

Appendix C: Forecast Tables

TABLE 1

U.S. SHORT-TERM ECONOMIC FORECASTS

ECONOMIC VARIABLE	FISCAL YEAR 2019				FISCAL YEAR 2020				FISCAL YEAR 2021			
	1ST. QTR.	2ND. QTR.	3RD QTR.	4TH. QTR.	1ST. QTR.	2ND. QTR.	3RD QTR.	4TH. QTR.	1ST. QTR.	2ND. QTR.	3RD QTR.	4TH. QTR.
Real Personal Consumption Expenditure per Capita (2012 \$)	39,766	39,807	40,181	40,393	40,590	40,786	40,975	41,155	41,335	41,511	41,676	41,830
Year over year change	0.7%	0.4%	3.8%	2.1%	2.0%	2.0%	1.9%	1.8%	1.8%	1.7%	1.6%	1.5%
Refiners' Acquisition Cost - Average (Dollars per barrel)	59.61	57.03	63.60	58.60	54.42	52.67	54.38	50.60	44.94	43.65	44.29	46.61
Year over year change	-44.6%	-16.2%	54.6%	-27.9%	-25.6%	-12.2%	13.6%	-25.1%	-37.8%	-11.0%	6.0%	22.7%
Consumer Price Index (1982-84 equals 100)	252.8	253.3	255.1	256.3	257.8	258.9	260.4	261.3	261.8	262.9	264.3	266.0
Seasonally Adjusted Annual Rate	1.5%	0.9%	2.9%	1.8%	2.4%	1.6%	2.4%	1.4%	0.7%	1.7%	2.2%	2.6%

Source: IHS Markit

TABLE 2
U.S. LONG-TERM ECONOMIC FORECASTS

FISCAL YEAR	REAL GROSS DOMESTIC PRODUCT (Billions 2012 \$)	REAL PERSONAL CONSUMPTION EXPENDITURE PER CAPITA (2012 \$)	CONSUMER PRICE INDEX (1982-84=1.00)	REFINERS' ACQUISITION COST AVERAGE (Dollars per barrel)
<u>Historical</u>				
2010	15,500	34,165	2.17	74.61
2015	17,322	36,907	2.37	56.69
2016	17,600	37,654	2.39	39.12
2017	17,984	38,369	2.44	48.16
2018	18,523	39,306	2.50	63.72
2019E	18,961	40,316	2.54	59.71
<u>Forecast</u>				
2020	19,349	40,877	2.60	53.02
2025	21,199	44,247	2.91	64.02
2030	23,581	48,266	3.25	83.51
2035	25,946	52,246	3.62	93.65
2040	28,374	56,213	4.03	104.20
<u>Avg Annual Growth</u>				
2010-19	2.3%	1.9%	1.8%	-2.4%
2019-20	2.0%	1.4%	2.1%	-11.2%
2020-30	2.0%	1.7%	2.3%	4.6%
2020-40	1.9%	1.6%	2.2%	3.4%
Source: IHS Markit				

TABLE 3

INTERNATIONAL GDP FORECASTS BY TRAVEL REGION

CALENDAR YEAR	GROSS DOMESTIC PRODUCT (In Billions of 2015 U.S. Dollars)								WORLD
	CANADA	MIDDLE EAST	AFRICA / EUROPE / LATIN AMERICA /	CARIBBEAN / MEXICO	AUSTRALIA / NEW ZEALAND	OTHER ASIA /	BASIN / CHINA /	JAPAN / PACIFIC	
<u>Historical</u>									
2010	1,400	21,273	4,613	18,934	64,293				
2015	1,557	23,157	5,174	24,341	74,354				
2016	1,572	23,678	5,164	25,528	76,380				
2017	1,622	24,319	5,259	26,852	78,969				
2018	1,655	24,825	5,329	28,163	81,501				
2019E	1,682	25,148	5,365	29,401	83,598				
<u>Forecast</u>									
2020	1,707	25,467	5,427	30,649	85,719				
2025	1,844	27,824	6,026	38,027	98,396				
2030	2,012	30,621	6,995	46,429	113,523				
2035	2,197	33,599	8,155	55,186	129,347				
2040	2,402	36,756	9,487	64,810	146,485				
<u>Avg Annual Growth</u>									
2010-19	2.1%	1.9%	1.7%	5.0%	3.0%				
2019-20	1.5%	1.3%	1.2%	4.2%	2.5%				
2020-30	1.7%	1.9%	2.6%	4.2%	2.8%				
2020-40	1.7%	1.9%	2.8%	3.8%	2.7%				

Source: IHS Markit website, GDP Components Tables (Interim Forecast, Monthly)

TABLE 4

INTERNATIONAL GDP FORECASTS – SELECTED AREAS/COUNTRIES

CALENDAR YEAR	GROSS DOMESTIC PRODUCT (In Billions of 2015 U.S. Dollars)				
	NORTH AMERICA (NAFTA)	EUROZONE	UNITED KINGDOM	JAPAN	CHINA
<u>Historical</u>					
2010	18,745	11,187	2,651	4,179	7,473
2015	20,951	11,667	2,930	4,390	10,916
2016	21,296	11,887	2,986	4,412	11,650
2017	21,814	12,207	3,043	4,509	12,436
2018	22,427	12,437	3,085	4,524	13,255
2019E	22,905	12,583	3,123	4,573	14,071
<u>Forecast</u>					
2020	23,353	12,697	3,142	4,586	14,887
2025	25,553	13,512	3,341	4,773	19,420
2030	28,465	14,397	3,596	5,001	24,531
2035	31,361	15,298	3,861	5,227	29,558
2040	34,441	16,201	4,134	5,460	34,879
<u>Avg Annual Growth</u>					
2010-19	2.3%	1.3%	1.8%	1.0%	7.3%
2019-20	2.0%	0.9%	0.6%	0.3%	5.8%
2020-30	2.0%	1.3%	1.4%	0.9%	5.1%
2020-40	2.0%	1.2%	1.4%	0.9%	4.3%

Source: IHS Markit website, GDP Components Tables (Interim Forecast, Monthly)

TABLE 5

U.S. COMMERCIAL AIR CARRIERS¹

TOTAL SCHEDULED U.S. PASSENGER TRAFFIC

FISCAL YEAR	REVENUE PASSENGER ENPLANEMENTS (Millions)			REVENUE PASSENGER MILES (Billions)		
	DOMESTIC	INTERNATIONAL	TOTAL	DOMESTIC	INTERNATIONAL	TOTAL
<u>Historical</u>						
2010	635	77	712	555	231	786
2015	696	90	787	629	261	890
2016	726	93	820	663	265	928
2017	744	97	841	684	271	955
2018	781	100	880	720	281	1,001
2019E	813	103	917	752	292	1,044
<u>Forecast</u>						
2020	858	106	964	795	304	1,099
2025	945	119	1,065	889	347	1,235
2030	1,049	141	1,190	999	406	1,405
2035	1,159	167	1,326	1,119	472	1,591
2040	1,271	197	1,468	1,244	545	1,789
<u>Avg Annual Growth</u>						
2010-19	2.8%	3.3%	2.8%	3.4%	2.6%	3.2%
2019-20	5.5%	2.7%	5.1%	5.8%	4.1%	5.3%
2020-30	2.0%	2.9%	2.1%	2.3%	2.9%	2.5%
2020-40	2.0%	3.1%	2.1%	2.3%	3.0%	2.5%

Source: Forms 41 and 298-C, U.S. Department of Transportation.

¹Sum of U.S. Mainline and Regional Air Carriers.

