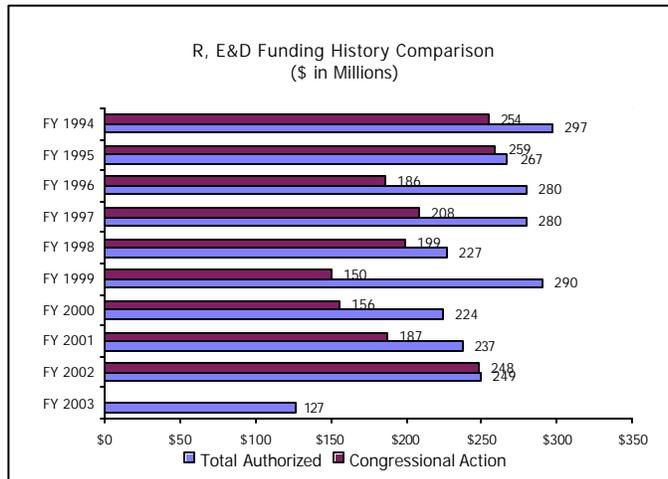
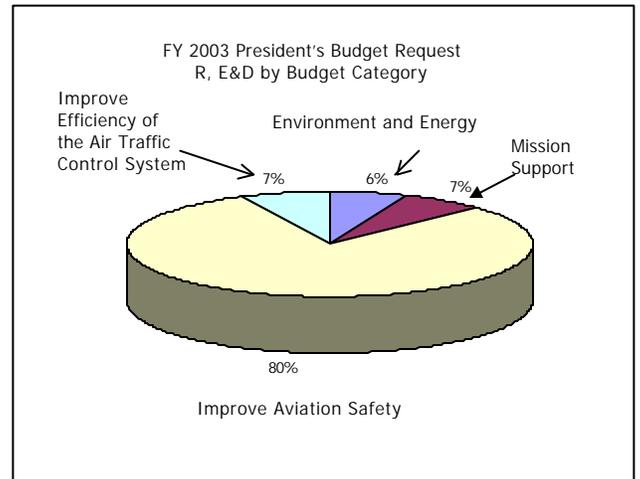


## RESEARCH, ENGINEERING AND DEVELOPMENT

**F**or FY 2003, \$127 million is requested to support the R,E&D program. This request represents \$121 million less than the FY 2002 enacted (adjusted) level of \$248 million. The difference is based primarily on \$50 million being transferred to TSA, a \$50 million supplemental one-time adjustment in 2002, and an \$18 million transfer to F&E. Of the total amount being requested, \$101.4 million is for aviation aircraft technology safety programs; \$9.1 million for programs associated with efficiencies in weather research; \$7.1 million for environmental and energy and \$8.5 million for mission support.



**Figure 6** Note: FY 2002 and 2003 include accrued costs



**Figure 7**

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.

This year's R,E&D budget request has been formatted in performance terms. Consistent with efforts to bring better focus and alignment with key outcome measures, there are four broad areas that represent the performance effects of the resources requested by FAA. Under these broader performance outcome areas, projects are listed under more specific performance measures they are intended to improve.

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.

