WYSASP AIR SERVICE EVALUATION

Presented by: Joseph Pickering
Mead & Hunt

© 2016 Mead & Hunt, Inc.

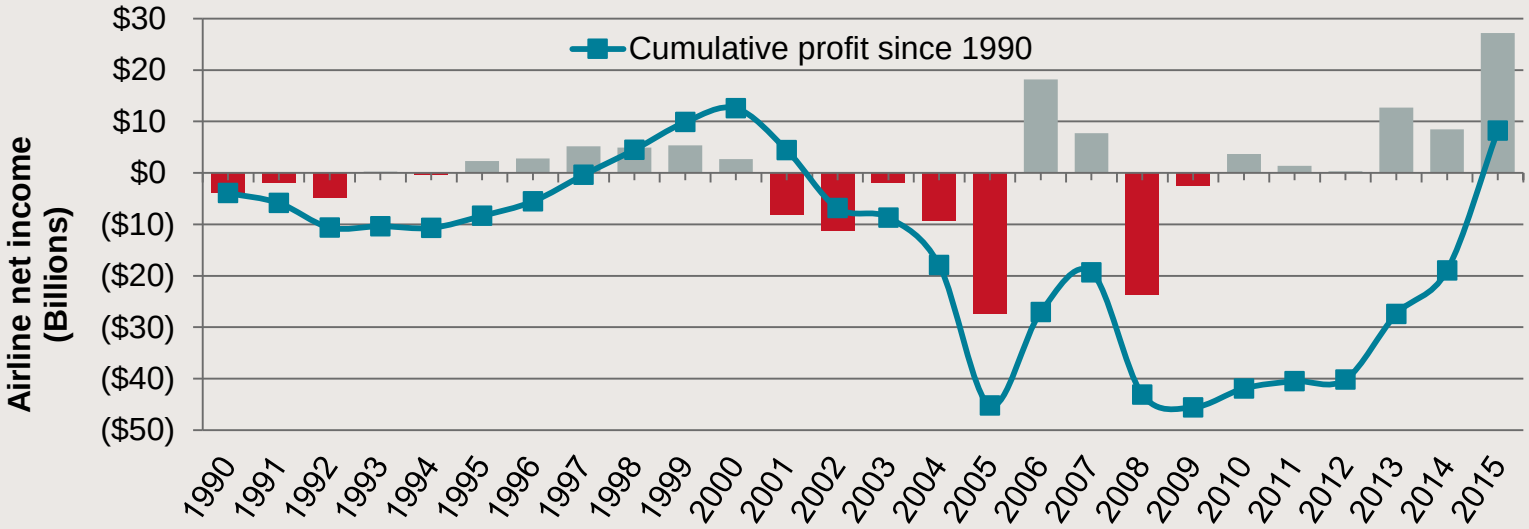
TOPICS

- Air Service Market Research
  - Overview of U.S. Airline Industry
  - State of Wyoming Air Service
- ASEP ROI Analysis
  - Methodology & Metrics
  - Case Study
- Airport Discussions
- Question and Discussion

Mead & Hunt

AIR SERVICE MARKET RESEARCH

AIRLINE PROFIT AND LOSS



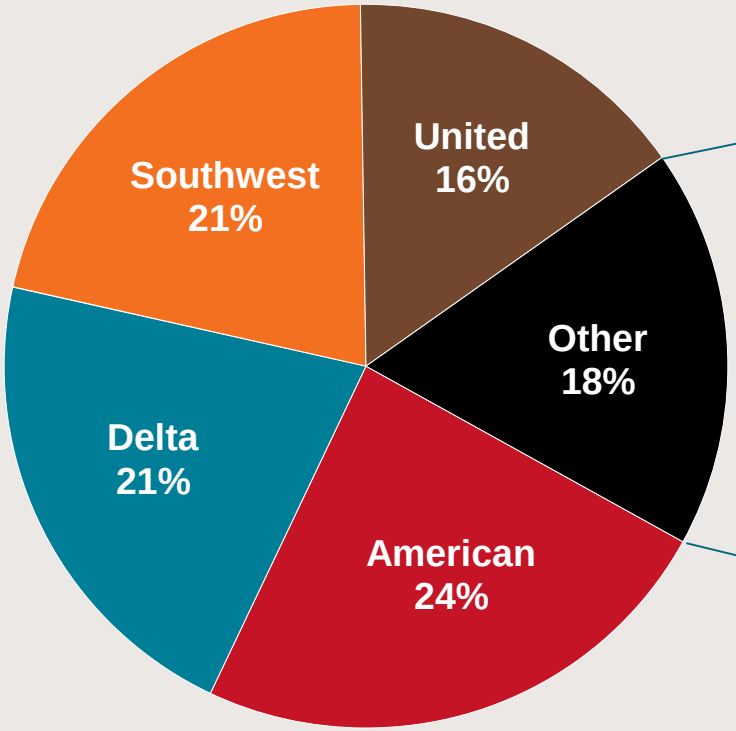
- Airlines consistently profitable since 2010; ~$54 billion combined net income 2010-2015
- Profit drivers include consolidation, capacity restraint, increase in ancillary revenue (e.g. bag fees) and fuel

Source: Diio Mi, Form 41 Net Income (All Airlines, Total System)