TABLE 6

U.S. COMMERCIAL AIR CARRIERS¹

SCHEDULED PASSENGER CAPACITY, TRAFFIC, AND LOAD FACTORS

FISCAL YEAR	DOMESTIC			INTERNATIONAL			SYSTEM		
	ASMs (BIL)	RPMs (BIL)	% LOAD FACTOR	ASMs (BIL)	RPMs (BIL)	% LOAD FACTOR	ASMs (BIL)	RPMs (BIL)	% LOAD FACTOR
<u>Historical</u>									
2010	679	555	81.7	281	231	82.1	961	786	81.8
2015	744	629	84.5	323	261	80.7	1,067	890	83.4
2016	783	663	84.7	329	265	80.6	1,112	928	83.5
2017	809	684	84.5	335	271	81.0	1,144	955	83.5
2018	850	720	84.7	345	281	81.5	1,195	1,001	83.8
2019E	884	752	85.1	352	292	82.9	1,236	1,044	84.5
<u>Forecast</u>									
2020	932	795	85.3	366	304	82.9	1,299	1,099	84.6
2025	1,033	889	86.1	418	347	82.9	1,451	1,235	85.1
2030	1,156	999	86.5	489	406	82.9	1,645	1,405	85.4
2035	1,291	1,119	86.7	569	472	82.9	1,860	1,591	85.5
2040	1,432	1,244	86.8	657	545	83.0	2,089	1,789	85.6
<u>Avg Annual Growth</u>									
2010-19	3.0%	3.4%		2.5%	2.6%		2.8%	3.2%	
2019-20	5.5%	5.8%		4.1%	4.1%		5.1%	5.3%	
2020-30	2.2%	2.3%		2.9%	2.9%		2.4%	2.5%	
2020-40	2.2%	2.3%		3.0%	3.0%		2.4%	2.5%	

Source: Forms 41 and 298-C, U.S. Department of Transportation.

¹Sum of U.S. Mainline and Regional Air Carriers.

TABLE 7

U.S. COMMERCIAL AIR CARRIERS¹

TOTAL SCHEDULED U.S. INTERNATIONAL PASSENGER TRAFFIC

FISCAL YEAR	REVENUE PASSENGER ENPLACEMENTS				REVENUE PASSENGER MILES			
	LATIN AMERICA		TOTAL		LATIN AMERICA		TOTAL	
	(Mil)	(Mil)	(Mil)	(Mil)	(Bil)	(Bil)	(Bil)	(Bil)
<u>Historical</u>								
2010	25	40	13	77	109	63	59	231
2015	25	52	14	90	107	83	71	261
2016	24	55	14	93	105	87	73	265
2017	25	58	14	97	106	90	75	271
2018	26	60	13	100	112	94	75	281
2019E	28	62	13	103	121	96	75	292
<u>Forecast</u>								
2020	30	63	14	106	130	97	77	304
2025	33	71	15	119	148	112	87	347
2030	37	87	17	141	169	139	98	406
2035	42	107	19	167	189	172	110	472
2040	46	130	21	197	211	211	123	545
<u>Avg. Annual Growth</u>								
2010-19	1.4%	5.1%	0.3%	3.3%	1.2%	4.7%	2.7%	2.6%
2019-20	6.9%	0.7%	2.2%	2.6%	7.4%	1.2%	2.4%	4.1%
2020-30	2.3%	3.3%	2.3%	2.9%	2.7%	3.7%	2.5%	2.9%
2020-40	2.2%	3.7%	2.2%	3.1%	2.5%	4.0%	2.3%	3.0%

Source: Forms 41 and 298-C, U.S. Department of Transportation.

¹Sum of U.S. Mainline and Regional Air Carriers.

TABLE 8

U.S. AND FOREIGN FLAG CARRIERS

TOTAL PASSENGER TRAFFIC TO/FROM THE UNITED STATES

CALENDAR YEAR	TOTAL PASSENGERS BY WORLD TRAVEL AREA (Millions)				TOTAL
	ATLANTIC	LATIN AMERICA	PACIFIC	U.S./CANADA TRANSBORDER	
<u>Historical</u>					
2010	56	53	27	22	158
2015	70	75	36	27	207
2016	75	79	39	28	220
2017	79	82	41	29	232
2018	85	86	42	31	244
2019E	88	88	44	32	252
<u>Forecast</u>					
2020	91	91	45	32	259
2025	104	102	55	37	298
2030	123	124	66	44	357
2035	143	150	78	51	422
2040	164	182	90	60	496
<u>Avg Annual Growth</u>					
2010-19	5.2%	5.8%	5.5%	4.2%	5.3%
2019-20	3.1%	2.9%	3.1%	2.5%	2.9%
2020-30	3.1%	3.2%	3.9%	3.1%	3.3%
2020-40	3.0%	3.5%	3.5%	3.2%	3.3%

Source: US Customs & Border Protection data processed and released by Department of Commerce; data also received from Transport Canada.

TABLE 9

U.S. COMMERCIAL AIR CARRIERS' FORECAST ASSUMPTIONS¹
SEATS PER AIRCRAFT MILE AND PASSENGER TRIP LENGTH

FISCAL YEAR	AVERAGE SEATS PER AIRCRAFT MILE		AVERAGE PASSENGER TRIP LENGTH			
	DOMESTIC (Seats/Mile)	INTERNATIONAL (Seats/Mile)	DOMESTIC (Miles)	INTERNATIONAL (Miles)	SYSTEM	
<u>Historical</u>						
2010	121.8	216.4	139.7	874.8	2,988.0	1,104.2
2015	131.5	214.8	149.0	902.7	2,892.6	1,131.0
2016	134.8	214.8	151.5	913.2	2,833.8	1,132.2
2017	137.8	217.2	154.3	918.9	2,798.6	1,135.6
2018	139.9	219.1	156.2	921.9	2,820.1	1,136.7
2019E	141.2	221.6	157.5	924.9	2,821.4	1,138.9
<u>Forecast</u>						
2020	141.9	222.8	158.1	927.4	2,861.2	1,140.4
2025	145.0	225.4	161.6	940.0	2,904.6	1,160.3
2030	147.7	226.6	164.8	952.7	2,873.2	1,180.6
2035	150.3	227.5	167.7	965.4	2,821.2	1,199.5
2040	152.8	228.6	170.6	978.4	2,768.0	1,218.4

Source: Forms 41 and 298-C, U.S. Department of Transportation.

¹Sum of U.S. Mainline and Regional Air Carriers.

TABLE 10

**U. S. MAINLINE AIR CARRIERS
SCHEDULED PASSENGER TRAFFIC**

FISCAL YEAR	REVENUE PASSENGER ENPLANEMENTS (Millions)			REVENUE PASSENGER MILES (Billions)		
	DOMESTIC	INTERNATIONAL	SYSTEM	DOMESTIC	INTERNATIONAL	SYSTEM
<u>Historical</u>						
2010	473	75	548	480	230	710
2015	543	87	630	556	259	815
2016	575	90	665	590	262	852
2017	595	93	689	612	269	881
2018	627	96	723	645	279	924
2019E	654	100	754	674	290	963
<u>Forecast</u>						
2020	690	103	792	712	301	1,014
2025	760	116	876	795	344	1,139
2030	844	137	981	894	403	1,297
2035	932	163	1,095	1,000	469	1,469
2040	1,023	192	1,214	1,111	541	1,652
<u>Avg Annual Growth</u>						
2010-19	3.7%	3.3%	3.6%	3.8%	2.6%	3.4%
2019-20	5.5%	2.6%	5.1%	5.7%	4.1%	5.2%
2020-30	2.0%	2.9%	2.2%	2.3%	2.9%	2.5%
2020-40	2.0%	3.2%	2.2%	2.2%	3.0%	2.5%

Source: Form 41, U.S. Department of Transportation.

