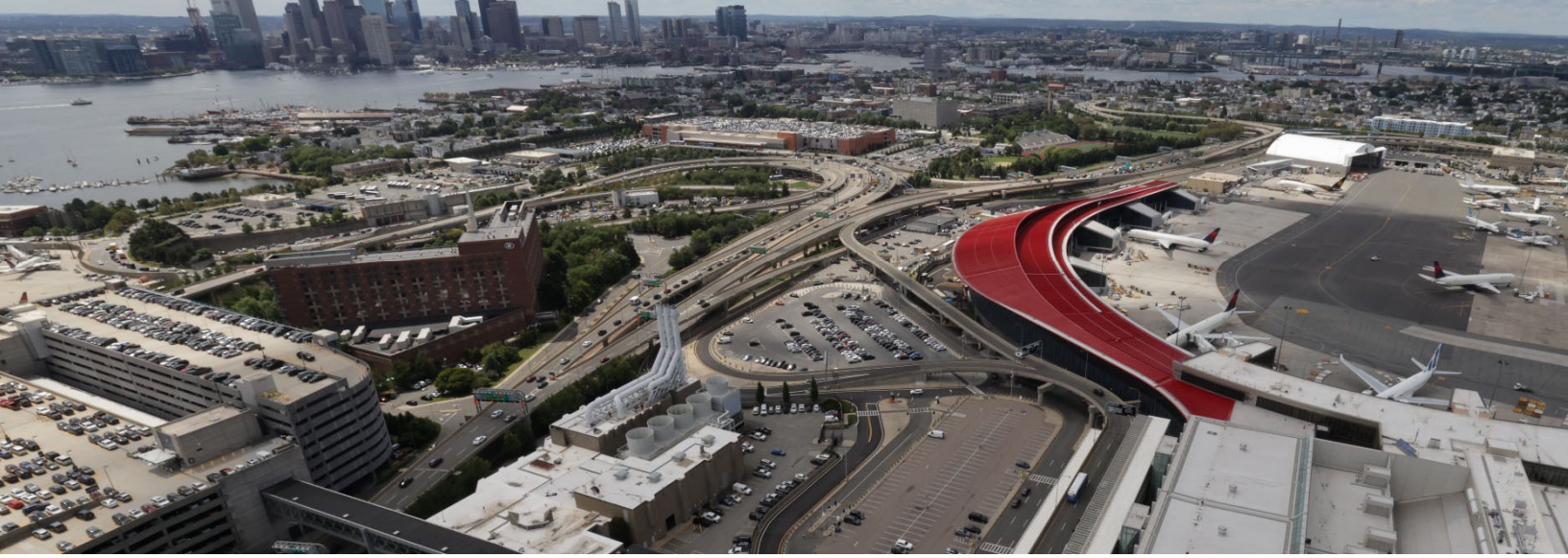


5. Regional Transportation

Logan Airport is a key component of New England's intermodal transportation system that is served by a network of airports, roadways, and rail. This chapter looks at Logan Airport's role in regional transportation and describes the range of options for air travel for the region. Logan Airport is the largest of the three airports owned and operated by Massport and is the primary international and domestic gateway for New England. Massport also owns and operates Worcester Regional Airport (ORH) and Hanscom Field (BED); both of which play important roles in New England's regional transportation system.

This chapter updates 2022 activity at each of the other commercial passenger airports in New England, including passenger and flight activity, ongoing projects to upgrade those facilities, and their long-range plans. Over the past decade, rail connections between Boston, New York City, and Washington D.C. have continued to capture more passengers and in the case of New York City, more passengers now use rail than aircraft to travel between Boston and the New York metropolitan area. This chapter focuses on 2022 **passenger counts** and aircraft operations at New England regional airports[1] and compares them to 2021 and 2019 figures, including:

- Changes in passenger counts, aircraft operations, and other factors affecting regional airport activity during the pandemic;
- The status of current capital improvement plans and projects;
- Massport's initiatives and joint efforts with other transportation agencies to improve the efficiency of the regional transportation system; and
- Regional long-range transportation planning efforts.

1 A review of passenger activity levels and aircraft operations at Logan Airport is provided in Chapter 3, *Activity Levels and Forecasting*.

Regional Transportation Key Findings

The following details key findings of regional transportation:

- Logan Airport is the largest airport in New England and is the primary international and domestic gateway for the region.[2] Worcester Regional Airport offers commercial service and provides facilities for **general aviation (GA)** and Hanscom Field is the region's premium GA facility. Other airports in the New England region include Bradley International Airport and Tweed-New Haven Airport (CT); T.F. Green International Airport (RI); Manchester-Boston Regional Airport and Portsmouth International Airport (NH); Portland International Jetport and Bangor International Airport (ME); and Burlington International Airport (VT).
- Excluding Logan Airport, the ten regional airports served approximately 15 million air passengers in 2022, approximately 14 percent below 2019 levels. The ten airports accounted for 622,461 aircraft operations, which was roughly 2 percent higher than 2021 and 2019 aircraft operations.
- The ten regional airports accommodated nearly 30 percent of the total air passengers in New England, while the remaining 70 percent were accommodated at Logan Airport.
- In 2022, ORH served 160,656 passengers, which was 17 percent below its 2019 **passenger count**, and welcomed its one-millionth passenger in 2022. jetBlue Airways, American Airlines, and Delta Air Lines resumed commercial service after a pause during the pandemic.
- Driven by GA demand, BED remained the second busiest airport in New England in 2022 after Logan Airport in terms of aircraft operations.
- New England regional airports continued to welcome new **low-cost carriers** and **ultra-low-cost carriers (ULCC)** in 2022, including Allegiant Air, Avelo Airlines, Breeze Airways, Frontier Airlines, Spirit Airlines, and Sun Country Airlines.
- In fiscal year (FY) 2022, Amtrak's Northeast Corridor (NEC) carried approximately 9.3 million rail passengers, almost doubling FY 2021 ridership, though 15 percent lower than the FY 2019 ridership.

5.1 New England Regional Airports

The New England region, which is anchored by Logan Airport, a primary hub, has a system of 10 secondary commercial service, **reliever**, and GA regional airports. **Figure 5-1** shows together, these 11 airports accommodated 51.3 million passengers in 2022, a 51.2 percent increase from 33.9 million passengers in 2021, though 14 percent below 2019's 59.7 million-passenger peak. Collectively, these airports represented more than 98 percent[3] of New England's air passenger demand.

2 A regional airport is an airport serving traffic that supports regional economies by connecting communities to statewide and interstate markets.

3 Federal Aviation Administration. Final Calendar Year (CY) 2022 Passenger Boarding Data.

The remaining passenger activity demand is accommodated by smaller commercial service airports and GA airports across the region. For this *2022 ESPR*, passenger – not air cargo – traffic is the primary measure of aviation recovery since the pandemic.

New England Regional Airports consist of the following 11 airports:

- Logan Airport (BOS)
- Worcester Regional Airport (ORH)
- Hanscom Field (BED)
- Bradley International Airport (BDL)
- Rhode Island T.F. Green International Airport (PVD)
- Manchester-Boston Regional Airport (MHT)
- Portland International Jetport (PWM)
- Burlington International Airport (BTV)
- Bangor International Airport (BGR)
- Tweed-New Haven Airport (HVN)
- Portsmouth International Airport (PSM)

Logan Airport serves a major domestic **origin and destination (O&D)** market.[4] Logan Airport is the primary international gateway for New England. The regional airports range in role and activity levels. BDL served over 5.7 million commercial passengers in 2022, while BED currently does not handle regularly scheduled commercial flights but serves as New England's largest GA facility. As commercial passenger air service rebounds and expands to meet regional passenger demand, the network of regional airports enhances airlines' ability to cater to New England's diverse local populations.

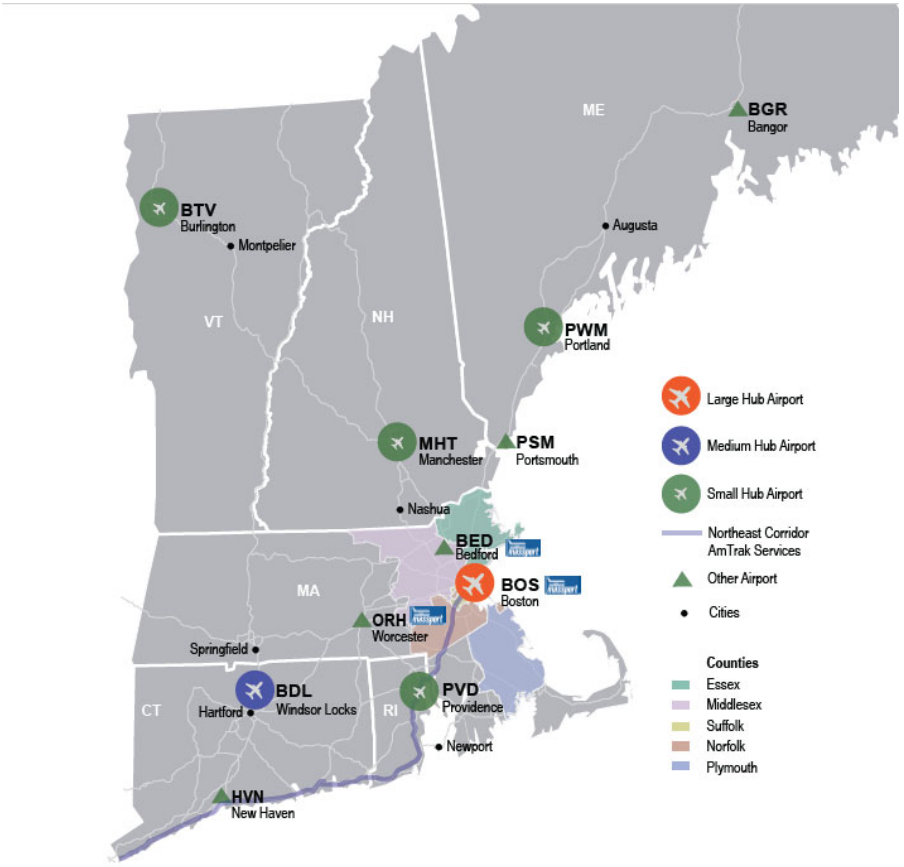
In addition to airports shown in **Figure 5-1**, tertiary airports in New England serve isolated communities where air operators offer **air taxi**, seasonal, or niche commercial air services. These airports, however, are primarily for GA purposes, and are listed below:

- **Massachusetts**: Hyannis Airport, Martha's Vineyard Airport, Nantucket Memorial Airport, New Bedford Regional Airport, and Provincetown Municipal Airport
- **Maine**: Augusta State Airport, Bar Harbor Airport, Rockland Airport, and Northern Maine Regional Airport
- **New Hampshire**: Lebanon Municipal Airport
- **Rhode Island**: Block Island State Airport and Westerly State Airport
- **Vermont**: Rutland Southern Vermont Regional Airport

These tertiary airports support frequent commercial flights to Logan Airport and PVD, including popular Cape Cod and island service during the summer. Most of these tertiary airports are either geographically isolated, sufficiently distant from Logan Airport, or both. Therefore, these airports are unlikely to reduce passenger usage of Logan Airport; rather, many of these airports depend on Logan Airport for connecting services.

