

# *Snow-Bird 2025*



Presented by: Chris Tomlin East-South DDSO

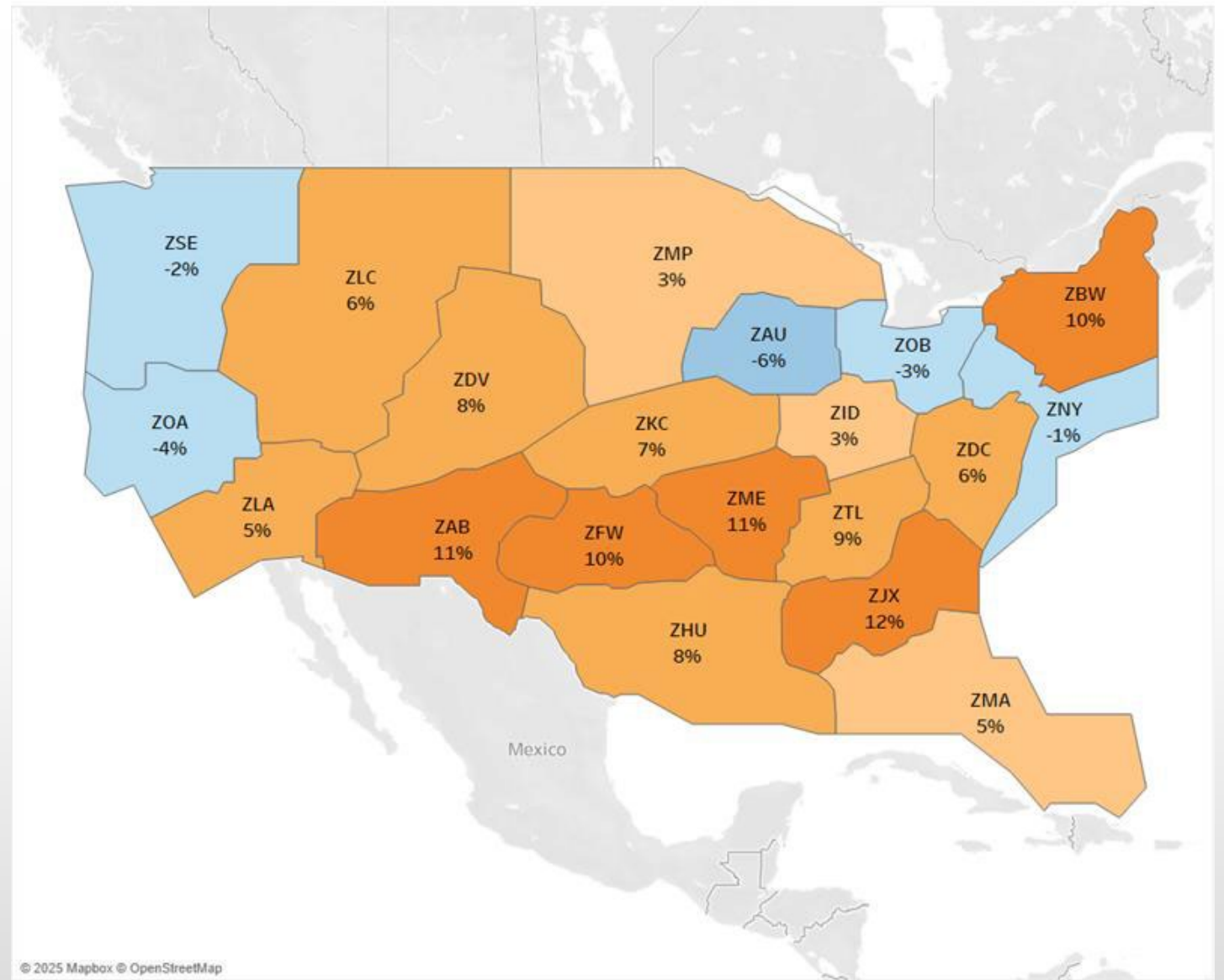


**Federal Aviation  
Administration**

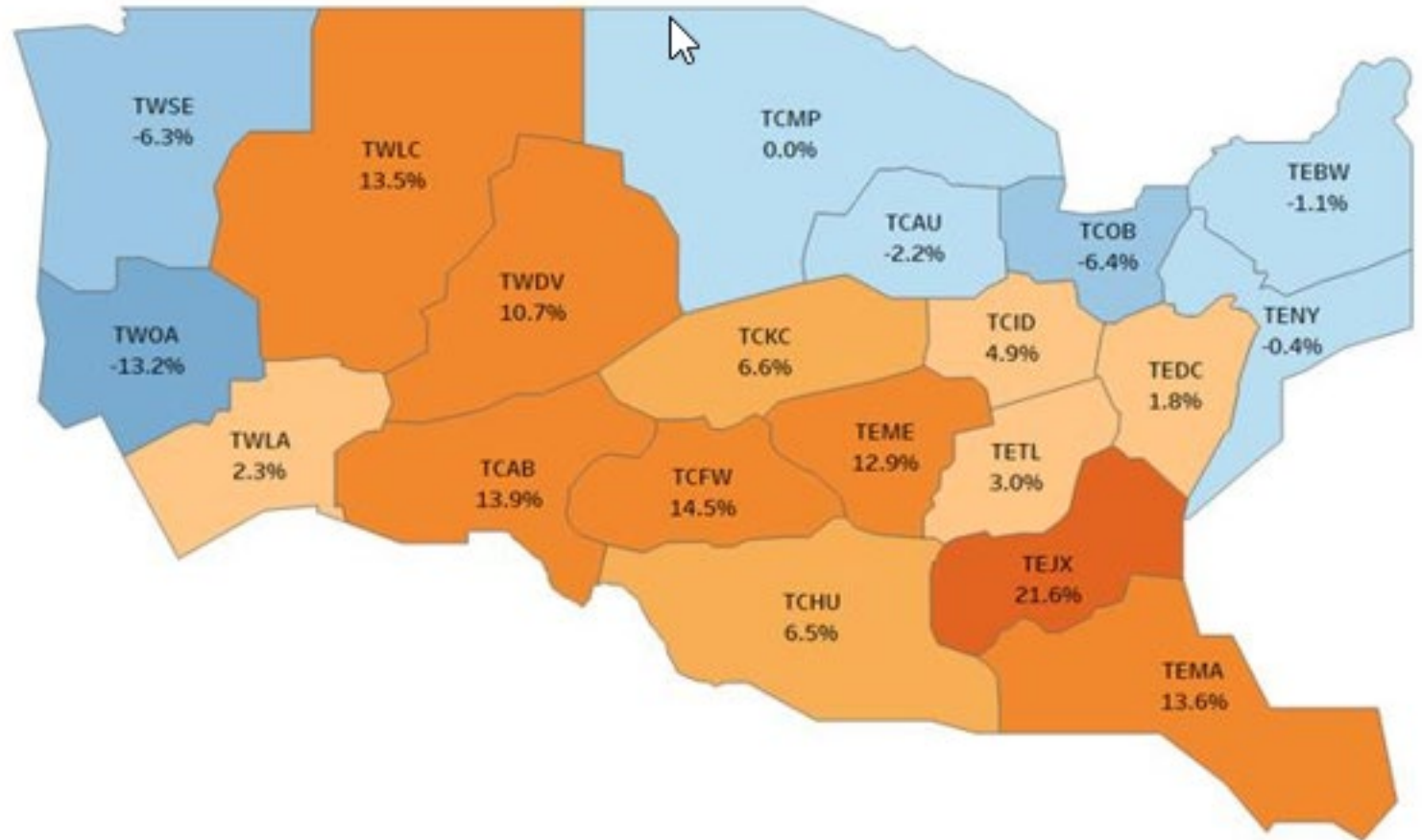
# What's Different

- **FTV vs UFT AFP Methodology**
- **MIA/FLL CDR Development**
- **ZMA (IDAC) Dept Scheduling out onto the Gulf and AR's**
- **Deep WATRS Emphasis and Usage Increase**
- **New ZJX Capping/Tunneling Required Advisories**
- **New Sectors in the Gulf for ZJX**
- **CDM Task 136**

# 2024 ARTCC Operational increases from 2017-2019 baseline



# 2024 ATCT Operational increases from 2017-2019 baseline



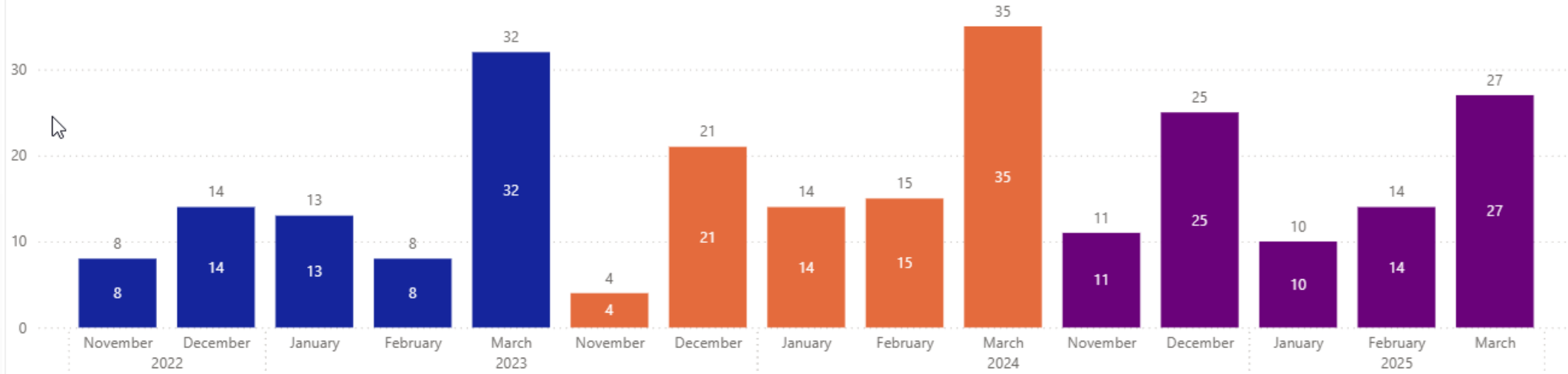


# Snow-Bird AFP Usage

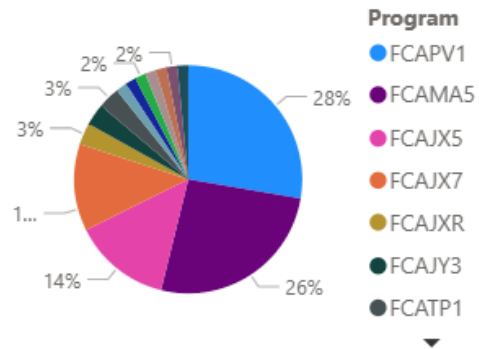
Count Of AFPs Used

Charged to ZMA or ZJX

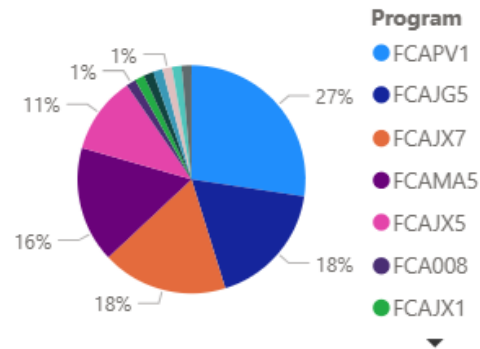
FiscalYear ● 2023 ● 2024 ● 2025



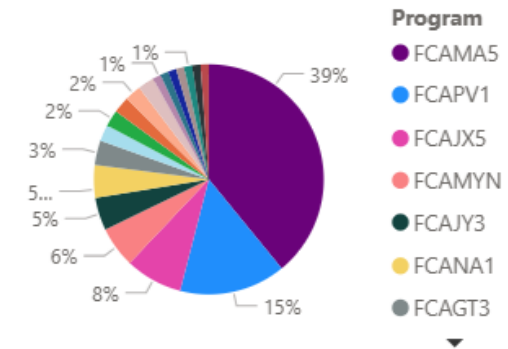
FY2023



FY2024



FY2025



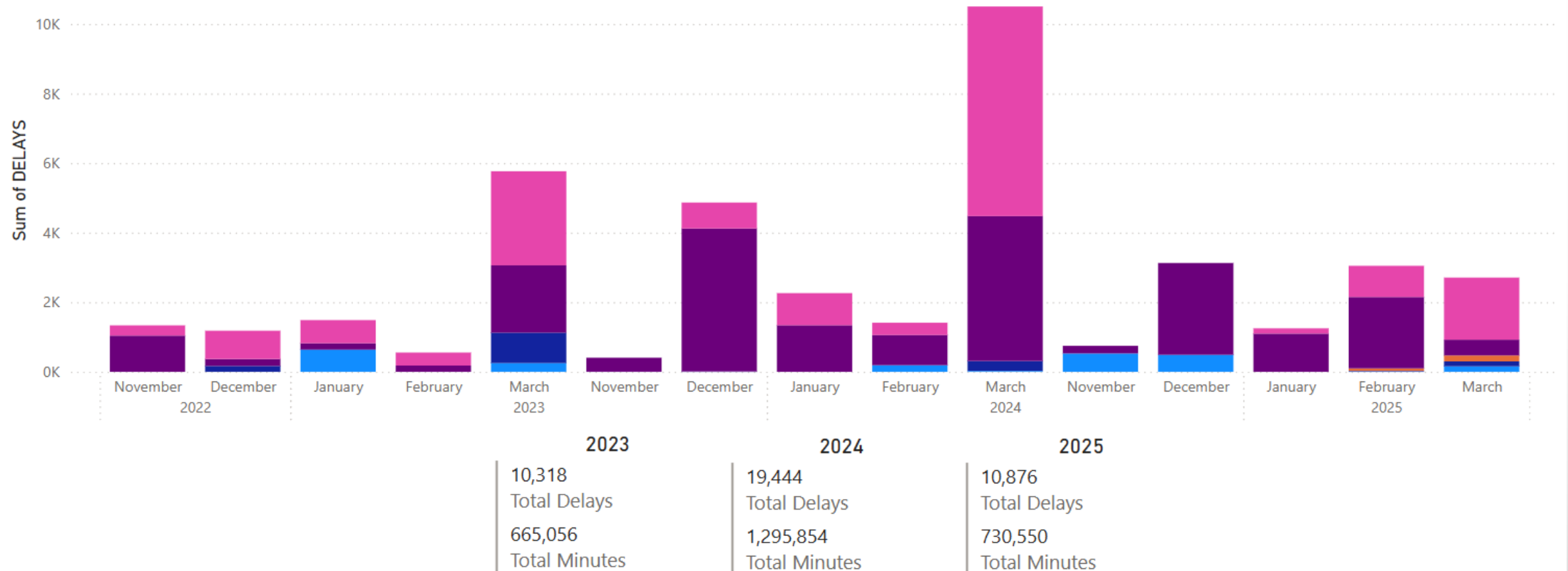
# Snow-Bird AFP Delay

AFP Delay - Total Minutes

2022 – March 25, 2025



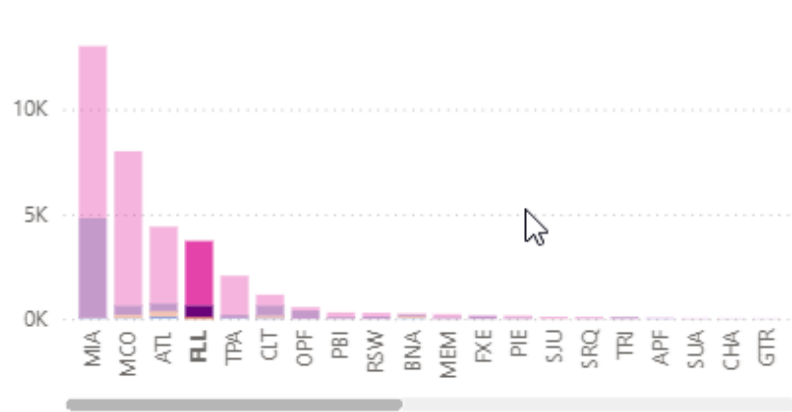
CAUSAL\_FACTOR ● EQUIPMENT ● OTHER ● RW ● VOLUME ● WX



