

JACKSON HOLE



AIRPORT





# EMPLOYEE OF THE MONTH

• May –

DRAFT



# EMPLOYEE OF THE MONTH

- Clair Holden-

DRAFT



# COMMUNITY OUTREACH

- Eco Fair







# COMMUNITY OUTREACH

- Best of the West Parade – First Place







# COMMUNITY OUTREACH

- Congratulations on your retirement Martha Preston!

- Thank you Contractors!





# COMMUNITY OUTREACH

- Touch-a-Truck







# COMMUNITY OUTREACH

- Memorial Day







# COMMENTS FROM TOWN OF JACKSON, TETON COUNTY, NATIONAL PARK SERVICE, AND PUBLIC





# PRESENTATION



# ACA Emissions Analysis, Net Zero Roadmap, and DarkSky Certification Updates

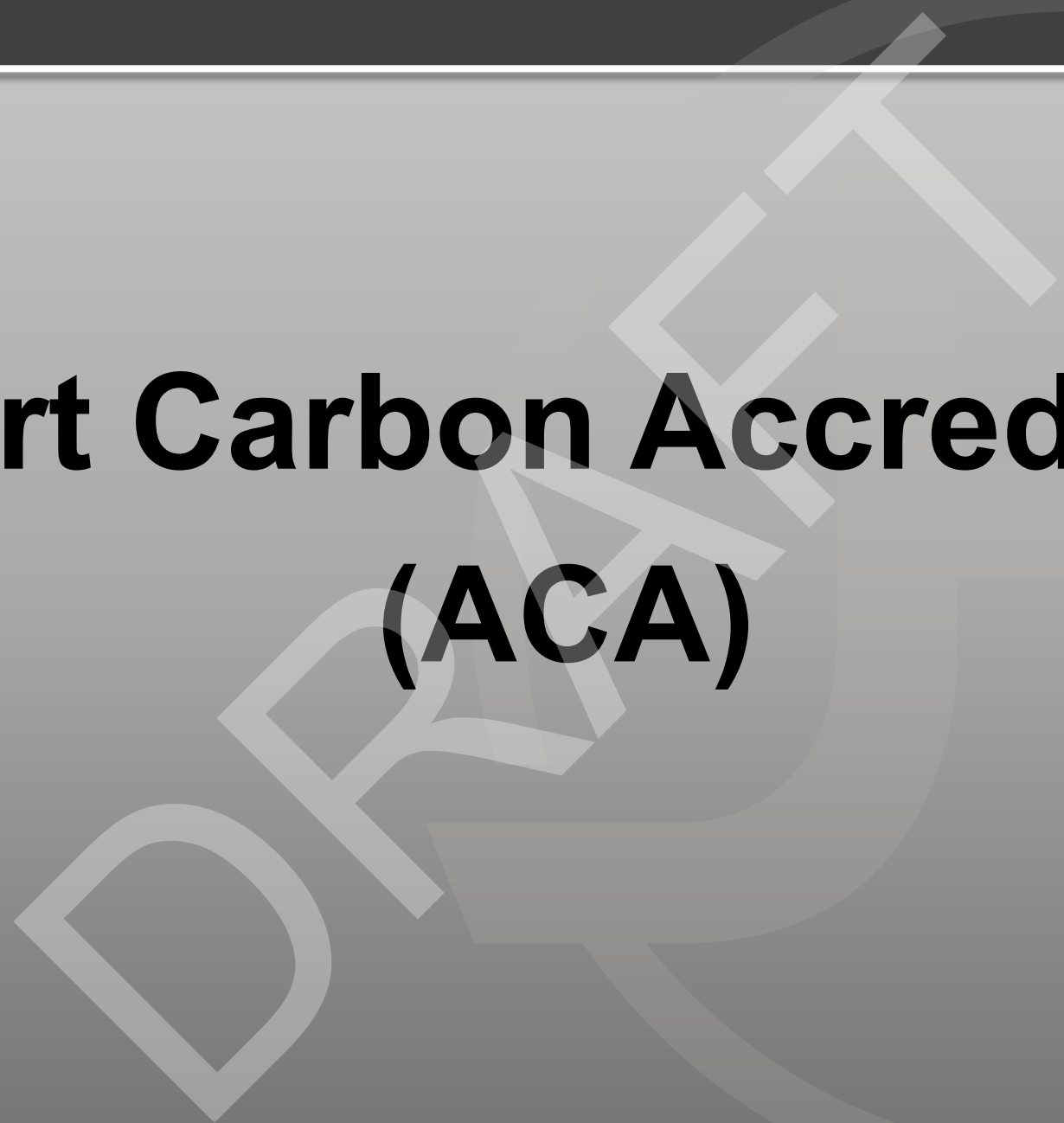
Jackson Hole Airport  
June 19, 2024







# **Airport Carbon Accreditation (ACA)**





# Scopes of Emissions



**Scope 1 Emissions**  
*Airport-owned facility emissions*  
*Airport-owned vehicles*

**Scope 2 Emissions**  
*Purchased energy*  
*Purchased heating/cooling*

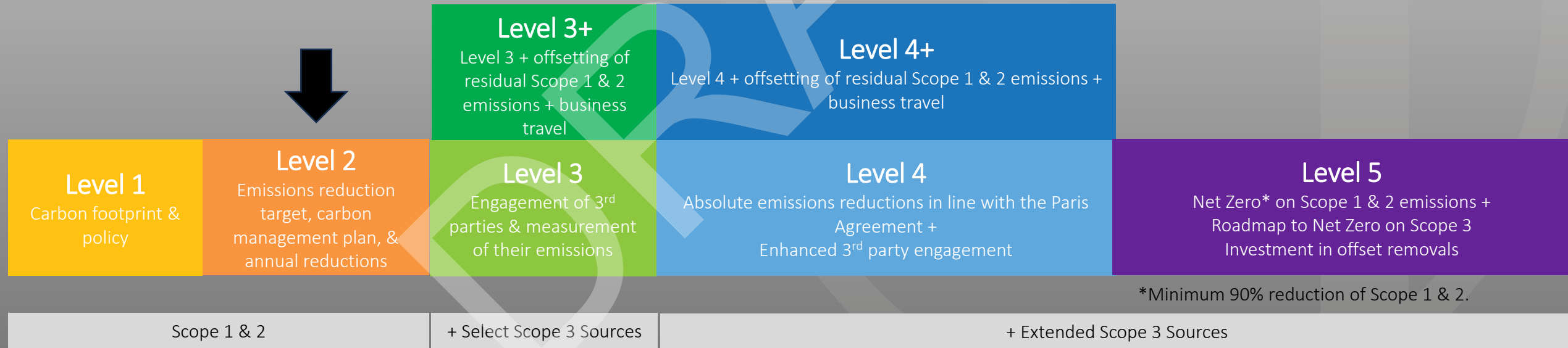
**Scope 3 Emissions**  
*Tenant emissions, passenger*  
*vehicles, aircraft emissions, waste*  
*disposal and processing*



# Airport Carbon Accreditation Program

## Levels of ACA & Emissions Scopes Considered

Graphic credit: Airport Carbon Accreditation Guidance Manual with modifications by Mead & Hunt



