

# F. Activity Levels Supporting Documentation

This appendix provides detailed information and tables in support of Chapter 3, *Activity Levels and Forecasting*. The contents of this appendix are summarized below.

|       |                                                                                                                             |      |
|-------|-----------------------------------------------------------------------------------------------------------------------------|------|
| F.1   | Activity Levels .....                                                                                                       | F-2  |
| F.1.1 | Historical Air Passengers and Operations .....                                                                              | F-2  |
|       | Table F-1 Logan Airport Historical Air Passenger and Operations Data .....                                                  | F-2  |
|       | Table F-2 Logan Airport Changes in Domestic Passenger Operations by Carrier.....                                            | F-3  |
|       | Table F-3 Logan Airport Changes in International Passenger Operations by Carrier.....                                       | F-5  |
| F.1.2 | Historical Scheduled Destinations.....                                                                                      | F-9  |
|       | Table F-4 Logan Airport Scheduled Passenger Departures by Destination.....                                                  | F-9  |
| F.2   | Derivative Forecasts .....                                                                                                  | F-20 |
| F.2.1 | Operations by Aircraft Type .....                                                                                           | F-20 |
|       | Table F-5 Forecast Logan Airport Operations by Aircraft Type, Actual 2022 and<br>Future Planning Horizon .....              | F-20 |
| F.2.2 | Operations by Stage Length and Time-of-Day .....                                                                            | F-22 |
|       | Table F-6 Stage Length Assumptions, Total Passenger Airline Operations, Future<br>Planning Horizon.....                     | F-23 |
|       | Table F-7 Stage Length Assumptions, Cargo Operations, Future Planning Horizon .....                                         | F-24 |
|       | Table F-8 Time-of-Day Assumptions by User Category and Stage Length, Future<br>Planning Horizon.....                        | F-24 |
| F.2.3 | Peak Month, Average Day Hourly Forecast .....                                                                               | F-25 |
|       | Table F-9 Peak Month Average Day Local Passengers, 2022 Base Year and Future<br>Planning Horizon.....                       | F-26 |
|       | Table F-10 Actual and Assumed Future Distribution of Passengers by Terminal .....                                           | F-26 |
|       | Table F-11 Peak Month Average Day Local Passengers by Terminal, 2022 Actual and<br>Future Forecast.....                     | F-27 |
|       | Table F-12 Terminal Distribution of Local Passengers by Hour for an Average Day<br>Peak Month, 2022.....                    | F-28 |
|       | Table F-13 Assumed Distribution of Local Passengers by Hour for an Average Day<br>Peak Month, Future Planning Horizon ..... | F-29 |
|       | Table F-14 Peak Month Average Day Local Passengers by Terminal and by<br>Hour, 2022 .....                                   | F-30 |
|       | Table F-15 Peak Month Average Day Local Passengers by Terminal and by Hour,<br>Future Planning Horizon .....                | F-31 |
| F.2.4 | Conclusion.....                                                                                                             | F-32 |

## F.1 Activity Levels

### F.1.1 Historical Air Passengers and Operations

Table F-1 Logan Airport Historical Air Passenger and Operations Data

| Year | Operations | Air Passengers | Year | Operations | Air Passengers |
|------|------------|----------------|------|------------|----------------|
| 1980 | 258,167    | 14,722,363     | 2002 | 392,079    | 22,696,141     |
| 1981 | 251,961    | 14,827,684     | 2003 | 373,304    | 22,791,169     |
| 1982 | 244,468    | 15,867,722     | 2004 | 405,258    | 26,142,516     |
| 1983 | 288,956    | 17,848,797     | 2005 | 409,066    | 27,087,905     |
| 1984 | 318,959    | 19,417,971     | 2006 | 406,119    | 27,725,443     |
| 1985 | 349,518    | 20,448,424     | 2007 | 399,537    | 28,102,455     |
| 1986 | 363,995    | 21,862,718     | 2008 | 371,604    | 26,102,651     |
| 1987 | 414,968    | 23,369,002     | 2009 | 345,306    | 25,512,086     |
| 1988 | 407,479    | 23,732,959     | 2010 | 352,643    | 27,428,962     |
| 1989 | 388,797    | 22,272,860     | 2011 | 368,987    | 28,907,938     |
| 1990 | 424,568    | 22,878,191     | 2012 | 354,869    | 29,235,643     |
| 1991 | 430,403    | 21,450,143     | 2013 | 361,339    | 30,218,631     |
| 1992 | 474,378    | 22,723,138     | 2014 | 363,797    | 31,634,445     |
| 1993 | 493,093    | 23,579,726     | 2015 | 372,930    | 33,449,580     |
| 1994 | 458,623    | 24,468,178     | 2016 | 391,222    | 36,288,042     |
| 1995 | 466,327    | 24,192,095     | 2017 | 401,371    | 38,412,419     |
| 1996 | 456,226    | 25,134,826     | 2018 | 424,024    | 40,941,925     |
| 1997 | 482,542    | 25,567,888     | 2019 | 427,176    | 42,522,411     |
| 1998 | 507,449    | 26,526,708     | 2020 | 206,702    | 12,618,128     |
| 1999 | 494,816    | 27,052,078     | 2021 | 266,034    | 22,678,499     |
| 2000 | 487,996    | 27,726,833     | 2022 | 378,613    | 36,090,716     |
| 2001 | 463,125    | 24,474,930     |      |            |                |

Source: Massport and U.S. Department of Transportation, T-100 Database.

**Table F-2 Logan Airport Changes in Domestic Passenger Operations by Carrier**

| Airline                         | 2000           | 2010           | 2015           | 2019           | 2020           | 2021           | 2022           | 2021-2022 Change | 2022 % of 2019 |
|---------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|----------------|
| <b>Scheduled Jet Carriers</b>   | <b>233,993</b> | <b>203,052</b> | <b>225,629</b> | <b>257,103</b> | <b>119,132</b> | <b>143,442</b> | <b>211,282</b> | <b>67,840</b>    | <b>82.2%</b>   |
| AirTran Airlines                | 3,090          | 13,672         |                |                |                |                |                |                  |                |
| Alaska Airlines <sup>1</sup>    |                | 1,733          | 3,027          | 5,920          | 2,535          | 2,882          | 4,404          | 1,522            | 74.4%          |
| Allegiant Air                   |                |                |                |                | 184            | 1,063          | 1,154          | 91               |                |
| America West Airlines           | 5,116          |                |                |                |                |                |                |                  |                |
| American Airlines <sup>2</sup>  | 30,821         | 21,313         | 56,623         | 50,150         | 24,634         | 27,917         | 40,356         | 12,439           | 80.5%          |
| American Trans Air              | 1,448          |                |                |                |                |                |                |                  |                |
| Continental Airlines            | 16,894         | 10,869         |                |                |                |                |                |                  |                |
| Delta Air Lines <sup>3</sup>    | 52,954         | 28,980         | 30,705         | 37,496         | 18,552         | 27,343         | 41,917         | 14,574           | 111.8%         |
| Frontier Airlines               | 1,052          | 1,094          |                | 1,211          | 674            | 1,006          | 1,145          | 139              | 94.5%          |
| Hawaiian Airlines               |                |                |                | 425            | 132            | 380            | 422            | 42               | 99.3%          |
| Independence Air                |                |                |                |                |                |                |                |                  |                |
| JetBlue                         |                | 49,981         | 79,364         | 104,571        | 46,789         | 54,122         | 83,400         | 29,278           | 79.8%          |
| Midway Airlines                 | 4,096          |                |                |                |                |                |                |                  |                |
| Midwest Airlines                | 3,726          | 1,961          |                |                |                |                |                |                  |                |
| Northwest Airlines              | 13,147         |                |                |                |                |                |                |                  |                |
| People Express                  |                |                |                |                |                |                |                |                  |                |
| Southwest Airlines <sup>4</sup> |                | 13,727         | 21,542         | 19,907         | 9,277          | 8,914          | 10,535         | 1,621            | 52.9%          |
| Spirit Airlines                 |                | 3,023          | 4,896          | 9,838          | 4,897          | 5,067          | 5,940          | 873              | 60.4%          |
| Sun Country Airlines            | 723            | 313            | 1,414          | 288            | 121            | 358            | 414            | 56               | 143.8%         |
| Trans World Airlines            | 6,280          |                |                |                |                |                |                |                  |                |
| United Airlines <sup>5</sup>    | 28,092         | 16,314         | 24,632         | 27,297         | 11,337         | 14,390         | 21,595         | 7,205            | 79.1%          |
| US Airways <sup>6</sup>         | 66,554         | 36,678         |                |                |                |                |                |                  |                |

Table F-2 Logan Airport Changes in Domestic Passenger Operations by Carrier

| Airline                                         | 2000           | 2010           | 2015           | 2019           | 2020           | 2021           | 2022           | 2021-2022 Change | 2022 % of 2019 |
|-------------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|----------------|
| Virgin America                                  |                | 3,394          | 3,426          |                |                |                |                |                  |                |
| <b>Regional/Commuter Carriers</b>               | <b>160,041</b> | <b>94,535</b>  | <b>70,274</b>  | <b>79,736</b>  | <b>47,257</b>  | <b>68,029</b>  | <b>85,707</b>  | <b>17,678</b>    | <b>107.5%</b>  |
| America West Express                            | 1,267          |                |                |                |                |                |                |                  |                |
| American Eagle                                  | 62,140         | 15,291         | 52             | 3,731          | 2,904          | 8,409          | 13,156         | 4,747            | 352.6%         |
| Boutique Air                                    |                |                |                | 1,881          | 2,106          | 1,689          | 1,348          | -341             | 71.7%          |
| Cape Air                                        | 31,026         | 35,899         | 35,994         | 35,358         | 25,013         | 31,107         | 29,253         | -1,854           | 82.7%          |
| Continental Connection                          |                | 1,809          |                |                |                |                |                |                  |                |
| Continental Express                             |                | 529            |                |                |                |                |                |                  |                |
| Delta Connection                                | 15,438         | 18,445         | 15,466         | 37,834         | 15,853         | 24,806         | 41,026         | 16,220           | 108.4%         |
| MidAtlantic Express                             |                |                |                |                |                |                |                |                  |                |
| Midwest/Republic                                |                | 258            |                |                |                |                |                |                  |                |
| Northwest Airlin                                |                |                |                |                |                |                |                |                  |                |
| PenAir                                          |                |                | 3,747          |                |                |                |                |                  |                |
| Republic Airlines                               |                |                | 34             |                |                |                |                |                  |                |
| Silver Airways                                  |                |                |                | 416            | 346            |                |                |                  |                |
| United Express                                  |                | 2,802          | 4,699          | 516            | 1,035          | 2,018          | 924            | -1,094           | 179.1%         |
| US Airways Express                              | 50,170         | 19,502         | 10,282         |                |                |                |                |                  |                |
| <b>Non-Scheduled Operations (Incl. Charter)</b> | <b>1,008</b>   | <b>501</b>     | <b>176</b>     | <b>109</b>     | <b>34</b>      | <b>84</b>      | <b>137</b>     | <b>53</b>        | <b>125.7%</b>  |
| <b>Total Domestic Operations</b>                | <b>395,042</b> | <b>298,117</b> | <b>296,079</b> | <b>336,948</b> | <b>166,423</b> | <b>211,555</b> | <b>297,126</b> | <b>85,571</b>    | <b>88.2%</b>   |

Source: Massport

Note: Excludes general aviation and all-cargo operations; Airlines listed without data populated conducted operations during specific intermittent annual periods not displayed above.

- 1 Alaska Airlines includes Virgin America beginning in 2018 (following 2016 acquisition).
- 2 American Airlines includes US Airways beginning in 2014 (following 2013 merger).
- 3 Delta Air Lines totals include Northwest Airlines beginning in 2009 (following 2008 merger).
- 4 Southwest Airlines include AirTran Airways beginning 2012 (following 2011 merger).
- 5 United Airlines totals include Continental Airlines beginning in 2011 (following 2010 merger).
- 6 US Airways totals in this chart include America West Airlines beginning in 2006 (following 2005 merger).