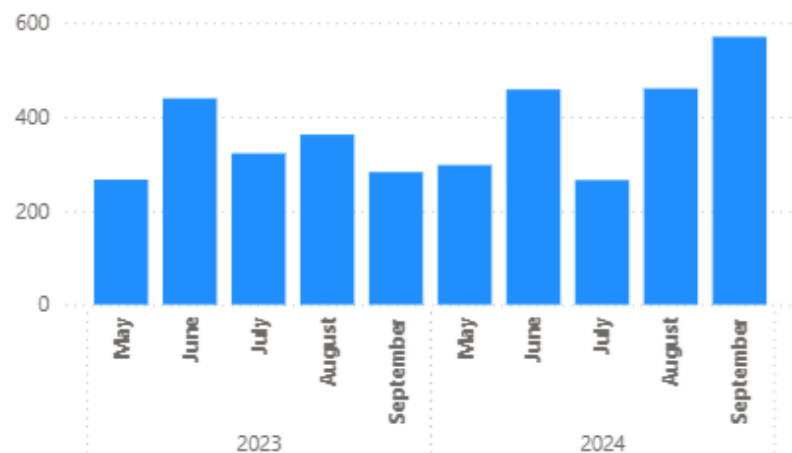
# FLL CDR Impacts

Sum of Delays By Origin

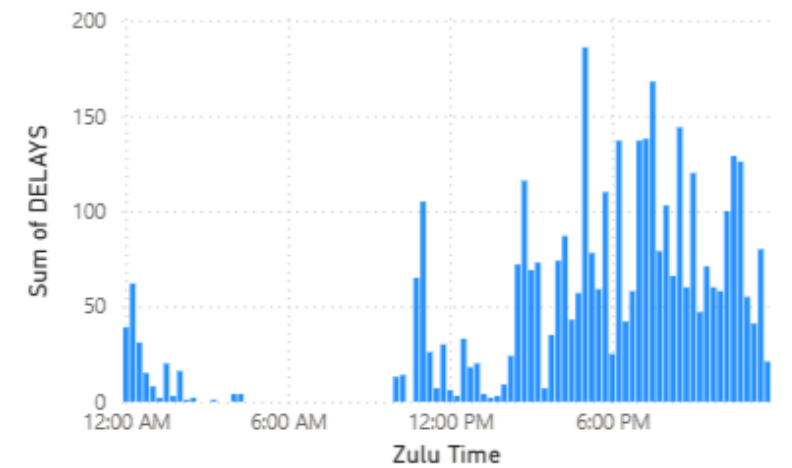
CAUSAL\_FACTOR ●EQUIPMENT ●OTHER ●RW ●VOLUME ●WX