4 A strong O&D market like Boston generates significant local passenger demand, with many passengers starting their journey and ending their journey in that market.

Figure 5-1 New England Regional Transportation System – 2022 Commercial Service Airport Passenger Counts and Aircraft Operations



Airport	Code	Passengers	Operations
Boston-Logan International	**BOS**	22,678,000	266,034
Bradley International	**BDL**	4,620,000	72,807
Rhode Island T.F. Green International	**PVD**	2,334,000	56,246
Portland International Jetport	**PWM**	1,704,000	53,741
Manchester-Boston Regional	**MHT**	959,000	45,993
Burlington International	**BTV**	598,000	89,122
Bangor International	**BGR**	498,000	42,939
Portsmouth International	**PSM**	145,000	63,103
Tweed New Haven Regional	**HVN**	57,000	40,031
Worcester Regional	**ORH**	28,000	20,919
Hanscom Field	**BED**	16,000	124,566

Source: Federal Aviation Administration (FAA). 2022 preliminary. *Passenger Boarding Data*. Massport and individual airport data reports. https://www.faa.gov/airports/planning_capacity/passenger_allcargo_stats/passenger/.

Note: Airport sizes are based on the FAA definition, described in Key Terminology. BOS, ORH, and BED are Massport-owned.

5.2 Strong Regional Economy Contributes to Rebounding Growth at Logan Airport

New England demonstrated strong economic growth through early 2020. This growth was the primary driver of air travel growth at Logan Airport, demonstrating the close relationship between the regional economy and Logan Airport activity. The Massachusetts Department of Transportation (MassDOT) *2019 Statewide Airport Economic Impact Study* reported a 22 percent increase in economic output at Logan Airport from 2014 to 2019.[5] This reflected increased contributions from visitor spending, airline and GA passenger traffic, and new on-airport businesses. The robust regional economy drove Logan Airport's inbound and outbound passenger demand by fostering global and domestic trade and tourism. While the region's economy rebounded to pre-pandemic levels in 2022, Logan Airport's passenger counts are rebounding slower than those at other domestic **large hub** airports. Travel restrictions among Logan Airport's non-stop destinations and airline route development planning decisions have contributed to Logan Airport's slower return to pre-pandemic passenger counts as discussed in Chapter 3, *Activity Levels and Forecasting*.

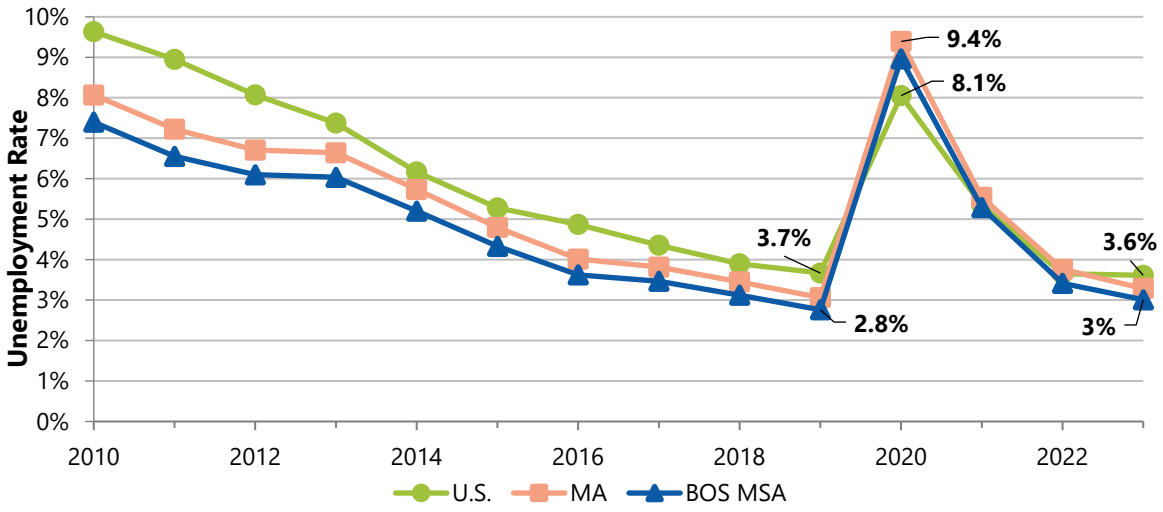
In 2022, the population of the six New England states was approximately 15.1 million, with Massachusetts accounting for approximately 46 percent. Logan Airport, the region's predominant international airport, caters to passengers from across New England, with a primary catchment area of five Massachusetts counties: Essex, Middlesex, Norfolk, Plymouth, and Suffolk, which includes the City of Boston. The catchment area currently has about 4.4 million people (see **Figure 5-1**) and has grown around 0.6 percent annually since 2010, increasing by approximately 400,000 people. Further information on population trends in the catchment area is in Appendix G, *Regional Transportation Supporting Documentation*.

5.2.1 Factors Influencing Massachusetts' Economy

In 2022, Massachusetts' economy maintained robust growth, supported by a strong labor market, low unemployment, and declining inflation. Although the national economy occasionally outpaced the State's quarterly economic growth, both economies grew in tandem. As of the time of this report, there are several indications of slower growth in 2024, corresponding with trends seen in 2023, which will be assessed in future Environmental Data Report (EDR) and ESPR reports.

5 Mass DOT. Massachusetts Statewide Airport Economic Impact Study Update. 2019. https://www.mass.gov/doc/aeronautics-economic-impact-study-2019/download.

Figure 5-2 **Unemployment Rate Comparison: U.S., Massachusetts, and Boston Metropolitan Statistical Area (MSA), 2010–2023 (Annual-basis, except 2023 year-to-date)**



Source: U.S. Bureau of Labor Statistics (BLS). 2023 (latest available month. is June 2023, preliminary; May 2023 for the BOS MSA).
Note: BOS MSA is represented as the Boston-Cambridge-Nashua, MA-NH Metropolitan New England City and Town Area, as defined by the U.S. BLS. Not seasonally adjusted.

In 2019, Greater Boston consistently maintained a lower unemployment rate compared to the State and the nation (see **Figure 5-2**). Massachusetts experienced peak unemployment in April 2020, which was greater than the national unemployment rate in the same month.[6] The State's unemployment rate fell steadily in 2021, and by June 2023, unemployment was at its lowest measure since 2000.[7]

Logan Airport not only serves a growing population but a high-earning one as well. Personal income per capita in 2022 within the Airport's catchment area was 11.6 percent higher than the State average and 46 percent higher than the national average.[8] Massachusetts' major employers are in technology, healthcare and social assistance, and educational services. The State's technology sector, especially the biotechnology industry in Boston, has experienced significant growth in recent years.[9] Massachusetts ranks third nationwide for education and healthcare, emphasizing its strengths in these areas.[10] Economic growth estimates underscore the contributions of innovation, business start-ups, educational services, and the healthcare and biotechnology industries. This advantage attracts higher venture capital

Boston leads the nation in technology jobs per capita as well as share of residents over the age of 25 with advanced degrees.

6 U.S. Bureau of Labor Statistics.
7 UMass Donahue Institute MassBenchmarks. Published July 2023.
8 Woods & Poole Economics, Inc. 2023. Complete Economic and Demographic Data Source. Measured in current U.S. dollars.
9 U.S. Census Bureau via DataUSA. 2019. Boston-Cambridge, Newton, MA-NH Metro Area Profile. www.datausa.io.
10 U.S. News & World Report 2023. Massachusetts.

investment per capita compared to other states. Jones Lange LaSalle's Innovation Geographies report[11] placed Boston at #4 for innovation, alongside top global markets like Tokyo and Silicon Valley. Massachusetts has the world's second-highest technology talent concentration, remains a global leader in life sciences, and is home to the most life sciences headquarters worldwide, with over 250 companies that have each secured $100+ million in funding.[12]

As the world continues to adapt to many societal and economic impacts of COVID-19, the aviation industry's future depends on factors beyond its control. These factors include the potential return and spread of COVID-19 or other infections leading to new quarantine requirements and travel restrictions, economic instability, and the varied impacts of global hostilities.

5.3 New England Regional Trends

In 2022, New England airports, including Logan Airport, generated slightly over one million aircraft takeoffs and landings, marking a 14 percent rise from 2021, but 3.4 percent fewer aircraft operations than in 2019. This section focuses on overall passenger and aircraft operation trends at Logan Airport and the ten regional airports. Industry-wide, airlines are operating larger aircraft fleets, which contributes to **upgauging**. This added **seat capacity** per flight reduces the number of aircraft operations flown per day, especially on leisure-oriented routes. Airline network optimization has also led to higher **load factors**. These factors reduce the total number of aircraft operations, so it is important to note that declining aircraft operations do not always indicate a weakening airport market.

Higher load factors mean the average flight is fuller today than it would have been 20 years ago, which indicates higher efficiency in operations.

