

## APPENDIX B. AIR SERVICE ACTIVITY ESTIMATES

The purpose of this estimate is to identify the effect that scheduled air service could have on airfield and terminal capacity and to identify potential operations levels and fleet mix for the noise analysis. Because there is not a consistent history of air carrier service at Fort Worth Meacham International Airport (FTW), the evolution of air service development scenarios in this Appendix is based on the markets and equipment identified in the preliminary Air Service Analysis in Chapter 3. In that study, the markets with the greatest short-term potential were Houston and Atlanta. The two markets with longer term potential were Denver and San Antonio. The study suggests that the Regional Jet is the most likely aircraft for these markets.

### AIR SERVICE DEVELOPMENT SCENARIOS

To determine the amount of terminal required if air service were feasible at Meacham, two scenarios were developed reflecting low and optimistic growth rates. If activity were below the low scenario, a carrier would likely discontinue service. The optimistic scenario would provide an opportunity for carriers to expand service and markets more rapidly. Table B-1 identifies the regional jet sizes and carriers using those aircraft that also serve the Dallas-Fort Worth market.

Table B-1. Regional Jet Sizes and Carriers Using These Aircraft That Are Serving the Dallas-Fort Worth Market

<b>Aircraft</b>	<b>Seats</b>	<b>Airlines</b>
Bombardier CRJ200	50	ASA, SkyWest
Bombardier CRJ700	70	ASA, AA Eagle
Bombardier CRJ900	90	New to market
Embraer ERJ 135	37	AA Eagle, Cont. Exp.
Embraer ERJ 140	44	AA Eagle, Cont. Exp.
Embraer ERJ 145	44	(Longer Range ERJ 140)
Embraer ERJ 170/175	70/78	New to market

### SLOW GROWTH SCENARIO

In the slow growth scenario, it is assumed that each of the four markets served through Meacham – Houston, Atlanta, Denver, and San Antonio – grow to less than 10 percent of the average passengers daily each way (PDEW) for the entire Dallas-Fort Worth market. The markets start rather slowly at a 45 percent load factor (L/F) and grow to about a 65 percent load factor. The Houston and Atlanta markets are started immediately and grown for ten years. The Denver market is started in the fourth year and the San Antonio market, in the sixth year. Growth of the four markets is shown in the following four tables.

Table B-2. Houston Market – Slow Growth Scenario.

Year	Type Aircraft	Seats per Aircraft	Daily Arrivals		Annual			PDEW <sup>4</sup>
			Weekday	Weekend	Ops <sup>1</sup>	L/F <sup>2</sup>	PAX <sup>3</sup>	
1	ERJ	44	7	4	4,472	45%	88,546	121
2	ERJ	44	7	4	4,472	50%	98,384	135
3	ERJ	44	7	4	4,472	55%	108,222	148
4	ERJ	44	7	4	4,472	60%	118,061	162
5	ERJ	44	7	5	4,680	65%	133,848	183
6	ERJ	44	8	5	5,200	60%	137,280	188
7	ERJ	44	8	5	5,200	60%	137,280	188
8	ERJ	44	8	5	5,200	62%	141,856	194
9	ERJ	44	9	6	5,928	64%	166,932	229
10	ERJ	44	9	6	5,928	65%	169,541	232

1. Ops – Operations 2. L/F – Load Factor 3. PAX – Total Passengers. 4. PDEW – Passengers Daily Each Way.

Table B-3. Atlanta Market – Slow Growth Scenario.

Year	Type Aircraft	Seats per Aircraft	Daily Arrivals		Annual			PDEW <sup>4</sup>
			Weekday	Weekend	Ops <sup>1</sup>	L/F <sup>2</sup>	PAX <sup>3</sup>	
1	CRJ	50	3	2	988	60%	29,640	41
2	CRJ	50	3	2	988	61%	30,134	41
3	CRJ	50	3	2	988	62%	30,628	42
4	CRJ	50	3	2	988	64%	31,616	43
5	CRJ	50	3	2	988	65%	32,110	44
6	CRJ	50	4	3	1,352	60%	40,560	56
7	CRJ	50	4	3	1,352	62%	41,912	57
8	CRJ	50	5	3	1,612	65%	52,390	72
9	CRJ	50	5	4	1,716	62%	53,196	73
10	CRJ	50	5	4	1,716	65%	55,770	76

1. Ops – Operations 2. L/F – Load Factor 3. PAX – Total Passengers. 4. PDEW – Passengers Daily Each Way.

Table B-4. Denver Market – Slow Growth Scenario.