Sum of DELAYS by Year and Month



Delay Start Time



2023

60.38

Average of DelayDuration

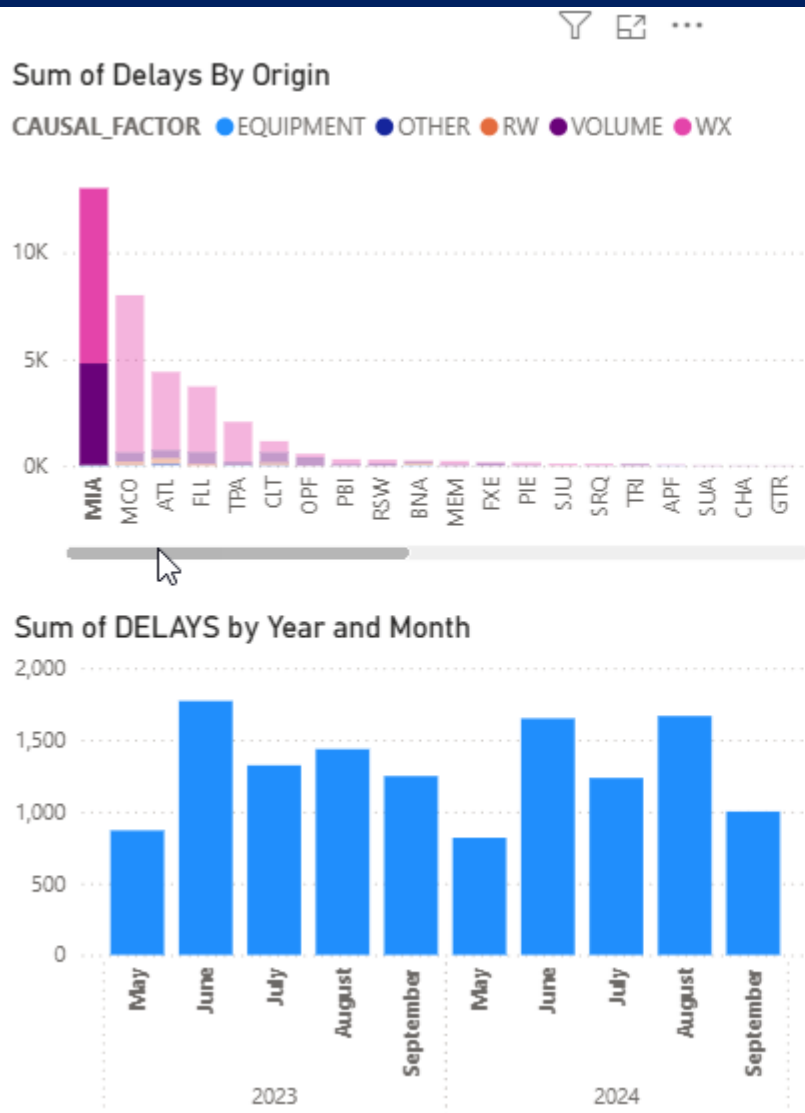
2024

44.34

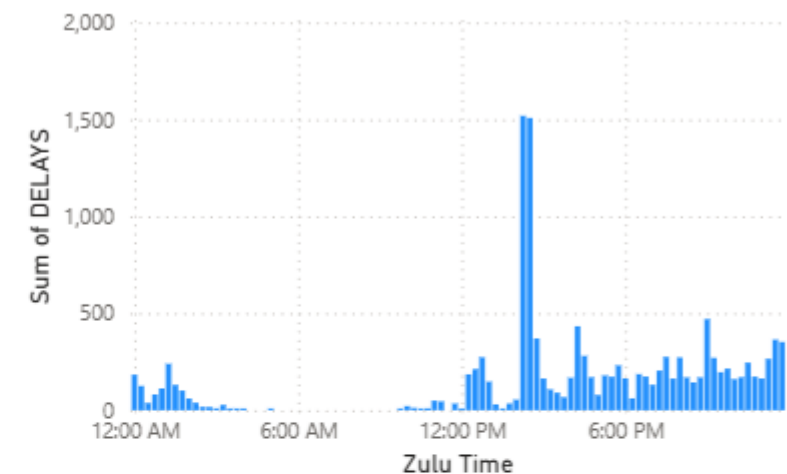
Average of DelayDuration



# MIA CDR Impacts



Delay Start Time



2023

55.78

Average of DelayDuration

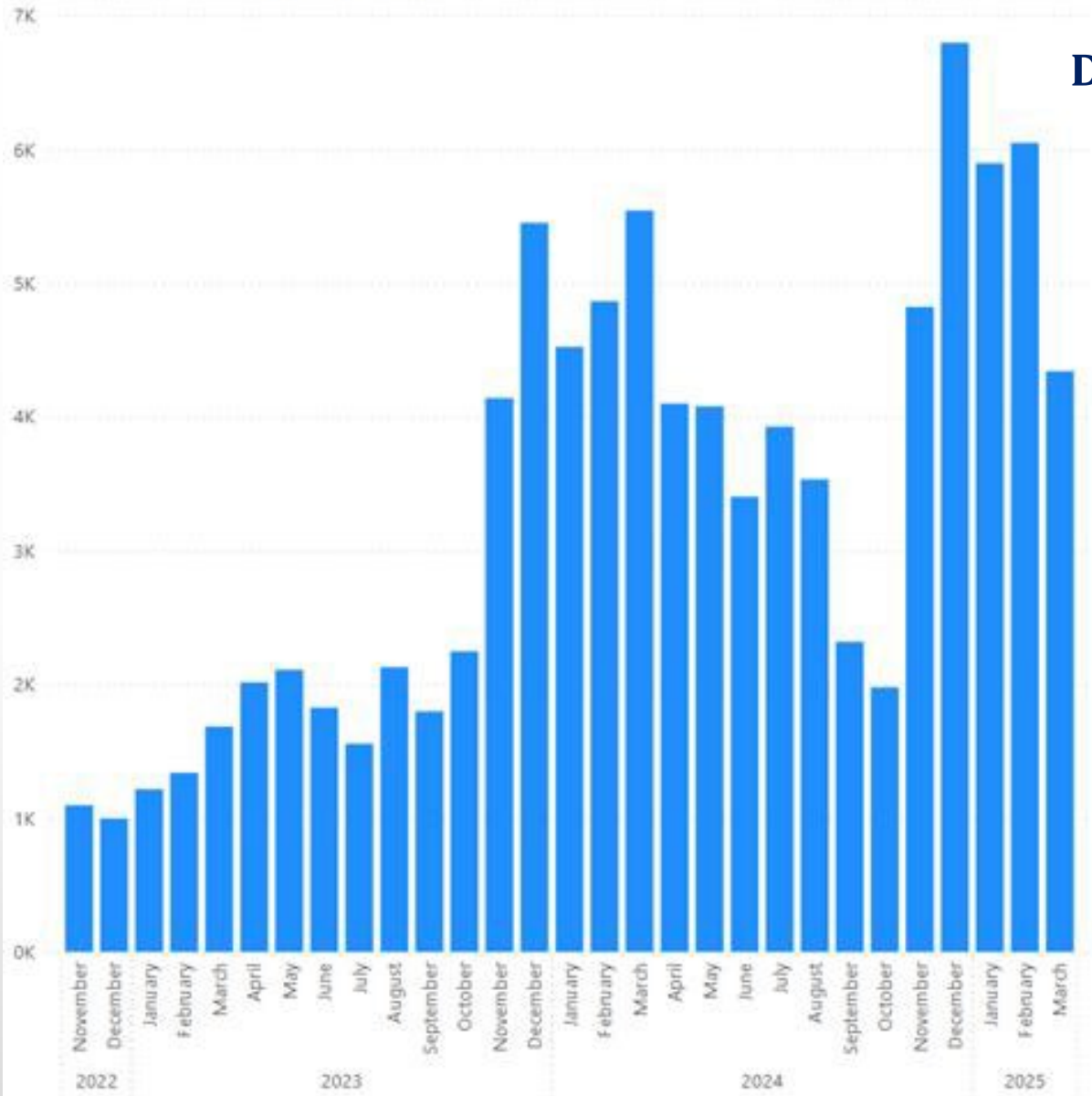
2024

50.41

Average of DelayDuration

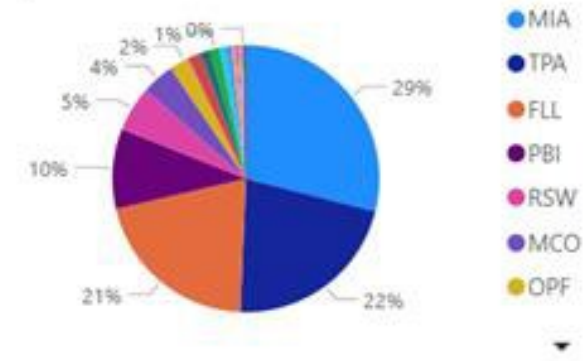


# TBFM Departure Scheduling By ZMA

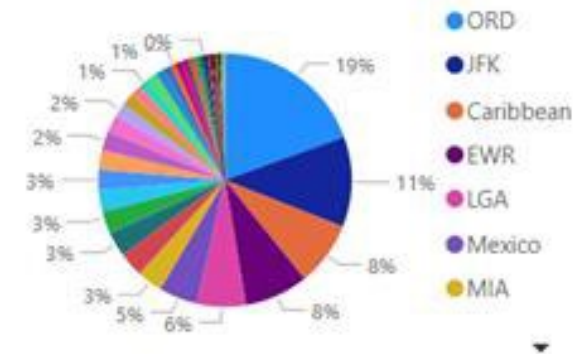


## ZMA (IDAC) Departure Scheduling into the Gulf and AR's

Departure

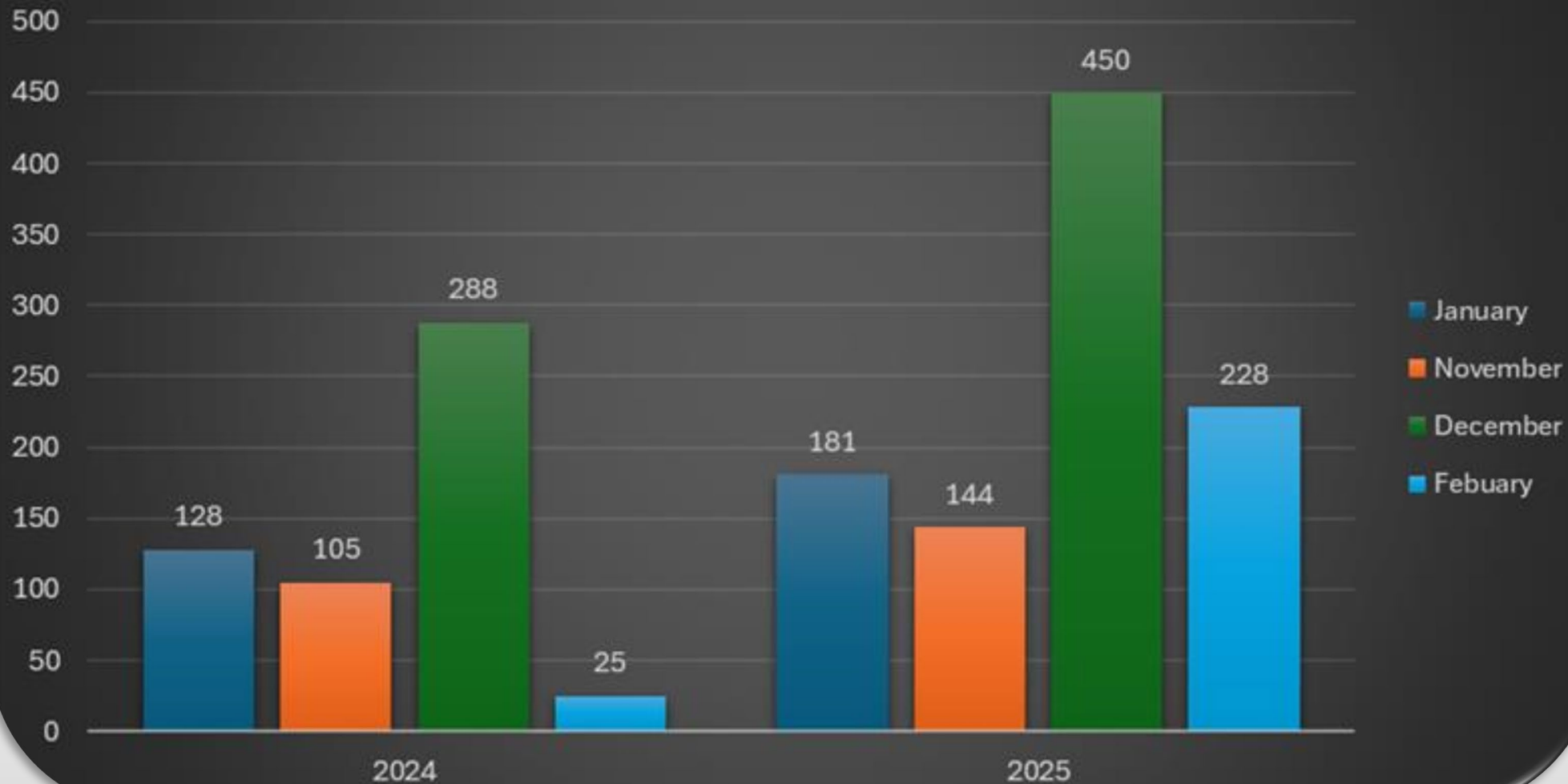


Destination





## WATRS Usage



**WATRS**  
Usage Increased  
By 84%  
over 2024

# East Area ZJX Capping/Tunneling Impacts

Dec 1, 2024 – March 20, 2025

## Normal Sector Volume

Sector	15:00	15:15	15:30	15:45	16:00	16:15	16:30	16:45	17:00	17:15	17:30	17:45	18:00	18:15	18:30	18:45	19:00	19:15	19:30	19:45	20:00	20:15	20:30	20:45	21:00	21:15	21:30	21:45
47	11	11	10	10	11	11	12	11	10	11	11	12	11	11	10	9	9	9	10	10	10	9	9	9	10	10	9	9
48	16	15	14	14	15	15	15	14	15	15	15	15	15	15	15	14	15	14	15	15	16	15	16	16	15	15	15	15
49	16	16	16	16	16	15	15	17	16	17	17	17	17	16	16	16	15	15	16	16	16	16	16	16	16	16	15	15
50	12	12	12	11	11	10	11	12	13	12	12	12	11	11	10	11	10	10	11	10	10	10	11	12	11	10	10	10
65	16	16	15	14	15	16	15	15	16	17	17	17	18	17	16	16	16	15	15	14	15	16	16	16	15	15	15	15
66	14	13	13	12	11	12	14	15	14	13	13	13	12	11	12	13	13	11	10	10	11	12	12	11	11	12	12	11

## Sector Volume When Capping & Tunneling was used

Sector	15:00	15:15	15:30	15:45	16:00	16:15	16:30	16:45	17:00	17:15	17:30	17:45	18:00	18:15	18:30	18:45	19:00	19:15	19:30	19:45	20:00	20:15	20:30	20:45	21:00	21:15	21:30	21:45
47	12	12	11	10	11	12	13	13	12	10	11	12	12	12	12	11	11	11	12	12	10	9	10	10	10	11	11	11
48	16	16	14	13	15	15	14	15	15	15	14	14	16	16	15	15	14	14	14	13	15	15	15	15	15	15	15	15
49	16	15	16	17	17	16	17	18	18	17	18	18	18	18	17	17	17	16	17	17	15	16	17	17	18	16	17	18
50	13	13	13	12	13	12	12	14	15	13	13	14	14	15	13	13	13	13	12	11	11	12	13	13	12	12	11	12
65	17	16	15	14	16	17	16	15	16	18	18	18	19	19	18	18	17	17	17	17	16	16	15	17	17	17	16	17
66	15	15	14	12	12	13	15	16	15	16	15	15	15	15	14	14	14	13	12	11	11	13	13	13	12	12	13	13

# West Area ZJX Capping/Tunneling Impacts

Dec 1, 2024 – March 20, 2025

## Normal Sector Volume

Sector	15:00	15:15	15:30	15:45	16:00	16:15	16:30	16:45	17:00	17:15	17:30	17:45	18:00	18:15	18:30	18:45	19:00	19:15	19:30	19:45	20:00	20:15	20:30	20:45	21:00	21:15	21:30	21:45	21:59	
10	8	8	8	8	8	7	7	7	7	8	7	7	7	7	7	7	7	7	6	6	6	7	7	6	6	7	7	6	6	
11	10	10	10	10	11	10	10	10	10	11	11	10	10	10	11	11	11	11	12	12	11	10	11	11	11	11	11	11	12	12
12	10	11	12	12	12	11	11	11	11	11	11	11	10	10	10	10	11	12	11	11	10	10	10	10	10	10	10	9	9	9
13	9	12	14	12	6	9	10	8	7	8	6	14	13	10	10	12	13	12	10	15	13	10	10	10	10	10	6	12	9	9
21	10	11	11	4	8	11	7	11	7	10	8	8	7	6	5	8	9	9	10	10	8	8	7	6	12	12	10	11	11	
28	9	8	8	9	9	8	8	9	9	8	9	9	9	8	8	8	8	8	9	9	8	8	8	8	7	7	7	7	7	
29	9	9	9	9	9	9	10	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	8	8	8	8	8	8	8	
30	16	15	14	14	14	14	14	15	14	15	16	15	14	15	16	15	15	17	20	19	18	17	17	16	17	17	17	17	18	
31	6	6	7	5	5	9	9	9	9	6	8	9	8	6	8	8	6	7	7	10	10	9	8	7	8	9	8	9	9	
79		6	10	8	9	7	8	6	8	13	14	18	10	10	10	9	9	9	11	13	11	8	6	7	9	8	9	9	8	

## Sector Volume When Capping & Tunneling was used

Sector	15:00	15:15	15:30	15:45	16:00	16:15	16:30	16:45	17:00	17:15	17:30	17:45	18:00	18:15	18:30	18:45	19:00	19:15	19:30	19:45	20:00	20:15	20:30	20:45	21:00	21:15	21:30	21:45	21:59
10	6	7	7	8	8	7	7	8	8	9	9	9	8	7	7	7	8	7	6	5	7	6	7	6	7	7	6	7	
11	11	10	11	12	11	10	9	10	10	11	11	10	9	10	10	10	10	11	12	12	11	11	10	11	11	10	10	12	
12	12	14	14	13	12	12	12	12	12	12	12	12	12	11	11	11	12	12	13	12	11	10	11	11	11	10	10	10	
13								10	10	9	11	11	9	11	11	10	7	7	14	14	18	16	11	12	11	6			
21	6	2	2	10	12	11	9	9	8	6	7	5	7	9	9	11	8	11	11	8	13	9	14	13	9	12	12	12	
28	10	8	9	7	8	9	11	10	9	10	10	10	10	10	8	9	8	8	10	9	10	9	9	8	10	9	8	8	
29	10	10	11	10	10	11	11	12	11	11	10	10	10	11	10	10	10	11	11	10	10	9	9	10	9	9	9	9	
30	17	15	14	16	16	15	16	16	15	15	17	17	16	15	16	15	16	17	19	20	19	16	17	16	16	16	18	20	
31	9	10	11	11	11	9	8	11	11	10	9	10	11	10	9	10	8	10	13	13	10	11	11	12	11	10	9	10	
79			5	6	11	10	11	12	7	13	12	8	6	7	7	7	10	11	11	7	11	12	10	11	11	3			



# Gulf Area ZJX Capping/Tunneling Impacts

Dec 1, 2024 – March 20, 2025

## Normal Sector Volume

Sector	15:00	15:15	15:30	15:45	16:00	16:15	16:30	16:45	17:00	17:15	17:30	17:45	18:00	18:15	18:30	18:45	19:00	19:15	19:30	19:45	20:00	20:15	20:30	20:45	21:00	21:15	21:30	21:45
14	11	12	12	11	10	11	11	11	11	11	11	11	11	11	10	10	11	11	11	11	11	11	10	10	11	11	11	11
15	11	11	11	11	10	11	10	10	10	10	10	10	10	10	10	10	11	11	10	10	10	10	10	10	11	11	10	10
77	5	5	5	6	6	6	5	5	6	6	6	6	6	6	5	6	5	6	6	6	6	6	5	6	5	6	5	5
78	9	10	10	10	9	9	9	9	10	10	10	9	9	9	9	9	9	9	9	9	9	9	8	9	9	9	9	9
87	8	9	9	9	9	8	9	9	9	9	9	10	10	9	9	9	9	9	9	9	9	9	9	8	8	9	9	8
88	7	9	9	8	8	8	9	9	9	9	9	9	9	9	8	8	8	9	9	8	9	8	8	7	8	9	8	8

## Sector Volume When Capping & Tunneling was used

Sector	15:00	15:15	15:30	15:45	16:00	16:15	16:30	16:45	17:00	17:15	17:30	17:45	18:00	18:15	18:30	18:45	19:00	19:15	19:30	19:45	20:00	20:15	20:30	20:45	21:00	21:15	21:30	21:45
14	12	12	12	11	10	12	12	11	12	12	12	12	12	11	10	10	11	11	10	11	11	11	10	11	11	11	11	11
15	11	11	11	11	11	10	10	10	11	10	9	10	10	11	11	10	11	10	10	10	10	10	10	10	10	11	10	10
77	6	6	6	6	7	7	7	6	7	6	7	7	7	6	6	7	7	7	8	7	7	7	7	6	7	7	6	5
78	10	10	11	11	9	9	9	10	10	10	10	10	11	10	10	10	10	10	9	10	9	9	8	9	10	9	8	8
87	9	9	10	10	9	9	10	10	10	10	11	11	11	11	11	11	10	9	10	10	9	9	10	10	10	10	9	10
88	8	8	9	8	7	8	7	8	8	8	8	8	8	8	8	7	7	8	7	7	8	8	7	8	8	8	8	8

# Central Area ZJX Capping/Tunneling Impacts

Dec 1, 2024 – March 20, 2025

## Normal Sector Volume

Sector	15:00	15:15	15:30	15:45	16:00	16:15	16:30	16:45	17:00	17:15	17:30	17:45	18:00	18:15	18:30	18:45	19:00	19:15	19:30	19:45	20:00	20:15	20:30	20:45	21:00	21:15	21:30	21:45	2
16	10	11	11	11	10	10	10	10	11	11	11	11	11	11	10	10	11	11	11	11	11	11	11	11	11	12	11	11	
17	11	11	12	11	10	10	11	10	10	10	10	11	11	11	11	10	10	10	10	11	11	11	11	11	10	11	12	12	
33	9	10	11	11	11	10	10	11	11	10	10	10	11	11	11	11	11	11	11	12	12	12	11	12	11	11	10	11	
34	15	15	15	16	16	16	16	16	16	16	16	15	15	15	15	16	16	16	16	17	16	15	15	16	17	16	15	16	16
85	12	11	12	13	12	12	12	13	13	12	13	13	13	12	13	13	13	13	13	13	13	13	13	13	13	12	13	12	
86	10	11	12	12	11	11	11	12	12	12	12	12	12	12	12	12	12	12	11	12	12	12	12	12	11	12	12	11	12

## Sector Volume When Capping & Tunneling was used

Sector	15:00	15:15	15:30	15:45	16:00	16:15	16:30	16:45	17:00	17:15	17:30	17:45	18:00	18:15	18:30	18:45	19:00	19:15	19:30	19:45	20:00	20:15	20:30	20:45	21:00	21:15	21:30	21:45	2
16	10	11	11	11	10	10	10	10	11	11	11	11	11	11	10	10	11	11	11	11	11	11	11	11	11	12	11	11	
17	11	11	12	11	10	10	11	10	10	10	10	11	11	11	11	10	10	10	10	11	11	11	11	11	10	11	12	12	
33	9	10	11	11	11	10	10	11	11	10	10	10	11	11	11	11	11	11	11	12	12	12	11	12	11	11	10	11	
34	15	15	15	16	16	16	16	16	16	16	16	15	15	15	15	16	16	16	16	17	16	15	15	16	17	16	15	16	16
85	12	11	12	13	12	12	12	13	13	12	13	13	13	12	13	13	13	13	13	13	13	13	13	13	13	12	13	12	
86	10	11	12	12	11	11	11	12	12	12	12	12	12	12	12	12	12	12	11	12	12	12	12	12	11	12	12	11	12





