600.0
1A05	1A05	Aeronautical Data Link (ADL)	25,000.0	30,200.0
	1A06	Free Flight Phase I	179,625.0	170,800.0
	1A07	Free Flight Phase II	0.0	50,000.0
<i>Subtotal - En Route Programs</i>			<b>267,587.0</b>	<b>345,270.0</b>
<i>B. Terminal Programs</i>				
1B01	1B01	Terminal Automation Program	112,440.0	114,850.0
<i>Subtotal - Terminal Programs</i>			<b>112,440.0</b>	<b>114,850.0</b>
<i>C. Flight Service Programs</i>				
1C01		Automated Flight Service Station - Voice Switch Replacement	1,000.0	0.0
<i>Subtotal - Flight Services Programs</i>			<b>1,000.0</b>	<b>0.0</b>
<i>D. Landing and Navigational Aids Programs</i>				
	1D01	Local Area Augmentation System (LAAS)	0.0	9,300.0
	1D02	Wide Area Augmentation System (WAAS) For GPS	0.0	65,000.0
1D01		Next Generation Navigation and Landing Systems	94,000.0	0.0
1D02		Next Generation Landing Systems	20,000.0	0.0
<i>Subtotal - Landing and Navigational Aids Programs</i>			<b>114,000.0</b>	<b>74,300.0</b>
<i>E. Research, Test, and Evaluation, Equipment and Facilities</i>				
	1E01	NAS Improvement of System Support Laboratory	0.0	2,162.0
1E02	1E02	Technical Center Facilities	11,477.5	8,795.5
	1E03	Technical Center Building and Plant Support	0.0	2,726.0
1E01		FAA Technical Center Facility – Technical Building Lease	1,322.5	0.0
<i>Subtotal - Research, Test, and Evaluation, Equipment and Facs</i>			<b>12,800.0</b>	<b>13,683.5</b>





## FACILITIES AND EQUIPMENT

FY 2000 Enacted	FY 2001 Request	TITLE	FY 2000 Enacted	FY 2001 Request
--------------------	--------------------	-------	--------------------	--------------------

### *F. Advanced Technology Development and Prototyping*

1F01	1F01	Advanced Technology Development and Prototyping	\$26,696.3	\$40,848.0
1F02	1F02	Safe Flight 21	16,000.0	25,000.0
<b><i>Subtotal - Advanced Technology Development and Prototyping</i></b>			<b>42,696.3</b>	<b>65,848.0</b>
<b><i>Total Activity 1</i></b>			<b>\$550,523.3</b>	<b>\$613,951.5</b>

### *ACTIVITY 2. Air Traffic Control Facilities and Equipment*

#### *A. En Route Programs*

2A01	2A01	En Route Automation Program	160,000.0	122,200.0
2A02	2A02	Next Generation Weather Radar (NEXRAD) - Provide	4,900.0	4,100.0
2A03	2A03	Air Traffic Operations Management System (ATOMS)	0.0	940.0
2A04	2A04	Weather and Radar Processor (WARP)	15,000.0	24,710.0
2A05	2A05	Aeronautical Data Link (ADL) Applications	0.0	1,200.0
2A06	2A06	ARTCC Building Improvements/Plant Improvements	36,900.0	58,000.0
2A09	2A07	Air Traffic Management (ATM)	15,000.0	25,944.0
2A10	2A08	Critical Communications Support	850.0	1,880.0
2A14	2A09	ATC Beacon Interrogator (ATCBI) - Replace	25,000.0	77,612.0
2A15	2A10	FAA Telecommunications Infrastructure	6,100.0	29,400.0
	2A11	Air/Ground Communications Infrastructure	0.0	16,074.0
	2A12	Aviation Weather Services Improvements	0.0	8,218.0
2A17	2A13	Air Traffic Control En Route Radar Facilities	2,700.0	2,844.0
2A18	2A14	En Route Communications and Control Facilities Improvement	1,430.0	5,031.6
2A07		Voice Switching and Control System (VSCS)	17,500.0	0.0
2A08		Remote Communications Facilities (RCF) – Expand/Relocate	6,700.0	0.0
2A11		DOD Base Closure – Facility Transfer	3,900.0	0.0
2A12		Back-Up Emergency Communications (BUEC) - Interim	1,580.0	0.0
2A13		Air/Ground Communication Radio Frequency Interference (RFI) Elimination	1,700.0	0.0
2A16		Volcano Monitoring	2,000.0	0.0
<b><i>Subtotal - En Route Programs</i></b>			<b>301,260.0</b>	<b>378,153.6</b>

