

**Massachusetts Port Authority  
Board Meeting**

June 15, 2023



Public Comment

## Chairman's Comments

Strategic Plan

MASSACHUSETTS PORT AUTHORITY



Massport Board of Directors  
State of Aviation Industry Update

---

MASSACHUSETTS PORT AUTHORITY

June 2023  
Massport

steer

# Today's Agenda

---

The Aviation  
Industry in  
June 2023

1

Massport  
Aviation in  
Perspective

2

Challenges and  
Choices

3

Discussion

4

The Aviation  
Industry in  
June 2023

1

Massport  
Aviation in  
Perspective

2

Challenges and  
Choices

3

Discussion

4

MASSACHUSETTS PORT AUTHORITY

# Aviation Industry May 2023 SWOT

## Strengths

- U.S.'s global competitive position
- Domestic aviation traffic recovery
- High-end general aviation surge
- Commercial airlines' profitability

## Weaknesses

- Project cost inflation
- Interest rates
- Small community air service
- Labor markets, including pilots

## Opportunities

- International aviation traffic recovery
- FAA Reauthorization 2023-2024
- e-VTOLs/AAM, low emission aircraft
- Energy investments

## Threats

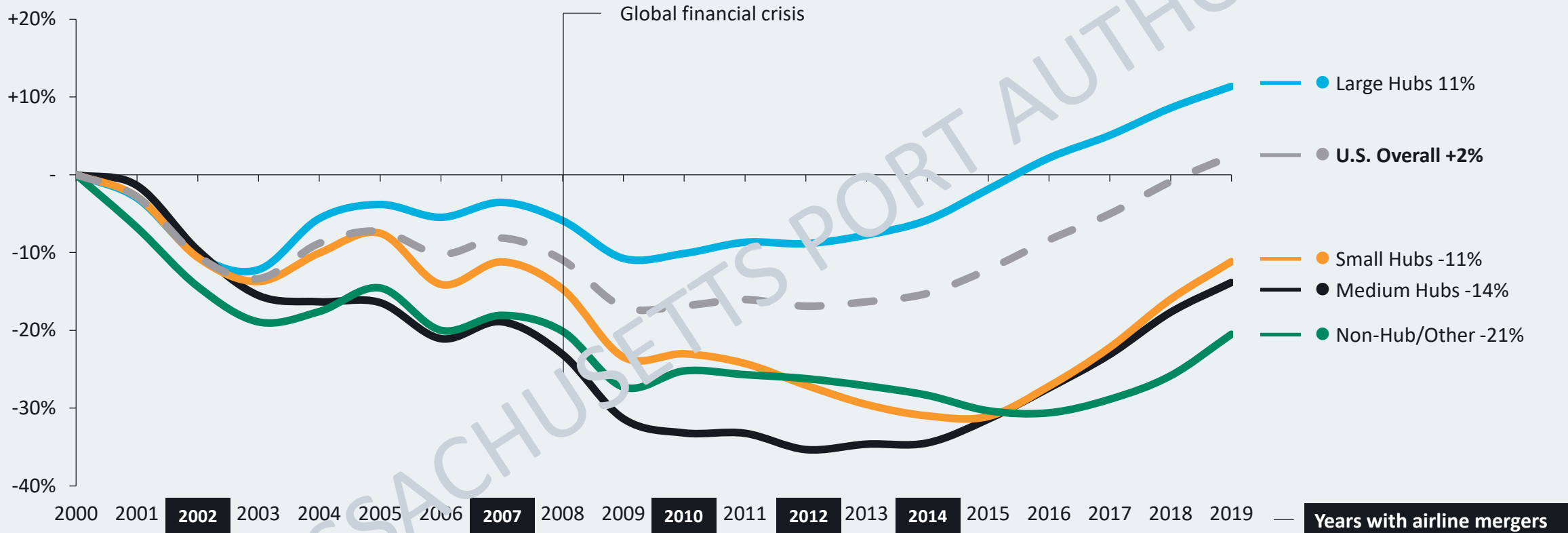
- Service and operational "tripwires"
- Policymaker divisions and gridlock
- Climate footprint of aviation
- Economic recession

# Since 2000, through to the pandemic, large hubs grew faster than other hubs

## Departing Seat Capacity Growth of U.S. Hubs<sup>1</sup> 2000-2019

% Year-Over-2000 Change

% 2019-Over-2000 Change

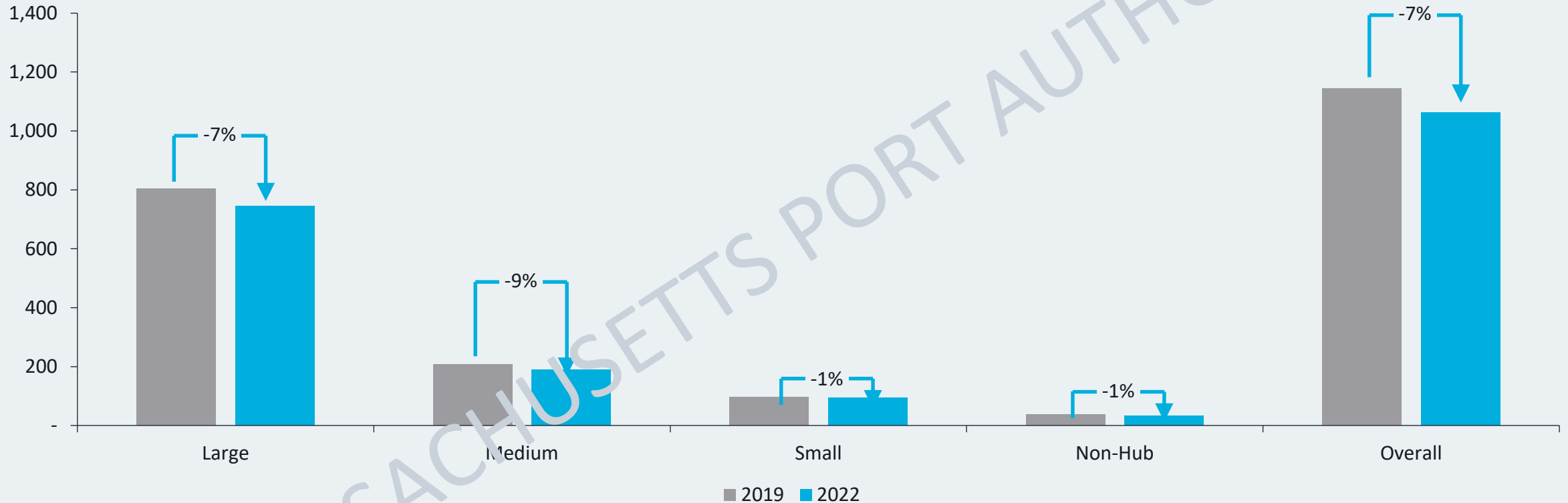


<sup>1</sup> Based on U.S. Federal Aviation Administration 2019 definitions and classifications.  
Source: Official Airline Guide data, U.S. Federal Aviation Administration data, Steer analysis

# Slower recovery in large and medium hubs delayed full U.S. capacity recovery

## Departing Seat Capacity of U.S. Hubs<sup>1</sup> 2019 vs. 2022

Million Departing Seats

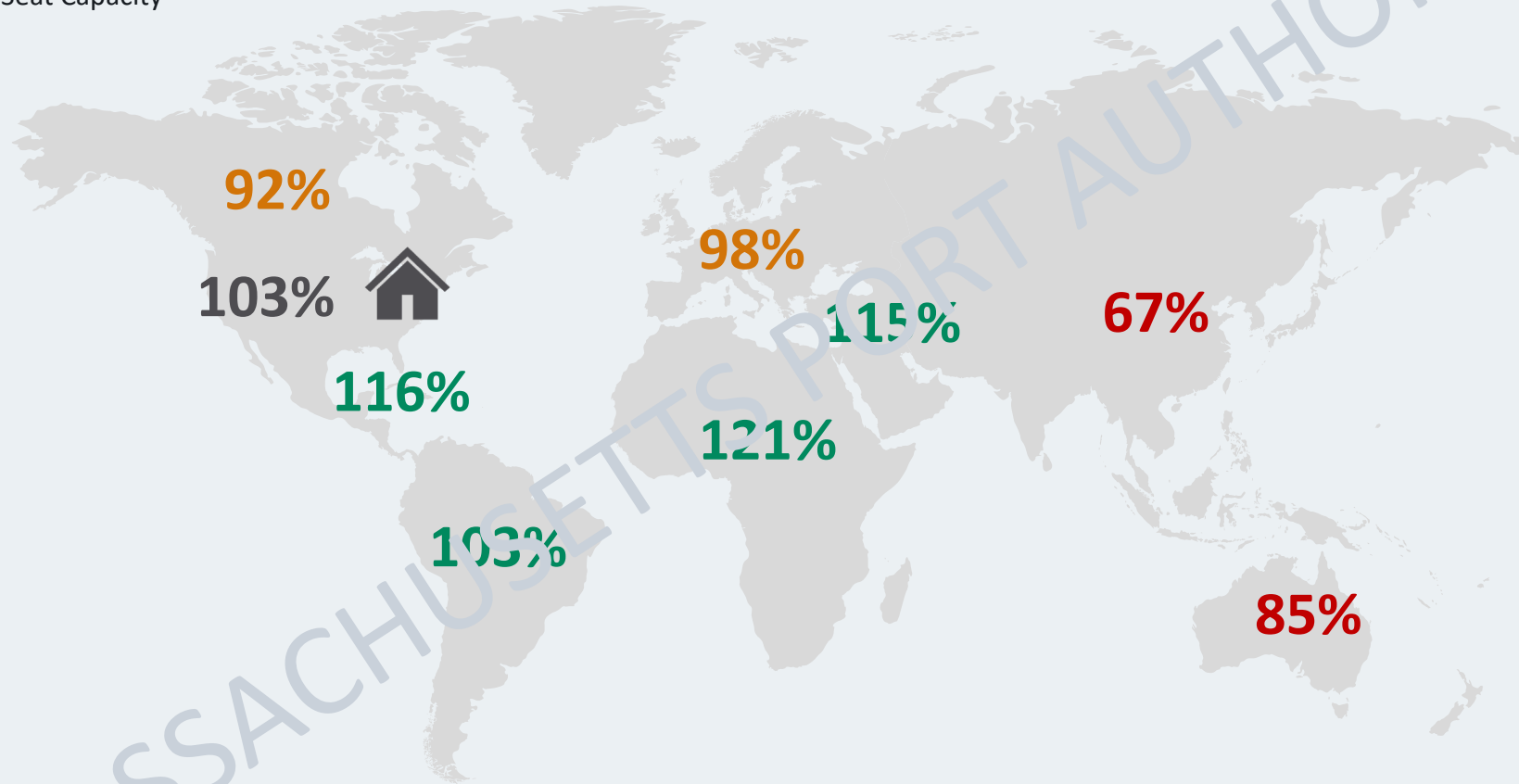


<sup>1</sup> Based on U.S. Federal Aviation Administration 2019 definitions and classifications.  
Source: Official Airline Guide data, U.S. Federal Aviation Administration data, Steer analysis

# Europe and Canada seat capacity are nearing 2019 levels, but Asia-Pacific still lags

Departing Seats from the U.S. to Other World Regions August 2023 vs. August 2019<sup>1</sup>

% August 2019 Departing Seat Capacity

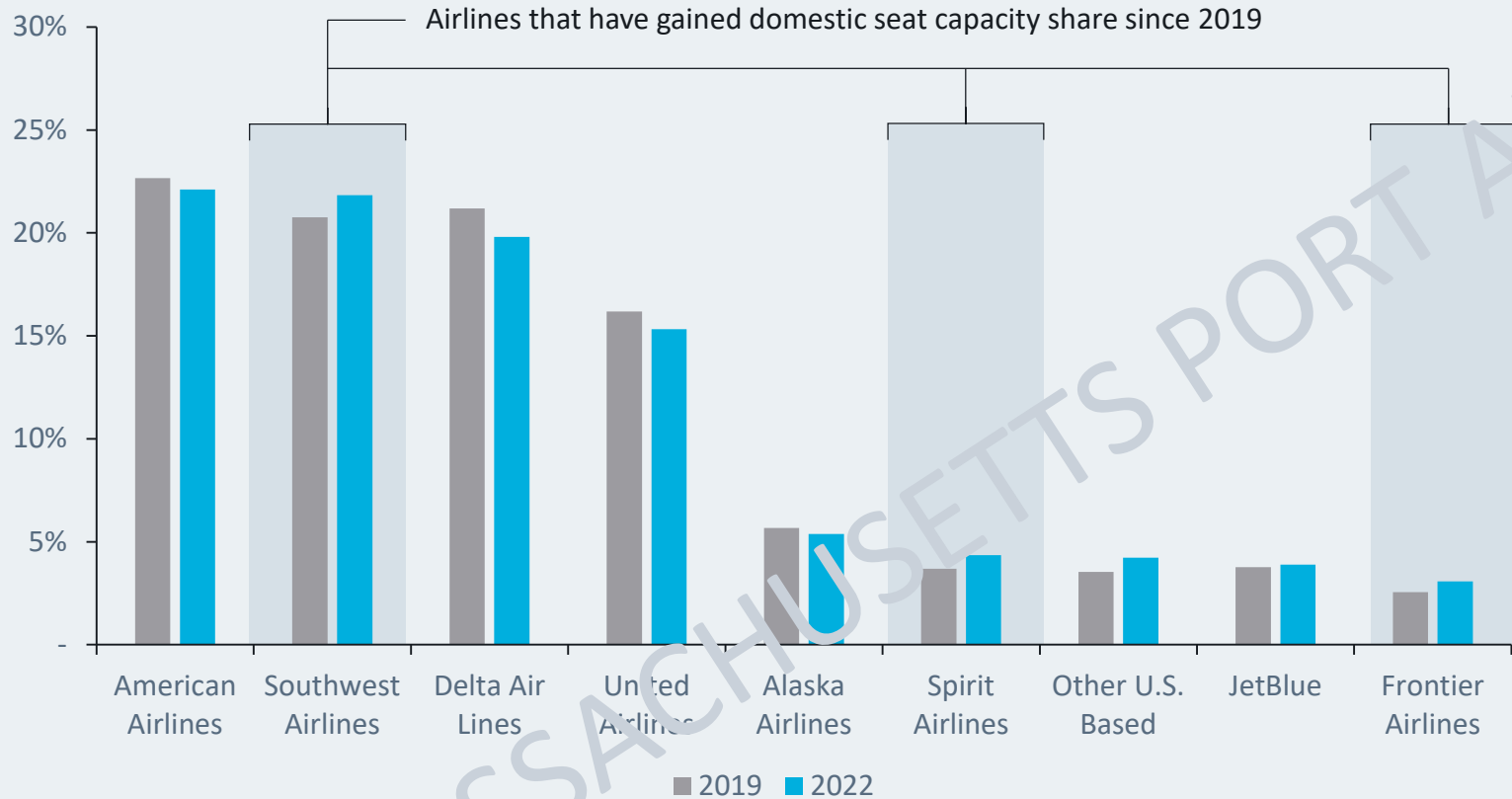


<sup>1</sup> Forecast includes forward scheduled capacities and may be subject to further changes  
Source: Official Airline Guide data, Steer analysis

# Southwest is now second in domestic seat share, overtaking Delta

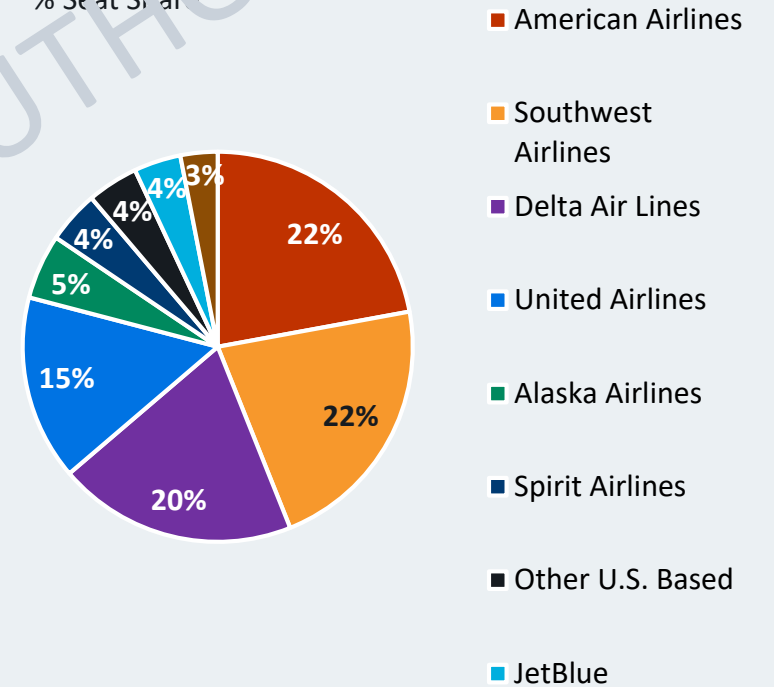
U.S. Airlines Industrywide Domestic Seat Share by Airline, 2019 vs. 2022

% Seat Share



U.S. Industry Domestic Seat Share by Airline, 2022

% Seat Share

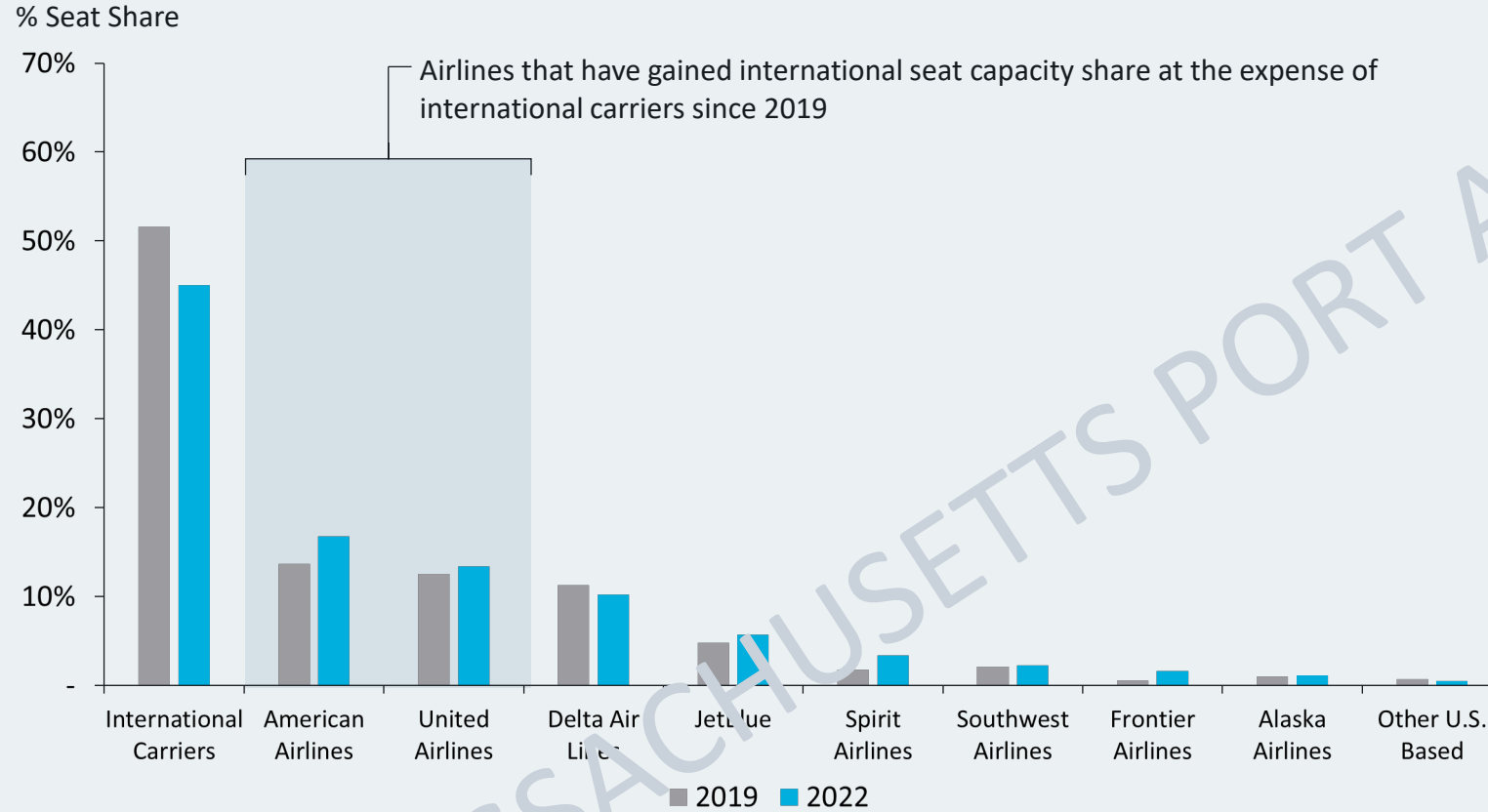


Source: Official Airline Guide data, Steer analysis

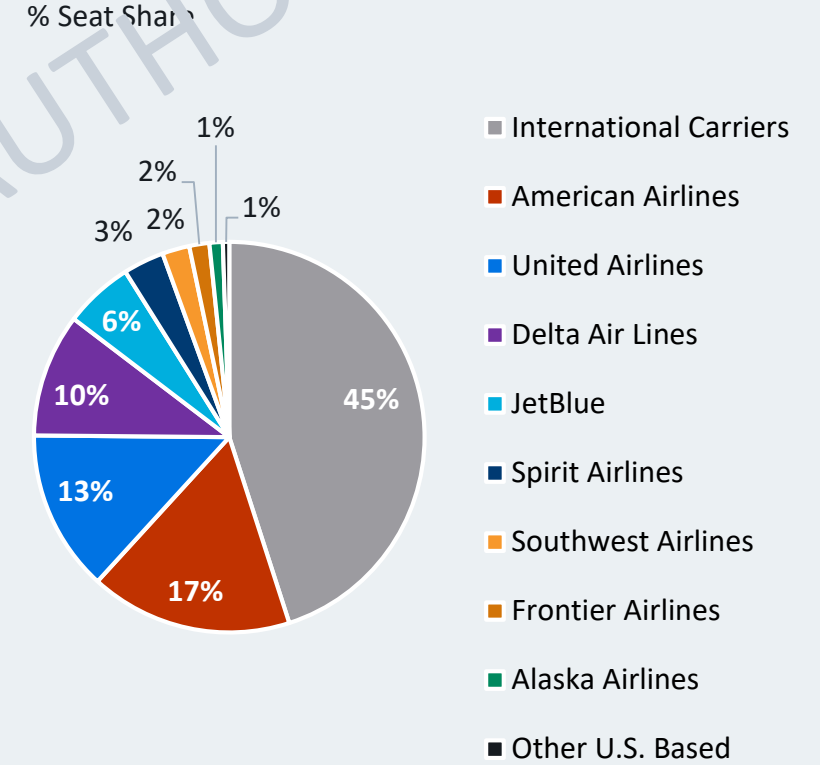


# U.S. air carriers gained international seat share during the pandemic

U.S. to International Seat Share by Airline, Industrywide 2019 vs. 2022



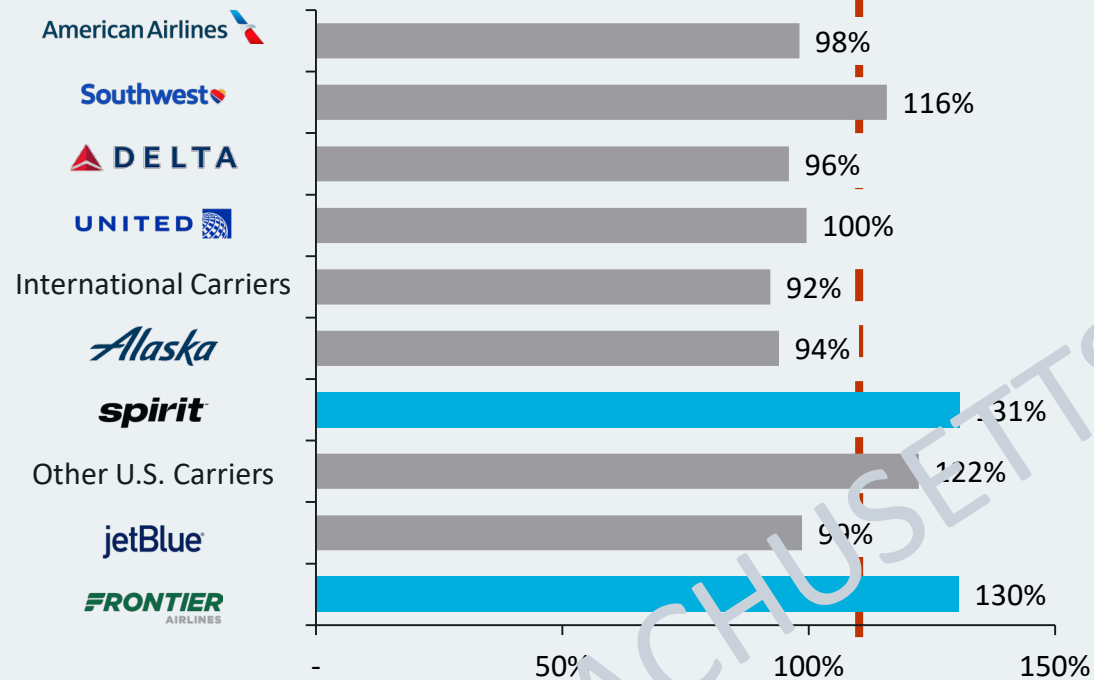
U.S. Industry International Seat Share by Airline, 2022



