

The Economic Impact of Civil Aviation on the U.S. Economy

State Supplement

November 2020



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Introduction

"Civil aviation provides the means of transporting millions of passengers and tons of freight to all corners of the globe each and every day. Consumers rely on this physical connectivity to improve their quality of life and businesses depend on it to facilitate transactions, both of which are key to increasing a nation's economic productivity and prosperity."

- The Economic Impact of Civil Aviation on the U.S. Economy, January 2020

This report supplements Federal Aviation Administration's (FAA) publication *The Economic* Impact of Civil Aviation on the U.S. Economy, released in January 2020. The Economic Impact Report, or The National Report, presents economic statistics on the impact of the industry on the U.S. economy at the national level for the year 2016. This supplement, also known as *The State Report*, examines the impact of the industry at the state level, a comparison of impacts across states, the state-level enabling impacts, and FAA spending impacts for 2016. As a result, the statistics and any conclusions contained in this report do not reflect the impact of COVID-19, but future reports will reflect the impact of COVID-19 as related to state impacts when the data becomes available.

As presented the January 2020 report, in 2016, all civil aviation activity, across both the direct and catalytic sectors, amounts to more than 5.2 percent of U.S. Gross Domestic Product (GDP), and generated \$1.8 trillion in total economic activity and supported 10.9 million jobs with \$488.2 billion in earnings.² Considering only the direct sectors, the impact is 2.3 percent of GDP, \$850 billion in economic activity, and over 4 million jobs. At the state level, the intensity of the impact varies by population, number of airports, civil aviation manufacturing, tourism, and other civil aviation related business activities.

The National Report incorporated the 2014-2016 years' data from the U.S. Department of Commerce (DOC), Department of Transportation (DOT), Department of Labor (DOL), and the National Science Foundation (NSF). The DOC's Census Bureau completed its 2012 Economic Census data collection and reporting. These data were incorporated into the estimates for manufacturing, air couriers, and travel arrangements.

More recent RIMS II multipliers from the Bureau of Economic Analysis (BEA) reflecting the 2007 input-output benchmark tables (I-O tables) and the 2016 regional economic accounts are also incorporated in this report. The incorporation of the new regional accounts (replacing the previous data from 2015) into the calculation of the new multipliers captures changes to the structure of the U.S. and regional economies that occurred during the year. The new multipliers mainly show changes to impacts on employment across the relevant industries and states with no clear direction of the change, whether increasing or decreasing employment compared to the previous version of multipliers.

This report includes, as the previous *State Report* (2017) did, two new categories in the

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economic impact estimates. These categories are aviation research and development (R&D) and avionics manufacturing. These categories improve the scope of the reports by capturing other economic impacts related to civil aviation. R&D is a key element in economic growth and productivity, while avionics accounts for new technology and products that are continually being integrated into aircraft.

The State Report provides snapshots of aviationrelated economic activity for all 50 states and the District of Columbia during calendar year 2016 based on data from the Bureau of Economic Analysis (BEA). As mentioned before, this report does not include any impacts from

COVID-19. The report is organized as follows: The first section covers the economic performance of state economies. The second section briefly examines state-level economic impacts of the civil aviation industry by the type of expenditure categories included in The National Report. These expenditure categories are: airline operations, airport operations, general aviation, aircraft manufacturing, avionics manufacturing, research and development, air couriers, visitor expenditures, and travel arrangements. State-level estimates of enabling effects, or economic activities which depend on air transportation, appear in the third section. Estimates of the impact of FAA spending in each state are presented in the fourth section. Fifty-one fact sheets, one for each state and the District of Columbia, are in Appendix A.

What's New?

This report incorporates the 2016 year's data from the U.S. Department of Commerce (DOC), Department of Transportation (DOT), Department of Labor (DOL), and the National Science Foundation (NSF). The DOC's Census Bureau completed its 2012 Economic Census data collection and reporting. These data were incorporated into the estimates for manufacturing, air couriers, and travel arrangements.

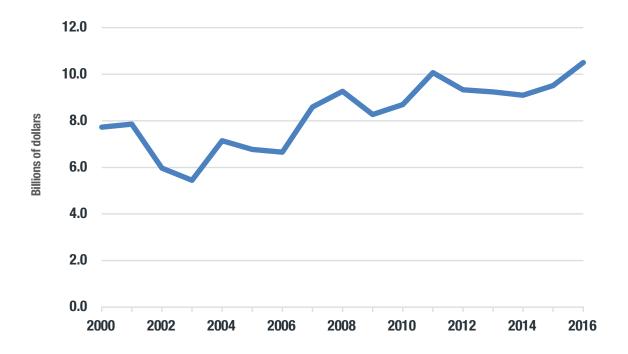
A new methodology to allocate the Airline Operations primary expenditure was also introduced. In prior editions of this report, the allocation was based on passenger share by state. The new allocation methodology utilizes revenue share by state, bringing it in line with the methodological approach that The National Report uses to calculate total Airline Operations primary expenditure.

More recent RIMS II multipliers from the Bureau of Economic Analysis (BEA) reflecting the 2007 input-output benchmark tables (I-O tables) and the 2016 annual regional economic

accounts are also incorporated in this report. The incorporation of the new regional accounts (replacing the previous data from 2015) into the calculation of the new multipliers captures changes to the structure of the U.S. and regional economies that occurred during the year. The new multipliers mainly show changes to impacts on employment across the relevant industries and states with no clear direction of the change, whether increasing or decreasing employment compared to the previous version of multipliers.

Beginning with the previous *State Report*, two new categories were included in the economic impact estimates. The categories are: aviation research and development (R&D) and avionics manufacturing. These categories improve the scope of the reports by capturing other economic impacts related to civil aviation. R&D is a key element in economic growth and productivity, while avionics accounts for new technology and products that are continually being integrated into aircraft.

Figure 1. Avionics Manufacturing, 2000-2016



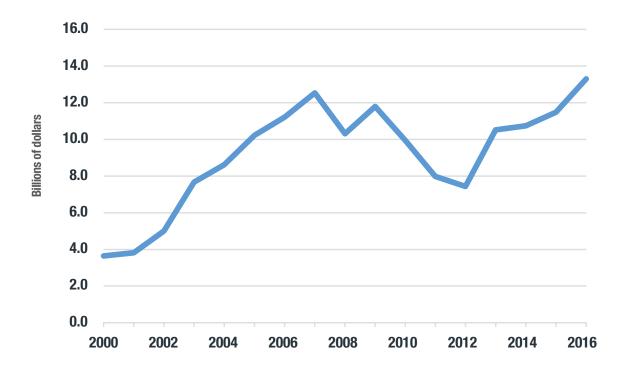
Avionics Manufacturing

A separate category for Avionics manufacturing is included in this and the prior version of the *National* and *State Reports*. Previously, it was assumed that all avionics equipment were included as part of new aircraft and aircraft parts manufacturing and were therefore not accounted for separately. Research shows this resulted in an incomplete estimate as some new avionics equipment was installed to update or replace older equipment on existing aircraft.³

The avionics data appears on **Figure 1** and includes the years 2000 through 2016. The graph shows in 2016, \$10.5 billion in new avionics equipment was manufactured in the U.S.

and includes newly manufactured equipment (including GPS) used to retrofit, refurbish, or replace avionics on existing aircraft, and new equipment exported to other countries. The methods employed to estimate this series are very similar to those used by the BEA to produce components of the U.S. GDP and components of the U.S. benchmark I-O tables, and are based mainly on data collected by the U.S. Census Bureau in various national surveys.

Figure 2. Aviation Research and Development Spending, 2000-2016



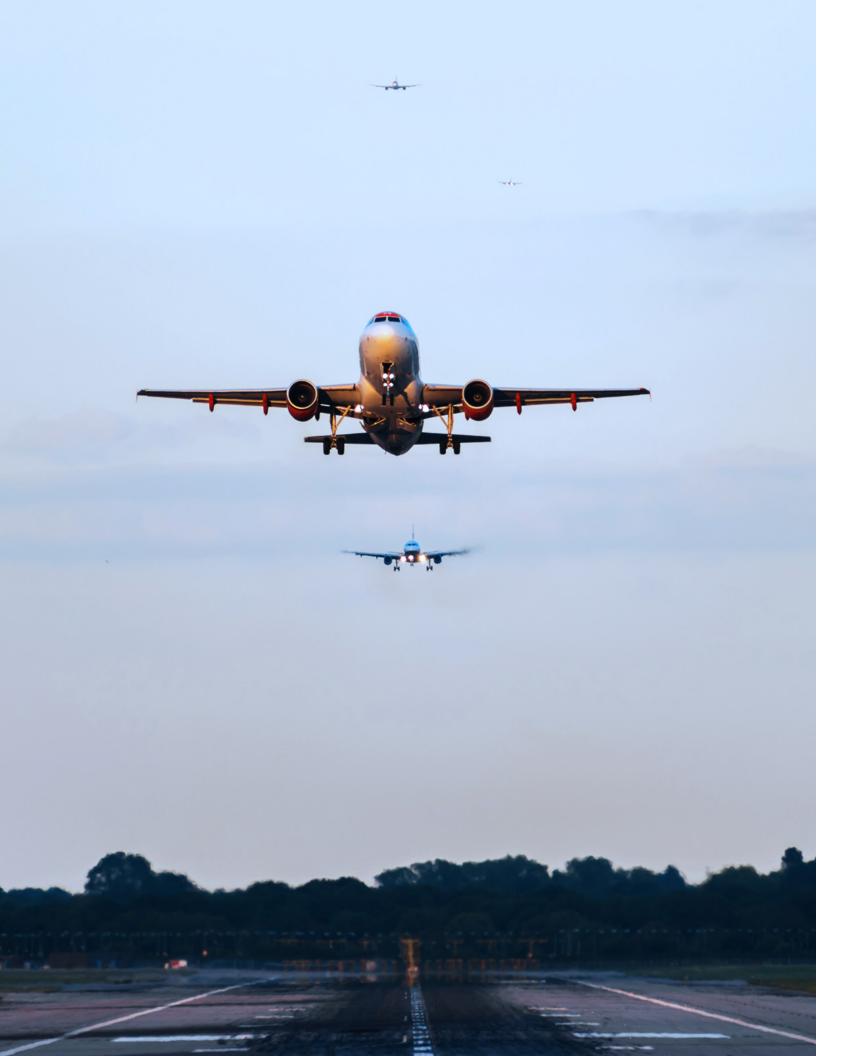
Aviation R&D

R&D, which includes innovation, has long been recognized as an important contributor to the economy. As part of the effort to better analyze the effects of R&D on the U.S. economy and improve international comparison of economic accounts, the BEA started to capitalize R&D products as an investment in the measurement of gross domestic product (GDP) starting in 2013. To be consistent in this report's measure of aviation's contribution to U.S. GDP, R&D estimates have been incorporated into the impact estimates.⁴

The primary source of data for the R&D estimates in this report is the NSF's Business R&D and Innovation Survey (BRDIS). The NSF defines R&D as "creative and systematic work undertaken in order to increase the stock

of knowledge and to devise new applications of available knowledge."⁵ In this sense, R&D includes all incidences of innovation conducted by businesses in the production of goods, services, or processes (development).

For this report, R&D conducted by U.S. domestic business in the manufacturing of aircraft and related parts industries — as captured in the NSF Survey — are counted as primary output in the impact estimates. The estimates of R&D, based on NSF data from 2000-2015 and extrapolated for 2016, are shown in **Figure 2**. In 2016, U.S. domestic businesses spent more than \$13 billion in activities related to aviation R&D and innovation.



State Economic Impact

In addition to providing connectivity and increased accessibility, aviation is important to a state's economic performance because it supports economic output, attracts business and tourism, supports local economic development, and retains jobs that might otherwise be relocated elsewhere.

The state-level estimates that appear in this report are based on the same methodology as the estimates that appear in The National Report and represent direct or catalytic expenditures on aviation-related economic activities. Civil aviation-related economic activities cover nine different expenditure categories. Direct expenditures account for the following seven activities: airline operations, airport operations, general aviation, aircraftrelated manufacturing, avionics manufacturing, research and development, and air couriers. Catalytic expenditures cover two activities: visitor expenditures, and travel arrangements. Together, these direct and catalytic expenditures use the Regional Input-Output Modeling System (RIMS II) multipliers for each state to produce estimates of the additional secondary impacts of aviation expenditures.6

The sum of the primary and secondary impacts is the total impact of civil aviation on a state's economy. When summed, the primary impacts for state-level estimates equal the national-level estimates. However, because of differences in multipliers, the summed state-level impacts will not equal the national-level estimates for total economic impacts. Examples of those differences include multipliers that are state and industry specific and multipliers that do not incorporate the interaction between states.

Based on multipliers provided by the RIMS II model, an estimate of value-added activities

within the civil aviation sector is used to identify the contribution of civil aviation-related economic activity. This measure is reported as a percentage of state GDP, representing aviation's contribution to the state's economy.⁷

Total economic impact on output by state (including the District of Columbia) appears in **Table 1** (column 2). Data on earnings, value added, and jobs generated by the aviation industry also appear in the table (columns 3, 4, and 5). Other information in **Table 1** includes contributions of aviation to state GDP and aviation-related jobs as a percent of total jobs (columns 6 and 7). Information on output (economic activity), earnings, jobs, and contribution to state GDP can also be found in the state fact sheets (Appendix A).

Nationally, the direct impact is 2.3 percent of GDP and including catalytic impacts the contribution of civil aviation is 5.2 percent of GDP in 2016.8 **Table 1** shows at the state level, the value of contribution to a state's GDP of direct and catalytic (visitor spending and travel arrangements) impacts range from a high of almost 21 percent (Hawaii) to a low of 0.4 percent (Delaware).

At the state level, aviation-related output is associated with population and overall economic activity. The three largest states in terms of populations are California, Texas, and Florida, which are also the top three states in terms of overall aviation economic activity.

Table 1 – Total Economic Impacts of Civil Aviation by State, Calendar Year 2016

State	Output (\$Millions)	Earnings (\$Millions)	Value Added (\$Millions)	Johs	Value Added Share of State GDP	Jobs Share of State Total ⁹
Alabama	7,420	1,912	3,930	50,163	1.9%	1.9%
Alaska	6,171	1,714	3,384	43,594	6.8%	9.5%
Arizona	41,082	11,062	23,019	284,459	7.4%	7.8%
Arkansas	5,338	1,304	2,766	32,424	2.3%	2.0%
California	194,811	53,870	109,138	1,150,100	4.1%	5.0%
Colorado	28,811	8,083	16,328	203,646	5.0%	5.6%
Connecticut	20,777	5,141	11,070	89,428	4.2%	3.9%
Delaware	506	116	286	3,342	0.4%	0.6%
District of Columbia	8,449	680	4,872	16,262	3.8%	1.8%
Florida	127,999	36,881	75,079	993,740	8.0%	8.5%
Georgia	41,802	11,259	23,368	322,789	4.3%	5.4%
Hawaii	30,530	8,571	17,734	208,349	20.7%	22.8%
Idaho	3,107	839	1,716	25,606	2.5%	2.6%
Illinois	55,515	15,093	31,047	351,210	3.9%	4.5%
Indiana	13,499	3,551	7,178	88,972	2.1%	2.3%
Iowa	3,604	924	1,955	25,616	1.1%	1.2%
Kansas	16,022	3,619	8,175	72,596	5.3%	3.8%
Kentucky	12,998	3,359	6,939	80,422	3.6%	3.2%
Louisiana	12,521	3,363	6,861	77,710	3.0%	2.9%
Maine	3,252	871	1,770	21,996	3.0%	2.7%
Maryland	14,873	3,875	8,540	90,567	2.2%	2.5%
Massachusetts	28,074	7,410	16,055	169,609	3.1%	3.6%
Michigan	22,345	6,236	12,482	157,619	2.5%	2.8%
Minnesota	19,365	5,194	10,592	142,771	3.1%	3.9%
Mississippi	2,070	513	1,085	13,773	1.0%	0.9%
Missouri	21,534	5,350	11,810	140,733	4.0%	3.8%
Montana	3,085	840	1,675	23,989	3.7%	3.6%
Nebraska	5,180	1,412	2,929	43,472	2.5%	3.3%
Nevada	33,342	9,387	19,778	245,273	13.1%	14.2%

State	Output (\$Millions)	Earnings (\$Millions)	Value Added (\$Millions)	Jobs	Value Added Share of State GDP	Jobs Share of State Total ⁹
New Hampshire	2,470	627	1,390	15,284	1.8%	1.7%
New Jersey	29,354	7,510	16,555	160,699	2.8%	3.0%
New Mexico	3,750	1,013	2,060	29,928	2.3%	2.7%
New York	99,827	26,104	58,683	617,341	3.8%	5.0%
North Carolina	28,776	7,613	15,864	206,856	3.1%	3.5%
North Dakota	2,352	564	1,224	14,477	2.4%	2.5%
Ohio	27,832	7,276	14,829	171,855	2.4%	2.5%
Oklahoma	6,918	1,839	3,724	46,927	2.1%	2.1%
Oregon	13,579	3,585	7,639	95,247	3.6%	3.9%
Pennsylvania	32,857	8,712	18,294	225,974	2.5%	3.0%
Rhode Island	2,665	683	1,542	18,555	2.7%	2.9%
South Carolina	7,542	1,987	4,147	49,413	2.0%	1.8%
South Dakota	1,395	382	759	10,483	1.6%	1.8%
Tennessee	24,049	6,453	13,249	156,224	4.0%	4.0%
Texas	110,919	30,098	61,222	709,708	3.9%	4.3%
Utah	15,012	4,152	8,436	119,353	5.3%	6.2%
Vermont	1,195	304	644	8,917	2.0%	2.1%
Virginia	18,105	4,691	10,132	117,629	2.1%	2.3%
Washington	85,298	21,849	45,035	410,234	9.1%	9.5%
West Virginia	1,296	247	547	6,529	0.8%	0.7%
Wisconsin	9,440	2,579	5,208	72,663	1.7%	2.0%
Wyoming	1,138	301	600	7,473	1.7%	1.9%

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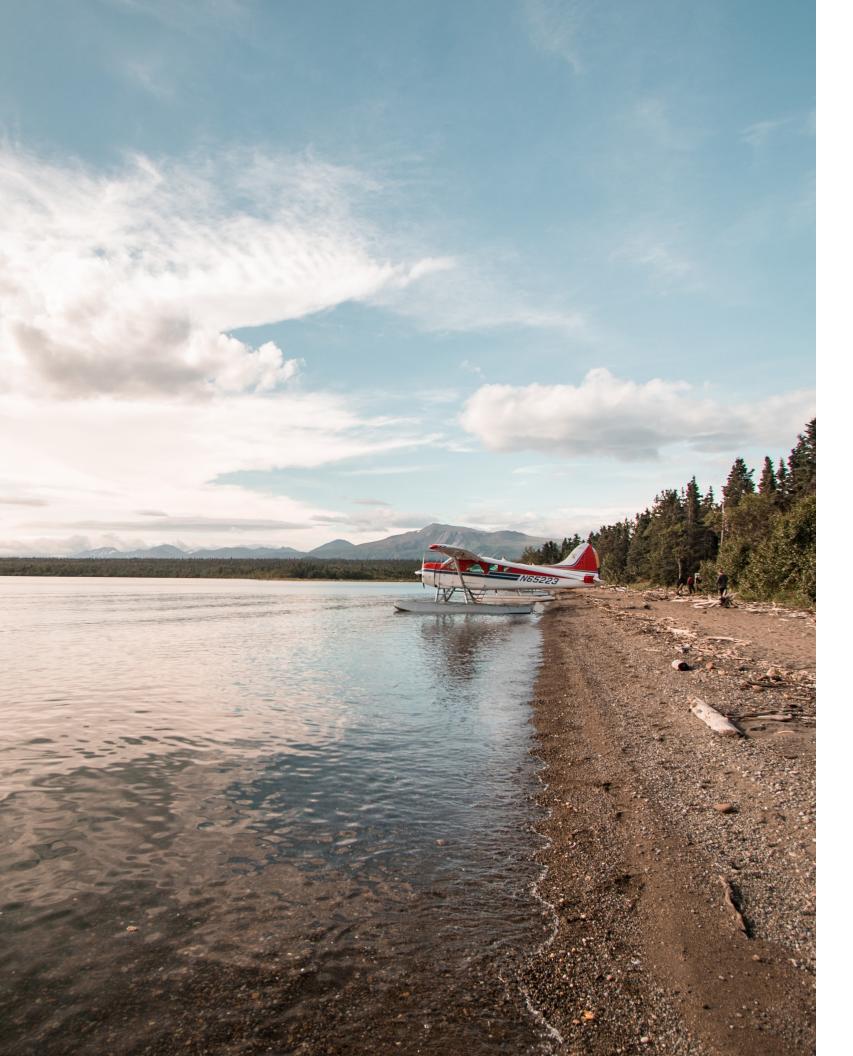


Table 2 – Contribution to State Gross Domestic Product, Top Ten States

2016 Total Economic Impact of Civil Aviation (Top 10 States, Percent)				
State Contribution to State GDP				
Hawaii	20.7%			
Nevada	13.1%			
Washington	9.1%			
Florida	8.0%			
Arizona	7.4%			
Alaska	6.8%			
Utah	5.3%			
Kansas	5.3%			
Colorado	5.0%			
Georgia	4.3%			

2016 Catalytic Economic Impact of Civil Aviation (Top 10 States, Percent)					
State Contribution to State GDP					
Hawaii	15.8%				
Nevada	10.5%				
Florida	5.8%				
Arizona	3.6%				
Utah	3.4%				
Alaska	3.1%				
New York	3.0%				
Colorado	2.9%				
District of Columbia	2.8%				
Illinois	2.5%				

2016 Direct Economic Impact of Civil Aviation (Top 10 States, Percent)				
State	Contribution to State GDP			
Washington	7.1%			
Hawaii	4.9%			
Kansas	4.8%			
Arizona	3.8%			
Alaska	3.8%			
Connecticut	3.2%			
Nevada	2.7%			
Tennessee	2.4%			
Kentucky	2.3%			
Florida	2.2%			

Table 2 shows the ranking of top ten states with the highest percent contribution to state GDP based on the different types of economic impact (total, direct, and catalytic). One factor common to all states and the impact of civil aviation is the importance of tourism. Aviation

and tourism have integrated and symbiotic impacts, as aviation brings many tourists to these destinations, while those tourist destinations provide passengers a reason to purchase flights in the first place. **Table 2** presents the top ten states for contribution to state GDP based on catalytic economic impact.

