

Middleton Municipal Airport (C29)
BOA/FAA Forecast Review Comments
8/12/19

1. **2.3 General Aviation Trends.** The FAA is not the source for Terminal Area Forecast (TAF) data for non-towered airports. This data comes straight from airports and states through the 5010 process. Therefore, please do not use this data as an FAA validated reflection of actual traffic at non-towered airports. Instead, confirm the current operations at the airport using fuel slips/sales, logbooks, surveys, TFMCS, etc. A true reflection of the types and number of operations is the most important piece of a forecast for non-towered airport. Please adjust this section accordingly.

Response: As suggested, an inventory of the 2019 operations was conducted through outreach to the based users, through interviews with the Fixed-Base-Operators (Morey Airplane Company & Capital Flight), through a review of the FAA's TFMSC database and through a review of visitor logs and fuel sales. The results of the Inventory are summarized within Appendix A.

As another means to estimate activity at C29, a statistical modeling equation was used that had been prepared for the Statistics and Forecast Branch of the FAA entitled 'Model for Estimating General Aviation Operations at Non-Towered Airports Using Towered and Non-towered Airport Data'. The results from the inventory and the modeling equation resulted in annual operations less than what had been reported on the 5010 estimates but were within 10%. For the purposes of this master plan, the 2019 inventoried number of operations was utilized as the baseline.

2. **2.3 General Aviation Trends.** If available, please add historic operations data for C29, preferably in chart form.

Response: Historic activity data was added in tabular form from 2010-2019 on Table 2-1.

3. **2.4.2 Fleet Mix.** Instead of using the TAF data, confirm the actual fleet mix using local information such as fuel slips/sales, logbooks, surveys, TFMCS, etc.

Response: The existing fleet mix of aircraft based at C29 was pulled from information validated in the National Based Aircraft Inventory Program (basedaircraft.com). The TAF is no longer used. A broader discussion on Based Aircraft and Fleet Mix is now provided within Section 2.5

4. **2.6 Based Aircraft Forecast.** 5010 data should not be used for based aircraft. Please exclusively use the validated aircraft at C29 from BasedAircraft.com. It is the authoritative source for this data. Please update this section and all subsections accordingly.

BasedAircraft.com as of 8/6/19

	5010 7/18/2019	Inventory	Currently Validated
Single Engine	81	88	79
Multi Engine	8	8	7
Jet	2	2	2
Helicopter	3	3	3
Total Single, Multi, Jet, and Heli	94	101	91
Glider	0	0	***
Military	0	***	***
Ultra-light	0	0	***
<u>Non 5010 aircraft types</u>		0	
Total Found in FAA Acft. Reg. Data		101	TOTAL 91
Total Not Found in FAA Acft. Reg. Data		0	
Total Entered in BasedAircraft.com		101	

Response: The latest data from basedaircraft.com was e-mailed from GCR (John Lyon) on March 16th, 2020 and identifies 100 validated based aircraft. This was presented as the latest and official source of the existing number of based aircraft at C29. This was updated and reflected in all sections.

5. **2.6 Based Aircraft Forecast.** If 5010 data is being used for historic purposes, please add a corresponding table and CAGR.

Response: The various reporting sources of based aircraft are listed in Table 2-3 for comparison. The text explains that basedaircraft.com is the authoritative source and that those numbers are utilized.

6. **2.6.1 FAA TAF.** Having two jet aircraft automatically puts the airport into the regional asset role, which requires at least 1 jet OR 100 based aircraft. Since there are only two jets at the airport, we recommend that the sponsor err on the side of caution and resolve the 10 duplications with other airports by December (prior to the snapshot for the NPIAS). If the airport is having difficulty with this, they can contact the GCR helpdesk. GCR can look at all the data associated with the aircraft (where it is flying, where the owner resides, etc.) and perhaps resolve the questionable aircraft. GCR can be reached at BasedAircraftSupport@BasedAircraft.com or (504) 304-0781 option 2 from 7:30 AM to 4:30 PM CST, non-holiday weekdays.

Response: Thank you for supplying this information. We did reach out to GCR and obtained the latest data and the Airport had worked with the GCR folks to resolve the duplications.

7. **2.7 Based Aircraft Fleet Mix.** Update using validated BasedAircraft.com data.

Response: This was updated using the data received from basedaircraft.com

8. **2.8 General Aviation Operations Forecast.** As previously indicated, the 2017 data needs to be supported by local data (fuel slips, log books, etc.), not simply what is in the TAF.

