Everything Is In A State of Flux; Including the Status Quo

--Robert Byrne

SWELBAR·ZHONG
CONSULTANCY

Who Is The Swelbar-Zhong Consultancy?

> **We are kinda new - but not. We are different. We are an economic analysis and research firm.**
>> > We are NOT air service consultants.
>> > We do NOT fit into most procurement boxes either.

> **Then why so much work involving networks and individual airports?**
>> > I grew up in the business doing financial restructuring of airlines. If you do not fully understand respective networks, then you do not understand the demand drivers.

> **People love our work and say they cannot afford it. It is nice to have, but….**
>> > That is probably right for many as individual clients are typically only concerned about . We created a product that tries to find a price point that works for most that amortizes the cost of rigorous analysis over many.

> **Our work is about understanding how changes in the airline industry impact the supply chain dependent on it.**
>> > For us it is about the C-Suite and the Board and the community assisting in supporting the client's message supported with economic analysis.

> **Where your organization fits is the fundamental premise for our work.**

Yesterday's **S**trengths may very well be tomorrow's **W**eakness. Yesterday's weakness may be tomorrow's **O**pportunity. Yesterday's **T**hreat may become tomorrow's opportunity. The virtuous circle remains intact.

What we **DO** know is that yesterday's **SWOT** analysis will likely not apply to tomorrow's thinking about the business.

SOME THEMES AS THE INDUSTRY RESETS

Introduction

> **If competition was keen among airports pre-Pandemic, the intensity promises to grow.**

>> Airports of all sizes will be competing for domestic service as smaller markets are now in vogue.

>> For the moment, international service feels like it is back to square 1. Until the artificial barriers to fly to various world regions are removed, international service will be slower to come back.

>> In the event the domestic market begins to show fatigue from pent-up Pandemic demand and wants international travel to be the substitute product, airports that can support international service must be ready to pursue those opportunities.

> **Since the Pandemic, the network carriers, Southwest and the ULCCs have found fertile ground in the Small Hub airport space. For each carrier type, each are growing faster today in Small and Nonhub markets than in Large and Medium Hub markets.**

>> Southwest made yesterday's Small Hub airports into Medium Hub airports.

>> Pre-Pandemic, bigger was better. That has not been the case of late. At least for now, this is not just a large hub airport game.

> **Today's ULCCs and new entrants are increasingly comfortable with a service pattern of less frequency and less than daily service and maybe even seasonal.**

>> Every airport must be prepared to attract service with different mindsets. There are significant tradeoffs among airline products.

> **Over the past years, and even before the Pandemic, smaller markets with economies increasingly attractive to the ever-growing technology industry were popping up around the country with some being discovered by new airline service and some not.**

>> **Yes, and I love the fact that Northwest Arkansas and Huntsville have been discovered.** There are more.

Swelbar·Zhong
CONSULTANCY

Pretending the Crystal Ball Is Clear

> **There are many things we DO NOT know, like:**
>> Will all the connecting hubs in place pre-COVID, remain post-COVID?
>> Should we be thinking less about just connectivity to secondary and tertiary markets along with having nonstop service to as many metro areas as possible AND some hybrid of point-to-point service?
>> Will all small markets in the state remain on airline maps? This time, really, the network carriers are exiting the vast majority of the 50-seat business.

> **There are some things we DO know, like:**
>> With limited aircraft resources over the next few years, competition for air service will be keen.
>> Many markets have won outsized service during the Pandemic. Not all of that service can be sustained.
>> Attracting international service is going to be difficult in the short to medium term. So many widebody aircraft have been parked on both sides of the ocean means that carriers serving transoceanic markets will be in search of new models promising profitability and efficiency.
>>> It was nice to see Medium Hub airports win international service in the 2015 – 2019 period. Aircraft technology is going to open up opportunities for even more markets like Small Hubs as well.

> **THERE WILL BE NOTHING EASY IN THE SHORT-TERM.** But like leisure travel exploded this summer after the availability of a vaccine, change is sure to occur, and the timetable is uncertain.

Swelbar·Zhong
CONSULTANCY

ECONOMICS and DEMOGRAPHICS and ANY and ALL LOCAL COMMERCIAL ACTIVITY

Economics and Demographics and Commercial Activity Big and Small

> You have to tell them what they don't know, cannot read or cannot get from public data.

> It has always been there, but the Pandemic highlighted population migration as work at home practices changed significantly, the desire for better quality of life in areas less densely populated increased, and the simple fact that businesses in the technology supply chain were growing from west to east.

>> As the population migrates, the new inhabitants will have different travel proclivities than the established base. What are they? **A serious need for data is present.**

>> The migration out of New York City has been documented.

>> Thinking certain metro areas with a Large Hub airport will get smaller, and new smaller metro areas get bigger. **THIS IS A BIT OF A DISRUPTOR**.

Swelbar·Zhong
CONSULTANCY

The Tech Hubs:
Will Remain Critically Important; However, They Are/Will Be Joined

A New Vernacular:
Tech Focus Cities and Emerging Tech Focus Cities Will Compete Vigorously for New Domestic and International Commercial Air Service

