

LANDED IN A PANDEMIC DEPARTING IN A RECESSION

December 2020 Update



SWELBAR·ZHONG
CONSULTANCY

TABLE OF CONTENTS

S1

Executive Summary, Critical Findings and Approach...Page 3

S4

The Recovery of U.S. – International Traffic...Page 114

S2

Altered Thinking: Public Health, Macroeconomics, Industry Realities ...Page 16

S5

Short-haul Flying Will Likely be Reconsidered...Page 125

S3

The Dynamic Traffic Impact Update – December 2020...Page 27

S6

Traffic/Capacity Recovery In The Two Most Recent Recessions ...Page 130



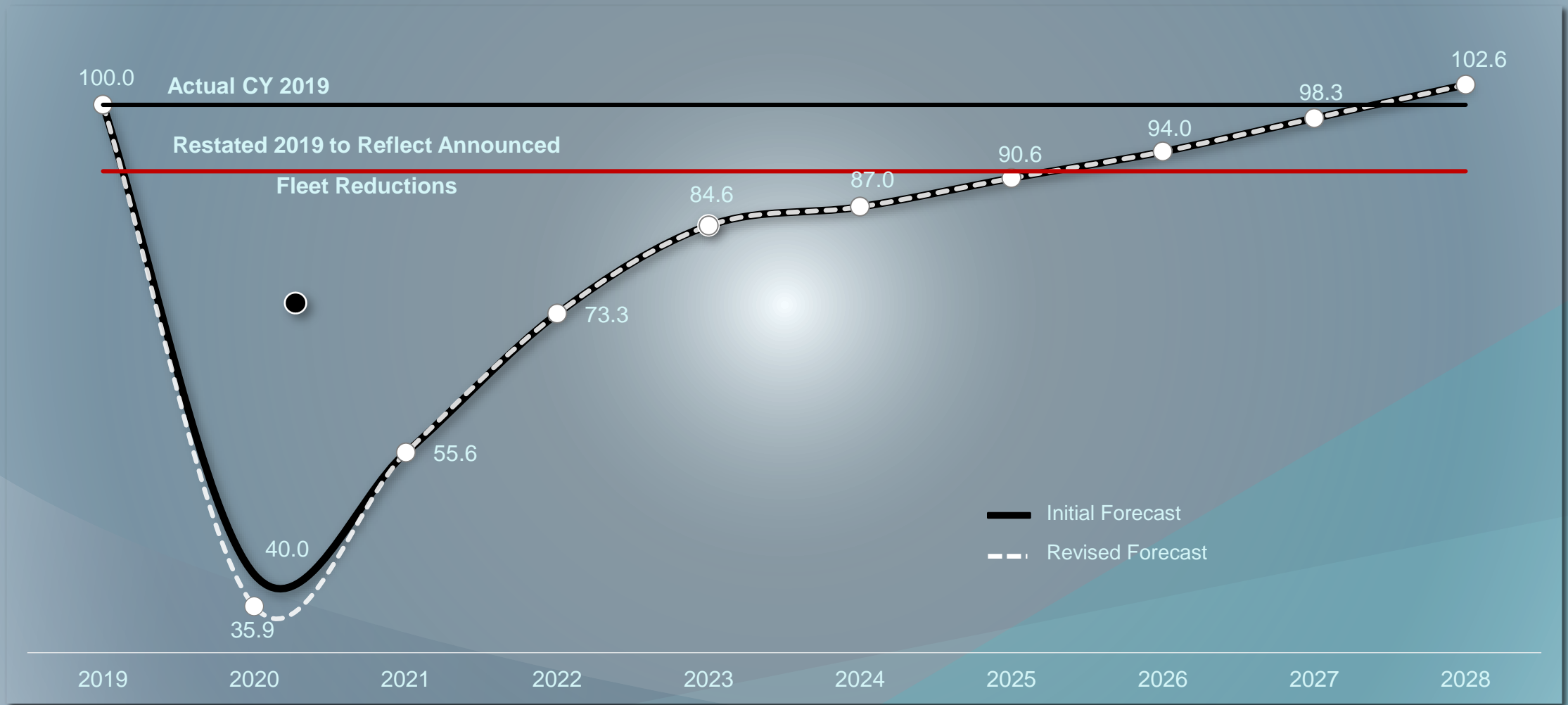
Executive Summary

- We now forecast that 2020 domestic traffic will be *less than our initial forecast of 40%* of the 2019 level (page 4). The **economy**, **consumer confidence** in the system and a **return of international travel** will all be catalysts for the domestic industry to show meaningful growth in the immediate term.
- The square root symbol ($\sqrt{\quad}$), not a letter in the alphabet (V, U, L, W), defines the shape of our initial, and current, forecast of the recovery in U.S. domestic traffic. Note: our forecast has not changed since April 2020.
 - Going forward, given the fleets that are announced as being permanently parked, the traffic generating capacity in 2020 is 8.5% less than in 2019. If only the network carriers were considered, they will have 17% less traffic generating capacity than in 2019.
- The influence of international traffic supporting domestic network cannot be overstated.
 - Less than 43% of international service is being flown in December 2020 (page 130). In 2019, international traffic amounted to 15% of passengers flying on a domestic service (page 5). Simply combining the impacts of airline decisions to discontinue fleets and the dearth of international travel, the domestic industry is structurally 18% smaller.
- Currently, there is much discussion of a vaccine and therapeutics. However, it is the depth of damage to the economy and international travel in 2020 that drives our 2021 thinking for now. There are estimates that a significant portion of the population could be vaccinated by summer of 2021. If significant distribution is successful, then our estimate for 2021 will likely be low.

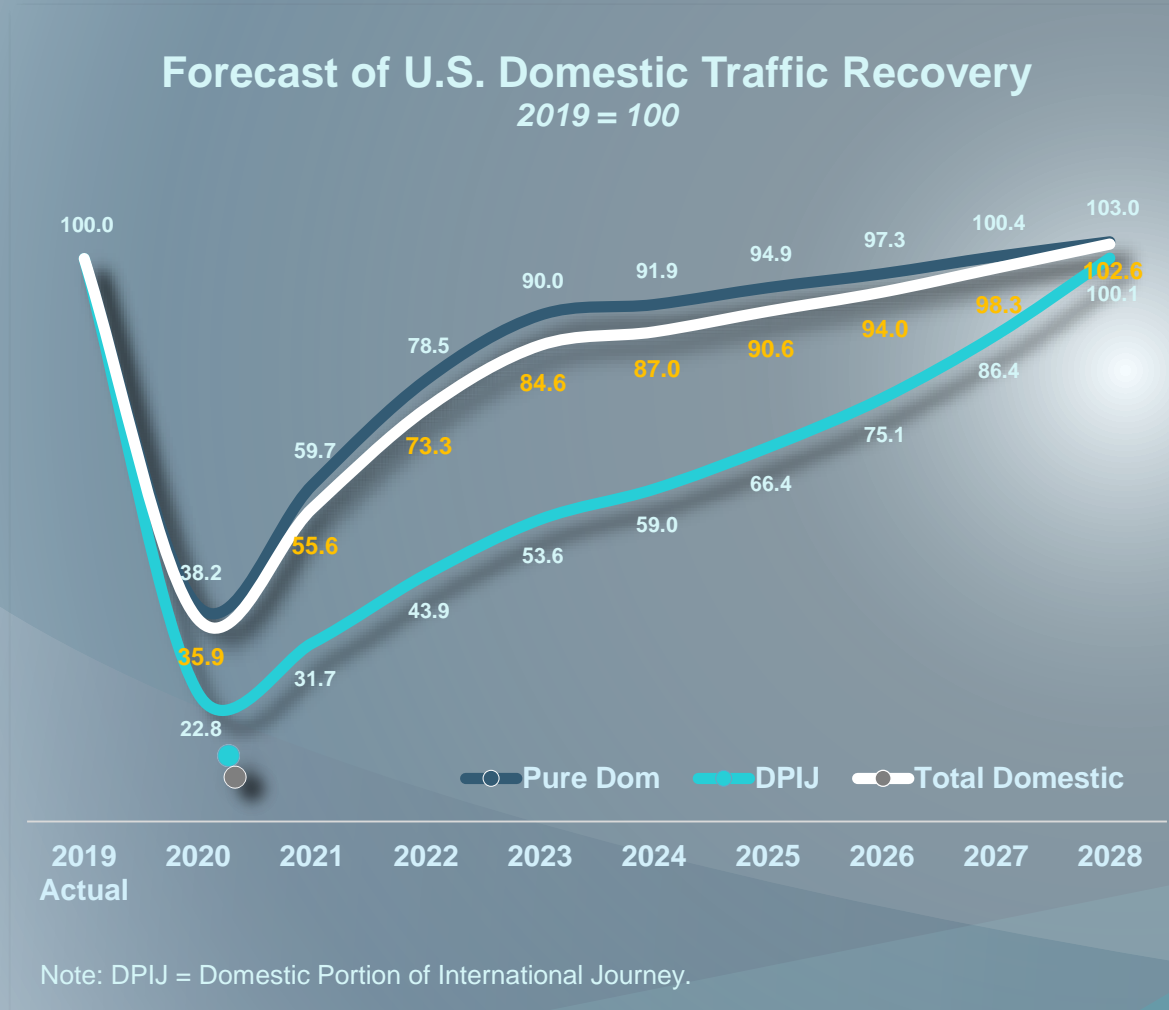


Forecast U.S. Domestic Air Traffic Recovery

2019 Actual = 100



Key Assumption: Any Path To A Domestic Traffic Recovery Will Require International Travel To Return To A Semblance Of Historic Norms

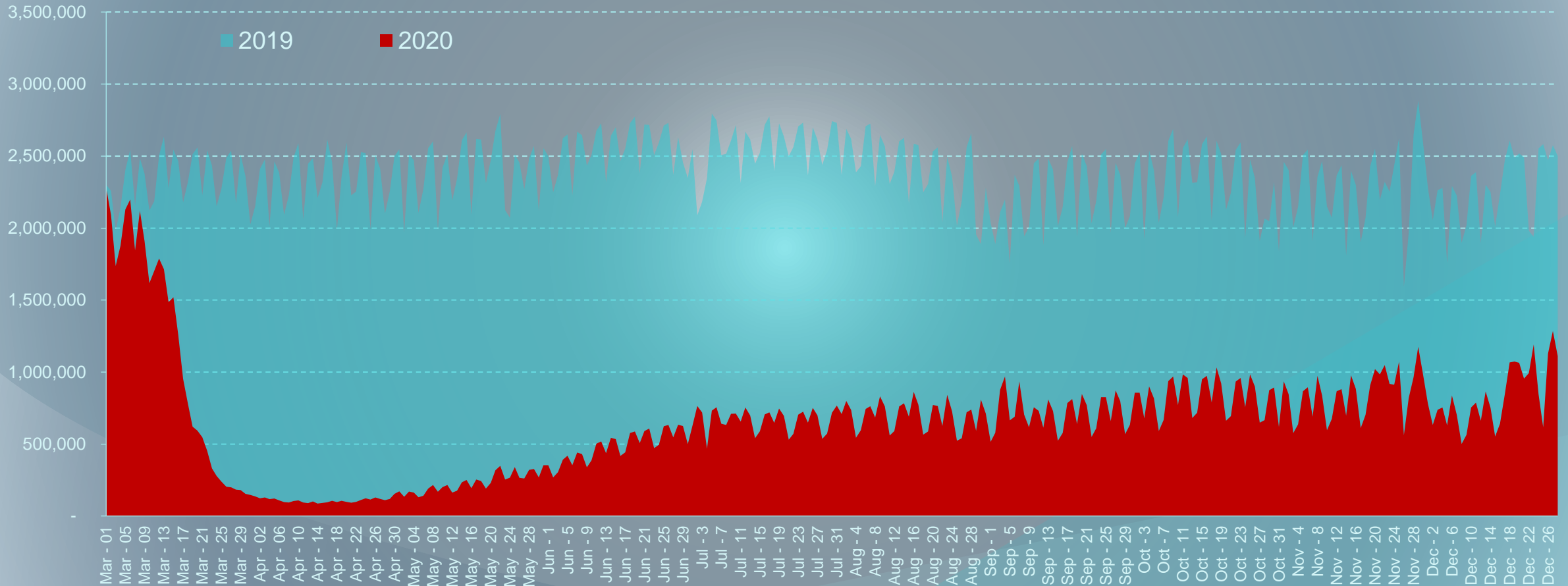


- Two buckets of passengers make up passengers flying on a domestic flight. Passengers flying within the U.S. are considered pure domestic passengers. However, there are passengers connecting to an international flight traveling on a domestic flight as well.
- Passengers traveling on a domestic flight to connect to an international flight account for 15% of U.S. domestic airport throughput (enplaned and deplaned passengers).
- Two structural headwinds will slow the domestic recovery: 1) the sheer number of parked aircraft; and 2) the return of international travel.

Traffic In The Immediate Aftermath Of Covid-19

The Holiday Surges Are Prevalent

Daily Passengers Screened by TSA

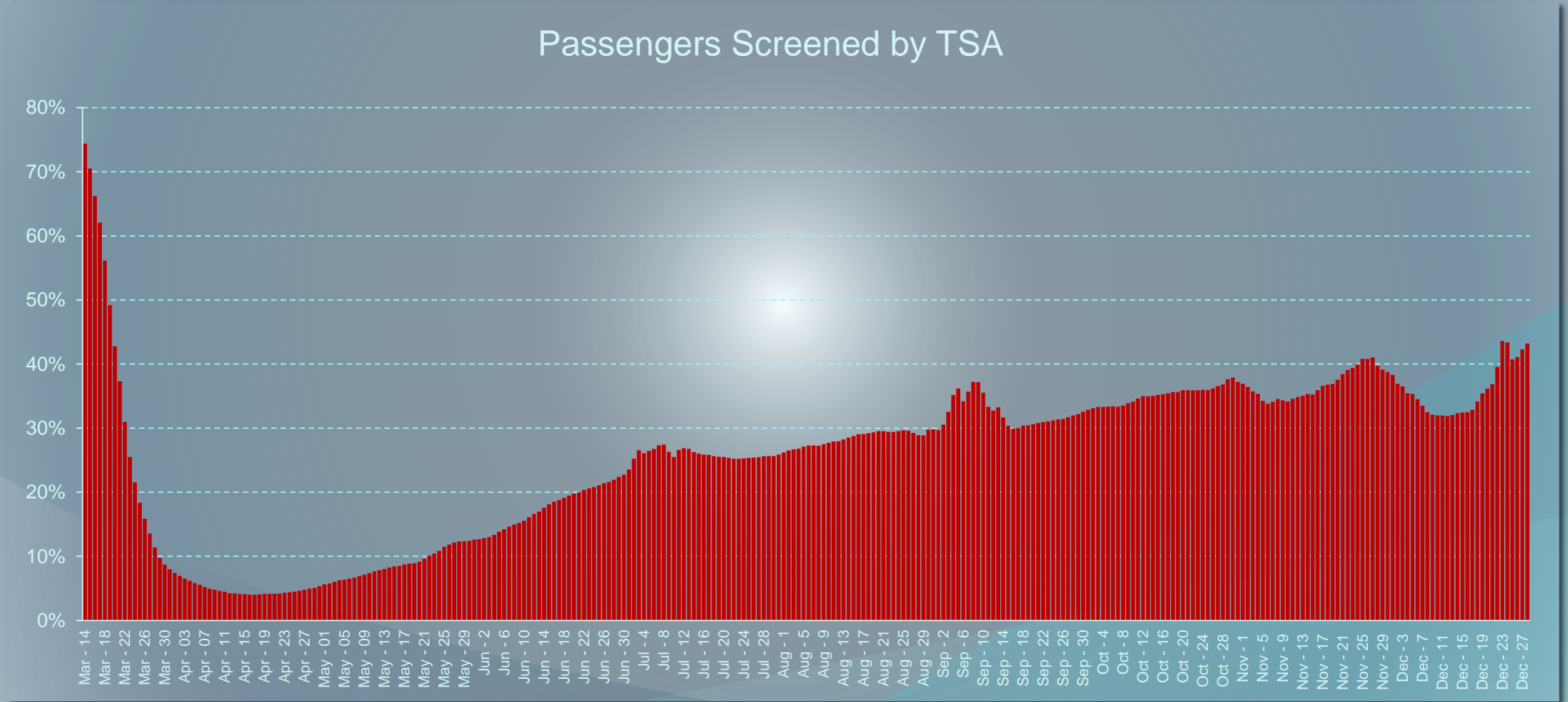


Source: TSA.



A Nascent Recovery – Barely Above 40% of 2019 Traffic Levels Even With the Holiday Surges

- Moving 7-Day Total 2020 v. 2019



Source: TSA.