Year	Type Aircraft	Seats per Aircraft	Daily Arrivals		Annual			PDEW <sup>4</sup>
			Weekday	Weekend	Ops <sup>1</sup>	L/F <sup>2</sup>	PAX <sup>3</sup>	
4	ERJ	44	3	2	1,976	50%	43,472	60
5	ERJ	44	3	2	1,976	53%	46,080	63
6	ERJ	44	3	2	1,976	55%	47,819	66
7	ERJ	44	3	2	1,976	58%	50,428	69
8	ERJ	44	3	2	1,976	62%	53,905	74
9	ERJ	44	3	2	1,976	65%	56,514	77
10	ERJ	44	3	2	1,976	70%	60,861	83

1. Ops – Operations 2. L/F – Load Factor 3. PAX – Total Passengers. 4. PDEW – Passengers Daily Each Way.

Table B-5. San Antonio Market – Slow Growth Scenario.

Year	Type Aircraft	Seats per Aircraft	Daily Arrivals		Annual			PDEW <sup>4</sup>
			Weekday	Weekend	Ops <sup>1</sup>	L/F <sup>2</sup>	PAX <sup>3</sup>	
6	ERJ	37	5	3	3,224	45%	53,680	74
7	ERJ	37	5	3	3,224	48%	57,258	78
8	ERJ	37	5	3	3,224	52%	62,030	85
9	ERJ	37	5	3	3,224	56%	66,801	92
10	ERJ	37	5	3	3,224	60%	71,573	98

1. Ops – Operations 2. L/F – Load Factor 3. PAX – Total Passengers. 4. PDEW – Passengers Daily Each Way.

**OPTIMISTIC GROWTH SCENARIO**

In the optimistic growth scenario, it is assumed that each of the four markets served through Meacham – Houston, Atlanta, Denver, and San Antonio – grow to about 20 percent of the PDEW for the entire Dallas-Fort Worth market. The markets start at a more optimistic load factor of 50 percent and grow to a 70 percent load factor. The Houston and Atlanta markets are started immediately and grown for ten years. The Denver market is started in the third year and the San Antonio market in the fifth year. Growth of the four markets is shown in the following four tables.

Table B-6. Houston Market – Optimistic Growth Scenario.

Year	Type Aircraft	Seats per Aircraft	Daily Arrivals		Annual			PDEW <sup>4</sup>
			Weekday	Weekend	Ops <sup>1</sup>	L/F <sup>2</sup>	PAX <sup>3</sup>	
1	CRJ	70	10	3	5,824	50%	203,840	279
2	CRJ	70	10	3	5,824	55%	224,224	307
3	CRJ	70	10	3	5,824	60%	244,608	335
4	CRJ	70	10	3	5,824	65%	264,992	363
5	CRJ	70	11	3	6,344	60%	266,448	365
6	CRJ	70	11	3	6,344	63%	279,770	383
7	CRJ	70	11	4	6,552	65%	298,116	408
8	CRJ	70	11	4	6,552	70%	321,048	440
9	CRJ	70	12	4	7,072	65%	321,776	441
10	CRJ	70	12	4	7,072	70%	346,528	475

1. Ops – Operations 2. L/F – Load Factor 3. PAX – Total Passengers. 4. PDEW – Passengers Daily Each Way.

Table B-7. Atlanta Market – Optimistic Growth Scenario.