Table 2 also shows the top ten states for contribution of GDP based on direct economic impact. Washington is ranked first as Boeing has a large aircraft manufacturing presence in the state. Aircraft manufacturing totaled nearly 60 percent of the Washington's overall aviation-related economic activity. Also noteworthy, FedEx maintains its headquarters in Tennessee (ranked 8th) and air courier expenditures accounted for 40 percent of Tennessee's total aviation-related economic activity.

Table 3 presents the economic impact for all 50 states and the District of Columbia of visitor expenditures and travel arrangements (the catalytic impact), on output and contribution to state GDP.

Catalytic Impacts

Table 3 – Catalytic Economic Impacts of Civil Aviation by State, Calendar Year 2016

State	Output (\$Millions)	Earnings (\$Millions)	Value Added (\$Millions)	Jobs	Value Added Share of State GDP	Jobs Share of State Total ⁹
Alabama	2,637	764	1,584	27,512	0.8%	1.0%
Alaska	2,444	716	1,508	22,372	3.1%	4.9%
Arizona	18,014	5,326	11,092	167,473	3.6%	4.6%
Arkansas	1,463	419	876	14,945	0.7%	0.9%
California	108,305	31,745	65,429	784,212	2.5%	3.4%
Colorado	15,828	4,678	9,646	131,404	2.9%	3.6%
Connecticut	4,402	1,225	2,692	30,102	1.0%	1.3%
Delaware	330	83	201	2,786	0.3%	0.5%
District of Columbia	5,678	556	3,574	14,763	2.8%	1.7%
Florida	87,589	26,076	54,069	754,452	5.8%	6.5%
Georgia	20,711	6,005	12,525	187,015	2.3%	3.1%
Hawaii	21,944	6,422	13,525	172,843	15.8%	18.9%
Idaho	1,546	446	937	16,414	1.4%	1.7%
Illinois	33,730	9,636	20,099	235,586	2.5%	3.0%
Indiana	4,818	1,361	2,856	42,574	0.8%	1.1%
Iowa	1,590	444	952	15,374	0.5%	0.7%
Kansas	1,049	280	629	9,751	0.4%	0.5%
Kentucky	4,079	1,106	2,422	32,008	1.2%	1.3%
Louisiana	6,218	1,824	3,774	51,178	1.7%	1.9%
Maine	1,100	325	673	10,546	1.1%	1.3%
Maryland	8,675	2,337	5,346	60,654	1.4%	1.7%
Massachusetts	18,926	5,314	11,617	133,035	2.2%	2.8%
Michigan	12,312	3,645	7,443	105,614	1.5%	1.9%
Minnesota	10,793	3,102	6,404	100,566	1.9%	2.7%
Mississippi	797	224	479	7,661	0.4%	0.5%
Missouri	9,764	2,651	5,841	88,971	2.0%	2.4%
Montana	1,241	366	762	13,604	1.7%	2.0%
Nebraska	3,243	936	1,968	32,824	1.7%	2.5%
Nevada	25,388	7,387	15,734	202,279	10.5%	11.7%

State	Output (\$Millions)	Earnings (\$Millions)	Value Added (\$Millions)	Jobs	Value Added Share of State GDP	Jobs Share of State Total ⁹
New Hampshire	1,206	326	742	9,405	0.9%	1.1%
New Jersey	17,062	4,657	10,374	116,350	1.8%	2.2%
New Mexico	1,765	515	1,079	19,196	1.2%	1.8%
New York	75,460	20,315	46,268	522,338	3.0%	4.3%
North Carolina	13,006	3,762	7,850	121,687	1.5%	2.1%
North Dakota	780	210	474	7,456	0.9%	1.3%
Ohio	10,221	2,921	6,067	91,978	1.0%	1.3%
Oklahoma	2,717	797	1,636	28,028	0.9%	1.2%
Oregon	7,317	2,091	4,457	64,661	2.1%	2.6%
Pennsylvania	18,432	5,175	11,047	158,758	1.5%	2.1%
Rhode Island	1,788	480	1,098	14,516	1.9%	2.3%
South Carolina	3,325	949	2,014	27,836	0.9%	1.0%
South Dakota	545	157	329	5,222	0.7%	0.9%
Tennessee	8,976	2,534	5,367	69,463	1.6%	1.8%
Texas	51,781	15,093	31,129	407,215	2.0%	2.4%
Utah	8,774	2,573	5,295	84,832	3.4%	4.4%
Vermont	652	183	399	6,447	1.3%	1.5%
Virginia	9,063	2,531	5,529	78,901	1.1%	1.5%
Washington	16,176	4,680	9,799	120,760	2.0%	2.8%
West Virginia	290	78	177	2,635	0.3%	0.3%
Wisconsin	5,004	1,456	2,995	49,774	1.0%	1.4%
Wyoming	287	81	176	2,644	0.5%	0.7%

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Direct Impacts

Table 4 – Direct Economic Impacts of Civil Aviation by State, Calendar Year 2016

State	Output (\$Millions)	Earnings (\$Millions)	Value Added (\$Millions)	Jobs	Value Added Share of State GDP	Jobs Share of State Total ⁹
Alabama	4,783	1,148	2,346	25,672	1.2%	1.0%
Alaska	3,727	998	1,876	21,027	3.8%	4.6%
Arizona	23,067	5,736	11,927	111,972	3.8%	3.1%
Arkansas	3,875	884	1,890	19,527	1.6%	1.2%
California	86,506	22,125	43,709	380,021	1.6%	1.6%
Colorado	12,983	3,405	6,682	64,525	2.0%	1.8%
Connecticut	16,375	3,916	8,377	60,639	3.2%	2.6%
Delaware	176	33	85	555	0.1%	0.1%
District of Columbia	2,770	124	1,297	1,747	1.0%	0.2%
Florida	40,410	10,805	21,009	233,748	2.2%	2.0%
Georgia	21,091	5,254	10,843	103,525	2.0%	1.7%
Hawaii	8,587	2,149	4,209	42,891	4.9%	4.7%
Idaho	1,561	392	779	10,334	1.1%	1.1%
Illinois	21,784	5,457	10,947	99,351	1.4%	1.3%
Indiana	8,681	2,190	4,322	49,501	1.3%	1.3%
Iowa	2,014	480	1,003	11,751	0.6%	0.6%
Kansas	14,973	3,339	7,545	63,644	4.8%	3.3%
Kentucky	8,919	2,253	4,518	51,757	2.3%	2.1%
Louisiana	6,303	1,539	3,087	29,935	1.4%	1.1%
Maine	2,152	546	1,097	12,393	1.8%	1.5%
Maryland	6,198	1,538	3,195	27,680	0.8%	0.8%
Massachusetts	9,148	2,096	4,439	40,370	0.9%	0.9%
Michigan	10,033	2,592	5,039	51,636	1.0%	0.9%
Minnesota	8,572	2,092	4,187	39,815	1.2%	1.1%
Mississippi	1,272	289	606	7,029	0.6%	0.4%
Missouri	11,769	2,699	5,969	55,100	2.0%	1.5%
Montana	1,843	474	913	12,225	2.0%	1.8%
Nebraska	1,938	476	960	12,315	0.8%	0.9%
Nevada	7,954	2,000	4,045	41,199	2.7%	2.4%

State	Output (\$Millions)	Earnings (\$Millions)	Value Added (\$Millions)	Jobs	Value Added Share of State GDP	Jobs Share of State Total ⁹
New Hampshire	1,264	300	649	6,187	0.8%	0.7%
New Jersey	12,291	2,853	6,181	50,961	1.1%	0.9%
New Mexico	1,986	497	980	12,202	1.1%	1.1%
New York	24,367	5,789	12,415	98,062	0.8%	0.8%
North Carolina	15,770	3,851	8,014	76,286	1.5%	1.3%
North Dakota	1,573	354	750	8,082	1.5%	1.4%
Ohio	17,612	4,355	8,762	84,558	1.4%	1.2%
Oklahoma	4,201	1,042	2,088	21,392	1.2%	0.9%
Oregon	6,262	1,494	3,182	32,582	1.5%	1.3%
Pennsylvania	14,425	3,537	7,247	70,273	1.0%	0.9%
Rhode Island	877	203	444	4,586	0.8%	0.7%
South Carolina	4,218	1,038	2,133	24,525	1.0%	0.9%
South Dakota	850	225	430	6,022	0.9%	1.0%
Tennessee	15,074	3,919	7,882	91,632	2.4%	2.3%
Texas	59,139	15,005	30,093	285,294	1.9%	1.7%
Utah	6,237	1,580	3,141	32,260	2.0%	1.7%
Vermont	543	121	245	2,931	0.8%	0.7%
Virginia	9,042	2,160	4,603	42,914	0.9%	0.8%
Washington	69,122	17,169	35,236	287,492	7.1%	6.7%
West Virginia	1,006	169	370	4,137	0.5%	0.5%
Wisconsin	4,435	1,123	2,214	25,515	0.7%	0.7%
Wyoming	851	220	423	4,829	1.0%	1.2%

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Economic Impact by Expenditure Category - Direct

Table 4 highlights the total direct economic impact that civil-aviation has on the U.S. economy. Below are the seven direct expenditure categories and the top five states in output level for each category. The national total direct output values cited below come from *The National Report*. As previously described these national values do not equal the summed state-level values.

Airline Operations

Table 5 – Total Economic Output for Airlines, Top Five States

2016 Economic Impact of Civil Aviation (Top Five States, Billions of Dollars)				
State	Airlines			
California	37.4			
Texas	23.6			
Florida	21.2			
New York	13.7			
Illinois	11.4			

Of the nine expenditure categories, airline operations accounted for the second-largest share of the economic impact, after visitor expenditures. Airline operations expenditures include spending on air transportation of passengers and freight on commercial passenger airlines. In 2016, the national total output by airlines was \$315.6 billion. **Table 5** presents the top five states by total airline output.

Together, these top five states contributed more than one-third of the national total output by airlines in 2016.

Airport Operations

Table 6 – Total Economic Output for Airports, Top Five States

2016 Economic Impact of Civil Aviation (Top Five States, Billions of Dollars)				
State	Airport Operations			
California	9.5			
Florida	7.6			
Texas	6.4			
Illinois	4.9			
New York	3.7			

Airports contributed \$81.7 billion in total output to the U.S. economy in 2016. California, Florida, Texas, Illinois, and New York were the top five states in the total economic impact of airport operations (**Table 6**). In terms of enplanements, nine out of the 20 busiest airports in the nation are located within these states.

General Aviation

Table 7 – Total Economic Output for General Aviation, Top Five States

2016 Economic Impact of Civil Aviation (Top Five States, Billions of Dollars)				
State	General Aviation			
California	5.0			
Texas	3.4			
Florida	3.4			
Ohio	1.4			
Arizona	1.4			

General aviation operations contributed \$52.3 billion to total national civil aviation-related economic output in 2016. California ranked first in total economic output for general aviation at \$5.0 billion in 2016 (**Table 7**). The warm weather states of Florida and Texas followed closely behind with \$3.4 billion each.

Aircraft Manufacturing

Table 8 – Total Economic Output for Aircraft, Aircraft Engine, and Parts Manufacturing, Top Five States

2016 Economic Impact of Civil Aviation (Top Five States, Billions of Dollars)				
State	Aircraft, Aircraft Engines and Parts Manufacturing			
Washington	49.9			
California	24.1			
Texas	19.1			
Connecticut	12.0			
Kansas	10.7			

Aircraft manufacturing output for the entire United States edged lower between 2014 and 2016 as most states saw activity ease. ¹⁰ The top five states in aviation-related manufacturing in 2016 were Washington, California, Texas, Connecticut, and Kansas (**Table 8**). Of these, only Washington increased in aviation-related manufacturing activity. These five states together accounted for 44 percent of national aviation-related manufacturing in the United States.

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Avionics Manufacturing

Table 9 – Total Economic Output for Avionics Manufacturing, Top Five States

2016 Economic Impact of Civil Aviation (Top Five States, Billions of Dollars)						
State Avionics Manufacturing						
Arizona	3.8					
Texas	2.2					
Kansas	1.8					
Florida	1.6					
California	1.1					

Nation-wide, avionics manufacturing economic output amounted to \$25.7 billion in 2016. The top-five states with avionics manufacturing were Arizona, Texas, Kansas, Florida, and California (**Table 9**). In all, these five states accounted for just over 40 percent of the national total.

Research and Development (R&D)

Table 10 - Total Economic Output for R&D, Top Five States

2016 Economic Impact of Civil Aviation (Top Five States, Billions of Dollars)				
State	R&D			
Washington	7.7			
California	3.8			
New York	3.0			
Connecticut	2.4			
Ohio	2.1			

In 2016, the total economic output of aviation R&D amounted to \$40.4 billion. The top-five states with R&D were Washington, California, New York, Connecticut and Ohio (**Table 10**). In all, these five states accounted for 47 percent of the national total.

Air Couriers

Table 11 – Total Economic Output for Air Couriers, Top Five States

2016 Economic Impact of Civil Aviation (Top Five States, Billions of Dollars)						
State Air Couriers						
Tennessee	9.4					
California	5.5					
Kentucky	4.9					
Texas	3.7					
Indiana	2.4					

Express air cargo has become an integral part of everyday life for businesses and consumers across the globe. Air couriers are engaged in air delivery of individually addressed letters, parcels, and packages (generally under 100 lbs.). Retail outlets of the largest air couriers, FedEx and UPS, are located in almost every nook and cranny of the United States. Air transportation's infrastructure, aircraft and technological advances have enabled air couriers to provide their customers with quick and reliable services.

The total economic output of air couriers grew 6.7 percent in real terms between 2014 and 2016. Tennessee, California, Kentucky, Texas, and Indiana were the top five states in total economic output for air couriers. Tennessee and Kentucky are home to FedEx and UPS international air hubs, providing considerable economic development and growth potential for local residents (**Table 11**).

Economic Impact by Expenditure Category - Catalytic

The prior section focused on the direct expenditure categories. This section covers the two remaining expenditure categories. To find the total impact that these catalytic expenditure categories has on the U.S. economy see **Table 3**. The tables below cover the individual impact these categories have on the U.S. economy. The national total catalytic output values cited below come from *The National Report*. As previously described these national values do not equal the summed state-level values. Additionally, visitor expenditures is split into two subgroupings airlines and general aviation.

Visitor Expenditures

Table 12 – Total Economic Output for Visitor Expenditures: Airlines, Top Five States

Visitor Expenditures - Airlines
104.4
85.2
73.4
50.0
31.9

Visitor expenditures by travelers using air transportation contributed the largest single portion of the total economic impact of civil aviation in 2016. At the national level, commercial airline visitor expenditures contributed \$886.5 billion to the U.S. economy and supported over 6.5 million jobs. In 2016, California, Florida, New York, Texas, and Illinois were the top five states for commercial airline visitor expenditures (Table 12). These five states are popular tourist and business destinations, and are home to some of the busiest airports in the nation.

Table 13 – Total Economic Output for Visitor Expenditures: General Aviation, Top Five States

2016 Economic Impact of Civil Aviation (Top Five States, Billions of Dollars)				
State	Visitor Expenditures - General Aviation			
California	1.1			
Florida	0.8			
Texas	0.7			
Alabama	0.3			
Arizona	0.3			

The top five states for general aviation visitor expenditures were California, Florida, Texas, Alabama, and Arizona (**Table 13**). All five states experience mild weather conditions that are conducive to general aviation operations. Nationally, general aviation visitor expenditures amounted to \$11.7 billion in total output and supported nearly 86 thousand jobs.

Travel Arrangements

Table 14 – Total Economic Output for Travel Arrangements, Top Five States

2016 Economic Impact of Civil Aviation (Top Five States, Billions of Dollars)					
State Travel Arrangements					
California	2.8				
New York	1.8				
Florida	1.6				
Illinois	1.6				
Texas	1.1				

In 2016, the top five states for travel arrangement and reservation services output were California, New York, Florida, Illinois, and Texas (**Table 14**). According to the 2012 Economic Census, the eight largest firms in the travel arrangement and reservation services industry accounted for nearly 25 percent of all receipts and nearly 57,000 employees.

More information about the economic impact of civil aviation for each state is presented in Appendix A, which contains civil aviation-related data on all 50 states and the District of Columbia. The fact sheets report data on aviation-related economic activity, including jobs, earnings, and other economic statistics.

The next section covers the enabling impacts of civil aviation, followed by FAA spending by state.

Enabling Impact by State

First introduced in *The National Report* (2011), the enabling impact of air transportation describes transportation services in terms of certain characteristics: speed, flexibility, reliability, cost, and safety.¹¹

Safety is always the most important characteristic for civil aviation, but speed, flexibility, and reliability are also important for passengers facing travel time constraints. Speed and reliability are highly important for high-value cargo. The value of air transportation is partly determined by passenger spending at their destinations and the value of goods transported by air. Destination spending (or visitor expenditures) was covered earlier in this report. This section presents air freight findings for 2016 by state.

Across all commodities, \$598.7 billion in goods was transported by air in 2016 (**Table 15**). Data for this section came from the Freight Analysis Framework published by the U.S. Department of Transportation.¹²

Among the commodities normally transported by air are manufactured and technology-oriented goods. Total values of the flows for the top ten commodities transported by air in 2016 appear in Table 15. Electronics (\$141.8 billion), transport equipment (\$83.9 billion), and machinery (\$83.0 billion) were the commodities with the three highest total values transported by air. Electronics accounted for about 24 percent of the value of all commodities, while transport equipment and machinery accounted for about 14 percent each. Together, the top three commodities accounted for over 51 percent of the total shipment value and the top five accounted for over 78 percent. Nine of the ten commodities listed on Table 15 remained from the 2014 list, with plastics/rubber replacing mixed freight.¹³

Value of Air Freight Flows by Commodity

Table 15 – Top Ten Value of Commodities Transported by Air, 2016 $\,$

Commodity	Domestic and Export Flows (\$Billions)		
Electronics	141.8		
Transport equipment	83.9		
Machinery	83.0		
Precision instruments	80.7		
Misc. manufactured products	78.3		
Pharmaceuticals	51.1		
Motorized vehicles	14.0		
Chemical products	12.9		
Articles-base metal	9.6		
Plastics/rubber	7.7		
All other commodities	35.7		
All Commodities	598.7		

Source: U.S. Department of Transportation, Federal Highway Administration and Bureau of Transportation Statistics, *Freight Analysis Framework*, Version 4.5.

Domestically across all categories, the majority of the value of goods transported is carried by truck and only about 1 percent is transported by air. Even so, it may seem impractical to move items under most of these headings by air, but the categories are quite broad and encompass a range of individual products. For example, Transport Equipment includes locomotives and other railway equipment, but it also includes high-value items such as spacecraft and spacecraft parts. In terms of dollars per ton of goods shipped, those moved

by air are valued at about \$67,000/ton while for all modes combined the value is under \$1,000/ton. In fact, the mode with the second highest value per ton is multi-modal including mail which averages less than \$6,000/ton. All other modes individually carried goods valued under \$1,000/ton on average.

Value of Air Freight Flows by State

Among the individual states, the value of freight transported by air includes goods transported within the state, to other states, and to other countries (exports). In 2016, California was ranked highest with \$114.5 billion worth of goods transported by air. Washington was second at \$56.0 billion. The next three states were New York (\$52.9 billion), Texas (\$51.1 billion), and Florida (\$30.5 billion) (Table 16). California, New York, Texas and Florida are the top four states in terms of both population and economic size, while Washington is ranked 13th by both measures.¹⁴ By value, goods shipped from California accounted for 19.1 percent of the value of goods shipped from all states and the District of Columbia; goods shipped from the top three states accounted for about 37 percent; and goods shipped from the top five states accounted for about 51 percent. All five states in **Table 16** are the same states that appeared on the previous State Report list, with Washington moving from 5th to 2nd place, and Texas and Florida shifting as well.

The latest estimates from the Freight Analysis Framework show that aviation continues to play an important role in transporting higher-value and perishable goods. The commodity categories

Table 16 – Top Five States, Value of Goods Transported by Air, 2016

State	Domestic and Export Flows (\$Billions)	
California	114.5	
Washington	56.0	
New York	52.9	
Texas	51.1	
Florida	30.5	
All other states	293.7	
All States	598.7	

Source: U.S. Department of Transportation, Federal Highway Administration and Bureau of Transportation Statistics, *Freight Analysis Framework*, Version 4.5.

that appear at the top of the list in **Table 15** are mainly the same categories that lead the lists for the top states in **Table 16**. For example, four of the top five categories of goods listed for the nation as a whole also appear in the top five list of goods transported from California. These categories are electronics, precision instruments, miscellaneous manufactured products and machinery.