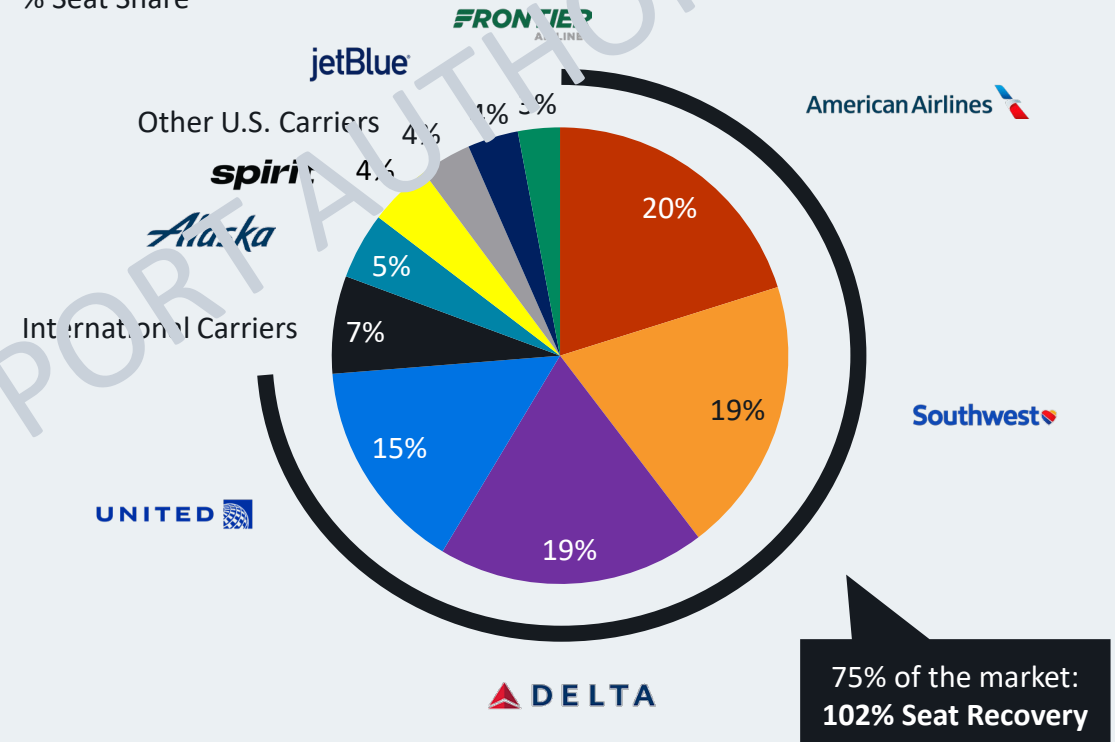
Source: Official Airline Guide data, Steer analysis

# Recovery patterns and increase in leisure travel have driven changes in networks

U.S. industry Departing Seats by Airline Recovery August 2023<sup>1</sup> vs. August 2019  
% Monthly 2019 Seat Capacity



U.S. Industry Departing Seat Share August 2023  
% Seat Share

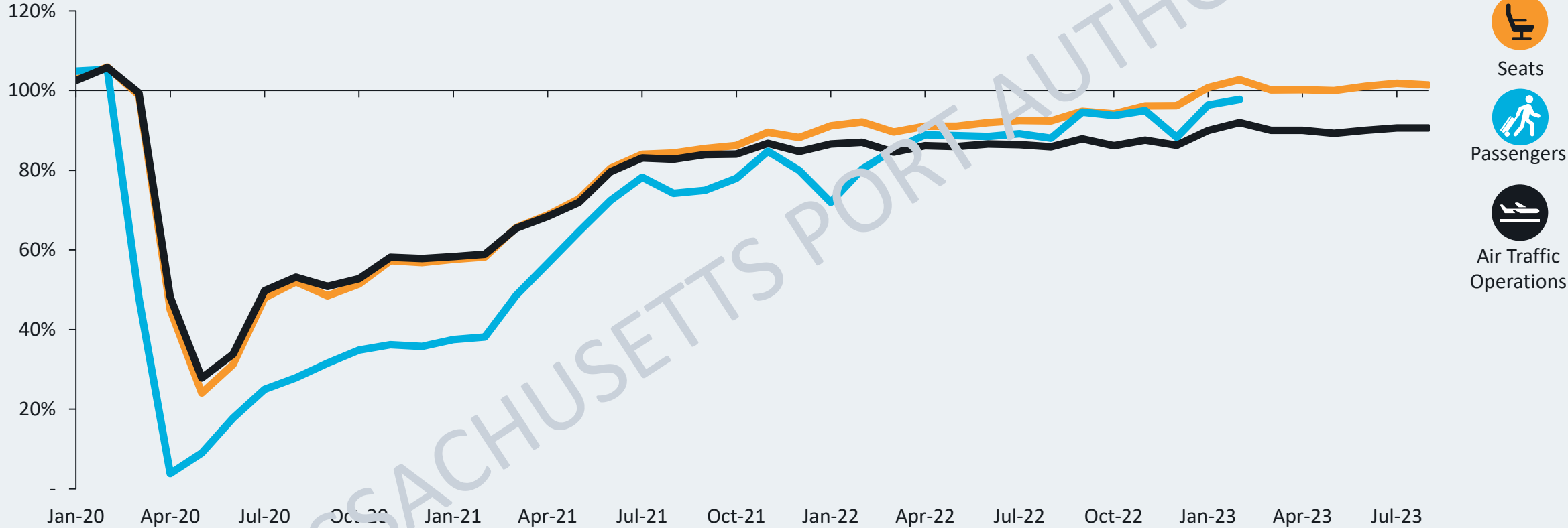


<sup>1</sup> Forecast includes forward scheduled capacities and may be subject to further changes.  
Note: Logos are trademarks of the respective owners.  
Source: Official Airline Guide data, Steer analysis

# Passengers and seat capacities are now better aligned

## U.S. Industry Departing Seats and Passengers January 2020-August 2023

% Monthly 2019 Figures



Source: Official Airline Guide data, U.S. Department of Transportation T-100 data, Steer analysis

The Aviation  
Industry in  
June 2023

1

Massport  
Aviation in  
Perspective

2

Challenges and  
Choices

3

Discussion

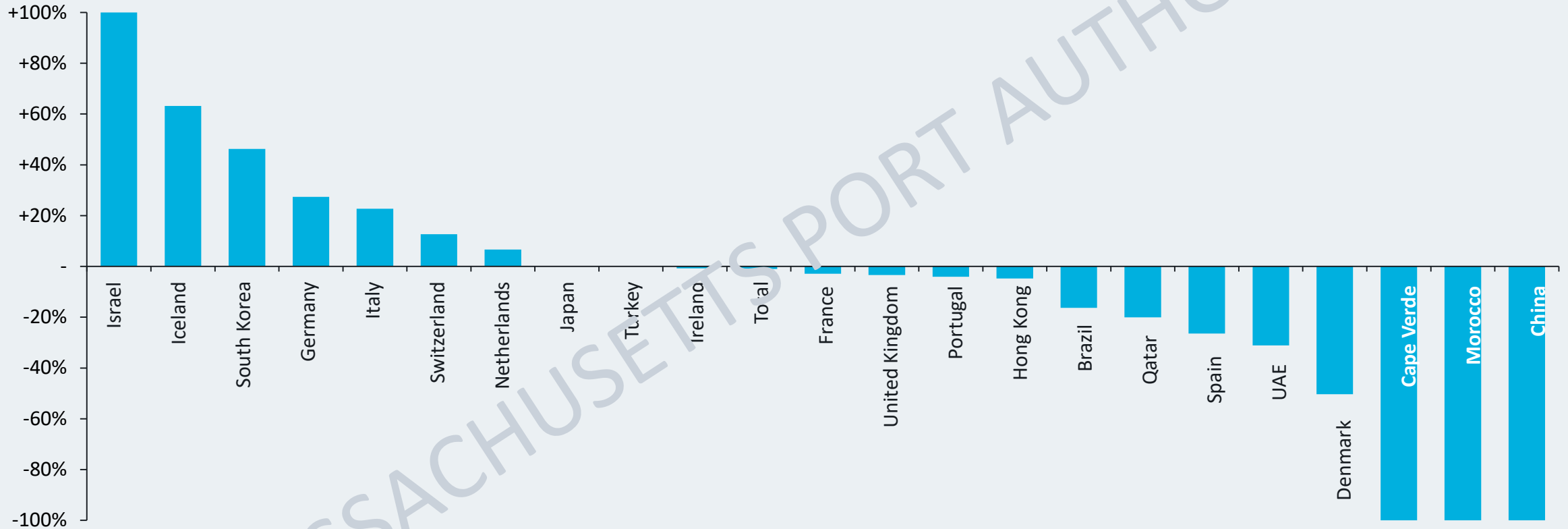
4

MASSACHUSETTS PORT AUTHORITY

# Overall BOS international seats slightly down, impacted by slow China recovery

Departing Seat Change from BOS to World Countries<sup>1</sup> – Long haul, August 2019 vs August 2023

August 2023 % of August 2019















<sup>1</sup>Greece and Colombia are new destinations that are not shown  
Source: Official Airline Guide data, Steer analysis

# New England regional airports are recovering seats faster than operations (except Providence)

## Regional Commercial Aircraft Seats and Operations 2019 vs. 2022

% CY 2019

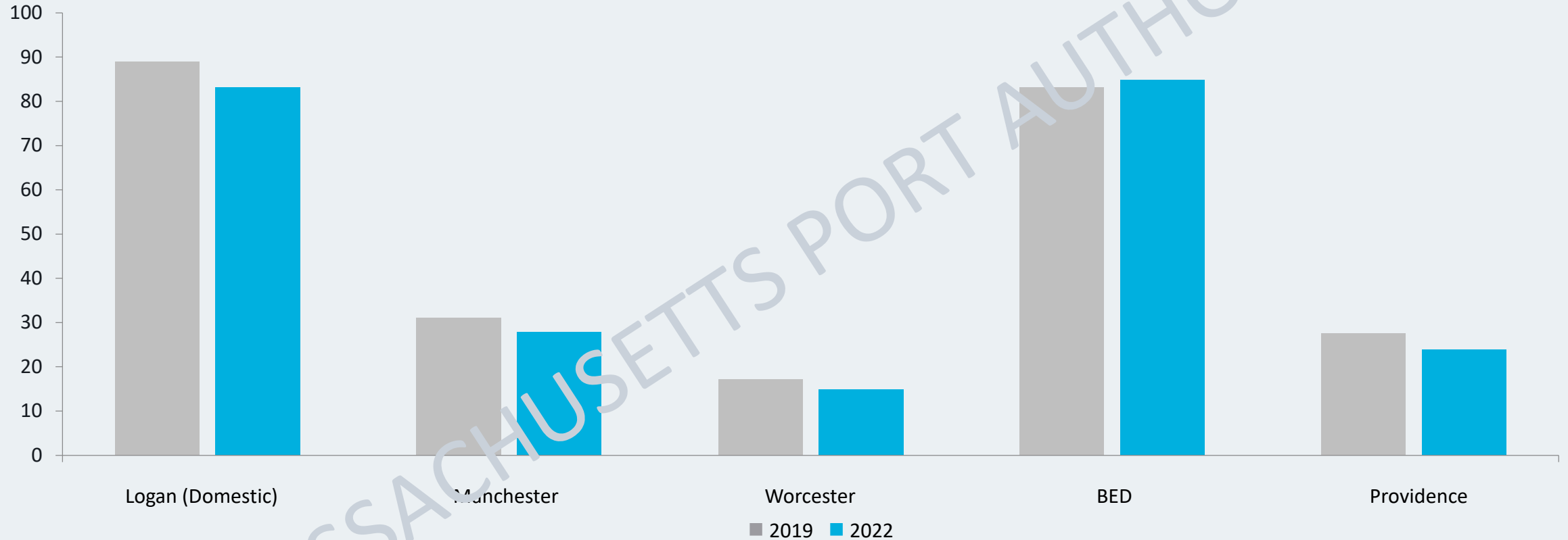
Airport	Aircraft Operations	Seats	Passengers
Logan Domestic	 92%	 93%	 87%
Manchester	 67%	 79%	 76%
Worcester	 78%	 118%	 111%
Providence	 86%	 85%	 79%

Source: Manchester-Boston Regional Airport, Worcester Regional Airport, Rhode Island T.F. Green International Airport, OAG, Steer analysis

# Non-Commercial operations at regional airports on their way to recovery

## Boston Regional Non-Commercial Aircraft Operations (GA + Air Taxi) 2019 vs. 2022

Thousand Operations

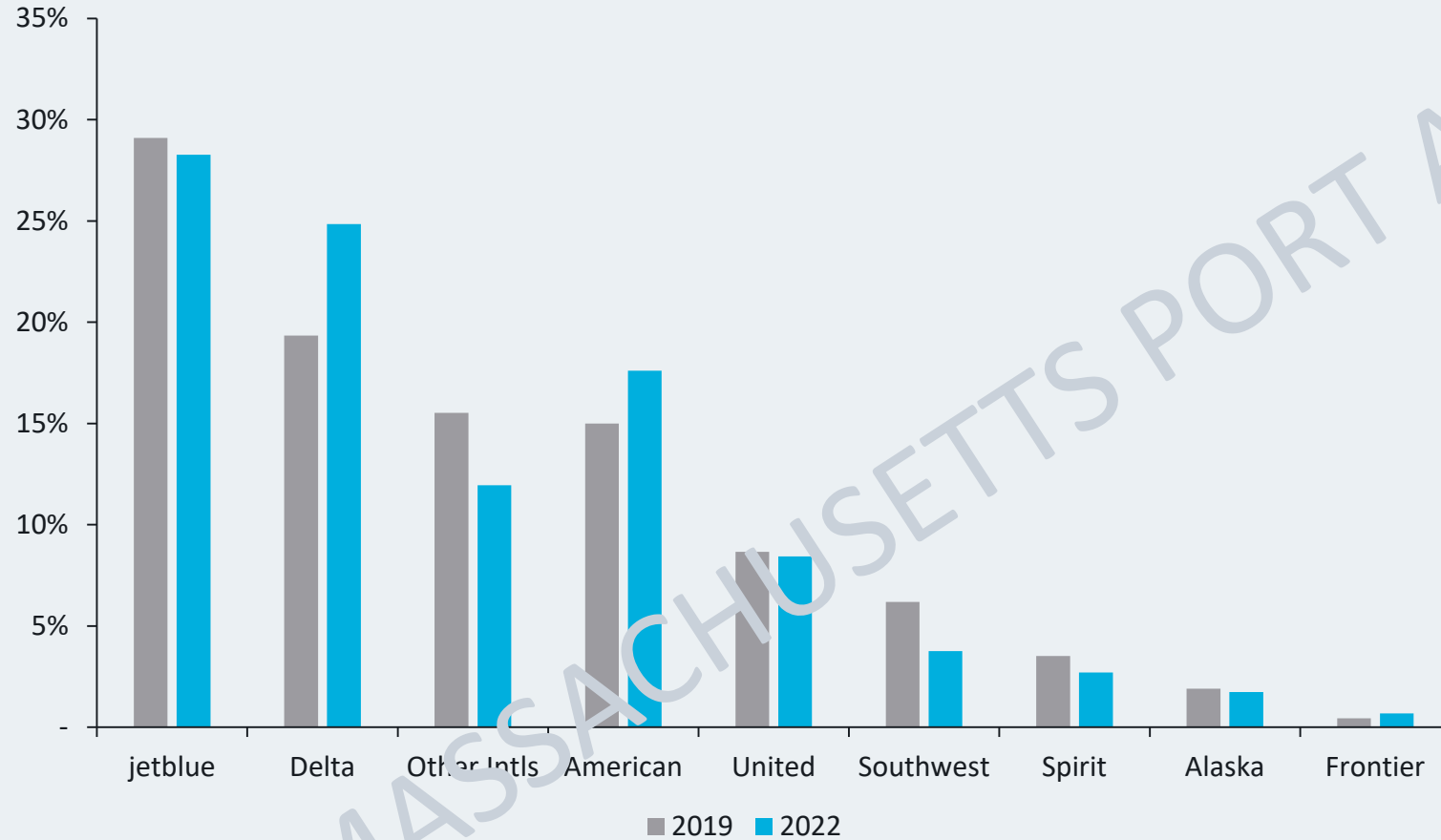


Source: Air Traffic Activity System (ATADS) and Steer Analysis, includes general aviation and air taxi (excludes local, air carrier or military)

# Delta gaining the most market share at Boston Logan

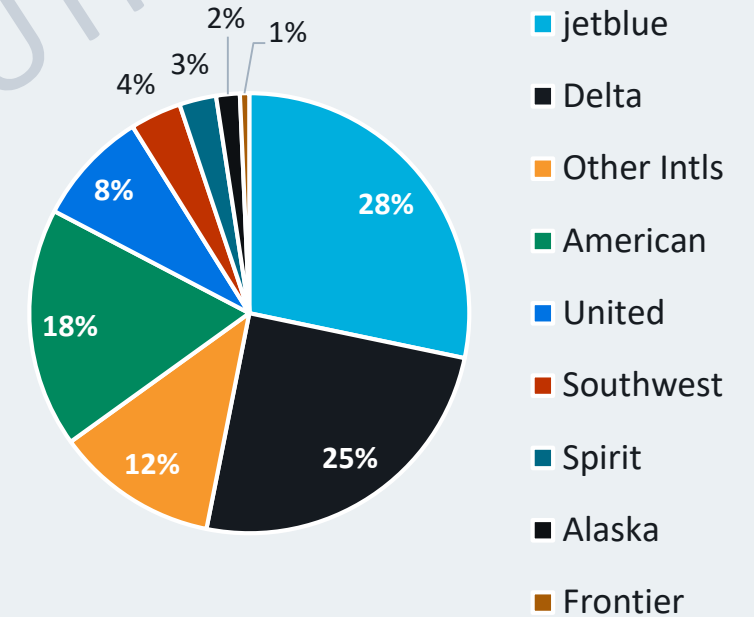
Seat Share by Airline, 2019 vs. 2022

% Seat Share



Seat Share by Airline, 2022

% Seat Share



Source: Official Airline Guide data, Steer analysis



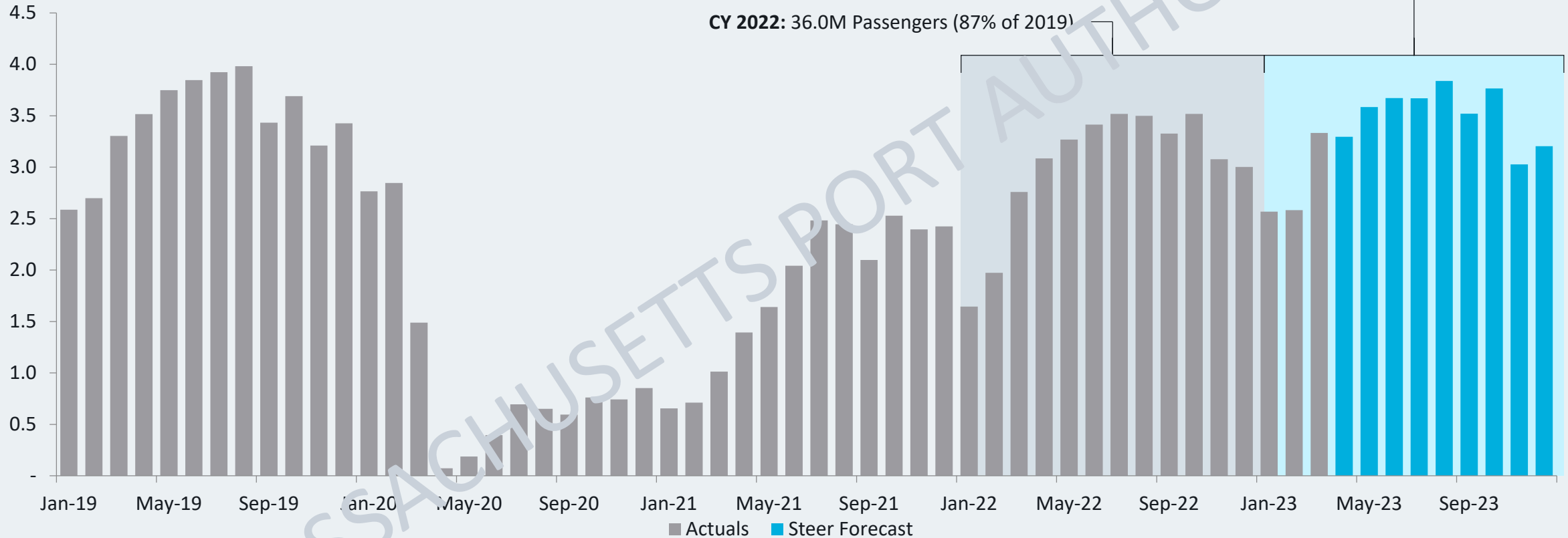
# Steer forecasts full *monthly* in the summer 2023 for Logan

## Boston Logan Passengers January 2019-December 2023

Million Passengers

CY 2023 Forecast: 40.0M Passengers (97% of 2019)

CY 2022: 36.0M Passengers (87% of 2019)



Source: Massport data, BTS T100, Steer analysis

The Aviation  
Industry in  
June 2023

1

Massport  
Aviation in  
Perspective

2

Challenges and  
Choices

3

Discussion

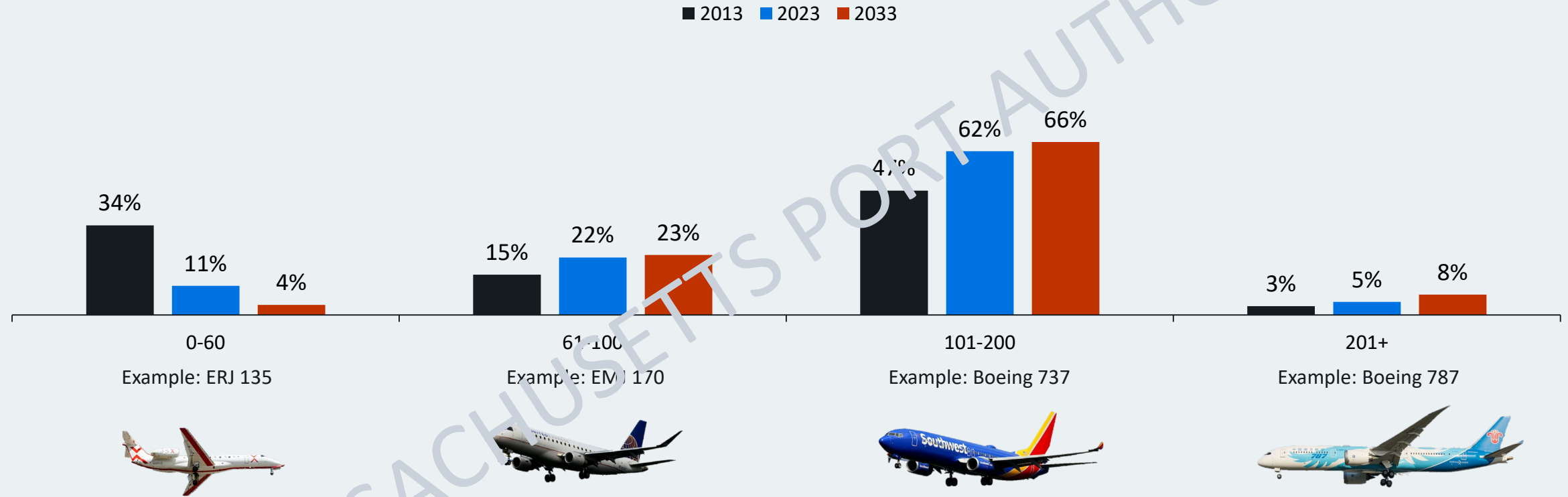
4

MASSACHUSETTS PORT AUTHORITY

# Aircraft sizes growing, changing networks and business models

## Share of Operations by Seat Capacity 2003-2033<sup>1</sup>

% of Annual Operations

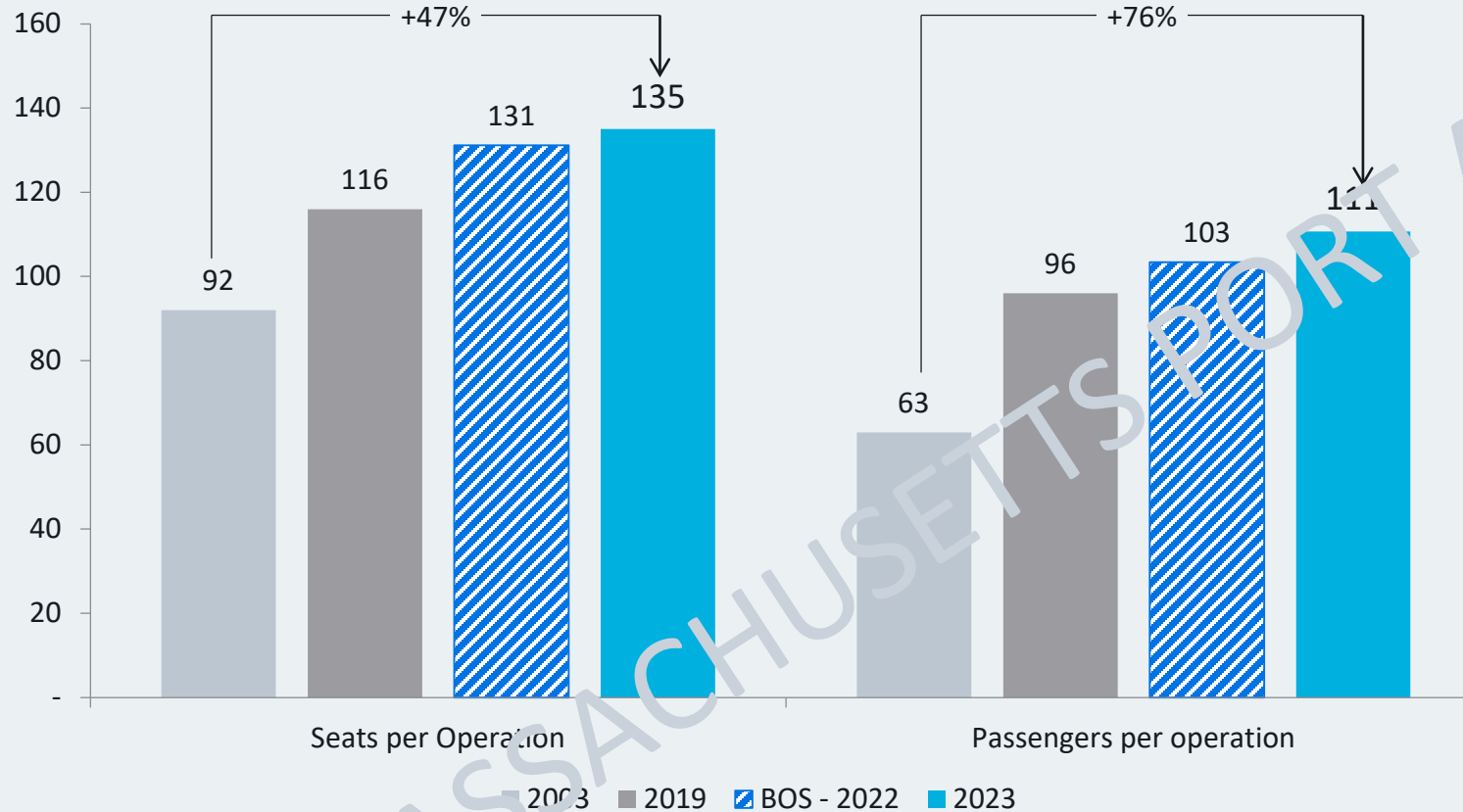


<sup>1</sup> 2023 and 2033 Include forward scheduled capacities and may be subject to further changes.  
Source: Official Airline Guide data, U.S. Federal Aviation Administration data, Steer analysis

# U.S. seats and passengers per operation 2003-2023

## Seats and Passengers per Operation, 2003-2023

Seats/Passengers per Operation



### Key Takeaways:

- As seats and passengers increase per operation, it becomes more challenging for smaller markets to fill commercial aircraft.
- The effects of which include loss of frequency and for some markets, the loss of air service entirely.
- For larger markets, airfields become more efficient, but pressures are placed on passenger-centric infrastructure, including terminals, roadways, curbs and parking.
- Newer aircraft, with more seats, have a significant positive impact on noise and emissions.
- **BOS figures are in line with U.S. overall evolution**

Source: Official Airline Guide data, I airport data, U.S. Department of Transportation T-100 data, Steer analysis

# The Service Imperative: Continuously striving to align airport infrastructure

Increasing seats per aircraft movement helps BOS's constrained airside (+) while challenging other terminal and ground transportation (!)