TABLE 11

U.S. MAINLINE AIR CARRIERS

SCHEDULED PASSENGER CAPACITY, TRAFFIC, AND LOAD FACTORS

FISCAL YEAR	DOMESTIC			INTERNATIONAL			SYSTEM		
	ASMs (BIL)	RPMs (BIL)	% LOAD FACTOR	ASMs (BIL)	RPMs (BIL)	% LOAD FACTOR	ASMs (BIL)	RPMs (BIL)	% LOAD FACTOR
<u>Historical</u>									
2010	581	480	82.7	279	230	82.2	860	710	82.5
2015	653	556	85.1	321	259	80.8	973	815	83.7
2016	692	590	85.3	325	262	80.7	1,017	852	83.8
2017	718	612	85.2	331	269	81.1	1,049	881	83.9
2018	756	645	85.3	342	279	81.6	1,098	924	84.1
2019E	785	674	85.8	349	290	83.0	1,134	963	84.9
<u>Forecast</u>									
2020	828	712	86.0	363	301	83.0	1,192	1,014	85.1
2025	917	795	86.7	415	344	83.0	1,332	1,139	85.6
2030	1,026	894	87.2	486	403	83.0	1,511	1,297	85.8
2035	1,144	1,000	87.4	565	469	83.0	1,709	1,469	85.9
2040	1,268	1,111	87.6	652	541	83.0	1,920	1,652	86.0
<u>Avg Annual Growth</u>									
2010-19	3.4%	3.8%		2.5%	2.6%	0.1%	3.1%	3.4%	
2019-20	5.5%	5.7%		4.1%	4.1%	0.0%	5.1%	5.2%	
2020-30	2.2%	2.3%		2.9%	2.9%	0.0%	2.4%	2.5%	
2020-40	2.2%	2.2%		3.0%	3.0%	0.0%	2.4%	2.5%	

Source: Form 41, U.S. Department of Transportation.

TABLE 12

U.S. MAINLINE AIR CARRIERS

SCHEDULED INTERNATIONAL PASSENGER ENPLANEMENTS

FISCAL YEAR	REVENUE PASSENGER ENPLANEMENTS (MIL)			TOTAL
	ATLANTIC	LATIN AMERICA	PACIFIC	
<u>Historical</u>				
2010	24.5	37.2	12.9	74.6
2015	24.6	48.6	14.0	87.2
2016	24.4	51.5	14.0	89.9
2017	24.8	54.7	13.9	93.5
2018	26.0	56.9	13.3	96.2
2019E	27.9	59.1	13.2	100.2
<u>Forecast</u>				
2020	29.8	59.5	13.5	102.8
2025	33.4	67.2	15.0	115.7
2030	37.4	82.7	16.9	137.1
2035	41.7	102.1	18.9	162.7
2040	46.3	124.6	21.0	191.9
<u>Avg Annual Growth</u>				
2010-19	1.4%	5.3%	0.3%	3.3%
2019-20	6.9%	0.6%	2.2%	2.6%
2020-30	2.3%	3.4%	2.3%	2.9%
2020-40	2.2%	3.8%	2.2%	3.2%

Source: Form 41, U.S. Department of Transportation.

TABLE 13

U.S. MAINLINE AIR CARRIERS

SCHEDULED PASSENGER CAPACITY, TRAFFIC, AND LOAD FACTORS
BY INTERNATIONAL TRAVEL REGIONS

FISCAL YEAR	ATLANTIC			LATIN AMERICA			PACIFIC			INTERNATIONAL		
	ASMs (BIL)	RPMS (BIL)	% LOAD FACTOR	ASMs (BIL)	RPMS (BIL)	% LOAD FACTOR	ASMs (BIL)	RPMS (BIL)	% LOAD FACTOR	ASMs (BIL)	RPMS (BIL)	% LOAD FACTOR
<u>Historical</u>												
2010	131	109	82.9	78	62	79.2	70	59	84.1	279	230	82.2
2015	133	107	80.0	101	81	80.3	86	71	82.5	321	259	80.8
2016	134	105	78.0	104	85	81.4	87	73	83.9	325	262	80.7
2017	134	106	79.5	107	88	82.3	91	75	82.2	331	269	81.1
2018	138	112	81.0	111	92	82.2	92	75	81.7	342	279	81.6
2019E	146	121	82.9	112	94	83.4	91	75	82.6	349	290	83.0
<u>Forecast</u>												
2020	156	130	82.9	113	95	83.4	94	77	82.6	363	301	83.0
2025	179	148	82.9	131	109	83.4	105	87	82.6	415	344	83.0
2030	203	169	82.9	163	136	83.4	119	98	82.6	486	403	83.0
2035	228	189	82.9	203	169	83.4	133	110	82.6	565	469	83.0
2040	255	211	82.9	249	207	83.4	149	123	82.6	652	541	83.0
<u>Avg Annual Growth</u>												
2010-19	1.2%	1.2%		4.1%	4.7%		2.9%	2.7%		2.5%	2.6%	
2019-20	7.4%	7.4%		1.1%	1.1%		2.4%	2.4%		4.1%	4.1%	
2020-30	2.7%	2.7%		3.7%	3.7%		2.5%	2.5%		2.9%	2.9%	
2020-40	2.5%	2.5%		4.0%	4.0%		2.3%	2.3%		3.0%	3.0%	

Source: Form 41, U.S. Department of Transportation.

TABLE 14

U.S. MAINLINE AIR CARRIER FORECAST ASSUMPTIONS

SEATS PER AIRCRAFT MILE

FISCAL YEAR	INTERNATIONAL					TOTAL (Seats/Mile)	SYSTEM (Seats/Mile)
	DOMESTIC (Seats/Mile)	ATLANTIC (Seats/Mile)	LATIN AMERICA (Seats/Mile)	PACIFIC (Seats/Mile)			
<u>Historical</u>							
2010	152.0	231.7	171.7	287.2		220.9	169.2
2015	157.7	237.0	173.9	272.1		219.5	173.8
2016	159.9	241.7	174.1	266.6		219.8	175.1
2017	162.3	243.4	176.4	267.5		221.8	177.3
2018	164.2	247.5	178.1	265.2		223.2	178.9
2019E	166.1	251.6	178.1	269.9		225.7	180.8
<u>Forecast</u>							
2020	166.7	252.1	178.6	270.6		226.9	181.4
2025	169.6	254.6	181.1	274.4		229.4	184.6
2030	172.0	257.1	183.6	278.1		230.4	187.2
2035	174.1	259.6	186.1	281.9		231.1	189.6
2040	176.2	262.1	188.6	285.6		232.0	191.9

Source: Form 41, U.S. Department of Transportation.

TABLE 15
U.S. MAINLINE AIR CARRIER FORECAST ASSUMPTIONS

AVERAGE PASSENGER TRIP LENGTH

FISCAL YEAR	INTERNATIONAL				TOTAL (Miles)	SYSTEM (Miles)
	DOMESTIC (Miles)	ATLANTIC (Miles)	LATIN AMERICA (Miles)	PACIFIC (Miles)		
<u>Historical</u>						
2010	1,015	4,433	1,660	4,587	3,077	1,296
2015	1,023	4,336	1,669	5,080	2,969	1,292
2016	1,027	4,291	1,650	5,176	2,917	1,283
2017	1,028	4,278	1,602	5,373	2,875	1,279
2018	1,029	4,299	1,610	5,638	2,895	1,277
2019E	1,030	4,330	1,582	5,709	2,890	1,278
<u>Forecast</u>						
2020	1,033	4,352	1,590	5,721	2,933	1,280
2025	1,046	4,440	1,622	5,776	2,976	1,301
2030	1,059	4,502	1,642	5,816	2,938	1,322
2035	1,072	4,538	1,656	5,842	2,880	1,341
2040	1,086	4,561	1,664	5,854	2,821	1,360

Source: Form 41, U.S. Department of Transportation.

