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FAA's Financing Proposal

Statement of

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Chairman Costello, Ranking Member Petri, and Members of the Subcommittee:

I appreciate the opportunity to be here today to discuss alternatives for financing the Federal Aviation Administration (FAA). This hearing is both timely and of critical importance given the expiration of the aviation excise taxes supporting FAA's programs at the end of fiscal year (FY) 2007 and potential future increases in FAA's workload and funding requirements.

Last month, FAA released a comprehensive proposal for reforming how it is financed that represents a significant change to the status quo. It calls for, among other things, a shift to user charges for air traffic services, changes to governance through the establishment of a new advisory board, and authority for the FAA to borrow beginning in FY 2013 to finance capital investments.

My testimony today makes the following points:

- There are important reasons to consider alternative financing mechanisms that have been well-documented in previous reports and commissions on reforming FAA. While airspace users pay for the system, the current financing mechanism bears little relationship to the services they actually use and whether they use them at busy or slack times. However, it's important to note that FAA's current financing mechanism could support both FAA's ongoing funding requirements and the potential cost of developing the next generation air traffic control system (NextGen), assuming revenue projections materialize.

- At the request of this Subcommittee, we examined the use of the National Airspace System (NAS) and who contributes to its congestion. Our work shows that general aviation activity accounts for a not insignificant amount of FAA's workload. Therefore, it is appropriate to consider this activity if the allocation of costs among users of the NAS is going to be included as part of any effort to move to a new financing system.

- FAA's cost accounting system can support the user fees envisioned by FAA. FAA's method for allocating costs among user groups, which underlies what each group would pay under FAA's proposal, is reasonable, although it reflects tradeoffs by the FAA. These tradeoffs result in fewer costs being allocated to general aviation and some air carriers than other possible methods.

- FAA's cost recovery proposal does not completely link costs and fees and, therefore, is not fully consistent with FAA's rationale for moving to user fees. However, there is more of a link between costs and fees under FAA's proposal than currently exists.

- How to best finance FAA is a policy call for the Congress. Nevertheless, FAA needs to continue to take steps to control costs regardless of whether it is funded in the future by excise taxes or user fees. In addition, FAA's proposed borrowing authority presents serious risks unless it is accompanied by strong controls. Finally, FAA will be challenged to implement its fee proposal, including the billing system, within the available timeframe.

FAA Faces Significant Near-Term Workload and Funding Issues

The current air traffic control system handles over 700 million passengers per year, a number that is projected to grow to over 1 billion travelers by 2015. This system must also be poised for the introduction of thousands of very light jets[1] over the same timeframe. This influx of new aircraft will strain the Agency's air traffic control systems and its inspection and certification workforces.

FAA plans to address this increased workload, at least in part, through the NextGen. NextGen is expected to shift today's ground-based air traffic control system to an aircraft-based system and to significantly enhance controller productivity through automation. This is a high-risk effort of unprecedented scope and complexity that also involves difficult policy questions as well as billion-dollar investments by FAA (new systems) and airspace users (new avionics).

These potentially significant increases in FAA's workload and cost requirements provide the backdrop against which Congress will need to evaluate alternate proposals for financing FAA.

FAA's Current Financing System Could Satisfy Its Future Funding Requirement, but Other Alternatives Merit Consideration

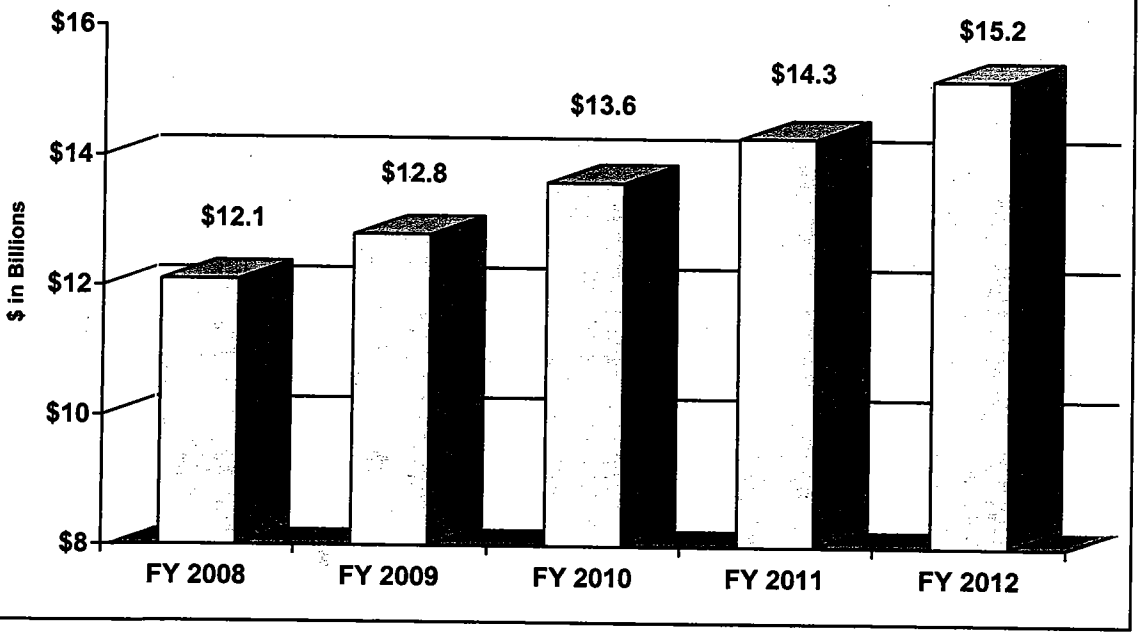
The Airport and Airways Trust Fund Could Support FAA's FYs 2008-2012 Spending