Source: Steer

# Many stakeholders deliver different stages of the overall airport experience

Generic Airport Customer Experience Scope ● On-Airport Processes ● Off-Airport Processes



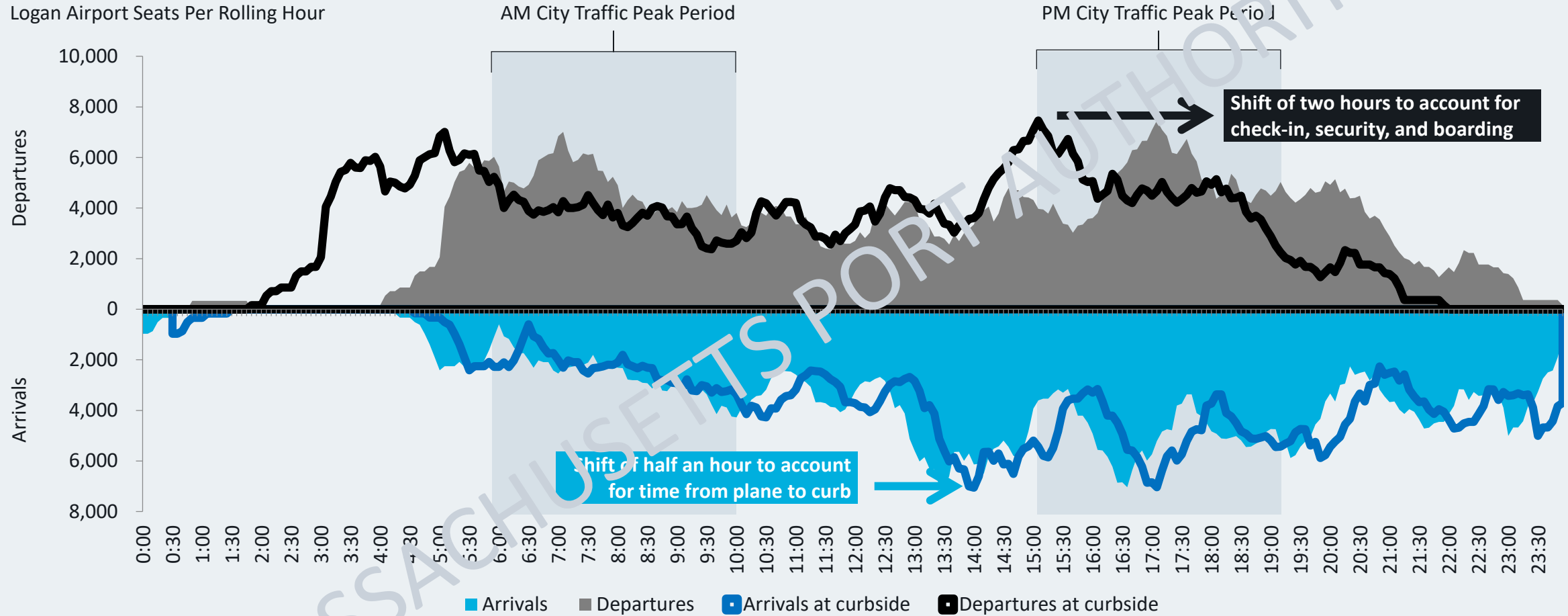
**Note:** Massport has daily, industry-leading security meetings to coordinate operations between different airport stakeholders, recognizing the need to work with others to ensure secure facilities and deliver excellent customer experience

Within each stage, there are many different stakeholders – **bolded emphasize the main stakeholder responsible**

Note; Figure for illustrative purposes only  
Source: Steer

# Return of pre-COVID-19 travel volumes means a return to landside congestion

Logan Airport Seats Per Rolling Hour



Note: Figure based on the scheduled daily profile of 05 October 2023 (Forecast). Arrival and departure shifts are based on assumptions; in reality, these would vary depending on the type of airlines/flights.  
 Source: Official Airline Guide data, Steer analysis, Boston MPO

# Net Zero, decarbonization and airline emissions

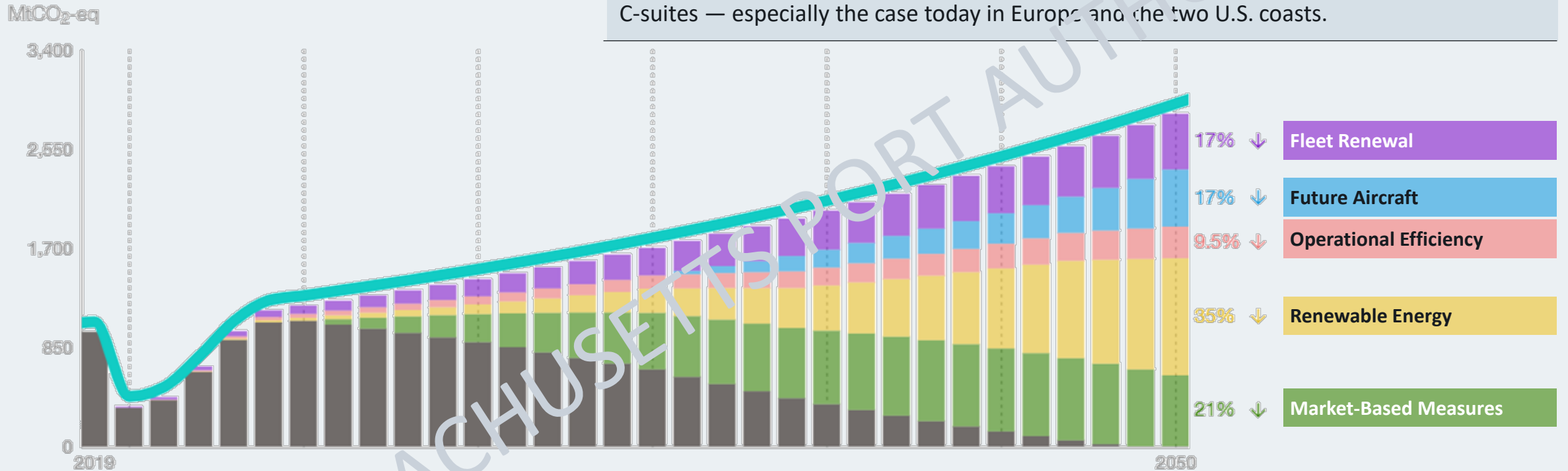
- In October 2022, 193 member states of the **International Civil Aviation Organization (ICAO)** agreed to a long-term aspirational goal of net-zero carbon dioxide (CO<sub>2</sub>) emissions from aviation by 2050
- The path for ***aviation as an industry*** must involve:
  - **Fleet renewal:** replacing older aircraft with latest available
  - **Future aircraft:** next generation platforms (e.g., hydrogen, battery-electric)
  - **Operational efficiencies:** More efficient routes, advanced air-traffic management
  - **Renewable energy:** Sustainable aviation fuels (SAF), hydrogen, batteries
  - **Market-based measures:** Offsets to reduce or remove GHGs from sectors outside of aviation

The path for ***airports*** is similar, with a focus on facilities (e.g., efficiency of terminal buildings (heating/cooling), surface vehicles, and electrification/power generation



# Boeing's Tool for a Net Zero Pathway (Cascade): Integrated Strategy Key

Net CO<sub>2</sub>-eq Emissions 2019 - 2050






Source: Boeing

# The future of electric aircraft: innovation and business models

## Electric Vertical Take-Off and Landing (e-VTOL)




### Joby Aero (commuter/short-haul)

-  **Range:** 150 miles
-  **Capacity:** 4 passengers
-  **Operations:** Joby as operator

## Electric Aircraft






### Eviation Alice (Short regional flights)

-  **Range:** 506 miles
-  **Capacity:** 9 passengers
-  **Operations:** Cape Air (Fleet: 75)






### Archer Midnight (commuter)

-  **Range:** 100 mile
-  **Capacity:** 4 passengers
-  **Operations:** Archer as operator



### Volocopter Velocity (short commuter routes)

-  **Range:** 22 miles
-  **Capacity:** 2 pax
-  **Operations:** Volocity

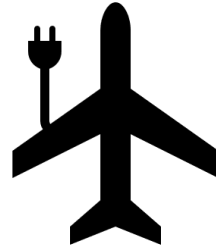
Source: Joby, Eviation, Archer, and Volocity websites, public news articles, Steer analysis

# In the decarbonization era, new airport users must contribute to power solutions

## Case Study: Eviation Alice

The Eviation Alice 9-passenger aircraft has a battery 9-15 times the size of a standard electric car. The daily electricity toll on LAX would be 0.1% to charge one Alice aircraft.

Eviation Alice



=



x9-15

=

0.1% of LAX's daily power consumption

## Case Study: 8 eVTOL Vertiport

According to a study by NASA's Langley Research Center, an eight-eVTOL vertiport (600kWh per eVTOL) would require **50MWh** of energy daily, the equivalent of the charging required for 2190 electric car trips. This would require 1 large or 2 additional power facilities.

8 eVTOL Vertiport



=



x2,190

=

12% of LAX's daily power consumption

Source: *How much electricity will electric aircraft need, and how much will it cost?*, Powered for Take Off NIA-NASA Urban Air Mobility Electric Infrastructure Study, Steer analysis

# Innovation, Airports and Massport's 2031 Goal

## Airports as Innovators



**Taker:** Airport accepts innovative solutions developed by other stakeholders



**Shaper:** Airport works with key stakeholders on innovations that span each other's areas of responsibility



**Maker:** Airport drives innovation in its areas of responsibility

## Airport Sustainability Initiatives

- New aircraft production
- Shift short-haul traffic to rail
- SAF aircraft/infrastructure
- Business travel offsets
- Air traffic management improvements
- Hydrogen aircraft/infrastructure
- Electric/battery aircraft/infrastructure
- Gateway congestion
- Regional transportation demand management
- Airport carbon offset purchases
- Incentivize electric Uber/Lyfts**
- Ground service equipment (airside/airport)**
- Roadway/curb congestion**
- Airport-wide transportation demand management**
- Energy efficient airport buildings**
- Green energy production**
- Airport access buses**
- On-airport electric vehicles**

Source: Steer analysis

The Aviation  
Industry in  
June 2023

1

Massport  
Aviation in  
Perspective

2

Challenges and  
Choices

3

Discussion

4

MASSACHUSETTS PORT AUTHORITY

# Thank you

Please contact:



**Stephen D. Van Beek, Ph.D.**

Director and Head of North American Aviation

[steve.vanbeek@steergroup.com](mailto:steve.vanbeek@steergroup.com)

+1 703 910 3844



**Michele Tavani**

Associate

[michele.tavani@steergroup.com](mailto:michele.tavani@steergroup.com)

+1 703 910 3846



**Duncan Nakajima**

Consultant

[duncan.nakajima@steergroup.com](mailto:duncan.nakajima@steergroup.com)

+1 213 425 0968



**DISCLAIMER:** This work may only be used within the context and scope of work for which Steer was commissioned and may not be relied upon in part or whole by any third party or be used for any other purpose. Any person choosing to use any part of this work without the express and written permission of Steer shall be deemed to confirm their agreement to indemnify Steer for all loss or damage resulting therefrom.

MASSACHUSETTS PORT AUTHORITY

## Real Estate and Strategic Initiatives

---

# Piers Park 3 Outside Closing Date Extension

Andrew Hargens

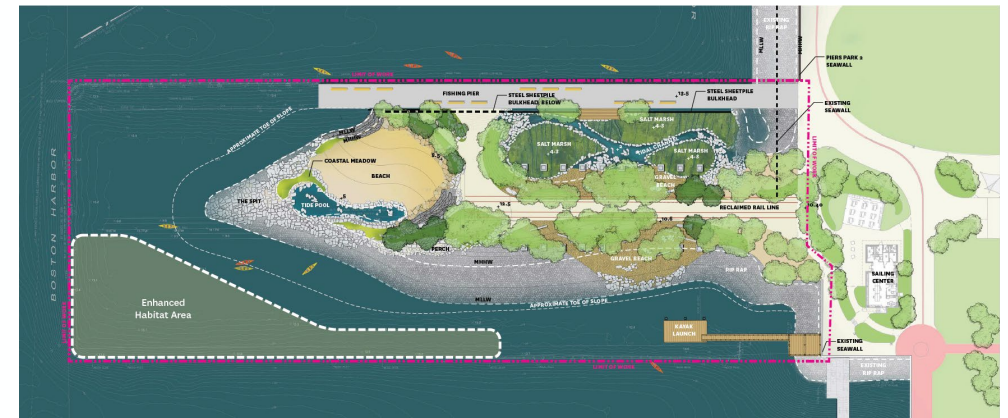
June 15, 2023





# Piers Park 3 will be an immersive and educational park in East Boston

- Piers Park 3 kicks off the Trustees' **One Waterfront Initiative**
  - Launched in 2018 “to create accessible, climate-resilient open space that serves diverse community needs and brings value to our vulnerable harbor city.”
- The Piers Park 3 design concept offers unique ecological and recreational features that will provide direct access to the water edge, complementing Piers Park 1 and Piers Park 2
- The Trustees have engaged the East Boston community through two evolutions of the Piers Park 3 concept design
- A 24-month extension will provide time for the Trustees to complete design/engineering, permitting, and fundraising for the project
  - New Outside Closing Date – December 31, 2024



Schematic Design as of November 2022

---

# Boxes at the Boston Fish Pier Update

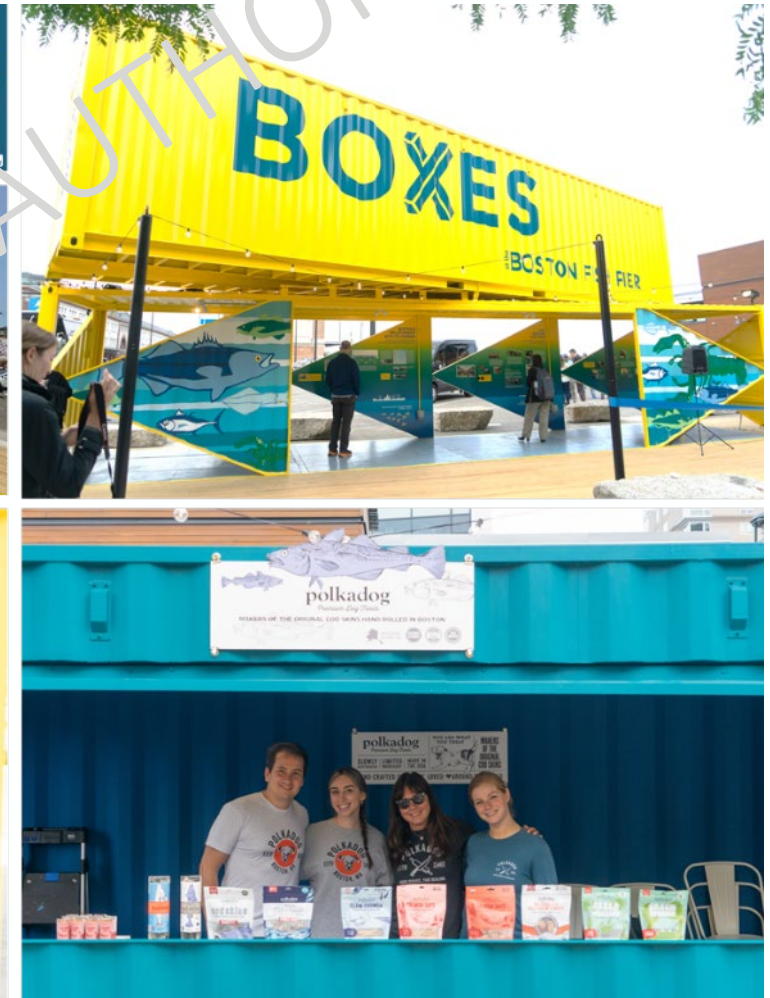
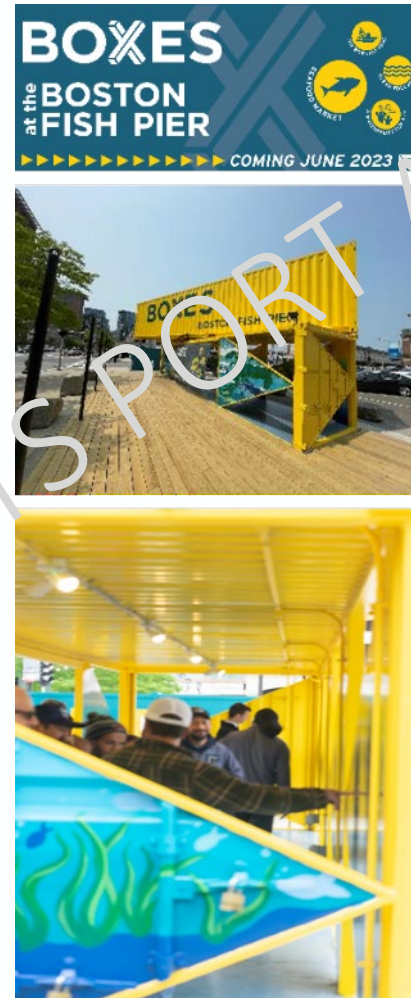
Andrew Hargens

June 15, 2023



# BOXES at the Boston Fish Pier opened for business on June 8

- Ribbon cutting and open house event celebrated the launch of this highly visible and distinctive “front-door” to promote the Boston Fish Pier, the seafood industry, and the working port
- Thursdays at the BOXES will feature a weekly seafood market showcasing Fish Pier tenants
- Educational programs will rotate weekdays and weekends throughout the summer



Audit and Finance Committee

MASSACHUSETTS PORT AUTHORITY

---

# FY2024 Budget Policy Objectives

John Prankevicius and Celeste Heinonen

June 6, 2023



FY2023 Operating Budget Update



## FY2023 Year End Financial Forecast

FY2023 Financial Plan <i>(in millions)</i>	Budget	Forecast
Total Revenue	\$873	\$1,055
Total Operating Expense	\$518	\$530
<b>Net Contribution</b>	<b><u>\$355</u></b>	<b><u>\$525</u></b>
Capital Investment	(\$355)	(\$355)
<b>New FY23-27 I&amp;E Transfer</b>	<b><u>-</u></b>	<b><u>(\$170)</u></b>
<b>Budget Balance</b>	<b>\$ -</b>	<b>\$ -</b>

- \$1.055 billion revenue forecast aided by stronger business activity, rising interest rates and last of federal aid
- Total Operating Expense is forecast to be 2.3% above budget to support more Aviation and Maritime business activity and will require a supplemental board vote
- Debt Service, Maintenance Reserve and I&E Fund Requirements of \$355M are being deposited as planned
- \$170 million in Improvement & Extension funding will be used to fund approved FY23 – FY27 Capital Improvement Program, additional capital needs, self insurance reserve, and potential Sumner Tunnel closure needs

MASSACHUSETTS PORT AUTHORITY

**FY2024 Business Activity Forecast  
Supporting FY2024 Operating Budget**



# Executive Summary

---

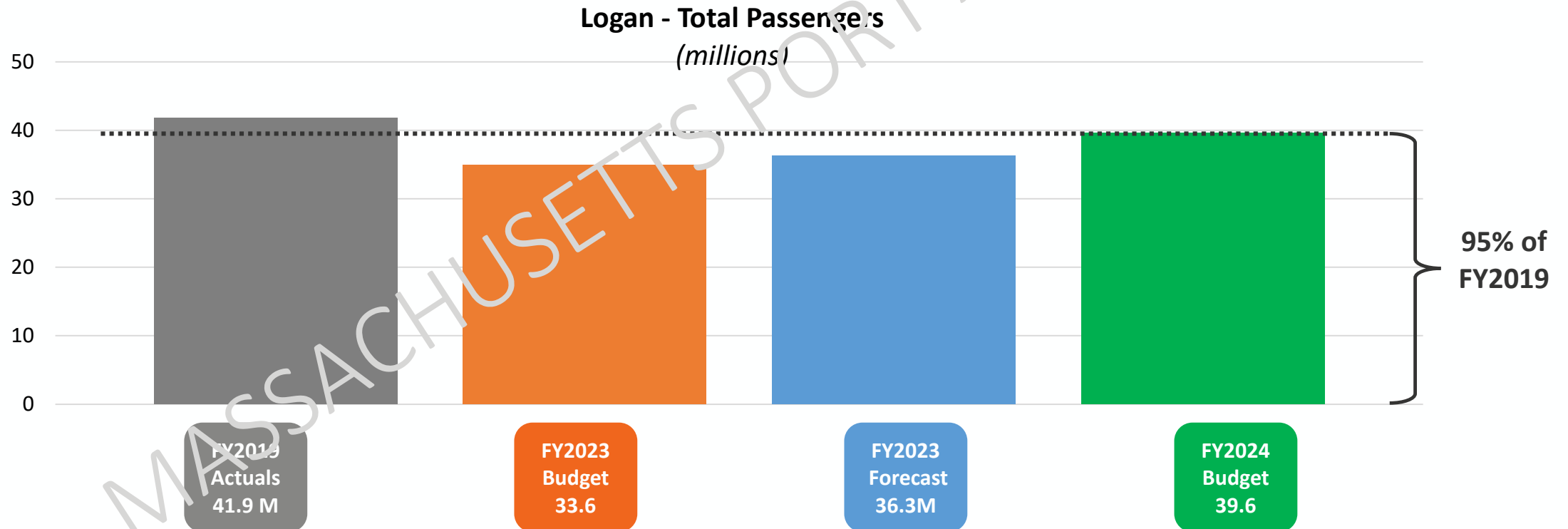
- The FY2024 Financial Plan is consistent with the March Board presentation on the FY23-FY27 Capital Improvement Program
- Massport's FY2024 Business Plan and Operating Budget is recommended to be \$1.045 billion, driven by increased activity across business lines
- Total Revenues to increase 20%; 89.5% of the increase driven by Logan Airport fixed and variable revenues, assisted by Maritime's improving activity (9%)
- Operating Expenses are increasing to reflect more business activity, additional services and new operating requirements, including more square footage in Terminal E, Logan Express expansion and funding needs for upcoming Sumner Tunnel closure
- The Operating Expense Budget is recommended to be \$600 million with the balance of \$445 million dedicated to pay bond holders and to finance the approved FY23-FY27 Capital Improvement Plan
- While business activity is currently strong across all business lines, geopolitical and economic risks, among others, are elevated and these uncertainties could alter Massport's business, operational, and financial trajectories
- If necessary, we are prepared to adjust and adapt our plans to serve customers and constituencies while continuing to be an economic engine for the Commonwealth