Table F-3 Logan Airport Changes in International Passenger Operations by Carrier

| Airline                        | 2000          | 2010          | 2015          | 2019          | 2020          | 2021          | 2022          | 2021-2022 Change | 2022 % of 2019 |
|--------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|------------------|----------------|
| <b>Scheduled Jet Carriers</b>  | <b>27,427</b> | <b>20,697</b> | <b>28,225</b> | <b>39,284</b> | <b>15,009</b> | <b>19,965</b> | <b>33,525</b> | <b>13,560</b>    | <b>85.3%</b>   |
| Aer Lingus                     | 1,160         | 1,097         | 1,973         | 1,860         | 868           | 655           | 1,910         | 1,255            | 102.7%         |
| Aeromexico                     |               |               | 345           | 16            |               |               |               |                  |                |
| Air Berlin                     |               |               |               |               |               |               |               |                  |                |
| Air Canada                     | 10,047        | 3,895         | 1,686         | 1,932         | 14            | 369           | 610           | 241              | 31.6%          |
| Air Europa                     |               |               |               |               |               |               |               |                  |                |
| Air France                     | 1,046         | 995           | 910           | 856           | 402           | 614           | 961           | 347              | 112.3%         |
| Air Jamaica                    |               |               |               |               |               |               |               |                  |                |
| Air One                        |               |               |               |               |               |               |               |                  |                |
| Alitalia                       | 729           | 624           | 562           | 550           | 72            |               |               |                  |                |
| American Airlines <sup>1</sup> | 4,657         | 2,422         | 571           | 183           | 181           | 550           | 899           | 349              | 491.3%         |
| Astraeus                       |               |               |               |               |               |               |               |                  |                |
| Avianca                        |               |               |               | 218           |               |               |               |                  |                |
| British Airways                | 2,159         | 2,082         | 2,575         | 2,650         | 1,136         | 991           | 1,703         | 712              | 64.3%          |
| Canadian Airlines              | 417           |               |               |               |               |               |               |                  |                |
| Cathay Pacific                 |               |               | 279           | 699           | 117           | 50            | 83            | 33               | 11.9%          |
| Condor                         |               |               |               |               |               |               | 104           | 104              |                |
| Copa Airlines                  |               |               | 646           | 966           | 188           | 283           | 228           | -55              | 23.6%          |
| Delta Air Lines <sup>2</sup>   | 733           | 1,675         | 3,122         | 4,722         | 1,397         | 1,477         | 4,976         | 3,499            | 105.4%         |
| Eastern Airlines               |               |               |               |               | 8             | 5             |               | -5               |                |
| El Al                          |               |               | 152           | 296           | 58            |               | 164           | 164              | 55.4%          |

Table F-3 Logan Airport Changes in International Passenger Operations by Carrier

| Airline                            | 2000  | 2010  | 2015  | 2019  | 2020  | 2021  | 2022  | 2021-2022 Change | 2022 % of 2019 |
|------------------------------------|-------|-------|-------|-------|-------|-------|-------|------------------|----------------|
| Emirates                           |       |       | 914   | 719   | 306   | 454   | 702   | 248              | 97.6%          |
| Eurowings                          |       |       |       |       |       |       |       |                  |                |
| Finnair                            |       |       |       |       |       |       |       |                  |                |
| FlyGlobespan                       |       |       |       |       |       |       |       |                  |                |
| Fly Play                           |       |       |       |       |       |       | 453   | 453              |                |
| Frontier Airlines <sup>3</sup>     |       |       |       |       |       | 30    | 344   | 314              |                |
| Hainan Airlines                    |       |       | 744   | 1,056 | 100   |       |       |                  |                |
| Iberia Airlines <sup>4</sup>       |       | 435   | 336   | 859   | 132   | 158   | 696   | 538              | 81.0%          |
| Icelandair                         | 726   | 816   | 1,287 | 1,044 | 906   | 1,122 | 1,450 | 328              | 138.9%         |
| ITA Airways <sup>5</sup>           |       |       |       |       |       |       | 484   | 484              |                |
| Japan Airlines                     |       |       | 728   | 728   | 396   | 644   | 730   | 86               | 100.3%         |
| JetBlue                            |       | 2,262 | 6,488 | 9,520 | 5,084 | 7,771 | 8,403 | 632              | 88.3%          |
| KLM Royal Dutch Airlines           |       |       |       | 263   | 251   | 304   | 364   | 60               | 138.4%         |
| Korean Air Lines                   | 314   |       |       | 367   | 208   | 314   | 366   | 52               | 99.7%          |
| LACSA Airlines                     |       |       |       |       |       |       |       |                  |                |
| LATAM                              |       |       |       | 476   | 129   | 5     | 54    | 49               | 11.3%          |
| Lufthansa                          | 1,140 | 1,657 | 1,687 | 1,703 | 511   | 866   | 1,446 | 580              | 84.9%          |
| Northwest Airlines                 | 744   |       |       |       |       |       |       |                  |                |
| Norwegian Air Shuttle <sup>6</sup> |       |       | 34    | 1,429 | 134   |       |       |                  |                |
| Olympic Airways                    | 256   |       |       |       |       |       |       |                  |                |
| Primera Air                        |       |       |       |       |       |       |       |                  |                |

**Table F-3 Logan Airport Changes in International Passenger Operations by Carrier**

| Airline                           | 2000          | 2010          | 2015          | 2019          | 2020         | 2021         | 2022         | 2021-2022 Change | 2022 % of 2019 |
|-----------------------------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|------------------|----------------|
| Qatar Airways                     |               |               |               | 730           | 350          | 528          | 728          | 200              | 99.7%          |
| Royal Air Maroc                   |               |               |               | 161           | 50           | 2            |              | (2)              |                |
| Sabena                            | 724           |               |               |               |              |              |              |                  |                |
| SATA International Airlines       |               | 403           | 542           | 809           | 288          | 409          | 648          | 239              | 80.1%          |
| Scandinavian Airlines             |               |               |               | 369           |              |              | 389          | 389              | 105.4%         |
| Spirit Airlines                   |               |               |               |               | 538          | 621          | 777          | 156              |                |
| SWISS International               | 926           | 720           | 711           | 978           | 198          | 328          | 804          | 476              | 82.2%          |
| TACA <sup>7</sup>                 |               |               |               | 136           |              |              |              |                  |                |
| TACV - Cabo Verde                 |               | 240           | 60            | 112           | 42           |              |              |                  |                |
| TAP - Air Portugal                | 200           |               |               | 644           | 328          | 525          | 965          | 440              | 149.8%         |
| Thomas Cook Airlines              |               |               |               | 2             |              |              |              |                  |                |
| Trans World Airlines              |               |               |               |               |              |              |              |                  |                |
| Turkish Airlines                  |               |               | 726           | 674           | 274          | 500          | 742          | 242              | 110.1%         |
| United Airlines                   | 728           |               |               | 21            | 1            |              | 528          | 528              | 2514.3%        |
| US Airways                        |               | 667           |               |               |              |              |              |                  |                |
| VG Airlines                       |               |               |               |               |              |              |              |                  |                |
| Virgin Atlantic Airways           | 721           | 707           | 702           | 1,361         | 342          | 390          | 670          | 280              | 49.2%          |
| WestJet Airlines                  |               |               |               | 4             |              |              | 144          | 144              | 3600.0%        |
| Wow Air                           |               |               | 445           | 171           |              |              |              |                  |                |
| <b>Regional/Commuter Carriers</b> | <b>15,594</b> | <b>12,494</b> | <b>14,153</b> | <b>15,149</b> | <b>3,787</b> | <b>2,675</b> | <b>9,628</b> | <b>6,953</b>     | <b>63.6%</b>   |
| Air Canada Regional <sup>8</sup>  | 4,088         | 7,065         | 10,024        | 8,910         | 2,913        | 2,054        | 4,557        | 2,503            | 51.1%          |

Table F-3 Logan Airport Changes in International Passenger Operations by Carrier

| Airline                                         | 2000          | 2010          | 2015          | 2019          | 2020          | 2021          | 2022          | 2021-2022 Change | 2022 % of 2019 |
|-------------------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|------------------|----------------|
| American Eagle Airlines                         | 8,975         | 2,480         |               |               |               |               | 1,614         | 1,614            |                |
| Delta Connection                                | 2,531         | 81            | 38            | 50            |               |               |               |                  |                |
| Porter Airlines                                 |               | 2,868         | 4,091         | 3,959         | 562           | 603           | 2,839         | 2,236            | 71.7%          |
| WestJet Encore                                  |               |               |               | 2,230         | 312           | 18            | 618           | 600              | 27.7%          |
| <b>Non-Scheduled Operations (Incl. Charter)</b> | <b>2,141</b>  | <b>305</b>    | <b>248</b>    | <b>43</b>     | <b>49</b>     | <b>24</b>     | <b>32</b>     | <b>8</b>         | <b>74.4%</b>   |
| <b>Total International Operations</b>           | <b>45,162</b> | <b>33,496</b> | <b>42,626</b> | <b>54,476</b> | <b>18,845</b> | <b>22,664</b> | <b>43,185</b> | <b>20,521</b>    | <b>79.3%</b>   |

Source: Massport.

Note: Excludes general aviation and all-cargo operations; Airlines listed without data populated conducted operations during specific intermittent annual periods not displayed above.

1 American Airlines includes US Airways beginning in 2014 (following 2013 merger).

2 Delta Air Lines totals include Northwest Airlines beginning in 2009 (following 2008 merger).

3 The 30 movements reported for Frontier Airlines in 2021 have been reallocated as scheduled movements in this ESPR, compared to the EDR 2020/2021 appendix E.

4 LEVEL Airlines service to Barcelona is operated by Iberia.

5 ITA (Italian state-owned) took over Alitalia, which went bankrupt in 2020, operations in late 2021. ITA announced it aims to reintroduce the Alitalia brand (pending as of 2023).

6 Norwegian Air Shuttle includes Norwegian UK.

7 TACA operated as Avianca El Salvador (parent company: Avianca Group); LACSA operated as Avianca Costa Rica (parent company: Avianca Group).