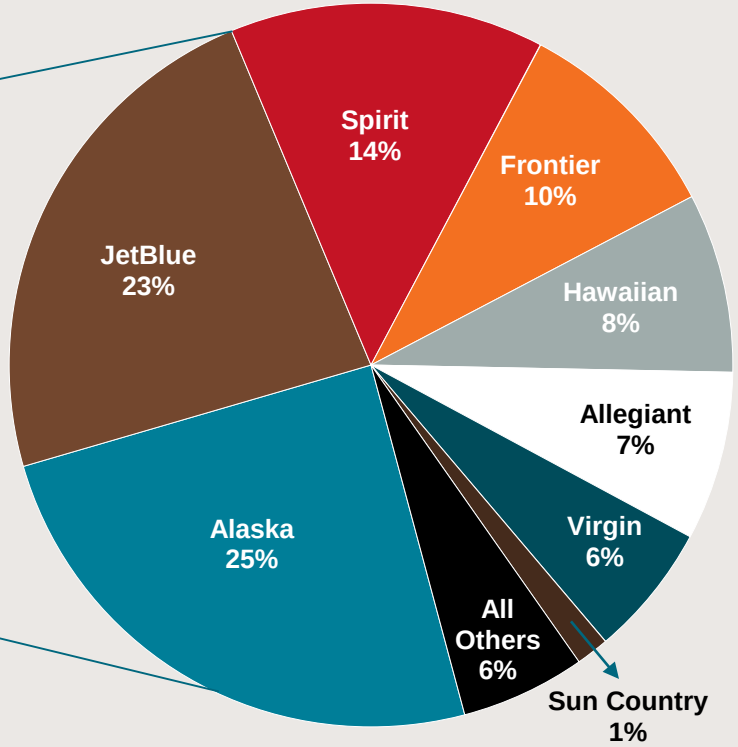
Mead & Hunt

U.S DOMESTIC OLIGOPOLY

82% of the market is controlled by 4 airlines



Only 18% of the market is controlled by all other carriers



Source: Diio Mi Scheduled Seats for YE June 2016

FREQUENCY & CAPACITY CHANGES

- Domestic departures down ~5% since July 2011, while seats are up ~7% as industry shifts to **larger gauge aircraft which helps offset the drop in flight departures**
- LCC/ULCCs are experiencing most growth but typically don't operate in smaller markets
- Airlines grew international seats faster than domestic seats over the past 5 years

CARRIER	JUL 2016 VS JUL 2011	
	FLIGHTS	SEATS
Domestic Schedule Comparison		
American Airlines	(2.9%)	4.0%
Delta Air Lines	(8.8%)	6.6%
Southwest Airlines	(8.4%)	1.0%
United Airlines	(19.6%)	(6.3%)
Alaska Airlines	31.0%	38.4%
JetBlue Airways	27.5%	28.5%
Spirit Airlines	138.6%	167.8%
Frontier Airlines	(42.3%)	(7.4%)
Allegiant Air	82.5%	105.1%
Total All Domestic	**(5.4%)**	**7.1%**
International Schedule Comparison		
Total All International	**18.7%**	**28.0%**

Source: Diio Mi Schedule (July 2016 versus July 2011); Ranked by July 2016 seats

FLEET CHANGES

- In the past 5 years, type of aircraft (e.g. turboprop, regional jet, etc.) has changed significantly
  - Turboprop aircraft-operated flights are down 39%
  - Regional jet-operated flights are down 21%
    - **Largest decrease in the 30-50 seat range**
    - Largest increase in the 71-100 seat range
  - Use of larger narrow-body jets are up 17% - most growth in the new larger narrow-body category

AIRCRAFT TYPE	DEPARTURES		
	JUL '16	JUL '11	CHANGE
Turboprop (< 30)	47,149	65,287	(28%)
Turboprop (30-50)	19,610	43,099	(55%)
Turboprop (50+)	12,324	21,828	(44%)
Regional jet (30-50)	117,572	191,163	(38%)
Regional jet (51-70)	40,473	37,423	8%
Regional jet (71-100)	38,286	20,934	83%
Narrow-body (70-125)	79,037	100,013	(21%)
Narrow-body (126-160)	259,311	257,914	1%
Narrow-body (> 160)	151,921	59,838	154%
All Turboprops	79,083	130,214	(39%)
All Regional Jets	196,331	249,520	(21%)
All Narrow-body Jets	490,269	417,765	17%

Source: Diio Mi

Mead & Hunt

PILOT SHORTAGE

- Fallout from the FAR Part 117 changes as a result of the Colgan accident
  - Adjusted pilot requirements for Part 121 carriers and minimum crew rest requirements effective Aug 2014
  - Will likely continue to be a problem for 3-5 years into the future
- Has sped the retirements of 50-seat regional jets and growth in smaller mainline aircraft
- Impacting some regional airlines significantly more than others

STATE OF WYOMING AIR SERVICE

WYOMING SERVICE LEVELS

WYOMING AIRPORT	TOTAL FLIGHTS - JULY 2016											TOTAL FLIGHTS	TOTAL SEATS
	DEN	SLC	ORD	DFW	MSP	LAX	SFO	IAH	ATL	LAS	INTRA-WY		
JAC	130	93	98	62	36	71	39	30	13	-	-	572	68,898
CPR	115	62	-	-	-	-	-	-	-	9	-	186	10,344
COD	31	113	9	-	-	-	-	-	-	-	-	153	7,830
GCC	56	31	-	-	-	-	-	-	-	-	-	87	4,350
RKS	56	-	-	-	-	-	-	-	-	-	-	56	2,800
LAR	52	-	-	-	-	-	-	-	-	-	-	52	2,600
CYS	74	-	-	-	-	-	-	-	-	-	22	96	864
RIW	31	-	-	-	-	-	-	-	-	-	31	62	558
WRL	-	-	-	-	-	-	-	-	-	-	53	53	477
SHR*	-	-	-	-	-	-	-	-	-	-	-	-	-
WY Total Flights	**545**	**299**	**107**	**62**	**36**	**71**	**39**	**30**	**13**	**9**	**106**	**1,317**	**-**
WY Total Seats	**30,921**	**22,018**	**14,648**	**7,936**	**6,210**	**4,920**	**3,740**	**3,540**	**2,340**	**1,494**	**954**	**-**	**98,721**

- Majority of service in Wyoming is to Denver or Salt Lake City
- Over 2/3rds of seats in Wyoming are at JAC

Mead & Hunt

Source: Diio Mi; Note: SHR service is scheduled charter through Denver Air Connection and is not reported in Diio.

