

2019 CHICO, CALIFORNIA LEAKAGE STUDY UPDATE

Prepared for:

CMA Chico Municipal Airport

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Introduction

On behalf of the entire InterVISTAS consulting group we would like to thank you for the opportunity to present our leakage study for the Chico Municipal Airport.

The InterVISTAS Consulting Group

The InterVISTAS Consulting Group (“InterVISTAS”) is comprised of several integrated companies that provide a range of services to the worldwide travel and tourism industry. Within the United States, InterVISTAS operates through InterVISTAS Consulting Inc., providing services to clients in the areas of international and domestic air service development, travel and tourism marketing, security and border facilitation, international transportation policy, and a wide range of related services.

InterVISTAS is a company of Royal HaskoningDHV, an international project management, engineering, and consultancy service provider based in Amersfoort, The Netherlands. Royal HaskoningDHV’s 6,500 employees provide services from around the world from more than 100 offices in more than 35 countries. The firm carries out more than 30,000 projects each year in aviation, planning, transport, infrastructure, water, maritime, industry, energy, mining, and buildings.

InterVISTAS Consulting, Inc. operates in North America from primary offices in Boston, Washington DC, Vancouver, and Burlingame (near SFO airport). The firm also utilizes satellite offices throughout the country.

The InterVISTAS Air Service Development Program

The InterVISTAS air service development program is anchored in quantitative analysis, strategic evaluation, and comprehensive business case proposals. This approach encompasses leading air service development analysis, forecasting capabilities, and access to industry decision markets. In addition, we provide an in-depth understanding of domestic and international aviation trends and airline developments, successful community engagement strategies, and other industry specific insight.

Most importantly, InterVISTAS has a proven track record of success in the primary goal of any air service development program – **obtaining new air service.**

Executive Summary

Population

The Chico MSA has grown from 219,000 in 2009 to currently 231,000 in 2019 (projected), equating to a growth rate of six percent or 0.6% CAGR, growing just under the U.S. average of 0.7% CAGR., including in this projection was a 21% growth within city limits of Chico due to the Paradise, California wildfire fire in November 2018.

Load Factors and Fares

Load factors at CIC trailed the U.S. average of 85% in 2015 at 62%, however this could likely be due to high fares and a small local market to San Francisco (SFO) where the drive time is less than three hours. Fares at CIC were \$193 in the latest year of service versus \$174 for the U.S. average – a significant premium and point of leverage for future air service.

Proxy Markets

Using several proxy markets with Metropolitan Statistical Areas closely related to Chico with a range of current air service patterns was the basis for estimating the latest traffic leakage, equating to a travel propensity of 1.81.

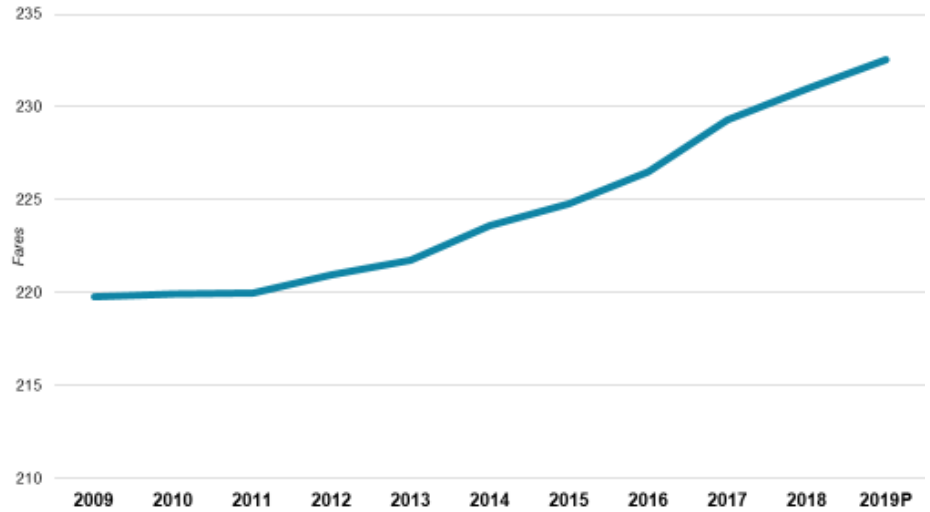
Market Sizes

A total of 698 passengers daily each way (PDEW) are estimated as leaking from Chico, CA. The Los Angeles (LAX) airport and nearby co-terminal airports consisting of Burbank (BUR), Ontario (ONT), Orange County (SNA) and Long Beach (LGB) is the largest market with 161 PDEW. A prospective airline will see viable load factors and revenue with just 5-6% of the estimated market size for one daily departure on a 50 seat jet aircraft. However, a market size like CIC could support three daily flights, requiring less than 20% market recapture to see viable levels in load factor.