Enabled flow estimates for each state and the District of Columbia appear in Appendix A.

The next section covers the economic impact of FAA spending, providing the latest updated data from fiscal year 2016.

FAA Spending

The FAA's spending in states represents the agency's contribution to the U.S. economy. This section presents the economic impact of those expenditures on each of the 50 states and the District of Columbia for fiscal year 2016. Apart from Washington, D.C. where the headquarters results in outlays, the largest driver of FAA spending is the presence of FAA facilities and airports which are spread throughout all 50 states. FAA spending includes payroll, non-payroll expenses (including facilities and equipment, operations, research, etc.), and grants issued through the Airport Improvement Program (AIP). The FAA's abilities to maintain safe skies, finance infrastructure projects, and support job creation are valuable to state and local officials. These expenditures assist local economies in important ways by:

- Keeping the civil aviation industry operating safely and efficiently,
- Providing federal, state, and local job opportunities,
- Facilitating opportunities for private businesses,
- Distributing aid for infrastructure building by local airports, and
- Modernizing the air traffic system with NextGen investment

Total spending by the FAA at the state level was \$14.1 billion in FY 2016 (**Table 17**), similar to that spent in FY 2014. ¹⁵ FAA expenditures were highest in the District of Columbia, Texas, Virginia, California and Oklahoma. Total expenditures in these five states comprised 40 percent of all FAA spending in FY 2016.

FAA spending not only supports direct federal employment, earnings, and jobs, but also induces other economic activities within state economies. Estimates of the total impact of FAA spending are derived through the use of the RIMS II model. The total impact of FAA spending, or the sum of primary FAA expenditures plus secondary impacts, was \$23.2 billion (**Table 18**). The total impact of FAA spending supported more than 150,000 jobs with earnings totaling \$6.6 billion. Texas, Oklahoma, and Virginia were the top three state beneficiaries of FAA spending in terms of this total impact.

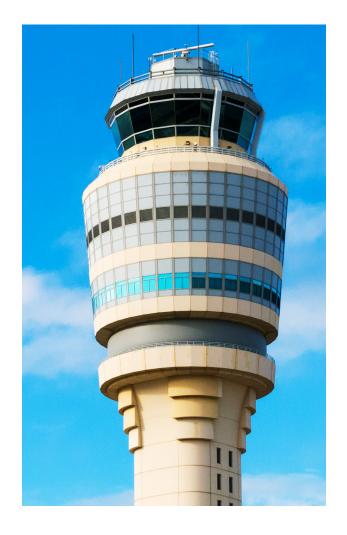


Table 17 – FAA Spending by State, FY 2016

State	FAA Spending (\$Millions)	Percent of FAA State Spending		FAA Spending (\$Millions)	Percent of FAA Spending	
Alabama	105.6	0.7	Montana	61.0	0.4	
Alaska	357.9	2.5	Nebraska	61.7	0.4	
Arizona	189.1	1.3	Nevada	112.2	0.8	
Arkansas	64.2	0.5	New Hampshire	132.7	0.9	
California	878.4	6.2	New Jersey	469.3	3.3	
Colorado	242.4	1.7	New Mexico	134.7	1.0	
Connecticut	53.7	0.4	New York	382.0	2.7	
Delaware	18.8	0.1	North Carolina	156.7	1.1	
District of Columbia	2,033.3	14.4	North Dakota	140.6	1.0	
Florida	624.5	4.4	Ohio	291.3	2.1	
Georgia	488.7	3.5	Oklahoma	864.5	6.1	
Hawaii	98.4	0.7	Oregon	91.2	0.6	
Idaho	40.1	0.3	Pennsylvania	244.0	1.7	
Illinois	637.0	4.5	Rhode Island	40.4	0.3	
Indiana	213.5	1.5	South Carolina	104.1	0.7	
Iowa	70.2	0.5	South Dakota	30.7	0.2	
Kansas	146.7	1.0	Tennessee	191.4	1.4	
Kentucky	85.1	0.6	Texas	924.3	6.5	
Louisiana	98.5	0.7	Utah	124.4	0.9	
Maine	47.2	0.3	Vermont	26.1	0.2	
Maryland	517.8	3.7	Virginia	912.7	6.5	
Massachusetts	489.8	3.5	Washington	372.5	2.6	
Michigan	148.4	1.0	West Virginia	51.7	0.4	
Minnesota	196.6	1.4	Wisconsin	84.5	0.6	
Mississippi	75.0	0.5	Wyoming	40.0	0.3	
Missouri	169.3	1.2	State Total	14,135.4	100.0	

Table 18 – Total Impact of FAA Spending by State, FY 2016

Total: Prin	nary + Second	ary Impacts		Total: P	rimary + Second	ary Impacts	
State	Output (\$Millions)	Earnings (\$Millions)	Jobs	State	Output (\$Millions)	Earnings (\$Millions)	Jobs
Alabama	198.3	64.2	1,581	Montana	100.5	33.7	837
Alaska	517.2	174.5	3,735	Nebraska	108.0	34.9	812
Arizona	344.9	112.6	2,816	Nevada	173.4	56.1	1,358
Arkansas	111.2	35.5	851	New Hampshire	167.9	50.1	1,222
California	1,445.1	455.4	9,581	New Jersey	860.5	251.4	5,201
Colorado	415.6	132.4	3,061	New Mexico	193.7	63.4	1,701
Connecticut	86.9	27.2	527	New York	498.8	143.4	3,097
Delaware	26.4	7.1	160	North Carolina	294.4	93.3	2,260
District of Columbia	2,454.0	170.5	2,998	North Dakota	254.4	77.7	1,526
Florida	1,044.4	338.8	8,823	Ohio	528.7	163.1	3,876
Georgia	868.6	269.6	7,063	Oklahoma	1,531.5	500.0	12,584
Hawaii	148.9	48.3	1,123	Oregon	162.9	50.4	1,103
Idaho	63.4	20.9	529	Pennsylvania	467.1	142.7	3,190
Illinois	1,291.2	393.9	8,250	Rhode Island	66.1	19.3	414
Indiana	354.7	108.3	2,591	South Carolina	189.6	59.9	1,527
lowa	117.3	37.5	872	South Dakota	49.7	16.5	383
Kansas	221.1	62.7	1,562	Tennessee	353.2	106.3	2,419
Kentucky	150.1	45.0	1,089	Texas	1,813.7	566.8	12,963
Louisiana	169.6	56.4	1,284	Utah	209.3	65.9	1,661
Maine	77.3	25.7	648	Vermont	43.4	14.0	337
Maryland	828.9	249.3	5,566	Virginia	1,492.8	448.3	10,908
Massachusetts	890.1	274.2	6,237	Washington	549.9	172.2	3,833
Michigan	243.1	78.5	1,898	West Virginia	69.1	20.6	538
Minnesota	316.4	98.5	2,260	Wisconsin	145.3	47.4	1,089
Mississippi	116.9	36.8	947	Wyoming	63.0	20.5	475
Missouri	294.6	87.2	2,205	State Total	23,182.9	6,629.0	153,570

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Conclusion



The State Report supplement updates and highlights the economic impact of civil aviation on all fifty state economies and the District of Columbia for 2016. The strength and importance of the civil aviation industry at the state level provides a platform for decision makers at the national and state levels to better formulate policies that support economic development and job creation. At the national level in 2016, direct civil aviation impacts were \$850 billion in economic activity, and over 4 million jobs. When visitor spending and travel arrangements are included, the total supports \$1.8 trillion in economic activity and 10.9 million jobs with \$488.2 billion in earnings. Direct and catalytic impacts accounted for 5.2 percent of U.S. GDP.

At the state level, the three most populous states and three of the top four states Gross State Product were California, Texas, and Florida, and these were the top three states in terms of aviation-related economic output. Civil aviation contribution to Gross State Product was 8.0 percent for Florida, while California and Texas were 4.1 percent and 3.9 percent. When looking at the direct impact of civil aviation

on Gross State Product in percentage term Washington (7.1 percent), Hawaii (4.9 percent), and Kansas (4.8 percent) were the top three states. For catalytic impact of civil aviation on Gross State Product in percentage term Hawaii (15.8 percent), Nevada (10.5 percent), and Florida (5.8 percent) were the top three states. Additionally, this report draws attention to the nine aviation-related economic categories which make up overall aviation economic activity for the states. With some exceptions, the largest states in population and economic output appear on every list. This is especially true for visitor expenditures and airline operations—the two largest aviation-related categories.

Due to the evolving nature of civil aviation, additional category estimates will be added to the report over time. For example, Commercial Space launches and unmanned aircraft systems are rapidly expanding industries but source data are sparse. As soon as reliable data are available, the inclusion of these categories will provide an even more robust picture of the importance of civil aviation to the U.S. Economy at both the national and state levels.

Notes

- 1. Previous versions of *The State Report* were published in 2009, 2011, 2015, and 2017. The 2017 version contained statistics for the year 2014. *The National Report* was published by the FAA in 2007, 2009, 2011, 2014, 2016, and 2020.
- U.S. Department of Transportation, Federal Aviation Administration. 2020. The Economic Impact of Civil Aviation on the U.S. Economy. January 2020. https://www.faa.gov/about/plans_reports/media/2020_jan_economic_impact_report.pdf
- 3. Since this report covers civil aviation only, it does not include defense avionic equipment.
- 4. U.S. Department of Commerce, Bureau of Economic Analysis, National Income and Product Accounts.
- National Science Foundation. Definitions of Research and Development: An Annotated Compilation of Official Sources. 2018. p. 7. https:// nsf.gov/statistics/randdef/
- 6. The RIMS II model was developed by the U.S. Department of Commerce, Bureau of Economic Analysis. Regional Input-Output Modeling System. http://www.bea.gov/regional/rims/index.cfm
- 7. State GDP is the sum of the value added of all economic activities in the state. GDP can also be measured as total economic activities less intermediate purchases.
- 8. U.S. Department of Transportation, Federal Aviation Administration. 2020. Op. cit.
- 9. Calculated using Bureau of Economic Analysis total employment data from the SAINC4 Personal Income and Employment by Major Component table.
- 10. U.S. Department of Transportation, Federal Aviation Administration. 2020. Op. cit.

- 11. Mariya A. Ishutkina and R. John Hansman. 2009. "Analysis of the Interaction Between Air Transportation and Economic Activity: A Worldwide Perspective," MIT International Center for Air Transportation.
- 12. U.S. Department of Transportation, Federal Highway Administration and Bureau of Transportation Statistics. 2019. Freight Analysis Framework. Versions 4.5.
- 13. For a list of the detailed commodities that make up the categories that appear on Table 15, see, U.S. Bureau of the Census, SCTG Commodity Codes, 2012 Commodity Flow Survey. November 2011. https://www.census.gov/econ/cfs/2012/2012_manual.pdf
- 14. Based on 2016 population estimates from the U.S. Census Bureau, the five most populous states were ranked in the following order: California (39.2 million persons), Texas (27.9 million), Florida (20.6 million), New York (19.6 million), and Illinois (12.8 million) (U.S. Department of Commerce, Bureau of the Census, Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2018. 2018 Population Estimates. https://www.census.gov/ programs-surveys/popest/data/tables.html. The size of each state's economy is measured in terms of state-level GDP. In 2016, the top five states by state GDP were California (\$2,663.4 billion), Texas (\$1,564.4 billion), New York (\$1,541.5 billion), Florida (\$938.4 billion), and Illinois (\$805.4 billion) (U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Accounts. http://www.bea.gov/regional/index.htm).
- 15. U.S. Department of Transportation, Federal Aviation Administration. 2017. The Economic Impact of Civil Aviation on the U.S. Economy. September 2017. https://www.faa.gov/about/plans_reports/media/2017-economic-impact-report.pdf

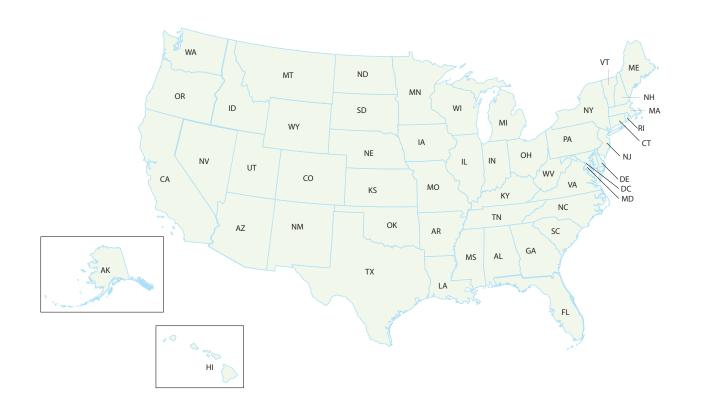
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Appendix A: State Fact Sheets





Economic Impact of Civil Aviation by State (2016)

Alabama

Largest Commercial Airport:

Birmingham-Shuttlesworth
International

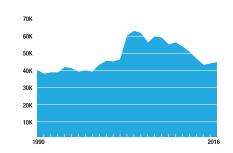
Population (Census Estimate):² **4,864,745**

Gross Domestic Product (\$Millions):³ **\$203,398**

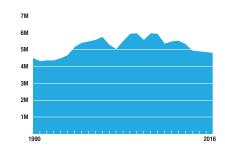
Contribution to Gross Domestic Product: 1.9%

Percent of International Visitors:⁴ **0.2**%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS ¹				
ACTIVITY			Commerci	al ⁶	
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers	
Commercial Aviation	5	132,634	156,235	4,816,431	
General Aviation	67	1,777,041	_	_	
Reliever Airports	2	_	_	_	
Total Aviation	74	1,909,675	156,235	4,816,431	

	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$1,220,279,512	\$279,965,611	6,580
Airport Operations	\$208,008,334	\$68,095,004	1,653
▶ General Aviation	\$997,117,373	\$228,766,092	5,377
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$2,035,252,234	\$470,164,269	9,178
Avionics Manufacturing	\$0	\$0	0
Research & Development	\$65,257,018	\$21,161,148	406
▶ Air Courier	\$257,158,240	\$79,595,381	2,479
Catalytic			
▶ Visitor Expenditures — Airlines	\$2,273,351,855	\$658,664,162	23,842
▶ Visitor Expenditures — General Aviation	\$311,493,707	\$90,249,884	3,267
Travel Arrangements	\$51,942,338	\$14,880,963	404
Total Aviation	\$7,419,860,612	\$1,911,542,514	53,185

	TOTAL ECONOMIC IMPACT ⁷		
TOTAL FAA SPENDING (FISCAL YEAR)	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$198,283,063	\$64,171,758	1,581

ENABLING EFFECTS	TRADE	FLOWS ⁸
ENABLING EFFECTS	Value (\$)	Weight (Tons)
Within State	\$8,474,500	143
State-to-State	\$356,040,000	11,737
Exports	\$2,188,772,100	16,199
Total Enabling Effects	\$2,553,286,600	28,078



Alaska

Largest Commercial Airport:1 **Ted Stevens Anchorage** International

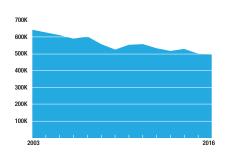
Population (Census Estimate):² 741,504

Gross Domestic Product (\$Millions):³ \$49,429

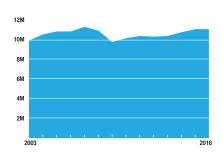
Contribution to Gross Domestic Product: 6.8%

Percent of International Visitors:4 0.3%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commercial ⁶	
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons) Passenç	gers
Commercial Aviation	87	973,226	4,067,016 11,093,0	076
General Aviation	169	831,689	-	_
Reliever Airports	0	_	_	_
Total Aviation	256	1,804,915	4,067,016 11,093,0	076

	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$1,517,723,666	\$343,729,072	6,420
Airport Operations	\$482,890,495	\$160,406,616	3,510
General Aviation	\$480,272,995	\$108,770,651	2,031
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$8,240,176	\$1,782,049	35
Avionics Manufacturing	\$0	\$0	0
Research & Development	\$2,287,813	\$753,259	14
Air Courier	\$1,235,752,037	\$382,538,498	9,016
Catalytic			
▶ Visitor Expenditures — Airlines	\$2,316,337,746	\$678,324,052	21,231
▶ Visitor Expenditures — General Aviation	\$106,548,763	\$31,202,094	977
Travel Arrangements	\$21,289,581	\$6,087,197	165
Total Aviation	\$6,171,343,272	\$1,713,593,488	43,399

TOTAL FAA SPENDING (FISCAL YEAR)	TOTAL	ECONOMIC IMPAC	T ⁷
	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$517,217,073	\$174,463,860	3,735
		TRADE	FLOWS ⁸
ENABLING EFFECTS			
		Value (\$)	Weight (Tons)
Within State		\$435,387,200	98,669
State-to-State		\$2,235,342,200	14,633
Exports		\$88,978,400	1,980
Total Enabling Effects		\$2,759,707,800	115,282



Economic Impact of Civil Aviation by State (2016)

Arizona

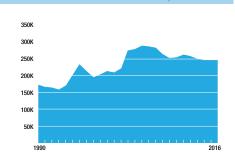
Largest Commercial Airport:1 **Phoenix Sky Harbor International** Population (Census Estimate):² 6,945,452

Gross Domestic Product (\$Millions):3 \$311,397

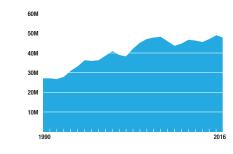
Contribution to Gross Domestic Product: **7.4**%

Percent of International Visitors:4 2.7%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS				
ACTIVITY			Commer	cial ⁶	
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers	
Commercial Aviation	10	929,964	351,028	48,262,199	
General Aviation	41	2,534,820	-	_	
Reliever Airports	8	-	-	_	
Total Aviation	59	3,464,784	351,028	48,262,199	

TOTAL ECONOMIC IMPACT⁷

			•
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$5,465,836,151	\$1,309,593,424	25,813
Airport Operations	\$1,264,525,604	\$417,658,523	10,334
General Aviation	\$1,404,264,612	\$336,456,427	6,632
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$10,202,713,209	\$2,460,921,210	44,465
Avionics Manufacturing	\$3,843,141,551	\$926,975,831	16,749
Research & Development	\$144,202,478	\$47,468,623	913
Air Courier	\$742,541,429	\$237,333,866	7,065
Catalytic			
▶ Visitor Expenditures — Airlines	\$17,053,020,080	\$5,044,075,246	160,032
Visitor Expenditures — General Aviation	\$292,268,848	\$86,449,559	2,743
Travel Arrangements	\$669,119,993	\$195,321,335	4,699
Total Aviation	\$41,081,633,957	\$11,062,254,044	279,445

	TOTAL FAA SPENDING (FISCAL YEAR)	TOTAL ECONOMIC IMPACT ⁷		
		Economic Activity	Earnings (Payroll)	Jobs
	Total FAA Spending	\$344,867,859	\$112,645,252	2,816

ENABLING EFFECTS	TRADE FLOWS ⁸		
ENABEING ETT EGTO	Value (\$)	Weight (Tons)	
Within State	\$0	0	
State-to-State	\$2,547,813,100	28,996	
Exports	\$9,396,854,400	57,544	
Total Enabling Effects	\$11,944,667,500	86,540	

Largest Commercial Airport:1

Adams Field/Clinton National

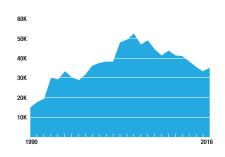
Population (Census Estimate):² **2,990,410**

Gross Domestic Product (\$Millions):³ **\$120,090**

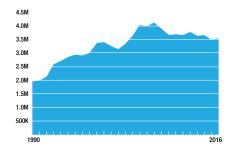
Contribution to Gross Domestic Product: **2.4**%

Percent of International Visitors:⁴ 0.1%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commerci	al ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	7	101,373	20,744	3,555,635
General Aviation	69	1,454,991	_	_
Reliever Airports	2	_	_	_
Total Aviation	78	1,556,364	20,744	3,555,635

	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$852,240,872	\$186,534,028	4,525
Airport Operations	\$211,991,528	\$67,719,367	1,623
General Aviation	\$782,063,223	\$171,173,911	4,152
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$1,946,730,618	\$436,046,773	8,605
Avionics Manufacturing	\$19,880,271	\$4,452,967	88
Research & Development	\$2,328,088	\$756,945	15
Air Courier	\$59,380,696	\$17,811,386	519
Catalytic			
▶ Visitor Expenditures — Airlines	\$1,328,915,618	\$380,815,118	13,600
▶ Visitor Expenditures — General Aviation	\$122,225,197	\$35,024,950	1,251
Travel Arrangements	\$11,881,767	\$3,345,048	94
Total Aviation	\$5,337,637,878	\$1,303,680,491	34,472

TOTAL FAA SPENDING (FISCAL YEAR)	TOTAL ECONOMIC IMPACT ⁷		
	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$111,179,119	\$35,488,609	851

ENABLING EFFECTS	TRADE	E FLOWS ⁸
	Value (\$)	Weight (Tons)
Within State	\$0	0
State-to-State	\$755,829,600	5,019
Exports	\$553,798,800	7,091
Total Enabling Effects	\$1,309,628,400	12,110



Economic Impact of Civil Aviation by State (2016)

California

Largest Commercial Airport:

Los Angeles International

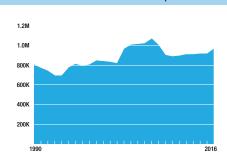
Population (Census Estimate):² **39,209,127**

