Massachusetts Port Authority Board Meeting

February 13, 2020
Report of the CEO
Lisa Wieland
I. Ensure safety and security at all of our facilities

II. Generate economic impact for the Commonwealth

III. Maintain strong relationships with our customers, business partners, stakeholders, and elected officials

IV. Enhance the customer experience

V. Improve financial performance and optimize business practices

VI. Collaborate with our surrounding communities and reduce impacts to the environment
Safety and Security
The U.S. implemented restrictions on travel from China in response to the coronavirus

Massport is actively coordinating with federal, state, and local partners on the situation

State Department elevates China travel advisory to 'Do Not Travel' due to coronavirus

US travel restrictions go into effect to combat coronavirus spread
The Worcester Regional Airport public safety drills train and prepare participants for active-shooter events

Active Shooter Drill – January 29
• The drill focused on the first four minutes of response to an active-shooter event
• The drill incorporated Worcester Police/Fire/EMS, Rescue Task Force, and other public safety stakeholders

Incident Command and Communication – February 12
• Massachusetts State Police, Massport Fire-Rescue, and mutual aid partners near ORH held a communications tabletop exercise (TTX) to address interoperability challenges
• The TTX reinforced proper command and control, and radio and dispatch protocols to ensure the establishment of a Unified Command structure with integrated communications
• Next training scheduled for February 26
Massport CARE Team training provided members with strategies used by FBI Victim Assistance for emergency incident response.

Massport CARE Team Training with FBI

- Lisa N. Solecki, FBI Victim Specialist for the Boston Area, presented to Massport’s CARE Team on Tuesday, January 28th.
- Nearly 45 CARE Team members attended the presentation (including volunteers from Logan, Hanscom, Worcester, and Maritime).
- CARE Team learned FBI’s best practices, tactics, techniques, and types of support that it uses when responding to many and diverse emergencies and disasters.

The Victim Services Division emerged out of the FBI response to the 9/11 attacks with a mission: to inform, support, and assist victims in navigating the aftermath of crime and the criminal justice process with dignity and resilience.
Economic Impact
Boston ranked in the top 10 among 180 U.S. cities for the Best Cities for Jobs

**WalletHub**

**Best Cities for Jobs**

**Ranking**

- Boston scored 5th in “Job Market”
- “Job Market” includes metrics on job opportunities, employment growth, job satisfaction, and access to employee benefits
- “Socio-economics” includes metrics on median annual income, housing affordability, average work & commute time, and family-friendliness

**Massport**

- Massport is a key economic and employment engine in the Commonwealth
- Massport facilities have generated $21.9B in economic impact and 107,000 direct jobs
- Boston’s robust employment market is also a driver of strong passenger traffic at Logan Airport, commercial and residential real estate demand in the Seaport, and need for freight cargo

**Ranking Methodology**

- 31 key metrics in two categories
  - Job Market
  - Socio-economics
The Federal Reserve’s January Beige Book reported robust economic activity in the Commonwealth in key industries.

**Federal Reserve Beige Book**

- **Retail and Tourism**
  - “The travel industry expects 2020 to be a good year; large conventions booked in Boston will help”

- **Manufacturing and Related Services**
  - All manufacturing respondents had a “positive outlook”
  - “Commercial real estate activity in the First District has continued to strengthen”
  - “Vacancies were low and construction was robust”
  - “Inventory shortages prevailed”

- **Commercial and Residential Real Estate**

**Potential Implications for Massport**

- Positive outlook for Logan leisure passenger demand, upcoming cruise season, and hotel bookings in the Seaport
  - Stable outlook for ocean and air freight
  - Strong demand for new Massport properties in Seaport and East Boston
  - Increased demand for existing available space by Massport and its tenants
Hanscom Field is attracting new aviation clients

The Hanscom Advantage

- Waltzing Matilda Aviation (WMA) believes its new location at Hanscom offers it an advantage, including:
  - Significant reductions on weather-related disruptions because of its multiple runways and instrument approaches
  - Efficient and responsive snow removal
  - Lower cost to its Boston-based customers because of no repositioning expenses
  - Faster departures with efficient integration into Boston-area airspace

- Hanscom Field’s Customs and Border Protection facility alleviates unnecessary stops for international returning flights

Charter Operator Finds Growth in Move to BED Airport

Waltzing Matilda Aviation (WMA) more than doubled its revenue in 2019 following a December 2018 move from its former offices at Norwood (Massachusetts) Memorial Airport (OWD) to Hanscom Field/Bedford Airport (BED) 20 miles northwest of Boston, the Part 135 operator announced today. Along with the move, the company also appointed a full-time sales director. “We are also very pleased to have attracted a wide range of new clients including Boston professional athletes, leading academics as well as broadening our network of corporate and private equity clients,” said WMA chief executive John Thomas.
The U.S. House of Representatives’ infrastructure plan could provide a boost to airports and ports

**Moving America and the Environment Forward:**
Funding Our Roads, Transit, Rail, Aviation, Broadband, Wastewater and Drinking Water Infrastructure

**Airport and Airway Infrastructure – $30B**

I. **Passenger Facility Charge (PFC)**
   - Increases the PFC cap and index to inflation
   - Revenue would fund landside development projects not eligible for AIP funding

II. **Airport and Airway Investment Program**
   - Creates new investment program focused on modernization projects
   - Funded through the Airport and Airway Trust Fund

III. **Sustainability and Noise**
   - Incentivizes the development, testing, and certification of new aircraft and technologies, including hybrid and electrical
   - Incentivizes the creation and use of sustainable aviation fuels
   - Accelerates research on policies and programs to lessen overflight noise

IV. **Innovation**
   - Advances deployment and of UAS for the construction of transportation infrastructure projects
   - Plans for the integration of large UAS and eVTOL aircraft into the National Airspace System

**Harbor Maintenance Trust Fund – $19.7B**

I. **Harbor Maintenance Trust Fund Utilization**
   - Enables investment of all Harbor Maintenance Trust Fund revenues (past and future) to address operation and maintenance dredging costs for Federally-authorized ports waterways

**Transformative Clean Energy Investment – $34.3B**

I. **Electric Vehicle Infrastructure**
   - $1.5B for electric vehicle infrastructure

II. **Energy Efficient Infrastructure and Investments**
   - $1.25B to reauthorize the Diesel Emissions Reductions Act (DERA) for 5 years to reduce carbon pollution from older vehicles
Strong Relationships
The City of Boston, MassDOT, and Massport collaborate to activate Lewis Mall for potential future ferry service

Enhanced Ferry Dock to support future water shuttle connections to East Boston

BOSTON - Friday, February 7, 2020 - Mayor Martin J. Walsh and the Boston Planning & Development Agency (BPDA) in collaboration with Massport and MassDOT today announced a joint effort to build a new ferry dock at Lewis Mall in East Boston. A new dock for enhanced water transportation service at Lewis Mall has been identified in Imagine Boston 2030, Go Boston 2030, PLAN: East Boston and Boston Harbor Now’s Business Plan for New Water Transportation Service as a priority for the residents of East Boston, and part of the City’s work to build equitable transportation options in the city of Boston. The new dock will better support current service and potential future improved water shuttle service.

"We’ve heard from East Boston residents and workers that improved water shuttle service is critical as the neighborhood continues to grow," said Mayor Walsh. "The Lewis Mall dock represents an important step to make improved water transportation a reality for East Boston, helping us reduce congestion on our roads and strengthen connections between our neighborhoods."