## Improved business activity will support the \$1.045 billion FY2024 business plan and operating budget

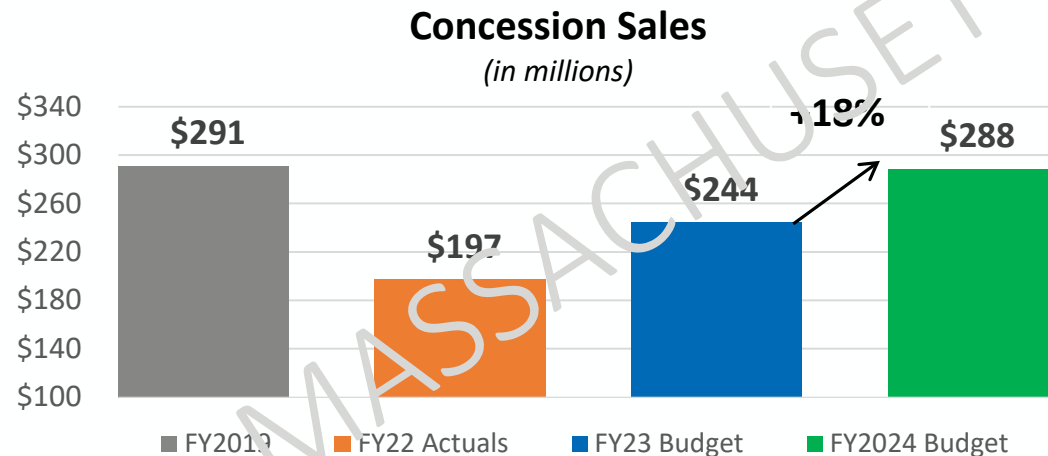
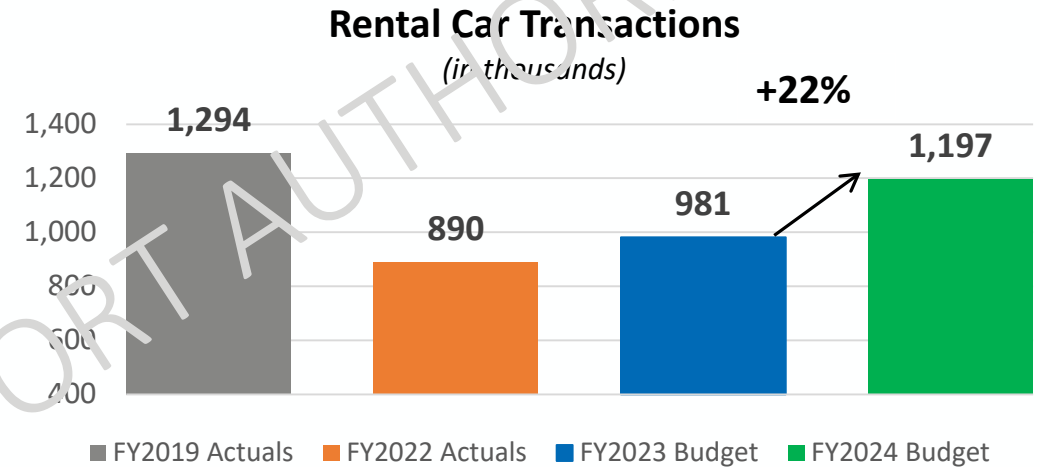
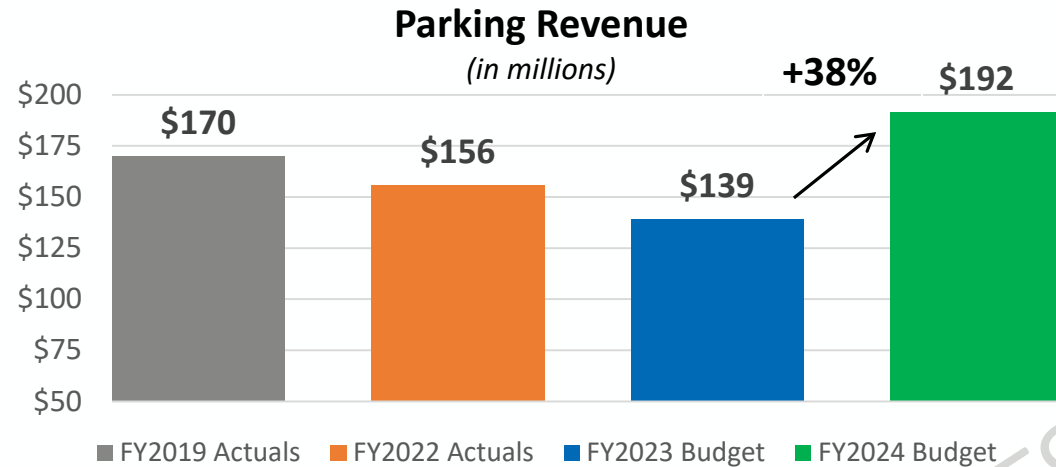
	Logan Passengers	Conley Containers	Cruise Passengers	Real Estate Revenues
FY2019 (Actuals)	41.9M	175K	396K	\$43M
FY2023 (Budget)	33.6M	115K	158K	\$38M
FY2024 (Budget)	39.6M	132K	333K	\$45M
Change in Business Activity (Budget to Budget)	18%	15%	124%	18%

# FY24 Logan passenger activity is forecast to reach 95% of pre-pandemic levels

- Logan's FY2023 passenger forecast is 36.3 million
- FY2024 forecast passenger activity is 39.6 million, or 95% of FY2019
- Activity increases as international traffic returns to its pre-pandemic share, with new routes added by JetBlue and Delta



# Higher Logan passenger volume will drive Aviation's variable revenues up 25% overall



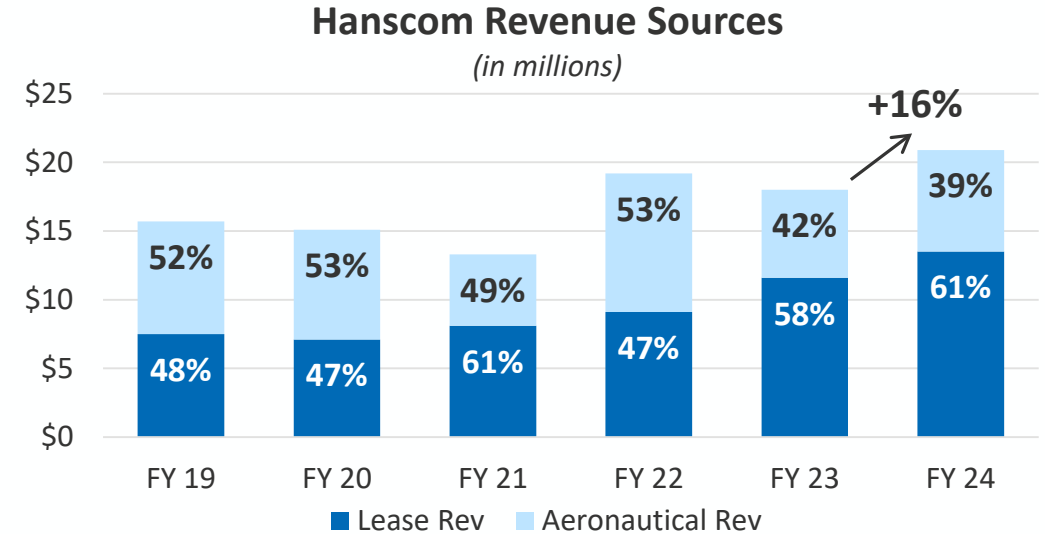
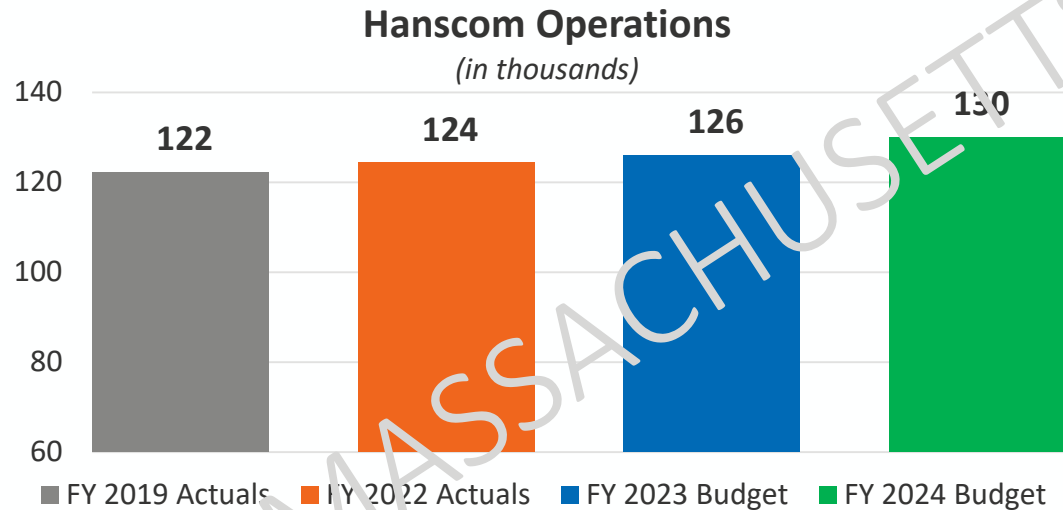
#### Observations:

- **Commercial Parking Revenues** to increase \$53M or 38%
  - Parking exits forecast to increase 31%, with revenue per exit increasing 2%
  - Implementation of July 1, 2023 parking rate increase, previously deferred during the pandemic, will add \$8M
- **Concession Sales** return to pre-pandemic levels as Sales per Enplanement trends 4% above FY2019
- **Rental Car Transactions** reflect recovering passenger activity and Rental Car companies managing demand

# New Hanscom Field ground leases will raise revenue performance by 16%

## Performance Highlights:

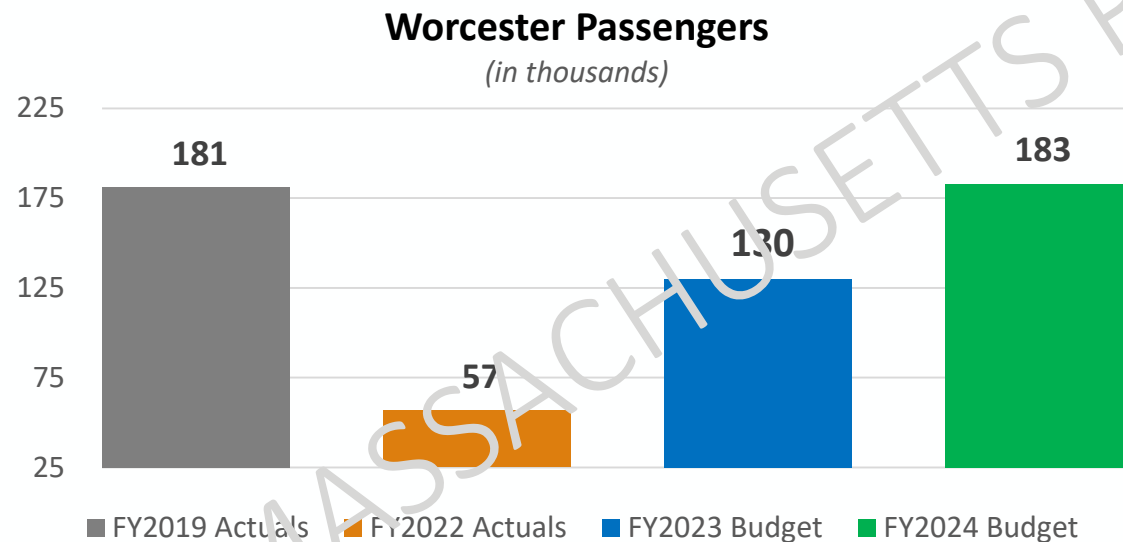
- FY2024 Budget to increase from \$18M in FY23 to \$21M as lease revenues continue to increase
- Hanscom FY24 Operations to increase 7% over FY19
- Atlantic Aviation will complete campus improvements, including a new 60,000 sf corporate hangar
- Signature Flight Support will commence \$15M hangar improvement project



# Worcester Regional Airport passenger activity is forecast to be the highest since Massport assumed ownership

Passenger growth supported by expanded air services and daily flights from three major carriers:

- JetBlue Fort Lauderdale service continues
- JetBlue Orlando service to restart June 15, 2023
- JetBlue Fort Myers winter seasonal service begins January 1, 2024
- American Airlines and Delta continue to provide New York City service



## Worcester Regional Airport Daily Nonstop Flights

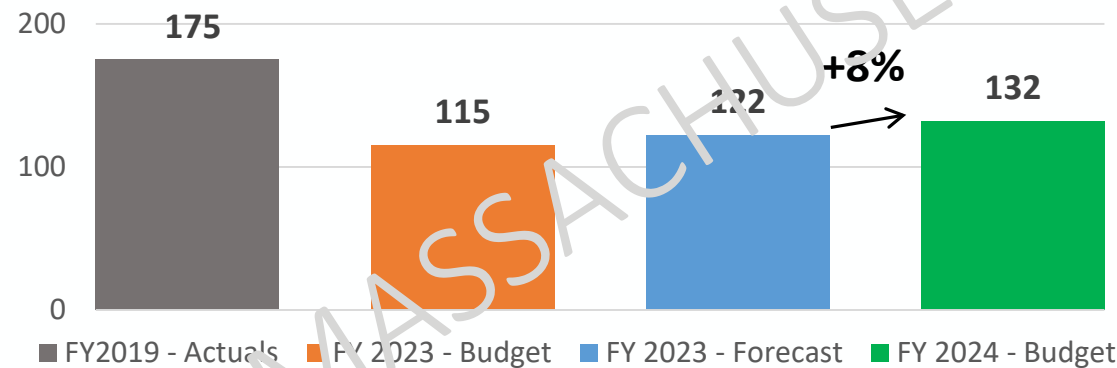


# Maritime revenue improves 16% as recovery continues for Conley Terminal, Flynn Cruiseport Boston and Real Estate development

Conley container volume is forecast to increase 8% due to increased frequency and expanded reach to 30+ ports globally

- Weekly services increase from three to six for the full fiscal year
- Tariff's adjusted 5% to recover Conley's inflationary increases
- Container incentive program being modified to incentivize carrier volume growth
- Market share recovery efforts continue with strategic outreach to new and existing customers

**Conley Container Volume**  
(in thousands)

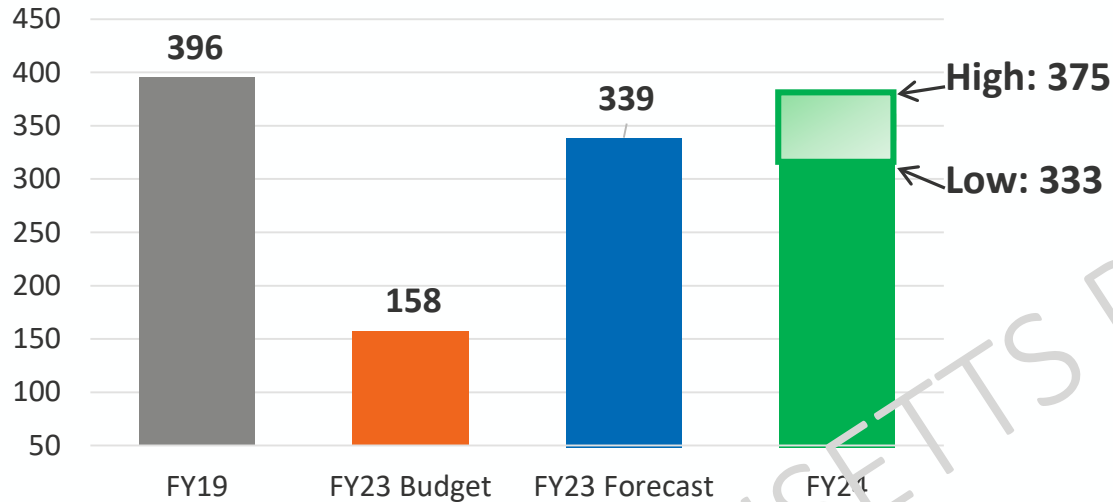


**Conley Terminal – Direct Connections (2023)**

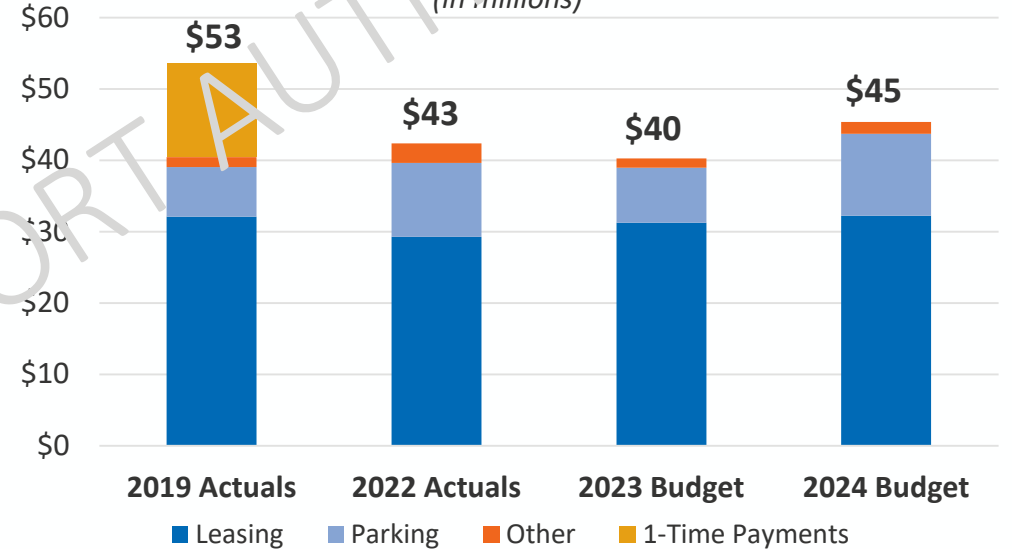


# Flynn Cruiseport Boston will rebound from the return of cruise activity; Real estate revenues will benefit from new commercial developments

**Flynn Cruiseport Boston Passenger Activity**  
(in thousands)



**Massport Real Estate**  
(in millions)



## Flynn Cruiseport Boston

- 148 cruise vessels expected in FY2024
- High cruise forecast achieved at 90% capacity
- Strong cruise passenger rebound supports travel/tourism industry in Boston and the Commonwealth, generating \$135M in annual economic impact and supporting 2,200 jobs

## Commercial Real Estate

- Seaport Circle comes online and increases ground rent by \$125K annually, \$20M payment excluded from operating revenues
- Fixed rents from hotels and other tenants increasing an additional 6% as a result of higher occupancy, CPI increases
- SBWTC parking benefits from new conventions and event parking





MASSACHUSETTS PORT AUTHORITY

FY2024 Operating Budget



# Massport's Revenue Budget increases 20% to \$1.045 billion, due to improved business activity

Revenue Forecast <i>(in millions)</i>	FY2023	FY2024	Variance
Logan	\$702	\$880	\$178
Hanscom	\$18	\$21	\$3
Worcester	\$2.1	\$2.4	\$0.3
Maritime/REAM	\$101	\$119	\$18
<b>Total Operating Revenue</b>	<b>\$823</b>	<b>\$1,022</b>	<b>\$199</b>
Investment Income	\$10	\$23	\$13
Federal Assistance	\$40	-	(\$40)
<b>TOTAL REVENUE</b>	<b>\$873</b>	<b>\$1,045</b>	<b>\$172</b>

20% increase

## FY24 Major Revenue Drivers:

### Logan:

- Fixed revenue from terminal rents, ground leases and landing fees increases 20% as capital and operating costs are recovered from airline rates and new Terminal E assets come online
- Budgeted parking revenue to increase \$53M; deferred parking rate increase effective July 1, 2023 to fund new investments
- Concessions, Ride Apps and Logan Express collectively increase \$32M over last year's budget

### Worcester and Hanscom:

- Worcester supported by increased landing fees and parking revenues
- Hanscom increases to \$21M, aided by recent ground lease developments

### Maritime:

- 18,000 additional containers at Conley Terminal
- 333,000 cruise passengers

### Real Estate:

- Parking activity at the South Boston Waterfront Transportation Center (SBWTC) outperforms prior year; new revenue at Fish Pier

### Other Revenue:

- Interest income increases to reflect higher interest rates

# Higher business activity, completion of the Terminal E project, strategic initiatives and community commitments results in a \$600 million operating expense budget for FY24

Project/Expense	Description	(\$ millions)
Logan Express Expansion	Direct Quincy employee shuttle, Back Bay, increased frequencies	\$13.8
Terminal E New Gates	Staffing, building cleaning, other M&O costs, utilities	\$8.3
Business Activity Increases	Building cleaning, SBWTC operating costs, credit card fees, business incentives, Terminal C ticket counter recapture, Logan Passenger Survey	\$9.1
Payroll & Benefits	Collective bargaining and merit pool adjustments, OPEB & Post Employment Benefits, 6% staff increase to restore personnel	\$16
Other Transportation Services	On-airport shuttle, MBTA Silver Line services, non-Massport employee parking, continuation of \$3 LEX ticket discount	\$7.7
Digital upgrades	Cybersecurity enhancements, Oracle Fusion (ERP)	\$2.1
Community Commitments	CPI-adjusted Pilot payments, Terminal E milestones, community contributions	\$3.6
Public Safety	State Police payroll and benefit increases, Fire Rescue increases	\$3.5
Inflationary increases	Changes in service contracts (i.e., cleaning, maintenance, other operating costs)	\$6.0
Utilities	Based on forecast rates, projected usage, and reduced electricity costs	\$0.8
<b>Sumner Tunnel Closure</b>	<b>Additional HOV programs, marketing, public safety/overtime, other</b>	<b>\$7.5</b>
<b>Aviation Security</b>	<b>Reserve</b>	<b>\$4.0</b>
<b>FY23 Expense Budget</b>	<b>FY24 Expense Budget Projection</b>	<b>Adjustments</b>
<b>\$518</b>	<b>\$ 600</b>	<b>\$82</b>

**+16% increase**

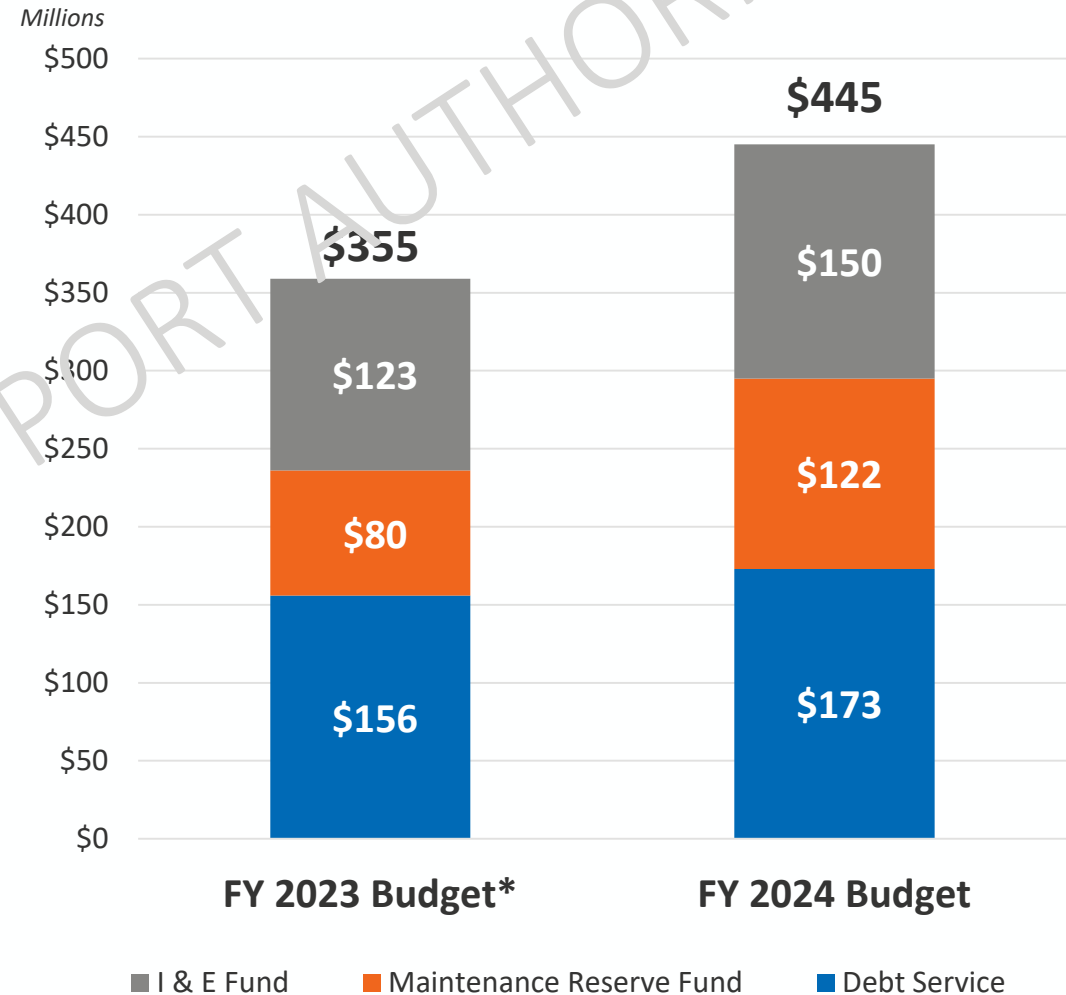


# The FY24 Business Plan and Operating Budget generates sufficient margin to meet funding requirements included in the FY23-FY27 Capital Program

FY24 earnings will be re-invested in Massport assets as follows:

- **\$150M** will be deposited into the I & E Fund to finance a portion of the \$500M in Net Zero investments included in the FY23-FY27 Capital Improvement Program
- Maintenance Reserve funding of **\$122M** will be used to keep Massport's transportation assets in a state of good repair
- **\$173M** will be used to pay bond holders on \$2.1B of outstanding Massport revenue bonds

Additional \$170M in FY23 retained earnings applied towards FY23-FY27 Capital Improvement Program, self insurance, and Summer Tunnel closure reserve



# Risks and challenges to achieving Massport's strategic initiatives and 5-year forecasts

---

## 1. Inflation/Economy

- Rising interest rates & Federal Reserve tightening
- Construction/operating cost impacts
- Real estate

## 2. Geopolitical Issues

- War in Ukraine
- Sanctions

## 3. COVID-19/World Public Health

- Variants
- Seasonal resurgence
- New pandemic

## 4. International Travel Recovery

- Asia recovery

## 5. Structural Change in Business Travel

- Business travel not fully recovered
- Discretionary revenue impacts

## 6. Climate Change/Environment

- Regulations
- Infrastructure investment needs

## 7. Changing Customer Behaviors

- Airport access modes
- Time spent in airport

## 8. Technology

- Autonomous vehicles
- Urban Air Mobility (UAM) –eVTOLs
- Generative AI

## 9. Traffic Congestion

- On-airport
- Gateways

## 10. Maritime Challenges

- Supply chain disruptions
- Change in shipping alliances and global trade
- Outflow of Distribution Centers/Warehouses from MA
- Truck access
- Land use pressure