TABLE 16

U.S. MAINLINE AIR CARRIER FORECAST ASSUMPTIONS

PASSENGER YIELDS

FISCAL YEAR	REVENUE PER PASSENGER MILE								
	DOMESTIC				INTERNATIONAL				SYSTEM
	CURRENT \$ (Cents)	FY 2019 \$ (Cents)	CURRENT \$ (Cents)	FY 2019 \$ (Cents)	CURRENT \$ (Cents)	FY 2019 \$ (Cents)	CURRENT \$ (Cents)	FY 2019 \$ (Cents)	
<u>Historical</u>									
2010	12.62	14.76	12.84	15.02	12.69	14.85			
2015	14.79	15.89	14.16	15.21	14.59	15.67			
2016	13.96	14.86	12.88	13.71	13.62	14.50			
2017	13.91	14.51	12.90	13.46	13.60	14.19			
2018	13.92	14.17	13.58	13.84	13.82	14.07			
2019E	14.12	14.12	13.47	13.47	13.92	13.92			
<u>Forecast</u>									
2020	14.15	13.87	13.66	13.38	14.00	13.72			
2025	15.49	13.56	14.82	12.97	15.29	13.39			
2030	17.09	13.36	16.14	12.61	16.79	13.13			
2035	18.47	12.99	17.42	12.25	18.14	12.75			
2040	19.98	12.62	18.78	11.86	19.58	12.37			
<u>Avg Annual Growth</u>									
2010-19	1.3%	-0.5%	0.5%	-1.2%	1.0%	-0.7%			
2019-20	0.2%	-1.8%	1.4%	-0.6%	0.6%	-1.5%			
2020-30	1.9%	-0.4%	1.7%	-0.6%	1.8%	-0.4%			
2020-40	1.7%	-0.5%	1.6%	-0.6%	1.7%	-0.5%			

Source: Form 41, U.S. Department of Transportation.

TABLE 17

U.S. MAINLINE AIR CARRIER FORECAST ASSUMPTIONS

INTERNATIONAL PASSENGER YIELDS BY REGION

FISCAL YEAR	REVENUE PER PASSENGER MILE								
	ATLANTIC		LATIN AMERICA		PACIFIC		TOTAL INTERNATIONAL		
	CURRENT \$ (Cents)	FY 2019 \$ (Cents)	CURRENT \$ (Cents)	FY 2019 \$ (Cents)	CURRENT \$ (Cents)	FY 2019 \$ (Cents)	CURRENT \$ (Cents)	FY 2019 \$ (Cents)	
<u>Historical</u>									
2010	12.73	14.90	13.33	15.60	12.50	14.63	12.84	15.02	
2015	14.64	15.72	14.38	15.45	13.20	14.18	14.16	15.21	
2016	13.83	14.72	12.72	13.54	11.69	12.45	12.88	13.71	
2017	13.58	14.16	13.40	13.98	11.36	11.85	12.90	13.46	
2018	14.38	14.65	14.13	14.39	11.73	11.94	13.58	13.84	
2019E	14.04	14.04	14.20	14.20	11.63	11.63	13.47	13.47	
<u>Forecast</u>									
2020	14.25	13.97	14.36	14.08	11.80	11.57	13.66	13.39	
2025	15.54	13.63	15.42	13.52	12.84	11.26	14.82	12.99	
2030	16.97	13.29	16.62	13.01	14.04	10.99	16.14	12.63	
2035	18.40	12.96	17.74	12.49	15.25	10.74	17.42	12.27	
2040	19.95	12.64	18.89	11.97	16.56	10.50	18.78	11.90	
<u>Avg Annual Growth</u>									
2010-19	1.1%	-0.7%	0.7%	-1.0%	-0.8%	-2.5%	0.5%	-1.2%	
2019-20	1.5%	-0.5%	1.2%	-0.8%	1.4%	-0.5%	1.4%	-0.5%	
2020-30	1.8%	-0.5%	1.5%	-0.8%	1.8%	-0.5%	1.7%	-0.6%	
2020-40	1.7%	-0.5%	1.4%	-0.8%	1.7%	-0.5%	1.6%	-0.6%	

Source: Form 41, U.S. Department of Transportation.

TABLE 18

U.S. MAINLINE AIR CARRIER FORECAST ASSUMPTIONS

JET FUEL PRICES

FISCAL YEAR	DOMESTIC		INTERNATIONAL		SYSTEM	
	CURRENT \$ (Cents)	FY 2019 \$ (Cents)	CURRENT \$ (Cents)	FY 2019 \$ (Cents)	CURRENT \$ (Cents)	FY 2019 \$ (Cents)
<u>Historical</u>						
2010	219.19	256.45	220.12	257.55	219.49	256.81
2015	207.29	222.72	211.77	227.53	208.96	224.51
2016	146.17	155.61	147.01	156.51	146.47	155.93
2017	162.31	169.31	160.79	167.72	161.76	168.73
2018	206.63	210.47	208.42	212.29	207.29	211.14
2019E	205.66	205.66	207.81	207.81	206.62	206.62
<u>Forecast</u>						
2020	189.22	185.41	191.20	187.34	190.10	186.27
2025	212.93	186.42	215.16	188.36	213.93	187.29
2030	280.36	219.16	283.29	221.45	281.67	220.18
2035	316.82	222.80	320.13	225.12	318.30	223.83
2040	352.46	222.60	356.13	224.92	354.10	223.63
<u>Avg Annual Growth</u>						
2010-19	-0.7%	-2.4%	-0.6%	-2.4%	-0.7%	-2.4%
2019-20	-8.0%	-9.8%	-8.0%	-9.8%	-8.0%	-9.8%
2020-30	4.0%	1.7%	4.0%	1.7%	4.0%	1.7%
2020-40	3.2%	0.9%	3.2%	0.9%	3.2%	0.9%

Source: Form 41, U.S. Department of Transportation

TABLE 19

U.S. COMMERCIAL AIR CARRIERS

AIR CARGO REVENUE TON MILES^{1, 2, 3}

FISCAL YEAR	ALL-CARGO CARRIER RTMS (Millions)			PASSENGER CARRIER RTMS (Millions)			TOTAL RTMS (Millions)		
	DOMESTIC	INT'L	TOTAL	DOMESTIC	INT'L	TOTAL	DOMESTIC	INT'L	TOTAL
<u>Historical</u>									
2010	11,306	15,971	27,276	1,495	6,246	7,742	12,801	22,217	35,018
2015	11,636	16,359	27,995	1,455	6,277	7,733	13,091	22,636	35,727
2016	11,998	16,236	28,234	1,373	6,136	7,509	13,372	22,372	35,744
2017	13,062	17,587	30,649	1,579	6,958	8,537	14,641	24,545	39,186
2018	14,182	19,465	33,647	1,580	7,532	9,112	15,761	26,997	42,759
2019E	14,737	19,668	34,405	1,468	6,986	8,453	16,205	26,654	42,858
<u>Forecast</u>									
2020	15,020	20,953	35,973	1,485	7,346	8,831	16,505	28,300	44,804
2025	16,133	26,908	43,041	1,537	8,831	10,368	17,670	35,739	53,409
2030	18,301	35,050	53,350	1,677	10,743	12,420	19,978	45,792	65,771
2035	20,113	42,881	62,994	1,772	12,243	14,015	21,885	55,123	77,008
2040	22,018	51,143	73,161	1,862	13,562	15,424	23,880	64,705	88,585
<u>Avg Annual Growth</u>									
2010-19	3.0%	2.3%	2.6%	-0.2%	1.3%	1.0%	2.7%	2.0%	2.3%
2019-20	1.9%	6.5%	4.6%	1.2%	5.2%	4.5%	1.9%	6.2%	4.5%
2020-30	2.0%	5.3%	4.0%	1.2%	3.9%	3.5%	1.9%	4.9%	3.9%
2020-40	1.9%	4.6%	3.6%	1.1%	3.1%	2.8%	1.9%	4.2%	3.5%

Source: Form 41, U.S. Department of Transportation

¹Includes freight/express and mail revenue ton miles on mainline air carriers and regionals/commuters.

²Domestic figures from 2000 through 2002 exclude Airborne Express, Inc.; international figures for 2003 and beyond include new reporting of contract service by U.S. carriers for foreign flag carriers.

³Domestic figures from 2003 and beyond include Airborne Express, Inc.

