



BROKEN PROMISES:

Deregulation and Consolidation Have Not Been Kind to Smaller Airports

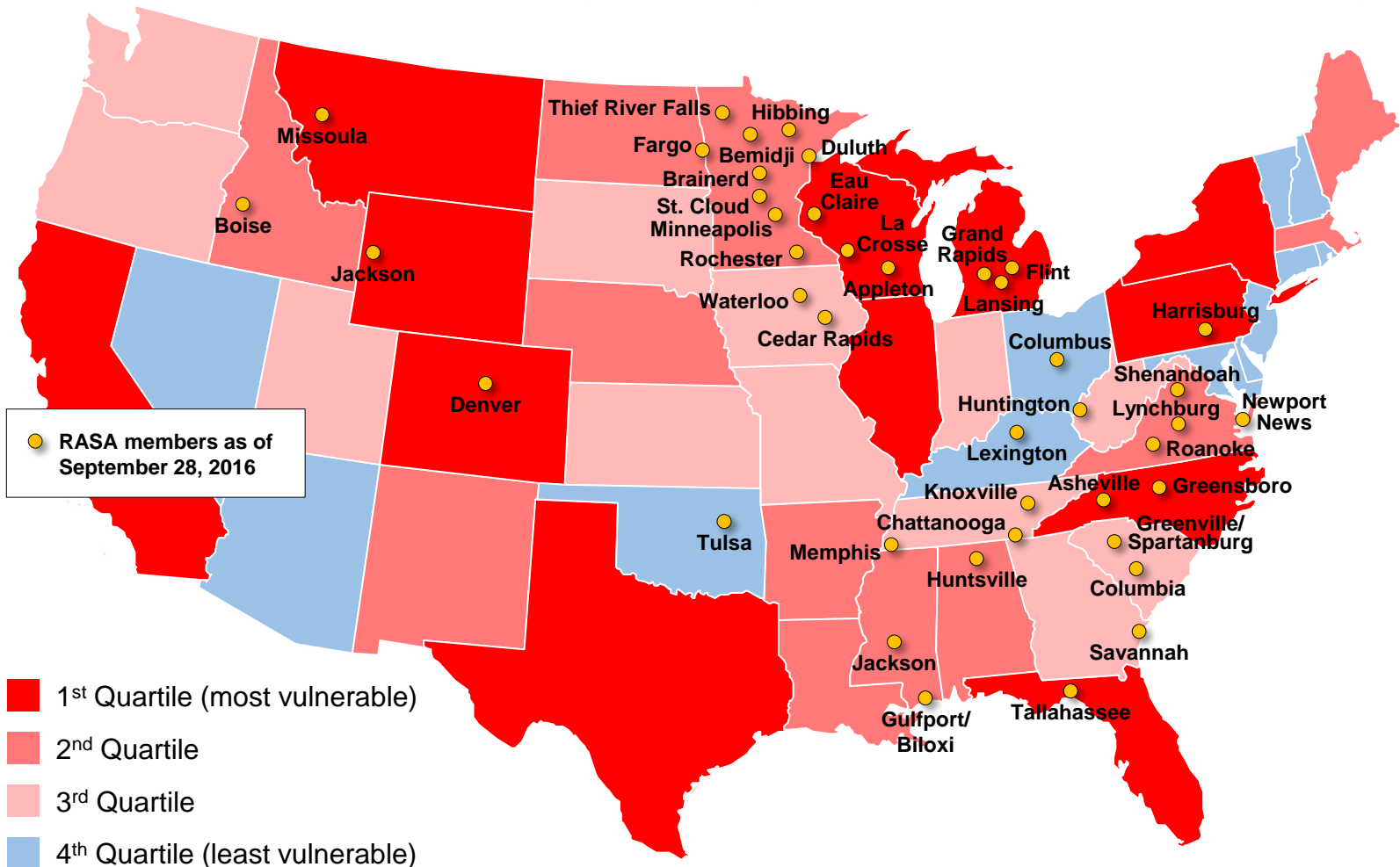
InterVISTAS

a company of Royal HaskoningDHV

August 2016

Regional Air Service Alliance Membership

States, Not Points, Are Analyzed By Air Service Vulnerability



Section 1

AIR SERVICE FROM 36,000 FEET

InterVISTAS

a company of Royal HaskoningDHV

Smaller Community/Airport** Air Service is Endangered

150-200 communities at risk of seeing a total, or near total, loss of their commercial air service because of unresolved industry issues

Smaller airports do not have the luxury to worry only about increasing PFCs—small communities are struggling to remain relevant and connected to tomorrow's economy.

**Smaller Communities/Airports defined as having less than .25% of US enplaned passengers.

Just As It Was True in 2007, It Is Even Truer Today And It Will Take Government Understanding and Intervention

Wednesday, April 25, 2007,

HOUSE OF REPRESENTATIVES,

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,

SUBCOMMITTEE ON AVIATION

“I think that the key question that confronts the Committee now, as it has in the past, is in a deregulated environment, **are we going to move toward a system where basically most people in America who live outside of a major hub airport have to drive for hours to access air service?** I don’t think that is an acceptable future for the Country, for our small and mid-size communities, in the deregulated environment. **It is going to require Government intervention,** and Government intervention in this case with these two programs I think can be improved upon.”

Representative DeFazio

**FAILING TO RESOLVE THESE
ISSUES WILL UNDERMINE ECONOMIC
DEVELOPMENT EFFORTS IN 200
SMALL AND RURAL COMMUNITIES**

First the Deregulators and then the Consolidators Made Promises to Small Communities

- **Deregulation** promised air service to the nation's smallest markets
- **Consolidating Carriers** promised air service/connectivity to the nation's smallest markets would improve as a result of larger networks
- **Now the airport community finds itself on the other end of promises due to three unaddressed issues**
 - **ISSUE 1** : **An inadequate pilot supply** threatens the smallest markets
 - **ISSUE 2**: **A trend toward larger aircraft by the US airline industry is being funded by the elimination of smaller aircraft sized best to serve secondary and tertiary markets – Time to rebuild the regional system**
- These threats require airports to take action to retain the air service they currently have.....
 - **ISSUE 3**: **Airports are regulated, and restricted, as to how they can use their revenue to enhance air service. In a market-based system an airport's hands are tied**

