

## **Taxation of Aviation**

Updated November 18, 2019

#### **Executive Summary**

- Today's tax regime is largely a vestige of the regulated days when air travel was a luxury good, inaccessible by the masses; it was never recalibrated to a true user fee system
  - This legacy is exacerbated by having airlines and their customers subsidize homeland security functions

     arguably a public good, as well as being largely singled out to help reduce the federal deficit, in the
     early 1990s and again last year
- Taxes levied by federal agencies and some states are often inequitably applied across "users," as confirmed by various federal cost allocation studies and state tax codes
- Whether levied on airlines or on passengers/shippers, and whether they are called taxes or user fees, taxes matter – they impact supply and demand as well as the sustainability of specific routes or frequencies; the impact varies over time and across markets
  - Ironically, the travelers most sensitive to tax increases or fees for mandatory services are those who are least affluent and whom regulations often purport to protect
- The U.S. government isn't the only authority to impose taxes or fees on airlines or their customers we must be cognizant of those imposed at the state/local/international levels



#### Air Travel is Taxed as if It Is Still a Luxury Good – a Legacy of the Regulated Era Pre-1979

"[N]ew and increased taxes have been levied without a serious examination of the equity, efficiency, and financial viability of the current aviation tax structure...

The mentality underlying the current tax structure has its roots in the World War II era, when air travel was explicitly discouraged in order to protect capacity for military uses. Like furs and jewelry, air travel was considered a luxury item and subjected to high excise tax rates. Since then, however, airlines have become the principal commercial intercity carrier. Despite this transformation, the federal government has continued to tax air travel as if it were a luxury item, even as other luxury excise taxes have been repealed. Even in 1970, when aviation excise taxes were re-rationalized as user fees to finance the airport and airway infrastructure, the taxes were in effect spillovers from a prior tax regime, rather than user fees justified on true cost grounds."

-- Rudy Barnes and John Heimlich, "Reassessing the U.S. Airline Industry's Federal Excise Tax Structure," Thesis for Master of Public Policy, Harvard Kennedy School of Government, April 9, 1996



#### U.S. Federally Imposed or Approved Taxes and Fees on Commercial Aviation

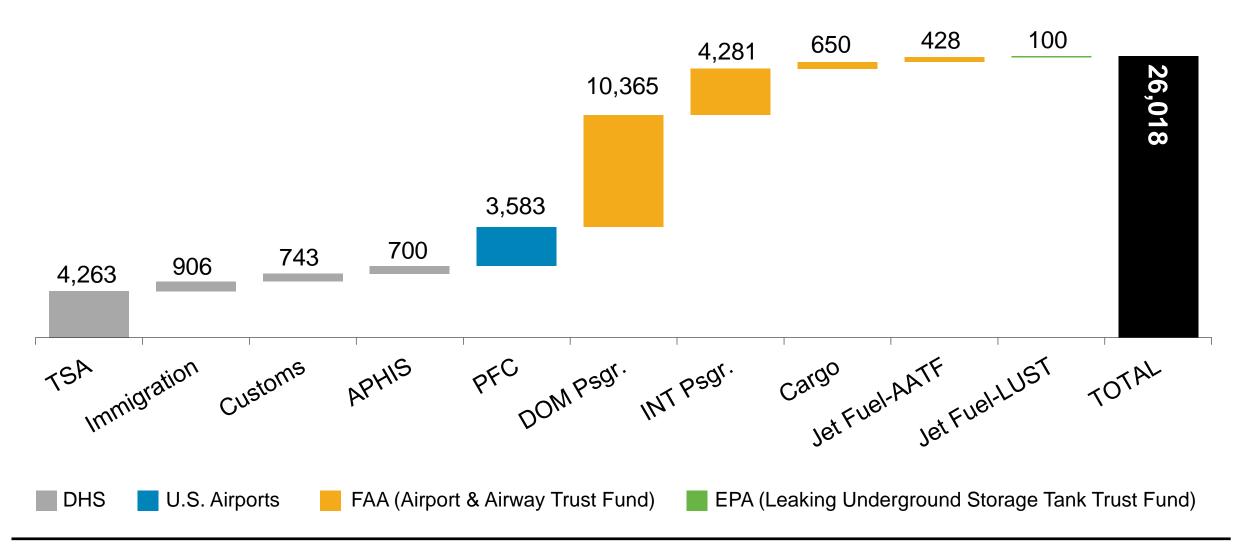
Taxes and Rates Since Inception of the Airport and Airway Trust Fund in the Early 1970s