Gross Domestic Product (\$Millions):³ \$2,663,396

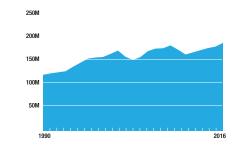
Contribution to Gross Domestic Product: 4.1%

Percent of International Visitors:⁴ **16.0**%

Number of Commercial Departures⁶



Number of Passengers⁶



ACTIVITY	AVIATION STATISTICS			
			Commer	cial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	26	2,308,664	4,562,656	214,365,780
General Aviation	128	7,787,793	_	_
Reliever Airports	36	_	_	_
Total Aviation	190	10,096,457	4,562,656	214,365,780

A.W.A.T.O.V. A.O.T.V.	тота	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs	
Direct				
▶ Airlines	\$37,434,895,311	\$8,778,737,256	141,392	
Airport Operations	\$9,517,167,248	\$3,092,056,049	59,271	
▶ General Aviation	\$5,013,792,520	\$1,175,768,406	18,937	
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$24,120,033,451	\$5,860,687,478	93,324	
Avionics Manufacturing	\$1,127,385,065	\$273,932,105	4,362	
▶ Research & Development	\$3,830,968,374	\$1,254,196,709	19,814	
▶ Air Courier	\$5,461,827,876	\$1,689,810,863	42,920	
Catalytic				
▶ Visitor Expenditures — Airlines	\$104,427,104,162	\$30,611,855,953	759,592	
▶ Visitor Expenditures — General Aviation	\$1,104,791,797	\$323,859,669	8,036	
Travel Arrangements	\$2,773,363,479	\$809,421,391	16,584	
Total Aviation	\$194,811,329,284	\$53,870,325,879	1,164,233	

	TOTAL FAA SPENDING (FISCAL YEAR)	TOTAL ECONOMIC IMPACT ⁷		
		Economic Activity	Earnings (Payroll)	Jobs
	Total FAA Spending	\$1,445,089,582	\$455,384,014	9,581

ENABLING EFFECTS	TRADE	FLOWS ⁸
	Value (\$)	Weight (Tons)
Within State	\$3,741,302,900	8,774
State-to-State	\$31,040,073,400	212,431
Exports	\$79,689,442,200	609,471
Total Enabling Effects	\$114,470,818,500	830,676

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Colorado

Largest Commercial Airport:1 **Denver International**

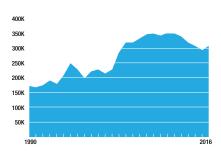
Population (Census Estimate):² 5,540,921

Gross Domestic Product (\$Millions):³ \$329,097

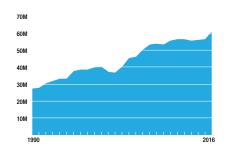
Contribution to Gross Domestic Product: 5.0%

Percent of International Visitors:4 1.1%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commerc	cial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	13	700,660	287,851	60,897,381
General Aviation	32	1,502,300	_	_
Reliever Airports	4	_	_	_
Total Aviation	49	2,202,960	287,851	60,897,381

	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$6,945,038,918	\$1,653,288,026	29,848
Airport Operations	\$2,171,807,150	\$715,090,758	14,488
▶ General Aviation	\$883,209,631	\$210,250,788	3,796
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$1,790,547,768	\$443,083,136	7,726
Avionics Manufacturing	\$0	\$0	0
Research & Development	\$537,545,141	\$177,190,309	3,130
▶ Air Courier	\$654,428,007	\$205,943,696	5,538
Catalytic			
▶ Visitor Expenditures — Airlines	\$15,408,416,508	\$4,554,556,949	128,331
▶ Visitor Expenditures — General Aviation	\$201,808,043	\$59,652,218	1,681
Travel Arrangements	\$218,173,429	\$63,941,086	1,392
Total Aviation	\$28,810,974,595	\$8,082,996,965	195,929

TOTAL FAA SPENDING (FISCAL YEAR)	TOTAL ECONOMIC IMPACT ⁷		
	Jobs		
Total FAA Spending	3,061		

ENABLING EFFECTS	TRADI	FLOWS ⁸
	Value (\$)	Weight (Tons)
Within State	\$0	0
State-to-State	\$1,993,312,700	34,937
Exports	\$3,337,277,200	30,645
Total Enabling Effects	\$5,330,589,900	65,582



Connecticut

Largest Commercial Airport:1 **Bradley International**

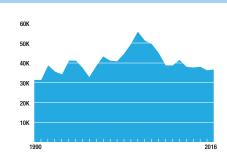
Population (Census Estimate):² 3,578,674

Gross Domestic Product (\$Millions):³ \$262,979

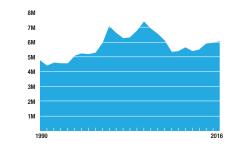
Contribution to Gross Domestic Product: **4.2**%

Percent of International Visitors:4 0.6%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS				
ACTIVITY			Commer	Commercial ⁶	
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers	
Commercial Aviation	2	99,218	129,497	6,055,972	
General Aviation	8	359,425	_	_	
Reliever Airports	3	_	_	_	
Total Aviation	13	458,643	129,497	6,055,972	

	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$1,077,193,651	\$235,963,399	4,155
Airport Operations	\$144,956,011	\$45,502,317	848
▶ General Aviation	\$179,109,024	\$39,234,518	691
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$11,975,513,737	\$2,692,316,952	40,315
Avionics Manufacturing	\$291,858,765	\$65,615,248	983
Research & Development	\$2,365,533,987	\$735,572,813	10,985
▶ Air Courier	\$341,235,467	\$101,865,230	2,683
Catalytic			
▶ Visitor Expenditures — Airlines	\$4,085,366,317	\$1,137,908,377	28,321
▶ Visitor Expenditures — General Aviation	\$47,363,636	\$13,192,324	328
Travel Arrangements	\$268,776,471	\$73,645,886	1,453
Total Aviation	\$20,776,907,068	\$5,140,817,065	90,741

TOTAL FAA SPENDING (FISCAL YEAR)	TOTAL ECONOMIC IMPACT ⁷		
	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$86,926,301	\$27,199,711	527

ENABLING EFFECTS	TRADE	FLOWS ⁸
ENABEING ETT EGTO	Value (\$)	Weight (Tons)
Within State	\$0	0
State-to-State	\$689,820,300	14,818
Exports	\$9,341,269,000	64,416
Total Enabling Effects	\$10,031,089,300	79,234



Delaware

Largest Commercial Airport:1
New Castle

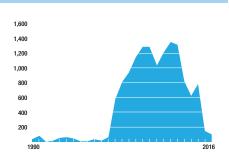
Population (Census Estimate):² **949,216**

Gross Domestic Product (\$Millions):³ **\$70,380**

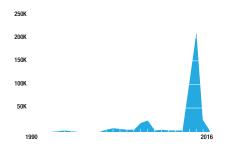
Contribution to Gross Domestic Product: **0.4**%

Percent of International Visitors:⁴ 0.1%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commerc	ial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	1	5,155	4,930	3,118
General Aviation	2	121,486	-	_
Reliever Airports	1	_	-	_
Total Aviation	4	126,641	4,930	3,118

	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$0	\$0	0
Airport Operations	\$16,824,634	\$4,675,426	97
General Aviation	\$67,811,608	\$12,621,350	206
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$86,275,850	\$14,268,837	231
Avionics Manufacturing	\$0	\$0	0
Research & Development	\$4,853,343	\$1,199,845	20
Air Courier	\$230,320	\$60,994	2
Catalytic			
▶ Visitor Expenditures — Airlines	\$295,032,986	\$74,248,021	2,566
▶ Visitor Expenditures — General Aviation	\$10,700,947	\$2,693,001	93
Travel Arrangements	\$24,267,984	\$5,747,681	126
Total Aviation	\$505,997,672	\$115,515,155	3,341

	TOTAL ECONOMIC IMPACT ⁷		
TOTAL FAA SPENDING (FISCAL YEAR)	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$26,422,355	\$7,066,355	160

ENABLING EFFECTS	TRADE	FLOWS ⁸
	Value (\$)	Weight (Tons)
Within State	\$0	0
State-to-State	\$128,484,500	4,026
Exports	\$1,350,254,600	13,497
Total Enabling Effects	\$1,478,739,100	17,523



Largest Commercial Airport:¹
Ronald Reagan Washington
National

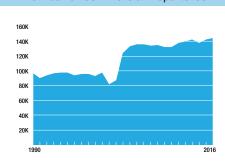
Population (Census Estimate):² **686,575**

Gross Domestic Product (\$Millions):³ \$129,817

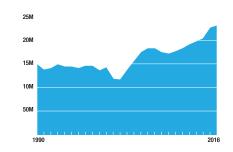
Contribution to Gross Domestic Product: **3.8**%

Percent of International Visitors:⁴ **0.7**%

Number of Commercial Departures⁶



Number of Passengers⁶



Economic Impact of Civil Aviation by State (2016)

District of Columbia

	AVIATION STATISTICS			
ACTIVITY			Commerc	cial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	0	293,138	2,375	23,031,899
General Aviation	0	3,261	_	_
Reliever Airports	1	_	_	_
Total Aviation	1	296,399	2,375	23,031,899

	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
Airlines	\$2,512,616,921	\$105,668,739	1,435
Airport Operations	\$256,656,370	\$17,823,941	312
▶ General Aviation	\$1,205,222	\$50,686	1
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$0	\$0	0
Avionics Manufacturing	\$0	\$0	0
Research & Development	\$0	\$0	0
Air Courier	\$0	\$0	0
Catalytic			
▶ Visitor Expenditures — Airlines	\$5,575,124,275	\$548,220,554	14,606
▶ Visitor Expenditures — General Aviation	\$601,344	\$59,132	2
Travel Arrangements	\$102,525,696	\$8,043,857	156
Total Aviation	\$8,448,729,828	\$679,866,909	16,510

	TOTAL FAA SPENDING (FISCAL YEAR)	TOTAL ECONOMIC IMPACT ⁷		
		Economic Activity	Earnings (Payroll)	Jobs
	Total FAA Spending	\$2,454,006,518	\$170,479,852	2,998

ENABLING EFFECTS	TRADE	FLOWS ⁸
ENABEING ETT EGTG	Value (\$)	Weight (Tons)
Within State	\$0	0
State-to-State	\$244,200	210
Exports	\$438,012,500	2,087
Total Enabling Effects	\$438,256,700	2,297

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Florida

Largest Commercial Airport:1 Miami International

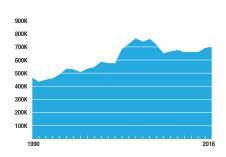
Population (Census Estimate):² 20,629,982

Gross Domestic Product (\$Millions):³ \$938,370

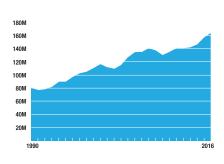
Contribution to Gross Domestic Product: 8.0%

Percent of International Visitors:4 19.5%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commer	cial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	20	1,846,283	2,729,876	163,688,028
General Aviation	59	6,086,404	-	_
Reliever Airports	21	_	_	_
Total Aviation	100	7,932,687	2,729,876	163,688,028

	тота	L ECONOMIC IMPAC	T ⁷
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
Airlines	\$21,247,881,827	\$5,177,681,670	105,874
Airport Operations	\$7,620,523,776	\$2,548,918,343	59,018
General Aviation	\$3,405,451,018	\$829,839,956	16,969
Aircraft, Aircraft Engine, and Parts Manufacturing	\$3,188,755,750	\$775,010,525	15,063
Avionics Manufacturing	\$1,629,376,617	\$396,011,525	7,697
Research & Development	\$1,220,531,959	\$406,006,447	8,241
Air Courier	\$2,097,513,349	\$671,546,195	20,886
Catalytic			
▶ Visitor Expenditures — Airlines	\$85,169,829,941	\$25,361,255,042	734,986
➤ Visitor Expenditures — General Aviation	\$829,974,814	\$247,143,888	7,162
▶ Travel Arrangements	\$1,589,023,175	\$468,052,776	12,303
Total Aviation	\$127,998,862,228	\$36,881,466,367	988,200

TOTAL FAA SPENDING (FISCAL YEAR)	TOTAL	ECONOMIC IMPAC	; T ⁷
	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$1,044,367,842	\$338,832,144	8,823
ENABLING EFFECTS		TRADE	FLOWS ⁸
ENABLING EFFECTS		Value (\$)	Weight (Tons)

ENABLING EFFECTS	TRADE	FLOWS ⁸
	Value (\$)	Weight (Tons)
Within State	\$86,010,200	2,578
State-to-State	\$4,955,187,000	62,129
Exports	\$25,454,627,300	189,147
Total Enabling Effects	\$30,495,824,500	253,854



Georgia

Largest Commercial Airport:1 Hartsfield-Jackson Atlanta International

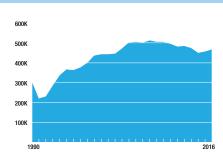
Population (Census Estimate):2 10,304,763

Gross Domestic Product (\$Millions):³ \$538,238

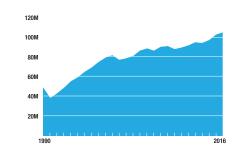
Contribution to Gross Domestic Product: **4.3**%

Percent of International Visitors:4 1.6%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commer	cial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	7	999,640	810,683	104,855,880
General Aviation	87	1,753,690	_	_
Reliever Airports	4	_	_	_
Total Aviation	98	2,753,330	810,683	104,855,880

	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$7,527,241,134	\$1,779,251,198	33,732
Airport Operations	\$1,929,680,182	\$617,556,520	15,288
General Aviation	\$1,008,649,455	\$238,419,458	4,520
Aircraft, Aircraft Engine, and Parts Manufacturing	\$9,786,465,713	\$2,354,334,834	43,674
Avionics Manufacturing	\$0	\$0	0
Research & Development	\$291,935,521	\$94,350,750	1,908
Air Courier	\$547,210,030	\$170,120,708	4,403
Catalytic			
▶ Visitor Expenditures — Airlines	\$20,119,171,568	\$5,833,675,112	182,392
▶ Visitor Expenditures — General Aviation	\$257,596,151	\$74,691,557	2,335
Travel Arrangements	\$333,876,178	\$96,166,172	2,288
Total Aviation	\$41,801,825,933	\$11,258,566,307	209,540

	TOTAL ECONOMIC IMPACT ⁷			
	TOTAL FAA SPENDING (FISCAL YEAR)	Economic Activity	Earnings (Payroll)	Jobs
	Total FAA Spending	\$868,615,437	\$269,567,872	7,063

ENABLING EFFECTS	TRADE FLOWS ⁸		
ENABLING ETTEOTS	Value (\$)	Weight (Tons)	
Within State	\$2,207,600	220	
State-to-State	\$6,682,197,400	58,418	
Exports	\$10,476,597,800	100,124	
Total Enabling Effects	\$17,161,002,800	158,761	

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Hawaii

Largest Commercial Airport:1 Honolulu International

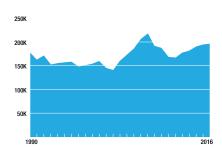
Population (Census Estimate):² 1,428,105

Gross Domestic Product (\$Millions):³ **\$85,867**

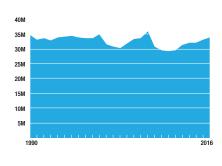
Contribution to Gross Domestic Product: **20.7**%

Percent of International Visitors:⁴ **6.0**%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commerc	cial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	9	646,550	770,154	33,819,581
General Aviation	5	289,667	_	_
Reliever Airports	1	_	_	_
Total Aviation	15	936,217	770,154	33,819,581

	TOTAI	L ECONOMIC IMPAC	T ⁷
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$6,540,902,470	\$1,503,281,843	27,819
Airport Operations	\$1,073,963,134	\$355,051,848	7,962
General Aviation	\$168,563,560	\$38,740,608	717
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$0	\$0	0
Avionics Manufacturing	\$0	\$0	0
Research & Development	\$2,528,545	\$829,467	16
Air Courier	\$800,564,421	\$250,664,900	6,377
Catalytic			
▶ Visitor Expenditures — Airlines	\$21,748,593,334	\$6,365,754,350	171,327
▶ Visitor Expenditures — General Aviation	\$26,007,555	\$7,612,341	205
Travel Arrangements	\$169,086,395	\$48,645,869	1,311
Total Aviation	\$30,530,214,415	\$8,570,581,227	215,733

	TOTAL ECONOMIC IMPACT ⁷		
TOTAL FAA SPENDING (FISCAL YEAR)	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$148,864,468	\$48,272,323	1,123
		· · · · · · · · · · · · · · · · · · ·	

ENABLING EFFECTS	TRADE	FLOWS ⁸
	Value (\$)	Weight (Tons)
Within State	\$397,792,400	48,956
State-to-State	\$326,787,300	31,483
Exports	\$445,196,600	10,893
Total Enabling Effects	\$1,169,776,300	91,331



Largest Commercial Airport:

Boise Air Terminal/Gowen Field

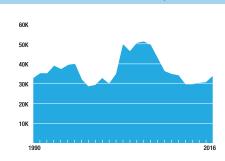
Population (Census Estimate):² 1,682,930

Gross Domestic Product (\$Millions):³ \$69,313

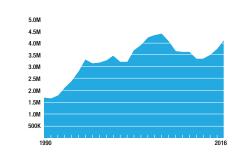
Contribution to Gross Domestic Product: **2.5**%

Percent of International Visitors:⁴ 0.1%

Number of Commercial Departures⁶



Number of Passengers⁶



Economic Impact of Civil Aviation by State (2016)

Idaho

	AVIATION STATISTICS			
ACTIVITY			Commerc	ial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	6	158,549	45,461	4,100,649
General Aviation	30	863,571	-	-
Reliever Airports	1	_	_	_
Total Aviation	37	1,022,120	45,461	4,100,649

	TOTAL	ECONOMIC IMPACT	ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs		
Direct					
Airlines	\$676,479,917	\$153,776,874	3,886		
Airport Operations	\$96,282,346	\$32,059,775	838		
General Aviation	\$411,970,833	\$93,648,881	2,366		
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$84,050,359	\$19,321,333	411		
Avionics Manufacturing	\$0	\$0	0		
Research & Development	\$2,437,464	\$806,565	15		
Air Courier	\$289,904,254	\$92,446,506	2,816		
Catalytic					
▶ Visitor Expenditures — Airlines	\$1,415,319,995	\$408,829,705	15,081		
▶ Visitor Expenditures — General Aviation	\$110,747,002	\$31,990,408	1,180		
Travel Arrangements	\$19,649,837	\$5,648,851	153		
Total Aviation	\$3,106,842,007	\$838,528,899	26,748		

	TOTAL FAA SPENDING (FISCAL YEAR)	TOTAL ECONOMIC IMPACT ⁷		
		Economic Activity	Earnings (Payroll)	Jobs
	Total FAA Spending	\$63,368,334	\$20,907,377	529

ENABLING EFFECTS	TRADE FLOWS ⁸		
ENABEING EIT EOTO	Value (\$)	Weight (Tons)	
Within State	\$0	0	
State-to-State	\$428,472,800	4,066	
Exports	\$2,812,374,300	14,013	
Total Enabling Effects	\$3,240,847,100	18,079	



Illinois

State-to-State

Total Enabling Effects

Exports

Largest Commercial Airport:
Chicago O'Hare International

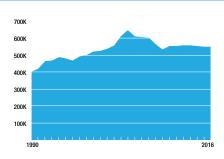
Population (Census Estimate):² 12,826,895

Gross Domestic Product (\$Millions):³ \$805,434

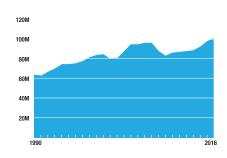
Contribution to Gross Domestic Product: **3.9**%

Percent of International Visitors:⁴ **3.2**%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commer	cial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	12	1,282,863	2,036,844	100,802,982
General Aviation	65	1,980,894	-	_
Reliever Airports	9	_	_	_
Total Aviation	86	3,263,757	2,036,844	100,802,982

	TOTAL ECONOMIC IMPACT ⁷		CT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs		
Direct					
▶ Airlines	\$11,417,278,262	\$2,564,088,976	42,362		
Airport Operations	\$4,915,049,896	\$1,512,116,217	31,147		
General Aviation	\$1,272,017,418	\$285,669,295	4,720		
Aircraft, Aircraft Engine, and Parts Manufacturing	\$1,427,222,021	\$334,609,491	5,522		
Avionics Manufacturing	\$1,123,284,027	\$263,351,805	4,346		
Research & Development	\$642,031,129	\$202,908,523	3,283		
Air Courier	\$987,499,882	\$293,866,448	7,972		
Catalytic					
▶ Visitor Expenditures — Airlines	\$31,897,123,828	\$9,115,446,000	224,643		
▶ Visitor Expenditures — General Aviation	\$274,896,803	\$78,559,025	1,936		
Travel Arrangements	\$1,558,419,769	\$441,977,099	9,008		
Total Aviation	\$55,514,823,035	\$15,092,592,880	334,938		

	TOTAL FAA CRENDING (FISCAL VEAR)	TOTAL	ECONOMIC IMPAC	T ⁷
TOTAL FAA SPENDING (FISCAL YEAR)	Economic Activity	Earnings (Payroll)	Jobs	
	Total FAA Spending	\$1,291,220,501	\$393,946,209	8,250
	ENABLING EFFECTS		TRADE	FLOWS ⁸
ENABLING EFFECTS			Value (\$)	Weight (Tons)
	Within State		¢2 000 000	386
	Within State		\$3,920,800	300