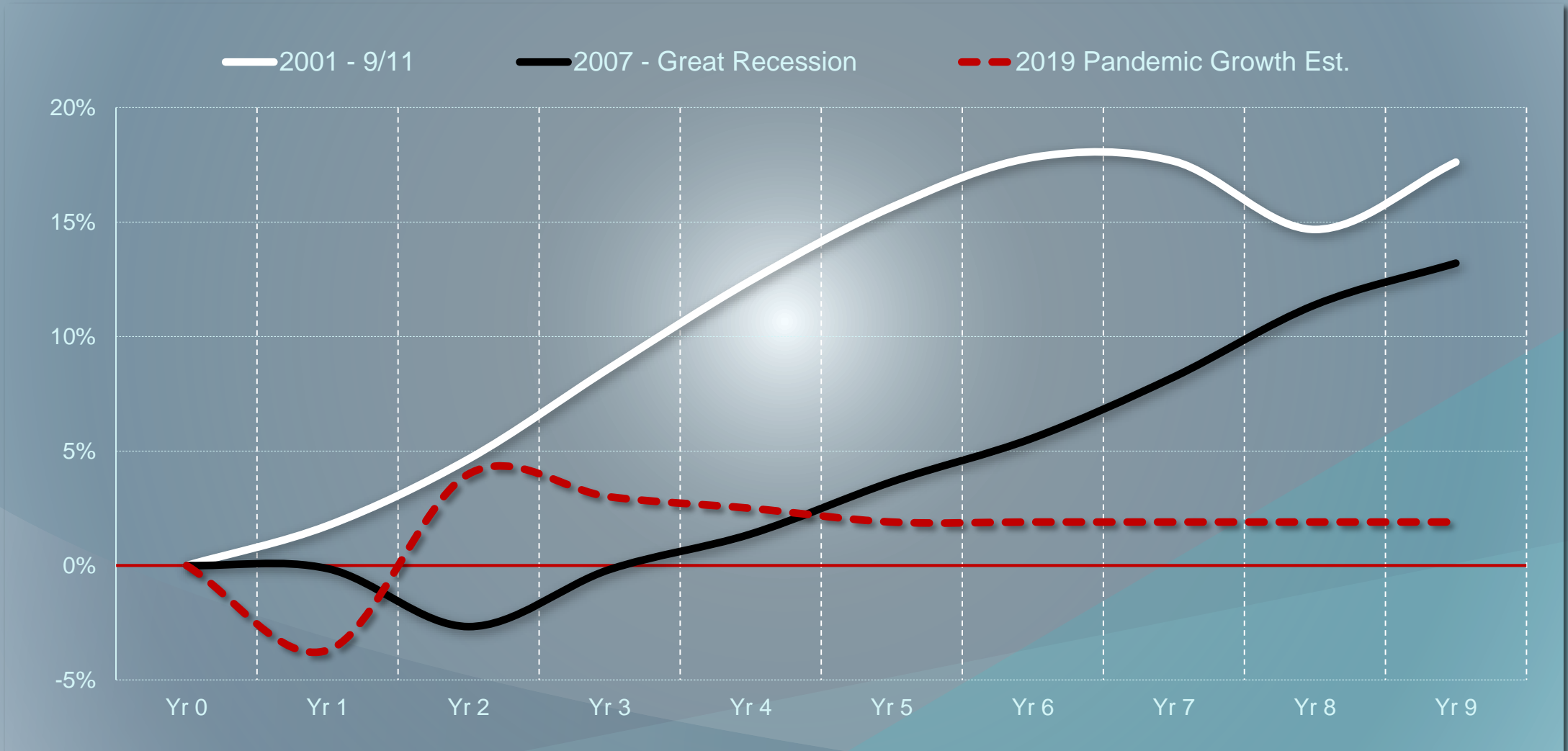


Executive Summary

- Whereas many point to the fact that there is no historical experience to point to, our canvass suggests that history should not be completely ignored.
 - The 9/11 recession was mild. The demand shock for certain sectors of the industry was not. The overall airline industry recovered fairly quick. That was not true for all carriers though.
- Gross Domestic Product (GDP) remains a critical driver in our outlook. While the 31.7% drop in 2q'20 exceeded our estimate, so did the 33.4% increase in 3q'20. The 2020 economy is still 3+% smaller than the economy in 2019.
- Consumer confidence is considered the second most important indicator. The lag in the relationship between consumer confidence and airline industry health is deemed to be a guiding influence in our thinking.
- Whereas our recovery time is longer than some other views of how the market will resuscitate, we are most persuaded by a recession deeply impacting the consumer's ability to buy, consumer confidence, business travel budgets and the belief that the industry will be judicious in deploying capacity while cash balances are replenished.



Historic Event Percent Changes in U.S. Real GDP: 9/11, The Great Recession and the Pandemic From Point Zero

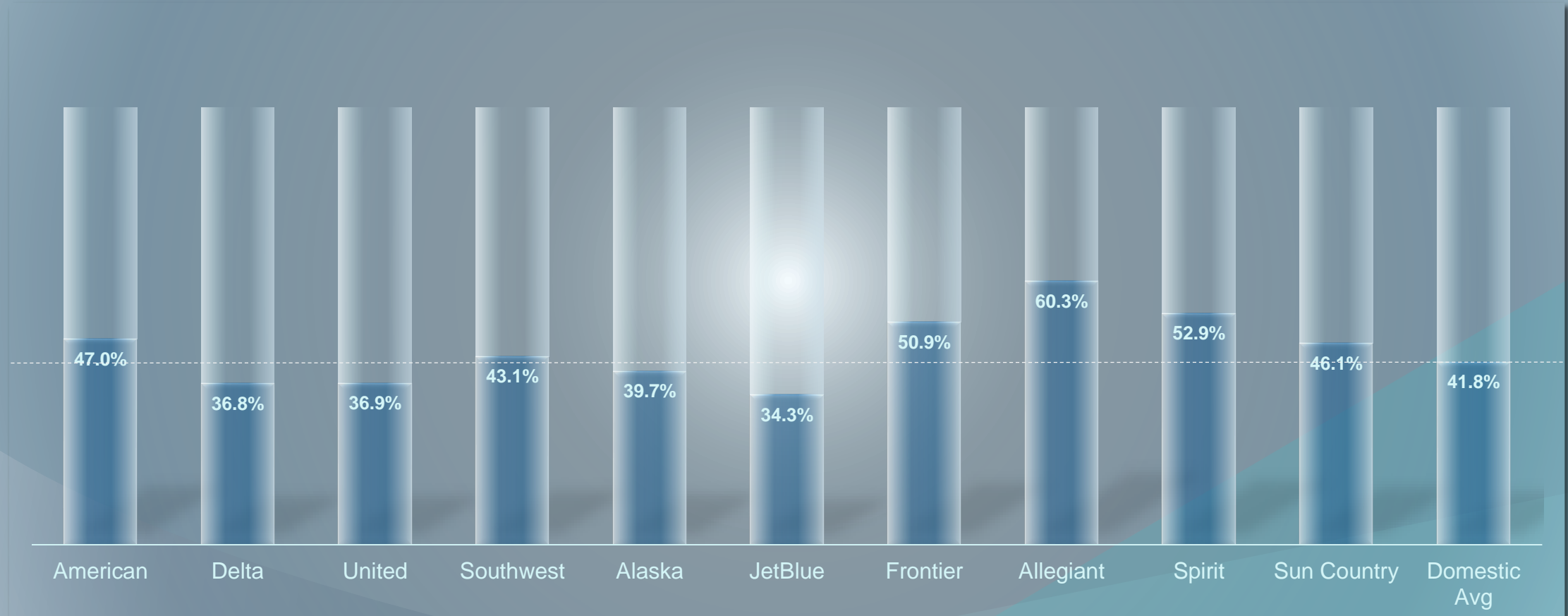


Executive Summary: Expected Airline Impacts

- As a result, the Big 3 network carriers (American, Delta and United) initially will cede market share to the 7 other carriers included in this work.
- Our view since April '20 has been that Southwest and Allegiant will take advantage of their long cash runways and make an early market share grab in the U.S. domestic marketplace. It is expected that the two airlines will remain aggressive along with Spirit. At least two new entrants are expected over the next two years and promises to make product a choice for air travel consumers.
- Domestic traffic for the first 9 months of 2020 is equal to 41.8% of 2019. Allegiant has carried the greatest percentage of its 2019 traffic while jetBlue has carried the smallest percentage. It should be noted that jetBlue is arguably doing the biggest re-think of its network so it is no surprise that its traffic generation is lagging.
 - With the exception of American, the more mature carriers – Delta, United and Alaska – are all carrying less domestic traffic in 2020 as a percent of 2019 than the average for the industry.
 - Southwest has added 12 new dots on its network map. With few exceptions, Southwest has markers down on nearly every airport contained within the large metro areas that envelope multiple airports.
 - Spirit and Frontier are signaling additional capacity in the months ahead.



Actual Domestic Traffic Comparison January – September, 2020 v. 2019



Source: U.S. DOT T-100 database.



Executive Summary: Expected Airport Impacts

- In the previous two recessions, the network carriers recovered much more slowly than the other significant players. The same is expected during this recovery. Airports depending on the network carriers for their service will likely face an uneven recovery.
 - Based on announced fleet reductions, Delta is expected to shrink the most, Alaska the least.
 - Initially, it is assumed that the network carriers will engage in a zero-sum game in adding capacity. New aircraft financed and delivered will be put into service replacing an existing, older aircraft in operation. Until cash balances begin their restoration, we are persuaded by industry comments that no new/minimal aircraft will be added unless they are fully financed.
- The loss of connectivity will ultimately impact the non-hub airports within each network over the longer term. Early post-COVID (April – September 2020 and now December – March 2021) traffic levels were/are artificially propped up by provisions in the CARES Act requiring service to be maintained.
- Of interest is the sustainability of the significant capacity added to medium and small hub airports between 2015 and 2019. It is not foreseen that all that capacity will return and is yet another reason why we are cautious on any immediate return to the actual 2019 levels.

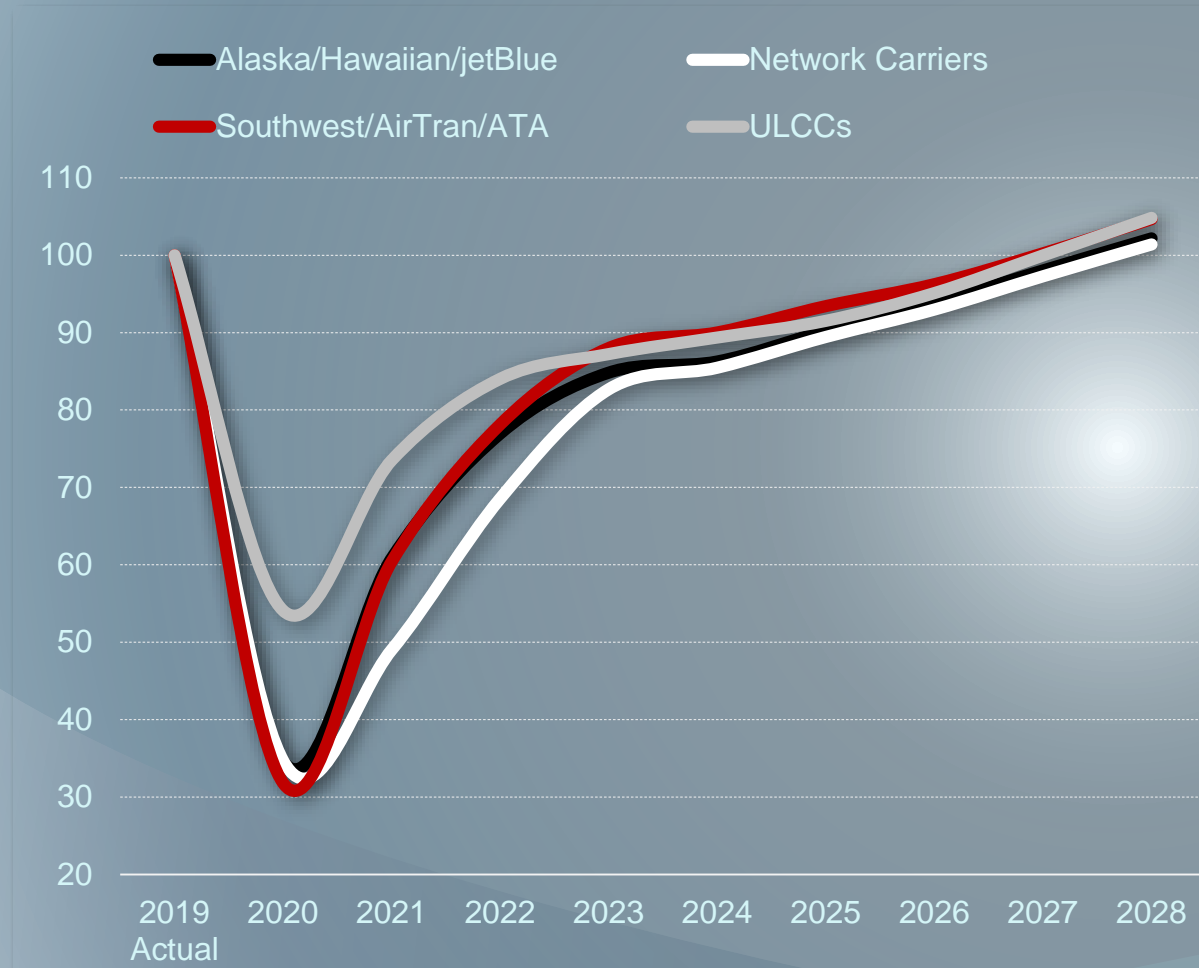


Executive Summary: Expected Airport Impacts

- Among the medium, small and non-hub airports most impacted in terms of absolute levels of traffic in 2020 as compared to 2019, the list includes the larger airports in each category.
 - More importantly, many of the airports listed were those that enjoyed significant growth in new service between 2015 – 2019. It was during this period that the industry grew at a rate greater than the economy. The incremental capacity deployed during this era did not produce the same profit margins that the industry enjoyed between 2010 – 2014. Therefore the reason for our questioning whether all this capacity will be restored.
- In terms of percentage change in our analysis of traffic impacted by networks deployed in September - December 2020 period, Southwest Airlines' airport domains define the list of large and medium hub airports.
- As travelers seek leisure-oriented destinations, virtually every carrier is adding capacity to traditional points in Florida, Arizona and Nevada. Non-traditional points like Palm Springs and Savannah are winners as each offer leisure attributes that today's travelers are seeking. Whereas these destinations will almost assuredly become more predominant dots on the airline's maps, the question remains around the levels of traffic at these secondary points and will that traffic be sufficient to support all of the service currently deployed.
- In the non-hub category particularly, small changes in service can have an outsized impact on the model output. Therefore, read cautiously.



Projected U.S. Domestic Traffic Recovery by Carrier Types

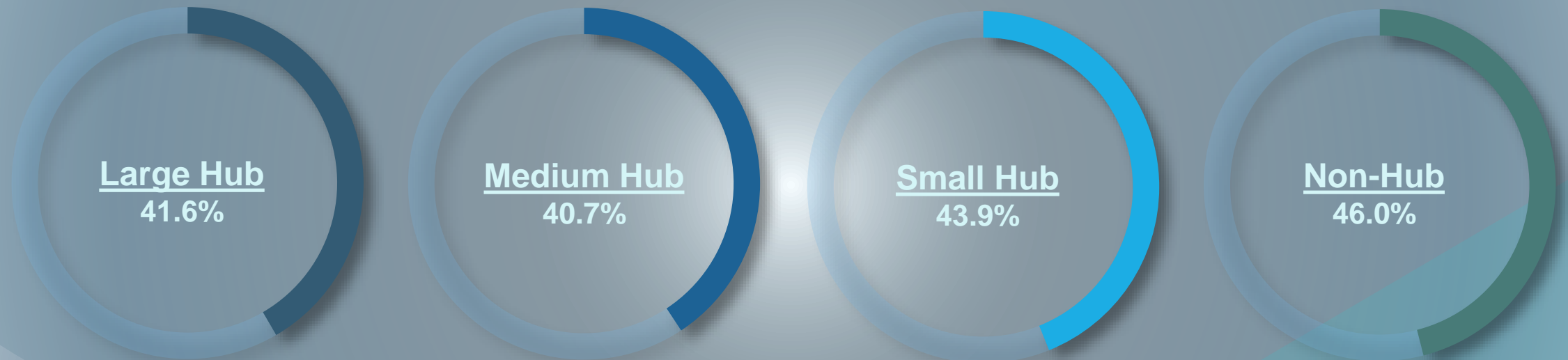


Note: Network Carriers include Delta/Northwest, American/US Airways/America West/TWA, and United/Continental; ULCCs include Frontier, Spirit, and Allegiant.