	Federally Imposed or Approved Aviation Tax or Fee	1972	1992	2002	1/1/2020
	Passenger Ticket (Excise) Tax <sup>1a</sup>	8.0%	10.0%	7.5%	7.5%
	Passenger Flight-Segment Tax <sup>1a</sup>	-	-	\$3.00	\$4.30
	Frequent-Flyer Tax (on sale of right to award miles) 2	-	-	7.5%	7.5%
	International Departure Tax <sup>3</sup> (IDT)	\$3	\$6	\$13.20	\$18.90
FAA	International Arrival Tax <sup>3</sup> (IAT)	-	-	\$13.20	\$18.90
(AATF)	Cargo Waybill Tax <sup>1b</sup>	5.0%	6.25%	6.25%	6.25%
,	Commercial Aviation Jet Fuel Tax <sup>4</sup>	-	-	4.3 cpg	4.3 cpg
	Noncommercial Jet Fuel Tax (not airlines)	7.0 cpg	17.5 cpg	21.8 cpg	21.8 cpg
	Noncommercial AvGas Tax (not airlines)	7.0 cpg	15.0 cpg	19.3 cpg	19.3 cpg
	Liquid Fuel in Fractional-Ownership Flight <sup>5</sup> (not airlines)	-	-	-	14.1 cpg
EPA	Leaking Underground Storage Tank (LUST) Tax <sup>6</sup>	-	0.1 cpg	0.1 cpg	0.1 cpg
	Airport Passenger Facility Charge (PFC) (maximum)	-	\$3/12	\$4.50/18	\$4.50/\$18
	September 11 <sup>th</sup> Fee <sup>7</sup>	_	-	\$2.50/5/10	\$5.60/11.20
DUC	APHIS Passenger Fee <sup>8</sup>	-	\$2	\$3.10	\$3.96
DHS	APHIS Aircraft Fee <sup>8</sup>	-	\$76.75	\$65.25	\$225
	Customs and Border Protection COBRA User Fee <sup>9</sup>	-	\$5	\$5	\$5.89
	Immigration and Customs Enforcement User Fee (IUF) <sup>10</sup>	-	\$5	\$6; \$7	\$7



#### U.S. Commercial Aviation Taxes/Fees\* Reached \$26 Billion (~\$71M per Day) in 2019

Fiscal Year 2019 Collections\* (\$Millions) from Airlines and their Customers





#### Who Legally Pays a Tax Has No Bearing on Who Bears its Economic Burden

In Economic Terms: Statutory Incidence Does Not Equate to Economic Incidence

"The statutory incidence of a tax indicates who is legally responsible for the tax... Because prices may change in response to the tax, knowledge of statutory incidence tells us essentially nothing about who is really paying the tax... The [economic] incidence of a unit tax is independent of whether it is levied on consumers or producers... The key point to remember is that nothing about the incidence of a tax can be known without information on the relevant behavioral elasticities."

Harvey S. Rosen (John L. Weinberg Professor of Economics, Princeton University, and former Chairman, Council of Economic Advisers) *Public Finance* (4<sup>th</sup> Ed.), Chapter 13

"And it would make no economic difference whether this premium was charged to the passenger directly... or to the airline that carried him... Whether airline or passenger ultimately bears the cost of an airport fee depends on the conditions of supply and demand rather than on who is assessed the charge. All this was recognized by... the Anti-Head-Tax Act."

Indianapolis Airport Authority v. American Airlines, Inc., 733 F.2d 1262, 1267 (7th Cir. 1984)



## The Price Elasticity of Demand for Air Travel Is Close to -1.0

Jan. 2003	<u>Air Travel Demand Elasticities: Concepts, Issues and Measurement</u> – conducted by professors at Wilfrid Laurier University for the Canadian Government's Department of Finance – reviewed 254 estimates taken from 21 studies and found a median price elasticity of demand of -1.122.
Dec. 2007	<u>Estimating Air Travel Demand Elasticities</u> (Inter VISTAS) – commissioned by the International Air Transport Association (IATA) – found national-level price elasticity of demand to be -0.8, meaning that, all else equal, if the all-in ticket price rises 10%, traffic falls roughly 8%.
Feb. 2012	GAO-12-342SP: "Our analysis assumes a demand elasticity of -1.122. This is the median of 254 estimates from 21 studies analyzed in a 2003 study conducted by the Department of Finance, Government of Canada."
Nov. 2014	Estimating Air Travel Demand Elasticities (Inter VISTAS) – commissioned by Airports Council International – North America (ACI-NA) – estimated national-level price elasticity of demand to be -0.65, meaning that if the all-in ticket price rises 10%, traffic falls roughly 6.5%.
Dec. 2014	GAO-15-107: "The elasticity rate we chose for our base model analysis was -0.8, which was drawn from a 2007 study conducted by InterVISTAS consulting for IATA and is based on a universal price increase at a national level. We also examined different elasticity rates of -0.65 and -1.122 to see how it affected our results. The -0.65 <i>elasticity</i> is drawn from a November 2014 study of demand elasticity also conducted by Inter <i>VISTAS</i> Consulting Inc. for ACI-NA. The -1.122 elasticity comes from a study completed by D.W. Gillen et al. in 2003."