- **Tech Focus Cities**
- **Emerging Tech Focus Cities**

Airports With At Least 10 New Domestic Routes
JUN-AUG 2021 VERSUS JUN-AUG 2019

NEW ENGLAND

PACIFIC

MOUNTAIN

MIDWEST

GREAT LAKES

MID-ATLANTIC

SOUTHWEST

SOUTHEAST

FCA
BZN
BOI
JAC
RAP
MKE
GRR
CLE
PIT
PWM
ACK
BDL
PVD
RNO
OAK
MCI
IND
CMH
STL
CVG
SDF
ORF
ONT
BUR
SNA
LGB
RDU
BNA
AVL
MYR
CHS
HHH
SAV
DAL
VPS
AUS
HOU
MSY
PNS
SRQ
RSW
EYW
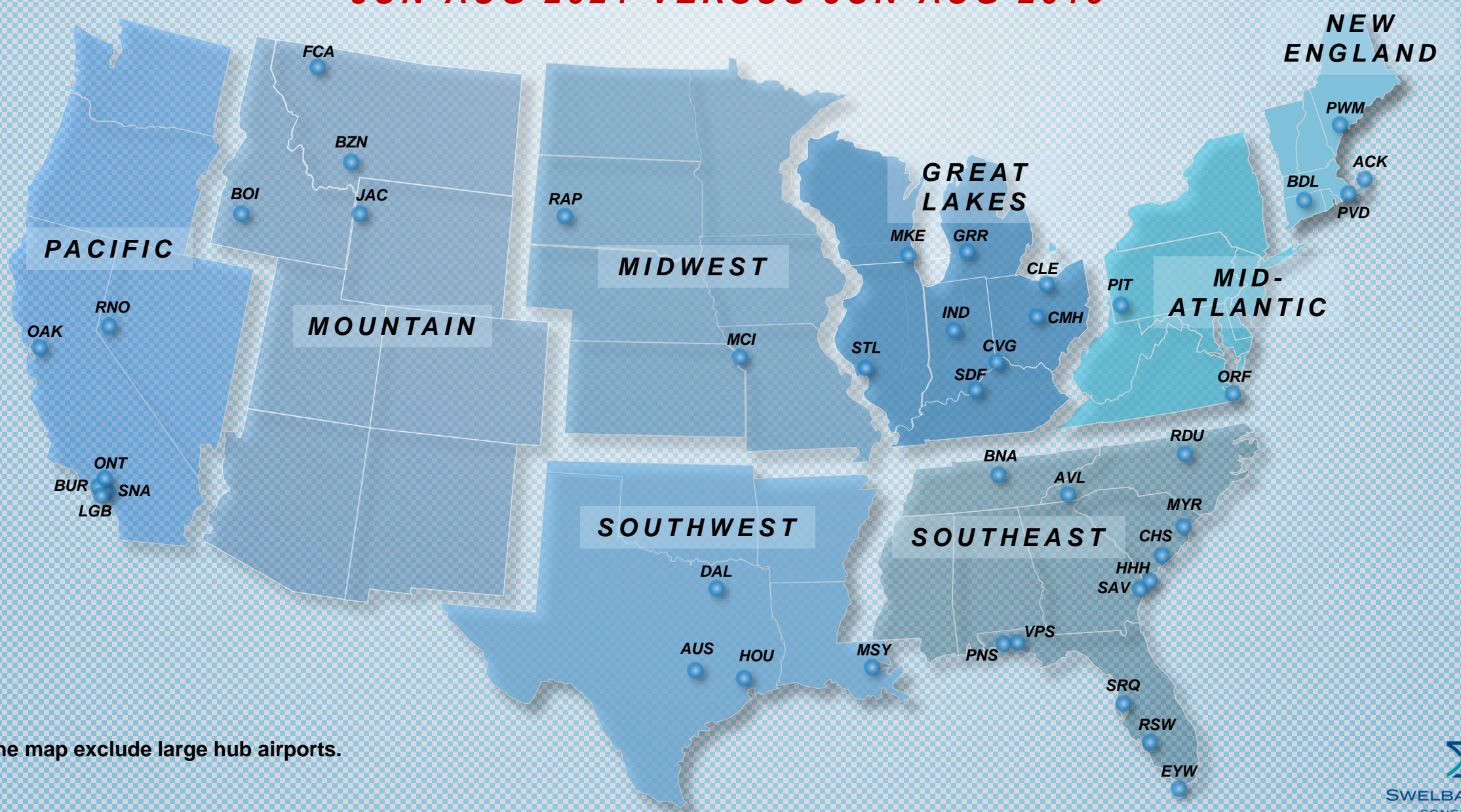
Note: The map exclude large hub airports.

Swelbar·Zhong
CONSULTANCY

New Domestic Routes
JUN-AUG 2021 VERSUS JUN-AUG 2019

GREAT LAKES REGION

Rank	Airport	New Routes
IND	Indianapolis, IN	18
CMH	Columbus, OH	17
CVG	Cincinnati, OH	16
MKE	Milwaukee, WI	15
SDF	Louisville, KY	14
CLE	Cleveland, OH	12
GRR	Grand Rapids, MI	11
TVC	Traverse City, MI	7
CAK	Akron, OH	5
ATW	Appleton, WI	5
PIA	Peoria, IL	4
DAY	Dayton, OH	3
FNT	Flint, MI	3
BLV	Belleville, IL	3
MSN	Madison, WI	2
BMI	Bloomington, IL	2
IWD	Ironwood, MI	2
UIN	Quincy, IL	2
ESC	Escanaba, MI	1
FWA	Fort Wayne, IN	1
RHI	Rhinelander, WI	1
MWA	Marion/Herrin, IL	1
DEC	Decatur, IL	1
OWB	Owensboro, KY	1
LCK	Columbus, OH	1
LEX	Lexington, KY	1

MID-ATLANTIC REGION

Rank	Airport	New Routes
PIT	Pittsburgh, PA	22
ORF	Norfolk, VA	11
RIC	Richmond, VA	8
BUF	Buffalo, NY	3
ISP	Islip, NY	3
JST	Johnstown, PA	2
AVP	Scranton, PA	2
AOO	Altoona, PA	2
ACY	Atlantic City, NJ	2
ROC	Rochester, NY	2
ABE	Allentown, PA	2
LNS	Lancaster, PA	2
CKB	Clarksburg, WV	1
CRW	Charleston, WV	1
SWF	Newburgh, NY	1
TTN	Trenton, NJ	1
ERI	Erie, PA	1
BFD	Bradford, PA	1
SCE	State College, PA	1
MSS	Massena, NY	1
SYR	Syracuse, NY	1
ALB	Albany, NY	1
DUJ	DuBois, PA	1
MGW	Morgantown, WV	1