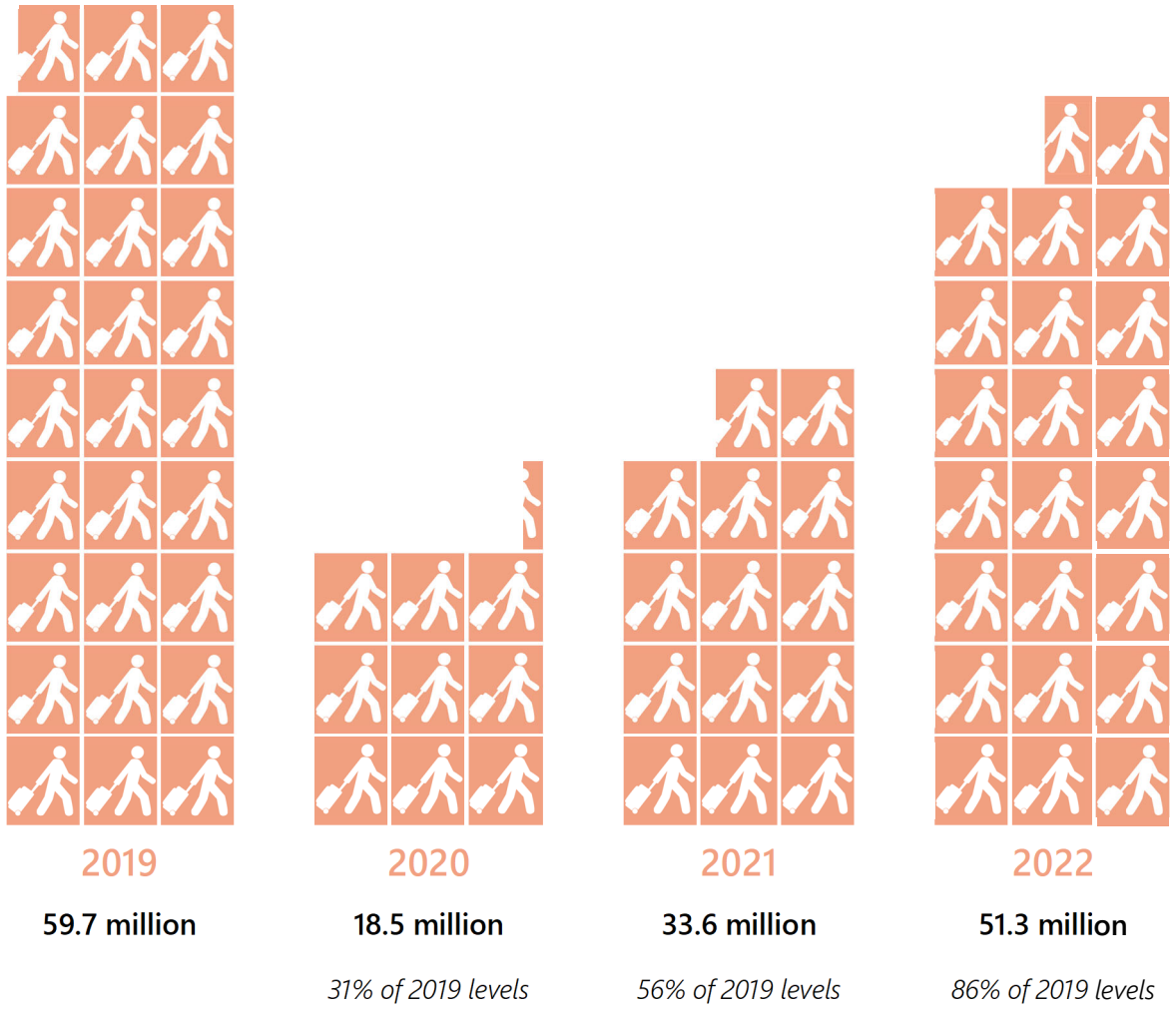
5.3.1 Regional Air Passenger Activity Trends

New England passenger counts rebounded significantly in 2021 and 2022 as travel resurged post-COVID-19 levels as shown in **Figure 5-3**. In 2021, regional airports saw higher annual passenger growth than in 2022 due to a limited reliance on international traffic and a sharper rebound from travel reductions in the early 2000s. The proportion of Logan Airport's total traffic influenced by international market segments is discussed in Chapter 3.

11 JLL's Innovation Geographies, "Innovation-oriented industries and talent concentration to drive urban and real estate recovery," January 25, 2022.

12 Boston Business Journal, "Resilience and recovery: What is driving Boston's economy forward?" March 21, 2022.

Figure 5-3 Passenger Activity at Logan Airport and New England Regional Airports in 2019-2022



Notes:
equal two million passengers

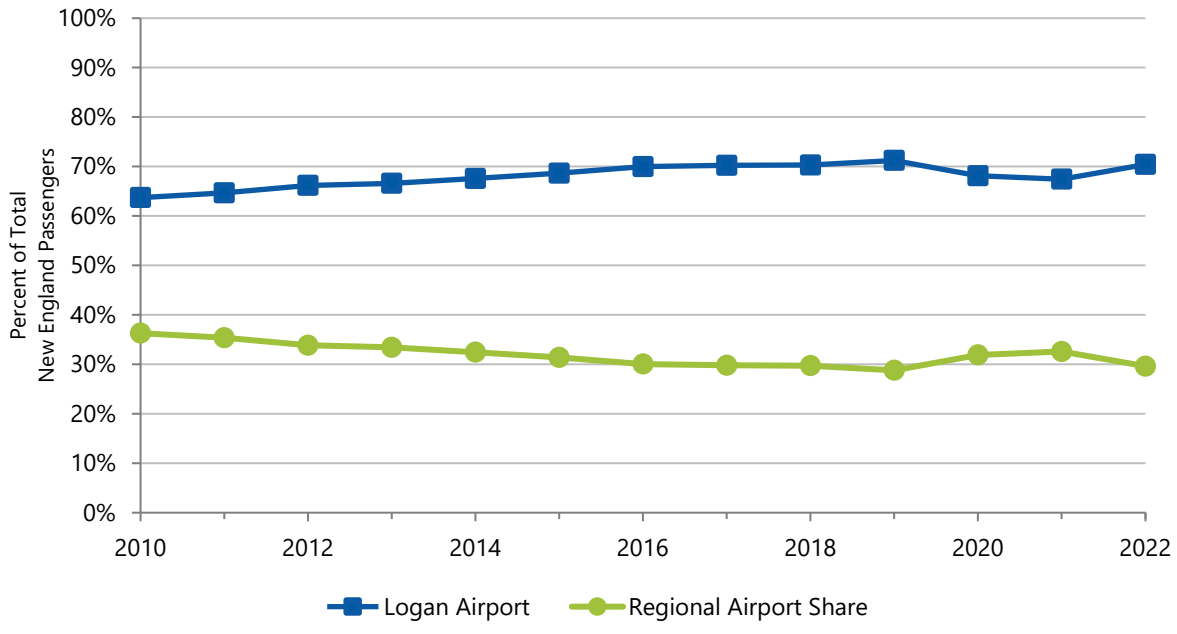
Table 5-1 summarizes passenger activity across each of the regional airports. 2022 passenger recovery towards pre-pandemic figures varied across New England's airports. Region-wide passenger activity was down 12 percent from 2019, but up 35 percent from 2021. Logan Airport remained the region's dominant gateway, handling 70 percent of all New England air passengers. In 2022, Logan handled more than twice as many passengers as the 10 other regional airports combined (see **Figure 5-4**).

Key performance metrics in 2022 for regional airports are listed below:

- New England's 10 regional airports, excluding Logan Airport, accounted for 15.2 million passengers in 2022, or 35 percent annual growth, compared to 17.2 million passengers in 2018 and 2019. These airports represented almost 30 percent of all New England passengers in 2022, compared to 28.8 percent in 2019 (see **Figure 5-4**).
- In 2022, Logan Airport passenger counts increased **year-over-year (YoY)** to 36.1 million passengers.
- Overall, New England airports' passenger counts grew by 51 percent in 2022.

Logan Airport's traffic growth has benefited from increased service by ULCC, plus increased presence from Delta Air Lines' and jetBlue Airways' hub operations. ULCCs such as Allegiant Air, Avelo Airlines, Breeze Airways, Spirit Airlines, and Sun Country Airlines have commenced operations at several New England secondary airports to capture pandemic-induced leisure demand, providing new non-stop connections for the region. Between 2010 and 2019, passenger traffic at New England's secondary airports grew 1.1 percent annually, slower than Logan Airport, where passenger traffic grew 5.0 percent annually. Facing service cuts, regional airport passenger share decreased from 2014 to 2019 while Logan Airport's route network, including new ULCC and low-cost carriers (LCC) services, expanded. These regional secondary commercial airports are returning to pre-pandemic passenger counts, bolstered by new ULCC service to popular leisure markets since the pandemic's onset.

Figure 5-4 Share of New England Passengers, 2010-2022



Source: Massport and individual airport data reports.

In 2022, PVD, MHT, and ORH collectively served 11.4 percent of total passengers using Greater Boston Area airports (BOS, PVD, MHT, ORH) as compared to 12.2 in 2019.

Figure 5-5 illustrates the historical air passenger distribution among BOS, PVD, MHT, and ORH; the latter recommencing scheduled commercial service in 2013.

Table 5-1 Passenger Activity at New England Regional Airports and Logan Airport (2010, 2019, 2021, 2022)

Airport	Passenger Levels (millions)[1]					Percent change from 2019 to 2022
	2000	2010	2019[2]	2021[2]	2022[2]	
Bradley International (BDL), CT	7.34	5.34	6.75	4.62	5.80	-14.2%
Rhode Island T.F. Green International (PVD), RI	5.43	3.94	3.99	2.33	3.17	-20.5%
Portland International Jetport (PWM), NH	1.34	1.71	2.18	1.71	1.99	-8.9%
Manchester-Boston Regional (MHT), NH	3.17	2.81	1.70	0.96	1.29	-23.8%
Burlington International (BTV), VT	0.90	1.30	1.41	0.78	1.20	-14.5%
Tweed-New Haven Regional (HVN), CT	0.08	0.07	0.10	0.06	0.70	+631.4%
Bangor International (BGR), ME	0.38	0.39	0.61	0.57	0.68	+11.1%
Portsmouth International (PSM), NH	0.07	0.00	0.23	0.15	0.16	-30.8%
Worcester Regional (ORH), MA	0.11	0.07	0.19	0.03	0.16	-17.4%
Hanscom Field (BED), MA3 4	0.16	0.00	0.02	0.02	0.02	+36.5%
Regional Subtotal	**18.98**	**15.63**	**17.17**	**11.22**	**15.17**	**-11.7%**
Logan Airport	27.73	27.43	42.52	22.68	36.09	-15.1%
Total	**46.71**	**43.06**	**59.70**	**33.90**	**51.26**	**-14.1%**

Source: Massport and individual airport data reports. Non-Massport airports may be based on U.S. Department of Transportation (U.S. DOT), T-100 Database for scheduled and non-scheduled services, if direct airport records are unavailable.

Notes: Data for Logan Airport includes domestic, international, and GA passengers.

Numbers in parentheses ( ) indicate negative numbers. All calculations may not properly sum due to rounding.

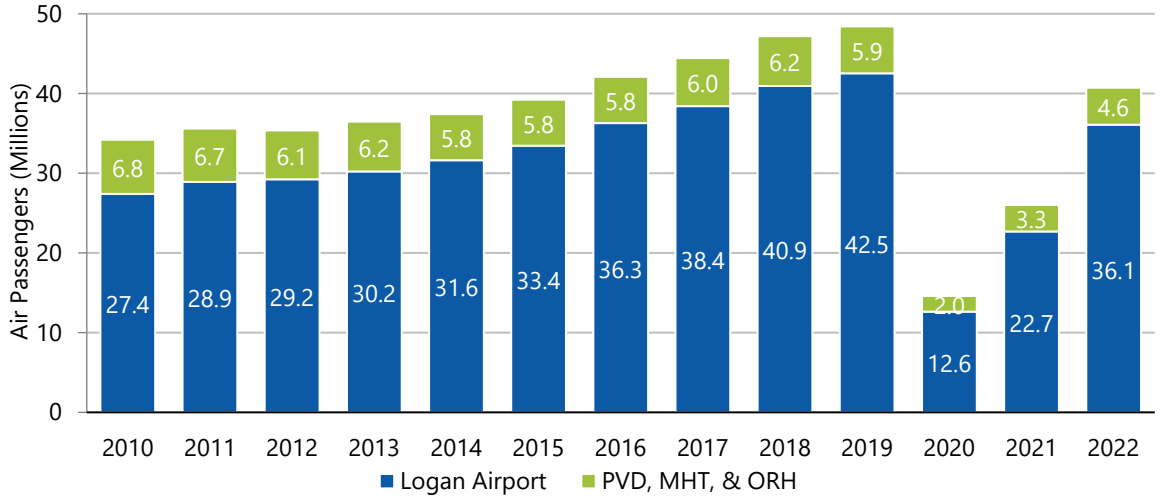
1 Passenger levels are in millions and rounded to the hundredth place; percent change was calculated with unrounded, raw data. Passenger levels are enplaned plus deplaned passengers (where available from airport records) or Federal Aviation Administration (FAA) enplaned passengers times two.