# North Area ZJX Capping/Tunneling Impacts

Dec 1, 2024 – March 20, 2025

## Normal Sector Volume

Sector	15:00	15:15	15:30	15:45	16:00	16:15	16:30	16:45	17:00	17:15	17:30	17:45	18:00	18:15	18:30	18:45	19:00	19:15	19:30	19:45	20:00	20:15	20:30	20:45	21:00	21:15	21:30	21:45
35	15	14	13	13	13	13	13	13	14	15	15	14	14	14	13	13	12	12	11	12	13	12	13	13	13	13	13	12
51	15	15	15	16	16	17	16	16	16	15	15	15	16	15	15	15	15	15	16	15	16	16	16	16	16	15	14	14
52	18	17	16	16	17	17	16	18	18	18	18	19	18	17	16	15	16	15	15	15	16	16	16	17	18	17	16	17
53	9	7	7	7	8	9	7	6	6	7	8	9	9	8	7	7	8	8	8	8	8	9	9	9	8	7	7	7
54	9	9	9	10	9	9	9	9	10	9	9	9	9	9	9	9	9	9	9	9	8	8	8	8	8	8	8	7
71	9	10	10	9	10	12	13	11	10	10	9	11	12	12	12	11	11	11	11	12	12	12	10	10	10	11	10	10
72	9	8	8	7	7	8	8	8	7	7	7	7	8	8	8	9	8	7	7	7	8	7	7	7	8	8	8	8
73	10	10	9	10	9	9	9	9	9	9	9	9	9	9	9	10	9	9	9	9	9	9	9	9	9	9	8	8

## Sector Volume When Capping & Tunneling was used

Sector	15:00	15:15	15:30	15:45	16:00	16:15	16:30	16:45	17:00	17:15	17:30	17:45	18:00	18:15	18:30	18:45	19:00	19:15	19:30	19:45	20:00	20:15	20:30	20:45	21:00	21:15	21:30	21:45
35	16	14	13	14	14	13	13	13	14	16	18	16	15	15	15	13	13	13	12	13	13	13	13	13	14	13	12	12
51	15	16	16	17	18	17	17	18	19	17	17	17	17	17	18	18	17	17	19	19	18	17	17	17	17	16	15	15
52	20	19	18	17	17	17	17	17	18	19	20	20	18	18	17	17	17	16	16	16	17	17	16	16	18	18	17	16
53	5	8	7	8	7	7	8	7	7	7	7	7	7	7	7	8	8	8	7	8	8	7	9	9	10	10	9	8
54	9	10	10	11	10	10	10	10	10	10	11	10	9	9	9	9	10	10	10	10	9	9	9	9	9	9	9	8
71	10	10	10	9	11	13	13	12	11	11	10	10	12	12	12	11	11	11	11	12	13	12	11	11	11	11	13	12
72	9	7	7	7	6	6	7	7	6	6	6	6	6	6	7	8	7	7	6	6	7	6	6	6	6	6	6	6
73	9	9	10	10	10	10	11	10	9	9	10	9	9	9	10	11	11	10	10	10	10	10	10	10	9	9	10	9

# South Area ZJX Capping/Tunneling Impacts

Dec 1, 2024 – March 20, 2025

## Normal Sector Volume

Sector	15:00	15:15	15:30	15:45	16:00	16:15	16:30	16:45	17:00	17:15	17:30	17:45	18:00	18:15	18:30	18:45	19:00	19:15	19:30	19:45	20:00	20:15	20:30	20:45	21:00	21:15	21:30	21:45	2
57	5	6	6	5	5	6	6	5	6	6	6	5	5	6	6	6	5	5	6	6	6	5	5	5	5	5	5	5	5
58	13	12	12	12	11	11	11	11	12	12	12	11	11	11	11	11	11	11	12	11	11	11	11	11	11	11	11	11	11
67	17	16	16	16	17	16	16	17	17	17	17	18	18	17	17	17	17	17	17	17	17	17	18	17	16	16	15	16	16
68	14	13	13	13	12	12	12	13	13	14	15	15	14	13	12	12	12	13	13	12	11	12	13	12	12	12	12	11	11
75	8	8	10	10	10	9	10	10	10	11	11	10	10	9	9	9	9	10	10	10	10	10	11	11	11	9	10	10	10
76	15	14	16	17	16	15	15	16	17	16	17	17	16	16	15	15	15	16	16	16	16	16	16	17	17	16	15	15	15

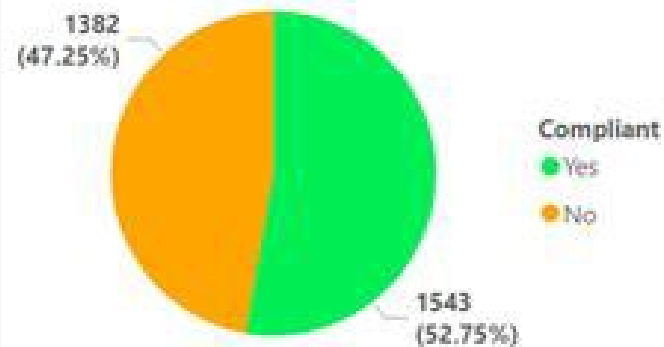
## Sector Volume When Capping & Tunneling was used

Sector	15:00	15:15	15:30	15:45	16:00	16:15	16:30	16:45	17:00	17:15	17:30	17:45	18:00	18:15	18:30	18:45	19:00	19:15	19:30	19:45	20:00	20:15	20:30	20:45	21:00	21:15	21:30	21:45	2
57	5	6	6	7	6	7	7	6	6	7	7	7	6	7	7	6	5	7	7	6	5	6	6	5	6	6	7	6	6
58	12	13	13	13	12	12	12	11	11	12	12	12	10	11	12	12	11	11	11	12	10	10	11	11	11	11	10	11	11
67	18	17	16	18	17	17	17	17	18	17	17	19	19	18	19	19	18	17	17	18	17	17	18	18	17	16	17	18	18
68	15	14	15	15	13	13	13	14	15	14	15	15	15	15	15	13	13	14	15	14	13	13	14	13	13	12	13	12	12
75	8	8	10	11	10	10	10	11	10	11	11	11	10	11	11	10	10	10	11	10	11	11	11	11	11	11	10	11	11
76	15	15	16	17	17	15	15	17	16	17	17	18	17	16	17	17	17	16	17	17	17	17	17	18	18	17	17	16	16

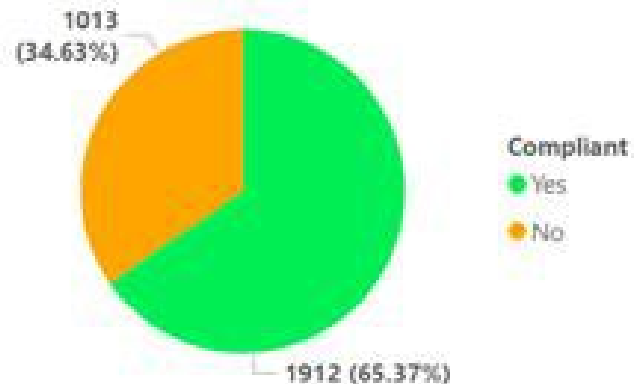
# Capping and Tunneling Compliance

21 days of data

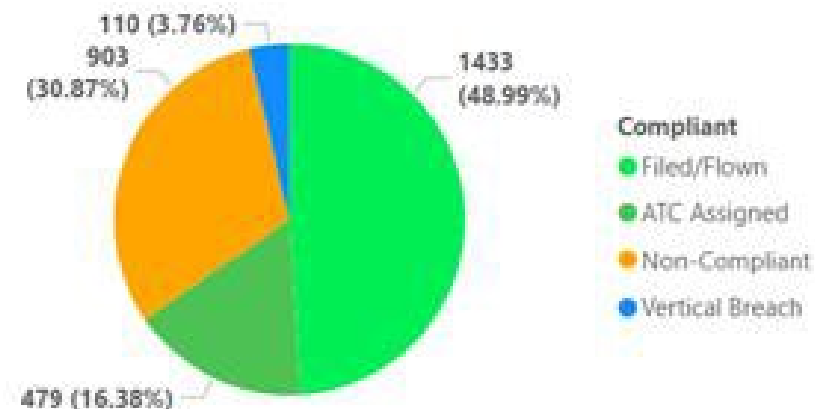
Filed Vertical Compliance



Flown Vertical Compliance



Flight Count by Compliance Categories



ACID	DEP	ARTCC	ARR	DepDate	DepTime	ArrDate	ArrTime	Filed Alt	Flown Alt	Cat	FCA
AAL1046	MIA	ZMA	ATL	02/21/2025	15:00	2/21/2025	16:29	300	310	Active	FCA006
AAL1046	MIA	ZMA	ATL	02/22/2025	14:30	2/22/2025	15:57	320	310	Active	FCA005
AAL1046	MIA	ZMA	ATL	02/23/2025	13:52	2/23/2025	15:21	260	311	Active	FCA008
AAL1046	MIA	ZMA	ATL	02/28/2025	14:10	2/28/2025	15:31	320	370	Active	FCA007
AAL1046	MIA	ZMA	ATL	03/02/2025	14:05	3/2/2025	15:32	340	330	Active	FCA005
AAL1046	MIA	ZMA	ATL	03/06/2025	14:00	3/6/2025	15:36	360	370	Active	FCA006

2925

Total Flight Count



Federal Aviation  
Administration

# New ZJX Sectors

## ZJX Central Area

### ZJX33/ZJX34

- Individual sectors owning FL240 and Above
- Unable to be split during high volume
- Ultra-High sector to help mitigate volume thru the North Central part of the airspace
- Increase capacity over Tallahassee area with transitions into Orlando, Tampa, South Florida Airports and International destinations
- Current timeline has this sector online Summer 2025

## ZJX West Area

### ZJX30

- Single sector owning Surface and Above
- Unable to split during high volume
- Unreliable Radar and Frequency coverage
- ADSB and low-level Non-Radar Procedures

### ZJX11

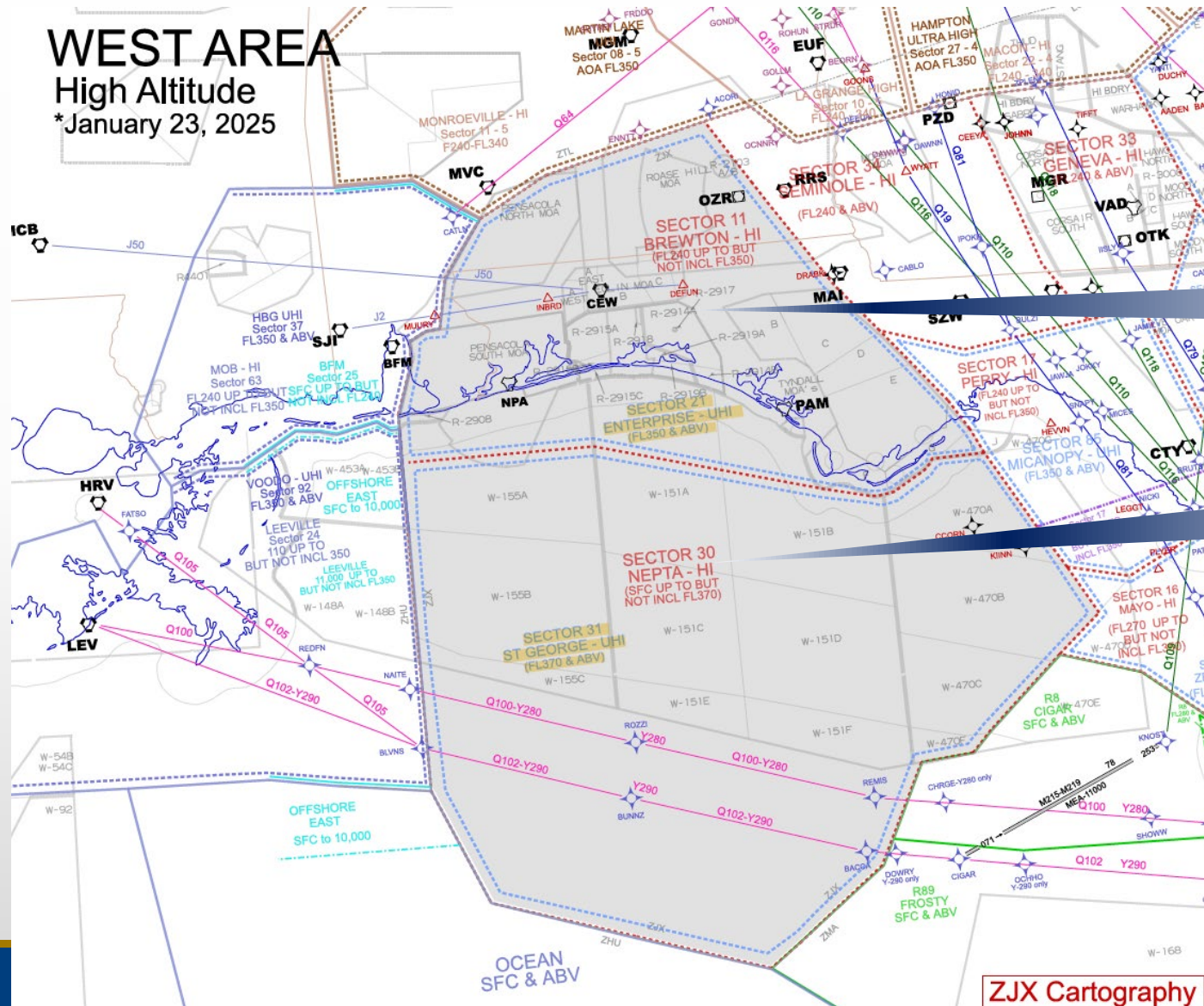
- Single sector owning FL240 and Above
- Unable to split during high volume
- Often over capacity during SWAP or Texas to Florida Playbook
- Used as an overflow outlet thru the Florida Panhandle