MIDWEST REGION

Rank	Airport	New Routes
STL	St. Louis, MO	19
RAP	Rapid City, SD	14
MCI	Kansas City, MO	12
DSM	Des Moines, IA	7
OMA	Omaha, NE	4
ATY	Watertown, SD	3
JLN	Joplin, MO	3
SUX	Sioux City, IA	2
ICT	Wichita, KS	2
FSD	Sioux Falls, SD	2
XWA	Williston, ND	2
SGF	Springfield, MO	1
EAR	Kearney, NE	1
STC	St. Cloud, MN	1
FOD	Fort Dodge, IA	1
RST	Rochester, MN	1
FAR	Fargo, ND	1
SLN	Salina, KS	1
DDC	Dodge City, KS	1
CDR	Chadron, NE	1
PIR	Pierre, SD	1
TVF	Thief River Falls, MN	1
AIA	Alliance, NE	1
CID	Cedar Rapids, IA	1
MCW	Mason City, IA	1

MOUNTAIN REGION

Rank	Airport	New Routes
BZN	Bozeman, MT	24
JAC	Jackson, WY	13
BOI	Boise, ID	11
FCA	Kalispell, MT	10
AZA	Phoenix, AZ	9
MSO	Missoula, MT	7
IDA	Idaho Falls, ID	5
COS	Colorado Springs, CO	5
TUS	Tucson, AZ	5
DRO	Durango, CO	4
GJT	Grand Junction, CO	4
SGU	St. George, UT	4
BIL	Billings, MT	3
PVU	Provo, UT	2
MTJ	Montrose/Delta, CO	2
EGE	Eagle, CO	2
HDN	Hayden, CO	2
SHR	Sheridan, WY	1
WYS	West Yellowstone, MT	1
COD	Cody, WY	1
CVN	Clovis, NM	1
CNY	Moab, UT	1
OGD	Ogden, UT	1
TEX	Telluride, CO	1
ALS	Alamosa, CO	1
TWF	Twin Falls, ID	1
RIW	Riverton/Lander, WY	1
ASE	Aspen, CO	1
SAF	Santa Fe, NM	1

Note: The lists exclude large hubs as base airports.

Swelbar·Zhong CONSULTANCY

New Domestic Routes
JUN-AUG 2021 VERSUS JUN-AUG 2019

NEW ENGLAND REGION

Rank	Airport	New Routes
PWM	Portland, ME	16
BDL	Hartford, CT	14
PVD	Providence, RI	12
ACK	Nantucket, MA	11
MVY	Martha's Vineyard, MA	7
BGR	Bangor, ME	7
BTV	Burlington, VT	3
PSM	Portsmouth, NH	2
BED	Bedford, MA	1
PQI	Presque Isle, ME	1
EWB	New Bedford, MA	1

PACIFIC REGION

Rank	Airport	New Routes
SNA	Santa Ana, CA	25
BUR	Burbank, CA	18
RNO	Reno, NV	13
ONT	Ontario, CA	12
LGB	Long Beach, CA	11
OAK	Oakland, CA	11
GEG	Spokane, WA	9
FAT	Fresno, CA	6
SBA	Santa Barbara, CA	6
RDM	Redmond, OR	6
SMF	Sacramento, CA	5
EUG	Eugene, OR	5
PSP	Palm Springs, CA	5
SJC	San Jose, CA	4
MFR	Medford, OR	4
MRY	Monterey, CA	2
HHR	Hawthorne, CA	2
ACV	Eureka/Arcata, CA	2
SMX	Santa Maria, CA	2
RDD	Redding, CA	2
STS	Santa Rosa, CA	2
SBP	San Luis Obispo, CA	2
PSC	Pasco, WA	2
PUW	Pullman, WA	1
MCE	Merced, CA	1

SOUTHEAST REGION

Rank	Airport	New Routes
BNA	Nashville, TN	44
SRQ	Sarasota, FL	32
RSW	Fort Myers, FL	30
CHS	Charleston, SC	26
VPS	Valparaiso, FL	22
MYR	Myrtle Beach, SC	21
RDU	Raleigh/Durham, NC	18
PNS	Pensacola, FL	17
MSY	New Orleans, LA	16
SAV	Savannah, GA	15
HHH	Hilton Head, SC	12
AVL	Asheville, NC	10
EYW	Key West, FL	10
JAX	Jacksonville, FL	9
PBI	West Palm Beach, FL	8
TYS	Knoxville, TN	8
PGD	Punta Gorda, FL	7
ECP	Panama City, FL	7
MEM	Memphis, TN	5
JAN	Jackson, MS	5
GSP	Greenville – Spartanburg, SC	5
HSV	Huntsville, AL	4

Rank	Airport	New Routes
SFB	Sanford, FL	4
PIE	St. Petersburg, FL	4
CAE	Columbia, SC	3
MKL	Jackson, TN	2
BHM	Birmingham, AL	2
CSG	Columbus, GA	2
DAB	Daytona Beach, FL	2
MSL	Muscle Shoals, AL	2
GLH	Greenville, MS	2
FAY	Fayetteville, NC	1
ILM	Wilmington, NC	1
PIB	Laurel, MS	1
GSO	Greensboro, NC	1
SHV	Shreveport, LA	1
CHA	Chattanooga, TN	1
TLH	Tallahassee, FL	1
USA	Concord, NC	1
AGS	Augusta, GA	1
MEI	Meridian, MS	1
AEX	Alexandria, LA	1
LFT	Lafayette, LA	1

SOUTHWEST REGION

Rank	Airport	New Routes
AUS	Austin, TX	34
HOU	Houston, TX	24
DAL	Dallas, TX	16
XNA	Fayetteville, AR	7
OKC	Oklahoma City, OK	6
LIT	Little Rock, AR	6
TUL	Tulsa, OK	4
SAT	San Antonio, TX	3
HOT	Hot Springs, AR	3
ELP	El Paso, TX	2
HRL	Harlingen, TX	2
MAF	Midland/Odessa, TX	1
VCT	Victoria, TX	1
HRO	Harrison, AR	1
MFE	McAllen, TX	1
ABI	Abilene, TX	1
ELD	El Dorado, AR	1
SJT	San Angelo, TX	1

Note: The lists exclude large hubs as base airports.

