







Global Trends with Modernizing ANSPs: Lessons for FAA Reform

Global Challenges to Improve Air Navigation Performance: A NEXTOR and FAA Workshop Pacific Grove, California

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Leaders Acknowledging Problem, Calling for Changes

"The funding appropriated to F&E over the past few years has forced FAA to choose between deferring maintenance of current infrastructure and keeping NextGen progress on track" (President's FY2016 Budget)

"One thing I think is vitally important is for the aviation industry to start having serious conversations about the structure of our aviation system, as well as the way to fund it ... about what it makes sense for the FAA to continue doing, and what we might be able to stop doing or do differently" (FAA Administrator Michael Huerta, Aero Club, 2013)

"We need to think bigger than a simple FAA reauthorization. I believe it needs to be a transformational bill. We can reform U.S. policy if we concentrate on the common ground ... and avoid battling one another on narrow issues."

(House T&I Chairman Bill Shuster, AOPA, 2014)

"[We should] drop our parochial views on funding and policies because we keep cancelling each other out on the Hill. Instead [we should] craft our collective futures together and create a new national aviation policy that recognizes change."

(Los Angeles World Airports and FAA MAC Chairman Gina Marie Lindsey, 2013)

FAA MAC Agreed Unanimously on Reform Principles

Management Advisory Council (MAC)

Public Law 104-264, The Federal Aviation Reauthorization Act of 1996, Sec 230, mandated the Council. The law was further amended by PL 106-181, Sec. 300.

The MAC provides the FAA
Administrator general advice from a
broad spectrum of aviation interests.
The council functions as an oversight
resource for management, policy,
spending and regulatory matters.

- Juan J. Alonso, Stanford University
- David J. Bronczek, FedEx Express
- Lynn Brubaker, Consultant
- Russell A. (Chip) Childs, Skywest Airlines
- Gina Marie Lindsey, LAX
- James C. Little, TWU
- Jack J. Pelton, Cessna
- Steven Pennington, USDOD*
- John D. Porcari, USDOT*
- Steven Predmore, jetBlue (to 2012)
- Ramon Ricondo, Ricondo Assoc. (Chair)
- Paul Rinaldi, NATCA
- Stephen D. Van Beek, LeighFisher

^{*} Note that public members do not advocate

Three Years of Budgetary Chaos Highlighted NAS Vulnerability

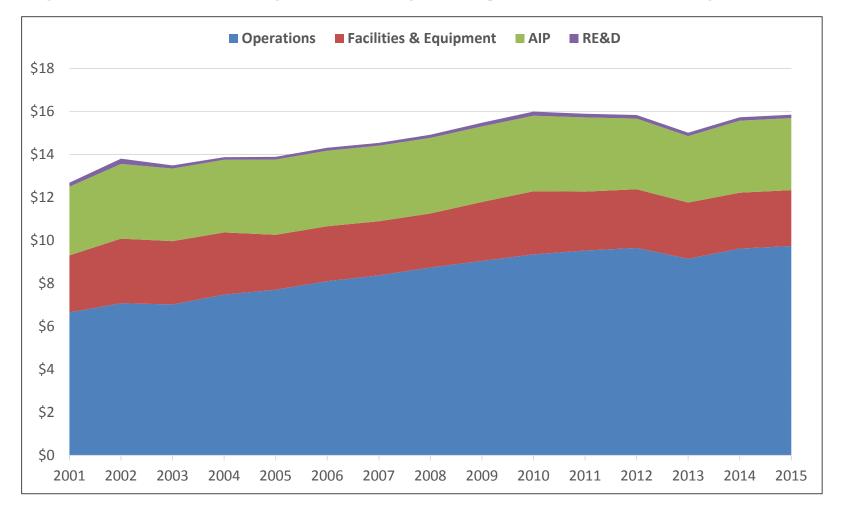
- 1. Partial Shutdown (FY 2011): FAA Authority lapses, 4,000 FAA employees furloughed, \$400 million in lost revenue for the Airport and Airway Trust Fund (AATF).
- 2. FAA Reauthorization (FY 2012): H.R. 658 passes after 23 temporary extensions of authority. Status quo bill does little to resolve long-term funding issues and policy developments for the FAA.
- 3. Sequestration (FY 2013): A week of furloughs, including controllers; decision not to maintain airport navaids; closure of the FAA Academy; and raiding trust fund to shift \$253 million "protected" AIP account to fund operations.
- 4. Sequestration (FY 2014 FY2021): Budget deal and easing of discretionary spending targets appears headed-off sequestration cuts for FY2014 and FY 2015. But FY 2016, similar to FY 2013 cuts, starts in under eight months.