8 Air Canada Regional includes flights operated by Sky Regional Airlines and Jazz Air.



## F.1.2 Historical Scheduled Destinations

Table F-4 Logan Airport Scheduled Passenger Departures by Destination

| Destination Airport  | Code | 2000           | 2010           | 2015           | 2019           | 2020          | 2021           | 2022           | 2021-2022 Change | 2022 % of 2019 |
|----------------------|------|----------------|----------------|----------------|----------------|---------------|----------------|----------------|------------------|----------------|
| <b>Domestic</b>      |      | <b>210,069</b> | <b>149,961</b> | <b>152,211</b> | <b>171,986</b> | <b>88,103</b> | <b>105,663</b> | <b>152,194</b> | <b>46,531</b>    | <b>88.5%</b>   |
| Akron/Canton         | CAK  |                | 475            | 287            |                |               |                |                |                  |                |
| Albany               | ALB  | 3,433          | 647            | 1,095          | 360            |               |                |                |                  |                |
| Albuquerque          | ABQ  |                |                |                |                |               |                |                |                  |                |
| Allentown/Bethlehem  | ABE  | 780            |                |                |                |               |                |                |                  |                |
| Asheville            | AVL  |                |                |                |                | 32            | 116            | 210            | 94               |                |
| Atlanta              | ATL  | 7,110          | 5,548          | 5,192          | 6,494          | 3,326         | 3,914          | 4,301          | 387              | 66.2%          |
| Atlantic City Pomona | ACY  |                | 536            | 166            |                |               |                | 46             | 46               |                |
| Augusta              | AUG  | 584            | 1,000          | 1,248          | 1,226          | 1,244         | 1,234          | 1,234          |                  | 100.7%         |
| Augusta              | AGS  |                |                |                |                |               |                | 4              | 4                |                |
| Austin               | AUS  |                | 365            | 444            | 1,122          | 452           | 1,007          | 1,734          | 727              | 154.5%         |
| Baltimore            | BWI  | 1,773          | 7,053          | 4,897          | 5,658          | 2,564         | 1,744          | 3,036          | 1,292            | 53.7%          |
| Bangor               | BGR  | 6,644          |                |                |                |               | 234            | 141            | -93              |                |
| Bar Harbor           | BHB  | 1,196          | 815            | 1,095          | 1,095          | 986           | 1,691          | 1,507          | -184             | 137.6%         |
| Bedford              | BED  |                |                |                |                | 1             | 1              |                | -1               |                |
| Binghamton           | BGM  |                |                |                |                |               |                |                |                  |                |
| Boise                | BOI  |                |                |                |                |               |                |                |                  |                |
| Bozeman              | BZN  |                |                |                |                | 22            | 60             | 48             | -12              |                |
| Buffalo              | BUF  | 950            | 2,181          | 2,203          | 2,337          | 717           | 345            | 501            | 156              | 21.4%          |
| Burbank              | BUR  |                |                |                | 299            | 83            |                |                |                  |                |

Table F-4 Logan Airport Scheduled Passenger Departures by Destination

| Destination Airport       | Code | 2000   | 2010  | 2015  | 2019  | 2020  | 2021  | 2022  | 2021-2022 Change | 2022 % of 2019 |
|---------------------------|------|--------|-------|-------|-------|-------|-------|-------|------------------|----------------|
| Burlington                | BTV  | 5,913  |       |       |       |       | 214   |       | (214)            |                |
| Charleston                | CHS  |        |       | 365   | 1,034 | 515   | 935   | 1,061 | 126              | 102.6%         |
| Charlotte                 | CLT  | 2,758  | 4,180 | 3,920 | 4,269 | 2,975 | 3,441 | 4,631 | 1,190            | 108.5%         |
| Chicago Midway            | MDW  | 868    | 1,756 | 1,531 | 1,538 | 964   | 943   | 1,252 | 309              | 81.4%          |
| Chicago O'Hare            | ORD  | 10,063 | 7,403 | 7,401 | 7,894 | 3,917 | 4,663 | 6,750 | 2,087            | 85.5%          |
| Cincinnati                | CVG  | 2,235  | 1,364 | 1,218 | 1,304 | 373   | 762   | 1,870 | 1,108            | 143.5%         |
| Cleveland                 | CLE  | 2,797  | 1,369 | 2,070 | 2,202 | 823   | 1,106 | 1,646 | 540              | 74.7%          |
| Cleveland Burke Lakefront | BKL  |        |       |       |       |       | 1     |       | -1               |                |
| Columbia                  | CAE  |        |       |       |       |       |       |       |                  |                |
| Columbus                  | CMH  | 2,708  | 972   | 1,081 | 1,453 | 329   | 743   | 1,501 | 758              | 103.3%         |
| Corpus Christi            | CRP  |        |       |       |       |       |       |       |                  |                |
| Dallas Love Field         | DAL  |        |       | 153   | 409   | 25    |       |       |                  |                |
| Dallas/Fort Worth         | DFW  | 5,002  | 2,938 | 3,406 | 3,126 | 2,144 | 2,382 | 3,374 | 992              | 107.9%         |
| Dayton                    | DAY  |        |       |       |       |       |       |       |                  |                |
| Denver                    | DEN  | 2,628  | 2,812 | 2,611 | 3,285 | 1,884 | 2,705 | 2,805 | 100              | 85.4%          |
| Des Moines                | DSM  |        |       |       |       |       |       |       |                  |                |
| Detroit                   | DTW  | 2,937  | 2,353 | 3,875 | 3,615 | 1,977 | 1,860 | 2,461 | 601              | 68.1%          |
| El Paso                   | ELP  |        |       |       |       |       |       |       |                  |                |
| Elmira/Corning            | ELM  | 441    |       |       |       |       |       |       |                  |                |
| Flint                     | FNT  |        |       |       |       |       |       | 52    | 52               |                |
| Fort Lauderdale           | FLL  | 3,327  | 2,370 | 2,258 | 3,047 | 2,289 | 3,530 | 2,719 | (811)            | 89.2%          |

**Table F-4 Logan Airport Scheduled Passenger Departures by Destination**

| Destination Airport      | Code | 2000  | 2010  | 2015  | 2019  | 2020  | 2021  | 2022  | 2021-2022 Change | 2022 % of 2019 |
|--------------------------|------|-------|-------|-------|-------|-------|-------|-------|------------------|----------------|
| Fort Myers               | RSW  | 949   | 1,587 | 1,742 | 2,060 | 1,605 | 1,732 | 1,854 | 122              | 90.0%          |
| Fort Walton Beach        | VPS  |       |       |       |       | 29    | 96    | 56    | (40)             |                |
| Grand Rapids             | GRR  |       |       |       |       |       | 83    | 86    | 3                |                |
| Green Bay                | GRB  |       |       |       |       |       |       | 1     | 1                |                |
| Greensboro               | GSO  | 415   |       |       |       |       |       |       |                  |                |
| Greenville/Spartanburg   | GSP  |       |       |       |       |       | 1     | 1     |                  |                |
| Harrisburg               | MDT  | 1,307 | 551   | 325   | 330   | 117   | 135   | 297   | 162              | 89.9%          |
| Hartford                 | BDL  |       |       |       |       |       |       |       |                  |                |
| Hilton Head Island       | HHH  |       |       |       |       |       | 45    | 19    | -26              |                |
| Honolulu                 | HNL  |       |       |       | 210   | 67    | 190   | 211   | 21               | 100.7%         |
| Houston                  | HOU  |       |       | 978   | 665   | 63    | 4     | 9     | 5                | 1.4%           |
| Houston Intercontinental | IAH  | 1,995 | 1,717 | 1,831 | 1,584 | 916   | 1,380 | 1,606 | 226              | 101.4%         |
| Hyannis                  | HYA  | 2,274 | 1,165 | 787   | 383   | 276   | 602   | 390   | -212             | 101.9%         |
| Indianapolis             | IND  | 765   | 1,121 | 1,181 | 1,356 | 252   | 827   | 1,757 | 930              | 129.5%         |
| Islip                    | ISP  | 4,222 |       |       |       |       |       |       |                  |                |
| Ithaca                   | ITH  | 872   |       |       |       |       |       |       |                  |                |
| Jackson                  | JAC  |       |       |       |       |       | 14    |       | -14              |                |
| Jacksonville             | JAX  |       | 365   | 767   | 1,900 | 554   | 943   | 1,290 | 347              | 67.9%          |
| Kansas City              | MCI  | 597   | 313   | 661   | 886   | 178   | 354   | 1,083 | 729              | 122.2%         |
| Kansas City              | MKC  |       |       |       |       |       | 1     | 1     |                  |                |
| Key West                 | EYW  |       |       |       |       | 20    | 316   | 155   | -161             |                |

Table F-4 Logan Airport Scheduled Passenger Departures by Destination

| Destination Airport  | Code | 2000   | 2010   | 2015  | 2019   | 2020  | 2021  | 2022  | 2021-2022 Change | 2022 % of 2019 |
|----------------------|------|--------|--------|-------|--------|-------|-------|-------|------------------|----------------|
| Knoxville            | TYS  |        |        |       |        | 26    | 93    | 109   | 16               |                |
| Las Vegas            | LAS  | 1,098  | 756    | 1,162 | 2,092  | 1,014 | 1,072 | 1,492 | 420              | 71.3%          |
| Lebanon              | LEB  |        | 1,734  | 1,460 | 1,460  | 1,534 | 1,460 | 1,460 |                  | 100.0%         |
| Long Beach           | LGB  |        | 459    | 292   | 403    | 96    |       |       |                  |                |
| Los Angeles          | LAX  | 3,647  | 3,382  | 4,456 | 5,248  | 2,382 | 3,431 | 4,684 | 1,253            | 89.2%          |
| Louisville           | SDF  |        |        |       |        |       |       | 185   | 185              |                |
| Madison              | MSN  |        |        |       |        | 14    | 2     | 3     | 1                |                |
| Manchester           | MHT  |        |        |       |        |       |       |       |                  |                |
| Martha's Vineyard    | MVY  | 3,863  | 3,218  | 2,731 | 2,596  | 1,558 | 1,850 | 2,376 | 526              | 91.5%          |
| Massena              | MSS  |        |        |       | 1,095  | 1,101 | 739   | 728   | -11              | 66.5%          |
| Memphis              | MEM  | 972    | 1,048  |       |        |       |       | 177   | 177              |                |
| Miami                | MIA  | 2,068  | 2,238  | 2,520 | 2,224  | 1,620 | 3,633 | 4,019 | 386              | 180.7%         |
| Milwaukee            | MKE  | 1,189  | 2,213  | 854   | 1,022  | 161   | 162   | 1,005 | 843              | 98.4%          |
| Minneapolis          | MSP  | 3,078  | 1,927  | 2,737 | 3,230  | 1,679 | 1,732 | 2,295 | 563              | 71.1%          |
| Montrose             | MTJ  |        |        |       |        | 4     | 16    |       | -16              |                |
| Myrtle Beach         | MYR  | 105    | 365    | 383   | 378    | 272   | 595   | 541   | -54              | 143.1%         |
| Nantucket            | ACK  | 5,022  | 3,884  | 4,311 | 4,228  | 2,524 | 2,936 | 3,346 | 410              | 79.1%          |
| Nashville            | BNA  | 642    |        | 688   | 3,063  | 1,524 | 1,850 | 2,383 | 533              | 77.8%          |
| New Orleans          | MSY  |        | 348    | 365   | 914    | 427   | 314   | 752   | 438              | 82.3%          |
| New York J F Kennedy | JFK  | 9,899  | 7,054  | 6,745 | 5,472  | 2,906 | 2,994 | 7,231 | 4,237            | 132.2%         |
| New York La Guardia  | LGA  | 11,872 | 11,705 | 9,352 | 10,893 | 3,619 | 3,384 | 8,879 | 5,495            | 81.5%          |

**Table F-4 Logan Airport Scheduled Passenger Departures by Destination**

| Destination Airport | Code | 2000   | 2010  | 2015  | 2019  | 2020  | 2021  | 2022  | 2021-2022 Change | 2022 % of 2019 |
|---------------------|------|--------|-------|-------|-------|-------|-------|-------|------------------|----------------|
| New York Newark     | EWR  | 5,206  | 3,666 | 5,366 | 5,926 | 2,414 | 2,460 | 4,784 | 2,324            | 80.7%          |
| Newport News        | PHF  |        | 549   |       |       |       |       |       |                  |                |
| Norfolk             | ORF  | 838    |       |       | 249   | 22    | 224   | 155   | -69              | 62.3%          |
| Northwest Florida   | ECP  |        |       |       |       |       |       |       |                  |                |
| Oakland             | OAK  |        | 195   | 88    | 44    |       |       |       |                  |                |
| Oklahoma City       | OKC  |        |       |       |       |       |       |       |                  |                |
| Omaha               | OMA  |        |       |       |       |       |       |       |                  |                |
| Ontario             | ONT  |        |       |       |       |       |       |       |                  |                |
| Orlando             | MCO  | 4,914  | 3,179 | 3,057 | 4,313 | 2,744 | 3,921 | 4,565 | 644              | 105.8%         |
| Palm Springs        | PSP  |        |       |       | 35    | 2     | 2     | 6     | 4                | 17.2%          |
| Pensacola           | PNS  |        |       |       |       |       |       | 81    | 81               |                |
| Philadelphia        | PHL  | 11,785 | 6,548 | 7,971 | 7,907 | 3,660 | 3,005 | 4,826 | 1,821            | 61.0%          |
| Phoenix             | PHX  | 1,386  | 1,348 | 1,569 | 1,692 | 984   | 1,100 | 1,704 | 604              | 100.7%         |
| Pittsburgh          | PIT  | 3,086  | 2,312 | 2,457 | 3,485 | 1,096 | 1,092 | 2,115 | 1,023            | 60.7%          |
| Plattsburgh         | PBG  |        | 1,025 | 756   |       |       |       |       |                  |                |
| Plattsburgh         | PLB  |        |       |       |       |       |       |       |                  |                |
| Pontiac             | PTK  |        |       |       |       |       |       |       |                  |                |
| Portland (ME)       | PWM  | 6,267  |       |       | 368   | 365   | 633   | 102   | -531             | 27.7%          |
| Portland (OR)       | PDX  |        | 352   | 519   | 746   | 157   | 326   | 408   | 82               | 54.7%          |
| Presque Isle        | PQI  | 1,835  | 991   | 991   |       |       |       |       |                  |                |
| Providence          | PVD  | 91     |       |       |       | 19    | 2     | 2     |                  |                |