# New ZJX Ultra-High ZJX31 and ZJX21

## WEST AREA

High Altitude

\*January 23, 2025



**Opened 1/23/25**

ZJX21 – Ultra-High overlies ZJX11 Altitudes  
FL350 & Above

ZJX31 – Ultra-High overlies ZJX30 Altitudes  
FL370 & Above

designed to allow for increased volume in  
the Gulf

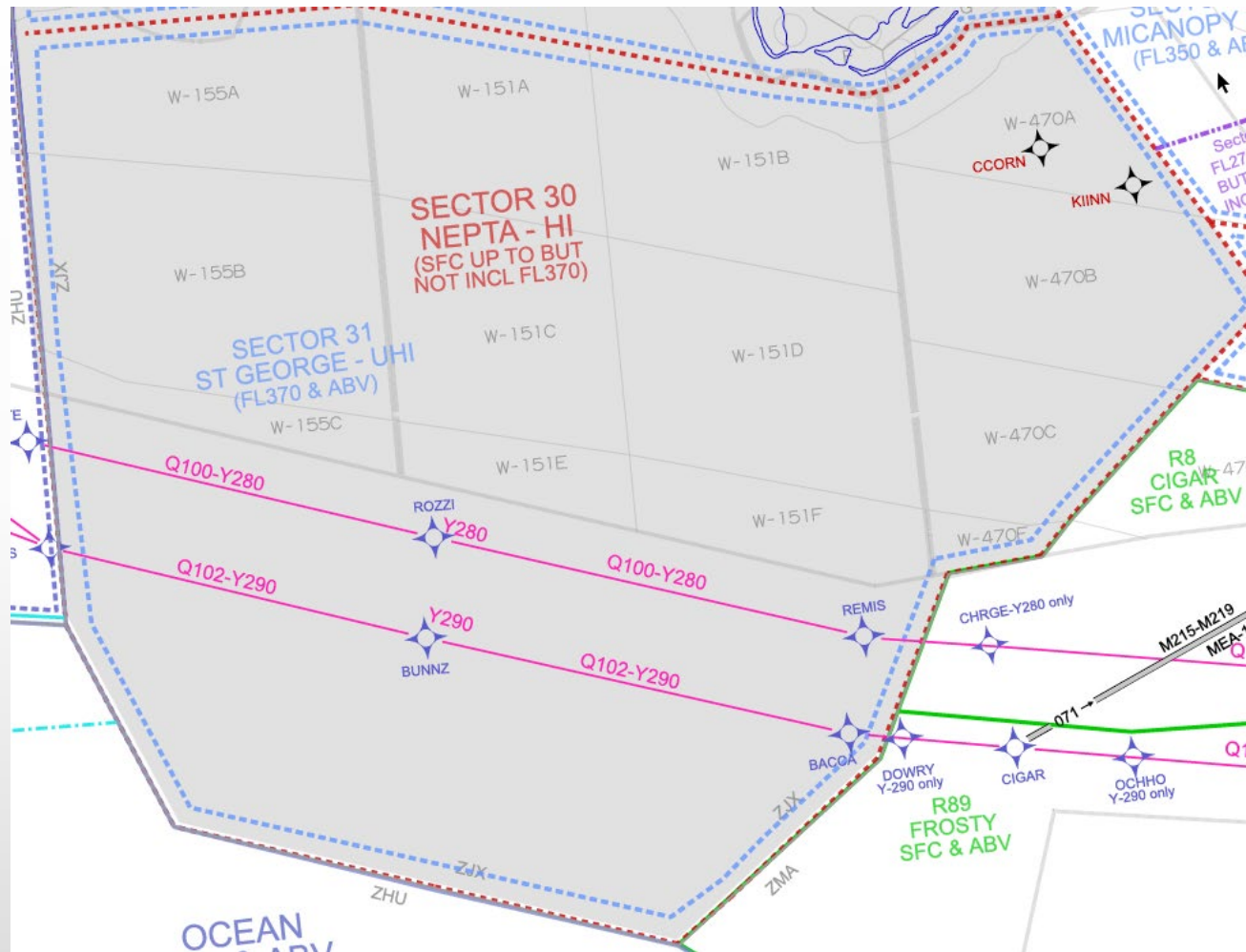
ZJX Cartography



Federal Aviation  
Administration



# ZJX West Area Ultra-High Sectors

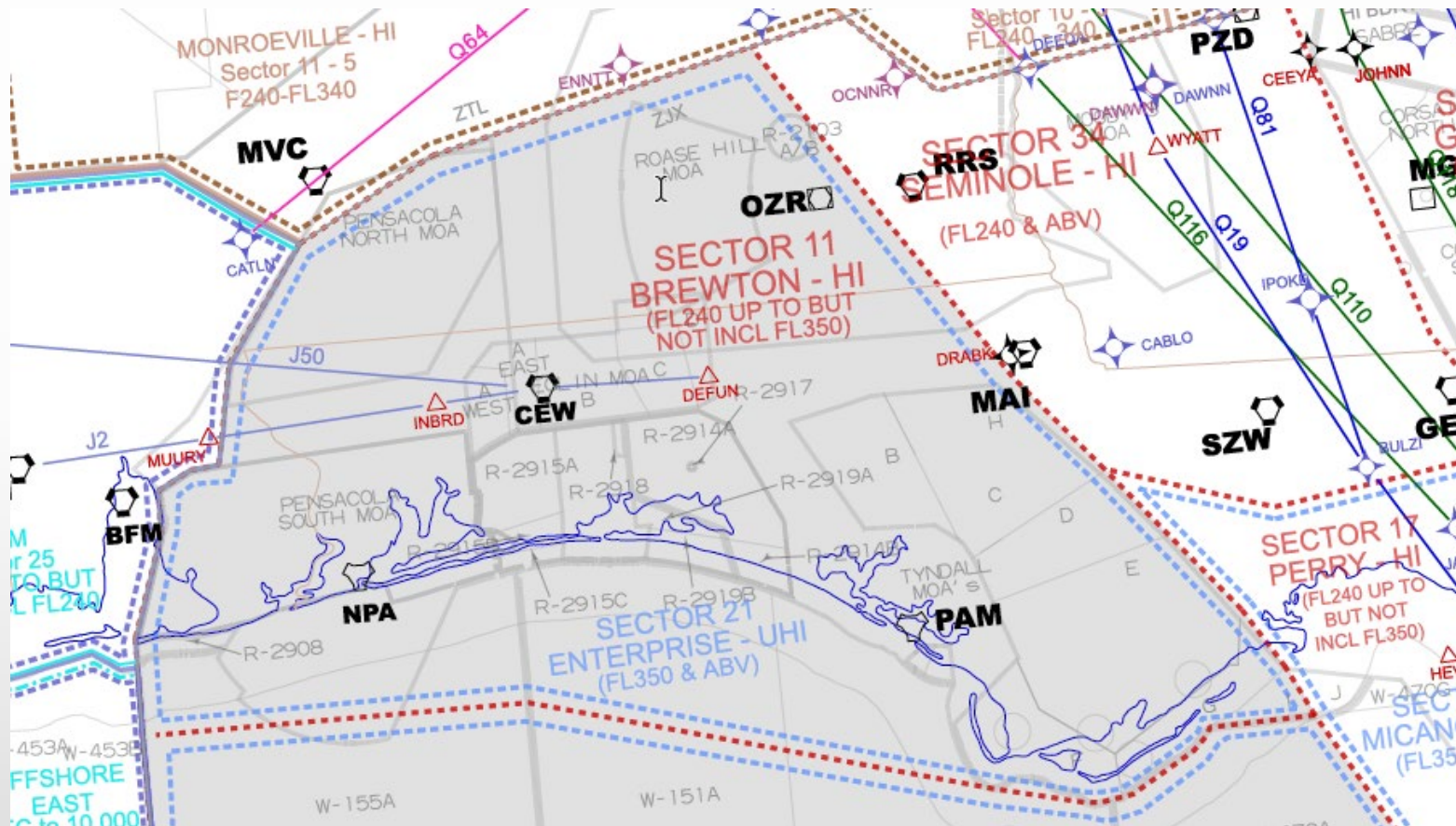


# ZJX30

- Old Sector was not stratified – owned Surface and above. High Volume, routinely over capacity with traffic transitioning between ZMA and ZHU.
- New Sector ZJX31 stratifies within the same sector dimensions. ZJX30 Surface up to FL369 and ZJX31 FL370 and Above.
- Benefit: New sector increases capacity, per hour, through Gulf of America. New MAP Parameters are:
- $$\begin{array}{ccc} \text{ZJX30} - 20 & & \\ \text{ZJX31} - 21 & \text{VS} & \text{ZJX 30} - 21 \end{array}$$
- Sector activated on January 23, 2025, with positive results

# ZJX West Area Ultra-High Sectors

**ZJX21**



- Old Sector was not stratified – owned FL240 and above. High Volume, routinely over capacity with traffic transitioning between ZJX, ZTL and ZHU.
- New Sector ZJX21 stratifies within the same sector dimensions. ZJX11 FL240 up to FL349 and ZJX21 FL350 and Above.
- Benefit: New sector increases capacity, per hour, through Panhandle. New MAP Parameters are:  

ZJX11 – 20      VS      ZJX 11 - 21  
ZJX21 – 21
- Sector activated on January 23, 2025 with positive results.
- Currently, limited use due to potential over-delivery of East Bound traffic and MilOps. Waiting on Central Ultra-High

