APPENDIX B

Aircraft Activity Forecast

U.S. Department
of Transportation
**Federal Aviation
Administration**

ORLANDO AIRPORTS DISTRICT OFFICE
8427 SouthPark Circle, Suite 524
Orlando, Florida 32819
Phone: (407) 487-7220 Fax: (407) 487-7135

June 10, 2025

Mrs. Clara Bennett
Executive Director
Boca Raton Airport Authority

Dear Mrs. Bennett:

RE: Boca Raton Airport (BCT)
Approval of Forecast of Aircraft Operations for Part 150 Noise Exposure Map (NEM) Update

The Federal Aviation Administration (FAA) approves the baseline operations by category forecast through year 2030 dated June 5, 2025, for use in the BCT NEM Update (see attachment). We found the forecast to be generally consistent with the FY2024 TAF, issued January 2025. It uses current data and supported by generally accepted forecasting methodologies.

The approval of the forecast does not automatically constitute a commitment on the part of the United States to participate in any development recommended in the NEM Update or shown on the ALP. FAA approval of the baseline forecast does not constitute justification for future projects. Justification for future projects will be made based on activity levels at the time the project is requested for development, in accordance with criteria in FAA Orders 5090.5 and 5100.38. Documentation of actual activity levels meeting planning activity levels will be necessary to justify AIP funding for eligible projects.

If you have any questions, please feel free to contact me at (407) 487-7231.

Sincerely,

MARISOL C ELLIOTT
Digitally signed by MARISOL C ELLIOTT
Date: 2025.06.10 14:30:29 -04'00'

Marisol C. Elliott
Community Planner

Attachment

cc: John Williams, Ricondo

RICONDO®

MEMORANDUM

Date: June 5, 2025

To: Mrs. Clara Bennett
Executive Director
Boca Raton Airport Authority

From: John Williams

Subject: BOCA RATON AIRPORT PART 150 NOISE EXPOSURE MAP UPDATES FORECAST MEMORANDUM

This memorandum summarizes the methodology used to develop the Existing Conditions and Future Conditions operational levels for the 14 Code of Federal Regulations (CFR) Part 150 Noise Exposure Map (NEM) Update at Boca Raton Airport (BCT or the Airport). Activity in 2024 is used to represent Existing Conditions, while forecast activity for 2030 represents Future Conditions. The operations forecast for 2030, 5 years from when the 14 CFR Part 150 NEM Update report will be provided to FAA for review and approval, is based on historical data provided by the Airport Sponsor and the Federal Aviation Administration (FAA), and represents a re-basing of the previous Master Plan Update (MPU) baseline operations forecast originally developed in January 2021 and approved by the FAA on May 25, 2021. The methodology used to develop the original MPU operations forecast as well as the re-basing process are both described in this memorandum. Based on the information provided in this memorandum, the Boca Rotan Airport Authority (the Authority) requests FAA review and approval of the proposed 2024 and forecast 2030 operational levels for use in developing NEMs in accordance with 14 CFR Part 150.

Master Plan Update Forecast Methodology

The MPU operations forecast was developed using regression analysis[1] to model the relationships between key socioeconomic indicators and aviation activity. Since 2021, the preferred MPU baseline operations forecast has been below observed annual operations counts. This difference was largest in 2022, with 8.4 percent fewer operations forecast than actually observed at the Airport. This difference was largely due to the COVID-19 recovery period, which was robust in 2021 and exceeded the relative growth forecast in the MPU and projected in its underlying socioeconomic indicators. However, the difference between observed and forecast operations has decreased as aviation and socioeconomic activity has normalized following the

[1] Socioeconomic regression analysis identifies relationships between aviation activity and one or more socioeconomic indicators. The relationships are presented as mathematical equations, which are applied to socioeconomic projections to forecast aviation activity. Regression outputs were evaluated based on two criteria, the value of the coefficient of determination (R-squared value) and the direction of the correlation coefficient. R-squared values range between 0 percent and 100 percent, with 0 percent representing no statistical relationship between variables and 100 percent indicating perfect correlation. Variables were considered strongly correlated for R-squared values greater than 70 percent. Additionally, a positive correlation coefficient is expected between socioeconomic indicators and aviation activity, such that an increase in socioeconomic activity correlates with an increase in aviation activity.

pandemic recovery period, with observed operations growing at a similar compound annual growth rate (CAGR)[2] to MPU forecast operations 2021 through 2024, representing 2.3 percent and 2.5 percent CAGRs, respectively. This indicates that the underlying relationships between socioeconomic and aviation activity remain robust and are valid for forecasting aviation activity in the post-recovery period. To determine whether any changes in socioeconomic conditions that affect the forecasts have changed, Woods & Poole Economics® [3] socioeconomic projections from January 2021 were compared to current projections to assess the current outlook and determine if changes to socioeconomic projections occurred.