2 Reflects most updated passenger statistics for BTV, MHT, PWM, and PSM based on latest available airport records as of August 2023.

3 If the figure is 0.00, it indicates fewer than 5,000, but more than zero scheduled commercial passengers.

4 BED also reported annual non-scheduled passengers above 9,000 between 2011 and 2022 via U.S. DOT T-100.

Figure 5-5 **Passenger Activity Levels at Logan Airport (BOS), Rhode Island T.F. Green International Airport (PVD), Manchester-Boston Regional (MHT), and Worcester Regional (ORH) Airports, 2010-2022**



Source: Massport and individual airport data reports.

5.3.2 Aircraft Operations Trends

Total aircraft takeoffs and landings in New England since the start of the COVID-19 pandemic have remained well below the region's historical high previously seen in 2000 with 1.6 million aircraft operations. This reduction is primarily the result of airline upgauging and route network optimization. In 2022, total regional aircraft operations were just above 1 million, or 96 percent of pre-pandemic aircraft operations. In 2022, commercial aircraft operations in New England had a 31.5 percent YoY increase, while GA and military aircraft operations declined 2.3 percent and 12.0 percent, respectively. Airlines maintained their aircraft upgauging trend while also maintaining high passenger load factors. Concurrently, secondary regional airports are encountering shifts in airline service commitments due to airlines adapting their network strategies to address challenges related to labor availability and operating costs. 2022 key airport operations trends are listed below:

- As shown in **Table 5-2**, total 2022 aircraft operations in New England, including Logan Airport, were slightly higher than in 2019.
- In 2022, annual aircraft operations at Logan Airport increased 42.3 percent from 2021 but remained 11.4 percent below 2019 levels.
- Annual aircraft operations in 2022 at the other 10 regional airports increased by 2.1 percent but remained below 2019 levels. GA and military aircraft operations at the regional airports were above 2019 levels.

- Despite expanding commercial airline service, regional airports like BDL, PSM, PVD, and HVN reported declining or stagnant aircraft operations due to post-pandemic recessions in local GA and business aviation activity.
- During the COVID-19 pandemic, businesses turned to non-commercial aircraft for safety and convenience, while remote work allowed people to move away from major cities, boosting demand for New England's GA airports. Commercial operations also improved as airlines resumed suspended routes or introduced new ones in high-demand leisure markets.

GA operations continue to dominate the regional airports. GA represented 6.7 and 9.0 percent of aircraft operations at Logan Airport in 2020 and 2021, respectively. This is typical for a large hub airport like Logan Airport. In 2022, New England airports handled 10.2 percent more total GA operations than in 2019. Fuel costs account for a sizable portion of an aircraft's operating costs. Crude oil prices increased from 2019-2022, affecting aviation AvGas and Jet-A fuel prices and could account for the slight decrease in GA activity from 2021.

At regional airports, aircraft operations outweigh passenger numbers due to fewer seats on GA aircraft. In 2022, regional airports accounted for 29.5 percent of New England's passengers, but 62.2 percent of aircraft operations. On average, there were approximately 24 passengers per aircraft operation at the regional airports in 2022, about 13 percent lower than the 2019 average of 28 passengers per aircraft operation. Logan Airport had approximately 95 passengers per aircraft operation in 2022, down from 100 passengers per aircraft operation in 2019.

Table 5-2 Aircraft Operations by Classification for New England's Airports (2019 and 2022)

Airport	2019				2022				Percent Change of Activity Levels			
	Commercial[1]	GA[2]	Military[2]	Total	Commercial[1]	GA[2]	Military[2]	Total	Commercial[1]	GA[2]	Military[2]	Total
Bradley International (BDL)	76,352	12,652	2,379	91,383	63,301	12,887	3,197	79,385	-17.1%	+1.9%	+34.4%	-13.1%
Rhode Island T.F. Green International (PVD)	46,393	23,017	351	69,761	42,296	23,786	746	66,828	-8.8%	+3.3%	+112.5%	-4.2%
Portland International (PWM)	35,855	21,731	646	58,232	30,706	21,298	1,013	53,017	-14.4%	-2.0%	+56.8%	-9.0%
Manchester-Boston Regional (MHT)	34,965	15,762	412	51,139	26,791	18,953	664	46,408	-13.4%	+20.2%	+61.2%	-9.3%
Burlington International (BTV)	28,413	40,894	3,963	73,270	24,050	72,409	5,108	101,567	-15.4%	+77.1%	+28.9%	+38.6%
Bangor International (BGR)	17,678	17,117	10,805	45,600	17,657	14,571	9,962	42,190	-0.1%	-14.9%	-7.8%	-7.5%
Portsmouth International (PSM)	9,346	28,742	3,457	41,545	11,174	44,247	6,298	61,719	+19.6%	+53.9%	+82.2%	+48.6%
Tweed-New Haven Regional (HVN)	6,094	21,853	483	28,430	8,548	17,489	335	26,372	+40.3%	-20.0%	-31.6%	-7.2%
Worcester Regional (ORH)	5,554	17,186	745	23,485	4,087	15,783	1,038	20,908	-26.4%	-8.2%	+39.3%	-11.0%
Hanscom Field (BED)[3]	426	127,670	575	128,671	554	119,961	1,701	122,216	+30.0%	-6.0%	+195.8%	-5.0%
Subtotal	**261,076**	**326,624**	**23,816**	**611,516**	**231,015**	**361,384**	**30,062**	**622,461**	**-11.5%**	**+10.6%**	**+26.2%**	**+1.8%**
Logan Airport	398,254	28,922	0	427,176	348,109	30,504	0	378,613	-12.6%	+5.5%	-	-11.4%
Total	**659,330**	**355,546**	**23,816**	**1,038,692**	**579,124**	**391,888**	**30,062**	**1,001,074**	**-12.2%**	**+10.2%**	**+26.2%**	**-3.6%**

Sources: Federal Aviation Administration (FAA) tower counts; Massport and individual airport data reports.

Notes: Ranked by 2022 commercial operations. FAA tower counts used for all airports except Logan Airport and PSM.

1 May include some Air Taxi operations by fractional jet operators. FAA tower counts may combine fractional jet operations with small regional/commuter airline operations.

2 Includes itinerant and local operations at the regional airports. Military operations at Logan Airport are negligible or non-existent and are not included in Massport counts.

3 Commercial value represents non-scheduled commercial activity.

5.3.3 Regional Airline Passenger Service in 2022

The aviation industry received COVID-19-related federal assistance, including through the Coronavirus Aid, Relief, and Economic Security (CARES) Act, in 2020 and 2021 to maintain and support air carriers' scheduled services, payroll, and employment efforts for airline staff and contractors. This funding helped the aviation sector continue its rebound throughout 2022. This progress occurred while airlines adjusted to rising inflation, supply chain challenges, shifts in business travel trends, and geopolitical disruptions. Airlines underwent several changes to adapt and achieve profitability in 2022. Business travel has changed in the post-COVID environment and concerns about a recession have altered passenger mixes. Airline networks have also adjusted to achieve more efficient operations, respond to labor shortages and rising fuel costs, and accommodate resurging leisure travel demand.

Airlines adjust service by adding flight frequencies, reducing flight frequencies, adjusting aircraft size, or a combination of the three. These modifications impact the number of seats available to passengers, referred to as seat capacity. Hence, when discussing airline services, both seat capacity and the number of departures are taken into consideration. This section summarizes airline departures, seat capacity variations, and many of the new and discontinued routes at regional airports during 2022. When relevant, information based on published 2023 advanced schedules is provided.

5.3.3.1 Service Developments at the Regional Airports

In 2022, 15 scheduled commercial carriers operated from the ten regional airports in New England, down from 16 in 2021. Air Canada was the only foreign carrier that restarted operations from the regional airports, while Boutique Air ceased service. Besides PWM and BED, none of the other New England regional airports experienced a decrease in total commercial operations in 2022.

In the 2010s, airlines largely recovered from the steep service cuts seen during the 2008-2009 economic recession. Since then, airlines optimized their networks by reducing unprofitable routes and by utilizing higher-capacity aircraft. This growth was largely eliminated during the peak of the COVID-19 pandemic. Although seven out of the ten New England regional airports reported below-2019 traffic levels in 2022, each of them experienced an increase in scheduled seat capacity compared to 2021. Notably, ORH and BGR exceeded 2019 passenger levels. Available seats at HVN greatly increased due to new airline service, placing HVN's seat capacity near BGR levels. In 2022, ORH exceeded 2019 capacity by 19.5 percent, representing a fivefold passenger increase over 2021, indicating strong post-pandemic recovery.

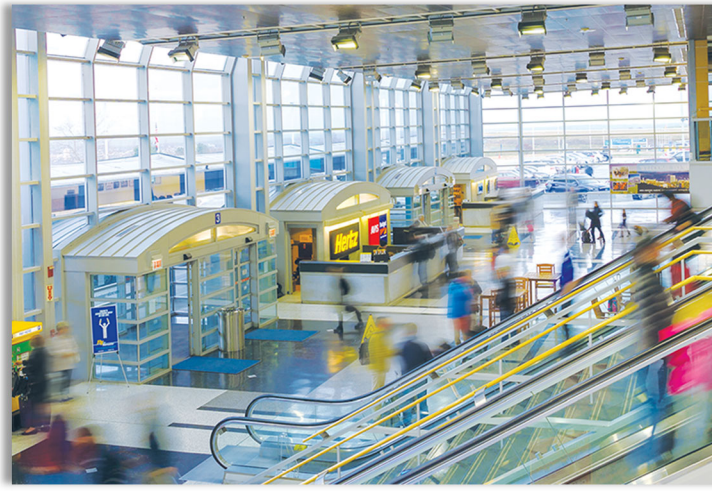
5.4 Worcester Regional Airport (ORH)

ORH, situated in Worcester and Leicester, Massachusetts, is approximately 50 miles west of Logan Airport. It offers corporate GA operations and commercial airline service. In 2000, Massport assumed management of ORH and acquired the facility from the City of Worcester in June 2010. In conjunction with the City of Worcester and community stakeholders, Massport promoted the reintroduction of scheduled airline service at ORH and secured new service from jetBlue Airways. In November 2013, jetBlue Airways commenced non-stop services to Orlando International and Fort Lauderdale-Hollywood airports using 100-seat Embraer 190 aircraft. Five years later, American Airlines and Delta Air Lines initiated flights. Key airport updates for 2022 are summarized in **Table 5-3**. Additional information is in Appendix G, Section G.3.