FAA is currently funded from two sources: the Airport and Airway Trust Fund and the General Fund. The Airport and Airway Trust Fund collects revenues from ten aviation-related excise taxes, including taxes on airfares, fuel, and cargo. Almost 68 percent of Trust Fund tax collections come from the 7.5 percent ticket

[1] These are small, "affordable" aircraft that will carry up to six passengers. Priced as low as $1 million per aircraft, very light jet manufacturers anticipate that these aircraft will find a niche among corporate and private owners and as on-demand air taxi services. According to FAA, up to 5,000 very light jets will vie for airspace by 2017.

tax and the segment tax. As shown in Chart 1 below, if the current aviation excise tax system remained in effect, FAA projects that Trust Fund tax revenues would steadily increase from $12.1 billion in FY 2008 to $15.2 billion in FY 2012.

Chart 1. Airport and Airway Trust Fund Projected Tax Revenues FY 2008 - FY 2012



The General Fund has historically been used to pay for portions of FAA's budget, with contributions towards the Agency's overall budget ranging from a low of 0 percent in FY 2000 to a high of 59 percent in FY 1984. Over the past 4 years, the General Fund has contributed approximately 20 percent towards FAA's overall budget.

In FY 2006, approximately 81 percent ($11.2 billion) of FAA's funding was provided from the Airport and Airway Trust Fund; the remaining 19 percent ($2.6 billion) was appropriated from the General Fund. However, with critical modernization and capacity-enhancing projects on the horizon, there are concerns as to whether the current funding structure could support the Agency's financial needs.

To answer this question, we analyzed FAA's Trust Fund revenue projections (based on the current rates) against the Agency's budget projections. In our analysis we made assumptions regarding how FAA's budget would be financed with Trust Fund revenues. First, we assumed that current authorization language that finances FAA's budget would remain in effect. This means that the Trust Fund would contribute the estimated amount of tax and interest revenue earned in

a fiscal year, with the General Fund making up the difference. Second, we assumed that the Trust Fund would earn $400 million annually in interest on its cash balance, a conservative estimate as compared to previous years.[2]

As shown in Table 1 below, the current financing system could meet FAA's budget requirements with a lower General Fund contribution than is currently appropriated. FAA's budget projections include funding for NextGen costs, which FAA estimates will total approximately $4.6 billion over the next 5 years.

Table 1. FAA's Budget and Funding Sources FYs 2008 – 2012 ($ in Millions)

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
FAA's Budget Projections	$14,077	$15,028	$15,661	$16,186	$16,645
Estimated Trust Fund Tax and Interest Revenue* (% of Budget)	$12,495 (89%)	$13,210 (88%)	$13,957 (89%)	$14,743 (91%)	$15,563 (93%)
General Fund Contribution (% of Budget)	$1,582 (11%)	$1,818 (12%)	$1,704 (11%)	$1,443 (9%)	$1,082 (7%)

* Assumes $400 million in interest revenue.

As the above table shows, FAA's budget projections fund the Airport Improvement Program (AIP) at $2.75 billion in FY 2008, $2.9 billion in FY 2009, and $3.05 billion in FYs 2010 through 2012. This is significantly less than the $3.7 billion AIP was authorized in FY 2007. Consequently, we analyzed whether the current financing system could support the agency's funding requirements if AIP was at or above current authorized levels. Under this scenario, while the General Fund contribution would increase it would make up a lower percentage of FAA's overall funding than the 20 percent the General Fund has contributed over the past 4 years.

Alternative Financing Mechanisms Merit Consideration

Supporters of the current excise taxes argue that the taxes have successfully funded FAA in the past, are easy to collect, are familiar to air travelers and industry, and are difficult to evade. Others argue that the current system is unfair, inequitable, and inflexible. This inflexibility may increase the likelihood that the

[2] The Trust Fund earned $429 million in interest in FY 2005 and $495 million in interest in FY 2006.

current system will be unable to generate sufficient revenues to meet FAA's future long-term funding needs.

FAA further argues that because the excise taxes are not related to costs, they do not provide incentives to its customers to use FAA services efficiently or to FAA to operate efficiently. For example, under the current system, there is no incentive for air carriers to transport the same number of passengers on a few larger planes than on many smaller planes from and to the same destinations even though the few larger planes would impose less costs on FAA. Over the last 20 years a number of blue-ribbon panels have also urged that FAA be funded by user fees.[3] Concerns such as these led FAA to propose a new system to finance its operations, a system built upon cost-based user fees.

FAA's Alternative Would Replace Many Aviation Excise Taxes With User Fees and Change Governance Structure

Financing. FAA proposes to fundamentally alter how users of its air traffic control services are charged for those services. Beginning in FY 2009, operators of turbine commercial flights would pay user fees instead of the current excise taxes to cover their share of the Air Traffic Organization (ATO) budget. Separate fees would be charged for oceanic, en route, and terminal services. The terminal user fee would differ for large and medium hub airports and could vary based on the weight of the aircraft, time of day, or day of the week for congested airports.