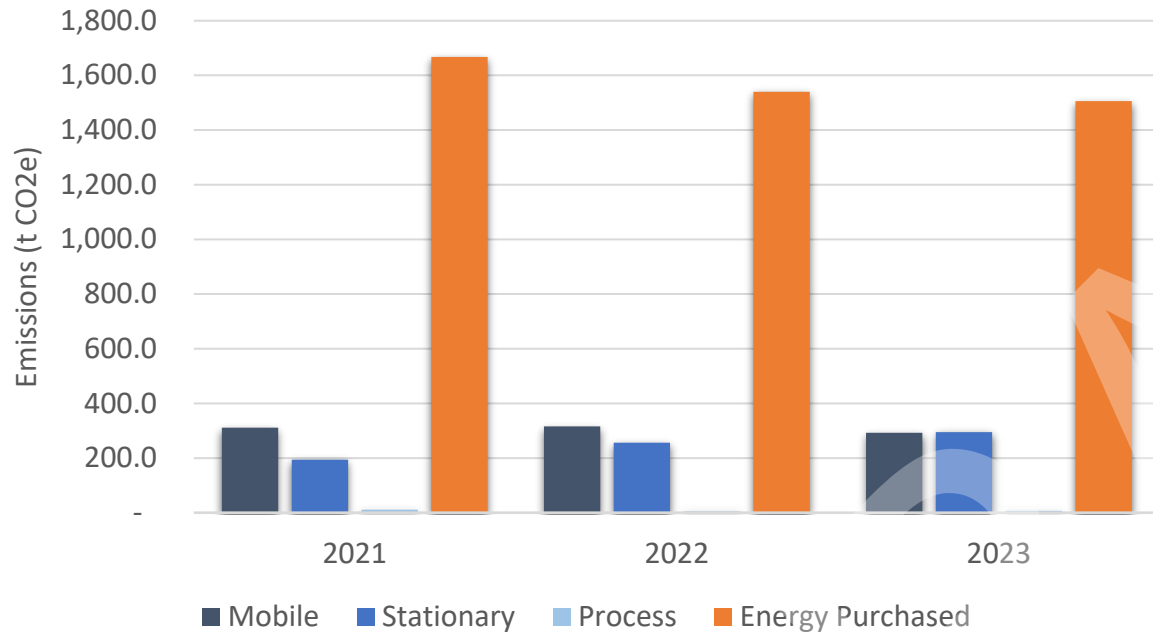
\*Minimum 90% reduction of Scope 1 & 2.





# Emissions Breakdowns

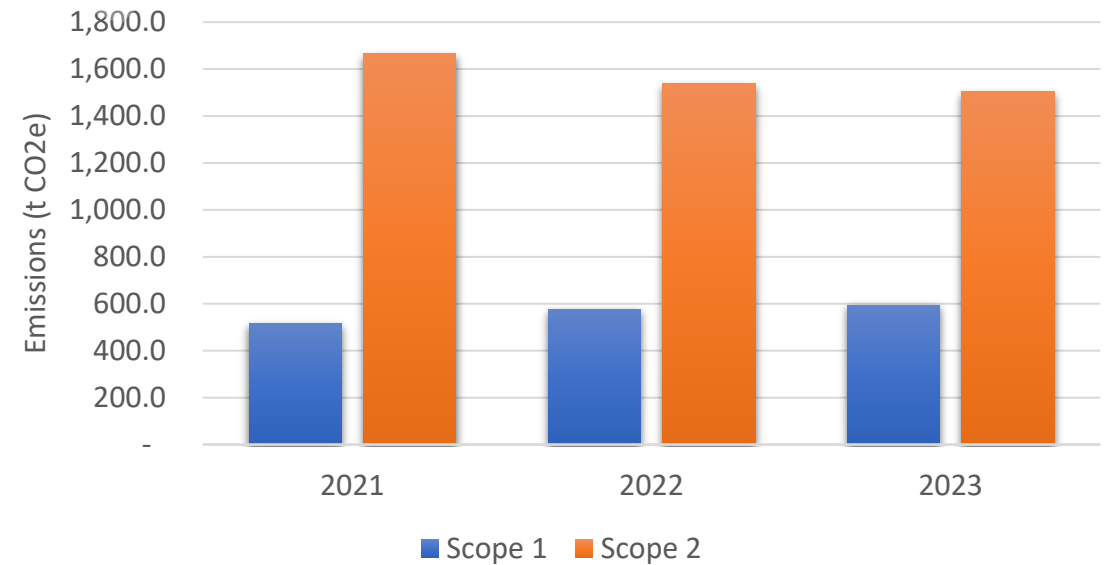
### Emission Source Breakdown



### Scope Breakdown

	Scope 1	Scope 2
2021	516.5	1,667.1
2022	577.1	1,539.8
2023	594.2	1,505.7

### Emissions: Scopes 1 & 2



# ACA Results and Next Steps

- ❖ Calculations show reduction in emissions per passenger
- ❖ Verification
- ❖ Updates to application
- ❖ Final Submittal

DRAFT



# Net Zero Carbon Roadmap

DRAFT





# Why Net Zero?

- ❖ Climate Mitigation and Environmental Stewardship
- ❖ Industry and Community Goals
  - FAA Climate Action Plan (2050)
  - Town of Jackson (2030)
  - Teton Climate Action Partnership (TCAP) (2030)



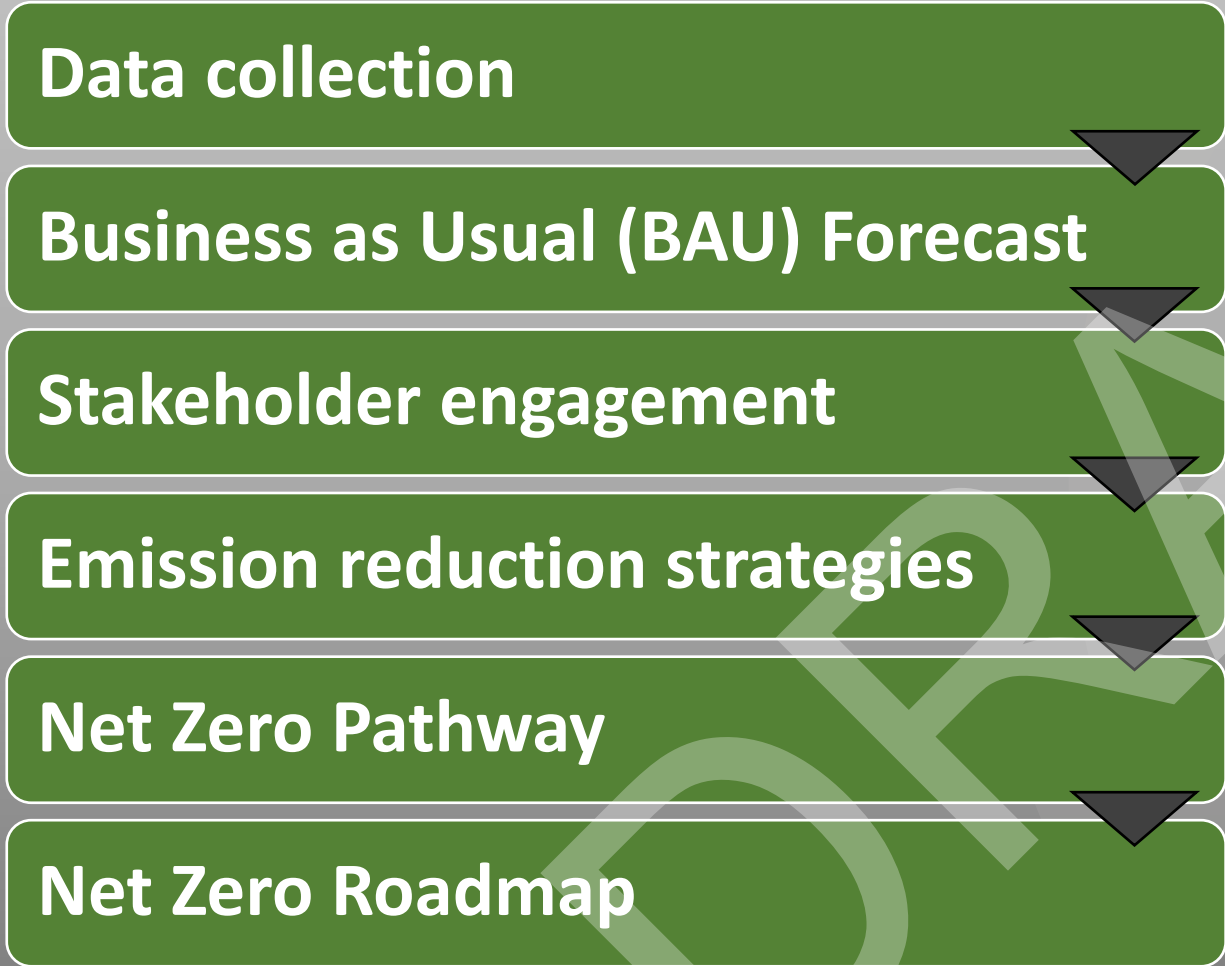


## **What is the Jackson Hole Airport *Net Zero Carbon Roadmap?***

An actionable strategy that will lead directly to implementing measures to reduce carbon emissions associated with the Jackson Hole Airport.