# Traffic Flow February 7, 2025

1430Z-1800Z

Gold

Military Airspace

Light Blue

ZJX33/ZJX34

ZJX11/ZJX21

ZJX30/ZJX31

Red

Flight tracks

Blue

Military Flights



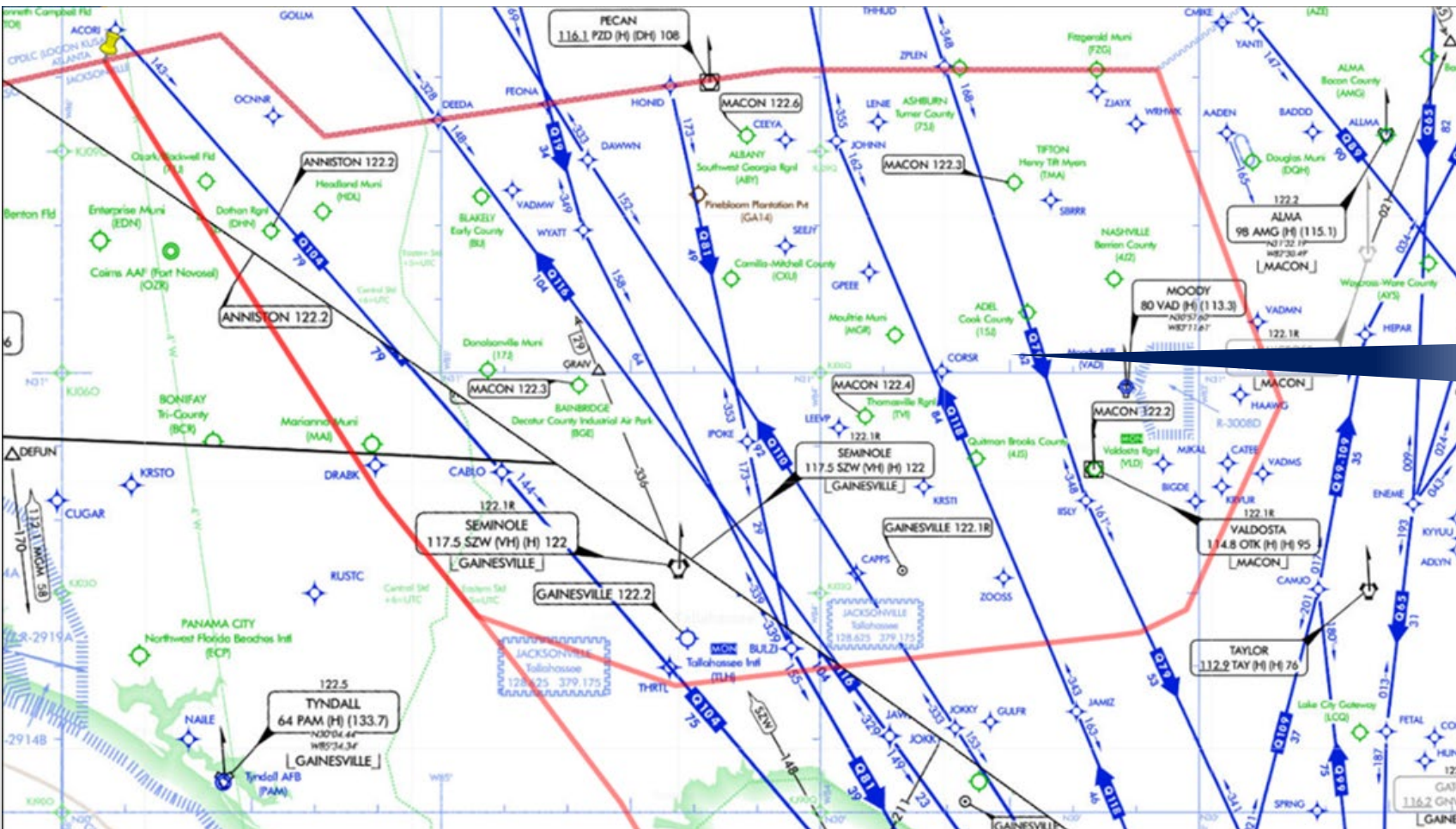


# Coming Soon... ZJX32 Ultra-High

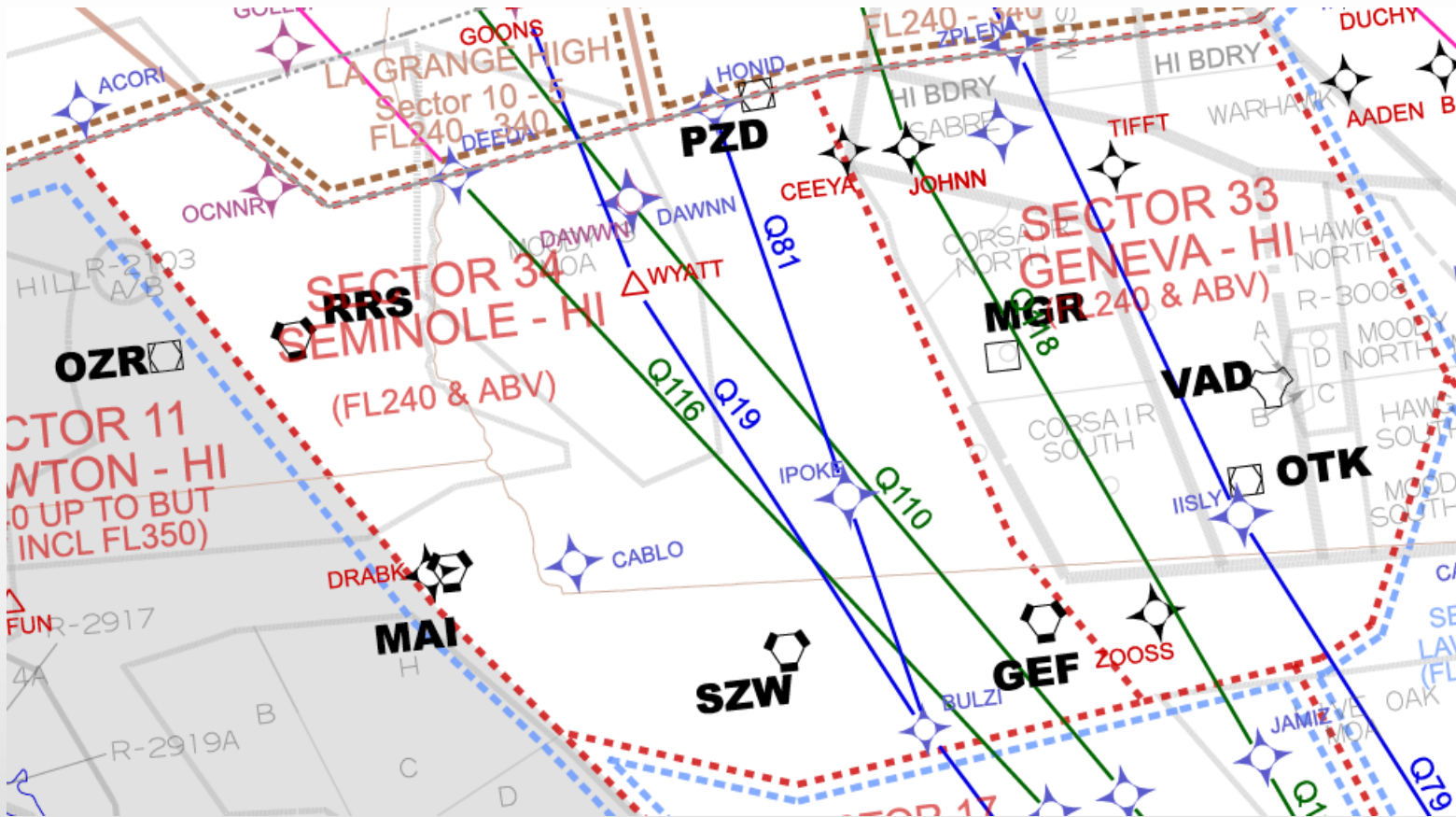
**Expected  
Timeframe: Late  
Summer**

ZJX32 – Ultra-High  
Overlies ZJX33 and ZJX34  
Altitudes: FL370 & Above

No procedural changes for new  
sector. Designed for Florida  
Panhandle and West Coast  
overflow volume.



# ZJX Central Area ZJX32 OZARK



## ZJX32

- ZJX32 overlies the current ZJX33/34 dimensions
- Sector Altitudes: ZJX33/34 FL240-FL369; ZJX32 FL370 and Above
- Expected to increase capacity over Tallahassee
- Completes the Ultra-High sectorization for the Western ZJX airspace
- Will affect total North/South throughput along Florida Westcoast and East/West capacity thru the Panhandle



# Expected Outcomes

- Increased capacity in all ZJX Western Sectors.
- Anticipated reduction in TMIs and Departure Delays for volume
- Anticipated reduction in need for AFPs for volume
- More efficient use of available airspace during Capping and Tunneling procedures
- More availability with Departure Gates in Central Florida during SWAP

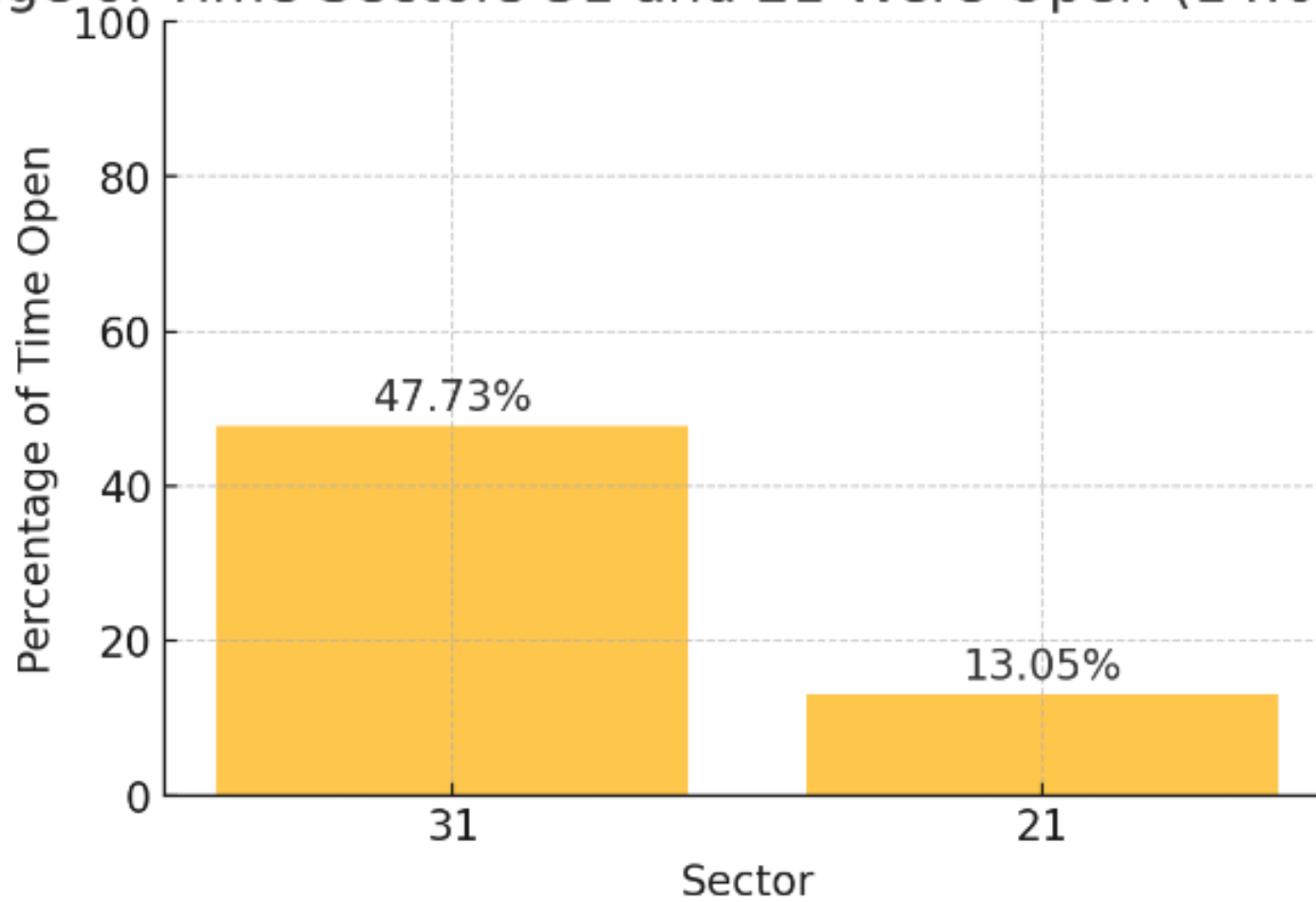
# What we've seen so far...

- ZJX Sector 31 has been opening consistently with a marked improvement of sector load balancing
- ZJX Sector 21 has been used less frequently. This is due to ZJX32 not being active. Any potential overcapacity volume thru the Florida Panhandle and West Coast of Florida will adversely affect ZJX33/34.
- When open ZJX21 is showing better sector loading.
- Once the Central Area Sector ZJX32 opens ZJX21 should be open more consistently.

# New Sector Utilization

Jan 23, 2025 – Feb 24, 2025

Percentage of Time Sectors 31 and 21 Were Open (14:00 - 23:45 GMT)



# Sector Load Comparison

\* Values are average sector load per 15 min buckets in Zulu time.

January 23, 2024 – Feb 24, 2024

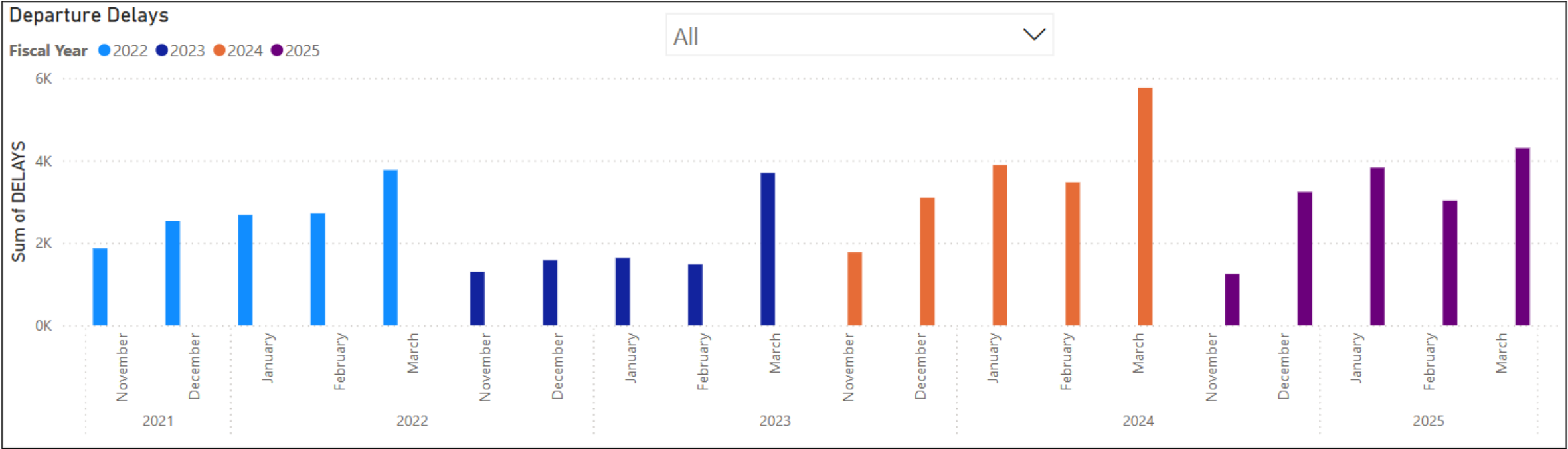
Sector	16:00	16:15	16:30	16:45	17:00	17:15	17:30	17:45	18:00	18:15	18:30	18:45	19:00	19:15	19:30	19:45	20:00	20:15	20:30	20:45	21:00	21:15	21:30	21:45	22:00	22:15	22:30	22:45
11	10.61	10.39	10.21	10.18	10.52	11.58	10.79	11.21	10.94	10.12	10.39	11.03	10.03	11.15	13.09	14.15	12.64	12.21	10.55	10.27	11.52	11.48	11.42	12.15	12.24	11.16	11.28	11.88
30	13.70	13.06	14.52	14.42	15.45	15.64	16.97	16.67	15.73	15.79	14.91	13.50	14.30	17.85	21.21	20.52	18.52	17.73	16.52	15.91	17.09	17.00	17.91	17.79	18.27	18.61	17.73	18.09

January 23, 2025 – Feb 24, 2025

Sector	16:00	16:15	16:30	16:45	17:00	17:15	17:30	17:45	18:00	18:15	18:30	18:45	19:00	19:15	19:30	19:45	20:00	20:15	20:30	20:45	21:00	21:15	21:30	21:45	22:00	22:15	22:30	22:45
11	9.63	9.20	9.20	9.37	9.10	11.00	10.55	8.74	8.20	8.97	8.91	9.22	9.28	10.16	12.25	11.16	9.94	9.53	8.53	8.75	9.47	9.09	8.94	10.00	10.32	10.48	10.29	11.26
21	11.00	13.50	10.50	9.33	7.25	8.00	7.33	6.50	7.00	6.50	5.86	8.60	8.25	9.63	10.71	9.29	9.67	8.17	9.00	7.75	10.25	11.50	10.75	11.00	8.20	8.00	7.60	7.40
30	12.38	13.16	13.88	12.84	12.48	12.94	14.06	13.88	12.44	12.31	13.97	13.00	12.84	15.47	18.66	17.91	15.25	13.41	12.94	12.63	12.81	11.69	13.72	15.38	14.97	14.22	15.19	16.03
31	7.08	8.00	8.15	9.80	9.50	7.67	8.46	9.38	9.23	7.85	8.71	8.64	7.06	8.41	10.18	11.06	9.84	9.84	9.58	9.17	9.67	9.22	8.52	9.71	8.50	6.73	7.27	8.70

# Snow-Bird Departure Delays

2022 – March 25, 2025



Airport	2022	2024	% Growth
ATL	724145	796224	10%
BNA	251446	275116	9%
CLT	499037	589530	18%
FLL	286181	307269	7%
MCO	364907	410474	12%
MEM	213418	202347	-5%
MIA	458478	485448	6%
PBI	171855	176111	2%
TPA	212995	230271	8%
Total	3182462	3472790	9%