## RESEARCH, ENGINEERING AND DEVELOPMENT

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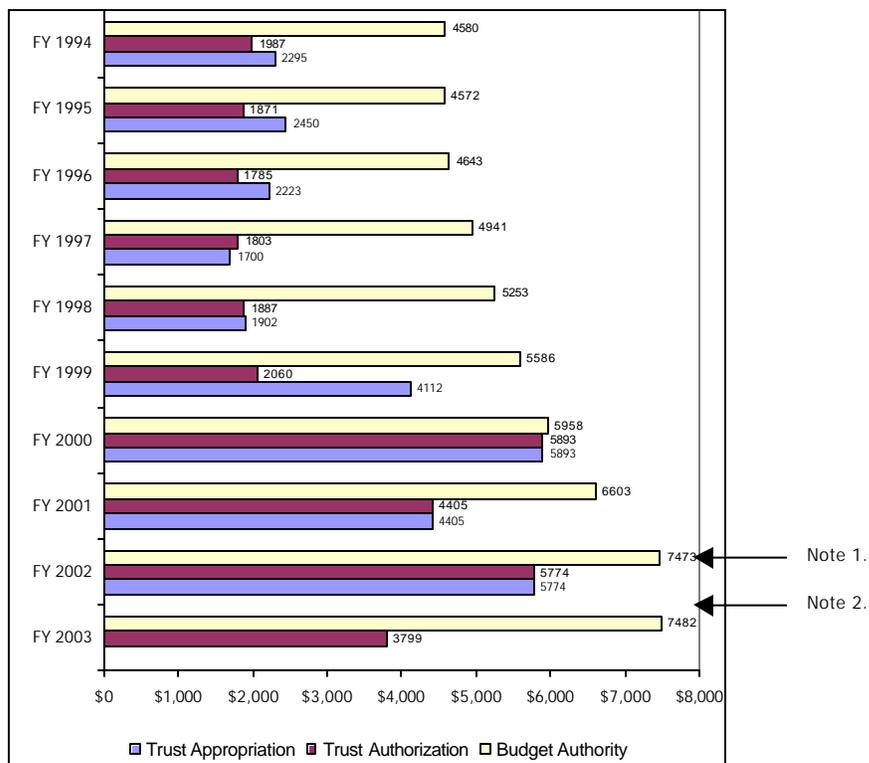
- Increased research on flight deck systems and human factors influencing the interoperability of decision support tools.
- Continued development of research initiatives supporting safer skies initiatives addressing controlled flight into terrain, weather, runway incursion, and aeronautical decisionmaking.

	<b>FY 2003 Request</b>
<b>FY 2003 R,E&amp;D by Goals</b>	
<b>A11. Improve Aviation Safety</b>	<b>\$101,423</b>
<b>Reduce Commercial Aviation Fatalities</b>	<b>46,207</b>
a. Fire Research and Safety	6,429
b. Propulsion and Fuel Systems	3,998
c. Advanced Materials/Structural Safety	1,374
d. Flight Safety/Atmospheric Hazards Research	3,101
e. Aging Aircraft	20,974
f. Aircraft Catastrophic Failure Prevention Research	1,920
g. Flightdeck/Maint/Sys Integration Human Factors	8,411
<b>Reduce General Aviation Fatalities</b>	<b>\$11,964</b>
b. Propulsion and Fuel Systems	1,713
c. Advanced Materials/Structural Safety	1,679
d. Flight Safety/Atmospheric Hazards Research	1,329
e. Aging Aircraft	5,243
g. Flightdeck/Maint/Sys Integration Human Factors	2,000
<b>Aviation System Safety</b>	<b>\$43,252</b>
h. Aviation Safety Risk Analysis	6,926
i. ATC/AF Human Factors	10,317
j. Aeromedical Research	6,603
k. Weather Research Safety	19,406
<b>A12. Improve Efficiency of Air Traffic Control System</b>	<b>\$9,099</b>
a. Weather Research Efficiency	9,099
<b>A13. Reduce Environmental Impact of Aviation</b>	<b>\$7,698</b>
a. Environment and Energy	7,698
<b>A14. Improve Efficiency of Mission Support</b>	<b>\$8,524</b>
a. System Planning and Resource Management	1,459
b. Technical Laboratory Facility	6,455
c. Strategic Partnerships	610
<b>Total R,E&amp;D</b>	<b>\$126,744</b>

Table 6

# AIRPORT AND AIRWAY TRUST FUND

Operations Appropriation and Trust Fund Share  
\$ in Millions



**Figure 8**

Notes:

- 1 Reflects \$200 Million one-time supplemental funding
- 2 Reflects one-time request for Federal health and retirement costs. Includes Operations Trust Fund request of \$3.799 billion