"MassDOT is committed to working with municipalities to provide safe and effective transportation options," said MassDOT Secretary and CEO Stephanie Pollack. "Lewis Mall was identified in the Boston Harbor Now business planning effort as a location with high potential for successful water transportation service. I am pleased to support the City of Boston’s efforts to modernize, expand, and improve accessibility of this high potential..."
Massport’s *Real Estate Diversity and Inclusion Initiative* recognized as model for both public and private sectors

**WGBH**

The Color Of Public Money: Philadelphia And Massport Show Paths To Expanding Minority Contracts

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**Banker & Tradesman**

Why Diversity Matters in Real Estate

Private Sector Should Follow Massport’s Example and Seek Greater Diversity in its Business Partners

By Greg Janey | Special to Banker & Tradesman | Feb 4, 2020

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**Massport Continues Diversity Model**

- **Omni Hotel:** Strong diversity commitments for design, construction, and finance with 39 minority and women investors
- **Parcel A2:** Significant M/WBE participation across the development, finance, design, and construction teams
- **Fidelity/Pembroke:** Selected MBE construction venture (Turner-Janey) for WTC Redevelopment

**Parcel H Diversity Networking Event**
Worcester Regional Airport partnered with local forecasters last week when government weather radar in Taunton went down.

- NBC10 deployed their mobile Doppler radar at ORH, providing the only detailed radar information for Central MA and interior Eastern MA; radar at Logan Airport provided imagery closer to the coast.
- This meant that last week the only working weather radars in Massachusetts were stationed on Massport properties.

With our government radar down this morning, we've deployed our exclusive @nbc10boston @StormRanger mobile Doppler Radar to @FlyWorcester to fill the gap between @BostonLogan's Terminal Radar and the nearest government weather radar in Maine & Long Island.
Customer Experience
Travel platform *Wanderu* ranked Logan Airport the 5th best airport in the nation for dining options

**The Boston Globe**

Logan ranks 5th on list of airports with best dining options

A recent study by travel booking site Wanderu finds it has a high density of well-rated restaurants

**Ranking Methodology**

- The total number of restaurants in each of the 50 busiest U.S. airports
- The number of restaurants in each airport that earned a rating of more than 3 stars on Yelp
- The top-ranked restaurant for each airport

*Top Ranked Restaurant*

Shōjō
Passengers are responding positively to Massport’s passenger amenities in the Ride App Area in Central Parking

Remote Bag Check-In

• Passengers checked over 10,000 bags at the remote bag check-in in January
• JetBlue and Delta saw the most bags from the service
• The services are available for domestic passengers of American, Alaska, Delta, JetBlue, Southwest, Spirit, and United Airlines
• Massport is working with vendor to expand service by allowing passengers to drop off bags 75 minutes before flight instead of 90 minutes
The Back Bay Logan Express move has improved efficiency, access and the customer experience

- The Back Bay Logan Express Hynes Convention Center stop moved to the Prudential and the Back Bay Station stop moved across the street
- This move has improved visibility of the service and created a faster route

The Boston Globe

Back Bay Logan Express has new drop-off and pickup locations

[Image of a bus with the text "LOGAN AIRPORT LOGAN AIRPORT LOGAN AIRPORT"]

[Image of a website URL: loganexpress.com]
Massport is informing the public on ways to best prepare for traveling during upcoming school vacations.

**HOW TO BE A SAVVY TRAVELLER**

- **Allow extra time**
  Two hours for domestic flights, three hours for international flights.

- **Catch the Logan Express**
  Five Greater Boston locations and stops at every terminal.

- **Take the T or come by sea**
  Choose from the Blue Line, Silver Line or water taxi.

- **Find Lyft & Uber in Central Parking**
  Out of the weather and connected to every terminal.

Sign up for text alerts by texting SIGNUP to 30256.

**LOGAN FORWARD**

Logan Forward is our commitment to build a better airport.
Delta CEO Ed Bastian highlighted technology investments to enhance the travel experience in his CES keynote address

- Bastian was the first airline CEO to ever keynote the Consumer Electronics Show (CES)

<table>
<thead>
<tr>
<th>Delta</th>
<th>Implications for Massport</th>
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<tr>
<td><strong>Mobile App</strong>&lt;br&gt;Updating its mobile app to serve as a “digital concierge”</td>
<td>Integration with planned All-in-One app which will have Parking Reservations and Logan Express Ticketing functionality</td>
</tr>
<tr>
<td><strong>Parallel Reality Display</strong>&lt;br&gt;To provide personalized content tailored to the passenger’s travel as they walk by a screen in the airport</td>
<td>Investigate the possibility of using this technology in the international terminal</td>
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<td><strong>Free WiFi</strong>&lt;br&gt;Will offer free Wi-Fi within the next couple of years</td>
<td>Seamless Wi-Fi service from Terminal A onto Delta planes would enhance the customer experience</td>
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<td><strong>Bag Delivery</strong>&lt;br&gt;Bastian asked: “Would you like your bag delivered to your hotel?”</td>
<td>An airline driven remote bag check-in model may require infrastructure and technology changes on landside and airside</td>
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Delta Implications for Massport
Integration with planned All-in-One app which will have Parking Reservations and Logan Express Ticketing functionality

Investigate the possibility of using this technology in the international terminal

Seamless Wi-Fi service from Terminal A onto Delta planes would enhance the customer experience

An airline driven remote bag check-in model may require infrastructure and technology changes on landside and airside
Financial Performance
### Massport FY20 Financial Results: YTD December

<table>
<thead>
<tr>
<th>Category</th>
<th>Percent Change vs. Plan</th>
<th>Notes</th>
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<tr>
<td>Revenues</td>
<td>10%</td>
<td>• Improvements in net margin are essential for funding HOV initiatives and capital projects</td>
</tr>
<tr>
<td>Expenses</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Operating &amp; Capital*</td>
<td>6%</td>
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*Including Debt Service, Maintenance Reserve & I&E*
Community Collaboration and Environmental Impact
The City of Boston and Massport officially kicked off the planning and design phase for the new Orient Heights Senior Center

On February 4, Mayor Walsh, East Boston elected officials, City of Boston Age Strong Commission and Public Facilities, and Massport met with residents to officially announce the next phase of the Senior Center project

- A new Orient Heights Senior Center was a community commitment made through the Logan Impact Advisory Group (LIAG) process
- Through the East Boston Foundation, Massport committed a one-time $25,000 payment for planning and $187,000 annually for 10 years for operating costs
- The Senior Center development is a partnership between Massport and the City of Boston
  - The City owns the site in Orient Heights (formerly a Boston Public Library branch)
  - The City will renovate the space and is responsible for all capital costs
- The City hopes to open the Senior Center by Spring 2021
Massport launches new scholarship honoring former Massport Port Director Deb Hadden

East Boston Times-Free Press

Massport announces new scholarship honoring former Port Director Hadden Gray

The Massachusetts Port Authority (Massport) announced a new scholarship available to students in Chelsea, Revere and Winthrop, honoring the late Port Director Deborah Hadden Gray who passed away in September 2019. Hadden Gray, of Melrose, worked for Massport for 20 years and served as Port Director from 2012-2015. She had a tremendous impact on Massport’s Maritime mission and was a strong advocate for the working port, and the jobs and businesses it supported, while carefully balancing the priorities of the South Boston communities.

Deb was a vibrant, passionate and talented leader at Massport for many years. She had a tremendous impact on our maritime mission and was instrumental

Deb Hadden

• Deb passed away in September 2019
• 20 years of service to Massport on numerous airport and maritime projects, retiring as Port Director
• A strong advocate for the working port, and the jobs and businesses it supported, and carefully balanced the priorities of host communities
• Led the effort to obtain Federal approval for the Boston Harbor Dredging Project and launched the Conley Terminal Clean Truck Program

$5,000 Scholarship

• Open to students of the City of Boston, Chelsea, Revere, or Winthrop
• For students studying biology, environmental or marine sciences, maritime business, other related maritime fields, or a trade
Local newspapers recognized Massport’s continued commitment and support for community programs

Massport’s Valued Support

By Sean Moran

The Gate of Heaven CYO instructional basketball program is funded by Massport. Young boys and girls meet every Saturday morning in October until February and are taught basic basketball skills. First and second graders learn how to dribble, pass, shoot and the basics of offense and defense. The first grade boys start at 8:30 with the second graders coming in at 9:15. The boys’ instructional program is run by Michael Donovan, Fred Haddad and me. We are also assisted by a great group of high school volunteers: Connor Strickland, Tommy White, Owen Donovan, Eddie Murray and James Buzzell. The girls’ instructional program is run by Marie Laundry. They also have some outstanding high school students/alumni, teaching the girls every week which includes Mary Kate Hart, Emily Harris, Jacqueline Baggen, and Rebecca Donovan. It’s quite impressive to see these teenagers giving up their Saturday mornings to volunteer. And it’s extremely helpful because the younger kids look up to their teenage mentors, hoping they will be just as good as them someday.