# Net Zero Roadmap – Next Steps

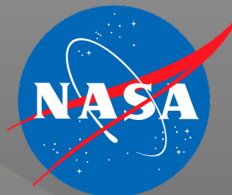




# DarkSky



Audubon



Smithsonian







***Thank you***

DRYFET

# **Fly Quiet Program Update & Annual Noise Report Summary**

**January 1, 2024 – March 31, 2024**

**2024 1<sup>st</sup> Quarter Update**

**Jackson Hole Airport  
June 2024**



# Fly Quiet 2024 Q1 Program Update

## Fly Quiet Goal

Encourage pilots to fly quieter aircraft and to utilize procedures that minimize noise over Grand Teton National Park as well as noise sensitive areas of our community.





# Fly Quiet Overview

Measures noise abatement goals/metrics and awards users that best achieve those goals\*

Continually redefines and expands noise reduction goals using multiple metrics and measures

Local voluntary initiative; operator involvement is critical

Provides information to users on how to improve their operations

*\*The Fly Quiet Program applies to Commercial and General Aviation jet aircraft. Non-jet aircraft and helicopter operations are not part of the FQP but are addressed in other noise abatement programs such as the Voluntary Curfew.*



# Fly Quiet Program Elements and Bonuses

ELEMENTS	Goal	Measure
<b>Fleet Quality</b>	Acknowledge/encourage operators to fly the quietest aircraft	<ul style="list-style-type: none"> <li>• FAA Aircraft Certificated Stage Noise Level</li> <li>• Stage 5 is highest</li> </ul>
<b>Minimize Higher Noise Events</b>	Minimize the highest aircraft noise events from individual overflights	<ul style="list-style-type: none"> <li>• Track high noise events per total operations</li> <li>• Zero high events is the highest score (100%)</li> </ul>
<b>Minimize Non-Compliance of Voluntary Curfew</b>	Rated upon number of times an operation occurred during the voluntary curfew hours (9:30pm to 7:00am)	<ul style="list-style-type: none"> <li>• Number of flights in curfew hours</li> <li>• <u>Low score</u> is based upon <u>greater number</u> of curfew non-compliance</li> <li>• Zero non-compliance operations is the highest score (100%)</li> </ul>
<b>Flight Procedure Compliance</b>	Acknowledge/encourage operators to fly the three noise abatement procedures	<ul style="list-style-type: none"> <li>• Three procedures evaluated with results combined into one score</li> <li>• Rated on % of flights following procedure goal</li> <li>• Full compliance is the highest score (100%)</li> </ul>

BONUSES	Goal	Measure
<b>Quiet Fleet Bonus</b>	Acknowledge/encourage operators that operate the very quietest aircraft	<ul style="list-style-type: none"> <li>• Aircraft that are at least 10 dB quieter than the Stage 5 standard. Up to 5 points for percent of fleet that is Stage 5+</li> </ul>
<b>Fly New Procedure Bonus</b>	Flying the new arrival procedure	<ul style="list-style-type: none"> <li>• Rated on the number of operations using the new procedure</li> <li>• 1-4 operations are awarded one point. 5 or more operations are awarded two points and so on (up to 5 bonus points)</li> </ul>



# Fly Quiet Scoring

## ❖ Scoring System

- Results based on a 0-100 scoring system
- **100** is considered the best possible score with the potential for additional bonus points
- Overall best score is sum of the points for all four categories plus bonus points
- The highest scoring operations are rated as Top Tier and the lowest are rated as Low Tier

## ❖ Notifications and Acknowledgements

- Both Top Tier and Low Tier operators in each category below

## ❖ Operations are categorized by type of operator and number of operations

CATEGORY OF OPERATOR	CLASSIFICATION BY NUMBER OF ANNUAL OPERATIONS
Commercial and Regional Airlines	Minimum of 12 operations
GA Fleets (i.e. fractional owners/fleets also referred to as Part 135)	-Operators with between 8 and 29 operations  -Operators with 30 or more operations
Single Owner/ Operator (i.e., N1234)	-Operators with between 8 and 29 operations  -Operators with 30 or more operations

FLY QUIET RATING	FLY QUIET SCORE
FQ Top Tier	<b>90-100+</b>
FQ Compliant	<b>70-89.9</b>
FQ Low Tier	<b>0-69.9</b>

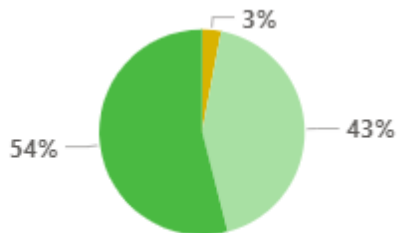
# 2024 Q1 Fly Quiet Operations Summary

## Airport Fly Quiet Operations Summary for Selected Period

2024-Q1

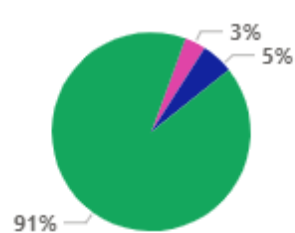
### % Corporate GA Operations by FQ Tier

● FQ Low Tier ● FQ Compliant ● FQ Top Tier



### % Corporate GA Stage

● S3 ● S4 ● S5



### % Corporate GA Stage 5 Plus

● Other ● Stage 5+



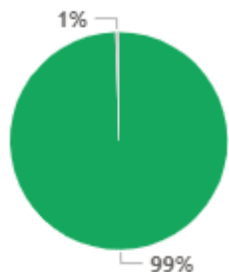
### % Curfew Operations

● Regular Hours ● Curfew Hours



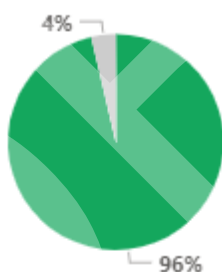
### % FQ Aircraft Flying GPS vs CONV

● Complies ● Not Complies



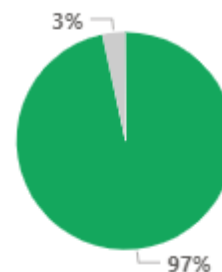
### % FQ Aircraft on or East of GPS Procedure

● Complies ● Not Complies



### % FQ Aircraft Departing So. Without Drift

● Complies ● Not Complies



## Observations:

- 2024Q1 shows reduction in number of Voluntary Curfew Hour Operations.
- Continued improvement in flying flight procedure goals.
- Note interim quarterly results show trends that may be influenced by seasonal conditions or short periods of irregular operations.

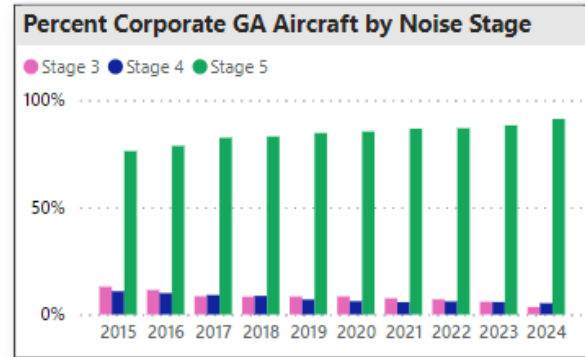
Data is from the Airport's Noise Monitoring System and may not exactly match official FAA counts.