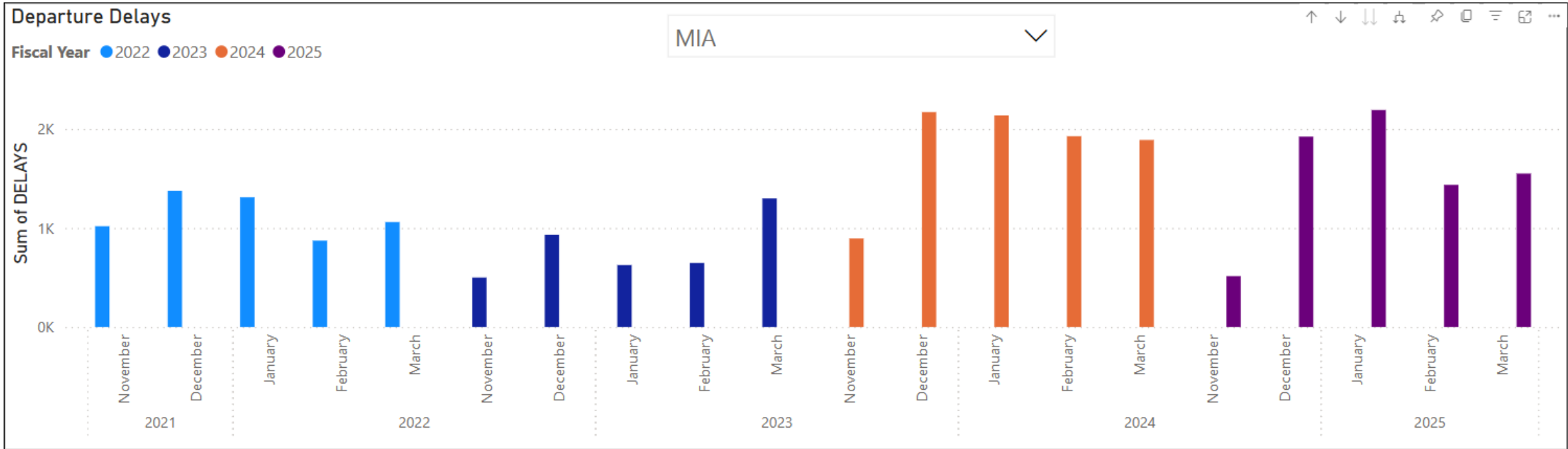
SB 2022	SB 2023	SB 2024	SB 2025
13,584	9,702	17,992	15,641
Total Dept Delays	Total Dept Delays	Total Dept Delays	Total Dept Delays
365,994	267,634	500,160	401,328
Total Minutes Dept Delay	Total Minutes Dept Delay	Total Minutes Dept Delay	Total Minutes Dept Delay
26.94	27.59	27.80	25.66
Avg Minutes	Avg Minutes	Avg Minutes	Avg Minutes

Airport	2022 partial	2025	% Growth
ATL	158,265	176,690	12%
BNA	51,754	57,968	12%
CLT	111,754	130,245	17%
FLL	70,380	78,533	12%
MCO	83,737	100,186	20%
MEM	46,979	38,218	-19%
MIA	113,041	125,130	11%
PBI	51,066	46,539	-9%
TPA	52,910	57,908	9%
Total	739,886	811,417	10%



# MIA Snow-Bird Departure Delays

2022 – March 25, 2025



Airport	2022	2024	% Growth
ATL	724145	796224	10%
BNA	251446	275116	9%
CLT	499037	589530	18%
FLL	286181	307269	7%
MCO	364907	410474	12%
MFM	213418	202347	5%
MIA	458478	485448	6%
PBI	171855	176111	2%
TPA	212995	230271	8%
Total	3182462	3472790	9%

SB 2022	SB 2023	SB 2024	SB 2025
5,636	4,003	9,019	7,615
Total Dept Delays	Total Dept Delays	Total Dept Delays	Total Dept Delays
124,566	96,958	229,966	179,264
Total Minutes Dept Delay	Total Minutes Dept Delay	Total Minutes Dept Delay	Total Minutes Dept Delay
22.10	24.22	25.50	23.54
Avg Minutes	Avg Minutes	Avg Minutes	Avg Minutes

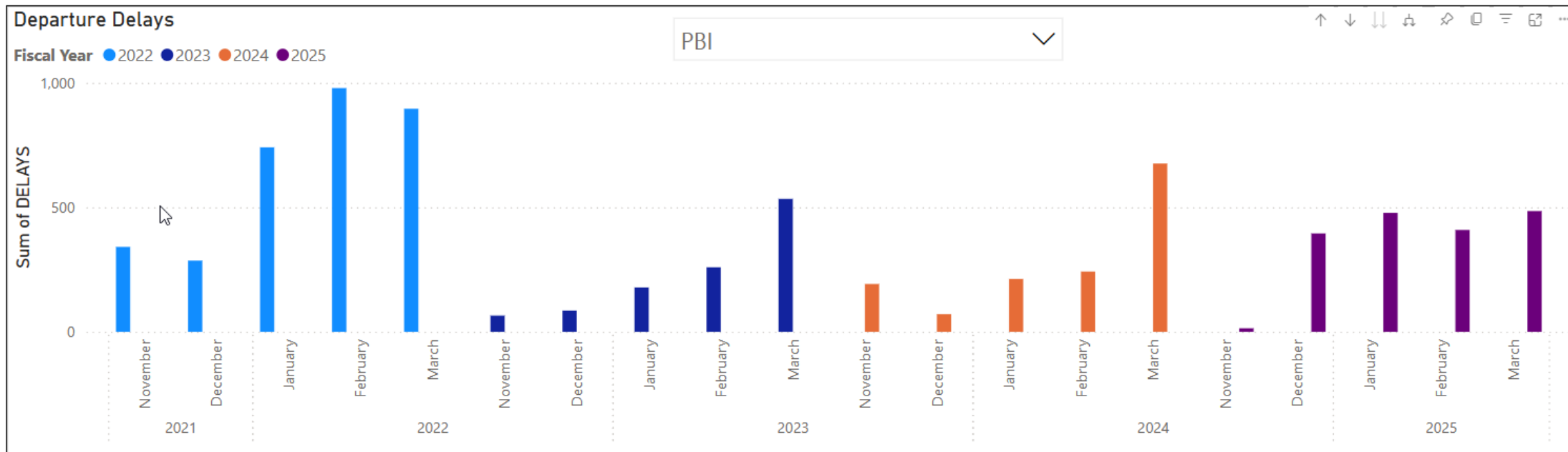
Airport	2022 partial	2025	% Growth
ATL	158,265	176,690	12%
BNA	51,754	57,968	12%
CLT	111,754	130,245	17%
FLL	70,380	78,533	12%
MCO	83,737	100,186	20%
MFM	46,970	38,218	-10%
MIA	113,041	125,130	11%
PBI	51,066	46,539	-9%
TPA	52,910	57,908	9%
Total	739,886	811,417	10%





# PBI Snow-Bird Departure Delays

2022 – March 25, 2025



Airport	2022	2024	% Growth
ATL	724145	796224	10%
BNA	251446	275116	9%
CLT	499037	589530	18%
FLL	286181	307269	7%
MCO	364907	410474	12%
MEM	213418	202347	-5%
MIA	458478	485448	6%
PBI	171855	176111	2%
TPA	212995	230271	8%
Total	3182462	3472790	9%

## SB 2022

3,243  
Total Dept Delays

102,481  
Total Minutes Dept Delay

31.60  
Avg Minutes

## SB 2023

1,121  
Total Dept Delays

36,811  
Total Minutes Dept Delay

32.84  
Avg Minutes

## SB 2024

1,393  
Total Dept Delays

50,525  
Total Minutes Dept Delay

36.27  
Avg Minutes

## SB 2025

1,781  
Total Dept Delays

47,859  
Total Minutes Dept Delay

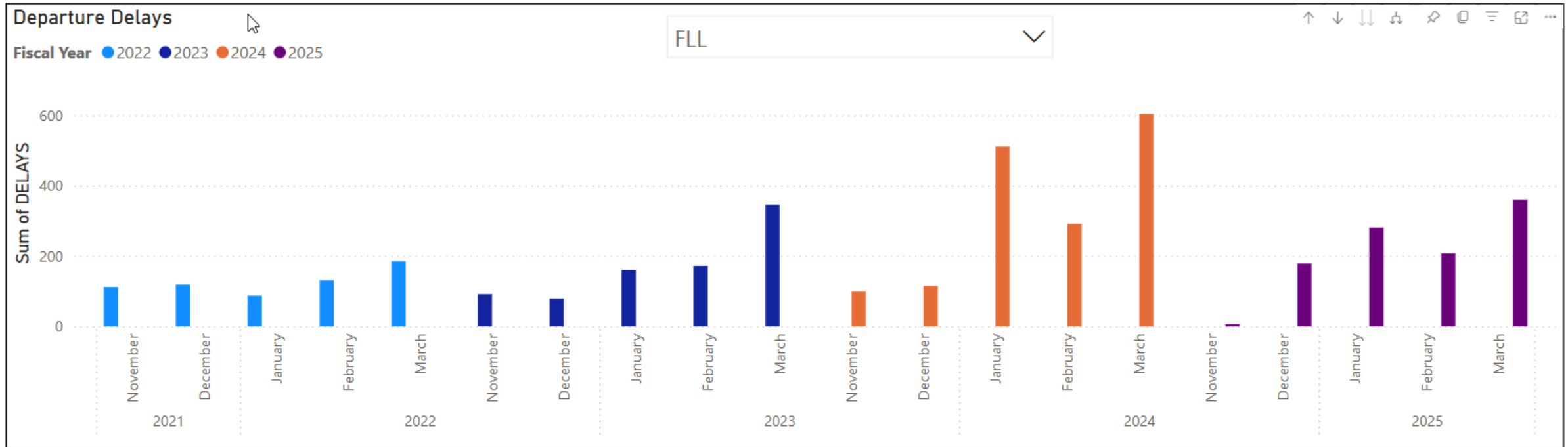
26.87  
Avg Minutes

Airport	2022 partial	2025	% Growth
ATL	158,265	176,690	12%
BNA	51,754	57,968	12%
CLT	111,754	130,245	17%
FLL	70,380	78,533	12%
MCO	83,737	100,186	20%
MEM	46,979	38,218	-19%
MIA	113,041	125,130	11%
PBI	51,066	46,539	-9%
TPA	52,910	57,908	9%
Total	739,886	811,417	10%



# FLL Snow-Bird Departure Delays

2022 – March 25, 2025



Airport	2022	2024	% Growth
ATL	724145	796224	10%
BNA	251446	275116	9%
CIT	499037	589530	18%
FLL	286181	307269	7%
MCO	364307	410474	12%
MEM	213418	202347	-5%
MIA	458478	485448	6%
PBI	171855	176111	2%
TPA	212995	230271	8%
Total	3182462	3472790	9%

**SB 2022**

633  
Total Dept Delays

17,208  
Total Minutes Dept Delay

27.18  
Avg Minutes

**SB 2023**

845  
Total Dept Delays

27,009  
Total Minutes Dept Delay

31.96  
Avg Minutes

**SB 2024**

1,620  
Total Dept Delays

47,108  
Total Minutes Dept Delay

29.08  
Avg Minutes

**SB 2025**

1,032  
Total Dept Delays

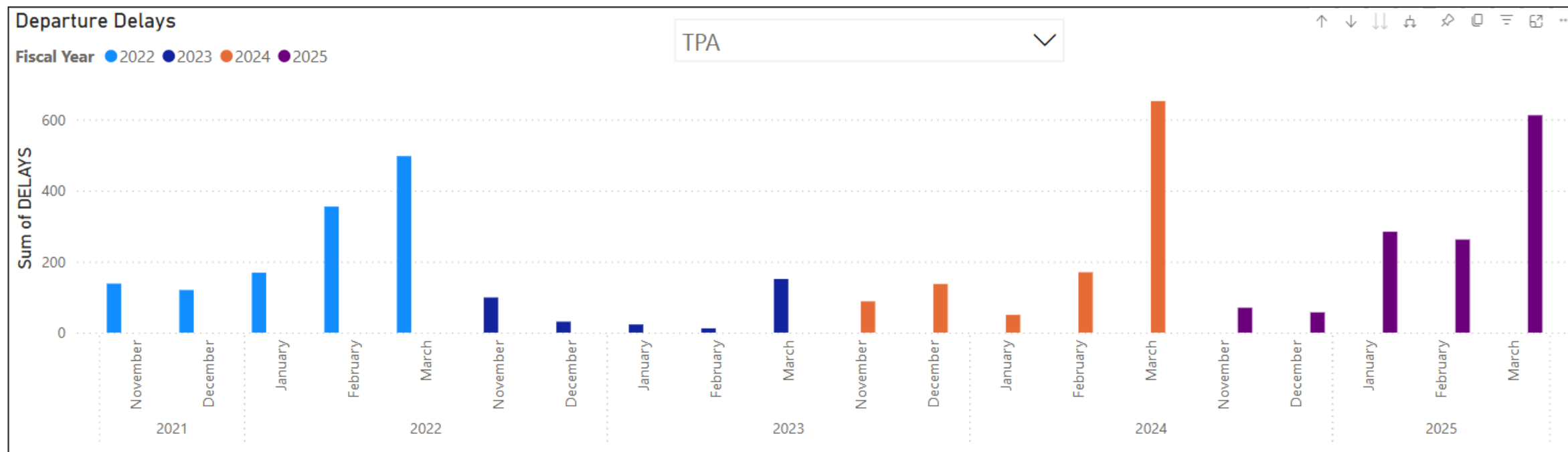
28,147  
Total Minutes Dept Delay

27.27  
Avg Minutes

Airport	2022 partial	2025	% Growth
ATL	158,265	176,690	12%
BNA	51,754	57,968	12%
CIT	111,754	130,245	17%
FLL	70,380	78,533	12%
MCO	85,737	100,188	20%
MEM	46,979	38,218	-19%
MIA	113,041	125,130	11%
PBI	51,066	46,539	-9%
TPA	52,910	57,908	9%
Total	739,886	811,417	10%

# TPA Snow-Bird Departure Delays

2022 – March 25, 2025



Airport	2022	2024	% Growth
ATL	724145	796224	10%
BNA	251446	275116	9%
CLT	499037	589530	18%
FLL	286181	307269	7%
MCO	364907	410474	12%
MEM	213418	202347	-5%
MIA	458478	485448	6%
PRI	171855	176111	3%
TPA	212995	230271	8%
Total	3182462	3472790	9%

