



AIRPORT MASTER PLAN





----- AGENDA -----

PIW Meeting #2 – September 13, 2023

- 1. Welcome & Housekeeping
- 2. Master Plan Process Review
- 3. Discussion of Draft Working Papers
 - Inventory
 - Aviation Demand Forecasts
- 4. Next Steps
- 5. Open Discussion/Questions

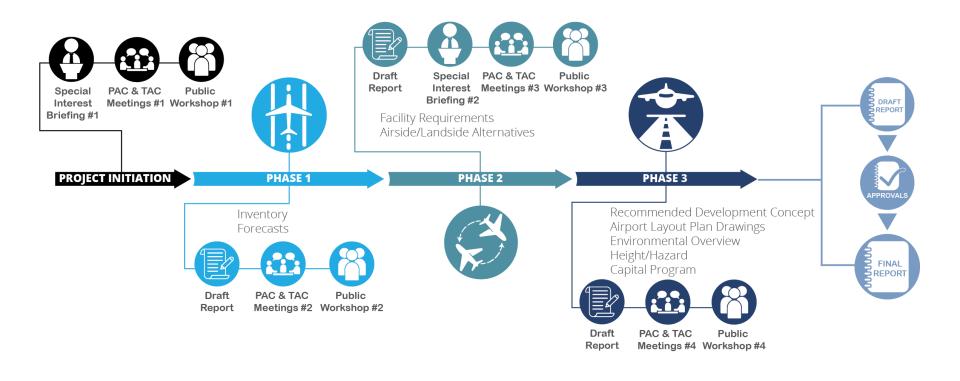


——— HOUSEKEEPING ————

- Ask a **Question:** The Q&A function will be opened at the end of the presentation. This will allow attendees to type in a question, the facilitator will read the question, and one of the panelists will answer the question.
- The **Chat** Feature: Chat will be disabled during the presentation to ensure the team is focused on the information being shared.
- Those that are only able to call in can also ask a question by pressing *9. We will call on you and then you'll need to unmute your line by pressing *6, so that you may verbally ask your question.
- **Reminder:** The presentation will be recorded. The recording will be posted to the project webpage at: **vgt.airportstudy.net** within 72 hours of the workshop.