Table F-4 Logan Airport Scheduled Passenger Departures by Destination

| Destination Airport       | Code | 2000  | 2010  | 2015  | 2019  | 2020  | 2021  | 2022  | 2021-2022 Change | 2022 % of 2019 |
|---------------------------|------|-------|-------|-------|-------|-------|-------|-------|------------------|----------------|
| Provincetown              | PVC  | 2,023 | 2,410 | 1,957 | 1,785 | 1,007 | 1,468 | 1,461 | -7               | 81.8%          |
| Raleigh/Durham            | RDU  | 3,775 | 3,259 | 3,598 | 4,433 | 1,865 | 2,321 | 3,042 | 721              | 68.6%          |
| Richmond                  | RIC  | 1,537 | 1,431 | 2,603 | 2,369 | 805   | 1,123 | 1,864 | 741              | 78.7%          |
| Rochester                 | ROC  | 3,644 | 908   | 886   | 1,369 | 518   | 480   | 1,101 | 621              | 80.4%          |
| Rockland                  | RKD  | 1,152 | 1,301 | 1,372 | 1,350 | 1,398 | 1,374 | 1,374 |                  | 101.8%         |
| Rutland                   | RUT  | 1,259 | 1,095 | 1,095 | 1,095 | 1,098 | 1,095 | 1,095 |                  | 100.0%         |
| Sacramento                | SMF  |       |       | 48    | 88    |       | 52    | 110   | 58               | 125.2%         |
| Salt Lake City            | SLC  | 1,094 | 669   | 617   | 1,148 | 744   | 985   | 1,078 | 93               | 93.9%          |
| San Antonio               | SAT  |       |       |       |       |       | 48    | 336   | 288              |                |
| San Diego                 | SAN  | 366   | 571   | 1,052 | 1,232 | 630   | 819   | 1,251 | 432              | 101.6%         |
| San Francisco             | SFO  | 3,526 | 3,711 | 4,272 | 5,075 | 2,198 | 2,160 | 3,856 | 1,696            | 76.0%          |
| San Jose                  | SJC  | 842   | 232   | 223   | 278   | 50    | 120   | 28    | -92              | 10.1%          |
| Saranac Lake              | SLK  |       | 1,174 | 1,095 | 1,095 | 1,098 | 1,095 | 789   | -306             | 72.1%          |
| Sarasota/Bradenton        | SRQ  |       | 82    | 212   | 306   | 251   | 399   | 345   | -54              | 112.9%         |
| Savannah                  | SAV  |       |       | 365   | 535   | 342   | 410   | 718   | 308              | 134.1%         |
| Seattle/Tacoma            | SEA  | 458   | 1,001 | 1,625 | 2,289 | 1,482 | 2,039 | 2,526 | 487              | 110.4%         |
| South Bend                | SBN  |       |       |       |       |       |       | 1     | 1                |                |
| Spokane                   | GEG  |       |       |       |       |       |       |       |                  |                |
| St. Louis                 | STL  | 2,187 | 934   | 722   | 1,227 | 591   | 597   | 1,458 | 861              | 118.9%         |
| St. Petersburg/Clearwater | PIE  |       |       |       |       |       | 1     | 2     | 1                |                |
| Steamboat Springs Hayden  | HDN  |       |       |       | 30    | 30    | 28    | 25    | -3               | 82.9%          |

Table F-4 Logan Airport Scheduled Passenger Departures by Destination

| Destination Airport   | Code | 2000          | 2010          | 2015          | 2019          | 2020         | 2021          | 2022          | 2021-2022 Change | 2022 % of 2019 |
|-----------------------|------|---------------|---------------|---------------|---------------|--------------|---------------|---------------|------------------|----------------|
| Syracuse              | SYR  | 3,876         | 991           | 578           | 695           | 321          | 158           | 515           | 357              | 74.1%          |
| Tampa                 | TPA  | 2,502         | 1,246         | 1,177         | 2,696         | 1,661        | 2,074         | 2,368         | 294              | 87.8%          |
| Traverse City         | TVC  |               |               |               |               |              | 85            | 100           | 15               |                |
| Trenton               | TTN  |               |               |               |               |              |               |               |                  |                |
| Tulsa                 | TUL  |               |               |               |               |              |               |               |                  |                |
| Washington Dulles     | IAD  | 8,625         | 4,625         | 2,505         | 1,444         | 834          | 959           | 1,371         | 412              | 95.0%          |
| Washington National   | DCA  | 8,474         | 9,419         | 8,678         | 9,246         | 4,170        | 5,256         | 11,267        | 6,011            | 121.9%         |
| Watertown             | ART  |               |               |               |               |              |               |               |                  |                |
| West Palm Beach       | PBI  | 1,674         | 1,450         | 1,650         | 1,978         | 1,235        | 1,065         | 1,636         | 571              | 82.7%          |
| Westchester County    | HPN  | 6,065         |               | 263           |               | 132          |               | 154           | 154              |                |
| Wichita               | ICT  |               |               |               |               |              |               |               |                  |                |
| Wilkes-Barre Scranton | AVP  | 584           |               |               |               |              |               |               |                  |                |
| Williamsport          | IPT  |               |               |               |               |              |               |               |                  |                |
| Wilmington            | ILM  |               |               |               |               |              | 70            | 210           | 140              |                |
| <b>International</b>  |      | <b>23,711</b> | <b>18,761</b> | <b>21,765</b> | <b>27,504</b> | <b>9,700</b> | <b>10,888</b> | <b>21,896</b> | <b>11,008</b>    | <b>79.6%</b>   |
| Amsterdam             | AMS  | 366           | 457           | 579           | 714           | 300          | 406           | 713           | 307              | 99.8%          |
| Aruba                 | AUA  | 9             | 407           | 417           | 685           | 329          | 656           | 761           | 105              | 111.1%         |
| Athens                | ATH  | 74            |               |               |               |              |               | 67            | 67               |                |
| Barbados              | BGI  |               |               | 9             | 74            | 27           | 44            | 66            | 22               | 89.5%          |
| Barcelona             | BCN  |               |               |               | 156           | 31           |               | 97            | 97               | 62.0%          |
| Beijing/Peking        | PEK  |               |               | 287           | 322           | 37           |               |               |                  |                |

Table F-4 Logan Airport Scheduled Passenger Departures by Destination

| Destination Airport  | Code | 2000 | 2010 | 2015 | 2019 | 2020 | 2021 | 2022 | 2021-2022 Change | 2022 % of 2019 |
|----------------------|------|------|------|------|------|------|------|------|------------------|----------------|
| Bermuda              | BDA  | 550  | 532  | 536  | 695  | 158  | 183  | 215  | 32               | 30.9%          |
| Bogota               | BOG  |      |      |      | 90   |      |      |      |                  |                |
| Brussels             | BRU  | 362  |      |      |      |      |      |      |                  |                |
| Calgary              | YYC  |      |      |      |      |      |      | 30   | 30               |                |
| Cancun               | CUN  |      | 307  | 264  | 333  | 285  | 422  | 718  | 296              | 215.6%         |
| Casablanca Mohamed V | CMN  |      |      |      | 79   | 31   |      |      |                  |                |
| Charlottetown        | YYG  |      |      |      |      |      |      |      |                  |                |
| Chongqing            | CKG  |      |      |      |      |      |      |      |                  |                |
| Cologne/Bonn         | CGN  |      |      |      |      |      |      |      |                  |                |
| Connaught            | NOC  |      |      |      |      |      |      |      |                  |                |
| Copenhagen           | CPH  |      |      |      | 196  | 1    | 2    | 204  | 202              | 103.9%         |
| Doha                 | DOH  |      |      |      | 365  | 222  | 261  | 365  | 104              | 100.0%         |
| Dubai                | DXB  |      |      | 457  | 361  | 156  | 228  | 353  | 125              | 97.9%          |
| Dublin               | DUB  | 223  | 348  | 653  | 885  | 393  | 326  | 973  | 647              | 109.9%         |
| Dusseldorf           | DUS  |      |      |      |      |      |      |      |                  |                |
| Edinburgh            | EDI  |      |      |      | 92   |      |      | 92   | 92               | 100.0%         |
| Fort De France       | FDF  |      |      | 9    |      |      |      |      |                  |                |
| Frankfurt            | FRA  | 580  | 548  | 536  | 501  | 186  | 304  | 462  | 158              | 92.2%          |
| Fredericton          | YFC  |      |      |      |      |      |      |      |                  |                |
| Freeport             | FPO  |      |      |      |      |      |      |      |                  |                |
| Funchal              | FNC  |      |      |      |      |      |      |      |                  |                |



**Table F-4 Logan Airport Scheduled Passenger Departures by Destination**

| Destination Airport | Code | 2000  | 2010  | 2015  | 2019  | 2020 | 2021 | 2022  | 2021-2022 Change | 2022 % of 2019 |
|---------------------|------|-------|-------|-------|-------|------|------|-------|------------------|----------------|
| Gander              | YQX  |       |       |       |       |      |      |       |                  |                |
| Glasgow             | GLA  |       |       |       |       |      |      |       |                  |                |
| Grand Cayman        | GCM  |       | 17    | 26    | 30    | 31   | 6    | 22    | 16               | 72.6%          |
| Halifax             | YHZ  | 3,210 | 852   | 700   | 851   | 158  |      | 210   | 210              | 24.7%          |
| Havana              | HAV  |       |       |       | 52    | 13   |      |       |                  |                |
| Helsinki            | HEL  |       |       |       |       |      |      |       |                  |                |
| Hong Kong           | HKG  |       |       | 140   | 348   | 60   | 25   | 47    | 22               | 13.5%          |
| Ilha Do Sal         | SID  |       |       |       | 4     | 20   | 7    |       | -7               |                |
| Istanbul            | IST  |       |       | 365   | 339   | 145  | 247  | 370   | 123              | 109.1%         |
| Las Palmas          | LPA  |       |       |       |       |      |      |       |                  |                |
| Lerwick Sumburgh    | LSI  |       |       |       |       |      |      |       |                  |                |
| Liberia             | LIR  |       |       | 26    | 26    | 27   | 27   | 34    | 7                | 131.5%         |
| Lisbon              | LIS  | 44    | 26    | 44    | 414   | 125  | 259  | 630   | 371              | 152.2%         |
| London Gatwick      | LGW  | 362   |       |       | 365   | 79   |      | 150   | 150              | 41.1%          |
| London Heathrow     | LHR  | 2,187 | 2,331 | 2,026 | 2,336 | 841  | 859  | 2,221 | 1,362            | 95.1%          |
| London Stansted     | STN  |       |       |       |       |      |      |       |                  |                |
| Madrid              | MAD  |       | 218   | 166   | 353   | 35   | 78   | 252   | 174              | 71.3%          |
| Manchester          | MAN  | 26    |       |       | 48    |      |      |       |                  |                |
| Mexico City         | MEX  |       |       | 166   | 369   | 8    |      |       |                  |                |
| Milan Malpensa      | MXP  | 366   |       |       |       |      |      |       |                  |                |
| Montego Bay         | MBJ  |       | 126   | 56    | 126   | 66   | 119  | 136   | 17               | 108.2%         |