General aviation and all operators of piston powered flights would pay primarily their share of the ATO budget through an increased gas tax. However, they would also pay the terminal fee if they landed or took off from a large-hub airport, although few actually use these airports. The General Fund would pay for public use of the airspace, including military use, and for other costs "in the public interest," such as Flight Service Stations (FSS) and airports with low passenger boarding levels.

In addition, both commercial operators and general aviation would pay the same gas tax to fund AIP and Essential Air Service (EAS). Neither commercial operators nor general aviation would pay for most FAA safety functions, which would be funded overwhelmingly by appropriations from the General Fund. However, user fees would be charged for 25 specific services in the areas of certification and registration, such as, aircraft registration and issuing an airman's certificate or special aircraft registration number.

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[3] The blue-ribbon commissions include the Transportation Research Board (1991), the Baliles Commission (1993), the National Performance Review (1993), and the Mineta Commission (1997).

Finally, FAA would be authorized to borrow, beginning in FY 2013, up to $5 billion from the U.S. Treasury to finance capital investments. All borrowing would have to be repaid by the end of FY 2017.

Governance. FAA also proposes to fundamentally alter the current decision-making process for setting fee levels. A new Air Transportation System Advisory Board (Board) would provide NAS users a significant role in deciding how the user fees would be set and how FAA funds are spent. The 13-member Board would be comprised of the FAA Administrator, a representative of the Department of Defense, 3 representatives of the public interest, and 8 representatives of specific stakeholder groups. Among other functions, the Board would make recommendations regarding the development and adoption of specific user fees. The FAA Administrator retains decision-making authority and can accept or reject any of its recommendations. The Administrator's decisions can be appealed only to the Secretary. Congress would have no direct role in determining how user fees would be structured or their levels.

Specifically, the Board, either on its own initiative or in response to a proposal from the FAA Administrator, could make recommendations regarding the type and level of user fees to be collected. The Administrator then would either establish the fees as recommended by the Board or modify them and publish an explanation for the modification in the Federal Register.

As with the current excise taxes, FAA would not be able to spend the fees until they are appropriated by Congress. Unlike the current taxes, the fees would offset FAA's appropriations. As such, any increase in fees should translate into higher appropriations for FAA programs because the increased fees and appropriations would offset, resulting in no additional amount counting against the overall limits on appropriations.

Underlying this new financing system is a cost allocation methodology, which assigns costs to different user groups. The level of fees or fuel tax would be based on the costs assigned to the user group by this methodology. A threshold question prior to undertaking such a cost allocation is whether all user groups use FAA air traffic control services in a material manner and, therefore, impact FAA's costs.

Commercial Operators, General Aviation, and Public Users All Make Significant Use of FAA's Air Traffic Services

At the request of this Subcommittee, we examined the question of which groups use FAA services. We examined use of tower, terminal, and en route services both

by type of user (air carrier, non-carrier, and public)[4] and type of aircraft (jet, turboprop, and piston/rotor) at more than 600 air traffic control facilities. We also examined how each group contributed to congestion, as measured by the demand for air traffic services, at several of the most heavily used towers, terminal control areas, and en route centers.

Use of Tower Services. We found that in FY 2005, non-carrier operations[5] of piston and rotor aircraft were the largest users of tower services (40 percent), and accounted for 25 percent more activity than air carrier jets (30 percent) (see Table 2). Commercial carriers dominate activity at the largest one-third of towers, while non-carriers dominate at the remaining two-thirds. However, almost one-third of the 100 largest towers, such as Teterboro and Van Nuys, serve non-carriers almost exclusively.

Table 2. Tower Services Usage
Percent of Tower Operations by User Category and Aircraft Type

User	Jet	Turboprop	Piston & Rotor	User Total
Air Carrier	30%	4%	1%	35%
Non-Carrier (General Aviation)	12% (9%)	7% (5%)	40% (38%)	59% (51%)
Public Use	4%	1%	1%	6%
Aircraft Total	**46%**	**13%**	**41%**	**100%**

Use of Terminal Area Control Services and En Route Services. Air carrier jets were the largest users of terminal area control services (38 percent), as measured by instrument operations, although non-carrier piston and rotor aircraft were second at 29 percent (see Table 3). Air carrier jets were by far the largest users of en route control services (75 percent) as measured by mileage, with non-carrier piston and rotor aircraft accounting for only 4 percent of activity. Public use activity accounted for 6 percent of tower services and 7 percent of terminal approach control services.

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[4] Air carriers are certificated, scheduled, and charter airlines, usually operating jet and turboprop aircraft with greater than 30 seats. These users generally fly fixed routes, serve large metropolitan areas, and have specific time-of-day requirements. Non-carriers are general aviation and fractional ownership aircraft and on-demand taxi operators operating aircraft with less than 30 seats – usually much less. Non-carriers have fewer time-of-day requirements and rarely use large hub airports.

