

Appendix C
MATERIALS SUPPORTING ORIGINAL FORECAST
Colorado Springs Airport

Prepared by:

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Appendix C
MATERIALS SUPPORTING ORIGINAL FORECAST
Colorado Springs Airport

This appendix provides material supporting the original forecast of aviation demand prepared for the master plan in the summer of 2010, as documented in Chapter 3. It included four primary sections:

- Alternative Forecast Scenarios – which describes alternative forecast scenarios for enplaned passengers, air cargo, and total aircraft operations.
- Peer Airports – a comparison of COS to its peer airports
- Regression analysis – a summary of the regression equation used to project passenger enplanements
- FAA approval – a letter documenting FAA’s approval of the original forecast

ALTERNATIVE FORECAST SCENARIOS

This appendix summarizes the alternative forecasts of enplaned passengers, air cargo, and total aircraft operations for COS. In addition to the baseline forecasts of aviation demand presented in Chapter 5, “Aviation Demand Forecasts”, two alternative scenarios were prepared for planning purposes and used as tools to manage uncertainty and to anticipate the facility requirements associated with higher levels of aviation activity and alternative fleet mixes compared with the baseline forecast.

Enplaned Passenger Alternative Forecast Scenarios

The enplaned passenger alternative forecast scenarios are presented in Tables C-1 and C-2. In Scenario 1, the number of enplaned passengers at COS is forecast to increase an average of 4.0% per year between 2009 and 2035, from 929,600 in 2009 to 2.6 million in 2035, as shown in Table C-1. In Scenario 2, the number of enplaned passengers at COS is forecast to increase an average of 5.2% per year between 2009 and 2035, from 929,600 in 2009 to 3.4 million in 2035, as shown in Table C-2. Tables C-1 and C-2 also show the passenger airline departure data associated with these levels of enplaned passengers.

Scenario 1 Forecast Assumptions

In Scenario 1, it was assumed that the majority of market leakage to Denver (80%) would be recaptured gradually through 2035 with a fleet mix that has a larger share of narrowbody aircraft than the baseline scenario. Accordingly, the Scenario 1 forecasts of enplaned passengers at COS were based on:

- A stronger and more rapid economic recovery than assumed in the baseline forecast resulting in a 4.2% increase in enplaned passengers for 2011, compared with a 3.5% increase in 2011 in the baseline forecast
- Oil prices (and fuel prices) would gradually increase with the improved economic conditions relative to 2009 levels
- The cost of travel would increase at faster rate than in the baseline scenario as a result of gradually increasing fuel prices and improved economic conditions
- Narrowbody aircraft would account for a gradually increasing share of the fleet mix beginning in 2011, increasing to 38% of passenger airline departures in 2035
- Average seat size would increase from 72 in 2009 to 103 in 2035

Passenger load factors would be maintained (81% to 82%) in 2010 and 2011 with gradual growth through 2035, reflecting an increased presence of low cost carriers and the trend of increased aircraft utilization in the industry as a whole Scenario 1 provides the basis for evaluating the facility planning implications of an aircraft fleet mix with a larger share of narrowbody aircraft and higher enplanement levels than the baseline forecast.

Scenario 2 Forecast Assumptions

In Scenario 2, it was assumed that all of the market leakage to Denver would be recaptured in the intermediate-term (assumed by 2016) with a fleet mix dominated by narrowbody aircraft rather than regional jets. Accordingly, the Scenario 2 forecasts of enplaned passengers at COS were based on:

- A stronger and more rapid economic recovery than assumed in both the baseline and Scenario 1 forecasts resulting in significant 15.9% increase in enplaned passengers in 2011
- Oil prices (and fuel prices) would gradually increase with the improved economic conditions relative to 2009 levels, similar to the Scenario 1
- The cost of travel would increase at faster rate than in the baseline scenario as a result of gradually increasing fuel prices and improved economic conditions, similar to Scenario 1
- Narrowbody aircraft would account for an increasing share of the fleet mix beginning in 2011, increasing to 30% in 2014 and 47% of passenger airline departures in 2035
- Average seat size would increase from 72 in 2009 to 111 in 2035

- Passenger load factors would be maintained (81% to 82%) in 2010 and 2011 with gradual growth through 2035, reflecting an increased presence of low cost carriers and the trend of increased aircraft utilization in the industry as a whole

Scenario 2 provides the basis for evaluating the facility planning implications of an aircraft fleet mix dominated by narrowbody aircraft and higher enplanement levels than the baseline forecast. The enplanement levels in 2035 would provide insight should the airport return to (or surpass) the levels of activity experienced in the mid-1990s with the Western Pacific Airlines hub operation.

Table C-1
FORECASTS OF ENPLANED PASSENGERS: SCENARIO 1
 Colorado Springs Airport

	Historical 2009	Estimated 2010	Scenario 1 forecast (market recaptured gradually)				
			2011	2014	2019	2029	2035
Enplaned passengers							
Mainline (a)	255,950	258,400	274,400	328,400	441,700	788,000	1,099,500
Regional affiliate	640,977	625,600	645,800	711,300	830,900	1,122,500	1,346,100
Low cost carriers	32,673	37,700	40,000	47,900	64,500	115,600	162,300
	<u>929,600</u>	<u>921,700</u>	<u>960,200</u>	<u>1,087,600</u>	<u>1,337,100</u>	<u>2,026,100</u>	<u>2,607,900</u>
Average annual percent change		-0.8%	4.2%	4.2%	4.2%	4.2%	4.3%
Passenger airline aircraft departures							
Mainline (a)	2,287	2,250	2,390	2,850	3,800	6,640	9,160
Regional affiliate	13,718	12,760	13,110	14,130	15,620	18,650	20,610
Low cost carriers	249	280	340	410	550	970	1,360
	<u>16,254</u>	<u>15,290</u>	<u>15,840</u>	<u>17,390</u>	<u>19,970</u>	<u>26,260</u>	<u>31,130</u>
Average annual percent change		-5.9%	3.6%	3.2%	2.8%	2.8%	2.9%
Average daily passenger airline aircraft departures							
Mainline (a)	6	6	7	8	10	18	25
Regional affiliate	38	35	36	39	43	51	56
Low cost carriers	1	1	1	1	2	3	4
	<u>45</u>	<u>42</u>	<u>43</u>	<u>48</u>	<u>55</u>	<u>72</u>	<u>85</u>
Average annual percent change		-5.7%	3.3%	3.2%	2.8%	2.8%	2.9%

The forecasts presented in this table were prepared using the information and assumptions given in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts will not be realized and unanticipated events and circumstances may occur. Therefore, there are likely to be differences between the forecast and actual results, and those differences may be material.

Note: The base year for the forecasts is 2009.

(a) Includes charters.

Sources: Historical: Colorado Springs Airport records. Forecast: LeighFisher, June 2010.

Table C-2
FORECASTS OF ENPLANED PASSENGERS: SCENARIO 2
 Colorado Springs Airport

	Historical 2009	Estimated 2010	Scenario 2 forecast (market recaptured by 2016)				
			2011	2014	2019	2029	2035
Enplaned passengers							
Mainline (a)	255,950	258,400	340,800	627,100	905,300	1,321,600	1,629,100
Regional affiliate	640,977	625,600	677,500	854,900	1,052,300	1,392,200	1,588,900
Low cost carriers	32,673	37,700	49,700	91,600	132,300	193,200	238,200
	<u>929,600</u>	<u>921,700</u>	<u>1,068,000</u>	<u>1,573,600</u>	<u>2,089,900</u>	<u>2,907,000</u>	<u>3,456,200</u>
Average annual percent change		-0.8%	15.9%	13.8%	5.8%	3.4%	2.9%
Passenger airline aircraft departures							
Mainline (a)	2,287	2,250	2,970	5,440	7,780	11,130	13,550
Regional affiliate	13,718	12,760	13,660	16,590	19,250	22,660	23,920
Low cost carriers	249	280	430	780	1,120	1,620	1,990
	<u>16,254</u>	<u>15,290</u>	<u>17,060</u>	<u>22,810</u>	<u>28,150</u>	<u>35,410</u>	<u>39,460</u>
Average annual percent change		-5.9%	11.6%	10.2%	4.3%	2.3%	1.8%
Average daily passenger airline aircraft departures							
Mainline (a)	6	6	8	15	21	30	37
Regional affiliate	38	35	37	45	53	62	66
Low cost carriers	1	1	1	2	3	4	5
	<u>45</u>	<u>42</u>	<u>47</u>	<u>62</u>	<u>77</u>	<u>97</u>	<u>108</u>
Average annual percent change		-5.7%	11.3%	10.2%	4.3%	2.3%	1.8%

The forecasts presented in this table were prepared using the information and assumptions given in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts will not be realized and unanticipated events and circumstances may occur. Therefore, there are likely to be differences between the forecast and actual results, and those differences may be material.

Note: The base year for the forecasts is 2009.

(a) Includes charters.

Sources: Historical: Colorado Springs Airport records. Forecast: LeighFisher, June 2010.

Air Cargo Alternative Forecast Scenarios

The alternative air cargo forecast scenarios are presented in Tables C-3 and C-4. In Scenario 1, air cargo tonnage is forecast to increase an average of 3.2% per year between 2009 and 2035, from 11,484 in 2009 to 26,181 in 2035, as shown in Table C-3. In Scenario 2, air cargo tonnage is forecast to increase an average of 4.8% per year between 2009 and 2035, from 11,484 in 2009 to 38,485 in 2035, as shown in Table C-4. Tables C-3 and C-4 also show the cargo airline departures that associated with the levels of air cargo tonnage.