Background

- Beginning with the spike in oil prices in 2008 that was exacerbated by the Great Recession, air service in the US has been under fire as the US airline industry was forced into strategies to reduce fixed costs
- Then the industry consolidated into 4 airline networks controlling over 80% of the traffic and 80+% of the revenue reducing the number of airline companies airports could approach to address air service deficiencies
- Between 2007 – 2015, small and non-hub airports as defined by the FAA witnessed significant reductions in air service

Changes in Service at Small- and Non-Hub Airports, 2007-2015

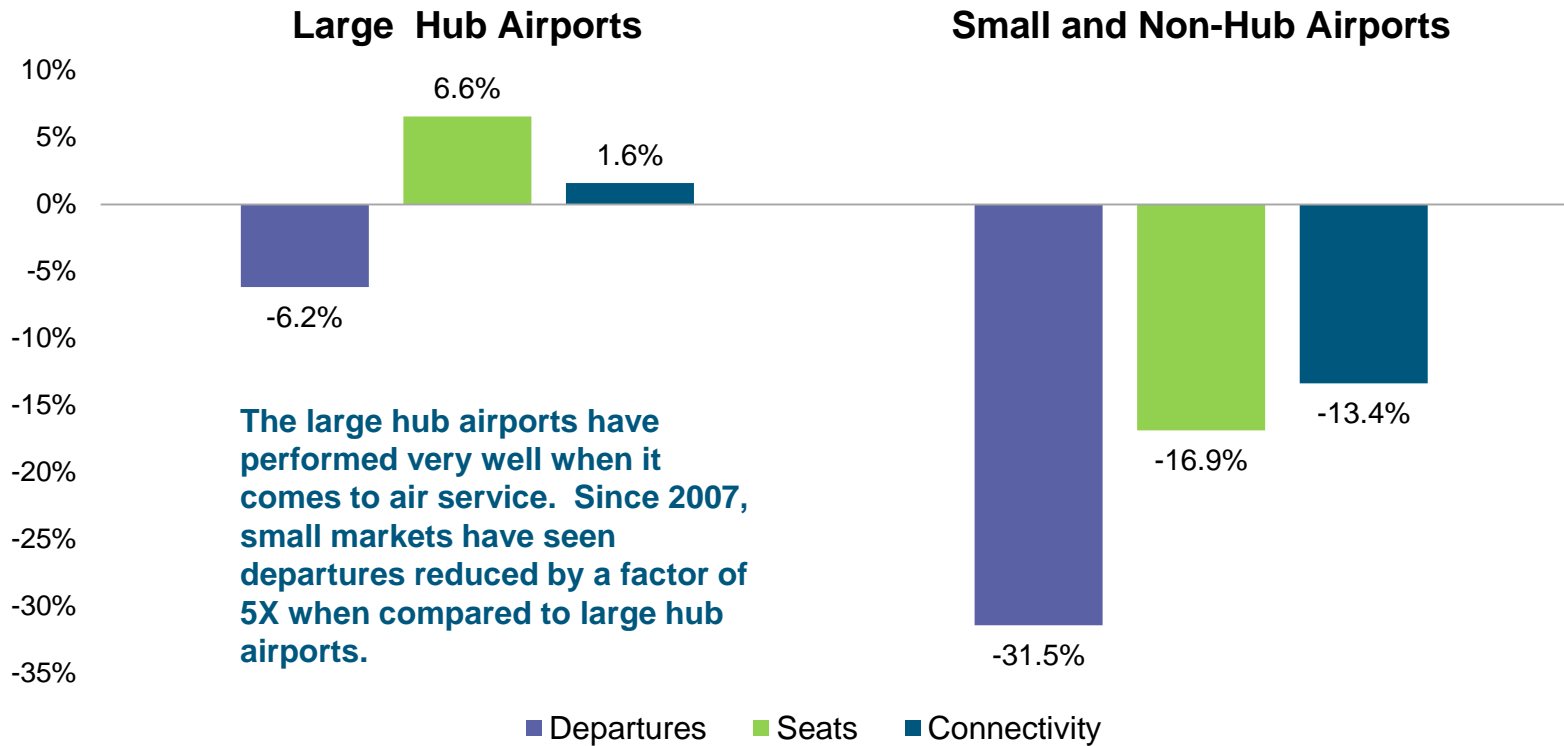
**Departures
declined by nearly
32%**

**Seats
declined by
17%**

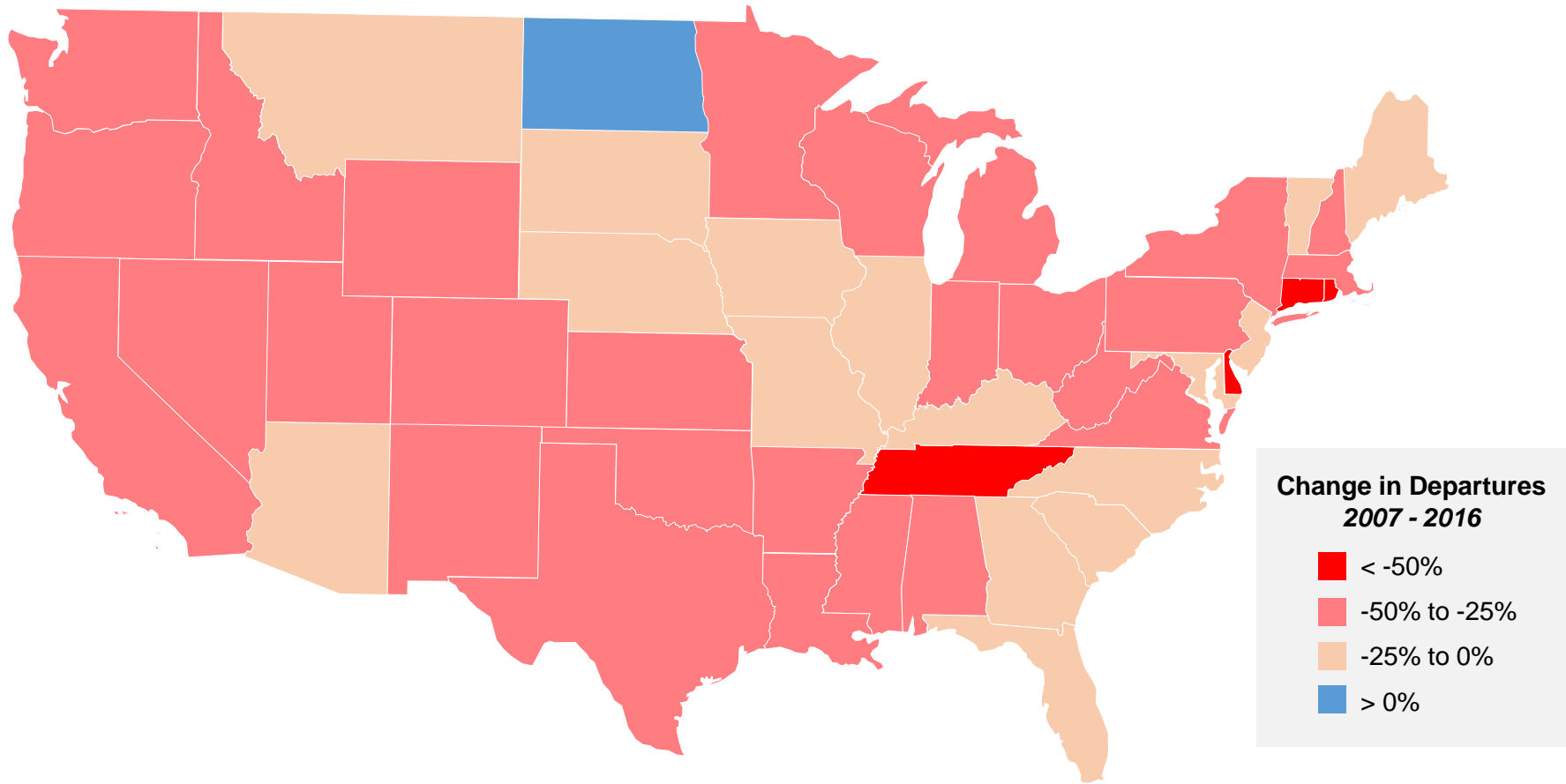
**Connectivity
declined by
13%**

Just As DeFazio Said: The Brunt of Air Service Losses Have Been At Small and Non-Hub Airports