“We are grateful for Massport’s support all these years which enables us to run this program,” said Gately’s Athletic Director, Kevin Lally. “This is the feeder system for all of our programs. The instructional program teaches players the basic skills and gives them confidence to graduate to our continuing leagues. Additionally, of the players decide to play on our travel teams and often play for their high school teams. We also need to mention the young volunteers,” Lally concluded. “We are very fortunate to have these young men and women.”

Massport delivers $25,000 grant to PPSC

By John Lynds

When Piers Park Sailing Center, the neighborhood’s beloved community sailing program, nearly closed a few years ago due to financial hardships, the East Boston community rallied to help save the sailing center. Numerous agencies, residents and businesses stepped up with donations to help keep PPSC afloat. A donation by Massport then, and another generous donation this week, has helped PPSC continue to run its successful summer youth programs that puts hundreds of local children on the Boston Harbor to sail throughout the summer months.

PPSC Executive Director Alex DeFronzo and Massport Executive Director Lisa Wieland announced another round of grant funding for the sailing center.

Massport gave a $25,000 grant to PPSC to continue supporting the sailing center’s Inclusive Youth Development Program. The grant will provide over 600 children and teens with summer programming at Piers Park. This funding provides youths with pathways for mentorship, leadership, and employment opportunities.

“We are pleased to once again be a corporate sponsor for the Piers Park Sailing Center and all that they do for East Boston and neighboring communities,” said Wieland. “The Sailing Center offers programming for people of all ages and abilities year round on Boston Harbor as well as mentoring and leadership opportunities. We want to thank Alec and his team for the great work they do every day.”

Students from Eastie, Winthrop, South Boston, Chelsea, and Revere will be able to sail, kayak, fish, and explore the harbor for low or no cost.

• Contribution to the Gates of Heaven CYO Instructional Basketball Program

• Contribution to the Piers Park Sailing Center
Massport’s 15th annual *Safe and Logan Stars* featured Boston Police Commissioner William Gross

**Massport Safe and Logan Stars**

The **SAFE, “Security Awareness For Everyone,”** award honors Massport employees whose actions demonstrate exemplary security awareness in their daily responsibilities.

**Logan Stars** honors non-Massport employees from the airlines, federal agencies, tenants, contractors and other partners that have gone “above and beyond” in service to customers and the Logan community.

**Speaker and Awards**

- Commissioner Gross delivered a powerful message on the importance of safety, security and partnerships
- Massport honored over 40 award recipients from Logan Airport and Worcester Regional Airport

Visual Materials for Massachusetts Port Authority Board Meeting February 13, 2020
While the number of guns brought to checkpoints was up 5% nationally in 2019, New England checkpoints saw a 20% decrease.
Logan Airport had robust passenger volume growth in January:

Logan Passenger Volume
January 2020

- Domestic: 2,363,283 (+8.3%)
- International: 572,124 (+9.7%)
- Total: 2,940,985 (+8.5%)
Due to Terminal C Canopy construction, Massport relocated taxis and limos from the curb to Central Parking on February 1

- Private pickup and drop-off as well as buses can still operate at the curb at Terminal C

The Boston Globe

Taxi, limo services at Logan Airport terminal C temporarily move to central parking

Starting Feb. 1, taxi and limos picking up passengers at Terminal C at Logan Airport will be temporarily relocated to the central parking garage, Massport announced Friday.

The change is due to construction of a new canopy and roadways at the terminal that is expected to be completed by late 2021, the agency said in a press release.

The canopy will be designed to provide more daylight and weather protection at the curb. High capacity elevators will also be added to improve access from the terminal to the garage. The project will also “increase the curbside areas and help with traffic flow,” the release said.
JetBlue announced several service changes at Logan Airport for 2020, including the discontinuation of service to Cuba.

The Boston Globe

JetBlue announced it is adding, dropping flights at Logan Airport.

JetBlue Service Changes at Logan

- Ending service to:
  - Oakland, CA
  - Havana, Cuba
- Adding new destination:
  - Bozeman, MT
- JetBlue called Bozeman “a mecca of outdoor recreation and urban sophistication,” due to its proximity to Yellowstone National Park and ski areas Big Sky Resort and Bridger Bowl.
- “To enable the new city, multi-route expansions and frequency additions, JetBlue will redeploy aircraft by adding flights on some existing routes and reducing flights on others that are not meeting expectations.”
  - Scott Laurence, Head of Revenue and Planning, JetBlue
Delta saw strong financial results in Q4 2019; JetBlue was slightly slowed by headwinds in Latin America and Caribbean markets.

**JetBlue**

JetBlue Airways (JBLU) Q4 profit declines 5% but beats estimates

- **Q4 2019:** Net income decreased 5% to $161M
- **Full-Year 2019:** Net income increased over 200% to $569M
- There were many contributing factors to Q4 results, including:
  - Decrease in load factor (0.6 points)
  - Higher operating expenses
  - Headwinds in Latin and Caribbean markets

**DELTA**

Delta’s fourth-quarter profit beats estimates thanks to cheaper fuel and strong travel demand

- **Q4 2019:** Net income increased by 8% to $1.1B
- **Full-Year 2019:** Net income increased by 21% to $4.7B
- There were many contributing factors to Q4 results, including:
  - Strong Passenger Demand
  - Strong Premium Cabin Demand
  - Greater Revenue from Loyalty Programs
  - Lower Fuel Costs
In their earnings calls, Delta and JetBlue, reiterated their commitment to the Boston market

**Delta**

- “I think we've had an incredible success in Boston and Boston customers are choosing us”
- “The third quarter data from the government just came out and we were in a virtual dead heat with JetBlue as the largest revenue carrier in Boston.”
- “I think we made great progress and I think customers will stick with us, and so we'll see who ultimately are the winners and losers in Boston, but I know we are -- we'll be a winner”
  
  – *Glen Hauenstein, President, Delta*

**JetBlue**

- “We are mindful that this year we anticipate facing heightened competition in both Boston and our Florida markets. But, we believe Fare Options 2.0 will be a key contributor to support our RASM growth and a tool to compete more effectively.”
  
  – *Robin Hayes, CEO, JetBlue*

- “Our focus is on growing out our key focus cities, including Boston and Fort Lauderdale. And we will adjust the network to ensure that we are meeting, not only our capacity commitments, but also our strategic -- our strategic focus city plan”
  
  – *Joanna Geraghty, President and COO, JetBlue*
American and United saw positive financial results in Q4 2019, but Southwest was hurt by the continued 737 MAX grounding

**American Airlines**

- Q4 2019: Net income increased by 27% to $414M
- Full-Year 2019: Net income increased by 42% to $3B
- AA adversely affected by 737 MAX grounding and labor disputes

**Southwest Airlines**

- Q4 2019: Net income decreased by 21% to $514M
- Full-Year 2019: Net income increased by 7% to $2.3B
- SW adversely affected by 737 MAX grounding and a 0.4 point decrease in load factor

**United Airlines**

- Q4 2019: Net income increased by 39% to $641M
- Full-Year 2019: Net income increased by 42% to $3B
- UA adversely affected by 737 MAX grounding and volatility in Hong Kong travel
Major airlines have extended their 737 MAX flights cancelations into June

THE WALL STREET JOURNAL.