Leakage Study

Metropolitan Area Population Growth

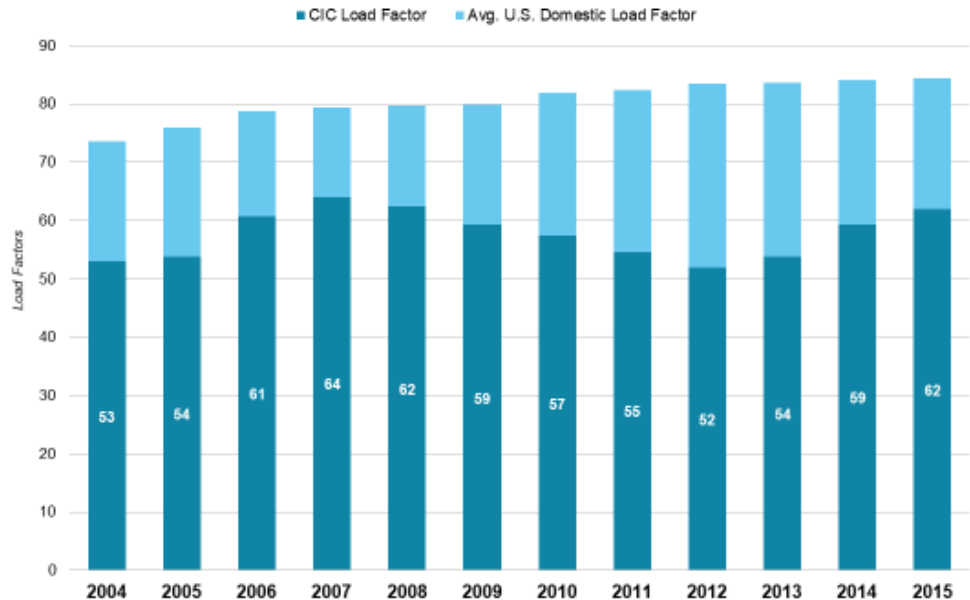
Chico is experiencing growth of 0.6% CAGR over the last ten years on par with the U.S. rate and this includes Paradise, CA within the MSA.



Source: Woods & Poole
2009-2019 estimates

Historic Load Factors

Chico's historic load factors were 62% versus the U.S. average of 85%. Fares and service patterns as well as the small local market affected these results.



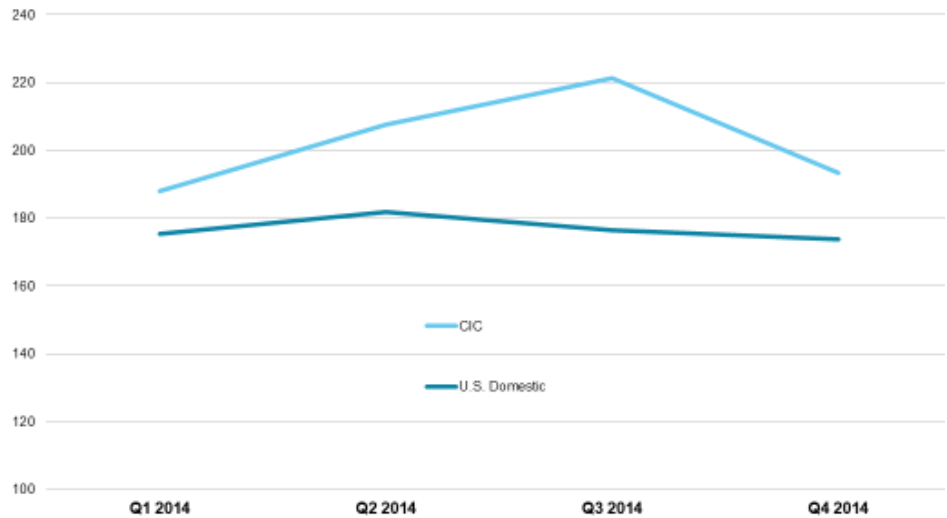
Source: DOT T-100
YE June 2004-2015

Fares

Fares adjusted to 1,000 miles depict a premium over the U.S. average and proves attractive as leverage for airlines to stimulate new incremental traffic.