Table F-4 Logan Airport Scheduled Passenger Departures by Destination

| Destination Airport              | Code | 2000  | 2010  | 2015  | 2019  | 2020 | 2021 | 2022 | 2021-2022 Change | 2022 % of 2019 |
|----------------------------------|------|-------|-------|-------|-------|------|------|------|------------------|----------------|
| Montreal Dorval                  | YUL  | 3,401 | 2,008 | 2,047 | 1,721 | 482  | 451  | 968  | 517              | 56.3%          |
| Moscow Sheremetyevo              | SVO  |       |       |       |       |      |      |      |                  |                |
| Munich                           | MUC  |       | 313   | 357   | 365   | 75   | 126  | 326  | 200              | 89.3%          |
| Nassau                           | NAS  |       | 180   | 136   | 187   | 202  | 50   | 158  | 108              | 84.4%          |
| Nykoping                         | NYO  |       |       |       |       |      |      |      |                  |                |
| Oslo                             | OSL  |       |       |       |       |      |      |      |                  |                |
| Ottawa                           | YOW  | 2,575 | 744   | 630   | 639   | 132  |      |      |                  |                |
| Panama City                      | PTY  |       |       | 334   | 486   | 109  | 141  | 113  | -28              | 23.2%          |
| Paris De Gaulle                  | CDG  | 898   | 710   | 916   | 898   | 274  | 309  | 786  | 477              | 87.5%          |
| Pointe-A-Pitre                   | PTP  |       |       | 9     |       |      |      |      |                  |                |
| Ponta Delgada                    | PDL  | 30    | 165   | 196   | 340   | 163  | 185  | 273  | 88               | 80.4%          |
| Port Au Prince                   | PAP  |       |       | 26    | 122   | 69   | 127  | 4    | -123             | 3.3%           |
| Porto                            | OPO  |       |       |       |       |      |      |      |                  |                |
| Praia                            | RAI  |       | 121   | 30    | 48    | 13   | 2    |      | -2               |                |
| Providenciales                   | PLS  | 4     | 39    | 86    | 86    | 81   | 72   | 108  | 36               | 125.0%         |
| Puerto Plata                     | POP  | 4     |       | 26    | 30    | 16   | 16   | 44   | 28               | 145.3%         |
| Punta Cana                       | PUJ  |       | 95    | 174   | 265   | 78   | 76   | 323  | 247              | 122.0%         |
| Quebec                           | YQB  | 1,229 |       |       |       |      |      |      |                  |                |
| Reykjavik Keflavik               | KEF  | 393   | 404   | 854   | 612   | 225  | 409  | 861  | 452              | 140.7%         |
| Rome Leonardo Da Vinci-Fiumicino | FCO  |       | 313   | 271   | 402   | 40   | 37   | 412  | 375              | 102.5%         |
| Saint Lucia Hewanorra            | UVF  |       |       | 26    | 30    | 26   | 43   | 45   | 2                | 148.6%         |

**Table F-4 Logan Airport Scheduled Passenger Departures by Destination**

| Destination Airport                       | Code | 2000           | 2010           | 2015           | 2019           | 2020          | 2021           | 2022           | 2021-2022 Change | 2022 % of 2019 |
|-------------------------------------------|------|----------------|----------------|----------------|----------------|---------------|----------------|----------------|------------------|----------------|
| Saint Maarten                             | SXM  |                | 39             | 56             | 35             | 33            | 65             | 72             | 7                | 205.7%         |
| Saint Thomas                              | STT  | 78             | 125            | 184            | 83             | 94            | 213            | 156            | -57              | 188.3%         |
| San Juan                                  | SJU  | 1,750          | 1,294          | 1,068          | 1,011          | 1,098         | 1,183          | 1,507          | 324              | 149.1%         |
| San Salvador                              | SAL  |                |                |                | 86             |               |                |                |                  |                |
| Santiago                                  | STI  |                |                | 206            | 475            | 338           | 636            | 390            | -246             | 82.1%          |
| Santo Domingo                             | SDQ  |                | 305            | 365            | 627            | 425           | 661            | 435            | -226             | 69.4%          |
| Sao Paulo Guarulhos                       | GRU  |                |                |                | 235            | 70            | 3              | 28             | 25               | 11.9%          |
| Sao Vicente                               | VXE  |                | 4              |                |                |               |                |                |                  |                |
| Seoul Incheon                             | ICN  |                |                |                | 184            | 105           | 157            | 182            | 25               | 99.1%          |
| Shanghai Pu Dong                          | PVG  |                |                | 83             | 209            | 24            |                |                |                  |                |
| Shannon                                   | SNN  | 366            | 213            | 352            | 241            | 73            |                | 295            | 295              | 122.6%         |
| Stockholm Arlanda                         | ARN  |                |                |                |                |               |                |                |                  |                |
| Tel Aviv                                  | TLV  |                |                | 75             | 148            | 31            |                | 177            | 177              | 119.6%         |
| Terceira                                  | TER  | 44             | 17             | 31             | 70             | 23            | 20             | 51             | 31               | 73.3%          |
| Tokyo Narita                              | NRT  |                |                | 365            | 365            | 169           | 208            | 284            | 76               | 77.8%          |
| Toronto                                   | YYZ  | 3,691          | 3,603          | 2,799          | 3,671          | 1,072         | 786            | 2,733          | 1,947            | 74.5%          |
| Toronto Island                            | YTZ  |                | 1,535          | 2,236          | 2,032          | 296           | 300            | 1,473          | 1,173            | 72.5%          |
| Vancouver                                 | YVR  | 366            |                |                | 92             |               |                | 100            | 100              | 108.7%         |
| Zurich                                    | ZRH  | 523            | 365            | 365            | 501            | 100           | 153            | 404            | 251              | 80.7%          |
| <b>Total Scheduled Carrier Departures</b> |      | <b>233,780</b> | <b>168,722</b> | <b>173,976</b> | <b>199,491</b> | <b>97,803</b> | <b>116,551</b> | <b>174,090</b> | <b>57,539</b>    | <b>87.3%</b>   |

Note: Destinations listed in the table without scheduled nonstop departure services in 2022 may have had scheduled services during specific intermittent annual periods not displayed above.

Source: OAG Schedules.

## F.2 Derivative Forecasts

Derivative forecasts based on the Future Planning Horizon were developed to support the air quality, noise, and Vehicle Miles Traveled (VMT) analyses for the 2022 ESPR. The derivative forecasts include:

- Annual aircraft operations by aircraft type (to support air quality modeling);
- Average daily arriving and departing operations by aircraft type and stage length (to support noise modeling); and
- Peak month, average day arriving and departing origin-destination passengers by time of day (to support VMT modeling).

### F.2.1 Operations by Aircraft Type

**Table F-5** provides a detailed summary of the Future Planning Horizon forecast by user category and aircraft type.

**Table F-5 Forecast Logan Airport Operations by Aircraft Type, Actual 2022 and Future Planning Horizon**

| Category/Aircraft Type    | 2022 Operations | Future Planning Horizon Operations |
|---------------------------|-----------------|------------------------------------|
| <b>Passenger Airlines</b> |                 |                                    |
| Airbus A220-100           | 10,530          | 19,520                             |
| Airbus A220-300           | 12,029          | 25,140                             |
| Airbus A319               | 15,738          | 7,540                              |
| Airbus A319 neo           | 0               | 19,110                             |
| Airbus A320               | 24,492          | 15,575                             |
| Airbus A320 neo           | 2,668           | 19,050                             |
| Airbus A321               | 51,586          | 40,100                             |
| Airbus A321 neo           | 9,246           | 39,550                             |
| Airbus A330-200           | 5,242           | 0                                  |
| Airbus A330-300           | 3,163           | 3,490                              |
| Airbus A330-900 neo       | 842             | 5,909                              |
| Airbus A340-300           | 321             | 0                                  |
| Airbus A340-600           | 563             | 0                                  |
| Airbus A350-900           | 757             | 2,500                              |
| Airbus 350-1000           | 101             | 1,480                              |
| Airbus A380               | 371             | 885                                |
| Boeing 717-200            | 7               | 0                                  |

**Table F-5 Forecast Logan Airport Operations by Aircraft Type, Actual 2022 and Future Planning Horizon**

| Category/Aircraft Type | 2022 Operations | Future Planning Horizon Operations |
|------------------------|-----------------|------------------------------------|
| Boeing 737-700         | 7,648           | 4,210                              |
| Boeing 737 Max 7       | 0               | 12,550                             |
| Boeing 737-800         | 21,889          | 11,560                             |
| Boeing B737 Max 8      | 2,305           | 19,200                             |
| Boeing 737-900         | 12,499          | 10,020                             |
| Boeing B737 Max 9      | 7,050           | 20,050                             |
| Boeing B737 Max 10     | 0               | 20,050                             |
| Boeing 747-400         | 474             | 0                                  |
| Boeing 747-8           | 0               | 960                                |
| Boeing 757-200         | 6,271           | 0                                  |
| Boeing 757-300         | 82              | 800                                |
| Boeing 767-300         | 2,802           | 0                                  |
| Boeing 767-400         | 535             | 0                                  |
| Boeing 777-200         | 1,059           | 3,125                              |
| Boeing 777-300         | 2,577           | 4,980                              |
| Boeing 777-9           | 0               | 2,630                              |
| Boeing 787-8           | 216             | 0                                  |
| Boeing 787-9           | 1,586           | 4,090                              |
| Boeing 787-10          | 144             | 3,110                              |
| Ilyushin               | 20              | 0                                  |
| Challenger 604         | 4               | 0                                  |
| CanadairRJ-200         | 10              | 0                                  |
| Canadair CRJ-900       | 4,907           | 10,023                             |
| Cessna C-402           | 25,589          | 8,610                              |
| Cessna C208            | 6               | 0                                  |
| Cessna Citation li     | 8               | 0                                  |
| DHC Dash-8-400         | 4,083           | 6,340                              |
| Embraer 145            | 2,961           | 1,877                              |
| Embraer 170            | 515             | 350                                |
| Embraer 175            | 52,480          | 55,689                             |
| Embraer 190            | 40,159          | 0                                  |

**Table F-5 Forecast Logan Airport Operations by Aircraft Type, Actual 2022 and Future Planning Horizon**

| Category/Aircraft Type       | 2022 Operations | Future Planning Horizon Operations |
|------------------------------|-----------------|------------------------------------|
| Embraer 195                  | 0               | 23,899                             |
| Embraer 195-E2               | 0               | 3,140                              |
| Gulfstream G650              | 6               | 0                                  |
| Pilatus PC-12                | 1,386           | 2,040                              |
| Tecnam P2012                 | 3,385           | 23,773                             |
| <b>Subtotal</b>              | <b>340,311</b>  | <b>452,925</b>                     |
| <b>Cargo Airlines</b>        |                 |                                    |
| Airbus A300-600              | 640             | 0                                  |
| Boeing 767-200               | 137             | 0                                  |
| Boeing 767-300               | 6,334           | 8,663                              |
| McDonnell Douglas MD-10      | 2               | 0                                  |
| McDonnell Douglas MD-11      | 213             | 0                                  |
| Boeing 757-200               | 64              | 743                                |
| Cessna 208                   | 381             | 495                                |
| Beech-99                     | 27              | 0                                  |
| <b>Subtotal</b>              | <b>7,798</b>    | <b>9,900</b>                       |
| <b>General Aviation (GA)</b> |                 |                                    |
| Piston                       | 1,581           | 1,667                              |
| Business Jet                 | 24,080          | 25,740                             |
| Turboprop                    | 3,737           | 3,941                              |
| Helicopter                   | 1,109           | 826                                |
| <b>Subtotal</b>              | <b>30,507</b>   | <b>32,175</b>                      |
| <b>Grand Total</b>           | <b>378,613</b>  | <b>495,000</b>                     |

Source: Massport and InterVISTAS.