#### *B. Terminal Programs*

2B01	2B01	Terminal Doppler Weather Radar (TDWR) - Provide	9,300.0	5,100.0
2B02	2B02	Terminal Automation Program	82,800.0	75,550.0
2B03	2B03	Aircraft Surface Detection Equipment (ASDE)	10,000.0	1,500.0
2B04	2B04	Airport Movement Area Safety System (AMASS)	18,200.0	20,650.0
2B05	2B05	Terminal Air Traffic Control Facilities - Replace	\$78,900.0	\$105,000.0



## FACILITIES AND EQUIPMENT

FY 2000 Enacted	FY 2001 Request	TITLE	FY 2000 Enacted	FY 2001 Request
2B06	2B06	Airport Traffic Control Tower (ATCT)/Terminal Radar Approach Control (TRACON) Facilities - Improve	24,782.7	40,259.7
2B07	2B07	Terminal Voice Switch Replacement (TVSR)	10,900.0	5,000.0
2B09	2B08	Employee Safety/OSHA and Environmental Compliance Standards	22,000.0	28,400.0
2B11	2B09	New Austin Airport at Bergstrom	1,500.0	2,500.0
2B12	2B10	Potomac TRACON	17,100.0	25,800.0
2B13	2B11	Northern California TRACON	17,500.0	6,000.0
2B14	2B12	Atlanta TRACON	7,700.0	3,400.0
2B15	2B13	Voice Recorder Replacement Program (VRRP)	2,500.0	2,632.0
2B16	2B14	NAS Infrastructure Management System (NIMS)	3,520.0	13,100.0
2B17	2B15	Terminal Digital Radar (ASR-11)	76,100.0	108,250.0
2B18	2B16	ASR - Weather System Processor (WSP)	24,000.0	22,400.0
2B19	2B17	DOD/FAA Facilities Transfer	3,000.0	2,600.0
2B21	2B18	Airport Surveillance Radar (ASR-9)	4,000.0	4,722.0
	2B19	Mode S – Provide	0.0	1,974.0
	2B20	Terminal Applied Engineering	0.0	6,700.0
2B20	2B21	Precision Runway Monitors	3,300.0	2,000.0
	2B22	Low Cost Airport Surface Detection Equipment (ASDE-X)	0.0	8,400.0
2B23	2B23	Terminal Radar (ASR) – Improve	3,838.8	3,233.6
2B24	2B24	Terminal Communications Improvements	1,124.0	1,250.7
2B08		Radio Control Equipment (RCE) – Provide	3,400.0	0.0
2B10		Chicago TRACON	700.0	0.0
2B22		Digital Bright Radar Indicator Tower Equipment	900.0	0.0
<b>Subtotal - Terminal Programs</b>			<b>427,065.5</b>	<b>496,422.0</b>

### C. Flight Service Programs

2C01	2C01	Flight Service Station (FSS) Automation	2,600.0	4,000.0
2C02	2C02	Automated Surface Observing System (ASOS)	9,900.0	8,213.9
2C03	2C03	FSAS Operational and Supportability Implementation System (OASIS)	10,000.0	23,100.0
	2C04	Weather Message Switching Center Replacement (WMSCR)	0.0	2,500.0
1C01	2C05	Automated Flight Service Station – Voice Switch Replacement	0.0	6,000.0
2C04	2C06	Flight Service Facilities Improvement	1,364.4	1,277.5
<b>Subtotal - Flight Service Programs</b>			<b>23,864.4</b>	<b>45,091.4</b>



## FACILITIES AND EQUIPMENT

FY 2000 Enacted	FY 2001 Request	TITLE	FY 2000 Enacted	FY 2001 Request
--------------------	--------------------	-------	--------------------	--------------------