Boeing Pushes Back Expected MAX Return

The new estimate for the FAA’s signoff is expected in June or July

Southwest extends 737 MAX cancellations through June 6

- Southwest – June 6
- 34 planes grounded

American Airlines extends Boeing 737 MAX flight cancellations into June

- American – June 3
- 24 planes grounded

United Airlines doesn’t expect to fly the Boeing 737 Max this summer

- United – June 4
- 14 planes grounded
Logan Airport’s Runway 9-27 maintenance update
Major Chuck Atchison is retiring from the Massachusetts State Police and Troop F after more than 31 years of dedicated service

- Major Charles “Chuck” Atchison began his tenure here at Logan Airport as a Captain, second in Command of Troop F in August 2017, left for a brief period of time, and returned as Major in August 2018 to present day

- He has been a critical part of the day-to-day safety and security operations and strategic planning across all areas of Logan Airport

- Under his tenure, he helped oversee multiple complex operational missions, including the successful summer 2019 deployment and integration of National Guard resources to augment the security operations at Logan

- He has also partnered with Massport on many vital safety and security drills including last year’s active shooter drill at Logan Airport
Report of the Director of Maritime
Mike Meyran
The FY21 President’s Budget allocated over $68M to Massachusetts for the Boston Harbor Deepening Project

- The FY21 President’s Budget allocated over $68,433,000 to Massachusetts for the Boston Harbor Deepening Project
- Massport will pay the required 25% match after it receives the formal letter from ACOE in March 2020
Overall the growth at U.S. East Coast ports was 2.5%, which was the slowest growth rate since 2016.

Port of NY/NJ saw growth of 2.6%, which represented a slow down from the 6.5% growth it had in 2018.

East Coast ports are still faring better than West Coast ports.

The top 10 US East Coast ports saw their combined throughput growth slow from 5.1 percent in the first 11 months of 2018 to just 2.3 percent through November 2019. Photo credit: Shutterstock.com.

Following global economic growth and the United States-China trade war dragged container cargo growth at US East Coast ports to its lowest level in three years during the first 11 months of 2019.
Conley Terminal volumes up ahead of Lunar New Year

**Imports up 2% YOY**

*Lunar New Year fell a week earlier than usual, resulting in the rush of cargo prior to factories closing*

**Exports up 5% YOY**

*Continued commitment from recycled fibers and lumber exporters to utilize cost-efficient and congestion-free gateway*

**TEUs up 1% YOY**

February 13, 2020
Maritime met with cruise lines at their headquarters to market and promote Flynn Cruiseport Boston

Visual Materials for Massachusetts Port Authority Board Meeting February 13, 2020
Key Takeaways: Cruise Lines provided key insights into future sailings and needs

I. Cruise ships cascading into New England will be comprised of two different builds
   • Ships under 3,000 passengers
   • Ships carrying 4,000+ passengers

II. Technology will revitalize the entire check-in and debark process
   • Security Screening – Facial Recognition
   • Online check-in

III. Cruise Lines are looking for a Homeport partner to anchor Canada/New England

IV. Cruise Lines are looking to secure long-term commitments, either individually or through potential consortiums

V. Short-term terminal improvements need to focus on streamlining curbside operations and clear signage
Cruise Line Feedback: Flynn Cruiseport Boston “exceeded expectations” in most areas on their Report Card

**Exceeding Expectations**

- Flynn Cruiseport Boston Team: Responsive and Service-Oriented
- Cooperation with Port Stakeholders: Port Agents, ILA, Tour Operators
- Value Proposition: Robust Airlift + Strong Economy + Potential Homeport Capacity = Strategic Port for Cruise Line Growth
- Recognized for Exceptional Wi-Fi Globally from NCL

**Needs Improvement**

- Curbside Operations
- Itinerary Planning
- Strategy on Flynn Cruiseport Boston Terminal Expansion Plan

Flynn Cruiseport Boston Report Card
EPA Regional Administrator Dennis Deziel toured Conley Terminal and recognized its transition to cleaner heavy-duty trucks

EPA Celebrates Massport Efforts to Add Cleaner Emissions Trucks

EPA Also Seeking Input on Initiative for Cleaner Emission Standards for Heavy-Duty Trucks

- Massport has used EPA grant funding to transition heavy-duty trucks used at Conley Terminal to lower-emission diesel equipment since 2011
- Massport has worked with the EPA to repower 5 RTG cranes, and has implemented a program to replace nearly 90 drayage trucks with vehicles that meet higher EPA emissions standards

The EPA intends to publish a proposed rule in early 2020 to establish new, more stringent emission standards for highway heavy-duty engines

- "EPA New England is proud of our lengthy track record partnering with Massport on efforts to protect workers, the local community and our regional air quality by taking concrete steps to reduce air pollution from heavy-duty trucks at these Massachusetts-based facilities"

  – Dennis Deziel, NE Regional Administrator, EPA

Visual Materials for Massachusetts Port Authority Board Meeting February 13, 2020
Ocean carriers have largely adjusted to IMO 2020 regulation mandating low-sulphur fuel in order to reduce emissions

**IMO 2020 - cleaner shipping for cleaner air**

- From January 1, 2020, the global upper limit of sulphur in ship fuel oil will be reduced to 0.50% (from 3.50%)
- The reduced limit, known as “IMO 2020”, is mandatory for all ships operating outside certain designated Emission Control Areas, where the limit is already 0.10%
- IMO Secretary-General stated that there was preparation in the works for three years with the IMO Member States, the shipping industry and fuel oil suppliers and implementation should be smooth
- Fuel costs initially spiked and are now stabilizing
The Carnival Corp. has taken the lead as the first cruise company to join the Getting to Zero Coalition

Carnival Corp. Joins Zero Emission Alliance
DECEMBER 17, 2019

• Carnival Corporation is the first cruise company to join the Getting to Zero Coalition

• Getting to Zero Coalition is a partnership of the Global Maritime Forum, the Friends of Ocean Action and the World Economic Forum

• The coalition is aligned with the IMO’s goal of reducing greenhouse gas emissions from shipping by at least 50% by 2050, as compared to 2008 emissions

Carnival Corporation has joined the Getting to Zero Coalition, an alliance of organizations across the maritime, energy, infrastructure and finance sectors committed to accelerating the decarbonization of the international shipping industry. Carnival Corp, with nine global cruise line brands, is the first cruise company to join the global alliance, the company announced Tuesday.

Carnival Industry News
Strategic Plan Implementation
Logan Ride App Operations Plan Implementation Update
Overview

- Status Update
- January – Average Daily Flight Schedule
- Preliminary Key Performance Indicators
January – Average Daily Flight Schedule

Morning: 6am-8am
Dep Seats 11,725
Arr Seats 2,444

Late Evening: 10pm-12am
Dep Seats 1,976
Arr Seats 7,679

Visual Materials for Massachusetts Port Authority Board Meeting February 13, 2020
KPIs: Ride app deadhead rate (preliminary) declined by 16 percentage points – better than target
WORCESTER AIRPORT
Worcester Regional Airport is well positioned to be an integral part of the regional airport system

• Serves business and leisure commercial airline passengers from the Central MA region and relieves Logan

• Accommodates corporate general aviation needs for Worcester and Central MA businesses

• Well situated to leverage the region’s role as intermodal cargo hub and provide air cargo services to relieve Logan
Prior to Massport’s involvement in Worcester Airport, passengers peaked at 355,000 passengers in 1989.