Master Plan Process and Elements -





CHAPTER ONE

INVENTORY



Figure 1.21: Location Map

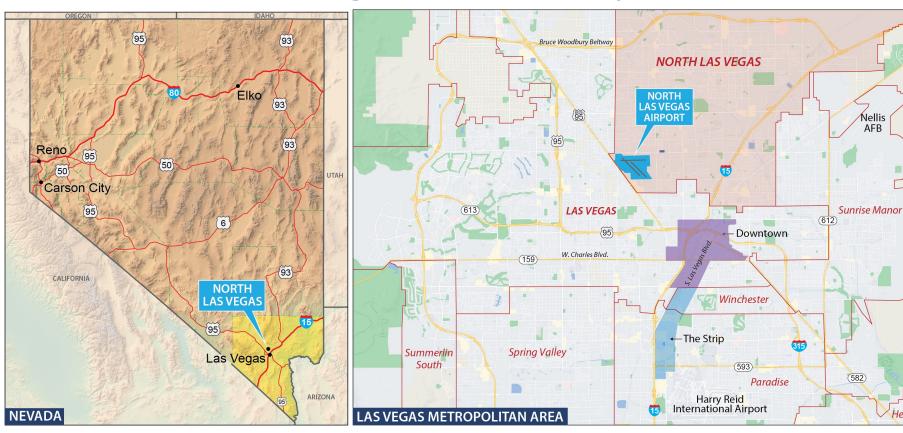




Figure 1.7: Existing Airside Facilities

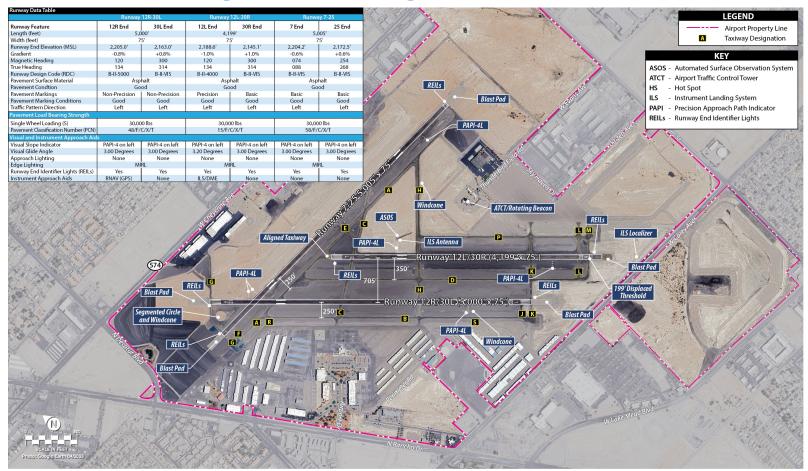




Figure 1.13: Existing Landside Facilities

Building #	Tenant Name	Services	Facility Type			
A-01	VGT	Airport Administration, Fuel	Terminal Building			
A-01	Sunshine and Tailwinds Café	Dining	Terminal Building			
A-01	Enterprise	Rental Car	Terminal Building			
A-01	Hertz	Rental Car	Terminal Building			
A-02	FAA ATCT	Government	Control Tower			
A-03	Horton Avionics Services	Aircraft Maintenance/ Aircraft Rental	Conventional Hangar			
A-04	Vacant	N/A	Conventional Hangar			
A-05	VGT	Fuel Storage	Fuel Farm			
A-06	Metro/Homeland Security	Government	Offices			
A-07 & A-14	Airport Mainentance Building	Maintenance	Storage Building			
A-08	Desert Aviation Center Hangars	Aircraft Storage	Conventional Hangar			
A-09 (OB1-OB12, OB21-OB44 OB50-OB63)	Outback Hangars	Aircraft Storage	Executive Hangars			
A-09 (OB70-OB84)	Private Portable T-Hangars	Aircraft Storage	T-Hangars			
A-10	Civil Air Patrol (Ranch House)	Government	Offices			
A-11 (A1-A12, B1-B12, C1-C12, D1-D12, E1-E12, F1-F11, G1-G10, H1-H10, 1-J5, K1-K5, L1-L6, M1-M5, N1-N9, P1-P10, Q1-Q12, R1-R11)	Private Portable T-Hangars	Aircraft Storage	T-Hangars			
A-11 (SP1-SP6)	Private Portable T-Hangars	Aircraft Storage	T-Hangars			
A-12 (SH28-43, SH 44-59, SH60-75, SH76-88)	Private Shaded Tie-down (North Shade Hangar)	Aircraft Storage	Shaded Tie-down			
A-12 (SHA1-7, SHB1-14, SHC 1-19, SHD1-13, SHE1-15, SHF1-15, SHG1-13, SHH1-15, SHJ1-15)	Private Shaded Tie-down (South Shade Hangar)	Aircraft Storage	Shaded Tie-down			