#### While Estimated Elasticity Values Vary, They Are Negative Across the Board

Price elasticity is a measure economists use to capture consumers' sensitivity to price changes for a particular good or service. It is defined as:

## % Change in Quantity Demanded ÷ % Change in Price

	Route/Market Level Short Long		National Level		
			Short	Long	
Domestic	-1.54	-1.40	-0.88	-0.80	
Transatlantic	-1.85	-1.68	-1.06	-0.96	
Transpacific	-0.92	-0.84	-0.53	-0.48	

Source: "Estimating Air Travel Demand Elasticities," InterVISTAS Consulting Inc. (Dec. 28, 2007); includes econometric analysis of data from 1994 through 2005



#### Domestic R/T Ticket Tax Example: Peoria, IL (PIA) – Raleigh-Durham, NC (RDU)

In This Example, Non-Airline Charges Constitute 21 Percent of the Ticket Price

Routing: PIA-ORD-RDU-ORD-PIA	Amount
Airline	\$235.91
Federal Ticket (Excise) Tax (7.5% of Fare)	17.69
Passenger Facility Charge @ PIA	4.50
Federal Security Surcharge (PIA-ORD-RDU)	5.60
Federal Flight Segment Tax (PIA-ORD)	4.30
Passenger Facility Charge @ ORD	4.50
Federal Flight Segment Tax (ORD-RDU)	4.30
Passenger Facility Charge @ RDU	4.50
Federal Security Surcharge (RDU-ORD-PIA)	5.60
Federal Flight Segment Tax (RDU-ORD)	4.30
Passenger Facility Charge @ ORD	4.50
Federal Flight Segment Tax (ORD-PIA)	4.30
Subtotal Government-Imposed Charges	64.09
Total Ticket Price (Fare + Taxes)	\$300.00

Source: A4A for tickets sold between January 1-December 31, 2020



#### Domestic R/T Ticket Tax Example: Washington Reagan (DCA) – Kahului, HI (OGG)

In This Example, Non-Airline Charges Constitute 10 Percent of the Ticket Price

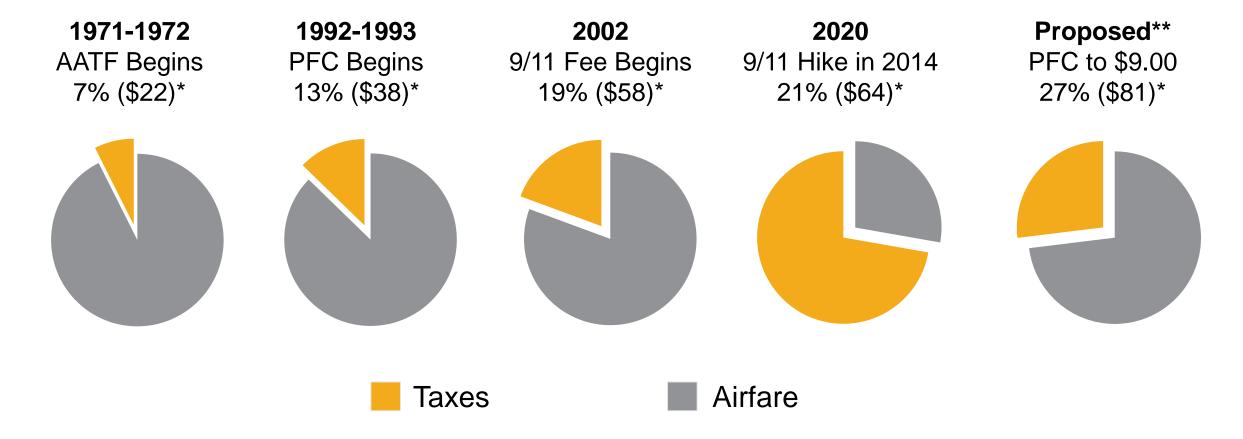
Routing: DCA-DFW-OGG-DFW-DCA	Amount
Airline	\$857.33
Federal Ticket (Excise) Tax (ad valorem, prorated)	32.66
Passenger Facility Charge @ DCA	4.50
Federal Security Surcharge (DCA-DFW-OGG)	5.60
Federal Flight Segment Tax (DCA-DFW)	4.20
Passenger Facility Charge @ DFW	4.50
Federal Flight Segment Tax (DFW-OGG)	4.20
Federal Arrival Tax for Hawaii/Alaska (OGG)	9.30
Federal Departure Tax for Hawaii/Alaska (OGG)	9.30
Passenger Facility Charge @ OGG	4.50
Federal Security Surcharge (OGG-DFW-DCA)	5.60
Federal Flight Segment Tax (OGG-DFW)	4.20
Passenger Facility Charge @ DFW	4.50
Federal Flight Segment Tax (DFW-DCA)	4.20
Subtotal Government-Imposed Charges	97.26
Total Ticket Price (Fare + Taxes)	\$954.59

Source: AA.com on Jan. 2, 2019, for travel April 19-29, 2019



#### Proposals to Hike the PFC to \$9.00 Would Increase the Tax Bite of Each Ticket

Growing Take of \$300\* Itinerary Leaves Less Revenue for Carriers to Reinvest



<sup>\*</sup> Sample itinerary is a \$300 domestic round trip with one stop each way and maximum passenger facility charge (PFC) per airport; total ticket price includes taxes