# 2024 Q1 Fly Quiet Program Trends – Individual Elements

## Fleet Quality

Corporate GA Percent Stage Certification



Percent that are 10 dB better than Stage 5



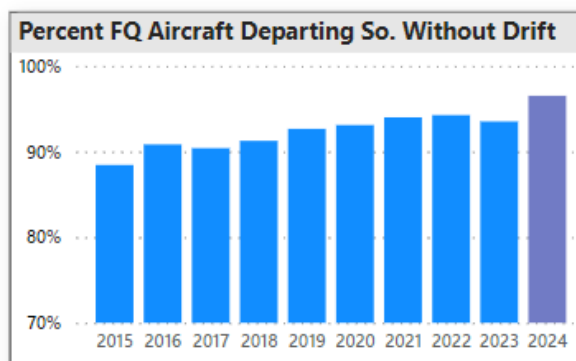
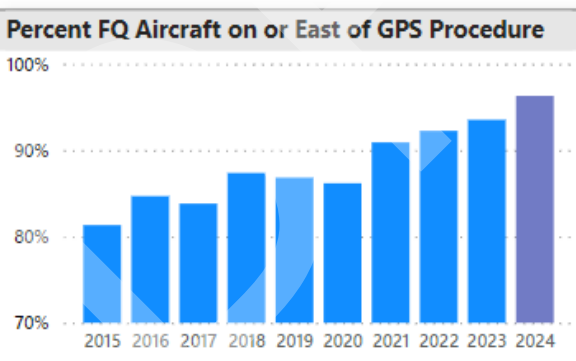
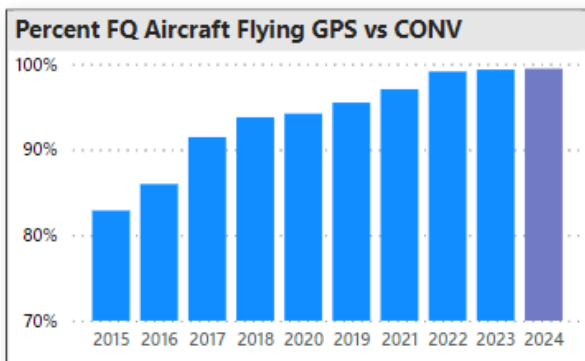
2024 is Q1 Only

### Notes:

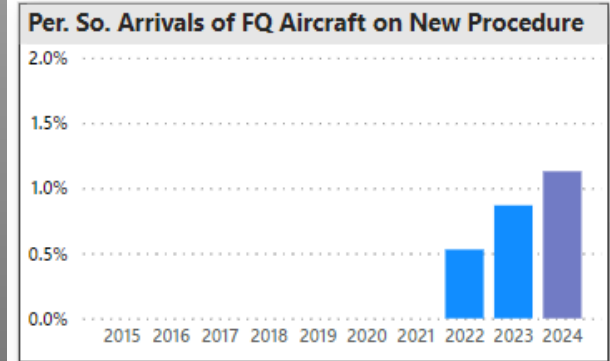
- Aircraft fleet quality has improved due to older, louder GA aircraft replaced with newer, quieter aircraft
  - In 2015, 80% of GA were Stage 5
  - In 2024, 94% of GA were Stage 5
- All flight procedure measures showed improvement over the past years.
- The use of the new arrival procedure is low, but continues to increase year over year

## Flight Procedure Compliance

Flight Procedures Compliance (2015-2024 Q1)

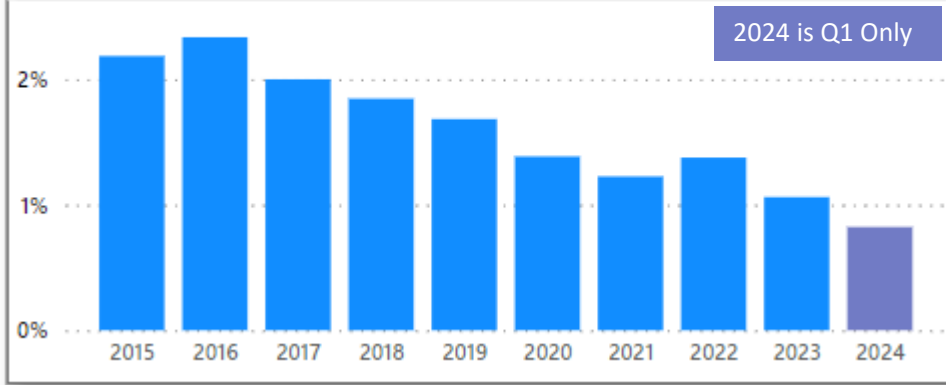


Percent New Arrival Procedure Use



# 2024 Q1 Fly Quiet Program Trends – Curfew Hours Operations

**Percent FQ Aircraft Operating in Expanded Curfew Hours**



2024 is Q1 Only

FLY QUIET RATING	FLY QUIET
FQ Top Tier	90-100+
FQ Compliant	70-89.9
FQ Low Tier	0-69.9

Note: Past year FQ scores have been updated to reflect the more stringent current scoring criteria.

## Observations

- During the first quarter, the number of Fly Quiet aircraft operations during the expanded voluntary curfew hours have decreased 48% over operations in the same hours for the 1<sup>st</sup> Quarter in 2023.
- While the Airport and the Fixed Based Operator have made considerable outreach efforts to minimize the Curfew hour operations many factors can contribute to this reduction.
- Seasonal trends including weather, operational events, and market demand can affect the results.
- Curfew hours operations account for 0.8 percent of operations for Corporate GA and 0.1 percent of the commercial operations.
- Multiple operators had reductions in Voluntary Curfew Hour Operations during 2024 Q1.

Note: Counts for Curfew operations for 2024 is Q1 only. All other years reflect the whole year of operations

**FLY QUIET SCORE FOR OPERATORS WITH HIGHEST NUMBER OF OPERATIONS**

Operator	Operator Name	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
EDG	Jet Edge	35.9	67.1	85.7	95.6	69.0	81.1	73.6	78.5	80.9	87.9
EJA	NetJets Aviation	69.0	71.3	82.6	83.7	83.2	83.2	84.1	86.8	89.1	94.7
EJM	Executive Jet Management	71.7	69.5	77.5	80.2	88.4	83.9	77.8	75.8	77.8	89.6
LXJ	Bombardier FlexJet	68.7	73.3	80.0	83.5	80.9	82.8	83.5	83.8	85.3	85.1
OPT	Flight Options	72.0	70.5	87.0	86.3	86.6		77.9		90.4	87.1
TTE	Avcenter	54.1	46.4	68.0	64.5	59.1	48.1	67.8	58.4	80.7	81.9
XOJ	XOJet	84.4	86.7	92.6	93.1	80.7	94.6	87.9	99.3	103.3	105.0

