

Appendix I

Fleet Mix Forecast

Technical Memorandum

12/20/2016

**Martin State Airport Environmental Assessment
for Phase I Improvements**

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EA for Phase I Improvements at Martin State Airport

Aviation Forecast Fleet Mix Technical Memorandum

The purpose of this technical memorandum is to document the development of the fleet mix forecasts for Martin State Airport (MTN). The forecasts are required to analyze potential noise impacts for the Environmental Assessment (EA) of the Phase I Improvements. Forecasts of based aircraft and aircraft operations are included.

The most current Federal Aviation Administration (FAA) forecast at the initiation of this study, the 2015 Terminal Area Forecast (TAF) and the Martin State Airport Layout Plan Update forecast (ALP Update forecast), were used to project the future fleet mix. The FAA TAF was used as the primary source of future aircraft operations projections while the ALP Update forecast was used to develop fleet mix distributions. In addition to the base year (2016), detailed fleet mix forecasts were prepared for 2021 and 2026.

This memorandum is organized as follows. Historical airport activity data and recent trends are described in Section 1. The TAF and ALP Update forecasts are presented in Section 2. Section 3 describes the methodologies applied to project aviation activity. The report concludes with a summary of the base year and forecast results in Section 4.

1. Historical Airport Activity

Historical airport activity was obtained from the 2015 FAA TAF. The TAF provides historical statistics including the number of aircraft and operations at MTN. **Table 1** shows the number of based General Aviation (GA) aircraft at the Airport from 1980 to 2014. **Table 2** shows the number of operations by category including air carrier, air taxi, general aviation and military for each fiscal year from 1980 to 2014.

Table 1
Historical Based GA Aircraft from FAA TAF (Fiscal Year) ⁽¹⁾

Year	Single Engine	Multi-Engine	Jet	Helicopter	Other	MTN Total
1980	96	22	-	11	-	129
1981	104	22	-	9	7	142
1982	110	22	-	7	13	152
1983	145	42	-	9	14	210
1984	134	23	-	30	14	201
1985	144	37	-	30	-	211
1986	144	24	13	30	-	211
1987	174	29	10	29	-	242
1988	174	29	-	29	-	232
1989	200	38	16	30	29	313
1990	195	34	38	30	29	326
1991	218	35	32	27	29	341
1992	203	21	10	26	28	288
1993	203	21	10	26	28	288
1994	116	21	9	25	38	209
1995	116	21	9	25	38	209
1996	120	21	9	25	38	213
1997	120	21	9	25	38	213
1998	120	21	9	25	38	213
1999	221	27	33	21	38	340
2000	221	27	33	21	38	340
2001	213	23	21	21	38	316
2002	213	23	21	21	38	316
2003	215	23	21	21	38	318
2004	206	49	40	30	27	352
2005	195	32	28	30	25	310
2006	188	34	29	27	25	303
2007	188	34	29	27	25	303
2008	156	33	15	11	25	240
2009	150	31	15	9	25	230
2010	139	31	13	11	-	194
2011	144	26	15	7	-	192
2012	143	24	13	7	20	207
2013	160	27	10	8	24	229
2014	158	28	9	9	24	228

Notes:

(1) The U.S. federal government's fiscal year begins on October 1st of the previous calendar year and ends on September 30th of the current year.

Source: FAA Terminal Area Forecast (TAF) 2015.

Table 2
Historical Number of Operations from FAA TAF (Fiscal Year)

Year	Itinerant				Local		Total
	AC	AT	GA	Military	GA	Military	
1990	-	49	90,000	13,975	62,000	1,692	167,716
1991	-	22	75,000	14,206	58,000	1,526	148,754
1992	-	30	73,000	15,881	50,000	-	138,911
1993	-	30	89,260	15,881	55,006	-	160,177
1994	-	30	89,260	15,881	55,006	-	160,177
1995 ⁽¹⁾	-	31	14,571	1,906	10,294	142	26,944 ⁽¹⁾
1996	-	144	66,663	7,459	45,448	848	120,562
1997	-	63	73,390	8,101	43,830	912	126,296
1998	-	131	72,052	6,938	40,060	618	119,799
1999	-	284	68,912	6,237	48,364	2,068	125,865
2000	-	384	68,833	5,769	51,460	1,700	128,146
2001	-	595	67,461	6,021	50,362	1,614	126,053
2002	12	1,136	66,803	7,132	49,802	2,474	127,359
2003	-	886	58,046	4,432	40,035	1,238	104,637
2004	-	2,196	58,830	6,770	35,458	1,188	104,442
2005	-	4,165	50,618	5,118	28,653	998	89,552
2006	-	4,141	47,589	4,305	27,009	1,383	84,427
2007	-	3,632	49,920	4,201	27,216	1,218	86,187
2008	1	3,057	46,219	4,524	22,514	996	77,311
2009	-	1,489	36,311	3,686	21,448	445	63,379
2010	8	1,655	36,038	2,669	21,164	588	62,122
2011	-	1,495	38,784	3,061	22,452	837	66,629
2012	1	1,781	40,505	2,366	21,518	654	66,825
2013	3	1,574	40,277	2,993	23,192	871	68,910
2014	1	1,444	38,970	2,337	29,918	664	73,334

Note:

(1): Data include only the last two months of FY 1995.

Source: FAA Terminal Area Forecast (TAF) 2015.

The total number of GA aircraft based at MTN fluctuated from 1980 to 2014 (the most recent year available for TAF historical data). There were two periods when MTN hosted a based GA fleet of more than 300 aircraft. The first period was from 1989 to 1991 with the total peaking at 341 in 1991. Based GA aircraft declined shortly thereafter, and the total counts stayed just above 200 between 1994 and 1998. From 1999 to 2007, the total exceeded 300 again with the all-time peak of 352 in 2004. After the beginning of the Great

Recession in 2008, however, the based GA aircraft counts had fallen to below 200 in 2010 and 2011. As the economy improved, the number of based GA aircraft recovered from below 200 to approximately 230 in 2013 and 2014.

The most recent available source is based aircraft is the MTN inventory performed in November 2016. The total number of based GA aircraft at the time was 234, consistent with the TAF. However, the Airport inventory showed more jets and fewer other aircraft than the TAF. In addition, there are 21 A-10 Thunderbolt II military aircraft currently based at MTN.

The total number of operations at the Airport declined in general from 1990 to 2010. However, the data prior to 1996 are based either on estimates or incomplete tabulations and should therefore be considered with caution. From 1996 to 2004, the total annual operations stayed above 100,000. From 2004 to 2010, operations dropped from 104,442 to 62,122. In 2011, the total operations increased to 66,629. The recent decline in operations through 2010 is largely attributable to increased post-9/11 operating restrictions, higher operating costs, and the Great Recession of 2008-2009. From 2011 to 2014, MTN accommodated an increased number of operations in response to a number of factors such as an improved economy and lower fuel prices.

As noted earlier, the numbers in Table 1 and Table 2 are the best available but nevertheless should be considered with caution. In some cases, notably from 1990 through 2000, some numbers remained unchanged over periods of several years indicating infrequent updates.

2. Available Forecasts

Available forecasts were reviewed to determine the extent to which they could be used to develop the based aircraft and operations fleet mix forecast. Two recent based aircraft and operation forecasts are available: the latest FAA TAF, published in 2015, and the forecast from the most recent MTN ALP Update, completed in 2011. This section describes these two forecasts and discusses their applicability.

2.1 FAA TAF

The TAF provides the FAA's official aviation activity projections for facilities in the National Plan of Integrated Airport Systems (NPIAS). The FAA uses the TAF as a guide for planning and budgeting purposes for facilities in the NPIAS. The TAF provides forecasts of passenger enplanements, number of based GA aircraft, and operations by user class, such as Air Carrier, Air Taxi, GA, and Military. It also differentiates itinerant and local operations. Itinerant operations are defined as operations outside the airport pattern. Local operations are defined as operations within the airport pattern. **Table 3** and **Table 4** show the TAF based aircraft and operations forecasts for MTN, respectively.

At the time this report was written, operations data through October 2016 were available from the Operations Network (OPSNET) tower counts ¹. After adjusting for seasonal variation, the observed operations track closely with the TAF for 2016. Both observed itinerant and local operations were slightly higher than the TAF. In total, the difference between observations and the TAF is less than 1%. Similarly, the TAF based aircraft forecast and airport counts for 2016 differed by less than 1%.

Table 3
TAF Based GA Aircraft Forecast

Year	Single Engine	Multi-Engine	Jet	Helicopter	Other	Total
Base Year						
2014	158	28	9	9	24	228
Forecast						
2015	160	29	9	9	24	231
2016	162	30	9	9	24	234
2017	164	31	9	9	24	237
2018	166	32	9	9	24	240
2019	168	33	9	9	24	243
2020	170	34	9	9	24	246
2021	172	35	9	9	24	249
2022	174	36	9	9	24	252
2023	176	36	9	9	24	254
2024	178	37	9	9	24	257
2025	180	38	9	9	24	260
2026	182	39	9	9	24	263
2027	184	40	9	9	24	266
2028	186	41	9	9	24	269
2029	188	42	9	9	24	272
2030	190	43	9	9	24	275
2031	192	44	9	9	24	278
2032	194	45	9	9	24	281
2033	196	46	9	9	24	284
2034	198	47	9	9	24	287
2035	200	48	9	9	24	290
2036	202	49	9	9	24	293
2037	204	50	9	9	24	296
2038	206	51	9	9	24	299
2039	208	52	9	9	24	302
2040	210	53	9	9	24	305
CAGR ⁽¹⁾	1.10%	2.48%	0.00%	0.00%	0.00%	1.13%

Note:

(1) Compound Annual Growth Rate (CAGR) 2014 to 2040.

Source: FAA 2015 Terminal Area Forecast (TAF) and HNTB Analysis.

¹ The Operations Network (OPSNET), FAA, <https://aspm.faa.gov/opsnet/sys/main.asp>

Table 4
TAF Operations Forecast

Year	Itinerant				Local		Total
	AC ⁽¹⁾	AT ⁽²⁾	GA ⁽³⁾	Military	GA ⁽³⁾	Military	
Base Year							
2014	1	1,444	38,970	2,337	29,918	664	73,334
Forecast							
2015	4	1,719	38,243	2,433	31,320	758	74,477
2016	4	1,719	38,339	2,433	32,558	758	75,811
2017	4	1,719	38,454	2,433	32,798	758	76,166
2018	4	1,719	38,570	2,433	33,040	758	76,524
2019	4	1,719	38,686	2,433	33,285	758	76,885
2020	4	1,719	38,802	2,433	33,532	758	77,248
2021	4	1,719	38,919	2,433	33,780	758	77,613
2022	4	1,719	39,036	2,433	34,029	758	77,979
2023	4	1,719	39,153	2,433	34,280	758	78,347
2024	4	1,719	39,271	2,433	34,533	758	78,718
2025	4	1,719	39,389	2,433	34,788	758	79,091
2026	4	1,719	39,507	2,433	35,045	758	79,466
2027	4	1,719	39,626	2,433	35,304	758	79,844
2028	4	1,719	39,745	2,433	35,564	758	80,223
2029	4	1,719	39,865	2,433	35,826	758	80,605
2030	4	1,719	39,985	2,433	36,090	758	80,989
2031	4	1,719	40,105	2,433	36,356	758	81,375
2032	4	1,719	40,226	2,433	36,624	758	81,764
2033	4	1,719	40,347	2,433	36,895	758	82,156
2034	4	1,719	40,468	2,433	37,167	758	82,549
2035	4	1,719	40,590	2,433	37,441	758	82,945
2036	4	1,719	40,712	2,433	37,718	758	83,344
2037	4	1,719	40,834	2,433	37,997	758	83,745
2038	4	1,719	40,957	2,433	38,278	758	84,149
2039	4	1,719	41,080	2,433	38,561	758	84,555
2040	4	1,719	41,204	2,433	38,846	758	84,964
CAGR ⁽⁴⁾							
	0.00%	0.60%	0.19%	0.14%	0.90%	0.46%	0.51%

Notes:

(1) AC: Air Carrier

(2) AT: Air Taxi

(3) GA: General Aviation

(4) Compound Annual Growth Rate (CAGR) from 2014 to 2040.

Source: FAA 2015 Terminal Area Forecast (TAF) and HNTB Analysis.

2.2 ALP Update Forecast

The latest MTN ALP Update includes an aviation activity forecast. This forecast was used to identify facility needs at MTN and it is also used in the Maryland Aviation System Plan. The base year is 2006 and horizon years are 2010, 2015, 2020, and 2025. Several methodologies were applied in the ALP based aircraft forecast including population growth, historical based aircraft growth, national based aircraft growth, and TAF growth. The national based aircraft growth methodology was used to develop the preferred forecast. For the operations forecast, multiple methodologies were used to project future operations for each TAF forecast category. A preferred forecast was then selected based on consistency with recent activity and national trends. **Table 5** shows the ALP Update based aircraft forecast and **Table 6** shows the ALP Update operations forecast.

The ALP Update forecast was reviewed to determine the extent it could be used to develop the fleet mix forecasts. Since the development of the ALP Update forecast in 2006, the outlook for the aviation industry has changed greatly. The U.S. economy experienced one of the most severe recessions in history. Historically high oil prices put tremendous pressure on the commercial and recreational aviation industry. Several major airline mergers were completed. General aviation activity, influenced by the downturn in the national and local economy and high fuel prices, was markedly reduced.

The ALP Update forecast was compared with available observations. **Table 7** compares the ALP forecasts and TAF observations for 2010. It shows that the ALP Update forecast overestimated both based aircraft and operations. Since the ALP forecast used pre-recession economics data and projections, this difference is expected. As the aviation industry environment has changed greatly since the ALP Update forecast was prepared, it is necessary to use new based aircraft and operations forecasts that incorporate the latest industry trends and base year data. Although the ALP Update's forecast of based aircraft and total operations is now dated, it is still the best available source for fleet mix trends at MTN.

Table 5
ALP Update Based Aircraft Forecast

Year	Single Engine	Multi-Engine	Jet	Helicopter	Military	Total
<i>Base Year</i>						
2006	188	41	22	27	25	303
<i>Forecast</i>						
2010	203	43	32	29	18	325
2015	208	46	45	30	18	347
2020	213	49	59	32	18	371
2025	218	51	75	34	18	396
CAGR ⁽¹⁾	0.78%	1.16%	6.67%	1.22%	-1.71%	1.42%

Note:

(1) Compound Annual Growth Rate (CAGR) 2006 to 2025.

Source: Airport Layout Plan (ALP) Update, 2011.

Table 6
ALP Update Operations Forecast

Year	Itinerant				Local		Total
	Air Carrier	Air Taxi	General Aviation	Military	General Aviation	Military	
Base Year							
2005	-	4,165	50,618	5,118	28,653	998	89,552
Forecast							
2010	-	4,689	56,216	5,200	30,867	1,000	97,973
2015	-	5,280	62,433	5,200	33,253	1,000	107,166
2020	-	5,944	69,337	5,200	35,823	1,000	117,305
2025	-	6,693	77,005	5,200	38,591	1,000	128,490
CAGR ⁽¹⁾	0.00%	2.40%	2.12%	0.08%	1.50%	0.01%	1.82%

Note:

(1) Compound Annual Growth Rate (CAGR) from 2005 to 2025.

Source: Airport Layout Plan (ALP) Update 2011 and HNTB analysis 2016.

Table 7
ALP Update Forecast vs. TAF Observation (2010)

2010		ALP	TAF
Based Aircraft	Single Engine	203	139
	Multi-Engine	43	31
	Jet	32	15
	Helicopter	29	7
	Military	18	N/A
Airport Operations	Itinerant		
	Air Carrier	-	8
	Air Taxi	4,689	1,655
	General Aviation	56,216	36,080
	Military	5,200	3,061
Local	General Aviation	30,867	21,164
	Military	1,000	588

Source: ALP Update, 2011 and FAA 2015 TAF.

3. Methodology

The methodology to develop the EA fleet mix forecast employed various data sources, including the ALP Update forecast, Airport input, and the TAF. Multiple steps were applied to incorporate information from several databases. This section describes the data sources, assumptions and methodologies used to estimate the base year and future fleet mix.

3.1 Data Sources

The following data sources were used in this report:

- Terminal Area Forecast (TAF): It forecasts operations by user class, including itinerant air carrier, air taxi, general aviation, and military, and local general aviation and military. It was used as the primary source of forecast aircraft operations.
- The Operations Network (OPSNET,): The FAA OPSNET contains the official air traffic operation counts available for public release. It provides operation counts by category, such as air carrier, air taxi, general aviation, and military and provides a breakout by Visual Flight Rules (VFR) and Instrument Flight Rules (IFR) operations. Operation counts are available for such facilities as airports, air traffic control towers, and Terminal Radar Approach Control Facilities (TRACON). The legacy Air Traffic Activity Data System (ATADS) has been integrated into OPSNET.
- Traffic Flow Management Systems Counts (TFMSC) ²: The FAA TFMS is comprised of the number of operations by individual aircraft. It is the primary data source used to identify fleet composition for the Airport.
- Distributed Operations Network (Distributed OPSNET) ³: The FAA distributed OPSNET records the hourly distribution of air traffic handled by various facilities. It provides essential information on day and night operations required for noise impact analysis.
- Flight Explorer: Flight Explorer is a radar-based aircraft tracking system. The origin and destination information it provides was used to calculate stage length for aircraft departures. The stage length is used in the Integrated Noise Model (INM) to determine the aircraft takeoff weight profile.
- ALP Update Forecast: The ALP Update forecast was used to project the distribution of future airport operations growth by aircraft category.
- Based Aircraft Inventory: A list of current based aircraft was provided by the Airport. It was used to prepare the based aircraft forecast and verify the fleet mix and develop local operations.
- Military operations information from Maryland Air National Guard (MDANG) 175th Wing: Military night operations were obtained from the Air National Guard's 175th wing staff.

² Traffic Flow Management Systems Counts (TFMSC), FAA, <https://aspm.faa.gov/etms/sys/main.asp>.

³ Distributed Operations Network (Distributed OPSNET), FAA, <https://aspm.faa.gov/etms/sys/OPSNET.asp>.

In addition to the above-mentioned data sources, information on military and helicopter flights provided by the Airport was applied.

3.2 Assumptions

The following assumptions were incorporated into the forecast:

- Unconstrained forecast
 - The forecast is unconstrained. Future aviation activity will not be constrained by airport infrastructure and capacity.
- Local Operations
 - Civil local operations are performed by based piston aircraft and helicopters. Civil local operations performed by piston aircraft are assumed to be touch-and-go.
 - All touch-and-go operations are conducted during the day (7:00 AM – 9:59 PM).
 - The number of local civil training flights by aircraft type is proportional to the number of based piston aircraft.
 - Since detailed information on based military training aircraft is unavailable, it is assumed that military local operations are performed by A-10 Thunderbolt II's, the predominant MDANG based aircraft.
- VFR Itinerant Operations
 - It is assumed that VFR operations are conducted by piston aircraft and helicopters.
 - It is assumed that VFR itinerant operations are proportional to IFR itinerant operations by piston aircraft.
- IFR Operations
 - It is assumed that the TFMSC data includes all IFR operations at the Airport.
- Induced Demand
 - It is assumed the proposed alternatives considered in the EA will not induce additional operations. The Maximum Accelerated Stop Distance Available (ASDA) alternative will provide an additional 100-foot runway for landing, which unlikely make a material difference in the fleet mix.

3.3. Based Aircraft Forecast

A based aircraft forecast was prepared consistent with the approach and assumptions used for the more detailed aircraft operations forecasts described in Sections 3.4 and 3.5. The MTN November 2016 inventory data was used to develop the base year (2016) numbers since it was the most up to date and detailed information source. The TAF based aircraft growth rates for MTN were used to develop the EA based aircraft forecast for several reasons. First, the TAF is tracking very well with actual based aircraft numbers at MTN. In 2016 the TAF projected 234 based aircraft as compared to the 233 actual based aircraft that were counted. Secondly, the TAF projections for moderate based aircraft growth are consistent with recent historical trends at MTN (see Table 1). Finally, the TAF approach is consistent with the methodology used to forecast operations later in this report in Sections 3.4 and 3.5.

The based GA aircraft forecast is presented in Table 8. As shown, total based GA aircraft are projected to increase at a 1.2 percent annual rate from 233 in 2016 to 262 in 2026. Military based aircraft were assumed to stay constant throughout the forecast period.