### *D. Landing and Navigational Aids Programs*

2D01	2D01	Very High Frequency (VHF) Omnidirectional Range (VOR) with Distance Measuring Equipment (DME) TACAN Network Plan	\$2,000.0	\$2,632.0
2D02	2D02	Instrument Landing System (ILS) - Establish/Upgrade	0.0	16,000.0
2D03	2D03	ILS - Replace Mark 1A, 1B, and 1C	1,000.0	1,000.0
	2D04	ILS - Replace GRN 27	0.0	1,000.0
	2D05	Gulf of Mexico Offshore Program	0.0	1,900.0
2D04	2D06	Low Level Windshear Alert System (LLWAS) – Upgrade to Phase III	2,200.0	5,734.0
2D05	2D07	Approach Lighting System Improvement Program (ALSIP)	8,700.0	1,040.0
2D06	2D08	Runway Visual Range (RVR)	6,300.0	3,000.0
2D07	2D09	Distance Measuring Equipment (DME) Sustain	1,200.0	1,128.0
2D08	2D10	Wide Area Augmentation System (WAAS) for GPS	0.0	46,000.0
2D09	2D11	Non-Directional Beacon (NDB) – Sustain	1,000.0	940.0
2D10	2D12	Visual Nav aids - Establish/Expand	1,000.0	2,820.0
	2D13	Loran-C Upgrades	0.0	20,000.0
2D14	2D14	Navigational and Landing Aids – Improve	3,146.8	2,955.9
2D11		Instrument Approach Procedures Automation (IAPA)	900.0	0.0
2D12		Visual Approach Slope Indicators (VASI) - Replace with Precision Approach Path Indicators (PAPI)	3,500.0	0.0
<b><i>Subtotal - Landing and Navigational Aids Programs</i></b>			<b>30,946.8</b>	<b>106,149.9</b>

### *E. Other ATC Facilities Programs*

2E01	2E01	Alaskan NAS Interfacility Communications System (ANICS)	3,600.0	2,500.0
2E02	2E02	Fuel Storage Tank Replacement and Monitoring	10,500.0	10,500.0
2E03	2E03	FAA Buildings and Equipment – Improve/Modernize	4,000.0	10,000.0
2E04	2E04	Electrical Power Systems - Sustain/Support	17,500.0	28,200.0
2E05	2E05	Air Navigational Aids and ATC Facilities (Local Projects)	2,000.0	1,880.0
2E06	2E06	Computer Aided Engineering Graphics (CAEG) Replacement	3,000.0	2,600.0
2E07	2E07	Aircraft Related Equipment Program	1,840.0	6,000.0
2E08	2E08	Airport Cable Loop Systems – Sustained Support	0.0	5,400.0
<b><i>Subtotal - Other ATC Facilities Programs</i></b>			<b>42,440.0</b>	<b>67,080.0</b>
<b><i>Total Activity 2</i></b>			<b>\$825,576.7</b>	<b>\$1,092,896.9</b>



## FACILITIES AND EQUIPMENT

FY 2000 Enacted	FY 2001 Request	TITLE	FY 2000 Enacted	FY 2001 Request
--------------------	--------------------	-------	--------------------	--------------------

### ACTIVITY 3. Non-ATC Facilities and Equipment

#### A. Support Equipment

3A01	3A01	NAS Management Automation Program (NASMAP)	\$800.0	\$1,034.0
3A02	3A02	Hazardous Materials Management	22,500.0	22,600.0
3A03	3A03	National Airspace System Recovery Communications (RCOM)	1,000.0	4,700.0
3A04	3A04	Aviation Safety Analysis System (ASAS)	14,000.0	15,980.0
3A05	3A05	Operational Data Management System (ODMS)	600.0	1,000.0
3A06	3A06	Logistics Support System and Facilities	2,300.0	7,500.0
3A07	3A07	Test Equipment - Maintenance Support for Replacement	1,000.0	940.0
3A08	3A08	Integrated Flight Quality Assurance	3,000.0	2,200.0
3A09	3A09	Safety Performance Analysis System (SPAS)	5,200.0	2,400.0
3A10	3A10	Performance Enhancement Systems (PENS)	5,000.0	2,500.0
3A13	3A11	Facility Security Risk Management	11,500.0	19,339.0
3A11	3A12	National Aviation Safety Data Analysis Center (NASDAC)	1,500.0	1,800.0
3A14	3A13	Information Security - NAS Information Coordination	7,500.0	11,200.0
3A15	3A14	Explosives Detection Systems	97,500.0	97,500.0
3A12		FAA Employee Housing – Provide	8,000.0	0.0
<b>Subtotal – Support Equipment</b>			<b>181,400.0</b>	<b>190,693.0</b>