Budgetary problems fall heavily on aviation due to the expansive roles played by the FAA and the agency's overreliance on the General Fund (and policymakers)

The Trust Fund: A Good Idea Outliving its Usefulness

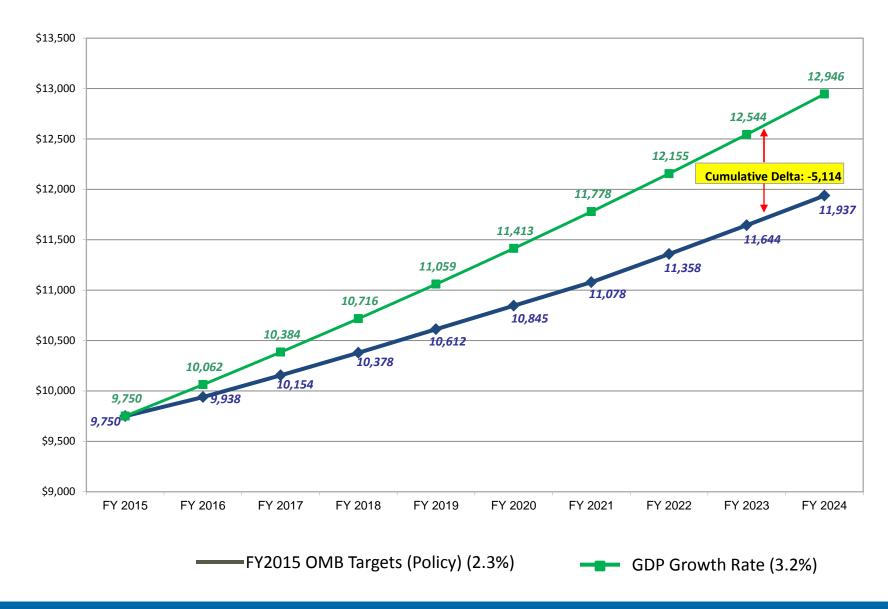
- The Airport and Airway Trust Fund was created over 40 years ago to provide a stable source of funding for FAA capital needs and airport infrastructure with the remainder supporting FAA operations (together with the General Fund).
- For decades this effectively dealt with a system funded by annual appropriations and one where those charged with running the FAA lacked both a capital budget and access to the financial markets (unlike their foreign counterparts).
- As long as industry revenues kept pace with system needs (principally through system growth)-- and taxpayer funds were available annually to fund the difference between FAA operating and capital needs and industry revenues -- the FAA could effectively operate, plan and invest.
- Changes in the aviation industry coupled with the continuing pressures on the federal budget mean that this "funding system" no longer meets its original intent of providing stable funding.
- Financial stability requires fundamental reform.

Capital Accounts Squeezed by Budget Limits and Ops



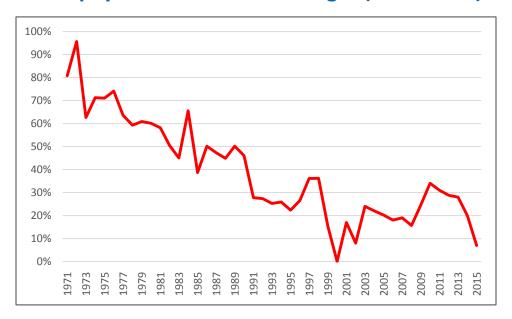
"The funding appropriated to F&E over the past few years has forced FAA to choose between deferring maintenance of current infrastructure and keeping NextGen progress on track" (President's FY2016 Budget)

Operations Forecasts Show Growing Problem



Taxpayer Contributions Trending Down; Unlikely to Fill Gap

Taxpayers' Share of FAA Budget (1971-2015)