Table 8
Based GA Aircraft Forecasts

Year	Forecasts	
	TAF	EA
2016	234	233
2021	249	248
2026	263	262
Compounded Annual Growth Rate		
2016-2026	1.2%	1.2%

Source: FAA 2015 TAF and HNTB Analysis.

3.4. Base Year Fleet Mix and Operations

The existing fleet composition was based on TFMSC data for itinerant operations, MTN based piston aircraft for local operations and information provided by the Airport. The TFMSC provides operation counts for each aircraft by category, including Air Carrier (AC), Air Taxi (AT), GA, and military, and by arrival and departure. Aircraft that account for 95% of the total observed operations were identified in the fleet mix. This includes aircraft with at least one landing/departure per month. Other aircraft with fewer operations are likely to be occasional visitors to the Airport. After the fleet mix and operations data were collected from the TFMSC and the based aircraft inventory, 2016 OPSNET data was used to estimate VFR itinerant operations and local operations. **Table 9** shows historical OPSNET data on itinerant and local operations by category. Since the latest OPSNET data only include tower counts from January 2016 to October 2016, it is necessary to extrapolate the 10-month counts to 12-month operations. The share of January to October operations to the annual operations was developed using historical data (2001 to 2015), which was applied to extrapolate the 10-month counts to the annual operations.

The FAA TAF is based on fiscal years while the EA study is based on calendar years. Therefore, it is necessary to convert the fiscal year operations in the TAF to calendar year operations. Monthly data from the FAA OPSNET from 2010 to 2015 was used to convert fiscal year operations to calendar year operations. The latest FAA OPSNET data include tower counts from January 2016 to October 2016. The total number of operations in 2016 was slightly higher compared with the TAF forecast for 2016. This information was used to develop a ratio to adjust the TAF. Only four air carrier operations each year were projected by the TAF through 2026. Since the air carrier operations were likely diverted commercial flights in the base year and carried out in the forecast, it was assumed that there would be no scheduled commercial operations at the Airport through 2026.

Table 10 shows the fiscal year to calendar year conversion and the base year adjustment. The adjusted TAF was used for the total number of operations by aircraft category for the base year (2016) and future years (2021 and 2026).

Table 11 shows the piston aircraft based at MTN. It was assumed that the local GA operations were performed by based piston aircraft and helicopters and the number of operations was proportional to the number of based aircraft.

Table 9
FAA OPSNET

Calendar Year	IFR Itinerant				VFR Itinerant				Local		Total Airport Operations
	Air Carrier	Air Taxi	General Aviation	Military	Air Carrier	Air Taxi	General Aviation	Military	Civil	Military	
2000	0	215	12,507	1,749	0	209	55,629	3,856	50,256	1,654	126,075
2001	0	789	14,381	2,838	0	87	52,133	3,135	50,950	1,396	125,709
2002	0	940	12,367	3,071	12	53	54,938	4,170	48,544	2,630	126,725
2003	0	937	16,360	2,803	0	9	40,738	1,751	39,749	1,112	103,459
2004	0	2,223	15,817	4,274	0	1,075	41,666	2,606	31,424	1,128	100,213
2005	0	2,265	14,161	2,833	0	1,355	34,509	1,604	28,049	1,080	85,856
2006	0	2,456	12,597	2,038	0	1,674	34,831	2,252	27,471	1,509	84,828
2007	0	2,437	11,629	1,875	0	1,242	37,585	2,193	25,520	984	83,465
2008	0	1,775	9,648	2,161	1	743	34,688	2,597	22,948	980	75,541
2009	0	1,202	8,776	2,206	3	421	26,847	1,500	21,244	409	62,608
2010	5	1,166	7,939	1,415	0	336	29,532	1,028	21,800	726	63,947
2011	0	1,355	8,077	1,934	0	155	30,890	1,203	23,016	761	67,391
2012	0	1,382	8,198	1,312	1	431	31,991	923	20,618	678	65,534
2013	3	1,303	8,023	1,675	0	271	32,254	1,318	23,192	871	68,910
2014	0	1,281	8,048	1,269	1	163	30,922	1,068	29,918	664	73,334
2015	4	1,474	8,214	1,226	0	245	30,029	1,207	31,320	758	74,477

Source: FAA Operations Network (OPSNET).

Table 10
TAF Forecast Adjustment

Time	Itinerant					Local			Total
	Air Carrier	Air Taxi	General Aviation	Military	Total	Civil	Military	Total	
OPSNET 2016 Data (Calendar Year)									
Jan - Oct	-	1,546	34,160	1,973	37,679	26,616	488	27,104	64,783
OPSNET 2001-2015 Data (Calendar Year)									
Jan	-	1,933	48,850	4,630	55,413	29,483	1,077	30,560	85,973
Feb	-	2,012	47,182	4,606	53,800	28,517	1,080	29,597	83,397
Mar	3	2,581	55,863	5,239	63,686	37,234	1,096	38,330	102,016
Apr	5	2,635	61,954	5,445	70,039	39,435	1,102	40,537	110,576
May	3	3,146	66,857	5,214	75,220	41,509	1,368	42,877	118,097
Jun	14	2,744	62,677	6,610	72,045	40,781	2,423	43,204	115,249
Jul	-	2,545	68,145	5,602	76,292	44,657	1,386	46,043	122,335
Aug	-	2,632	67,373	5,616	75,621	43,607	1,516	45,123	120,744
Sep	1	3,009	61,461	5,071	69,542	36,992	1,348	38,340	107,882
Oct	4	3,063	62,527	4,688	70,282	41,940	1,172	43,112	113,394
Nov	-	2,750	55,811	3,916	62,477	35,254	1,128	36,382	98,859
Dec	-	2,272	49,801	4,827	56,900	30,084	1,188	31,272	88,172
Total	30	31,322	708,501	61,464	801,317	449,493	15,884	465,377	1,266,694
Fiscal Year to Calendar Year Conversion Factors									
Jan - Sep	87%	74%	76%	78%	76%	76%	78%	76%	76%
Oct - Dec	13%	26%	24%	22%	24%	24%	22%	24%	24%

Table 10
TAF Forecast Adjustment

FAA TAF 2015 Forecast (Fiscal Year)									
2016	4	1,719	38,339	2,433	42,495	32,558	758	33,316	75,811
2021	4	1,719	38,919	2,433	43,075	33,780	758	34,538	77,613
2026	4	1,719	39,507	2,433	43,663	35,045	758	35,803	79,466
FAA 2015 TAF Forecast (Calendar Year)									
2016	4	1,719	38,366	2,433	42,522	32,615	758	33,373	75,896
2021	4	1,719	38,947	2,433	43,103	33,839	758	34,597	77,700
2026	4	1,719	39,535	2,433	43,691	35,107	758	35,865	79,556
Base Year (2016) Adjustment									
Jan-Oct	100%	84%	85%	86%	85%	85%	85%	85%	
2016									
Adjusted	-	1,841	40,144	2,300	44,275	31,143	571	31,714	
Adj Factors	-	0.93	0.96	1.06		1.05	1.33		
FAA 2015 TAF Forecast (Calendar Year) - Based Year Adjusted									
2016	-	1,605	36,667	2,573	40,846	34,157	1,006	35,163	76,009
2021	-	1,605	37,222	2,573	41,400	35,439	1,006	36,445	77,845
2026	-	1,605	37,784	2,573	41,963	36,767	1,006	37,772	79,735

Sources: FAA OPSNET, TAF, and HNTB Analysis.

Table 11
Based Piston Aircraft

Aircraft	Description	Total
C172	Cessna 172 Single Engine SEPF	23
C182	Cessna 182 Skylane	13
PA28	Piper PA-28-151 Cherokee Warrior	12
PA32	Piper PA-32 Cherokee Six	12
BE35	Beechcraft Model 35 Bonanza	9
P28T	Piper PA-28R-180/200/201 Cherokee Arrow I/II/III	7
C177	Cessna 177 Cardinal	7
BE36	Beechcraft Model 36 Bonanza	6
BE23	Beechcraft Model 23 Musketeer	5
M20J	Mooney Mark 20 Series	4
SR22	Cirrus SR22	4
BE58	Beechcraft Model 55/56/58 Baron	3
P32R	Piper PA-32R Lance/Saratoga	3
PARC	Piper PA-28-180/181 Cherokee Archer	3
BL17	Bellanca Super Viking Model 17-30A	3
BE55	Beechcraft Model 55/56/58 Baron	3
C150	Cessna 150 Single Engine SEPF	3
PA34	Piper PA-34 Seneca	3
BE33	Beechcraft Model 33 Debonair/Bonanza	3
M020	Mooney Mark 20 Series	3
PA31	Piper PA-31 Navajo	2
AA5A	Grumman AA-5A Cheetah; AA-5 Tiger	2
GA7	Gulfstream American GA-7 Cougar (GA7)	2
RV6	Vans RV-6	2
C152	Cessna 152 Single Engine SEPF	2
M20F	Mooney Mark 20 Series	2
AA5	Grumman AA-5A Cheetah; AA-5 Tiger	2
M20K	Mooney 252TSE (M20K)	2
PA60	Piper PA-60/PA-61 Aerostar (Aerostar 600/700)	2
BE24	Beechcraft Model 24 Sierra/Musketeer	2
PA20	Piper PA-20 Pacer	2
M20C	Mooney Mark 20 Series	2
BE76	Beechcraft Model 76 Duchess	2
RV7A	Van's Aircraft RV-7/RV-7A	1
DA40	Diamond DA40 SEPF	1
PA24	Piper PA-24 Comanche	1
ERCO	ErCoupe	1
C180	Cessna 180 Skywagon	1
PA11	Cub Crafters CC-11 Carbon Cub/ Sport Cub	1
C310	Cessna 310 Twin Engine Piston aircraft	1
PA30	Piper PA-30 Twin Comanche	1
COL3	Cessna 350 Corvalis/Lancair LC42	1

Table 11
Based Piston Aircraft

PA38	Piper PA-38 Tomahawk	1
SA30	STOLP SA-300 Starduster Too	1
RV4	Van's Aircraft RV-4	1
LGEZ	Rutan 61 Long-EZ	1
SIRA	Tecnam P2002 Sierra	1
C335	Cessna 335 Twin Piston MEVP	1
CH7A	Aeronca Model 7 Champion	1
C340	Cessna 340 Twin Piston MEVP	1
CLDS	Rearwin Cloudster 8090/8125/8235	1
C400	Cessna 400 Corvalis/Lancair LC41/Columbia 400	1
COZY	AeroCad AeroCanard	1
AC11	Rockwell Commander 114	1
DFLY	Viking Dragonfly	1
C421	Cessna 421 Golden Eagle	1
EAGL	Christen/Aviat Eagle	1
M20T	Mooney Mark 20 Series	1
MOR2	Varga 2150 Kachina	1
G109	Burkhart Grob G109	1
NAVI	Ryan L-17/U-18 Navion	1
RV8	Vans RV-8	1
AC12	Rockwell Commander 112A	1
CH75	Zenith STOL CH-750	1
LC42	Cessna 350 Corvalis/Lancair LC42	1
G115	Burkhart Grob G115	1
YK52	Aerostar Yak-52/54	1
G202	Gearhardt J Giles G202	1
G2T1	Great Lakes Sport Trainer	1
Total		191

Sources: Based aircraft inventory and HNTB Analysis.

The FAA Distributed OPSNET database provides an hourly operation distribution by category such as air carrier and air taxi, general aviation, and military. For noise modeling purposes, acoustic daytime is defined as 7:00 a.m. to 9:59 p.m. and acoustic night time is defined as 10:00 PM until 6:59 AM. The 2016 Distributed OPSNET data, supplemented by the information provided by the Airport, was used to calculate the day/night split for each category. It shows air carrier and air taxi operations have a higher percentage of night operations than general aviation. This is reasonable, given that general aviation operations are primarily for recreation and training purposes, which usually occur during the day. It was assumed that the day/night percentage by category would stay the same through the forecast period. Based on discussion with Airport personnel, it was determined that all local operations were performed during daytime hours. The MDANG provided the number of operations occurred during acoustic night time in 2015 and 2016 (through October). The night time operations in 2016 were extrapolated to estimate the total number of night time military operations.

Table 12 shows the day/night split applied in the base year fleet mix.

Table 12
Day / Night Split

Departure					
Day			Night		
AC+AT	GA	Military	AC+AT	GA	Military
82.7%	95.2%	99.6%	17.3%	4.8%	0.4%

Arrival					
Day			Night		
AC+AT	GA	Military	AC+AT	GA	Military
96.2%	93.6%	99.6%	3.8%	6.4%	0.4%

Source: FAA Distributed OPSNET and HNTB Analysis.

In addition, a notable number of helicopter flights occur at the Airport. The Maryland State Police, Baltimore City Police, Baltimore County Police, a flight school, a medical emergency response unit and two news agencies have helicopters stationed at the Airport. The Baltimore City Police fly on a daily basis. The Baltimore County police helicopters are operated on an emergency-response basis. The news agencies, flight school, and medical emergency response unit's helicopters operate on average 17 operations each day. The Maryland State Police currently operate AgustaWestland AW139 helicopters. The Baltimore City Police fly four Eurocopter EC120 helicopters. The Baltimore County Police operate Eurocopter AS350B helicopters and the two news organizations fly Bell 206 JetRangers. The flight school utilizes Robinson R22 for flight training purposes. The medical emergency response unit operates Eurocopter EC135 helicopters. Collectively, there are 22 helicopters that perform on average 15 flights (30 operations) each day. The above-mentioned helicopter data was included in the fleet mix estimate and forecast. Based on the information

provided by the Airport, it was assumed that 10% of the helicopter operations were itinerant except operations performed by the flight school which uses helicopters for local training flights. The modeled number of helicopter operations represent an average annual day condition although the daily operations may vary substantially due to the on-call nature of these operations.

Another parameter that needs to be determined for the noise analysis is stage length for departing aircraft. The noise modeling software Aviation Environmental Design Tool (AEDT) uses stage length as a surrogate for aircraft takeoff weight which affects noise. The AEDT uses nine stage length categories, typically in increments of 500 nautical miles. Current stage lengths by aircraft type were derived from the Flight Explorer data which provided origin, destination, and aircraft information. Distances between origin and destination were calculated and categorized into one of the AEDT stage length categories. However, Flight Explorer mainly tracks IFR flights with filed flight plans or VFR flights detected by radar. For flights not monitored by the Flight Explorer, it is assumed that the stage length is 1.

3.5. Future Fleet Mix and Operations Projections

The 2021 and 2026 TAF projections, converted to calendar year and adjusted by the base year, were used as the basis for future operation levels. **Table 13** shows the base year and projected operations from the adjusted TAF. The base year operations total was scaled to match the adjusted TAF by type and category. Future projections were scaled to match the TAF by type and category as well.

Table 13
FAA TAF (Adjusted)

Year	Itinerant				Local		Total
	Air Carrier	Air Taxi	General Aviation	Military	Civil	Military	
2016	-	1,605	36,667	2,573	34,157	1,006	76,009
2021	-	1,605	37,222	2,573	35,439	1,006	77,845
2026	-	1,605	37,784	2,573	36,767	1,006	79,735

Source: FAA 2015 TAF and HNTB Analysis.

Two sets of forecast factors were applied to the base year fleet mix to estimate future fleet mixes within each category. The first set of factors employed the FAA’s forecast of average flight hours by aircraft category in the Aerospace Forecast 2016-2036⁴. The second set of factors considered average GA aircraft age, production period and rate, and service length to estimate the future fleet size of each individual aircraft type within the ALP Update forecast categories.

⁴ Aerospace Forecast 2016 -2036, FAA, https://www.faa.gov/data_research/aviation/aerospace_forecasts/

After applying the two adjustment factors, an additional adjustment was applied to match the TAF operations projections. All operations within each aircraft category were adjusted proportionally in this step.

The future day/night operations split and stage length distributions were assumed to remain the same as the base year split in each category.

Figure 1 illustrates the general approach used to develop the base year fleet estimate and future fleet aircraft operations projections.

Figure 1
Base Year and Future Year Operations Fleet Forecast Flow Chart

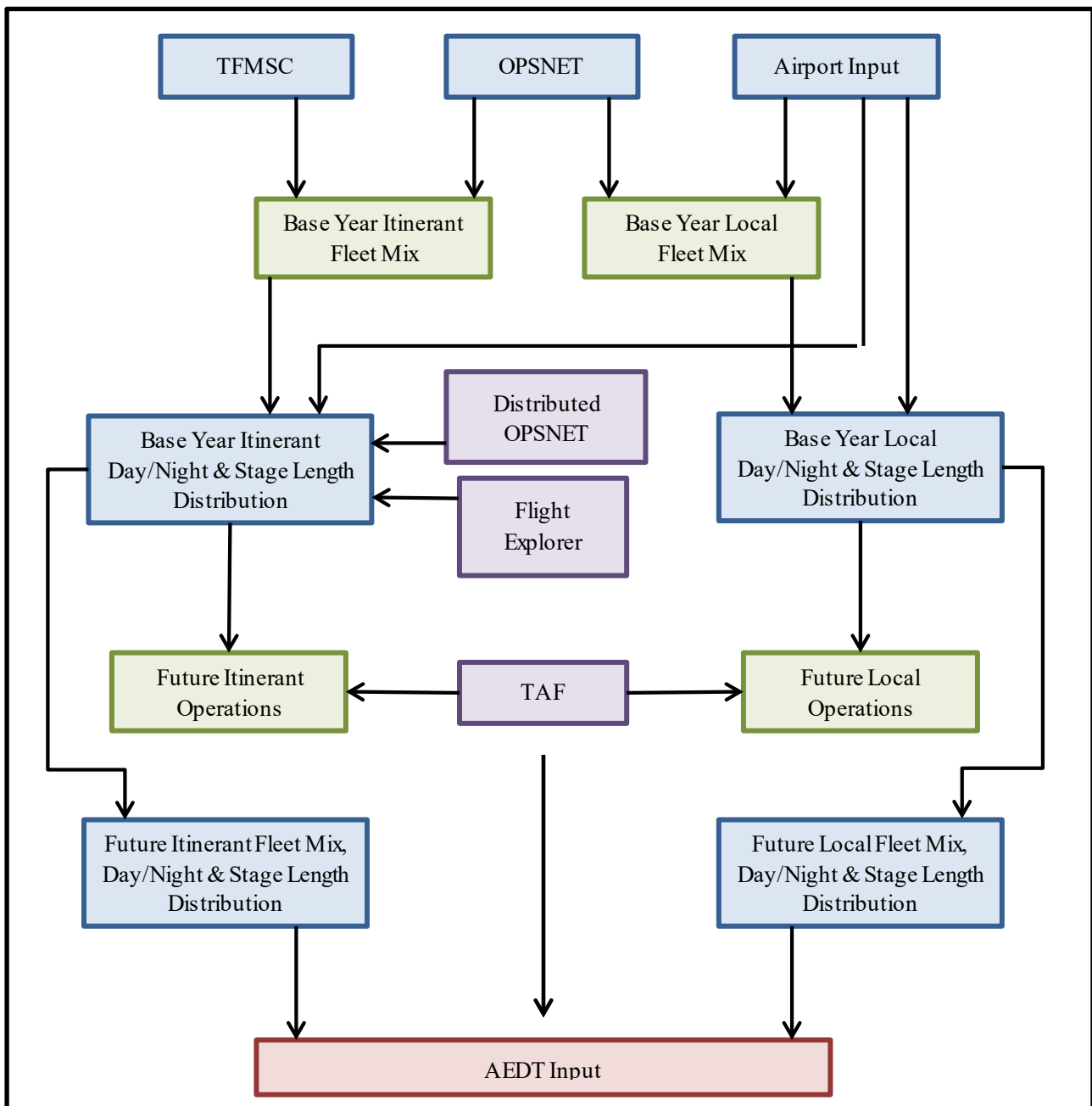


Figure 2 shows the base year fleet composition and the number of operations by each category. In 2016, single engine piston aircraft accounted for approximately 58.2% of the total operations. Multi-Engine piston aircraft accounted for 14.8% of the total operations. In total, piston aircraft represented approximately 73.0% of the total operations. Helicopter operations comprised around 14.6% of the total operations. Operations by jet aircraft constituted 10.3% of the total, followed by multi-engine and single-engine turboprops at 2.1% of the total operations.