\$6,870,896,200

\$14,094,497,400

\$20,969,314,400

Largest Commercial Airport:¹
Indianapolis International

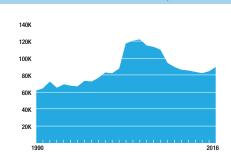
Population (Census Estimate):² **6,633,344**

Gross Domestic Product (\$Millions):³ \$338,227

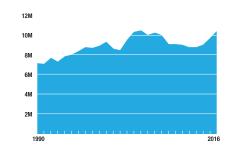
Contribution to Gross Domestic Product: 2.1%

Percent of International Visitors:⁴ 0.3%

Number of Commercial Departures⁶



Number of Passengers⁶



Economic Impact of Civil Aviation by State (2016)

Indiana

	AVIATION STATISTICS			
ACTIVITY			Commerc	ial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	4	244,517	1,112,204	10,384,054
General Aviation	54	1,076,039	-	_
Reliever Airports	7	_	_	_
Total Aviation	65	1,320,556	1,112,204	10,384,054

	TOTA	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs	
Direct				
▶ Airlines	\$2,140,598,922	\$462,418,886	9,675	
▶ Airport Operations	\$586,825,370	\$182,042,991	4,409	
▶ General Aviation	\$617,108,360	\$133,309,682	2,789	
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$2,377,380,377	\$540,477,768	10,257	
▶ Avionics Manufacturing	\$257,567,165	\$58,555,765	1,111	
▶ Research & Development	\$286,771,820	\$90,904,421	1,574	
▶ Air Courier	\$2,414,741,739	\$721,918,955	19,686	
Catalytic				
▶ Visitor Expenditures — Airlines	\$4,572,361,649	\$1,292,205,390	40,632	
▶ Visitor Expenditures — General Aviation	\$143,261,613	\$40,487,486	1,273	
Travel Arrangements	\$102,164,298	\$28,774,491	669	
Total Aviation	\$13,498,781,314	\$3,551,095,834	92,075	

	TOTAL ECONOMIC IMPACT			
	TOTAL FAA SPENDING (FISCAL YEAR)	Economic Activity	Earnings (Payroll)	Jobs
	Total FAA Spending	\$354,726,154	\$108,260,493	2,591

ENABLING EFFECTS	TRADE	FLOWS ⁸
ENABEING EIT EGTO	Value (\$)	Weight (Tons)
Within State	\$2,614,900	224
State-to-State	\$3,080,168,500	24,394
Exports	\$11,963,596,000	85,950
Total Enabling Effects	\$15,046,379,400	110,568

103,127

141,241

244,754



Iowa

Largest Commercial Airport:1 **Des Moines International**

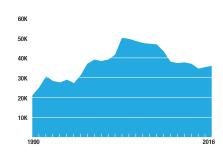
Population (Census Estimate):² 3,131,785

Gross Domestic Product (\$Millions):3 \$180,351

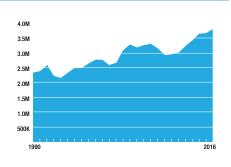
Contribution to Gross Domestic Product: 1.1%

Percent of International Visitors:4 0.1%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commerc	ial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	6	102,274	113,374	3,793,280
General Aviation	72	797,995	_	_
Reliever Airports	1	_	_	_
Total Aviation	79	900,269	113,374	3,793,280

	TOTAL	ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs	
Direct				
▶ Airlines	\$710,890,242	\$153,497,231	3,853	
Airport Operations	\$111,562,251	\$35,467,456	909	
▶ General Aviation	\$372,539,711	\$80,439,723	2,019	
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$481,772,431	\$106,692,431	1,951	
Avionics Manufacturing	\$0	\$0	0	
Research & Development	\$32,771,974	\$10,486,663	209	
▶ Air Courier	\$304,783,162	\$93,384,452	2,809	
Catalytic				
▶ Visitor Expenditures — Airlines	\$1,445,763,037	\$404,120,429	14,058	
▶ Visitor Expenditures — General Aviation	\$104,512,031	\$29,213,257	1,016	
▶ Travel Arrangements	\$39,289,896	\$10,849,697	300	
Total Aviation	\$3,603,884,737	\$924,151,340	27,125	

TOTAL FAA SPENDING (FISCAL YEAR)	TOTAL ECONOMIC IMPACT ⁷		
	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$117,279,103	\$37,541,703	872

ENABLING EFFECTS	TRADI	E FLOWS ⁸
	Value (\$)	Weight (Tons)
Within State	\$0	0
State-to-State	\$209,840,100	11,008
Exports	\$1,517,457,000	16,534
Total Enabling Effects	\$1,727,297,100	27,542

Economic Impact of Civil Aviation by State (2016)

Kansas

Largest Commercial Airport:1 **Wichita Dwight D Eisenhower** National

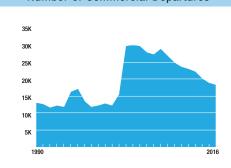
Population (Census Estimate):² 2,911,263

Gross Domestic Product (\$Millions):3 \$155,682

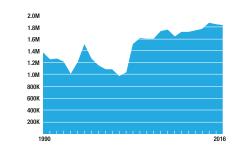
Contribution to Gross Domestic Product: 5.3%

Percent of International Visitors:4 0.1%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commer	cial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	7	108,510	31,482	1,830,361
General Aviation	69	1,221,700	_	_
Reliever Airports	4	_	_	_
Total Aviation	80	1,330,210	31,482	1,830,361

AVIATION ACTIVITY	TOTAL ECONOMIC IMPACT ⁷		
	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$437,969,380	\$87,406,884	2,026
Airport Operations	\$146,238,481	\$41,285,742	862
▶ General Aviation	\$725,751,685	\$144,840,475	3,358
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$10,685,278,055	\$2,334,184,879	43,070
Avionics Manufacturing	\$1,764,398,265	\$385,430,471	7,112
Research & Development	\$989,620,711	\$289,862,396	5,735
▶ Air Courier	\$223,669,627	\$56,130,832	1,481
Catalytic			
▶ Visitor Expenditures — Airlines	\$872,307,820	\$233,338,031	8,195
▶ Visitor Expenditures — General Aviation	\$141,616,605	\$37,881,742	1,330
Travel Arrangements	\$35,436,514	\$9,019,130	226
Total Aviation	\$16,022,287,142	\$3,619,380,582	73,395

TOTAL FAA SPENDING (FISCAL YEAR)	TOTAL	ECONOMIC IMPACT	
	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$221,140,186	\$62,702,615	1,562

ENABLING EFFECTS	TRADE FLOWS ⁸		
	Value (\$)	Weight (Tons)	
Within State	\$2,874,700	238	
State-to-State	\$1,932,966,800	23,628	
Exports	\$2,679,242,400	16,668	
Total Enabling Effects	\$4,615,083,900	40,534	



Kentucky

Largest Commercial Airport:1 Cincinnati/Northern Kentucky International

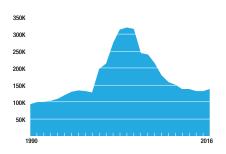
Population (Census Estimate):² **4,438,229**

Gross Domestic Product (\$Millions):³ \$195,080

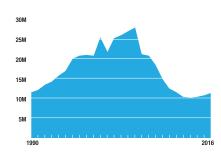
Contribution to Gross Domestic Product: **3.6**%

Percent of International Visitors:⁴ 0.1%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commerc	ial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	5	358,658	3,629,571	11,263,538
General Aviation	49	787,148	-	_
Reliever Airports	1	_	_	_
Total Aviation	55	1,145,806	3,629,571	11,263,538

	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$2,379,949,776	\$490,729,721	9,560
Airport Operations	\$467,339,103	\$137,187,838	3,078
➤ General Aviation	\$443,034,021	\$91,350,651	1,780
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$756,152,925	\$165,056,618	3,433
Avionics Manufacturing	\$0	\$0	0
Research & Development	\$1,011,418	\$307,042	6
▶ Air Courier	\$4,871,827,799	\$1,368,116,026	33,901
Catalytic			
➤ Visitor Expenditures — Airlines	\$3,932,507,502	\$1,066,307,278	30,871
➤ Visitor Expenditures — General Aviation	\$110,277,112	\$29,901,859	866
Travel Arrangements	\$35,960,459	\$9,717,749	272
Total Aviation	\$12,998,060,114	\$3,358,674,784	83,765

TOTAL FAA SPENDING (FISCAL YEAR)	TOTAL ECONOMIC IMPACT ⁷		
	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$150,134,564	\$45,029,519	1,089

ENABLING EFFECTS	TRADI	E FLOWS ⁸
	Value (\$)	Weight (Tons)
Within State	\$0	0
State-to-State	\$2,412,647,500	46,575
Exports	\$14,353,744,900	119,386
Total Enabling Effects	\$16,766,392,400	165,960



Economic Impact of Civil Aviation by State (2016)

Louisiana

Largest Commercial Airport:

Louis Armstrong New Orleans
International

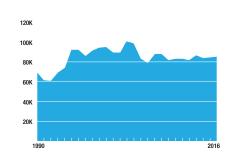
Population (Census Estimate):² 4,678,215

Gross Domestic Product (\$Millions):³ **\$228,087**

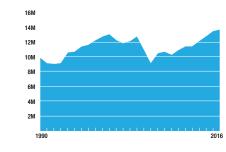
Contribution to Gross Domestic Product: **3.0**%

Percent of International Visitors:⁴
1.1%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commer	cial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	7	317,946	97,676	13,652,067
General Aviation	46	1,357,344	_	_
Reliever Airports	3	_	_	_
Total Aviation	56	1,675,290	97,676	13,652,067

AVIATION ACTIVITY	TOTAL ECONOMIC IMPACT ⁷		
	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$2,867,558,569	\$652,962,934	11,665
▶ Airport Operations	\$854,577,673	\$278,292,571	5,928
▶ General Aviation	\$827,075,282	\$188,330,766	3,364
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$1,373,909,110	\$305,461,621	5,833
Avionics Manufacturing	\$52,100,055	\$11,583,421	221
▶ Research & Development	\$10,186,834	\$3,374,201	69
▶ Air Courier	\$317,316,286	\$98,599,663	2,854
Catalytic			
▶ Visitor Expenditures — Airlines	\$6,045,188,463	\$1,773,621,850	49,761
▶ Visitor Expenditures — General Aviation	\$130,810,934	\$38,379,139	1,077
Travel Arrangements	\$41,942,338	\$12,143,911	340
Total Aviation	\$12,520,665,544	\$3,362,750,077	81,113

TOTAL FAA SPENDING (FISCAL YEAR)	TOTAL ECONOMIC IMPACT		
	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$169,555,053	\$56,447,086	1,284

ENABLING EFFECTS	TRADE FLOWS ⁸	
ENABEING ETTEOTO	Value (\$)	Weight (Tons)
Within State	\$231,200	0
State-to-State	\$121,761,100	7,411
Exports	\$860,815,700	12,870
Total Enabling Effects	\$982,808,000	20,281

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Maine

Largest Commercial Airport:1 **Portland International Jetport**

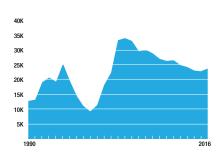
Population (Census Estimate):² 1,331,370

Gross Domestic Product (\$Millions):³ \$59,604

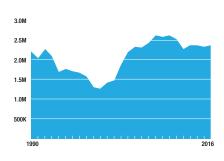
Contribution to Gross Domestic Product: 3.0%

Percent of International Visitors:4 0.1%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commerc	cial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	6	91,221	12,318	2,372,703
General Aviation	27	387,461	_	_
Reliever Airports	2	_	_	_
Total Aviation	35	478,682	12,318	2,372,703

	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$441,102,770	\$103,590,316	2,631
Airport Operations	\$145,515,015	\$49,269,095	1,271
General Aviation	\$189,325,444	\$44,461,935	1,129
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$1,112,191,362	\$262,906,934	5,107
Avionics Manufacturing	\$0	\$0	0
Research & Development	\$66,816,921	\$22,295,803	473
Air Courier	\$197,223,263	\$63,295,309	1,781
Catalytic			
▶ Visitor Expenditures — Airlines	\$1,017,814,413	\$300,533,144	9,807
➤ Visitor Expenditures — General Aviation	\$40,450,440	\$11,943,924	390
Travel Arrangements	\$41,935,536	\$12,233,194	349
Total Aviation	\$3,252,375,164	\$870,529,654	22,939

	TOTAL ECONOMIC IMPACT ⁷		
TOTAL FAA SPENDING (FISCAL YEAR)	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$77,298,715	\$25,661,686	648

TRADE	FLOWS ⁸
Value (\$)	Weight (Tons)
\$0	0
\$51,984,700	2,033
\$891,835,800	13,850
\$943,820,500	15,882
	Value (\$) \$0 \$51,984,700 \$891,835,800



Largest Commercial Airport:1 **Baltimore/Washington** International Thurgood Marshall

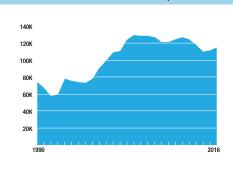
Population (Census Estimate):² 6,004,692

Gross Domestic Product (\$Millions):3 \$384,156

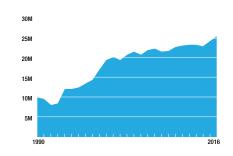
Contribution to Gross Domestic Product: **2.2**%

Percent of International Visitors:4 0.8%

Number of Commercial Departures⁶



Number of Passengers⁶



Economic Impact of Civil Aviation by State (2016)

Maryland

	AVIATION STATISTICS			
ACTIVITY			Commer	cial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	3	254,851	134,073	25,461,450
General Aviation	9	566,673	-	_
Reliever Airports	6	_	-	_
Total Aviation	18	821,524	134,073	25,461,450

	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
Airlines	\$2,620,918,379	\$571,646,683	9,404
Airport Operations	\$934,835,693	\$288,885,793	6,089
▶ General Aviation	\$295,688,937	\$64,492,508	1,061
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$691,733,716	\$149,242,445	2,477
Avionics Manufacturing	\$400,092,827	\$86,320,545	1,433
Research & Development	\$936,978,108	\$283,123,323	4,619
Air Courier	\$318,074,748	\$94,130,665	2,596
Catalytic			
▶ Visitor Expenditures — Airlines	\$8,421,332,801	\$2,269,568,684	59,154
▶ Visitor Expenditures — General Aviation	\$60,171,543	\$16,216,370	423
Travel Arrangements	\$193,370,977	\$51,636,004	1,077
Total Aviation	\$14,873,197,730	\$3,875,263,020	88,333

TOTAL FAA SPENDING (FY 2014)	TOTAL ECONOMIC IMPACT ⁷		
	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$828,860,927	\$249,316,734	5,566

ENABLING EFFECTS	TRADE FLOWS ⁸	
	Value (\$)	Weight (Tons)
Within State	\$0	0
State-to-State	\$975,298,900	18,031
Exports	\$3,912,812,600	39,456
Total Enabling Effects	\$4,888,111,500	57,487



Massachusetts

Largest Commercial Airport:1 General Edward Lawrence Logan

Population (Census Estimate):² 6,826,022

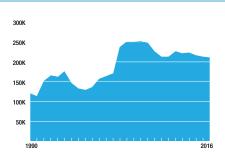
International

Gross Domestic Product (\$Millions):³ \$519,741

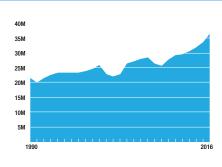
Contribution to Gross Domestic Product: **3.1**%

Percent of International Visitors:4 3.0%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commer	cial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	7	582,538	326,114	36,334,711
General Aviation	17	983,585	_	_
Reliever Airports	4	_	_	_
Total Aviation	28	1,566,123	326,114	36,334,711

	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$5,425,099,638	\$1,175,114,386	20,672
Airport Operations	\$1,474,902,889	\$454,562,991	10,503
▶ General Aviation	\$491,100,550	\$106,375,801	1,871
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$785,239,896	\$81,205,022	1,416
Avionics Manufacturing	\$92,442,916	\$9,559,918	167
Research & Development	\$483,812,739	\$152,396,590	2,383
▶ Air Courier	\$395,161,853	\$117,183,688	3,358
Catalytic			
▶ Visitor Expenditures — Airlines	\$18,377,259,422	\$5,161,346,868	129,771
▶ Visitor Expenditures — General Aviation	\$129,252,639	\$36,301,262	913
Travel Arrangements	\$419,702,835	\$116,162,593	2,351
Total Aviation	\$28,073,975,377	\$7,410,209,118	173,404

TOTAL FAA SPENDING (FISCAL YEAR)	TOTAL ECONOMIC IMPACT ⁷		
	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$890,091,449	\$274,184,992	6,237

ENABLING EFFECTS	TRADI	E FLOWS ⁸
	Value (\$)	Weight (Tons)
Within State	\$0	0
State-to-State	\$3,736,818,500	93,438
Exports	\$16,918,028,500	127,766
Total Enabling Effects	\$20,654,847,000	221,203



Largest Commercial Airport:1 **Detroit Metropolitan Wayne**

County

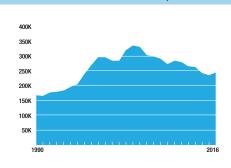
Population (Census Estimate):2 9,951,890

Gross Domestic Product (\$Millions):3 \$490,183

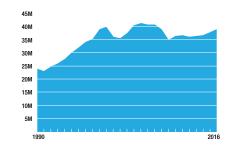
Contribution to Gross Domestic Product: 2.5%

Percent of International Visitors:4 0.8%

Number of Commercial Departures⁶



Number of Passengers⁶



Economic Impact of Civil Aviation by State (2016)

Michigan

	AVIATION STATISTICS			
ACTIVITY			Commer	cial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	19	594,336	311,979	39,060,345
General Aviation	68	1,425,096	-	_
Reliever Airports	8	_	_	_
Total Aviation	95	2,019,432	311,979	39,060,345

	тота	ECONOMIC IMPACT	Γ^7
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$4,940,778,147	\$1,156,462,497	20,399
Airport Operations	\$1,358,728,138	\$447,509,373	10,638
General Aviation	\$751,721,932	\$175,951,681	3,104
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$1,206,918,539	\$291,617,956	5,447
Avionics Manufacturing	\$594,893,923	\$143,739,402	2,685
Research & Development	\$321,952,170	\$106,462,389	1,841
Air Courier	\$857,720,194	\$269,928,574	7,521
Catalytic			
▶ Visitor Expenditures — Airlines	\$11,962,872,011	\$3,541,751,351	102,792
▶ Visitor Expenditures — General Aviation	\$196,719,128	\$58,241,051	1,690
Travel Arrangements	\$152,262,585	\$44,671,835	1,132
Total Aviation	\$22,344,566,768	\$6,236,336,108	157,249

TOTAL FAA SPENDING (FISCAL YEAR)	TOTAL ECONOMIC IMPACT ⁷		
	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$243,116,823	\$78,541,939	1,898

ENABLING EFFECTS	TRADE FLOWS ⁸		
	Value (\$)	Weight (Tons)	
Within State	\$493,400	41	
State-to-State	\$2,177,593,300	114,523	
Exports	\$5,780,558,000	94,414	
Total Enabling Effects	\$7,958,644,700	208,978	



Minnesota

Largest Commercial Airport:

Minneapolis-St. Paul
International/Wold-Chamberlain

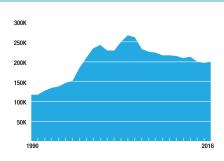
Population (Census Estimate):² **5,523,409**

Gross Domestic Product (\$Millions):³ \$338,638

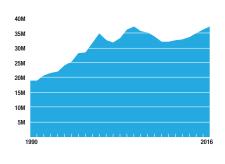
Contribution to Gross Domestic Product: **3.1**%

Percent of International Visitors:⁴ **0.4**%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commerc	cial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	8	490,792	235,175	37,232,013
General Aviation	82	1,488,228	-	_
Reliever Airports	7	_	_	_
Total Aviation	97	1,979,020	235,175	37,232,013

	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$4,727,708,570	\$1,064,492,912	18,368
Airport Operations	\$868,749,145	\$277,678,711	6,449
General Aviation	\$874,743,063	\$196,957,527	3,399
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$441,315,853	\$105,001,382	2,011
Avionics Manufacturing	\$924,723,274	\$220,017,525	4,213
Research & Development	\$209,925,956	\$68,032,613	1,130
Air Courier	\$524,598,116	\$159,454,286	4,246
Catalytic			
▶ Visitor Expenditures — Airlines	\$10,355,525,432	\$2,976,473,577	97,180
▶ Visitor Expenditures — General Aviation	\$188,027,269	\$54,044,404	1,765
Travel Arrangements	\$249,544,890	\$71,790,028	1,622
Total Aviation	\$19,364,861,568	\$5,193,942,964	140,382

TOTAL FAA SPENDING (FISCAL YEAR)	TOTAL ECONOMIC IMPACT ⁷		
	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$316,389,666	\$98,483,698	2,260
	TRADE FI		OWS8

ENABLING EFFECTS	TRADE	E FLOWS ⁸
	Value (\$)	Weight (Tons)
Within State	\$0	0
State-to-State	\$2,631,451,600	26,295
Exports	\$7,580,114,000	69,289
Total Enabling Effects	\$10,211,565,600	95,583



Largest Commercial Airport:

Jackson-Medgar Wiley Evers
International

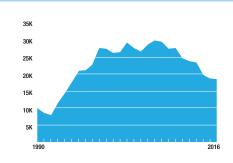
Population (Census Estimate):² 2,988,298