MATCHING CUSTOMERS and PRODUCT?

Think Seriously About Matching Your Customers With Airline Products Offered

> Surely, we are not at this point in the industry's cycle.

> We first heard about the ubiquitous airline in 1992 from Mike Levine. Might we finally be at the point where there will be product differentiation?

> > Or will it just be more the same?

> United and Delta seem to be headed down a differentiation path.

> There are some consumers in your airport today that have never know anything but mobile access and related technology.

> > The Y's were the highest spending generation in 2020. They will inherit significant wealth.

> > The Z's will likely pass the Y's in wealth in the 2030s.

> What kind of airline product do these consumers desire?

> Will it be business or leisure travel?

Swelbar·Zhong
CONSULTANCY

Your Customers Today and Tomorrow Are Different….

B Baby Boomers	X Generation X	Y Generation Y/Millennials	Z Generation Z
Born: 1946 - 1964.	Born: 1965 – 1980.	Born: 1981 – 1996.	Born: 1997 -
71.6 million.	65.2 million.	72.1 million.	68 million.
Biggest consumers of traditional media but over 90% have a Facebook account.	Still watch TV and other traditional media. Digitally savvy. Heavy Facebook users.	95% still watch TV but lean to Netflix. Very comfortable with mobile, but nearly 1/3 still use computer for purchases. Typically have multiple social media accounts.	**Have known little but mobile access.**
Ensuring retirement, a major concern.	Rising a family, paying off student debt and taking care of aging parents a strain on resources.	Massive student debt delaying major purchases.	More fiscally conservative after watching struggles of Y. Much more fiscally conservative.
Most disposable income. Less influenced by peers.		**Highest spending generation in 2020. Expected inheritance potentially make the Millennials the wealthiest generation in history.**	**Projected to hit $33T in income by 2030. Most influenced by known and online peers. Could pass the Millennials in 2031.**
Average Annual Travel Spend -- Airlines: $1,800 -- Hotels: $1,670 -- Rental Cars: $549	Average Annual Travel Spend -- Airlines: $1,859 -- Hotels: $1,726 -- Rental Cars: $535	Average Annual Travel Spend -- Airlines: $1,637 -- Hotels: $1,563 -- Rental Cars: $504	**Average Annual Travel Spend -- Airlines: $2,068** -- Hotels: $1,842 -- Rental Cars: $561