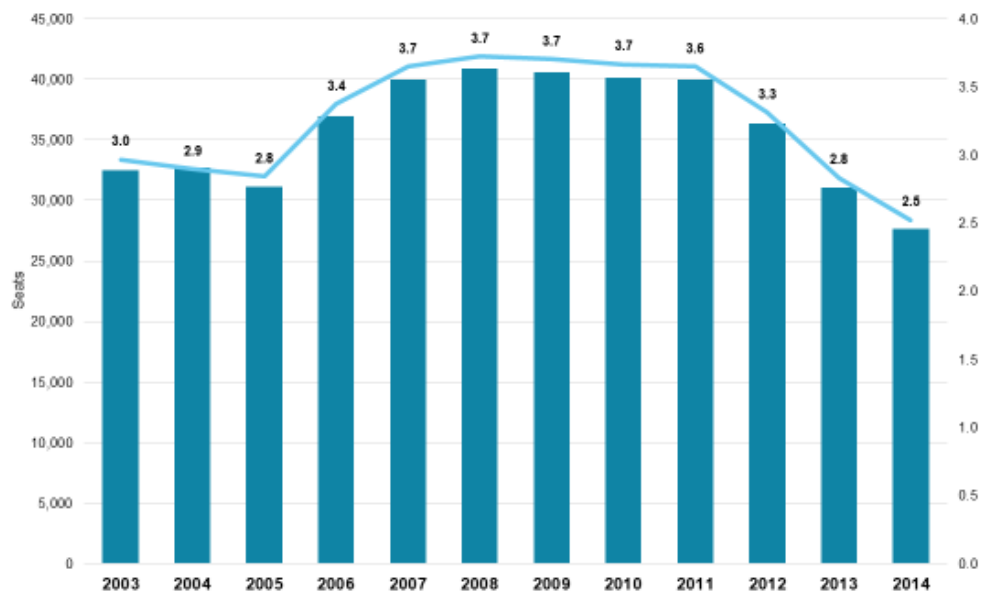
Fares at Chico have proven to remain above the U.S. during all times of scheduled service. Service was suspended in Q4 of 2014, the last year of scheduled operations.

Source: USDOT



Prior Service Pattern

Service was on United Airlines branded EMB-120 aircraft with 30 seats. Service levels have been reduced prior to cessation of service in 4Q 2014.

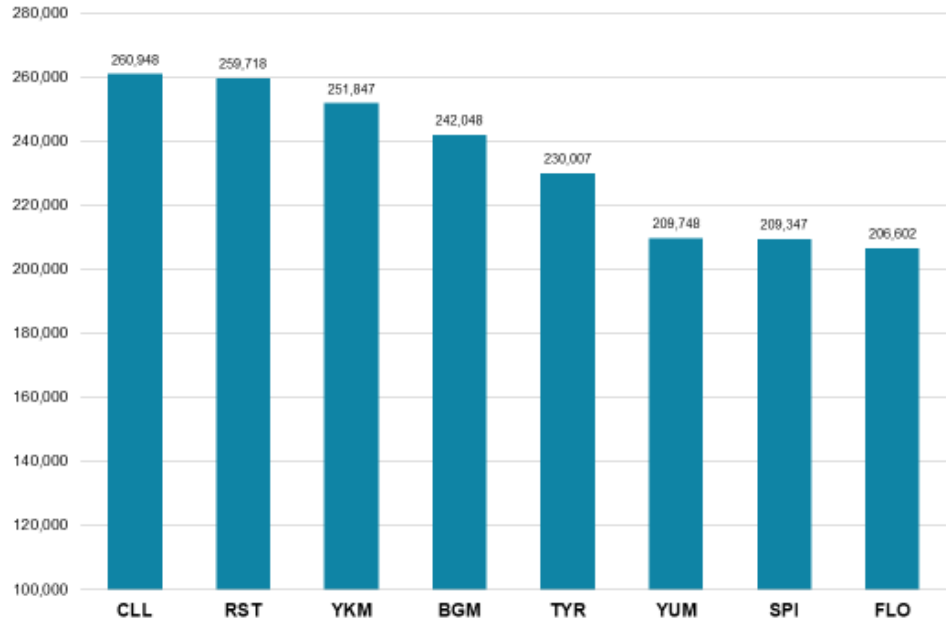


Market Proxies to Evaluate Potential Service

We examined each of the eight markets below, all of which have populations ranging between 200,000 to 260,000 and all offer scheduled air service.