Building #	Tenant Name	Services	Facility Type
A-15	VGT	Self Service Fuel	Fuel Island
A-17	Sin City Flying Club	Flight Training	Offices
A-18	Vegas Aviation	Flight Training	Conventional Hangar
A-18	Skyline Helicopters	Flight Training	Conventional Hangar
A-18	702 Helicopters	Air Tour/Aircraft Maintenance/ Flight Training	Conventional Hangar
A-18	Wild West Helicopters	AirTour	Conventional Hangar
A-18	Flyright Aviation	Flight Training	Conventional Hangar
A-19	BLM Helitak Building	Government	Offices
A-20	LVMPD Armor	Government	Conventional Hangar
A-21	Agency Hangars	Government	Box Hangars
A-22	West Air Flight Training	Air Tour/Flight Training	Conventional Hangar
A-23 (SR01-SR31)	Skid Row Hangars	Aircraft Storage	Executive Hangars
A-24	Cheyenne Air Center	Commercial Leasing	Conventional Hangar
A-24	5 Star Helicopter Tours	AirTour	Conventional Hangar
A-25	Steelman Aviation	Air Charter	Conventional Hangar
A-25	AirSmart	Air Charter	Conventional Hangar
A-26	Desert Aviation Center	Commercial Leasing	Conventional Hangar
A-26	Airwork Las Vegas	Air Tour/Aircraft Rental/Flight Training	Conventional Hangar
A-26	Desert Dogs Aviation	Flight Training	Conventional Hangar
A-26	Sheble Flight School	Flight Training	Conventional Hangar
A-26	Chennault Flying Services	Flight Training	Conventional Hangar
A-26	Light Sport Aviation	Flight Training	Conventional Hangar
A-27	Private Executive Hangars	Aircraft Storage	Conventional Hangar
A-27	All In Aviation	Flight Training	Conventional Hangar
A-27	Lone Mountain Aviation	Aircraft Maintenance	Conventional Hangar
A-28	EGA Aviation	Aircraft Maintenance	Conventional Hangar
A-29	Las Vegas Metropolitan Police	Government	Conventional Hangar
EH1-EH-4	Private Executive Hangars	Aircraft Storage	Executive Hangars



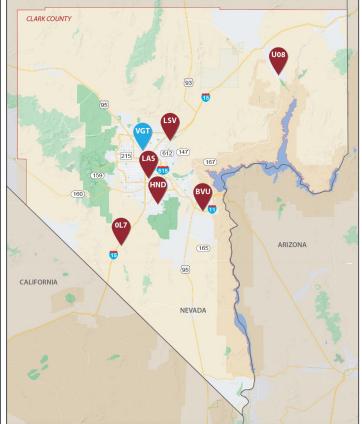






Figure 1.2: Vicinity Airports

Airport	Distance From VGT (mi)	Distance From the Las Vegas City Center (mi)	Runway Configuration & Length (ft)	FBO	ATCT	2023 NPIAS Role	Area (acres)	Elevation (ft)	Based Aircraft (Aug. 2023)
North Las Vegas Airport (VGT)	N/A	7	7/25: 5,005'x 75' 12L/30R: 4,199'x 75' 12R/30L: 5,000'x 75'	Yes	Yes	Reliever	920	2,205′	511
Harry Reid International Airport (LAS)	8	2.7	08L-26R: 14,515' x 150' 08R-26L: 10,526' x 150' 01R-19L: 9,771' x 150' 01L-19R: 8,988' x 150'	Yes	Yes	Primary Commercial Service	2,800	2,181′	176
Henderson Executive (HND)	14.5	9	17R-35L: 6,501' x 100' 17L-35R: 5,001' x 75'	Yes	Yes	Reliever	760	2,492′	254
Boulder City Municipal (BVU)	22.6	21	09-27: 5,103' x 75' 15-33: 3,852' x 75'	Yes	Yes	Non-hub Primary	530	2,203′	240
Jean Sport Aviation Center (0L7)	27.3	25	02R-20L: 3,700' x 60' 02L-20R: 4,600' x 75'	No	No	GA Basic	232	2,835′	37
Nellis Air Force Base (LSV)	7.9	12	02R-20L: 3,700' x 60' 02L-20R: 4,600' x 75'	Yes	Yes	N/A	14,000	1,869′	N/A
Perkins Field Airport (U08)	42.0	62.7	13-31: 4,811' x 75'	Yes	No	GA Basic	250	1,365′	19



N/A = not applicable ATCT = airport traffic control tower FBO = fixed base operator NPIAS = National Plan of Integrated Airport Systems MSL = mean sea level