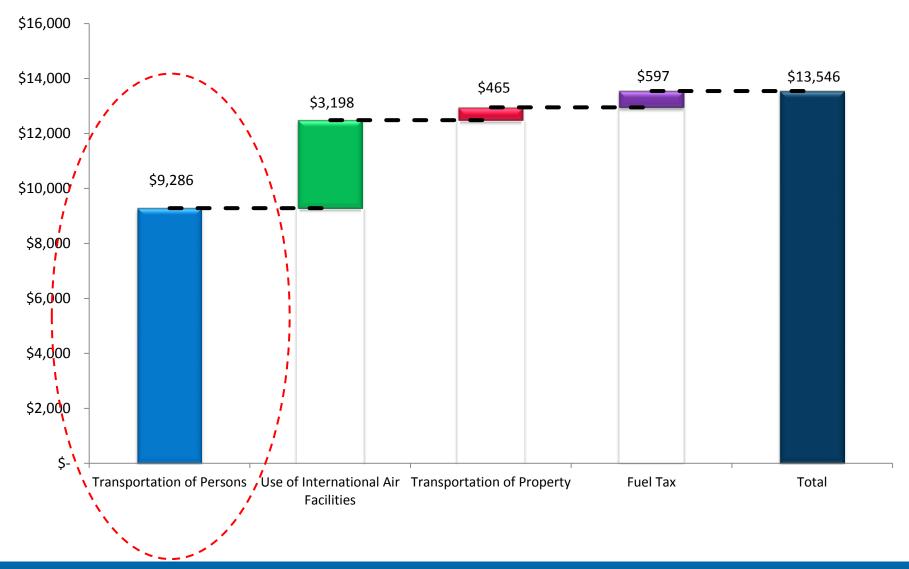
Pressures on Taxpayer Spending 2016 - ?

- Sequestration hanging over 2016
- Politics right now favoring "shared sacrifice" or across-the-board cuts
- PAYGO (Senate) and CUTGO (House) rules enforce discipline and pressure spending
- With Highway Trust Fund and AATF financial issues, infrastructure spending now widely perceived as "discretionary"
- Other transportation priorities including highways, transit and rail all lack sufficient dedicated revenues (or dedicated revenues at all), requiring taxpayer funding if they are to be continued

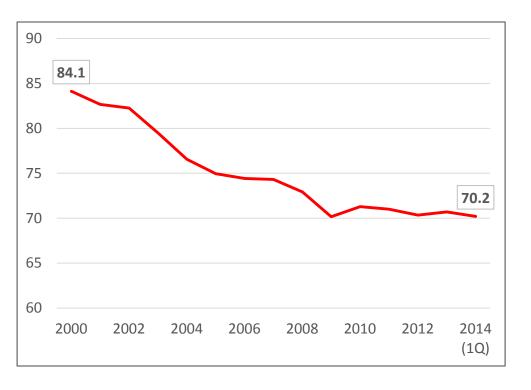
Tax Collections Unlikely to Grow Sufficiently to Fund FAA

Тах	Description	Adjusted?	Driver	7 Year Trend (absolute values)
Domestic Passenger Ticket Tax	7.5% of ticket price	Ad Valorem	Enplanements and Fare Price Average Airfare Price (2013 Dollars)	2006 2012 Flat
Domestic Flight Segment Tax	\$3.90 per segment	СРІ	Domestic Segments	Flat
Int'l Arrival and Departure Tax	\$17.20	СРІ	International Passengers	Growth
CONUS to/from Alaska or Hawaii	\$8.60	СРІ	Enplanements to/from AK/HI to CONUS	Flat
Domestic Cargo	6.25% of Freight Value	Ad Valorem	Cargo Value and Volume	Decrease
GA Fuel Tax	Avgas: \$0.193/gallon Jet: \$0.218/gallon	No	Operations	Decrease
Commercial Fuel Tax	\$0.043/gallon	No	Operations	Decrease

Commercial Air Transport Provides Dominant Source of Revenue

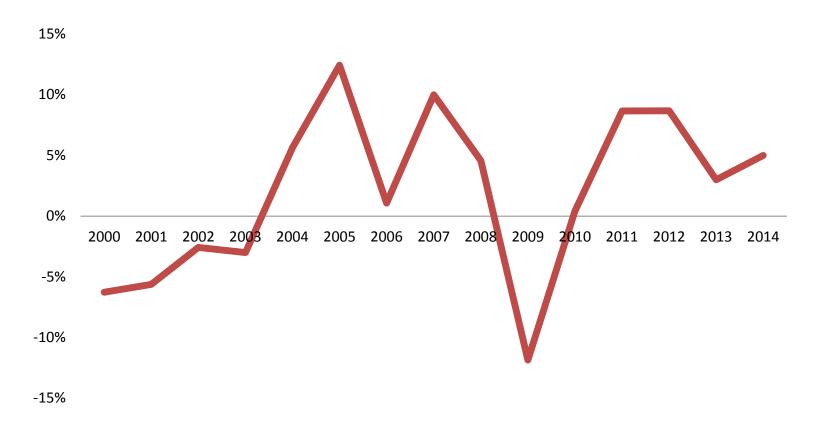


Changes in Ticketing Practices Eroding Per Pax "Return"