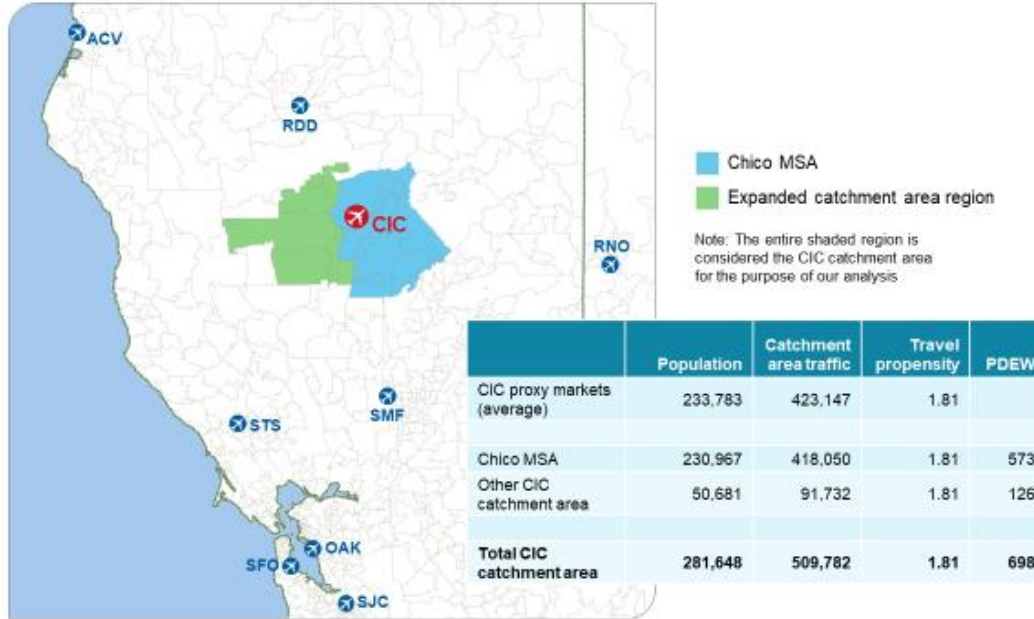
Travel propensity reflects each market's ratio of catchment area traffic to regional MSA population.

This tranche of eight markets was chosen to reflect a diverse set of market conditions albeit with similarities to Chico. The average catchment area traffic to population ratio is 1.81



City	Airport	2018 Population	YE1Q19 O&D	Catchment area traffic	Travel Propensity
Rochester	RST	259,718	350,513	1,003,146	3.86
Springfield	SPI	209,347	145,702	414,275	1.98
College Station	CLL	260,948	149,242	424,309	1.63
Yuma	YUM	209,748	154,208	439,564	2.10
Yakima	YKM	251,847	131,277	376,367	1.49
Binghamton	BGM	242,048	72,226	208,069	0.86
Tyler	TYR	230,007	96,227	275,235	1.20
Florence	FLO	206,602	85,121	244,142	1.18
Total		1,870,265	1,184,516	3,385,109	1.81

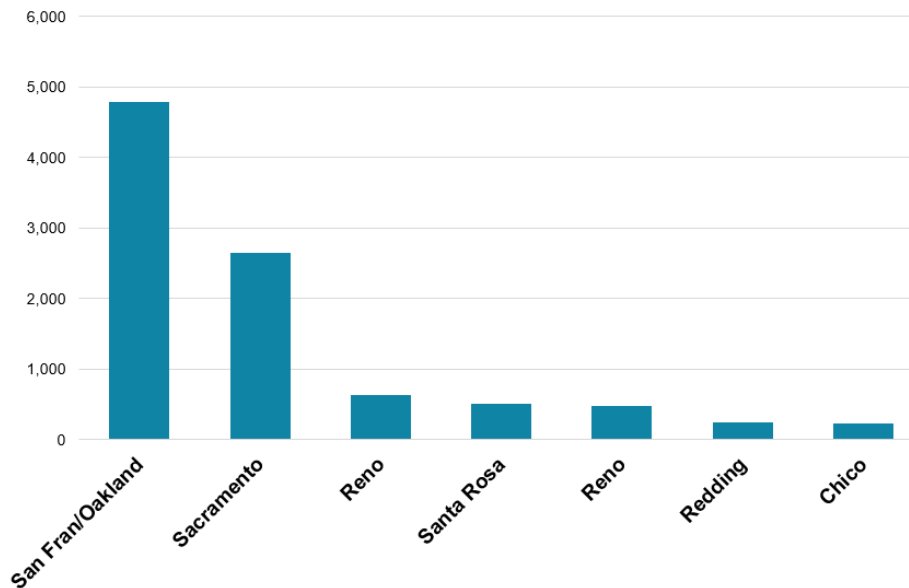
Projected CIC Catchment Area Consists of 281,000+