Gross Domestic Product (\$Millions):³ **\$106,891**

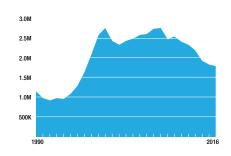
Contribution to Gross Domestic Product: 1.0%

Percent of International Visitors:⁴ **0.1**%

Number of Commercial Departures⁶



Number of Passengers⁶



Economic Impact of Civil Aviation by State (2016)

Mississippi

	AVIATION STATISTICS			
ACTIVITY			Commerci	al ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	6	67,336	9,678	1,783,736
General Aviation	66	1,065,147	_	_
Reliever Airports	1	_	_	_
Total Aviation	73	1,132,483	9,678	1,783,736

AVIATION ACTIVITY	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$418,870,600	\$90,354,638	2,199
▶ Airport Operations	\$97,124,551	\$30,658,932	796
▶ General Aviation	\$597,457,959	\$128,877,743	3,136
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$107,351,784	\$23,614,246	472
Avionics Manufacturing	\$0	\$0	0
Research & Development	\$11,579,238	\$3,689,957	77
▶ Air Courier	\$40,093,724	\$11,433,371	349
Catalytic			
▶ Visitor Expenditures — Airlines	\$672,061,642	\$188,974,935	6,473
▶ Visitor Expenditures — General Aviation	\$115,044,043	\$32,348,879	1,108
Travel Arrangements	\$9,971,303	\$2,780,477	80
Total Aviation	\$2,069,554,845	\$512,733,177	14,690

	TOTAL FAA SPENDING (FISCAL YEAR)	TOTAL ECONOMIC IMPACT ⁷		
		Economic Activity	Earnings (Payroll)	Jobs
	Total FAA Spending	\$116,941,234	\$36,785,858	947

ENABLING EFFECTS	TRADE	FLOWS ⁸
	Value (\$)	Weight (Tons)
Within State	\$0	0
State-to-State	\$2,655,619,900	7,654
Exports	\$1,688,197,200	11,471
Total Enabling Effects	\$4,343,817,100	19,125

The Economic Impact of Civil Aviation on the U.S. Economy

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Missouri

Largest Commercial Airport:1

Lambert-St Louis International

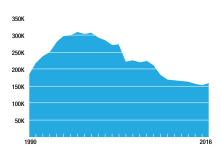
Population (Census Estimate):² **6,087,203**

Gross Domestic Product (\$Millions):³ \$296,070

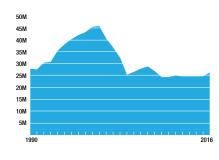
Contribution to Gross Domestic Product: **4.0**%

Percent of International Visitors:⁴ **0.2**%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS				
ACTIVITY				Commercial ⁶	
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers	
Commercial Aviation	8	385,167	207,285	26,308,977	
General Aviation	63	885,226	_	_	
Reliever Airports	5	_	_	_	
Total Aviation	76	1,270,393	207,285	26,308,977	

AVIATION ACTIVITY	TOTAL	ECONOMIC IMPACT	7
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$4,190,267,563	\$904,530,443	19,357
Airport Operations	\$654,359,185	\$195,630,997	4,811
General Aviation	\$477,913,647	\$103,164,640	2,208
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$5,433,906,126	\$1,207,812,546	21,948
Avionics Manufacturing	\$72,807,742	\$16,183,221	294
Research & Development	\$506,910,613	\$146,098,591	2,811
▶ Air Courier	\$433,268,974	\$125,241,981	3,671
Catalytic			
▶ Visitor Expenditures — Airlines	\$9,276,577,468	\$2,520,612,788	85,361
➤ Visitor Expenditures — General Aviation	\$123,001,128	\$33,421,617	1,132
Travel Arrangements	\$364,882,297	\$97,106,739	2,479
Total Aviation	\$21,533,894,742	\$5,349,803,563	144,071

	TOTAL ECONOMIC IMPACT ⁷		
TOTAL FAA SPENDING (FISCAL YEAR)	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$294,630,161	\$87,218,548	2,205

ENABLING EFFECTS	TRADE	FLOWS ⁸
	Value (\$)	Weight (Tons)
Within State	\$3,725,200	116
State-to-State	\$1,495,758,700	20,393
Exports	\$2,349,614,000	22,575
Total Enabling Effects	\$3,849,097,900	43,084

Economic Impact of Civil Aviation by State (2016) Montana



Largest Commercial Airport:1

Bozeman Yellowstone
International

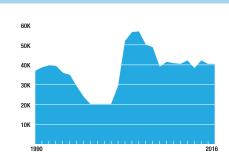
Population (Census Estimate):² 1,040,863

Gross Domestic Product (\$Millions):³ \$45,550

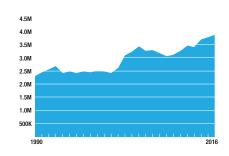
Contribution to Gross Domestic Product: **3.7**%

Percent of International Visitors:⁴ 0.1%

Number of Commercial Departures⁶



Number of Passengers⁶



		AVIATION STATISTICS				
ACTIVITY			Commerc	ial ⁶		
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers		
Commercial Aviation	12	149,515	65,554	3,881,165		
General Aviation	59	589,846	_	_		
Reliever Airports	0	_	_	_		
Total Aviation	71	739,361	65,554	3,881,165		

	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$866,285,073	\$196,165,621	4,755
Airport Operations	\$111,397,697	\$37,501,316	970
▶ General Aviation	\$330,585,520	\$74,859,323	1,815
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$28,294,126	\$6,234,026	122
Avionics Manufacturing	\$0	\$0	0
Research & Development	\$933,078	\$313,939	7
▶ Air Courier	\$505,817,439	\$159,116,525	4,556
Catalytic			
▶ Visitor Expenditures — Airlines	\$1,162,979,328	\$343,260,167	12,786
▶ Visitor Expenditures — General Aviation	\$62,472,732	\$18,439,193	687
Travel Arrangements	\$15,741,761	\$4,602,437	132
Total Aviation	\$3,084,506,754	\$840,492,547	25,829

	TOTAL FAA SPENDING (FISCAL YEAR)	TOTAL ECONOMIC IMPACT ⁷		
		Economic Activity	Earnings (Payroll)	Jobs
	Total FAA Spending	\$100,460,410	\$33,734,463	837

ENABLING EFFECTS	TRADE	FLOWS ⁸
	Value (\$)	Weight (Tons)
Within State	\$0	0
State-to-State	\$543,398,700	4,136
Exports	\$273,806,700	2,345
Total Enabling Effects	\$817,205,400	6,481

The Economic Impact of Civil Aviation on the U.S. Economy

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Nebraska

Largest Commercial Airport:1 **Eppley Airfield**

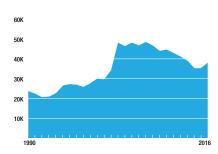
Population (Census Estimate):² 1,905,924

Gross Domestic Product (\$Millions):³ \$116,056

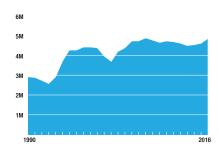
Contribution to Gross Domestic Product: **2.5**%

Percent of International Visitors:4 0.5%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commercia	l ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	6	122,206	70,073	4,839,907
General Aviation	66	697,801	_	_
Reliever Airports	1	_	_	_
Total Aviation	73	820,007	70,073	4,839,907

AVIATION ACTIVITY	TOTAL	ECONOMIC IMPACT	7
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$889,795,744	\$199,757,171	4,932
Airport Operations	\$173,397,361	\$55,393,375	1,332
General Aviation	\$347,887,722	\$78,100,022	1,928
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$87,971,641	\$9,346,929	197
Avionics Manufacturing	\$0	\$0	0
Research & Development	\$10,056,267	\$3,257,323	67
Air Courier	\$428,777,442	\$130,148,322	3,858
Catalytic			
▶ Visitor Expenditures — Airlines	\$3,112,876,021	\$899,119,198	31,651
▶ Visitor Expenditures — General Aviation	\$68,881,930	\$19,895,770	700
Travel Arrangements	\$60,834,178	\$17,123,976	472
Total Aviation	\$5,180,478,306	\$1,412,142,087	45,139

	TOTAL ECONOMIC IMPACT ⁷		
TOTAL FAA SPENDING (FISCAL YEAR)	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$107,963,233	\$34,916,983	812

ENABLING EFFECTS	TRADE	FLOWS ⁸
	Value (\$)	Weight (Tons)
Within State	\$0	0
State-to-State	\$74,732,900	8,839
Exports	\$722,566,500	7,038
Total Enabling Effects	\$797,299,400	15,877



Nevada

Economic Impact of Civil Aviation by State (2016)

Largest Commercial Airport:1 **McCarran International**

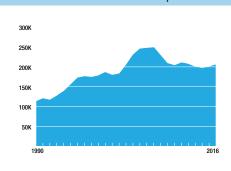
Population (Census Estimate):² 2,919,772

Gross Domestic Product (\$Millions):³ \$150,436

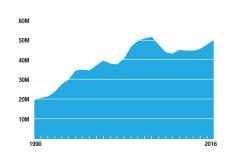
Contribution to Gross Domestic Product: 13.1%

Percent of International Visitors:4 7.3%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commerc	cial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	5	673,357	184,384	49,883,016
General Aviation	22	630.345	_	_
Reliever Airports	3	_	_	_
Total Aviation	30	1,303,702	184,384	49,883,016

	TOTAL	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs	
Direct				
▶ Airlines	\$5,923,025,658	\$1,376,344,697	26,170	
Airport Operations	\$1,113,405,899	\$364,846,100	8,813	
▶ General Aviation	\$327,601,072	\$76,125,282	1,447	
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$70,491,208	\$16,611,521	342	
Avionics Manufacturing	\$0	\$0	0	
▶ Research & Development	\$95,009,374	\$30,894,552	572	
▶ Air Courier	\$424,935,545	\$135,594,140	3,854	
Catalytic				
▶ Visitor Expenditures — Airlines	\$25,154,261,683	\$7,319,804,521	200,486	
▶ Visitor Expenditures — General Aviation	\$86,837,359	\$25,269,376	692	
▶ Travel Arrangements	\$146,445,774	\$41,775,266	1,101	
Total Aviation	\$33,342,013,573	\$9,387,265,455	243,478	

	TOTAL ECONOMIC IMPACT ⁷		
TOTAL FAA SPENDING (FISCAL YEAR)	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$173,432,580	\$56,141,349	1,358

ENABLING EFFECTS	TRADE FLOWS ⁸		
	Value (\$)	Weight (Tons)	
Within State	\$6,536,800	23	
State-to-State	\$512,127,900	19,130	
Exports	\$7,275,647,400	21,370	
Total Enabling Effects	\$7,794,312,100	40,524	



New Hampshire

Largest Commercial Airport:1 Manchester

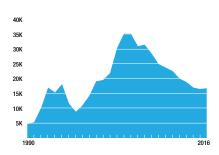
Population (Census Estimate):² 1,342,373

Gross Domestic Product (\$Millions):³ \$78,402

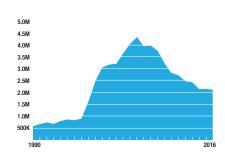
Contribution to Gross Domestic Product: **1.8%**

Percent of International Visitors:4 0.1%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commerc	ial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	3	69,201	95,895	2,097,983
General Aviation	11	278,900	-	_
Reliever Airports	1	_	_	_
Total Aviation	15	348,101	95,895	2,097,983

	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$324,934,013	\$69,298,827	1,290
Airport Operations	\$130,743,878	\$40,417,026	862
➤ General Aviation	\$134,628,628	\$28,712,310	534
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$180,544,873	\$38,522,154	730
Avionics Manufacturing	\$275,701,604	\$58,825,374	1,114
Research & Development	\$49,222,718	\$14,964,627	247
Air Courier	\$167,816,802	\$49,535,557	1,410
Catalytic			
▶ Visitor Expenditures — Airlines	\$1,136,347,221	\$307,839,431	8,946
➤ Visitor Expenditures — General Aviation	\$24,822,322	\$6,724,432	195
Travel Arrangements	\$44,899,578	\$11,884,838	264
Total Aviation	\$2,469,661,638	\$626,724,576	15,592

	TOTAL ECONOMIC IMPACT ⁷		
TOTAL FAA SPENDING (FISCAL YEAR)	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$167,885,078	\$50,143,841	1,222

ENABLING EFFECTS	TRADI	E FLOWS ⁸
	Value (\$)	Weight (Tons)
Within State	\$0	0
State-to-State	\$518,847,600	8,054
Exports	\$2,300,214,200	18,569
Total Enabling Effects	\$2,819,061,800	26,623



New Jersey

Economic Impact of Civil Aviation by State (2016)

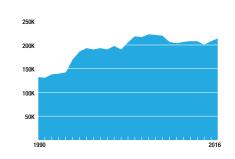
Largest Commercial Airport:1 **Newark Liberty International** Population (Census Estimate):2 8,874,516

Gross Domestic Product (\$Millions):3 \$581,271

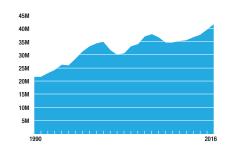
Contribution to Gross Domestic Product: 2.8%

Percent of International Visitors:4 2.0%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commerc	ial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	4	540,701	788,706	41,647,677
General Aviation	8	849,507	-	_
Reliever Airports	12	_	-	_
Total Aviation	24	1,390,208	788,706	41,647,677

	TOTAL	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs	
Direct				
▶ Airlines	\$8,045,969,693	\$1,711,502,605	27,860	
▶ Airport Operations	\$1,559,866,685	\$460,021,996	8,869	
▶ General Aviation	\$512,688,572	\$109,056,815	1,775	
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$225,637,960	\$49,377,853	884	
Avionics Manufacturing	\$500,514,504	\$109,530,912	1,960	
▶ Research & Development	\$226,626,909	\$68,013,396	1,092	
▶ Air Courier	\$1,220,004,344	\$345,530,895	8,521	
Catalytic				
▶ Visitor Expenditures — Airlines	\$16,480,280,698	\$4,500,274,732	112,990	
▶ Visitor Expenditures — General Aviation	\$122,406,679	\$33,425,625	839	
▶ Travel Arrangements	\$459,647,852	\$123,337,518	2,520	
Total Aviation	\$29,353,643,894	\$7,510,072,347	167,311	

	TOTAL FAA SPENDING (FISCAL YEAR)	TOTAL ECONOMIC IMPACT ⁷		
		Economic Activity	Earnings (Payroll)	Jobs
	Total FAA Spending	\$860,479,787	\$251,391,987	5,201

ENABLING EFFECTS	TRADE FLOWS ⁸		
ENABEING ETT EGTO	Value (\$)	Weight (Tons)	
Within State	\$0	0	
State-to-State	\$4,628,277,500	95,377	
Exports	\$11,854,256,500	127,054	
Total Enabling Effects	\$16,482,534,000	222,430	



New Mexico

Largest Commercial Airport:

Albuquerque International Sunport

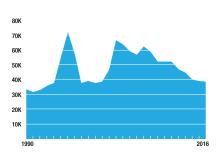
Population (Census Estimate):² **2,092,789**

Gross Domestic Product (\$Millions):³ **\$91,004**

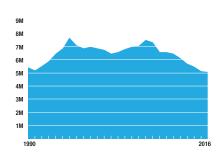
Contribution to Gross Domestic Product: 2.3%

Percent of International Visitors:⁴ 0.1%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commerci	al ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	6	117,209	96,481	5,102,916
General Aviation	43	544,425	_	_
Reliever Airports	1	_	_	_
Total Aviation	50	661,634	96,481	5,102,916

	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$999,716,778	\$225,838,954	5,216
Airport Operations	\$137,603,259	\$45,594,830	1,185
▶ General Aviation	\$313,697,083	\$70,865,092	1,637
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$49,198,204	\$11,209,790	212
Avionics Manufacturing	\$64,203,482	\$14,628,737	277
Research & Development	\$12,017,531	\$3,987,417	74
▶ Air Courier	\$409,212,151	\$125,244,740	3,601
Catalytic			
▶ Visitor Expenditures — Airlines	\$1,691,052,918	\$493,781,503	18,424
▶ Visitor Expenditures — General Aviation	\$62,521,703	\$18,256,117	681
Travel Arrangements	\$11,193,654	\$3,224,097	91
Total Aviation	\$3,750,416,764	\$1,012,631,275	31,398

	TOTAL ECONOMIC IMPACT ⁷		
TOTAL FAA SPENDING (FISCAL YEAR)	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$193,660,748	\$63,434,067	1,701

TRADE FLOWS ⁸	
Value (\$)	Weight (Tons)
\$0	0
\$307,773,200	2,686
\$1,496,996,100	5,184
\$1,804,769,300	7,870
	Value (\$) \$0 \$307,773,200 \$1,496,996,100



Largest Commercial Airport:

John F. Kennedy International

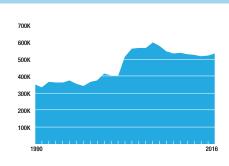
Population (Census Estimate):² 19,641,589

Gross Domestic Product (\$Millions):³ \$1,541,524

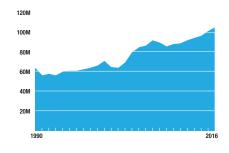
Contribution to Gross Domestic Product: **3.8**%

Percent of International Visitors:⁴ **17.4**%

Number of Commercial Departures⁶



Number of Passengers⁶



Economic Impact of Civil Aviation by State (2016)

New York

	AVIATION STATISTICS			
ACTIVITY			Commer	cial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	20	1,293,406	1,569,501	104,572,642
General Aviation	50	2,053,797	-	_
Reliever Airports	19	_	_	_
Total Aviation	89	3,347,203	1,569,501	104,572,642

	TOTA	L ECONOMIC IMPACT	7
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$13,659,605,573	\$2,863,148,766	45,296
Airport Operations	\$3,672,218,127	\$1,101,211,096	20,571
General Aviation	\$1,042,652,262	\$214,774,273	3,398
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$1,447,665,193	\$319,909,829	4,790
Avionics Manufacturing	\$398,416,739	\$88,043,445	1,318
Research & Development	\$3,041,012,300	\$872,511,861	14,087
Air Courier	\$1,123,573,730	\$329,165,926	8,602
Catalytic			
▶ Visitor Expenditures — Airlines	\$73,398,188,563	\$19,780,371,247	511,247
▶ Visitor Expenditures — General Aviation	\$235,408,749	\$63,441,245	1,640
Travel Arrangements	\$1,826,282,650	\$471,528,653	9,451
Total Aviation	\$99,827,023,887	\$26,104,106,343	620,400

	TOTAL ECONOMIC IMPACT		
TOTAL FAA SPENDING (FISCAL YEAR)	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$498,846,082	\$143,354,570	3,097

ENABLING EFFECTS	TRADE FLOWS		
ENABEING ETT EGTG	Value (\$)	Weight (Tons)	
Within State	\$86,111,600	1,365	
State-to-State	\$5,393,867,600	46,001	
Exports	\$47,428,989,700	145,334	
Total Enabling Effects	\$52,908,968,900	192,699	



North Carolina

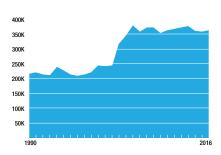
Largest Commercial Airport:¹ **Charlotte/Douglas International**Population (Census Estimate):² **10,156,679**

Gross Domestic Product (\$Millions):³ \$518,248

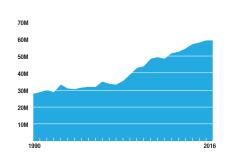
Contribution to Gross Domestic Product: 3.1%

Percent of International Visitors:⁴ 0.9%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS				
ACTIVITY				Commercial ⁶	
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers	
Commercial Aviation	11	839,413	326,511	59,181,458	
General Aviation	59	1,647,322	_	_	
Reliever Airports	2	_	_	_	
Total Aviation	72	2,486,735	326,511	59,181,458	

	TOTAL	ECONOMIC IMPACT	7
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$5,749,882,354	\$1,328,359,147	26,614
Airport Operations	\$891,494,292	\$287,217,826	6,737
General Aviation	\$874,353,760	\$201,996,449	4,047
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$6,925,169,505	\$1,648,109,272	29,320
Avionics Manufacturing	\$398,861,013	\$94,924,252	1,689
Research & Development	\$212,399,352	\$68,819,172	1,249
Air Courier	\$717,593,223	\$221,839,059	6,629
Catalytic			
▶ Visitor Expenditures — Airlines	\$12,520,868,600	\$3,622,143,897	117,599
➤ Visitor Expenditures — General Aviation	\$232,459,479	\$67,247,865	2,183
Travel Arrangements	\$252,479,710	\$72,154,126	1,905
Total Aviation	\$28,775,561,287	\$7,612,811,064	197,974

	TOTAL ECONOMIC IMPACT ⁷		
TOTAL FAA SPENDING (FISCAL YEAR)	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$294,357,506	\$93,288,462	2,260

ENABLING EFFECTS	TRADI	E FLOWS ⁸
	Value (\$)	Weight (Tons)
Within State	\$0	0
State-to-State	\$2,321,968,100	43,097
Exports	\$8,728,643,700	79,627
Total Enabling Effects	\$11,050,611,800	122,724

Economic Impact of Civil Aviation by State (2016)

North Dakota

Largest Commercial Airport:1

Hector International

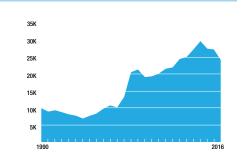
Population (Census Estimate):² **754,353**