- Ancillary fees growing at >15% per year.
- The loss of <u>taxed</u> airline revenue costing the NAS >\$500m annually
- Airline ticketing practices, rather than system use, increasingly determining how much airlines provide for NAS capital needs, AIP and other needs.
- Airlines such as Southwest and jetBlue which have more of their tickets taxed are discriminated against by existing policy.
- Even with modest system growth,
 AATF revenues will grow more slowly due to the relative decline of fare revenue.

Annual Change Often +10%/-10% Imperiling FAA Planning



The current AATF structure is not providing the degree of stability in funding envisioned by its creators—especially with the nation's fiscal issues. This imperils the goal of creating a financially sustainable FAA capable of operating and investing in NextGen and airports

Four Reform Principles for FAA Reform

- 1. Create a sustainable financial future for the FAA: The most important goal is to establish a funding system that provides dedicated and sufficient user-based revenues to pay for FAA obligations. MAC members believe that general fund support for the aviation industry should be phased out as soon as possible in order to insulate the agency and the provision of user services from day-to-day politics.
- 2. Separate a new commercialized ATO from the FAA: Modeled after other ANSPs (such as NAV CANADA), separate the service-oriented ATO from the FAA and appoint a board consisting of users and aviation stakeholders to oversee its work. MAC members strongly believe that ATO reform must be accompanied by overall aviation policy reform due to the links between policy and funding decisions.
- **3.** Assess and codify FAA Authorities and programs: Simplify statutes, regulations and policy by reviewing existing rules and procedures and eliminating redundant regulatory oversight. MAC members believe that this process will result in significant savings to the FAA and will obviate the need for a near-term increase in user revenues after the phase-out of general fund support.
- Reform the tax structure: Eliminate the current mix of AATF taxes and fees and replace it with transparent schedules of cost-based fees that provide sufficient funding for services such as air traffic control and aircraft certification. MAC members believe that new schedules should be (1) "revenue neutral" and (2) flexible in their administration in order to gain the confidence of stakeholders and facilitate the transition to a new system.

Policy Setting for FAA Reform in 2015

1. FAA Management Advisory Council (MAC) Recommendations

- 2011-2013 Final Report issued documenting challenges and recommending path forward
- Unanimous agreement of members, active cooperation with FAA and U.S. DOT
- "New MAC" continuing work

2. Policy-Making Process for FAA Reform

- Views of Aviation Stakeholders
- Leadership of House Transportation and Infrastructure Committee wants "transformational reform"
- Facilitating role of FAA's Michael Huerta
- Business Roundtable (BRT), "Term Sheet"

3. Appropriations, Authorization and Sequestration

- Fiscal Year (FY) 2015: full year appropriations
- Debt limit reached March 15, 2015
- Sequestration averted for FY 2015, back in play in FY 2016 (October 1, 2015)
- Current FAA authorization expires September 30, 2015

FAA Funding Should Shift Away from Government to Users

■ FAA is too linked to policy and budgetary failure in Washington

- "In order to keep pace with these modernization projects and the rest of the world, the FAA needs to be properly funded and staffed, which can only happen with stable and predictable funding" (Paul Rinaldi, President NATCA, November 18, 2014, Before House T&I)
- "It's impossible to long-term plan if your budget is bouncing around" and "... we have a big problem here we have to manage out of" (Rich Swayze, FAA, Before the NextGen Advisory Committee, October 8, 2014, as quoted in AIN)

■ ICAO, ANSPs and Airports offer <u>cost-recovery</u> models to emulate

- ICAO: separate ATC operations from the safety regulator
- ANSPs from France (part of ministry) to the U.K. and Canada (separate commercialized entities)
 dedicate user fees for operations and capital investment, enabling leveraging of funds and
 access to capital markets
- Most U.S. airports segregate the airport cost-center; in addition, revenue diversion prohibitions
 as well as bond ordinances ensure that airport funds will be dedicated to repay debt

Appropriations process inappropriately inserts Congress into ATO service decisions

- FAA gets caught up in politics unrelated to its provision of services
- Excessive oversight, micro-management, and parochialism interfere with business decisions