Figure 2

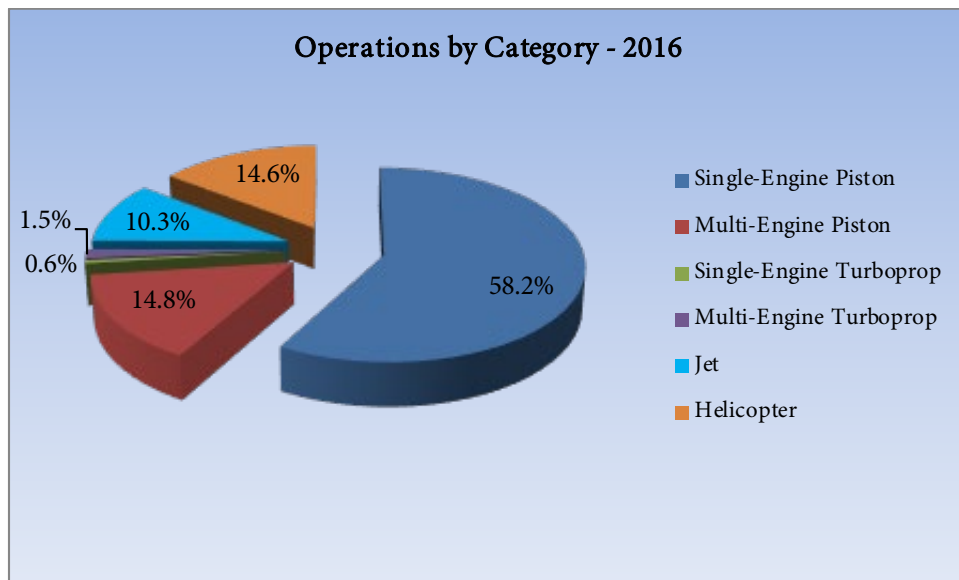


Figure 3 shows the 2021 forecast fleet composition by category. It is projected that in 2021 the share of piston aircraft operations will be reduced to 70.3%, with single-engine piston aircraft operations decreased slightly to 56.9% and multi-engine piston aircraft operations decreased to 13.4%. Helicopter operations are expected to increase to 16.8%. Jet operations are projected to increase to 10.9%. The remainder of the fleet, including single-engine and multi-engine turboprops, is projected to account for 2.0% of the total operations.

Figure 3

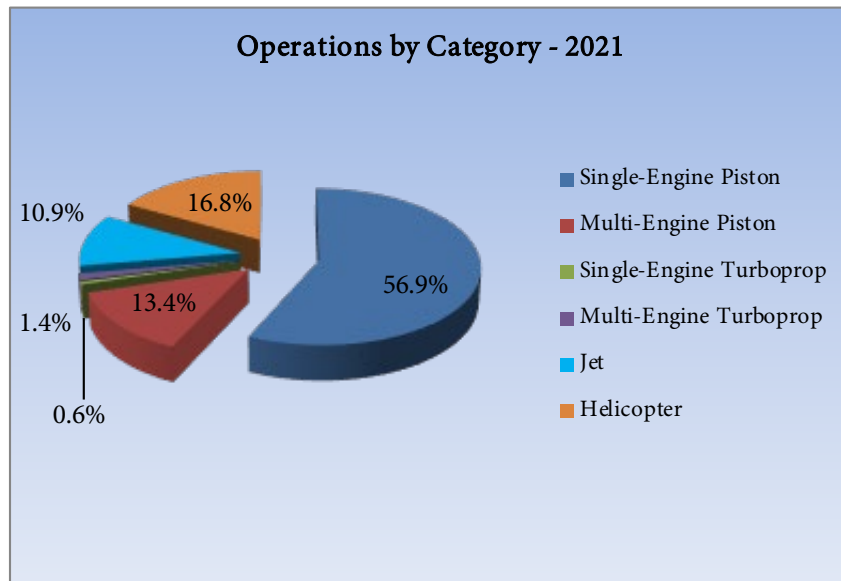
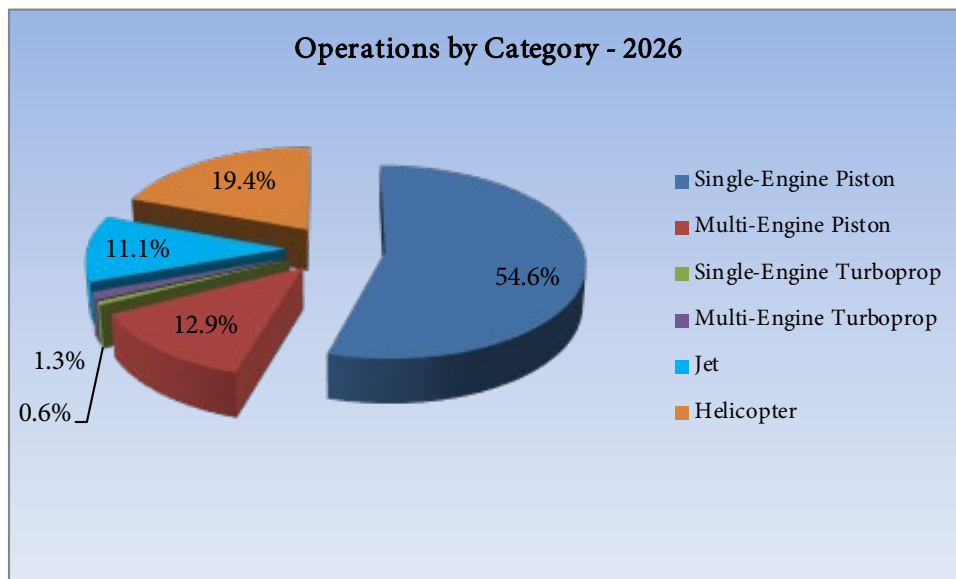


Figure 4 shows the 2026 fleet composition and operation projection. It is projected that in 2026 the share of piston aircraft operations will be further reduced to 67.5%, with single-engine piston aircraft operations decreased to 54.6% and multi-engine piston aircraft operations slightly decreasing to 12.9%. Helicopter operations are expected to continue to increase to 19.4%. Jet operations are projected to increase to 11.1%. Operations by single-engine and multi-engine turboprops are projected to account for 1.9% of the total operations.

Figure 4



4. Summary

The total number of based aircraft at MTN is forecast to increase from 254 to 283 as presented in **Table 14**. In percentage terms, helicopters and jets are expected to grow the most, but single-engine piston aircraft are projected to continue to account for the majority of based aircraft throughout the forecast period.

Table 14
Summary of Based Aircraft Forecast

	2016	2021	2026
Single Engine Piston	169	178	183
Multi-Engine Piston	22	23	26
Turboprop	3	3	3
Jets	23	25	28
Helicopters	11	14	17
Other	5	5	5
Military	21	21	21
Total	254	269	283

Source: FAA 2015 TAF and HNTB Analysis.

Table 15 breaks out the based aircraft forecast by individual aircraft type. Consistent with the operations forecast, the Table 15 forecast considered average GA aircraft age, production period and rate, and aircraft service length to estimate the future numbers of each individual based aircraft type. Single-engine piston aircraft like the Cessna Skyhawks and Skylanes and Piper Cherokees are anticipated to continue to have the greatest representation. However, notable numbers of high-performance business jets including Cessna Citations, Embraer Phenoms, Dassault Falcons, Gulfstreams, and Learjets are also projected. Military based aircraft were assumed to stay constant throughout the forecast period.

Table 15
Forecast of Based Aircraft by Type

Aircraft ID	Aircraft Description	2016	2021	2026
Single Engine Piston				
AA5	AA5 - American AA-5 Traveler	2	2	2
AA5A	AA5A - Grumman AA-5A Cheetah; AA-5 Tiger	2	2	2
AC11	AC11 - Rockwell Commander 114	1	1	1
AC12	AC12 - Rockwell Commander 112A	1	1	1
BE23	BE23 - Beechcraft Model 23 Musketeer	5	5	5
BE24	BE24 - Beechcraft Model 24 Sierra/Musketeer	2	2	2
BE33	BE33 - Beech Bonanza 33	3	3	3
BE35	BE35 - Beech Bonanza 35	9	9	9
BE36	BE36 - Beech Bonanza 36	6	6	6
BL17	BL17 - Bellanca Super Viking Model 17-30A	3	3	3
C150	C150 - Cessna 150 Single Engine SEPF	3	3	3
C152	C152 - Cessna 152 Single Engine SEPF	2	2	2
C172	C172 - Cessna Skyhawk 172/Cutlass	23	24	24
C177	C177 - Cessna 177 Cardinal	7	7	7
C180	C180 - Cessna 180 Skywagon	1	1	1
C182	C182 - Cessna Skylane 182	13	14	15
C400	C400 - Cessna 400 Corvalis/Lancair LC41/Columbia 400	1	1	1
CH75	CH75 - Zenith STOL CH-750	1	1	1
CH7A	CH7A - Aeronca Model 7 Champion	1	1	1
CLDS	CLDS - Rearwin Cloudster 8090/8125/8235	1	1	1
COL3	COL3 - Lancair LC-40 Columbia 400	1	2	2
COZY	COZY - AeroCad AeroCanard	1	1	1
DA40	DA40 - Diamond Star DA40	1	2	2
DFLY	DFLY - Viking Dragonfly	1	1	1
EAGL	EAGL - Christen/Aviat Eagle	1	1	1
ERCO	ERCO - ErCoupe	1	1	1
G109	G109 - Burkhart Grob G109	1	1	1
G115	FOX - Kitfox 57	1	1	1
G202	G202 - Gearhardt J Giles G202	1	1	1
G2T1	G2T1 - Great Lakes Sport Trainer	1	1	1
LC42	LC42 - Cessna 350 Corvalis/Lancair LC42	1	1	1
LGEZ	LGEZ - Rutan 61 Long-EZ	1	1	1
M020	KOLB - Kolb Firestar	3	3	3
M20C	M20C - Mooney Mark 20 Series	2	2	2
M20F	M20F - Mooney Mark 20 Series	2	2	2
M20J	M20J - Mooney Mark 20 Series	4	4	4
M20K	M20K - Mooney 252TSE (M20K)	2	2	2
M20T	M20T - Turbo Mooney M20K	1	1	1
MOR2	MOR2 - Varga 2150 Kachina	1	1	1
NAVI	NAVI - Ryan L-17/U-18 Navion	1	1	1
P28T	P28T - Piper PA-28R-180/200/201 Cherokee Arrow I/II/III	7	8	8
P32R	P32R - Piper 32	3	3	3
PA11	PA11 - Cub Crafters CC-11 Carbon Cub/ Sport Cub	1	1	1
PA20	PA20 - Piper PA-20 Pacer	2	2	2
PA24	PA24 - Piper PA-24 Comanche	1	1	1

Table 15
Forecast of Based Aircraft by Type

Aircraft ID	Aircraft Description	2016	2021	2026
PA28	PA28 - Piper Cherokee	12	13	14
PA32	PA32 - Piper Cherokee Six	12	12	13
PA38	PA38 - Piper PA-38 Tomahawk	1	1	1
PARC	PARC - Piper PA-28-180/181 Cherokee Archer	3	3	4
RV4	RV4 - Van's Aircraft RV-4	1	1	1
RV6	RV6 - Vans RV-6	2	2	2
RV7A	RV7A - Van's Aircraft RV-7/RV-7A	1	1	1
RV8	RV8 - Vans RV-8	1	1	1
SA30	SA30 - STOLP SA-300 Starduster Too	1	1	1
SIRA	SIRA - Tecnam P2002 Sierra	1	1	1
SR22	SR22 - Cirrus SR 22	4	7	8
YK52	YK52 - Aerostar Yak-52/54	1	1	1
Subtotal		169	178	183
Helicopters				
AS50	AS50 - Eurocopter AS350B	5	7	9
B06	B06 - Bell 206B-3	1	1	2
R22	R22 - Robinson R22B w/Lycoming 0320	4	5	5
R44	R44 - Robinson R44	1	1	1
Subtotal		11	14	17
Jets				
C525	C525 - Cessna CitationJet/CJ1	1	1	1
C650	C650 - Cessna III/VI/VII	1	1	1
C750	C750 - Cessna Citation X	1	1	1
CL60	CL60 - Bombardier Challenger 600/601/604	1	1	2
E50P	E50P - Embraer Phenom 100	1	1	1
E55P	E55P - Embraer Phenom 300	2	2	3
F2TH	F2TH - Dassault Falcon 2000	3	5	5
FA20	FA20 - Dassault Falcon 20	1	0	0
G150	G150 - Gulfstream G150	1	2	2
GALX	GALX - IAI 1126 Galaxy/Gulfstream G200	1	1	1
GLF4	GLF4 - Gulfstream IV/G400	4	4	4
GLF5	GLF5 - Gulfstream V/G500	1	1	1
LJ45	LJ45 - Bombardier Learjet 45	2	2	3
LJ60	LJ60 - Bombardier Learjet 60	2	2	2
MS76	MS76 - Morane Saulnier Paris Jet	1	1	1
Subtotal		23	25	28
Multi-Engine Piston				
BE55	BE55 - Beech Baron 55	3	3	3
BE58	BE58 - Beech 58	3	3	4
BE76	BE76 - Beechcraft Model 76 Duchess	2	2	2
C310	C310 - Cessna 310	1	1	1
C335	C335 - Cessna 335 Twin Piston MEVP	1	1	1
C340	C340 - Cessna 340	1	1	1
C421	C421 - Cessna Golden Eagle 421	1	1	1

Table 15
Forecast of Based Aircraft by Type

Aircraft ID	Aircraft Description	2016	2021	2026
GA7	GA7 - Grumman American Cougar	2	2	3
PA30	PA30 - Piper PA-30	1	1	1
PA31	PA31 - Piper Navajo PA-31	2	2	2
PA34	PA34 - Piper PA-34 Seneca	3	4	4
PA60	PA60 - Piper PA-60/PA-61 Aerostar (Aerostar 600/700)	2	2	3
Subtotal		22	23	26
Turboprop				
AC69	AC69 - Rockwell Turbo Commander	1	1	1
BE30	BE30 - Raytheon 300 Super King Air	1	1	1
C441	C441 - Cessna Conquest	1	1	1
Subtotal		3	3	3
Other				
FOX	FOX - Kitfox 57	1	1	1
KOLB	KOLB - Kolb Firestar	1	1	1
UNK	UNK - unknown	1	1	1
SREY	SREY - SeaRey	2	2	2
Subtotal		5	5	5
Military				
A10	A10 - Fairchild A10	21	21	21
Subtotal		21	21	21
Grand Total		254	269	283

Source: FAA 2015 TAF and HNTB Analysis.

The total number of operations at MTN is projected to increase from 2016 to 2026. Air taxi and military operations are projected to remain constant. Itinerant GA operations are expected to increase from 36,667 to 37,222 from 2016 to 2021, representing a 1.5% increase. During the same period, local GA operations are projected to increase from 34,157 to 35,439, representing a 3.8% increase. From 2021 to 2026, the upward trend in the itinerant GA category is expected to continue from 37,222 to 37,784, representing a growth of 1.5% during the period. Local GA operations are expected to increase to 36,767, representing a growth rate of 3.7% during the period.

Table 16 and **Table 17** summarize the forecast of GA and military aircraft operations by equipment category. In 2016, airport operations were dominated by piston aircraft and helicopters, with piston aircraft accounting for approximately 73.0% and helicopters 14.6% of the total operations. In 2021 and 2026, the percentage of piston operations is expected to decline and the percentage of jet and helicopter operations is

expected to increase. This trend is consistent with the general aviation operations forecast by the FAA. Operations from turboprops are expected to stay low.

A more detailed GA and military annual fleet mix by aircraft type is presented in **Table 18** and **Table 19**. Detailed fleet composition, operations, stage length, and day/night split by aircraft type for an average annual day are presented in **Tables A.1, A.2, and A.3** in *Attachment A*.

Table 16
Forecast of MTN Aircraft Operations by Category - GA

	2016	2021	2026
Single Engine Piston	44,253	44,318	43,530
Multi-Engine Piston	11,233	10,420	10,319
Turboprops	1,526	1,508	1,519
Jets	4,433	5,050	5,455
Helicopters	10,985	12,971	15,333
Total	72,430	74,267	76,156

Sources: FAA TAF 2015, OPSNET, TFMS-C, Flight Explorer, and HNTB Analysis.

Table 17
Forecast of MTN Aircraft Operations by Category - Military

	2016	2021	2026
Turboprop	73	57	44
Jets	3,400	3,417	3,432
Helicopters	106	105	103
Total	3,579	3,579	3,579

Sources: FAA TAF 2015, OPSNET, TFMS-C, Flight Explorer, and HNTB Analysis.

Table 18

MTN Fleet and Annual Operations Forecast by Aircraft Type - GA

Aircraft		Operations		
ID	Description	2016	2021	2026
A139	A139 - Agusta AB-139	2,008	2,437	2,966
AA5	AA5 - American AA-5 Traveler	387	354	340
AA5A	AA5A - Grumman AA-5A Cheetah; AA-5 Tiger	252	234	222
AC11	AC11 - Rockwell Commander 114	126	117	111
AC12	AC12 - Rockwell Commander 112A	126	127	131
AC90	AC90 - Gulfstream Commander	48	44	43
AEST	AEST - Piper Aero Star	866	770	760
AS50	AS50 - Eurocopter AS350B	2,190	2,658	3,235
ASTR	ASTR - IAI Astra 1125	27	26	26
AT43	AT43 - Aérospatiale/Alenia ATR 42-200/300/320	51	53	54
B06	B06 - Bell 206B-3	1,095	1,329	1,618
B190	B190 - Beech 1900/C-12J	34	31	31
B350	B350 - Beech Super King Air 350	277	276	277
B430	B430 - Bell 430	20	24	30
B738	B787 - Boeing 737-800	1	1	1
BE10	BE10 - Beech King Air 100 A/B	31	28	28
BE20	BE20 - Beech 200 Super King	120	118	117
BE23	BE23 - Beechcraft Model 23 Musketeer	631	584	555
BE24	BE24 - Beechcraft Model 24 Sierra/Musketeer	252	234	222
BE30	BE30 - Raytheon 300 Super King Air	51	44	42
BE33	BE33 - Beech Bonanza 33	1,140	1,035	1,000
BE35	BE35 - Beech Bonanza 35	2,150	1,964	1,545
BE36	BE36 - Beech Bonanza 36	2,622	2,378	2,300
BE40	BE40 - Raytheon/Beech Beechjet 400/T-1	186	186	189
BE55	BE55 - Beech Baron 55	1,125	1,011	989
BE58	BE58 - Beech 58	2,897	2,792	2,828
BE60	BE60 - Beech 60 Duke	134	120	118
BE76	BE76 - Beechcraft Model 76 Duchess	252	231	223
BE9L	BE9L - Beech King Air 90	68	67	68
BL17	BL17 - Bellanca Super Viking Model 17-30A	379	350	333
C150	C150 - Cessna 150 Single Engine SEPF	379	350	273
C152	C152 - Cessna 152 Single Engine SEPF	252	234	222
C172	C172 - Cessna Skyhawk 172/Cutlass	9,708	8,802	8,506
C177	C177 - Cessna 177 Cardinal	1,241	1,140	1,091
C180	C180 - Cessna 180 Skywagon	126	117	91
C182	C182 - Cessna Skylane 182	3,206	3,090	3,036
C206	C206 - Cessna 206 Stationair	90	86	86

Table 18

MTN Fleet and Annual Operations Forecast by Aircraft Type - GA

Aircraft		Operations		
ID	Description	2016	2021	2026
C210	C210 - Cessna 210 Centurion	245	216	209
C25A	C25A - Cessna CitationCJ2	63	99	107
C25B	C25B - Cessna Citation CJ3	81	148	163
C25C	C25C - Cessna Citation CJ4	29	35	44
C310	C310 - Cessna 310	410	368	295
C335	C335 - Cessna 335 Twin Piston MEVP	126	116	111
C340	C340 - Cessna 340	648	580	570
C400	C400 - Cessna 400 Corvalis/Lancair LC41/Columbia 400	126	127	131
C414	C414 - Cessna Chancellor 414	254	226	223
C421	C421 - Cessna Golden Eagle 421	1,186	1,058	1,042
C441	C441 - Cessna Conquest	146	135	132
C500	C500 - Cessna 500/Citation I	10	10	10
C501	C501 - Cessna I/SP	12	11	11
C525	C525 - Cessna CitationJet/CJ1	117	131	139
C550	C550 - Cessna Citation II/Bravo	114	110	110
C560	C560 - Cessna Citation V/Ultra/Encore	157	163	167
C56X	C56X - Cessna Excel/XLS	291	311	324
C650	C650 - Cessna III/VI/VII	121	116	116
C680	C680 - Cessna Citation Sovereign	56	97	105
C750	C750 - Cessna Citation X	140	153	161
C82R	C82R - Cessna Skylane RG	418	412	416
CH75	CH75 - Zenith STOL CH-750	126	127	131
CH7A	CH7A - Aeronca Model 7 Champion	126	127	131
CL30	CL30 - Bombardier (Canadair) Challenger 300	145	256	277
CL35	CL35 - Bombardier Challenger 300	12	12	15
CL60	CL60 - Bombardier Challenger 600/601/604	203	212	219
CLDS	CLDS - Rearwin Cloudster 8090/8125/8235	126	127	131
COL3	COL3 - Lancair LC-40 Columbia 400	499	844	890
COL4	COL4 - Lancair LC-41 Columbia 400	597	1,041	1,122
COZY	COZY - AeroCad AeroCanard	126	127	131
DA40	DA40 - Diamond Star DA40	231	354	370
DFLY	DFLY - Viking Dragonfly	126	127	131
DH8B	DH8B - Bombardier DHC8-200	78	80	93
E135	E135 - Embraer ERJ 135/140/Legacy	19	22	24
E50P	E50P - Embraer Phenom 100	170	164	164
E55P	E55P - Embraer Phenom 300	556	658	831
EA50	EA50 - Eclipse 500	27	26	26