WYOMING SERVICE CHANGES SINCE 2005

AIRPORT	ANNUAL FLIGHTS			CHANGE		ANNUAL SEATS			CHANGE	
	2005	2010	2015	2005-2015	2010-2015	2005	2010	2015	2005-2015	2010-2015
COD	1,328	1,291	847	(36%)	(34%)	44,735	44,450	42,810	(4%)	(4%)
CPR	4,174	2,259	2,560	(39%)	13%	137,840	119,434	140,644	2%	18%
CYS	1,880	2,080	701	(63%)	(66%)	39,790	47,302	6,309	(84%)	(87%)
GCC	1,040	3,280	1,084	4%	(67%)	27,394	79,194	51,760	89%	(35%)
JAC	4,436	3,435	3,758	(15%)	9%	345,825	396,322	407,529	18%	3%
LAR	1,448	1,384	634	(56%)	(54%)	27,512	26,296	30,440	11%	16%
RIW	1,039	1,272	1,270	22%	(0%)	27,529	35,707	17,480	(37%)	(51%)
RKS	1,270	2,129	747	(41%)	(65%)	25,076	60,515	34,930	39%	(42%)
SHR	596	1,772	74	(88%)	(96%)	11,324	44,943	666	(94%)	(99%)
WRL	621	774	634	2%	(18%)	11,799	14,706	8,726	(26%)	(41%)
State of Wyoming	**17,832**	**19,676**	**12,309**	**(31%)**	**(37%)**	**698,824**	**868,869**	**741,294**	**6%**	**(15%)**

- Departures are down 37%, while seats are up 6% since 2005
- Traditional Great Lakes markets were the hardest hit

Mead & Hunt

Source: Diio Mi

WYOMING PASSENGER TRENDS

WYOMING AIRPORT	O&D PASSENGERS				CHANGE 2015 VS		
	2005	2010	2014	2015	2005	2010	2014
JAC	452,196	563,864	589,524	580,469	28%	3%	(2%)
CPR	151,130	160,153	203,766	202,417	34%	26%	(1%)
COD	48,976	55,405	64,105	65,495	34%	18%	2%
GCC	29,790	62,538	53,541	59,451	100%	(5%)	11%
RKS	29,277	42,669	40,199	33,916	16%	(21%)	(16%)
LAR	19,072	15,622	25,599	27,206	43%	74%	6%
RIW	23,737	35,506	16,426	7,300	(69%)	(79%)	(56%)
CYS	25,726	38,330	9,981	5,687	(78%)	(85%)	(43%)
WRL	11,389	10,297	5,856	2,960	(74%)	(71%)	(49%)
SHR	29,638	33,966	20,542	758	(97%)	(98%)	(96%)
Wyoming	**820,932**	**1,018,350**	**1,029,540**	**985,660**	**20%**	**(3%)**	**(4%)**

- Passengers are down 4% year-over-year, but **up 20% since 2005**
- The markets traditionally served only by Great Lakes are down significantly

Mead & Hunt

Source: Diio Mi

WYOMING AVERAGE FARE TRENDS

AIRPORT	AVERAGE FARE ($)				% CHANGE 2015 VS			O&D REVENUE ($000s)				% CHANGE 2015 VS		
	2005	2010	2014	2015	2005	2010	2014	2005	2010	2014	2015	2005	2010	2014
JAC	189	219	285	301	59	38	6	85,382	123,368	167,859	174,618	105	42	4
CPR	187	208	248	250	34	20	1	28,223	33,336	50,518	50,576	79	52	0
GCC	234	210	299	297	27	41	(1)	6,977	13,138	16,034	17,651	153	34	10
COD	178	202	264	269	51	33	2	8,714	11,203	16,943	17,607	102	57	4
RKS	205	202	299	301	47	50	1	5,999	8,600	12,034	10,223	70	19	(15)
LAR	173	193	219	240	39	25	10	3,308	3,014	5,619	6,540	98	117	16
RIW	186	212	257	293	58	38	14	4,405	7,546	4,223	2,143	(51)	(72)	(49)
CYS	205	195	277	305	49	57	10	5,270	7,471	2,760	1,737	(67)	(77)	(37)
WRL	152	188	189	211	39	13	12	1,735	1,931	1,107	626	(64)	(68)	(43)
SHR	107	220	249	257	139	17	3	3,179	7,485	5,121	195	(94)	(97)	(96)
WYOMING	**187**	**213**	**274**	**286**	**53**	**34**	**4**	**153,192**	**217,093**	**282,218**	**281,916**	**84**	**30**	**(0)**
UNITED STATES	**171**	**209**	**241**	**229**	**34**	**9**	**(5)**	**91,346**	**108,845**	**134,720**	**134,088**	**47**	**23**	**(0)**

- Wyoming average fares are following US average trends for smaller markets

Mead & Hunt

Source: Diio Mi

WYOMING AIRPORT DISCUSSION

CASPER (CPR)

2015 Top Origin and Destination Markets from CPR

RANK	AIRPORT	CPR - CY 2015				% CHANGE VS 2014			
		PAX	% ORIGIN	REV ($)	FARE ($)	PAX	REV	FARE	SEATS
1	Las Vegas, NV	32,017	56	2,287,903	72	1	(11)	(12)	8
2	Houston, TX (IAH)	8,567	44	3,210,309	375	(29)	(36)	(10)	-
3	Phoenix, AZ (PHX)	8,403	55	1,587,129	189	11	8	(3)	-
4	Salt Lake City, UT	8,028	41	1,361,607	170	(34)	(20)	21	17
5	Dallas, TX (DFW)	6,827	50	1,472,909	216	(4)	(10)	(6)	-
6	Denver, CO	5,009	35	487,135	97	(22)	(32)	(13)	(3)
7	Seattle-Tacoma, WA	4,891	55	1,048,134	214	18	6	(10)	-
8	Portland, OR	3,998	61	859,741	215	5	2	(3)	-
9	Oklahoma City, OK	3,959	43	1,162,445	294	(28)	(13)	20	-
10	Chicago, IL (ORD)	3,322	55	1,023,560	308	25	15	(8)	-
Total/Average		**202,417**	**54**	**50,575,825**	**250**	**(1)**	**0**	**1**	**4**