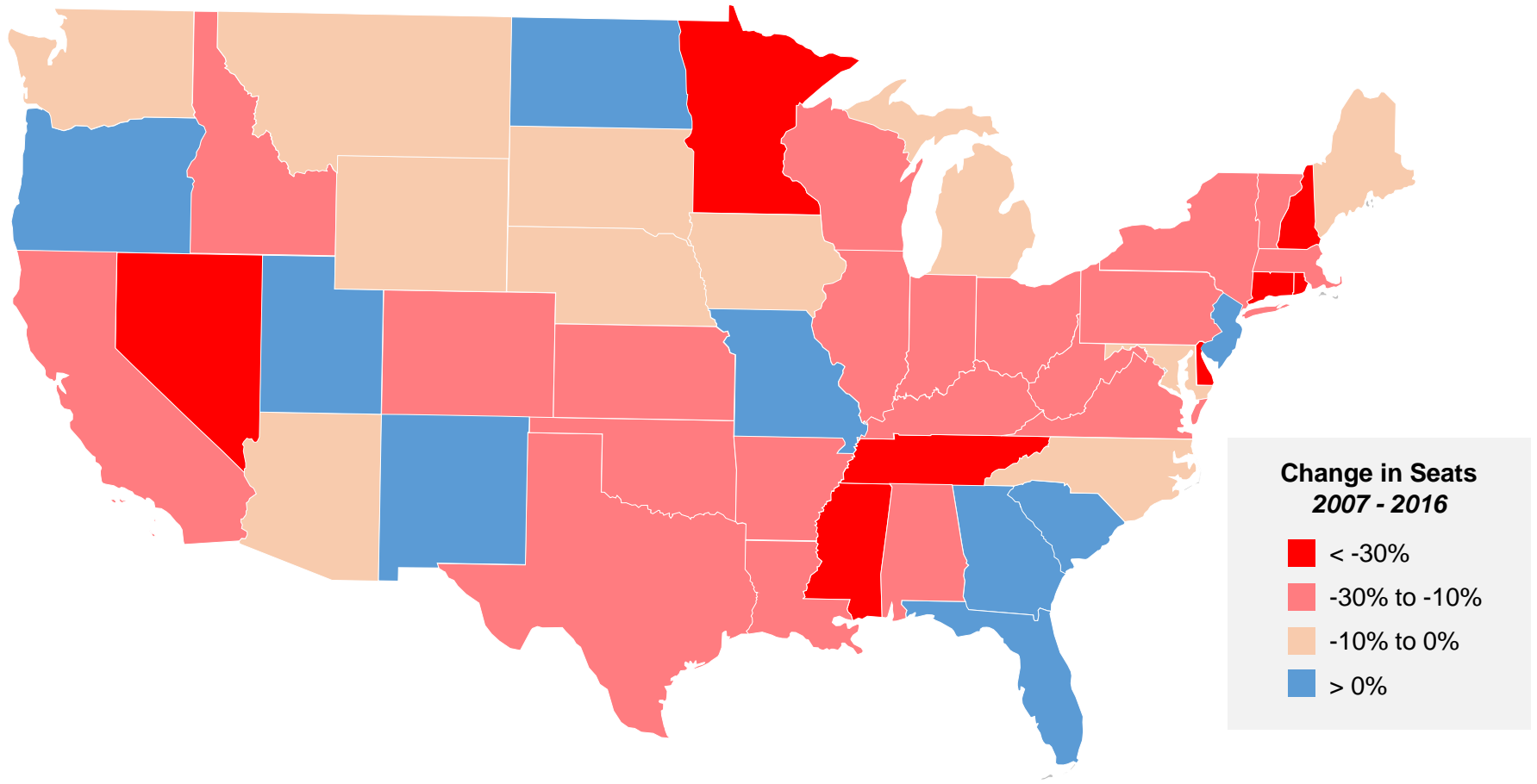
Air Service Changes 2007 - 2016



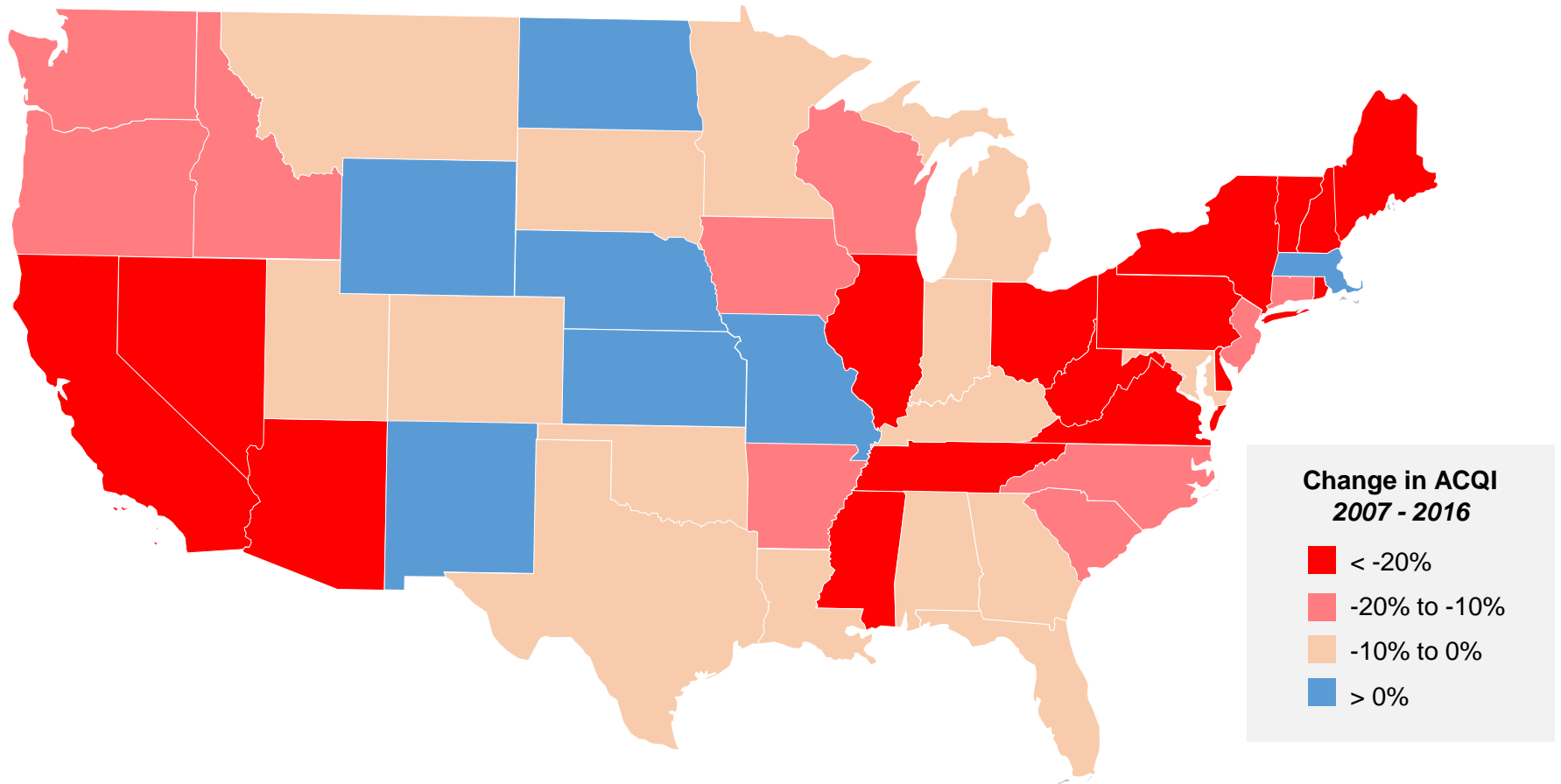
Since 2007, Scheduled Departures at Small and Non-hub Airports Have Increased in only One State—49 States are down