Scenario 1 Forecast Assumptions

In Scenario 1, it is assumed that an additional integrated cargo carrier would initiate service in the near-term. Scenario 1 offers insight into the cargo facility planning implications should two integrated carriers serve the airport. While the number of all-cargo operations are not significantly greater than that forecast in the baseline scenario, additional space would have to be allocated to the cargo carrier, potentially increasing the amount of space required for air cargo operations on the airport grounds. Accordingly, the Scenario 1 forecasts of air cargo activity were based on:

- Stronger economic recovery than expected within the baseline forecast scenario.
- An additional integrated cargo carrier (Federal Express currently serves the Airport) would initiate regular service; the carrier would gradually increase the number of flights per week with an accompanying growth in cargo tonnage serving the United States

Scenario 2 Forecast Assumptions

Scenario 2 assumes that an integrated cargo carrier would initiate regional air cargo hub operations in the near-term. Scenario 2 offers insight into the cargo facility planning implications should two integrated carriers serve the airport, with one of the carriers operating a regional hub. With regional hub operations, the spatial needs of the hub carrier would be significantly greater than that of an integrated carrier operating two or three flights per day. The hub carrier would likely operate both narrowbody and small feeder aircraft which would affect the spatial allocation dedicated to this increase cargo activity. Accordingly, the Scenario 2 forecasts of air cargo activity were based on:

- Stronger economic recovery than expected within the baseline forecast scenario.
- The cargo hub carrier would employ a mix of narrowbody and feeder aircraft serving the United States
- Cargo tonnage would increase in accordance with the growth of the hub operation over time.

Table C-3
FORECASTS OF TOTAL AIR CARGO: SCENARIO 1
Colorado Springs Airport

	Historical 2009	Estimated 2010	Scenario 1 forecast (additional integrated carrier)				
			2011	2014	2019	2029	2035
Total air cargo (tons)							
All-Cargo airlines							
Integrated carrier	11,310	11,490	11,720	14,810	17,110	22,360	25,960
Regional feeder	116	110	110	120	120	130	130
	<u>11,426</u>	<u>11,600</u>	<u>11,830</u>	<u>14,930</u>	<u>17,230</u>	<u>22,490</u>	<u>26,090</u>
Passenger airlines	58	72	72	74	78	86	91
Total Airport--air cargo	<u>11,484</u>	<u>11,672</u>	<u>11,902</u>	<u>15,004</u>	<u>17,308</u>	<u>22,576</u>	<u>26,181</u>
Average annual percent change	--	1.6%	2.0%	8.0%	2.9%	2.7%	2.5%
 All-cargo airline aircraft departures							
All-Cargo airlines							
Integrated carrier	491	480	480	570	600	660	700
Regional feeder	335	340	340	340	340	340	340
Total Airport--all-cargo airline departures	<u>826</u>	<u>820</u>	<u>820</u>	<u>910</u>	<u>940</u>	<u>1,000</u>	<u>1,040</u>
Average annual percent change	--	-0.7%	0.0%	3.5%	0.7%	0.6%	0.7%
 Cargo per operation (tons)							
All-Cargo airlines							
Integrated carrier	11.5	12.0	12.2	13.0	14.3	16.9	18.5
Regional feeder	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Total	<u>6.9</u>	<u>7.1</u>	<u>7.2</u>	<u>8.2</u>	<u>9.2</u>	<u>11.2</u>	<u>12.5</u>

The forecasts presented in this table were prepared using the information and assumptions given in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts will not be realized and unanticipated events and circumstances may occur. Therefore, there are likely to be differences between the forecast and actual results, and those differences may be material.

Note: Includes enplaned and deplaned cargo in tons.

Sources: Historical: Colorado Springs Airport records. Forecast: LeighFisher, June 2010.

Table C-4
FORECASTS OF TOTAL AIR CARGO: SCENARIO 2
 Colorado Springs Airport

	Historical 2009	Estimated 2010	Scenario 2 forecast (regional feeder hub)				
			2011	2014	2019	2029	2035
Total air cargo (tons)							
All-Cargo airlines							
Integrated carrier	11,310	13,270	14,910	20,860	27,010	33,600	37,860
Regional feeder	116	150	180	300	430	500	550
	<u>11,426</u>	<u>13,420</u>	<u>15,090</u>	<u>21,160</u>	<u>27,440</u>	<u>34,100</u>	<u>38,410</u>
Passenger airlines	58	59	59	61	64	71	75
Total Airport--air cargo	<u>11,484</u>	<u>13,479</u>	<u>15,149</u>	<u>21,221</u>	<u>27,504</u>	<u>34,171</u>	<u>38,485</u>
Average annual percent change	--	17.4%	12.4%	11.9%	5.3%	2.2%	2.0%
All-cargo airline aircraft departures							
All-Cargo airlines							
Integrated carrier	491	560	620	800	930	970	1,000
Regional feeder	335	420	500	740	950	1,050	1,120
Total Airport--all-cargo airline departures	<u>826</u>	<u>980</u>	<u>1,120</u>	<u>1,540</u>	<u>1,880</u>	<u>2,020</u>	<u>2,120</u>
Average annual percent change	--	18.6%	14.3%	11.2%	4.1%	0.7%	0.8%
Cargo per operation (tons)							
All-Cargo airlines							
Integrated carrier	11.5	11.8	12.0	13.0	14.5	17.3	18.9
Regional feeder	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Total	<u>6.9</u>	<u>6.8</u>	<u>6.7</u>	<u>6.9</u>	<u>7.3</u>	<u>8.4</u>	<u>9.1</u>

The forecasts presented in this table were prepared using the information and assumptions given in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts will not be realized and unanticipated events and circumstances may occur. Therefore, there are likely to be differences between the forecast and actual results, and those differences may be material.

Note: Includes enplaned and deplaned cargo in tons.

Sources: Historical: Colorado Springs Airport records. Forecast: LeighFisher, June 2010.

Alternative Aircraft Operations Forecasts

Tables C-5 and C-6 provide aircraft operations forecasts for Scenarios 1 and 2. In Table C-5, the passenger and cargo airline operations are shown as derived from the enplaned passenger and air cargo tonnage totals associated with Scenario 1; Table C-6 provides the same for Scenario 2.

Table C-5
FORECASTS OF TOTAL AIRCRAFT OPERATIONS BY TYPE: SCENARIO 1
 Colorado Springs Airport

	Historical 2009	Estimated 2010	Scenario 1 (market recaptured gradually)				
			2011	2014	2019	2029	2035
Passenger airline aircraft operations							
Mainline (a)	4,574	4,500	4,780	5,700	7,600	13,280	18,320
Regional affiliate (b)	27,436	25,620	26,220	28,260	31,240	37,300	41,220
Low cost carriers (c)	498	560	680	820	1,100	1,940	2,720
Total passenger operations	32,508	30,680	31,680	34,780	39,940	52,520	62,260
Average annual percent change	--	-5.6%	3.3%	3.2%	2.8%	2.8%	2.9%
All-cargo airline aircraft operations							
Air carrier	982	960	960	1,140	1,200	1,320	1,400
Air taxi	670	680	680	680	680	680	680
Total all-cargo operations	1,652	1,640	1,640	1,820	1,880	2,000	2,080
Average annual percent change	--	-0.7%	0.0%	3.5%	0.7%	0.6%	0.7%
A/DACG aircraft operations							
	318	500	500	500	500	500	500
Average annual percent change	--	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
General aviation operations							
Itinerant	34,739	35,090	35,520	36,870	39,350	44,870	48,590
Local	33,672	33,670	34,090	35,370	37,630	42,760	46,330
Total general aviation operations	68,411	68,760	69,610	72,240	76,980	87,630	94,920
Average annual percent change	--	0.5%	1.2%	1.2%	1.3%	1.3%	1.3%
Military operations							
Itinerant	19,100	19,100	19,100	19,100	19,100	19,100	19,100
Local	19,359	19,360	19,360	19,360	19,360	19,360	19,360
Total military operations	38,459	38,460	38,460	38,460	38,460	38,460	38,460
Other activity (d)							
	3,948	3,800	3,900	4,000	4,300	4,900	5,200
Total airport--aircraft operations	145,296	143,660	145,610	151,620	161,880	185,830	203,240
Average annual percent change	--	-1.1%	1.4%	1.4%	1.3%	1.4%	1.5%

The forecasts presented in this table were prepared using the information and assumptions given in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts will not be realized and unanticipated events and circumstances may occur. Therefore, there are likely to be differences between the forecast and actual results, and those differences may be material.

Note: Aircraft operations include departures and arrivals.

- (a) Includes charter airlines.
- (b) Includes Frontier Airline regional affiliates Lynx Aviation and Republic Airlines.
- (c) Allegiant Air was the only low cost carrier serving the Airport in 2009.
- (d) Includes nonscheduled and empty flights. Other operations accounted for 2.7% of commercial airline (passenger and all-cargo) operations in 2009 and are assumed to account for this share in future years.

Sources Historical: City of Colorado Springs records and U.S. Department of Transportation, Federal Aviation Administration, ATADS online database. Forecast: LeighFisher, June 2010.