Response: Please see response to Comment #1. Inventory of 2019 operations provided in Appendix A.

9. **2.8.4 Operations per Based Aircraft.** This is a really old methodology that our FAA Headquarters office has determined to be inaccurate due to variations in the percentage of itinerant operations

and overly optimistic. We would therefore not approve this preferred alternative and recommend deleting this as the method for determining future operations.

Response: This forecasting method was removed as suggested.

10. **2.9 Military Operations Forecast.** As previously discussed, the TAF is airport/state self-reported data that does not originate and is not validated by the FAA. Please determine what is currently at the airport and adjust this section accordingly. TFMSC shows three military operations in calendar year 2018.

TFMSC Report (Airport)								
From 01/2018 To 12/2018 Airport=C29 Service Type=Jet								
#	User Class	Departures	Arrivals	Total Operations	Departure Seats	Average Departure Seats	Arrival Seats	Average Arrival Seats
1	Air Carrier	42	42	84	237	5	243	5
2	General Aviation	139	137	276	817	5	802	5
3	Military	3	0	3	3	1	0	0
4	Air Taxi	2	2	4	23	11	23	11
Total:		186	181	367	1,080	5	1,068	5

Response: Very few military operations occur at C29. Some helicopter operations from nearby Truax ANG base at MSN have been seen on occasion but are not common. This section has been updated accordingly.

11. **2.10 Commercial Operations.** As previously stated, TAF data needs to be supported with local data. The latest ACAIS data shows that the only commercial service at C29 was by Morey Airplane Co. with 280 enplanements in calendar year 2017. Morey's website indicate that they fly Cessna 152s/172Ns/172Ss, which have the capacity to transport 2-4 people. That translates into 70-280 departures, with a possibility of 140-560 total operations, which is far less than the 2,500 TAF figure for 2017. TFMSC shows 100 air taxi / air carrier IFR flights in calendar year 2017 and 88 in calendar year 2018.

SCHEDULE TYPE		ENPLANEMENTS		
CARRIER NAME (CARRIER CODE)	SCHEDULED	NONSCHEDULED	TOTAL	
ATCO - Nonscheduled/On-Demand Air Carriers, filing FAA Form 1800-31.				
Morey Airplane Co, Inc. (AZSA)	0	280	280	
ATCO Total:	0	280	280	
Site Total:	0	280	280	

TFMSC Report (Airport)

From 01/2017 To 12/2017 | Airport=C29 | Service Type=Jet

# User Class	Departures	Arrivals	Total Operations	Departure Seats	Average Departure Seats	Arrival Seats	Average Arrival Seats
1 Air Carrier	48	50	98	327	6	339	6
2 General Aviation	157	153	310	954	6	935	6
3 Air Taxi	1	1	2	8	8	8	8
Total:	206	204	410	1,289	6	1,282	6

TFMSC Report (Airport)

From 01/2018 To 12/2018 | Airport=C29 | Service Type=Jet

# User Class	Departures	Arrivals	Total Operations	Departure Seats	Average Departure Seats	Arrival Seats	Average Arrival Seats
1 Air Carrier	42	42	84	237	5	243	5
2 General Aviation	139	137	276	817	5	802	5
3 Military	3	0	3	3	1	0	0
4 Air Taxi	2	2	4	23	11	23	11
Total:	186	181	367	1,080	5	1,068	5

Response: This section has been updated to use TFMSC and ACAIS data. One of the biggest commercial activities occurring at the Airport right now is the daily deliveries from Freight Runners Express and Pro Aire Cargo Consultants. Both of these companies are contracted to provide air freight deliveries for UPS, which has a delivery center located only 1.5 miles south of the Airport. These operations were lumped together in the commercial operations category.

The Morey Airplane Company reported that they have a Cessna 340 and a Cessna 310 that they utilize for charter flights. Morey reported 240 charter operations in 2019 but these were not reflected as air-taxi operations in TFMSC. Morey's charter operations were combined with other charter (air-taxi) operations identified in TFMSC and the air-freight operations to depict the overall commercial activity occurring at C29.

12. **2.12.2 Future Jet Operations.** For this airport, this section is critical for determining if the current runway and taxiway dimensions will satisfy existing and future demand. In order to paint a clear

and well reasoned picture for the reader about how and why jet traffic will increase, this section needs additional work.