The Business/Leisure Market Competition Continuum
Intense At The Top End; More Intense At The Bottom End
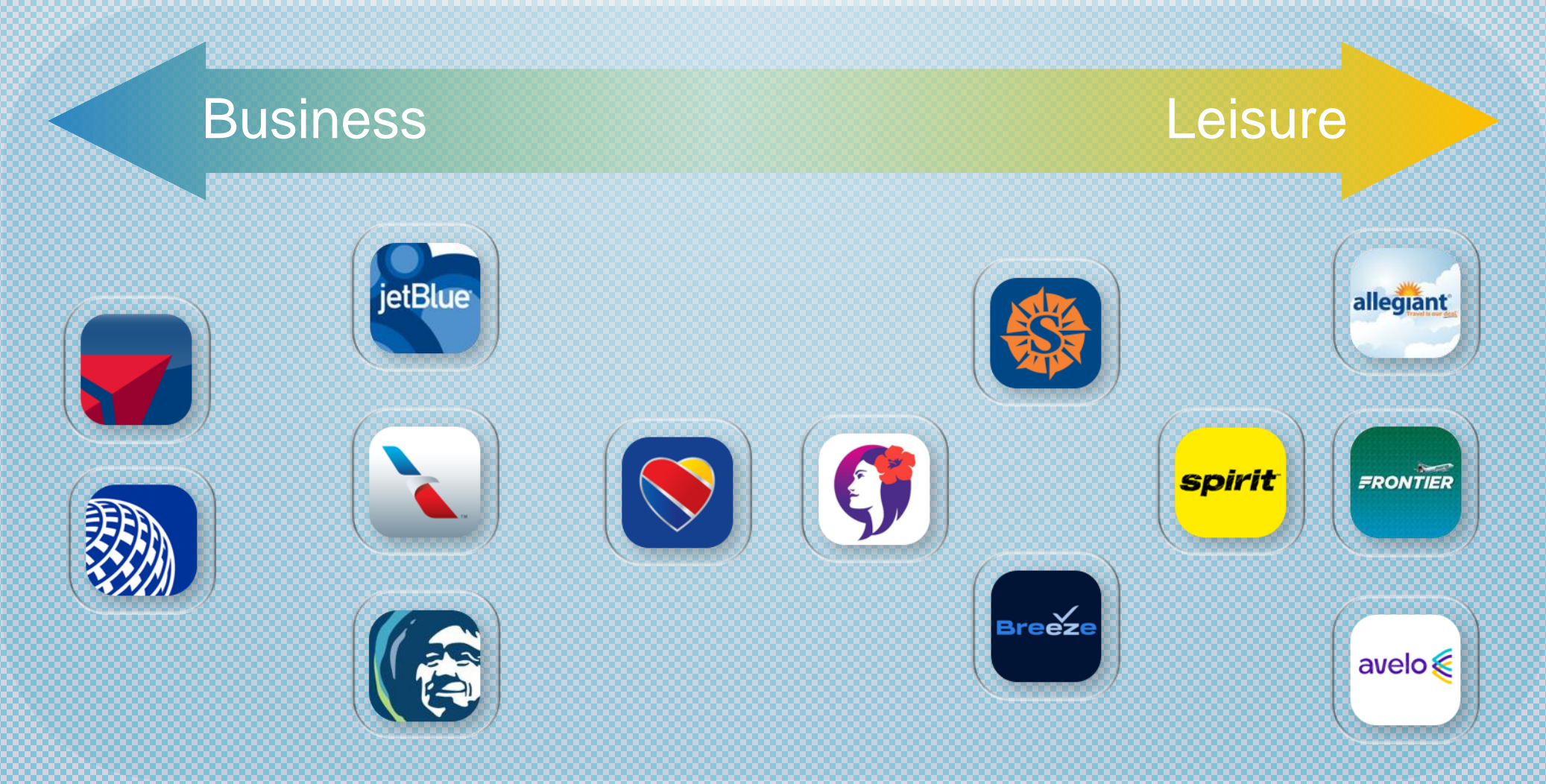
Business ←———————→ Leisure
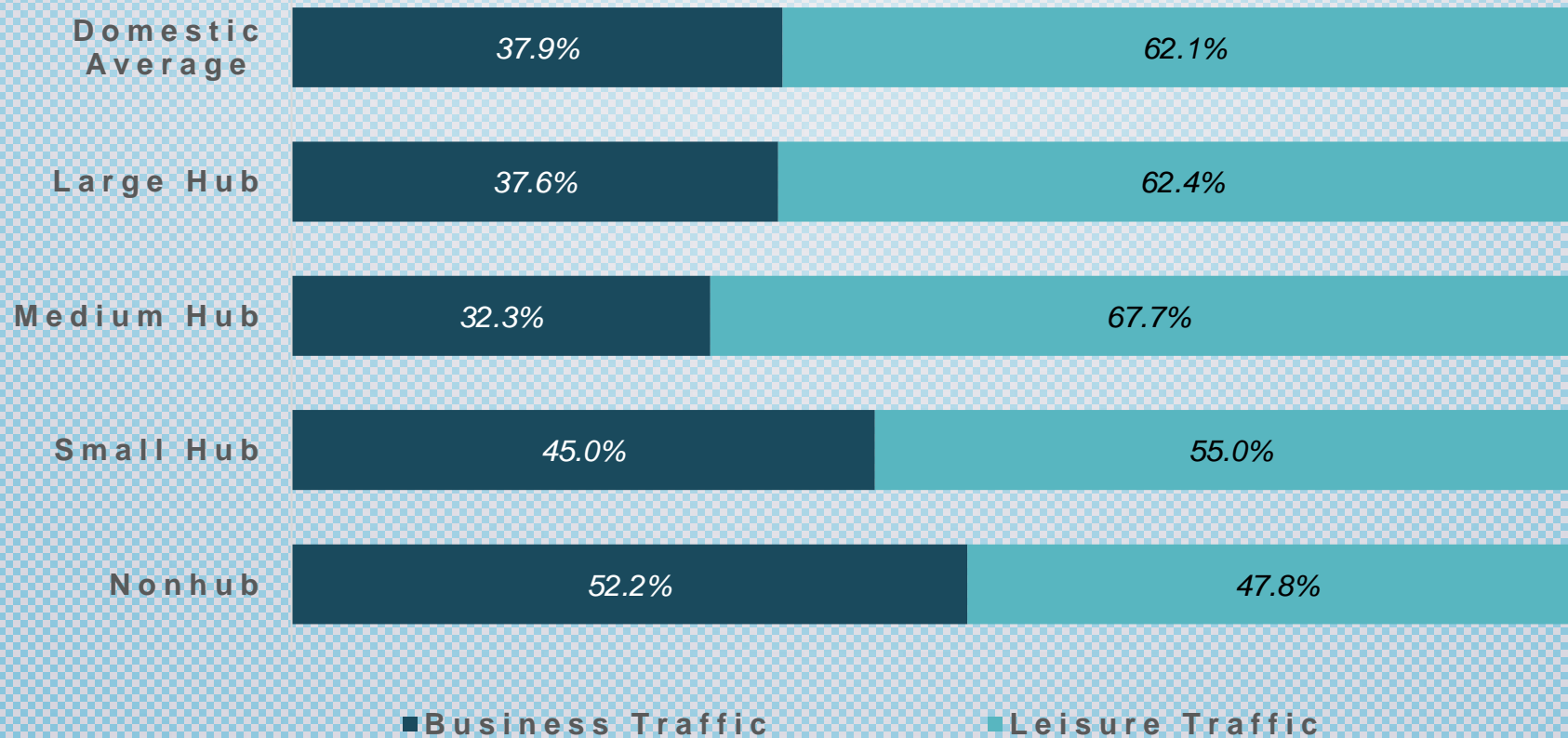
FOR PLANNING PURPOSES...THE TRADEOFF OF CONNECTIVITY OR NOT

The Air Service Tradeoff:
Destination Travel Or A Need For Connectivity?

> Simply, the ULCCs and the new entrants do not have connectivity for sale.

> Southwest does. A maturing Southwest is now more vulnerable to labor cost pressures and must also compromise its commitment to point-to-point service to grow past the limits that route density places on those airlines.

>> This is why they are adding dots to their map. More dots = increased connectivity.

> Hubs will be tested. As more and more nonstop service is being added to large metro areas that were significant sources of connecting traffic before the pandemic, certain hubs will likely be smaller.

> It is interesting to note the success of smaller markets in winning new service and/or realizing increased service levels since the Pandemic as compared to 2019.

> All of this new service to/from these critical connecting markets will reduce traffic at the connecting hubs.

>> And the trend toward larger aircraft will have some profound effects on network architecture as well.

> **THINKING ALL WE CAN SURMISE: BIGGER AIRCRAFT = LESS FREQUENCY = FEWER CONNECTING BANKS**

Swelbar·Zhong
CONSULTANCY

Hub and Spoke OR Spoke and Hub?
Some Markets Are Just Ready Made: Not All Will Be Winners -- But…

> Combining a market's economic and demographic underpinnings with the absolute number of local passengers that were forced to connect pre-COVID, in effect create a ready-made list of airports to enter whether an incumbent or a new entrant.