Table C-6
FORECASTS OF TOTAL AIRCRAFT OPERATIONS BY TYPE: SCENARIO 2
 Colorado Springs Airport

	Historical 2009	Estimated 2010	Scenario 2 (market recaptured by 2016)				
			2011	2014	2019	2029	2035
Passenger airline aircraft operations							
Mainline (a)	4,574	4,500	5,940	10,880	15,560	22,260	27,100
Regional affiliate (b)	27,436	25,620	27,320	33,180	38,500	45,320	47,840
Low cost carriers (c)	498	560	860	1,560	2,240	3,240	3,980
Total passenger operations	32,508	30,680	34,120	45,620	56,300	70,820	78,920
Average annual percent change	--	-5.6%	11.2%	10.2%	4.3%	2.3%	1.8%
All-cargo airline aircraft operations							
Air carrier	982	1,120	1,240	1,600	1,860	1,940	2,000
Air taxi	670	840	1,000	1,480	1,900	2,100	2,240
Total all-cargo operations	1,652	1,960	2,240	3,080	3,760	4,040	4,240
Average annual percent change	--	18.6%	14.3%	11.2%	4.1%	0.7%	0.8%
A/DACG aircraft operations							
	318	500	500	500	500	500	500
Average annual percent change	--	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
General aviation operations							
Itinerant	34,739	35,090	35,520	36,870	39,350	44,870	48,590
Local	33,672	33,670	34,090	35,370	37,630	42,760	46,330
Total general aviation operations	68,411	68,760	69,610	72,240	76,980	87,630	94,920
Average annual percent change	--	0.5%	1.2%	1.2%	1.3%	1.3%	1.3%
Military operations							
Itinerant	19,100	19,100	19,100	19,100	19,100	19,100	19,100
Local	19,359	19,360	19,360	19,360	19,360	19,360	19,360
Total military operations	38,459	38,460	38,460	38,460	38,460	38,460	38,460
Other activity (d)							
	3,948	3,800	4,000	4,400	5,000	5,700	6,100
Total airport--aircraft operations							
	145,296	143,980	148,750	164,120	180,820	206,970	222,960
Average annual percent change	--	-0.9%	3.3%	3.3%	2.0%	1.4%	1.2%

The forecasts presented in this table were prepared using the information and assumptions given in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts will not be realized and unanticipated events and circumstances may occur. Therefore, there are likely to be differences between the forecast and actual results, and those differences may be material.

Note: Aircraft operations include departures and arrivals.

- (a) Includes charter airlines.
- (b) Includes Frontier Airline regional affiliates Lynx Aviation and Republic Airlines.
- (c) Allegiant Air was the only low cost carrier serving the Airport in 2009.
- (d) Includes nonscheduled and empty flights. Other operations accounted for 2.7% of commercial airline (passenger and all-cargo) operations in 2009 and are assumed to account for this share in future years.

Sources: Historical: City of Colorado Springs records and U.S. Department of Transportation, Federal Aviation Administration, ATADS online database. Forecast: LeighFisher, June 2010.

PEER AIRPORTS

This appendix summarizes a comparison of COS with other small hub airport peers conducted as part of the preparation of aviation demand forecasts for the Master Plan Update. The objective was to better understand the performance of Colorado Springs Airport relative to some of its peers and to evaluate the key drivers at peer airports in preparing forecasts of aviation demand for the Airport. A number of characteristics and metrics were used to compare Colorado Springs Airport with 11 peer airports, the average of the 12 airports, and the average of the top 30 small hub airports in the U.S. according to passenger activity.

Note: the peer airports presentation on the following pages was prepared by Jacobs Consultancy in March 2010. Jacobs Consultancy's name as of the date of this publication is LeighFisher.



Peer Airport Comparison

Colorado Springs Airport

Prepared for the **City of Colorado Springs**

March 2010



Contents

- Introduction
- Key drivers
- Peer airport identification
- Enplaned passengers
- Seats
- Load factor
- Airline yield

- As part of the preparation of aviation activity forecasts for the Master Plan Update, a comparison to other small hub airport peers was conducted. The objective was to better understand the performance of Colorado Springs Airport relative to some of its peers.
- Throughout the presentation, each characteristic or metric for the Colorado Springs Airport is compared to that of 11 peer airports, the average of the 12 airports, and the average of the top 30 small hub airports in the U.S. according to passenger activity.
- This evaluation informed the preparation of baseline forecasts as well as the definition of alternative demand scenarios.



Bombardier Q400

ECONOMIC HEADLINES

- **March 5, 2010**
U.S. Consumer Credit Rises for First Time in Year
In an encouraging sign for the economy, U.S. consumers increased their debt in January for the first time in a year, signaling that household demand may be on the upswing.
- **March 5, 2010**
U.S. Jobless Rate Steady at 9.7%
The number of people filing for initial unemployment benefits declined according to the Labor Department showing signs that the labor market may have turned the corner.
- **January 29, 2010**
U.S. GDP Surges 5.7% in Fourth Quarter of 2009
The U.S. economy grew a better-than-expected 5.9 percent in the fourth quarter of 2009. The stronger surge in economic growth followed a 2.2% increase in GDP in the third quarter after four quarters of contraction.

Key Drivers of Aviation Activity

Key Drivers

- Economic recovery
- Oil prices
- COS seating capacity
- COS average aircraft size
- COS load factors
- Cost of travel

- The following key drivers were examined to inform the forecast scenario assumptions.
- **Economic recovery** – the duration and strength of the recovery could distinguish the forecast scenarios (e.g. low forecast scenario may project late recovery).
- **Oil prices** – the volatility of oil prices could help to define alternative forecast scenarios. Will oil prices remain around \$70 to \$90 per barrel, or return to peak prices of \$120 or more? What affect will alternative assumptions have on future aviation demand?
- **COS seating capacity** – using published schedules, near-term seating capacity can be estimated; alternative scenarios may be used to consider potential long-term developments.
- **COS average aircraft size** – will regional/small capacity jets continue to dominate the market in the long-term? Will large turboprops continue to play a role? Should one of the scenarios anticipate a return of narrowbody aircraft? Is this likely?
- **COS load factors** – load factors are strong for COS operators, will this continue? What effect might these load factors have on fleet mix?
- **Cost of travel** – similar to the assumptions for an economic recovery, the cost of travel could distinguish the forecast scenarios.



Bombardier C Series

AIRLINE INDUSTRY HEADLINES

- **March 1, 2010**
Things are Looking Up for U.S. Airlines
The industry is beginning to show signs of a recovery, with modest increases in revenue and forecasts of growing demand this year.
- **February 26, 2010**
Bombardier Gets \$3.1 Billion Order From Republic Airways
Republic will be the U.S. launch customer for Bombardier's new C Series, providing the Canadian manufacturer with a crucial foothold in the world's largest domestic airline market before its larger rivals have their own new-technology offerings ready.
- **February 24, 2010**
U.S. Airline Passenger Revenue Rose in January
Passenger revenue at U.S. airlines rose 1.4% in January compared with the same month a year ago, reversing 14 consecutive months of declines, according to the Air Transport Association trade group.

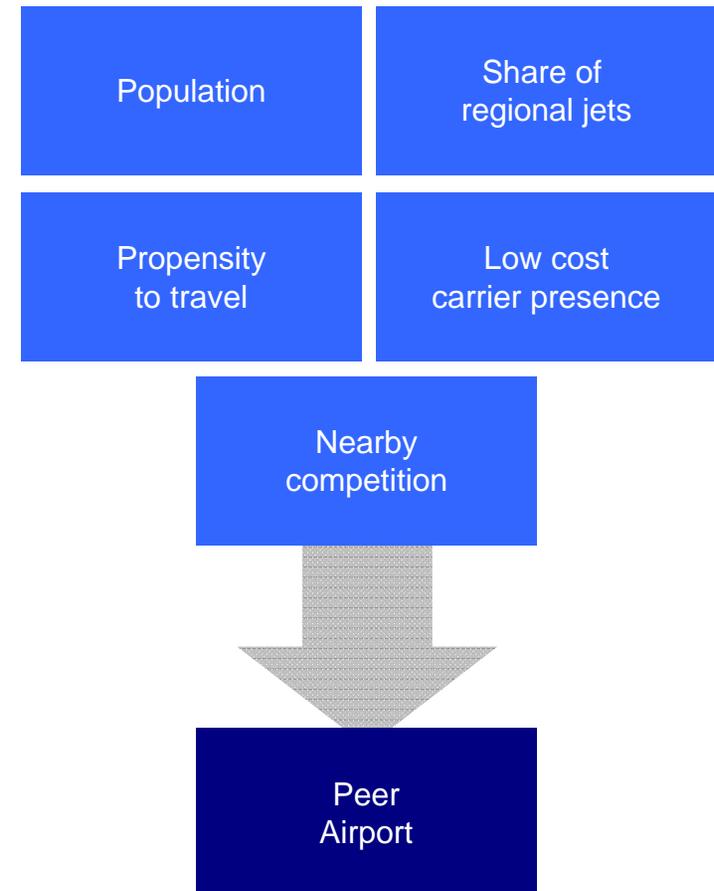
Peer Airport Identification

Takeaways

- Peer airports identified by the evaluation include those serving:

Sarasota, FL
Akron, OH
Dayton, OH
Portland, ME
Albany, NY
Little Rock, AR
Greensboro, NC
Des Moines, IA
Rochester, NY
Grand Rapids, MI
Madison, WI

- To identify which airports should be included for comparison purposes, those with similar passenger activity levels were evaluated in terms of the following characteristics:
 - Regional population
 - Low cost carrier presence and share of market
 - Share of regional jets in aircraft fleet mix
 - P propensity to travel (trips per person)
 - Distance and drive time to nearby medium and large hub airports
- Airports with outlying data points were eliminated, for example:
 - Long Island McArthur Airport served just over 1 million enplanements in 2008, but is located in a region with a population of nearly 8 million people (COS had just under 1 million enplanements in a region with just over 600 thousand people)
 - Orlando Sanford Airport had 83% of its seats in 2008 offered by the low cost carrier Allegiant Air relative to COS' 10% share of seats offered by low cost carriers (including Allegiant and Frontier), in addition the airport is a "secondary" airport serving a much larger metropolitan area
 - Savannah / Hilton Head International experiences about 3.6 trips per person due to its location and demographics, relative to COS' more typical 1.6 trips per person