Notes: Future Planning Horizon represents a 10- to 15-year planning horizon.

Totals may not add due to rounding.

## F.2.2 Operations by Stage Length and Time-of-Day

A forecast of aircraft operations by stage length and time of day has also been developed for the Future Planning Horizon, with consideration of the fleet mix expectations presented above, and historical data on operations. The stage length assumptions are summarized in **Table F-6**. Passenger flights with stage lengths up to 500 miles are forecast to continue representing the largest share of operations at Logan

Airport. This is consistent with historical trends. As shown, larger aircraft are used to serve longer-duration flights, such as international flights to Asia, Europe, and South America.

**Table F-6 Stage Length Assumptions, Total Passenger Airline Operations, Future Planning Horizon**

| Stage Length (nm) | Piston        | TP ≤ 50 seats | RJ ≤ 50 seats | TP 51-99 seats | RJ 51-99 seats | Jet 100-149 seats | Jet 150-199 seats | Jet ≥ 200 seats | Total          | Percent of Total |
|-------------------|---------------|---------------|---------------|----------------|----------------|-------------------|-------------------|-----------------|----------------|------------------|
| 0 to 500          | 32,383        | 2,040         | 1,877         | 6,340          | 36,908         | 60,727            | 35,896            | -               | 176,172        | 38.9%            |
| 501 to 1,000      | -             | -             | -             | -              | 26,008         | 30,293            | 37,228            | -               | 93,529         | 20.7%            |
| 1,001 to 1,500    | -             | -             | -             | -              | 3,146          | 14,505            | 44,086            | -               | 61,738         | 13.6%            |
| 1,501 to 2,500    | -             | -             | -             | -              | -              | 9,583             | 50,599            | 400             | 60,581         | 13.4%            |
| 2,501 to 3,500    | -             | -             | -             | -              | -              | -                 | 27,346            | 19,606          | 46,952         | 10.4%            |
| 3,501 to 4,500    | -             | -             | -             | -              | -              | -                 | -                 | 5,609           | 5,609          | 1.2%             |
| 4,501 to 5,500    | -             | -             | -             | -              | -              | -                 | -                 | 2,992           | 2,992          | 0.7%             |
| Over 5,500        | -             | -             | -             | -              | -              | -                 | -                 | 5,352           | 5,352          | 1.2%             |
| <b>Total</b>      | <b>32,383</b> | <b>2,040</b>  | <b>1,877</b>  | <b>6,340</b>   | <b>66,062</b>  | <b>115,109</b>    | <b>195,155</b>    | <b>33,959</b>   | <b>452,925</b> | <b>100%</b>      |

Source: InterVISTAS.

Notes: Future planning horizon represents a 10-year to 15-year planning horizon.

Totals may not add due to rounding.

Stage length is measured in nautical miles (nm).

TP stands for Turboprop.

RJ stands for Regional jet.

NB stands for Narrow-body jet.

WB stands for Wide-body jet.

**Table F-7** summarizes stage length assumptions for cargo airline operations. The profile of cargo operations by stage length is based primarily on the distribution observed in 2022.

**Table F-7 Stage Length Assumptions, Cargo Operations, Future Planning Horizon**

| Stage Length (nm) | Non-Jet | Narrowbody Jet | Widebody Jet | Total | Percent of Total |
|-------------------|---------|----------------|--------------|-------|------------------|
| 0 to 500          | 495     | 149            | 1,261        | 1,904 | 19.2%            |
| 501 to 1,000      | -       | 186            | 4,549        | 4,735 | 47.8%            |
| 1,001 to 1,500    | -       | 149            | 2,460        | 2,608 | 26.3%            |
| 1,501 to 2,500    | -       | 260            | 208          | 468   | 4.7%             |
| 2,501 to 3,500    | -       | -              | 184          | 184   | 0.0%             |
| Total             | 495     | 743            | 8,662        | 9,900 | 100%             |

Source: InterVISTAS.

Notes: Future planning horizon represents a 10-year to 15-year planning horizon.

Totals may not add due to rounding.

Stage length is measured in nautical miles (nm).

**Table F-8** summarizes arrival and departure times of passenger, cargo, and General Aviation (GA) flights organized by stage length. Nighttime hours are defined as 10:00 PM to 7:00 AM. The results are based on assumptions regarding future development of flight schedules.

**Table F-8 Time-of-Day Assumptions by User Category and Stage Length, Future Planning Horizon**

| User Category / Stage Length (nm) | Arrivals Day | Arrivals Night | Departures Day | Departures Night |
|-----------------------------------|--------------|----------------|----------------|------------------|
| <b>Passenger Airlines</b>         |              |                |                |                  |
| 0 to 500                          | 89.5%        | 10.5%          | 89.8%          | 10.2%            |
| 501 to 1,000                      | 83.8%        | 16.2%          | 89.6%          | 10.4%            |
| 1,001 to 1,500                    | 74.3%        | 25.7%          | 89.0%          | 11.0%            |
| 1,501 to 2,500                    | 64.9%        | 35.1%          | 91.2%          | 8.8%             |
| 2,501 to 3,500                    | 94.5%        | 5.5%           | 76.5%          | 23.5%            |
| 3,501-4,500                       | 99.8%        | 0.2%           | 98.2%          | 1.8%             |
| 4,501-5,500                       | 27.0%        | 73.0%          | 76.8%          | 23.2%            |
| 5,501+                            | 97.1%        | 2.9%           | 58.4%          | 41.6%            |
| <b>Cargo Airlines</b>             |              |                |                |                  |
| 0-500                             | 70.5%        | 29.5%          | 41.6%          | 58.4%            |
| 501-1000                          | 69.8%        | 30.2%          | 57.0%          | 43.0%            |
| 1001-1500                         | 90.0%        | 10.0%          | 90.3%          | 9.7%             |
| 1501-2500                         | 50.0%        | 50.0%          | 50.0%          | 50.0%            |



**Table F-8 Time-of-Day Assumptions by User Category and Stage Length, Future Planning Horizon**

| User Category / Stage Length (nm) | Arrivals Day | Arrivals Night | Departures Day | Departures Night |
|-----------------------------------|--------------|----------------|----------------|------------------|
| 2501-3500                         | 50.0%        | 50.0%          | 50.0%          | 50.0%            |
| <b>General Aviation</b>           |              |                |                |                  |
| 0-500                             | 92.4%        | 7.6%           | 92.8%          | 7.2%             |
| 501-1000                          | 91.1%        | 8.9%           | 96.4%          | 3.6%             |
| 1001-1500                         | 90.7%        | 9.3%           | 95.0%          | 5.0%             |
| 1501-2500                         | 76.8%        | 23.2%          | 93.1%          | 6.9%             |
| 2501-3500                         | 90.0%        | 10.0%          | 79.2%          | 20.8%            |

Source: InterVISTAS.

Notes: Future Planning Horizon represents a 10- to 15-year Future Planning Horizon.

Totals may not add due to rounding

Stage length is measured in nautical miles (nm).

### F.2.3 Peak Month, Average Day Hourly Forecast

The peak month, average day passenger forecast reflects an average busy weekday during the peak month at Logan Airport in terms of passenger numbers. The peak month is usually a summer month as more people travel due to summer vacations. In 2022, the peak month for passenger traffic was August, and the selected busy day was Tuesday, August 2, 2022. The percentage of Origin and Destination (O&D) passengers was determined from U.S. Department of Transportation T-100 data for the month of August by airline and airport.

**Table F-9** shows the peak month average day local passengers for domestic and international destinations. 2022 represents actual data, while the Future Planning Horizon is forecasted data for the 10- to 15-year horizon. As shown, the portion of domestic local passengers and portion of international local passengers in the Future Planning Horizon as compared to 2022. International local traffic is anticipated to increase marginally. Peak month average day domestic passenger traffic is 4.6 percent higher than average day domestic traffic, and peak month average day international passenger traffic is 5.9 percent higher than average day international traffic in the Future Planning Horizon. This reflects a gradual flattening of the peaks throughout the year. Peak month average day local domestic passengers and international passengers increase in the future planning horizon compared to 2022 levels.

**Table F-9 Peak Month Average Day Local Passengers, 2022 Base Year and Future Planning Horizon**

|                                                   | 2022 Domestic | 2022 International | Future Planning Horizon Domestic | Future Planning Horizon International |
|---------------------------------------------------|---------------|--------------------|----------------------------------|---------------------------------------|
| Annual Enplaned + Deplaned Passengers             | 29,527,910    | 6,450,000          | 41,826,300                       | 11,556,000                            |
| Percent Peak Month                                | 9.35%         | 11.80%             | 9.21%                            | 10.53%                                |
| Peak Month Enplaned + Deplaned Passengers         | 2,760,000     | 761,000            | 3,854,202                        | 1,217,116                             |
| Percent Local                                     | 94.1%         | 87.8%              | 94.1%                            | 88.3%                                 |
| Peak Month Local Passengers                       | 2,598,315     | 668,326            | 3,627,707                        | 1,074,400                             |
| Peak Month, Average Day Local Passengers          | 85,906        | 19,524             | 119,898                          | 33,522                                |
| Peak Month, Average Day as Percent of Average Day | 106.2%        | 110.5%             | 104.6%                           | 105.9%                                |

Source: Massport and InterVISTAS.

Notes: Future planning horizon represents a 10-year to 15-year planning horizon.

Forecast peak month, average day passengers are also distributed by terminal, as shown in **Table F-10**. The terminal distribution forecast for the Future Planning Horizon assumes the airline locations from a proposed Massport future gate allocation plan. According to this plan, Terminal B has the majority of narrowbody aircraft equivalent gates, followed by Terminal C, then Terminal A. Terminal E has the least number of gates allocated in the Future Planning Horizon, but does represent an increase of 4 gates the 2022 distribution. The forecast also assumes that the share of passengers using Terminal E will increase once planned renovations are complete.

**Table F-10 Actual and Assumed Future Distribution of Passengers by Terminal**

| Terminal      | Narrowbody Equivalent Gates | Percent of Total | 2022 ADPM Passengers | Future Planning Horizon ADPM Passengers |
|---------------|-----------------------------|------------------|----------------------|-----------------------------------------|
| A             | 21                          | 19.3%            | 23.3%                | 22.8%                                   |
| B             | 41                          | 37.6%            | 36.2%                | 34.3%                                   |
| C             | 27                          | 24.8%            | 26.8%                | 25.7%                                   |
| E             | 20                          | 18.3%            | 13.6%                | 17.3%                                   |
| Total Airport | 109                         | 100%             | 100%                 | 100%                                    |

Source: Massport and InterVISTAS.

Notes: Future planning horizon represents a 10-year to 15-year planning horizon.

Actual and forecast local passengers by terminal for the peak month, average day are shown in **Table F-11**. Domestic passenger numbers are forecast to increase by approximately 34,000, and international passengers are forecast increase by approximately 14,000 in the Future Planning Horizon, as compared to 2022 levels.

**Table F-11** Peak Month Average Day Local Passengers by Terminal, 2022 Actual and Future Forecast

| Terminal      | 2022 Domestic | 2022 International | Future Planning Horizon Domestic | Future Planning Horizon International |
|---------------|---------------|--------------------|----------------------------------|---------------------------------------|
| A             | 22,224        | 1,746              | 31,258                           | 2,718                                 |
| B             | 37,660        | 2,163              | 51,879                           | 3,157                                 |
| C             | 24,774        | 2,952              | 33,768                           | 4,834                                 |
| E             | 1,248         | 12,663             | 2,993                            | 22,813                                |
| Total Airport | 85,906        | 19,524             | 119,898                          | 33,522                                |

Source: InterVISTAS.