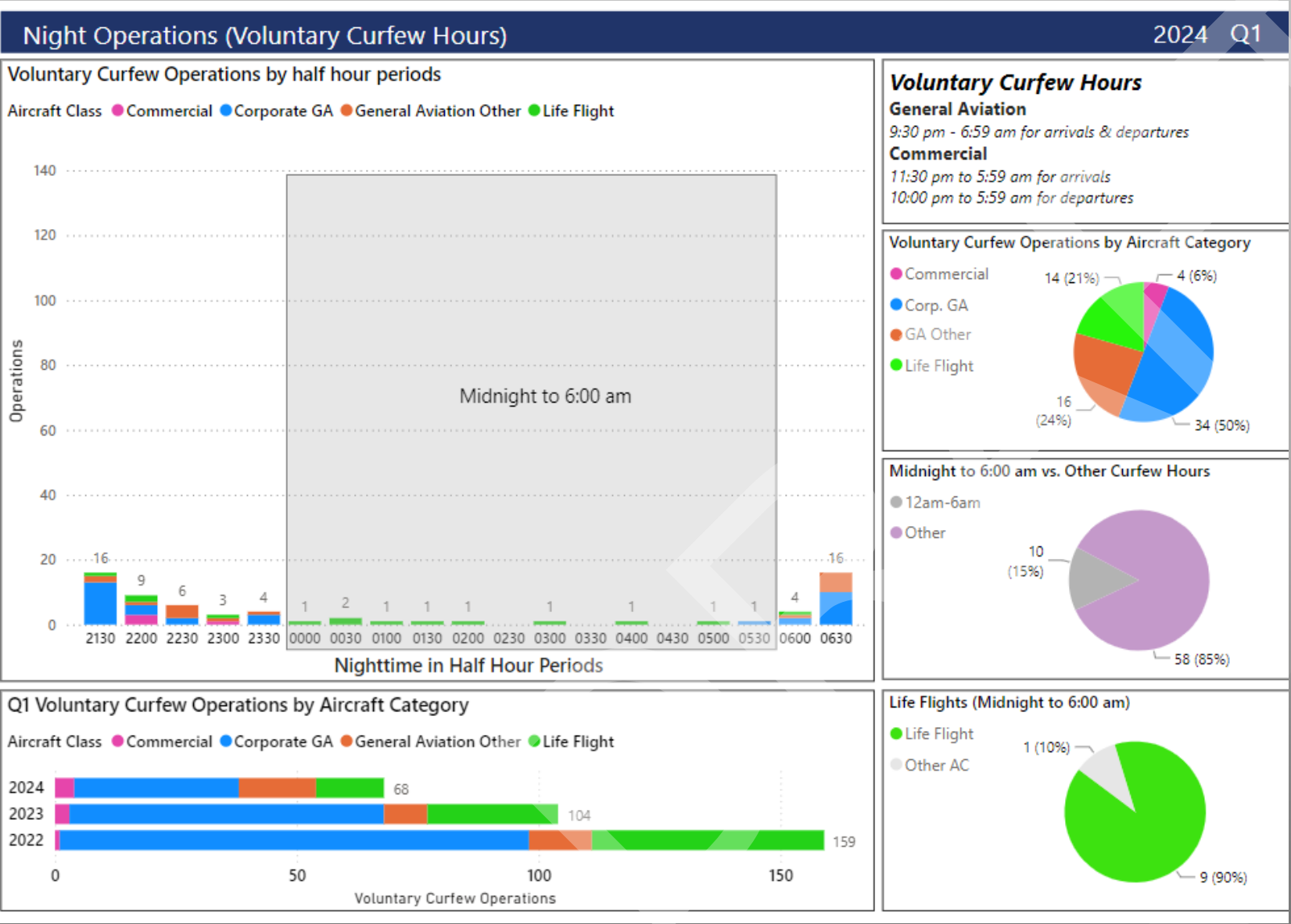
**CURFEW OPERATIONS DURING NEW EXPANDED HOURS (9:30PM TO 7:00 AM)**

Operator	Operator Name	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
EDG	Jet Edge	4	0	2	0	2	0	2	1	3	0
EJA	NetJets Aviation	51	57	50	55	39	28	55	51	28	2
EJM	Executive Jet Management	2	3	6	6	0	1	3	5	4	1
LXJ	Bombardier FlexJet	7	11	18	14	22	16	28	31	28	12
OPT	Flight Options	13	10	5	7	6		0		0	0
TTE	Avcenter	4	5	7	13	19	9	2	4	0	0
XOJ	XOJet	2	2	2	2	4	0	3	0	0	0

**PERCENT OF TOTAL OPERATIONS IN THE VOLUNTARY CURFEW PERIOD**

Operator	Operator Name	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
EDG	Jet Edge	11.4%	0.0%	5.0%	0.0%	2.9%	0.0%	1.6%	0.6%	0.7%	0.0%
EJA	NetJets Aviation	2.8%	2.6%	2.5%	2.6%	1.7%	1.0%	1.5%	1.7%	0.8%	0.2%
EJM	Executive Jet Management	1.3%	1.3%	3.0%	2.6%	0.0%	0.4%	0.9%	1.4%	1.0%	1.2%
LXJ	Bombardier FlexJet	2.0%	1.5%	3.1%	2.1%	2.3%	1.1%	1.7%	2.3%	1.4%	2.2%
OPT	Flight Options	3.1%	2.8%	1.7%	2.7%	3.1%		0.0%		0.0%	0.0%
TTE	Avcenter	7.4%	5.1%	5.6%	8.7%	7.8%	7.8%	2.6%	2.5%	0.0%	0.0%
XOJ	XOJet	0.8%	0.7%	0.7%	0.9%	1.4%	0.0%	1.0%	0.0%	0.0%	0.0%

# 2024 Q1– Curfew Hours Operations – Including FQ and other Operations

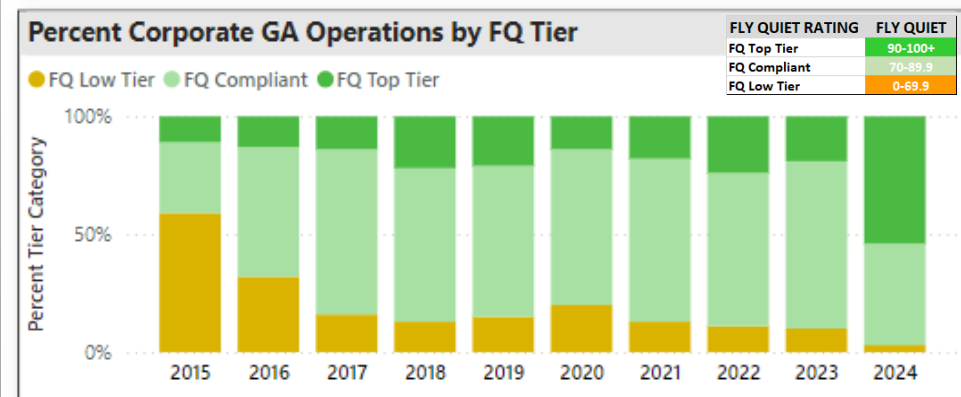


- ### Observations
- Life Flights Operations:** Life Flights (all but one were propeller aircraft) account for 21% of Curfew Hours Operations.
  - FQ Aircraft Voluntary Curfew Operations:** In 2024, there were 4 Commercial and 35 Corporate GA operations in the expanded curfew hours – this is 0.5% of the total Commercial and Corporate GA operations.
  - Other General Aviation Operations:** Other General Aviation except the life flights (propeller piston, propeller turbo prop, helicopter, and VFR operations) accounts for 35 of the Voluntary Curfew hour operations, which is 47% of the nighttime operations; 4 of these operations occurred between midnight and 6am.
  - Midnight to 6am:** During the period from midnight to 6am there were no Commercial and 1 Corporate GA operations; The majority of the curfew hour operations are during the shoulder hours.

# 2024 Q1 Fly Quiet Program Trends - Overall

## Overall Airport Fly Quiet Trends

Percent Total Operations by FQ TIER (2015 to 2024 Q1)



Noted Individual Improvements in 2024 Q1 over past year

Category	Code	Operator	Improvement
Air Carrier	UAL	United Airlines	Reduced Curfew Hour Operations
	ASA	Alaska Airlines	
GA Fleet	EJA	NetJets	Reduced Curfew Hour Operations
	FTH	Mountain Aviation	
Single Operator	N307GP	Air Cashmere	Reduced Curfew Hour Operations and High Noise Events

### Observations:

- 2024 Q1 showed a trend of improvement in individual and overall airport scores over past years.
- In 2024 Q1, 60% of Corporate GA Operations are in the Top Tier. In 2023 there were 54% while in 2015, there were 11%.

Note: Past year FQ scores have been updated to reflect current more restrictive scoring criteria.

## Top Scoring Operators 2024 Q1

### Air Carrier

OPERATOR			OVERALL
Call Sign / N-Number	Owner / Operator	Total Ops	Total Fly Quiet Score
ASA	Alaska Airlines	134	90.9
DAL	Delta Air Lines	725	88.3
AAL	American Airlines	520	85.5
SKW	Skywest Airlines	539	84.1
UAL	United Airlines	1,250	83.9

### Large GA Fleet

OPERATOR			OVERALL
Call Sign / N-Number	Owner / Operator	Total Ops	Total Fly Quiet Score
UJC	Ultimate Air Shuttle	19	104.1
ASP	AirSprint	20	102.3
JTZ	Nicholas Air	18	101.9
FTH	Mountain Aviation	157	101.2
PXT	Pacific Coast Jet	18	100.6

### Large Single Operator

OPERATOR			OVERALL
Call Sign / N-Number	Owner / Operator	Total Ops	Total Fly Quiet Score
N54PV	Moss Lane Ventures, LLC	12	105.0
N124MV	RC Aviation, LLC	23	102.0
N482PG	ROGER ROGER LLC	19	101.2
N405PC	TIME 2 FLY LLC	18	98.0
N306MF	TAMKO Building Products, ...	16	95.3





# Next Steps

## ❖ Planned 2024 Activities

- Promote Top Tier operators
- Continue to work with Low Tier operators to improve score
- Contact operators that continue to have curfew operations
- Outreach to operators each quarter with performance metrics
- Advertise and promote Fly Quiet Top Tier operators with national industry publications