Source: IRS and http://airlines.org/dataset/government-imposed-taxes-on-air-transportation/

Note: AATF = Airport and Airway Trust Fund

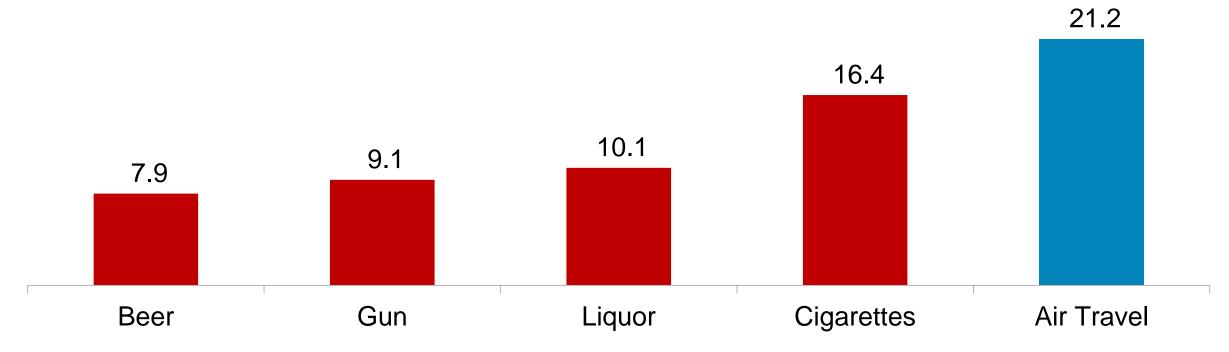


<sup>\*\*</sup> Based on various legislative proposals to increase the PFC to \$9.00 per segment (up to \$36 per round trip)

#### Federal Excise Taxes on Air Travel Exceed Those on Various "Sin" Goods

High Rate on Air Travel Is Anachronistic & Counterproductive; Reflects Obsolete Role as Luxury Item

#### **Effective Federal Excise Tax Rate** (% of Total Price incl. Federal Taxes)



#### <u>Notes</u>

- Beer: 12-pack of Bud Light costing \$10.49 taxed at \$0.05 per can
- Pistols and Revolvers: Federal rate is 10 percent of pre-tax sale price
- Distilled Spirits: 750ml 80 proof bottle of Absolut Vodka costing \$18.99 taxed at \$2.14 (assuming 80 proof)
- Cigarettes: Pack of 20 small cigarettes costing \$5.15 before federal excise taxes of \$1.01
- Air Travel: \$300 domestic round trip with one stop each way involving airports levying a passenger facility charge (PFC) of \$4.50 per segment

Source: A4A (http://airlines.org/dataset/government-imposed-taxes-on-air-transportation/) and U.S. Treasury (https://www.ttb.gov/tax\_audit/taxrates.shtml)



#### International R/T Ticket Tax Example: Richmond, VA (RIC) – London, UK (LHR)

In This Example, Non-Airline Charges Constitute 19 Percent of the Ticket Price

Routing: RIC-ORD-LHR-ORD-RIC	Code	Authority	Amount (USD)
Airline	Fare + YQ/YR	n/a	\$1,047.00
Passenger Facility Charge @ RIC	XF	RIC	4.50
Federal Security Surcharge (RIC-ORD-LHR)	AY	DHS	5.60
Passenger Facility Charge @ ORD	XF	ORD	4.50
International Departure Tax (ORD-LHR)	US	FAA	18.30
Passenger Service Charge @ LHR	UB	UK	60.30
Air Passenger Duty (LHR-ORD-RIC)	GB	UK	104.70
International Arrival Tax (LHR-ORD)	US	FAA	18.30
Animal & Plant Health Inspection Fee @ ORD	XA	DHS	3.96
Immigration User Fee @ ORD	XY	DHS	7.00
Customs User Fee @ ORD	YC	DHS	5.65
Passenger Facility Charge @ ORD	XF	ORD	4.50
Federal Security Surcharge (ORD-RIC)	AY	DHS	5.60
Subtotal UK-Imposed Charges	n/a	n/a	165.00
Subtotal US-Imposed Charges	n/a	n/a	77.91
Subtotal Government-Imposed Charges	n/a	n/a	242.91
Total Ticket Price (Fare + Taxes)	n/a	n/a	\$1,289.91

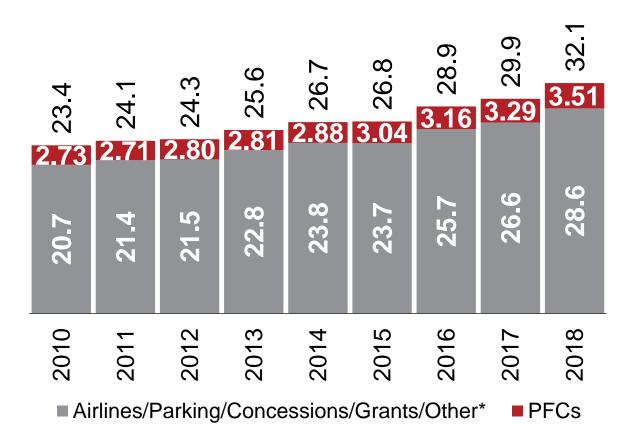
Source: A4A and AA.com (priced June 11, 2018, for "Main Cabin" travel September 15-23, 2018)