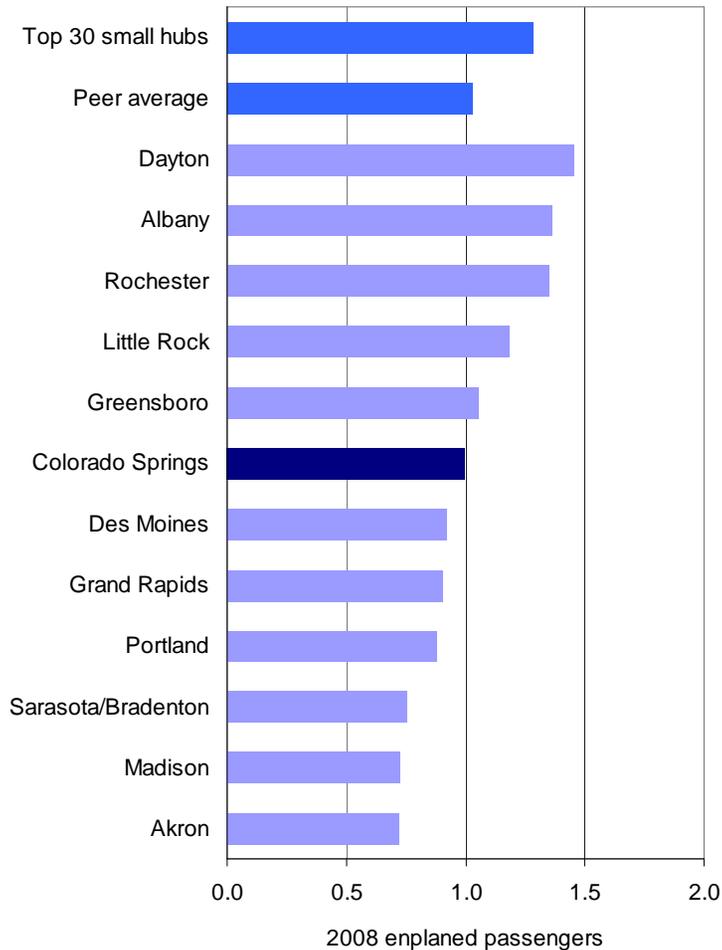
Enplaned Passengers

Takeaways

- COS served over 997 thousand enplaned passengers in 2008
- Since 2001, COS has typically served approximately 1 million enplaned passengers per year
- COS served over 1.2 million enplaned passengers in 2000, contributing to its average annual percent change of -2.3%

ENPLANED PASSENGERS AT PEER AIRPORTS

Ranked by 2008 enplaned passengers

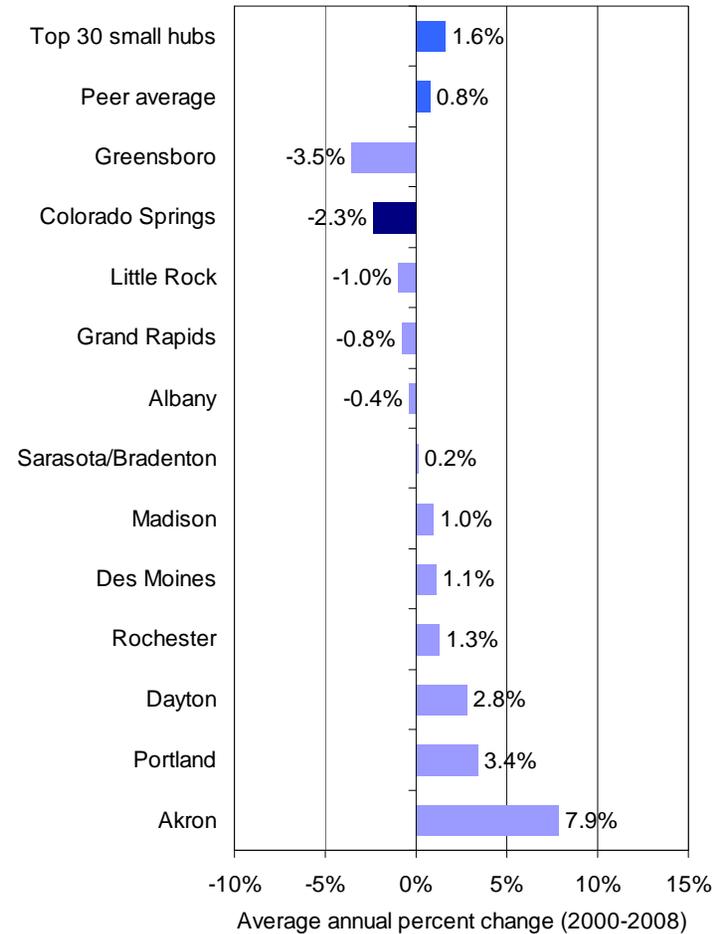


Source: U.S. Department of Transportation, FAA Air Carrier Activity Information System, www.faa.gov

TRENDS IN ENPLANED PASSENGERS

AT PEER AIRPORTS

Ranked by average annual percent change between 2000 and 2008



Source: U.S. Department of Transportation, FAA Air Carrier Activity Information System, www.faa.gov

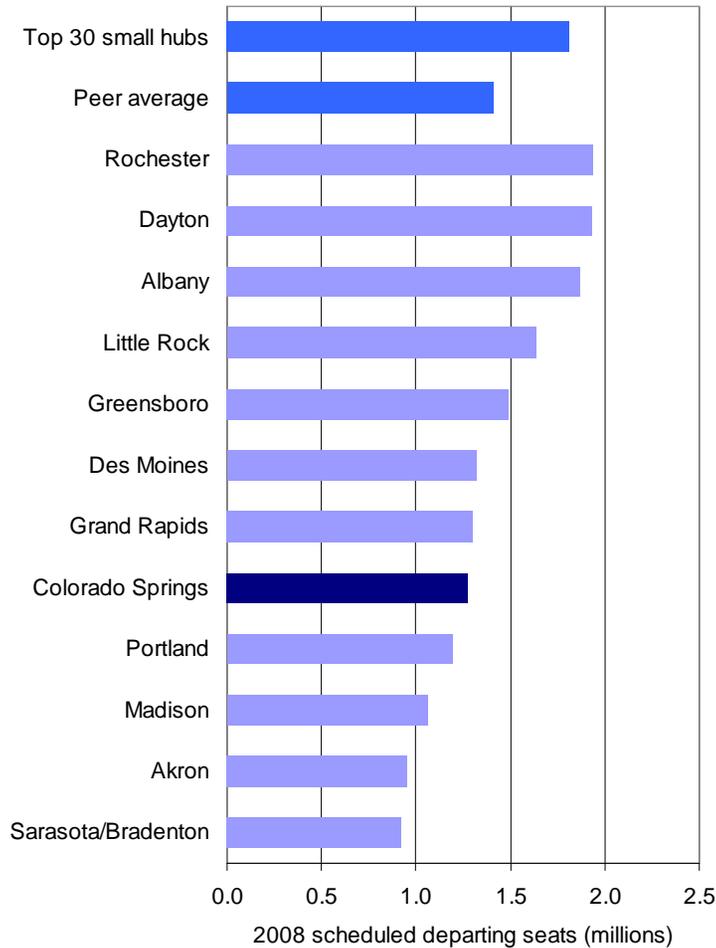
Seats

Takeaways

- COS seating capacity was 1.27 million seats in 2008.
- Seating capacity at small hub airports has generally followed the trend for large hub airports since 2000, reflecting the role of many small airports as spokes in airline connecting networks
- COS seating capacity decreased an average of 5.6% per year between 2000 and 2009, compared with an average decrease of 2.4% for all small hubs

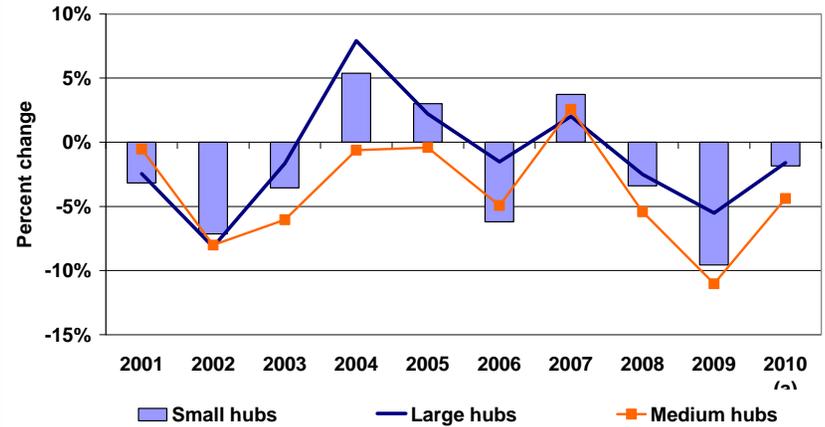
TOTAL SEATING CAPACITY AT PEER AIRPORTS

Ranked by 2008 scheduled departing seats



Source: Official Airline Guides, Inc., online database, accessed December 2009.

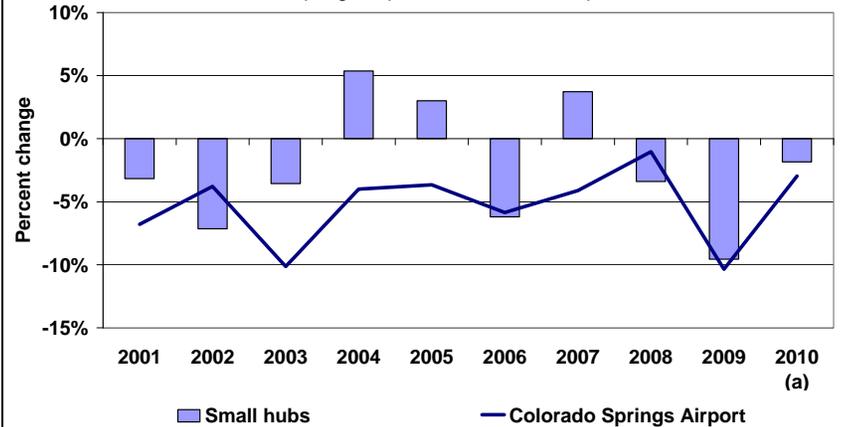
YEAR OVER YEAR PERCENT CHANGE IN TOTAL SCHEDULED DEPARTING SEATS BY HUB SIZE



(a) Represents the percent change for January through June.
Source: Official Airline Guide, Inc., online database, accessed December 2009.