- Network Carriers:** It is expected that the network carriers will recover slower than will other players in the industry. The sector has announced the greatest number of aircraft reductions; business travel is expected to be less; and hubs will be smaller and likely fewer.
- Southwest:** Like the period following 9/11, it is expected that Southwest will exploit industry weakness and grab share in markets critical to their network.
- Hybrids:** This sector is made up of Alaska, jetBlue and Hawaiian. All have loyal customer followings. These carriers all serve markets with strong leisure attributes, therefore they are assumed to get planes back in the air as soon as practical.
- ULCCs:** All of the ULCCs are expected to grow rapidly, then see their growth trajectory flatten.



Actual Domestic Traffic Comparison January – September, 2020 v. 2019



Source: U.S. DOT T-100 database.



Section 2:
**Altered Thinking: Public Health,
Macroeconomics, Industry Realities**
December 2020 Update



**The U.S. Airline Industry Has Never Had To
Recover From A Pandemic...**

**...Then Immediately Encounter A Zero-Demand
Environment**



10 Data Points/Strategies That Shaped Our Initial Thinking

1. Both the Federal Reserve and the OECD economic forecasts point to a slower growth after an initial bump;
2. Jobs here on March 1, 2020 will not all be replaced;
3. The carriers will engage in “Capacity Discipline” coming out of the recession in order to repair deep balance damage; **(This is one assumption that will likely prove wrong. The Darwinian Struggle is about to commence.)**
4. Capacity added by the 7 carriers other than the Big 3 cannot offset their reductions;
5. The “Hassle Factor” will likely return. Airport experience will be longer; **(Airports are mitigating)**
6. International traffic fills a lot of domestic airplanes. It will be slow to return;
7. Small community traffic fills a lot of domestic airplanes too. The sector will likely be smaller;
8. The concern that business travel returns in a lesser form;
9. The 2019 traffic generating fleet will be less based on announced fleet reductions. Aircraft for growth purposes are not assumed through 2023; and
10. The recovery will be uneven geographically. Hubs need balance. Redundant flows will be eliminated.



Altered Thinking

- In Europe and in Asia and now the U.S., second/third waves of COVID-19 are present and producing even more cases, hospitalizations and deaths. This work assumes the same and influences our initial forecast of a slower recovery trajectory.
- The use of macroeconomic inputs combines the 9/11 shock and the longer recovery timeline of the Great Recession. Notable is that the Great Recession was based in the financial sector (higher income), this recession is more service industry based (lower income).
- Capacity added back into the system will lead demand for most carriers.
 - Simply look at passenger load factors. The focus for all carriers, but particularly for the network carriers will first be on building a “cash positive” network – then worry about profitability.
- Airline hubs will be smaller as fleets will be smaller, as turn times increase due to cabin cleaning between flights (Southwest now reducing turn times) and longer boarding experiences can be expected. Thus, airport assets will not achieve pre-pandemic utilization.
 - The “Hassle Factor” again presents itself. (Airports working hard to mitigate this experience)
 - As a result of smaller hubs, connectivity will decrease impacting smaller markets first.
 - Not all hubs will come back online immediately due to geographic imbalances caused by the pervasiveness of COVID-19. Hubs require some geographic balance to be most efficient.

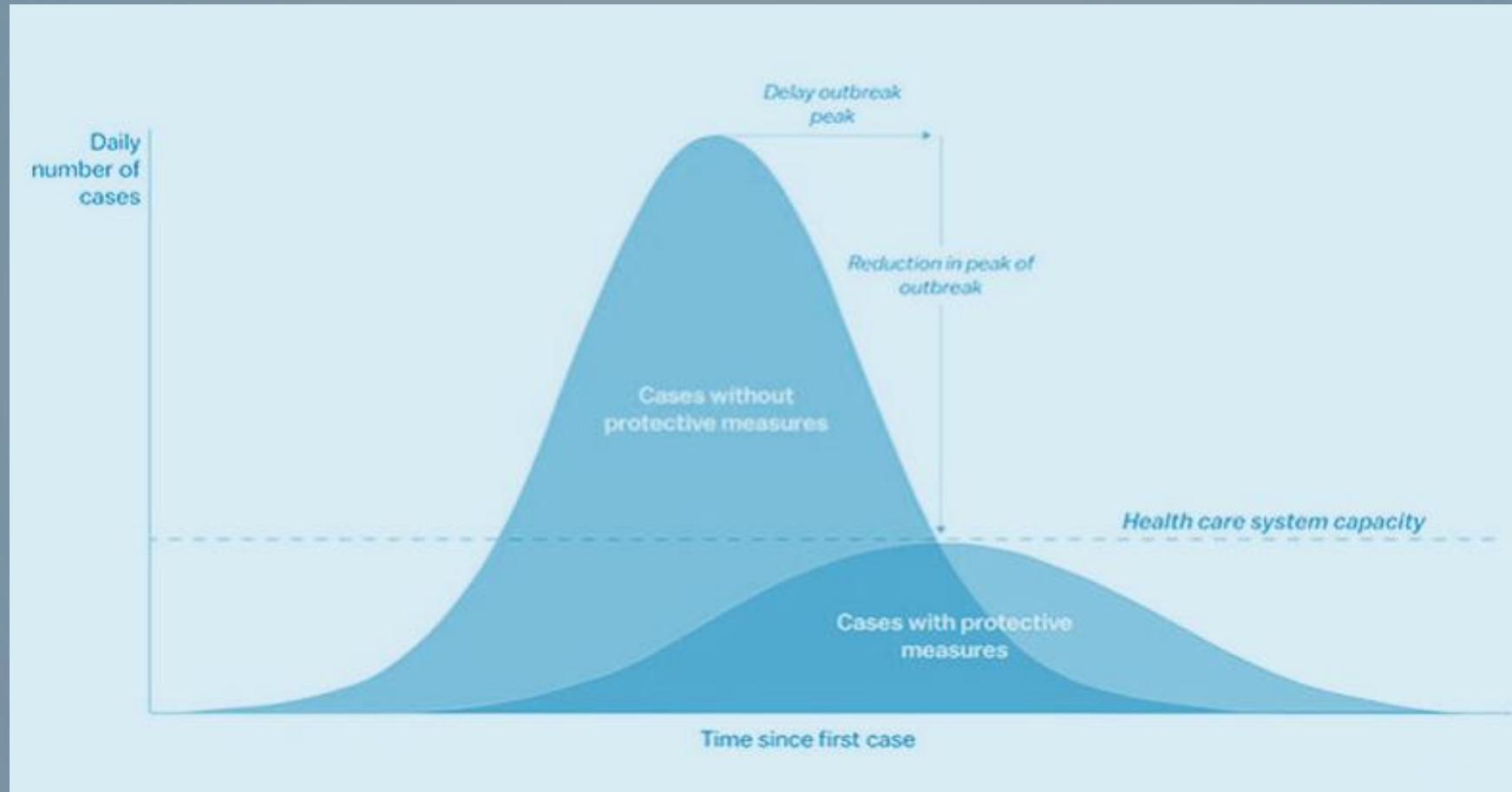


The Traffic/Revenue Drought Will Likely Not Sustain The Operations Of All Airlines Operating Today

**The Virus, Macroeconomy, Consumer Behaviors and
Demand Will Profoundly Influence A System Re-Draw**



The Curve's Right Side = The Early Stage of the Recovery We're Still Not There as of December 2020



Source: CDC.



Altered Thinking

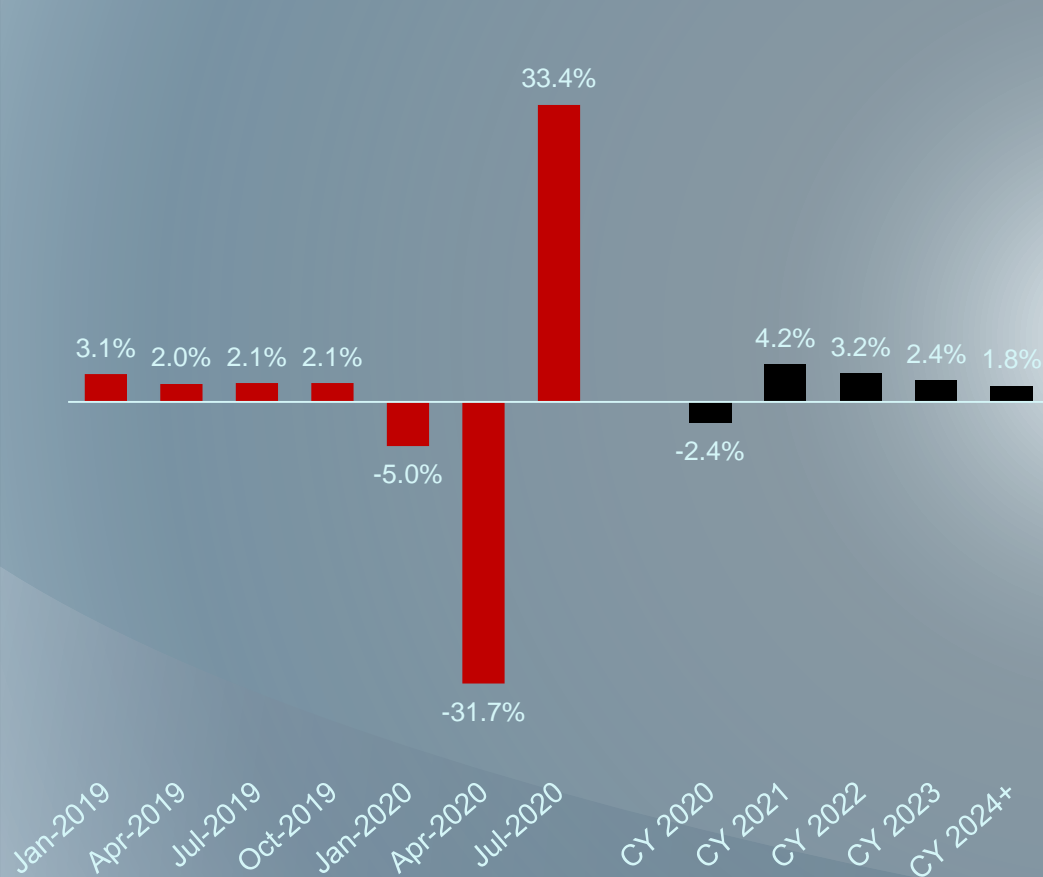
- The recovery really cannot begin in earnest until we get to the right side of the curve. As daily cases are currently back on the rise, it is unclear when the beginning of a true and sustainable recovery can be called. Yes, a vaccine will be necessary with at least 2/3 of the population having access to the vaccine.
- The primary inputs to our macroeconomic forecast are GDP and unemployment. Secondary inputs are consumer confidence, manufacturing activity, retail sales and personal consumption. A heavy reliance on consumer-oriented data points reflects our fervent belief that it will be the consumer who will signal when the recovery is underway and likely sustainable.
- Some will say, we may be overweighting our attention to the COVID trends, however just as daily trends in COVID cases rise again, capacity cuts in December and the early months of 2021 have an impact on anticipated traffic levels at airports of all sizes.
- All observers pay attention to the number of daily passengers screened by the TSA. With cash balances at historically high levels, cash remains fragile. At some point soon, we need to make revenue the barometer for growth.



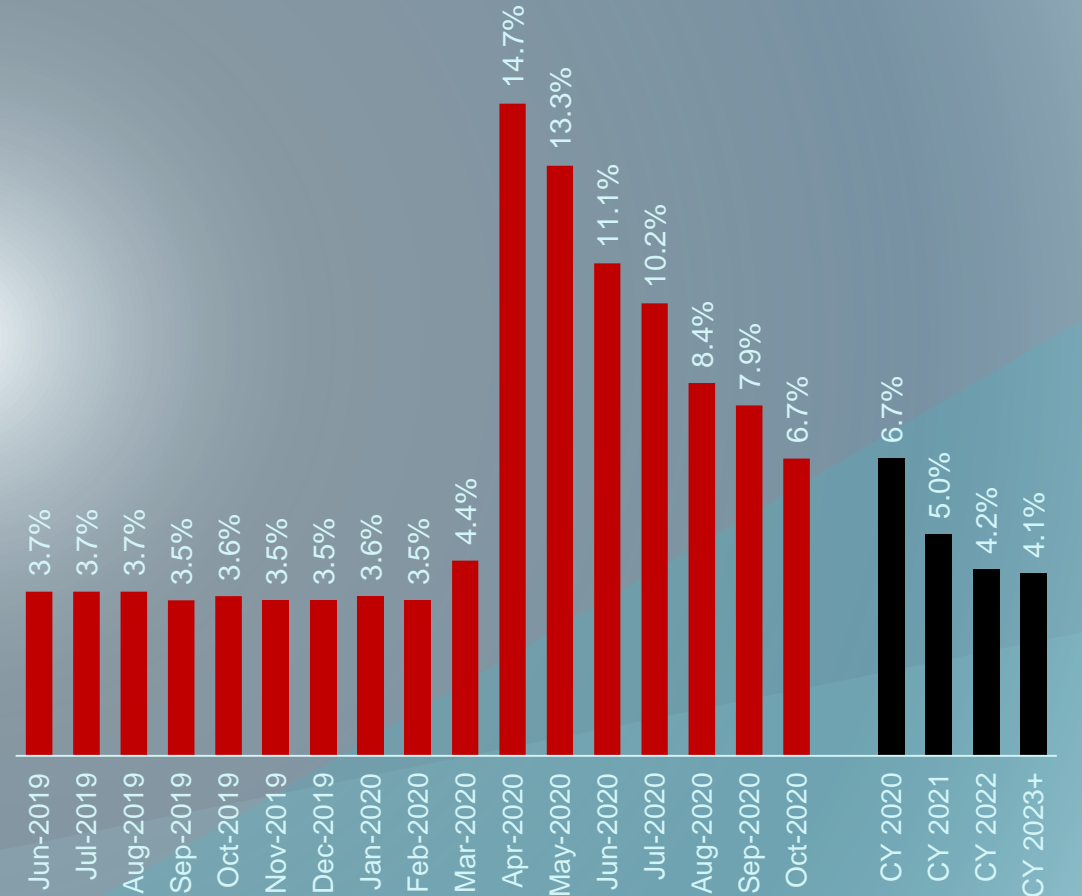
PRIMARY INPUTS: Real GDP and the Unemployment Rate

SECONDARY INPUTS: Confidence, Consumption, Manufacturing and Retail Sales

Real GDP



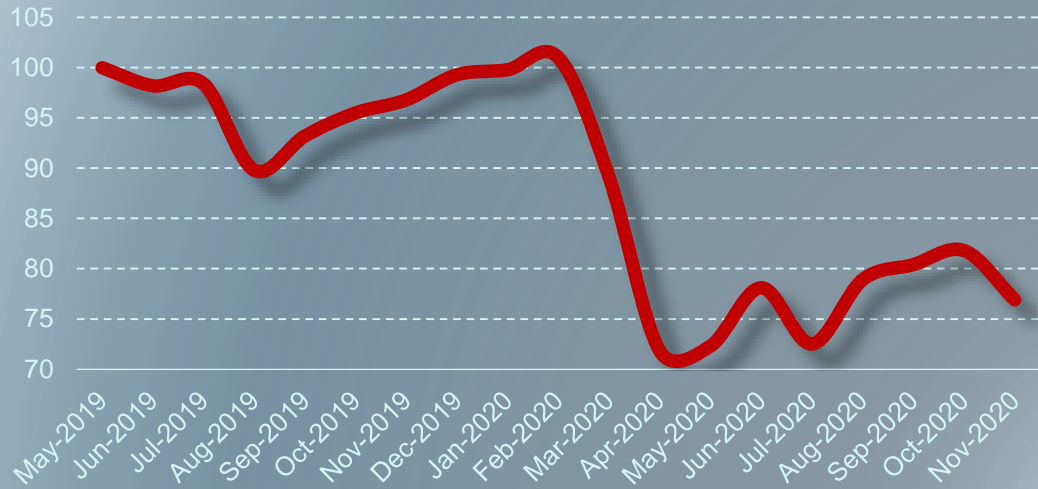
Unemployment Rate



Note: Federal Reserve Bank of St. Louis. Forecast: Federal Reserve.