Figure 1.16: City of North Las Vegas Zoning Map

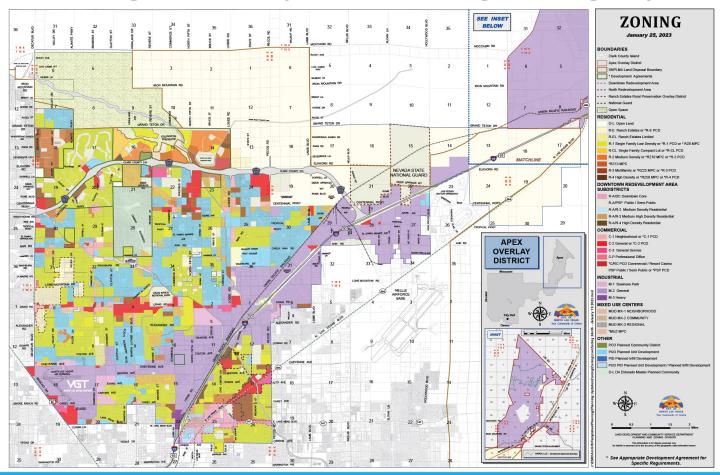


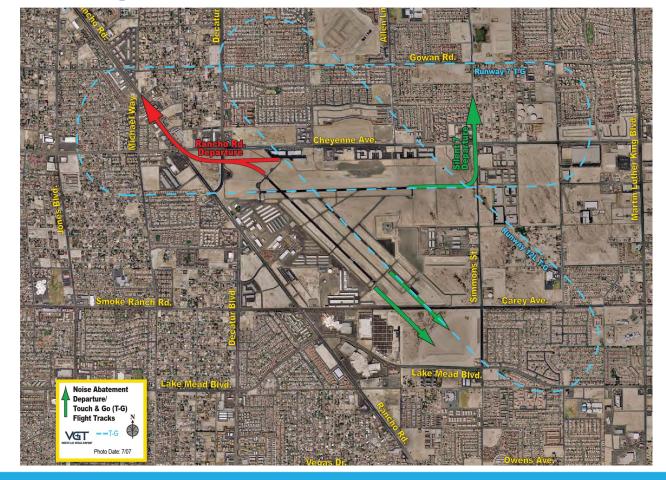


Figure 1.17: Air Terminal Environs Overlay





Figure 1.19: Noise Abatement Procedures





CHAPTER TWO

AVIATION DEMAND FORECASTS



Table 2.1: VGT Historical Operations Data

Year	FAA TAF	OPSNET	Motioninfo ADS-B
2013	124,362	131,426	131,386
2014	131,736	126,942	127,705
2015	133,359	135,687	*incomplete data
2016	150,293	159,430	159,425
2017	176,165	177,298	177,991
2018	173,731	168,748	168,726
2019	178,326	193,214	*incomplete data
2020	184,395	171,684	171,684
2021	159,889	162,624	164,688
2022	187,997	181,408	184,335
2023	202,434	164,781	167,483
CAGR 2013-2023	4.99%	2.29%	2.46%

Notes:

2022 and 2023 TAF data are reported as estimates. 2023 OPSNET data are represented by the last 12 months of data collected, ending July 2023. 2023 Motioninfo operations are represented by the last 12 months of data collected, ending April 2023. *In 2015 data was collected from January through March and in 2019 data was collected from January through April. Data for these partial years is noted as incomplete.



Table 2.2: VGT Historical Based Aircraft Data

Year	No. of Based Aircraft
2013	489
2014	536
2015	530
2016	582
2017	574
2018	586
2019	594
2020	538
2021	548
2022	557
2023	511
CAGR 2013-2023	0.44%

Notes:

The 2023 data set is the validated count from basedaircraft.com accessed August 2023; the *Henderson Executive Airport Master Plan* data were utilized for 2013-2019. The FAA TAF was utilized for 2020-2022.