YEAR OVER YEAR PERCENT CHANGE IN TOTAL SCHEDULED DEPARTING SEATS

Colorado Springs Airport and Small Hub Airports



(a) Represents the percent change for January through June.
Source: Official Airline Guide, Inc., online database, accessed December 2009.

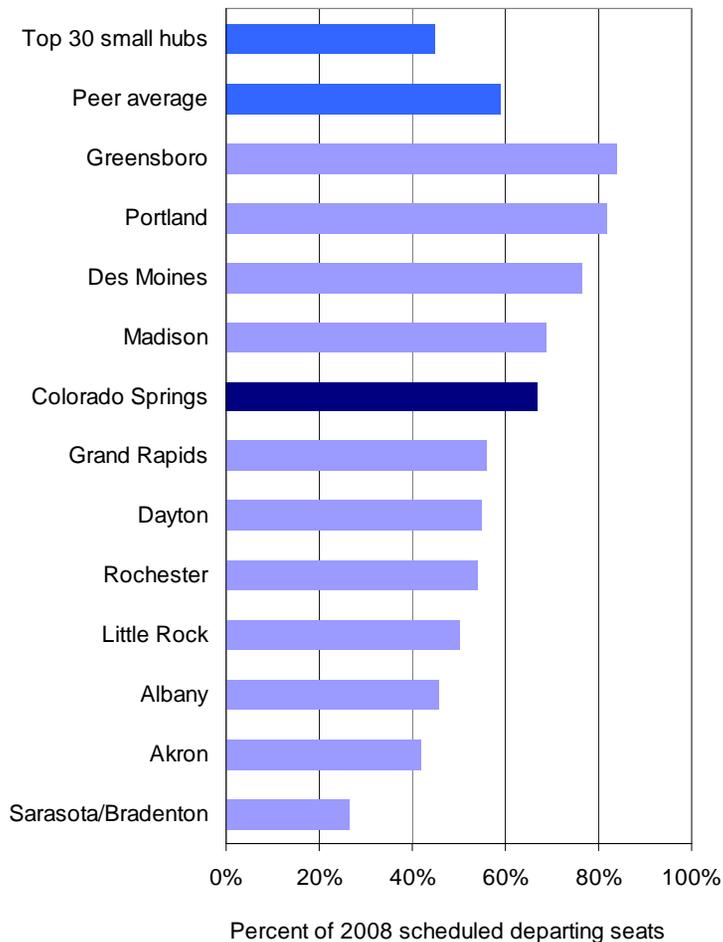
Regional Aircraft Seats

Takeaways

- Regional aircraft accounted for nearly 70% of total seating capacity at COS in 2008 compared with 14% in 2000
- Regional aircraft seating capacity at COS increased an average of 12.8% per year between 2000 and 2009, compared with an average increase of 4.6% for all small hubs
- Large regional jets (with more than 60 seats) drove much of the growth in regional aircraft seating capacity at COS and accounted for 27% of total seats in 2009, compared with 16% for small hubs

REGIONAL AIRCRAFT SEATING CAPACITY AT PEER AIRPORTS

Ranked by 2008 regional aircraft share of scheduled departing seats

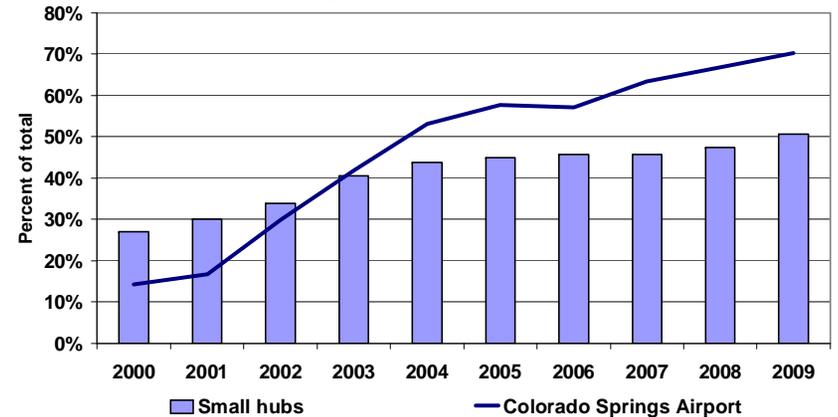


Note: Regional aircraft include prop, turboprop, and regional jet aircraft. Includes turboprop (Q400) and regional jets with more than 60 seats (CR7, CR9).

Source: Official Airline Guide, Inc., online database, accessed December 2009.

REGIONAL AIRCRAFT SEATS AS A PERCENT OF TOTAL SCHEDULED DEPARTING SEATS

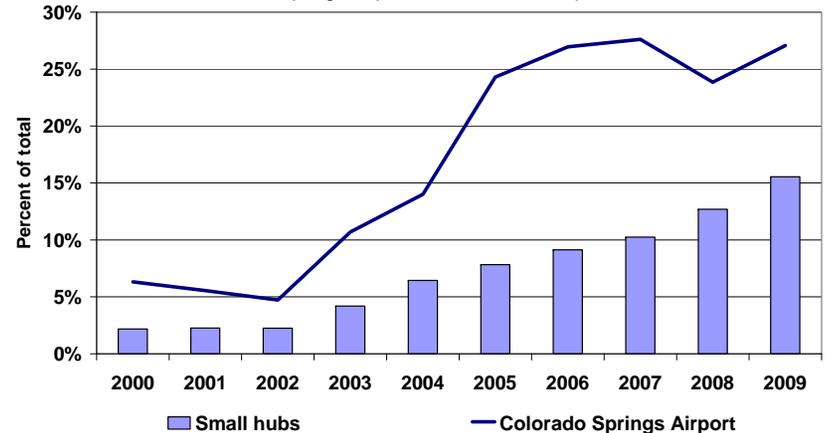
Colorado Springs Airport and Small Hub Airports



Note: Regional aircraft include prop, turboprop, and regional jet aircraft. Includes turboprop (Q400) and regional jets with more than 60 seats (CR7, CR9).
Source: Official Airline Guide, Inc., online database, accessed December 2009.

LARGE REGIONAL JET SEATS AS A PERCENT OF TOTAL SCHEDULED DEPARTING SEATS

Colorado Springs Airport and Small Hub Airports



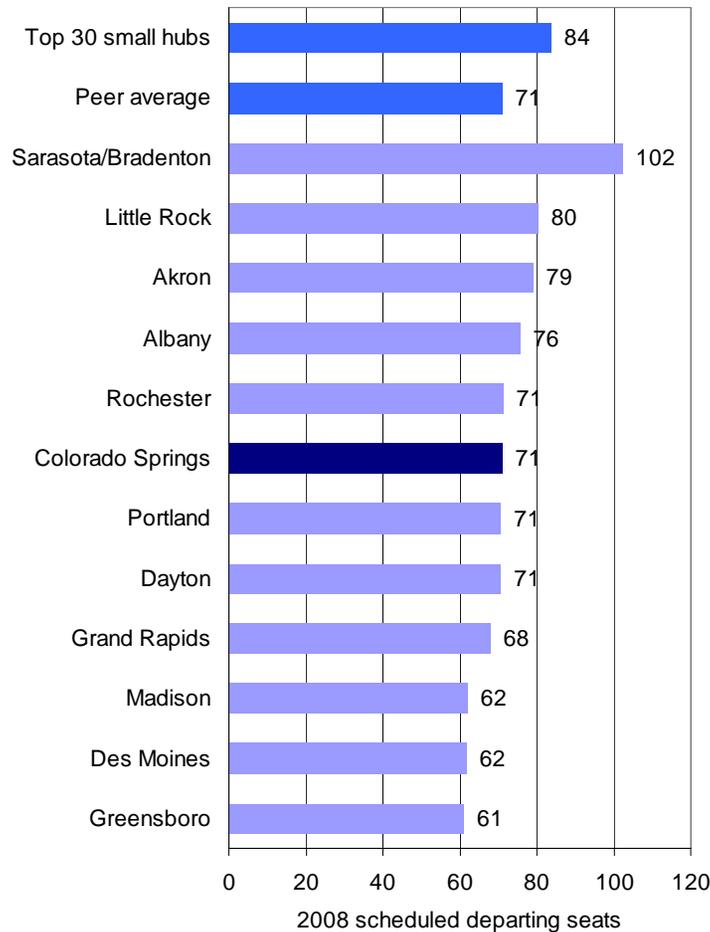
Note: Large regional jet aircraft have more than 60 seats (excludes the Q400 turboprop aircraft).
Source: Official Airline Guide, Inc., online database, accessed December 2009.