## 11. External Shocks and Threats

- Cyber breach
- Active shooter
- Extreme weather

---

# Logan Airport Rates and Charges

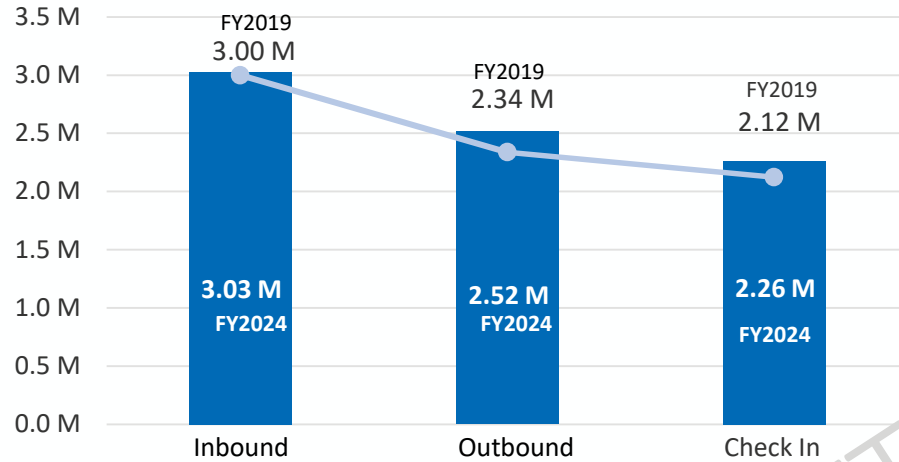
Dan Gallagher

June 15, 2023



# Logan FY2024 Terminal E Activity Forecast

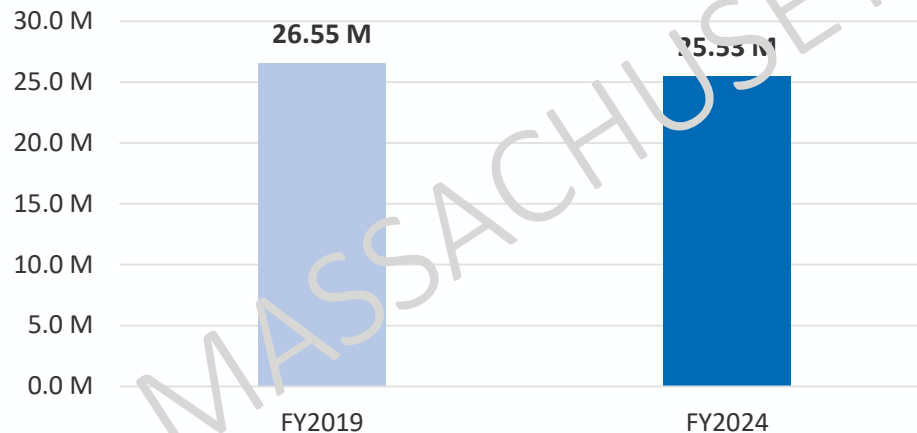
### Terminal E Passengers



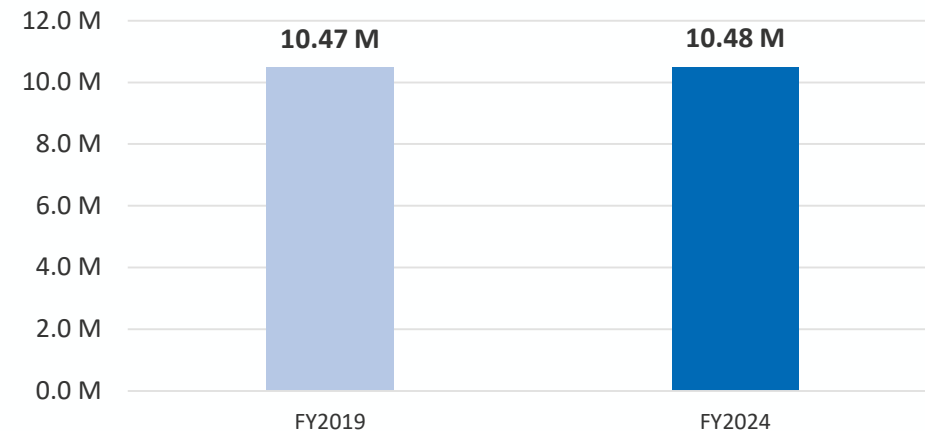
### Assumptions:

- Terminal E International passenger levels, forecasted to recover to pre-pandemic levels in Summer 2023, influenced by relocation of departing international customers from domestic terminals
- Bag Fees: Customers still checking more bags per passenger than historic average as well as higher leisure passenger mix equating to higher baggage counts
- Landed Weights: forecast to remain relatively flat as airlines show continued capacity discipline and allow load factors to rise on existing flight activity

### Landed Weights FY2023 Forecast



### Baggage Activity FY2023 Forecast

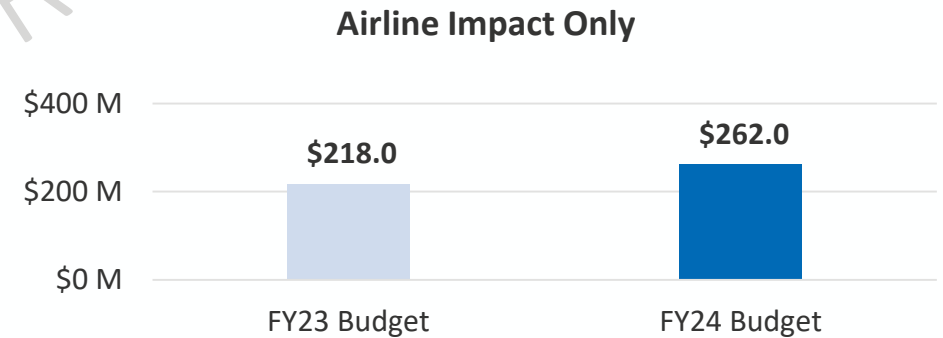
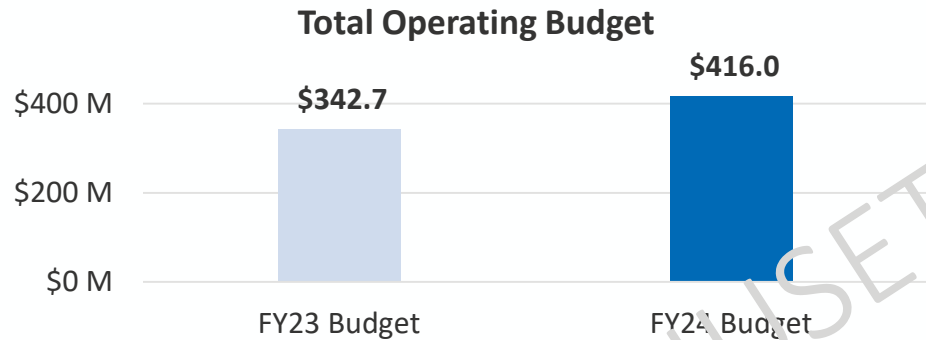


# FY2024 Operating and Capital Budget Summary

FY2024 Operating Budget to increase by \$73.3M with airline share approximately \$44M

Primary drivers:

- Increase in operating and contractual services to align with increase of passenger activity
- Overall costs of labor and material continue to increase due to economic factors
- Additional resources (State Police, HOV services, operational staffing) necessary for Sumner Tunnel closure impact



FY2024 Capital Amortization to increase by \$32.1M:

Primary drivers:

- Terminal E Modernization represents \$28.2M
- All other FY2024 increases will be added to appropriate cost centers



\*Dedicated Quincy Service Lot (began 2/13/23)



# Estimated FY2024 Rates & Charges

Description	FY 23 Budget Rate	FY 24 Budget Rate	% Variance
<b>Landing Field Rate</b>	\$5.74	\$6.19	7.8%
<b>Baggage Screening Facility Fee (per bag)</b>	\$2.10	\$2.07	-1.5%
<b>Terminal Rates (per SF)</b>			
<b>Terminal A</b>	\$182.23	\$188.38	3.4%
<b>Terminal B</b>	\$167.49	\$166.45	-0.6%
<b>Terminal B Pier B BHS Facility</b>	\$10.97	\$13.09	19.3%
<b>Terminal C</b>			
Terminal C - Main	\$201.43	\$231.81	15.1%
Piers B & C - Upper	\$151.12	\$169.64	12.3%
Piers B & C - Lower	\$94.60	\$110.16	16.5%
Pier A - Upper	\$138.22	\$152.88	10.6%
Pier A - Lower	\$133.41	\$148.09	11.0%
<b>Terminal E</b>			
Type 1	\$131.55	\$158.81	20.7%
Type 2	\$134.55	\$161.81	20.3%
Type 3	\$145.05	\$172.31	18.8%
<b>Regional Carrier Facility</b>	\$93.33	\$72.94	-21.8%
<b>Passenger Fees (per passenger)</b>			
<b>Terminal E</b>			
Inbound International	\$14.93	\$16.35	9.5%
Outbound Passenger	\$4.68	\$5.80	23.9%
Inbound Non-FIS/Domestic	\$14.93	\$16.35	9.5%
Common Use Check-in	\$9.22	\$9.58	3.9%



---

# Policy Review and Approval

Anna Tenaglia and John Prankevicius

June 15, 2023



# Summary of Updates Made to Massport's Financial Policies

---

The following policy updates are being made based on industry best practices, guidance provided by Investment, financial and energy advisors with review by tax, bond and energy counsel:

**1. Debt Issuance and Debt Management Policy:**

- Recognizes PFC revenues as available funds to pay debt as previously voted by the Board

**2. Financial Hedge Policy:**

- Adds language to consider the impact a termination payment made or received will have on arbitrage yield liability

**3. Investment Policy:**

- Certain permitted investments to be rated by any two nationally recognized rating agencies

**4. Retiree Benefits Trust Funding policy:**

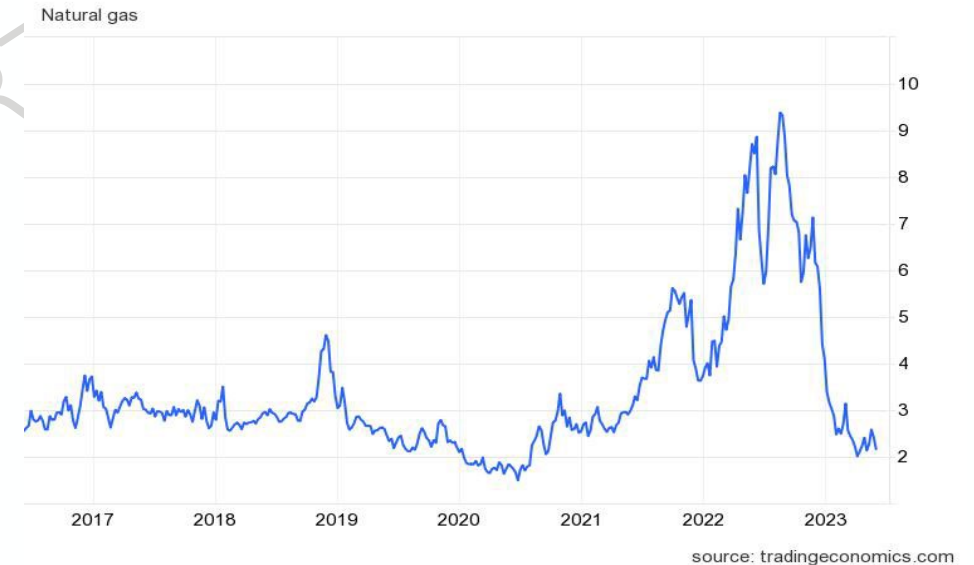
- Addresses changes to the amortization of actuarial value of assets, changes to the recognition of gain/losses; adds language to amortize surplus greater than 110% of net assets over 30 years

**5. Energy Hedge Policy:**

- Reflects the laddering of energy levels to price lock for each forward hedging period
- Adds language regarding early formation of strategies to implement carbon reduction purchases, i.e., RECs to align with NetZero

# Massport will initiate a new Electricity Rate Setting Methodology in FY24

- Historically, Massport used Eversource’s published electricity rates to bill customers for electricity usage
- Three factors led to new Massport electricity rate methodology:
  1. Volatile natural gas prices caused large swings in the Eversource published electricity rates
  2. Future Net Zero initiatives and clean energy programs require investment and cost recovery
  3. Massport’s wholesale electricity purchasing advantages will be extended to all Massport electricity customers resulting in price stability
- Massport’s Electricity Rate Setting Methodology will:
  - Recover all Massport electricity costs (direct, indirect, and capital amortization)
  - Include rate design standards used by the electric industry (G-1, G-2, G-3 rates)
  - Establish rates annually (July)
  - Require a cost and usage “true-up” based on actual expense and customer usage



## Massport will initiate a new Electricity Rate Setting Methodology in FY24 *(continued)*

---

- Staff engaged an electricity rate setting consultant to assist in developing a new rate methodology
- Massport electricity rates will recover the following expenses:
  - Wholesale electricity supply and distribution expenses
  - Utility and electricity distribution management expenses (Logan & Admin staff and O&M costs)
  - General & Administrative costs (overhead)
  - Capital Amortization related to investments made to Massport's electricity distribution system
  - Clean energy programs and Net Zero initiatives applicable to electricity
- Massport's FY24 budget incorporates this new approach

# Massport Electricity Rates Classification and Design for Massport Tenants

- Rate design elements to recover energy costs, distribution and management

Energy, Distribution, & Management	Logan Airport			Hanscom, Conley, Black Falcon, Autoport		
	G-1	G-2	G-3	G-1	G-2	G-3
Customer Charge	\$39.46	\$56.12	\$384.39	\$37.14	\$37.14	\$37.14
Demand Charge		\$25.35	\$31.88		\$15.74	\$13.69
Energy Charge						
a) Distribution	\$0.0474	-	-	-	-	-
b) Supply	\$0.1069	\$0.0567	\$0.0568	\$0.1069	\$0.0567	\$0.0568
c) Green Energy	-	-	-	-	-	-

- Rate design to recover electricity capital investments by clearing centers

Capital Investment Recovery	Rate per kWh
Logan	\$0.0886
Hanscom	\$0.0722
Conley Terminal	\$0.0392
Black Falcon	\$0.0028
Autoport	-

## Comparison of new Massport electricity rates to Eversource rates (FY24)

Rate per kWh*	G-1	G-2	G-3
<b>Eversource electricity rate</b>	\$0.377	\$0.228	\$0.222
<b>Massport electricity rates</b>			
Logan Airport	\$0.279	\$0.240	\$0.229
Hanscom Field	\$0.239	\$0.182	\$0.173
Conley Terminal	\$0.206	\$0.149	\$0.140
Black Falcon	\$0.169	\$0.113	\$0.104
Autoport	\$0.191	\$0.152	\$0.140

Note: Massport electricity rate fixed for 12 months, while Eversource rate changes every 3 months (G-2, G-3) and 6 months (G-1)

## Next Steps

---

- Finalize FY24 electricity expenses and set electricity rates for July customer billing
- Communicate electricity rate setting methodology to tenants (currently underway)
- Board votes to adopt new Massport electricity rate policy at June Board meeting
- Update Massport utility billing system software with new electricity rates
- Track actual expenses and tenant usage compared to budget (throughout the year)
- Perform annual true-up, if necessary, and adjust rates and tenant bills to reflect actual electricity costs



Appendix

MASSACHUSETTS PORT AUTHORITY

# Debt Issuance and Debt Management Policy

---

**Policy Objective:** Bond funded projects must be central to Massport's core mission, must be owned and operated by Massport and included in the five-year capital program

- Projected coverage to exceed 2.0x in any year
- Exceed 250 days cash on hand
- Annual operating ratio goal of 65%
- Financial metrics must remain flexible over time to reflect bond rating agency criteria applicable to maintaining a AA credit rating

**Moody's Investor Services, S&P Ratings and Fitch Ratings are Aa2, AA, AA respectively; one of the highest in the U.S. for all airport bonds**

## Issuance Practices:

- Term of debt should not exceed the useful life of the assets financed by the bonds
  - Debt service should provide for level debt to maximize future debt capacity
  - Fixed rate debt should constitute at least 70% of the portfolio; variable rate debt no more than 20%
- Debt has been issued on a negotiated basis; provides greater flexibility in the timing of bond sales and offers the ability to adjust the structure in response to market conditions
- Massport will select senior underwriters and co-managers on a competitive basis

## Debt Issuance & Debt Management Policy *(continued)*

---

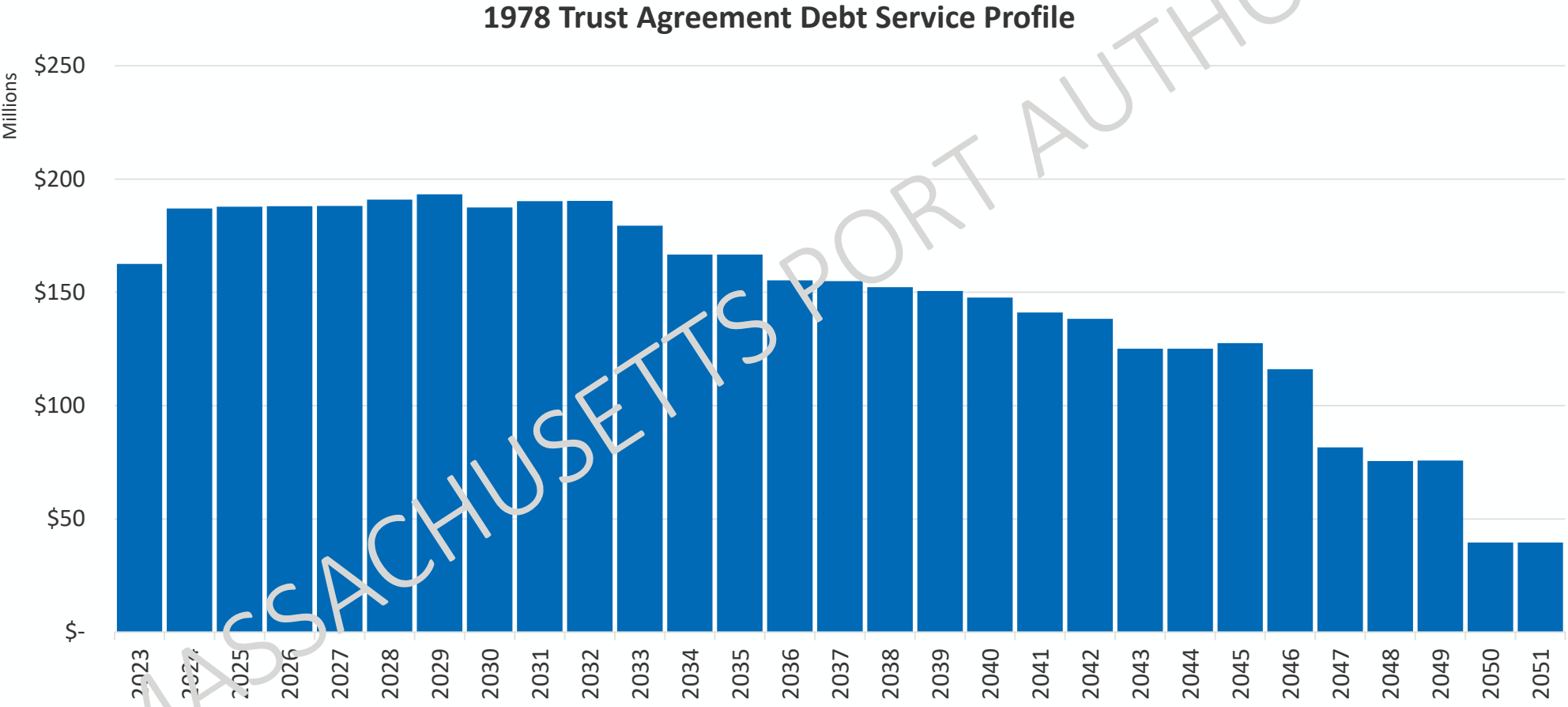
### **Post Issuance and Compliance:**

- Compliance with use of proceeds is monitored and reported at monthly investment strategy committee meetings
- Rebate consultants will prepare the required analysis as part of each year's audit
- Digital Assurance Certification, LLC (DAC), the Authority's dissemination agent, will provide the required information to EMMA, the national electronic data base for municipal securities
- The policy complies with the state's Finance and Governance Board (SFGB), mandates to review derivative bond transactions proposed to be entered by state entities

### **Updates to the Debt Issuance and Debt Management Policy:**

- The 1999 PFC Trust Agreement was terminated as of July 1, 2017 as there are no outstanding PFC Revenue Bonds
- Upon receiving bondholder consent in July 2019, the 21st Supplemental Agreement to the 1978 Trust Agreement recognized PFC revenues as available funds to pay debt (assuming FAA has approved the project to be PFC eligible)

# The Authority's debt service profile is conservative, maintains capacity in future years and is a driver of the Authority's high credit ratings



# Financial Hedge Policy

---

**Policy Objective:** To provide general guidelines on the use, procurement and execution of interest rate swaps, options, caps, collars and related financial transactions (“financial hedges”)

- Increased financial flexibility
- Opportunities for interest rate savings
- Balance sheet management through better matching of assets and liabilities
- Ensures transactional risks are identified, mitigated, monitored, and appropriately compensated
- Establishes proper oversight and reporting for any such hedges
- Financial hedges are appropriate when they achieve a specific financial objective consistent with Massport’s overall debt management program
- Financial hedges must be specifically approved by the Board and supported by Massport’s financial advisors

## Update to the Financial Hedge Policy:

- Adds language to consider the impact a termination payment made or received will have on arbitrage yield liability on bonds where the Financial Hedge has been integrated with a tax-exempt bond issuance
  - Termination payments received by the Authority may reduce the yield on bonds or refunding bonds
  - Termination payments made by the Authority may increase the yield on bonds or refunding bonds

**Financial hedges may not be used for speculation**

# Investment Policy

---

**Policy Objective:** To provide direction and delegation of authority for the investment of Massport's funds in conformance with the Enabling Act and established trust agreements

- The “prudent person” standard shall be applied in the context of managing the overall portfolio
- Establishes Investment Oversight Committee and quarterly performance review meetings
- Defines permitted investments
- Provides for benchmarks or targets
- Provides for management oversight and procedures
- Investment Priority:
  - Preserve capital
  - Provide liquidity
  - Generate interest income
- The policy requires the hiring of an investment advisor to provide guidance and inform the Investment Committee on financial markets and strategic investment direction
- Updates to the Investment Policy include modernizing the definition of rating agency:
  - Provides that certain fixed income securities including U.S. Treasuries, Agencies, Municipal bonds, Corporate Bonds, Certificate of Deposits, Commercial Paper and Money Market Mutual Funds, may be rated by any two nationally recognized statistical rating organization (NRSRO)
  - Includes the adoption of the 23rd Supplemental Agreement to the 1978 Trust Agreement and 2nd Supplemental Agreement to the CFC Trust Agreement, to incorporate these updates to the definitions of Investment Securities and Permitted Investments

**The rating agencies have affirmed the ratings with these changes**

## Investment Policy (continued)

---

**Portfolio Management:** The portfolio is conservatively managed under guidelines of the Board Voted Investment Policy, with holdings, sector weightings, and durations regularly reviewed by staff and our Investment Advisor, Public Financial Management (PFM)

- The portfolio is comprised of U.S Treasuries, agency bonds, municipal bonds, corporate bonds, the Massachusetts Municipal Depository Trust (MMDT), and commercial paper instruments
- Corporate bond highlights:
  - 90% of the portfolio is in AA- rating or better
  - Commercial banking institutions investments include: Bank of America, Bank of New York Mellon, Royal Bank of Canada, TD Bank
  - Other financial services firms investments include: Guardian Life, Northwest Mutual, Met Life, and Mass Mutual, with AA- rating or better
  - Investments in industrial, consumer and technology include: Colgate Palmolive, Nestle Holdings, Walmart and Apple
  - The portfolio also includes an 11% allocation in municipal bonds, with ratings of AAA-AA
- Analysis performed includes Treasury yield curve, Federal Funds rate outlook, economic releases, yield and spread of offering, ratings, industry/sector and duration to optimize trade opportunities and enhance portfolio returns
- Investment decisions are influenced and based on cash flow requirements driven by the capital plan and capital plan liquidity needs

## Investment Policy (continued)

### Investment Performance Overview:

- As the Federal Reserve increased interest rates, the portfolio's duration was well positioned and overall returns exceeded benchmarks by 107 basis points for the quarters ending 12/31/22 and 3/31/23

#### A&F Investment Portfolio Short Term Outperformance

	Quarter Return	Benchmark Return	Alpha
3/31/2023	5.42%	5.16%	0.26%
12/31/2022	3.84%	3.03%	0.81%
			<b>1.07%</b>

- During the last 1, 3, and 5 years, investment returns were above benchmarks by 495 basis points, but were challenged by a significantly low interest rate environment, pandemic related liquidity needs, and lower cash flows from partnership billing assistance

#### A&F Investment Portfolio Long Term Outperformance

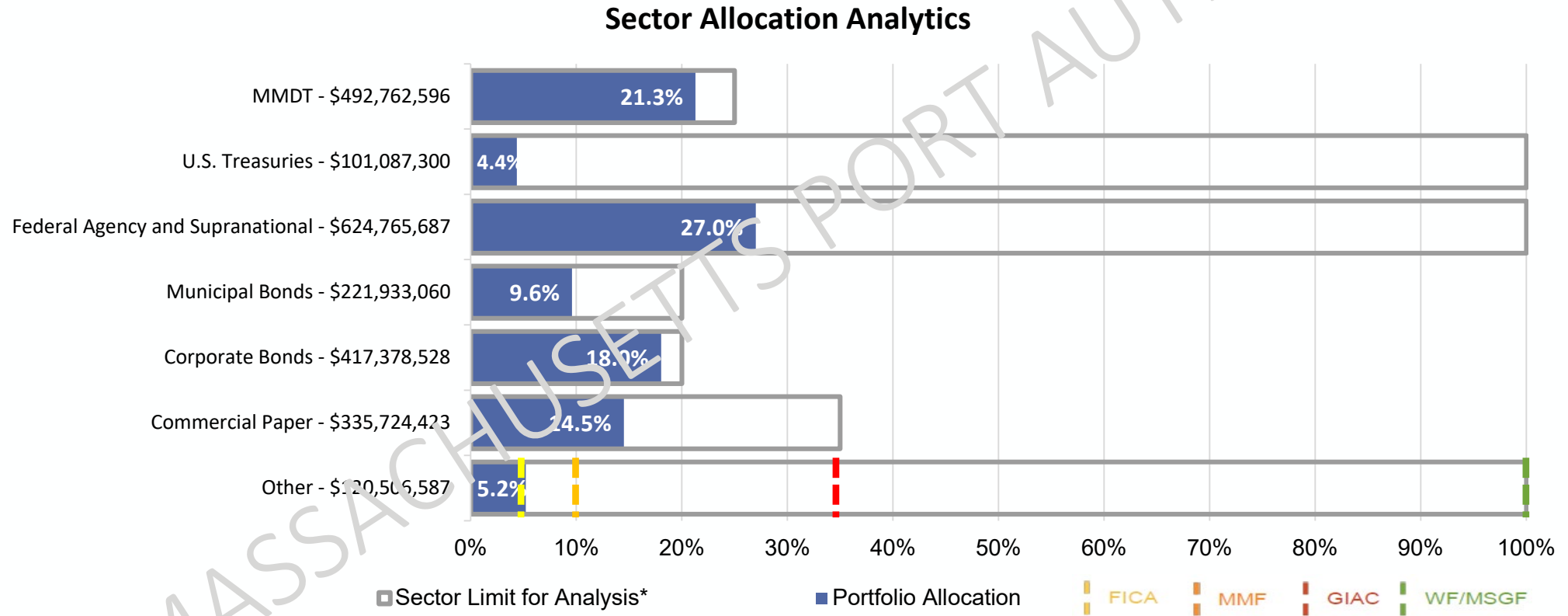
	Quarter Return	Benchmark Return	Alpha
6/30/2022	-1.33%	-1.90%	0.57%
6/30/2021	0.85%	0.10%	0.75%
6/30/2020	3.53%	-0.10%	3.63%
			<b>4.95%</b>

- Despite these challenges, since FY19 the investment portfolio generated over \$121 million of interest income used to support operating expenses and capital investment during this same period



# Investment Policy (continued)

Portfolio compliance with sector allocation is monitored continuously:



Dashed lines indicate sub-sector limits within "Other" Sector. FICA, MMF, GIAC, and WF/MSGF have respective limits of 5%, 10%, 35%, and 100%.