- a. None of the future demand from the user survey data referenced in Section 2.4 has been included. If this data is being used to support future jet growth, the supporting letters/surveys need to include specific aircraft and yearly number of operations.

Response: The original 2018 user survey results are referenced and provided in Appendix C. Additionally, more specific documentation from known business users of the Airport were obtained and are additionally referenced in the chapter. Correspondence from the business users who have identified a need for additional airport facilities is provided in Appendix D.

- b. If you plan on using small jet aircraft as justification for existing/future aircraft length and will be using separate aircraft performance manuals for this justification instead of the charts provided in Advisory Circular 150/5325-4B, please add C29 specific data that shows the current and projected operations for each aircraft.

Response: Both the guidance in AC 150/5325-4B and individual aircraft manuals will be used. We plan to submit a runway length justification study (separately) and would like to obtain concurrence from FAA on a runway length that can be supported before advancing the facility requirements section and before taking this to the public or the Master Plan Advisory Committee.

- c. Please include a chart with historical and all of the forecasting methods like you did in section 2.6.6.

Response: A summary chart is now provided at the conclusion of all forecasting subjects.

- 13. **2.14 Critical Aircraft.** Based only on the TFMSC IFR data, the existing critical aircraft would be B-I. Please provide additional data and a more transparent argument if you wish to get to B-II for either the existing or future critical aircraft. Normally, B-I cannot be added to B-II to justify B-II.

TFMSC Report (Airport)									
From 01/2018 To 12/2018 Airport=C29									
Airplane #	Airplane Approach Category	Airplane Design Group	Departures	Arrivals	Total Operations	Departure Seats	Average Departure Seats	Arrival Seats	Average Arrival Seats
1	No Data	No Data	72	47	119	263	3	163	3
2	A	I	563	540	1,103	2,260	4	2,175	4
3	A	II	8	8	16	72	9	72	9
Sub-Total for A			571	548	1,119	2,332	4	2,247	4
4	B	I	438	481	919	1,767	4	1,741	3
5	B	II	85	87	172	517	6	532	6
Sub-Total for B			523	568	1,091	2,284	4	2,273	4
6	C	II	1	1	2	4	4	4	4
Sub-Total for II			86	88	174	521	6	536	6
7	D	I	3	0	3	3	1	0	0
Total:			1,170	1,164	2,334	4,886	4	4,687	4

Response: A more robust discussion on the design aircraft at C29 is now presented in Section 2.10. The most demanding aircraft at C29 are the turbine powered aircraft (small jets and turboprops). The size of these aircraft ranges from the high end of the B-I standards to the low end of B-II standards. The forecasts outline that while there are not 500 annual operations of Group II aircraft currently, it is reasonable to expect that they will eclipse this threshold over the course of the planning horizon. B-II is identified as the future design critical aircraft category, these planes are anticipated to be on the small end of this classification with wingspans closer to 49' wide than 79' wide.

14. **2.15 Forecast Summary and TAF Comparison.** Based solely on the data and arguments currently in your forecast submittal, the forecasted numbers are not strongly supported. We recommend either provide a stronger story with backup data and a clear line of logic; or changing your current forecast to a “high option” and develop a less aggressive “preferred option”. If you plan on extending the runway at this airport, we cannot predict if an EIS will be needed and will probably need to obtain APP-400 approval based on FAA’s Review and Approval of Aviation Forecasts (June 2008). If not, we are still required to make sure that the approved forecast is reasonable and will be providing it to APP-400 during the next TAF update. Either way, it is in your best interest to make the applicable changes during the master planning process.

Response: We appreciate your review and hope that the updated chapter is received as a stronger, more documented case for the projected activity at C29. The chapter is structured to present low, medium and high-growth forecasting scenarios based on the above comment / suggestion. By structuring the forecasts in this way, we hope it will provide the City (and its surrounding residents) an idea of how the activity at the airport will change under a range of growth conditions; and better assist them in the decision making process regarding potential future actions.

Exception to Headquarters Review

FAA headquarters review is not required for forecasts at non-towered general aviation and reliever airports where:

- five and ten year forecasts do not exceed 200 based aircraft or 200,000 total annual operations, and
- the related development is not expected to require an EIS and/or BCA.

FAA field offices should ensure that these forecasts are thorough, supported by reasonable planning assumptions and current data, and developed using appropriate methodologies. These forecasts should be provided to APP-400 and APO-110 for use in the annual update of the TAF. APO-110, when updating the TAF, may require additional information, especially if the forecast exceeds normal expectations without adequate justification.