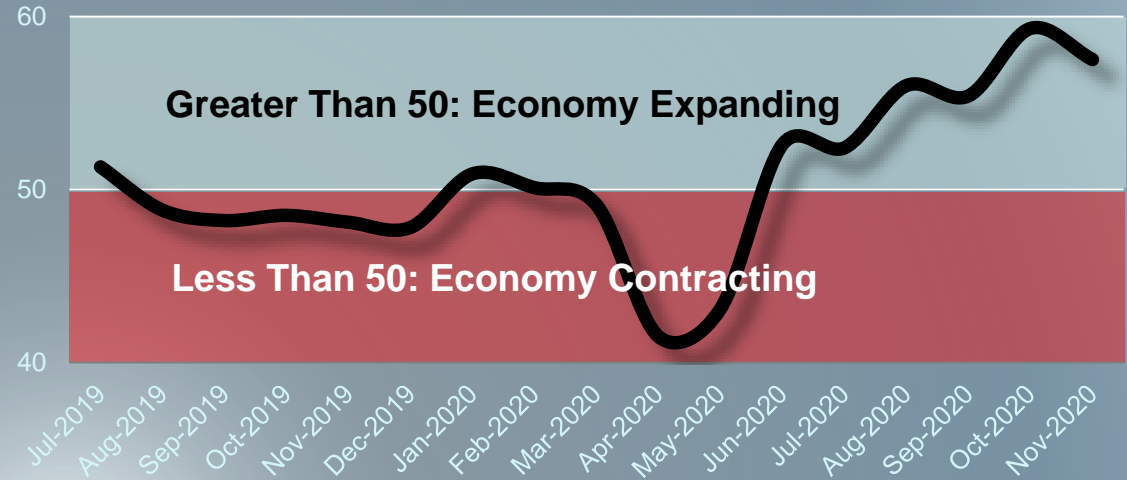


Consumer Confidence



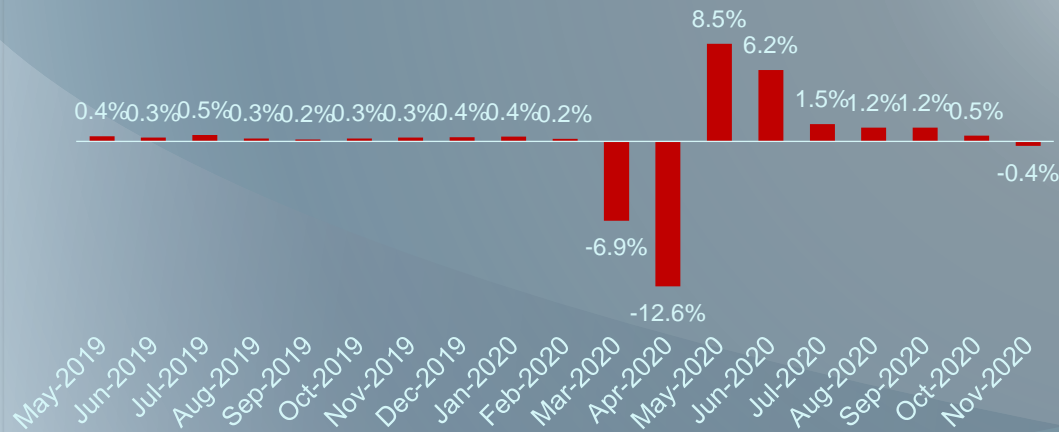
Source: University of Michigan.

Manufacturing ISM Report on Business



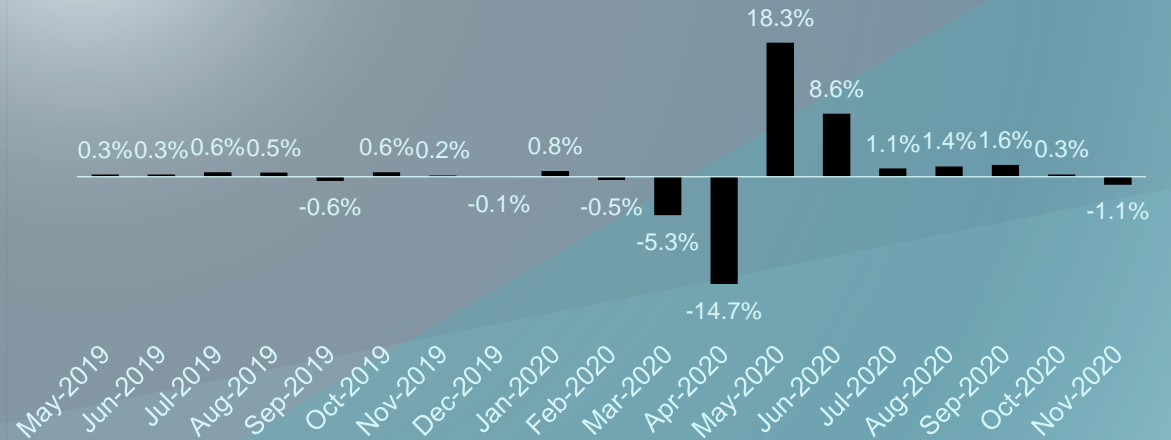
Source: Institute for Supply Management.

Personal Consumption Expenditures



Source: Federal Reserve Bank of St. Louis.

Retail Sales

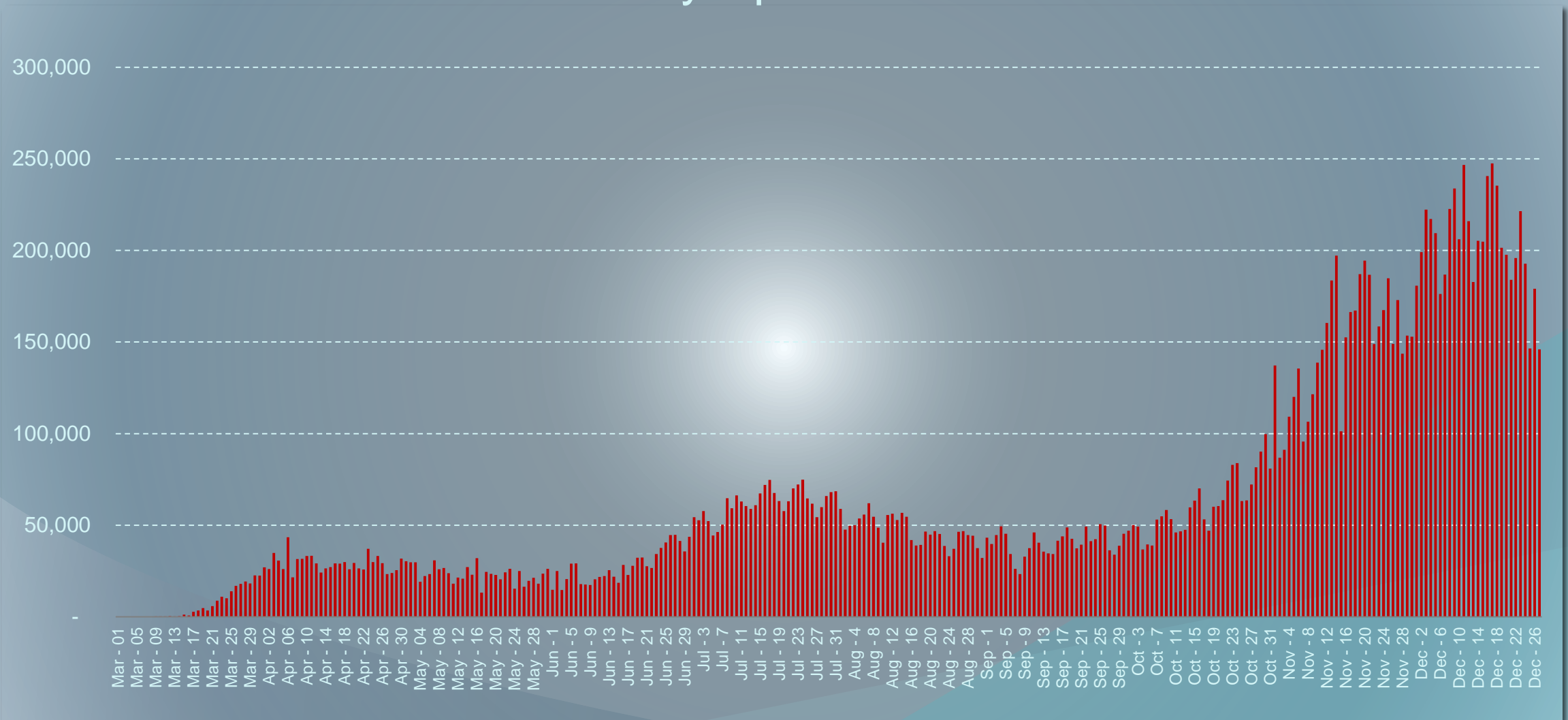


Source: Federal Reserve Bank of St. Louis.



New Daily COVID-19 Cases

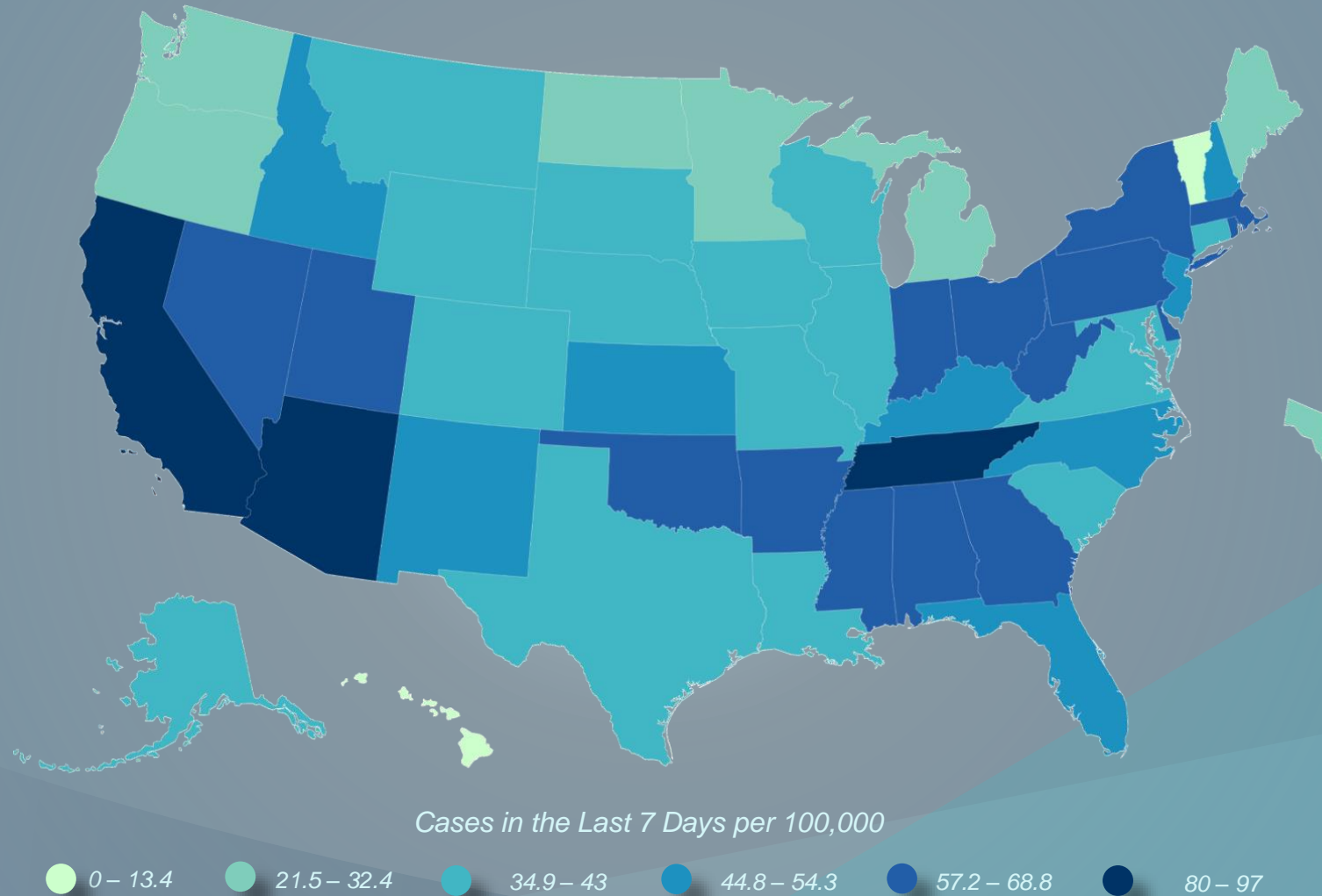
The Post-Holiday Spikes Are Pronounced



Source: CDC.



The Recovery Will Be Uneven – All Geographies Are Not The Same And Will Impact Hub Redevelopment



Source: CDC. Reported COVID-19 Cases by State as of December 29, 2020



Section 3:
A Dynamic Look: Expected Impact On
Historical Traffic Flows Resulting From
Sequential Schedule Changes
December 2020 Update



Critical Definitions and Assumptions Embedded in the Analysis

- The following output **includes enplaned and deplaned traffic** for pure domestic trips, as well as any Domestic Portion of an International Journey (DPIJ). Traffic share by carrier and hub do not include international traffic on their respective codeshare partners. Thus, the output captures the actual number of passengers entering and exiting a respective airport. **The output is load factor adjusted.**
- What Data Points are Actual and What are Projections for CY 2020

Actual – Reported T-100								Projection - Based on September - December Schedules, 2020 v. 2019, and Reported CY 2019 Traffic			
Jan'20	Feb'20	Mar'20	Apr'20	May'20	Jun'20	Jul'20	Aug'20	Sep'20	Oct'20	Nov'20	Dec'20

- Only the following 10 carriers are included in this airline and airport specific traffic impact analysis: American (AA), Delta (DL), United (UA), Southwest (WN), Alaska (AS), JetBlue (B6), Frontier (F9), Spirit (NK), Allegiant (G4), and Sun Country (SY)



Our DYNAMIC Modeling – A Planning Tool for Many Stakeholders

- Following the Great Recession, carrier capacity deployment strategies became much more important than at any time in the history of network development. Historically, capacity added to the system was correlated to the growth in the economy.
- In the Capacity Discipline Era (2010 – 2014), just because a route might pencil out as profitable, if the market did not fit the carrier's strategy – it was not flown. If it was not profitable on a stand-alone basis, it was not flown. Our work is designed to focus on the evolution of a post-Pandemic industry.
- As the semblance of a recovery begins, we have modeled the U.S. domestic market by carrier and by hub/focus city in order that we can begin to glean carrier strategies in adding capacity/connectivity back into the system.
 - It can only be as good as the data filed. Schedules being filed today (December 2020) for tomorrow are more reliant than schedules filed early in the Pandemic.
- With each month's update, we expect carrier strategies to become clearer thus enabling stakeholders in the system to better plan.



Our DYNAMIC Modeling – A Planning Tool for Many Stakeholders

- As we begin this exercise, it will enable users to:
 - Assess carrier hub activity both in terms of local and connecting traffic;
 - What hubs/focus cities are more relevant in the short-term;
 - Give the user a benchmark against a 2019 timeframe to measure against; and
 - Most importantly, what size markets are being focused on by the various carriers in their capacity deployment strategies.
- The application of the output will augment any planner's thinking.
- This will remain a dynamic piece of work in progress. Initial model output corroborates most of what is being reported in press accounts.



What Our Dynamic Modeling Says.....

- We are not completely sold on the fact that historic traffic flows will mean little in the post-COVID-19 industry architecture. Yes, new flows and new service will emerge. We are not of the view that all hubs will survive as some within a carrier network that offer identical itineraries between A and B may be deemed as duplicative.
- We rely on the 2019 domestic traffic flows to form the basis of the analysis. As the world is fixated on when does the industry return to 2019 traffic/capacity levels, using 2019 seems appropriate at this stage. Although it is probably better to assume 2017 or 2018 depending on which airlines provide the bulk of the service in a respective market.
- For the 10 U.S. domestic carriers, we adjust the calendar year 2019 airport throughput by carrier and by hub based on monthly schedule changes. The output produced on the following pages reflects domestic schedules in September - December 2020 as compared to September - December 2019.
 - Thus, the 2019 airport throughput is adjusted based on seats offered and connectivity to points beyond the hub/focus city. These changes will be significant in the early months as service is restored.
- As we are assuming a near zero-sum game on capacity deployed by the carriers through 2023, the dynamic analysis will quickly enable the user to identify airports/geographies where service is being restored and where it is not being restored.