Source: Woods & Poole 2018, USDOT, ARC YE 1Q19

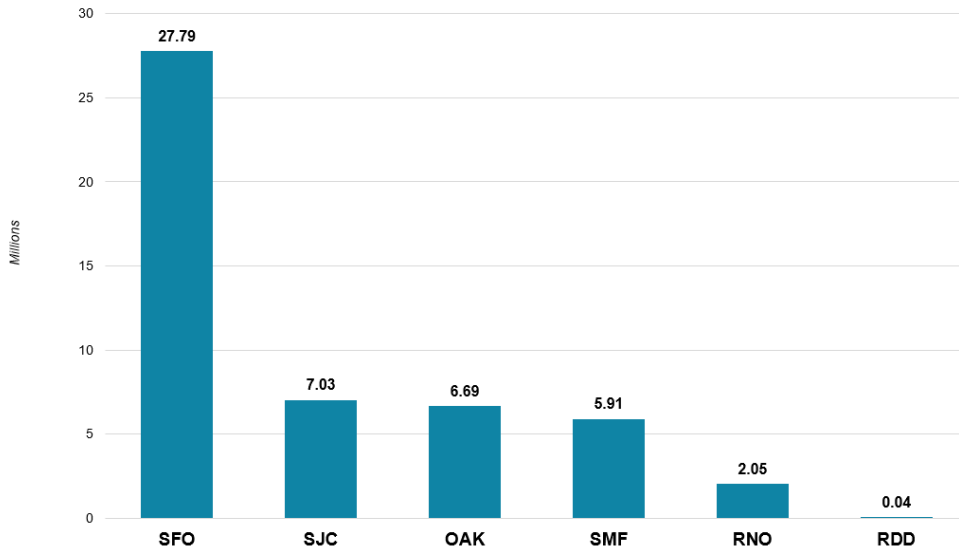
We believe the true catchment area of Chico is in excess of 281,000 residents for which an airline to effectively draw from, equating to over 500,000 O&D when factoring in likelihood of travelling through our research of cities with existing airline service.

Regional Population Totals



Regional Bay Area population now exceeds 4.5 million, not including South Bay, San Jose. Incorporating the South Bay drives the total to over 6 million residents.

Four Regional Airports Drive 10 million Annual Passengers

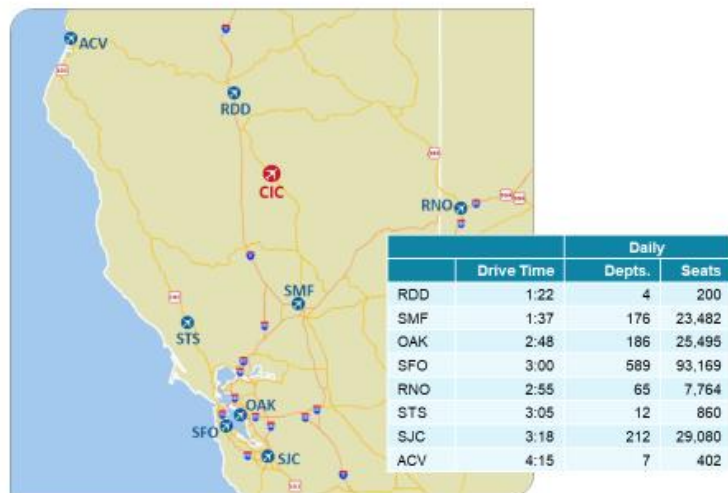


While San Francisco-SFO is clearly the region’s preeminent airport, OAK/SJC/SMF drive competitive service patterns. Redding remains a much smaller competitive threat.