2013 – 2015 Load Factor Percentage by Airline and Destination

AIRLINE	HUB	2013				2014				2015			
		1	2	3	4	1	2	3	4	1	2	3	4
Allegiant	AZA	78	75										
	LAS	81	83	86	80	82	83	87	75	80	78	74	75
Delta	SLC	55	68	75	74	65	78	83	68	72	69	74	71
United	DEN	63	71	74	77	75	76	78	81	78	69	74	74
CPR Average		**69**	**74**	**76**	**77**	**75**	**79**	**81**	**75**	**77**	**71**	**74**	**73**

- Load factors average in the 70s for past 3 years
  - Seats up 4% year-over-year
- Energy sector may be impacting demand

Source: Diio Mi

Mead & Hunt

CODY (COD)

2015 Top Origin and Destination Markets from COD

RANK	AIRPORT	COD - CY 2015				% CHANGE VS 2014			
		PAX	% ORIGIN	REV ($)	FARE ($)	PAX	REV	FARE	SEATS
1	Denver, CO	4,831	40	971,724	201	(13)	(6)	8	3
2	Salt Lake City, UT	4,166	43	535,420	129	(24)	(18)	8	(4)
3	Phoenix, AZ (PHX)	2,788	45	532,014	191	58	29	(18)	-
4	Los Angeles, CA	2,505	38	491,751	196	13	25	11	-
5	Las Vegas, NV	2,398	73	407,862	170	4	13	8	-
6	Houston, TX (IAH)	2,132	46	561,687	264	(28)	(30)	(3)	-
7	Dallas, TX (DFW)	1,837	41	461,887	251	(6)	(15)	(10)	-
8	San Francisco, CA	1,553	41	364,350	235	(8)	17	27	-
9	Chicago, IL (ORD)	1,455	37	455,475	313	9	6	(3)	6
10	Atlanta, GA	1,389	44	412,150	296	0	10	10	-
Total/Average		**65,495**	**43**	**17,606,839**	**269**	**2**	**4**	**2**	**(0)**

2013 – 2015 Load Factor Percentage by Airline and Destination from COD

AIRLINE	HUB	2013				2014				2015			
		1	2	3	4	1	2	3	4	1	2	3	4
Delta	SLC	47	71	86	69	57	76	82	78	57	81	82	79
United	DEN	77	79	86	82	76	82	75	83	77	84	82	78
	ORD							79				80	
COD Average		**64**	**76**	**86**	**77**	**68**	**80**	**78**	**81**	**68**	**83**	**82**	**78**

- Fairly seasonal market, with peaks during the summer
  - United Chicago service started in 2014
- Overall revenue up 4% year-over-year

Source: Diio Mi

Mead & Hunt

CHEYENNE (CYS)

2015 Top Origin and Destination Markets from CYS

RANK	AIRPORT	CYS - CY 2015				% CHANGE VS 2014			
		PAX	% ORIGIN	REV ($)	FARE ($)	PAX	REV	FARE	SEATS
1	Denver, CO	679	45	35,812	53	(43)	(39)	7	(23)
2	Houston, TX (IAH)	244	35	95,756	391	17	11	(5)	-
3	Minneapolis, MN	175	33	47,025	269	(39)	(39)	(0)	-
4	Las Vegas, NV	167	55	38,362	230	44	20	(17)	-
5	Dallas, TX (DFW)	130	21	39,144	300	(0)	(6)	(6)	-
6	Salt Lake City, UT	123	31	41,875	339	(32)	33	95	-
7	Phoenix, AZ (PHX)	120	46	32,052	267	(35)	(14)	33	-
8	Los Angeles, CA	103	46	30,461	295	(49)	(41)	17	-
9	Chicago, IL (ORD)	102	28	44,560	438	(2)	(2)	(0)	-
10	San Diego, CA	83	78	22,759	273	52	90	25	-
Total/Average		**5,687**	**40**	**1,736,633**	**305**	**(43)**	**(37)**	**10**	**(31)**

2013 – 2015 Load Factor Percentage by Airline and Destination from CYS

AIRLINE	HUB	2013				2014				2015			
		1	2	3	4	1	2	3	4	1	2	3	4
Great Lakes	DEN	38	45	47	47	49	37	31	27	23	23	22	19
CYS Average		**33**	**40**	**42**	**40**	**38**	**33**	**63**	**29**	**23**	**32**	**28**	**19**

- Cheyenne passenger traffic has been greatly affected by Great Lakes' problems
- Seats down 31% year-over-year
- Load factors impact long-term viability

Source: Diio Mi

Mead & Hunt

GILLETTE (GCC)

2015 Top Origin and Destination Markets from GCC

RANK	AIRPORT	GCC - CY 2015				% CHANGE VS 2014			
		PAX	% ORIGIN	REV ($)	FARE ($)	PAX	REV	FARE	SEATS
1	Denver, CO	3,998	38	902,901	226	6	7	2	56
2	Salt Lake City, UT	3,784	41	752,909	199	(34)	(25)	14	60
3	Phoenix, AZ (PHX)	3,165	66	716,729	226	38	38	(0)	-
4	Dallas, TX (DFW)	3,157	56	708,488	225	71	42	(17)	-
5	Las Vegas, NV	2,012	88	442,834	220	0	6	6	-
6	Houston, TX (IAH)	1,868	44	640,640	343	(26)	(31)	(7)	-
7	Chicago, IL (ORD)	1,388	54	381,858	275	34	9	(19)	-
8	Orlando, FL (MCO)	1,328	78	378,683	285	12	24	11	-
9	Los Angeles, CA	1,308	49	326,572	250	3	(1)	(4)	-
10	Sacramento, CA	1,241	36	320,474	258	130	142	5	-
Total/Average		**59,451**	**56**	**17,651,425**	**297**	**11**	**10**	**(1)**	**21**

2013 – 2015 Load Factor Percentage by Airline and Destination from GCC

AIRLINE	HUB	2013				2014				2015			
		1	2	3	4	1	2	3	4	1	2	3	4
Delta	SLC	43	59	63	62	52	61	69	67	44	44	45	41
United	DEN	64	73	71	76	72	72	60	66	60	65	68	70
GCC Average		**54**	**64**	**63**	**66**	**60**	**64**	**61**	**64**	**53**	**56**	**59**	**58**