#### B. Training, Equipment, and Facilities

	3B01	Distance Learning	0.0	2,162.0
3B01	3B02	National Airspace System (NAS) Training Facilities	0.0	1,880.0
3B02	3B03	Aeronautical Center Training and Support Facilities	0.0	7,200.0
<b>Subtotal - Training, Equipment, and Facilities</b>			<b>0.0</b>	<b>11,242.0</b>
<b>Total Activity 3</b>			<b>\$181,400.0</b>	<b>\$201,935.0</b>

### ACTIVITY 4, Mission Support

#### A. System Support and Services

4A01	4A01	System Engineering and Development Support	22,200.0	24,711.0
4A02	4A02	Program Support Leases	31,100.0	33,800.0
4A03	4A03	Logistics Support Services Contract (LSSC)	5,600.0	6,300.0
4A04	4A04	Mike Monroney Aeronautical Center – Lease	14,600.0	14,000.0
4A05	4A05	In-Plant NAS Contract Support Services	2,800.0	2,619.0
4A06	4A06	Transition Engineering Support	38,700.0	37,539.0
4A07	4A07	Frequency and Spectrum Engineering – Provide	3,000.0	2,900.0
4A08	4A08	Permanent Change-of-Station (PCS) Moves	2,500.0	26,400.0



## FACILITIES AND EQUIPMENT

FY 2000 Enacted	FY 2001 Request	TITLE	FY 2000 Enacted	FY 2001 Request
4A09	4A09	FAA Systems Architecture	\$1,000.0	\$3,534.0
4A10	4A10	Technical Services Support Contract (TSSC)	40,000.0	44,911.0
4A11	4A11	Resource Tracking Program (RTP)	0.0	3,450.0
4A12	4A12	Center For Advanced Aviation System Development	61,000.0	63,400.0
<i>Total Activity 4</i>			<b>\$222,500.0</b>	<b>\$263,564.0</b>
 <i>ACTIVITY 5, Personnel and Related Expenses</i> 				
5A01	5A01	Personnel and Related Expenses	<b>\$295,000.0</b>	<b>\$322,652.6</b>
<i>Total Activity 5</i>			<b>\$295,000.0</b>	<b>\$322,652.6</b>
<b>TOTAL</b>			<b>\$2,075,000.0<sup>1</sup></b>	<b>\$2,495,000.0</b>

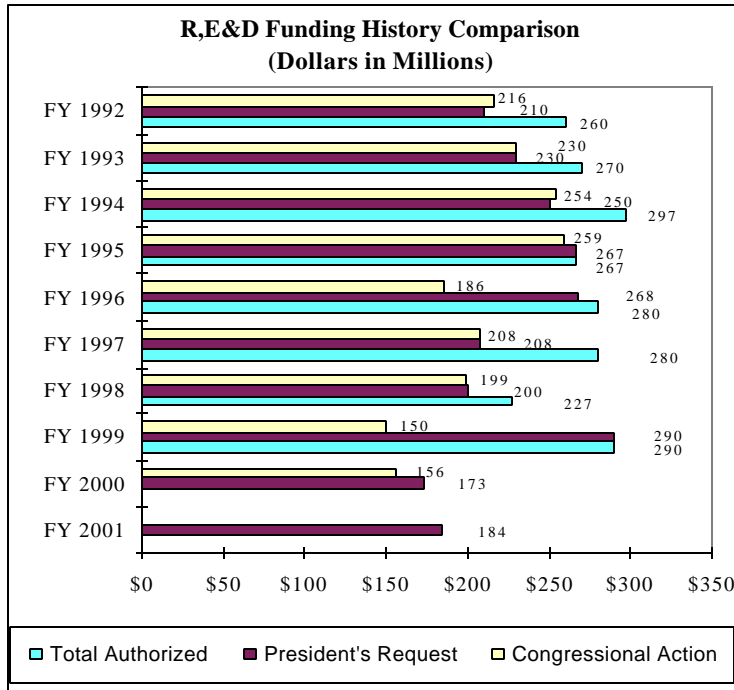
<sup>1</sup> Excludes \$30 million rescission of prior year unobligated balances