Sacramento, CA (SMF) is Primary Leakage Airport

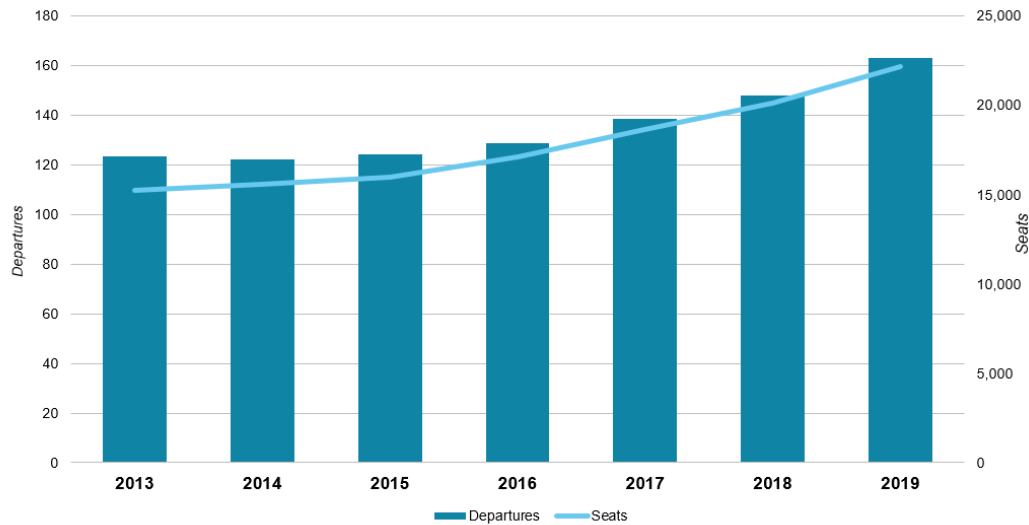
Sacramento-SMF captures the most traffic from the Chico area given the reasonable drive-time of 1 hour 35 minutes on average with airline service from 15 carriers, including ultra-low cost options Frontier and Spirit Airlines.

SMF drives a large service profile within reasonable 1:35 minute drive



Capacity Growth at Sacramento Drives Service

Capacity growth continues at Sacramento, among fastest growing in Calif. and U.S.

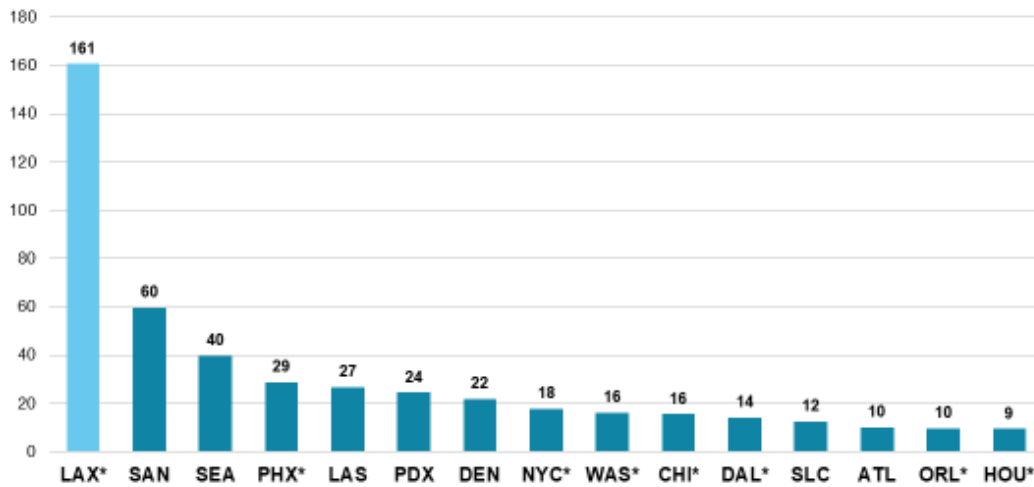


Sacramento-SMF will operate over 160 peak daily departure on 15 carriers with an annual average domestic load factor of 85.1% compared to the U.S. average of 83.0%.

Sacramento's domestic O&D fare of \$166 is also roughly in line with aggregate industry figures.