Table 1 presents a comparison between the previous and current socioeconomic projections. CAGRs are presented for two periods, 2020 through 2030 and 2025 through 2030. These periods represent the span between both the MPU base year (2020) and the NEM Update Existing Conditions (2024) and Future Conditions (2030). Socioeconomic variables used in regression modeling are presented for the geographic regions serving as the basis for regression analyses, the county, and the Miami MSA. For both regions, the average CAGR for the period from 2020 through 2030 is higher than the previous socioeconomic projections, while the average CAGR for the period from 2025 through 2030 is lower than the previous socioeconomic projections. When examined by individual socioeconomic variable and geographic region, the differences include both increases and decreases relative to previous projections. When taken as a whole, the differences between previous and current socioeconomic projections do not represent a substantial change from the ones serving as the basis for the MPU operations forecast. Accordingly, the MPU forecast operations growth rates remain as appropriate growth rates for re-basing the MPU forecast starting at 2024.

Temporary Flight Restrictions

Temporary Flight Restrictions (TFRs) are flight restrictions issued when the President of the United States (the President) is in residence at Mar-a-Lago. TFRs have several levels of restrictions and prohibitions, depending on whether an airport is located within the inner or outer core of the area in which restrictions are in effect.[4] Airports within the inner core have stricter limitations imposed by TFRs than those in the outer core. For example, PBI is located within the inner core and all aircraft operations are prohibited except for military, law enforcement, and regularly scheduled commercial activity when a TFR is in effect. In contrast, BCT is in the outer core and is subject to different and less stringent restrictions.

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2 Compound annual growth rate is the average annual growth rate for each year during a specified period.

3 Woods & Poole Economics is an independent firm that specializes in long-term county economic and demographic data projections since 1983.

4 The inner core is represented by 10 nautical miles around the center point. The outer core extends from 10 to 30 nautical miles from the extent of the inner core.

TABLE 1 SOCIOECONOMIC PROJECTIONS – COMPOUND ANNUAL GROWTH RATE COMPARISONS

SOCIOECONOMIC VARIABLE	2020 WOODS & POOLE PROJECTIONS		2024 WOODS & POOLE PROJECTIONS		DIFFERENCE	
	2020–2030	2025–2030	2020–2030	2025–2030	2020–2030	2025–2030
Palm Beach County						
Population	1.3%	1.2%	1.1%	1.2%	-0.1%	0.0%
Employment	2.1%	2.0%	2.8%	2.0%	0.7%	-0.1%
Total Earnings	3.1%	3.1%	3.6%	2.9%	0.5%	-0.2%
Net Earnings	3.2%	3.1%	3.5%	2.8%	0.4%	-0.2%
Total Personal Income	3.4%	3.3%	3.0%	2.6%	-0.4%	-0.7%
Per Capita Personal Income	2.1%	2.0%	1.8%	1.4%	-0.3%	-0.7%
Gross Regional Product	3.2%	3.1%	3.8%	2.9%	0.5%	-0.2%
Miami MSA						
Population	1.0%	1.0%	0.8%	1.0%	-0.2%	0.0%
Employment	1.8%	1.7%	2.4%	1.5%	0.7%	-0.2%
Total Earnings	2.8%	2.7%	3.5%	2.5%	0.8%	-0.2%
Net Earnings	2.8%	2.7%	3.6%	2.5%	0.8%	-0.2%
Total Personal Income	3.1%	3.0%	2.9%	2.4%	-0.2%	-0.6%
Per Capita Personal Income	2.1%	2.0%	2.1%	1.5%	0.0%	-0.6%
Gross Regional Product	2.8%	2.7%	3.7%	2.6%	0.9%	-0.1%

NOTES: Miami MSA – Miami–Fort Lauderdale–West Palm Beach, Florida Metropolitan Statistical Area. MPU – Master Plan Update
SOURCES: Woods & Poole Economics, Inc., April 2025 (socioeconomic projections, 2024 edition); Woods & Poole Economics, Inc., January 2021 (socioeconomic projections, 2020 edition); Ricondo & Associates, Inc., April 2025 (analysis).

Historical operations data indicate that the issuance of TFRs has a temporary impact on the overall number of operations at BCT. From 2017 through 2020, during the current President's first term in office, TFRs were in effect on approximately 102 days. Analysis of operational data from those periods shows that the restrictions resulted in an approximately 0.8 percent increase in annual operations. Since Inauguration Day on January 20, 2025, the Airport has experienced several days with TFRs in effect, which have had an observable impact on itinerant operations at BCT. However, historical data from the President's first term suggest that TFRs have a limited effect on overall annual activity. Furthermore, the effects of TFRs are temporary, unpredictable, and are expected to cease by January 2029. Consequently, the recent effect of TFRs on operations is not considered a long-term factor influencing activity at BCT, and the forecast for 2030 Future Conditions does not incorporate the effects of the TFRs.