Since 2007, Scheduled Seats at Small and Non-hub Airports Have Increased in Only Nine States



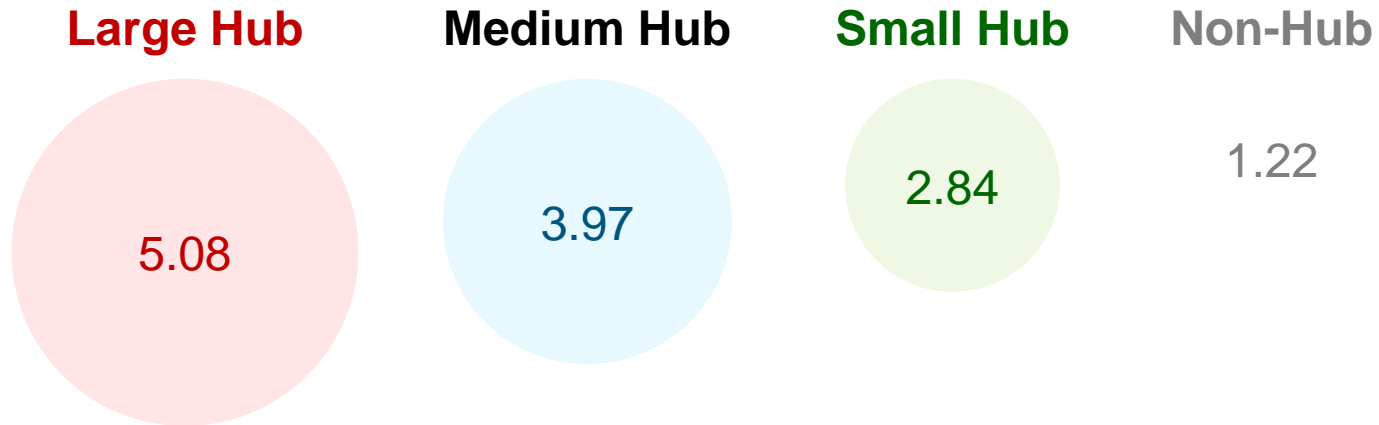
Since 2007, Airline Connectivity at Small and Non-hub Airports Has Increased in Only Seven States



Source: MIT Airport Connectivity Quality Index (ACQI)