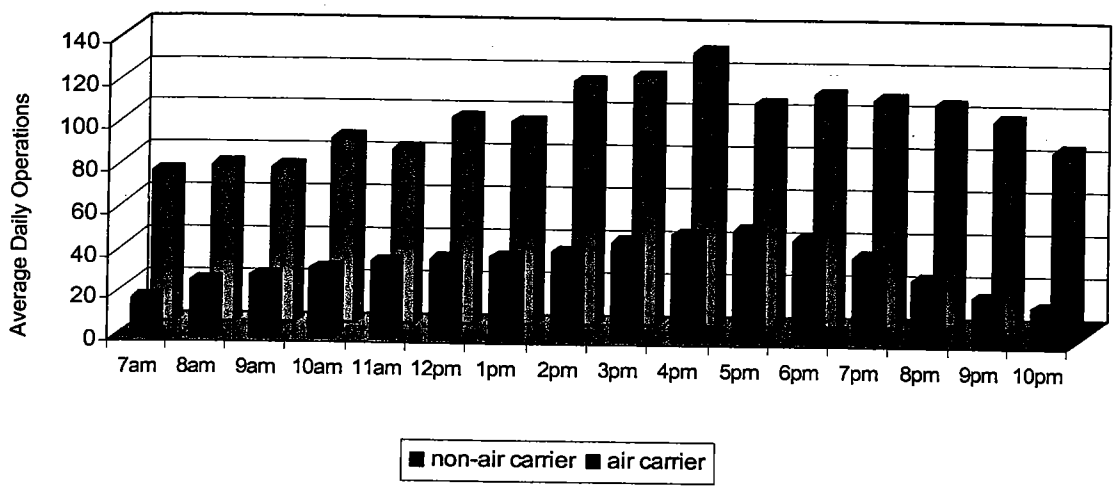
[5] An operation represents an aircraft handled by an air traffic control facility – in the case of a tower, a landing or takeoff; and in the case of a terminal area radar, an instrument approach or departure or other control within the terminal airspace.

Table 3. Terminal Area Control Services Usage
Percent of Approach Control Operations by User Category and Aircraft Type

User	Jet	Turboprop	Piston & Rotor	User Total
Air Carrier	38%	5%	1%	44%
Non-Carrier (General Aviation)	13% (7%)	7% (3%)	29% (22%)	49% (33%)
Public Use	4%	2%	1%	7%
Aircraft Total	**55%**	**14%**	**31%**	**100%**

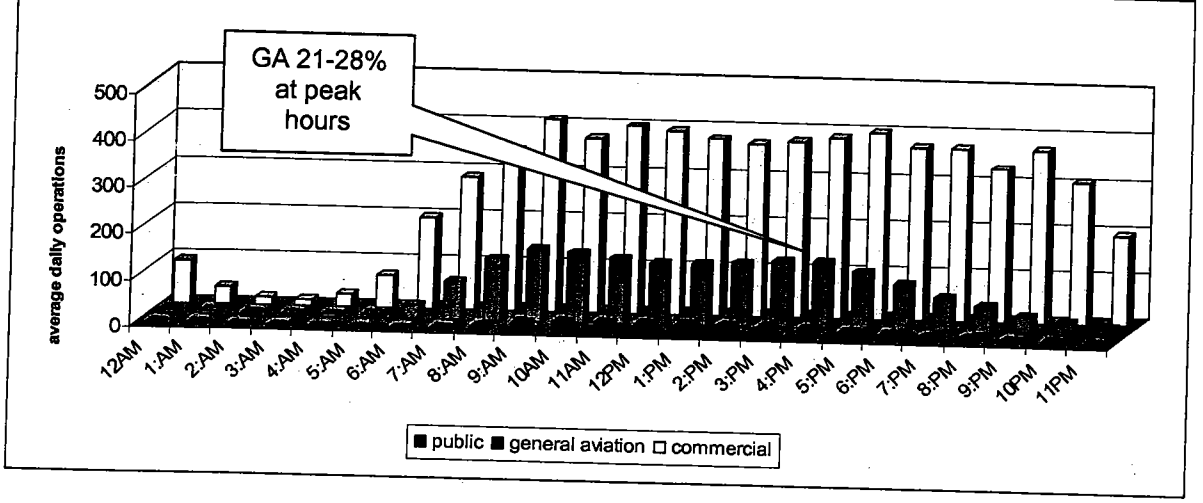
Congestion. We found that both air carriers and non-carriers contribute to congested airspace. Air carrier operations accounted for the largest segment of demand at the heavily used terminal area control facilities and en route centers we examined and exhibited a pattern of peak and off-peak demand. However, non-carrier (including general aviation) demand for terminal and en route services at these heavily used facilities was not insignificant and showed a similar pattern of peak and off-peak demand. For example, Chart 2 below depicts this usage pattern for the New York terminal control area. Non-carriers' use of terminal area control services was for instrument approach services to outlying airports -- their use of large-hub airports was minimal.

Chart 2. New York Terminal Control Area
Instrument Approach Operations by Hour of Day



As an additional example, Chart 3 below depicts the usage pattern for non-carrier use of en route services at the Atlanta en route center. In July 2005, non-carrier usage accounted for from 21 percent to 28 percent of demand during peak hours. Although not depicted in the chart, similarly, non-carrier usage accounted for from 17 percent to 23 percent of demand at the Cleveland center.

Chart 3. En Route Center Operations By Hour of Day Atlanta Center July 2005



Based on this analysis, we concluded that commercial operators', general aviation's, and public users' use of FAA's air traffic services is sufficient to warrant separate cost allocation categories. None of these groups had activity levels low enough to support a conclusion that they did not materially contribute to FAA's costs and should not be included in a cost allocation study.