Average Seats Per Departure

Takeaways

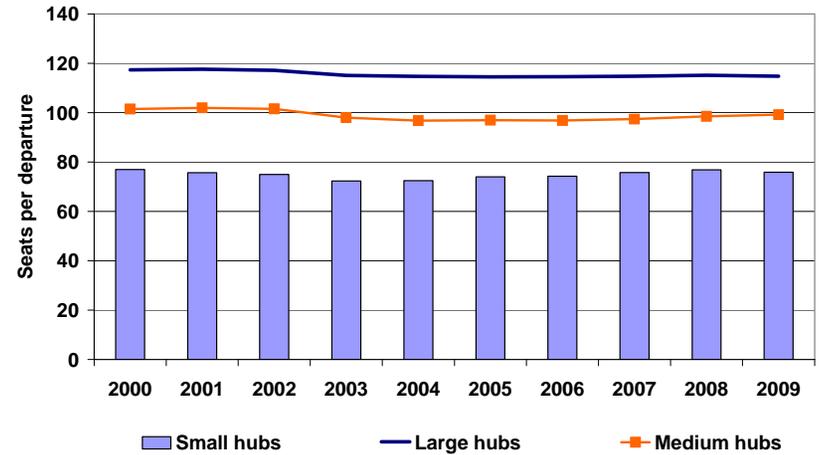
- Since 2000, small hub airports have averaged about 75 seats per departure, compared with an average of 100 and 116 for medium and large hub airports, respectively
- The average number of seats per departure at COS has decreased since 2000, reflecting the replacement of narrowbody aircraft with turboprops and regional jets

AVERAGE SEATS PER DEPARTURE AT PEER AIRPORTS
Ranked by 2008 scheduled departing seats



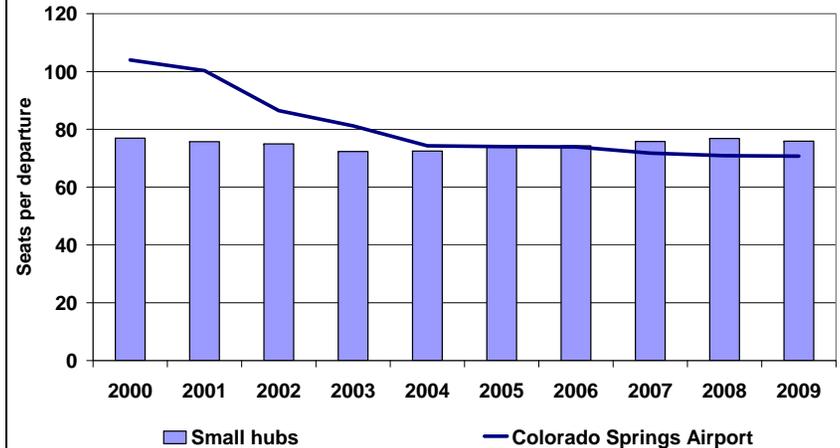
Source: Official Airline Guides, Inc., online database, accessed December 2009.

AVERAGE SEATS PER DEPARTURE BY HUB SIZE



Source: Official Airline Guide, Inc., online database, accessed December 2009.

AVERAGE SEATS PER DEPARTURE
Colorado Springs Airport and Small Hub Airports



Source: Official Airline Guide, Inc., online database, accessed December 2009.

Regional Airlines

Takeaways

- Changes in the contractual arrangements between regional airlines and mainline carriers may affect future levels of service and regional aircraft fleets

Corporate Groupings of Top 50 Regional Airlines
(as of December 2008)

2008 Individual Carrier Rank	2008 Carrier Group Rank	Carrier	Primary Codes Shared in 2008	2008 Passengers Enplaned	2008 Enplaned Carrier Group
	1	SkyWest Airlines			33,125,090
1		- SkyWest Airlines	UA/DL/YX	20,668,204	
4		- Atlantic Southeast	DL	12,456,886	
	2	American Eagle			19,103,083
2		- American Eagle	AA	16,558,307	
17		- Executive Airlines	AA	2,544,776	
	3	Republic Holdings			18,794,634
8		- Chautauqua Airlines	AA/CO/DL/UA/US	7,599,581	
10		- Republic Airlines	F9/US/YX	7,001,933	
14		- Shuttle America	DL/MW/UA	4,193,120	
3	4	ExpressJet Airlines	CO/DL/UA/VQ	14,848,078	
	5	Mesa Airlines			13,057,975
5		- Mesa Airlines	UA/US	11,181,822	
20		- Freedom Airlines	DL	1,811,776	
38		- Air Midwest	US/YV	64,377	
	6	Pinnacle Airlines			12,867,690
6		- Pinnacle Airlines	DL/NW	10,331,557	
18		- Colgan Air	CO/UA/US	2,536,133	
7	7	Comair	DL	8,101,300	
	8	US Airways Group			7,839,737
13		- PSA Airlines	US	4,743,922	
16		- Piedmont Airlines	US	3,095,815	
	9	Northwest Airlines			7,426,537
12		- Mesaba Airlines	NW	5,293,662	
19		- Compass Air	NW	2,132,875	
9	10	Horizon Air	AS	7,389,899	
11	11	Air Wisconsin	US	5,593,952	
	12	Trans States Airlines			4,986,457
15		- Trans States Airlines	UA/AA/US	3,495,153	
21		- GoJet Airlines	UA	1,491,304	
22	13	Lynx Aviation	F9	984,706	
23	14	Cape Air	CO	701,647	
24	15	Commutair	CO	698,116	
25	16	Gulfstream Intl	CO	685,901	
26	17	Great Lakes Aviation Ltd.		569,844	
27	18	Hawaii Island Air		525,506	
28	19	ERA Aviation		354,006	
29	20	Peninsula Airways	AS	228,400	
30	21	Hageland Aviation		158,323	
31	22	Skyway Airlines	YX	146,780	
32	23	Frontier Flying Service		144,607	
33	24	Seaborne Aviation		135,598	
34	25	Grant Aviation		118,659	
35	26	Kenmore Air Harbor		110,233	
36	27	Bering Air		79,984	
37	28	Pacific Wings Airlines		69,005	
39	29	Yute Air - Flight Alaska		52,805	
40	30	PM Air LLC		51,992	
41	31	Wings of Alaska		41,165	
42	32	Warbelows Air Ventures		39,633	
43	33	Wright Air		29,810	
44	34	Vieques Airlink		26,585	
45	35	Mokulele Flight Services	YV	26,266	
46	36	New England Airlines		21,485	
47	37	Pacific Airways		20,240	
48	38	Taquan Air Service		18,230	
49	39	Iliamna Air Taxi		18,212	
50	40	Homer Air		17,134	
Total Traffic Activity - Top 50 Airlines				159,209,304	
Total Traffic Activity				159,320,717	
Top 50 Airlines as a Percent of Total				99.9%	

REGIONAL AIRLINE INDUSTRY HEADLINES

- **February 17, 2010**
ExpressJet Contracts with United
Regional carrier ExpressJet Airlines signed a contract with United airlines to fly 22 ERJ-145 aircraft for United Express. The company was successful in bidding to replace flying done by other United Express partner carriers whose contracts have expired.
- **February 15, 2010**
SkyWest to Launch COS-IAD Service
SkyWest operating as United Express will begin a daily nonstop flight from Colorado Springs Airport to Washington-Dulles on June 9.
- **January 5, 2010**
Mesa Air Group Files for Bankruptcy Protection
Mesa will seek to dramatically reduce the current fleet of aircraft from 130 to 77. The filing comes after the loss of contracts with United and Delta as well as litigation with Aloha Airlines.
- **December 30, 2009**
Regional Airlines Get Wings Clipped by Big Partners
Shakeout is likely as commuter lines contend with lower fees and fewer routes amid overall industry downturn.

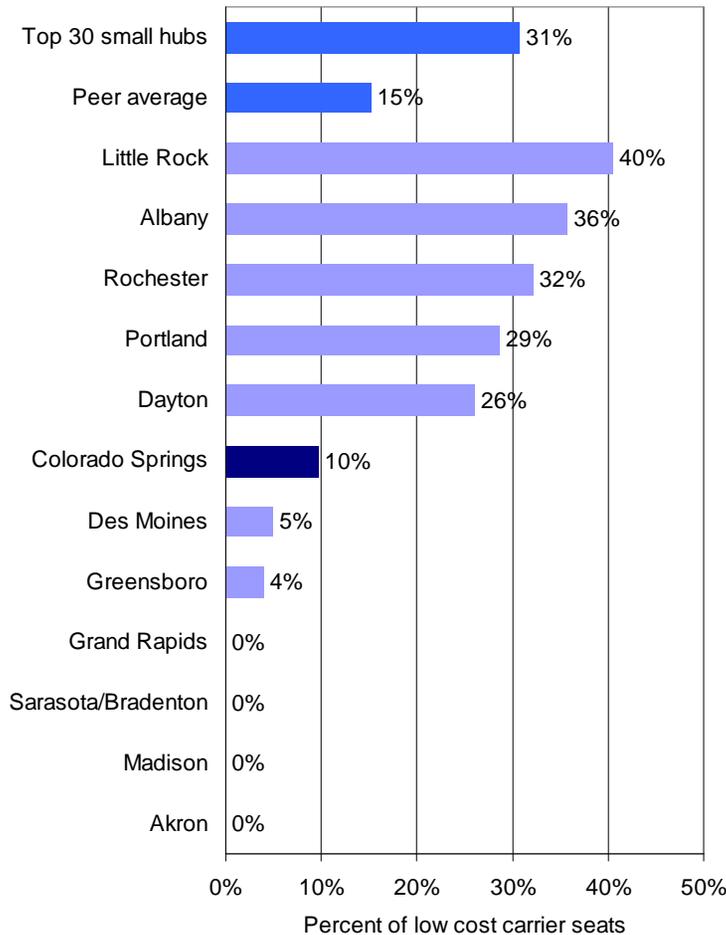
Low Cost Carrier Seats

Takeaways

- Low cost carriers (LCCs) accounted for 10% of COS total seating capacity in 2008, compared with an average of 31% for the top 30 small hub airports (which is consistent with the national average)
- LCCs accounted for 40% of total seating capacity at Denver International Airport in 2008 and 2009, reflecting the re-introduction of service by Southwest in 2006 as well as low cost service by Frontier and JetBlue
- LCCs include: AirTran, Allegiant, America West, Frontier, Independence Air, JetBlue, Spirit, Southwest, and Virgin America

LOW COST CARRIER SEATING CAPACITY AT PEER AIRPORTS

Ranked by 2008 low cost carrier share of scheduled departing seats

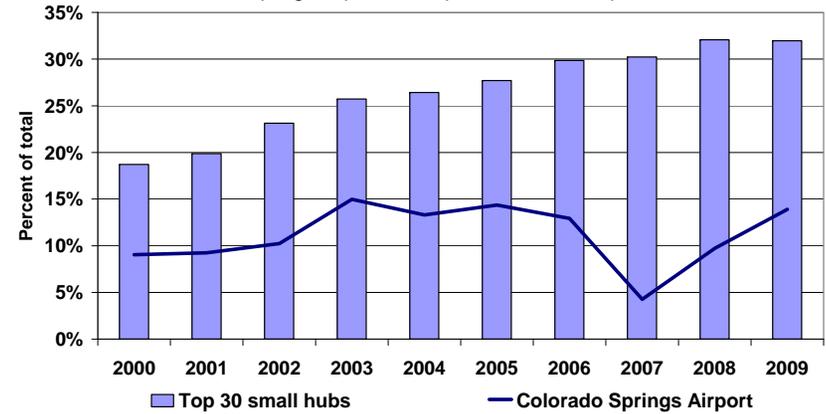


Note: Low cost carriers include AirTran, Allegiant, America West, Frontier, Independence Air, JetBlue, Spirit, Southwest, and Virgin America.