The Propensity to Fly by Hub Size

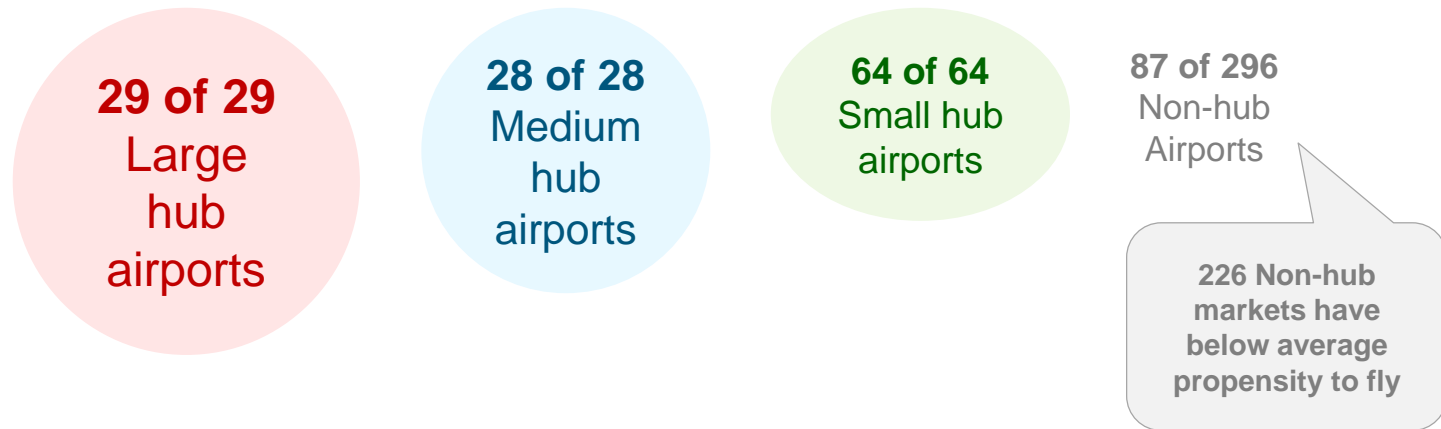
O&D Passengers per 1000 in Population Size



Note: InterVISTAS analysis based on 2014 population & Year ended March 2016 domestic O&D traffic. Hub size based on FAA definition.

Source: Woods & Poole Economics 2015. US DOT, DB1B database, via Diio.

Only 151 of 360 (42%) of Small and Non-Hub Airports Are Supporting 70-Seat Service Today



Note: Only 36 Non-hub airports with below average propensity to fly have 70-seat service today

Note: Hub size based on FAA definition. Only include airports in the 48 states.

Source: Innovata schedules 2016, via Diio.

Market Attributes Supporting 70-Seat Service by Hub Size

Large Hub Markets

	2015 Seats	Population	O&D Pax	PDEWs
Avg	20,866,123	6,272,132	20,332,634	27,853
High	53,527,980	20,007,684	38,925,199	53,322
Low	8,624,415	1,152,914	7,743,786	10,608

Avg. 70-seat RJ Departures per airport per day: 87.1

Medium Hub Markets

	2015 Seats	Population	O&D Pax	PDEWs
Avg	5,429,625	2,284,374	7,033,279	9,635
High	9,782,881	6,954,402	10,140,860	13,892
Low	2,599,804	666,086	3,621,682	4,961

Avg. 70-seat RJ Departures per airport per day: 24.9

Small Hub Markets

	2015 Seats	Population	O&D Pax	PDEWs
Avg	1,187,947	744,726	1,656,091	2,269
High	2,574,801	2,947,709	3,414,253	4,677
Low	324,747	99,072	712,608	976

Avg. 70-seat RJ Departures per airport per day: 10.9

Non Hub Markets

	2015 Seats	Population	O&D Pax	PDEWs
Avg	119,475	196,384	159,252	218
High	666,411	2,828,892	906,282	1,241
Low	117	7,384	205	0.3

Avg. 70-seat RJ Departures per airport per day: 1.0

On average, airports need nearly 80,000 enplanements to support large RJ service

Note: Hub size based on FAA definition. Population is for 2014. O&D Pax and PDEWs is for YE1q2016, domestic only.

Source: Woods & Poole Economics 2015. US DOT, DB1B database, Innovata schedules, via Diio.

In a Market-based System, Airports Know What Is Best For Their Communities

- Congress has charged DOT and FAA with responsibility to ensure that federally-obligated airports:
 - are available for public use on fair and reasonable terms without unjust economic discrimination;
 - airport revenue is only used for legitimate airport purposes; and
 - any non-aeronautical activities will not adversely affect the safety, utility and efficiency of an airport
- Many of the undesirable features of these rules were never mandated by Congress, but rather were inventions by the DOT and FAA
- By strictly adhering to the meaning of three areas above, it would allow local communities much greater flexibility, including the adoption of air service incentive and marketing programs by/through the airport operator, that would effectively address urgent community needs while at the same time complying with the acts of Congress