- Gillette's overall revenue is up on a significant increase in seats

Source: Diio Mi

Mead & Hunt

JACKSON HOLE (JAC)

2015 Top Origin and Destination Markets from JAC

		JAC - CY 2015				% CHANGE VS 2014			
RANK	AIRPORT	PAX	% ORIGIN	REV ($)	FARE ($)	PAX	REV	FARE	SEATS
1	Chicago, IL (ORD)	29,195	19	7,912,652	271	(0)	0	0	4
2	Los Angeles, CA	28,500	23	7,102,681	249	11	16	4	27
3	New York, NY (LGA)	25,145	17	8,474,200	337	4	12	8	-
4	Dallas, TX (DFW)	24,349	16	5,550,684	228	(1)	6	7	30
5	San Francisco, CA	23,369	25	5,634,653	241	(1)	7	8	24
6	Newark, NJ	23,141	14	7,938,043	343	40	38	(1)	16
7	Boston, MA	22,768	20	7,198,187	316	(3)	5	8	-
8	Atlanta, GA	20,704	14	5,061,951	244	(3)	1	4	(27)
9	Houston, TX (IAH)	19,422	13	5,153,735	265	3	1	(2)	108
10	Denver, CO	17,512	31	3,477,724	199	(35)	(21)	23	(12)
Total/Average		**580,469**	**22**	**174,617,502**	**301**	**(2)**	**4**	**6**	**3**

- JAC's traffic is very skewed to inbound visitors (78%)
- Los Angeles and Newark had the largest growth year over year
- Overall revenue up driven by average fares up 6%

Source: Diio Mi

Mead & Hunt

JACKSON HOLE (JAC)

2015 Top Origin and Destination Markets from JAC

AIRLINE	HUB	2013				2014				2015			
		1	2	3	4	1	2	3	4	1	2	3	4
American	DFW	78	85	91	79	81	82	87	75	81	82	91	71
	ORD		84	94			81	89			86	95	69
Delta	ATL	86	95	93	89	85	92	92	74	85	87	85	78
	LAX				67	66		69	70	62	73	67	71
	MSP	87		93	79	79	86	89	68	77	89	88	69
	SEA					44				49			57
	SLC	80	79	87	71	72	83	82	77	75	80	80	73
Frontier	DEN	76	86	90		67	87	90					
United	DEN	75	80	78	74	72	79	72	77	72	76	76	70
	EWR	81			68	78			71	81			76
	IAD								58	78			64
	IAH		82	82		78	86	84	75	68	80	73	67
	LAX	64		71	67	68		71	70	62	45	68	71
	ORD	78	92	87	73	75	86	85	80	73	84	85	74
	SFO	63		87	73	74		74	61	73	47	78	75
JAC Average		**78**	**84**	**86**	**75**	**77**	**84**	**83**	**73**	**76**	**80**	**83**	**71**

- JAC is a very seasonal market, with significantly more service during peak season
  - AA's service has the overall strongest Load Factor
  - Load factors remain stable year over year

Source: Diio Mi

Mead & Hunt

LARAMIE (LAR)

2015 Top Origin and Destination Markets from LAR

RANK	AIRPORT	LAR - CY 2015				% CHANGE VS 2014			
		PAX	% ORIGIN	REV ($)	FARE ($)	PAX	REV	FARE	SEATS
1	Denver, CO	2,178	48	156,620	72	22	10	(10)	39
2	Houston, TX (IAH)	957	57	217,056	227	(4)	2	7	-
3	Chicago, IL (ORD)	898	60	258,843	288	7	36	26	-
4	Portland, OR	869	56	163,668	189	27	12	(11)	-
5	Phoenix, AZ (PHX)	781	64	118,269	151	(23)	(10)	17	-
6	Seattle-Tacoma, WA	780	71	177,728	228	(1)	33	34	-
7	Minneapolis, MN	735	45	148,269	202	31	53	16	-
8	San Francisco, CA	648	57	158,671	245	16	35	16	-
9	Las Vegas, NV	632	76	108,319	171	3	30	26	-
10	Washington, DC (IAD)	596	49	175,869	295	65	71	4	-
Total/Average		**27,206**	**56**	**6,540,113**	**240**	**6**	**16**	**10**	**39**

2013 – 2015 Load Factor Percentage by Airline and Destination from LAR

AIRLINE	HUB	2013				2014				2015			
		1	2	3	4	1	2	3	4	1	2	3	4
United	DEN	50	56	61	62	55	57	61	62	43	40	48	51
LAR Average		**50**	**56**	**62**	**62**	**55**	**58**	**61**	**62**	**43**	**40**	**48**	**51**

- Laramie service continues to improve with SkyWest's EAS service
- The switch from turboprops to regional jets resulted in a significant reduction in load factor but revenue up double digits

Source: Diio Mi

Mead & Hunt

RIVERTON (RIW)

2015 Top Origin and Destination Markets from RIW

RANK	AIRPORT	RIW - CY 2015				% CHANGE VS 2014			
		PAX	% ORIGIN	REV ($)	FARE ($)	PAX	REV	FARE	SEATS
1	Denver, CO	2,817	49	386,987	137	(62)	(60)	5	(36)
2	Phoenix, AZ (PHX)	213	40	72,040	339	(26)	(12)	19	-
3	San Francisco, CA	186	35	74,934	402	(17)	10	32	-
4	Minneapolis, MN	177	10	49,435	280	(23)	(22)	1	-
5	Los Angeles, CA	166	39	47,437	285	(21)	(25)	(4)	-
6	Seattle-Tacoma, WA	152	35	49,333	324	(50)	(47)	7	-
7	Washington, DC (IAD)	147	50	59,103	403	(43)	(40)	7	-
8	Portland, OR	139	54	59,639	430	(36)	(29)	12	-
9	Dallas, TX (DFW)	122	76	36,444	300	(39)	(32)	12	-
10	Ontario, CA	121	39	49,940	412	51	84	22	-
Total/Average		**7,300**	**44**	**2,143,461**	**293**	**(56)**	**(49)**	**14**	**(17)**