Source: Official Airline Guides, Inc., online database, accessed December 2009.

LOW COST CARRIER SEATS AS A PERCENT OF TOTAL SCHEDULED DEPARTING SEATS

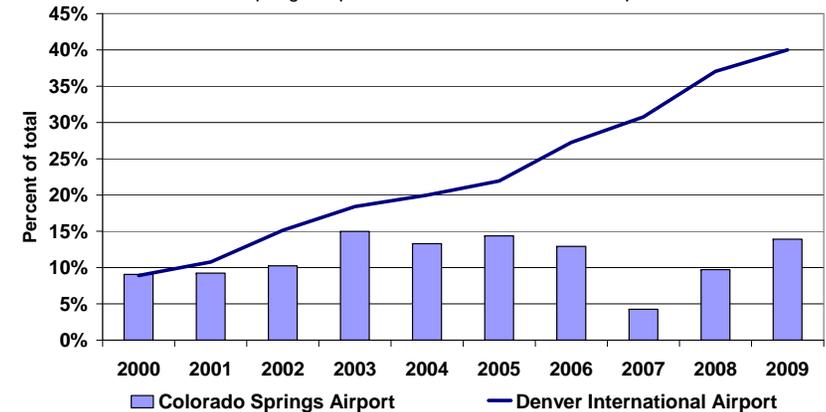
Colorado Springs Airport and Top 30 Small Hub Airports



Note: Low cost carriers include AirTran, Allegiant, America West, Frontier, Independence Air, JetBlue, Spirit, Southwest, and Virgin America.
Source: Official Airline Guide, Inc., online database, accessed December 2009.

LOW COST CARRIER SEATS AS A PERCENT OF TOTAL SCHEDULED DEPARTING SEATS

Colorado Springs Airport and Denver International Airport

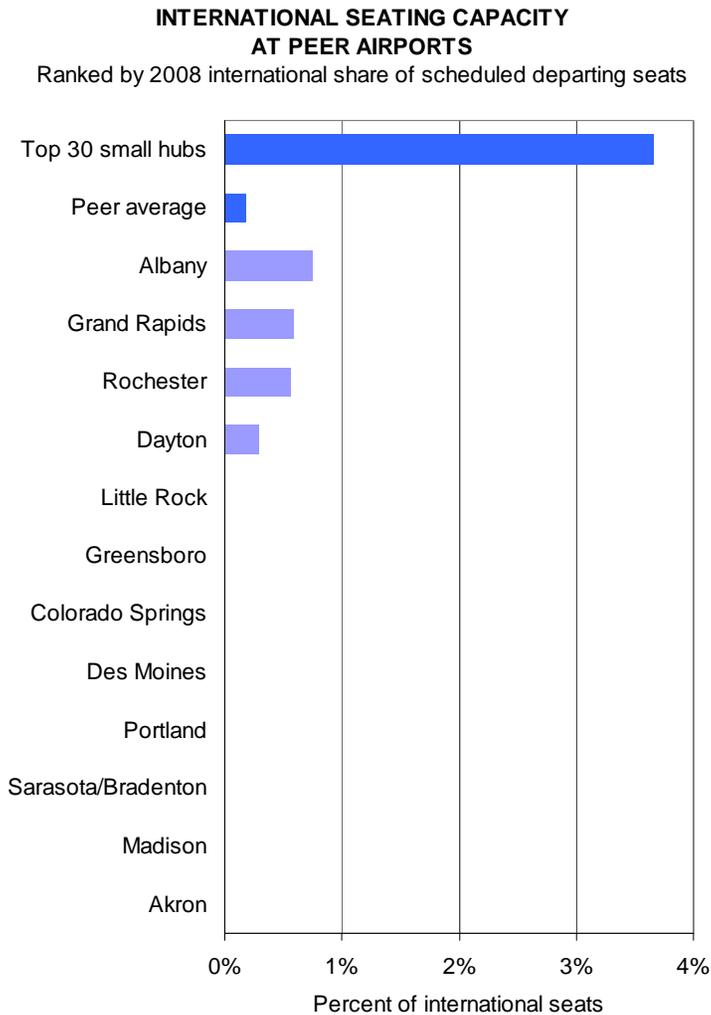


Note: Low cost carriers include AirTran, Allegiant, America West, Frontier, Independence Air, JetBlue, Spirit, Southwest, and Virgin America.
Source: Official Airline Guide, Inc., online database, accessed December 2009.

International Seats

Takeaways

- **International service accounts for a small share of seating capacity at most small hub airports.**
- **Seven of the 12 peer airports do not have international service**
- **Those peer airports with international service have less than 1% of scheduled departing seats bound for international destinations**



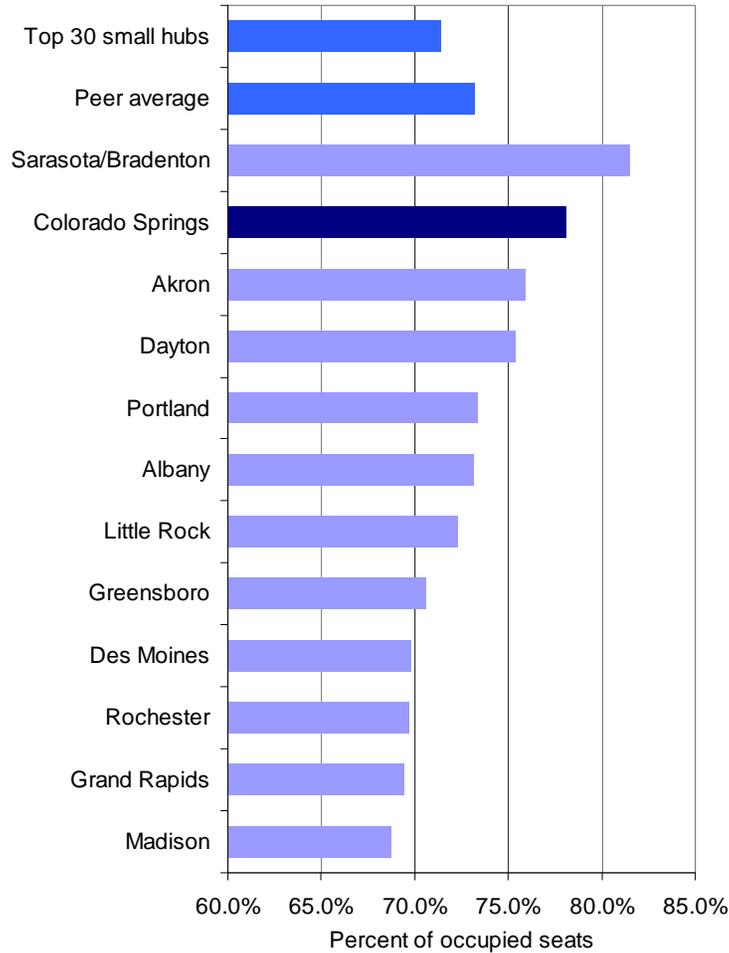
Source: Official Airline Guides, Inc, online database, accessed December 2009.

Takeaways

- COS exhibited a higher load factor than all but one of its peers, with 78.1% of seats occupied in 2008
- The load factors at COS have been higher than the average for all small hub airports since 2000
- Of the top 30 small hub airports, COS ranked second highest in terms of load factor for 2008

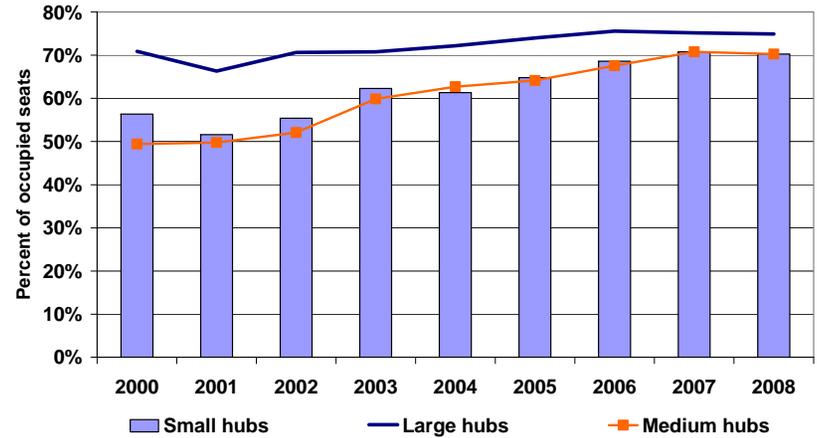
ENPLANED PASSENGER LOAD FACTOR AT PEER AIRPORTS

Ranked by 2008 load factor



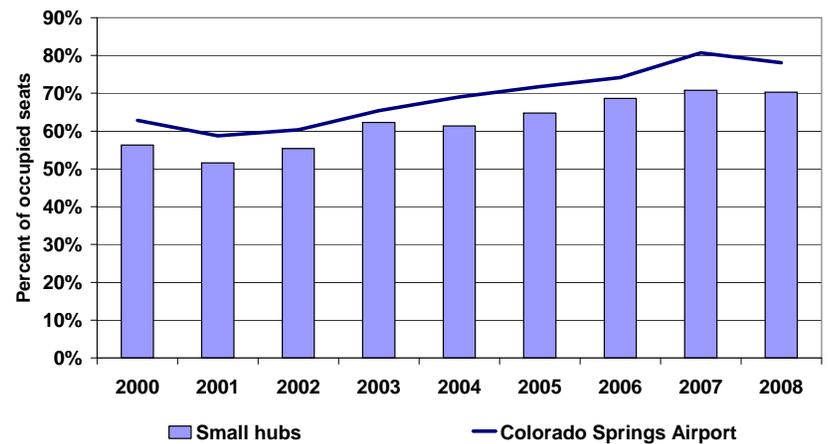
Sources: U.S. Department of Transportation, Federal Aviation Administration, Air Carrier Activity Information System, www.faa.gov and Official Airline Guide, Inc., online database, accessed December 2009.