A Structural Impediment to Small Community Air Service Pilot Supply

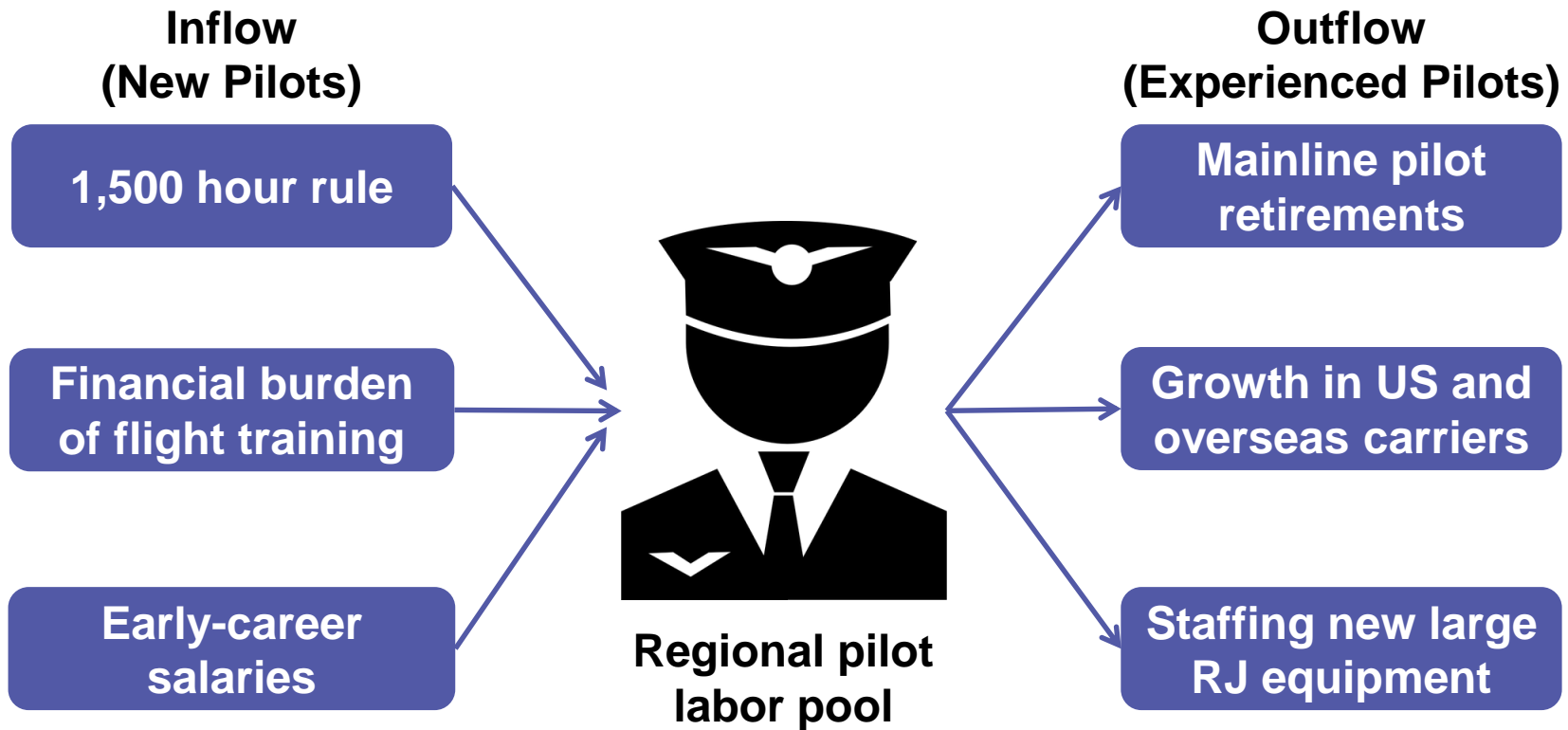


- The current pilot supply needed to fill vacant positions at US airlines is yet another structural issue faced by airports of all sizes when it comes to retaining, enhancing and expanding air service. It is already present and is being cited as a reason communities are losing certain services
- When the industry was deregulated, government programs were made available to enable a regional industry to incubate, grow and prosper
 - Loan guarantees for pilot training should be considered
- Impediments to pilot availability, like, but not limited to, the 1500 hour rule need to be revisited, or risk significant service loss at the smallest US airports

Understanding the Forces Shaping the Problem

Retirements and New Equipment are Putting a Strain on Labor Supply

- The pool of regional jet pilots is affected by demand-side and supply-side pressures:



Important to note is that the military is no longer a major source of commercial pilots as they have been historically.

Legislation That Limits Pilot Supply Will Lead To Disastrous Effects

All communities would feel the effects as the regional industry shrinks

- Suppose that the regional pilot labor force in 2015 stayed fixed over time.
- Not an outrageous assumption, considering the new 1500-hour rule that is making it ever so difficult for carriers to fill new classes.
- Based on replacement of retiring pilots at the 4 largest US carriers and larger aircraft being delivered to the regional industry and if other sources of labor do not appear:
 - By the end of 2017, all turboprop aircraft would likely be retired along with 412 small jets, or 53% of small jets flying today;
 - Remaining small jets likely to be retired by the end of 2020; and
 - By 2022, today's regional industry will be at least 40% of its size today – and maybe smaller

Let's go to the numbers...

You Could Even Make a Case that the Regional Business As We Know It Could Be Extinct By 2022

Number of Pilots Needed to fill new equipment	2,769
Number of Pilots Needed to Backfill Retirements Thru 2022	13,134
Regional Pilot Workforce in 2015	16,292
Percent of 2015 Regional Pilots Needed to Backfill Retirements	80.1%
Percent of 2015 Regional Pilots Needed to Fund New Equipment	17.0%
Estimated Reduction of 2015 Regional Pilot Workforce by 2022	97.1%

	Pilot Headcount				Regional Units	Cumulative Units
	Retirements	Orders	Total	Cumulative		
2016	1,233	434	1,667	1,667	192	192
2017	1,479	434	1,913	3,580	220	412
2018	1,619	434	2,053	5,633	237	649
2019	1,872	434	2,306	7,939	266	915
2020	2,059	434	2,493	10,432	287	1,202
2021	2,379	434	2,813	13,245	324	1,526
2022	2,483	165	2,648	15,893	305	1,831

Notes: Assumes that 2015 pilot supply is held constant over time

Notes: Retirements are those of the Big 4 airlines only. The actual number is larger.

Notes: Delivery dates are large regional aircraft orders are estimated.

Conclusions

- Today, frequency cuts and not market exits are the modus operandi for the network carriers although that trend is beginning to be seen change
- But there are plenty of examples where the pilot supply issue is impacting air service, including the reliability of existing service
- When compared to 2004 (Pre-restructuring), small and non-hub airports have witnessed out-sized losses in air service
- 160-200 Markets do not have sufficient population or traffic to support service from 76-120 seat aircraft
- And airports cannot even use their own capital to make investments in air service that the community needs and wants
- **Deregulation and consolidation were intended to advance the economic interests of all stakeholders. Complexity often requires change. Structural events require new thinking.**