FAA's Cost Allocation Methodology Is Reasonable, But Its Cost Recovery Plan Does Not Completely Link Costs and Fees

FAA's User Fees Proposal has Three Components: Cost Accounting, Cost Allocation, and Cost Recovery

Cost accounting is the process by which FAA's costs are assigned to a specific facility or activity, for example, an air traffic control tower. Cost allocation uses information from the cost accounting system to assign costs to groups of users of FAA's air traffic control services. Cost recovery addresses how the costs assigned to each user group will be collected.

We believe the cost accounting system can support user fees as envisioned by FAA, and the cost allocation methodology used by FAA is generally sound. However, the cost recovery methodology is not fully consistent with FAA's overriding goal of linking costs and fees to promote more efficient use of FAA services.

FAA's Cost Accounting System Can Support User Fees

The FAA's cost accounting system is sufficient to support user fees as FAA currently envisions them. Since 1996, FAA has spent over $66 million to complete the implementation of its cost accounting system. We have issued four assessments of FAA's system during this time period. Should the structure of these fees change, then FAA would need to consider the capabilities of the cost accounting system to support the new structure.

In FY 2006, FAA received a qualified opinion on its financial statements. We believe this would have no material impact on the integrity of user fee calculations because the amounts in question would not be used in those calculations. The qualified opinion was due to concerns over the Construction in Progress balances, as recorded in the financial accounting system. However, to calculate its user fees, FAA plans to replace acquisition-related costs, including asset depreciation expenses, with budgeted costs, which is how these funds are appropriated to FAA. Therefore, the amounts in question in the FY 2006 financial statements would not factor into FAA's calculation of user fees.

FAA's Cost Allocation Methodology

Cost allocation is a critical element of the FAA financing debate because it is the basis for determining the amounts that would be collected from each user group. Adding to the intensity of the debate regarding FAA's cost allocation methodology are the numerous policy decisions and judgment calls inherent in the process.

FAA's goal was to allocate costs in a manner that was simple, transparent, and repeatable. To accomplish this, it employed a three-step process. First, it assigned the costs from its cost accounting system for approximately 600 service delivery points to six service categories.[6] Each service category shares similar cost and operating characteristics.

[6] These six categories were oceanic en route services, domestic en route services, large hub airports, middle activity airports, low activity airports, and flight service stations.

Second, FAA assigned costs within each service category[7] to either high-performance aircraft operators or piston aircraft operators. The high performance group includes all turbine aircraft, most of which are jets, that tend to require more complex air traffic control equipment and procedures because of the conditions under which they fly and the time sensitivity of their operations. The piston group includes gas-powered piston aircraft and helicopters, which generally fly slower and at lower altitudes and require less complex air traffic control services.

To accomplish this second step, FAA examined three types of costs, called tiers, and assigned the costs in each tier to the high-performance or piston user group based on separate criteria. The three tiers FAA used are:

- Tier 1 costs are those that could be assigned to one user group because they principally benefit a single user group and use by the other users does not result in a material incremental cost.

- Tier 2 costs are shared costs assignable to more than one user with a fixed and variable component. The fixed component was allocated entirely to the principal user (usually the high-performance users) and the variable component was assigned based on usage.

- Tier 3 costs are overhead and other costs that could not be assigned to a specific user group or allocated based on activity. These costs were allocated between high-performance and piston based on their share of the cost assigned to them under Tiers 1 and 2.

Third, FAA further subdivided costs within each user group by purpose of the operation: commercial, general aviation, and public use. This subdivision was based solely on usage — great circle miles[8] for oceanic and domestic en route services and operations for terminal services. The subdivision resulted in cost groupings for six user categories: high-performance commercial, high-performance general aviation, high-performance public, piston commercial, piston general aviation, and piston public.

Totaling these cost categories by purpose of the operation resulted in an allocation of 73.5 percent of FAA's FY 2005 costs to commercial users, 15.6 percent to general aviation, and 10.9 percent to public users.

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[7] FAA assigned all FSS costs to the public and, therefore, did not need to assign FSS costs based on aircraft type.

[8] The minimum distance between any two points on the globe.

FAA's Cost Allocation Results Reflect Two Key Decisions

FAA's cost allocation was driven by the answers to two key questions:

1. Should FAA have considered user's price sensitivity in its cost allocation?

2. What is the appropriate view of the NAS?

Price Sensitivity. Some users believe FAA should have used Ramsey pricing in its cost allocation to take into account user's price sensitivity for ATC services so that no one would stop flying as a result of those services costing too much (often referred to as being "priced out of the system"). Ramsey pricing is a method of allocating costs to achieve the greatest economic benefits for, in this case, FAA and its users. FAA used it in its 1997 cost allocation study[9] methodology and it has been frequently raised in the context of the current debate.

I would like to make three points about Ramsey pricing. First, Ramsey pricing is not designed to minimize the number of users priced out of the system, it is designed to maximize economic benefits.[10] Therefore, it is not necessarily true that had FAA used Ramsey pricing, fewer users would be priced out of the system.

Second, FAA does not have the data needed to properly use Ramsey pricing to allocate costs, that is, estimates of the sensitivity of each user group's demand to changes in price. We are unaware of any international source for the data either. In its 1997 study, FAA simply assumed values for these price sensitivities, it did not base them on empirical data.

Third, using Ramsey pricing may not shift costs among user groups much when compared with FAA's allocations. For example, Ramsey pricing could have an offsetting impact on different segments of the general aviation community. The price sensitivity of piston general aviation operators is likely to be high because the operators derive no economic benefit from their flights. Conversely, the price sensitivity of jet and turbo prop general aviation operators, which is used largely for business purposes, is likely to be lower because operators are already paying a premium for the service.