Estimated Market Size

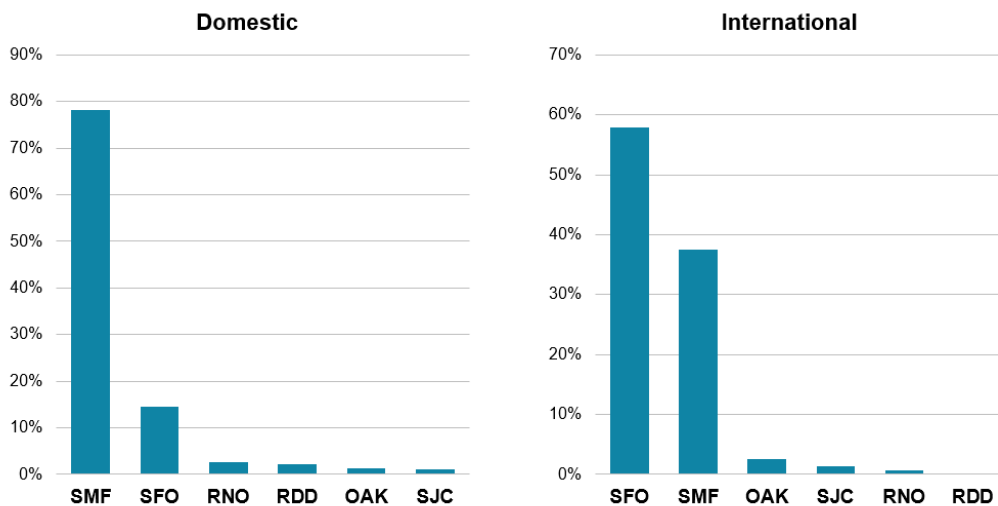
Estimated 698 Total PDEW – Top O&D Markets



Los Angeles Area (cotermed LAX, LGB, BUR, ONT, SNA) is the largest market from Chico with 161 PDEW, followed by San Diego with 60 PDEW with 75% utilizing Sacramento to get there.

International Service Profile

SFO's international service profile drives heavy use from CIC residents



Domestically Sacramento offers enough non-stop and connectivity for Chico residents, but for international flights San Francisco offers long-haul non-stop access and more itineraries to choose from.

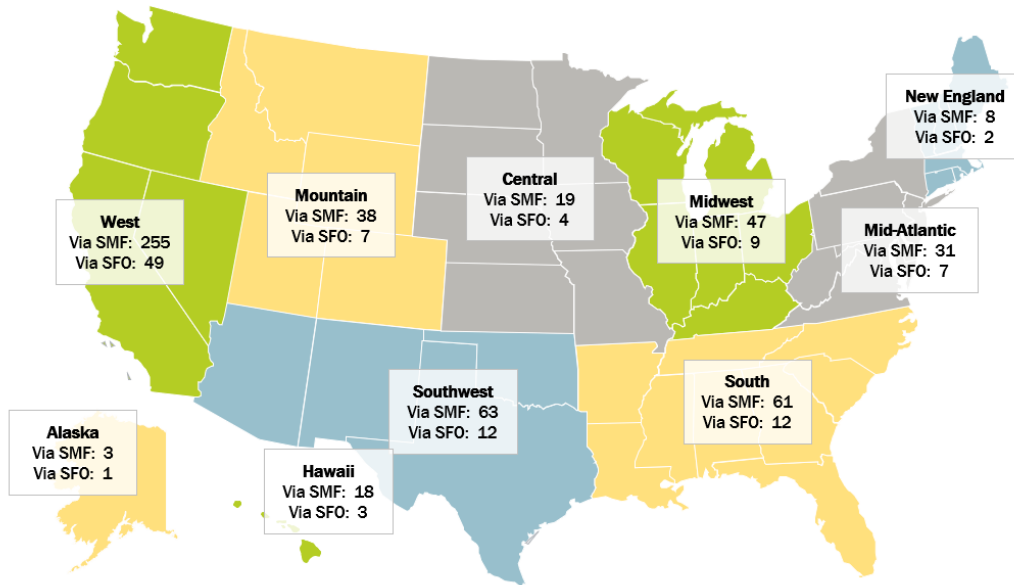
SMF Drives Lower Fares than SFO

Rank	City /Co-Term	Avg. Domestic Fares	
		via SMF Fare	via SFO Fare
1	LAX*	94	91
2	SAN	83	95
3	SEA	106	129
4	PHX*	127	130
5	LAS	119	102
6	PDX	118	110
7	DEN	148	143
8	NYC*	197	300
9	WAS*	244	250
10	CHI*	225	195
11	DAL*	175	129
12	SLC	133	153
13	HOU*	155	273
14	ATL	250	279
15	ORL*	185	232
16	OGG	250	250
17	BOS*	212	269
18	HNL	283	257
19	BOI	99	178
20	AUS	161	184
	Subtotal Top 20	168	188
	Total	166	261

Sacramento-SMF drove on average 10% lower fares than San Francisco for CIC area passengers. When combined with drive time – Sacramento is by far the number one choice without non-stop access from Chico.