(This page intentionally left blank)

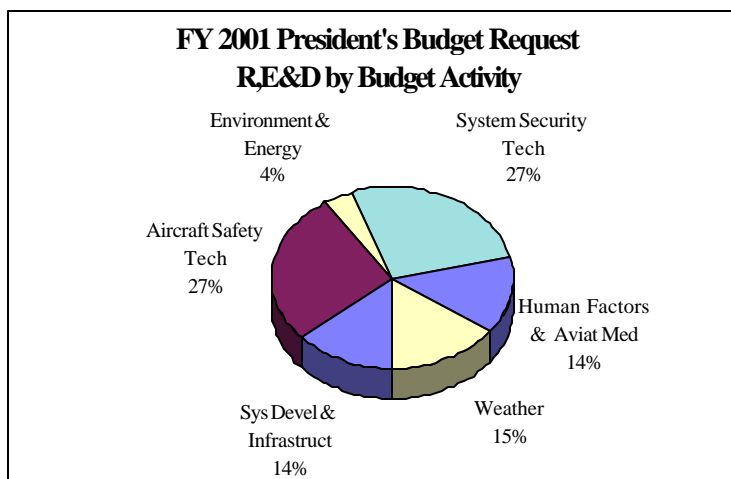


## RESEARCH, ENGINEERING, AND DEVELOPMENT



**Figure 10**

for aircraft safety technology programs. A part of the increased funding will support the Vice President's Safer Skies initiative. The remaining \$101.7 million is for all other R,E&D activities. Additional funding is provided for human factors, environment and energy, system development and infrastructure programs.



**Figure 11**

For FY 2001, \$184 million is requested to support the R,E&D program. This request represents an 18% percent increase from the FY 2000 enacted level of \$156 million. The FY 2001 request includes \$5.5 million for program initiatives in information security. These initiatives include the funding of intrusion detection systems and programs supporting Executive Order 13010 and Presidential Decision Directive (PDD) 63.

\$27.8 million is requested for weather research to provide funding for initiatives such as improved oceanic hazardous weather forecasting and establishment of a national ceiling and visibility weather program. \$49.4 million is requested

The FAA R,E&D program continues to make significant contributions to aviation research that assure the safety, capacity, and cost effectiveness of the air transportation system to meet increasing demands and user requirements. The R,E&D program has also made significant contributions to the development of effective standards, regulations, and guidance materials necessary to support the agency's regulatory mission.



## **RESEARCH, ENGINEERING, AND DEVELOPMENT**

---

The following activities are examples of future benefits that will be attained from a continued investment in FAA R,E&D programs:

- Development of in-flight icing products based on satellite data analysis.
- Preparation of aircraft noise certification handbook and exploratory research of airplane and rotorcraft noise reduction technologies.
- Increased research on the utilization of automated external defibrillators on aircraft and research on flight deck systems and human factors influencing the interoperability of decision support tools.
- Continued development of research initiatives supporting safer skies initiatives addressing controlled flight into terrain, weather, runway incursion, and aeronautical decisionmaking.