Different Views of the NAS. Air carriers view the NAS in terms of how to optimize the use of a scarce resource. As a result, in their view, each aircraft or

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[9] A Cost Allocation Study of FAA's FY 1995 Costs, March 19, 1997, prepared by GRA, Inc. for FAA Office of Aviation Policy and Plans.

[10] Some incorrectly use Ramsey pricing and ability or willingness to pay interchangeably. This leads to the mistaken belief that Ramsey pricing will tend to price fewer users out of the system than other allocation methodologies.

blip on the radar screen handled by a controller should be treated the same from a cost allocation standpoint. The general aviation community views the NAS as being built for the air carriers. As a result, in their view, they should not be charged for equipment, services, and system capacity needed to meet the needs of the air carriers.

The air carriers' view would lead to certain costs being allocated in proportion to use of the NAS while general aviation's view would lead to those costs being allocated to the user group for whom a facility was built or service instituted. FAA allocated costs consistent with the view advocated by the general aviation community.[11]

For example, FAA assigned all the costs of terminal area control (TRACON) services to the primary large hub airport within the terminal area based on their determination that the TRACON would not have been established if it were not for the large hub airport. This resulted in approximately $371 million in costs[12] being allocated to the users of the large-hub airport instead of to aircraft served by the TRACON but landing at a surrounding airport, or only transiting the terminal area airspace.

This had two effects. First, TRACON costs for high-activity, predominately general aviation airports, such as Teterboro, Phoenix Deer Valley, and Ft. Lauderdale Executive were allocated to air carrier users of the nearby large-hub airports -- LaGuardia, Phoenix Sky Harbor, and Ft. Lauderdale. Second, TRACON costs for flights at medium sized hubs were allocated to those using large hubs (Table 4). This may create a competitive advantage for medium-hub over large-hub airports due to their lower terminal fees.

[11] Specifically, if FAA determined that a facility was required to meet the needs of high-performance aircraft and the costs of the facility did not vary much because of its use by operators of other aircraft, then the entire costs of the facility was assigned to the operators of high-performance aircraft.

[12] Estimate based on FY 2006 data.

Table 4. Consequence of Allocating TRACON Costs Only to Large HUB Users		
Airline Flights Using These Airports	**Obtain Instrument Services From These TRACONS**	**The Cost of Which is Borne By the Users of These Airports**
Medium Activity Airport	TRACON/Terminal Area	Large Hub Airport(s)
Burbank	Southern California	Los Angeles/San Diego
Ontario	Southern California	Los Angeles/San Diego
Sarasota	Tampa	Tampa International
San Jose	Northern California	San Francisco
Santa Ana	Southern California	Los Angeles/San Diego
Sacramento	Northern California	San Francisco
Islip	New York	Kennedy/LaGuardia/Newark
Oakland	Northern California	San Francisco
Long Beach	Southern California	Los Angeles/San Diego
Houston Hobby	Houston	Houston Bush
Dallas Love Field	Fort Worth	Dallas/Ft. Worth

FAA's Cost Allocation Methodology Is Reasonable. FAA allocated costs in a manner consistent with its goals of simplicity, transparency, and repeatability. In theory, FAA could have chosen a goal of maximizing economic benefits by using Ramsey pricing, but could not have done so in practice. Therefore, we concluded that FAA's cost allocation methodology is reasonable.

We do not believe FAA's methodology would have been improved, as some have argued, by using aircraft weight as a proxy for Ramsey pricing. Aircraft weight is only a crude proxy for willingness to pay, which is itself a proxy for Ramsey pricing. The use of proxies or approximations for Ramsey pricing is problematic because inaccurate estimates of price sensitivities in Ramsey pricing can produce a worse outcome, from an economic perspective, than an accounting based cost allocation method.

The air carrier and general aviation views of the NAS serve different, but valid goals. Neither goal is right or wrong. However, by adopting the general aviation position, FAA's methodology significantly reduced the costs that would have otherwise been attributed to general aviation users.

FAA's Cost Recovery Proposal Does Not Completely Link Costs and Fees, Although That Linkage is Stronger Than Under the Current System

FAA's cost recovery proposal does not completely link the costs users impose upon the system and the charges paid by those users. Linking costs and fees is seen as a way to provide users with an incentive to use FAA service more

efficiently and for the FAA to operate more efficiently. This linkage has been one of FAA's primary rationales for moving to a cost-based user fee system. While this linkage is less than direct, it is stronger than the linkage that currently exists between costs and fees.

The weakening of this linkage results from two FAA decisions: (1) to permit weight to be an element in terminal, and perhaps, en route fees and (2) not to recover all the costs allocated to general aviation from those users. First, FAA's proposal explicitly permits weight to be a factor in setting the terminal user fees.[13] Weight could be a factor in setting en route fees because these fees would be based on "any other method that is consistent with the treaties and international agreements to which the United States is a party."

Weight is used internationally at this stage of the process as a proxy for a user's value of the service or willingness to pay for it. According to the International Civil Aviation Organization (ICAO), "...aircraft weight is considered to be a valid charging parameter for representing the value of service to users ...It may be assumed that the value of the service generally increases as aircraft payload increases..." As such, it attempts to introduce an aspect of fairness into the charges.