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# 2023 Annual Noise Report

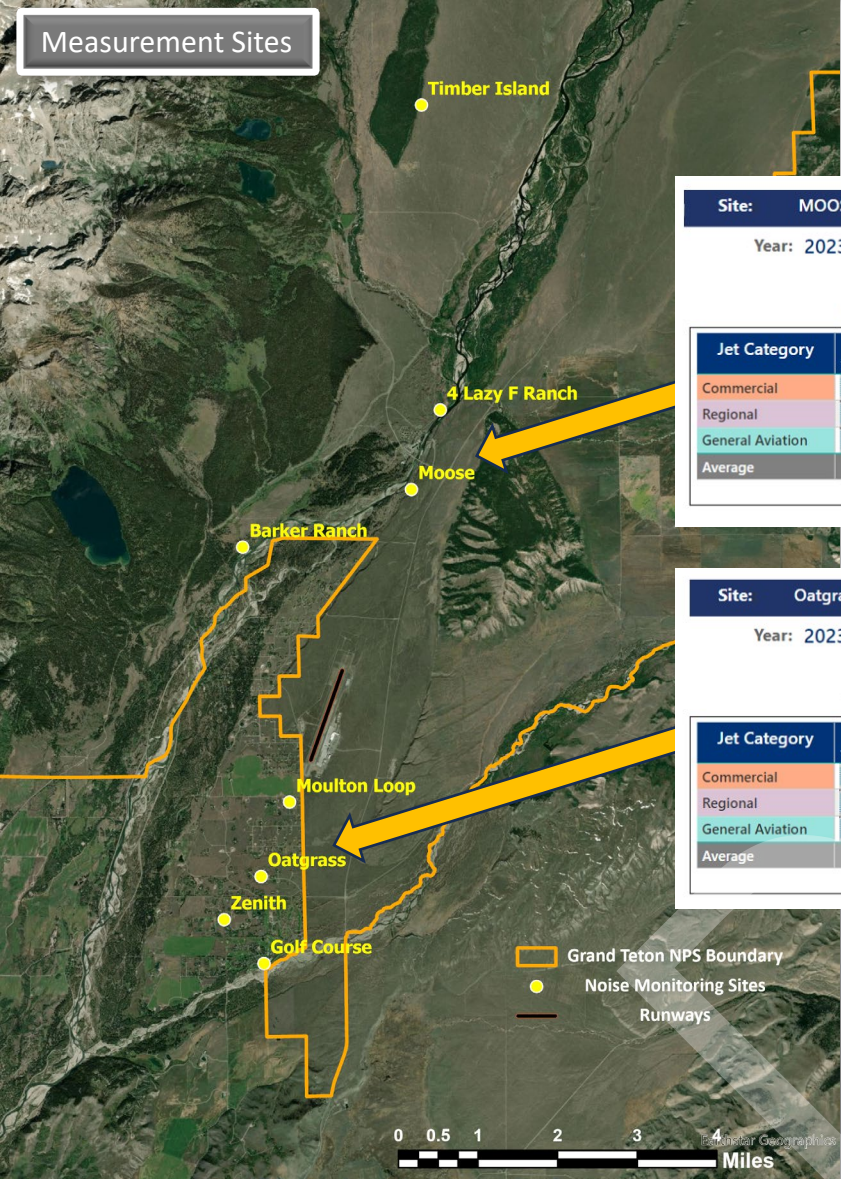
- ❖ Presents information on annual operational activity levels
- ❖ Presents noise measurement data results
  - Single Event
  - Long-term DNL
- ❖ Presents modeled contour results
- ❖ Identifies changes and trends
- ❖ Determines compliance with Use Agreement requirements
- ❖ Results show:
  - Airport is **in compliance** with Use Agreement noise limits in Grand Teton National Park (45 and 55 DNL limits)
  - Noise levels **do not** exceed FAA guidelines for residential land uses (65 DNL guideline)
- ❖ Report is on the Airport website





# 2023 Annual Noise Report Results

## Measurement Sites



## Single Event Measurements

Site: MOOSE AVERAGE MAXIMUM LEVEL BY TYPE OF AIRCRAFT

Year: 2023 Operation: Arrival Runway: 19

Average Maximum Noise Level by Jet Category

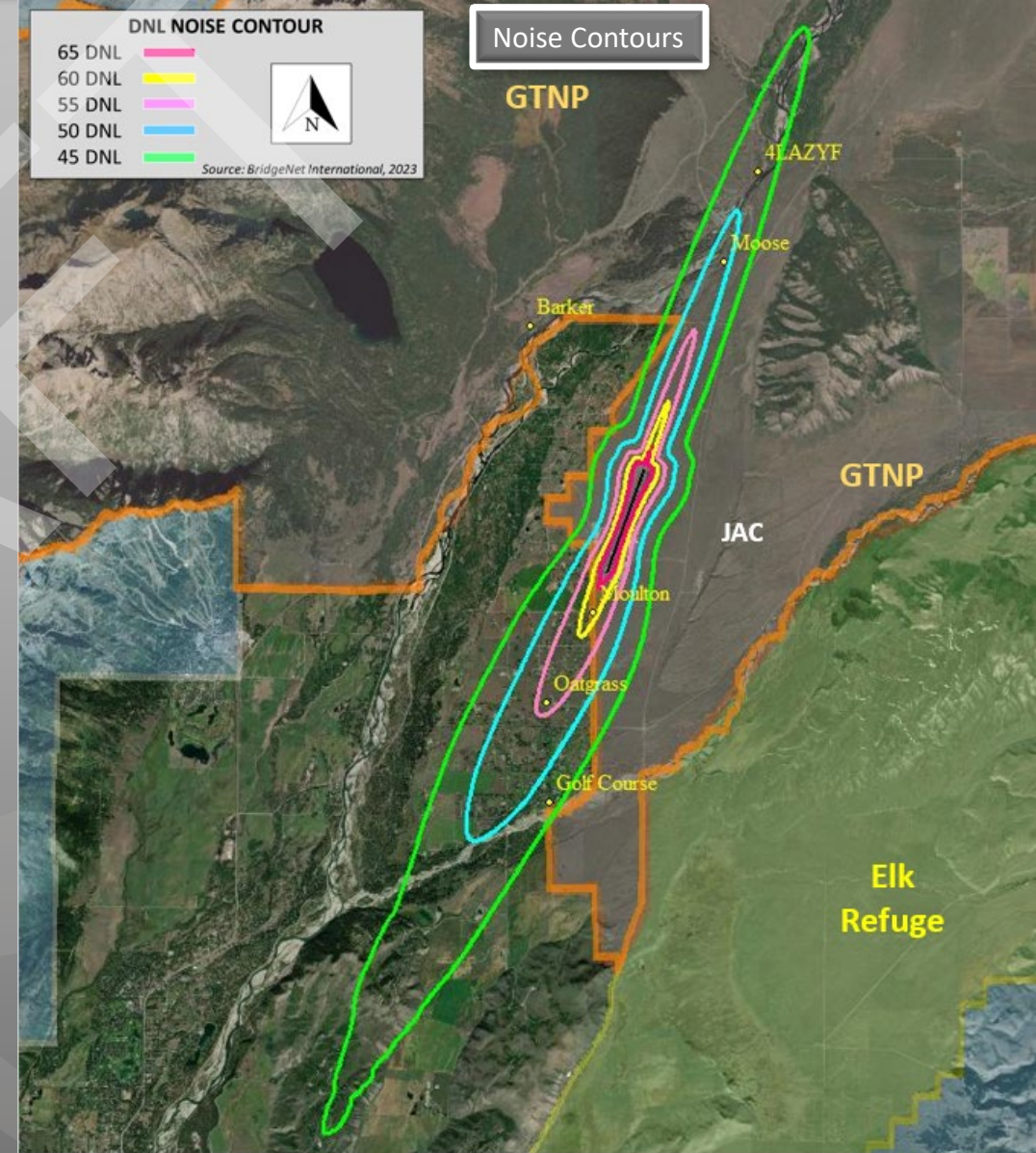
Jet Category	Lmax (Avg)
Commercial	78
Regional	76
General Aviation	72
Average	74