## Retiree Benefits Trust Funding Policy *(continued)*

---

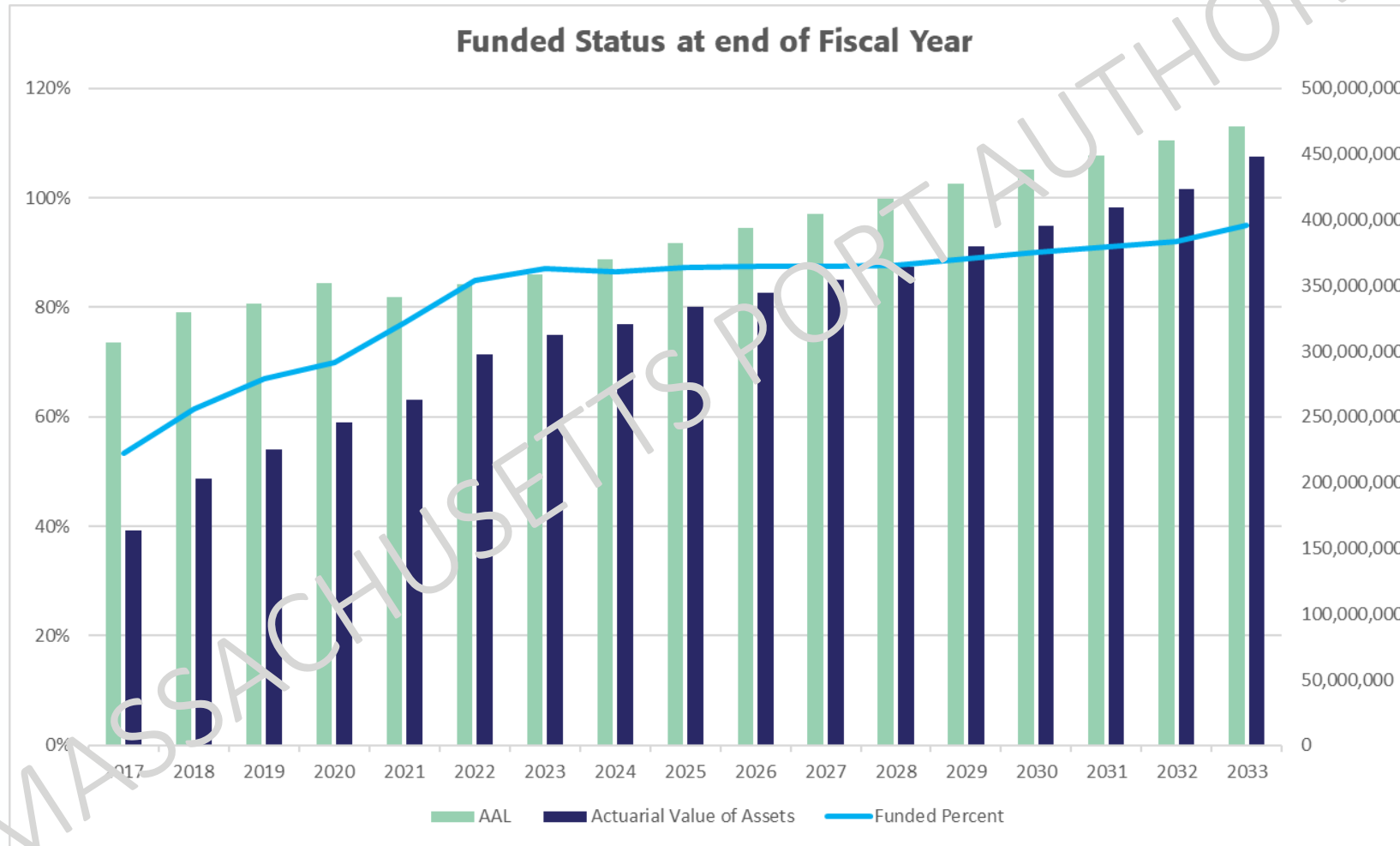
**Policy Objective:** To establish a methodology for funding benefits obligations accruing under the Massport Retiree Benefits Trust

- Goal to fund 100% of the annual contribution rate for each year
- Provide sufficient assets to permit the payment of all benefits under the Trust
- Actuarial assumptions are adopted in an effort to align the funding of the Trust with actual demographic, healthcare and economic experience, thus providing stability to the contribution rate over time
  - Demographic assumptions of retirement, disability, and mortality rates
  - Economic assumptions of inflation, healthcare inflation, and investment return
  - The actuary will also provide advice to the Committee and recommend assumptions
- Investment return assumptions will be evaluated by an independent investment advisor

**Updates to the Retiree Benefits Trust Funding policy to produce stable contributions:**

- Gain loss recognition increases to 10 years from 5 years, smoothing the period for Actuarial Value of Assets (AVA)
- Legacy gains or losses to be recognized immediately and in line with best practices
- Added language when AVA surplus is greater than 10%, the surplus is amortized over 30 years and used to reduce contributions

# The Retiree Benefits Trust is approximately 87% funded as of January 1, 2022



# Energy Hedge Policy

---

**Policy Objective:** Establish guidelines for procurement and hedging of electricity and natural gas in the futures markets

- Establishes Energy Oversight Committee and roles to undertake hedges
- Goal is to mitigate price volatility and to provide stable and predictable costs
- Sets forth how and when staff will take action relative to contract options
- Requires regular monitoring of commodity markets, pricing and technical analysis

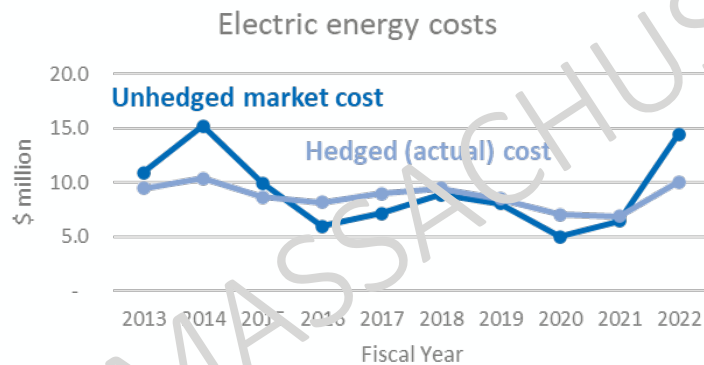
**Updates to the policy include revision to Hedge Model and the addition of carbon reduction strategies:**

- The Hedge Model assists with determining the timing and quantity of commodity hedge locks
- Current hedges are based on future commodity prices for natural gas traded relative to a three year average
  - When natural gas futures fall within a target range, the Authority may lock in a price for a corresponding natural gas or electricity position, or both
- Proposed changes
  - In addition to market price, added clarification that hedges to be based on percent limits setting minimum and maximum hedge levels throughout 3-year forward looking window
  - Separate percent limits for natural gas and electricity portfolios due to unique risk profiles and contracting practices

# Electric and natural gas hedging has stabilized and reduced costs over recent fiscal years

## Electric Energy:

- Hedge program has stabilized energy costs over last 10 fiscal years
  - Wholesale energy\* annual costs (hedged) ranged from \$6.8 to \$10.3 million
  - Unhedged costs at market prices would have ranged from \$5.0 to \$15.2 million
- Hedging has saved \$4.5 million since FY13
- Day ahead energy bidding has saved more than \$1 million in one three year study

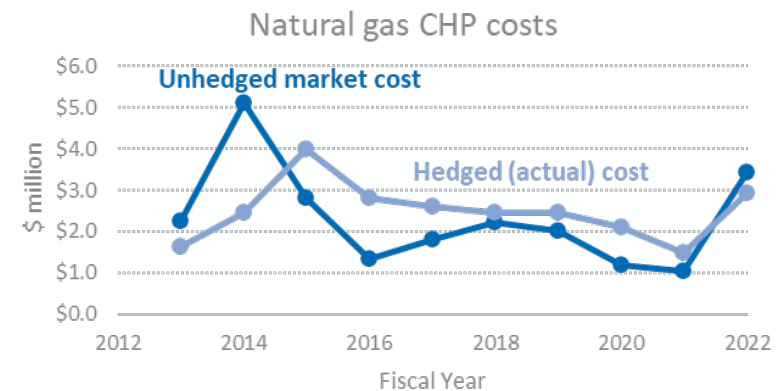


\* Energy is the largest cost item in electric budget. Other costs include transmission, capacity, and grid services



## Natural Gas:

- Hedge program has stabilized natural gas costs over last 10 fiscal years, especially in winter months when usage is highest
  - Annual costs (hedged) related to Central Heating Plant (CHP)\* ranged from \$1.5 to \$4.0 million
  - Unhedged costs of spot market to Algonquin Citygate would have ranged from \$1.0 to \$5.0 million
- Hedging has saved on average over \$900k/year during the winter period (Nov – Mar)



\* The CHP is the largest cost item in natural gas budget. Other costs are related to Non-CHP budget items

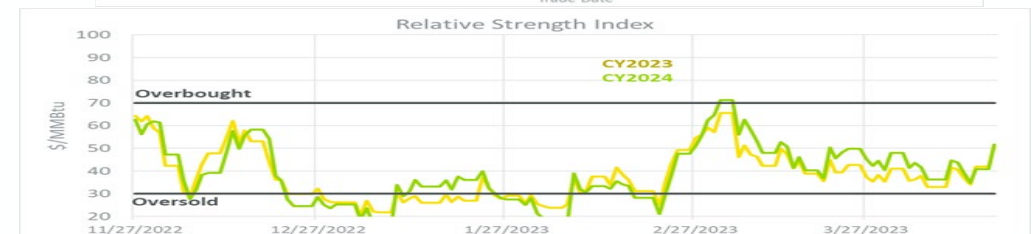
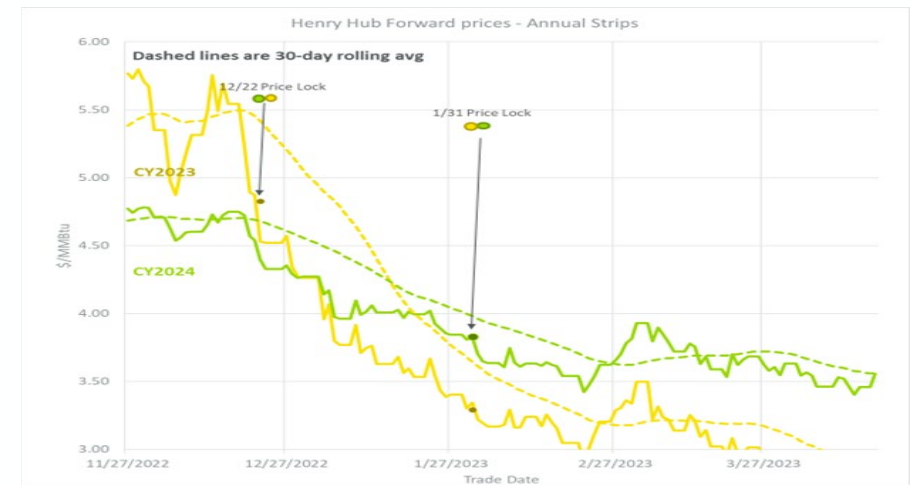
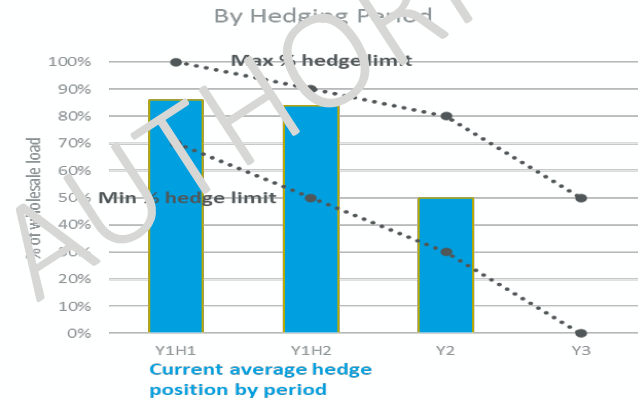
# Energy Hedge Policy (continued)

## Managing to Proposed Hedge Percent Limits

- Massport’s actual electric hedge position (as of 5/1) is shown at right against proposed limits for rolling annual and semi-annual periods
- Current position is within limits
- 2<sup>nd</sup> half Year 1 position is near maximum hedge limit, which would potentially limit hedging for that period in short term
- Analyses are done to show when positions will start to fall below minimums

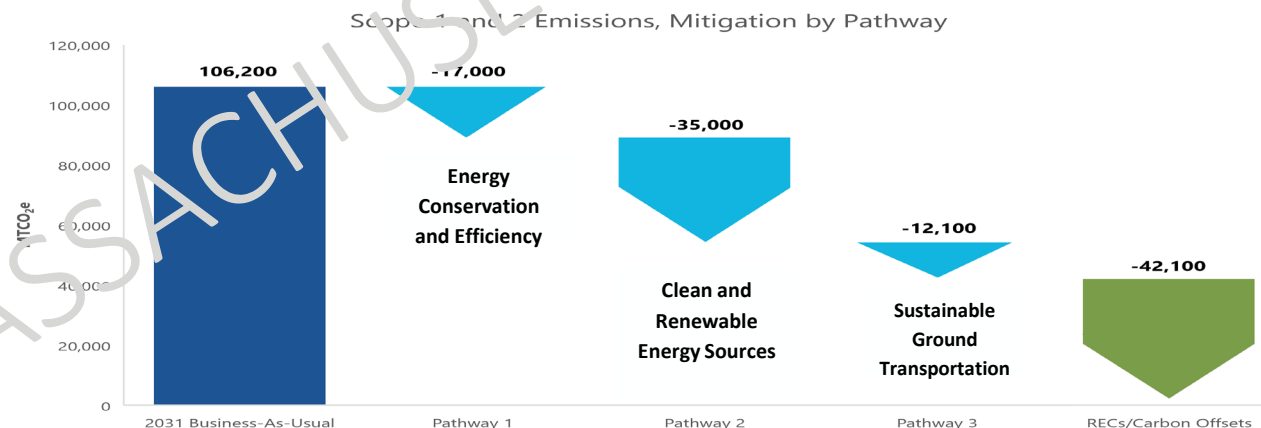
## Managing within Percent Hedged Limits

- Continue energy portfolio management practice that looks to market monitoring, pricing and technical analysis in making hedge decisions
- Performance is regularly reviewed by Energy Oversight Committee



## Energy Hedge Policy *(continued)*

- Additional proposed change adds “Carbon Reduction Commodities” as a separate commodity category under the policy
  - NetZero is expected to introduce need for procurements of RECs, CO2 offsets, and other products to meet program targets
  - Enables future hedging program guidelines when compliance strategies are better defined
  - Historical demand for these products has been minimal
- The policy recognizes that the Authority may purchase various commodities such as renewable natural gas, renewable energy certificates (RECs) or Green-e, or Carbon Credits/Offsets through competitive solicitations, in accordance with the Authority’s NetZero objective, which is still under development
- Other strategies for meeting these objectives may include LEED Certification or other desirable accreditations



VPPA, PPA,  
Offsets, RECs,  
close the gap

---

# Annual Insurance Program

John Pranckevicius

June 15, 2023





# FY24 Massport Annual Insurance Program

---

- The annual insurance assessment is a requirement of the Authority's 1978 Trust Agreement
- Albert Risk Management Consultants certifies to the Trustee that:
  1. The Authority's FY24 insurance and risk management program is properly structured
  2. The program is cost effective given the Authority's complex risk profile
- The Authority's insurance risk profile consists of:
  - High limit/layered program for liability coverage and property insurance
  - Moderate to high retention levels
  - Limited/specialty insurance market
  - Structure is designed to protect the Authority and bond holders from catastrophic loss
- The FY24 Insurance Program will be approximately \$11.1M

# FY24 Massport Annual Insurance Procurement Summary

## Property Coverage: \$500M limit, \$1M retention, plus 10% on next \$50M per occurrence

- Values increased from \$8.4B to \$8.9B, or 6%, \$600M in new asset values (Terminal E Mod, B-C Connector, Berth 10) added \$500K to premium renewal, the insurable rate increased 13% (0.0715 to 0.0823) due to global property losses

## Aviation Liability: \$750M limit, retention of \$250K per policy aggregate

- 8.8% premium renewal increase related to higher operations and passenger travel

## Maritime Liability: \$100M limit, retention of \$25K per occurrence

- 6% premium renewal increase due to the return of cruise operations and more containers

## Excess Workers Compensation: unlimited, retention of \$1.0M per occurrence

- Premium increased due to higher regulated reimbursement rates for worker medical care and wage replacement

## Automobile Liability: \$5M limit, retention of \$5k per occurrence

- 12% Premium renewal is due to an increase in fleet size from 642 to 712 from new State Police vehicle program

FY22	Insurance	FY23	FY24	FY 23-24 Variance	FY23-24 % Increase
\$5,648,000	Property	\$6,200,000	\$7,700,000	\$1,500,000	19%
\$1,268,000	Airport Liability	\$1,355,000	\$1,474,000	\$119,000	8.8%
\$440,000	Marine Liability	\$474,000	\$506,000	\$32,000	6%
\$563,000	Excess Workers Comp	\$645,000	\$689,000	\$44,000	6%
\$688,000	Automobile Liability	\$697,000	\$794,000	\$97,000	12%
\$8,607,000		\$9,371,000	\$11,163,000	\$1,792,000	18%

---

# Annual Independent Audit Plan

John Pranckevicius

June 15, 2023



## FY23 Authority Wide Annual Independent Audit Plan

---

- Ernst & Young (EY) presented their FY23 audit plan to the Audit & Finance Committee at its June 6, 2023 meeting
- EY is partnering with KVR LLC, a Boston-based WBE accounting firm, to perform this year's audit work (similar to last year)
- EY and KVR presented their required communications, and areas of audit emphasis to the Committee
- EY informed the Committee of a new Accounting Standards pronouncement (GASB 86) on technology subscriptions that will be in effect this year
- EY indicated that the audit will be completed by September 29, 2023 in conformance with the Authority's 1978 Trust Agreement

---

# Logan Airport Electric Vehicle Cabs Program

Dan Gallagher

June 15, 2023

# Logan Airport Electric Vehicle Cabs Program

## Recommendation:

- Staff requests authorization from the Board to authorize a new incentive program to support the growth of electric vehicles (“EV”) in the taxi fleet serving Logan

## Background:

- The proposed Logan Airport Electric Vehicle Cabs Program is modelled after the Logan Airport Clean Air Cabs Program, originally approved by the Board in 2007
- The Clean Air Cabs Program authorized policies and procedures to allow front of line privileges for hybrid vehicle taxis
- The now-expired hybrid cab front of line program was implemented to support the widespread adoption of hybrid vehicles in the Boston taxi fleet
- This Electric Cabs Vehicles Program is intended to help incentivize the growth of EV taxis



MASSACHUSETTS PORT AUTHORITY

## Facilities and Construction

---

# Massport Building Condition Assessment

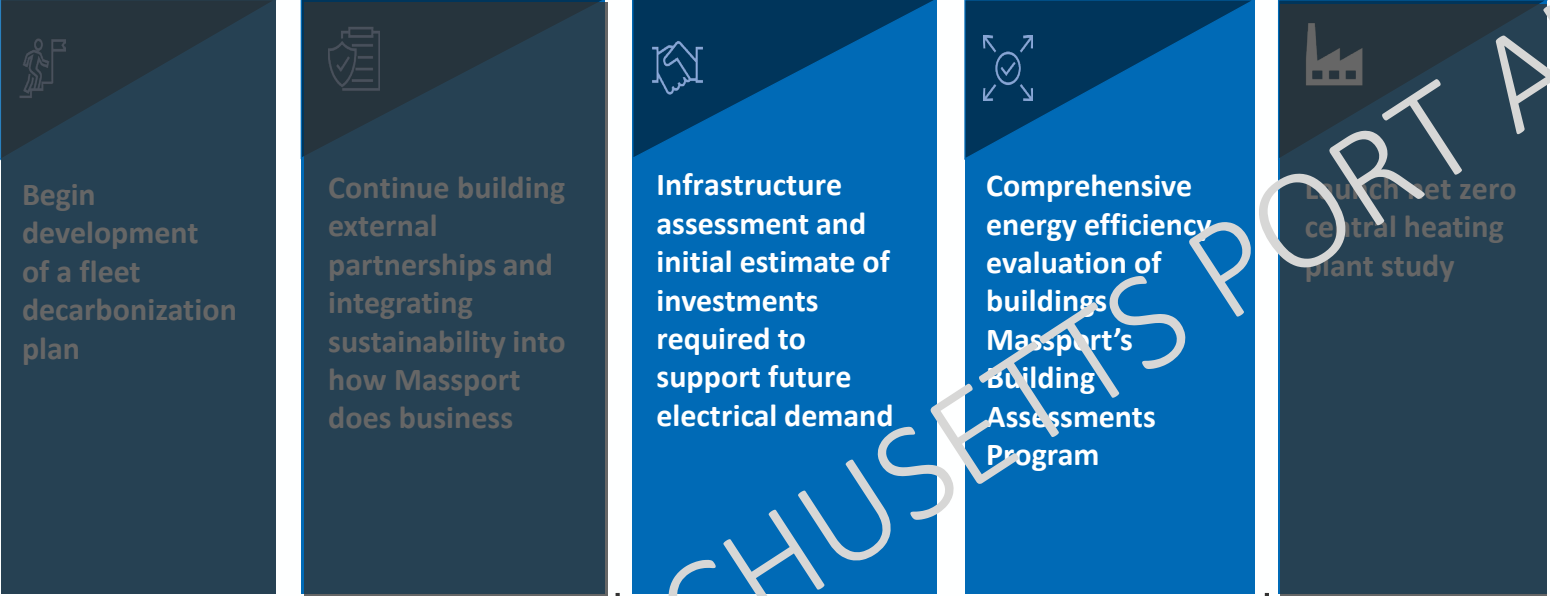
Luciana Burdi

June 15, 2023





# The Massport Building Condition Assessment (MICA) is part of Massport's Net Zero Focus in 2023



# MASSACHUSETTS PORT AUTHORITY

## Climate Action Plan

# MICA as solution to address our needs



**Technology  
Centric**



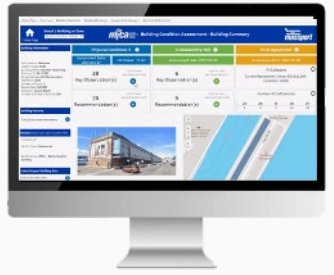
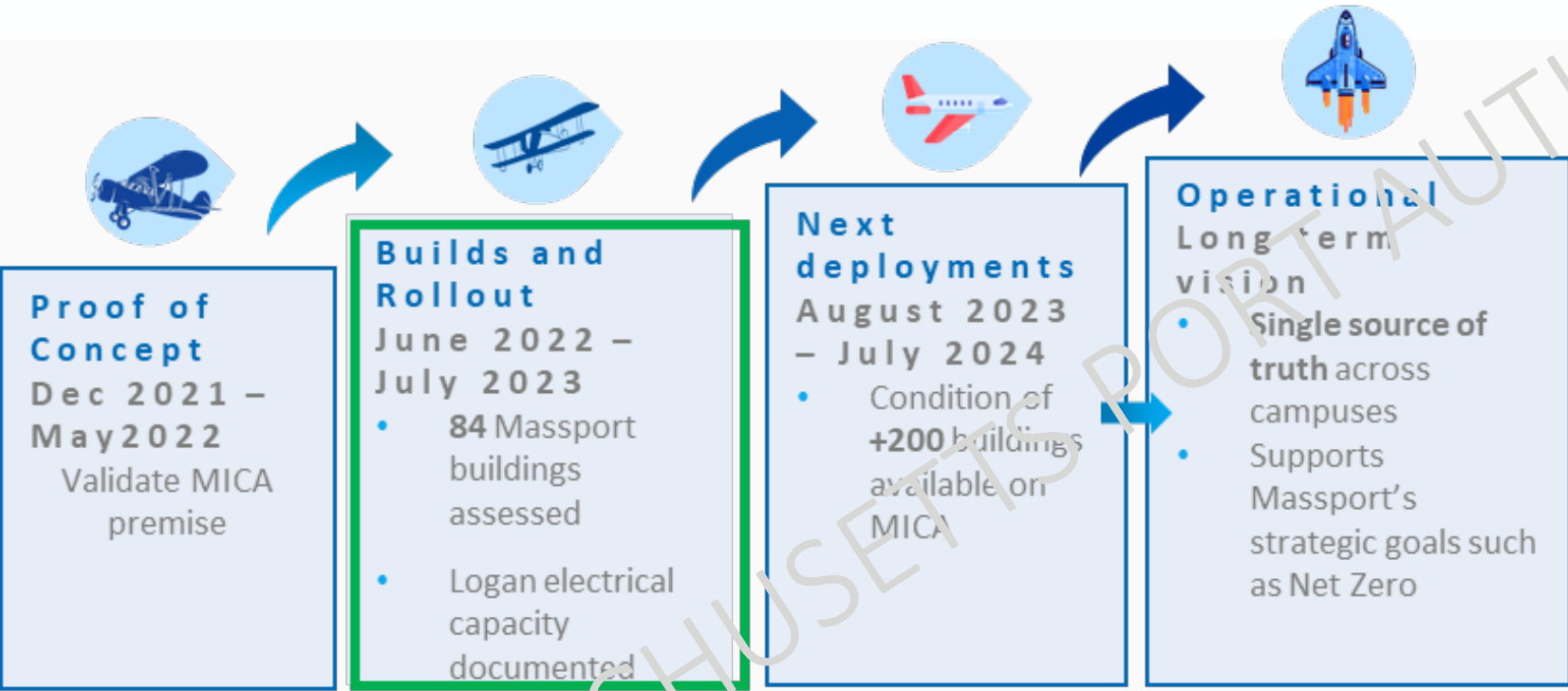
**Holistic view to  
Massport's  
Infrastructure**