Table 18

MTN Fleet and Annual Operations Forecast by Aircraft Type - GA

Aircraft		Operations		
ID	Description	2016	2021	2026
EAGL	EAGL - Christen/Aviat Eagle	126	127	131
EC20	EC120 - Eurocopter EC-120	2,920	3,544	4,314
EC35	EC135 - Eurocopter EC-135	730	886	1,078
ERCO	ERCO - ErCoupe	126	127	131
F2TH	F2TH - Dassault Falcon 2000	276	306	322
F900	F900 - Dassault Falcon 900	19	20	21
FA50	FA50 - Dassault Falcon/Mystère 50	22	21	21
G109	G109 - Burkhart Grob G109	126	127	131
G115	G115 - Burkhart Grob G115	126	127	131
G150	G150 - Gulfstream G150	76	149	166
G202	G202 - Gearhardt J Giles G202	126	127	131
G280	G280 - Gulfstream G280	10	12	16
G2T1	G2T1 - Great Lakes Sport Trainer	126	127	131
GA7	GA7 - Grumman American Cougar	760	754	814
GA8	GA8 - Gippsland GA-8 Airvan	23	19	19
GALX	GALX - IAI 1126 Galaxy/Gulfstream G200	182	214	229
GLEX	GLEX - Bombardier BD-700 Global Express	56	63	67
GLF4	GLF4 - Gulfstream IV/G400	378	364	364
GLF5	GLF5 - Gulfstream V/G500	102	118	127
H25B	H25B - BAe HS 125/700-800/Hawker 800	151	152	156
LC42	LC42 - Cessna 350 Corvalis/Lancair LC42	126	127	131
LGEZ	LGEZ - Rutan 61 Long-EZ	126	127	131
LJ31	LJ31 - Bombardier Learjet 31/A/B	31	29	30
LJ35	LJ35 - Bombardier Learjet 35/36	58	56	56
LJ40	LJ40 - Learjet 40; Gates Learjet	31	57	63
LJ45	LJ45 - Bombardier Learjet 45	86	98	104
LJ60	LJ60 - Bombardier Learjet 60	280	270	270
LJ75	LJ75 - Learjet 75	122	147	187
M020	M020 - Mooney Mark 20 Series	379	350	333
M20C	M20C - Mooney Mark 20 Series	252	254	262
M20F	M20F - Mooney Mark 20 Series	252	254	262
M20J	M20J - Mooney Mark 20 Series	505	467	444
M20K	M20K - Mooney 252TSE (M20K)	252	254	262
M20P	M20P - Mooney M-20C Ranger	776	698	679
M20T	M20T - Turbo Mooney M20K	962	944	994
MOR2	MOR2 - Varga 2150 Kachina	126	127	131
MU2	MU2 - Mitsubishi Marquise/Solitaire	15	12	11

Table 18

MTN Fleet and Annual Operations Forecast by Aircraft Type - GA

Aircraft		Operations		
ID	Description	2016	2021	2026
NAVI	NAVI - Ryan L-17/U-18 Navion	126	127	131
P28A	P28A - Piper Cherokee	1,552	1,491	1,489
P28R	P28R - Cherokee Arrow/Turbo	373	361	361
P28T	P28T - Piper PA-28R-180/200/201 Cherokee Arrow I/II/III	883	893	879
P32R	P32R - Piper 32	513	471	451
P46T	P46T - Piper Malibu Meridian	39	61	64
PA11	PA11 - Cub Crafters CC-11 Carbon Cub/ Sport Cub	126	127	131
PA20	PA20 - Piper PA-20 Pacer	252	254	262
PA24	PA24 - Piper PA-24 Comanche	126	117	91
PA27	PA27 - Piper Aztec	119	106	105
PA28	PA28 - Piper Cherokee	1,798	1,767	1,730
PA30	PA30 - Piper PA-30	260	235	188
PA31	PA31 - Piper Navajo PA-31	1,237	1,107	1,088
PA32	PA32 - Piper Cherokee Six	2,529	2,314	2,221
PA34	PA34 - Piper PA-34 Seneca	707	691	694
PA38	PA38 - Piper PA-38 Tomahawk	126	127	131
PA46	PA46 - Piper Malibu	731	658	640
PA60	PA60 - Piper PA-60/PA-61 Aerostar (Aerostar 600/700)	252	255	271
PARC	PARC - Piper PA-28-180/181 Cherokee Archer	379	381	393
PC12	PC12 - Pilatus PC-12	388	408	417
PRM1	PRM1 - Raytheon Premier 1/390 Premier 1	15	25	28
R22	R22 - Robinson R22B w/Lycoming 0320	2,008	2,078	2,076
RV4	RV4 - Van's Aircraft RV-4	126	127	131
RV6	RV6 - Vans RV-6	252	262	260
RV7A	RV7A - Van's Aircraft RV-7/RV-7A	126	127	131
RV8	RV8 - Vans RV-8	126	127	131
S76	S76 - Sikorsky S-76	15	15	16
SA30	SA30 - STOLP SA-300 Starduster Too	126	127	131
SIRA	SIRA - Tecnam P2002 Sierra	126	127	131
SR20	SR20 - Cirrus SR-20	134	149	156
SR22	SR22 - Cirrus SR 22	2,916	4,533	4,789
SW4	SW4 - Swearingen Merlin 4/4A Metro2	164	133	123
TBM8	TBM8 - Socata TBM-850	17	17	20
YK52	YK52 - Aerostar Yak-52/54	126	127	131
Z42	Z42 - Moravan Zlin Z-242	328	321	339
Grand Total		72,430	74,266	76,156

Sources: FAA TAF 2015, OPSNET, TFMS-C, Flight Explorer, and HNTB Analysis.

Table 19

MTN Fleet and Annual Operations Forecast by Aircraft Type - Military

Aircraft		Operations		
ID	Description	2016	2021	2026
A10	A10 - Fairchild A10	3,391	3,409	3,423
C130	C130 - Lockheed 130 Hercules	73	57	44
C17	C17 - Beoing C-17 Globemaster III	8	8	8
EC45	EC45 - Eurocopter EC-145	55	54	53
H60	H60 - Sikorsky SH-60 Seahawk	51	51	50
Grand Total		3,579	3,579	3,579

Sources: FAA TAF 2015, OPSNET, TFMS-C, and HNTB Analysis.

Attachment A
Detailed Fleet Mix

Table A.1
Fleet and Average Daily Operations - 2016

Aircraft		Operations				
ID	Description	Type	Stage Length	Day	Night	Total
A10	A10 - Fairchild A10	Arrival	1	3.25	0.02	3.27
A139	A139 - Agusta AB-139	Arrival	1	0.26	0.02	0.28
AA5	AA5 - American AA-5 Traveler	Arrival	1	0.17	0.01	0.18
AC90	AC90 - Gulfstream Commander	Arrival	1	0.06	0.00	0.07
AEST	AEST - Piper Aero Star	Arrival	1	1.11	0.08	1.19
AS50	AS50 - Eurocopter AS350B	Arrival	1	0.28	0.02	0.30
ASTR	ASTR - IAI Astra 1125	Arrival	1	0.03	0.00	0.04
AT43	AT43 - Aérospatiale/Alenia ATR 42-200/300/320	Arrival	1	0.07	0.00	0.07
B06	B06 - Bell 206B-3	Arrival	1	0.14	0.01	0.15
B190	B190 - Beech 1900/C-12J	Arrival	1	0.04	0.00	0.05
B350	B350 - Beech Super King Air 350	Arrival	1	0.36	0.02	0.38
B430	B430 - Bell 430	Arrival	1	0.03	0.00	0.03
B738	B787 - Boeing 737-800	Arrival	1	-	0.00	0.00
BE10	BE10 - Beech King Air 100 A/B	Arrival	1	0.04	0.00	0.04
BE20	BE20 - Beech 200 Super King	Arrival	1	0.16	0.01	0.16
BE30	BE30 - Raytheon 300 Super King Air	Arrival	1	0.07	0.00	0.07
BE33	BE33 - Beech Bonanza 33	Arrival	1	0.98	0.07	1.04
BE35	BE35 - Beech Bonanza 35	Arrival	1	1.30	0.09	1.39
BE36	BE36 - Beech Bonanza 36	Arrival	1	2.39	0.16	2.56
BE40	BE40 - Raytheon/Beech Beechjet 400/T-1	Arrival	1	0.24	0.01	0.25
BE55	BE55 - Beech Baron 55	Arrival	1	0.96	0.07	1.02
BE58	BE58 - Beech 58	Arrival	1	3.23	0.22	3.45
BE60	BE60 - Beech 60 Duke	Arrival	1	0.17	0.01	0.18
BE9L	BE9L - Beech King Air 90	Arrival	1	0.09	0.01	0.09
C130	C130 - Lockheed 130 Hercules	Arrival	1	0.10	-	0.10
C17	C17 - Boeing C-17 Globemaster III	Arrival	1	0.01	0.00	0.01
C172	C172 - Cessna Skyhawk 172/Cutlass	Arrival	1	8.72	0.60	9.32
C177	C177 - Cessna 177 Cardinal	Arrival	1	0.46	0.03	0.49
C182	C182 - Cessna Skylane 182	Arrival	1	2.01	0.13	2.14
C206	C206 - Cessna 206 Stationair	Arrival	1	0.11	0.01	0.12
C210	C210 - Cessna 210 Centurion	Arrival	1	0.31	0.02	0.34
C25A	C25A - Cessna Citation CJ2	Arrival	1	0.08	0.01	0.09
C25B	C25B - Cessna Citation CJ3	Arrival	1	0.10	0.01	0.11
C25C	C25C - Cessna Citation CJ4	Arrival	1	0.04	0.00	0.04
C310	C310 - Cessna 310	Arrival	1	0.36	0.03	0.39
C340	C340 - Cessna 340	Arrival	1	0.67	0.05	0.72
C414	C414 - Cessna Chancellor 414	Arrival	1	0.33	0.02	0.35
C421	C421 - Cessna Golden Eagle 421	Arrival	1	1.36	0.09	1.45
C441	C441 - Cessna Conquest	Arrival	1	0.19	0.01	0.20

Table A.1
Fleet and Average Daily Operations - 2016

Aircraft		Operations				
ID	Description	Type	Stage Length	Day	Night	Total
C500	C500 - Cessna 500/Citation I	Arrival	1	0.01	0.00	0.01
C501	C501 - Cessna I/SP	Arrival	1	0.02	0.00	0.02
C525	C525 - Cessna CitationJet/CJ1	Arrival	1	0.15	0.01	0.16
C550	C550 - Cessna Citation II/Bravo	Arrival	1	0.15	0.01	0.16
C560	C560 - Cessna Citation V/Ultra/Encore	Arrival	1	0.20	0.01	0.22
C56X	C56X - Cessna Excel/XLS	Arrival	1	0.38	0.02	0.40
C650	C650 - Cessna III/VI/VII	Arrival	1	0.15	0.01	0.17
C680	C680 - Cessna Citation Sovereign	Arrival	1	0.07	0.00	0.08
C750	C750 - Cessna Citation X	Arrival	1	0.18	0.01	0.19
C82R	C82R - Cessna Skylane RG	Arrival	1	0.54	0.04	0.57
CL30	CL30 - Bombardier (Canadair) Challenger 300	Arrival	1	0.19	0.01	0.20
CL35	CL35 - Bombardier Challenger 300	Arrival	1	0.02	0.00	0.02
CL60	CL60 - Bombardier Challenger 600/601/604	Arrival	1	0.26	0.02	0.28
COL3	COL3 - Lancair LC-40 Columbia 400	Arrival	1	0.48	0.03	0.51
COL4	COL4 - Lancair LC-41 Columbia 400	Arrival	1	0.76	0.05	0.82
DA40	DA40 - Diamond Star DA40	Arrival	1	0.13	0.01	0.14
DH8B	DH8B - Bombardier DHC8-200	Arrival	1	0.10	0.01	0.11
E135	E135 - Embraer ERJ 135/140/Legacy	Arrival	1	0.02	0.00	0.03
E50P	E50P - Embraer Phenom 100	Arrival	1	0.22	0.01	0.23
E55P	E55P - Embraer Phenom 300	Arrival	1	0.72	0.05	0.76
EA50	EA50 - Eclipse 500	Arrival	1	0.03	0.00	0.04
EC20	EC120 - Eurocopter EC-120	Arrival	1	0.37	0.03	0.40
EC35	EC135 - Eurocopter EC-135	Arrival	1	0.09	0.01	0.10
EC45	EC45 - Eurocopter EC-145	Arrival	1	0.07	-	0.07
F2TH	F2TH - Dassault Falcon 2000	Arrival	1	0.36	0.02	0.38
F900	F900 - Dassault Falcon 900	Arrival	1	0.02	0.00	0.03
FA50	FA50 - Dassault Falcon/Mystère 50	Arrival	1	0.03	0.00	0.03
G150	G150 - Gulfstream G150	Arrival	1	0.10	0.01	0.10
G280	G280 - Gulfstream G280	Arrival	1	0.01	0.00	0.01
GA7	GA7 - Grumman American Cougar	Arrival	1	0.65	0.04	0.70
GA8	GA8 - Gippsland GA-8 Airvan	Arrival	1	0.03	0.00	0.03
GALX	GALX - IAI 1126 Galaxy/Gulfstream G200	Arrival	1	0.23	0.02	0.25
GLEX	GLEX - Bombardier BD-700 Global Express	Arrival	1	0.07	0.00	0.08
GLF4	GLF4 - Gulfstream IV/G400	Arrival	1	0.49	0.03	0.52
GLF5	GLF5 - Gulfstream V/G500	Arrival	1	0.13	0.01	0.14
H25B	H25B - BAe HS 125/700-800/Hawker 800	Arrival	1	0.19	0.01	0.21
H60	H60 - Sikorsky SH-60 Seahawk	Arrival	1	0.07	-	0.07
LJ31	LJ31 - Bombardier Learjet 31/A/B	Arrival	1	0.04	0.00	0.04
LJ35	LJ35 - Bombardier Learjet 35/36	Arrival	1	0.07	0.01	0.08

Table A.1
Fleet and Average Daily Operations - 2016

Aircraft		Operations				
ID	Description	Type	Stage Length	Day	Night	Total
LJ40	LJ40 - Learjet 40; Gates Learjet	Arrival	1	0.04	0.00	0.04
LJ45	LJ45 - Bombardier Learjet 45	Arrival	1	0.11	0.01	0.12
LJ60	LJ60 - Bombardier Learjet 60	Arrival	1	0.36	0.02	0.38
LJ75	LJ75 - Learjet 75	Arrival	1	0.16	0.01	0.17
M20P	M20P - Mooney M-20C Ranger	Arrival	1	0.99	0.07	1.06
M20T	M20T - Turbo Mooney M20K	Arrival	1	1.07	0.07	1.14
MU2	MU2 - Mitsubishi Marquise/Solitaire	Arrival	1	0.02	0.00	0.02
P28A	P28A - Piper Cherokee	Arrival	1	1.99	0.14	2.13
P28R	P28R - Cherokee Arrow/Turbo	Arrival	1	0.48	0.03	0.51
P32R	P32R - Piper 32	Arrival	1	0.17	0.01	0.18
P46T	P46T - Piper Malibu Meridian	Arrival	1	0.05	0.00	0.05
PA27	PA27 - Piper Aztec	Arrival	1	0.15	0.01	0.16
PA28	PA28 - Piper Cherokee	Arrival	1	0.36	0.03	0.39
PA30	PA30 - Piper PA-30	Arrival	1	0.17	0.01	0.18
PA31	PA31 - Piper Navajo PA-31	Arrival	1	1.26	0.09	1.35
PA32	PA32 - Piper Cherokee Six	Arrival	1	1.30	0.09	1.39
PA34	PA34 - Piper PA-34 Seneca	Arrival	1	0.42	0.03	0.45
PA46	PA46 - Piper Malibu	Arrival	1	0.94	0.06	1.00
PC12	PC12 - Pilatus PC-12	Arrival	1	0.50	0.03	0.53
PRM1	PRM1 - Raytheon Premier 1/390 Premier 1	Arrival	1	0.02	0.00	0.02
S76	S76 - Sikorsky S-76	Arrival	1	0.02	0.00	0.02
SR20	SR20 - Cirrus SR-20	Arrival	1	0.17	0.01	0.18
SR22	SR22 - Cirrus SR 22	Arrival	1	3.09	0.21	3.30
SW4	SW4 - Swearingen Merlin 4/4A Metro2	Arrival	1	0.22	0.01	0.22
TBM8	TBM8 - Socata TBM-850	Arrival	1	0.02	0.00	0.02
Z42	Z42 - Moravan Zlin Z-242	Arrival	1	0.42	0.03	0.45
A10	A10 - Fairchild A10	Departure	1	3.25	0.02	3.27
A139	A139 - Agusta AB-139	Departure	1	0.26	0.01	0.28
AA5	AA5 - American AA-5 Traveler	Departure	1	0.18	0.01	0.18
AC90	AC90 - Gulfstream Commander	Departure	1	0.06	0.00	0.07
AEST	AEST - Piper Aero Star	Departure	1	1.13	0.06	1.19
AS50	AS50 - Eurocopter AS350B	Departure	1	0.29	0.01	0.30
ASTR	ASTR - IAI Astra 1125	Departure	1	0.04	0.00	0.04
AT43	AT43 - Aérospatiale/Alenia ATR 42-200/300/320	Departure	1	0.07	0.00	0.07
B06	B06 - Bell 206B-3	Departure	1	0.14	0.01	0.15
B190	B190 - Beech 1900/C-12J	Departure	1	0.04	0.00	0.05
B350	B350 - Beech Super King Air 350	Departure	1	0.17	0.02	0.19
B350	B350 - Beech Super King Air 350	Departure	2	0.17	0.02	0.19
B430	B430 - Bell 430	Departure	1	0.03	0.00	0.03