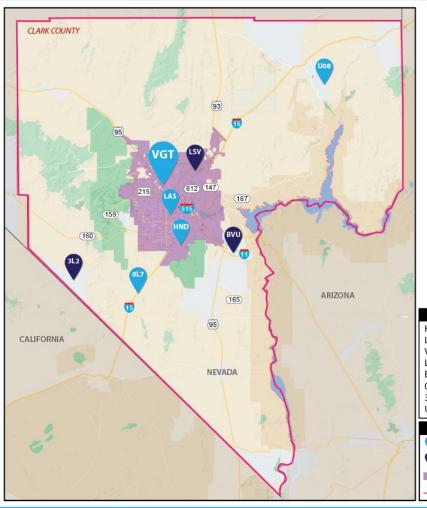


Figure 2.1: Las Vegas **Metropolitan Statistical Area Map**

KEY

HND - Henderson Executive Airport

LSV- Nellis Air Force Base

VGT - North Las Vegas Airport

LAS - Harry Reid International Airport

BVU - Boulder City Municipal Airport 0L7 - Jean Sport Aviation

3L2 - Sky Ranch Airport

U08 - Perkins Field Airport

LEGEND







Las Vegas Metropolitan Statistical Area



Figure 2.2: Regional Market Share – Historical Based Aircraft

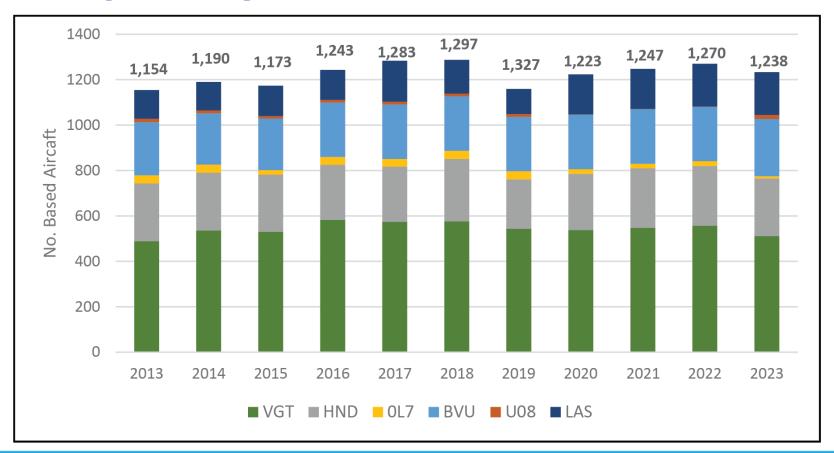




Figure 2.3: Based Aircraft Forecast Methodology Summary

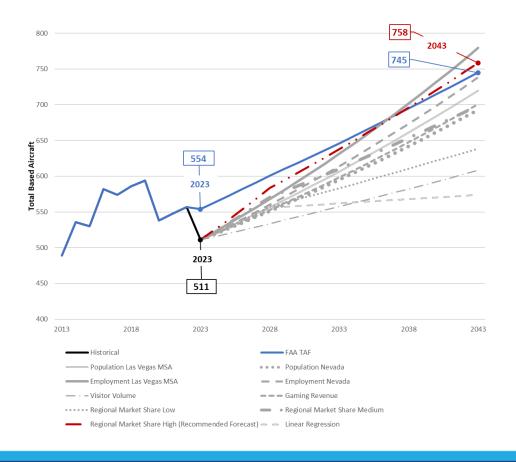




Figure 2.7: Historical and Forecast Based Aircraft

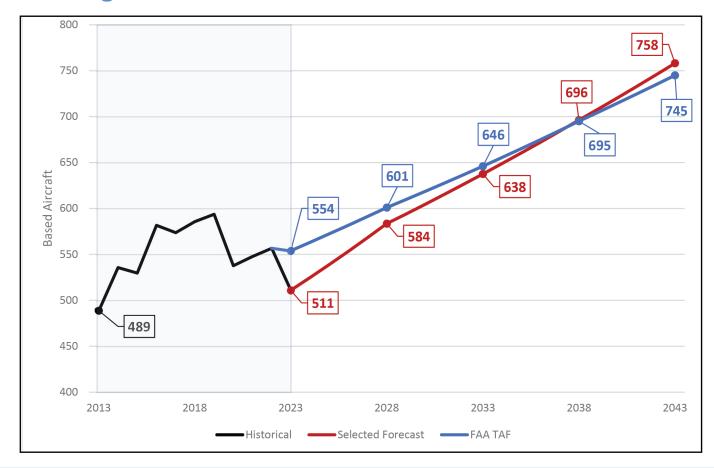




Figure 2.4: Based Aircraft Fleet Mix Forecast

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YEAR	Total	Single- Piston	%	Multi- Piston	%	Turbo- Prop	%	Jet	%	Rotorcraft	%
2023	511	406	79%	48	9%	18	4%	14	3%	25	5%
2028	584	467	80%	47	8%	23	4%	18	3%	29	5%
2033	638	506	79 %	47	7 %	28	4%	23	4%	34	5%
2038	696	546	78 %	46	7%	36	5%	30	4%	39	6%