**Access to data, analysis, and  
KPIs to inform strategic  
business decisions**



# MICA Coming Accomplishments and Next Steps



**Board Recommendation:**

Approve a partial project budget for MPA Project Number A427, Massport Infrastructure Condition Assessment, in the not-to-exceed amount of \$13 million

---

# Terminal E Modernization

Luciana Burdi

June 15, 2023



## Proposed New Security Checkpoint Screening Lanes in Terminal E 4-gate Addition

---

- The new security checkpoint screening lane equipment, CT (Computed Tomography), takes advantage of the latest advancements in approved screening technology
- New state-of-the-art security checkpoint screening lane equipment has been approved by the Transportation Security Administration (TSA) and will improve security, efficiency, and the passenger experience
- **Board Recommendation:** Approve an additional \$20 million for a revised full project budget for MPA-L338, Terminal E Modernization

Assent Agenda

MASSACHUSETTS PORT AUTHORITY

---

# Sumner Tunnel Update

Lisa Wieland and Joel Barrera

June 15, 2023

# Massport's goal is to support MassDOT's critical infrastructure project while balancing our mission and a broad range of stakeholder interests

## Sumner Tunnel Closure:

- 24/7
- July 5 to August 31

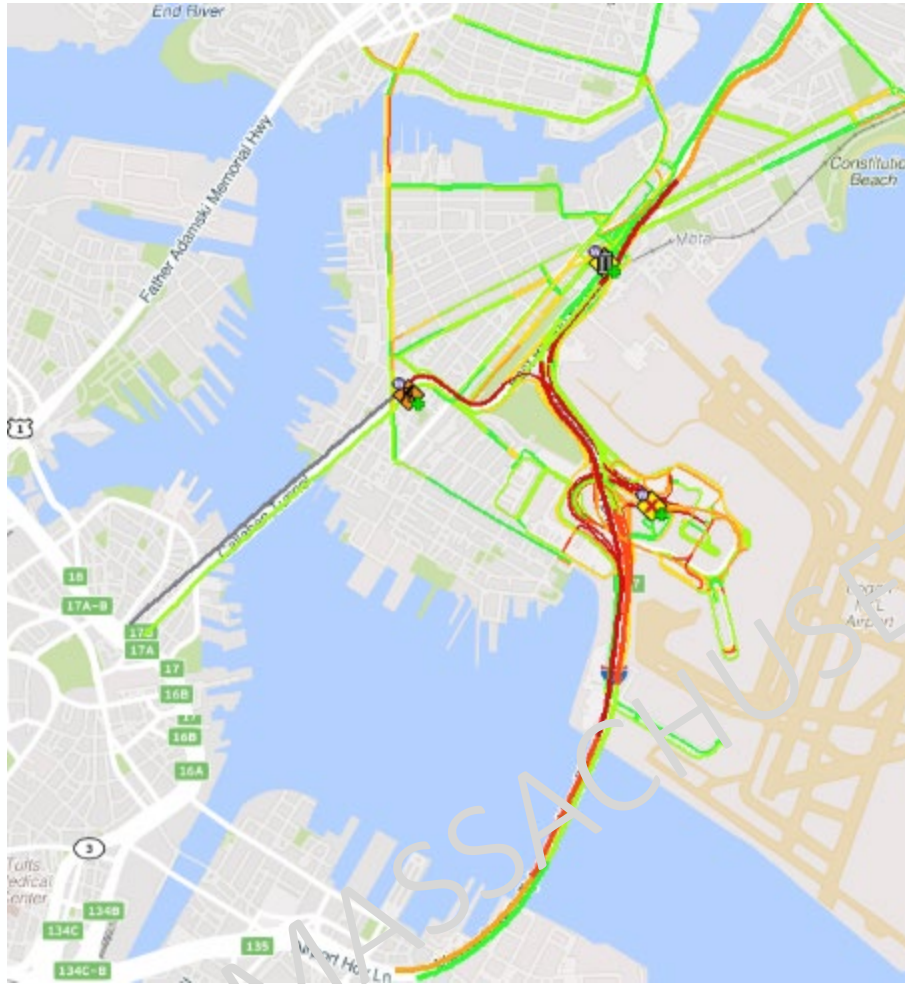
## Key Issues/Concerns:

- Public safety
- Impact on surrounding communities
- Disruptions to passengers and cargo, freight
- Implications for the broader aviation system





# State Police will work proactively with MassDOT to monitor and mitigate traffic impacts on gateway and airport roadways



## Massport Goals

- Prevent gridlock and unsafe conditions on terminal area roadways
- Reduce impact of traffic mitigation actions on surrounding communities
- Prioritize transit, cargo and emergency vehicle access
- Facilitate ability of airport workers and flight crews to get to Logan and cargo and departing passengers to make their flights
- Communicate and coordinate State Police traffic mitigation actions with MassDOT

# State Police are coordinating with the MassDOT Highway Operations Center (HOC) on reducing East Boston impacts

- When the State Police must close Route 145 off ramp from Route 1A for safety reasons, they coordinate with MassDOT HOC
- MassDOT created a signed East Boston detour route through airport roadways
- East Boston residents are alerted by a variable message sign when the ramp is closed and the detour is in effect

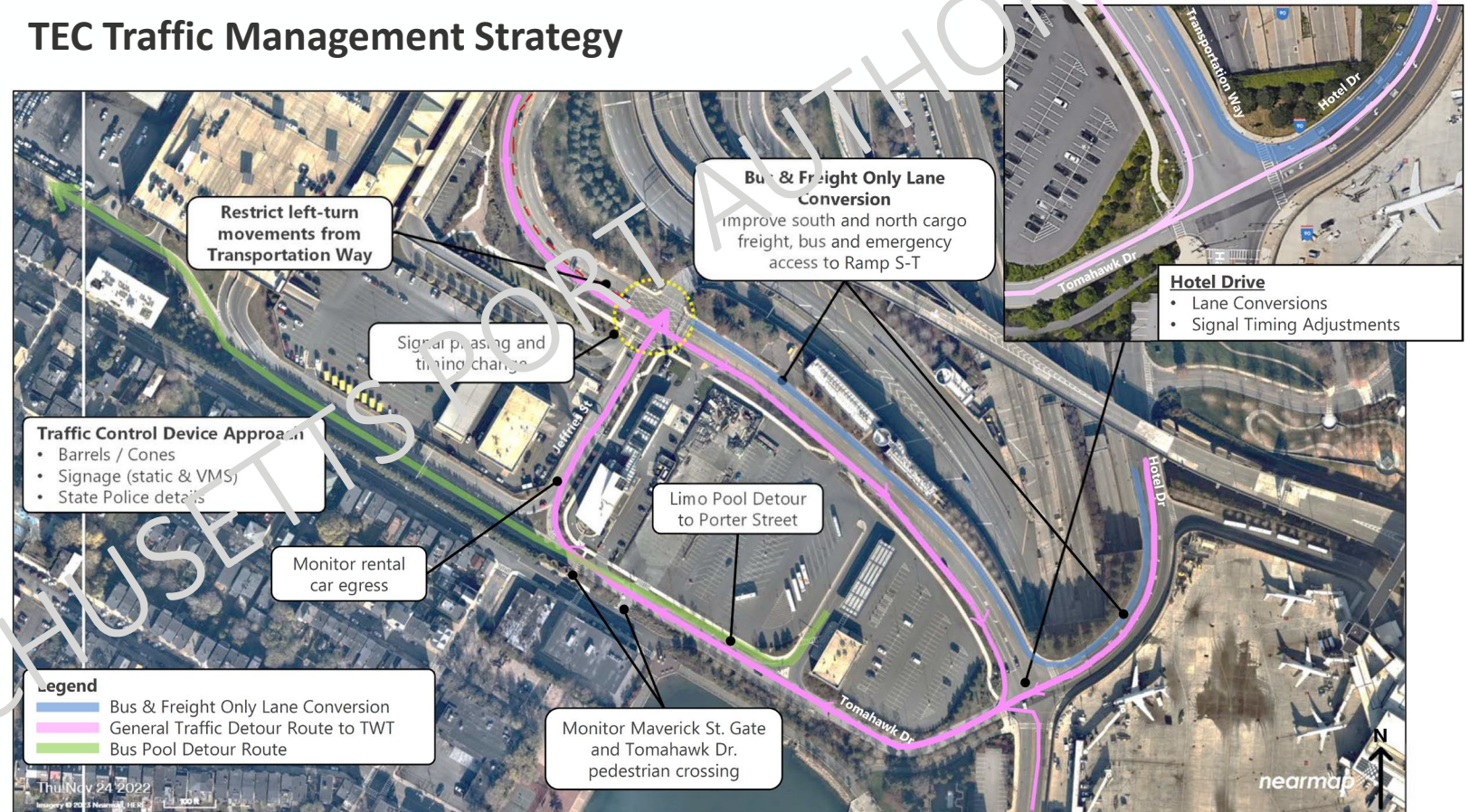




# Massport and State Police successfully piloted a traffic management strategy to prioritize Transit, Emergency, and Cargo vehicles - the TEC Pilot

- The traffic management strategy creates a bus/freight/emergency vehicle only lane on Transportation Way from Hotel Drive to the TWT entrance
- Other vehicles coming from Hotel Drive are rerouted to Tomahawk Drive, then a right on Jeffries St and straight into the TWT
- Vehicles approaching from the east end of Transportation Way are prohibited from making a left into the TWT and are diverted to the Tomahawk Drive/Jeffries St route to access the tunnel
- The strategy eliminates a pinch point at Transportation Way and the TWT entrance
- Based on positive results and feedback, the **priority lane and detour will remain in effect throughout the summer**

## TEC Traffic Management Strategy







# Preparing for Full Summer Tunnel Closure: Passenger Support Getting to/from Logan

## Massport is Expanding Transit Options:

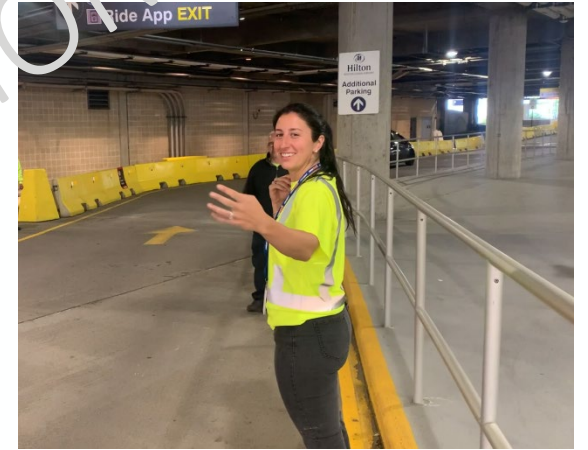
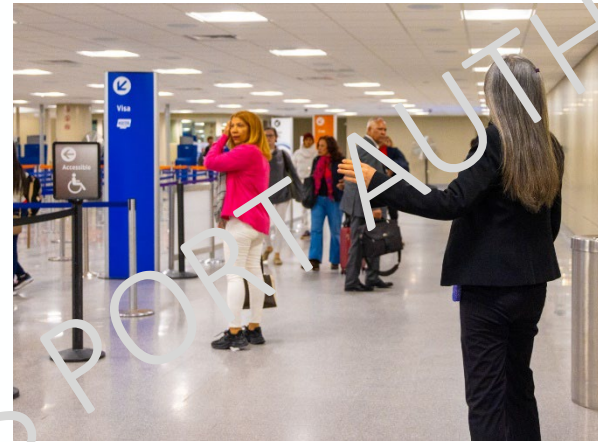
- Purchased 10 new, enhanced electric SL1 buses and coordinating with MBTA on improved service during tunnel closure
- Added direct, frequent service from MBTA Blue Line Airport Station and improved wayfinding
- Created new Logan Express Employee site in Quincy, increasing capacity for passengers at the Braintree Logan Express
- Expanded LEX cover bus fleet to improve schedule reliability
- Extended 25% discount for online Logan Express tickets during closure (kids 17 and under are free)
- Enhanced real-time bus arrival time information for SL1, Airport Shuttles, and Logan Express at curbs and baggage claims, and on FlyLogan and transit apps
- Added a Logan Airport stop to the Winthrop Ferry, which also serves the Seaport, Financial District, and Quincy
- Promoting water transportation to Logan by providing a “Ticket to Skip to the Front of the Line” for airport checkpoint screening



# Preparing for Full Summer Tunnel Closure: Passenger Support at Logan

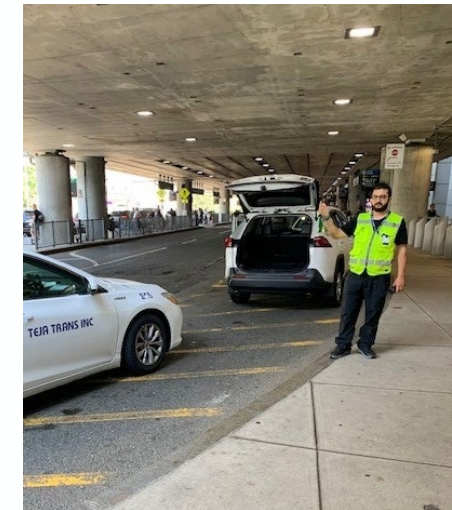
## Public Service Representatives

- Accelerated the hiring and onboarding of front line customer service staff by July 1
- Will be deployed in the highest traffic areas of the terminal arrivals and departures levels, in the walkways to Central Parking, Ride App areas, and Rental Car Center



## Ground Transportation Staff

- Will be deployed to curbs and parking garages to ensure smooth operations
- GTU agents will be very active directing traffic at the taxi stands and Ride App locations throughout the airport
- They will also be answering questions, providing service updates and making transportation recommendations





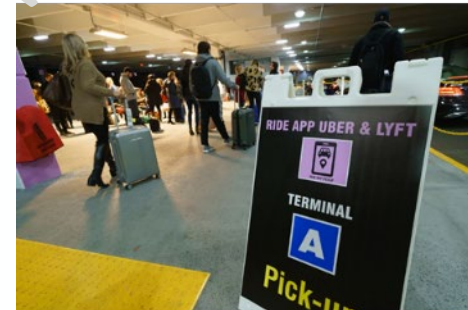
# Preparing for Full Summer Tunnel Closure: Outreach to Stakeholders

## Logan Airport Community

- Passenger and cargo airlines
- Cargo handlers
- Airport Tenants
- Rental Car Companies
- On-airport and off-airport hotels
- Uber/Lyft
- Boston Taxi Association
- New England Livery Association
- Motor Coach Association
- Logan Express bus operators

## Other Business Partners

- All commercial real estate tenants
- Seafood industry/maritime partners (Fish Pier and MMT tenants)
- Ray Flynn Marine Business Park Association
- Boston Chamber of Commerce
- AIM
- A Better City



## Messaging to airline passengers:

- Do not drive to Logan if you are able to take another mode
- Allow two extra hours of travel time to and from the airport

# Preparing for Full Summer Tunnel Closure: Massport Passenger Outreach

## Print

The Boston Globe  
Boston Herald



## Social Media

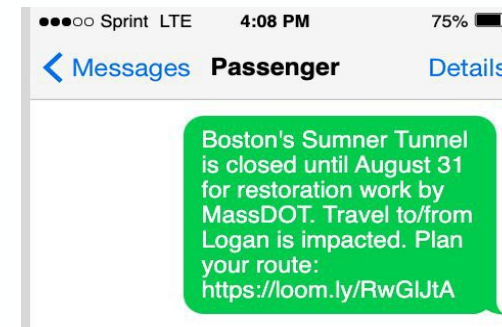
## Radio



## Video (Social & Reach TV)



## Text Alerts



## Logan Website:

- Banner and callouts

## Airport Signage

## Variable Message Signs Managed by MassDOT



## Worcester Regional Airport

- Complementary campaign promoting use of Worcester Regional Airport



## Summary

---

- Collaborating closely with MassDOT, the MBTA and others
- Extensive communications/media campaign in place
- Prepared to be vigilant, agile and ready to adjust as needed

Report of the CEO  
Lisa Wieland

## Massport Goals – FY 2023

---

- Ensure safe, secure and healthy facilities
- Generate economic impact for the Commonwealth
- Enhance the customer experience
- Improve financial and operational performance
- Embed DE&I into our organizational DNA
- Advance our environmental leadership
- Bring about digital transformation
- Maintain strong relationships with business partners, customers, stakeholders, elected officials, surrounding communities and employees

# 2023 Massport Summer Drone Awareness Campaign

- Massport kicked-off the 6<sup>th</sup> public outreach and educational campaign for drone safety at the end of May
  - Focus is to mitigate risky or dangerous activities that could interfere with safe aviation and maritime operations
- Campaign seeks to provide drone operators with:
  - Basic rules for safe drone piloting
  - QR code that directs the user to the FAA website that explains all unmanned aircraft system (UAS) rules
- Multiple media platforms utilized:
  - Social Media
  - Print media in 17 local pubs including Spanish language
- Coverage is consistent with past holiday and summer campaigns
  - Targets communities within a 10-mile radius of each airport
  - Additional coverage includes shore-line communities covering the South Shore



**READY TO FLY THIS SUMMER?**

**KNOW THE RULES AND KEEP THE SKIES SAFE**

Before you fly a drone, learn the rules to keep everyone safe. Those who break the law could be fined.

- Register your drone
- Take the FAA's Recreational UAS Safety Test
- Flying near airports is prohibited without prior FAA approval
- Never fly near any aircraft
- Keep your drones in sight below 400 feet at all times
- Comply with Remote ID rules
- Learn the rules about flying over people
- Download the B4UFLY app



Visit [FAA.gov/UAS](https://www.faa.gov/UAS) for more information



# Cybersecurity Table Top Exercise for Senior Staff

## Response to a ransomware attack on a third party vendor set the stage for this training exercise

- **Drill exercised:**

- Notification processes
- Communications
- Decision Making
- Crisis Management

- **Identified potential impacts of a cyber attack:**

- **Operational** – Possible impacts on day-to-day functions, business efficiencies, and safety implications
- **Reputational** – Even third party breaches will have direct or indirect impact based on scale of attack
- **Financial** – Costs can add up quickly

- **Takeaways**

- Enhanced understanding of roles for decision makers
- Identified potential challenges during a cyber crisis
- Communication amongst senior leadership, employees, regulators, stakeholders, media, and others must be concise and consistent
- Comprehensive policies regulating third party vendor access to Massport systems needs constant review and updates





# The Seaport Hotel celebrated its 25<sup>th</sup> Anniversary



# Pembroke announced two new leases and renovations at Seaport office buildings

- Citizens Energy Corporation
  - Non-profit energy company
  - Relocating its headquarters to Seaport East
  - 10 year lease/6,780 sq ft
- Cervello Inc.
  - Data and analytics consulting firm that provides business planning solutions
  - Signed lease at Seaport West
  - 5 year lease/11,769 sq ft
- Seaport East undertaking comprehensive renovation of lobby incorporating innovative amenities, as well as a new café





# We awarded the Worcester Regional Airport Education Vacation Sweepstakes to two teachers from local high schools



Worcester Technical High School, Worcester, MA



Blackstone Valley Regional Vocational Technical High School, Upton, MA



# Winthrop Ferry added a Logan Airport stop, expanding HOV choices for passengers and employees

- The seasonal Winthrop Ferry service, the Valkyrie, restarted on May 29
- In addition to the Logan Airport water dock, the ferry stops in the Seaport, Financial District, and Marina Bay in Quincy



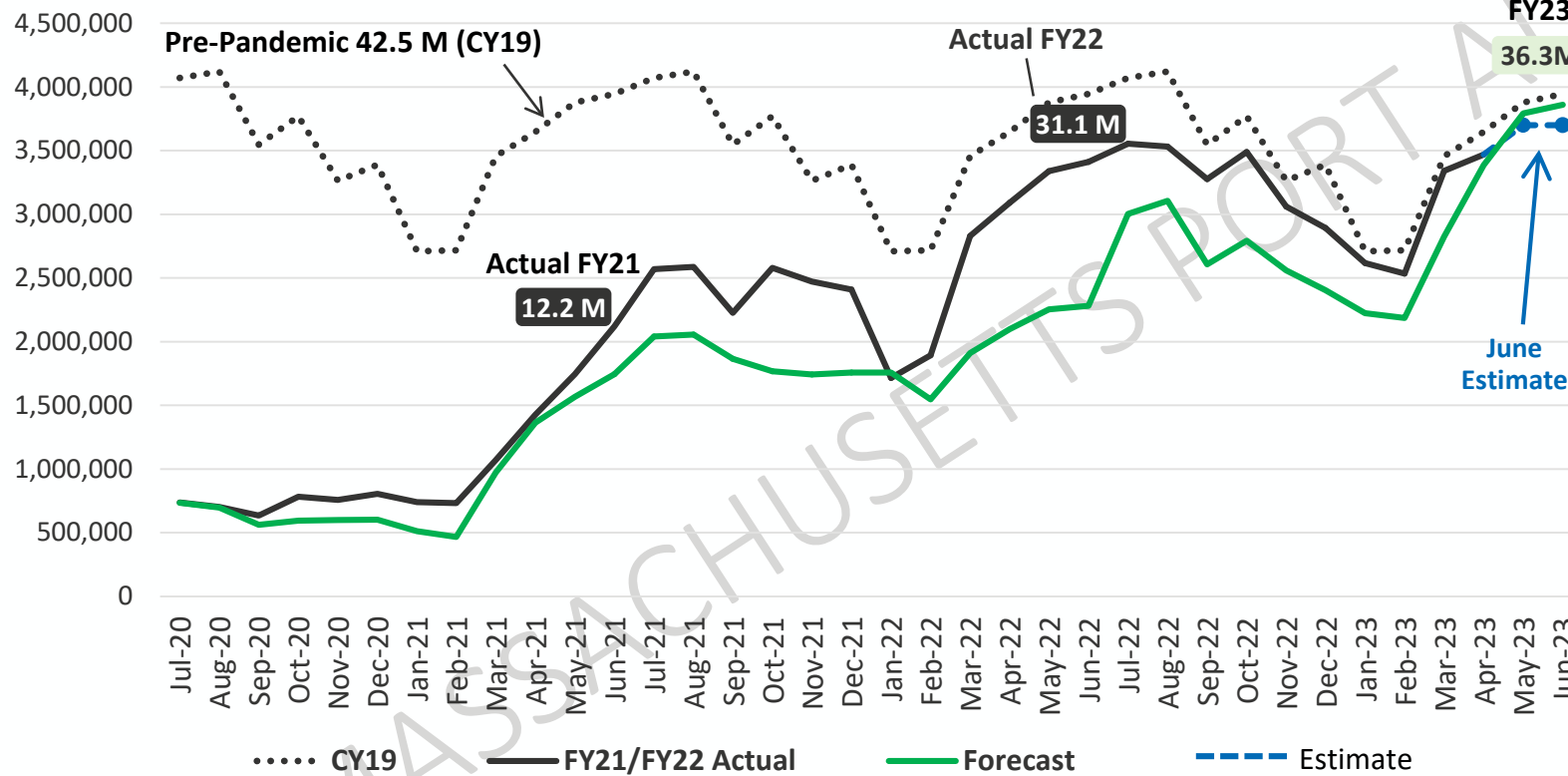
## Winthrop - Logan Airport - Seaport - Boston - Quincy 2023 Schedule

Commuting between Winthrop, Quincy and Boston has never been easier!  
Enjoy the harbor views and get to your destination in comfort.