American Airlines

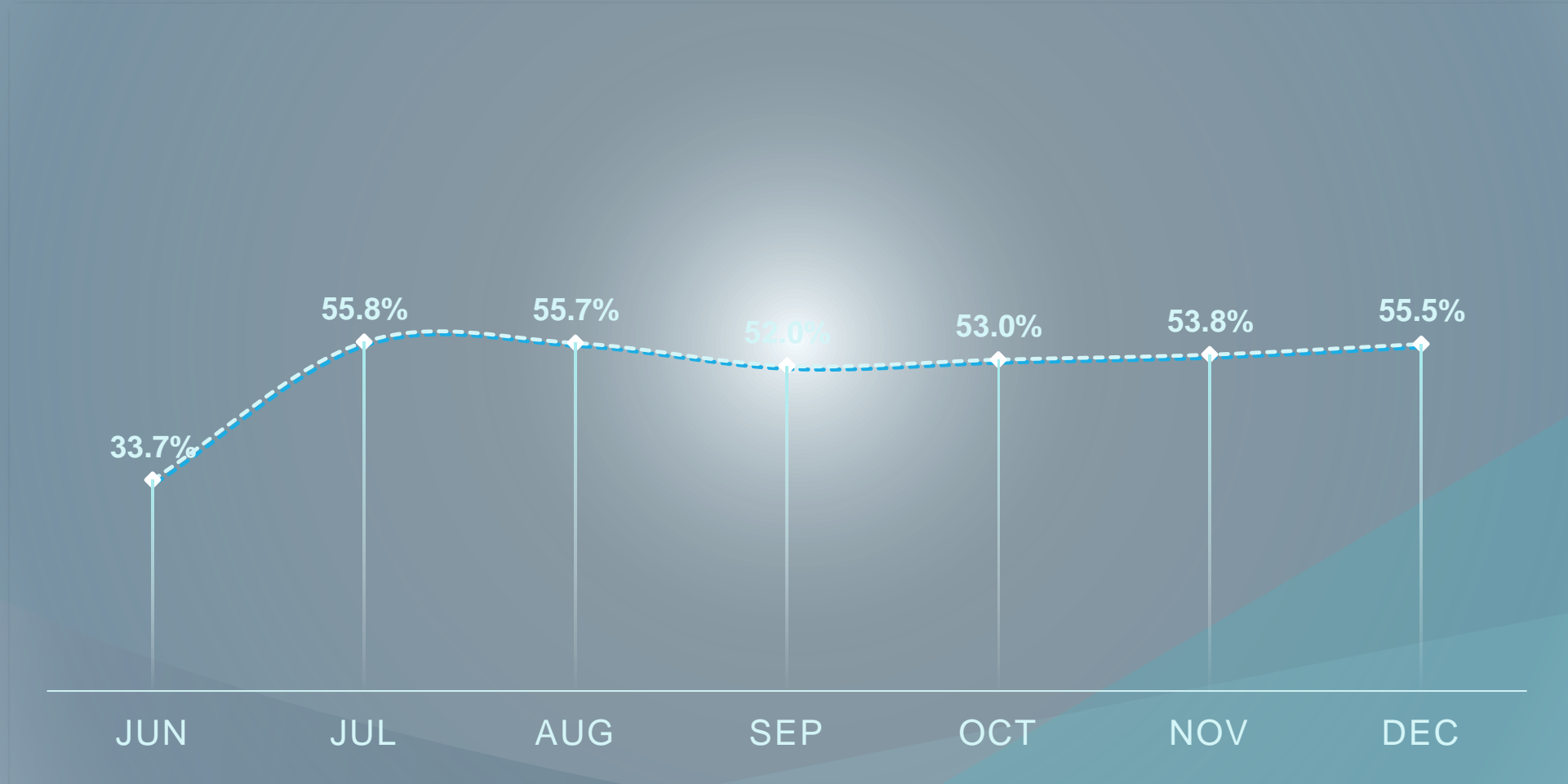


Executive Summary: Airline Specific Capacity Deployment and Traffic Impacts by Geographic Region and by Airport Type

▪ **American Airlines (pages 34 – 39):**

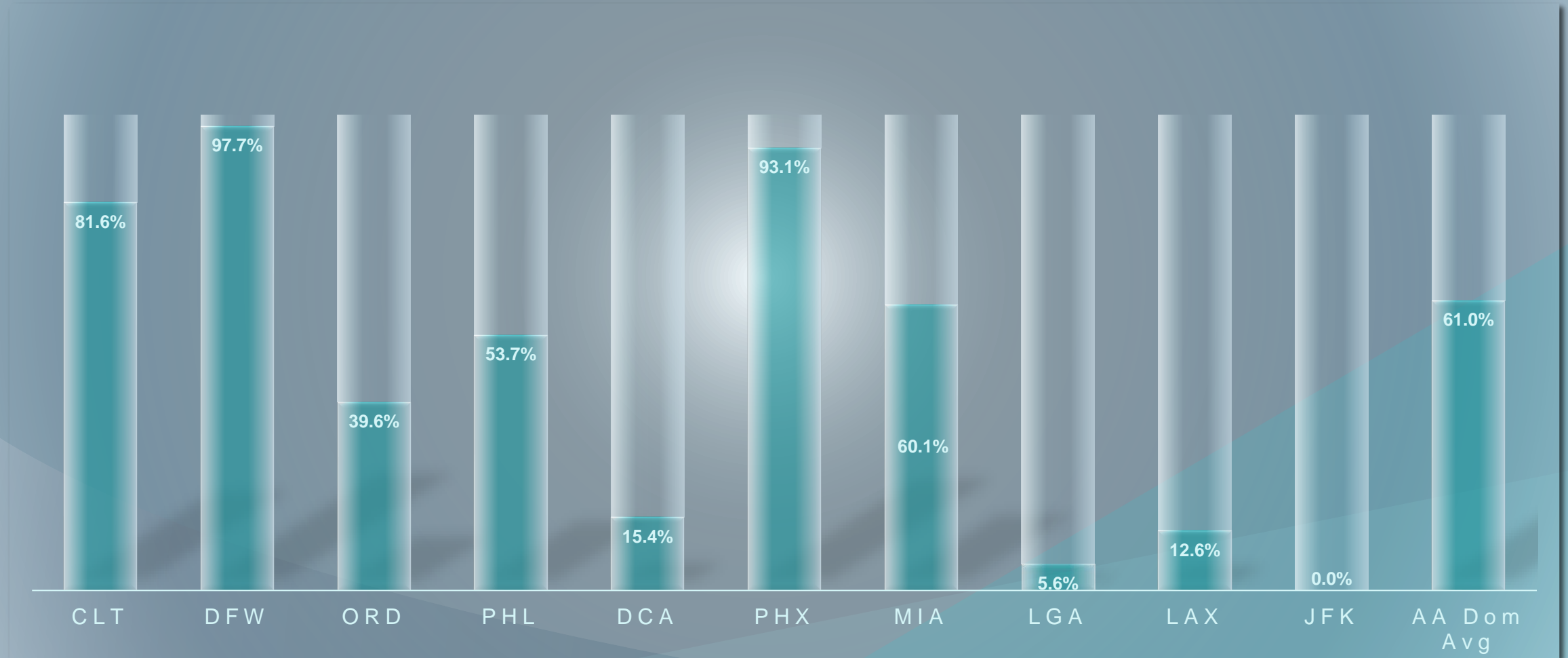
- In December 2020, American is flying 55.5% of its 2019 domestic seat capacity (page 34);
- In December 2020, American is deploying more than 60% of its 2019 regional partner capacity (page 35);
- Throughout the pandemic, American has focused on its hubs at DFW, CLT and MIA. As the carrier focuses less on Chicago, it is building up its capacity at Phoenix. However, it is very slow to build LAX and its significant presence at many Northeast markets (page 37);
- Based on the rebuild of its 2019 network, it is MIA, PHX, DFW and CLT that are expected to experience the least relative decline in passengers in 2020 while DCA, LGA will and JFK experience the most (page 38).
- American's relative expected loss of traffic in 2020 v. 2019 is the least at Large Hub airports and the most at Medium Hub airports (page 39).

American's Outbound Domestic Seat Capacity Comparison By Month, 2020 v. 2019

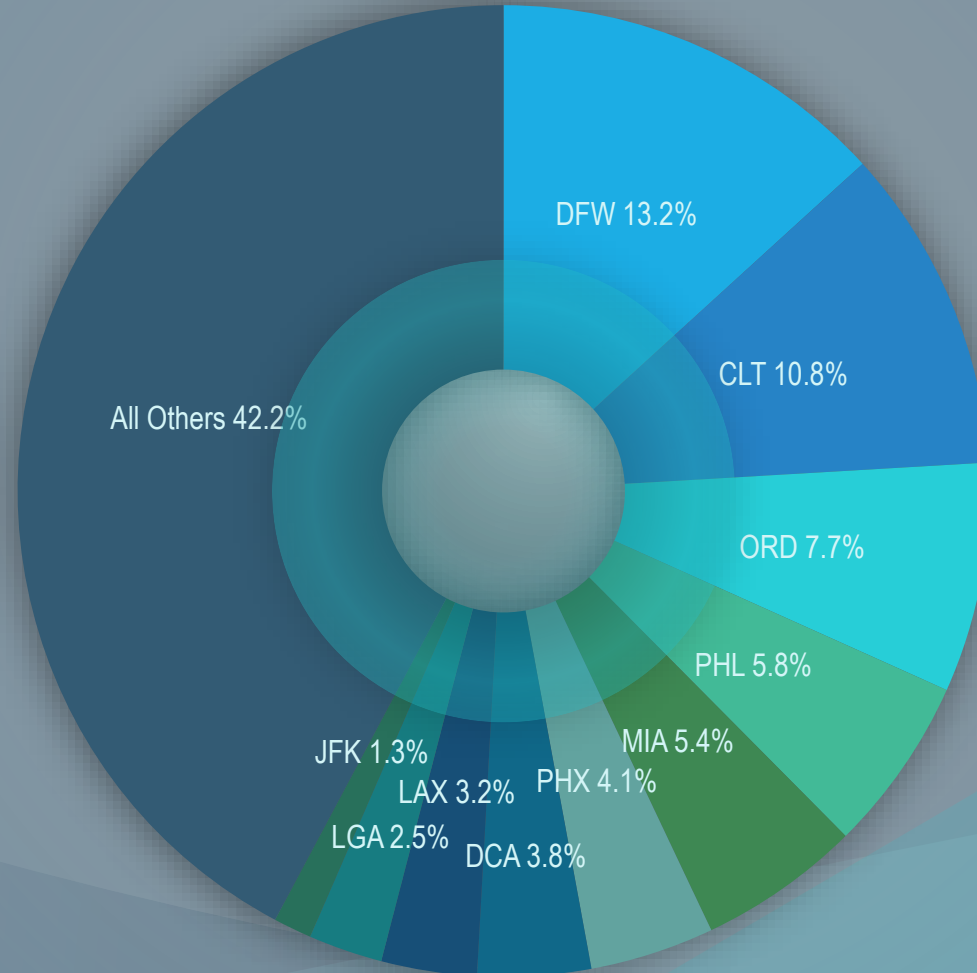


Domestic *Regional* Departures at *American's* Hub Airports

December 2020 v. December 2019



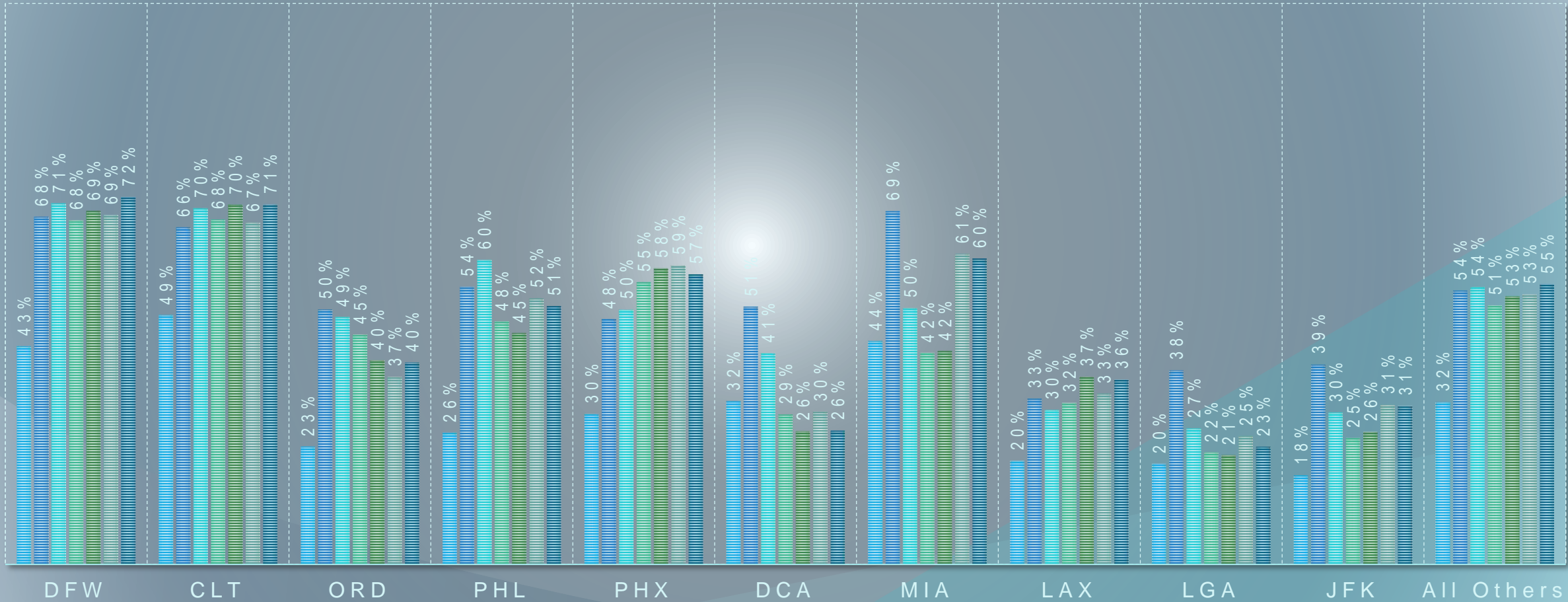
American Airlines – Share of Domestic Departures CY 2019



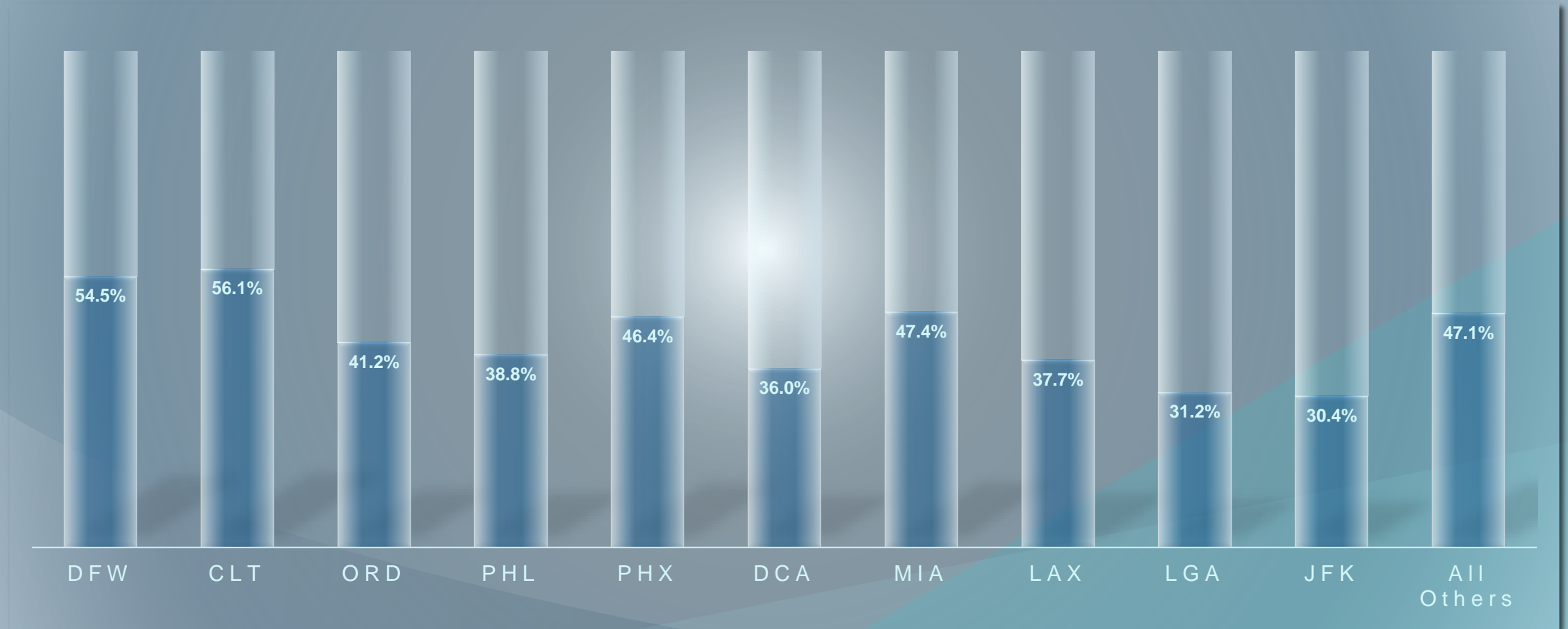
American's Hub Airports

AA's Outbound Domestic Seat Capacity Comparison by Month, 2020 v. 2019

JUN JUL AUG SEP OCT NOV DEC



Actual Domestic Traffic Comparison January – September, 2020 v. 2019 American Airlines at Its Hubs

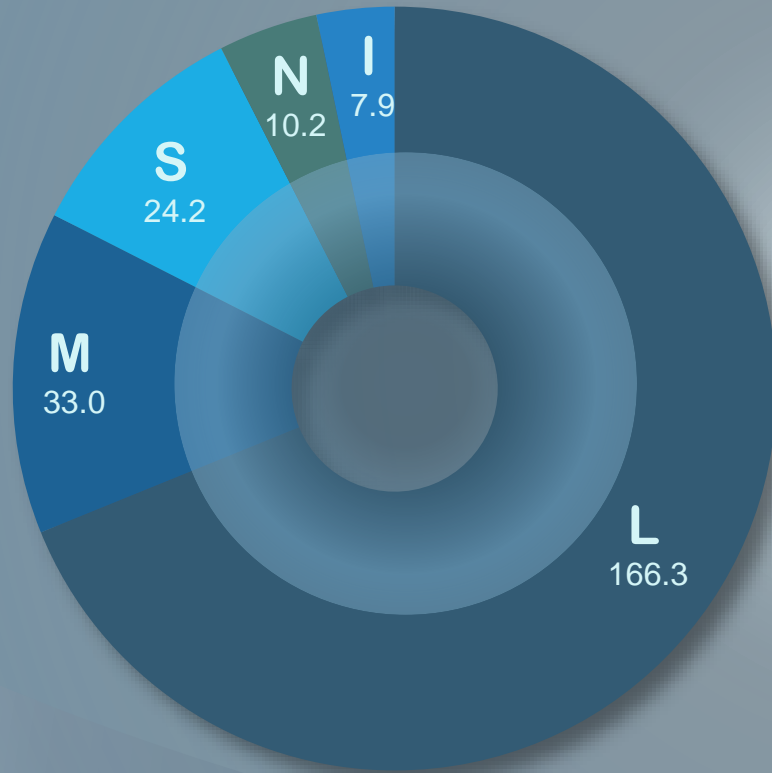


Source: U.S. DOT T-100 database.