2013 – 2015 Load Factor Percentage by Airline and Destination from RIW

AIRLINE	HUB	2013				2014				2015			
		1	2	3	4	1	2	3	4	1	2	3	4
Great Lakes	DEN	53	56	54	54	48	52	56	51	49	52	33	30
RIW Average		**51**	**54**	**54**	**54**	**48**	**49**	**50**	**44**	**43**	**45**	**28**	**26**

- Riverton continues to suffer from poor service on Great Lakes
  - Passengers are down 56 percent from 2014 to 2015

Source: Diio Mi

Mead & Hunt

ROCK SPRINGS (RKS)

2015 Top Origin and Destination Markets from RKS

RANK	AIRPORT	RKS - CY 2015				% CHANGE VS 2014			
		PAX	% ORIGIN	REV ($)	FARE ($)	PAX	REV	FARE	SEATS
1	Denver, CO	4,108	44	657,589	160	22	23	1	55
2	Houston, TX (IAH)	3,093	37	1,066,654	345	(13)	(26)	(15)	-
3	Dallas, TX (DFW)	1,219	52	292,366	240	(10)	(9)	1	-
4	Pittsburgh, PA	860	40	301,174	350	(7)	(14)	(8)	-
5	Minneapolis, MN	812	44	201,173	248	(14)	(25)	(13)	-
6	Oklahoma City, OK	736	43	222,732	303	(28)	(23)	7	-
7	Las Vegas, NV	733	79	138,118	188	(30)	(19)	16	-
8	Seattle-Tacoma, WA	609	57	149,122	245	(9)	(20)	(13)	-
9	Chicago, IL (ORD)	592	73	177,873	300	25	16	(7)	-
10	Phoenix, AZ (PHX)	586	56	129,100	220	(31)	(35)	(6)	-
Total/Average		**33,916**	**52**	**10,223,311**	**301**	**(16)**	**(15)**	**1**	**(32)**

2013 – 2015 Load Factor Percentage by Airline and Destination from RKS

AIRLINE	HUB	2013				2014				2015			
		1	2	3	4	1	2	3	4	1	2	3	4
Delta	SLC	45	57	57	59	52	51	58	76	62			
United	DEN	57	62	55	59	56	62	52	58	49	51	53	52
RKS Average		**51**	**58**	**54**	**56**	**52**	**56**	**54**	**60**	**49**	**51**	**53**	**52**

Source: Diio Mi

- Delta eliminated service to SLC in 2015, resulting in significant reduction in passengers
- Denver load factors have declined even with less seats in the market overall

Mead & Hunt

SHERIDAN (SHR)

2015 Top Origin and Destination Markets from SHR

RANK	AIRPORT	SHR - CY 2015				% CHANGE VS 2014			
		PAX	% ORIGIN	REV ($)	FARE ($)	PAX	REV	FARE	SEATS
1	Denver, CO	488	49	76,064	156	(96)	(96)	(5)	(93)
2	Houston, TX (IAH)	40	50	22,156	560	(87)	(81)	49	-
3	Los Angeles, CA	28	35	10,384	372	(90)	(88)	15	-
4	Dallas, TX (DFW)	20	0	5,801	293	(91)	(91)	7	-
5	New York, NY (LGA)	20	0	9,286	469	(94)	(92)	21	-
6	Minneapolis, MN	19	100	9,658	511	(74)	(43)	122	-
7	Chicago, IL (ORD)	19	100	4,101	217	(93)	(96)	(37)	-
8	San Diego, CA	19	100	3,761	199	(88)	(91)	(22)	-
9	Salt Lake City, UT	19	0	6,237	330	(87)	(87)	(3)	-
10	San Antonio, TX	18	100	5,931	330	(85)	(86)	(9)	-
Total/Average		**758**	**52**	**194,852**	**257**	**(96)**	**(96)**	**3**	**(94)**

2013 – 2015 Load Factor Percentage by Airline and Destination from SHR

AIRLINE	HUB	2013				2014				2015			
		1	2	3	4	1	2	3	4	1	2	3	4
Great Lakes	DEN	43	49	57	54	46	47	49	36	30			
SHR Average		**43**	**49**	**57**	**54**	**46**	**47**	**49**	**36**	**30**			

- Great Lakes suspended service in 2015
- Denver Air Connection operates to SHR under Part 380 scheduled charter (performance data not available from the US DOT)
- Example of a positive outcome of the ASEP

Source: Diio Mi

Mead & Hunt

WORLAND (WRL)

2015 Top Origin and Destination Markets from WRL

RANK	AIRPORT	WRL - CY 2015				% CHANGE VS 2014			
		PAX	% ORIGIN	REV ($)	FARE ($)	PAX	REV	FARE	SEATS
1	Denver, CO	2,118	40	322,417	152	(55)	(56)	(2)	70
2	Dallas, TX (DFW)	88	56	21,993	250	771	617	(18)	-
3	Phoenix, AZ (PHX)	58	33	23,408	400	-	-	-	-
4	Des Moines, IA	53	41	26,838	508	-	-	-	-
5	Reno, NV	41	100	10,143	245	-	-	-	-
6	Tucson, AZ	32	0	11,059	341	50	184	90	-
7	San Francisco, CA	30	67	9,827	324	(41)	(47)	(10)	-
8	Birmingham, AL	23	100	7,652	327	-	-	-	-
9	Bakersfield, CA	22	100	18,326	830	2	71	67	-
10	Philadelphia, PA	21	0	5,672	271	-	-	-	-
Total/Average		**2,960**	**43**	**625,676**	**211**	**(49)**	**(43)**	**12**	**3**

2013 – 2015 Load Factor Percentage by Airline and Destination from WRL

AIRLINE	HUB	2013				2014				2015			
		1	2	3	4	1	2	3	4	1	2	3	4
Great Lakes	DEN	21	28	34	32	25	12	10	12	11	9	10	7
WRL Average		**21**	**28**	**34**	**32**	**25**	**12**	**10**	**12**	**11**	**9**	**10**	**7**