> All but a few of the markets identified have received new nonstop services over the past years.
> > "Tech Focus Cities" in Nashville, San Antonio, Kansas City, Boise and Indianapolis have all been winners.
> > "Emerging Tech Focus Cities" like Grand Rapids, Madison, Greenville, SC, and Upstate New York have seen service grow.
> > Savannah, the Florida Panhandle and others have emerged as emerging leisure regions.

> More to come as Fayetteville, AR and Huntsville, AL are discovered. There will be more.

1

Austin, TX	San Jose, CA
Nashville, TN	Pittsburgh, PA
New Orleans, LA	Cleveland, OH
Raleigh/Durham, NC	Fort Myers, FL
San Antonio, TX	Columbus, OH
Sacramento, CA	Jacksonville, FL
Kansas City, MO	Hartford, CT
Santa Ana, CA	Milwaukee, WI
Indianapolis, IN	Cincinnati, OH
St. Louis, MO	Albuquerque, NM

2

Houston Hobby, TX	Richmond, VA
West Palm Beach, FL	Anchorage, AK
Omaha, NE	Buffalo, NY
Oakland, CA	Kahului, HI
Ontario, CA	Tucson, AZ
Oklahoma City, OK	Reno, NV
Memphis, TN	Spokane, WA
Charleston, SC	Providence, RI
Norfolk, VA	Boise, ID
Dallas Love Field, TX	Louisville, KY

3

Grand Rapids, MI	Savannah, GA
El Paso, TX	Kona, HI
Burbank, CA	Myrtle Beach, SC
Birmingham, AL	Little Rock, AR
Tulsa, OK	Pensacola, FL
Albany, NY	Madison, WI
Des Moines, IA	Portland, ME
Greer, SC	Knoxville, TN
Lihue, HI	Manchester, NH
Rochester, NY	Greensboro, NC

4

Palm Springs, CA	Huntsville, AL
Colorado Springs, CO	Lexington, KY
Wichita, KS	Midland/Odessa, TX
Dayton, OH	Cedar Rapids, IA
Bozeman, MT	Eugene, OR
Fresno, CA	Panama City, FL
Fayetteville, AR	Sioux Falls, SD
Sarasota, FL	Asheville, NC
Burlington, VT	Chattanooga, TN
Fort Walton Beach, FL	Wilmington, NC
Harrisburg, PA	Springfield, MO
Columbia, SC	Medford, OR

Swelbar·Zhong CONSULTANCY

Markets Receiving Increased Service* By Carriers From All Sectors
It Has Been Much Less About Large and Medium Hub Airports
Jun-Aug 2021 v. Jun-Aug 2019

Network Carriers

Large Hub (1)

MIA		

Medium Hub (3)

ONT	RSW	SJU

Small Hub (15)

AVL	EYW	ITO	SRQ
BOI	FAI	KOA	STT
BZN	FAT	MYR	VPS
ECP	FSD	PNS	

Nonhub (36)

ABI	BPT	GJT	RAP
ACK	CLL	HDN	RDD
ACV	DLG	HHH	SJT
ADK	DRT	HRL	SPS
ADQ	EGE	IDA	STX
AKN	FCA	JAC	SUN
ASE	FLG	MSO	TVC
BGR	GCC	MVY	TWF
BIL	GGG	OTH	VLD

Southwest

Large Hub (3)

DEN	HNL	IAD

Medium Hub (5)

CHS	OGG	RSW	SJU
SNA			

Small Hub (10)

BOI	GRR	LGB	RIC
DSM	GSP	PNS	
ECP	KOA	PWM	

ULCCs

Large Hub (9)

ATL	FLL	MIA	PHX	SLC	TPA
EWR	MCO	PHL			

Medium Hub (17)

BDL	CHS	MCI	ONT	RSW	SNA
BNA	CMH	MKE	PBI	SJU	STL
BUR	IND	OMA	PIT	SMF	

Small Hub (32)

ACY	ELP	LEX	PIE	SDF	VPS
AZA	FAR	LIT	PNS	SGF	XNA
BOI	GEG	MEM	PWM	SRQ	
BZN	GRR	MFR	RIC	STT	
DAY	ICT	MYR	RNO	TUS	
DSM	ISP	PGD	ROC	TYS	

Nonhub (29)

ABE	CRW	GJT	JAC	PIA	SPI
ATW	EVV	GTF	LBE	PVU	STC
BGR	FCA	HGR	LCK	RAP	STX
BIL	FNT	HTS	MRY	SHV	SWF
BLV	FWA	IDA	MSO	SMX	

* Defined as 10% more seat capacity in 2021.

Swelbar•Zhong
CONSULTANCY

New Markets By Carriers From All Sectors
Jun-Aug 2021 v. Jun-Aug 2019

Network Carriers		
Nonhub (12)		
ALS	FOD	SGU
CDB	JST	SHR
DDC	MCW	VCT
DEC	RIW	XWA

Southwest		
Large Hub (3)		
IAH	MIA	ORD
Small Hub (13)		
BZN	JAN	SAV
COS	LIH	SBA
EUG	MYR	SRQ
FAT	PSP	VPS
ITO		
Nonhub (2)		
HDN	MTJ	

ULCCs			
Large Hub (1)			
MDW			
Medium Hub (1)			
HOU			
Small Hub (3)			
EYW	FAI	RDM	
Nonhub (4)			
DRO	ILG	SCE	TVC

SWELBAR·ZHONG
CONSULTANCY

SMALL COMMUNITY AIR SERVICE...
...THE CONVERSATION WILL BE HAD AGAIN

Small Community Air Service
A Threat Or Multiple Winners?

> There are certainly going to be winners.

> What happens when the CARES Act monies no long subsidize?