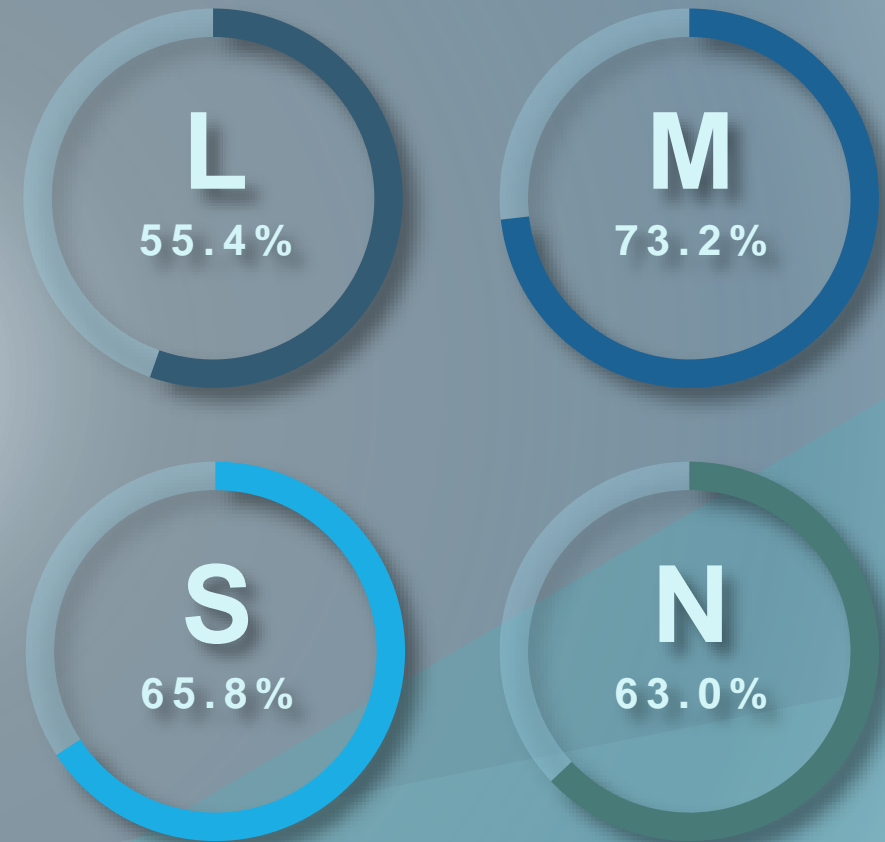


American: Estimated Domestic Traffic Impact by Airport Type

Annualized Airport Throughput in Millions by Hub Group



Impacted Traffic As a Percent of *American's* Total Throughput by Hub Group



Reflects actual traffic for January – August 2020. September – December 2020 estimated based on September - December 2020 v. September - December 2019 published schedules. Impact on international traffic is for Domestic Portion of International Journey (DPIJ).

L=Large Hubs, M=Medium Hubs, S=Small Hubs, N=Non-hubs, I=International.

Delta Air Lines



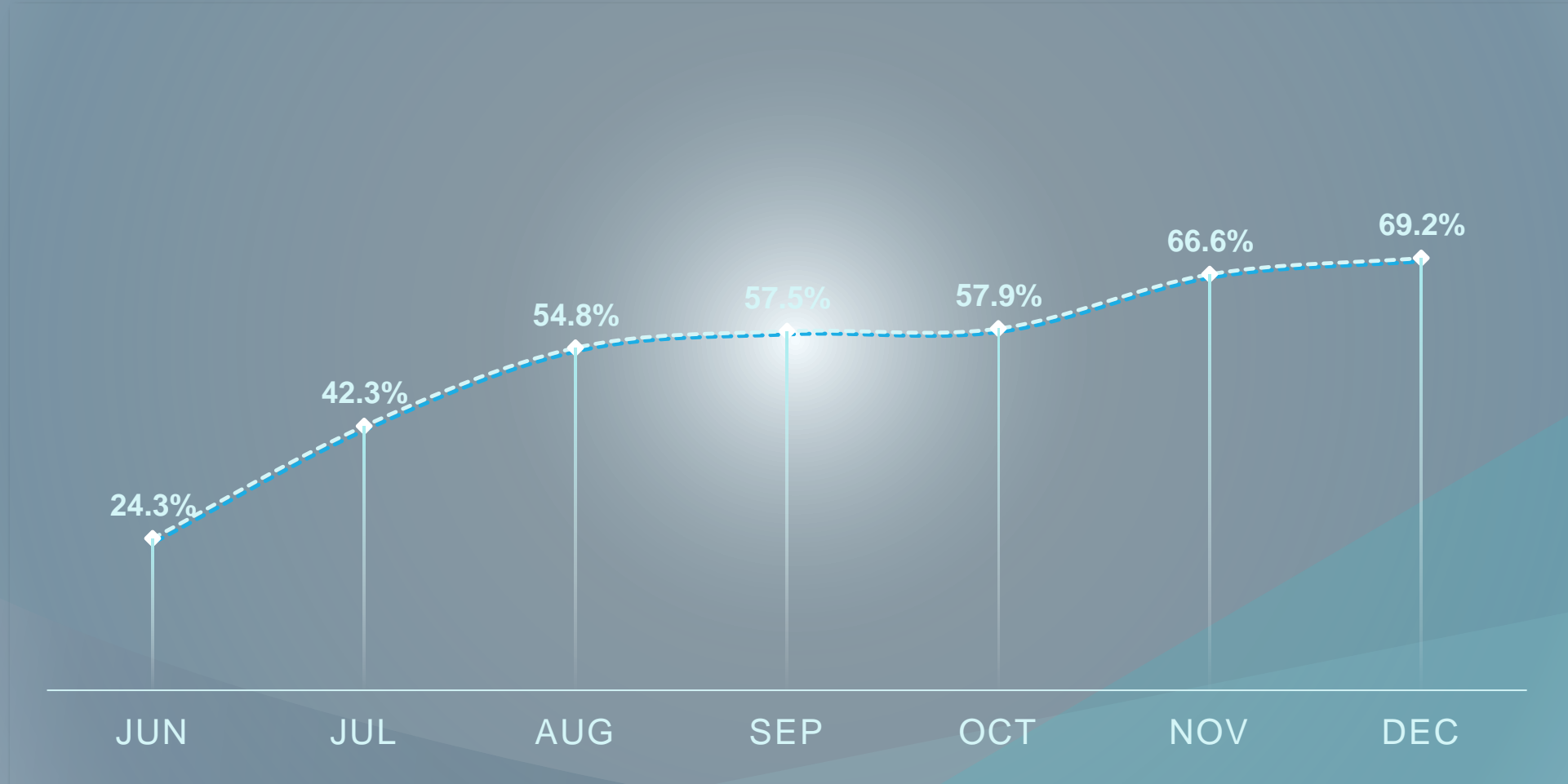
Executive Summary: Airline Specific Capacity Deployment and Traffic Impacts by Geographic Region and by Airport Type

▪ Delta Air Lines (pages 42– 47):

- In December 2020, Delta is flying 69.2% of its 2019 domestic seat capacity (page 42);
- In December 2020, Delta is deploying 75% of its 2019 regional partner capacity (page 43);
- Throughout the pandemic, Delta has focused on its western hubs at SLC and SEA. Unlike some other network carriers, it is more aggressive in building LAX. Whereas some carriers are building back with a focus on some hubs versus others, Delta has been adding back capacity with a more even application (page 45);
- Based on the rebuild of its 2019 network, it is Delta's northeast U.S. presence that is slow to come back online (page 46) although more capacity is expected.
- Delta's relative expected loss of traffic in 2020 v 2019 is the least at Large Hub airports and the most at Medium Hub airports (page 47).

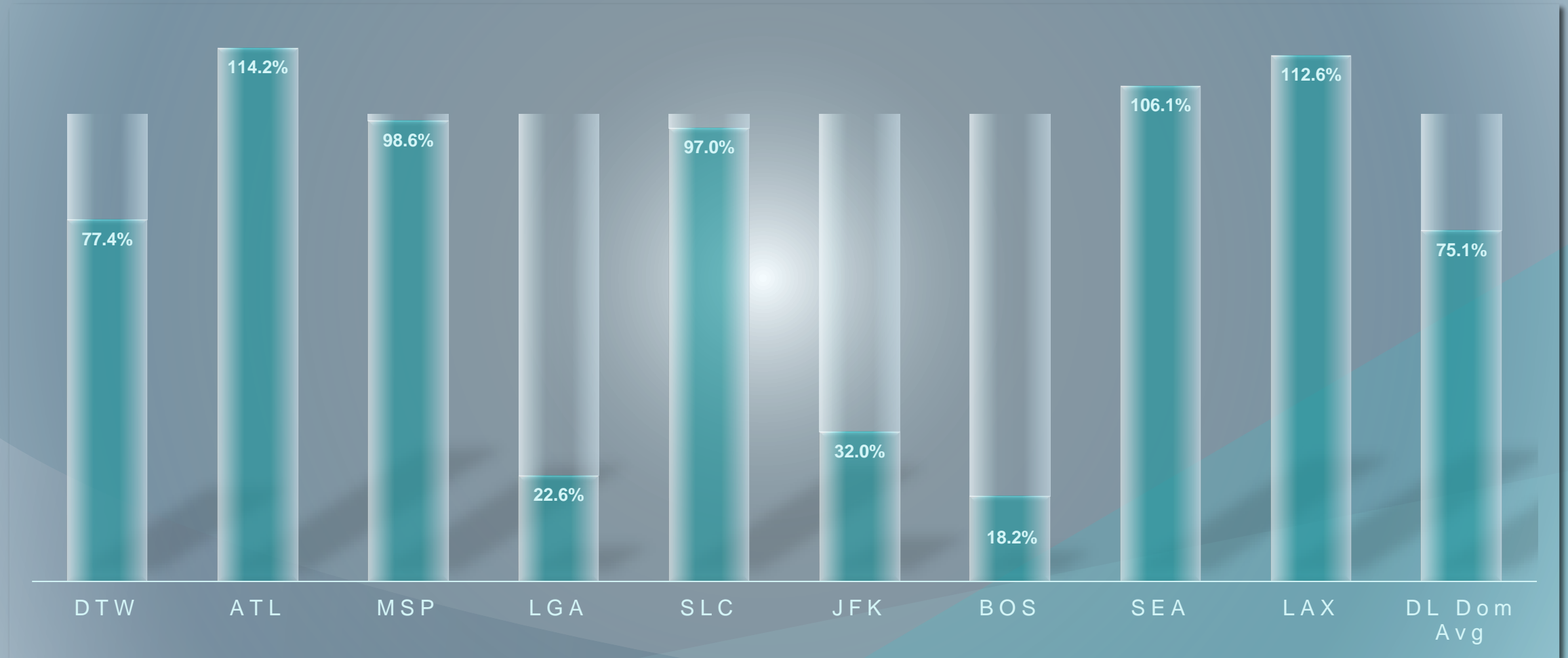
Delta's Outbound Domestic Seat Capacity Comparison By Month

2020 v. 2019

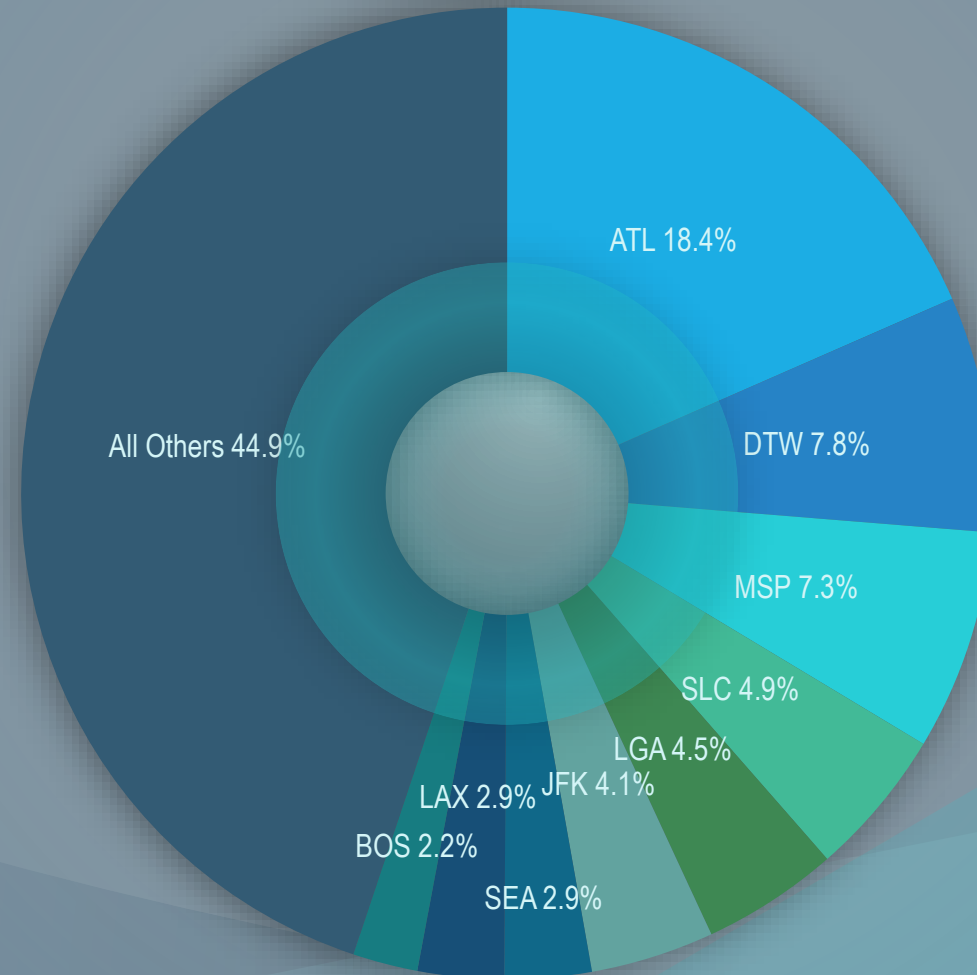


Domestic **Regional** Departures at *Delta's* Hub Airports

December 2020 v. December 2019



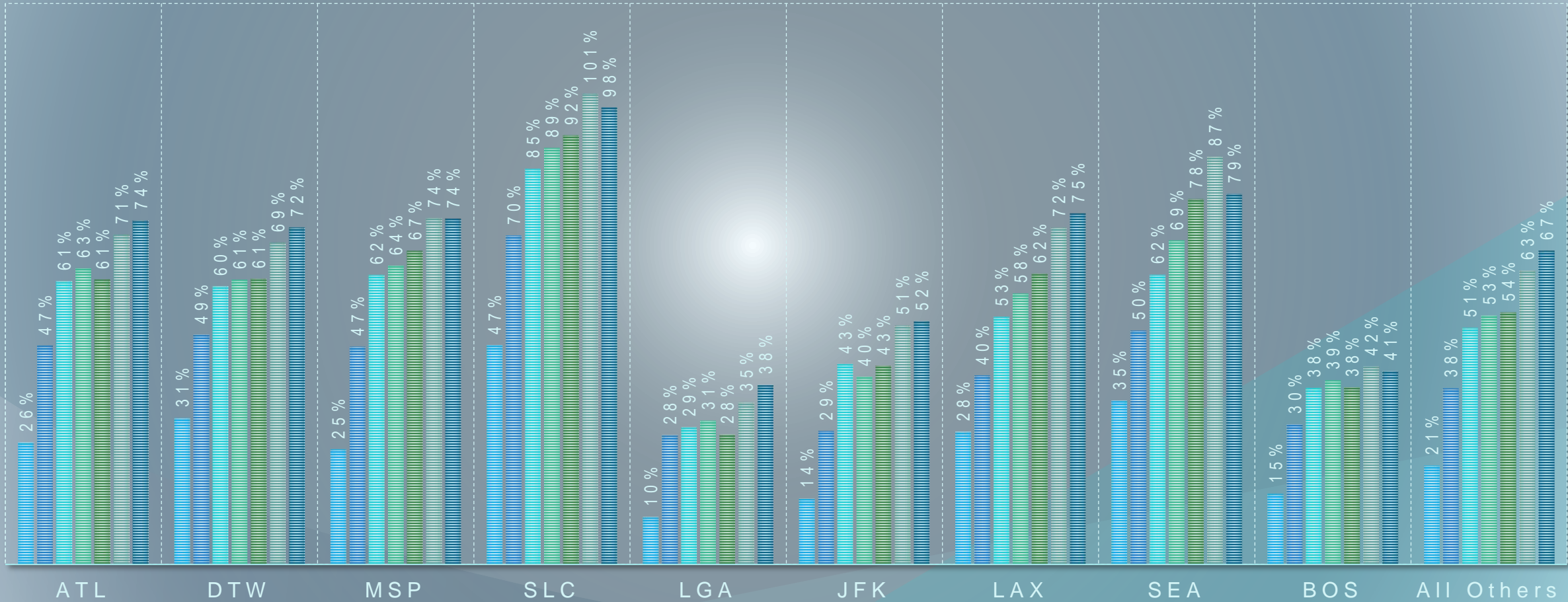
Delta Air Lines – Share of Domestic Departures CY 2019