Section 2

AIR SERVICE VULNERABILITY INDEX

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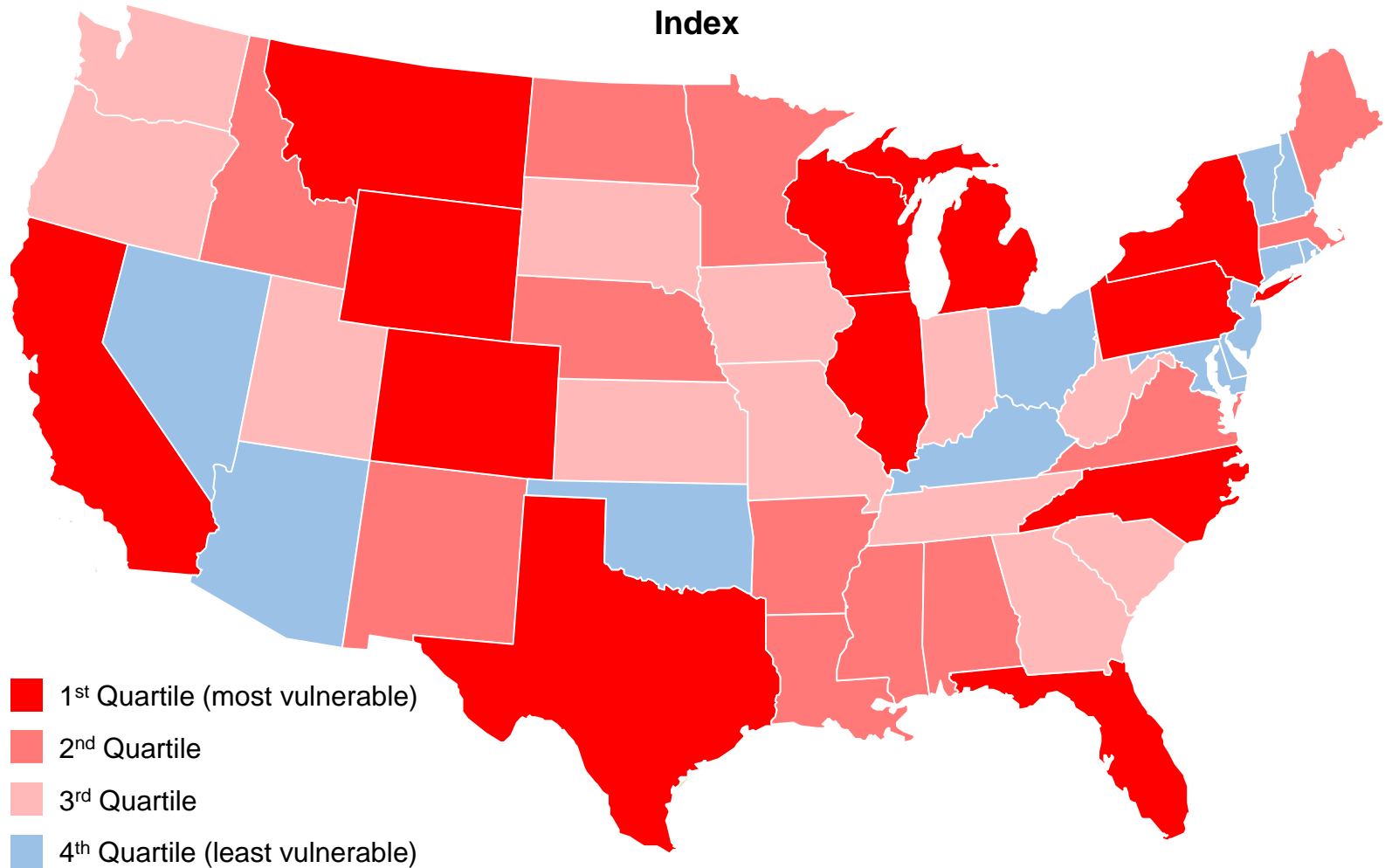
The Air Service Vulnerability Index

- In an attempt to isolate states in order that small community air service difficulties might find a champion for the issue, InterVISTAS created a model that ranks airport systems by state. Small and non-hub airports are ranked most vulnerable to retaining any, or some, of their existing air service
- The index incorporates six variables into its output:
 - Geography: is there a larger airport(s) within 120 miles;
 - Population: how does it compare to other airports;
 - Seats per Departure: more seats signal airline willingness to add larger aircraft into the market;
 - Passengers per Day Each Way (PDEWs): how do traffic levels compare to other airports;
 - Airline Revenue: revenue is viewed as more important than traffic; and
 - Connectivity: the higher the connectivity ratio, competitive service is likely

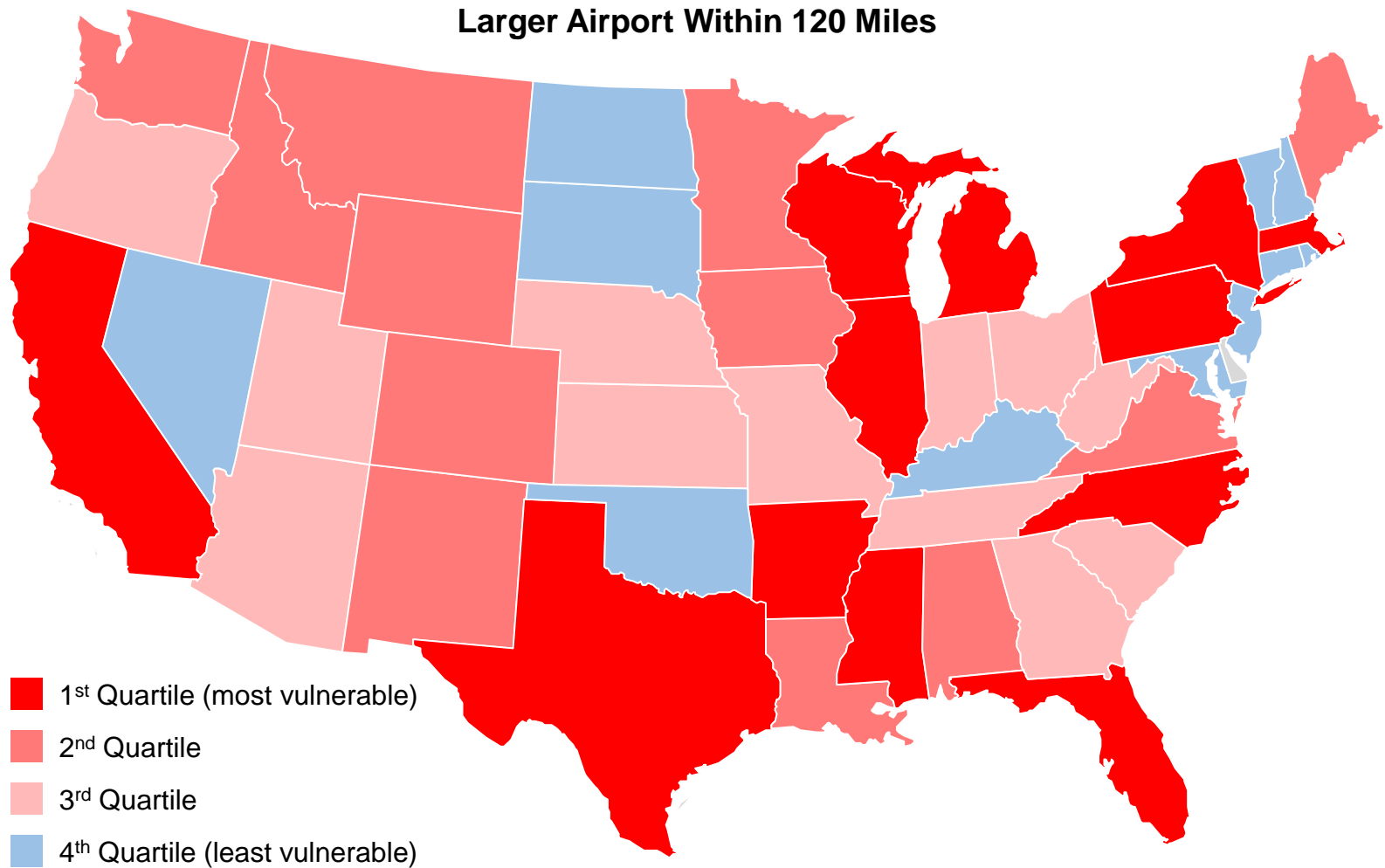
The Air Service Vulnerability Index (Page 2)