Gross Domestic Product (\$Millions):³ \$50,772

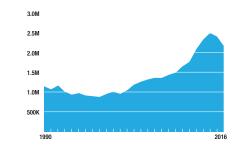
Contribution to Gross Domestic Product: **2.4**%

Percent of International Visitors:⁴ 0.0%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commer	cial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	8	176,606	34,454	2,164,075
General Aviation	45	657,459	_	_
Reliever Airports	0	_	_	_
Total Aviation	53	834,065	34,454	2,164,075

	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$537,630,033	\$111,238,988	2,472
▶ Airport Operations	\$151,977,766	\$45,927,565	892
▶ General Aviation	\$381,991,166	\$79,036,341	1,757
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$104,115,731	\$7,666,614	163
Avionics Manufacturing	\$0	\$0	0
Research & Development	\$10,207,467	\$3,151,542	61
▶ Air Courier	\$386,851,186	\$106,718,298	2,737
Catalytic			
▶ Visitor Expenditures — Airlines	\$718,913,569	\$193,723,543	6,898
▶ Visitor Expenditures — General Aviation	\$49,565,096	\$13,356,162	476
Travel Arrangements	\$11,209,645	\$2,996,809	82
Total Aviation	\$2,352,461,660	\$563,815,861	15,538

	TOTAL FAA SPENDING (FISCAL YEAR)	TOTAL ECONOMIC IMPACT ⁷		
		Economic Activity	Earnings (Payroll)	Jobs
	Total FAA Spending	\$254,377,528	\$77,724,446	1,526

ENABLING EFFECTS	TRADE FLOWS ⁸		
	Value (\$)	Weight (Tons)	
Within State	\$0	0	
State-to-State	\$10,191,600	1,290	
Exports	\$130,082,400	1,721	
Total Enabling Effects	\$140,274,000	3,011	

The Economic Impact of Civil Aviation on the U.S. Economy

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Ohio

Largest Commercial Airport:¹
Cleveland-Hopkins International

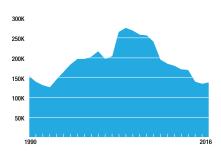
Population (Census Estimate):² 11,635,003

Gross Domestic Product (\$Millions):³ **\$621,363**

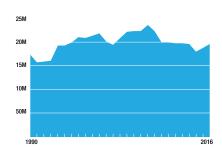
Contribution to Gross Domestic Product: **2.4**%

Percent of International Visitors:⁴ **0.7**%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commerc	ial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	8	501,084	379,754	19,482,765
General Aviation	81	2,379,379	-	_
Reliever Airports	10	_	_	_
Total Aviation	99	2,880,463	379,754	19,482,765

	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$4,011,099,146	\$903,304,414	16,087
Airport Operations	\$800,950,268	\$252,618,052	5,324
▶ General Aviation	\$1,422,678,677	\$320,388,971	5,706
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$8,473,850,700	\$1,992,232,259	39,001
Avionics Manufacturing	\$328,425,921	\$77,214,095	1,512
▶ Research & Development	\$2,071,506,240	\$658,191,652	12,601
▶ Air Courier	\$503,415,922	\$151,386,091	4,327
Catalytic			
▶ Visitor Expenditures — Airlines	\$9,752,730,426	\$2,787,791,189	88,187
➤ Visitor Expenditures — General Aviation	\$236,231,989	\$67,526,265	2,136
Travel Arrangements	\$231,550,163	\$65,834,402	1,655
Total Aviation	\$27,832,439,454	\$7,276,487,402	176,536

	TOTAL ECONOMIC IMPACT ⁷		
TOTAL FAA SPENDING (FISCAL YEAR)	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$528,703,525	\$163,106,060	3,876

ENABLING EFFECTS	TRADE	FLOWS8
	Value (\$)	Weight (Tons)
Within State	\$15,922,200	413
State-to-State	\$2,020,180,800	33,510
Exports	\$11,864,413,700	156,855
Total Enabling Effects	\$13,900,516,700	190,778

Economic Impact of Civil Aviation by State (2016)

Oklahoma

Largest Commercial Airport:1
Will Rogers World

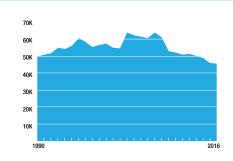
Population (Census Estimate):² 3,926,769

Gross Domestic Product (\$Millions):³ \$178,510

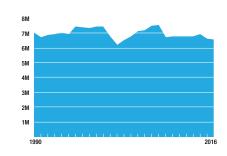
Contribution to Gross Domestic Product: 2.1%

Percent of International Visitors:⁴ 0.1%

Number of Commercial Departures⁶



Number of Passengers⁶



ACTIVITY	AVIATION STATISTICS			
			Commerc	ial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	3	116,066	91,253	6,584,957
General Aviation	95	1,072,427	_	_
Reliever Airports	3	_	_	_
Total Aviation	101	1,188,493	91,253	6,584,957

TOTAL ECONOMIC IMPACT ⁷		
Economic Activity	Earnings (Payroll)	Jobs
\$1,557,531,416	\$363,494,442	6,988
\$302,003,741	\$100,035,075	2,413
\$668,216,628	\$155,947,436	2,998
\$1,266,481,102	\$301,305,085	5,771
\$91,487,185	\$21,765,468	417
\$39,639,887	\$13,162,622	276
\$275,299,262	\$86,059,487	2,530
\$2,523,539,800	\$740,079,307	26,134
\$143,247,012	\$42,010,096	1,483
\$50,656,619	\$14,745,045	411
\$6,918,102,651	\$1,838,604,062	49,420
	\$1,557,531,416 \$302,003,741 \$668,216,628 \$1,266,481,102 \$91,487,185 \$39,639,887 \$275,299,262 \$2,523,539,800 \$143,247,012 \$50,656,619	\$1,557,531,416 \$363,494,442 \$302,003,741 \$100,035,075 \$668,216,628 \$155,947,436 \$1,266,481,102 \$301,305,085 \$91,487,185 \$21,765,468 \$39,639,887 \$13,162,622 \$275,299,262 \$86,059,487 \$2,523,539,800 \$740,079,307 \$143,247,012 \$42,010,096 \$50,656,619 \$14,745,045

	TOTAL FAA SPENDING (FISCAL YEAR)	TOTAL ECONOMIC IMPACT ⁷		
		Economic Activity	Earnings (Payroll)	Jobs
	Total FAA Spending	\$1,531,486,310	\$499,991,680	12,584

ENABLING EFFECTS	TRADE	FLOWS ⁸
	Value (\$)	Weight (Tons)
Within State	\$0	0
State-to-State	\$335,677,600	13,748
Exports	\$1,727,354,400	13,432
Total Enabling Effects	\$2,063,032,000	27,180

The Economic Impact of Civil Aviation on the U.S. Economy

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Oregon

Largest Commercial Airport:

Portland International

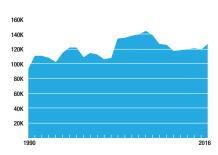
Population (Census Estimate):² 4,091,404

Gross Domestic Product (\$Millions):³ **\$215,153**

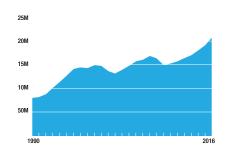
Contribution to Gross Domestic Product: **3.6**%

Percent of International Visitors:⁴ **0.4**%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commerc	cial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	7	304,757	243,985	20,637,631
General Aviation	48	1,351,009	-	_
Reliever Airports	2	_	_	_
Total Aviation	57	1,655,766	243,985	20,637,631

AVIATION ACTIVITY	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
Airlines	\$3,008,546,155	\$637,129,022	12,778
Airport Operations	\$703,554,933	\$210,951,491	4,474
General Aviation	\$680,616,489	\$144,136,236	2,891
Aircraft, Aircraft Engine, and Parts Manufacturing	\$577,286,080	\$132,914,868	2,503
Avionics Manufacturing	\$194,814,344	\$44,854,230	845
Research & Development	\$31,571,340	\$10,095,753	194
Air Courier	\$1,065,609,499	\$313,512,028	8,899
Catalytic			
▶ Visitor Expenditures — Airlines	\$7,051,623,506	\$2,016,001,253	62,434
▶ Visitor Expenditures — General Aviation	\$185,105,007	\$52,920,001	1,639
Travel Arrangements	\$80,412,535	\$22,460,732	589
Total Aviation	\$13,579,139,888	\$3,584,975,614	97,244

	TOTAL ECONOMIC IMPACT ⁷		
TOTAL FAA SPENDING (FISCAL YEAR)	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$162,872,048	\$50,336,651	1,103

ENABLING EFFECTS	TRADI	E FLOWS ⁸
	Value (\$)	Weight (Tons)
Within State	\$0	0
State-to-State	\$794,609,100	25,702
Exports	\$11,211,590,500	50,196
Total Enabling Effects	\$12,006,199,600	75,898



Largest Commercial Airport: Philadelphia International

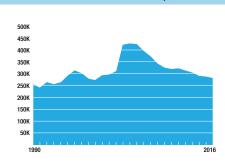
Population (Census Estimate):² 12,783,538

Gross Domestic Product (\$Millions):³ **\$724,266**

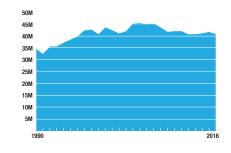
Contribution to Gross Domestic Product: 2.5%

Percent of International Visitors:⁴ 1.8%

Number of Commercial Departures⁶



Number of Passengers⁶



Economic Impact of Civil Aviation by State (2016)

Pennsylvania

	AVIATION STATISTICS			
ACTIVITY			Commer	cial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	13	698,452	677,517	40,612,447
General Aviation	38	1,458,958	_	_
Reliever Airports	12	_	_	_
Total Aviation	63	2,157,410	677,517	40,612,447

	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$6,593,218,381	\$1,452,699,837	26,703
Airport Operations	\$1,742,784,527	\$539,379,650	12,051
General Aviation	\$859,104,436	\$189,288,569	3,479
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$2,924,287,540	\$679,885,391	11,674
Avionics Manufacturing	\$228,023,927	\$53,014,669	910
Research & Development	\$448,354,145	\$138,965,859	2,330
Air Courier	\$1,629,655,848	\$483,520,048	13,126
Catalytic			
▶ Visitor Expenditures — Airlines	\$17,922,581,653	\$5,033,378,389	155,096
▶ Visitor Expenditures — General Aviation	\$163,596,442	\$45,944,430	1,416
Travel Arrangements	\$345,503,127	\$95,886,311	2,246
Total Aviation	\$32,857,110,025	\$8,711,963,153	229,031

TOTAL FAA SPENDING (FISCAL YEAR)	TOTAL ECONOMIC IMPACT ⁷		
	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$467,086,508	\$142,737,238	3,190

ENABLING EFFECTS	TRADE	FLOWS ⁸
	Value (\$)	Weight (Tons)
Within State	\$32,400	124
State-to-State	\$1,878,396,500	30,073
Exports	\$10,739,973,000	112,980
Total Enabling Effects	\$12,618,401,900	143,176



Rhode Island

Largest Commercial Airport:1 **Theodore Francis Green State**

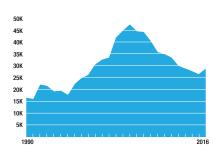
Population (Census Estimate):² 1,057,063

Gross Domestic Product (\$Millions):³ \$57,727

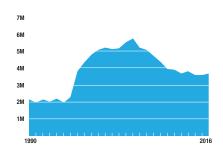
Contribution to Gross Domestic Product: **2.7**%

Percent of International Visitors:4 0.1%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS				
ACTIVITY				Commercial ⁶	
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers	
Commercial Aviation	3	61,356	13,969	3,684,669	
General Aviation	1	87,845	_	_	
Reliever Airports	2	_	_	_	
Total Aviation	6	149,201	13,969	3,684,669	

AVIATION ACTIVITY	TOTAL	ECONOMIC IMPACT	Γ ⁷
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$556,566,294	\$114,035,821	2,371
Airport Operations	\$140,200,611	\$41,669,185	950
▶ General Aviation	\$41,809,774	\$8,566,476	178
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$0	\$0	0
Avionics Manufacturing	\$0	\$0	0
Research & Development	\$2,436,674	\$703,770	14
▶ Air Courier	\$135,981,827	\$37,551,499	1,073
Catalytic			
➤ Visitor Expenditures — Airlines	\$1,732,160,463	\$465,457,180	14,133
➤ Visitor Expenditures — General Aviation	\$8,526,431	\$2,291,178	70
Travel Arrangements	\$47,758,619	\$12,248,867	313
Total Aviation	\$2,665,440,693	\$682,523,978	19,102

	TOTAL ECONOMIC IMPACT ⁷		
TOTAL FAA SPENDING (FISCAL YEAR)	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$66,067,300	\$19,304,194	414

ENABLING EFFECTS	TRADE	FLOWS ⁸
	Value (\$)	Weight (Tons)
Within State	\$0	0
State-to-State	\$207,610,500	3,834
Exports	\$974,735,800	8,799
Total Enabling Effects	\$1,182,346,300	12,633



Largest Commercial Airport:1 **Charleston AFB/International**

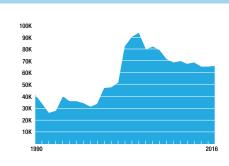
Population (Census Estimate):² 4,958,235

Gross Domestic Product (\$Millions):³ \$212,675

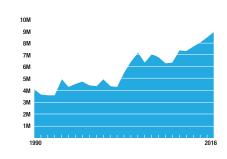
Contribution to Gross Domestic Product: 2.0%

Percent of International Visitors:4 0.3%

Number of Commercial Departures⁶



Number of Passengers⁶



Economic Impact of Civil Aviation by State (2016)

South Carolina

	AVIATION STATISTICS			
ACTIVITY			Commerci	al ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	6	284,574	135,425	8,904,390
General Aviation	45	587,917	_	_
Reliever Airports	2	_	_	_
Total Aviation	53	872,491	135,425	8,904,390

	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
Airlines	\$1,676,248,278	\$391,409,760	9,903
Airport Operations	\$295,563,253	\$95,688,977	2,430
General Aviation	\$318,397,287	\$74,346,866	1,881
Aircraft, Aircraft Engine, and Parts Manufacturing	\$1,497,293,133	\$343,727,865	6,482
Avionics Manufacturing	\$0	\$0	0
Research & Development	\$69,264,836	\$22,154,876	462
Air Courier	\$361,162,967	\$110,762,814	3,366
Catalytic			
Visitor Expenditures — Airlines	\$3,191,180,233	\$911,361,136	26,768
Visitor Expenditures — General Aviation	\$80,831,921	\$23,084,585	678
Travel Arrangements	\$52,531,198	\$14,661,792	389
Total Aviation	\$7,542,473,105	\$1,987,198,671	52,360

TOTAL FAA SPENDING (FY 2014)	TOTAL ECONOMIC IMPACT ⁷		
	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$189,647,514	\$59,914,856	1,527

ENABLING EFFECTS	TRADE FLOWS ⁸		
ENABEING EIT EGTG	Value (\$)	Weight (Tons)	
Within State	\$6,716,000	66	
State-to-State	\$663,718,300	12,905	
Exports	\$2,988,118,100	60,947	
Total Enabling Effects	\$3,658,552,400	73,918	



South Dakota

Largest Commercial Airport:1 Joe Foss Field

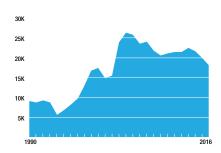
Population (Census Estimate):² 862,890

Gross Domestic Product (\$Millions):³ \$48,462

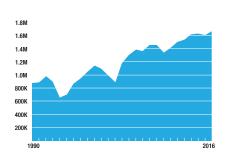
Contribution to Gross Domestic Product: **1.6**%

Percent of International Visitors:4 0.0%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commerc	ial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	4	76,610	53,888	1,663,863
General Aviation	54	387,723	-	_
Reliever Airports	0	_	-	_
Total Aviation	58	464,333	53,888	1,663,863

	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$323,658,149	\$73,532,840	1,819
Airport Operations	\$46,120,266	\$15,417,051	355
▶ General Aviation	\$179,518,726	\$40,785,384	1,009
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$0	\$0	0
Avionics Manufacturing	\$0	\$0	0
Research & Development	\$890,749	\$290,827	6
▶ Air Courier	\$300,028,397	\$95,074,345	2,833
Catalytic			
▶ Visitor Expenditures — Airlines	\$504,779,162	\$145,384,626	4,848
▶ Visitor Expenditures — General Aviation	\$33,886,260	\$9,759,795	325
► Travel Arrangements	\$6,308,730	\$1,736,813	48
Total Aviation	\$1,395,190,439	\$381,981,681	11,244

TOTAL FAA SPENDING (FISCAL YEAR)	TOTAL ECONOMIC IMPACT ⁷		
	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$49,660,653	\$16,454,788	383

ENABLING EFFECTS	TRADE	FLOWS8
	Value (\$)	Weight (Tons)
Within State	\$0	0
State-to-State	\$146,242,100	1,966
Exports	\$93,206,400	1,311
Total Enabling Effects	\$239,448,500	3,277

Economic Impact of Civil Aviation by State (2016)

Tennessee

Largest Commercial Airport:1 **Nashville International**

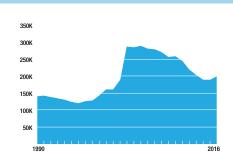
Population (Census Estimate):² 6,645,011

Gross Domestic Product (\$Millions):³ \$334,385

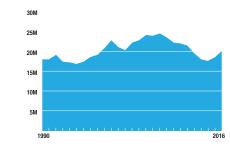
Contribution to Gross Domestic Product: 4.0%

Percent of International Visitors:4 0.7%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commerc	cial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	5	488,288	4,850,516	20,246,250
General Aviation	59	1,288,861	-	_
Reliever Airports	5	_	_	_
Total Aviation	69	1,777,149	4,850,516	20,246,250

	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$3,832,354,736	\$831,287,598	18,983
▶ Airport Operations	\$624,217,246	\$185,681,611	4,168
▶ General Aviation	\$742,891,741	\$161,142,883	3,680
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$497,464,386	\$115,422,372	2,144
Avionics Manufacturing	\$0	\$0	0
▶ Research & Development	\$14,830,243	\$4,667,891	84
▶ Air Courier	\$9,361,773,657	\$2,620,476,907	62,573
Catalytic			
▶ Visitor Expenditures — Airlines	\$8,692,444,693	\$2,454,715,065	67,418
▶ Visitor Expenditures — General Aviation	\$175,822,611	\$49,651,672	1,364
▶ Travel Arrangements	\$107,282,185	\$29,871,499	681
Total Aviation	\$24,049,081,499	\$6,452,917,498	161,095

	TOTAL FAA SPENDING (FISCAL YEAR)	TOTAL ECONOMIC IMPACT ⁷		
		Economic Activity	Earnings (Payroll)	Jobs
	Total FAA Spending	\$353,168,726	\$106,292,003	2,419

ENABLING EFFECTS	TRADE	FLOWS ⁸
ENABLING LITEOTS	Value (\$)	Weight (Tons)
Within State	\$27,312,600	419
State-to-State	\$2,254,204,000	23,878
Exports	\$8,786,131,200	67,423
Total Enabling Effects	\$11,067,647,800	91,720



Texas

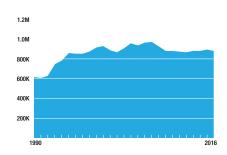
Largest Commercial Airport:¹ **Dallas/Fort Worth International**Population (Census Estimate):² **27,937,492**

Gross Domestic Product (\$Millions):³ \$1,564,396

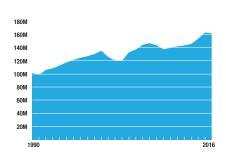
Contribution to Gross Domestic Product: **3.9**%

Percent of International Visitors:⁴ **4.0**%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commerc	ial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	24	2,009,239	2,069,756	162,137,146
General Aviation	162	4,883,151	-	_
Reliever Airports	24	_	_	_
Total Aviation	210	6,892,390	2,069,756	162,137,146

AVIATION ACTIVITY	ТОТА	L ECONOMIC IMPAC	Γ ⁷
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$23,572,037,849	\$5,575,356,536	98,229
Airport Operations	\$6,362,822,222	\$2,035,473,531	46,552
▶ General Aviation	\$3,417,048,351	\$808,214,503	14,240
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$19,059,197,159	\$4,646,401,648	79,950
Avionics Manufacturing	\$2,163,953,712	\$527,545,731	9,077
Research & Development	\$907,630,614	\$294,139,887	5,241
▶ Air Courier	\$3,655,875,657	\$1,117,861,406	32,005
Catalytic			
▶ Visitor Expenditures — Airlines	\$50,036,645,194	\$14,585,915,526	394,941
▶ Visitor Expenditures — General Aviation	\$653,240,971	\$190,422,791	5,156
▶ Travel Arrangements	\$1,090,740,767	\$316,212,135	7,118
Total Aviation	\$110,919,192,494	\$30,097,543,693	692,509

	TOTAL ECONOMIC IMPACT ⁷		
TOTAL FAA SPENDING (FISCAL YEAR)	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$1,813,738,614	\$566,797,106	12,963
	<u> </u>		

ENABLING EFFECTS	TRADE	FLOWS ⁸
	Value (\$)	Weight (Tons)
Within State	\$952,560,600	5,445
State-to-State	\$10,659,894,500	129,610
Exports	\$39,467,936,900	297,269
Total Enabling Effects	\$51,080,392,000	432,325