TABLE 20

U.S. COMMERCIAL AIR CARRIERS

INTERNATIONAL AIR CARGO REVENUE TON MILES BY REGION^{1,2}

FISCAL YEAR	ATLANTIC (MILLIONS)	LATIN AMERICA (MILLIONS)	PACIFIC (MILLIONS)	OTHER INTERNATIONAL (MILLIONS)	TOTAL (MILLIONS)
<u>Historical</u>					
2010	6,786	1,990	7,897	5,545	22,217
2015	6,627	1,639	9,018	5,352	22,636
2016	6,639	1,565	8,851	5,316	22,372
2017	7,061	1,689	9,939	5,857	24,545
2018	7,554	1,846	10,422	7,176	26,997
2019E	7,426	1,663	10,429	7,135	26,654
<u>Forecast</u>					
2020	7,894	1,640	11,124	7,642	28,300
2025	9,318	1,644	14,403	10,374	35,739
2030	11,052	1,867	18,754	14,119	45,792
2035	12,833	2,031	22,947	17,312	55,123
2040	14,591	2,143	27,619	20,352	64,705
<u>Avg. Annual Growth</u>					
2010-19	1.0%	-2.0%	3.1%	2.8%	2.0%
2019-20	6.3%	-1.4%	6.7%	7.1%	6.2%
2020-30	3.4%	1.3%	5.4%	6.3%	4.9%
2020-40	3.1%	1.3%	4.7%	5.0%	4.2%

Source: Form 41, U.S. Department of Transportation

¹Includes freight/express and mail revenue ton miles on mainline air carriers and regionals/commuters.

²Figures for 2003 and beyond include new reporting of contract service by U.S. carriers for foreign flag carriers.

TABLE 21

**U.S. MAINLINE AIR CARRIERS
PASSENGER JET AIRCRAFT**

CALENDAR YEAR	LARGE NARROWBODY				LARGE WIDEBODY				TOTAL	LARGE JETS	REGIONAL JETS	TOTAL JETS
	2 ENGINE	3 ENGINE	4 ENGINE	TOTAL	2 ENGINE	3 ENGINE	4 ENGINE	TOTAL				
<u>Historical</u>												
2010	3,120	8	1	3,129	470	9	43	522	3,651	71	3,722	
2015	3,319	2	0	3,321	492	0	31	523	3,844	99	3,943	
2016	3,457	2	0	3,459	490	0	27	517	3,976	97	4,073	
2017	3,539	1	0	3,540	517	0	0	517	4,057	98	4,155	
2018	3,678	0	0	3,678	541	0	0	541	4,219	98	4,317	
2019E	3,775	0	0	3,775	553	0	0	553	4,328	60	4,388	
<u>Forecast</u>												
2020	3,706	0	0	3,706	516	0	0	516	4,222	60	4,282	
2025	3,723	0	0	3,723	527	0	0	527	4,250	60	4,310	
2030	3,799	0	0	3,799	607	0	0	607	4,406	52	4,458	
2035	4,126	0	0	4,126	702	0	0	702	4,828	16	4,844	
2040	4,505	0	0	4,505	805	0	0	805	5,310	0	5,310	
<u>Avg Annual Growth</u>												
2010-19	2.1%	-100.0%	N/A	2.1%	1.8%	N/A	-100.0%	0.6%	1.9%	-1.9%	1.8%	
2019-20	-1.8%	N/A	N/A	-1.8%	-6.7%	N/A	N/A	-6.7%	-2.4%	0.0%	-2.4%	
2020-30	0.2%	N/A	N/A	0.2%	1.6%	N/A	N/A	1.6%	0.4%	-1.4%	0.4%	
2020-40	1.0%	N/A	N/A	1.0%	2.2%	N/A	N/A	2.2%	1.2%	-99.9%	1.1%	

TABLE 22

**U.S. MAINLINE AIR CARRIERS
CARGO JET AIRCRAFT**

CALENDAR YEAR	LARGE NARROWBODY				LARGE WIDEBODY				TOTAL
	2 ENGINE	3 ENGINE	4 ENGINE	TOTAL	2 ENGINE	3 ENGINE	4 ENGINE	TOTAL	
<u>Historical</u>									
2010	153	104	31	288	265	200	97	562	850
2015	228	22	2	252	309	156	72	537	789
2016	235	19	2	256	328	149	77	554	810
2017	243	16	2	261	360	149	85	594	855
2018	213	11	2	226	392	120	100	612	838
2019E	216	10	2	228	419	120	112	651	879
<u>Forecast</u>									
2020	224	11	2	237	440	118	111	669	906
2025	258	6	2	266	547	113	123	783	1,049
2030	346	0	0	346	729	112	122	963	1,309
2035	398	0	0	398	920	103	114	1,137	1,535
2040	457	0	0	457	1,223	17	94	1,334	1,791
<u>Avg Annual Growth</u>									
2010-19	3.9%	-22.9%	N/A	-2.6%	5.2%	-5.5%	1.6%	1.6%	0.4%
2019-20	3.7%	10.0%	N/A	3.9%	5.0%	-1.7%	-0.9%	2.8%	3.1%
2020-30	4.4%	N/A	N/A	3.9%	5.2%	-0.5%	0.9%	3.7%	3.7%
2020-40	3.6%	N/A	N/A	3.3%	5.2%	-9.2%	-0.8%	3.5%	3.5%

TABLE 23

TOTAL JET FUEL AND AVIATION GASOLINE FUEL CONSUMPTION

U.S. CIVIL AVIATION AIRCRAFT
(Millions of Gallons)

FISCAL YEAR	JET FUEL			AVIATION GASOLINE			TOTAL FUEL CONSUMED	
	U.S. AIR CARRIERS ^{1,2}			GENERAL				
	DOMESTIC	INT'L.	TOTAL	GENERAL AVIATION	TOTAL	AIR CARRIER	GENERAL AVIATION	TOTAL
<u>Historical</u>								
2010	12,036	6,315	18,351	1,435	19,786	2	221	223
2015	12,834	6,541	19,374	1,383	20,757	2	196	198
2016	13,441	6,467	19,908	1,437	21,345	2	206	208
2017	13,868	6,668	20,536	1,541	22,077	2	206	208
2018	14,553	7,121	21,674	1,820	23,494	2	232	234
2019E	14,598	7,043	21,641	1,879	23,521	2	231	233
<u>Forecast</u>								
2020	15,247	7,260	22,507	1,934	24,441	2	230	232
2025	16,069	7,884	23,953	2,152	26,105	2	218	220
2030	17,117	8,777	25,894	2,354	28,248	2	211	213
2035	18,186	9,711	27,896	2,519	30,415	2	206	208
2040	19,195	10,667	29,862	2,689	32,551	2	205	207
<u>Avg Annual Growth</u>								
2010-19	2.2%	1.2%	1.8%	3.0%	1.9%	0.0%	0.5%	0.5%
2019-20	4.4%	3.1%	4.0%	2.9%	3.9%	0.0%	-0.8%	-0.8%
2020-30	1.2%	1.9%	1.4%	2.0%	1.5%	0.0%	-0.9%	-0.9%
2020-40	1.2%	1.9%	1.4%	1.7%	1.4%	0.0%	-0.6%	-0.6%

Source: Air carrier jet fuel, Form 41, U.S. Department of Transportation; all others, FAA APO estimates.

¹Includes both passenger (mainline and regional air carrier) and cargo carriers.