Noise Exposure Map Update Forecast

The NEM Update forecast represents a re-basing of the MPU forecast previously described. Because socioeconomic growth rates have remained relatively stable between the time of the original MPU forecast and current data, the MPU growth rate previously approved by the FAA was applied to forecast aircraft activity in 2030. **Table 2** presents the overall NEM Update operations forecast by operation category. Total aircraft operations are forecast to increase from 85,555 operations in 2024 to 97,274 operations in 2030. Growth from Existing Conditions in 2024 to Future Conditions in 2030 represents a 2.2 percent CAGR. Itinerant air taxi and local GA operations are forecast to grow at slightly higher CAGRs than total aircraft operations, representing 3.0 percent and 2.5 percent CAGRs, respectively, while itinerant GA operations are forecast to grow at a 1.7 percent CAGR. Military operations are forecast to remain constant, in line with FAA TAF forecast methodology.

TABLE 2 AIRCRAFT OPERATIONS BY CATEGORY – EXISTING AND FUTURE CONDITIONS

	ITINERANT				LOCAL			TOTAL AIRCRAFT OPERATIONS
YEAR	AIR TAXI	GENERAL AVIATION	MILITARY	TOTAL	GENERAL AVIATION	MILITARY	TOTAL	
Existing Conditions								
2024	16,088	42,870	151	59,109	26,171	275	26,446	85,555
Future Conditions								
2030	19,177	47,311	151	66,639	30,360	275	30,635	97,274
Compound Annual Growth Rate								
2024 - 2030	3.0%	1.7%	0.0%	2.0%	2.5%	0.0%	2.5%	2.2%

SOURCES: US Department of Transportation, Federal Aviation Administration, Operations Network (OPSNET), April 2025 (historical operations); Ricondo & Associates, Inc., April 2025 (forecast).

Table 3 presents the NEM Update forecast and 2024 FAA TAF operations, which represents the most recent published TAF at the time this memo was finalized. The NEM Update forecast is within the defined FAA tolerance for forecast variance.[5] In 2030, operations forecast in the NEM Update are 2.4 percent higher than operations forecast in the 2024 FAA TAF.

TABLE 3 2024 TERMINAL AREA FORECAST COMPARISON

YEAR	OPERATIONS		VARIANCE
	NEM UPDATE	2024 FAA TAF[1]	
Historical			
2021	81,800	78,136	4.7%
2022	81,626	82,235	-0.7%
2023	81,611	83,497	-2.3%
2024	85,555	83,585	2.4%
Forecast			
2030	97,274	94,993	2.4%
Compound Annual Growth Rate			
2024 - 2030	2.2%	2.2%	

NOTES: FAA – Federal Aviation Administration; NEM – Noise Exposure Map; TAF – Terminal Area Forecast
1 The FAA TAF is forecast on a fiscal year basis (October 1 through September 30) and is presented as published.
SOURCES: US Department of Transportation, Federal Aviation Administration, Operations Network (OPSNET), April 2025 (historical operations); US Department of Transportation, Federal Aviation Administration, *2024 Terminal Area Forecast*, April 2025; Ricondo & Associates, Inc., April 2025 (NEM Update).

Summary

Operations at BCT have outpaced the projections presented in the MPU baseline forecast, with actual activity between 2021 and 2024 exceeding forecast levels by approximately 5 to 11 percent. This variance is primarily attributable to a more rapid recovery from the COVID-19 pandemic than originally anticipated during the development of the MPU forecast. Despite these differences in actual activity, the underlying socioeconomic projections used in the MPU forecast have not significantly changed. The current projections remain broadly consistent with those used in the MPU forecast and do not constitute a substantial shift in forecast assumptions. As such, the growth rates from the MPU forecast have been retained and applied to existing activity in 2024 to forecast 2030 operational levels.

5 Forecast tolerances are defined in FAA AC 150/5070-6B as exceeding a 10 percent difference from the TAF at 5 years and exceeding a 15 percent difference from the TAF at 10 years.

In the proposed NEM Update forecast, total operations at BCT are projected to increase at a CAGR of 2.2 percent from 2024 through 2030. Applying the MPU growth rate to the 2024 base year results in a 2030 forecast that differs from the 2024 FAA TAF by 2.4 percent. This variance is within the 10 percent tolerance threshold established in FAA Advisory Circular 150/5070-6B and reflects a reasonable projection of operational conditions under the 2030 Future Conditions scenario. As such, the Authority requests FAA review and approval of the proposed 2024 and forecast 2030 operational levels for use in developing NEMs in accordance with 14 CFR Part 150.

cc:
Stephen Smith, Ricondo
Dharma Thapa, Ricondo
Jeffrey Covert, Ricondo

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