Notes: Future planning horizon represents a 10-year to 15-year planning horizon.

The hourly distribution of local passengers by terminal in 2022 was developed using published flight schedules, which provide departure and arrival times, seat counts, and airline assignments by terminal. The hourly distribution of local passengers by terminal for the average day, peak month in 2022 is provided in **Table F-12**.

**Table F-13** provides the hourly distribution of local passengers by terminal for the average day, peak month in the future planning horizon. The peak hour for arriving and departing local passengers at each terminal remains the same in the future planning horizon except for Terminal E arrivals which have shifted to earlier in the afternoon. This is primarily due to the timing of additional international arriving flights in the future planning horizon flight schedule.

**Table F-12 Terminal Distribution of Local Passengers by Hour for an Average Day Peak Month, 2022**

| Hour         | Terminal A  |             | Terminal B  |             | Terminal C  |             | Terminal E  |             | Total Airport |             |             |
|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------|-------------|-------------|
|              | Arrive      | Depart      | Arrive      | Depart      | Arrive      | Depart      | Arrive      | Depart      | Arrive        | Depart      | Total       |
| 00:00-00:59  | 1.5%        | 0.0%        | 3.9%        | 0.0%        | 1.4%        | 0.0%        | 0.0%        | 0.0%        | 2.1%          | 0.0%        | 1.1%        |
| 01:00-01:59  | 0.0%        | 0.0%        | 1.4%        | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.5%          | 0.0%        | 0.3%        |
| 02:00-02:59  | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.0%          | 0.0%        | 0.0%        |
| 03:00-03:59  | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.0%          | 0.0%        | 0.0%        |
| 04:00-04:59  | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.0%          | 0.0%        | 0.0%        |
| 05:00-05:59  | 0.0%        | 1.2%        | 1.6%        | 3.8%        | 6.6%        | 2.4%        | 0.0%        | 0.0%        | 2.3%          | 2.4%        | 2.3%        |
| 06:00-06:59  | 2.9%        | 7.3%        | 2.3%        | 11.6%       | 1.7%        | 5.6%        | 0.0%        | 0.0%        | 1.9%          | 7.7%        | 4.8%        |
| 07:00-07:59  | 3.5%        | 12.3%       | 2.3%        | 7.4%        | 3.7%        | 10.6%       | 5.0%        | 4.4%        | 3.4%          | 9.1%        | 6.2%        |
| 08:00-08:59  | 4.0%        | 8.6%        | 2.2%        | 8.6%        | 2.5%        | 10.0%       | 4.2%        | 1.0%        | 3.0%          | 8.2%        | 5.6%        |
| 09:00-09:59  | 4.3%        | 3.5%        | 4.0%        | 5.1%        | 1.5%        | 6.5%        | 0.0%        | 7.0%        | 2.8%          | 5.3%        | 4.0%        |
| 10:00-10:59  | 7.6%        | 5.6%        | 5.9%        | 3.6%        | 5.7%        | 5.0%        | 5.3%        | 4.0%        | 6.1%          | 4.5%        | 5.3%        |
| 11:00-11:59  | 3.0%        | 6.7%        | 4.2%        | 6.7%        | 2.7%        | 6.3%        | 3.3%        | 4.3%        | 3.4%          | 6.3%        | 4.9%        |
| 12:00-12:59  | 3.7%        | 4.0%        | 7.0%        | 7.3%        | 4.0%        | 2.3%        | 7.0%        | 4.0%        | 5.5%          | 4.8%        | 5.2%        |
| 13:00-13:59  | 5.9%        | 4.5%        | 4.6%        | 4.4%        | 9.0%        | 3.4%        | 8.9%        | 6.5%        | 6.6%          | 4.4%        | 5.5%        |
| 14:00-14:59  | 4.4%        | 2.8%        | 9.3%        | 4.5%        | 4.0%        | 7.1%        | 11.4%       | 0.0%        | 7.2%          | 4.3%        | 5.8%        |
| 15:00-15:59  | 9.6%        | 4.3%        | 4.4%        | 8.2%        | 7.6%        | 2.5%        | 12.2%       | 1.0%        | 7.5%          | 4.9%        | 6.2%        |
| 16:00-16:59  | 5.5%        | 5.0%        | 7.3%        | 4.6%        | 8.2%        | 6.3%        | 2.4%        | 0.0%        | 6.4%          | 4.7%        | 5.5%        |
| 17:00-17:59  | 7.7%        | 7.8%        | 6.1%        | 6.4%        | 4.4%        | 8.3%        | 4.8%        | 17.3%       | 5.8%          | 8.4%        | 7.1%        |
| 18:00-18:59  | 7.8%        | 11.2%       | 5.8%        | 5.7%        | 9.4%        | 7.3%        | 14.0%       | 1.0%        | 8.4%          | 7.0%        | 7.7%        |
| 19:00-19:59  | 6.0%        | 7.1%        | 4.2%        | 7.5%        | 5.7%        | 4.9%        | 2.8%        | 9.7%        | 4.7%          | 7.0%        | 5.8%        |
| 20:00-20:59  | 5.4%        | 5.4%        | 4.6%        | 2.1%        | 4.9%        | 4.9%        | 11.4%       | 13.1%       | 5.9%          | 4.8%        | 5.4%        |
| 21:00-21:59  | 4.6%        | 2.1%        | 5.8%        | 0.6%        | 5.4%        | 4.4%        | 2.7%        | 7.0%        | 4.9%          | 2.6%        | 3.8%        |
| 22:00-22:59  | 3.1%        | 0.0%        | 4.4%        | 1.4%        | 5.9%        | 1.0%        | 4.7%        | 10.6%       | 4.5%          | 1.9%        | 3.2%        |
| 23:00-23:59  | 9.7%        | 0.7%        | 8.7%        | 0.6%        | 5.8%        | 1.1%        | 0.0%        | 9.3%        | 6.8%          | 1.7%        | 4.3%        |
| Peak Percent | 9.7%        | 12.3%       | 9.3%        | 11.6%       | 9.4%        | 10.6%       | 14.0%       | 17.3%       | 8.4%          | 9.1%        | 7.7%        |
| Peak Hour    | 23:00-23:59 | 07:00-07:59 | 14:00-14:59 | 06:00-06:59 | 18:00-18:59 | 07:00-07:59 | 18:00-18:59 | 17:00-17:59 | 18:00-18:59   | 07:00-07:59 | 18:00-18:59 |

Source: Massport and InterVISTAS.

Notes: 2022 gate assignments provided by Massport.

**Table F-13 Assumed Distribution of Local Passengers by Hour for an Average Day Peak Month, Future Planning Horizon**

| Hour         | Terminal A  |             | Terminal B  |             | Terminal C  |             | Terminal E  |             | Total Airport |             |             |
|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------|-------------|-------------|
|              | Arrive      | Depart      | Arrive      | Depart      | Arrive      | Depart      | Arrive      | Depart      | Arrive        | Depart      | Total       |
| 00:00-00:59  | 1.0%        | 0.0%        | 2.9%        | 0.0%        | 1.2%        | 0.0%        | 1.1%        | 2.6%        | 1.7%          | 0.4%        | 1.1%        |
| 01:00-01:59  | 0.0%        | 0.0%        | 1.8%        | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 1.9%        | 0.6%          | 0.3%        | 0.5%        |
| 02:00-02:59  | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.0%          | 0.0%        | 0.0%        |
| 03:00-03:59  | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.0%          | 0.0%        | 0.0%        |
| 04:00-04:59  | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.0%        | 0.8%        | 0.0%        | 0.0%        | 0.0%          | 0.2%        | 0.1%        |
| 05:00-05:59  | 1.0%        | 0.8%        | 1.7%        | 5.0%        | 4.9%        | 1.9%        | 1.1%        | 0.0%        | 2.2%          | 2.5%        | 2.3%        |
| 06:00-06:59  | 4.1%        | 7.2%        | 2.8%        | 8.6%        | 3.3%        | 6.7%        | 1.1%        | 1.4%        | 2.9%          | 6.7%        | 4.8%        |
| 07:00-07:59  | 5.7%        | 10.9%       | 3.2%        | 7.4%        | 5.3%        | 10.3%       | 4.7%        | 2.6%        | 4.5%          | 8.3%        | 6.4%        |
| 08:00-08:59  | 3.2%        | 10.1%       | 3.6%        | 8.6%        | 3.9%        | 9.5%        | 3.9%        | 0.5%        | 3.6%          | 8.0%        | 5.8%        |
| 09:00-09:59  | 3.7%        | 5.0%        | 4.9%        | 5.7%        | 1.5%        | 7.1%        | 3.4%        | 7.7%        | 3.6%          | 6.2%        | 4.9%        |
| 10:00-10:59  | 6.6%        | 4.8%        | 6.2%        | 4.9%        | 5.0%        | 4.5%        | 4.9%        | 3.1%        | 5.8%          | 4.5%        | 5.1%        |
| 11:00-11:59  | 2.7%        | 5.9%        | 2.7%        | 5.7%        | 2.6%        | 5.1%        | 4.9%        | 3.8%        | 3.1%          | 5.3%        | 4.2%        |
| 12:00-12:59  | 4.2%        | 3.2%        | 7.0%        | 5.8%        | 4.8%        | 2.3%        | 4.6%        | 7.8%        | 5.4%          | 4.6%        | 5.0%        |
| 13:00-13:59  | 4.6%        | 4.6%        | 4.6%        | 5.5%        | 8.0%        | 3.4%        | 9.1%        | 4.2%        | 6.3%          | 4.5%        | 5.4%        |
| 14:00-14:59  | 6.1%        | 2.9%        | 8.1%        | 5.0%        | 3.2%        | 7.4%        | 11.2%       | 0.0%        | 7.1%          | 4.4%        | 5.7%        |
| 15:00-15:59  | 8.8%        | 5.5%        | 4.1%        | 7.0%        | 7.3%        | 2.2%        | 10.0%       | 0.5%        | 7.0%          | 4.4%        | 5.7%        |
| 16:00-16:59  | 4.6%        | 5.9%        | 7.8%        | 4.3%        | 8.3%        | 5.8%        | 4.1%        | 6.7%        | 6.5%          | 5.4%        | 6.0%        |
| 17:00-17:59  | 6.3%        | 6.5%        | 6.0%        | 6.6%        | 4.4%        | 8.3%        | 6.6%        | 14.7%       | 5.8%          | 8.2%        | 7.0%        |
| 18:00-18:59  | 8.5%        | 9.1%        | 6.4%        | 5.9%        | 8.8%        | 7.8%        | 9.5%        | 4.0%        | 8.0%          | 6.8%        | 7.4%        |
| 19:00-19:59  | 6.7%        | 8.0%        | 5.1%        | 7.0%        | 5.4%        | 5.3%        | 3.1%        | 5.2%        | 5.1%          | 6.5%        | 5.8%        |
| 20:00-20:59  | 4.8%        | 6.0%        | 3.9%        | 4.1%        | 4.9%        | 4.7%        | 8.1%        | 9.6%        | 5.2%          | 5.5%        | 5.3%        |
| 21:00-21:59  | 4.1%        | 2.3%        | 5.5%        | 1.4%        | 4.5%        | 4.9%        | 3.3%        | 9.3%        | 4.5%          | 3.7%        | 4.1%        |
| 22:00-22:59  | 4.1%        | 0.5%        | 4.0%        | 1.1%        | 6.7%        | 0.8%        | 4.4%        | 7.4%        | 4.7%          | 1.8%        | 3.3%        |
| 23:00-23:59  | 9.3%        | 0.7%        | 7.6%        | 0.4%        | 5.9%        | 1.4%        | 0.9%        | 7.0%        | 6.3%          | 1.7%        | 4.0%        |
| Peak Percent | 9.3%        | 10.9%       | 8.1%        | 8.6%        | 8.8%        | 10.3%       | 11.2%       | 14.7%       | 8.0%          | 8.3%        | 7.4%        |
| Peak Hour    | 23:00-23:59 | 07:00-07:59 | 14:00-14:59 | 06:00-06:59 | 18:00-18:59 | 07:00-07:59 | 14:00-14:59 | 17:00-17:59 | 18:00-18:59   | 07:00-07:59 | 18:00-18:59 |

Source: Massport and InterVISTAS.