Site: Oatgrass AVERAGE MAXIMUM LEVEL BY TYPE OF AIRCRAFT

Year: 2023 Operation: Departure Runway: 19

Average Maximum Noise Level by Jet Category

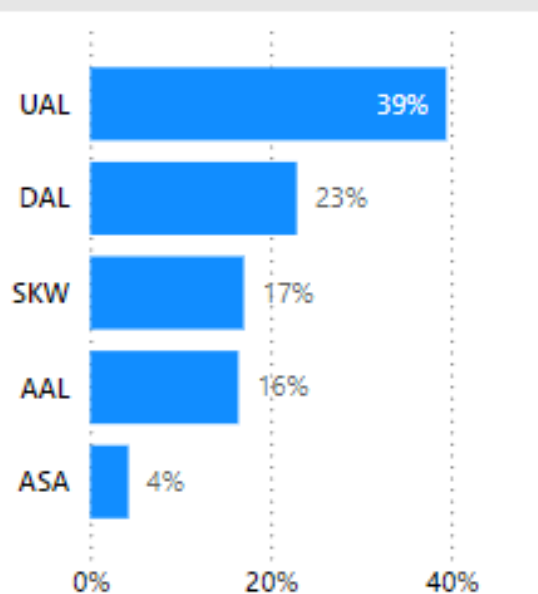
Jet Category	Lmax (Avg)
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General Aviation	74
Average	76



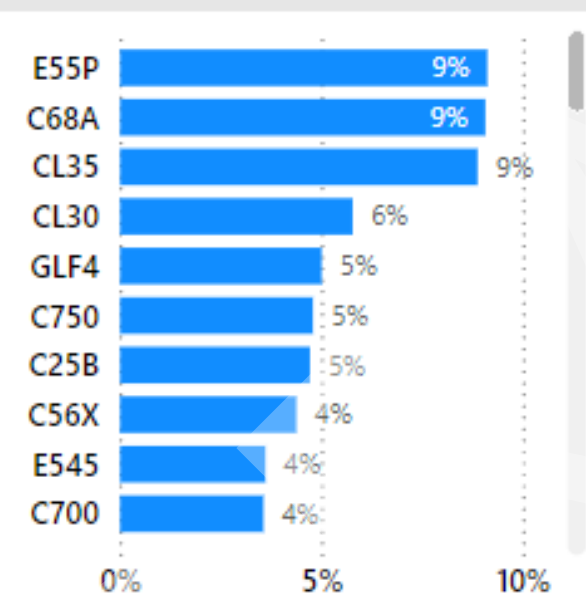


# 2024 Q1 Fly Quiet Operations Summary

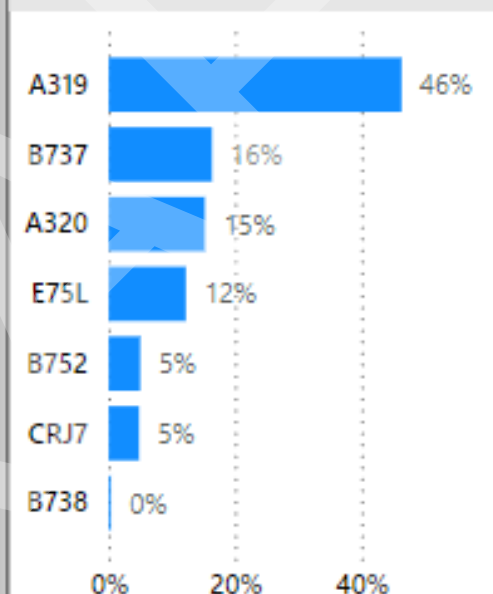
### Commercial Operators (%)



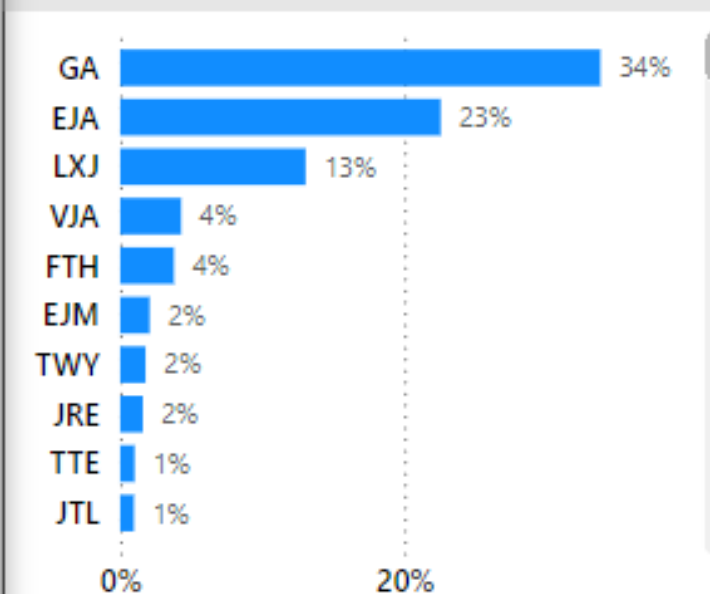
### Top 10 Corporate GA Aircraft (%)



### Commercial Aircraft (%)



### Top 10 Corporate GA Operators (%)







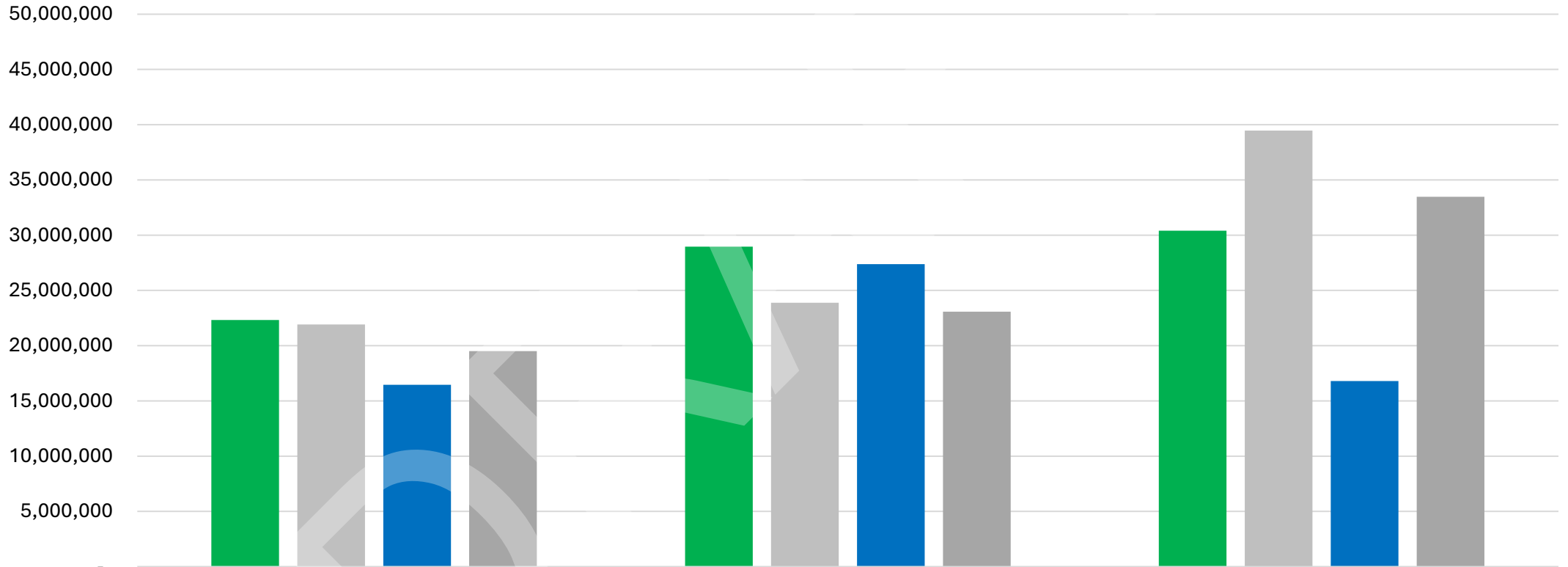
# CONSENT AGENDA

1. Approval of the Minutes – April 17, 2024 Regular Meeting
2. Equipment Purchase – Network Tapping Equipment
3. Equipment Purchase – MB2 Plow Truck
4. Equipment Purchase – Overaasen RS 400 Broom
5. Resolution 2024-04 – AIP 81 (Net Zero Carbon Roadmap Grant)