Worcester Regional Airport Passengers

Peak Passengers:
355,000

Massport begins ORH Operations

Massport acquires ORH

JetBlue

American

Delta
In 2010, Massport embarked on a plan with Central MA leadership to revitalize Worcester Regional Airport

- Massport acquired airport from the City
- Massport modernized fire safety and emergency services
- Rectrix begins operations
- Rectrix opens new facility
- Massport completed $30M CAT III All Weather Landing System
- 700,000 passenger milestone

New services:
- JetBlue/ New York JFK
- American/ Philadelphia
- Delta/ Detroit

2010

2013

- JetBlue initiated Orlando and Fort Lauderdale services
- Rectrix initiates operations

2015

2018 / 2019

59

Visual Materials for Massachusetts Port Authority Board Meeting February 13, 2020
Massport has invested over $100M in Worcester Regional Airport

Investments in operations, safety and security, equipment and new airside infrastructure:

- CAT III Landing System $22 M
- New Taxiway $10 M
- Runway Resurfacing $4.5 M
- ARFF Building Renovation $5.5 M
- ARFF Emergency Vehicles $1.2 M
- Snow Removal Equipment $3.4 M
- Rectrix New FBO $7.8 M
- Acquisition costs $17 M
- Cumulative Operating Deficits $30 M
Worcester became JetBlue’s 80th destination (November 2013)

Nonstop markets:
  - Orlando
  - Ft. Lauderdale

One daily nonstop flight to each destination

Connecting services provided to Caribbean, Central and South American markets
Building on Worcester Regional Airport’s initial success … additional services were added

JetBlue
• Third destination added May 2018:
  o New York JFK

American Airlines
• Second airline entered market October 2018:
  o Philadelphia

Delta Air Lines
• Third airline to add nonstop service beginning August 2019:
  o Detroit
**Worcester Regional Airport offers nonstop service to New York, Philadelphia, Detroit and Florida**

### JetBlue

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>Depart</th>
<th>Arrive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worcester</td>
<td>New York JFK</td>
<td>6:00 am</td>
<td>7:07 am</td>
</tr>
<tr>
<td>New York JFK</td>
<td>Worcester</td>
<td>10:54 pm</td>
<td>11:58 pm</td>
</tr>
<tr>
<td>Worcester</td>
<td>Orlando</td>
<td>3:55 pm</td>
<td>6:59 pm</td>
</tr>
<tr>
<td>Orlando</td>
<td>Worcester</td>
<td>12:32 pm</td>
<td>3:19 pm</td>
</tr>
<tr>
<td>Worcester</td>
<td>Ft. Lauderdale</td>
<td>5:16 pm</td>
<td>8:35 pm</td>
</tr>
<tr>
<td>Ft. Lauderdale</td>
<td>Worcester</td>
<td>1:36 pm</td>
<td>4:41 pm</td>
</tr>
</tbody>
</table>

### American Airlines

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>Depart</th>
<th>Arrive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worcester</td>
<td>Philadelphia</td>
<td>3:55 pm</td>
<td>5:20 pm</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>Worcester</td>
<td>2:17 pm</td>
<td>3:30 pm</td>
</tr>
</tbody>
</table>

### Delta

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>Depart</th>
<th>Arrive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worcester</td>
<td>Detroit</td>
<td>4:40 pm</td>
<td>7:03 pm</td>
</tr>
<tr>
<td>Detroit</td>
<td>Worcester</td>
<td>1:45 pm</td>
<td>3:45 pm</td>
</tr>
</tbody>
</table>

Note: Flight times for February/March 2020
Investments and new services are driving growth at Worcester

Worcester Regional Airport Passengers

<table>
<thead>
<tr>
<th>Year</th>
<th>Passengers</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>14,980</td>
</tr>
<tr>
<td>2014</td>
<td>116,711</td>
</tr>
<tr>
<td>2015</td>
<td>119,155</td>
</tr>
<tr>
<td>2016</td>
<td>116,627</td>
</tr>
<tr>
<td>2017</td>
<td>109,929</td>
</tr>
<tr>
<td>2018</td>
<td>145,030</td>
</tr>
<tr>
<td>2019</td>
<td>194,625</td>
</tr>
</tbody>
</table>

Source: Worcester Regional Airport

JetBlue commences FL services
JetBlue adds JFK
American commences PHL service
Delta commences DTW service

Visual Materials for Massachusetts Port Authority Board Meeting February 13, 2020
Worcester Regional Airport’s Economic Impact has doubled

- $97M of economic output in 2019
- Total aviation related jobs grew from 358 to 587, a 64% increase
- Growth drivers include:
  - Over $100M of Massport and private investment
  - New JetBlue and American Airlines Services

Source: MassDOT, 2019 Massachusetts Statewide Airport Economic Impact Report
Where do we go from here?

Opportunities for:

1. Commercial Passenger Service
2. General Aviation
3. Air Cargo
The broader Worcester Renaissance offers a platform for future growth at Worcester Regional Airport

- **Higher Ed Hub**
  - Talent Pipeline
  - 12 colleges and universities
  - 36,000+ students

- **Healthcare Hub**
  - Pharmaceuticals & Biotech Innovation

- **Business Hub**
  - Business HQs & Emerging Opportunities
  - Central MA home to large and Fortune 500 businesses

- **Development Hub**
  - Real Estate Development Boom
  - $2.6B in recent construction

- **Employment Hub**
  - Labor Market Expansion
  - 2nd largest city in New England
  - 3.2% economic growth (2018)
  - Low 2.8% unemployment rate
  - Added 46,000 new jobs over 10 years
The Airport’s market area extends into surrounding communities and generates 3.1 million O&D passengers annually.

Worcester Regional Airport Market Area

- 84% of passengers from the Worcester Airport market area choose Logan Airport

Annual O&D Passengers
- Over 100K
- 50 – 100K
- 25 to 50K
- 10 – 25K
- 5 – 10K
- Under 5K

Visual Materials for Massachusetts Port Authority Board Meeting February 13, 2020
In 2019, Massport launched on a $300,000 campaign to raise overall awareness and new target audiences

College Market
- Worcester is home to 9 colleges and universities with more than 36,000 college students
- College sweepstakes campaign
  - Holiday Break
  - Spring Break
  - Summer Break

Hispanic Market
- Latinos/Hispanics represent >20% of the Worcester area population
- Media Outreach:
  - Univision (Report aired Aug. 2019)
  - Tele Mundo (Report aired Sept. 2019)
- Key Message:
  - Five daily flights with connections to about 2 dozen destinations in Mexico, the Caribbean, and South America
A campaign to market Central MA as a destination and grow the inbound visitor market is planned for the fall

Increase fly-in market to ORH. Drive tourism to Worcester + Central, MA.

- Partnering with Discover Central MA, the Chamber and City or Worcester to create the perfect fall getaway
- Goal is to increase the inbound visitor market
- 2020 Fall Campaign
- Highlight Central MA attractions, businesses and happenings
Massport will continue to work with airlines and Central MA leadership to grow commercial passenger services

Worcester Regional Airport Historical and Forecast Passengers

<table>
<thead>
<tr>
<th>Year</th>
<th>Historical</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>100,000</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>200,000</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>300,000</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>400,000</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>500,000</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>600,000</td>
<td></td>
</tr>
<tr>
<td>Future</td>
<td>700,000</td>
<td></td>
</tr>
</tbody>
</table>

Requirements to Serve 400,000 Passengers

Facilities are Adequate:
- Parking
- Passenger Terminal
  - Check-in
  - Baggage processing
  - Check-point
  - Hold rooms
- Gates and aircraft parking

Service Growth - 5 New Departures:
- Additional Florida markets
- Service to a new airline hub market
- Additional services to existing hubs

Source: InterVISTAS Forecast.
General Aviation activity has declined consistent with national trends, but corporate (air taxi) activity is growing.