Delta's Hub Airports

DL's Outbound Domestic Seat Capacity Comparison by Month, 2020 v. 2019

JUN JUL AUG SEP OCT NOV DEC



DELTA

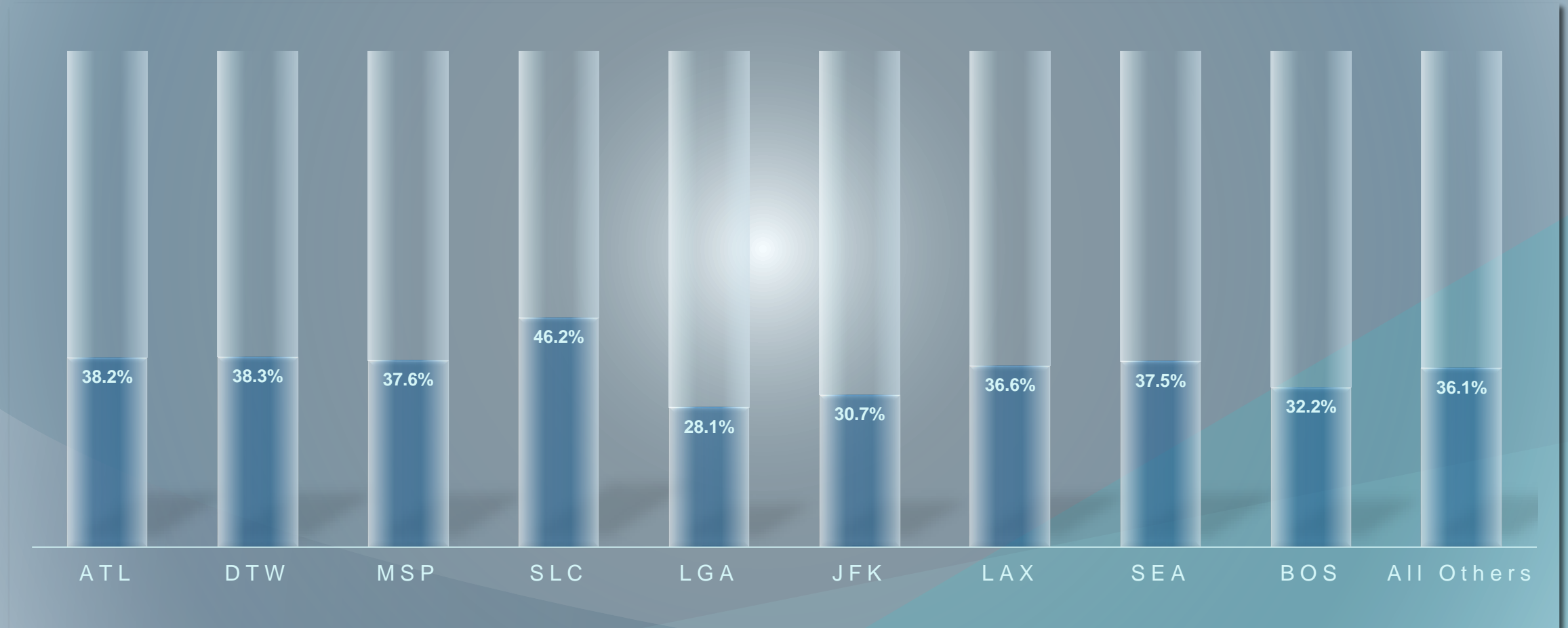


December update is based on published schedules as of November 20, 2020.



SWELBAR·ZHONG
CONSULTANCY

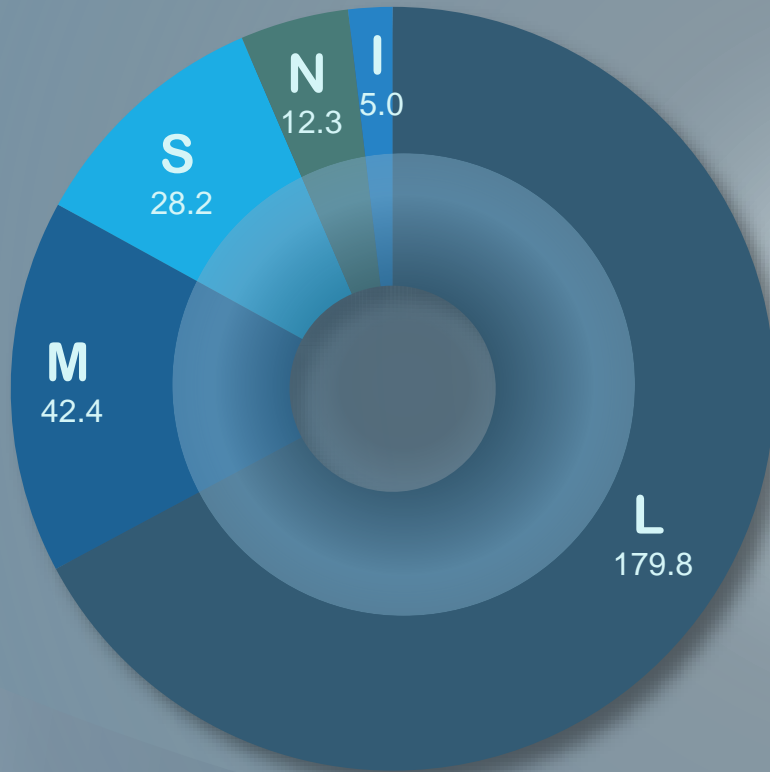
Actual Domestic Traffic Comparison January – September, 2020 v. 2019 Delta Air Lines at Its Hubs



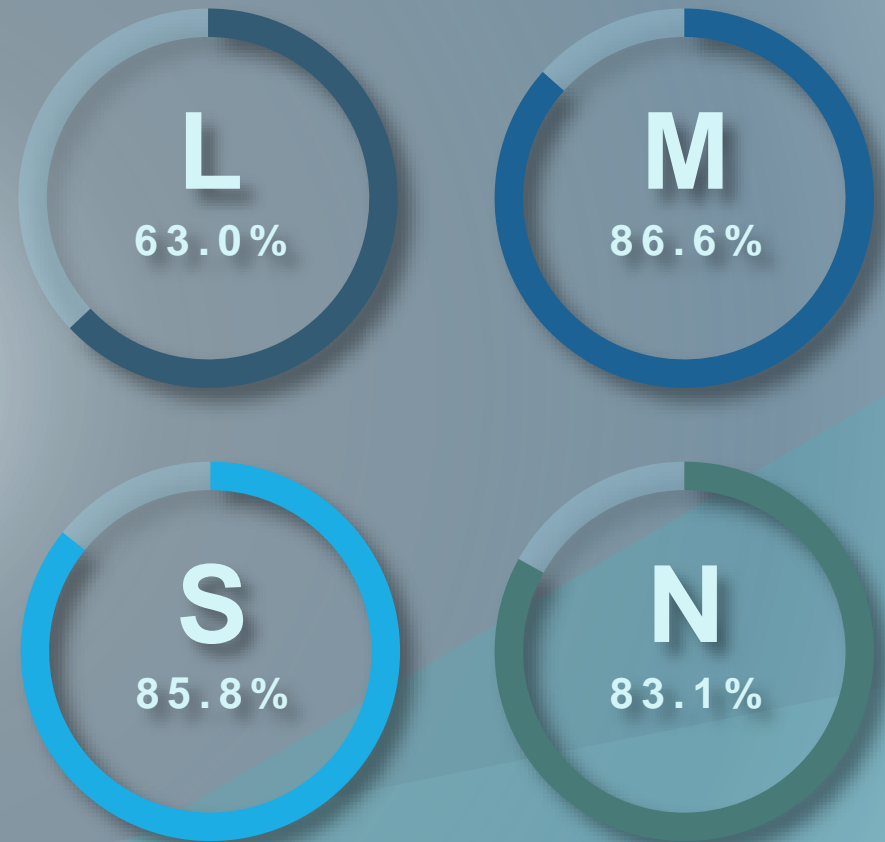
Source: U.S. DOT T-100 database.

Delta: Estimated Domestic Traffic Impact by Airport Type

Annualized Airport Throughput in Millions by Hub Group



Impacted Traffic As a Percent of *Delta's* Total Throughput by Hub Group



Reflects actual traffic for January – August 2020. September – December 2020 estimated based on September - December 2020 v. September - December 2019 published schedules. Impact on international traffic is for Domestic Portion of International Journey (DPIJ).

L=Large Hubs, M=Medium Hubs, S=Small Hubs, N=Non-hubs, I=International.



United Airlines



Executive Summary: Airline Specific Capacity Deployment and Traffic Impacts by Geographic Region and by Airport Type

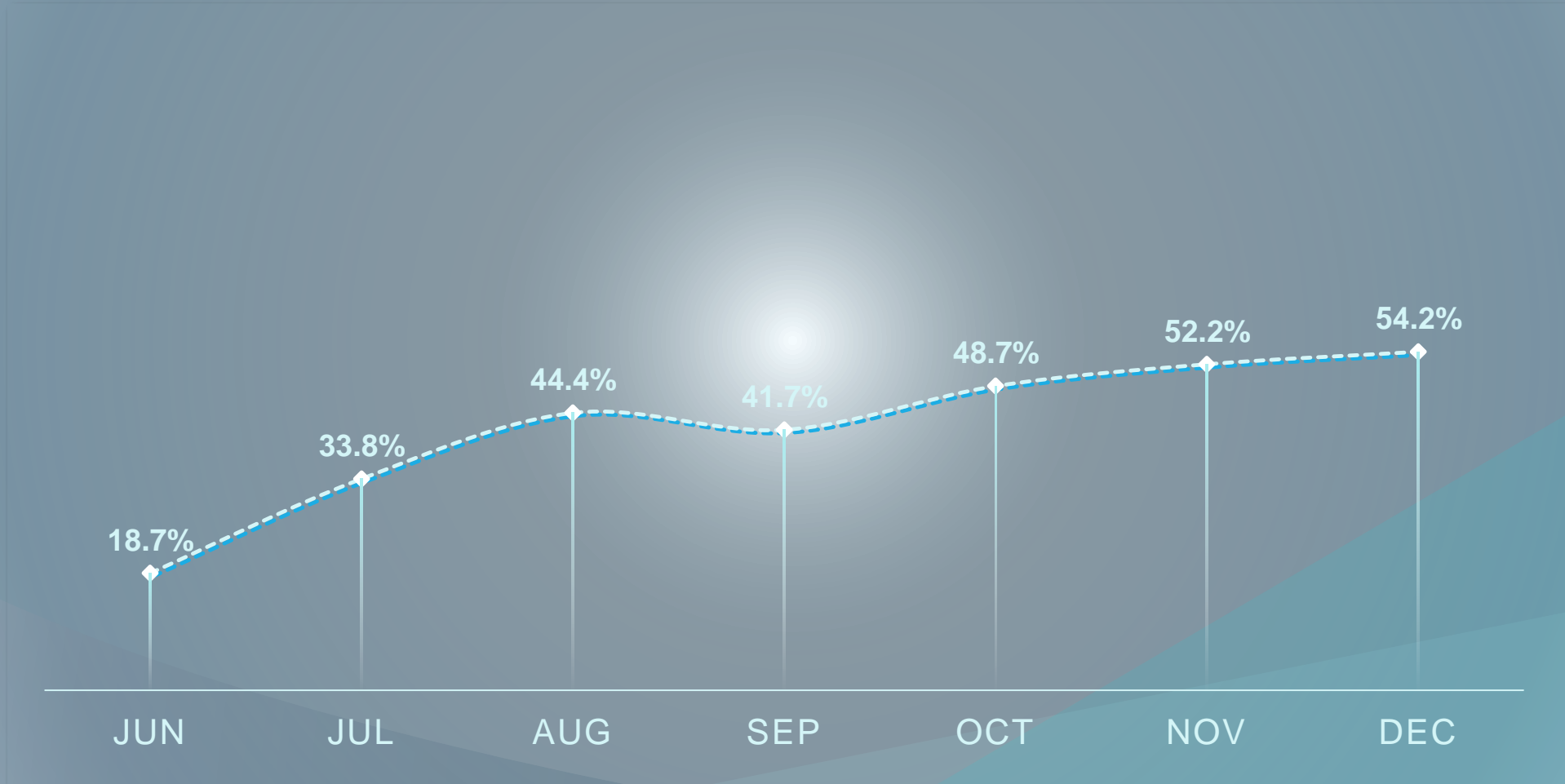
▪ **United Airlines (pages 50 – 55):**

- In December 2020, United is flying 54.2% of its 2019 domestic seat capacity (page 50);
- In December 2020, United is deploying more than 57% of its 2019 regional partner capacity (page 51);
- Throughout the pandemic, United has been most focused on its interior hubs of DEN, ORD and IAH. Like Delta, United has been adding back capacity with a more even application. United has built back 60% of the Washington Dulles hub/gateway. Where United differs is the level of non-hub flying it has added to its network relative to the other network carriers (page 53);
- Based on the rebuild of its 2019 network, it is United's northeast U.S. and west coast presence that is slow to come back online which is having a significant impact on the relative level of traffic at each of United's hubs (page 54).
- United's relative expected loss of traffic in 2020 v. 2019 is the least at Large Hub airports and the most at Medium Hub airports (page 55).