AVERAGE ENPLANED PASSENGER LOAD FACTOR BY HUB SIZE



Sources: U.S. Department of Transportation, Federal Aviation Administration, Air Carrier Activity Information System, www.faa.gov and Official Airline Guide, Inc., online database, accessed December 2009.

AVERAGE ENPLANED PASSENGER LOAD FACTOR Colorado Springs Airport and Small Hub Airports

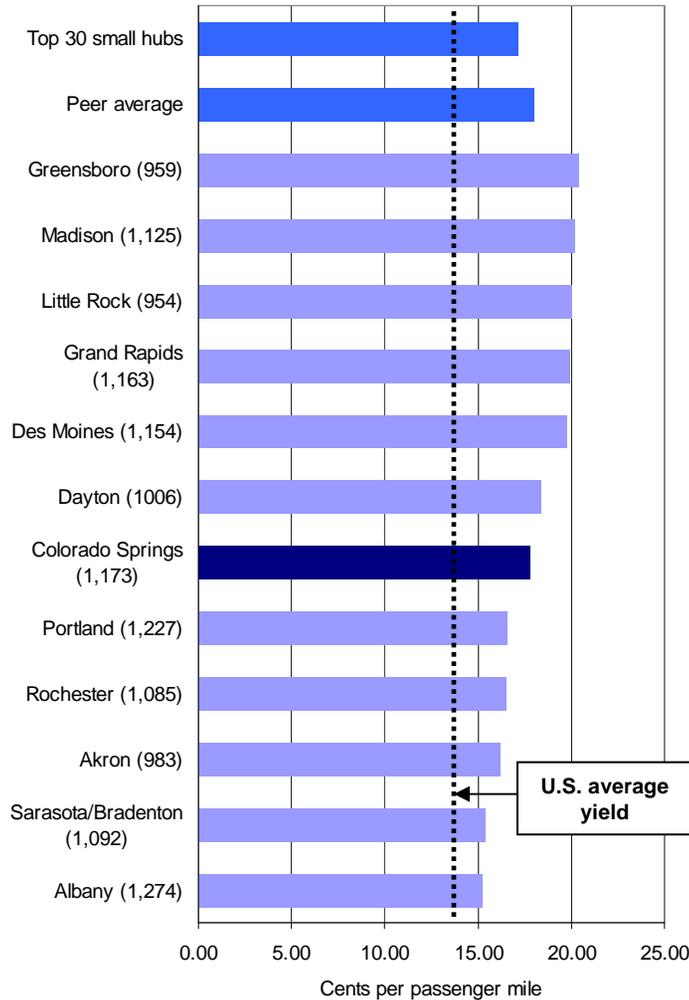


Sources: U.S. Department of Transportation, Federal Aviation Administration, Air Carrier Activity Information System, www.faa.gov and Official Airline Guide, Inc., online database, accessed December 2009.

Takeaways

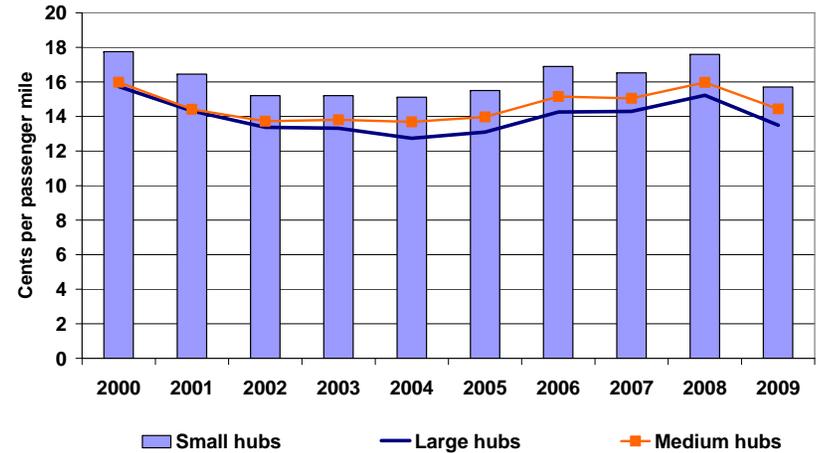
- COS airlines enjoy higher than average airline yields at over 17 cents per passenger mile
- Variation in average yields among small hubs reflects differences in average trip length, shares of low cost carrier service, and origin-destination patterns
- Average yields at COS have been higher than the average for all small hub airports and the nation as a whole since 2000 reflecting its central geographical location
- Average yield at DEN in 2008 was 15.87 cents per passenger mile; average trip length of 1,068

AVERAGE AIRLINE YIELD AT PEER AIRPORTS
Ranked by 2008 yield, average trip length in parenthesis



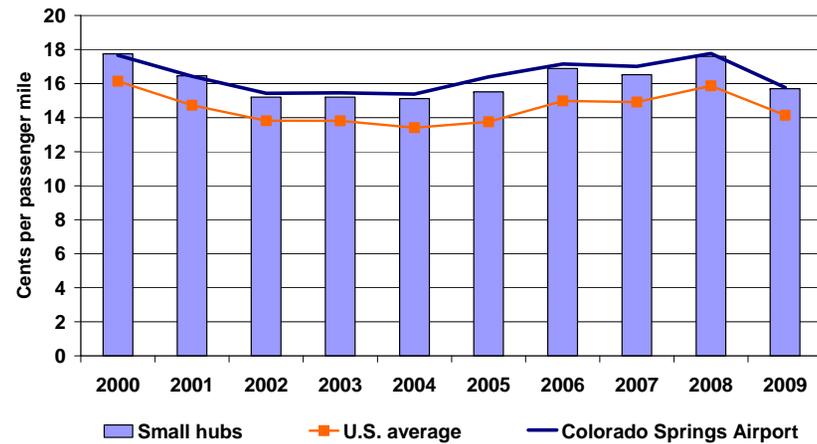
Source: U.S. Department of Transportation, Origin-Destination Survey of Airline Passenger Traffic, Domestic, OD1B online database, accessed December 2009.

AVERAGE AIRLINE YIELD BY HUB SIZE



Source: U.S. Department of Transportation, Origin-Destination Survey of Airline Passenger Traffic, Domestic, OD1B online database, accessed December 2009.

AVERAGE AIRLINE YIELD
Colorado Springs Airport, Small Hub Airports, and United States



Source: U.S. Department of Transportation, Origin-Destination Survey of Airline Passenger Traffic, Domestic, OD1B online database, accessed December 2009.

REGRESSION ANALYSIS

Regression analysis compares the historical relationship between a dependent variable, in this case, enplaned passengers, and an independent or “predictor” variable. The predictor variable is eventually used to project future levels of the dependent variable. In aviation demand forecasts, the predictor variable is typically represented by an economic or demographic metric such as population, employment, or personal income. Regression analyses produce a mathematical equation that identifies the strength or reliability of the historical correlation between the dependent variable (enplaned passengers) and predictor variables. The statistical reliability of this equation is typically measured by a regression statistic known as “R-squared.” An R-squared of 1.0 would represent a perfect historical correlation between the dependent and predictor variable and suggest that the measurement of this historical relationship will be a reliable predictor of future results. An R-squared value above 0.90 is considered to be acceptable for forecast purposes.

The regression model defined during the forecast process to represent passenger demand is presented in Table C-7.

Table C-7 REGRESSION MODEL Colorado Springs Airport		
Regression model	Coefficient	t-statistic
ORIGINATING PASSENGER MODEL		
Dependent variable = ln(COS originating passengers)		
Independent variables		
ln(Colorado Springs MSA total income, in 2009 dollars)	0.87	5.33
ln(COS domestic airline yield, 2009 dollars)	-1.97	-4.39
ln(DEN domestic airline yield, 2009 dollars)	1.59	4.81
Dummy variable for Western Pacific service expansion and cessation (1995 - 1998)	0.38	3.75
Constant	0.19	0.06
Observations	26	
Adjusted R-squared	0.92	
Source: LeighFisher, July 2010.		

FAA APPROVAL LETTER



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

Denver Airports District Office
26805 E. 68th Avenue, Room 224
Denver, Colorado 80249
303-342-1250; FAX303-342-1260

September 23, 2010

Neal Ralston, A.A.E.
Airport Planning & Development Mngr.
Colorado Springs Airport
Airport Development Office
7770 Milton E. Proby Parkway, Suite 50
Colorado Springs, Colorado 80916

Colorado Springs Airport
Colorado Springs, Colorado
AIP Project No. 3-08-0010-049
Forecast Approval

Dear Mr. Ralston:

The Federal Aviation Administration has completed its review of forecast information for the Colorado Springs Airport, dated July 26, 2010. We found it to be supported by reasonable planning assumptions and current data and developed using appropriate forecasting methodologies. Accordingly, this forecast is approved for use in the Colorado Springs Airport's Master Plan Update Study.

If you have any questions concerning this matter, please contact me at (303) 342-1264 or by email at linda.bruce@faa.gov.

Sincerely,

A handwritten signature in cursive script that reads "Linda A. Bruce".

Linda A. Bruce
Airport Planner, Colorado

cc: Chris Schaffer, DEN-615