Table A.1
Fleet and Average Daily Operations - 2016

Aircraft		Operations				
ID	Description	Type	Stage Length	Day	Night	Total
B738	B787 - Boeing 737-800	Departure	1	-	0.00	0.00
BE10	BE10 - Beech King Air 100 A/B	Departure	1	0.04	0.00	0.04
BE20	BE20 - Beech 200 Super King	Departure	1	0.15	0.01	0.16
BE30	BE30 - Raytheon 300 Super King Air	Departure	1	0.06	0.01	0.07
BE33	BE33 - Beech Bonanza 33	Departure	1	0.99	0.05	1.04
BE35	BE35 - Beech Bonanza 35	Departure	1	1.32	0.07	1.39
BE36	BE36 - Beech Bonanza 36	Departure	1	2.43	0.12	2.56
BE40	BE40 - Raytheon/Beech Beechjet 400/T-1	Departure	1	0.18	0.03	0.21
BE40	BE40 - Raytheon/Beech Beechjet 400/T-1	Departure	2	0.04	0.01	0.05
BE55	BE55 - Beech Baron 55	Departure	1	0.97	0.05	1.02
BE58	BE58 - Beech 58	Departure	1	2.73	0.14	2.87
BE58	BE58 - Beech 58	Departure	2	0.55	0.03	0.57
BE60	BE60 - Beech 60 Duke	Departure	1	0.18	0.01	0.18
BE9L	BE9L - Beech King Air 90	Departure	1	0.09	0.00	0.09
C130	C130 - Lockheed 130 Hercules	Departure	1	0.10	-	0.10
C17	C17 - Boeing C-17 Globemaster III	Departure	1	0.01	0.00	0.01
C172	C172 - Cessna Skyhawk 172/Cutlass	Departure	1	8.86	0.46	9.32
C177	C177 - Cessna 177 Cardinal	Departure	1	0.47	0.02	0.49
C182	C182 - Cessna Skylane 182	Departure	1	2.02	0.13	2.14
C206	C206 - Cessna 206 Stationair	Departure	1	0.12	0.01	0.12
C210	C210 - Cessna 210 Centurion	Departure	1	0.31	0.02	0.34
C25A	C25A - Cessna Citation CJ2	Departure	1	0.08	0.01	0.09
C25B	C25B - Cessna Citation CJ3	Departure	1	0.10	0.01	0.11
C25C	C25C - Cessna Citation CJ4	Departure	1	0.04	0.00	0.04
C310	C310 - Cessna 310	Departure	1	0.37	0.02	0.39
C340	C340 - Cessna 340	Departure	1	0.68	0.03	0.72
C414	C414 - Cessna Chancellor 414	Departure	1	0.33	0.02	0.35
C421	C421 - Cessna Golden Eagle 421	Departure	1	1.38	0.07	1.45
C441	C441 - Cessna Conquest	Departure	1	0.19	0.01	0.20
C500	C500 - Cessna 500/Citation I	Departure	1	0.01	0.00	0.01
C501	C501 - Cessna I/SP	Departure	1	0.02	0.00	0.02
C525	C525 - Cessna CitationJet/CJ1	Departure	1	0.15	0.01	0.16
C550	C550 - Cessna Citation II/Bravo	Departure	1	0.15	-	0.15
C550	C550 - Cessna Citation II/Bravo	Departure	3	-	0.01	0.01
C560	C560 - Cessna Citation V/Ultra/Encore	Departure	1	0.09	0.01	0.10
C560	C560 - Cessna Citation V/Ultra/Encore	Departure	2	0.11	0.01	0.12
C56X	C56X - Cessna Excel/XLS	Departure	1	0.14	-	0.14
C56X	C56X - Cessna Excel/XLS	Departure	2	0.21	-	0.21
C56X	C56X - Cessna Excel/XLS	Departure	3	-	0.05	0.05

Table A.1
Fleet and Average Daily Operations - 2016

Aircraft		Operations				
ID	Description	Type	Stage Length	Day	Night	Total
C650	C650 - Cessna III/VI/VII	Departure	1	0.16	0.01	0.17
C680	C680 - Cessna Citation Sovereign	Departure	1	0.07	0.01	0.08
C750	C750 - Cessna Citation X	Departure	1	0.10	0.01	0.11
C750	C750 - Cessna Citation X	Departure	2	0.07	0.01	0.08
C82R	C82R - Cessna Skylane RG	Departure	1	0.54	0.03	0.57
CL30	CL30 - Bombardier (Canadair) Challenger 300	Departure	1	0.18	0.02	0.20
CL35	CL35 - Bombardier Challenger 300	Departure	1	0.01	0.00	0.01
CL35	CL35 - Bombardier Challenger 300	Departure	4	-	0.00	0.00
CL60	CL60 - Bombardier Challenger 600/601/604	Departure	2	0.13	0.01	0.14
CL60	CL60 - Bombardier Challenger 600/601/604	Departure	4	0.13	0.01	0.14
COL3	COL3 - Lancair LC-40 Columbia 400	Departure	1	0.49	0.02	0.51
COL4	COL4 - Lancair LC-41 Columbia 400	Departure	1	0.78	0.04	0.82
DA40	DA40 - Diamond Star DA40	Departure	1	0.14	0.01	0.14
DH8B	DH8B - Bombardier DH8C-200	Departure	1	0.10	0.01	0.11
E135	E135 - Embraer ERJ 135/140/Legacy	Departure	1	0.02	0.00	0.03
E50P	E50P - Embraer Phenom 100	Departure	1	0.07	0.00	0.08
E50P	E50P - Embraer Phenom 100	Departure	2	0.15	0.01	0.16
E55P	E55P - Embraer Phenom 300	Departure	1	0.52	0.02	0.54
E55P	E55P - Embraer Phenom 300	Departure	2	0.19	0.03	0.22
EA50	EA50 - Eclipse 500	Departure	1	0.04	0.00	0.04
EC20	EC120 - Eurocopter EC-120	Departure	1	0.38	0.02	0.40
EC35	EC135 - Eurocopter EC-135	Departure	1	0.10	0.00	0.10
EC45	EC45 - Eurocopter EC-145	Departure	1	0.07	-	0.07
F2TH	F2TH - Dassault Falcon 2000	Departure	1	0.19	0.01	0.20
F2TH	F2TH - Dassault Falcon 2000	Departure	2	0.16	0.01	0.17
F900	F900 - Dassault Falcon 900	Departure	1	0.02	0.00	0.03
FA50	FA50 - Dassault Falcon/Mystère 50	Departure	2	0.03	0.00	0.03
G150	G150 - Gulfstream G150	Departure	1	0.03	0.00	0.03
G150	G150 - Gulfstream G150	Departure	2	0.04	0.00	0.04
G150	G150 - Gulfstream G150	Departure	3	0.03	0.00	0.03
G280	G280 - Gulfstream G280	Departure	1	0.01	0.00	0.01
GA7	GA7 - Grumman American Cougar	Departure	1	0.66	0.03	0.70
GA8	GA8 - Gippsland GA-8 Airvan	Departure	1	0.03	0.01	0.03
GALX	GALX - IAI 1126 Galaxy/Gulfstream G200	Departure	1	0.05	0.00	0.05
GALX	GALX - IAI 1126 Galaxy/Gulfstream G200	Departure	2	0.19	0.01	0.20
GLEX	GLEX - Bombardier BD-700 Global Express	Departure	1	0.04	0.00	0.04
GLEX	GLEX - Bombardier BD-700 Global Express	Departure	4	0.04	0.00	0.04
GLF4	GLF4 - Gulfstream IV/G400	Departure	1	0.37	0.02	0.39
GLF4	GLF4 - Gulfstream IV/G400	Departure	3	0.12	0.01	0.13

Table A.1
Fleet and Average Daily Operations - 2016

Aircraft		Operations				
ID	Description	Type	Stage Length	Day	Night	Total
GLF5	GLF5 - Gulfstream V/G500	Departure	1	0.09	0.00	0.09
GLF5	GLF5 - Gulfstream V/G500	Departure	3	0.04	0.00	0.05
H25B	H25B - BAe HS 125/700-800/Hawker 800	Departure	1	0.19	0.02	0.21
H60	H60 - Sikorsky SH-60 Seahawk	Departure	1	0.07	-	0.07
LJ31	LJ31 - Bombardier Learjet 31/A/B	Departure	1	0.04	0.00	0.04
LJ35	LJ35 - Bombardier Learjet 35/36	Departure	1	0.08	0.00	0.08
LJ40	LJ40 - Learjet 40; Gates Learjet	Departure	1	0.04	0.00	0.04
LJ45	LJ45 - Bombardier Learjet 45	Departure	2	0.11	0.01	0.12
LJ60	LJ60 - Bombardier Learjet 60	Departure	1	0.18	0.01	0.19
LJ60	LJ60 - Bombardier Learjet 60	Departure	2	0.18	0.01	0.19
LJ75	LJ75 - Learjet 75	Departure	1	0.16	0.01	0.17
M20P	M20P - Mooney M-20C Ranger	Departure	1	1.01	0.05	1.06
M20T	M20T - Turbo Mooney M20K	Departure	1	1.09	0.06	1.14
MU2	MU2 - Mitsubishi Marquise/Solitaire	Departure	1	0.02	0.00	0.02
P28A	P28A - Piper Cherokee	Departure	1	2.02	0.10	2.13
P28R	P28R - Cherokee Arrow/Turbo	Departure	1	0.49	0.02	0.51
P32R	P32R - Piper 32	Departure	1	0.18	0.01	0.18
P46T	P46T - Piper Malibu Meridian	Departure	1	0.05	0.00	0.05
PA27	PA27 - Piper Aztec	Departure	1	0.08	0.00	0.08
PA27	PA27 - Piper Aztec	Departure	2	0.08	0.00	0.08
PA28	PA28 - Piper Cherokee	Departure	1	0.37	0.02	0.39
PA30	PA30 - Piper PA-30	Departure	1	0.18	0.01	0.18
PA31	PA31 - Piper Navajo PA-31	Departure	1	1.28	0.07	1.35
PA32	PA32 - Piper Cherokee Six	Departure	1	1.32	0.07	1.39
PA34	PA34 - Piper PA-34 Seneca	Departure	1	0.43	0.02	0.45
PA46	PA46 - Piper Malibu	Departure	1	0.48	0.02	0.50
PA46	PA46 - Piper Malibu	Departure	2	0.48	0.02	0.50
PC12	PC12 - Pilatus PC-12	Departure	1	0.24	0.04	0.29
PC12	PC12 - Pilatus PC-12	Departure	2	0.24	-	0.24
PRM1	PRM1 - Raytheon Premier 1/390 Premier 1	Departure	2	0.02	0.00	0.02
S76	S76 - Sikorsky S-76	Departure	1	0.02	0.00	0.02
SR20	SR20 - Cirrus SR-20	Departure	1	0.18	0.01	0.18
SR22	SR22 - Cirrus SR 22	Departure	1	3.13	0.17	3.30
SW4	SW4 - Swearingen Merlin 4/4A Metro2	Departure	1	0.19	0.04	0.22
TBM8	TBM8 - Socata TBM-850	Departure	1	0.02	0.00	0.02
Z42	Z42 - Moravan Zlin Z-242	Departure	1	0.43	0.02	0.45
A10	A10 - Fairchild A10	Touch-and-Go	1	2.76	-	2.76
A139	A139 - Agusta AB-139	Touch-and-Go	1	4.95	-	4.95
AA5	AA5 - American AA-5 Traveler	Touch-and-Go	1	0.69	-	0.69

Table A.1
Fleet and Average Daily Operations - 2016

Aircraft		Operations				
ID	Description	Type	Stage Length	Day	Night	Total
AA5A	AA5A - Grumman AA-5A Cheetah; AA-5 Tiger	Touch-and-Go	1	0.69	-	0.69
AC11	AC11 - Rockwell Commander 114	Touch-and-Go	1	0.35	-	0.35
AC12	AC12 - Rockwell Commander 112A	Touch-and-Go	1	0.35	-	0.35
AS50	AS50 - Eurocopter AS350B	Touch-and-Go	1	5.40	-	5.40
B06	B06 - Bell 206B-3	Touch-and-Go	1	2.70	-	2.70
BE23	BE23 - Beechcraft Model 23 Musketeer	Touch-and-Go	1	1.73	-	1.73
BE24	BE24 - Beechcraft Model 24 Sierra/Musketeer	Touch-and-Go	1	0.69	-	0.69
BE33	BE33 - Beech Bonanza 33	Touch-and-Go	1	1.04	-	1.04
BE35	BE35 - Beech Bonanza 35	Touch-and-Go	1	3.11	-	3.11
BE36	BE36 - Beech Bonanza 36	Touch-and-Go	1	2.07	-	2.07
BE55	BE55 - Beech Baron 55	Touch-and-Go	1	1.04	-	1.04
BE58	BE58 - Beech 58	Touch-and-Go	1	1.04	-	1.04
BE76	BE76 - Beechcraft Model 76 Duchess	Touch-and-Go	1	0.69	-	0.69
BL17	BL17 - Bellanca Super Viking Model 17-30A	Touch-and-Go	1	1.04	-	1.04
C150	C150 - Cessna 150 Single Engine SEPF	Touch-and-Go	1	1.04	-	1.04
C152	C152 - Cessna 152 Single Engine SEPF	Touch-and-Go	1	0.69	-	0.69
C172	C172 - Cessna Skyhawk 172/Cutlass	Touch-and-Go	1	7.95	-	7.95
C177	C177 - Cessna 177 Cardinal	Touch-and-Go	1	2.42	-	2.42
C180	C180 - Cessna 180 Skywagon	Touch-and-Go	1	0.35	-	0.35
C182	C182 - Cessna Skylane 182	Touch-and-Go	1	4.49	-	4.49
C310	C310 - Cessna 310	Touch-and-Go	1	0.35	-	0.35
C335	C335 - Cessna 335 Twin Piston MEVP	Touch-and-Go	1	0.35	-	0.35
C340	C340 - Cessna 340	Touch-and-Go	1	0.35	-	0.35
C400	C400 - Cessna 400 Corvalis/Lancair LC41/Columbia 400	Touch-and-Go	1	0.35	-	0.35
C421	C421 - Cessna Golden Eagle 421	Touch-and-Go	1	0.35	-	0.35
CH75	CH75 - Zenith STOL CH-750	Touch-and-Go	1	0.35	-	0.35
CH7A	CH7A - Aeronca Model 7 Champion	Touch-and-Go	1	0.35	-	0.35
CLDS	CLDS - Rearwin Cloudster 8090/8125/8235	Touch-and-Go	1	0.35	-	0.35
COL3	COL3 - Lancair LC-40 Columbia 400	Touch-and-Go	1	0.35	-	0.35
COZY	COZY - AeroCad AeroCanard	Touch-and-Go	1	0.35	-	0.35
DA40	DA40 - Diamond Star DA40	Touch-and-Go	1	0.35	-	0.35
DFLY	DFLY - Viking Dragonfly	Touch-and-Go	1	0.35	-	0.35
EAGL	EAGL - Christen/Aviat Eagle	Touch-and-Go	1	0.35	-	0.35
EC20	EC120 - Eurocopter EC-120	Touch-and-Go	1	7.20	-	7.20
EC35	EC135 - Eurocopter EC-135	Touch-and-Go	1	1.80	-	1.80
ERCO	ERCO - ErCoupe	Touch-and-Go	1	0.35	-	0.35
G109	G109 - Burkhart Grob G109	Touch-and-Go	1	0.35	-	0.35
G115	G115 - Burkhart Grob G115	Touch-and-Go	1	0.35	-	0.35
G202	G202 - Gearhardt J Giles G202	Touch-and-Go	1	0.35	-	0.35

Table A.1
Fleet and Average Daily Operations - 2016

Aircraft		Operations				
ID	Description	Type	Stage Length	Day	Night	Total
G2T1	G2T1 - Great Lakes Sport Trainer	Touch-and-Go	1	0.35	-	0.35
GA7	GA7 - Grumman American Cougar	Touch-and-Go	1	0.69	-	0.69
LC42	LC42 - Cessna 350 Corvalis/Lancair LC42	Touch-and-Go	1	0.35	-	0.35
LGEZ	LGEZ - Rutan 61 Long-EZ	Touch-and-Go	1	0.35	-	0.35
M020	M020 - Mooney Mark 20 Series	Touch-and-Go	1	1.04	-	1.04
M20C	M20C - Mooney Mark 20 Series	Touch-and-Go	1	0.69	-	0.69
M20F	M20F - Mooney Mark 20 Series	Touch-and-Go	1	0.69	-	0.69
M20J	M20J - Mooney Mark 20 Series	Touch-and-Go	1	1.38	-	1.38
M20K	M20K - Mooney 252TSE (M20K)	Touch-and-Go	1	0.69	-	0.69
M20T	M20T - Turbo Mooney M20K	Touch-and-Go	1	0.35	-	0.35
MOR2	MOR2 - Varga 2150 Kachina	Touch-and-Go	1	0.35	-	0.35
NAVI	NAVI - Ryan L-17/U-18 Navion	Touch-and-Go	1	0.35	-	0.35
P28T	P28T - Piper PA-28R-180/200/201 Cherokee Arrow I/II/III	Touch-and-Go	1	2.42	-	2.42
P32R	P32R - Piper 32	Touch-and-Go	1	1.04	-	1.04
PA11	PA11 - Cub Crafters CC-11 Carbon Cub/ Sport Cub	Touch-and-Go	1	0.35	-	0.35
PA20	PA20 - Piper PA-20 Pacer	Touch-and-Go	1	0.69	-	0.69
PA24	PA24 - Piper PA-24 Comanche	Touch-and-Go	1	0.35	-	0.35
PA28	PA28 - Piper Cherokee	Touch-and-Go	1	4.15	-	4.15
PA30	PA30 - Piper PA-30	Touch-and-Go	1	0.35	-	0.35
PA31	PA31 - Piper Navajo PA-31	Touch-and-Go	1	0.69	-	0.69
PA32	PA32 - Piper Cherokee Six	Touch-and-Go	1	4.15	-	4.15
PA34	PA34 - Piper PA-34 Seneca	Touch-and-Go	1	1.04	-	1.04
PA38	PA38 - Piper PA-38 Tomahawk	Touch-and-Go	1	0.35	-	0.35
PA60	PA60 - Piper PA-60/PA-61 Aerostar (Aerostar 600/700)	Touch-and-Go	1	0.69	-	0.69
PARC	PARC - Piper PA-28-180/181 Cherokee Archer	Touch-and-Go	1	1.04	-	1.04
R22	R22 - Robinson R22B w/Lycoming 0320	Touch-and-Go	1	5.50	-	5.50
RV4	RV4 - Van's Aircraft RV-4	Touch-and-Go	1	0.35	-	0.35
RV6	RV6 - Vans RV-6	Touch-and-Go	1	0.69	-	0.69
RV7A	RV7A - Van's Aircraft RV-7/RV-7A	Touch-and-Go	1	0.35	-	0.35
RV8	RV8 - Vans RV-8	Touch-and-Go	1	0.35	-	0.35
SA30	SA30 - STOLP SA-300 Starduster Too	Touch-and-Go	1	0.35	-	0.35
SIRA	SIRA - Tecnam P2002 Sierra	Touch-and-Go	1	0.35	-	0.35
SR22	SR22 - Cirrus SR 22	Touch-and-Go	1	1.38	-	1.38
YK52	YK52 - Aerostar Yak-52/54	Touch-and-Go	1	0.35	-	0.35
Grand Total				202.07	6.17	208.24

Sources: FAA TAF 2015, OPSNET, TFMS-C, Flight Explorer, and HNTB Analysis 2016.