Second, FAA chose not to recover from general aviation operators either the costs of towers at airports boarding less than 100,000 passengers or flight service stations. Instead, it decided to recover those costs from the public through appropriations from the General Fund.

FAA's rationale for treating the costs of low-enplanement towers in this manner was to preserve the public's access to the Nation's transportation system through these low-enplanement airports. As a result, $650 million in costs[14] for these towers would be recovered from the general fund instead of the users of these facilities, that is, general aviation. However, these airports provide little access to the NAS and therefore, recovering these costs from the taxpayer is not in line with FAA's rationale. Of the 27 million operations at the nearly 300 airports for which the costs are at issue, only 2.5 percent were for air carrier flights in 2005.

FAA also chose to recover the $564 million in costs for FSS from the public, even though they almost exclusively serve general aviation aircraft. FAA's rationale was that it did not want to discourage the general aviation community from accessing the safety services provided by FSS. However, general aviation would

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[13] FAA has told us that it expects weight would be used in setting these fees. However, since the Board would propose a fee structure for the FAA Administrator's approval, FAA can not say with absolute certainty at this time the fee would ultimately be structured.

[14] Estimate based on FY 2005 data.

pay a flat gas tax to cover the costs of all services consumed by the general aviation community at large. Individual pilots would not pay a transaction based fee specifically for using FSS services. Any possible disincentive for using FSS services by having those costs included in the gas tax base would be minimal at best.

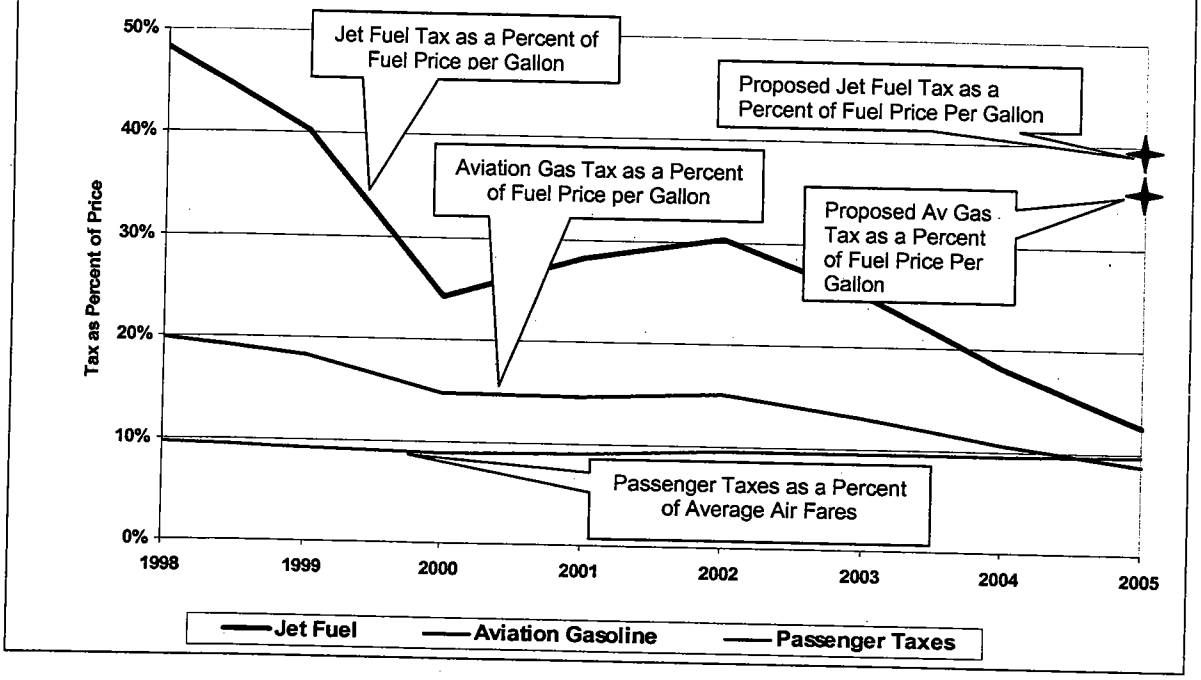
FAA's Proposal Will Reduce Air Carriers' and Increase General Aviation's Costs

Under FAA's proposal, in FY 2009, air carriers would contribute $10.1 billion in user fees and taxes, or 81 percent of the total fees and taxes collected, compared to the $11.8 billion, or 92 percent, they would contribute under the current excise tax system. Within this category, regional airlines, foreign airlines, and commercial freight carriers would contribute more in fees than under the current system. This is because the current system collects more revenue from larger rather than smaller aircraft, since it is based primarily on the number of passengers per aircraft (the ticket tax and segment fee).

General aviation's contribution would increase by 334 percent under FAA's proposal, from $414 million under the current excise taxes to $1,382 million. On a percentage basis, this is a dramatic increase, although, on an out-of-pocket or historical basis, the increase is less dramatic. For a general aviation piston aircraft that does not use an airport with user fees, the proposed 70 cents per gallon fuel tax would add $8.11 in out-of-pocket costs to the per hour flight cost. Similarly, a Learjet 35 would pay an additional $151.11 per hour, compared to a direct operating cost base of over $1,700 per hour.

On an historical basis, the fuel tax as a proportion of the cost of a gallon of gas dropped significantly since 1998 because the tax rate remained unchanged while the price of a gallon of gas increased (see Chart 4 below). FAA's proposed jet fuel tax rate would be significantly below the 1998 rate, when viewed in terms of the tax rate as a proportion of the cost of a gallon of gas, whereas the aviation gas tax rate would be higher.