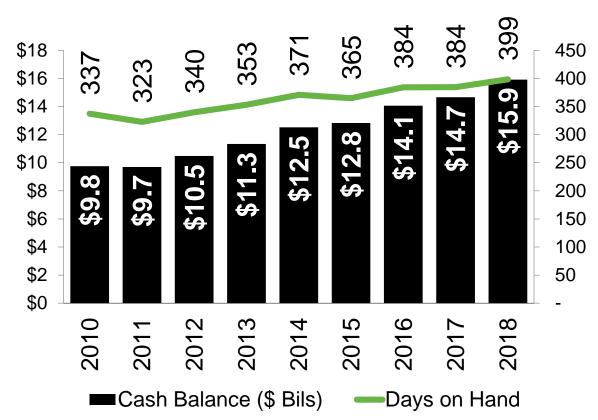
#### U.S. Airports Have Ample/Multiple Resources from Which to Fund Improvements

Record Revenues and Record Levels of Cash

#### **U.S. Airport Revenues** (\$ Billions)



#### U.S. Airport *Unrestricted* Cash & Investments



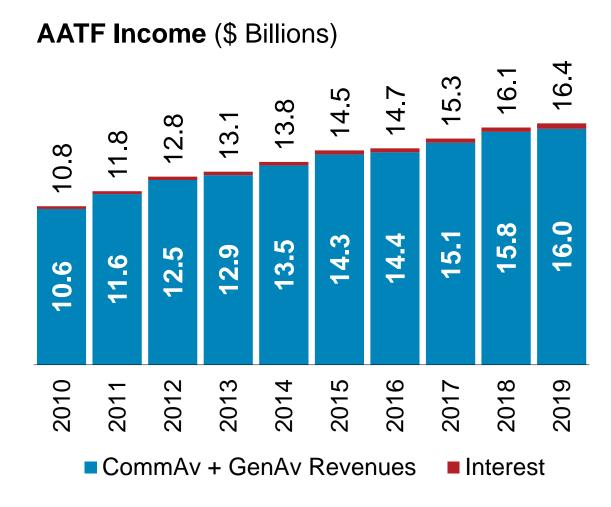
Source: FAA Form 127 reports, filed by more than 400 U.S. commercial service airports

Note: Days on hand = unrestricted cash and investments ÷ operating expense (excl. depreciation) \* 365

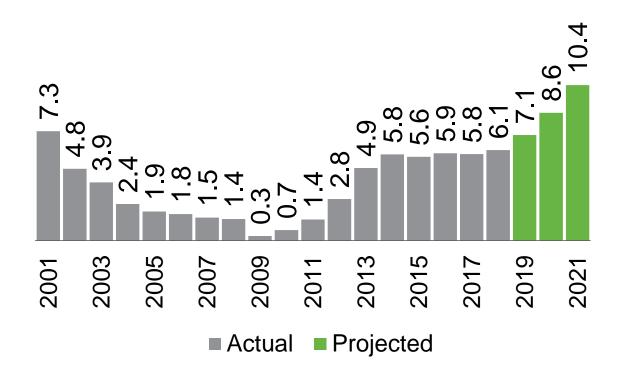


#### U.S. Airports Have Ample/Multiple Resources from Which to Fund Improvements (Cont'd)

Record Airport and Airway Trust Fund (AATF) Income and Uncommitted Balance



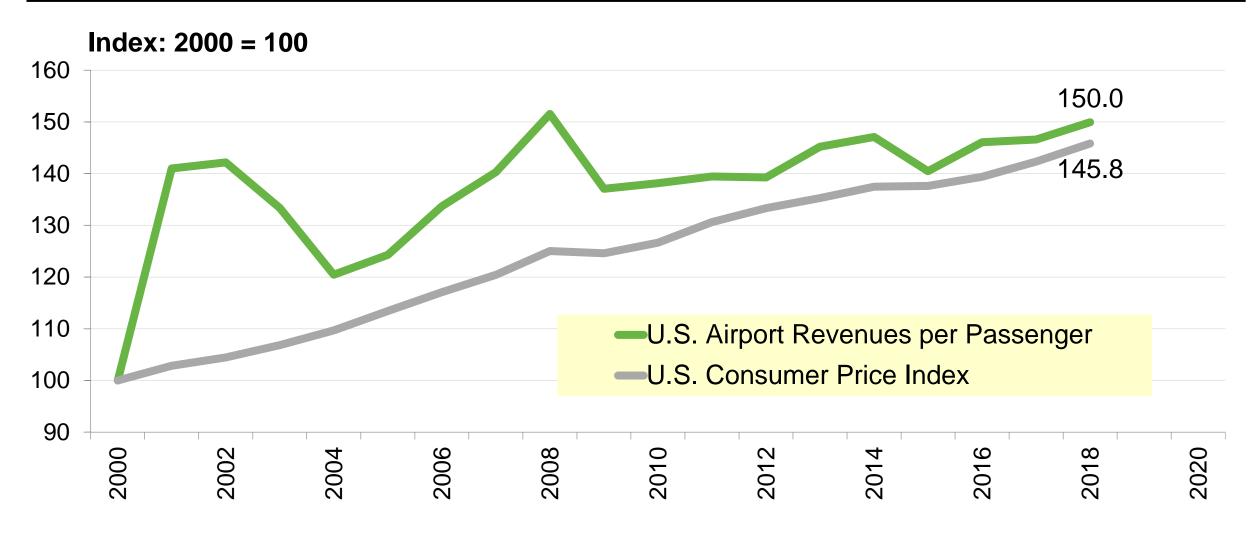
#### **AATF Uncommitted Balance** (\$ Billions)