<table>
<thead>
<tr>
<th>General Aviation Aircraft Operations</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>CY 2010 41,843</td>
<td>-59%</td>
</tr>
<tr>
<td>CY 2019 17,009</td>
<td></td>
</tr>
<tr>
<td>CY 2010 1,002</td>
<td>122%</td>
</tr>
<tr>
<td>CY 2019 2,222</td>
<td></td>
</tr>
</tbody>
</table>

Local and Itinerant Trends
- National decline in recreational flying
- Loss of flight school at Worcester in 2015

Air Taxi Trends
- Corporate market growing nationally
- Worcester Area business growth
- Rectrix investment at ORH
Private investment continues to support Corporate General Aviation market

Previous Investment
• Ross-Rectrix invested $7.8 million in a Hangar and FBO Facility in 2015
  o 20,000 SF hangar capable of handling the Gulf Stream 650
  o 5,000 SF office/customer amenities
  o Provides fueling and maintenance service to GA users
  o Provides customer service, baggage handling, fueling, and other ground support services to JetBlue

Investment for the Future
• Ross-Rectrix is currently constructing a new fuel farm to replace the existing facility
• Massport has negotiated with Ross-Rectrix for additional capital investments and leased premises
• Benefits of new Ross-Rectrix investment:
  Provides additional close-in itinerant aircraft parking
  o Replaces condemned building and outdated hangar
  o Preserves other locations for aviation uses (e.g., cargo)
Air Cargo Opportunity: The Worcester area has become a major cargo intermodal distribution hub

**Worcester is one of the most accessible cities in the state for warehousing and distribution**

- At the cross-section of five major highways and routes
- Serves as one of only two CSX Intermodal Terminals in Massachusetts
- 8.4 million SF of warehousing and distribution space
- Central Massachusetts location makes it proximate to Boston, Hartford, Springfield, and beyond
- Large distribution centers for UPS and FedEx about 10 miles from ORH
- Large amazon Fulfillment Center in Milford
Opportunity exists for future air cargo operations at Worcester Regional Airport

• Existing cargo activity is limited to trucking operations at a warehouse on site
• North Airfield has adequate land for additional warehouse and cargo aircraft
• CAT III ILS enables all weather operations
• CSX Intermodal Distribution Center - only 15 minutes from ORH
• Close to truck staging services near I-90
• Potential for major UPS distribution center in Grafton*
• Larger cargo aircraft may require investment in airfield

*UPS purchased 226 acres of land at $18.3 million in Grafton for a potential $200 million facility, approximately 30 minutes from ORH
Airport overview and existing land use

Note: Out of 1,300 acres of airport property, 300 acres are separated from the airport towards the western hillside by Mannville Road and Paxton Street (Route 56)
The Airport’s hill top location and steep topography delineates aviation from non-aviation uses

Key aviation infrastructure:
• Runways 11-29 and 5-23
• Taxiways
• Passenger Terminal
• Vehicle Parking
• Aircraft Gates and Parking
• Fixed Base Operator (FBO)
• Hangars/T-hangars
• Fuel Farm
• GSE Maintenance Facilities
• Snow Equipment Storage
• Cargo Warehouse (truck-to-truck)
North Airfield is suitable for future aviation development including hangars, cargo, and support facilities
Potential for compatible non-aviation development is limited

- Steep topography
- Wetlands
- Lack of utility and poor access to airfield
- Proximity to residential areas
Two sites deemed suitable and ready for aviation compatible development

- 6.5 acres with potential for 55K SF Building
- 2.8 acres with potential for 32K SF Building

Existing Industrial Park

- Relatively flat but not suitable for aircraft
- Ease of access
- Access to utilities
- Adjacent to existing Industrial Park
Goals for future

Commercial Passenger Service:
• Continue to work towards increasing commercial passenger service

General Aviation:
• Continue to support and grow corporate/general aviation including air taxi

Air Cargo:
• Explore potential for air cargo service by leveraging Worcester Airport’s location as a hub for intermodal transportation

Economic Growth:
Continue to support revitalization of Worcester
Safety and Security
EMERGENCY PREPAREDNESS
Coronavirus: Massport Planning/Preparedness Activities

• Proactive meetings initiated by the Director of Aviation, matter discussed at daily 0830 meetings, and separate forums were conducted to assist in establishing and coordinating enhanced screening protocols at BOS:
  o Engaged directly with CDC in four formal meetings and brought outside partners in for a coordination meeting on 1/30
  o Identified and facilitated space requirements for CDC personnel
  o Developed emergency response plans and contingency operations for Massport, Fire/Rescue, EMS, and MSP first responders
  o Established a plan and contingencies with JetBlue, American, and Delta for hanger space if isolation is required
• Meetings conducted to refresh Massport’s Communicable Disease Response Plan and internal Communicable Disease/Pandemic Plan for employees
  o Updates and modifications are currently being addressed
• MPA Communication Center, Aviation Operations, Fire Rescue, Mass State Police, CBP, and Massport staff established communications and transportation plans to be activated when symptomatic patients are in need for evaluation and transport to a hospital
• Will continue to engage directly with CDC; indication is they will remain for an indefinite period
Novel Coronavirus Timeline

- 1/29 – CDC Team from NY arrives at BOS
- 1/29 - **CDC Warning – Level 3** to Avoid Nonessential Travel to China
- 1/30 - World Health Organization (WHO) declares a global health emergency
- 1/31 – U.S. declares a Public Health Emergency; temporarily suspends entry for any foreign nationals who have traveled to China
  - The action restricts all foreign nationals who have been to China — other than immediate family of American citizens and permanent residents — from entering the United States. Flight crew and flights carrying only cargo are excluded
- 2/1 – The first confirmed case in Massachusetts; Previously traveled through BOS on 1/28
- 2/1 – **DoS Travel Advisory Level 4** is issued: Do Not Travel To China
- 2/1 – DHS directs flights from China funneled through seven select US airports (JFK, ORD, SFO, SEA, HNL, LAX, ATL)
- 2/2 – DHS expands the list of US airports to 11 adding IAD, EWR, DFW, and DTW
- 2/2 – Any U.S. citizen returning from Hubei Province, China, within the past 14 days will be quarantined for up to 14 days
  - Those who have been to other parts of China within the past 14 days will be subject to “proactive entry screening” and up to 14 days of monitoring and self quarantine
Screening/Outreach Efforts at Logan Airport

3 Screenings Levels

• **Primary** – (CBP/MPA/Others): Monitor passengers for symptoms
  o Travelers from Wuhan get Secondary Screening; all travelers arriving from China receive Traveler Health Advisory Notices

• **Secondary** – (CDC/MPA/Others): Temperature check, health declaration form, health assessment questionnaire

• **Tertiary** – (CDC only): More in-depth health assessment in Isolation Room. If hospitalization is necessary, BPH and DPH are notified
Airlines and the federal government have taken steps to suspend and restrict travel to and from China

As of January 31, the International Air Transport Association (IATA) has estimated that air travel to and within mainland China has dropped by 40% due to the coronavirus.

As of February 3, Hainan Airlines has suspended direct service from Boston to Beijing and Shanghai.

As of February 9, Cathay Pacific has reduced Boston-Hong Kong service from 7 to 5 times per week.

All major U.S. carriers have now suspended service to China; most major international carriers have also canceled or greatly reduced service.

DHS has authorized 11 airports to screen inbound passengers from China to the U.S. – Boston is not one of them.
Screening/Outreach Efforts at Port of Boston

Beginning on Sunday, 2/1 at 5:00 PM (EST), all arriving vessels that have been in any port in the People’s Republic of China (PRC) (except Hong Kong and Macau) will be subject to the following restrictions:

- **Non-passenger commercial vessels** will be permitted to enter the U.S. and conduct normal operations, as long as no crewmembers are exhibiting symptoms and crewmembers remain aboard.

- **Passengers** vessels that have visited China in the previous 14 days will be denied entry until they pass the 14-day threshold.

- **Any vessel**, passenger or non-passenger, reporting crewmembers or passengers who exhibit symptoms, regardless of the date of last port call, will be denied entry pending Coast Guard coordination with CLC and local health authorities.

A USCG Marine Safety Information Bulletin (MSIB) was issued on 2/2:

- Contained further details on Coast Guard actions (including how to address symptomatic crewmembers) related to Novel Coronavirus.

Information was shared with port partners, agents, pilots, facilities and other maritime stakeholders.