# INCOME/EXPENSE

## FY2023/2024 JULY 1, 2023 – MAY 31, 2024



- Income Actual
- Income Budget
- Expenses Actual
- Expenses Budget

Airport Operations  
 22,322,691  
 21,920,565  
 16,462,649  
 19,505,130

Fuel Farm Operations  
 28,963,364  
 23,881,502  
 27,383,240  
 23,077,466

FBO Operations  
 30,405,297  
 39,463,580  
 16,796,703  
 33,475,322





## RESOLUTION 2024-03 ESTABLISHMENT OF FEES AND CHARGES

- Board established Fees and Charges annually following the adoption of the budget
- Changes for FY23-24 include:
  - Increased general aviation and airline landing fees
  - Increased airline space lease rates
  - Reduced number of peak dates for the public parking lot
  - Adjustment to security badge rates



# WOOLPERT 13<sup>TH</sup> AMENDMENT

## DEICE PAD AND COLLECTION SYSTEM IMPROVEMENTS DESIGN AND CONSTRUCTION ADMINISTRATION AND MANAGEMENT

- Amendment to the Woolpert On-Call Engineering Services Agreement
- Design Services and Construction Administration and Management for the deice pad and collection system improvements
- Total cost of \$3,186,109

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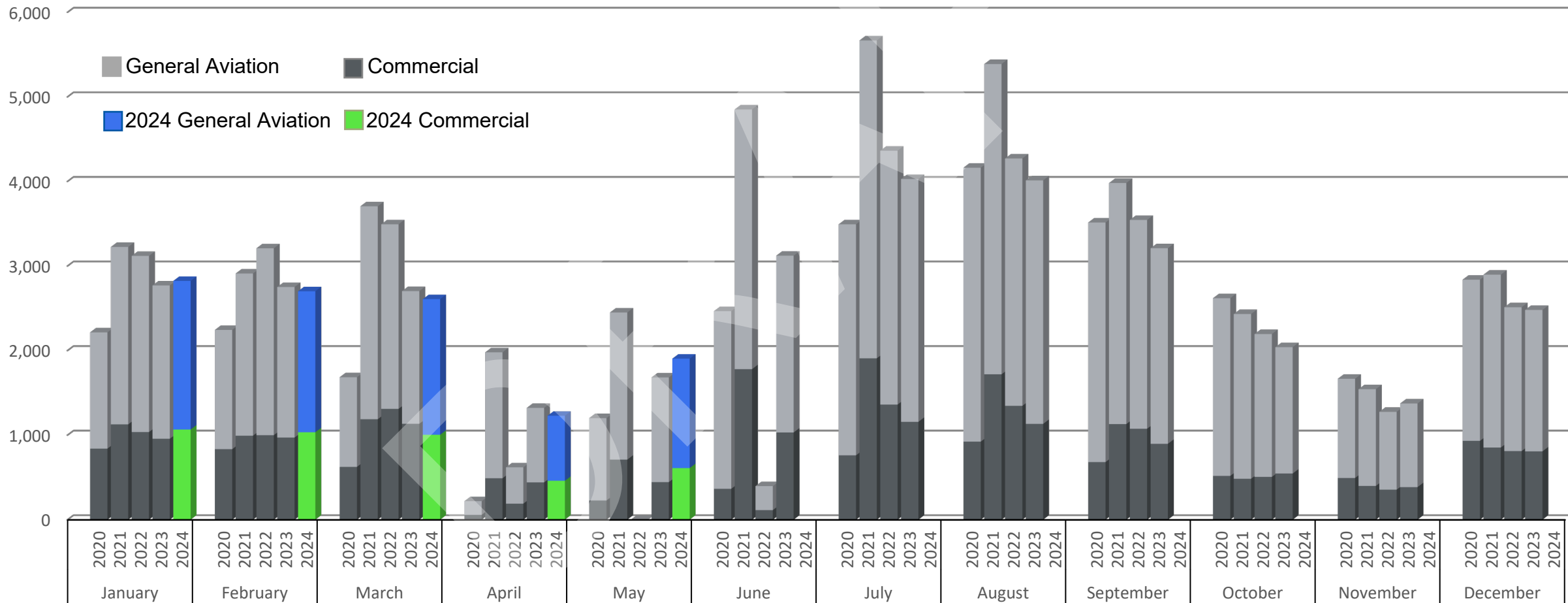


# DIRECTOR'S COMMENTS



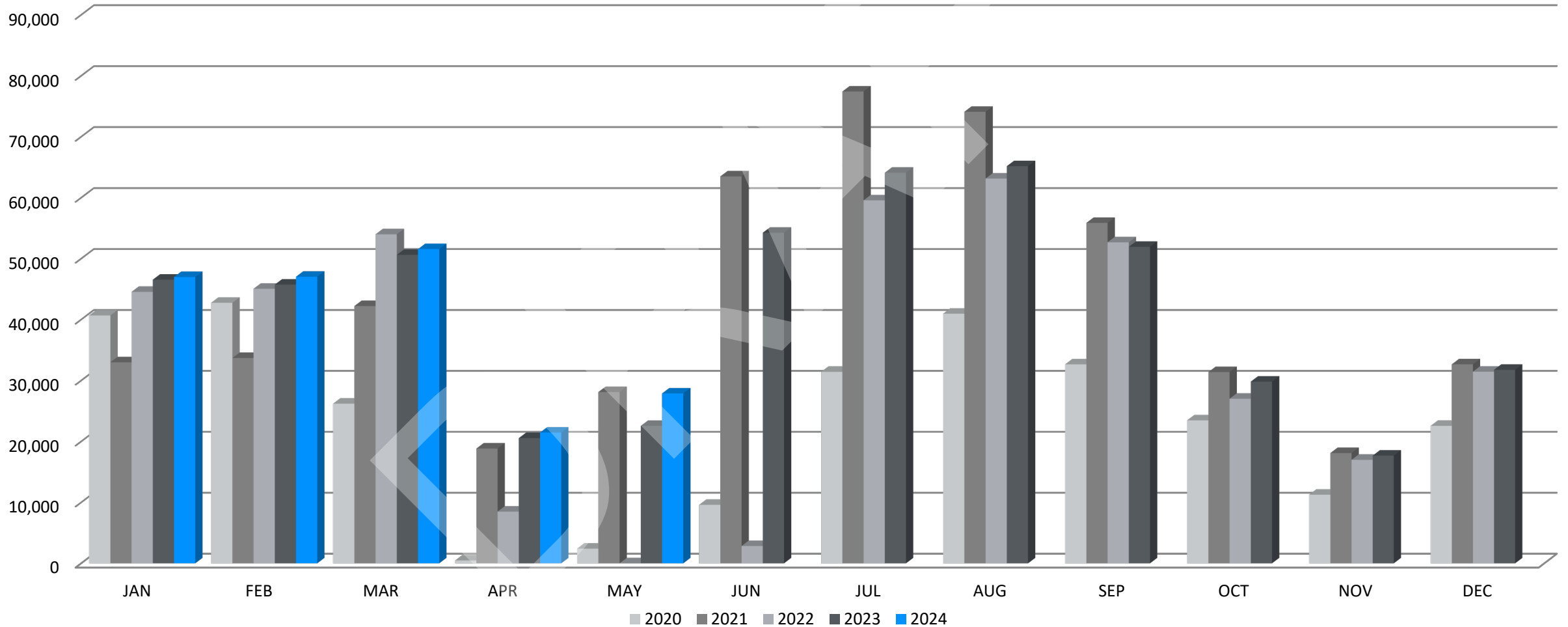


# JAC OPERATIONS 2020-2024





# JAC ENPLANEMENTS 2020 - 2024







# OPERATIONS, SECURITY, AND FBO UPDATES







# BOARD COMMENTS AND PROPOSED MEETING DATES

- Board Retreat June 19-20, 2024\*
- August 21, 2024
- October 23, 2024\*
- December 18, 2024

\*Moved from 3<sup>rd</sup> Wednesday of the month.

Dates are subject to change. Please refer to the Airport website for the latest information.



JACKSON HOLE



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