Table 5-3 Worcester Regional Airport (ORH) 2022 Highlights

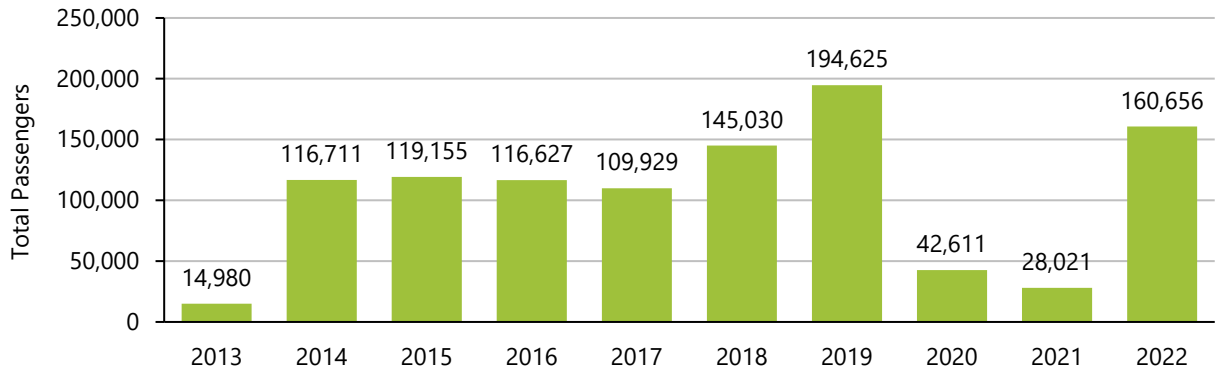
- In 2022, the Airport served 160,000 passengers, which was 17.4 percent below 2019 levels.
- Operations in 2022 totaled 20,908 which was 11.0 percent below 2019 levels.
- Between 2013 and 2022, ORH served 1.04 million commercial passengers as illustrated in **Figure 5-6**.
- GA activity declined 6 percent in 2022 from 2021.
- Airline seat capacity is 20 percent higher than in 2019 (Source: Official Airline Guide [OAG]).

Reference **Table 5-1** for historical passenger activity.
See **Table 5-2** for historical aircraft operations.



Worcester Regional Airport Lobby
Photo Credit – Massport

Figure 5-6 Passenger Activity at Worcester Regional Airport (ORH), 2013–2022



Source: Massport.
Note: 2021 passenger activity was revised compared to the *2020/2021 EDR* report.

5.5 Hanscom Field (BED)

Situated in Bedford, Concord, Lincoln, and Lexington, Massachusetts, around 20 miles northwest of Logan Airport, BED is the foremost general aviation facility for business and corporate aviation in New England. It functions as a reliever for Logan Airport by accommodating a range of GA activities, including corporate aviation, private flights, pilot training, commuter air services, air charters, and light cargo operations. More than 98 percent of the air traffic at BED is civilian. BED also serves as a joint commercial-military facility, hosting the Hanscom Air Force Base and the 66th Air Base Group. During the COVID-19 pandemic, GA flying increased dramatically due to travelers wanting to avoid crowded conditions on commercial flights. Eventually, commercial and charter air traffic recovered, and the pandemic-related demand for GA services receded. This is highlighted in BED's 2022 aircraft operations decline from pre-pandemic-era activity. Key updates for 2022 are summarized in **Table 5-4**. ESPRs are periodically prepared for BED and can be found on Massport's website.[13] Additional information is included in Appendix G, Section G.4.

Hanscom Field
Photo Credit – Massport

Table 5-4 Hanscom Field (BED) 2022 Key Highlights

- In 2022, there were 22,000 air taxi passengers which was a 36.5 percent increase from 2019.
- Operations in 2022 were 122,216; this was 1.2 percent lower than 2021 and 5 percent lower than 2019.
- BED managed four times more GA operations than Logan Airport and 1.6 times more than BTV, the second busiest GA airport in the region.

See **Table 5-1** for historical passenger activity.
See **Table 5-2** for historical aircraft operations.

13 Massport. Project Environmental Filings – Hanscom Field. 2023. https://www.massport.com/environment/project-environmental-filings/hanscom-field.

5.6 Bradley International Airport (BDL)

Situated in Windsor Locks, Connecticut, around 90 miles southwest of Logan Airport, BDL is a commercial airport and a dual-use military facility. The quasi-public Connecticut Airport Authority (CAA) supervises the operation and development of BDL. As a quasi-public agency, the CAA consists of an 11-member board and assumes responsibility for the day-to-day management of BDL. Additionally, the CAA oversees the operations at five GA airports in Connecticut: Danielson, Groton/New London, Hartford Brainard, Waterbury-Oxford, and Windham airports. The primary objective of the CAA is to foster the transformation of BDL and the five GA airports into significant economic contributors for the state. Key airport updates for 2022 are summarized in **Table 5-5**. Additional information including further breakdowns of passenger activity and operations, service developments, and facility improvements are included in Appendix G, Section G.5.

Table 5-5 Bradley International Airport (BDL) 2022 Key Highlights

- In 2022, 5.8 million passengers were recorded, which was 14.2 percent lower than the 2019 levels.
- The total operations in 2022 were 79.,400 which was 13.1 percent below the 2019 levels.
- BDL experienced consistent passenger growth from 2012 to 2019 and notably surpassed a count of 6 million passengers in 2016.

See **Table 5-1** for historical passenger activity.
See **Table 5-2** for historical aircraft operations.

Bradley International Airport Lobby
Photo Credit – Connecticut Airport Authority

5.7 Rhode Island T.F. Green International Airport (PVD)

Situated in Warwick, PVD is the first airport in the U.S. to be owned and operated by a state entity – the Rhode Island Airport Corporation (RIAC). In May 2021, RIAC modified the airport's name by incorporating "Rhode Island" and "International" to enhance its alignment with the state's economy and tourism industry, further supporting Rhode Island's economic growth and appeal to tourists. PVD is just 60 miles southwest of Logan Airport, offering travelers in Boston's southern suburbs an airport alternative. Key airport updates for 2022 are summarized in **Table 5-6**. Additional information is included in Appendix G, Section G.6.

T.F. Green Airport, Rhode Island
Photo Credit – Airport Technology

Table 5-6 Rhode Island T.F. Green International Airport (PVD) 2022 Key Highlights

- In 2022, the passenger count was 3.2 million, which was 20.5 percent below the levels in 2019. The peak of PVD passenger count occurred in 2018, with a total of 4.3 million passengers.
- The operations in 2022 totaled 66,800 which was 4.2 percent lower than 2019 levels.
- In 2022, PVD managed approximately 23,000 GA aircraft operations, exceeding both the operation levels of 2021 and 2019.
- The recovery of commercial aviation continued to lag, driven by its three largest commercial carriers – American Airlines, Southwest, and Delta, which operated around 17 percent below pre-pandemic levels.

See Table 5-1 for historical passenger activity.
See Table 5-2 for historical aircraft operations.

5.8 Manchester-Boston Regional Airport (MHT)

MHT, located in Manchester, New Hampshire, is fewer than 50 miles north of Boston, Massachusetts. The City of Manchester owns the airport, and management is overseen by a five-member board. Key airport updates for 2022 are summarized in **Table 5-7**. Additional information is included in Appendix G, Section G.7.

Table 5-7 Manchester-Boston Regional Airport (MHT) 2022 Key Highlights

- In 2022, there were 1.3 million passengers, approximately 23.8 percent below the 2019 level of 1.7 million passengers. In 2018, MHT served 1.8 million passengers.
- Total operations in 2022 were 46,400, a 9.3 percent decrease from 2019 levels.
- MHT's seat capacity in 2022 was 26.9 percent lower than the 2019 level (Source: Official Airline Guide [OAG]).
- Total aircraft operations were 9.0 percent below the 2019 levels; however, strong GA activity (18.9 thousand GA movements) exceeded the 2019 levels by 20 percent.
- Commercial operations at MHT were 11 percent higher in 2022 than during the lowest point of the COVID pandemic in 2020, marking the slowest recovery among all New England airports.

See **Table 5-1** for historical passenger activity.
See **Table 5-2** for historical aircraft operations.

Manchester-Boston Regional Airport
Photo Credit – Airport Technology

5.9 Portland International Jetport (PWM)

PWM, situated in Portland, Maine, is under the ownership of the City of Portland. Prior to the onset of the COVID-19 pandemic, the airport experienced consistent growth in both passenger activity and operations from 2014 to 2019. In 2022, passenger traffic nearly returned to 2019 levels. This growth was supported by increased seat capacity offered by major airlines such as jetBlue Airways, United Airlines, Southwest Airlines, and Delta Air Lines. Key airport updates for 2022 are summarized in **Table 5-8**. Additional information is included in Appendix G, Section G.8.

Portland Jetport
Photo Credit – City of Portland

Table 5-8 Portland International Jetport (PWM) 2022 Key Highlights

- In 2022, there were 1.99 million passengers, which is 8.9 percent below the levels recorded in 2019.
- Operations in 2022 were 53,000 a decrease of 9.0 percent compared to the 2019 levels.
- The distribution of commercial and GA operations in 2022 remained consistent with the 2019 shares, accounting for approximately 60 percent and 40 percent of total aircraft operations, respectively.
- With just under two million passengers served in 2022, PWM ranked as the third busiest New England regional airport, following BDL and PVD.

See Table 5-1 for historical passenger activity.
See Table 5-2 for historical aircraft operations.

5.10 Burlington International Airport (BTV)

Patrick Lahey Airport, situated in Burlington, Vermont, is under the ownership of the City of Burlington and operates as a joint-use civil-military airport. From 2017 to 2019, the airport saw an overall growth in passenger traffic, operations, and available seat capacity. In 2022 the airport reached 85.5 percent of 2019 passenger levels. Key airport updates for 2022 are summarized in **Table 5-9**. Additional information is included in Appendix G, Section G.9.

Table 5-9 Burlington International Airport (BTV) 2022 Key Highlights

- In 2022, there were 1.2 million passengers which was a decrease of 14.5 percent from 2019 levels.
- Operations in 2022 were significantly higher than in 2019, with 101,600 recorded operations, a 38.6 percent increase.
- There was a surge in GA activity at BTV, particularly in private jet and aircraft manufacturer test flights, which totaled 72,400 aircraft operations. This represents a 77 percent increase over 2019 GA volumes.
- Commercial activity at BTV saw a growth of 4,500 aircraft operations or 23 percent from 2021. However, it remained 15 percent below 2019 levels.
- For the first time since 2019, BTV served more than one million passengers.

See **Table 5-1** for historical passenger activity.
See **Table 5-2** for historical aircraft operations.