²Forecast assumes 1.0% annual improvement in available seat miles per gallon for U.S. Commercial Air Carrier

TABLE 24

U.S. REGIONAL CARRIER FORECAST ASSUMPTIONS

FISCAL YEAR	AVERAGE SEATS PER AIRCRAFT MILE			AVERAGE PASSENGER TRIP LENGTH			REVENUE PER PASSENGER MILE**	
	DOMESTIC (Seats/Mile)	INT'L (Seats/Mile)	TOTAL (Seats/Mile)	DOMESTIC (Miles)	INT'L (Miles)	TOTAL (Miles)	CURRENT \$ (Cents)	2018 \$ (Cents)
<u>Historical</u>								
2010	56.1	53.2	56.0	464	503	465	15.74	18.41
2015	59.9	62.6	60.0	475	695	480	10.93	11.74
2016	61.5	68.9	61.8	481	723	487	11.31	12.04
2017	63.0	70.8	63.2	482	718	487	11.30	11.79
2018	63.8	70.8	64.0	487	680	491	11.32	11.53
2019E	64.3	70.8	64.4	492	685	496	11.50	11.50
<u>Forecast</u>								
2020	64.9	71.1	65.0	494	688	498	11.53	11.29
2025	67.5	72.6	67.6	504	703	508	12.61	11.04
2030	70.0	74.1	70.1	515	717	519	13.90	10.87
2035	72.6	75.6	72.7	525	731	529	15.02	10.57
2040	75.4	77.1	75.4	535	746	539	16.24	10.26
<u>Avg Annual Growth</u>								
2010-19	1.5%	3.2%	1.6%	0.7%	3.5%	0.7%	-3.4%	-5.1%
2019-20	1.0%	0.4%	0.9%	0.4%	0.4%	0.4%	0.2%	-1.8%
2020-30	0.8%	0.4%	0.8%	0.4%	0.4%	0.4%	1.9%	-0.4%
2020-40	0.8%	0.4%	0.7%	0.4%	0.4%	0.4%	1.7%	-0.5%

Source: Form 41 and 298C, U.S. Department of Transportation.

** Reporting carriers.

TABLE 25

U.S. REGIONAL CARRIERS

SCHEDULED PASSENGER TRAFFIC

(In Millions)

FISCAL YEAR	REVENUE PASSENGERS			REVENUE PASSENGER MILES		
	DOMESTIC	INTERNATIONAL	TOTAL	DOMESTIC	INTERNATIONAL	TOTAL
<u>Historical</u>						
2010	162	3	164	75,030	1,347	76,377
2015	153	3	156	72,754	2,116	74,870
2016	152	4	155	72,964	2,564	75,527
2017	149	3	152	71,715	2,468	74,183
2018	154	3	157	74,886	2,295	77,181
2019E	159	3	163	78,499	2,211	80,709
<u>Forecast</u>						
2020	168	3	172	83,110	2,341	85,450
2025	185	4	189	93,361	2,629	95,990
2030	205	4	209	105,564	2,973	108,537
2035	227	5	231	118,971	3,351	122,321
2040	249	5	254	133,046	3,747	136,793
<u>Avg Annual Growth</u>						
2010-19	-0.2%	2.1%	-0.1%	0.5%	5.7%	0.6%
2019-20	5.4%	5.4%	5.4%	5.9%	5.9%	5.9%
2020-30	2.0%	2.0%	2.0%	2.4%	2.4%	2.4%
2020-40	2.0%	2.0%	2.0%	2.4%	2.4%	2.4%

Source: Form 41 and 298C, U.S. Department of Transportation.

TABLE 26

U.S. REGIONAL CARRIERS

SCHEDULED PASSENGER CAPACITY, TRAFFIC, AND LOAD FACTORS

YEAR	DOMESTIC			INTERNATIONAL			TOTAL		
	ASMS (MIL)	RPMs (MIL)	% LOAD FACTOR	ASMS (MIL)	RPMs (MIL)	% LOAD FACTOR	ASMS (MIL)	RPMs (MIL)	% LOAD FACTOR
<u>Historical</u>									
2010	98,461	75,030	76.2	1,857	1,347	72.5	100,318	76,377	76.1
2015	90,681	72,754	80.2	2,819	2,116	75.0	93,500	74,870	80.1
2016	91,158	72,964	80.0	3,519	2,564	72.8	94,677	75,527	79.8
2017	90,938	71,715	78.9	3,380	2,468	73.0	94,317	74,183	78.7
2018	93,924	74,886	79.7	3,023	2,295	75.9	96,947	77,181	79.6
2019E	98,259	78,499	79.9	2,933	2,211	75.4	101,192	80,709	79.8
<u>Forecast</u>									
2020	103,793	83,110	80.1	3,098	2,341	75.5	106,891	85,450	79.9
2025	115,736	93,361	80.7	3,455	2,629	76.1	119,191	95,990	80.5
2030	130,373	105,564	81.0	3,892	2,973	76.4	134,265	108,537	80.8
2035	146,604	118,971	81.2	4,376	3,351	76.6	150,980	122,321	81.0
2040	163,703	133,046	81.3	4,887	3,747	76.7	168,590	136,793	81.1
<u>Avg Annual Growth</u>									
2010-19	0.0%	0.5%		5.2%	5.7%	0.4%	0.1%	0.6%	
2019-20	5.6%	5.9%		5.6%	5.9%	0.2%	5.6%	5.9%	
2020-30	2.3%	2.4%		2.3%	2.4%	0.1%	2.3%	2.4%	
2020-40	2.3%	2.4%		2.3%	2.4%	0.1%	2.3%	2.4%	

Source: Form 41 and 298C, U.S. Department of Transportation.

TABLE 27

U.S. REGIONAL CARRIERS

PASSENGER AIRCRAFT

AS OF JANUARY 1	REGIONAL AIRCRAFT												TOTAL FLEET		
	LESS THAN 9 SEATS	10 TO 19 SEATS	20 TO 30 SEATS	31 TO 40 SEATS		OVER 40 SEATS		TOTAL	NON JET	JET	TOTAL	NON JET	JET	TOTAL	
	PROP	JET	TOTAL	PROP	JET	TOTAL	PROP	JET	TOTAL	PROP	JET	TOTAL	PROP	JET	
<u>Historical</u>															
2010	440	92	82	144	28	172	99	1,728	1,827	857	1,756	2,613			
2015	346	68	13	32	0	32	57	1,628	1,685	516	1,628	2,144			
2016	390	55	13	59	0	59	40	1,637	1,677	557	1,637	2,194			
2017	367	65	19	26	0	26	65	1,644	1,709	542	1,644	2,186			
2018	360	77	20	11	3	14	54	1,795	1,849	522	1,798	2,320			
2019E	374	72	19	11	0	11	39	1,846	1,885	515	1,846	2,361			
<u>Forecast</u>															
2020	347	67	18	10	0	10	44	1,876	1,920	486	1,876	2,362			
2025	269	52	14	8	0	8	59	1,915	1,974	402	1,915	2,317			
2030	194	37	10	6	0	6	67	1,848	1,915	314	1,848	2,162			
2035	116	22	6	3	0	3	74	2,001	2,075	221	2,001	2,222			
2040	34	6	2	1	0	1	85	2,192	2,277	128	2,192	2,320			
<u>Avg Annual Growth</u>															
2010-19	-1.8%	-2.7%	-15.0%	-24.9%	N/A	-26.3%	-9.8%	0.7%	0.3%	-5.5%	0.6%	-1.1%			
2019-20	-7.3%	-6.9%	N/A	-9.1%	N/A	-9.1%	12.8%	1.6%	1.9%	-5.7%	1.6%	0.0%			
2020-30	-5.7%	-5.8%	N/A	-5.0%	N/A	-5.0%	4.3%	-0.2%	0.0%	-4.3%	-0.2%	-0.9%			
2020-40	-11.0%	-11.4%	N/A	-10.9%	N/A	-10.9%	3.3%	0.8%	0.9%	-6.5%	0.8%	-0.1%			