## RESEARCH, ENGINEERING, AND DEVELOPMENT

**Table 7**

### Research, Engineering, and Development Summary of Request by Activity/Program (Dollars in Thousands)

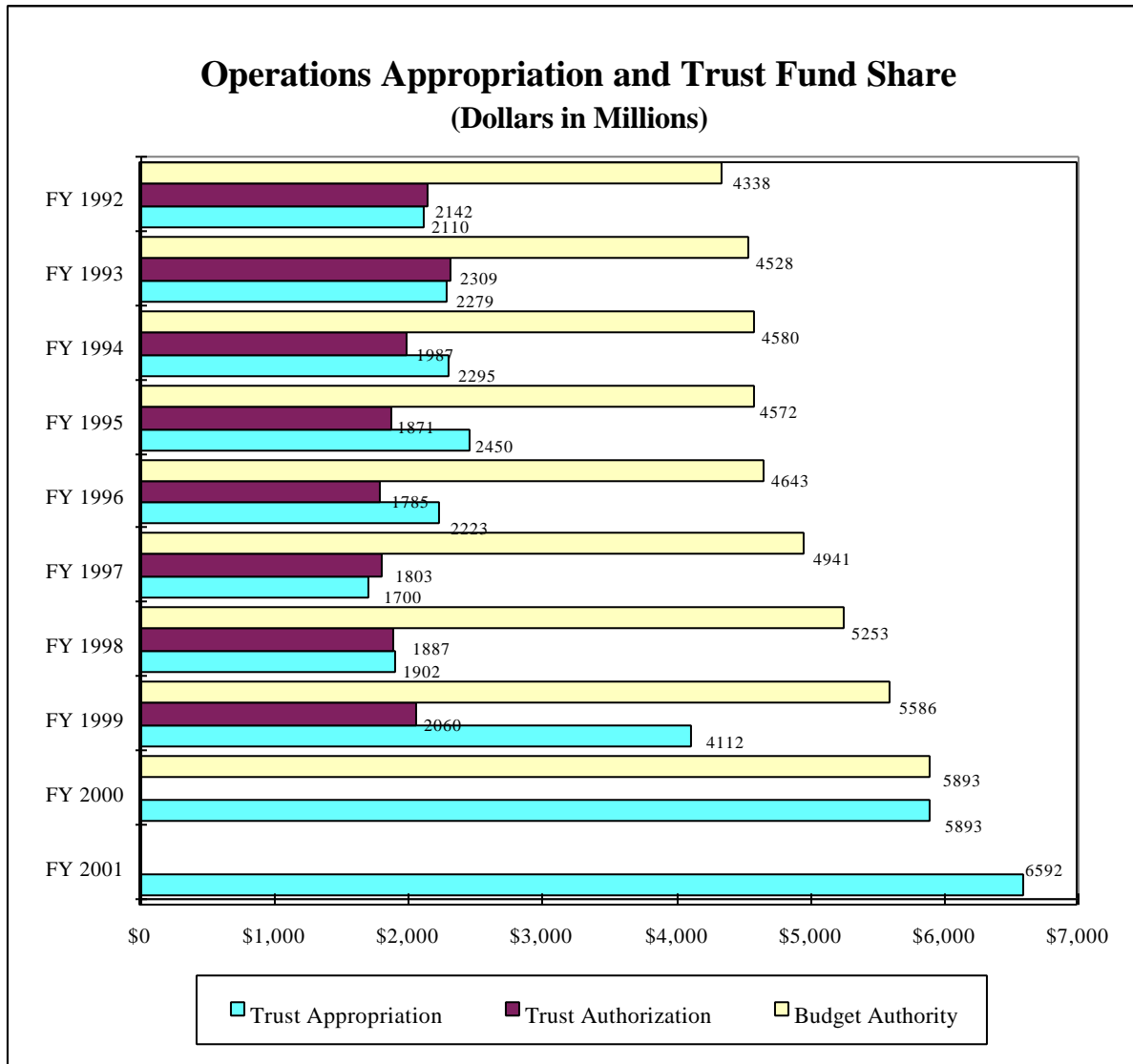
Program Area/Program	FY 2000 Enacted	FY 2001 Request
<b>1 System Development and Infrastructure</b>	<b>\$17,139</b>	<b>\$25,281</b>
a. System Planning and Resource Management	1,164	1,350
b. Technical Laboratory Facility	11,075	13,431
c. Center for Advanced Aviation System Development	4,900	5,000
d. Information Security	0	5,500
<b>2 Weather</b>	<b>\$19,300</b>	<b>\$27,789</b>
a. Weather Program	16,200	24,689
b. Juneau AK	3,100	3,100
<b>3 Aircraft Safety Technology</b>	<b>\$44,457</b>	<b>\$49,380</b>
a. Fire Research and Safety	4,750	5,451
b. Advanced Materials/Structural Safety	2,338	2,797
c. Propulsion and Fuel Systems	3,126	5,200
d. Flight Safety/Atmospheric Hazards Research	3,844	4,109
e. Aging Aircraft	21,594	22,384
f. Aircraft Catastrophic Failure Prevention Research	1,981	2,782
g. Aviation Safety Risk Analysis	6,824	6,657
<b>4 System Security Technology</b>	<b>\$50,147</b>	<b>\$49,374</b>
a. Explosives and Weapons Detection	42,606	37,460
b. Airport Security Technology Integration	2,285	2,462
c. Aviation Security Human Factors	5,256	5,145
d. Aircraft Hardening	0	4,307
<b>5 Human Factors (HF) and Aviation Medicine</b>	<b>\$21,971</b>	<b>\$25,099</b>
a. Flight Deck/Maintenance/System Integration Human Factors	9,142	10,100
b. Air Traffic Control/Airway Facilities Human Factors	8,000	9,950
c. Aeromedical Research	4,829	5,049
<b>6 Environment and Energy</b>	<b>\$3,481</b>	<b>\$7,443</b>
a. Environment and Energy	3,481	7,443
<b>TOTAL R,E&amp;D</b>	<b>\$156,495</b>	<b>\$184,366</b>