Table A.2
Fleet and Average Daily Operations - 2021

Aircraft		Operations				
ID	Description	Type	Stage Length	Day	Night	Total
A10	A10 - Fairchild A10	Arrival	1	3.27	0.02	3.29
A139	A139 - Agusta AB-139	Arrival	1	0.30	0.02	0.33
AA5	AA5 - American AA-5 Traveler	Arrival	1	0.15	0.01	0.17
AC90	AC90 - Gulfstream Commander	Arrival	1	0.06	0.00	0.06
AEST	AEST - Piper Aero Star	Arrival	1	0.99	0.07	1.06
AS50	AS50 - Eurocopter AS350B	Arrival	1	0.33	0.02	0.35
ASTR	ASTR - IAI Astra 1125	Arrival	1	0.03	0.00	0.04
AT43	AT43 - Aérospatiale/Alenia ATR 42-200/300/320	Arrival	1	0.07	0.00	0.07
B06	B06 - Bell 206B-3	Arrival	1	0.17	0.01	0.18
B190	B190 - Beech 1900/C-12J	Arrival	1	0.04	0.00	0.04
B350	B350 - Beech Super King Air 350	Arrival	1	0.36	0.02	0.38
B430	B430 - Bell 430	Arrival	1	0.03	0.00	0.03
B738	B738 - Boeing 737-800	Arrival	1	-	0.00	0.00
BE10	BE10 - Beech King Air 100 A/B	Arrival	1	0.04	0.00	0.04
BE20	BE20 - Beech 200 Super King	Arrival	1	0.15	0.01	0.16
BE30	BE30 - Raytheon 300 Super King Air	Arrival	1	0.06	0.00	0.06
BE33	BE33 - Beech Bonanza 33	Arrival	1	0.88	0.06	0.94
BE35	BE35 - Beech Bonanza 35	Arrival	1	1.17	0.08	1.25
BE36	BE36 - Beech Bonanza 36	Arrival	1	2.15	0.15	2.30
BE40	BE40 - Raytheon/Beech Beechjet 400/T-1	Arrival	1	0.24	0.01	0.26
BE55	BE55 - Beech Baron 55	Arrival	1	0.85	0.06	0.91
BE58	BE58 - Beech 58	Arrival	1	3.10	0.21	3.31
BE60	BE60 - Beech 60 Duke	Arrival	1	0.15	0.01	0.16
BE9L	BE9L - Beech King Air 90	Arrival	1	0.09	0.01	0.09
C130	C130 - Lockheed 130 Hercules	Arrival	1	0.08	-	0.08
C17	C17 - Boeing C-17 Globemaster III	Arrival	1	0.01	0.00	0.01
C172	C172 - Cessna Skyhawk 172/Cutlass	Arrival	1	7.84	0.54	8.38
C177	C177 - Cessna 177 Cardinal	Arrival	1	0.41	0.03	0.44
C182	C182 - Cessna Skylane 182	Arrival	1	1.90	0.13	2.03
C206	C206 - Cessna 206 Stationair	Arrival	1	0.11	0.01	0.12
C210	C210 - Cessna 210 Centurion	Arrival	1	0.28	0.02	0.30
C25A	C25A - Cessna Citation CJ2	Arrival	1	0.13	0.01	0.14
C25B	C25B - Cessna Citation CJ3	Arrival	1	0.19	0.01	0.20
C25C	C25C - Cessna Citation CJ4	Arrival	1	0.04	0.00	0.05
C310	C310 - Cessna 310	Arrival	1	0.32	0.02	0.35
C340	C340 - Cessna 340	Arrival	1	0.60	0.04	0.64
C414	C414 - Cessna Chancellor 414	Arrival	1	0.29	0.02	0.31
C421	C421 - Cessna Golden Eagle 421	Arrival	1	1.21	0.08	1.29
C441	C441 - Cessna Conquest	Arrival	1	0.17	0.01	0.19

Table A.2
Fleet and Average Daily Operations - 2021

Aircraft		Operations				
ID	Description	Type	Stage Length	Day	Night	Total
C500	C500 - Cessna 500/Citation I	Arrival	1	0.01	0.00	0.01
C501	C501 - Cessna I/SP	Arrival	1	0.01	0.00	0.02
C525	C525 - Cessna CitationJet/CJ1	Arrival	1	0.17	0.01	0.18
C550	C550 - Cessna Citation II/Bravo	Arrival	1	0.14	0.01	0.15
C560	C560 - Cessna Citation V/Ultra/Encore	Arrival	1	0.21	0.01	0.22
C56X	C56X - Cessna Excel/XLS	Arrival	1	0.41	0.02	0.43
C650	C650 - Cessna III/VI/VII	Arrival	1	0.15	0.01	0.16
C680	C680 - Cessna Citation Sovereign	Arrival	1	0.13	0.01	0.13
C750	C750 - Cessna Citation X	Arrival	1	0.20	0.01	0.21
C82R	C82R - Cessna Skylane RG	Arrival	1	0.53	0.04	0.57
CL30	CL30 - Bombardier (Canadair) Challenger 300	Arrival	1	0.33	0.02	0.35
CL35	CL35 - Bombardier Challenger 300	Arrival	1	0.02	0.00	0.02
CL60	CL60 - Bombardier Challenger 600/601/604	Arrival	1	0.27	0.02	0.29
COL3	COL3 - Lancair LC-40 Columbia 400	Arrival	1	0.80	0.06	0.86
COL4	COL4 - Lancair LC-41 Columbia 400	Arrival	1	1.33	0.09	1.43
DA40	DA40 - Diamond Star DA40	Arrival	1	0.20	0.01	0.22
DH8B	DH8B - Bombardier DHC8-200	Arrival	1	0.10	0.01	0.11
E135	E135 - Embraer ERJ 135/140/Legacy	Arrival	1	0.03	0.00	0.03
E50P	E50P - Embraer Phenom 100	Arrival	1	0.21	0.01	0.22
E55P	E55P - Embraer Phenom 300	Arrival	1	0.85	0.06	0.90
EA50	EA50 - Eclipse 500	Arrival	1	0.03	0.00	0.04
EC20	EC120 - Eurocopter EC-120	Arrival	1	0.44	0.03	0.47
EC35	EC135 - Eurocopter EC-135	Arrival	1	0.11	0.01	0.12
EC45	EC45 - Eurocopter EC-145	Arrival	1	0.07	-	0.07
F2TH	F2TH - Dassault Falcon 2000	Arrival	1	0.39	0.03	0.42
F900	F900 - Dassault Falcon 900	Arrival	1	0.03	0.00	0.03
FA50	FA50 - Dassault Falcon/Mystère 50	Arrival	1	0.03	0.00	0.03
G150	G150 - Gulfstream G150	Arrival	1	0.19	0.01	0.20
G280	G280 - Gulfstream G280	Arrival	1	0.02	0.00	0.02
GA7	GA7 - Grumman American Cougar	Arrival	1	0.64	0.04	0.68
GA8	GA8 - Gippsland GA-8 Airvan	Arrival	1	0.03	0.00	0.03
GALX	GALX - IAI 1126 Galaxy/Gulfstream G200	Arrival	1	0.27	0.02	0.29
GLEX	GLEX - Bombardier BD-700 Global Express	Arrival	1	0.08	0.01	0.09
GLF4	GLF4 - Gulfstream IV/G400	Arrival	1	0.47	0.03	0.50
GLF5	GLF5 - Gulfstream V/G500	Arrival	1	0.15	0.01	0.16
H25B	H25B - BAe HS 125/700-800/Hawker 800	Arrival	1	0.20	0.01	0.21
H60	H60 - Sikorsky SH-60 Seahawk	Arrival	1	0.07	-	0.07
LJ31	LJ31 - Bombardier Learjet 31/A/B	Arrival	1	0.04	0.00	0.04
LJ35	LJ35 - Bombardier Learjet 35/36	Arrival	1	0.07	0.00	0.08

Table A.2
Fleet and Average Daily Operations - 2021

Aircraft		Operations				
ID	Description	Type	Stage Length	Day	Night	Total
LJ40	LJ40 - Learjet 40; Gates Learjet	Arrival	1	0.07	0.01	0.08
LJ45	LJ45 - Bombardier Learjet 45	Arrival	1	0.13	0.01	0.13
LJ60	LJ60 - Bombardier Learjet 60	Arrival	1	0.35	0.02	0.37
LJ75	LJ75 - Learjet 75	Arrival	1	0.19	0.01	0.20
M20P	M20P - Mooney M-20C Ranger	Arrival	1	0.89	0.06	0.96
M20T	M20T - Turbo Mooney M20K	Arrival	1	1.05	0.07	1.12
MU2	MU2 - Mitsubishi Marquise/Solitaire	Arrival	1	0.02	0.00	0.02
P28A	P28A - Piper Cherokee	Arrival	1	1.91	0.13	2.04
P28R	P28R - Cherokee Arrow/Turbo	Arrival	1	0.46	0.03	0.49
P32R	P32R - Piper 32	Arrival	1	0.15	0.01	0.17
P46T	P46T - Piper Malibu Meridian	Arrival	1	0.08	0.01	0.08
PA27	PA27 - Piper Aztec	Arrival	1	0.14	0.01	0.15
PA28	PA28 - Piper Cherokee	Arrival	1	0.35	0.02	0.37
PA30	PA30 - Piper PA-30	Arrival	1	0.15	0.01	0.16
PA31	PA31 - Piper Navajo PA-31	Arrival	1	1.12	0.08	1.20
PA32	PA32 - Piper Cherokee Six	Arrival	1	1.17	0.08	1.25
PA34	PA34 - Piper PA-34 Seneca	Arrival	1	0.41	0.03	0.43
PA46	PA46 - Piper Malibu	Arrival	1	0.84	0.06	0.90
PC12	PC12 - Pilatus PC-12	Arrival	1	0.53	0.03	0.56
PRM1	PRM1 - Raytheon Premier 1/390 Premier 1	Arrival	1	0.03	0.00	0.03
S76	S76 - Sikorsky S-76	Arrival	1	0.02	0.00	0.02
SR20	SR20 - Cirrus SR-20	Arrival	1	0.19	0.01	0.20
SR22	SR22 - Cirrus SR 22	Arrival	1	4.78	0.33	5.11
SW4	SW4 - Swearingen Merlin 4/4A Metro2	Arrival	1	0.18	0.01	0.18
TBM8	TBM8 - Socata TBM-850	Arrival	1	0.02	0.00	0.02
Z42	Z42 - Moravan Zlin Z-242	Arrival	1	0.41	0.03	0.44
A10	A10 - Fairchild A10	Departure	1	3.27	0.02	3.29
A139	A139 - Agusta AB-139	Departure	1	0.31	0.02	0.33
AA5	AA5 - American AA-5 Traveler	Departure	1	0.16	0.01	0.17
AC90	AC90 - Gulfstream Commander	Departure	1	0.06	0.00	0.06
AEST	AEST - Piper Aero Star	Departure	1	1.00	0.05	1.06
AS50	AS50 - Eurocopter AS350B	Departure	1	0.34	0.02	0.35
ASTR	ASTR - IAI Astra 1125	Departure	1	0.03	0.00	0.04
AT43	AT43 - Aérospatiale/Alenia ATR 42-200/300/320	Departure	1	0.07	0.00	0.07
B06	B06 - Bell 206B-3	Departure	1	0.17	0.01	0.18
B190	B190 - Beech 1900/C-12J	Departure	1	0.04	0.00	0.04
B350	B350 - Beech Super King Air 350	Departure	1	0.17	0.02	0.19
B350	B350 - Beech Super King Air 350	Departure	2	0.17	0.02	0.19
B430	B430 - Bell 430	Departure	1	0.03	0.00	0.03

Table A.2
Fleet and Average Daily Operations - 2021

Aircraft		Operations				
ID	Description	Type	Stage Length	Day	Night	Total
B738	B787 - Boeing 737-800	Departure	1	-	0.00	0.00
BE10	BE10 - Beech King Air 100 A/B	Departure	1	0.04	0.00	0.04
BE20	BE20 - Beech 200 Super King	Departure	1	0.15	0.01	0.16
BE30	BE30 - Raytheon 300 Super King Air	Departure	1	0.05	0.01	0.06
BE33	BE33 - Beech Bonanza 33	Departure	1	0.89	0.05	0.94
BE35	BE35 - Beech Bonanza 35	Departure	1	1.19	0.06	1.25
BE36	BE36 - Beech Bonanza 36	Departure	1	2.19	0.11	2.30
BE40	BE40 - Raytheon/Beech Beechjet 400/T-1	Departure	1	0.18	0.03	0.21
BE40	BE40 - Raytheon/Beech Beechjet 400/T-1	Departure	2	0.04	0.01	0.05
BE55	BE55 - Beech Baron 55	Departure	1	0.87	0.04	0.91
BE58	BE58 - Beech 58	Departure	1	2.62	0.14	2.76
BE58	BE58 - Beech 58	Departure	2	0.52	0.03	0.55
BE60	BE60 - Beech 60 Duke	Departure	1	0.16	0.01	0.16
BE9L	BE9L - Beech King Air 90	Departure	1	0.09	0.00	0.09
C130	C130 - Lockheed 130 Hercules	Departure	1	0.08	-	0.08
C17	C17 - Boeing C-17 Globemaster III	Departure	1	0.01	0.00	0.01
C172	C172 - Cessna Skyhawk 172/Cutlass	Departure	1	7.97	0.41	8.38
C177	C177 - Cessna 177 Cardinal	Departure	1	0.42	0.02	0.44
C182	C182 - Cessna Skylane 182	Departure	1	1.91	0.12	2.03
C206	C206 - Cessna 206 Stationair	Departure	1	0.11	0.01	0.12
C210	C210 - Cessna 210 Centurion	Departure	1	0.28	0.02	0.30
C25A	C25A - Cessna Citation CJ2	Departure	1	0.13	0.01	0.14
C25B	C25B - Cessna Citation CJ3	Departure	1	0.19	0.01	0.20
C25C	C25C - Cessna Citation CJ4	Departure	1	0.05	0.00	0.05
C310	C310 - Cessna 310	Departure	1	0.33	0.02	0.35
C340	C340 - Cessna 340	Departure	1	0.61	0.03	0.64
C414	C414 - Cessna Chancellor 414	Departure	1	0.29	0.01	0.31
C421	C421 - Cessna Golden Eagle 421	Departure	1	1.23	0.06	1.29
C441	C441 - Cessna Conquest	Departure	1	0.18	0.01	0.19
C500	C500 - Cessna 500/Citation I	Departure	1	0.01	0.00	0.01
C501	C501 - Cessna I/SP	Departure	1	0.01	0.00	0.02
C525	C525 - Cessna CitationJet/CJ1	Departure	1	0.17	0.01	0.18
C550	C550 - Cessna Citation II/Bravo	Departure	1	0.14	-	0.14
C550	C550 - Cessna Citation II/Bravo	Departure	3	-	0.01	0.01
C560	C560 - Cessna Citation V/Ultra/Encore	Departure	1	0.09	0.01	0.10
C560	C560 - Cessna Citation V/Ultra/Encore	Departure	2	0.11	0.01	0.12
C56X	C56X - Cessna Excel/XLS	Departure	1	0.15	-	0.15
C56X	C56X - Cessna Excel/XLS	Departure	2	0.23	-	0.23
C56X	C56X - Cessna Excel/XLS	Departure	3	-	0.05	0.05

Table A.2
Fleet and Average Daily Operations - 2021

Aircraft		Operations				
ID	Description	Type	Stage Length	Day	Night	Total
C650	C650 - Cessna III/VI/VII	Departure	1	0.15	0.01	0.16
C680	C680 - Cessna Citation Sovereign	Departure	1	0.12	0.02	0.13
C750	C750 - Cessna Citation X	Departure	1	0.11	0.01	0.12
C750	C750 - Cessna Citation X	Departure	2	0.08	0.01	0.09
C82R	C82R - Cessna Skylane RG	Departure	1	0.54	0.03	0.57
CL30	CL30 - Bombardier (Canadair) Challenger 300	Departure	1	0.31	0.04	0.35
CL35	CL35 - Bombardier Challenger 300	Departure	1	0.01	0.00	0.02
CL35	CL35 - Bombardier Challenger 300	Departure	4	-	0.00	0.00
CL60	CL60 - Bombardier Challenger 600/601/604	Departure	2	0.14	0.01	0.15
CL60	CL60 - Bombardier Challenger 600/601/604	Departure	4	0.14	0.01	0.15
COL3	COL3 - Lancair LC-40 Columbia 400	Departure	1	0.82	0.04	0.86
COL4	COL4 - Lancair LC-41 Columbia 400	Departure	1	1.36	0.07	1.43
DA40	DA40 - Diamond Star DA40	Departure	1	0.21	0.01	0.22
DH8B	DH8B - Bombardier DHC8-200	Departure	1	0.10	0.01	0.11
E135	E135 - Embraer ERJ 135/140/Legacy	Departure	1	0.03	0.00	0.03
E50P	E50P - Embraer Phenom 100	Departure	1	0.07	0.00	0.07
E50P	E50P - Embraer Phenom 100	Departure	2	0.14	0.01	0.15
E55P	E55P - Embraer Phenom 300	Departure	1	0.62	0.02	0.64
E55P	E55P - Embraer Phenom 300	Departure	2	0.22	0.03	0.26
EA50	EA50 - Eclipse 500	Departure	1	0.03	0.00	0.04
EC20	EC120 - Eurocopter EC-120	Departure	1	0.45	0.02	0.47
EC35	EC135 - Eurocopter EC-135	Departure	1	0.11	0.01	0.12
EC45	EC45 - Eurocopter EC-145	Departure	1	0.07	-	0.07
F2TH	F2TH - Dassault Falcon 2000	Departure	1	0.21	0.02	0.23
F2TH	F2TH - Dassault Falcon 2000	Departure	2	0.18	0.01	0.19
F900	F900 - Dassault Falcon 900	Departure	1	0.03	0.00	0.03
FA50	FA50 - Dassault Falcon/Mystère 50	Departure	2	0.03	0.00	0.03
G150	G150 - Gulfstream G150	Departure	1	0.06	0.00	0.06
G150	G150 - Gulfstream G150	Departure	2	0.08	0.00	0.08
G150	G150 - Gulfstream G150	Departure	3	0.06	0.00	0.06
G280	G280 - Gulfstream G280	Departure	1	0.02	0.00	0.02
GA7	GA7 - Grumman American Cougar	Departure	1	0.65	0.03	0.68
GA8	GA8 - Gippsland GA-8 Airvan	Departure	1	0.02	0.00	0.03
GALX	GALX - IAI 1126 Galaxy/Gulfstream G200	Departure	1	0.06	0.00	0.06
GALX	GALX - IAI 1126 Galaxy/Gulfstream G200	Departure	2	0.22	0.01	0.23
GLEX	GLEX - Bombardier BD-700 Global Express	Departure	1	0.04	0.00	0.04
GLEX	GLEX - Bombardier BD-700 Global Express	Departure	4	0.04	0.00	0.04
GLF4	GLF4 - Gulfstream IV/G400	Departure	1	0.35	0.02	0.37
GLF4	GLF4 - Gulfstream IV/G400	Departure	3	0.12	0.01	0.12

Table A.2
Fleet and Average Daily Operations - 2021

Aircraft		Operations				
ID	Description	Type	Stage Length	Day	Night	Total
GLF5	GLF5 - Gulfstream V/G500	Departure	1	0.10	0.01	0.11
GLF5	GLF5 - Gulfstream V/G500	Departure	3	0.05	0.00	0.05
H25B	H25B - BAe HS 125/700-800/Hawker 800	Departure	1	0.19	0.02	0.21
H60	H60 - Sikorsky SH-60 Seahawk	Departure	1	0.07	-	0.07
LJ31	LJ31 - Bombardier Learjet 31/A/B	Departure	1	0.04	0.00	0.04
LJ35	LJ35 - Bombardier Learjet 35/36	Departure	1	0.07	0.00	0.08
LJ40	LJ40 - Learjet 40; Gates Learjet	Departure	1	0.07	0.00	0.08
LJ45	LJ45 - Bombardier Learjet 45	Departure	2	0.12	0.01	0.13
LJ60	LJ60 - Bombardier Learjet 60	Departure	1	0.18	0.01	0.18
LJ60	LJ60 - Bombardier Learjet 60	Departure	2	0.18	0.01	0.18
LJ75	LJ75 - Learjet 75	Departure	1	0.19	0.01	0.20
M20P	M20P - Mooney M-20C Ranger	Departure	1	0.91	0.05	0.96
M20T	M20T - Turbo Mooney M20K	Departure	1	1.07	0.05	1.12
MU2	MU2 - Mitsubishi Marquise/Solitaire	Departure	1	0.01	0.00	0.02
P28A	P28A - Piper Cherokee	Departure	1	1.94	0.10	2.04
P28R	P28R - Cherokee Arrow/Turbo	Departure	1	0.47	0.02	0.49
P32R	P32R - Piper 32	Departure	1	0.16	0.01	0.17
P46T	P46T - Piper Malibu Meridian	Departure	1	0.08	0.00	0.08
PA27	PA27 - Piper Aztec	Departure	1	0.07	0.00	0.07
PA27	PA27 - Piper Aztec	Departure	2	0.07	0.00	0.07
PA28	PA28 - Piper Cherokee	Departure	1	0.35	0.02	0.37
PA30	PA30 - Piper PA-30	Departure	1	0.16	0.01	0.16
PA31	PA31 - Piper Navajo PA-31	Departure	1	1.14	0.06	1.20
PA32	PA32 - Piper Cherokee Six	Departure	1	1.19	0.06	1.25
PA34	PA34 - Piper PA-34 Seneca	Departure	1	0.41	0.02	0.43
PA46	PA46 - Piper Malibu	Departure	1	0.43	0.02	0.45
PA46	PA46 - Piper Malibu	Departure	2	0.43	0.02	0.45
PC12	PC12 - Pilatus PC-12	Departure	1	0.26	0.04	0.30
PC12	PC12 - Pilatus PC-12	Departure	2	0.26	-	0.26
PRM1	PRM1 - Raytheon Premier 1/390 Premier 1	Departure	2	0.03	0.00	0.03
S76	S76 - Sikorsky S-76	Departure	1	0.02	0.00	0.02
SR20	SR20 - Cirrus SR-20	Departure	1	0.19	0.01	0.20
SR22	SR22 - Cirrus SR 22	Departure	1	4.84	0.26	5.11
SW4	SW4 - Swearingen Merlin 4/4A Metro2	Departure	1	0.15	0.03	0.18
TBM8	TBM8 - Socata TBM-850	Departure	1	0.02	0.00	0.02
Z42	Z42 - Moravan Zlin Z-242	Departure	1	0.42	0.02	0.44
A10	A10 - Fairchild A10	Touch-and-Go	1	2.76	-	2.76
A139	A139 - Agusta AB-139	Touch-and-Go	1	6.02	-	6.02
AA5	AA5 - American AA-5 Traveler	Touch-and-Go	1	0.64	-	0.64