Burlington International Airport
Photo Credit – City of Burlington

5.11 Bangor International Airport (BGR)

BGR is in Bangor, Maine and owned by the City of Bangor. BGR is close to several of Maine's outstanding outdoor recreation areas, including Acadia National Park, Baxter State Park, Mount Katahdin, and Sugarloaf Ski Resort. Key airport updates for 2022 are summarized in **Table 5-10**. Additional information is included in Appendix G, Section G.10.

Bangor International Airport
Photo Credit – Flybangor.com

Table 5-10 Bangor International Airport (BGR) 2022 Key Highlights

- In 2022, the passenger count was 675,200, marking an increase of 11.1 percent from the 2019 levels.
- 2022 operations totaled 42,100 which was a decrease of 7.5 percent compared to the 2019 levels.
- BGR is one of the two commercial service airports in New England that managed to surpass the passenger counts of 2019.

See Table 5-1 for historical passenger activity.
See Table 5-2 for historical aircraft operations.

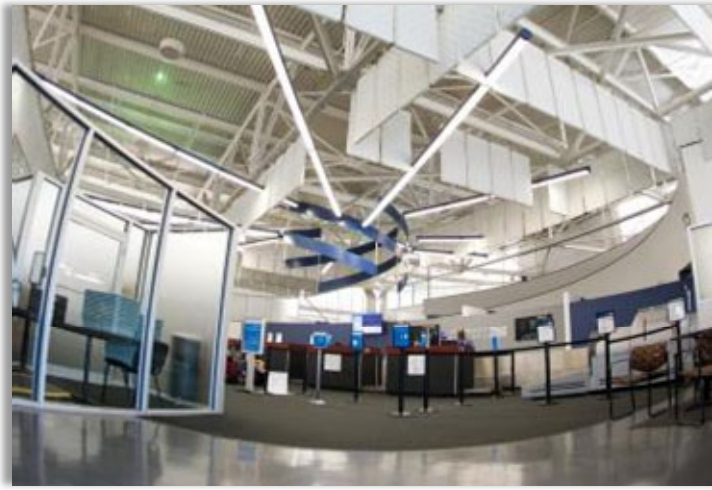
5.12 Tweed-New Haven Regional Airport (HVN)

HVN, situated in New Haven, Connecticut, operates under the management of the Tweed-New Haven Airport Authority, consisting of a six-member board. In 2022, HVN's passenger count surged past 700,000, and it plans to maintain an average of nine daily departures throughout 2023. This growth stems from ULCC Avelo Airlines choosing HVN as its inaugural East Coast base. Additionally, HVN's expansion initiatives, unveiled in 2021, will support Avelo's network expansion efforts. Key airport updates for 2022 are summarized in **Table 5-11**. Additional information is included in Appendix G, Section G.11.

Table 5-11 Tweed-New Haven Airport (HVN) 2022 Key Airport Highlights

- In 2022, the passenger count increased to 701,700, an impressive 631.4 percent increase from 2019 levels.
- Operations in 2022 decreased to 26,400, which is 7.3 percent below the 2019 levels.
- In 2021, Avelo Airlines set up an East Coast base at HVN, which had a profound impact on the airport's operations and the local economy. By 2023, Avelo plans to serve 18 non-stop destinations from HVN.
- Avelo Airlines served 700,000 passengers in 2022 alone, which is over seven times HVN's 2019 passenger volume.
- GA and military aircraft operations continued to be lower than the 2019 levels by 20 percent and 31 percent, respectively.
- Plans for terminal expansion and a runway extension are currently under review.

See **Table 5-1** for historical passenger activity.
See **Table 5-2** for historical aircraft operations.



Tweed-New Haven Regional Airport
Photo Credit – CTourism

5.13 Portsmouth International Airport (PSM)

PSM, situated in Portsmouth, New Hampshire, is managed by the Pease Development Authority. Over the past 15 years, the airport has undergone $85 million in airfield infrastructure improvements. Additionally, a newly reconstructed 5.3-acre terminal apron has been completed, enhancing the airport's facilities and operational capabilities. Key airport updates for 2022 are summarized in **Table 5-12**. Additional information is included in Appendix G, Section G.12.

Portsmouth International Airport at Pease
Photo Credit – Seacoastonline

Table 5-12 Portsmouth International Airport (PSM) 2022 Key Highlights

- There were 161,300 passengers in 2022, representing a 30.8 percent decrease below 2019 levels.
- 2022 operations were robust with 61,700 which was a 48.5 percent increase from 2019 levels.
- The continued growth in GA operations and demand for corporate travel further pushed PSM's aircraft operations even higher, resulting in an almost 50 percent increase as compared to 2019.

See Table 5-1 for historical passenger activity.
See Table 5-2 for historical aircraft operations.

5.14 Metropolitan and Regional Long-Range Transportation Planning

This section highlights efforts to promote an integrated, multimodal regional transportation network through cooperative transportation planning among agencies and stakeholders.

Massport plays a fundamental role within the transportation systems of the Boston metropolitan area and New England. Additionally, Massport supports an integrated multimodal transportation policy to improve the efficient use of transportation infrastructure on both a metropolitan and a regional scale. Logan Airport functions as New England's premier commercial airport, providing an essential connection between the New England states and the World.[14]

A balanced regional intermodal transportation network reduces reliance on Logan Airport as the region's primary transportation hub and provides New England travelers with a greater range of viable transportation options.

Massport participates in regional transportation planning efforts, which are included in **Table 5-13** below. Additionally, recognizing that Logan Airport is a substantial trip generator and key transportation resource in the Greater Boston metropolitan area, Massport participates in several interagency transportation planning forums that strive to enhance a variety of travel modes. Highlighting the value of interagency collaboration, the MassDOT Secretary of Transportation is an ex-officio member of the Massport Board of Directors. The table describes long-term statewide transportation initiatives that are part of the Boston and statewide transportation vision. Where applicable, Massport's commitment to and involvement in the regional transportation system is highlighted. At a local level, Massport engages with municipalities, particularly the City of Boston, to coordinate on transportation planning and land use issues. Recent plans, released by the City of Boston and discussed below, provide a relevant policy framework.

14 Federal Aviation Administration. 2007. Capacity Needs in the National Airspace System 2007-2025 (commonly referred to as FACT-2). https://www.faa.gov/sites/faa.gov/files/airports/resources/publications/reports/fact_2.pdf. Transportation Research Board. 2010. Airport Cooperative Research Program (ACRP) Report 31: Innovative Approaches to Addressing Aviation Capacity Issues in Coastal Mega-regions. https://nap.nationalacademies.org/read/14363/chapter/1.

5.14.1 Rail

High-speed rail is increasingly viewed as a complement to the regional transportation system and aviation planning.[15] Given the comparable travel times, proximity of service to downtown Boston, and the potential for highly efficient electrified propulsion, high-speed rail could provide intercity connectivity for city pairs in a corridor up to 600 miles long that would be competitive with air travel.[16] Boston's South Station is undergoing planning and design for expansion that would support rail mobility in Massachusetts and along the NEC, including future high-speed rail. **Table 5-14** reports on recent developments and current rail service originating in Boston, the status of air-rail linkages in the NEC, and the expanding Pilgrim Partnership, which provides commuter rail between Massachusetts and Rhode Island.

15 Transportation Research Board. 2015. ACRP 03-23: Integrating Aviation and Passenger Rail Planning. https://crp.trb.org/acrpwebresource2/wp-content/themes/acrp-child/documents/065/original/ACRP_118_Integrating_Aviation_and_Passenger_Rail_Planning.pdf.

16 America 2050. 2009. Where High-Speed Rail Works Best. http://www.america2050.org/pdf/Where-HSR-Works-Best.pdf.

Table 5-13 Local and Regional Rail Planning

Plan	Description
Amtrak Northeast Corridor (NEC)	• Amtrak's NEC is an intercity rail line that operates between Boston's South Station and Washington, D.C. via New York City, also serving the major destinations of Providence, Rhode Island; New Haven, Connecticut; Philadelphia, Pennsylvania; and Baltimore, Maryland. Amtrak operates two services between Boston and Washington, D.C.: the high-speed Acela Express and the lower-speed Northeast Regional that makes local stops along the route. Logan Airport passengers can connect directly to Boston's South Station via Silver Line bus rapid transit (BRT) service, taxi, or other unscheduled modes. Silver Line service from Logan Airport to South Station is free as it is subsidized by Massport. • Amtrak's share of the Northeast total passenger market has increased substantially since the introduction of Acela Express service in 2000. In FY 2022, the NEC carried 9.2 million trips on its Acela Express and Northeast Regional services, 109 percent more than in FY 2021.[17,18] Acela Express accounted for about 2.1 million trips, while the Northeast Regional accounted for approximately 7.1 million trips. • Travel times on the Acela Express range from approximately 3.75 hours from Boston to New York to approximately 6.75 hours from Boston to Washington, D.C. Travel times on the Northeast Regional range from about 4.25 hours from Boston to New York to approximately 8.00 hours from Boston to Washington, D.C. On weekdays, a total of 18 daily departures are offered from Boston-South Station to New York-Penn Station, of which about half are Acela Express. On Saturdays and Sundays, a total of 12 departures and 14 departures are offered from Boston-South Station to New York, respectively.[19] • Amtrak share may rise over the next few years as it replaces the old "Amfleet I" cars with contemporary rail equipment.[20] Amtrak will also introduce next-generation Acela rail cars (scheduled to enter service in late 2024), which will increase the number of seats per train by approximately 25 percent and operate at top speeds 10 mph higher than current top speeds of 150 mph.[21]

17 Amtrak. FY 2022 Company Profile. https://www.amtrak.com/national-facts.

18 Amtrak. FY 2021 Company Profile. https://www.amtrak.com/content/dam/projects/dotcom/english/public/documents/corporate/nationalfactsheets/Amtrak-Company-Profile-FY2021-030922.pdf.

19 Amtrak. 2022. Train Schedules and Timetables. https://www.amtrak.com/train-schedules-timetables.

20 Amtrak. "Amtrak Five Year Equipment Asset Line Plan: Base (FY 2019) + Five Year Strategic Plan (2020-2024)," https://www.amtrak.com/content/dam/projects/dotcom/english/public/documents/corporate/businessplanning/Amtrak-Equipment-Asset-Line-Plan-FY20-24.pdf.