# AIRPORT AND AIRWAY TRUST FUND

## AIRPORT AND AIRWAY TRUST FUND Unavailable Collections (in millions of dollars)

Identification code: 20-8103-0-7-402		FY 2001	FY 2002	FY 2003
		Actual	Estimate	Estimate
<b>Balance, start of year:</b>				
01.99	Balance, start of year .....	7,074	7,344	4,738
<b>Receipts:</b>				
02.00	Excise Taxes .....	9,191	8,939	9,680
02.40	Interest .....	882	869	623
02.81	Facilities and equipment, offsetting collections .....	72	208	120
02.82	Research, engineering and development, offsetting collections .....	4	16	16
02.99	Total receipts and collections .....	10,149	10,032	10,439
04.00	Total: Balances and collections .....	17,223	17,376	15,177
<b>Appropriation:</b>				
05.00	Trust fund share of FAA operations .....	-4,405	-5,974	-3,799
05.01	Grants-in-aid for airports .....	-2,594	-3,173	-3,404
05.02	Facilities and equipment .....	-2,723	-3,230	-3,119
05.03	Research, engineering and development .....	-191	-261	-143
05.05	Office of airline information .....	0	0	-4
05.99	Total appropriations .....	-9,913	-12,638	-10,469
06.10	Unobligated balance returned to receipts .....	34	0	0
07.99	Total balance, end of year .....	7,344	4,660	4,556

Section 9502 of Title 26, U.S.C., 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 Airport and Airway Trust Fund. In turn, appropriations are authorized from this fund to meet the obligations for airport improvement grants, FAA facilities and equipment, research, and operations, and for the Bureau of Transportation Statistics Office of Airline Information.

The status of the fund is as follows (in millions of dollars):

### Status of Funds (in millions of dollars)

Identification code: 20-8103-0-7-402		FY 2001	FY 2002	FY 2003
		Actual	Estimate	Estimate
<b>Unexpended balance, start of year:</b>				
0100	Uninvested balance .....	837	825	0
0101	U.S. Securities Par value .....	13,097	13,657	12,767
0199	Total balance, start of year .....	13,934	14,482	12,767
<b>Cash Income during the year:</b>				
Current law:				
Receipts				
1201	Passenger ticket tax .....	4,805	4,248	4,736
1202	Passenger flight segment tax .....	1,556	1,634	1,771
1203	Waybill tax .....	493	585	606
1204	Fuel tax .....	769	849	882
1205	International departure/arrival tax .....	1,336	1,371	1,401
1206	Rural airports tax .....	82	93	96

## AIRPORT AND AIRWAY TRUST FUND

1207	Frequent flyer tax.....	150	158	162
	Offsetting receipts (intragovernmental):			
1240	Interest: Airport and airway trust fund .....	882	869	623
	Offsetting collections:			
1281	Facilities and equipment .....	72	208	120
1282	Research, engineering, and development .....	4	16	16
1299	Income under present law.....	10,149	10,032	10,439
	<b>Cash outgo during year:</b>			
4500	Trust fund share of FAA operations (Airport and airway trust fund).....	-5,069	-6,050	-3,823
4501	Grants-in-aid for airports (Airport and airway trust fund).....	-2,017	-2,798	-3,273
4502	Facilities and equipment (Airport and airway trust fund) .....	-2,266	-2,389	-2,709
4502	Facilities and equipment offsetting collections .....	-72	-208	-120
4503	Research, engineering and development (Airport and airway trust fund) .....	-167	-247	-195
4503	Research, engineering and development offsetting collections	-4	-16	-16
4504	Payment to air carriers .....	-6	-39	-25
4505	Office of airline information.....	0	0	-4
4599	Total cash outgo (-).....	-9,601	-11,747	-10,165
	<b>Unexpended balance, end of year:</b>			
8700	Uninvested balance .....	825	0	0
8701	U.S. Securities: Par value .....	13,660	12,767	13,041
8799	Total balance, end of year .....	14,485	12,767	13,041

**Table 7**