- MPA-Maritime held a coordination meeting and has been in routine contact with the USCG, CBP, CDC, and Boston EMS MA/Boston Departments of Health.

Visual Materials for Massachusetts Port Authority Board Meeting February 13, 2020
Due to the coronavirus outbreak, there will be a reduction of ocean container volumes from Chinese ports by at least 20%.

**Conley Terminal offers 3 weekly services, connecting Boston to Asia, North Europe, and Latin America**

**Mediterranean Shipping Company (MSC)**
N. Europe-US East Coast Service

**Ocean Alliance Asia-US East Coast Service**: COSCO, OOCL, Evergreen, CMA CGM, APL

**THE Alliance Asia-US East Coast Service**: Hapag-Lloyd, ONE Network, Yang Ming

**Impact to Maritime**

- Factory shutdowns and other restrictions hitting China will reduce ocean container volumes by about 6M containers.
- The full impact is not yet known, but data from key Chinese ports already shows a reduction of over 20% since Jan. 20.
- China is the world’s biggest exporter.
- Reduction is expected to impact the supply chains in the U.S. and Europe.
- Maersk announced it will cut two sailings in the Asia-Europe trade loop over the next two weeks.
Community Outreach
On February 24th, Senator Ed Markey will hold a Field Hearing at Logan Airport on Aviation Security

The Subcommittee on Security has legislative and oversight responsibility for:
- U.S. Coast Guard
- Maritime Administration
- Federal Maritime Commission
- Navigation and merchant marine issues
- Maritime laws to support maritime commerce and protect marine living resources

The subcommittee also has legislative and oversight jurisdiction over:
- Transportation Security Administration
- Security issues under the Commerce Committee’s jurisdiction, including cybersecurity, drone security, and digital network security

- Senator Markey will chair the hearing as part of the U.S. Senate Committee on Commerce, Science, and Transportation Sub-Committee on Security
- The focus of the hearing will be aviation cargo scanning and screening technologies
- The hearing will take place on February 24 from 9:00 AM to 11:30 AM at the Cathy Leonard-McLean Community Room at the Logan Airport Rental Car Center (RCC)
Massport sent a letter to the FAA concerning the re-treatment of homes that were previously sound insulated

January 28, 2020

D. Kirk Shaffer
Associate Administrator for Airports
Federal Aviation Administration
Office of the Associate Administrator for Airports (ARR)
800 Independence Avenue SW
Washington, D.C. 20591

Subject: Residential Sound Treatment and Old Window Technology

Dear Associate Administrator Shaffer:

The Massachusetts Port Authority (Massport) and the FAA have a strong, historic partnership implementing one of the most successful airport noise mitigation sound treatment programs in the nation. Since 1984, when Massport and the FAA first collaborated on testing noise mitigation strategies for homes, we have sound insulated over 11,000 dwellings and 36 schools in 7 communities most affected by aircraft noise. I am writing today to formally request that our two agencies work together to address the first generation treatments (dating from 1984 to 1993) located in our noise-impacted communities.

Boston Logan International Airport has been experiencing tremendous growth due to a strong economy and a vibrant airline industry. Over the past five years, traffic at Logan has increased by over 10 million passengers. This level of growth requires Massport, with support from the FAA and our airline partners, to invest in new infrastructure at Logan Airport. A critical part of our success in proposing and implementing key projects at Logan airport in close proximity to residential communities is our ability to address aircraft noise and air emissions impacts.

One area of community engagement around noise impacts has been the re-treatment of homes that were sound insulated during the early years of the residential soundproofing program. The composite structures and materials that were used then are no longer in use. The structures and materials used in window and door treatments today are more effective and durable.

The FAA’s current policy does not allow the re-treatment of homes that were previously sound insulated under the program. I respectfully request that the FAA revisit this policy for those homes that were treated between 1984 and 1993 with the old technology and continue to fall within the latest 65 DNL contour. This request targets a narrow set of eligible homes with the highest noise exposure and whose owners have not been able to update their structures to take advantage of the vast improvements in the effectiveness and effectiveness of window and door treatments.

I look forward to further discussions with you on this critical community engagement effort.

Sincerely,

Lisa S. W. Wakefield
Chief Executive Officer

cc: Winsome Lenfort, (FAA), Gail Latrell (FAA), Ed Freni, Flavio Leo, Senator Edward Markey, Senator Elizabeth Warren, Congresswoman Katherine Clark, Congresswoman Ayanna Pressley

Soundproofing Re-Treatment

• The FAA’s current policy does not allow for the re-treatment of homes that were previously sound insulated during the early years of the residential soundproofing program

Massport requested that the FAA revisit this policy for homes that were treated between 1984 and 1993 with old technology and continue to fall within the latest 65 DNL contour
Audit and Finance
WHOLESALE ELECTRIC POWER PURCHASE
Electricity Procurement Contracts

- Massport is a certified/licensed wholesale purchaser of power under the Federal Power Act since 1996
- Massport buys power on the wholesale market from suppliers and the ISO-NE spot market, and resells the power to the Authority’s tenants
- Electricity prices are based on natural gas prices using a heat rate multiplier
- Record low natural gas prices create opportunity to lock-in cheap electricity prices for Logan tenants

Today’s vote delegates authority to staff to:

- Extend current Master Service Agreements (MSAs) with five (5) energy suppliers to December 31, 2024
- Hold Request for Qualifications (RFQs) to expand pool of suppliers (2-3 more)
- Solicit bids (NG conversion rates) for electricity supply for 3 more years (hedging)
Natural Gas Prices are at Historical Lows

Futures over succeeding calendar years compared to recent historical calendar year averages

* Shows commodity price only. Total cost of delivered natural gas to New England will also include “basis” (mostly pipeline transportation costs).
**Electricity Procurement**

**Current Power Supply Transactions**

- Two 10 MW block *heat rate* transactions - tied to NYMEX Henry Hub natural gas prices in years 2019 through 2021
- 87% of Massport’s electricity load volumes were purchased using these contracts; 13% purchased from the ISO-New England spot market
- *Heat rate* transactions convert the price of NYMEX Henry Hub natural gas(s) into an electricity rate. Suppliers bid on the lowest conversion rate
  - Natural gas (and thus electricity) prices are periodically locked based on Energy Hedge Policy/Model
  - Distribution services are provided by NSTAR pursuant to a Distribution Service Agreement with Massport
The Electricity Procurement Program has generated $6.2 million in savings during 5 year period

* Shows energy prices only. Total cost of power supply will also include capacity, ancillaries, supplier margin, and other relatively minor items like ISO-NE administrative costs.
Electricity Procurement Next Steps

- Extend MSAs with current suppliers
- Issue RFQ for New Counterparty MSAs by Mid-March 2020
- Issue RFB for new energy supply Mid-March 2020
- Indicative Bids Early April 2020
- Final Bids and Close Transactions by Mid-April 2020
- Review Procurement Award at a subsequent Board meeting
- New Service Begins January 1, 2022
WOBURN LOGAN EXPRESS BUS SERVICE CONTRACT
Woburn Logan Express Service Contract

**Contract Highlights**

- Woburn service is third busiest LEX route (22% of LEX ridership), 424,000 annual passengers
- Contract competitively bid. 3 proposals received
- Paul Revere proposal was 10.3% lower than closest competitor for 30-minute service
- Term of contract is 7 years
- Staff recommends full budget approval ($43,104,613) to allow for potential increase in frequency of service, based on demand

**Annual Cost Overview – 30 Minute Service**

<table>
<thead>
<tr>
<th></th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Bus Operating Cost</td>
<td>$4.0 M</td>
</tr>
<tr>
<td>Fuel</td>
<td>0.4</td>
</tr>
<tr>
<td>Amortization of 8 buses</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total Annual Cost</strong></td>
<td>$4.9 M</td>
</tr>
<tr>
<td><strong>Total Cost over 7 year term</strong></td>
<td>$34.1 M</td>
</tr>
<tr>
<td>(maintaining 30 minute service)</td>
<td></td>
</tr>
<tr>
<td>Additional cost for 20 minute service</td>
<td>$9.0 M</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$43.0 M</td>
</tr>
</tbody>
</table>
FY20 SIX MONTH FINANCIAL PERFORMANCE
Highlights for First Six Months