Table A.2
Fleet and Average Daily Operations - 2021

Aircraft		Operations				
ID	Description	Type	Stage Length	Day	Night	Total
AA5A	AA5A - Grumman AA-5A Cheetah; AA-5 Tiger	Touch-and-Go	1	0.64	-	0.64
AC11	AC11 - Rockwell Commander 114	Touch-and-Go	1	0.32	-	0.32
AC12	AC12 - Rockwell Commander 112A	Touch-and-Go	1	0.35	-	0.35
AS50	AS50 - Eurocopter AS350B	Touch-and-Go	1	6.57	-	6.57
B06	B06 - Bell 206B-3	Touch-and-Go	1	3.29	-	3.29
BE23	BE23 - Beechcraft Model 23 Musketeer	Touch-and-Go	1	1.60	-	1.60
BE24	BE24 - Beechcraft Model 24 Sierra/Musketeer	Touch-and-Go	1	0.64	-	0.64
BE33	BE33 - Beech Bonanza 33	Touch-and-Go	1	0.96	-	0.96
BE35	BE35 - Beech Bonanza 35	Touch-and-Go	1	2.88	-	2.88
BE36	BE36 - Beech Bonanza 36	Touch-and-Go	1	1.92	-	1.92
BE55	BE55 - Beech Baron 55	Touch-and-Go	1	0.95	-	0.95
BE58	BE58 - Beech 58	Touch-and-Go	1	1.03	-	1.03
BE76	BE76 - Beechcraft Model 76 Duchess	Touch-and-Go	1	0.63	-	0.63
BL17	BL17 - Bellanca Super Viking Model 17-30A	Touch-and-Go	1	0.96	-	0.96
C150	C150 - Cessna 150 Single Engine SEPF	Touch-and-Go	1	0.96	-	0.96
C152	C152 - Cessna 152 Single Engine SEPF	Touch-and-Go	1	0.64	-	0.64
C172	C172 - Cessna Skyhawk 172/Cutlass	Touch-and-Go	1	7.36	-	7.36
C177	C177 - Cessna 177 Cardinal	Touch-and-Go	1	2.24	-	2.24
C180	C180 - Cessna 180 Skywagon	Touch-and-Go	1	0.32	-	0.32
C182	C182 - Cessna Skylane 182	Touch-and-Go	1	4.41	-	4.41
C310	C310 - Cessna 310	Touch-and-Go	1	0.32	-	0.32
C335	C335 - Cessna 335 Twin Piston MEVP	Touch-and-Go	1	0.32	-	0.32
C340	C340 - Cessna 340	Touch-and-Go	1	0.32	-	0.32
C400	C400 - Cessna 400 Corvalis/Lancair LC41/Columbia 400	Touch-and-Go	1	0.35	-	0.35
C421	C421 - Cessna Golden Eagle 421	Touch-and-Go	1	0.32	-	0.32
CH75	CH75 - Zenith STOL CH-750	Touch-and-Go	1	0.35	-	0.35
CH7A	CH7A - Aeronca Model 7 Champion	Touch-and-Go	1	0.35	-	0.35
CLDS	CLDS - Rearwin Cloudster 8090/8125/8235	Touch-and-Go	1	0.35	-	0.35
COL3	COL3 - Lancair LC-40 Columbia 400	Touch-and-Go	1	0.60	-	0.60
COZY	COZY - AeroCad AeroCanard	Touch-and-Go	1	0.35	-	0.35
DA40	DA40 - Diamond Star DA40	Touch-and-Go	1	0.54	-	0.54
DFLY	DFLY - Viking Dragonfly	Touch-and-Go	1	0.35	-	0.35
EAGL	EAGL - Christen/Aviat Eagle	Touch-and-Go	1	0.35	-	0.35
EC20	EC120 - Eurocopter EC-120	Touch-and-Go	1	8.76	-	8.76
EC35	EC135 - Eurocopter EC-135	Touch-and-Go	1	2.19	-	2.19
ERCO	ERCO - ErCoupe	Touch-and-Go	1	0.35	-	0.35
G109	G109 - Burkhart Grob G109	Touch-and-Go	1	0.35	-	0.35
G115	G115 - Burkhart Grob G115	Touch-and-Go	1	0.35	-	0.35
G202	G202 - Gearhardt J Giles G202	Touch-and-Go	1	0.35	-	0.35

Table A.2
Fleet and Average Daily Operations - 2021

Aircraft		Operations				
ID	Description	Type	Stage Length	Day	Night	Total
G2T1	G2T1 - Great Lakes Sport Trainer	Touch-and-Go	1	0.35	-	0.35
GA7	GA7 - Grumman American Cougar	Touch-and-Go	1	0.70	-	0.70
LC42	LC42 - Cessna 350 Corvalis/Lancair LC42	Touch-and-Go	1	0.35	-	0.35
LGEZ	LGEZ - Rutan 61 Long-EZ	Touch-and-Go	1	0.35	-	0.35
M020	M020 - Mooney Mark 20 Series	Touch-and-Go	1	0.96	-	0.96
M20C	M20C - Mooney Mark 20 Series	Touch-and-Go	1	0.70	-	0.70
M20F	M20F - Mooney Mark 20 Series	Touch-and-Go	1	0.70	-	0.70
M20J	M20J - Mooney Mark 20 Series	Touch-and-Go	1	1.28	-	1.28
M20K	M20K - Mooney 252TSE (M20K)	Touch-and-Go	1	0.70	-	0.70
M20T	M20T - Turbo Mooney M20K	Touch-and-Go	1	0.35	-	0.35
MOR2	MOR2 - Varga 2150 Kachina	Touch-and-Go	1	0.35	-	0.35
NAVI	NAVI - Ryan L-17/U-18 Navion	Touch-and-Go	1	0.35	-	0.35
P28T	P28T - Piper PA-28R-180/200/201 Cherokee Arrow I/II/III	Touch-and-Go	1	2.45	-	2.45
P32R	P32R - Piper 32	Touch-and-Go	1	0.96	-	0.96
PA11	PA11 - Cub Crafters CC-11 Carbon Cub/ Sport Cub	Touch-and-Go	1	0.35	-	0.35
PA20	PA20 - Piper PA-20 Pacer	Touch-and-Go	1	0.70	-	0.70
PA24	PA24 - Piper PA-24 Comanche	Touch-and-Go	1	0.32	-	0.32
PA28	PA28 - Piper Cherokee	Touch-and-Go	1	4.10	-	4.10
PA30	PA30 - Piper PA-30	Touch-and-Go	1	0.32	-	0.32
PA31	PA31 - Piper Navajo PA-31	Touch-and-Go	1	0.63	-	0.63
PA32	PA32 - Piper Cherokee Six	Touch-and-Go	1	3.84	-	3.84
PA34	PA34 - Piper PA-34 Seneca	Touch-and-Go	1	1.03	-	1.03
PA38	PA38 - Piper PA-38 Tomahawk	Touch-and-Go	1	0.35	-	0.35
PA60	PA60 - Piper PA-60/PA-61 Aerostar (Aerostar 600/700)	Touch-and-Go	1	0.70	-	0.70
PARC	PARC - Piper PA-28-180/181 Cherokee Archer	Touch-and-Go	1	1.04	-	1.04
R22	R22 - Robinson R22B w/Lycoming 0320	Touch-and-Go	1	5.69	-	5.69
RV4	RV4 - Van's Aircraft RV-4	Touch-and-Go	1	0.35	-	0.35
RV6	RV6 - Vans RV-6	Touch-and-Go	1	0.72	-	0.72
RV7A	RV7A - Van's Aircraft RV-7/RV-7A	Touch-and-Go	1	0.35	-	0.35
RV8	RV8 - Vans RV-8	Touch-and-Go	1	0.35	-	0.35
SA30	SA30 - STOLP SA-300 Starduster Too	Touch-and-Go	1	0.35	-	0.35
SIRA	SIRA - Tecnam P2002 Sierra	Touch-and-Go	1	0.35	-	0.35
SR22	SR22 - Cirrus SR 22	Touch-and-Go	1	2.21	-	2.21
YK52	YK52 - Aerostar Yak-52/54	Touch-and-Go	1	0.35	-	0.35
Grand Total				207.02	6.26	213.28

Sources: FAA TAF 2015, OPSNET, TFMS-C, Flight Explorer, and HNTB Analysis 2016.

Table A.3
Fleet and Average Daily Operations - 2026

Aircraft		Operations				
ID	Description	Type	Stage Length	Day	Night	Total
A10	A10 - Fairchild A10	Arrival	1	3.29	0.02	3.31
A139	A139 - Agusta AB-139	Arrival	1	0.38	0.03	0.40
AA5	AA5 - American AA-5 Traveler	Arrival	1	0.15	0.01	0.16
AC90	AC90 - Gulfstream Commander	Arrival	1	0.06	0.00	0.06
AEST	AEST - Piper Aero Star	Arrival	1	0.97	0.07	1.04
AS50	AS50 - Eurocopter AS350B	Arrival	1	0.41	0.03	0.44
ASTR	ASTR - IAI Astra 1125	Arrival	1	0.03	0.00	0.04
AT43	AT43 - Aérospatiale/Alenia ATR 42-200/300/320	Arrival	1	0.07	0.00	0.07
B06	B06 - Bell 206B-3	Arrival	1	0.21	0.01	0.22
B190	B190 - Beech 1900/C-12J	Arrival	1	0.04	0.00	0.04
B350	B350 - Beech Super King Air 350	Arrival	1	0.36	0.02	0.38
B430	B430 - Bell 430	Arrival	1	0.04	0.00	0.04
B738	B738 - Boeing 737-800	Arrival	1	-	0.00	0.00
BE10	BE10 - Beech King Air 100 A/B	Arrival	1	0.04	0.00	0.04
BE20	BE20 - Beech 200 Super King	Arrival	1	0.15	0.01	0.16
BE30	BE30 - Raytheon 300 Super King Air	Arrival	1	0.05	0.00	0.06
BE33	BE33 - Beech Bonanza 33	Arrival	1	0.85	0.06	0.91
BE35	BE35 - Beech Bonanza 35	Arrival	1	0.93	0.06	1.00
BE36	BE36 - Beech Bonanza 36	Arrival	1	2.09	0.14	2.24
BE40	BE40 - Raytheon/Beech Beechjet 400/T-1	Arrival	1	0.25	0.01	0.26
BE55	BE55 - Beech Baron 55	Arrival	1	0.84	0.06	0.90
BE58	BE58 - Beech 58	Arrival	1	3.15	0.22	3.37
BE60	BE60 - Beech 60 Duke	Arrival	1	0.15	0.01	0.16
BE9L	BE9L - Beech King Air 90	Arrival	1	0.09	0.01	0.09
C130	C130 - Lockheed 130 Hercules	Arrival	1	0.06	-	0.06
C17	C17 - Boeing C-17 Globemaster III	Arrival	1	0.01	0.00	0.01
C172	C172 - Cessna Skyhawk 172/Cutlass	Arrival	1	7.63	0.52	8.15
C177	C177 - Cessna 177 Cardinal	Arrival	1	0.40	0.03	0.43
C182	C182 - Cessna Skylane 182	Arrival	1	1.88	0.13	2.01
C206	C206 - Cessna 206 Stationair	Arrival	1	0.11	0.01	0.12
C210	C210 - Cessna 210 Centurion	Arrival	1	0.27	0.02	0.29
C25A	C25A - Cessna Citation CJ2	Arrival	1	0.14	0.01	0.15
C25B	C25B - Cessna Citation CJ3	Arrival	1	0.21	0.01	0.22
C25C	C25C - Cessna Citation CJ4	Arrival	1	0.06	0.00	0.06
C310	C310 - Cessna 310	Arrival	1	0.26	0.02	0.28
C340	C340 - Cessna 340	Arrival	1	0.59	0.04	0.63
C414	C414 - Cessna Chancellor 414	Arrival	1	0.29	0.02	0.31

Table A.3
Fleet and Average Daily Operations - 2026

Aircraft		Operations				
ID	Description	Type	Stage Length	Day	Night	Total
C421	C421 - Cessna Golden Eagle 421	Arrival	1	1.19	0.08	1.27
C441	C441 - Cessna Conquest	Arrival	1	0.17	0.01	0.18
C500	C500 - Cessna 500/Citation I	Arrival	1	0.01	0.00	0.01
C501	C501 - Cessna I/SP	Arrival	1	0.01	0.00	0.02
C525	C525 - Cessna CitationJet/CJ1	Arrival	1	0.18	0.01	0.19
C550	C550 - Cessna Citation II/Bravo	Arrival	1	0.14	0.01	0.15
C560	C560 - Cessna Citation V/Ultra/Encore	Arrival	1	0.22	0.01	0.23
C56X	C56X - Cessna Excel/XLS	Arrival	1	0.42	0.02	0.44
C650	C650 - Cessna III/VI/VII	Arrival	1	0.15	0.01	0.16
C680	C680 - Cessna Citation Sovereign	Arrival	1	0.14	0.01	0.14
C750	C750 - Cessna Citation X	Arrival	1	0.21	0.01	0.22
C82R	C82R - Cessna Skylane RG	Arrival	1	0.53	0.04	0.57
CL30	CL30 - Bombardier (Canadair) Challenger 300	Arrival	1	0.36	0.02	0.38
CL35	CL35 - Bombardier Challenger 300	Arrival	1	0.02	0.00	0.02
CL60	CL60 - Bombardier Challenger 600/601/604	Arrival	1	0.28	0.02	0.30
COL3	COL3 - Lancair LC-40 Columbia 400	Arrival	1	0.85	0.06	0.91
COL4	COL4 - Lancair LC-41 Columbia 400	Arrival	1	1.44	0.10	1.54
DA40	DA40 - Diamond Star DA40	Arrival	1	0.21	0.01	0.23
DH8B	DH8B - Bombardier DH8C-200	Arrival	1	0.12	0.01	0.13
E135	E135 - Embraer ERJ 135/140/Legacy	Arrival	1	0.03	0.00	0.03
E50P	E50P - Embraer Phenom 100	Arrival	1	0.21	0.01	0.22
E55P	E55P - Embraer Phenom 300	Arrival	1	1.07	0.07	1.14
EA50	EA50 - Eclipse 500	Arrival	1	0.03	0.00	0.04
EC20	EC120 - Eurocopter EC-120	Arrival	1	0.55	0.04	0.59
EC35	EC135 - Eurocopter EC-135	Arrival	1	0.14	0.01	0.15
EC45	EC45 - Eurocopter EC-145	Arrival	1	0.07	-	0.07
F2TH	F2TH - Dassault Falcon 2000	Arrival	1	0.41	0.03	0.44
F900	F900 - Dassault Falcon 900	Arrival	1	0.03	0.00	0.03
FA50	FA50 - Dassault Falcon/Mystère 50	Arrival	1	0.03	0.00	0.03
G150	G150 - Gulfstream G150	Arrival	1	0.21	0.01	0.23
G280	G280 - Gulfstream G280	Arrival	1	0.02	0.00	0.02
GA7	GA7 - Grumman American Cougar	Arrival	1	0.70	0.05	0.74
GA8	GA8 - Gippsland GA-8 Airvan	Arrival	1	0.03	0.00	0.03
GALX	GALX - IAI 1126 Galaxy/Gulfstream G200	Arrival	1	0.29	0.02	0.31
GLEX	GLEX - Bombardier BD-700 Global Express	Arrival	1	0.09	0.01	0.09
GLF4	GLF4 - Gulfstream IV/G400	Arrival	1	0.47	0.03	0.50
GLF5	GLF5 - Gulfstream V/G500	Arrival	1	0.16	0.01	0.17
H25B	H25B - BAe HS 125/700-800/Hawker 800	Arrival	1	0.20	0.01	0.21
H60	H60 - Sikorsky SH-60 Seahawk	Arrival	1	0.07	-	0.07

Table A.3
Fleet and Average Daily Operations - 2026

Aircraft		Operations				
ID	Description	Type	Stage Length	Day	Night	Total
LJ31	LJ31 - Bombardier Learjet 31/A/B	Arrival	1	0.04	0.00	0.04
LJ35	LJ35 - Bombardier Learjet 35/36	Arrival	1	0.07	0.00	0.08
LJ40	LJ40 - Learjet 40; Gates Learjet	Arrival	1	0.08	0.01	0.09
LJ45	LJ45 - Bombardier Learjet 45	Arrival	1	0.13	0.01	0.14
LJ60	LJ60 - Bombardier Learjet 60	Arrival	1	0.35	0.02	0.37
LJ75	LJ75 - Learjet 75	Arrival	1	0.24	0.02	0.26
M20P	M20P - Mooney M-20C Ranger	Arrival	1	0.87	0.06	0.93
M20T	M20T - Turbo Mooney M20K	Arrival	1	1.11	0.08	1.18
MU2	MU2 - Mitsubishi Marquise/Solitaire	Arrival	1	0.02	0.00	0.02
P28A	P28A - Piper Cherokee	Arrival	1	1.91	0.13	2.04
P28R	P28R - Cherokee Arrow/Turbo	Arrival	1	0.46	0.03	0.49
P32R	P32R - Piper 32	Arrival	1	0.15	0.01	0.16
P46T	P46T - Piper Malibu Meridian	Arrival	1	0.08	0.01	0.09
PA27	PA27 - Piper Aztec	Arrival	1	0.13	0.01	0.14
PA28	PA28 - Piper Cherokee	Arrival	1	0.35	0.02	0.37
PA30	PA30 - Piper PA-30	Arrival	1	0.12	0.01	0.13
PA31	PA31 - Piper Navajo PA-31	Arrival	1	1.11	0.08	1.18
PA32	PA32 - Piper Cherokee Six	Arrival	1	1.14	0.08	1.22
PA34	PA34 - Piper PA-34 Seneca	Arrival	1	0.41	0.03	0.44
PA46	PA46 - Piper Malibu	Arrival	1	0.82	0.06	0.88
PC12	PC12 - Pilatus PC-12	Arrival	1	0.54	0.03	0.57
PRM1	PRM1 - Raytheon Premier 1/390 Premier 1	Arrival	1	0.04	0.00	0.04
S76	S76 - Sikorsky S-76	Arrival	1	0.02	0.00	0.02
SR20	SR20 - Cirrus SR-20	Arrival	1	0.20	0.01	0.21
SR22	SR22 - Cirrus SR 22	Arrival	1	5.07	0.35	5.42
SW4	SW4 - Swearingen Merlin 4/4A Metro2	Arrival	1	0.16	0.01	0.17
TBM8	TBM8 - Socata TBM-850	Arrival	1	0.03	0.00	0.03
Z42	Z42 - Moravan Zlin Z-242	Arrival	1	0.43	0.03	0.46
A10	A10 - Fairchild A10	Departure	1	3.29	0.02	3.31
A139	A139 - Agusta AB-139	Departure	1	0.38	0.02	0.40
AA5	AA5 - American AA-5 Traveler	Departure	1	0.15	0.01	0.16
AC90	AC90 - Gulfstream Commander	Departure	1	0.06	0.00	0.06
AEST	AEST - Piper Aero Star	Departure	1	0.99	0.05	1.04
AS50	AS50 - Eurocopter AS350B	Departure	1	0.42	0.02	0.44
ASTR	ASTR - IAI Astra 1125	Departure	1	0.03	0.00	0.04
AT43	AT43 - Aérospatiale/Alenia ATR 42-200/300/320	Departure	1	0.07	0.00	0.07
B06	B06 - Bell 206B-3	Departure	1	0.21	0.01	0.22
B190	B190 - Beech 1900/C-12J	Departure	1	0.04	0.00	0.04
B350	B350 - Beech Super King Air 350	Departure	1	0.17	0.02	0.19