Economic Impact of Civil Aviation by State (2016)

Utah

Largest Commercial Airport:¹
Salt Lake City International

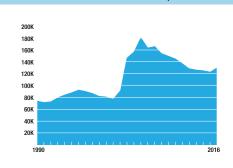
Population (Census Estimate):² 3,042,613

Gross Domestic Product (\$Millions):³ **\$157,902**

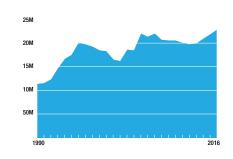
Contribution to Gross Domestic Product: **5.3**%

Percent of International Visitors:⁴ **1.2**%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS				
ACTIVITY			Commerc	ial ⁶	
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers	
Commercial Aviation	7	296,769	192,813	22,835,921	
General Aviation	28	665,266	_	_	
Reliever Airports	1	_	_	_	
Total Aviation	36	962,035	192,813	22,835,921	

	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$3,057,114,043	\$709,363,311	13,340
▶ Airport Operations	\$528,508,679	\$170,843,769	3,663
▶ General Aviation	\$426,611,899	\$98,989,709	1,862
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$1,051,633,688	\$255,003,821	5,095
▶ Avionics Manufacturing	\$317,475,537	\$76,982,580	1,538
▶ Research & Development	\$187,044,934	\$61,415,304	1,298
▶ Air Courier	\$668,857,363	\$207,034,572	5,465
Catalytic			
▶ Visitor Expenditures — Airlines	\$8,462,288,861	\$2,481,574,878	82,180
▶ Visitor Expenditures — General Aviation	\$74,587,879	\$21,872,972	724
▶ Travel Arrangements	\$237,546,137	\$69,391,310	1,928
Total Aviation	\$15,011,669,020	\$4,152,472,225	117,092

	TOTAL FAA SPENDING (FISCAL YEAR)	TOTAL ECONOMIC IMPACT ⁷		
		Economic Activity	Earnings (Payroll)	Jobs
	Total FAA Spending	\$209,253,173	\$65,887,112	1,661

ENABLING EFFECTS	TRADI	E FLOWS ⁸
	Value (\$)	Weight (Tons)
Within State	\$0	0
State-to-State	\$2,298,270,000	318,124
Exports	\$8,099,746,700	42,250
Total Enabling Effects	\$10,398,016,700	360,374



Vermont

Largest Commercial Airport:¹ **Burlington International**

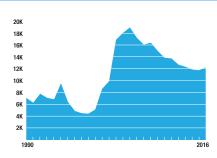
Population (Census Estimate):² **623,644**

Gross Domestic Product (\$Millions):³ \$31,635

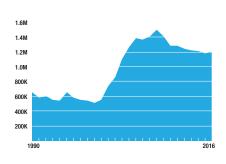
Contribution to Gross Domestic Product: 2.0%

Percent of International Visitors:⁴ **0.1**%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commerc	cial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	2	28,378	5,358	1,200,149
General Aviation	10	159,978	_	_
Reliever Airports	0	_	_	_
Total Aviation	12	188,356	5,358	1,200,149

	TOTAL ECONOMIC IMPACT		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$219,389,559	\$46,608,915	1,173
Airport Operations	\$41,156,219	\$13,008,925	333
General Aviation	\$72,796,556	\$15,465,497	389
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$95,993,804	\$9,215,805	197
Avionics Manufacturing	\$0	\$0	0
Research & Development	\$75,728,676	\$24,618,138	506
Air Courier	\$37,895,317	\$11,759,450	333
Catalytic			
▶ Visitor Expenditures — Airlines	\$626,819,165	\$176,366,770	6,229
▶ Visitor Expenditures — General Aviation	\$13,611,965	\$3,829,970	135
Travel Arrangements	\$11,461,999	\$3,209,995	83
Total Aviation	\$1,194,853,261	\$304,083,465	9,378

	TOTAL ECONOMIC IMPACT ⁷		
TOTAL FAA SPENDING (FISCAL YEAR)	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$43,429,360	\$14,015,267	337

ENABLING EFFECTS	TRADE	FLOWS8
	Value (\$)	Weight (Tons)
Within State	\$0	0
State-to-State	\$509,658,400	4,249
Exports	\$1,442,579,600	7,477
Total Enabling Effects	\$1,952,238,000	11,726



Largest Commercial Airport:1
Washington Dulles International

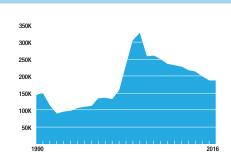
Population (Census Estimate):² **8,410,946**

Gross Domestic Product (\$Millions):³ \$493,866

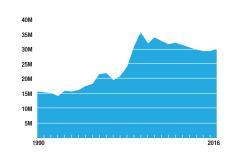
Contribution to Gross Domestic Product: 2.1%

Percent of International Visitors:⁴ 0.9%

Number of Commercial Departures⁶



Number of Passengers⁶



Economic Impact of Civil Aviation by State (2016)

Virginia

	AVIATION STATISTICS			
ACTIVITY			Commer	cial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	9	462,951	418,123	29,996,018
General Aviation	33	1,272,446	_	_
Reliever Airports	5	_	_	_
Total Aviation	47	1,735,397	418,123	29,996,018

	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$4,875,589,324	\$1,069,839,813	19,971
Airport Operations	\$1,194,997,063	\$367,139,025	8,317
▶ General Aviation	\$669,587,131	\$146,926,027	2,743
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$953,579,380	\$214,521,974	3,621
Avionics Manufacturing	\$553,479,117	\$124,513,423	2,102
Research & Development	\$206,250,346	\$61,483,088	1,056
▶ Air Courier	\$588,593,132	\$175,834,120	5,104
Catalytic			
▶ Visitor Expenditures — Airlines	\$8,613,462,085	\$2,409,266,498	75,821
▶ Visitor Expenditures — General Aviation	\$155,005,671	\$43,356,547	1,364
Travel Arrangements	\$294,562,545	\$78,529,895	1,715
Total Aviation	\$18,105,105,794	\$4,691,410,410	121,815

TOTAL FAA SPENDING (FISCAL YEAR)	TOTAL ECONOMIC IMPACT		
	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$1,492,808,433	\$448,294,003	10,908

ENABLING EFFECTS	TRADE FLOWS ⁸		
	Value (\$)	Weight (Tons)	
Within State	\$9,740,100	241	
State-to-State	\$1,170,847,700	14,415	
Exports	\$3,967,754,300	36,715	
Total Enabling Effects	\$5,148,342,100	51,372	

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Washington

Largest Commercial Airport:1 **Seattle-Tacoma International**

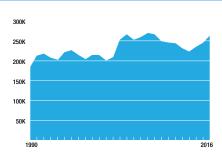
Population (Census Estimate):² 7,294,680

Gross Domestic Product (\$Millions):³ \$492,943

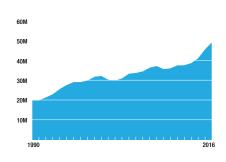
Contribution to Gross Domestic Product: **9.1**%

Percent of International Visitors:4 1.5%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commer	cial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	13	662,309	687,124	49,429,101
General Aviation	46	2,187,544	_	_
Reliever Airports	5	_	_	_
Total Aviation	64	2,849,853	687,124	49,429,101

	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$6,664,632,381	\$1,523,697,805	25,073
Airport Operations	\$1,411,135,982	\$457,098,019	8,902
▶ General Aviation	\$1,303,637,606	\$298,043,410	4,904
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$49,917,196,574	\$11,771,442,465	192,973
Avionics Manufacturing	\$719,907,578	\$169,768,160	2,783
Research & Development	\$7,719,147,463	\$2,523,198,173	41,482
Air Courier	\$1,386,294,958	\$425,481,309	11,375
Catalytic			
▶ Visitor Expenditures — Airlines	\$15,462,597,437	\$4,474,588,583	116,041
▶ Visitor Expenditures — General Aviation	\$282,148,339	\$81,648,490	2,117
Travel Arrangements	\$431,029,336	\$123,697,122	2,601
Total Aviation	\$85,297,727,656	\$21,848,663,537	408,252

 	TOTAL ECONOMIC IMPACT ⁷		
TOTAL FAA SPENDING (FISCAL YEAR)	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$549,889,574	\$172,248,283	3,833

ENABLING EFFECTS	TRADE	FLOWS ⁸
	Value (\$)	Weight (Tons)
Within State	\$10,509,600	349
State-to-State	\$13,951,109,400	48,489
Exports	\$42,062,615,100	1,037,056
Total Enabling Effects	\$56,024,234,100	1,085,896



Economic Impact of Civil Aviation by State (2016)

West Virginia

Largest Commercial Airport:1 Yeager

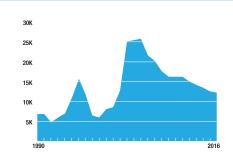
Population (Census Estimate):² 1,830,929

Gross Domestic Product (\$Millions):³ \$69,814

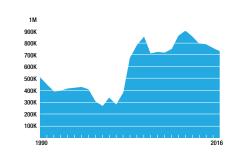
Contribution to Gross Domestic Product: 0.8%

Percent of International Visitors:4 0.0%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commerc	cial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	7	63,896	12,460	728,092
General Aviation	15	270,930	-	_
Reliever Airports	1	_	_	_
Total Aviation	23	334,826	12,460	728,092

	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
> Airlines	\$144,143,573	\$29,009,310	715
Airport Operations	\$99,868,144	\$30,145,932	777
▶ General Aviation	\$144,850,649	\$29,151,611	719
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$491,424,691	\$43,579,721	877
Avionics Manufacturing	\$0	\$0	0
▶ Research & Development	\$17,996,090	\$5,592,255	115
▶ Air Courier	\$108,044,807	\$31,328,977	935
Catalytic			
➤ Visitor Expenditures — Airlines	\$251,449,749	\$67,651,411	2,297
➤ Visitor Expenditures — General Aviation	\$28,936,094	\$7,785,124	264
Travel Arrangements	\$9,576,100	\$2,543,476	74
Total Aviation	\$1,296,289,896	\$246,787,818	6,772

	TOTAL FAA SPENDING (FISCAL YEAR)	TOTAL ECONOMIC IMPACT ⁷		
		Economic Activity	Earnings (Payroll)	Jobs
	Total FAA Spending	\$69,103,923	\$20,602,422	538

ENABLING EFFECTS	TRADE FLOWS ⁸	
ENABEING EITEOTO	Value (\$)	Weight (Tons)
Within State	\$0	0
State-to-State	\$202,003,000	2,308
Exports	\$539,421,700	11,700
Total Enabling Effects	\$741,424,700	14,008

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Wisconsin

Largest Commercial Airport:¹ **General Mitchell International**

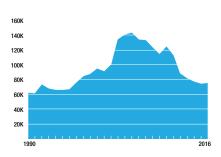
Population (Census Estimate):² 5,772,958

Gross Domestic Product (\$Millions):³ \$312,141

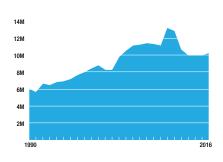
Contribution to Gross Domestic Product: 1.7%

Percent of International Visitors to:4
0.3%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commer	cial ⁶
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	8	252,919	130,708	10,260,676
General Aviation	73	1,607,405	_	_
Reliever Airports	6	_	_	_
Total Aviation	87	1,860,324	130,708	10,260,676

	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$1,744,171,358	\$394,557,626	8,882
Airport Operations	\$297,922,546	\$97,464,706	2,305
➤ General Aviation	\$788,354,859	\$178,337,650	4,015
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$356,729,952	\$84,257,550	1,604
Avionics Manufacturing	\$359,320,178	\$84,869,347	1,616
Research & Development	\$309,469,941	\$100,991,598	1,948
Air Courier	\$579,525,081	\$182,134,698	5,145
Catalytic			
▶ Visitor Expenditures — Airlines	\$4,700,019,645	\$1,368,095,556	47,050
➤ Visitor Expenditures — General Aviation	\$208,898,058	\$60,806,662	2,091
Travel Arrangements	\$95,465,320	\$27,510,045	632
Total Aviation	\$9,439,876,939	\$2,579,025,438	75,288

	TOTAL ECONOMIC IMPACT ⁷		
TOTAL FAA SPENDING (FISCAL YEAR)	Economic Activity	Earnings (Payroll)	Jobs
Total FAA Spending	\$145,313,180	\$47,373,690	1,089

TRADE FLOWS ⁸	
Value (\$)	Weight (Tons)
\$417,000	40
\$1,379,117,700	30,047
\$5,250,841,400	74,752
\$6,630,376,100	104,839
	Value (\$) \$417,000 \$1,379,117,700 \$5,250,841,400

Economic Impact of Civil Aviation by State (2016)

Wyoming

Largest Commercial Airport:

Jackson Hole

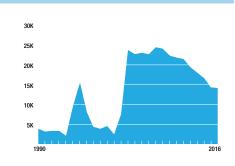
Population (Census Estimate):² **584,290**

Gross Domestic Product (\$Millions):³ \$35,905

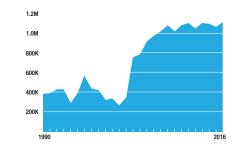
Contribution to Gross Domestic Product: 1.7%

Percent of International Visitors:⁴ 0.0%

Number of Commercial Departures⁶



Number of Passengers⁶



	AVIATION STATISTICS			
ACTIVITY			Commercial ⁶	
	Number of Airports ¹	Aircraft Operations ⁵	Freight (Tons)	Passengers
Commercial Aviation	9	50,597	14,871	1,104,434
General Aviation	24	269,737	_	_
Reliever Airports	0	_	_	_
Total Aviation	33	320,334	14,871	1,104,434

	TOTAL ECONOMIC IMPACT ⁷		
AVIATION ACTIVITY	Economic Activity	Earnings (Payroll)	Jobs
Direct			
▶ Airlines	\$309,681,637	\$66,263,675	1,546
▶ Airport Operations	\$114,970,802	\$37,213,173	941
▶ General Aviation	\$146,502,052	\$31,347,562	731
 Aircraft, Aircraft Engine, and Parts Manufacturing 	\$16,244,921	\$3,419,171	70
Avionics Manufacturing	\$0	\$0	0
Research & Development	\$834,416	\$268,609	5
▶ Air Courier	\$262,786,933	\$81,635,855	2,350
Catalytic			
▶ Visitor Expenditures — Airlines	\$241,706,261	\$67,810,650	2,253
▶ Visitor Expenditures — General Aviation	\$29,844,702	\$8,372,926	278
Travel Arrangements	\$15,816,665	\$4,385,423	113
Total Aviation	\$1,138,388,389	\$300,717,045	8,288

TOTAL FAA SPENDING (FISCAL YEAR)	TOTAL ECONOMIC IMPACT ⁷			
	Economic Activity	Earnings (Payroll)	Jobs	
	Total FAA Spending	\$62,955,340	\$20,536,519	475

ENABLING EFFECTS	TRADE FLOWS ⁸	
ENABEING EITEOTO	Value (\$)	Weight (Tons)
Within State	\$0	0
State-to-State	\$12,835,700	1,522
Exports	\$29,760,100	284
Total Enabling Effects	\$42,595,800	1,806



Appendix A Notes

- U.S. Department of Transportation, Federal Aviation Administration. National Plan of Integrated Airport Systems (NPIAS). http:// www.faa.gov/airports/planning_capacity/npias/
- 2. U.S. Department of Commerce, Bureau of the Census, Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2018. 2018 Population Estimates. https://www.census.gov/programs-surveys/popest/data/tables.html
- 3. U.S. Department of Commerce, Bureau of Economic Analysis. Regional Economic Accounts. https://www.bea.gov/data/economic-accounts/regional
- 4. U.S. Department of Commerce, International Trade Administration. Office of Travel and Tourism Industries. https://travel.trade.gov/

- 5. U.S. Department of Transportation, Federal Aviation Administration. Terminal Area Forecast (TAF). https://taf.faa.gov/
- 6. U.S. Department of Transportation, Bureau of Transportation Statistics. T-100 Segment Database.
- 7. Total economic impact is the sum of primary plus secondary impacts.
- 8. U.S. Department of Transportation, Federal Highway Administration and Bureau of Transportation Statistics. 2019. Freight Analysis Framework. Versions 4.5. https://ops.fhwa.dot.gov/freight_freight_analysis/faf/

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Glossary of Economic Terms

Catalytic Impact

Catalytic impact refers to sectors that provide goods and services that are related to and partially dependent upon civil aviation but their main function is not to support aviation. These categories include visitor expenditures and travel arrangers.¹

Direct Impact

Direct impact refers to sectors that provide goods and services that are fundamental to and inseparable from civil aviation. These categories include airline operations, airport operations, civil aviation-related manufacturing, research and development, and air couriers.

Earnings

Wages and salaries and other labor income, such as overtime, benefits, and proprietors' income, paid to all employed persons by employers for a given unit of work or time. The Bureau of Labor Statistics (BLS) publishes earnings data.

Employment (Jobs)

Employment is the implicit or explicit contractual relationship which exists between an employer and employee, whereby the employee voluntarily agrees to provide work effort to the employer in exchange for cash or in kind remuneration.² The BLS is responsible for collecting and publishing data on the number of employed within the United States. According to the BLS: "Employment data refer to persons on establishment payrolls who received pay for any part of the pay period that includes the 12th day of the month. Data exclude proprietors, the unincorporated self-employed, unpaid volunteer or family workers, farm workers, and domestic workers. Salaried officers of corporations are included. Government employment covers

only civilian employees; military personnel are excluded. Employees of the Central Intelligence Agency, the National Security Agency, the National Imagery and Mapping Agency, and the Defense Intelligence Agency also are excluded."³

Enabling Impact

Enabling impact is the economic impact on employment and income generated by economic activities that are dependent on the availability of air transportation services.⁴

FAA Spending

FAA spending includes FAA expenditures on payroll, non-payroll (including facilities and equipment, operations, research), and grants issued through the Airport Improvement Program (AIP).

Gross Domestic Product

Gross domestic product (GDP) is the dollar measure of overall economic production during a given period of time. It is the current-dollar value of all final goods and services produced within a country during a specified time period, such as a year or quarter. These goods and services include consumption, investment, government expenditures, and exports. GDP can also be viewed in value-added terms as the sum or aggregate of value added over each stage of production over the entire economy. The Bureau of Economic Analysis (BEA) publishes annual and quarterly measures of GDP.

Gross Output

For an industry, gross output is the dollar value of goods or services produced by the industry and made available for use outside that industry during a specified time period.⁵ It is measured as total sales or receipts, plus other operating

income, commodity taxes (sales and excise taxes), and changes in inventories; or, equivalently, as value added, plus goods and services purchased for use in production. For an entire nation, total gross output is equal to total intermediate inputs plus GDP. Therefore, total gross output exceeds GDP. The BEA publishes annual national- and industry-level estimates of gross output.

Input

The total monetary value of goods and services consumed or used to produce a final good or service including capital, labor, energy, materials, and services.

Multipliers

Multipliers measure the impact of particular spending on the rest of the economy. In particular, these coefficients gauge the effects of spending on output, earnings, and employment. The BEA publishes industry-level multiplier estimates.

Output

Output is the current-dollar production of goods or services by a production unit and measured by total sales or receipts of that unit, plus other operating income, commodity taxes (sales and excise taxes), and changes in inventories.

Primary Impact

This is a term used to categorize the dollar amounts that flow through the civil aviation industry. Primary impact refers to the first round of expenditures within each sector that are collected from government and private sources. These amounts are applied against the RIMS II multipliers to derive secondary impacts.

Secondary Impact

This is a term used to categorize the dollar amounts that flow through the civil aviation industry. Secondary impacts result from followon spending down the supply chain after the initial round or primary impact. This includes payments to suppliers, and suppliers of suppliers, as well as spending by employees of those businesses. Secondary impacts therefore capture both interindustry and household spending that derive from activity in the respective sectors.

Total Economic Activity

Total economic activity is a term used interchangeably with Gross Output.

Total Impact

Total impact is the sum of primary and secondary impacts.

Value Added

Value added refers to the current dollar contribution into production by an individual producer, industry or sector during a specified time period. It is measured as the difference between gross output and goods and services purchased for use in production. (These purchased goods and services are also called input purchases or intermediate inputs.) Equivalently, value added consists of employee compensation, production-related taxes, imports less subsidies, and gross operating surplus. Value added can be summed or aggregated across individual producers over an entire sector, industry or nation; at the national level, total value added equals GDP. The BEA publishes national- and selected sector-level annual and quarterly measures of value added, as well as selected annual industry measures.

Glossary Notes

- 1. ACI Europe, "The Social and Economic Impact 4. Mariya A. Ishutkina and R. John Hansman. of Airports in Europe," 2004, p. 5.
- 2. United Nations. 2008. System of National Accounts, 2008. P. 136.
- 3. U.S. Department of Labor, Bureau of Labor Statistics. 2011. Handbook of Methods. March 2011.
- 2009. "Analysis of the Interaction Between Air Transportation and Economic Activity: A Worldwide Perspective," MIT International Center for Air Transportation.
- 5. Organization for Economic Co-operation and Development. 2002. "Glossary of Statistical Terms."



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Kathy Kowsky, FAA

Randal Matsunaga, FAA

Thomas McComb, BEA

Allison Ritman, FAA

For more information, please send inquiries to:

Roger Schaufele, Manager Forecast and Performance Analysis Division Office of Aviation Policy and Plans roger.schaufele@faa.gov





U.S. Department of Transportation

Federal Aviation Administration

800 Independence Avenue, SW Washington, DC 20591