TABLE 28

ACTIVE GENERAL AVIATION AND AIR TAXI AIRCRAFT

AS OF DEC. 31	FIXED WING				ROTORCRAFT			TOTAL GENERAL AVIATION FLEET						
	SINGLE ENGINE	PISTON MULTI-ENGINE	TURBO PROP	TURBO JET	TURBINE TURBO	PISTON	TURBINE	TOTAL	EXPERI-MENTAL**	LIGHT SPORT AIRCRAFT**	OTHER	TOTAL PISTONS	TOTAL TURBINES	
<u>Historical*</u>														
2010	139,519	15,900	155,419	9,369	11,484	20,853	3,588	6,514	10,102	24,784	6,528	5,684	223,370	27,367
2015	127,887	13,254	141,141	9,712	13,440	23,152	3,286	7,220	10,506	27,922	2,369	4,941	210,031	30,372
2016	129,652	12,986	142,638	9,779	13,751	23,530	3,344	7,233	10,577	27,585	2,478	4,986	211,794	30,763
2017	129,833	13,083	142,916	9,949	14,217	24,166	3,270	7,241	10,511	26,921	2,551	4,692	211,757	31,407
2018	130,179	12,861	143,040	9,925	14,596	24,521	3,082	6,907	9,989	27,531	2,554	4,114	211,749	31,428
2019E	129,535	12,800	142,335	9,965	15,035	25,000	3,130	7,035	10,165	27,725	2,700	4,410	212,335	32,035
<u>Forecast</u>														
2020	128,495	12,750	141,245	9,995	15,495	25,490	3,175	7,165	10,340	27,970	2,845	4,490	212,380	32,655
2025	122,245	12,485	134,730	10,230	17,760	27,990	3,405	7,820	11,225	29,365	3,545	4,545	211,400	35,810
2030	115,710	12,195	127,905	10,795	19,970	30,765	3,665	8,540	12,205	30,805	4,185	4,575	210,440	39,305
2035	109,600	11,900	121,500	11,530	22,035	33,565	3,940	9,305	13,245	32,245	4,810	4,595	209,960	42,870
2040	104,335	11,635	115,970	12,595	24,000	36,595	4,215	10,080	14,295	33,475	5,430	4,615	210,380	46,675
<u>Avg Annual Growth</u>														
2010-19	-0.8%	-2.4%	-1.0%	0.7%	3.0%	2.0%	-1.5%	0.9%	0.1%	1.3%	-9.3%	-2.8%	-0.6%	1.8%
2019-20	-0.8%	-0.4%	-0.8%	0.3%	3.1%	2.0%	1.4%	1.8%	1.7%	0.9%	5.4%	1.8%	0.0%	1.9%
2020-30	-1.0%	-0.4%	-1.0%	0.8%	2.6%	1.9%	1.4%	1.8%	1.7%	1.0%	3.9%	0.2%	-0.1%	1.9%
2020-40	-1.0%	-0.5%	-1.0%	1.2%	2.2%	1.8%	1.4%	1.7%	1.6%	0.9%	3.3%	0.1%	0.0%	1.8%

* Source: 2001-2010, 2012-2018, FAA General Aviation and Air Taxi Activity (and Avionics) Surveys.

**Experimental Light-sport category that was previously shown under Sport Aircraft is moved under Experimental Aircraft category, starting in 2012.

Note: An active aircraft is one that has a current registration and was flown at least one hour during the calendar year.

TABLE 29
ACTIVE GENERAL AVIATION AND AIR TAXI HOURS FLOWN
(In Thousands)

AS OF DEC. 31	FIXED WING										TOTAL				
	PISTON			TURBINE			ROTORCRAFT				GENERAL AVIATION		TOTAL		
	SINGLE ENGINE	MULTI-ENGINE	TOTAL	TURBO PROP	TURBO JET	TURBO TOTAL	PISTON	TURBINE	TOTAL	EXPERI-MENTAL**	LIGHT SPORT AIRCRAFT**	OTHER		PISTONS	TURBINES
2010	12,161	1,818	13,979	2,325	3,375	5,700	794	2,611	3,405	1,226	311	181	24,802	8,311	
2015	11,217	1,608	12,825	2,538	3,837	6,375	798	2,496	3,294	1,295	191	162	24,142	8,871	
2016	11,865	1,683	13,548	2,708	3,847	6,554	780	2,348	3,128	1,224	187	193	24,834	8,902	
2017	12,047	1,536	13,583	2,625	4,065	6,690	782	2,538	3,320	1,241	209	168	25,212	9,228	
2018	12,092	1,694	13,785	2,736	4,592	7,328	601	2,322	2,922	1,153	187	131	25,506	9,650	
2019E	12,030	1,670	13,700	2,774	4,810	7,584	621	2,394	3,015	1,195	209	150	25,853	9,978	
Forecast															
2020	11,846	1,651	13,497	2,807	5,019	7,827	641	2,457	3,098	1,242	223	153	26,039	10,284	
2025	10,881	1,598	12,479	2,956	5,945	8,901	738	2,756	3,494	1,363	292	156	26,684	11,657	
2030	10,209	1,567	11,776	3,129	6,824	9,953	831	3,058	3,889	1,480	357	157	27,612	13,011	
2035	9,770	1,550	11,321	3,344	7,592	10,936	923	3,362	4,285	1,598	424	159	28,723	14,298	
2040	9,626	1,551	11,177	3,652	8,331	11,983	1,012	3,670	4,682	1,707	496	160	30,205	15,652	
Avg Annual Growth															
2010-19	-0.1%	-0.9%	-0.2%	2.0%	4.0%	3.2%	-2.7%	-1.0%	-1.3%	-0.3%	-4.3%	-2.1%	0.5%	-0.3%	2.1%
2019-20	-1.5%	-1.1%	-1.5%	1.2%	4.4%	3.2%	3.2%	2.6%	2.7%	3.9%	6.5%	2.1%	0.7%	-1.3%	3.1%
2020-30	-1.5%	-0.5%	-1.4%	1.1%	3.1%	2.4%	2.6%	2.2%	2.3%	1.8%	4.8%	0.3%	0.6%	-1.1%	2.4%
2020-40	-1.0%	-0.3%	-0.9%	1.3%	2.6%	2.2%	2.3%	2.0%	2.1%	1.6%	4.1%	0.2%	0.7%	-0.7%	2.1%

* Source: 2001-2010, 2012-2018, FAA General Aviation and Air Taxi Activity (and Avionics) Surveys.

** Experimental light-sport category that was previously shown under Sport Aircraft is moved under Experimental Aircraft category, starting in 2012.

Note: An active aircraft is one that has a current registration and was flown at least one hour during the calendar year.

TABLE 30

ACTIVE PILOTS BY TYPE OF CERTIFICATE, EXCLUDING STUDENT PILOTS*

AS OF DEC. 31	RECREATIONAL		PRIVATE	COMMERCIAL	AIRLINE TRANSPORT	ROTOR-CRAFT ONLY		GLIDER ONLY	TOTAL LESS STUDENT PILOTS	INSTRUMENT RATED PILOTS ¹
	2010	2015				SPORT PILOT	SPORT PILOT			
Historical**										
2010	212	3,682	202,020	123,705	142,198	15,377	21,275	508,469	318,001	
2015	190	5,482	170,718	101,164	154,730	15,566	19,460	467,310	304,329	
2016	175	5,889	162,313	96,081	157,894	15,518	17,991	455,861	302,572	
2017	153	6,097	162,455	98,161	159,825	15,355	18,139	460,185	306,652	
2018	144	6,246	163,695	99,880	162,145	15,033	18,370	465,513	311,017	
2019	127	6,467	161,105	100,863	164,947	14,248	19,143	466,900	314,168	
Forecast										
2020	125	6,740	161,700	100,950	166,900	14,100	19,350	469,865	316,300	
2025	110	8,110	157,900	100,800	171,100	14,500	20,050	472,570	322,700	
2030	90	9,405	150,700	100,100	176,900	15,700	20,300	473,195	329,200	
2035	70	10,615	144,500	99,300	183,400	17,000	20,450	475,335	335,300	
2040	50	11,680	140,600	98,600	190,100	18,300	20,600	479,930	341,200	
<u>Avg Annual Growth</u>										
2010-19	-5.5%	6.5%	-2.5%	-2.2%	1.7%	-0.8%	-1.2%	-0.9%	-0.1%	
2019-20	-1.6%	4.2%	0.4%	0.1%	1.2%	-1.0%	1.1%	0.6%	0.7%	
2020-30	-3.2%	3.4%	-0.7%	-0.1%	0.6%	1.1%	0.5%	0.1%	0.4%	
2020-40	-4.5%	2.8%	-0.7%	-0.1%	0.7%	1.3%	0.3%	0.1%	0.4%	

** Source: FAA U.S. Civil Airmen Statistics.

* Starting with April 2016, there is no expiration date on the new student pilot certificates. This generates a cumulative increase in the student pilot numbers and breaks the link between student pilot and private pilot or higher level certificates. Since there is no sufficient data yet to forecast the student certificates under the new rule, student pilot forecast is suspended and excluded from this table.