Notes: Gate assignments planned for the Future Planning Horizon (based on Massport assumptions for 2022).

Arriving and departing local passengers by terminal and hour of the day in 2022 are shown in **Table F-14**. In 2022, Terminal B was the busiest terminal with nearly 40,000 local passengers. Terminal C was the second busiest with over 28,000 passengers, followed by Terminal A with nearly 24,000 passengers. Terminal E handled almost 14,000 local passengers.

**Table F-14 Peak Month Average Day Local Passengers by Terminal and by Hour, 2022**

| Hour        | Terminal A |        | Terminal B |        | Terminal C |        | Terminal E |        | Total Airport |        |         |
|-------------|------------|--------|------------|--------|------------|--------|------------|--------|---------------|--------|---------|
|             | Arrive     | Depart | Arrive     | Depart | Arrive     | Depart | Arrive     | Depart | Arrive        | Depart | Total   |
| 00:00-00:59 | 168        | -      | 782        | -      | 189        | -      | -          | -      | 1,140         | -      | 1,140   |
| 01:00-01:59 | -          | -      | 286        | -      | -          | -      | -          | -      | 286           | -      | 286     |
| 02:00-02:59 | -          | -      | -          | -      | -          | -      | -          | -      | -             | -      | -       |
| 03:00-03:59 | -          | -      | -          | -      | -          | -      | -          | -      | -             | -      | -       |
| 04:00-04:59 | -          | -      | -          | -      | -          | -      | -          | -      | -             | -      | -       |
| 05:00-05:59 | -          | 146    | 322        | 764    | 889        | 339    | -          | -      | 1,211         | 1,250  | 2,461   |
| 06:00-06:59 | 335        | 908    | 455        | 2,309  | 223        | 806    | -          | -      | 1,013         | 4,023  | 5,036   |
| 07:00-07:59 | 402        | 1,530  | 456        | 1,481  | 501        | 1,522  | 423        | 240    | 1,782         | 4,774  | 6,555   |
| 08:00-08:59 | 456        | 1,076  | 439        | 1,717  | 342        | 1,436  | 358        | 56     | 1,596         | 4,285  | 5,881   |
| 09:00-09:59 | 490        | 432    | 803        | 1,020  | 206        | 928    | -          | 381    | 1,498         | 2,762  | 4,260   |
| 10:00-10:59 | 869        | 700    | 1,170      | 723    | 762        | 710    | 448        | 217    | 3,249         | 2,351  | 5,600   |
| 11:00-11:59 | 345        | 837    | 831        | 1,329  | 359        | 908    | 275        | 234    | 1,810         | 3,309  | 5,119   |
| 12:00-12:59 | 427        | 495    | 1,394      | 1,460  | 532        | 334    | 589        | 217    | 2,942         | 2,505  | 5,447   |
| 13:00-13:59 | 673        | 562    | 904        | 885    | 1,205      | 490    | 749        | 355    | 3,531         | 2,293  | 5,824   |
| 14:00-14:59 | 510        | 345    | 1,836      | 892    | 535        | 1,013  | 960        | -      | 3,841         | 2,250  | 6,090   |
| 15:00-15:59 | 1,097      | 533    | 875        | 1,633  | 1,014      | 352    | 1,028      | 56     | 4,014         | 2,574  | 6,588   |
| 16:00-16:59 | 633        | 622    | 1,457      | 917    | 1,099      | 900    | 199        | -      | 3,388         | 2,439  | 5,827   |
| 17:00-17:59 | 883        | 972    | 1,202      | 1,270  | 595        | 1,186  | 402        | 948    | 3,082         | 4,377  | 7,459   |
| 18:00-18:59 | 891        | 1,405  | 1,146      | 1,144  | 1,256      | 1,041  | 1,181      | 56     | 4,474         | 3,645  | 8,119   |
| 19:00-19:59 | 686        | 889    | 832        | 1,506  | 768        | 707    | 233        | 533    | 2,520         | 3,635  | 6,155   |
| 20:00-20:59 | 624        | 679    | 908        | 421    | 652        | 703    | 964        | 717    | 3,148         | 2,521  | 5,669   |
| 21:00-21:59 | 527        | 263    | 1,142      | 110    | 731        | 629    | 229        | 382    | 2,629         | 1,385  | 4,013   |
| 22:00-22:59 | 354        | -      | 870        | 288    | 788        | 146    | 394        | 579    | 2,406         | 1,013  | 3,420   |
| 23:00-23:59 | 1,112      | 91     | 1,723      | 120    | 775        | 154    | -          | 508    | 3,609         | 873    | 4,483   |
| Total       | 11,485     | 12,485 | 19,832     | 19,991 | 13,421     | 14,306 | 8,431      | 5,480  | 53,168        | 52,262 | 105,430 |

Source: Massport and InterVISTAS.

Notes: Bold indicates airport-wide peak hour passengers.

**Table F-15** shows a similar peak month, busy day passenger distribution by terminal and time of day for the future planning horizon.

**Table F-15 Peak Month Average Day Local Passengers by Terminal and by Hour, Future Planning Horizon**

| Hour        | Terminal A |        | Terminal B |        | Terminal C |        | Terminal E |        | Total Airport |        |         |
|-------------|------------|--------|------------|--------|------------|--------|------------|--------|---------------|--------|---------|
|             | Arrive     | Depart | Arrive     | Depart | Arrive     | Depart | Arrive     | Depart | Arrive        | Depart | Total   |
| 00:00-00:59 | 170        | -      | 791        | -      | 224        | -      | 158        | 286    | 1,343         | 286    | 1,629   |
| 01:00-01:59 | -          | -      | 483        | -      | -          | -      | -          | 210    | 483           | 210    | 693     |
| 02:00-02:59 | -          | -      | -          | -      | -          | -      | -          | -      | -             | -      | -       |
| 03:00-03:59 | -          | -      | -          | -      | -          | -      | -          | -      | -             | -      | -       |
| 04:00-04:59 | -          | -      | -          | -      | -          | 163    | -          | -      | -             | 163    | 163     |
| 05:00-05:59 | 168        | 148    | 469        | 1,374  | 890        | 377    | 168        | -      | 1,695         | 1,899  | 3,594   |
| 06:00-06:59 | 678        | 1,268  | 756        | 2,379  | 599        | 1,349  | 158        | 158    | 2,191         | 5,154  | 7,345   |
| 07:00-07:59 | 941        | 1,924  | 876        | 2,060  | 971        | 2,091  | 690        | 288    | 3,478         | 6,363  | 9,842   |
| 08:00-08:59 | 526        | 1,772  | 979        | 2,394  | 714        | 1,923  | 578        | 57     | 2,797         | 6,146  | 8,943   |
| 09:00-09:59 | 607        | 875    | 1,340      | 1,574  | 284        | 1,440  | 507        | 848    | 2,737         | 4,737  | 7,475   |
| 10:00-10:59 | 1,076      | 852    | 1,702      | 1,358  | 918        | 908    | 723        | 340    | 4,420         | 3,458  | 7,878   |
| 11:00-11:59 | 435        | 1,035  | 734        | 1,586  | 470        | 1,032  | 727        | 417    | 2,366         | 4,069  | 6,436   |
| 12:00-12:59 | 685        | 561    | 1,923      | 1,614  | 881        | 461    | 673        | 861    | 4,161         | 3,496  | 7,658   |
| 13:00-13:59 | 746        | 803    | 1,262      | 1,522  | 1,463      | 692    | 1,340      | 464    | 4,811         | 3,481  | 8,291   |
| 14:00-14:59 | 992        | 502    | 2,208      | 1,383  | 584        | 1,501  | 1,648      | -      | 5,431         | 3,386  | 8,817   |
| 15:00-15:59 | 1,445      | 974    | 1,113      | 1,932  | 1,347      | 442    | 1,476      | 57     | 5,381         | 3,405  | 8,786   |
| 16:00-16:59 | 755        | 1,045  | 2,141      | 1,202  | 1,530      | 1,169  | 609        | 745    | 5,034         | 4,162  | 9,196   |
| 17:00-17:59 | 1,030      | 1,150  | 1,652      | 1,829  | 811        | 1,680  | 982        | 1,620  | 4,475         | 6,278  | 10,753  |
| 18:00-18:59 | 1,395      | 1,608  | 1,760      | 1,620  | 1,619      | 1,575  | 1,404      | 437    | 6,179         | 5,239  | 11,418  |
| 19:00-19:59 | 1,099      | 1,400  | 1,406      | 1,933  | 993        | 1,079  | 453        | 575    | 3,951         | 4,986  | 8,938   |
| 20:00-20:59 | 780        | 1,052  | 1,077      | 1,122  | 908        | 955    | 1,198      | 1,057  | 3,963         | 4,185  | 8,149   |
| 21:00-21:59 | 665        | 403    | 1,510      | 380    | 829        | 988    | 491        | 1,028  | 3,495         | 2,799  | 6,295   |
| 22:00-22:59 | 679        | 82     | 1,093      | 291    | 1,228      | 154    | 644        | 822    | 3,645         | 1,349  | 4,994   |
| 23:00-23:59 | 1,520      | 131    | 2,088      | 122    | 1,085      | 274    | 136        | 773    | 4,829         | 1,299  | 6,128   |
| Total       | 16,392     | 17,584 | 27,363     | 27,673 | 18,349     | 20,253 | 14,764     | 11,042 | 76,868        | 76,552 | 153,420 |

Source: Massport and InterVISTAS.

Notes: Gate assignments planned for the Future Planning Horizon (based on Massport assumptions for 2022).

Bold indicates airport-wide peak hour passengers.

Based on **Table F-15**, Terminal B is expected to remain the busiest terminal with nearly 55,000 local passengers, followed by Terminal C with over 38,500 passengers. Terminal A is forecast to process nearly 34,000 passengers, and Terminal E is forecast to process almost 26,000 local passengers in the Future Planning Horizon. The overall airport-wide peak of total local passengers remains in the 18:00 hour.

### F.2.4 Conclusion

Passenger demand continues to grow at Logan Airport and is forecast to increase from over 36 million scheduled and charter passengers in 2022 to 53.5 million passengers in the Future Planning Horizon. This translates into a 48.0 percent overall growth. Passenger aircraft operations are expected to increase at a lower overall growth rate of 33.0 percent, increasing from over 340,000 to almost 453,000. When compared to the pre-pandemic 2019 traffic, these increases are only 26.0 percent for passengers and 16.0 percent for passenger aircraft operations.

Average aircraft throughput is expected to increase from 132 seats per operation in 2022 to 141 seats per operation in the Future Planning Horizon. This discrepancy between passenger and operations growth rate will be the result of airlines flying larger aircraft and operating aircraft with higher seat capacities. New, modern and efficient aircraft types are continuing to enter service such as the Boeing 737 MAX and Airbus 320 NEO family. These aircraft will open new market opportunities in addition to replacing older, aging aircraft. The 50-seat RJ market is expected to continue shrinking as more carriers shift operations to larger, 76- to 90-seat, aircraft such as the Embraer 175 and 195. Long-haul operations will continue to grow in Europe and the Middle East, and remain the most mature international market. However, Asia is forecast to grow the fastest as it has been the slowest market to recover from COVID-19.