



Federal Aviation Administration

Fact Sheet – Federal Aviation Administration (FAA) Forecast Fiscal Years (FY) 2017-2038

For Immediate Release

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I. 2017 Summary: Economic Activity and Air Travel

- U.S. Gross Domestic Product (GDP) increased 2.1 percent; world GDP increased 3.0 percent.
- Domestic mainline yields decreased 0.4 percent while international yields increased 0.4 percent in 2017. In real terms (adjusted for inflation in Fiscal Year (FY) 2017 dollars), domestic yields decreased 2.5 percent and international yields decreased 1.6 percent.
- Domestic enplanements on mainline (large) and regional air carriers increased from 726.1 million in 2016 to 743.5 million (2.4 percent) in 2017. Domestic mainline carrier enplanements increased 3.6 percent while domestic regional carrier enplanements decreased 2.1 percent. International enplanements on mainline and regional air carriers increased from 93.4 million in 2016 to 96.9 million (3.7 percent) in 2017. Mainline carrier international enplanements were up 4.0 percent while regional carrier international enplanements decreased 3.2 percent.
- Domestic Revenue Passenger Miles (RPMs) by mainline and regional air carriers increased from 663.1 billion in 2016 to 683.3 billion (3.0 percent) in 2017. Domestic mainline carrier RPMs increased 3.7 percent while domestic regional carrier RPMs decreased 1.9 percent. International RPMs by U.S. carriers increased from 264.8 billion in 2016 to 271.3 billion (2.4 percent) in 2017. Total system RPMs increased from 927.9 billion in 2016 to 954.6 billion

(2.9 percent) in 2017. Total mainline carrier RPMs increased by 3.3 percent while total regional carrier RPMs decreased by 2.0 percent.

- U.S. commercial air carriers (including passenger and cargo) reported an operating profit of \$24.6 billion in 2017, compared to an operating profit of \$29.6 billion in 2016. Operating revenues increased 5.4 percent in 2017, while operating expenses increased 9.6 percent.
- In 2017, total landings and takeoffs at combined [FAA \(https://www.faa.gov/\)](https://www.faa.gov/) and contract-towers were up 0.7 percent from 2016. Air carrier activity increased by 4.4% while commuter/air taxi activity decreased by 5.3 percent. General aviation activity increased 0.1 percent while military aircraft activity rose 2.6 percent.

II. Economic Assumptions for FAA Forecasts

- U.S. Real GDP forecast to increase from \$17.0 trillion in 2017 to \$25.8 trillion in 2038, an average annual rate of 2.0 percent. World GDP is forecast to grow at a faster pace of 2.8 percent over the same 21-year period, from \$79.6 trillion to \$141.9 trillion.

GDP by World Region (Average Annual Percent Growth)

World Region	Fiscal Year				Calendar Year			
	2017	2018	2019	2018-38	2017	2018	2019	2018-38
U.S	2.1	2.6	2.6	2.0	1.6	2.3	2.6	2.1
World	N/A	N/A	N/A	N/A	3.0	3.1	3.0	2.8
Canada	N/A	N/A	N/A	N/A	3.0	2.3	2.2	2.0
Europe/Afr/ME	N/A	N/A	N/A	N/A	2.4	2.3	2.2	2.1
Latin America	N/A	N/A	N/A	N/A	1.3	1.9	2.7	3.8
Asia/Pacific	N/A	N/A	N/A	N/A	4.7	4.6	4.4	3.8

- Inflation is projected to increase 1.9 percent in 2018 and remain moderate over the remaining 20 years of the forecast period, averaging 2.4 percent annually.

III. Aviation Activity Forecasts

Mainline Air Carrier and Regionals

- Total mainline air carrier and regional RPMs are forecast to increase from 954.6 billion in 2017 to 1.60 trillion in 2038, an average annual rate of 2.5 percent. Domestic RPMs are projected to increase 5.2 percent in 2018 and then grow an average of 2.0 percent per year during the remaining 20-year forecast period.

International RPMs are forecast to increase 4.0 percent in 2018 and then grow an average of 3.2 percent per year for the rest of the forecast period.

- Total mainline air carrier and regional enplanements are forecast to increase from 840.8 million in 2017 to 1.28 billion in 2038, an average annual rate of 2.0 percent. Domestic enplanements are projected to increase 4.7 percent in 2018 and then grow an average of 1.7 percent per year during the remaining 20-year forecast period. International enplanements are forecast to increase 5.0 percent in 2018 and then grow an average of 3.3 percent per year for the rest of the forecast period.