Sources: A4A, FAA, U.S. Treasury and Congressional Budget Office (August 2019 projections)



## U.S. Airport Revenues per Passenger Have Outpaced U.S. Inflation

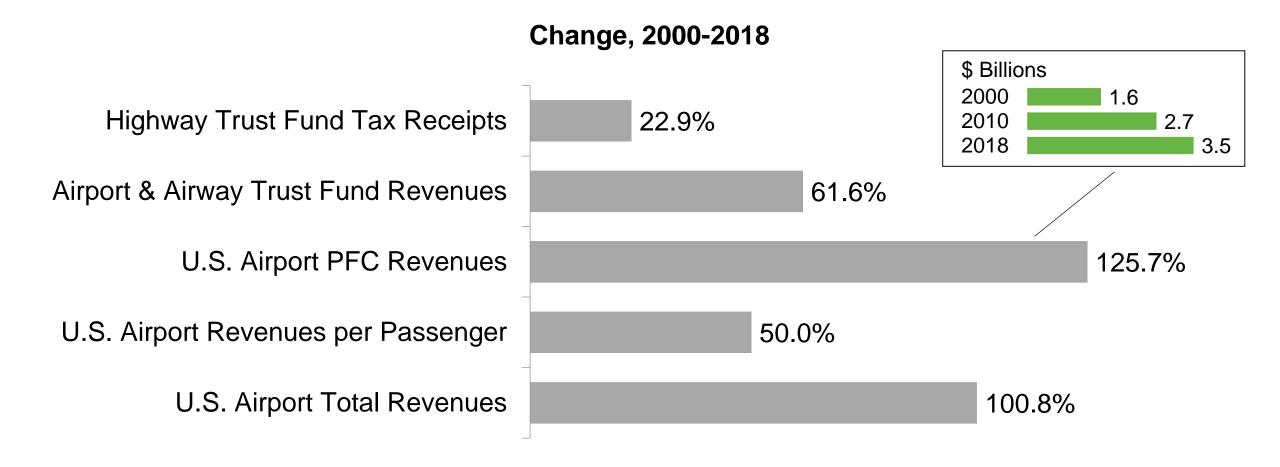


Source: Bureau of Labor Statistics (for CPI), FAA Form 5100-127 and DOT T100 market + 298c reflecting all airline flights departing U.S. airports