- Worland service was greatly impacted by Great Lakes issues
- Final order terminating WRL's EAS eligibility effective September 30, 2016

Source: Diio Mi

Mead & Hunt

MARKET ASSESSMENT

Best Assessment

High airfares Low load factor Several competitors	High airfares High load factor Few competitors
Low airfares Low load factor Many competitors	Low airfares High load factor Several competitors

Load factor

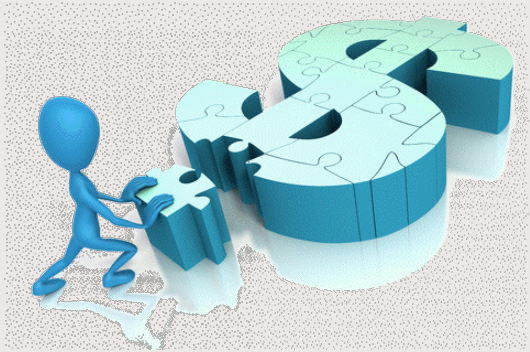
Fares

Worst Assessment

Multiple factors considered for final assessment

WY ASEP ROI ANALYSIS

PURPOSE OF ROI ANALYSIS



- Wyoming is a leader in providing airline assistance to maintain and expand air service through the WY ASEP
- Purpose of study is to gain a greater level of understanding of the value of these investments
  - A more granular assessment of the WY ASEP than the macro 2013 WY AEIS
  - **By flight analysis**
  - Use of IMPLAN (IMpacts for PLANning – industry standard software for economic analysis) to model the total economic impact and payoff of the WY ASEP

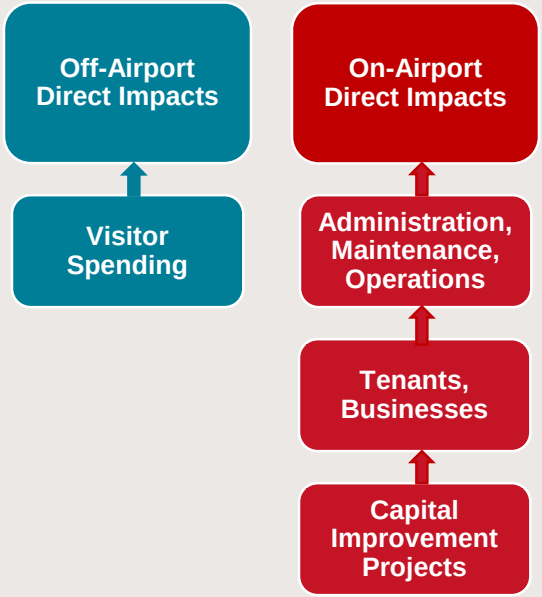
Mead & Hunt

DATA SOURCES

- WYDOT ASEP
- WY 2013 AEIS
  - Airport Employment, Payroll and Output (adjusted for inflation and enplanements)
  - Visitor percentages (benchmarked against ARC ticketed data and O&D POO) and average Spend Per Visit
- US DOT T-100 and O&D flown data
- IMPLAN model at the county level (firm level payroll and demographics and an FAA approved approach)

METHODOLOGY

Estimate 2 categories of Direct Impacts:
1) Off-Airport Visitor Spending
2) On-Airport Activities



2 groups responsible for generating economic activity:

- Visitors traveling on commercial service flights spending during their stay
- Businesses and organizations engaged in airport activities

Mead & Hunt

METHODOLOGY (cont.)

- Estimates of Direct Economic Output, Employment, and Payroll attributed to ASEP flights:
  - Economic Output
    - Visitor purchases are included as off-airport direct spending (visitor purchases made at the airport are included as on-airport economic output, e.g. airport concessions)
    - Economic activity attributed to ASEP flight – includes spending of businesses such as airlines, ground-handling services, retail and food vendors, airport management, operations staff, and government organizations (capital expenditures of these businesses and government organizations are included)
  - Employment
    - # of employees with jobs attributed to ASEP flight (subset of jobs related to commercial service)
  - Payroll
    - Annual wages, salaries and benefits attributed to ASEP flight (subset of payroll related to commercial service)

Mead & Hunt

METHODOLOGY (cont.)

- Beyond Direct Impacts there are Multiplier Effects
  - Result from the re-spending and re-circulation of Direct Impacts and can occur multiple times
  - Measure the successive waves of spending as a result of the initial expenditure
  - Calculated using IMPLAN – models the way $$ are spent and re-spent (multiplier)
  - Based on size, reach, diversity and trends of region's economy
  - 2 types of Multiplier Effects – Indirect & Induced Impacts
    - Indirect Impacts: Business expenses such as equipment and supplies (e.g. FBO equipment purchases as a result of commercial service or restaurant supply purchases as a result of visitors)
    - Induced Impacts: Salaries spent on goods and services (e.g. airport employees spend paycheck on housing, groceries, etc. and purchases circulate through the economy resulting in increased economic activity)
  - Ratio where a multiplier of 1.5 represents a total of indirect and induced impacts that are 50% of the total direct impact

$$Multiplier = \frac{Direct + Indirect + Induced}{Direct}$$

Mead & Hunt

METHODOLOGY (cont.)