21 Amtrak. "New Acela Fleet," https://www.amtrak.com/next-generation-high-speed-trains.

Table 5-13 Local and Regional Rail Planning

Plan	Description
Northeast Corridor Capital Investment Program, Next-Generation High Speed Rail Plan, and Connect NEC 2035	• In 2010, two reports on the NEC were released: the Northeast Corridor Infrastructure Master Plan, which documented expanded capacity and upgrades through 2030,[22] and a next-generation high-speed rail proposal titled, "A Vision for High-Speed Rail in the Northeast Corridor." The high-speed rail plan predicts a shift from auto and air to rail between New York City and Boston, nearly eliminating the air market by 2050.[23] • The two plans were integrated into a single coherent service and investment program in July 2012, called the NEC Capital Investment Program (CIP). The Program would advance the near-term projects outlined in the Master Plan, while phasing improvements to the Acela Express high-speed.[24] The NEC Commission publishes a five-year NEC CIP annually, issuing the most recent FY23-27 CIP in October 2022.[25] • The Federal Railroad Administration (FRA) developed the NEC Project Inventory, issuing a list of priority projects in the NEC and establishing a systematic approach to guide the $16 billion in funding awarded for the NEC passenger rail service.[26] The list aims to reverse decades of underinvestment in infrastructure by proposing replacement and rehabilitation of vital assets, as well as major rail station upgrades and expansions. Subsequent versions of the NEC Project Inventory will be published every two years. • Released in 2023, *Connect NEC 2037* (C37) is the most recent reinvestment plan for the NEC and includes a 15-year service development and infrastructure plan to address the NEC's backlog of state-of-good repair needs and future growth. • Work along the Rhode Island stretch has improved train operations and passenger experience. In 2017, the Rhode Island Department of Transportation (RIDOT) and Amtrak completed the Kingston Station Capacity Expansion project. The project constructed a third track, enabling higher speed Acela trains to safely bypass regional trains.[27] The renovation of Providence Station began in 2022 and is set to finish in 2024.[28]

22 The NEC Master Plan Working Group. 2017. The Northeast Corridor Infrastructure Master Plan. https://railroads.dot.gov/elibrary/northeast-corridor-infrastructure-master-plan.

23 Amtrak. September 2010. A Vision for High-Speed Rail in the Northeast Corridor. https://www.uprfbmwed.org/Docs/amtrak/Amtrak_Memos/Amtrak_NECHSRReport92810LR%5B1%5D.pdf.

24 Amtrak. July 2012. The Amtrak Vision for the Northeast Corridor: 2012 Update Report. amtrak-vision-for-the-northeast-corridor-july-2012.pdf.

25 NEC Commission. October 2022, FY23-27 CIP. https://nec-commission.com/app/uploads/2022/10/FY23-27-Capital-Investment-Plan-01-Body-Oct-22.pdf.

26 FRA. November 2022, NEC Project Inventory. https://railroads.dot.gov/elibrary/nec-inventory.

27 Amtrak. State of Rhode Island Fact Sheet FY 2019. https://www.amtrak.com/content/dam/projects/dotcom/english/public/documents/corporate/statefactsheets/RHODEISLAND19.pdf.

28 RIDOT. Providence Station State of Good Repair Project. https://www.dot.ri.gov/projects/PVDStation/index.php.

Table 5-13 Local and Regional Rail Planning

Plan	Description
Compass Rail	• In October 2023, MassDOT proposed the Compass Rail intercity passenger rail, which would include East-West and North-South services with a Springfield, MA hub.[29] The initiative aims to increase transportation options, support economic development, improve the freight network, and induce a modal shift. • Completed in 2016, the Northern New England Intercity Rail Initiative (NNEIRI) was a collaboration between MassDOT, the Vermont Agency of Transportation, and the Connecticut Department of Transportation (CTDOT) "to examine…more frequent and higher speed intercity passenger rail service" along the Inland Route and the Boston to Montreal Route corridors.[30] • MassDOT conducted an East-West Passenger Rail Study to examine how to make passenger rail service from Boston to Springfield and Pittsfield a competitive travel option along the corridor. The study, released in January 2021, assessed six alternatives, including high-speed rail and potential infill stations.[31] • In November 2021, MassDOT released the Massachusetts Intercity Rail Governance White Paper to assess options for passenger rail in Western Massachusetts. The Western Massachusetts Passenger Rail Commission was established in 2022 to explore potential public entities to implement East-West Passenger Rail.[32] • Through the Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program, MassDOT has won more than $108 million for the Inland Route, with design to begin in 2024.[33,34] Compass Rail includes the proposed Inland Route and service between Boston and Albany to advance the East-West Passenger Rail vision.[35] In 2022, MassDOT was awarded almost $1.8 million in CRISI funding for preliminary engineering and environmental review to improve rail infrastructure, safety, and capacity near Springfield Union Station.[36]

29 MassDOT. Compass Rail: Passenger Rail for the Commonwealth, October 2023. https://www.mass.gov/doc/compass-rail-passenger-rail-for-the-commonwealth-presentation-to-the-board-on-october-18-2023/download.

30 MassDOT. NNEIRI. https://www.mass.gov/files/documents/2018/05/24/NNEIRI_StudySummary.pdf.

31 Available online at https://www.mass.gov/east-west-passenger-rail-study.

32 Available online at https://malegislature.gov/Events/Hearings/Detail/4411.

33 MassDOT. Compass Rail: Passenger Rail for the Commonwealth, October 2023. https://www.mass.gov/doc/compass-rail-passenger-rail-for-the-commonwealth-presentation-to-the-board-on-october-18-2023/download.

34 MassDOT. Healey-Driscoll Administration Secures More Than $108 Million for Train Corridor Improvements Between Springfield and Worcester, September 2023. https://www.mass.gov/news/healey-driscoll-administration-secures-more-than-108-million-for-train-corridor-improvements-between-springfield-and-worcester.

35 MassDOT. Compass Rail: Passenger Rail for the Commonwealth, October 2023. https://www.mass.gov/doc/compass-rail-passenger-rail-for-the-commonwealth-presentation-to-the-board-on-october-18-2023/download.

36 MassDOT. Healey-Driscoll Administration Secures More Than $108 Million for Train Corridor Improvements Between Springfield and Worcester, September 2023. https://www.mass.gov/news/healey-driscoll-administration-secures-more-than-108-million-for-train-corridor-improvements-between-springfield-and-worcester.

Table 5-13 Local and Regional Rail Planning

Plan	Description
Boston-South Station Expansion	• MassDOT evaluated options to expand Boston's South Station Rail Terminal capacity and related layover capacity to meet high-speed, intercity, and commuter rail services needs on the NEC and the Massachusetts Bay Transportation Authority's (MBTA's) South Side system. South Station operates above design capacity and constrains regional rail mobility.[37] The proposed South Station Expansion Project aims to increase passenger capacity, improve service reliability, contribute to city-building in Boston, and reopen Dorchester Avenue for public use.[38] The MBTA operates the Silver Line, which provides a direct connection between South Station and all Logan Airport passenger terminals. • The U.S. Department of Transportation (U.S. DOT) awarded MassDOT a grant to improve South Station's Tower 1 interlocking, critical infrastructure that distributes trains to and from the station.[39] This early action project will provide operating benefits, including reliability and resiliency. Construction began in 2023 with projected completion in 2028. • The station is also undergoing improvements as part of the South Station Air Rights Project, with anticipated completion in 2025. A collaborative effort between the Boston Planning and Development Agency (BPDA), the private developer, and the MBTA, this project will expand the outdoor concourse area, increase bus terminal capacity by more than 50 percent, provide more convenient connections between the bus and rail terminals, and construct a new mixed-use tower.[40]
Commuter Rail Services	• RIDOT allocates some of its federal funding to the MBTA under the Pilgrim Partnership in return for commuter rail service between Boston and Rhode Island. On weekdays, 20 round trips are provided between Boston and Providence, approximately half of which serve PVD. • RIDOT, in cooperation with the City of Pawtucket and U.S. DOT, invested $63 million in a new MBTA commuter rail station in Pawtucket, Rhode Island. The station opened in January 2023,[41] and will attract passengers in the overlapping catchment area along the Providence Line.

37 MassDOT. About this Project. https://www.mass.gov/lists/south-station-expansion-documents.

38 MassDOT. October 2017. South Station Expansion Final Environmental Assessment and Section 4(f) Determination. https://www.mass.gov/lists/south-station-expansion-final-environmental-assessment.

39 MBTA. South Station Tower One Interlocking Project. https://www.mbta.com/projects/south-station-tower-one-interlocking-project.

40 MBTA. South Station Transportation Center Improvements. https://www.mbta.com/projects/south-station-transportation-center-improvements.

41 RIDOT. Pawtucket/Central Falls Transit Center. http://www.dot.ri.gov/projects/PCF/index.php.

Table 5-13 Local and Regional Rail Planning

Plan	Description
Massachusetts State Rail Plan[42]	• In 2010, MassDOT developed the first State Rail Plan which outlines a 20-year vision and action plan for rail services in Massachusetts. Massport advised and supported MassDOT on this plan.
Commuter Rail Services *continued*	• In April 2019, construction began on the $3.42 billion South Coast Rail corridor project to expand the commuter rail Middleborough Line from Boston to the New Bedford and Fall River areas. The $1 billion Phase 1 will bring six new stations and two new layover facilities in 2024.[43,44] Phase 2 will provide service to the South Coast through the Town of Stoughton.[45] • In October 2019, the MBTA launched a one-year pilot to test weekday commuter rail service to Foxboro. The MBTA operated 10 daily round trips as part of the Service Pilot, with 500 parking spaces available at Foxboro Station. The MBTA suspended the service pilot in 2020 as a result of the pandemic. This pilot was relaunched in Fall 2022, and commuter rail service to Foxboro was made permanent in October 2023.[46]
MBTA Rail Transformation	• The MBTA's 2020 Rail Vision planning study identified cost-effective strategies to transform the MBTA's existing Commuter Rail system to better support improved mobility and economic competitiveness in the Boston region. The study assessed different approaches to increase frequency, reduce travel time, and improve connectivity on the current network. The project evaluated six alternatives for a future MBTA rail system to understand the costs, ridership potential, and operational feasibility of these alternatives.[47] • While the study was completed pre-pandemic and reflects pre-pandemic mobility patterns, the MBTA continues to advance planning for elements of a Regional Rail Transformation. The Regional Rail Transformation has resulted in schedule changes beginning in spring 2021 to implement more frequent bi-directional service and hourly clock face service on some lines. • The Regional Rail Transformation has also continued planning for capital investments and electrification.[48]

42 MassDOT. 2018. State Rail Plan. https://www.mass.gov/service-details/rail-plan.

43 MBTA, South Coast Rail. https://www.mbta.com/projects/south-coast-rail.

44 MassDOT. South Coast Rail. https://www.mass.gov/south-coast-rail.

45 *Ibid.*

46 MBTA. Foxboro Weekday Service Pilot. https://www.mbta.com/projects/foxboro-weekday-service-pilot.

47 MBTA. Rail Vision. https://www.mbta.com/projects/rail-vision.

48 MBTA. Regional Rail Transformation Update. June 23, 2022.

Table 5-13 Local and Regional Rail Planning

Plan	Description
Northern Tier Passenger Rail Study	• MassDOT is studying alternatives for passenger rail service from North Adams to Greenfield and Boston.[49] The new service would offer an alternative means of transportation from western and central Massachusetts to Boston and facilitate travel to the northern areas of Berkshire, Franklin, and Worcester counties from Boston.[50] The study aims to support economic development along the Northern Tier corridor, promote transportation equity, and minimize transportation impacts on public health and the environment.