2043	758	584	77%	46	6%	45	6%	38	5%	45	6%
CAGR (2023-2043)	1.99%	1.84%		-0.21%	-	4.69%	-	5.12%	-	2.98%	-



Figure 2.5: Historical General Aviation Operations

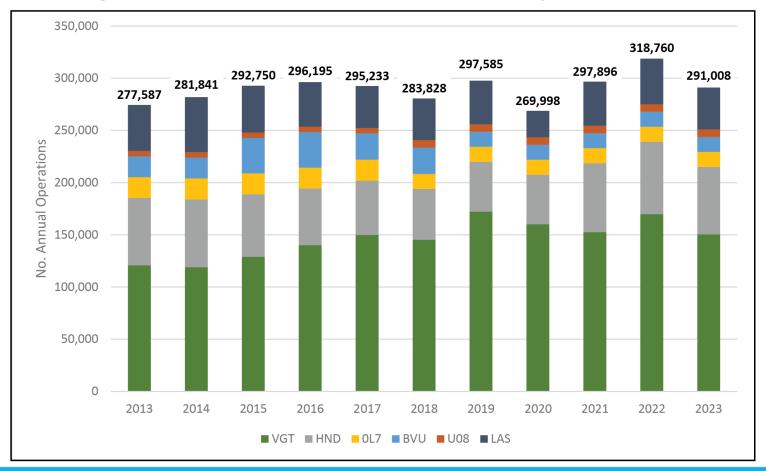




Figure 2.6: General Aviation Operation Forecast Methodology Summary

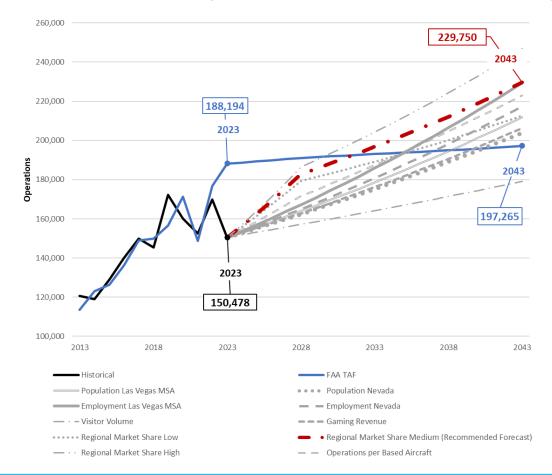




Table 2.14: Air Taxi Operations Forecast

Year	VGT AT Operations	Nevada AT Operations	VGT Market %
2013	9,506	266,266	3.6%
2014	6,791	266,958	2.5%
2015	5,499	260,656	2.1%
2016	17,297	272,333	6.4%
2017	24,125	295,294	8.2%
2018	20,640	283,245	7.3%
2019	19,214	318,118	6.0%
2020	10,130	240,677	4.2%
2021	8,741	280,985	3.1%
2022	9,607	320,226	3.0%
2023	12,489	317,933	3.9%
CAGR (2013-2023)	2.8%	1.8%	
2028	13,721	345,483	4.0%
2033	15,075	355,662	4.2%
2038	16,563	366,366	4.5%
2043	18,197	377,607	4.8%
CAGR (2023-2043)	1.9%	0.9%	

Notes:

AT = air taxi

CAGR = compound annual growth rate

2023 OPSNET data are the last 12 months of operations through July 2023. VGT data combine air taxi and air carrier operations from OPSNET.