(This page intentionally left blank)



## AIRPORT AND AIRWAY TRUST FUND



**Figure 12**



## AIRPORT AND AIRWAY TRUST FUND

**Table 8**                                      **Airport and Airway Trust Fund**  
**Amounts Available for Appropriation**  
(Dollars in Millions)

	FY 1999 Actual	FY 2000 Enacted	FY 2001 Estimate
Balance, Start of Year	\$4,589	\$7,310	\$7,410
<b>Receipts:</b>			
Tax Revenues	10,391	9,222	9,645
Interest	698	771	811
Aviation User Fees, Legislative Proposal	0	0	965
Interest: Legislative Proposal Not Subject to PAYGO	0	-9	-11
Total Receipts	11,089	9,984	11,410
Total: Balances and Collections	\$15,678	\$17,294	\$18,820
<b>Appropriations:</b>			
Trust Fund Share of FAA Operations	-4,112	-5,900	-6,592
Grants-in-Aid for Airports Contract Authority	-2,410	-1,896	-1,950
Facilities and Equipment	-2,122	-2,075	-2,495
Research, Engineering, and Development	-150	-156	-184
Subtotal Appropriation	\$-8,794	\$-10,027	\$-11,221
Unobligated Balance Returned to Receipts	425	136	0
Adjustment in Expired Accounts	1	7	0
Total Balance, End of Year	\$7,310	\$7,410	\$7,599



## AIRPORT AND AIRWAY TRUST FUND

**Table 8 (cont'd) Airport and Airway Trust Fund  
Amounts Available for Appropriation  
(Dollars in Millions)**

	FY 1999 Actual	FY 2000 Enacted	FY 2001 Estimate
<b>Unexpended Balance, Start of Year:</b>			
Uninvested Balance	\$861	\$32	\$0
U.S. Securities: Par Value	8,550	12,411	13,333
<b>Total Balance, Start of Year</b>	<b>\$9,411</b>	<b>\$12,443</b>	<b>\$13,333</b>
<b>Cash Income During the Year</b>			
<b>Government Receipts:</b>			
Passenger Ticket Tax	5,941	4,850	4,911
Passenger Flight Segment Tax	1,339	1,594	1,809
Waybill Tax	412	443	479
Fuel Tax	1,009	854	878
International Departure/Arrival Tax	1,484	1,286	1,367
Frequent Flyer Tax	149	141	144
Rural Airports Tax	57	54	57
Aviation User Fees, Legislative Proposal	0	0	965
<b>Intragovernmental Transactions:</b>			
Interest: Airport and Airway Trust Fund	698	771	811
Interest: Legislative Proposal Not Subject to PAYGO	0	-9	-11
<b>Offsetting Collections:</b>			
Operations	0	72	74
Facilities and Equipment	27	77	77
Research, Engineering, and Development	5	16	16
<b>Income Under Present Law</b>	<b>11,121</b>	<b>10,158</b>	<b>10,623</b>
<b>Additional Income Under Proposed Legislation</b>	<b>0</b>	<b>-9</b>	<b>954</b>
<b>Total Cash Income</b>	<b>\$11,121</b>	<b>\$10,149</b>	<b>\$11,577</b>
<b>Cash Outgo During Year:</b>			
Trust Fund Share of FAA Operations	-4,122	-5,194	-6,523
Trust Fund Share of FAA Operations, Offsetting Collections	0	-72	-74
Grants-in-Aid for Airports	-1,565	-1,894	-1,925
Facilities and Equipment	-2,195	-1,805	-1,976
Facilities and Equipment Offsetting Collections	-27	-77	-77
Research, Engineering, and Development	-174	-194	-199
Research, Engineering, and Development Offsetting Collections	-5	-16	-16
Payments to Air Carriers (Trust Fund)	-1	-1	0
Grants-in-Aid for Airports, Supplemental Proposal	0	-2	26
Trust Fund Share of FAA Operations, Supplemental Proposal	0	-2	-2
Outgo Under Present Law	-8,089	-9,255	-10,789
Outgo Under Proposed Legislation	0	0	24
<b>Total Cash Outgo</b>	<b>-\$8,089</b>	<b>-\$9,255</b>	<b>-\$10,765</b>
<b>Unexpended Balance, End of Year:</b>			
Uninvested Balance	32	0	0
U.S. Securities: Par Value	12,411	13,333	14,145
<b>Total Balance, End of Year</b>	<b>\$12,443</b>	<b>\$13,333</b>	<b>\$14,145</b>