#### PFCs and Aviation Trust Fund Revenues Have Sharply Outpaced Highway Revenues

2018 PFC Collections Reached \$3.5 Billion – the Highest Level in Program History

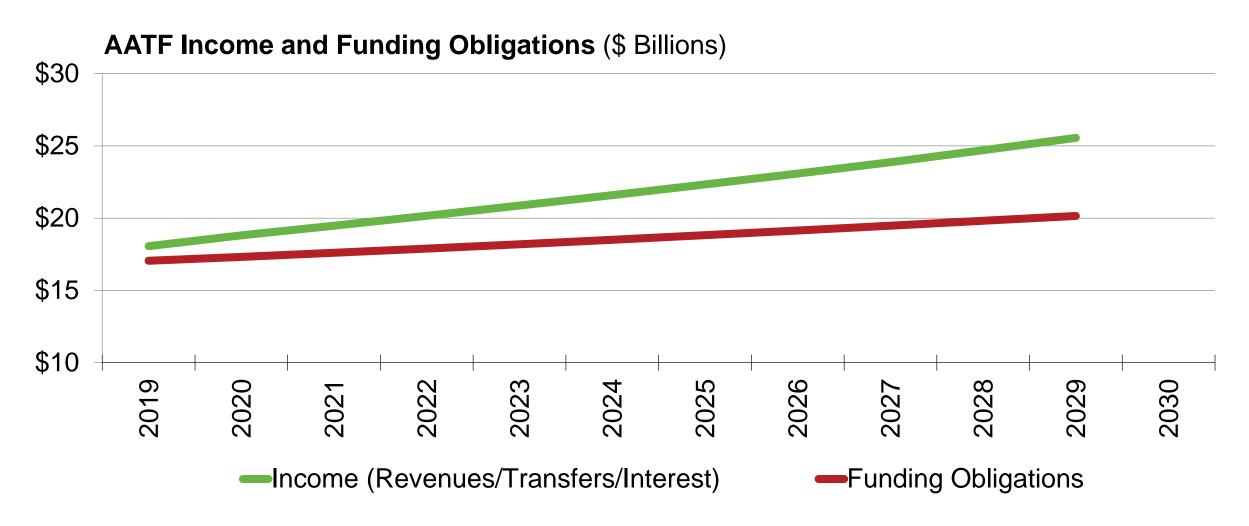


Source: FAA Passenger Facility Charge (PFC) reports and Federal Highway Administration

Note: AATF = Airport and Airway Trust Fund



### **CBO Projects Airport & Airway Trust Fund Revenues to Outpace Spending\***

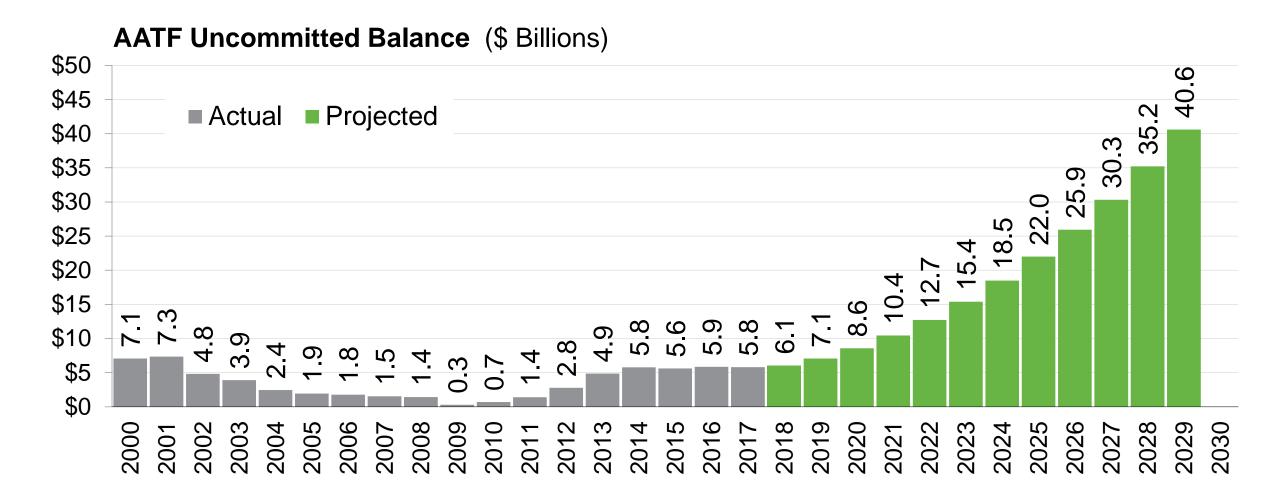


Source: Congressional Budget Office projections (August 2019)



#### CBO Projects AATF Uncommitted Balance to Reach All-Time High of \$8.6B in 2020

Revenues and Interest Will Sharply Exceed Funding Obligations\* Over Next Decade

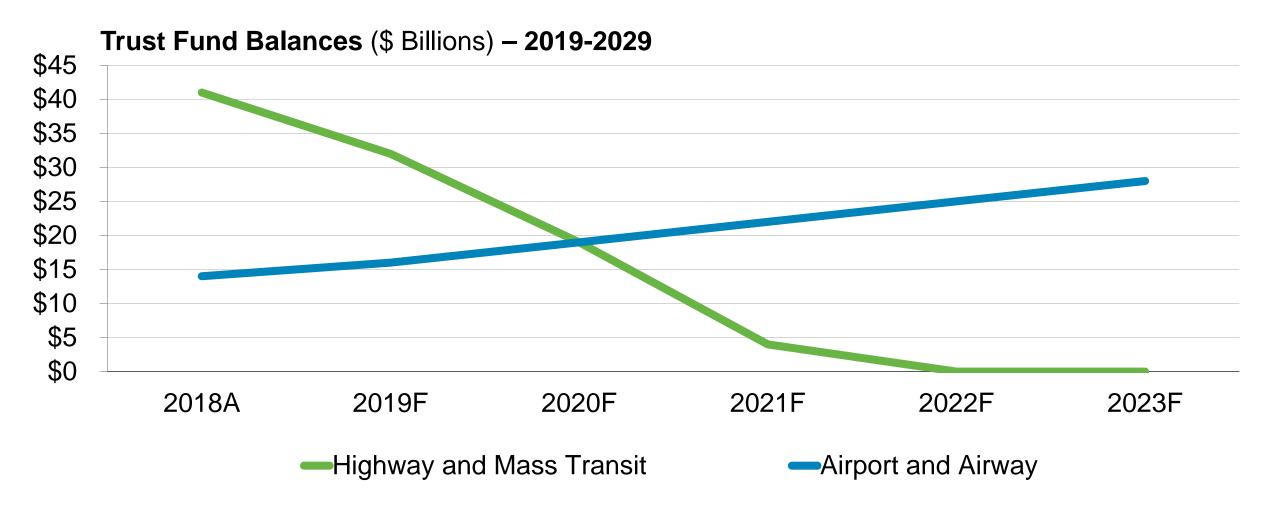


Source: Congressional Budget Office projections (August 2019)