## SB 2022

1,279  
Total Dept Delays

42,653  
Total Minutes Dept Delay

33.35  
Avg Minutes

## SB 2023

316  
Total Dept Delays

9,620  
Total Minutes Dept Delay

30.44  
Avg Minutes

## SB 2024

1,097  
Total Dept Delays

34,296  
Total Minutes Dept Delay

31.26  
Avg Minutes

## SB 2025

1,285  
Total Dept Delays

41,355  
Total Minutes Dept Delay

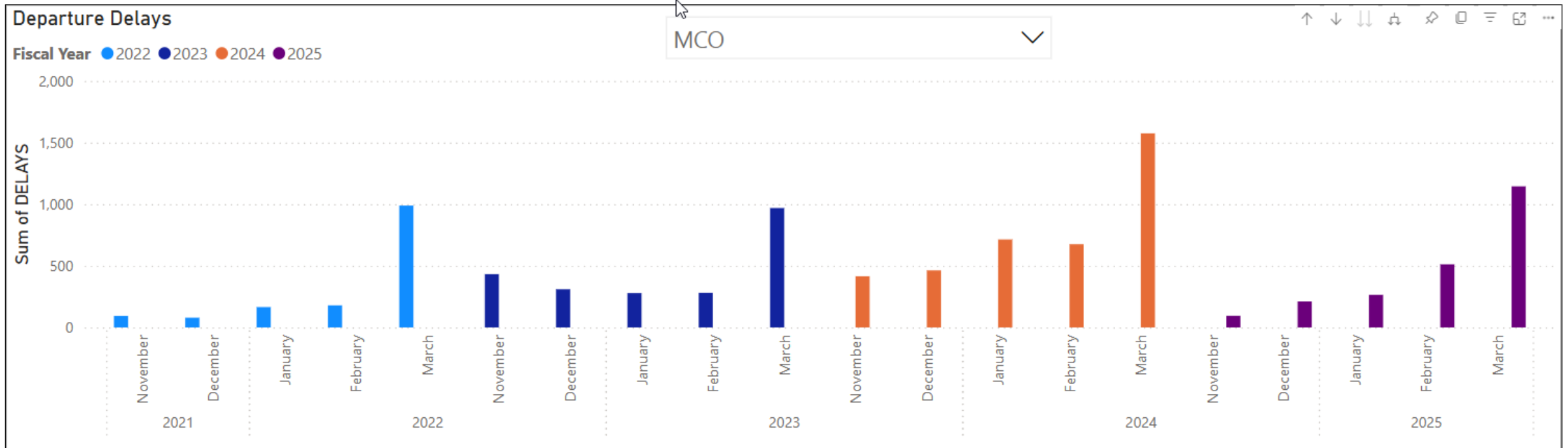
32.18  
Avg Minutes

Airport	2022 partial	2025	% Growth
ATL	158,265	176,690	12%
BNA	51,754	57,968	12%
CLT	111,754	130,245	17%
FLL	70,380	78,533	12%
MCO	83,737	100,186	20%
MEM	46,979	38,218	-19%
MIA	113,041	125,130	11%
PRI	51,066	46,539	-9%
TPA	52,910	57,908	9%
Total	739,886	811,417	10%



# MCO Snow-Bird Departure Delays

2022 – March 25, 2025



Airport	2022	2024	% Growth
ATL	724145	796224	10%
BNA	251446	275116	9%
CLT	499037	589530	18%
FLI	286181	307269	7%
MCO	364907	410474	12%
MEM	213418	202347	-5%
MIA	458478	485448	6%
PBI	171855	176111	2%
TPA	212995	230271	8%
Total	3182462	3472790	9%

## SB 2022

1,505  
Total Dept Delays

46,214  
Total Minutes Dept Delay

30.71  
Avg Minutes

## SB 2023

2,269  
Total Dept Delays

66,641  
Total Minutes Dept Delay

29.37  
Avg Minutes

## SB 2024

3,842  
Total Dept Delays

112,357  
Total Minutes Dept Delay

29.24  
Avg Minutes

## SB 2025

2,226  
Total Dept Delays

68,182  
Total Minutes Dept Delay

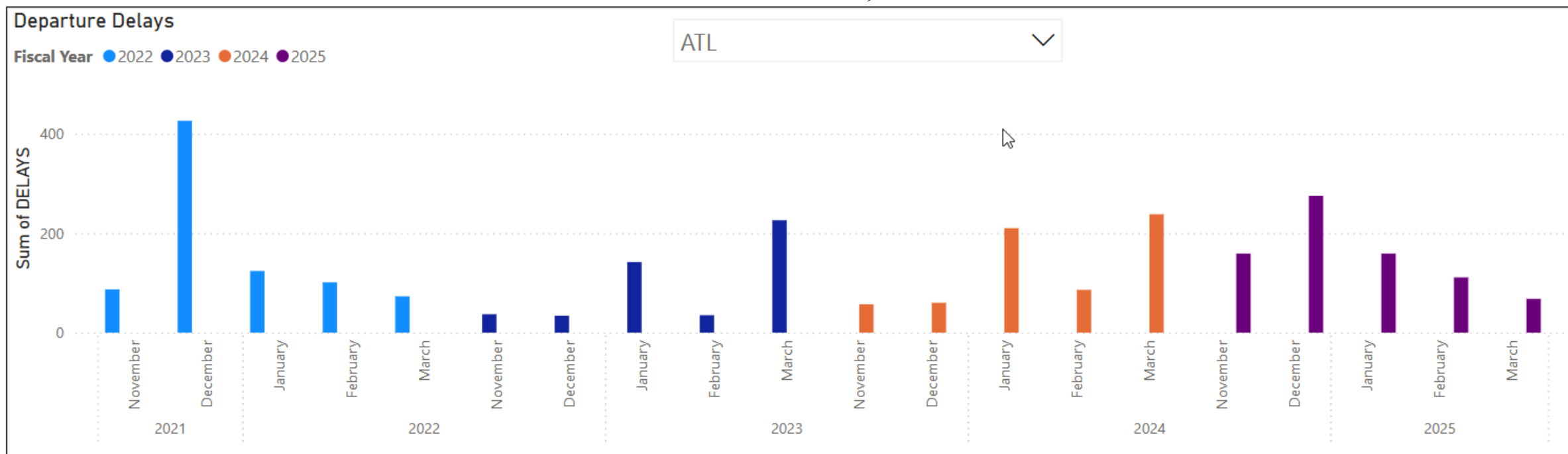
30.63  
Avg Minutes

Airport	2022 partial	2025	% Growth
ATL	158,265	176,690	12%
BNA	51,754	57,968	12%
CLT	111,754	130,245	17%
FLI	70,380	78,533	12%
MCO	83,737	100,186	20%
MEM	46,979	38,218	-19%
MIA	113,041	125,130	11%
PBI	51,066	46,539	-9%
TPA	52,910	57,908	9%
Total	739,886	811,417	10%



# ATL Snow-Bird Departure Delays

2022 – March 25, 2025



Airport	2022	2024	% Growth
ATL	724145	796224	10%
BNA	251446	275116	9%
CLT	499037	589530	18%
FLL	286181	307269	7%
MCO	364907	410474	12%
MEM	213418	202347	-5%
MIA	458478	485448	6%
PBI	171855	176111	2%
TPA	212995	230271	8%
Total	3182462	3472790	9%

**SB 2022**

811  
Total Dept Delays

22,804  
Total Minutes Dept Delay

28.12  
Avg Minutes

**SB 2023**

474  
Total Dept Delays

13,670  
Total Minutes Dept Delay

28.84  
Avg Minutes

**SB 2024**

651  
Total Dept Delays

17,718  
Total Minutes Dept Delay

27.22  
Avg Minutes

**SB 2025**

772  
Total Dept Delays

16,327  
Total Minutes Dept Delay

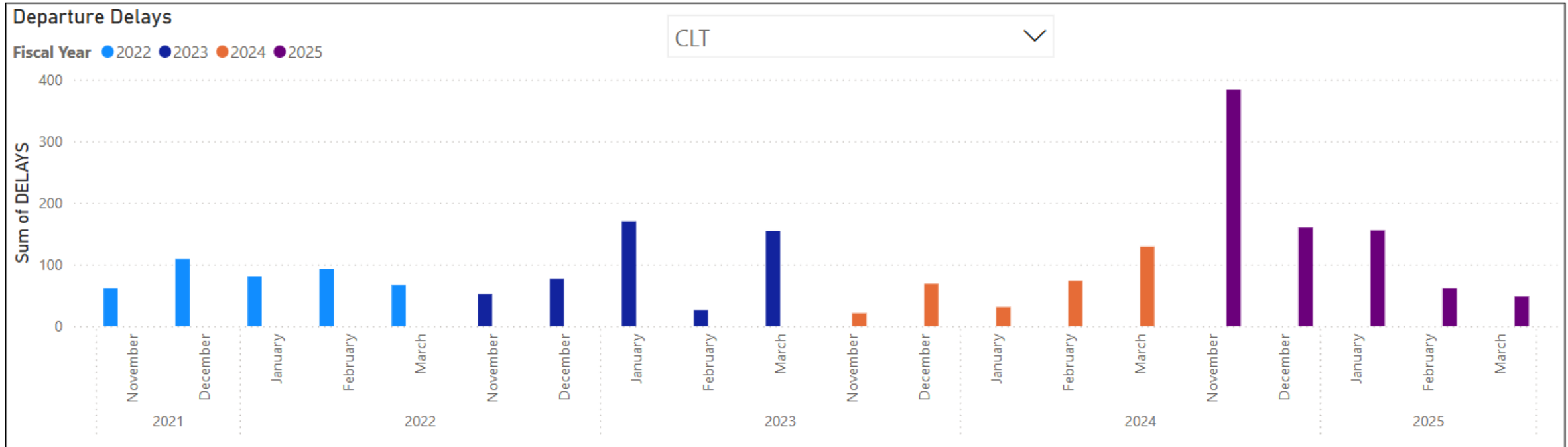
21.15  
Avg Minutes

Airport	2022 partial	2025	% Growth
ATL	158,265	176,690	12%
BNA	51,754	57,968	12%
CLT	111,754	130,245	17%
FLL	70,380	78,533	12%
MCO	83,737	100,186	20%
MEM	46,979	38,218	-19%
MIA	113,041	125,130	11%
PBI	51,066	46,539	-9%
TPA	52,910	57,908	9%
Total	739,886	811,417	10%



# CLT Snow-Bird Departure Delays

2022 – March 25, 2025



Airport	2022	2024	% Growth
ATL	724145	796224	10%
BNA	751116	775116	9%
CLT	499037	589530	18%
FLL	286181	307269	7%
MCO	364907	410474	12%
MEM	213418	202347	-5%
MIA	458478	485448	6%
PBI	171855	176111	2%
TPA	212995	230271	8%
Total	3182462	3472790	9%

## SB 2022

411  
Total Dept Delays

8,113  
Total Minutes Dept Delay

19.74  
Avg Minutes

## SB 2023

479  
Total Dept Delays

10,952  
Total Minutes Dept Delay

22.86  
Avg Minutes

## SB 2024

324  
Total Dept Delays

6,506  
Total Minutes Dept Delay

20.08  
Avg Minutes

## SB 2025

808  
Total Dept Delays

16,694  
Total Minutes Dept Delay

20.66  
Avg Minutes

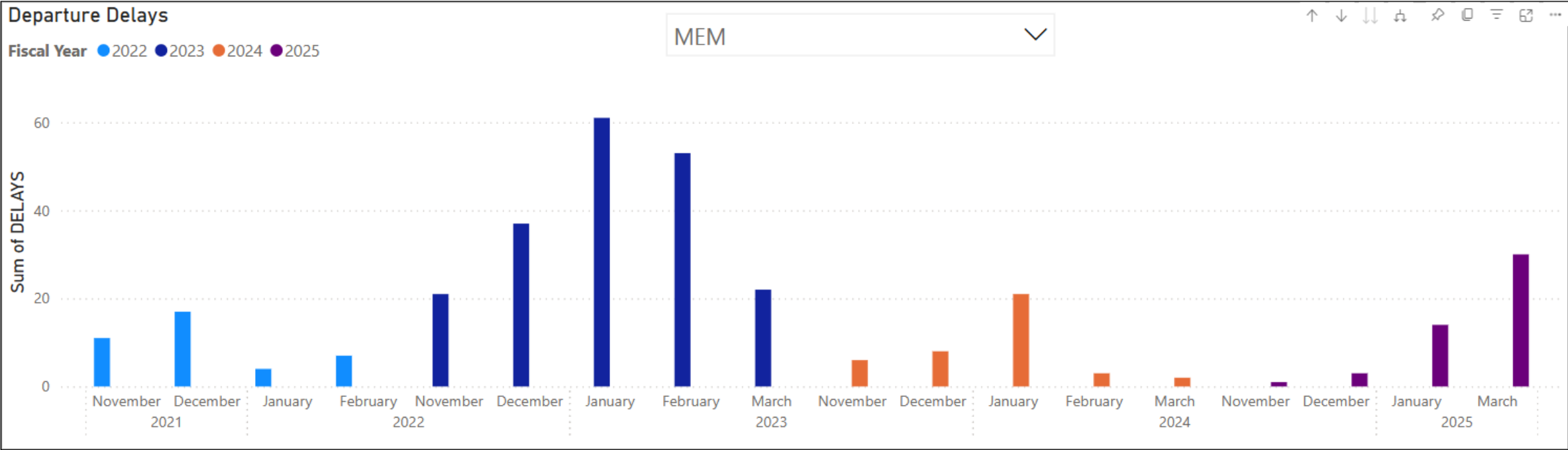
Airport	2022 partial	2025	% Growth
ATL	158,265	176,690	12%
BNA	51,754	57,069	12%
CLT	111,754	130,245	17%
FLL	70,380	78,533	12%
MCO	83,737	100,186	20%
MEM	46,979	38,218	-19%
MIA	113,041	125,130	11%
PBI	51,066	46,539	-9%
TPA	52,910	57,908	9%
Total	739,886	811,417	10%





# MEM Snow-Bird Departure Delays

2022 – March 25, 2025



Airport	2022	2024	% Growth
ATL	724145	796224	10%
BNA	251446	275116	9%
CLT	499037	589530	18%
FLL	286181	307269	7%
MCO	364907	410474	12%
MEM	213418	202347	-5%
MIA	458478	485448	6%
PBI	171855	176111	2%
TPA	212995	230271	8%
Total	3182462	3472790	9%

SB 2022	SB 2023	SB 2024	SB 2025
39	194	40	48
Total Dept Delays	Total Dept Delays	Total Dept Delays	Total Dept Delays
1,264	5,917	1,485	1,622
Total Minutes Dept Delay	Total Minutes Dept Delay	Total Minutes Dept Delay	Total Minutes Dept Delay
32.41	30.50	37.13	33.79
Avg Minutes	Avg Minutes	Avg Minutes	Avg Minutes

Airport	2022 partial	2025	% Growth
ATL	158,265	176,690	12%
BNA	51,754	57,968	12%
CLT	111,754	130,245	17%
FLL	70,380	78,533	12%
MCO	83,737	100,186	20%
MEM	46,979	38,218	-19%
MIA	113,041	125,130	11%
PBI	51,066	46,539	-9%
TPA	52,910	57,908	9%
Total	739,886	811,417	10%



# Questions