Table 5-14 Regional Transportation Planning

Plan	Description
Regional Airport Cooperative Planning Efforts	
New England Regional Airport System Plan (NERASP)[51] – Commercial Service Airports	• Federal Aviation Administration (FAA) New England Region, in concert with the New England Airport Directors and New England State Aviation Directors, completed the *NERASP*.[52] (2006)
New England Regional Airport System Planning – General Aviation (NERASP-GA)	• New England aviation officials, in collaboration with the FAA, studied the GA airport system, including primary commercial service airports. This data will guide FAA in deciding on capital investments considering high operational costs, reduced activity, old infrastructure, and limited state funds for improvements.[53]

49 MassDOT. Northern Tier Passenger Rail Study. https://www.mass.gov/northern-tier-passenger-rail-study.

50 MassDOT. Northern Tier Passenger Rail Study Public Meeting. https://storymaps.arcgis.com/stories/f8b3c1274ac246b19499d1c092893b08.

51 Information on the NERASP-GA study can be found at https://www.faa.gov/airports/new_england/planning_capacity/airport_system_plan/.

52 The NERASP, which was published by the FAA in 2006, includes Logan International Airport and these 10 regional airports: BGR, BDL, BTV, BED, MHT, PWM, PSM, PVD, HVN, and ORH.

53 The Evolving Role of our General Aviation Airports and Their Significance to New England - A Profile of the New England General Aviation Airports: Phase 1 Summary of Findings, September 2015, prepared for New England State Aviation Directors by Louis Berger, Airports Solutions Group, and ICF International.

Table 5-14 Regional Transportation Planning

Plan	Description
Regional Cooperative Planning Efforts	
Boston Metropolitan Planning Organization (MPO)	• Massport supports multimodal transportation planning and improved integration of its facilities in the Boston area through its permanent voting membership on the Boston MPO and by providing input on the Boston MPO's policy and programming decisions including the Transportation Improvement Program (TIP). • Massport actively participates in MPO's decision-making board, participating in related policy decisions, and utilizing Central Transportation Planning Staff (CTPS) to support its ground transportation planning initiatives.
Metropolitan Area Planning Council (MAPC) *MetroCommon 2050*	• Massport is an ex-officio member of the Executive Committee of MAPC, a regional planning agency that promotes smart growth and regional collaboration. MAPC membership includes 101 municipal government representatives, 21 gubernatorial appointees, 10 state officials, and three City of Boston officials. MAPC adopted *MetroCommon 2050* in 2021, a land-use and policy plan advocating for inclusive growth, mobility, equal housing, wealth and health equity, representative government, and climate change mitigation.[54]
Conference of New England Governors (CONEG) and the Conference of New England Governors and Eastern Canadian Premiers (NEG/ECP)	• The CONEG is a formally established body that coordinates regional policy programs in the areas of economic development, transportation, environment, energy, and health, among others. • NEG/ECP coordinates policies of common interest to achieve a greater balance between modes to increase transportation capacity without overburdening Logan Airport and the New England aviation system. The six New England states and the five Eastern Canadian provinces have worked cooperatively since 1973. • MassDOT has a representative on the NEG/ECP Transportation and Air Quality Committee, which covers regional transportation issues and infrastructure development, use, and efficiency. • In 2015, the NEG/ECP passed and implemented the Climate Change Action Plan, which provided direction on reducing greenhouse gas emissions and a target range of 35 to 45 percent below 1990 levels by 2030.[55]

54 MAPC, *MetroCommon 2050*. https://metrocommon.mapc.org/.

55 Conference of NEG/ECP. August 30, 2015. Resolution 39-1, Resolution Concerning Climate Change.

Table 5-14 Regional Transportation Planning

Plan	Description
Boston and Statewide Long-Term Transportation Vision	
Long-Range Transportation Plan of the Boston Region MPO	• As a member of the MPO board, Massport is an active participant in the development of the Boston MPO's Long-Range Transportation Plan. For the Airport, the plan's long-range vision finds that support for interconnected ground transportation systems and access to the Airport and air cargo are critical. • In August 2019, the Boston MPO adopted its current LRTP, *Destination 2040*, to help the region address challenges related to increased congestion, stressed transportation infrastructure, and climate change to the long-term vitality of the region. New funding opportunities as part of Destination 2040 include transit modernization, dedicated bus lane infrastructure, and climate resiliency. • The next LRTP, *Destination 2050*, will be adopted in 2023. Destination 2050 will be designed to address the forces and uncertainties that will shape the Boston region between the current environment and 2050.
Massachusetts State Freight Plan	• MassDOT initiated a comprehensive *Massachusetts State Freight Plan* in 2022, with Massport's participation as a member of the leadership Freight Advisory Committee, focusing on near and long-term freight systems. • This plan includes the designation of new miles of Critical Urban and Rural Freight Routes to the National Highway Freight Network, improving connections to Logan Airport and Massport maritime facilities, and will assist in identifying cargo trends and supporting urban supply chains.
Focus40	• *Focus40* is a 25-year investment plan for the Massachusetts Bay Transportation Authority (MBTA) released in March 2019 to meet the needs of the Boston Region through the year 2040. The *Focus40* plan considers all rapid transit, commuter rail, bus, ferry, and paratransit services,[56] and future changes in technology, demographic shifts, mobility preferences, infrastructure challenges, as well as climate change impacts.[57,58] Some projects outlined in the plan have been implemented or are currently underway including the Green Line Extension to Union Square in Somerville (March 2022) and the Medford Branch (December 2022). • Massport actively participated in the Focus40 planning process to provide input on the role of Logan Airport and other Massport assets. The proposed Silver Line extension of service to Everett and a direct connection between the Red and Blue Lines would improve public transit access to Logan Airport.[59,60]

56 Transportation for persons with disabilities to supplement public transportation systems.

57 MassDOT. 2022. Focus40: Planning in the Face of Uncertainty. https://www.mbtafocus40.com/region-in-2040.

58 MassDOT. 2022. Focus40. https://www.mbtafocus40.com/.

59 MBTA. Silver Line Extension Alternatives Analysis. https://www.mbta.com/projects/silver-line-extension-slx-alternatives-analysis.

60 MBTA. FY23-7 Capital Investment Plan (CIP). https://cdn.mbta.com/sites/default/files/2022-05/2022-05-26-fy23-27-mbta-final-cip-public-document-accessible.pdf.

Table 5-14 Regional Transportation Planning

Plan	Description
Go Boston 2030	• The City of Boston's comprehensive transportation plan, GoBoston 2030, released in 2017, is intended to guide transportation planning policy and infrastructure investments through 2030 while following the guiding principles of equity, economic opportunity, and climate responsiveness. The plan aims to improve safety, expand access, increase reliability, reduce car use, reduce emissions, and increase affordability. • As of May 2022, 30 projects are in implementation; 11 projects are in design; and 17 projects have not yet started. Massport, a key stakeholder in the plan, contributes to the project affecting its facilities.
Water Transportation Advisory Council and Ferry Study	• Massport is a participating member of the Water Transportation Advisory Council for the Boston region. • Massport served as a council member on a study in 2019, led by Boston Harbor Now that evaluated water transportation needs in Boston Harbor. The study identified three potential water service corridors and developed business plans for rider assessment and implementation feasibility.
Bus Transformation	• As part of its 5-year CIP, the MBTA is improving bus service through the Better Bus Project, which includes planning for Bus Network Redesign (BNRD) and Facility Modernization as well as Bus Electrification.[61] • In 2019, the MBTA purchased five battery electric buses (BEBs) for the Silver Line, and projects are underway to modernize maintenance facilities to accommodate BEBs. Massport purchased ten new Silver Line electric and hybrid buses in 2022 as part of the MBTA procurement program. • The BNRD will include increased service frequencies of 15 minutes or better for the Silver Line.
South Boston Transportation Action Plan	• Launched in late 2022, the South Boston Transportation Action Plan builds upon Imagine *Boston 2030* and *Go Boston 2030*, studying key transportation connections to and within the South Boston area. It will evaluate safety concerns and recommend improvements to simplify intersections for all users, improve the transit network, expand the bike network, and improve walkability.[62]

61 MBTA. Better Bus Project. https://www.mbta.com/projects/better-bus-project.

62 BDPA South Boston Transportation Action Plan, https://www.bostonplans.org/news-calendar/news-updates/2022/11/08/bpda-launches-south-boston-transportation-action-plan.

Table 5-14 Regional Transportation Planning

Plan	Description
South Boston Waterfront Transportation Plan	• In 2013, Massport, the City of Boston, MassDOT, and the Massachusetts Convention Center Authority created a sustainable transportation plan for the South Boston Waterfront, providing solutions for growth, transportation needs, and area improvement, while preserving neighborhood benefits. Massport continues to engage with other agency partners in the implementation of recommendations from this plan. • Since, the City of Boston, jointly led by the Boston Planning and Development Agency (BPDA) and the Boston Transportation Department (BTD), has developed a draft South Boston Strategic Transit Plan to improve the operations, capacity, and connectivity of the transit network serving the South Boston Seaport.
Local Planning Efforts	
Imagine Boston 2030[63]	• *Imagine Boston 2030*, was released in 2017 and is the City of Boston's comprehensive development plan, and addresses topics including housing, mobility, climate change, open space, equity, health, and transportation. • Massport continues to engage with the City of Boston and other stakeholders to shape the implementation of relevant strategies and align its planning efforts with the plan's strategies.[64]
Climate Ready Boston	• Climate Ready Boston, released in 2016, aims to guide Boston toward a more affordable, equitable, connected, and resilient future. Components of the Climate Ready Boston plan include: updating climate projections; completing vulnerability assessments; identifying impacts to focus areas; and creating more climate resiliency initiatives. The City has developed a pilot tool to track its implementation progress.[65] • In 2022, Phase II Costal Resilience Solutions for East Boston and Charlestown were released and included a study of the East Boston waterfront that was not included in the prior Phase I study.[66]
Coastal Resilience Solutions for South Boston	• The City of Boston published the *Coastal Resilience Solutions for South Boston* report in October 2018. This plan presents near- and long-term visions for reducing risk due to sea level rise and coastal flooding in South Boston. This is the second neighborhood coastal resilience plan from the Climate Ready Boston initiative.

63 City of Boston. Imagine Boston 2030. https://www.boston.gov/civic-engagement/imagine-boston-2030/.

64 List of the planning initiatives set forth by the BPDA can be found via this link: https://www.bostonplans.org/planning/planning-initiatives.

65 City of Boston Progress Summary & Details. 2022. https://www.boston.gov/departments/environment/climate-ready-boston-progress/.

66 City of Boston, Climate Ready Boston. 2022. https://www.boston.gov/departments/environment/climate-ready-boston/coastal-resilience-east-boston.