- Business activity remains positive
  - Logan passengers **↑ 3.1%** versus last year
    - Delta +18.6%, JetBlue +7.1%, Foreign Flag +3.4%
  - Cruise passengers **↑ 2.2%** due to longer season/more itineraries

- International trade and tariffs impacting Conley Imports and Exports
  - Container volume **↓ 4.3%** due to pre-tariff shipping last year, tariffs this year

- Operating Revenue **↑ 6.0%** to $505 million

- Operating Expenses **↑ 5.3%** or $13.2 million from Logan business growth and higher Safety/Security costs

- Net Contribution is $30 million, $13 million lower than last year due to $29 million increase in capital investment
### Income Statement: Net Contribution was $30M for first half of year

<table>
<thead>
<tr>
<th></th>
<th>First Half FY 2020</th>
<th>First Half FY 2019</th>
<th>FY20 vs Prior Year</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenues</strong></td>
<td>$ 505.2 M</td>
<td>$476.6 M</td>
<td>↑ $ 28.6 M</td>
<td>6.0% Higher Terminal Rent, Parking, Investment Income</td>
</tr>
<tr>
<td><strong>Operating Expenses</strong></td>
<td>(264.1 M)</td>
<td>(250.9 M)</td>
<td>↑ (13.2 M)</td>
<td>5.3% Increased security, new Ride App implementation, HOV initiatives, Logan Forward</td>
</tr>
<tr>
<td><strong>Capital Investment</strong></td>
<td>(211.3 M)</td>
<td>(182.7 M)</td>
<td>↑ (28.6 M)</td>
<td>15.7% More Debt Service due to $770M of bond issuances (Terminal A, New Money)</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>($ 475.4 M)</td>
<td>($ 433.6 M)</td>
<td>↑ ($ 41.8 M)</td>
<td>9.6%</td>
</tr>
<tr>
<td><strong>Net Contribution</strong></td>
<td>$ 29.8 M</td>
<td>$ 43.0 M</td>
<td>↓ ($ 13.2 M)</td>
<td>30.7%</td>
</tr>
</tbody>
</table>
Revenues: Up $29 Million or 6.0%

Logan Airport: $20 Million (5.3%)
- Terminal Rent and Landing Fees up $14.0 million: recover capital investment on terminal improvements & runways and operating costs
- Parking revenue up $4.5 million: on-airport $3.8 million and Logan Express $0.7 million
- Concession revenues up $2.1 million: Taxi/Limo/Ride App due to net Ride App growth $1.2 million, Terminal Concessions $0.9 million
- Utilities and Other ($0.6) million

Maritime: $3 Million (5.8%)
- Conley terminal container revenues down $2.4 million: 4.3% decrease in container volume
- Cruise revenue up $0.2 million: 2.2% increase in passengers
- Parking and details revenue down $0.6 million: primarily due to one-time parking revenue in FY19.

Real Estate: $5 Million (17.9%)
- Net one-time fee income $2.9 million: Transaction rent for Boston Harbor Industrial Development property
- Parking up $1.6 million: primarily due to higher usage at SBWTC
- Commercial property ground rent up $0.8 million: annual CPI lease adjustments

Investment Income: $6 Million: higher cash balances and interest rates
Expenses: Operating Expense is up 5% while Terminal A bond deal increased Debt Service Cost

**Operating Expenses:** $13 Million, 5.3%

- **Safety and Security costs up $5.4 million:** higher State Police and National Guard expenses and additional Airport Rescue and Firefighter (ARFF) resources at Worcester and Hanscom
- **Business volume costs up $4.0 million or 4.8%:** increased operating costs for terminals, Aviation and Maritime business incentive programs, and administrative and collectively bargained wages and benefits
- **New initiatives added $2.1 million:** Braintree LEX 20 minute service, passenger bag service for Ride App customers, Logan Forward marketing and the addition of ground transportation staff to support the Ride App program
- **Services up $1.6 million:** maintenance of elevator/escalators, baggage carousels, fire alarms, electrical systems, and other critical items
- **Repairs up $1.0 million:** to keep equipment, fire boats, facilities and other assets operational
- **Other ($0.9) million**

**Capital Investment:** $29 Million

- **Debt Service up $26.5 million:** $770 million of bond issuances in calendar year 2019
  - $315M in February for Terminal A Refunding, $455M in July for the FY19-23 Capital Program
- **Maintenance Reserve and I&E funds up $2.1 million** to support $2.6 billion Capital Program
FY 2020 Full Year Forecast
### FY 2020 Full Year Forecast

- Strength of Logan’s Business Activity expected to keep Massport’s financial performance ahead of last year

<table>
<thead>
<tr>
<th>Business Activity Forecast</th>
<th>FY20 Forecast</th>
<th>FY19 Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logan Passengers (M)</td>
<td>43.7</td>
<td>41.9</td>
</tr>
<tr>
<td>Conley Containers</td>
<td>160,400</td>
<td>174,849</td>
</tr>
<tr>
<td>Cruise Passengers</td>
<td>400,000</td>
<td>395,971</td>
</tr>
</tbody>
</table>

**Financial Forecast**

<table>
<thead>
<tr>
<th></th>
<th>FY20</th>
<th>FY19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>$ 967 M</td>
<td>$ 927 M</td>
</tr>
<tr>
<td>Operating Expense</td>
<td>(541 M)</td>
<td>(517 M)</td>
</tr>
<tr>
<td>Capital Investment</td>
<td>(382 M)</td>
<td>(362 M)</td>
</tr>
<tr>
<td>Total Expenses</td>
<td>($ 923 M)</td>
<td>($ 879 M)</td>
</tr>
<tr>
<td>Net Margin</td>
<td>$ 44 M</td>
<td>$ 48 M</td>
</tr>
</tbody>
</table>
Conclusions

• Massport’s business activity for 1st half of year was solid, and is reflected in our financial margin targets being slightly ahead of plan for the year.

• Looking ahead, Logan’s passenger activity in the 2nd half is expected to exceed last year by about 5% due to JetBlue, Delta, and American Airlines domestic growth plans.

• Coronavirus poses risks to travel and trade; the suspension of direct flights to China lowers Logan’s traffic by 10K passengers per month. Management will continue to evaluate spillover effect to Massport’s business plan.

• Conley container activity expected to be below last year because of market uncertainty.

• Logan’s 2nd half passenger growth expected to keep our financial plan ahead of target, and the reserve we achieved in the first half provides a degree of safety if trade and travel conditions deteriorate.
FY19 UNIFORM GUIDANCE AUDIT OF FEDERAL AWARDS AND PASSENGER FACILITY CHARGES
1. Ernst & Young (EY) audit opinion states that Massport was in compliance with all Federal requirements

2. Federal Grants: Received $28.4M ($3M or 12% above last year)
   - $16.3M from FAA Airport Improvement Program
     - Logan East Alpha & Bravo Taxiways ($6M), Logan ARFF/CBP facilities ($4M), Worcester R/W 15-33 and East Taxiway ($4M)
   - $11.4M from US DOT Maritime Administration
     - Conley Terminal Berth 11 & 12 Rehab ($7M), Paving of Reefer area ($3M), and RTG drive replacement ($1M)
   - $0.7M from: US Department of Homeland Security ($0.4M), FEMA ($0.2M) and EPA ($0.1M)

3. Passenger Facility Charges: Collected $85.4M ($5M or 6% above last year)
   - $76.4M of PFC funds expended during the year
     - $65.5M to pay for projects in the Capital Program
     - $10.9M for Logan Terminal A to keep rates comparable to other terminals