Weekday Departure Schedule (commuter times in red)	Winthrop 6:30 AM	→	Quincy 6:50 AM	→	Logan Airport 7:10 AM	→	Aquarium/Financial District 7:20 AM	→	Quincy 7:40 AM	→	Winthrop 8:05 AM	→	Logan Airport 8:25 AM
	Seaport 8:35 AM	→	Aquarium ARRIVAL ONLY 8:45 AM	→	Winthrop 10:30 AM	→	Quincy 10:50 AM	→	Logan Airport 11:10 AM	→	Aquarium/Financial District 11:20 AM	→	Seaport 11:30 AM
	Winthrop Arrival Only 11:45 AM	→	Winthrop Departure 3:35 PM	→	Logan Airport 4:00 PM	→	Aquarium/Financial District 4:10 PM	→	Seaport 4:20 PM	→	Quincy 4:40 PM	→	Winthrop 5:05 PM
	Logan Airport 5:20 PM	→	Seaport 5:30 PM	→	Aquarium/Financial District 5:40 PM	→	Winthrop 6:05 PM	→	Quincy 6:30 PM	→	Winthrop Arrival Only 6:50 PM		

# Logan's passenger volume is trending upward, but a full recovery is not expected until after FY23

Forecast of Logan Passengers FY22 to FY23



## Positive Trends Continue but Headwinds Remain

- Domestic business travel appears to be ticking upward
- Airlines face supply challenges: pilot shortage, delayed aircraft deliveries
- FAA air traffic controller staffing issues causing airlines to reduce summer flight schedules
- Lifting of COVID testing requirements in the U.S. for passengers arriving from China
- Ongoing conflict in Ukraine
- Possible U.S. and global economic recession

# Financial Performance: April 2023

---

## *Activity Highlights*

- Logan served 3.5M passengers
- Conley Terminal processed 10,800 containers
- Real Estate revenues exceeded plan by \$0.8M
- Expenses were \$1.1M above budget

## *Financial Results*

Revenues	\$93M
Expenses	<u>(\$79M)</u>
<b>Contribution</b>	<b>\$14M</b>

*April contribution will be used to fund HOV initiatives, the Capital Program, and matching funds for Logan Airport BIL grants*

# Massport applied for two federal grants to help fund HOV and maritime initiatives

## FY23 RAISE Grant Project Description:

- Add ≈1000 new parking spaces to the existing Framingham Logan Express garage
- Enables HOV service expansion, reducing SOV trips and lowering CO2E emissions by an additional 7,200 tons annually (equivalent to the annual energy usage of 750+ homes)
- Other Sustainability elements: wetlands restoration, 8 EV dual-charging stations, and Solar PV (159 MWh annually)
- Signalization and intersection improvements on Route 30 (collaboration with City of Framingham)

**Project Cost:** \$51.5M

**Grant Request:** \$25M



## FY23 Port Infrastructure Development Program grant

### Project Description:

- Rehabilitate aging infrastructure at the North Jetty Berth and construct a multi-purpose bulk cargo facility to strengthen Boston as a full-service port
- Project to be built and operated by Eastern Salt
- Reduces truck miles by enabling bulk and breakbulk cargo to be shipped directly into the Port of Boston, rather than distant facilities
- Supports resiliency by raising the site by 2+ feet
- Creates good-paying maritime industrial/union jobs

**Project Cost:** \$64M

**Grant Request:** \$34M



## Massport was recognized for its commitment to supplier diversity

---



- Massachusetts Supplier Diversity Office (SDO) held its first Excellence in Supplier Diversity awards ceremony
- Massport was presented with a citation from Governor Healey for its commitment to supplier diversity
- The success of Massport's Procurement/Supplier Diversity Program is a collective authority-wide effort to enhance access, opportunity and equity for diverse businesses



# Massport celebrated Asian American, Native Hawaiian, and Pacific Islander (AANHPI) Heritage Month and LGBTQ Pride Month

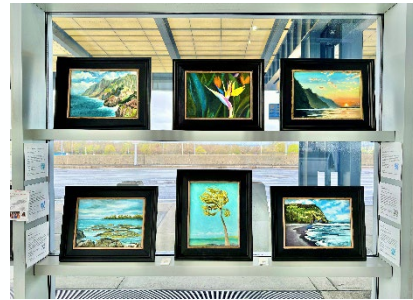


## Logan Office Center

- Raised the Pride flag on the IGC Harborwalk with special guest, Jonathan Allen, Co-founder and Director of the Leadership Brainery
- Multicultural ERG and DE&I/Compliance sponsored a Fireside Chat with Leverett Wing, President and CEO of The Commonwealth Seminar (TCS) for AANHPI Heritage Month

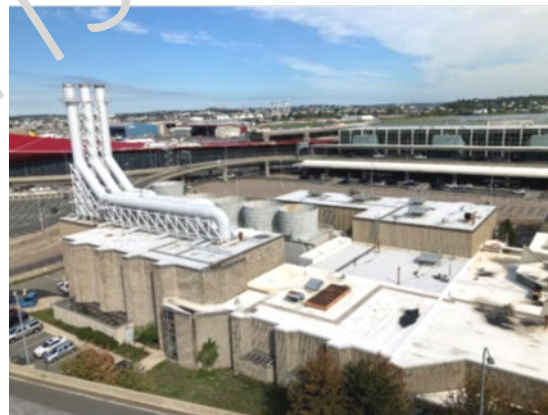
## Worcester Regional Airport

- Hosted a month-long art exhibit featuring two local Asian-American artists and a community open house featuring poetry readings by Worcester's Poet Laureate and performances by local dance groups



# Massport is making strides in fleet decarbonization and energy efficiency

- **10 MBTA Silver Line enhanced electric buses** will enter service by the end of June 2023
- **10 fleet EVs** procured (Ford F-150s and Transits):
  - 6 Battery Electric – **3 in service**
  - 4 Hybrids – **2 in service**
- **97 State Police hybrid cruisers** procured
  - **10 in service**
  - 55 in service by end of June
  - 32 in service by September
- **8 DC Fast Chargers** were activated in the Ride App (6) and Taxi (2) lots last month
- **1,000 Rental Car EVs**, up from 500
- Design consultant selected for the **Central Heating Plant (CHP)** ‘Study to Achieve Net Zero’

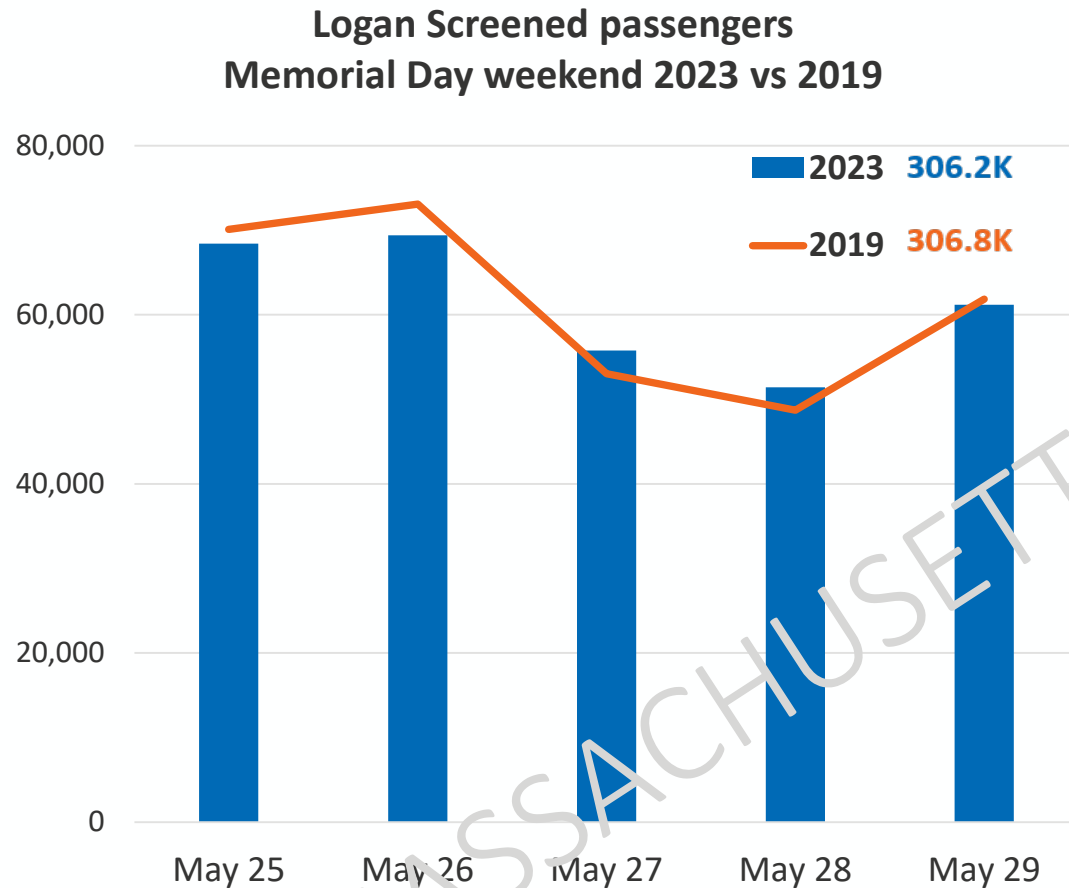


MASSACHUSETTS PORT AUTHORITY

Report of the Director of Aviation  
Ed Freni



# Logan Airport outbound passenger activity for the long Memorial Day weekend nearly recovered to pre-pandemic volumes



- 68K-69K daily outbound passengers leading into the holiday weekend
- Overall passengers (5-day total) up 10% over last year
- Flights down 3% over last year and 5% compared to 2019 as airlines up-gauge aircraft

## Logan Airport passenger activity levels – May 2023

### Logan Activity Summary May 2023

	2023	Prior Year 2022	% Change Over 2022	Pre Pandemic 2019	% Change Over 2019
Passengers	3.7M	3.3M	12.0%	3.9M	-3.7%
Aircraft Operations	35.4K	34.1K	3.7%	38.0K	-6.9%

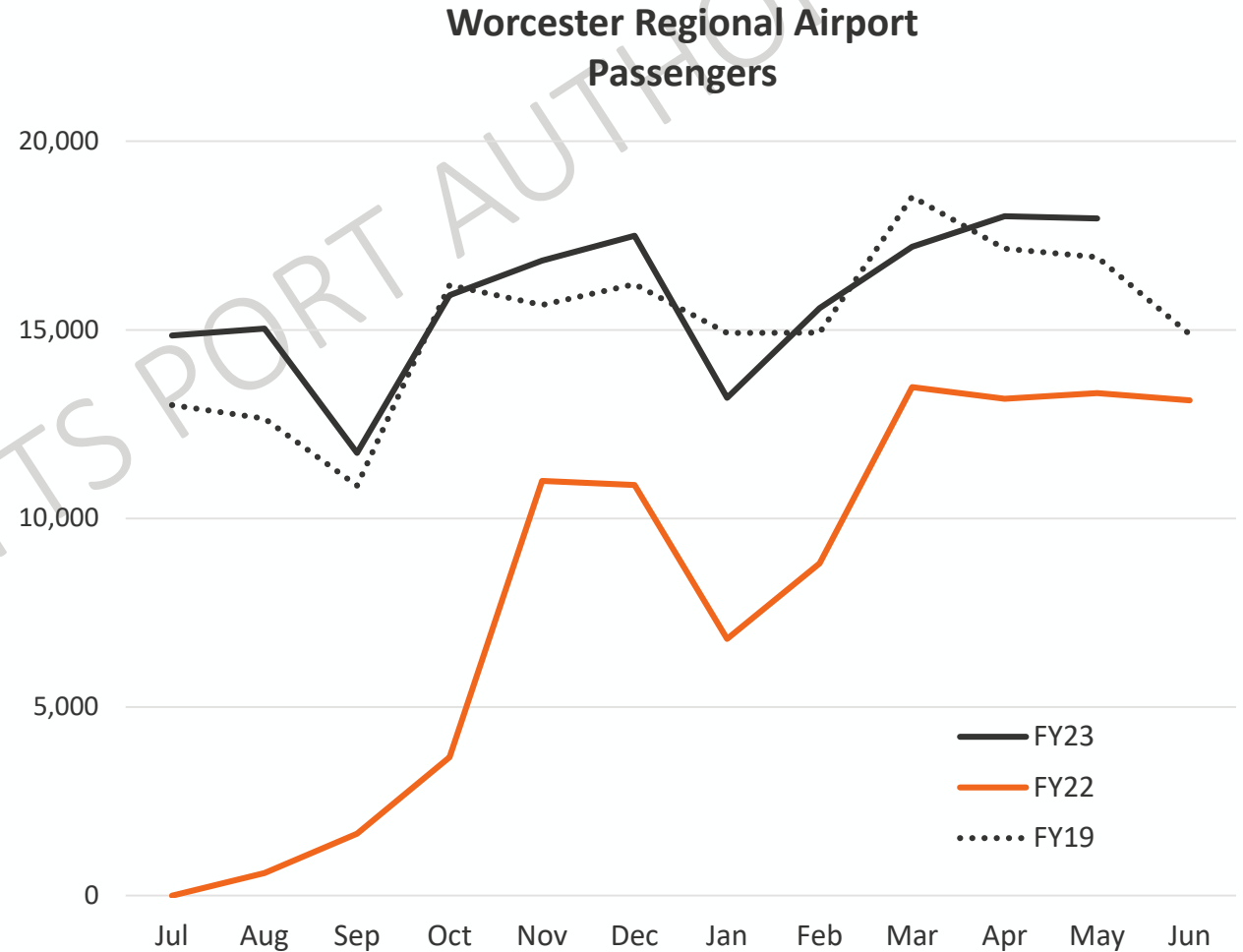
# Worcester Regional Airport passenger activity levels – May 2023

## Month:

- 18,000 passengers
  - Up 35% over 2022
  - Up 6% over 2019

## FYTD:

- 155,900 passengers
  - Up 108% compared to FYTD 2022
  - Up 4% compared to FYTD 2019



# Massport hosted the 9<sup>th</sup> Regional Runway Safety Summit in Worcester

- Massport brought together airport operators from around New England, New York, and New Jersey to discuss airfield safety
- Over 100 participants representing local, state, and federal government and the private sector were in attendance

## Key Take-Aways:

- Exercise process discipline before modifying airfield construction safety and phasing plans
- Develop local programs to bring together pilots, air traffic controllers, and airport operations personnel to discuss and/or advance safety initiatives (e.g., new procedures, emerging technology, etc.) - expand this collaboration in future summits
- Develop a means to assess the effectiveness and proficiency of airport operations training personnel

## Presentations made by:

- Massport Aviation & Capital Programs
- FAA Headquarters
- National Transportation Safety Board
- Connecticut Airport Authority
- Avports (Tweed-New Haven Airport)
- Panel discussion featuring FAA Air Traffic (Boston Tower) and the Massachusetts Business Aviation Association



## Massport hosted a Wings for Autism event at Worcester Regional Airport

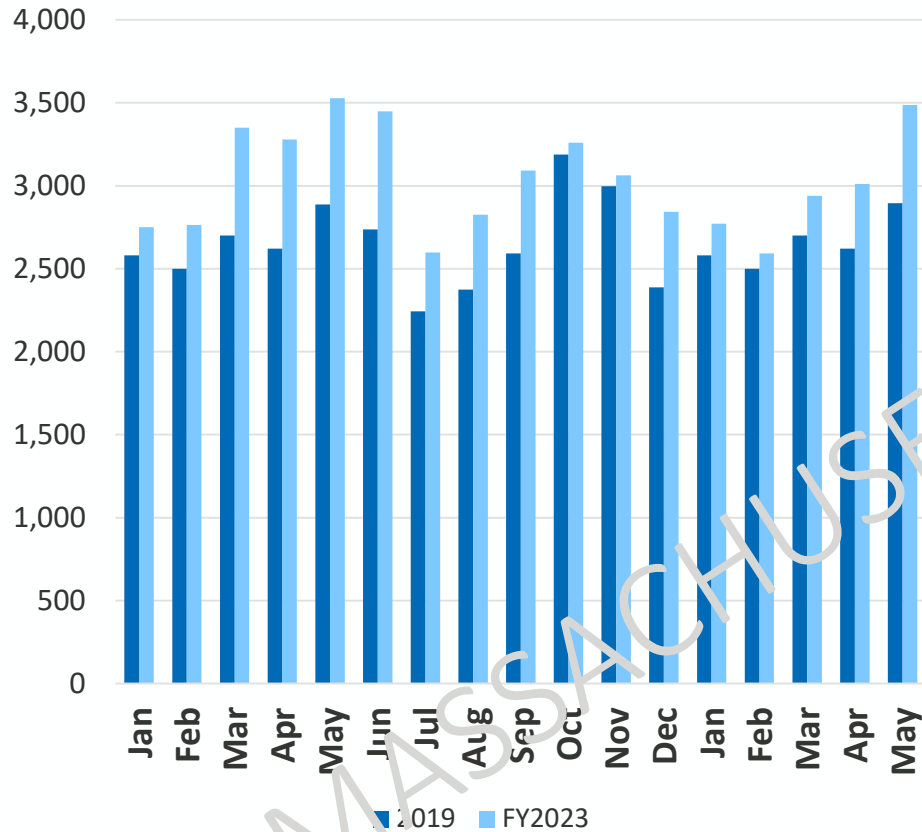
- Massport welcomed almost 200 participants to the event
- For many families it was their first Wings for Autism event as they felt more comfortable with the regional airport setting
- Delta and JetBlue each made an aircraft available so the children could experience the onboarding process
- Over 75 volunteers from Massport, Delta, JetBlue, American, the Charles River Center, TSA/FAMs, Worcester Fire Rescue and Massport State Police were on hand to help make the event a huge success





# Hanscom jet activity is normalizing after the COVID bump, but still exceeds pre-pandemic levels

Hanscom Field  
Jet Operations



## May Activity:

	Jets	Total
Operations	3,500	12,400
Chg vs 2019	20%	3%
Chg vs 2022	(1%)	9%

## FYTD May Activity:

	Jets	Total
Operations	32,500	111,700
Chg vs 2019	14%	1%
Chg vs 2022	(4%)	(0.3%)



MASSACHUSETTS PORT AUTHORITY

Report of the Director of Maritime  
Joe Morris

# Massport continues to promote Conley Terminal's strong value proposition, providing consistent service, high weekly frequency, and expanded global connectivity

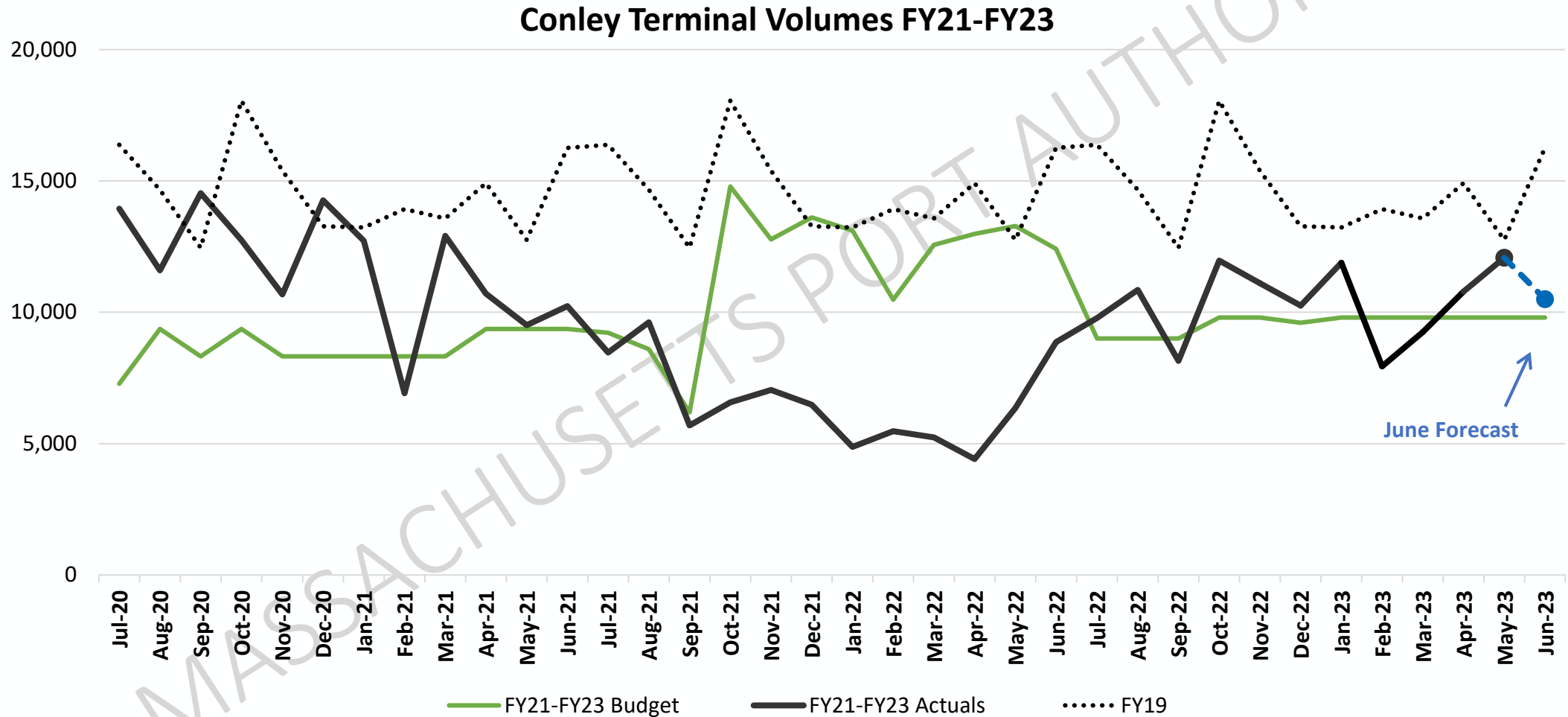
- Implementing new **Customer Relationship Management (CRM)** tool in collaboration with IT to improve data tracking of lead generation/customer engagement
- Global connectivity to more than 30 ports
- Recent wins for new business from large importers in Massachusetts and New Hampshire
  - Footwear
  - Golf apparel
  - Auto parts
- Container Incentive Program revamp will help attract and support New England businesses to prioritize freight through Conley Terminal

## Conley Terminal Strategic Initiatives 2023 and Beyond

- ✓ 1. Deliver on the value proposition consistently
- ✓ 2. Provide diversified carrier offerings and global connectivity
- ✓ 3. Expand incentive programs for importers and exporters
- ✓ 4. Recapture New England market share
5. Restructure ocean carrier contracts

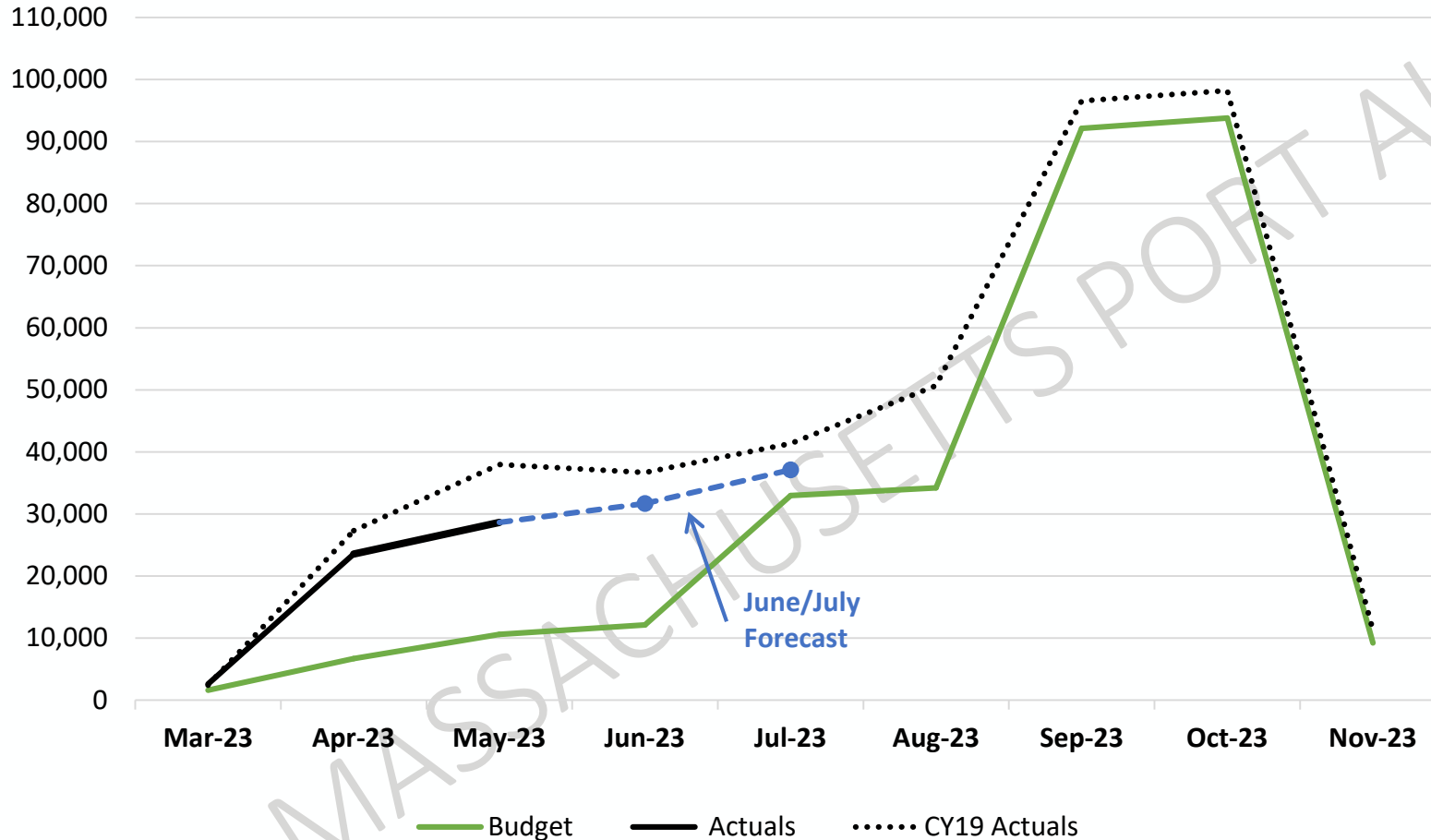


# Conley Terminal serviced +12,000 containers and a record 22 vessels in May



# Flynn Cruiseport Boston welcomed nine cruise ships in May, for a total of 16 cruise ships and nearly 55,000 cruise passengers to date in 2023

## Flynn Cruiseport Passengers



## Cruise Season Ship Calls

Months	Home Ports	Ports-of-Call	Total
<b>Actual:</b>			
March-May	13	3	16
<b>Expected:</b>			
June-August	22	12	34
September-November	23	77	100
<b>Total</b>	<b>58</b>	<b>92</b>	<b>150</b>