Table A.3
Fleet and Average Daily Operations - 2026

Aircraft		Operations				
ID	Description	Type	Stage Length	Day	Night	Total
B350	B350 - Beech Super King Air 350	Departure	2	0.17	0.02	0.19
B430	B430 - Bell 430	Departure	1	0.04	0.00	0.04
B738	B787 - Boeing 737-800	Departure	1	-	0.00	0.00
BE10	BE10 - Beech King Air 100 A/B	Departure	1	0.04	0.00	0.04
BE20	BE20 - Beech 200 Super King	Departure	1	0.15	0.01	0.16
BE30	BE30 - Raytheon 300 Super King Air	Departure	1	0.05	0.01	0.06
BE33	BE33 - Beech Bonanza 33	Departure	1	0.87	0.04	0.91
BE35	BE35 - Beech Bonanza 35	Departure	1	0.95	0.05	1.00
BE36	BE36 - Beech Bonanza 36	Departure	1	2.13	0.11	2.24
BE40	BE40 - Raytheon/Beech Beechjet 400/T-1	Departure	1	0.19	0.03	0.21
BE40	BE40 - Raytheon/Beech Beechjet 400/T-1	Departure	2	0.04	0.01	0.05
BE55	BE55 - Beech Baron 55	Departure	1	0.85	0.04	0.90
BE58	BE58 - Beech 58	Departure	1	2.67	0.14	2.80
BE58	BE58 - Beech 58	Departure	2	0.53	0.03	0.56
BE60	BE60 - Beech 60 Duke	Departure	1	0.15	0.01	0.16
BE9L	BE9L - Beech King Air 90	Departure	1	0.09	0.00	0.09
C130	C130 - Lockheed 130 Hercules	Departure	1	0.06	-	0.06
C17	C17 - Boeing C-17 Globemaster III	Departure	1	0.01	0.00	0.01
C172	C172 - Cessna Skyhawk 172/Cutlass	Departure	1	7.75	0.40	8.15
C177	C177 - Cessna 177 Cardinal	Departure	1	0.41	0.02	0.43
C182	C182 - Cessna Skylane 182	Departure	1	1.90	0.12	2.01
C206	C206 - Cessna 206 Stationair	Departure	1	0.11	0.01	0.12
C210	C210 - Cessna 210 Centurion	Departure	1	0.27	0.02	0.29
C25A	C25A - Cessna Citation CJ2	Departure	1	0.14	0.01	0.15
C25B	C25B - Cessna Citation CJ3	Departure	1	0.21	0.02	0.22
C25C	C25C - Cessna Citation CJ4	Departure	1	0.06	0.00	0.06
C310	C310 - Cessna 310	Departure	1	0.27	0.01	0.28
C340	C340 - Cessna 340	Departure	1	0.60	0.03	0.63
C414	C414 - Cessna Chancellor 414	Departure	1	0.29	0.01	0.31
C421	C421 - Cessna Golden Eagle 421	Departure	1	1.21	0.06	1.27
C441	C441 - Cessna Conquest	Departure	1	0.17	0.01	0.18
C500	C500 - Cessna 500/Citation I	Departure	1	0.01	0.00	0.01
C501	C501 - Cessna I/SP	Departure	1	0.01	0.00	0.02
C525	C525 - Cessna CitationJet/CJ1	Departure	1	0.18	0.01	0.19
C550	C550 - Cessna Citation II/Bravo	Departure	1	0.14	-	0.14
C550	C550 - Cessna Citation II/Bravo	Departure	3	-	0.01	0.01
C560	C560 - Cessna Citation V/Ultra/Encore	Departure	1	0.09	0.01	0.10
C560	C560 - Cessna Citation V/Ultra/Encore	Departure	2	0.11	0.01	0.13
C56X	C56X - Cessna Excel/XLS	Departure	1	0.16	-	0.16

Table A.3
Fleet and Average Daily Operations - 2026

Aircraft		Operations				
ID	Description	Type	Stage Length	Day	Night	Total
C56X	C56X - Cessna Excel/XLS	Departure	2	0.23	-	0.23
C56X	C56X - Cessna Excel/XLS	Departure	3	-	0.05	0.05
C650	C650 - Cessna III/VI/VII	Departure	1	0.15	0.01	0.16
C680	C680 - Cessna Citation Sovereign	Departure	1	0.13	0.02	0.14
C750	C750 - Cessna Citation X	Departure	1	0.11	0.01	0.13
C750	C750 - Cessna Citation X	Departure	2	0.09	0.01	0.09
C82R	C82R - Cessna Skylane RG	Departure	1	0.54	0.03	0.57
CL30	CL30 - Bombardier (Canadair) Challenger 300	Departure	1	0.34	0.04	0.38
CL35	CL35 - Bombardier Challenger 300	Departure	1	0.02	0.00	0.02
CL35	CL35 - Bombardier Challenger 300	Departure	4	-	0.00	0.00
CL60	CL60 - Bombardier Challenger 600/601/604	Departure	2	0.14	0.01	0.15
CL60	CL60 - Bombardier Challenger 600/601/604	Departure	4	0.14	0.01	0.15
COL3	COL3 - Lancair LC-40 Columbia 400	Departure	1	0.87	0.04	0.91
COL4	COL4 - Lancair LC-41 Columbia 400	Departure	1	1.46	0.07	1.54
DA40	DA40 - Diamond Star DA40	Departure	1	0.22	0.01	0.23
DH8B	DH8B - Bombardier DHC8-200	Departure	1	0.12	0.01	0.13
E135	E135 - Embraer ERJ 135/140/Legacy	Departure	1	0.03	0.00	0.03
E50P	E50P - Embraer Phenom 100	Departure	1	0.07	0.00	0.07
E50P	E50P - Embraer Phenom 100	Departure	2	0.14	0.01	0.15
E55P	E55P - Embraer Phenom 300	Departure	1	0.78	0.03	0.81
E55P	E55P - Embraer Phenom 300	Departure	2	0.28	0.04	0.33
EA50	EA50 - Eclipse 500	Departure	1	0.03	0.00	0.04
EC20	EC120 - Eurocopter EC-120	Departure	1	0.56	0.03	0.59
EC35	EC135 - Eurocopter EC-135	Departure	1	0.14	0.01	0.15
EC45	EC45 - Eurocopter EC-145	Departure	1	0.07	-	0.07
F2TH	F2TH - Dassault Falcon 2000	Departure	1	0.22	0.02	0.24
F2TH	F2TH - Dassault Falcon 2000	Departure	2	0.19	0.01	0.20
F900	F900 - Dassault Falcon 900	Departure	1	0.03	0.00	0.03
FA50	FA50 - Dassault Falcon/Mystère 50	Departure	2	0.03	0.00	0.03
G150	G150 - Gulfstream G150	Departure	1	0.06	0.00	0.07
G150	G150 - Gulfstream G150	Departure	2	0.09	0.00	0.09
G150	G150 - Gulfstream G150	Departure	3	0.06	0.00	0.07
G280	G280 - Gulfstream G280	Departure	1	0.02	0.00	0.02
GA7	GA7 - Grumman American Cougar	Departure	1	0.71	0.04	0.74
GA8	GA8 - Gippsland GA-8 Airvan	Departure	1	0.02	0.00	0.03
GALX	GALX - IAI 1126 Galaxy/Gulfstream G200	Departure	1	0.06	0.00	0.06
GALX	GALX - IAI 1126 Galaxy/Gulfstream G200	Departure	2	0.24	0.01	0.25
GLEX	GLEX - Bombardier BD-700 Global Express	Departure	1	0.04	0.00	0.05
GLEX	GLEX - Bombardier BD-700 Global Express	Departure	4	0.04	0.00	0.05

Table A.3
Fleet and Average Daily Operations - 2026

Aircraft		Operations				
ID	Description	Type	Stage Length	Day	Night	Total
GLF4	GLF4 - Gulfstream IV/G400	Departure	1	0.35	0.02	0.37
GLF4	GLF4 - Gulfstream IV/G400	Departure	3	0.12	0.01	0.12
GLF5	GLF5 - Gulfstream V/G500	Departure	1	0.11	0.01	0.12
GLF5	GLF5 - Gulfstream V/G500	Departure	3	0.05	0.00	0.06
H25B	H25B - BAe HS 125/700-800/Hawker 800	Departure	1	0.20	0.02	0.21
H60	H60 - Sikorsky SH-60 Seahawk	Departure	1	0.07	-	0.07
LJ31	LJ31 - Bombardier Learjet 31/A/B	Departure	1	0.04	0.00	0.04
LJ35	LJ35 - Bombardier Learjet 35/36	Departure	1	0.07	0.00	0.08
LJ40	LJ40 - Learjet 40; Gates Learjet	Departure	1	0.08	0.00	0.09
LJ45	LJ45 - Bombardier Learjet 45	Departure	2	0.13	0.01	0.14
LJ60	LJ60 - Bombardier Learjet 60	Departure	1	0.18	0.01	0.19
LJ60	LJ60 - Bombardier Learjet 60	Departure	2	0.18	0.01	0.19
LJ75	LJ75 - Learjet 75	Departure	1	0.24	0.01	0.26
M20P	M20P - Mooney M-20C Ranger	Departure	1	0.89	0.04	0.93
M20T	M20T - Turbo Mooney M20K	Departure	1	1.12	0.06	1.18
MU2	MU2 - Mitsubishi Marquise/Solitaire	Departure	1	0.01	0.00	0.02
P28A	P28A - Piper Cherokee	Departure	1	1.94	0.10	2.04
P28R	P28R - Cherokee Arrow/Turbo	Departure	1	0.47	0.02	0.49
P32R	P32R - Piper 32	Departure	1	0.15	0.01	0.16
P46T	P46T - Piper Malibu Meridian	Departure	1	0.08	0.00	0.09
PA27	PA27 - Piper Aztec	Departure	1	0.07	0.00	0.07
PA27	PA27 - Piper Aztec	Departure	2	0.07	0.00	0.07
PA28	PA28 - Piper Cherokee	Departure	1	0.35	0.02	0.37
PA30	PA30 - Piper PA-30	Departure	1	0.13	0.01	0.13
PA31	PA31 - Piper Navajo PA-31	Departure	1	1.13	0.06	1.18
PA32	PA32 - Piper Cherokee Six	Departure	1	1.16	0.06	1.22
PA34	PA34 - Piper PA-34 Seneca	Departure	1	0.42	0.02	0.44
PA46	PA46 - Piper Malibu	Departure	1	0.42	0.02	0.44
PA46	PA46 - Piper Malibu	Departure	2	0.42	0.02	0.44
PC12	PC12 - Pilatus PC-12	Departure	1	0.26	0.04	0.31
PC12	PC12 - Pilatus PC-12	Departure	2	0.26	-	0.26
PRM1	PRM1 - Raytheon Premier 1/390 Premier 1	Departure	2	0.04	0.00	0.04
S76	S76 - Sikorsky S-76	Departure	1	0.02	0.00	0.02
SR20	SR20 - Cirrus SR-20	Departure	1	0.20	0.01	0.21
SR22	SR22 - Cirrus SR 22	Departure	1	5.14	0.28	5.42
SW4	SW4 - Swearingen Merlin 4/4A Metro2	Departure	1	0.14	0.03	0.17
TBM8	TBM8 - Socata TBM-850	Departure	1	0.03	0.00	0.03
Z42	Z42 - Moravan Zlin Z-242	Departure	1	0.44	0.02	0.46
A10	A10 - Fairchild A10	Touch-and-Go	1	2.76	-	2.76

Table A.3
Fleet and Average Daily Operations - 2026

Aircraft		Operations				
ID	Description	Type	Stage Length	Day	Night	Total
A139	A139 - Agusta AB-139	Touch-and-Go	1	7.32	-	7.32
AA5	AA5 - American AA-5 Traveler	Touch-and-Go	1	0.61	-	0.61
AA5A	AA5A - Grumman AA-5A Cheetah; AA-5 Tiger	Touch-and-Go	1	0.61	-	0.61
AC11	AC11 - Rockwell Commander 114	Touch-and-Go	1	0.30	-	0.30
AC12	AC12 - Rockwell Commander 112A	Touch-and-Go	1	0.36	-	0.36
AS50	AS50 - Eurocopter AS350B	Touch-and-Go	1	7.98	-	7.98
B06	B06 - Bell 206B-3	Touch-and-Go	1	3.99	-	3.99
BE23	BE23 - Beechcraft Model 23 Musketeer	Touch-and-Go	1	1.52	-	1.52
BE24	BE24 - Beechcraft Model 24 Sierra/Musketeer	Touch-and-Go	1	0.61	-	0.61
BE33	BE33 - Beech Bonanza 33	Touch-and-Go	1	0.91	-	0.91
BE35	BE35 - Beech Bonanza 35	Touch-and-Go	1	2.24	-	2.24
BE36	BE36 - Beech Bonanza 36	Touch-and-Go	1	1.83	-	1.83
BE55	BE55 - Beech Baron 55	Touch-and-Go	1	0.92	-	0.92
BE58	BE58 - Beech 58	Touch-and-Go	1	1.02	-	1.02
BE76	BE76 - Beechcraft Model 76 Duchess	Touch-and-Go	1	0.61	-	0.61
BL17	BL17 - Bellanca Super Viking Model 17-30A	Touch-and-Go	1	0.91	-	0.91
C150	C150 - Cessna 150 Single Engine SEPF	Touch-and-Go	1	0.75	-	0.75
C152	C152 - Cessna 152 Single Engine SEPF	Touch-and-Go	1	0.61	-	0.61
C172	C172 - Cessna Skyhawk 172/Cutlass	Touch-and-Go	1	7.00	-	7.00
C177	C177 - Cessna 177 Cardinal	Touch-and-Go	1	2.13	-	2.13
C180	C180 - Cessna 180 Skywagon	Touch-and-Go	1	0.25	-	0.25
C182	C182 - Cessna Skylane 182	Touch-and-Go	1	4.30	-	4.30
C310	C310 - Cessna 310	Touch-and-Go	1	0.25	-	0.25
C335	C335 - Cessna 335 Twin Piston MEVP	Touch-and-Go	1	0.31	-	0.31
C340	C340 - Cessna 340	Touch-and-Go	1	0.31	-	0.31
C400	C400 - Cessna 400 Corvalis/Lancair LC41/Columbia 400	Touch-and-Go	1	0.36	-	0.36
C421	C421 - Cessna Golden Eagle 421	Touch-and-Go	1	0.31	-	0.31
CH75	CH75 - Zenith STOL CH-750	Touch-and-Go	1	0.36	-	0.36
CH7A	CH7A - Aeronca Model 7 Champion	Touch-and-Go	1	0.36	-	0.36
CLDS	CLDS - Rearwin Cloudster 8090/8125/8235	Touch-and-Go	1	0.36	-	0.36
COL3	COL3 - Lancair LC-40 Columbia 400	Touch-and-Go	1	0.62	-	0.62
COZY	COZY - AeroCad AeroCanard	Touch-and-Go	1	0.36	-	0.36
DA40	DA40 - Diamond Star DA40	Touch-and-Go	1	0.56	-	0.56
DFLY	DFLY - Viking Dragonfly	Touch-and-Go	1	0.36	-	0.36
EAGL	EAGL - Christen/Aviat Eagle	Touch-and-Go	1	0.36	-	0.36
EC20	EC120 - Eurocopter EC-120	Touch-and-Go	1	10.64	-	10.64
EC35	EC135 - Eurocopter EC-135	Touch-and-Go	1	2.66	-	2.66
ERCO	ERCO - ErCoupe	Touch-and-Go	1	0.36	-	0.36
G109	G109 - Burkhart Grob G109	Touch-and-Go	1	0.36	-	0.36

Table A.3
Fleet and Average Daily Operations - 2026

Aircraft		Operations				
ID	Description	Type	Stage Length	Day	Night	Total
G115	G115 - Burkhart Grob G115	Touch-and-Go	1	0.36	-	0.36
G202	G202 - Gearhardt J Giles G202	Touch-and-Go	1	0.36	-	0.36
G2T1	G2T1 - Great Lakes Sport Trainer	Touch-and-Go	1	0.36	-	0.36
GA7	GA7 - Grumman American Cougar	Touch-and-Go	1	0.74	-	0.74
LC42	LC42 - Cessna 350 Corvalis/Lancair LC42	Touch-and-Go	1	0.36	-	0.36
LGEZ	LGEZ - Rutan 61 Long-EZ	Touch-and-Go	1	0.36	-	0.36
M020	M020 - Mooney Mark 20 Series	Touch-and-Go	1	0.91	-	0.91
M20C	M20C - Mooney Mark 20 Series	Touch-and-Go	1	0.72	-	0.72
M20F	M20F - Mooney Mark 20 Series	Touch-and-Go	1	0.72	-	0.72
M20J	M20J - Mooney Mark 20 Series	Touch-and-Go	1	1.22	-	1.22
M20K	M20K - Mooney 252TSE (M20K)	Touch-and-Go	1	0.72	-	0.72
M20T	M20T - Turbo Mooney M20K	Touch-and-Go	1	0.36	-	0.36
MOR2	MOR2 - Varga 2150 Kachina	Touch-and-Go	1	0.36	-	0.36
NAVI	NAVI - Ryan L-17/U-18 Navion	Touch-and-Go	1	0.36	-	0.36
P28T	P28T - Piper PA-28R-180/200/201 Cherokee Arrow I/II/III	Touch-and-Go	1	2.41	-	2.41
P32R	P32R - Piper 32	Touch-and-Go	1	0.91	-	0.91
PA11	PA11 - Cub Crafters CC-11 Carbon Cub/ Sport Cub	Touch-and-Go	1	0.36	-	0.36
PA20	PA20 - Piper PA-20 Pacer	Touch-and-Go	1	0.72	-	0.72
PA24	PA24 - Piper PA-24 Comanche	Touch-and-Go	1	0.25	-	0.25
PA28	PA28 - Piper Cherokee	Touch-and-Go	1	4.00	-	4.00
PA30	PA30 - Piper PA-30	Touch-and-Go	1	0.25	-	0.25
PA31	PA31 - Piper Navajo PA-31	Touch-and-Go	1	0.61	-	0.61
PA32	PA32 - Piper Cherokee Six	Touch-and-Go	1	3.65	-	3.65
PA34	PA34 - Piper PA-34 Seneca	Touch-and-Go	1	1.02	-	1.02
PA38	PA38 - Piper PA-38 Tomahawk	Touch-and-Go	1	0.36	-	0.36
PA60	PA60 - Piper PA-60/PA-61 Aerostar (Aerostar 600/700)	Touch-and-Go	1	0.74	-	0.74
PARC	PARC - Piper PA-28-180/181 Cherokee Archer	Touch-and-Go	1	1.08	-	1.08
R22	R22 - Robinson R22B w/Lycoming 0320	Touch-and-Go	1	5.69	-	5.69
RV4	RV4 - Van's Aircraft RV-4	Touch-and-Go	1	0.36	-	0.36
RV6	RV6 - Vans RV-6	Touch-and-Go	1	0.71	-	0.71
RV7A	RV7A - Van's Aircraft RV-7/RV-7A	Touch-and-Go	1	0.36	-	0.36
RV8	RV8 - Vans RV-8	Touch-and-Go	1	0.36	-	0.36
SA30	SA30 - STOLP SA-30 Starduster Too	Touch-and-Go	1	0.36	-	0.36
SIRA	SIRA - Tecnam P2002 Sierra	Touch-and-Go	1	0.36	-	0.36
SR22	SR22 - Cirrus SR 22	Touch-and-Go	1	2.29	-	2.29
YK52	YK52 - Aerostar Yak-52/54	Touch-and-Go	1	0.36	-	0.36
Grand Total				212.11	# 6.34	# 218.45

Table A.3
Fleet and Average Daily Operations - 2026

Aircraft		Operations				
ID	Description	Type	Stage Length	Day	Night	Total

Sources: FAA TAF 2015, OPSNET, TFMS-C, Flight Explorer, and HNTB Analysis 2016.

Attachment B
FAA Fleet Mix Approval
12/22/2016



U. S. Department
Of Transportation

**Federal Aviation
Administration**

WASHINGTON AIRPORTS DISTRICT OFFICE
23723 Air Freight Lane, Suite 210
Dulles, Virginia 20166
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December 22, 2016

Ms. Robin Bowie
Acting Director, Office of Environmental Services
Maryland Aviation Administration
P.O. Box 8766
BWI Airport, Maryland 21240-0766

RECEIVED

JAN 04 2017

MD AVIATION ADMINISTRATION
PLANNING & ENVIRONMENTAL SERVICES

Reference: Martin State Airport
Proposed Forecast of Aviation Activity

Dear Ms. Bowie:

We have received the updated Forecast of Aviation Activity for Martin State Airport as transmitted with your December 21, 2016 email. The forecast is summarized in Tables 14, 16 and 17. Based on our review the forecast is approved. This forecast shall be used to develop facility requirements and alternatives analyzed in the ongoing Environmental Assessment. If you have any questions please do not hesitate to contact our office.

Sincerely,

Thomas A. Priscilla, Jr.
Washington Airports District Office