\* Total amounts made available for obligation from Trust Fund



# In Stark Contrast to the Healthy Airport and Airway Trust Fund, the Congressional Budget Office (CBO) Projects the Nation's Highway Trust Fund to Run Out of Money in 2022



Source: Congressional Budget Office projections (The Budget and Economic Outlook: 2019 to 2029, Table D-1, January 2019)



## **DHS Rates by User: Individuals**

User	Customs	Immigration	AQI (APHIS)	TSA
Airline passenger	\$5.77	\$7.00	\$3.96	\$5.60 per 1-way
Cruise passenger*	\$2.02 or \$5.77	\$3.00 or \$7.00	\$1.75	NONE
Rail passenger	NONE	NONE	NONE	NONE
Bus passenger	NONE	NONE	NONE	NONE
Private aircraft passenger	NONE	NONE	NONE	NONE
Motorist	NONE	NONE	NONE	NONE
Boater	NONE	NONE	NONE	NONE
Pedestrian	NONE	NONE	NONE	NONE
Sender of foreign mail	\$5.77	NONE	NONE	NONE

21

Source: DHS



 $<sup>^{\</sup>star}$  Passengers from U.S. territories and possessions pay the lower rates

## **DHS Rates by User: Individuals**

User	Customs	Immigration	AQI (APHIS)
Commercial aircraft	NONE	NONE	\$225
Cruise ship or ferry	\$458.35 (\$6,246/yr)	NONE	\$825
Cargo vessel	\$115.37 (\$1,573/yr)	NONE	\$825
Commercial truck	\$5.75 (max \$104.89/yr)	NONE	\$7.55
Freight train	\$8.65 (max \$104.89/yr)	NONE	\$2.00
Passenger train	\$8.65 (max \$104.89/yr)	NONE	NONE
Bus	NONE	NONE	NONE
Car	NONE	NONE	NONE
Private aircraft	\$28.24	NONE	NONE
Private boat	\$28.24	NONE	NONE

22

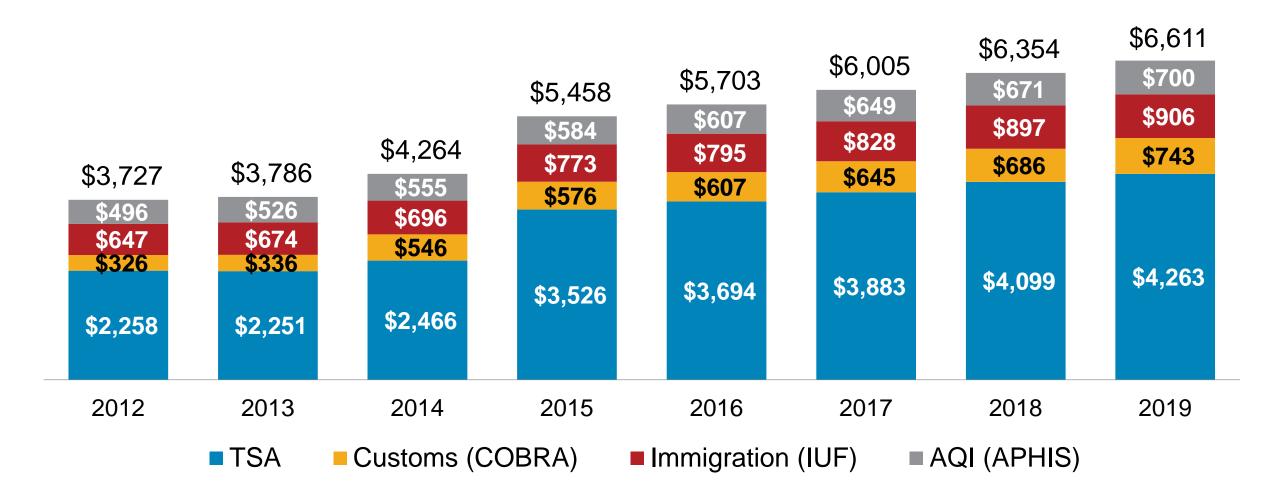
Source: DHS



 $<sup>^{\</sup>star}$  Passengers from U.S. territories and possessions pay the lower rates

#### Department of Homeland Security (DHS) Fee Collections from Airlines/Customers

\$ Millions by Federal Fiscal Year, 2012-2019



Source: DHS, including interest and penalties





## **Airlines for America®**

We Connect the World