Year	Type Aircraft	Seats per Aircraft	Daily Arrivals		Annual			PDEW <sup>4</sup>
			Weekday	Weekend	Ops <sup>1</sup>	L/F <sup>2</sup>	PAX <sup>3</sup>	
1	CRJ	50	10	3	2,912	50%	72,800	100
2	CRJ	50	10	3	2,912	60%	87,360	120
3	CRJ	50	10	3	2,912	65%	94,640	130
4	CRJ	50	10	3	2,912	68%	99,008	136
5	CRJ	50	10	4	3,016	70%	105,560	145
6	CRJ	50	11	4	3,276	60%	98,280	135
7	CRJ	50	11	4	3,276	63%	103,194	141
8	CRJ	50	11	4	3,276	65%	106,470	146
9	CRJ	50	12	5	3,640	65%	118,300	162
10	CRJ	50	12	5	3,640	70%	127,400	175

1. Ops – Operations 2. L/F – Load Factor 3. PAX – Total Passengers. 4. PDEW – Passengers Daily Each Way.

Table B-8. Denver Market – Optimistic Growth Scenario.

Year	Type Aircraft	Seats per Aircraft	Daily Arrivals		Annual			PDEW <sup>4</sup>
			Weekday	Weekend	Ops <sup>1</sup>	L/F <sup>2</sup>	PAX <sup>3</sup>	
3	ERJ	44	5	4	3,432	55%	83,054	114
4	ERJ	44	5	4	3,432	58%	87,585	120
5	ERJ	44	5	4	3,432	62%	93,625	128
6	ERJ	44	5	4	3,432	63%	95,135	130
7	ERJ	44	5	4	3,432	65%	98,155	134
8	ERJ	44	6	5	4,160	65%	118,976	163
9	ERJ	44	6	5	4,160	70%	128,128	176
10	ERJ	44	6	5	4,160	75%	137,280	188

1. Ops – Operations 2. L/F – Load Factor 3. PAX – Total Passengers. 4. PDEW – Passengers Daily Each Way.

Table B-9. San Antonio Market – Optimistic Growth Scenario.

Year	Type Aircraft	Seats per Aircraft	Daily Arrivals		Annual			PDEW <sup>4</sup>
			Weekday	Weekend	Ops <sup>1</sup>	L/F <sup>2</sup>	PAX <sup>3</sup>	
5	ERJ	44	5	3	3,224	50%	70,928	97
6	ERJ	44	5	3	3,224	58%	82,276	113
7	ERJ	44	5	3	3,224	62%	87,951	120
8	ERJ	44	5	3	3,224	65%	92,206	126
9	ERJ	50	6	4	3,952	62%	122,512	168
10	ERJ	50	6	4	3,952	65%	128,440	176

1. Ops – Operations 2. L/F – Load Factor 3. PAX – Total Passengers. 4. PDEW – Passengers Daily Each Way.

## SUMMARY OF AIR SERVICE DEVELOPMENT SCENARIOS

The following table identifies the total levels of airport activity that would be produced by the scenarios developed in the previous two sections. This should be considered as a range of feasible activity if the City of Fort Worth decides to actively pursue development of air service at Meacham. In the summary table at the end of this chapter, it is assumed that the first year of air service starts in 2005. The level of activity shown in that table is an average of the low and high values in the following table.

Table B-10. Total Levels of Low and High Airport Activity Based on Service Development Scenarios\*.

Year	Maximum Daily Arrivals		Total Annual			
			Operations		Enplanements	
	Low	High	Low	High	Low	High
1	10	20	5,500	9,000	59,100	138,300
2	10	20	5,500	8,700	64,300	155,800
3	10	25	5,500	12,200	69,400	211,200
4	13	25	7,400	12,200	96,600	225,800
5	13	31	7,600	16,000	106,000	268,300
6	20	32	11,800	16,300	139,700	277,700
7	20	32	11,800	16,500	143,400	293,700
8	21	33	12,000	17,200	155,100	319,400
9	22	36	12,800	18,800	171,700	345,400
10	22	36	12,800	18,800	178,900	369,800

\* Totals of Operations and Enplanements from previous tables are rounded.