Mainline Air Carriers

- U.S. mainline carrier domestic RPMs are forecast to increase 5.6 percent in 2018 and grow at an average annual rate of 2.0 percent for the remaining 20 years of the forecast period. U.S. mainline carrier domestic enplanements are forecast to increase 5.3 percent in 2018. For the remaining 20 years of the forecast period, enplanements grow at an average annual rate of 1.7 percent, reaching 880.3 million in 2038.
- U.S. mainline carrier international RPMs are forecast to increase 4.0 percent in 2018 and grow at an average annual rate of 3.2 percent for the remaining 20 years of the forecast period. U.S. mainline carrier enplanements are forecast to increase 5.2 percent in 2018, and then grow an average of 3.3 percent per year thereafter, reaching 188.9 million in 2038. The fastest growing region is Latin America (3.8 percent per year), followed by the Atlantic (2.6 percent per year), and Asia/Pacific (2.5 percent per year).

U.S. Mainline Air Carriers Enplanements by World Region (Average Annual Percent Growth)

World Region	Fiscal Year			
	2017	2018	2019	2018-38
Domestic	3.6	5.3	3.5	1.7
International	4.0	5.2	3.2	3.5
Atlantic	1.9	3.0	5.0	2.6
Latin America	6.3	7.2	2.5	3.8
Asia/Pacific	0.8	0.8	3.0	2.5
System	3.6	5.3	3.3	2.0

- Total passengers to/from the United States (U.S. and foreign flag carriers) are projected to increase 4.7 percent in 2017 (calendar year). The average annual

rate of growth between 2017 and 2037 is 3.6 percent, with passengers increasing from 228.8 million to 467.1 million. The fastest growing region is Latin America at 3.9 percent per year, followed by Asia/Pacific (3.8 percent per year), Canadian Trans-border (3.5 percent per year) and Atlantic (3.4 percent per year).

U.S. Mainline & Foreign Flag Air Carriers

Passengers by World Region

(Average Annual Percent Growth)

World Region	Calendar Year			
	2017	2018	2019	2018-38
Total U.S./Foreign Flag	5.3	4.7	2.8	3.6
Atlantic	4.8	4.6	3.0	3.4
Latin America	5.5	5.2	1.2	3.9
Asia/Pacific	8.4	4.4	4.4	3.8
Canadian Transborder	2.0	3.8	4.4	3.5

- Domestic mainline passenger real yield (adjusted for inflation) is forecast to decrease from 13.89 cents in 2017 to 13.64 cents in 2018 (down 1.8 percent). Thereafter, domestic mainline carrier real yield declines at an average rate of 0.4 percent dropping to 12.55 cents in 2038. International mainline real yield is forecast to decrease from 12.93 cents in 2017 to 12.86 cents in 2018 (down 0.6 percent). Thereafter, international real yield declines at a rate of 0.6 percent annually, falling to 11.41 cents by 2038.

U.S. Mainline Air Carriers

Real Yield

(Average Annual Percent Growth)

Region	Fiscal Year			
	2017	2018	2019	2018-38
Domestic	(2.5)	(1.8)	(1.1)	(0.4)
International	(1.6)	(0.6)	(0.6)	(0.6)

- U.S. mainline air carrier passenger jet fleet increases from 4,057 aircraft in 2017 to 5,023 aircraft in 2038, an average annual increase of 1.0 percent. The fleet is projected to increase by 2.1 percent in 2018 (86 aircraft), driven by an increase in the narrow body fleet.

Regional Carriers

- Regional carrier enplanements are forecast to increase 2.0 percent to 154.8 million in 2018, and grow 1.6 percent a year thereafter, reaching 214.5 million in 2038.

U.S. Regional Air Carrier Enplanements (Average Annual Percent Growth)

Region	Fiscal Year			
	2017	2018	2019	2018-2038
Domestic	(2.1)	2.0	2.4	1.6
International	(3.1)	2.0	2.4	1.6

- Regional carrier RPMs are forecast to increase 2.4 percent in 2018 and grow at an average annual rate of 2.1 percent for the remaining 20 years of the forecast period.
- The regional carrier passenger aircraft fleet decreases from 2,131 aircraft in 2017 to 2,011 aircraft in 2038, an average annual decrease of 0.2 percent. The fleet is projected to shrink 2.4 percent in 2018 (51 aircraft)
- Regional jets increase from 1,644 aircraft in 2017 to 1,910 aircraft in 2038, an annual increase of 0.7 percent. All of the increase is attributed to jet aircraft in the 70-90-seat category.

Cargo

- Total air cargo RTMs (freight/express and mail) increase from 39.2 billion in 2017 to 89.6 billion in 2038—up an average of 3.8 percent a year; domestic RTMs increase 1.9 percent a year; international RTMs increase 4.7 percent a year.