Figure 2.8: Historical and Forecast Total Operations

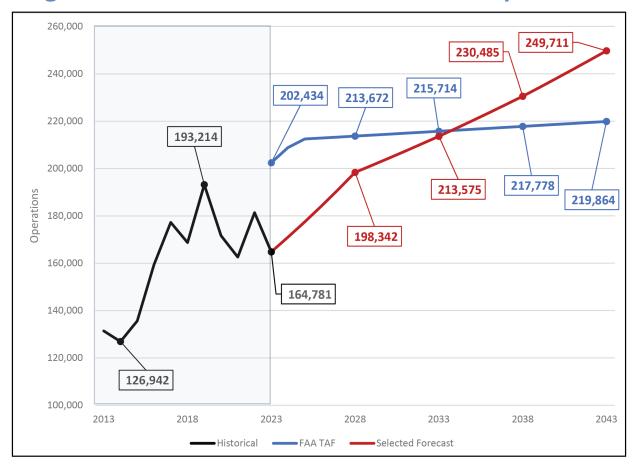




Table 2.20: Operational Fleet Mix Forecast

Year	Total Operations	SEP	MEP	TP	Small Jet	Medium Jet	Large Jet	HELO
2023	164,781	136,263	15,478	2,803	953	1,213	9	8,062
2028	198,342	164,627	16,114	4,018	1,505	2,037	198	9,843
2033	213,575	176,495	15,684	5,020	2,006	2,815	320	11,235
2038	230,485	189,283	15,309	6,166	2,580	3,709	576	12,862
2043	249,711	203,346	15,151	7,491	3,246	4,745	749	14,983
CAGR (2023-2043)	2.1%	2.0%	-0.1%	5.0%	6.3%	7.1%	24.7%	3.1%

Notes:

SEP = single-engine piston aircraft

MEP = multi-engine piston aircraft

TP = turbo-prop aircraft

HELO = rotorcraft

CAGR = compound annual growth rate

2023 total operations are represented by the last 12 months of data collected, ending July 2023.



Table 2.24: Historical and Forecast Operations by Airport Reference Code

B-I	B-II	B-III	C-I	C-II	C-III	D-I	D-II	D-III				
Historical												
1,008	1,950	16	104	126	0	12	28	18				
746	1,324	14	44	90	0	20	6	10				
958	2,172	14	78	172	0	10	20	20				
1,198	2,282	14	68	236	0	12	8	8				
1,512	2,230	2	102	245	0	22	10	2				
2,052	3,027	23	144	440	10	45	31	55				
2,785	4,108	75	203	790	28	127	84	126				
3,781	5,576	164	285	1,418	95	228	156	257				
5,131	7,568	297	402	2,546	207	355	341	468				
	1,008 746 958 1,198 1,512 2,052 2,785 3,781	1,008 1,950 746 1,324 958 2,172 1,198 2,282 1,512 2,230 2,052 3,027 2,785 4,108 3,781 5,576	1,008 1,950 16 746 1,324 14 958 2,172 14 1,198 2,282 14 1,512 2,230 2 2,052 3,027 23 2,785 4,108 75 3,781 5,576 164	1,008 1,950 16 104 746 1,324 14 44 958 2,172 14 78 1,198 2,282 14 68 1,512 2,230 2 102 2,052 3,027 23 144 2,785 4,108 75 203 3,781 5,576 164 285	1,008 1,950 16 104 126 746 1,324 14 44 90 958 2,172 14 78 172 1,198 2,282 14 68 236 1,512 2,230 2 102 245 2,052 3,027 23 144 440 2,785 4,108 75 203 790 3,781 5,576 164 285 1,418	1,008 1,950 16 104 126 0 746 1,324 14 44 90 0 958 2,172 14 78 172 0 1,198 2,282 14 68 236 0 1,512 2,230 2 102 245 0 2,052 3,027 23 144 440 10 2,785 4,108 75 203 790 28 3,781 5,576 164 285 1,418 95	1,008 1,950 16 104 126 0 12 746 1,324 14 44 90 0 20 958 2,172 14 78 172 0 10 1,198 2,282 14 68 236 0 12 1,512 2,230 2 102 245 0 22 2,052 3,027 23 144 440 10 45 2,785 4,108 75 203 790 28 127 3,781 5,576 164 285 1,418 95 228	1,008 1,950 16 104 126 0 12 28 746 1,324 14 44 90 0 20 6 958 2,172 14 78 172 0 10 20 1,198 2,282 14 68 236 0 12 8 1,512 2,230 2 102 245 0 22 10 2,052 3,027 23 144 440 10 45 31 2,785 4,108 75 203 790 28 127 84 3,781 5,576 164 285 1,418 95 228 156				