CIC PDEW by Regional via SFO vs SMF

CIC PDEW by destination region via primary leakage airports

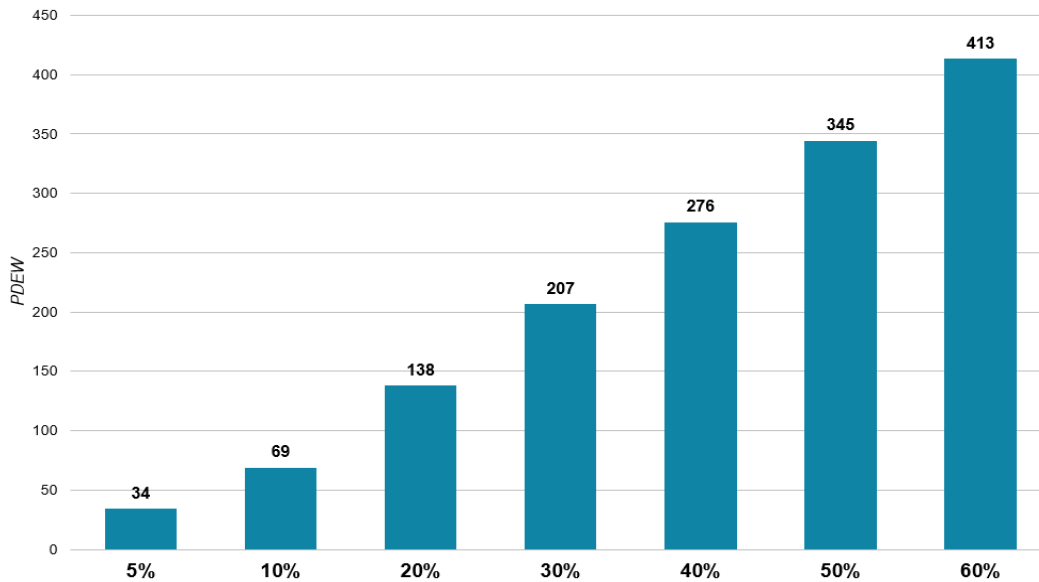


The west coast, primarily Los Angeles and San Diego are by far the largest markets from Chico.

Market Size Detail

Rank	City /Co-Term	CIC PDEW	Alternate airports share of CIC traffic demand						Total
			SMF	SFO	OAK	SJC	RNO	Other	
1	LAX*	159	92%	4%	0%	2%	2%	0%	100%
2	SAN	61	100%	0%	0%	0%	0%	0%	100%
3	SEA	40	97%	0%	0%	0%	3%	0%	100%
4	PHX*	29	95%	0%	0%	0%	5%	0%	100%
5	LAS	27	59%	29%	0%	12%	0%	0%	100%
6	PDX	24	81%	3%	0%	0%	16%	0%	100%
7	DEN	22	87%	0%	0%	3%	10%	0%	100%
8	NYC*	18	59%	34%	0%	6%	0%	0%	100%
9	WAS*	16	77%	0%	0%	8%	15%	0%	100%
10	CHI*	15	96%	4%	0%	0%	0%	0%	100%
11	DAL*	14	86%	11%	0%	3%	0%	0%	100%
12	SLC	12	92%	5%	0%	0%	3%	0%	100%
13	HOU*	10	96%	0%	0%	0%	4%	0%	100%
14	ATL	10	100%	0%	0%	0%	0%	0%	100%
15	ORL*	10	55%	28%	0%	7%	10%	0%	100%
16	OGG	9	71%	14%	9%	5%	1%	0%	100%
17	BOS*	8	63%	33%	0%	0%	3%	0%	100%
18	HNL	8	67%	17%	8%	6%	2%	0%	100%
19	BOI	8	94%	0%	0%	0%	6%	0%	100%
20	AUS	7	50%	40%	0%	0%	10%	0%	100%
Subtotal Top 20		509	81%	11%	1%	3%	5%	0%	100%
Total		698	78%	16%	2%	1%	2%	1%	100%

Summary/Required Capture Rate



In Summary, given the estimated number of leaked passengers of 698, a conservative capture rate of 20% would yield 138 passengers daily each way. As the carrier grows in frequency and gauge of aircraft, they will effectively capture more of these local passengers.

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