Totals may not add due to rounding



## SUMMARY OF OUTLAYS

**Table 9**

### Amounts Available in FY 2000 (Dollars in Millions)

	FY 2000 President's Budget	FY 2000 Enacted	Difference
<b>Budget Authority</b>			
Operations	\$6,039.0	\$5,893.4 <sup>1</sup>	\$-145.6
(General)	0.0	0.0	0.0
(Trust)	(6,039.0)	(5,893.4)	(-145.6)
Grants-in-Aid to Airports Obligation Limitation	1,600.0	1,845.6 <sup>2</sup>	245.6
Facilities and Equipment	2,319.0	2,045.0 <sup>3</sup>	-274.0
Research, Engineering, and Development	173.0	156.5	-16.5
<b>Total Amounts Available</b>	<b>\$10,131.0</b>	<b>\$9,940.5</b>	<b>\$-190.5</b>
<b>Full Time Equivalents</b>	<b>50,661</b>	<b>49,164</b>	<b>-1,497</b>
<b>Direct</b>	<b>49,232</b>	<b>48,617</b>	<b>-615</b>
Operations	45,939	44,872	-1,067
Facilities and Equipment	2,835	2,786	-49
Research, Engineering, and Development	455	455	0
Grants-in-Aid for Airports	0	501	501
Aviation Insurance Revolving Fund	3	3	0
<b>Reimbursable</b>	<b>1,429</b>	<b>547</b>	<b>-882</b>
Operations	308	308	0
Franchise Fund	1,066	184	-882
Facilities and Equipment	55	55	0
Research, Engineering, and Development	0	0	0

<sup>1</sup> Reflects FAA share of DOT-wide TASC reduction

<sup>2</sup> Reflects \$50 million rescission for FY 2000 Supplemental

<sup>3</sup> Reflects \$30 million rescission of prior year unobligated balances



## OUTLAYS

**Table 10**

### Summary of Outlays (Dollars in Millions)<sup>1</sup>

	FY 1999 Actual	FY 2000 Enacted	FY 2001 Estimate
<b>Appropriation</b>			
Operations	\$5,577	\$5,851	\$6,524
(General)	(1,455)	(659)	0
(Trust)	(4,122)	(5,192)	(6,524)
Facilities and Equipment	2,195	1,805	1,976
Research, Engineering, and Development	174	194	199
Grants-in-Aid to Airports	1,565	1,896	1,899
National Civil Aviation Review Commission	*	0	0
Aviation User Fees (Non-Add)	*	-5	-22
Miscellaneous Expired Accounts	*	*	0
Aviation Insurance Revolving Fund	-3	-3	-3
Administrative Services Franchise Fund	-1	5	-36
<b>TOTAL Outlays</b>	<b>\$9,507</b>	<b>\$9,748</b>	<b>\$10,558</b>
(General)	(1,451)	(661)	(-39)
(Trust)	(8,056)	(9,087)	(10,598)
Proprietary Receipts:			
Miscellaneous Recoveries & Receipts	*	-1	-1

Totals may not add due to rounding

<sup>1</sup> Asterisks denote amounts of less than \$1 million