Notes:

2023 data are comprised of TFMSC data from the last 12 months, ending July 2023.

A-I and A-II are not shown as smaller/slower aircraft are unlikely to impact critical design aircraft.

C-IV through C-V and D-IV and above are not shown due to minimal activity at VGT.



Table 2.26: Existing and Future Design Aircraft Characteristics

Design Aircraft	2023 Operations	2043 Operations	ARC	Taxiway Design Group	Wingspan (feet)	Tail Height (feet)	Approach Speed (knots)	Typical Seats
Phenom 300 (Existing)	553	1,877	B-II	1A	52.2	16.8	116	6
Challenger 300/350 (Future)	173	1,792	C-II	1B	64	20	125	9
Gulfstream G650 (Ultimate)	2	468	D-III	2B	99.58	25.67	145	18

Notes:

ARC = airport reference code

2023 data are comprised of TFMSC data from the last 12 months, ending July 2023.

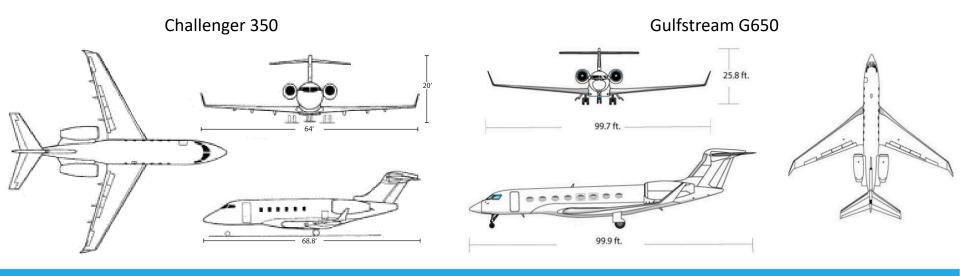




Figure 2.28: Forecast Summary

YEAR	General Aviation Operations	Air Taxi Operations	Military Operations	Total Operations	Based Aircraft
2023	150,478	12,489	1,814	164,781	511
2028	182,856	13,721	1,764	198,342	584
2033	196,735	15,075	1,764	213,575	638
2038	212,158	16,563	1,764	230,485	696
2043	229,750	18,197	1,764	249,711	758
CAGR (2023-2043)	2.1%	1.9%	-0.1%	2.1%	2.0%



——— NEXT STEPS

- ▶ Phase 2 Elements Facility Requirements and Airside & Landside Alternatives
- ▶ PAC Meeting #3 March 2024 timeframe; draft documents available for review approx. one week prior to meeting
- ▶ **Public Information Workshop #3** Held same day as PAC meeting #3; we encourage you to invite your associates and members of the public
- Phase 3 Elements Begin work on next elements following PAC meeting #3 and discussion with group



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- Ask a **Question:** The Q&A function will be opened momentarily. This will allow attendees to type in a question, the facilitator will read the question, and one of the panelists will answer the question.
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QUESTIONS?

We want to hear from you!

Direct any questions or comments after this meeting to Eric Pfeifer with Coffman Associates at 816-525-3500 or epfeifer@coffmanassociates.com or visit the project website to submit comments online.

vgt.airportstudy.net