Create a new U.S. Air Traffic Agency, Cooperative or Corporation

- Insulate air traffic services from policy and budgetary failure
- Refocus policymaker attention to the public goods of aviation (i.e., safety, accessibility, environmental stewardship, security, customer protection) and away from day-to-day air traffic management of operations and capital planning
- Provide a separate government entity, outside of the FAA, that recovers costs and provides air traffic services (removed from the appropriations process!)
 (e.g., France, Netherlands)

or preferably

 Adopt shareholder cooperative (or corporate by-laws) protected by statute and appoint a governing board consisting of air traffic customers (i.e., commercial airlines, general aviation, labor) to hire a CEO and manage a transitioned executive team and workforce (e.g., Australia, Canada, United Kingdom)

Recover Costs from User Fees or Other Fee Structures

- Replace AATF Taxes with User Fees: Eliminate the mixed array of taxes that are unrelated to the cost of providing air traffic control services and replace them with a transparent schedule of cost-based fees sufficient for support operations and capital investments (consistent with ANSPs and ICAO). Fees would flow to the balance sheets of airlines and become a B2B transaction.
- Create Fee Schedule and Set Rates: Fees would likely be based on aircraft weight and distance. General aviation, namely light and recreational aircraft, would be provided alternative fee structures such as an annual charge or the ability to pay through a fuel tax (research has shown they are not big users of the system).
- Non-ATO Financial Support: Shift non-air traffic services to alternative funding sources, preferably outside of the general fund.
 - Airport Improvement Program: Reform program, provide larger airports with enhanced cost recovery/fee setting and collect residual through a smaller segment fee or through ATO cost recovery.
 - Certification: Move to more of an EASA-like fee-for-service model, that would increase direct costs but lead to greater indirect cost savings.
 - Safety/Regulation: Recover through ATO or modest tax (or general fund)

Complex? Recovery 99%+, Cost of Collection > 0.3%

Sector	Distance Factor		Weight Factor		Rate 2010	Charge (Euro)
Belgium	0.29	x	1,18	X	€ 76.59 =	€ 26.21
Netherlands	3.03	X	1,18	X	€ 65.81 =	€ 235.30
Germany	2.19	x	1,18	X	€ 71.99 =	€ 186.04
Denmark	2.14	Х	1,18	X	€ 67.90 =	€ 171.46
Total Charge =						€ 619.01

January 2011, Unit charges available at: http://www.eurocontrol.int/crco/public/standard_page/information_circulars.html

Organizational Models for ATO/FAA Reform

Nation	Air Navigation Service Provider	Ownership	Funding (Charges)	Access to Markets	Comments
Australia (1995)	Airservices Australia	Government Corporation	User Fees	yes	Minister of Transport appoints board
Canada (1996)	NAV CANADA	Private, non-profit, non-share corporation	User Fees	yes	Unions appoint 2 board members, balance by airlines, airports, government
France (2005)	Direction des services de la navigation aerienne	Government Department	User Fees	yes	Most like the FAA, only user fees and access to markets really distinguish
Germany (2007)	Deutsche Flugsicherung GmbH	Government Corporation	User Fees	yes	Uses ICAO principles of cost recovery for fees
Netherlands (1993)	Luchtverkeersleiding Nederland	Independent Government Agency	User Fees	yes	Receives some government support for services exempt from fees
United Kingdom (2001)	National Air Traffic Services, Ltd.	Public private partnership	User Fees	yes	Government owns 49%, balance owned by airlines, airports, employees
United States (2004)	FAA Air Traffic Organization	Government Department	Taxes	no	Uncertain funding results in inability to confidently invest

Sources for Consideration of ATO/FAA Reform

- ICF International, Airport Policy Report, January 2015
- FAA Management Advisory Council 1-2014 Final Report
- Dorothy Robyn. Brookings Institution. <u>Air Support: Creating a Safer and More</u> Reliable Air Traffic Control System. July 2008
- Robert W. Poole, Jr. <u>Organization and Innovation in Air Traffic Control</u>. Hudson Institute Initiative on Future Innovation. Hudson, 2013
- Bert Elias. Congressional Research Service. "Air Traffic Inc: Considerations Regarding the Corporatization of Air Traffic Control, January 5, 2015.
- Mbs Ottawa, Inc. "Air Traffic Control Commercialization Policy: Has It Been Effective?" McGill University, May 2005.