- Then the index breaks down service levels at each airport by five service profiles
 - **No Service:** only the range in population is analyzed;
 - **No Service from the Big 6:** (AA, DL, UA, WN, AS and B6), seen as more vulnerable as market not served by a network carrier and instead is served by a point-to-point carrier;
 - **Service from 1 of the Big 6:** seen as vulnerable to losing all service based on the 6 attributes discussed previously;
 - **Service from 2 of the Big 6:** seen as vulnerable to losing a competitive service based on the 6 attributes discussed previously; and
 - **Service from 3 or more of the Big 6:** seen as vulnerable to losing a competitive service based on the 6 attributes discussed previously

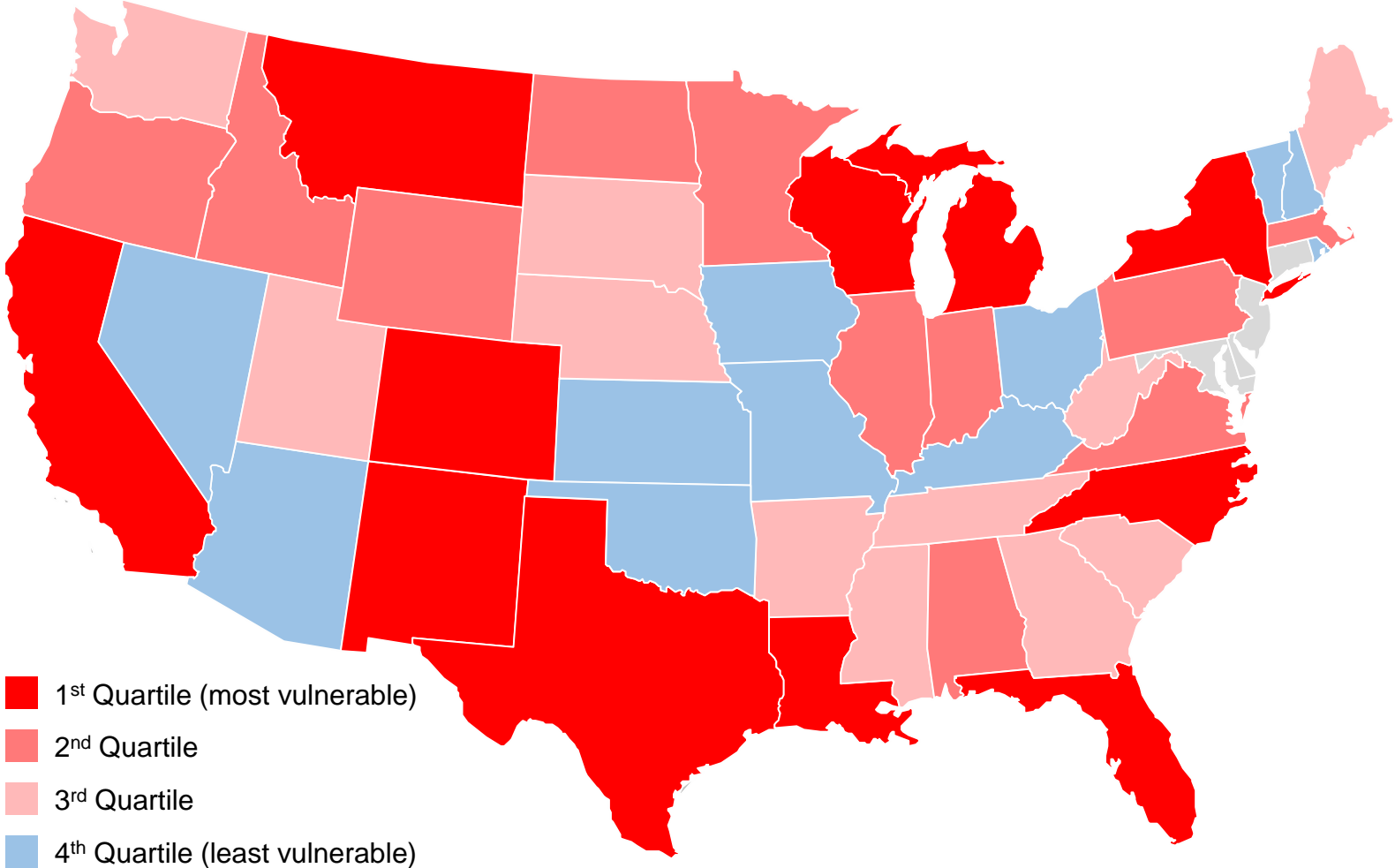
Multi-Factor Air Service Vulnerability Index (AVI)



Service Vulnerability Due to Larger Airport Within 120 Miles



States Most Vulnerable to Losing Competitive Services



InterVISTAS

a company of Royal HaskoningDHV

William S. “Bill” Swelbar
Executive Vice President

Albert Zhong
Consultant

InterVISTAS Consulting Inc.
1150 Connecticut Avenue, NW
Suite 601
Washington, DC 20036

P +1-202-688-2243 | C +1-703-625-1130
Email: william.swelbar@intervistas.com

www.intervistas.com