- Off-Airport Direct Economic Impact
  - **Visitor Spending** attributed to ASEP flight
  - Based on ratio of enplanements/onboards, % of visitors for each market and average spend per visit (from 2013 AEIS surveys) adjusted for inflation
  - Example: Airport X has total enplanements/onboards of 100K, an ASEP flight that generated 10K in enplanements/onboards, is 50% visitors with an average spend of $500 per trip - results in $2.5M in direct Visitor Spending
  - Determine # of jobs for each $1M in Visitor Spending which generates Multiplier Effects
- On-Airport Economic Impact
  - Percentage of total airport **Output**, Employment, and Payroll attributed to ASEP flight
  - Based on ratio of ASEP enplanements/onboards as a % of total enplanements/onboards and adjusted for inflation
  - Example: Airport X has 25 employees, $1M payroll, $2M Output, total enplanements/onboards of 100K and an ASEP flight that generated 10K in enplanements/onboards - results in $200K in Output, 2.5 Jobs, $100K in Payroll attributable to the ASEP flight **plus Multiplier Effects**
- **Total Impact = Visitor Spending + On-Airport Output + On-Airport Output Multipliers**

Mead & Hunt

CPR-MSP EXAMPLE

CPR-MSP ASEP Flight October 2004 to September 2005

- ASEP MRG $1,633,520
- Generated 18,268 enplanements/onboards (total CPR enplanements/onboards of 86,002)
- % visitors 43.2% with an average spend of $564 per trip (inflation adjusted from AEIS surveys)
- Airport Output related to all commercial service $25.7M (admin, tenants, projects inflation adjusted from AEIS surveys)

ROUTE	WYDOT ASEP ROI SUMMARY TABLES											
	SUBSIDY	ONBOARDS	% VISITORS	VISITORS	SPEND PER TRIP	DIRECT OFF-AIRPORT VISITOR SPENDING	DIRECT V.S. ROI	ON-AIRPORT OUTPUT	ON-AIRPORT OUTPUT MULTIPLIER	TOTAL ECONOMIC IMPACTS	TOTAL ECONOMIC IMPACT/$ INVESTED	TOTAL ECONOMIC IMPACTS ROI
CPR-MSP	$1,633,520	18,268	43.2	7,892	$564	$4,447,498	172%	$4,864,827	$4,232,399	$13,544,724	$8.29	729%

- Where ROI = (Economic Impact from Investment – Initial Investment)/Initial Investment
- On-Airport Multiplier Effects (1.9 Output/1.8 Employment/2.3 Payroll – IMPLAN generated)
- On-Airport payroll $1.5M
- Off-Airport payroll $2.0M

Mead & Hunt

CPR-MSP SUMMARY

CRP-MSP Subsidy = $1,633,520

Direct Off-Airport Visitor Spending	On-Airport Output	On-Airport Output Multiplier
Onboards of 18,268 % of visitors = 43.2%		
Visitors of 7,892 Spend per trip = $564		
$4,447,498	**$4,864,827**	**$4,232,399**
Direct Visitor Spend ROI = 172%		

Total Economic Impacts = $13,544,724

Total Economic Impact per $1 Invested = $8.29

Total Economic Impacts ROI = 729%

Mead & Hunt

JAC-DFW EXAMPLE

JAC-DFW ASEP Flight December 2011 to March 2012

- ASEP MRG $168,515
- Generated 13,570 enplanements/onboards (total JAC enplanements/onboards of 81,262)
- % visitors 90% with an average spend of $1,784 per trip (inflation adjusted from AEIS surveys)
- Airport Output related to all commercial service $75.8M (admin, tenants, projects inflation adjusted from AEIS surveys)

ROUTE	WYDOT ASEP ROI SUMMARY TABLES											
	SUBSIDY	ONBOARDS	% VISITORS	VISITORS	SPEND PER TRIP	DIRECT OFF-AIRPORT VISITOR SPENDING	DIRECT V.S. ROI	ON-AIRPORT OUTPUT	ON-AIRPORT OUTPUT MULTIPLIER	TOTAL ECONOMIC IMPACTS	TOTAL ECONOMIC IMPACT/$ INVESTED	TOTAL ECONOMIC IMPACTS ROI
JAC-DFW	$168,515	13,570	90.0	12,213	$1,784	$21,786,411	12,828%	$4,316,037	$3,754,952	$29,857,400	$177.18	17,618%

- Where ROI = (Economic Impact from Investment – Initial Investment)/Initial Investment
- On-Airport Multiplier Effects (1.9 Output/1.8 Employment/2.4 Payroll – IMPLAN generated)
- On-Airport payroll $1.5M
- Off-Airport payroll $5.8M

Mead & Hunt

JAC-DFW SUMMARY

JAC-DFW Subsidy = $168,515

Direct Off-Airport Visitor Spending	On-Airport Output	On-Airport Output Multiplier
Onboards of 13,570 % of visitors = 90.0%		
Visitors of 12,213 Spend per trip = $1,784		
$21,786,411	**$4,316,037**	**$3,754,952**
Direct Visitor Spend ROI = 12,828%		

Total Economic Impacts = $29,857,400

Total Economic Impact per $1 Invested = $177.18

Total Economic Impacts ROI = 17,618%

Mead & Hunt

STUDY APPROACH CAVEATS

- Analysis relies on specific methodologies, definitions and assumptions to arrive at the estimates
  - Involved gathering data from industry sources and existing studies then entering the data and assumptions into an economic model
  - Industry leading Ph.D. Economists teamed with air service development experts to complete the analysis
- Methodology discussed today is a high level overview of a complex, multi-layered, detailed process
  - Iterative process where results were reviewed, modified and re-run for greater credibility
  - Conservative assumptions (e.g. airport Output calculated through IMPLAN > AEIS so more conservative values used; adjusted for inflation/enplanements)
  - Assumes visitors on ASEP flight would not have otherwise materialized
- Complicated to accurately estimate the true net incremental jobs and visitor spending as a result of a route – this analysis represents a credible methodology to allocate positive impacts across individual route decisions

Mead & Hunt

SUMMARY

- Industry has changed significantly over the past decade
- Consolidation means fewer options for most smaller markets
  - LCC/ULCC is where majority of growth is coming from domestically
- Industry generally transitioning to larger aircraft
- Airlines consider many influencing factors
  - Local economy
  - Unmet demand
  - Fit with airline strategy
  - Best use of limited resource
- ASEP generates a positive ROI and provides a critical market-correcting funding mechanism for maintaining or expanding air service that otherwise might not exist
- Your feedback on the methodology is welcome

Mead & Hunt

Thank You! Questions/Comments?

Mead & Hunt

© 2016 Mead & Hunt, Inc.