> As plans are announced regarding the use of 50-seat regional aircraft in the networks, rural air service markets should be safe.

> Mainline pilot scope clauses are problematic again.

> Larger aircraft will likely influence traffic contained in certain catchment areas enveloping multiple airports.

> Might some of the regional providers find a way to make the small regional jet profitable on a sustainable basis?

>> Connectivity is so important to sustaining many small markets. Mainline pilot scope clauses will have some influence as to where a carrier code can be used and not.

>> These Nonhub markets support a lot of mainline aircraft. There is a public policy case to be made.

Swelbar·Zhong
CONSULTANCY

Airport Vulnerability
All Airports Included Are Within 180 Miles From At Least One Large Or Medium Hub Airport

Group 1 (48)
Highly Vulnerable & Only Served by A Single Legacy Carrier

A B I	C L L	I P T	R K S
A B Y	C M I	L A R	S B Y
A C T	C S G	L W B	S H D
A L O	C Y S	M G M	S L N
A R T	D B Q	M K G	S P S
B F F	D H N	P A H	S U X
B G M	D R T	P G V	T W F
B P T	E A R	P I B	T X K
B Q K	E A U	P I H	T Y R
B R D	F L O	P R C	U I N
C D C	G G G	P U B	V E L
C G I	H I B	R D D	V L D

Group 2 (9)
Highly Vulnerable & Served by Multiple Legacy Carriers

A E X	I T H	S C E
C W A	L A N	S G U
E R I	L C H	S P I

Group 3 (32)
Vulnerable

A T W	E W N	M B S
A V P	F A Y	M L I
A Z O	F N T	P I A
C A E	F W A	R O A
C H A	G R K	R S T
C H O	G S O	S A F
C K B	H T S	S B N
C O U	I L M	S G F
C R W	L E X	S W F
D L H	L R D	T R I
E V V	L S E	

Group 4 (11)
Less Vulnerable

A C K	G P T	O R H
A V L	H P N	S C K
E L M	I S P	S T S
F L G	M V Y	

Note: Airport Vulnerability is defined by seat capacity ratio of small RJ (with 44/50 seat configuration) as airport total:
Highly Vulnerable = Greater Than 75%; Vulnerable = Between 25% and 75%; and Less Vulnerable = Less Than 25%.

Swelbar·Zhong
CONSULTANCY

AIRLINES HAVE ENVIRONMENTAL GOALS..
..HOW MIGHT YOUR AIRPORT CONTRIBUTE?

Most Airlines Have Goals for 2050

> ESG or Environmental, Social and Governance is the new buzz in boardrooms around the world.

> United has made a big splash over meeting carbon neutrality goals by 2050

   > To begin, UA announced it will buy Sustainable Aviation Fuel (SAF) to fly over 220 million revenue passenger miles in 2021. (UA flew 60 billion in the first quarter of 2020)

> There is an Airport Carbon Accreditation (ACA) scheme.

   > Only 300 airports around the globe involved. That leaves the vast majority not involved.

      > From airlines to ground handling to retailers…airports need to contribute to the environmental goals along with everyone in the supply chain….

      > In North America, Edmonton, Salt Lake City and Los Angeles International Airport are involved at certain stages of the 4-level program.

> **As the industry resets, might there be an edge for one airport v. another vying for service from an airline with stated goals for 2050?**

Swelbar·Zhong
CONSULTANCY

OTHER STUFF...

Other Stuff

> **eVTOLs**

>> Intra-city or something more?

>>> If we thought early morning or late afternoon/evening service was important for airlines, this space could get real crowded real quick.

>> Infrastructure needed. Heliports/Vertiports needed. Great use for unused parking decks.

>> Disruptive technology or a step toward a technology that might truly disrupt?

> **Supersonic**

>> Boom is making a minimum $8 billion bet on R&D

>> United is making a bet that its coastal gateways (and avoiding ANC on the way to Tokyo)

>> Is there value in time saved? Or will any premium get competed away as it habitually does?

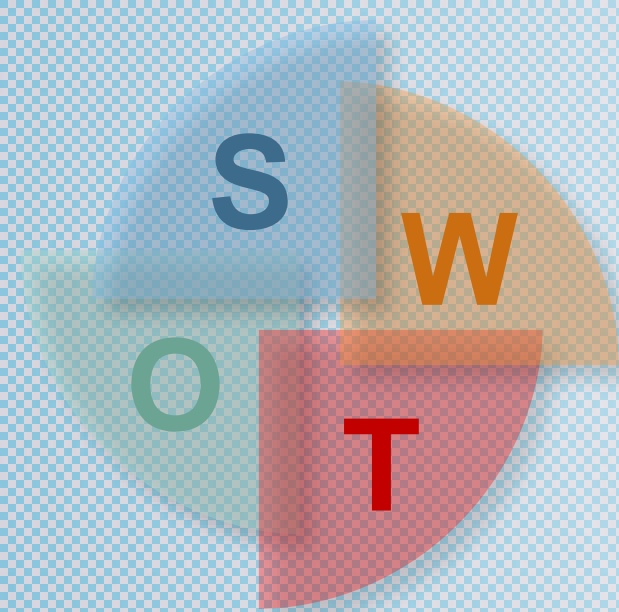>> Aerion, developing first supersonic business aircraft, shelved due to financing constraints.