Chart 4. Jet Fuel, Aviation Gas and Passenger Taxes as a Percent of Fuel Price FYs 1998-2005



The 70 cents per gallon gas tax in the FAA's proposal reflects the proposed $2.9 billion funding level for the AIP and $50 million funding level for the Essential Air Service (EAS) program included in the FY 2008 President's budget. If Congress were to increase AIP and EAS to an historical level of $3.9 billion, the FAA's proposed fuel tax would need to increase by 6.6 cents per gallon, thereby raising the total gas tax paid by general aviation from 70 cents to 76.6 cents per gallon.

Key Issues that Need Greater Attention

How to best finance FAA is a policy call for The Congress. Regardless of whether FAA continues to be funded through the current excise taxes or, in part, by user fees, it needs to do all it can to control costs. As we testified in February before this Subcommittee, a clear understanding of Agency requirements is essential, including how many controllers and safety inspectors it needs. Also, FAA needs to refine its cost estimates for NextGen and develop a strategy for how this extraordinarily complex effort will be managed and executed. Any business seeking to borrow $5 billion for capital expenditures would take these steps.

Getting Reliable Cost Estimates for NextGen and Developing Effective Transition strategies.

A major thrust of FAA's proposal focuses on ways to finance NextGen initiatives. FAA's most recent estimates suggest that the Agency will require $15.4 billion for capital projects from FY 2008 through FY 2012. This includes $4.6 billion for NextGen initiatives.[15]

As we noted in a recent report,[16] the transition to NextGen is an extraordinarily complex effort involving billion dollar investments from both the government (new automation and communication systems) and aviation industry (new avionics). The Joint Planning and Development Office's most recent progress report estimates the cost for airspace users to equip with new avionics to be in the $14 billion to $20 billion range over the long haul. While financing is a front and center issue, the overall execution and management of this effort is also important. We note that the bulk of NextGen funds from FY 2009 through FY 2012 will be allocated to developmental efforts, including demonstration projects.

Our work on a wide range of major acquisitions underscores the importance of understanding risks and getting a firm grasp of technical requirements. FAA needs to continue to refine costs for NextGen—for both the government and airspace users—and determine what reasonably can be expected over the next several years with the infusion of additional funds. Further, FAA needs to articulate a strategy for how it will mitigate past problems that led to massive cost growth, schedule slips, and performance problems with major acquisitions and successfully deliver new capabilities.

Borrowing Authority Poses Serious Risks

Borrowing authority provides a way to guarantee sufficient funding for appropriate long-term investments. It would allow project managers to make large investments based on predictable, stable levels of funding. Ideally, this would lead to capital expenditure decisions based on user needs and a rational cost-benefit tradeoff. In addition, the transition to borrowing produces a one-time period of reduced revenue needs — that is, lower taxes or user fees. From the airlines' standpoint, this transition produces a window of cost savings.

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[15] This includes $4.3 billion in capital funds and additional $300 million for Research, Engineering, and Development efforts.

[16] OIG Report Number AV-2007-031, "Joint Planning and Development Office: Actions Needed to Reduce Risks With the Next Generation Air Transportation System," February 12, 2007.

However, there is a significant risk associated with granting borrowing authority. In the absence of meaningful reform at FAA, the one-time influx of cash may simply allow inefficient investments to continue. In view of this, borrowing authority could saddle future users of the ATC system with a significant debt without seeing any real benefits. Additionally, it would require legislative changes and consideration of budgetary scoring issues and of the impact on the Federal deficit.

If any form of borrowing authority is granted, it is critical that: (1) there is a clear understanding of what investment the FAA would be borrowing money for (that is, long-term investments in order to meet future demand), (2) the borrowing is not simply a short-sighted vehicle to put off increased fees or taxes in the near-term, and (3) accountability and discipline is established to ensure cost control and efficient on-schedule implementation of capital investments.

Finally, under FAA's proposal, the authority to borrow would begin in 2013 with all monies to be repaid by 2017. With a maturity of only 5 years, FAA would be funding long-term investments with short-term borrowing, resulting in the need to repay the debt before the fruits of the investment could be realized. In addition, FAA's funding requirements 5 years from now are difficult to estimate, and in the case of NextGen, poorly defined. There is no clear evidence at this point that FAA needs an additional $5 billion for modernization and infrastructure projects in 2013.

Implementing FAA's Proposed System Would Be a Challenge

FAA's proposal provides 1 year for the Board to be appointed and reach agreement on a fee structure and fee levels, and for FAA to implement a billing system based on that fee structure. This timetable is ambitious, even if FAA employs the option of contracting the billing process with an outside vendor.

In sum, FAA is at a critical juncture with regard to how it is financed. Decisions regarding alternative funding mechanisms should be made with an eye toward FAA's projected workload and funding requirements. Excise taxes are one funding mechanism that could provide sufficient resources to support FAA's needs, but falls short in other regards. User fees is another alternative that is not without controversy — particularly, regarding how costs are allocated among users. FAA cost allocation methodology is generally sound, but several choices made by FAA distribute costs incurred by the general aviation community to air carriers or taxpayers.

Mr. Chairman, that concludes my statement. I would be happy to answer any questions you or other members of the Subcommittee may have.