U.S. Commercial Air Carriers Air Cargo Revenue Ton Miles (Average Annual Percent)

Region	Fiscal Year			
	2017	2018	2019	2018-2038
Domestic	9.5	7.9	2.1	1.9

Total	9.6	8.7	5.0	3.8
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Region	Fiscal Year			
	2017	2018	2019	2018-2038
International	9.7	9.2	6.8	4.7
Total	9.6	8.7	5.0	3.8

- The cargo fleet increases from 855 aircraft in 2017 to 1,178 aircraft in 2038, an average increase of 1.6 percent a year.

General Aviation

- The general aviation fleet increases from 213,050 aircraft in 2017 to 214,090 in 2038, growing an average of 0.0 percent a year.
- Fixed-wing turbine aircraft grow at a rate of 2.0 percent per year, fixed-wing piston aircraft decline at a rate of 0.9 percent per year, and rotorcraft grow at a rate of 1.8 percent per year.
- General aviation hours flown are forecast to increase from 25.4 million in 2017 to 30.2 million in 2038, an average annual growth rate of 0.8 percent a year.
- Fixed-wing turbine aircraft hours flown grow at a rate of 2.4 percent per year, fixed-wing piston aircraft hours flown decline at a rate of 1.0 percent per year, and rotorcraft hours flown grow at a rate of 2.2 percent per year.

IV. FAA Workload Forecasts

Operations at Airports with FAA Traffic Control and Contract Tower Service

- Total operations are forecast to increase 1.4 percent to 51.0 million in 2018, and then grow at an average annual rate of 0.9 percent for the remainder of the forecast period, reaching 60.5 million in 2038. The average annual growth rate for the entire 21-year forecast period is 0.9 percent.
- Commercial operations increase 2.2 percent in 2018, and grow at a rate of 1.5 percent thereafter, reaching 30.7 million in 2038.
- General aviation operations increase 0.9 percent in 2018, and grow at a rate of 0.3 percent thereafter, totaling 27.4 million in 2038.

Terminal Radar Approach Control (TRACON) Operations

- TRACON operations are forecast to increase 1.5 percent to 38.6 million in 2018, and then grow at an average annual rate of 1.0 percent for the remainder

of the forecast period, reaching 47.6 million in 2038. The average annual growth rate for the entire 21-year forecast period is 1.1 percent.

- Commercial TRACON operations increase 2.3 percent in 2018, and grow at a rate of 1.5 percent thereafter, reaching 30.8 million in 2038.
- General aviation TRACON operations increase 0.3 percent in 2018, and grow at a rate of 0.4% thereafter, totaling 14.5 million in 2038.

Aircraft Handled at Air Route Traffic Control Centers

- Instrument Flight Rule (IFR) aircraft handled at FAA air-route-traffic-control centers are forecast to increase to 44.7 million (1.9 percent) in 2018 and then grow 1.4 percent a year over the remaining 20 years of the forecast period, reaching 59.4 million in 2038.
- Commercial IFR aircraft handled increase from 34.7 million in 2017 to 35.4 million in 2018 (2.2 percent). Thereafter commercial IFR aircraft handled grow at an average annual rate of 1.6 percent, reaching 48.8 million in 2038.
- General aviation IFR aircraft handled increase 1.1 percent during 2018. Thereafter, general aviation IFR aircraft handled grow at an average annual rate of 0.8 percent, reaching 8.8 million in 2038.

V. Unmanned Aircraft System (UAS) Forecasts

Model Fleet

- The small model UAS fleet is forecast to more than double in size from 1.1 million vehicles in 2017 to 2.4 million units in 2022. The average annual growth rate over the 5-year forecast period is 16.9 percent.
- The FAA has also developed high and low ranges around the small model UAS fleet forecast reflecting uncertainty about the public's continued adoption of this new technology.
- In the high case, the small model UAS fleet by 2022 is about 3.2 million units. In the low case, the small model UAS fleet by 2022 is about 2.0 million units.

Non-Model Fleet

- The commercial, small non-model UAS fleet is forecast to grow from 110,604 in 2017 to 451,800 in 2022. The average annual growth rate over the 5-year forecast period is 32.5 percent.
- The FAA's small non-model (commercial) UAS fleet size forecast contains certain broad assumptions about operating limitations for small UAS during the next five years based on the basic constraints of the existing regulations including daytime operations, within visual line of sight, and a single pilot operating only one small UAS at a time. The main difference in the high and

base forecasts is the differing assumptions on how quickly the regulatory environment will evolve, enabling the more widespread routine uses of UAS for commercial purposes.

- In a high case, the small non-model fleet is 717.895 in 2022. The average annual growth rate over the 5-year forecast period is 45.4 percent.

Remote Pilots

- The number of remote pilots are forecast to increase from 73,673 in 2017 to 301,000 in 2022. The average annual growth rate over the 5-year forecast period is 32.4 percent.

VI. Commercial Space Forecast

- The number of authorized commercial launches and reentries is forecast to increase from 22 in 2017 to between 39 and 61 by 2020.

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