> **Pilot/Maintenance Technician Supply**

> **Oil Prices**

Swelbar·Zhong
CONSULTANCY

RETHINKING YESTERDAY'S SWOT ANALYSIS
Yesterday's Weaknesses May Be Today's Opportunity

S
W
O
T

Large Hub Airports

*P*RE - *P*ANDEMIC

Population Base ----------------------------
Population Migration ----------------------
Hubs/Gateways -------------------------------
Reverse Leakage -----------------------------
Adequate Infrastructure -------------------
Multiple Airports in Metro Area --------
Pilot Scope Clauses ----------------------

*P*OST - *P*ANDEMIC

Population Migration
Fewer/Smaller/No Growth Businesses
Potentially Smaller/Recovery Longer
New Service Shrinks Catchment Area
New Competition
New Competition
Larger Aircraft/More Throughput

Swelbar·Zhong
CONSULTANCY

S
W
O
T
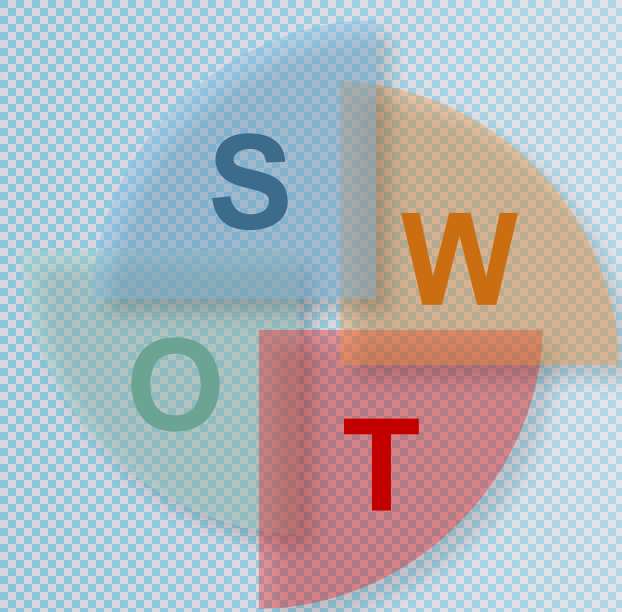
Medium Hub Airports

PRE - PANDEMIC

Southwest Airlines

Southwest Airlines

Reverse Leakage

Growing Home to All Gens

Nonstop/Long-haul Service

Pilot Scope Clauses

POST - PANDEMIC

Southwest Airlines

New Entrant/ULCC

New Service Shrinks Catchment Area

Right Service Mix?

Adequate Facilities

Larger Aircraft / Less Frequency

Swelbar•Zhong
CONSULTANCY
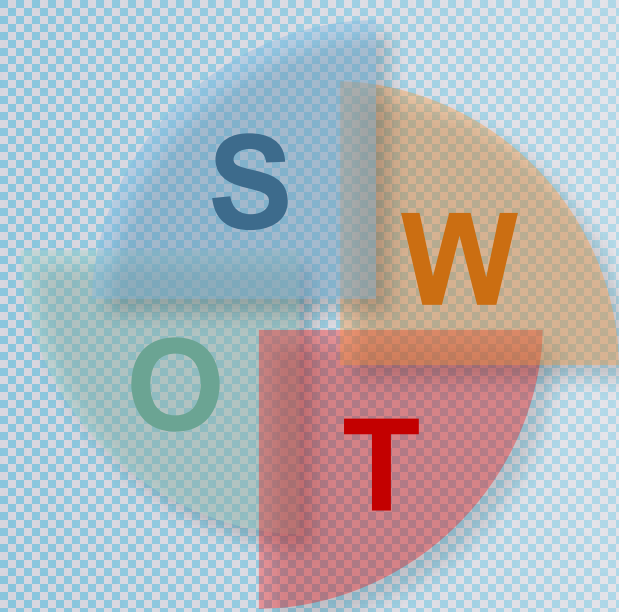
Small Hub Airports

PRE - PANDEMIC

Small (PDEW) Markets on Paper

Known Leakage to Drivable Larger Market

Too Small for Southwest

Benefiting from Migration

Long-haul Domestic/Int'l Service

Pilot Scope Clauses

POST - PANDEMIC
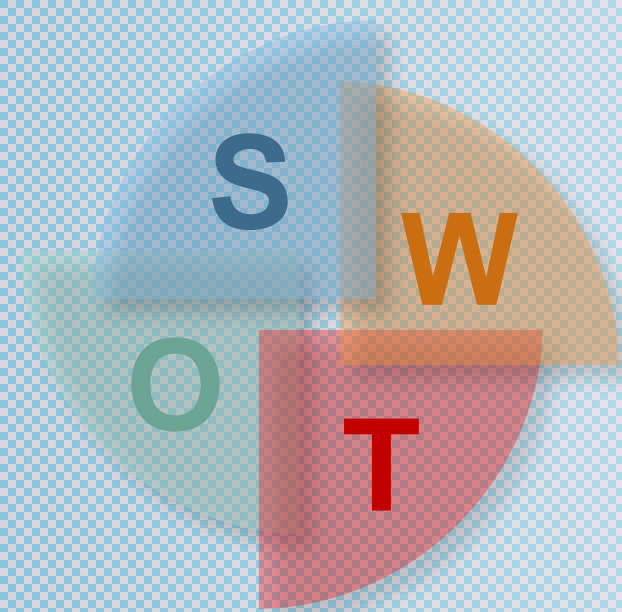
Less Than Daily (PWEW) Service

New Entrant/ULCC

Southwest Now has Appetite

Insufficient Data to Tell Story

Aircraft Technology

New Competition Invites Improved Product

Swelbar·Zhong
CONSULTANCY

S W O T

Nonhub Airports

PRE - PANDEMIC

Proven Pre-COVID Market

High Relative Fares

EAS Program Every FAA Reauth. Bill

Known Leakage to Larger Market

Market Discovered/Leisure Attributes

Pilot Scope Clauses

POST - PANDEMIC

Bigger Aircraft/Less Nodal Connectivity

New Entrant/ULCC

New Administration

New Entrant/Less Than Daily

Infrastructure/Hold Rooms

Smaller Regional Industry

SWELBAR·ZHONG
CONSULTANCY

Research Lab — Swelbar-Zhong Consultancy
(Swelbar-ZhongAir.com/Research-Lab)

William S. Swelbar
Swelbar@Swelbar-ZhongAir.com

Albert Zhong
Zhong@Swelbar-ZhongAir.com

C +1-703-625-1130

www.Swelbar-ZhongAir.com