¹ Instrument rated pilots should not be added to other categories in deriving total.

Note: An active pilot is a person with a pilot certificate and a valid medical certificate.

TABLE 31

GENERAL AVIATION AIRCRAFT FUEL CONSUMPTION
(In Millions of Gallons)

CALENDAR YEAR	FIXED WING				TOTAL FUEL CONSUMED						
	PISTON		TURBINE		ROTORCRAFT		TOTAL FUEL CONSUMED				
	SINGLE ENGINE	MULTI-ENGINE	TURBO PROP	TURBO JET	PISTON	TURBINE	EXPERIMENTAL** / OTHER	LIGHT SPORT**	AVGAS	JET FUEL	TOTAL
<u>Historical*</u>											
2010	133	54	187	1,123	11	125	22	1	221	1,435	1,656
2015	128	40	191	1,063	10	128	15	1	196	1,383	1,578
2016	137	42	207	1,117	10	113	17	1	206	1,437	1,643
2017	138	41	198	1,204	10	139	16	1	206	1,541	1,747
2018	152	50	234	1,455	9	132	20	1	232	1,820	2,052
2019E	152	49	236	1,509	9	135	21	1	231	1,879	2,111
<u>Forecast</u>											
2020	149	48	239	1,558	9	137	22	1	230	1,934	2,164
2025	137	46	248	1,755	11	149	24	2	218	2,152	2,370
2030	127	44	259	1,936	12	160	26	2	211	2,354	2,565
2035	119	44	270	2,079	13	171	27	2	206	2,519	2,725
2040	115	44	287	2,225	14	177	29	3	205	2,689	2,894
<u>Avg Annual Growth</u>											
2010-19	1.5%	-1.1%	2.6%	3.3%	-2.1%	0.9%	-0.3%	-2.6%	0.5%	3.0%	2.7%
2019-20	-1.5%	-1.5%	1.2%	3.3%	3.2%	1.6%	4.2%	6.7%	-0.8%	2.9%	2.5%
2020-30	-1.6%	-0.8%	0.8%	2.2%	2.5%	1.5%	1.5%	4.4%	-0.9%	2.0%	1.7%
2020-40	-1.3%	-0.5%	0.9%	1.8%	2.3%	1.3%	1.4%	3.7%	-0.6%	1.7%	1.5%

*Source: FAA APO Estimates.

** Experimental Light-sport category that was previously shown under Sport Aircraft is moved under Experimental Aircraft category, starting in 2012.
Note: Detail may not add to total because of independent rounding.

TABLE 32

**TOTAL COMBINED AIRCRAFT OPERATIONS AT AIRPORTS
WITH FAA AND CONTRACT TRAFFIC CONTROL SERVICE**
(In Thousands)

FISCAL YEAR	AIR CARRIER	AIR TAXI/ COMMUTER	GENERAL AVIATION				MILITARY			NUMBER OF TOWERS	
			ITINERANT	LOCAL	TOTAL	ITINERANT	LOCAL	TOTAL	FAA	CONTRACT	
<u>Historical</u>											
2010	12,658	9,410	14,864	11,716	26,580	1,309	1,298	2,607	51,255	264	244
2015	13,755	7,895	13,887	11,691	25,579	1,292	1,203	2,495	49,724	264	252
2016	14,417	7,580	13,905	11,633	25,538	1,317	1,145	2,462	49,997	264	252
2017	15,047	7,180	13,839	11,732	25,571	1,326	1,200	2,526	50,325	264	253
2018	15,686	7,126	14,130	12,354	26,485	1,319	1,155	2,474	51,770	264	254
2019E	16,192	7,234	14,245	13,109	27,354	1,349	1,134	2,483	53,264	264	256
<u>Forecast</u>											
2020	16,869	7,423	14,412	13,600	28,013	1,350	1,136	2,486	54,790	264	256
2025	19,398	5,557	14,594	13,824	28,418	1,350	1,136	2,486	55,858	264	256
2030	21,389	5,840	14,780	14,055	28,835	1,350	1,136	2,486	58,550	264	256
2035	23,638	6,143	14,970	14,293	29,264	1,350	1,136	2,486	61,531	264	256
2040	25,995	6,462	15,166	14,539	29,705	1,350	1,136	2,486	64,648	264	256
<u>Avg. Annual Growth</u>											
2010-19	2.8%	-2.9%	-0.5%	1.3%	0.3%	0.3%	-1.5%	-0.5%	0.4%		
2019-20	4.2%	2.6%	1.2%	3.7%	2.4%	0.0%	0.1%	0.1%	2.9%		
2020-30	2.4%	-2.4%	0.3%	0.3%	0.3%	0.0%	0.0%	0.0%	0.7%		
2020-40	2.2%	-0.7%	0.3%	0.3%	0.3%	0.0%	0.0%	0.0%	0.8%		

Source: FAA Air Traffic Activity.

TABLE 33

TOTAL TRACON OPERATIONS
(In Thousands)

FISCAL YEAR	AIR CARRIER	AIR TAXI/ COMMUTER	GENERAL AVIATION	MILITARY	OVERFLIGHT	TOTAL
<u>Historical</u>						
2010	12,576	8,667	10,839	2,054	4,851	38,987
2015	13,611	7,095	10,399	1,966	4,100	37,171
2016	14,292	6,893	10,289	1,979	4,260	37,713
2017	14,909	6,513	10,490	1,928	4,244	38,085
2018	15,519	6,495	10,805	1,954	4,115	38,888
2019E	16,014	6,600	10,960	1,946	3,706	39,227
<u>Forecast</u>						
2020	16,680	6,828	11,055	1,947	3,821	40,331
2025	19,183	4,658	11,179	1,947	3,869	40,835
2030	21,159	4,908	11,306	1,947	4,114	43,434
2035	23,391	5,177	11,436	1,947	4,389	46,339
2040	25,728	5,460	11,568	1,946	4,676	49,379
<u>Avg Annual Growth</u>						
2010-19	2.7%	-3.0%	0.1%	-0.6%	-2.9%	0.1%
2019-20	4.2%	3.4%	0.9%	0.0%	3.1%	2.8%
2020-30	2.4%	-3.2%	0.2%	0.0%	0.7%	0.7%
2020-40	2.2%	-1.1%	0.2%	0.0%	1.0%	1.0%
Source: FAA Air Traffic Activity.						

TABLE 34

**IFR AIRCRAFT HANDLED
AT FAA EN ROUTE TRAFFIC CONTROL CENTERS**
(In Thousands)

FISCAL YEAR	IFR AIRCRAFT HANDLED			TOTAL
	COMMERCIAL	GENERAL AVIATION	MILITARY	
<u>Historical</u>				
2010	30,965	6,550	2,982	40,498
2015	33,116	7,007	1,795	41,918
2016	34,104	7,301	1,826	43,231
2017	34,665	7,428	1,765	43,858
2018	35,729	7,406	1,735	44,870
2019E	35,781	6,309	1,645	43,734
<u>Forecast</u>				
2020	37,059	6,298	1,525	44,882
2025	38,489	6,450	1,525	46,464
2030	42,340	6,610	1,525	50,475
2035	46,687	6,778	1,525	54,990
2040	51,236	6,955	1,525	59,716
<u>Avg Annual Growth</u>				
2010-19	1.6%	-0.4%	-6.4%	0.9%
2019-20	3.6%	-0.2%	-7.3%	2.6%
2020-30	1.3%	0.5%	0.0%	1.2%
2020-40	1.6%	0.5%	0.0%	1.4%

Source: FAA Air Traffic Activity