United's Outbound Domestic Seat Capacity Comparison By Month

2020 v. 2019



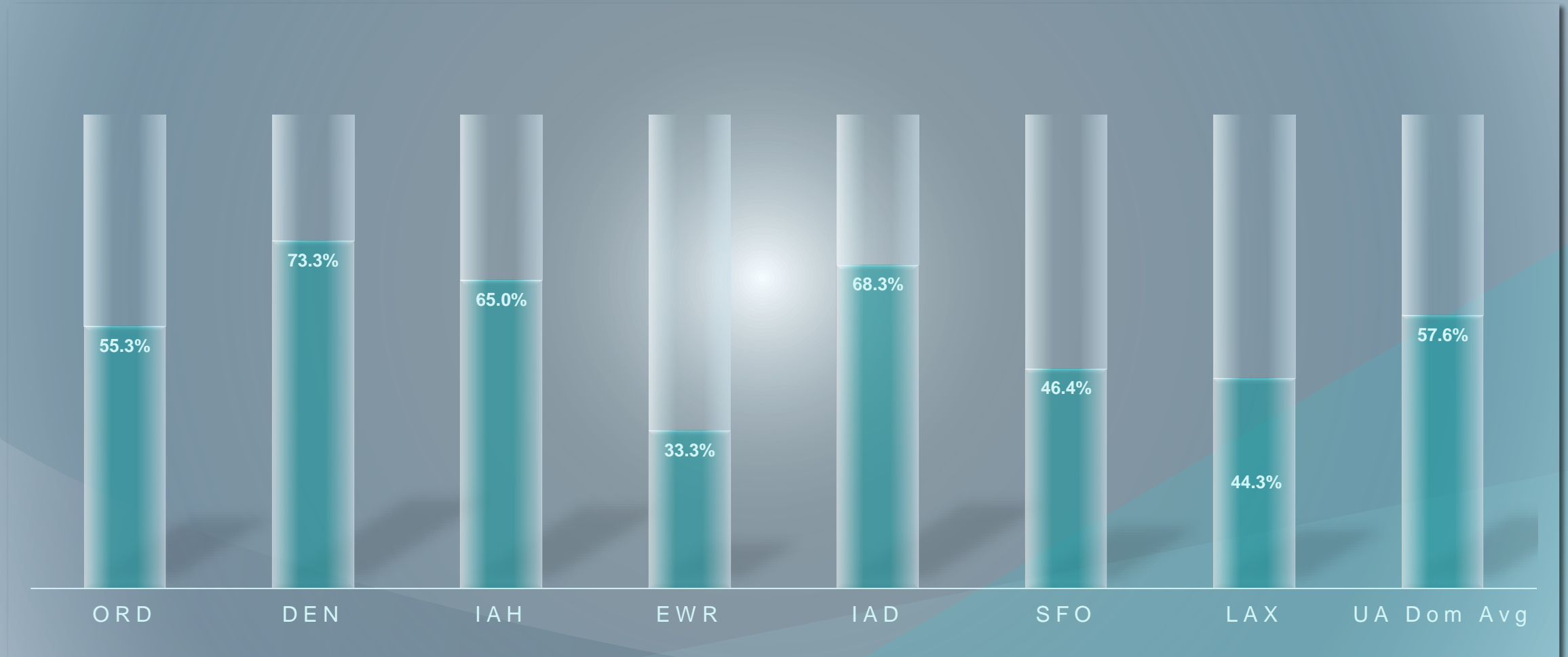
UNITED



SWELBAR·ZHONG
CONSULTANCY

Domestic **Regional** Departures at *United's* Hub Airports

December 2020 v. December 2019

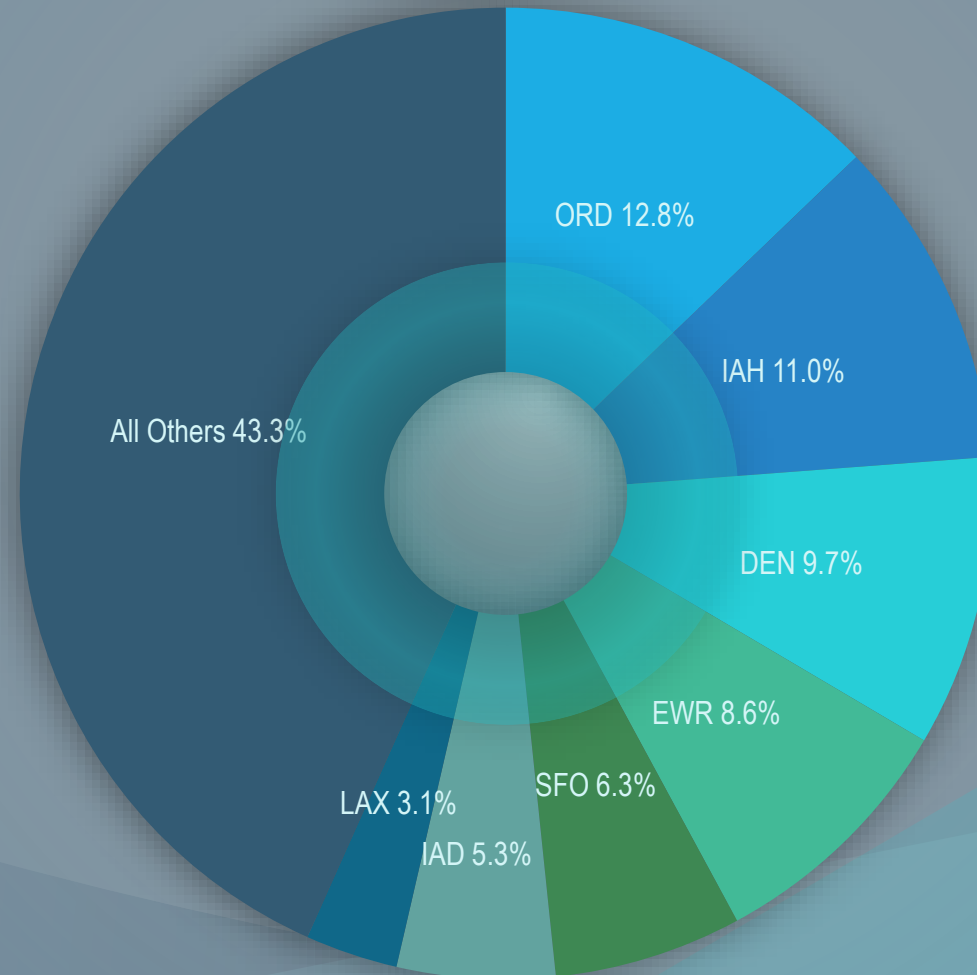


UNITED



SWELBAR·ZHONG
CONSULTANCY

United Airlines – Share of Domestic Departures CY 2019



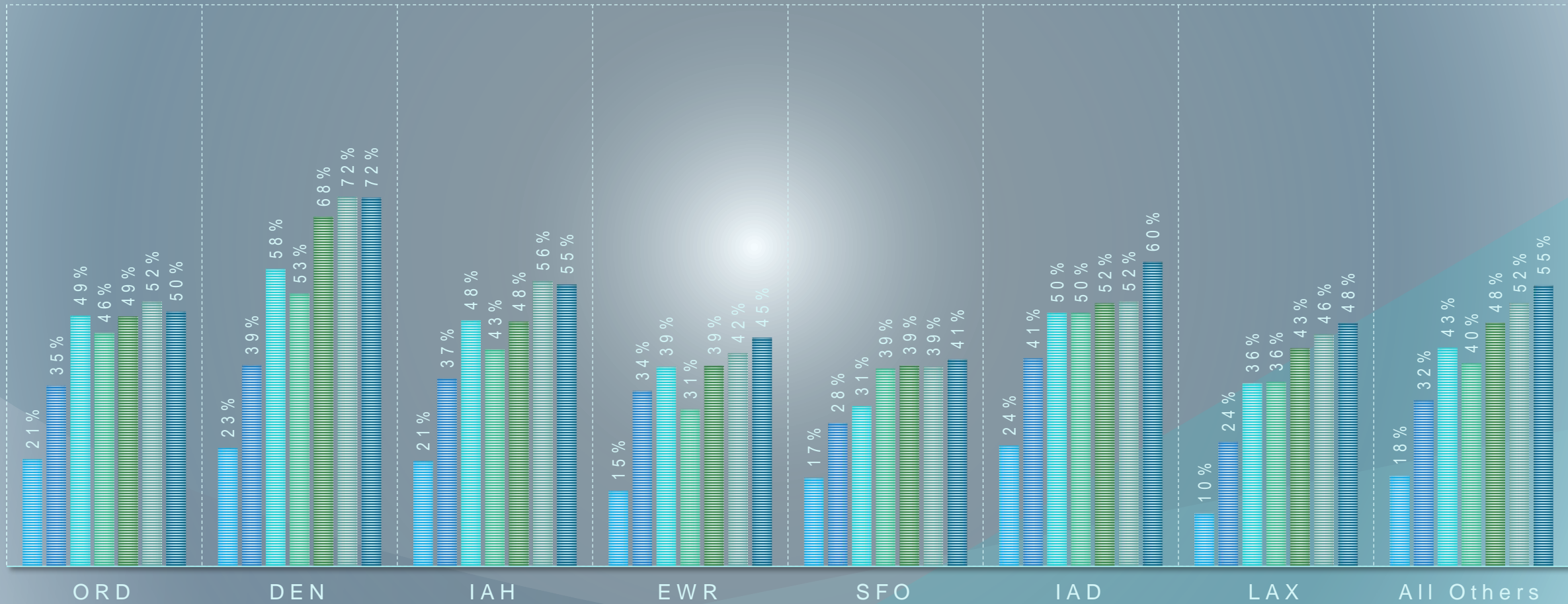
UNITED



United's Hub Airports

UA's Outbound Domestic Seat Capacity Comparison by Month, 2020 v. 2019

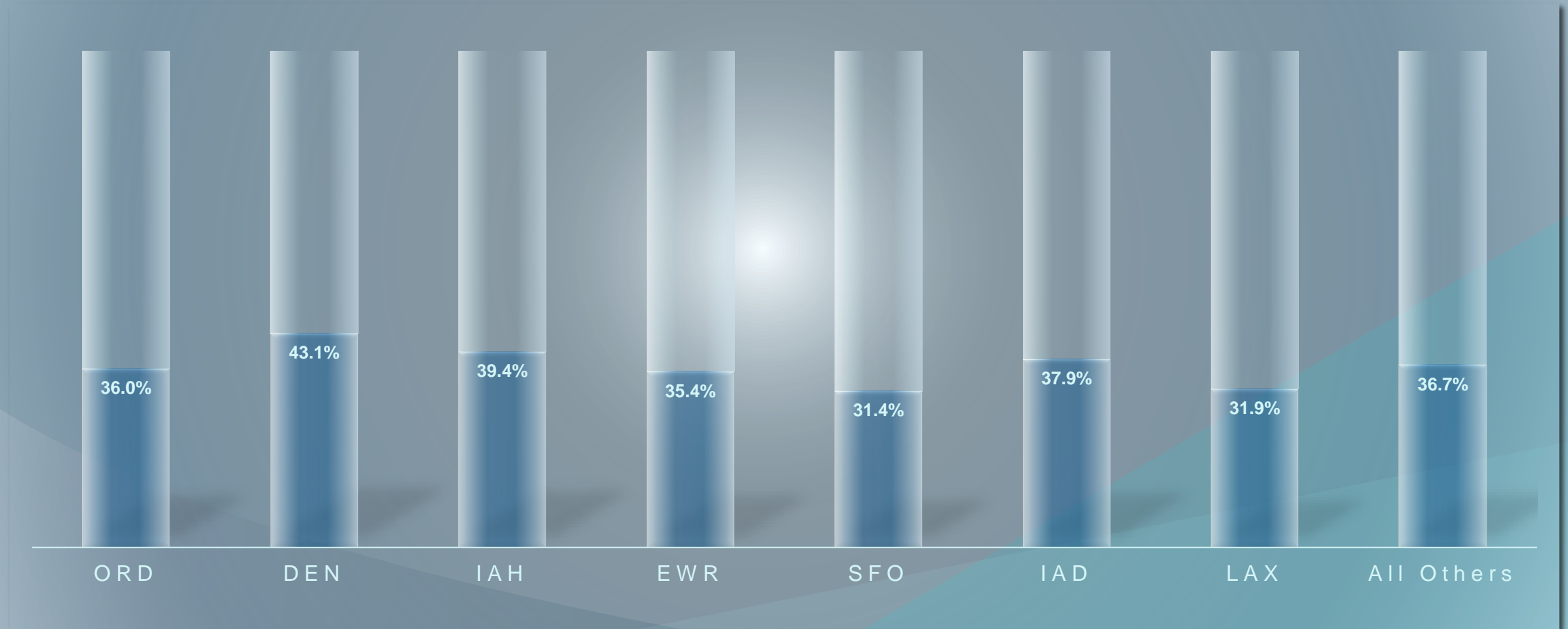
JUN JUL AUG SEP OCT NOV DEC



December update is based on published schedules as of November 20, 2020.



Actual Domestic Traffic Comparison January – September, 2020 v. 2019 United Airlines at Its Hubs

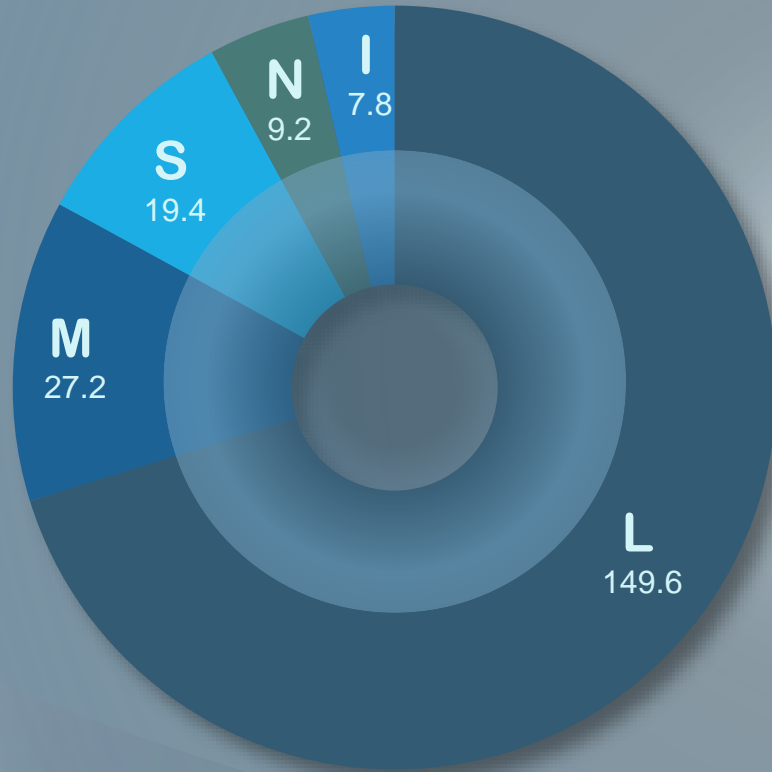


Source: U.S. DOT T-100 database.

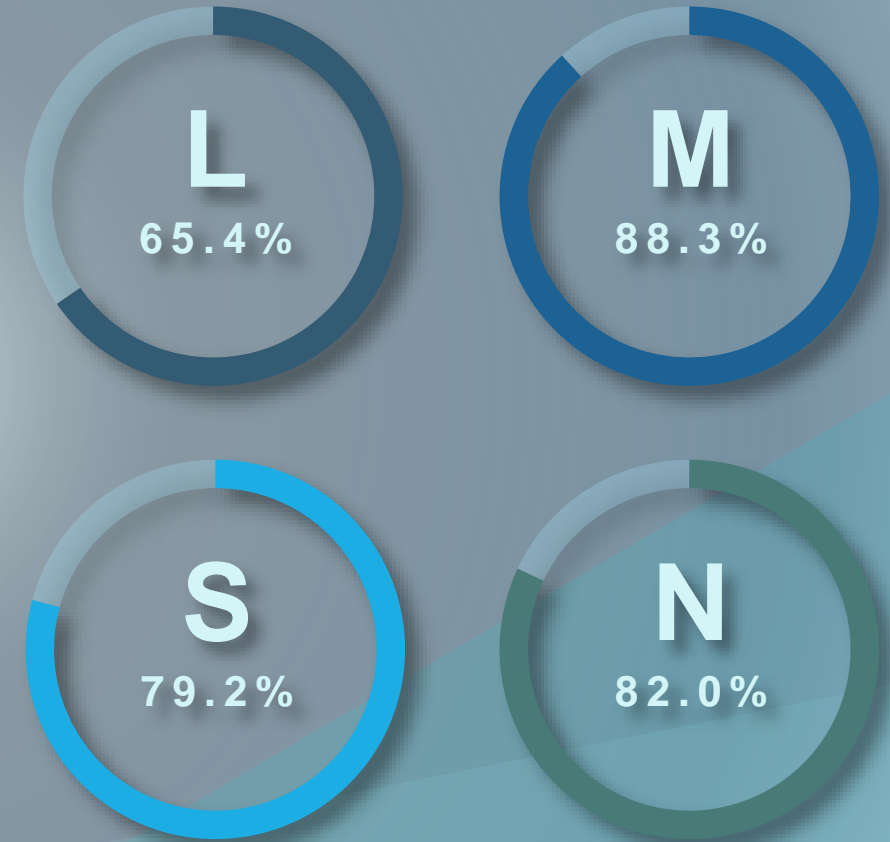


United: Estimated Domestic Traffic Impact by Airport Type

Annualized Airport Throughput in Millions by Hub Group



Impacted Traffic As a Percent of *United's* Total Throughput by Hub Group



Reflects actual traffic for January – August 2020. September – December 2020 estimated based on September - December 2020 v. September - December 2019 published schedules. Impact on international traffic is for Domestic Portion of International Journey (DPIJ).

L=Large Hubs, M=Medium Hubs, S=Small Hubs, N=Non-hubs, I=International.

Southwest Airlines



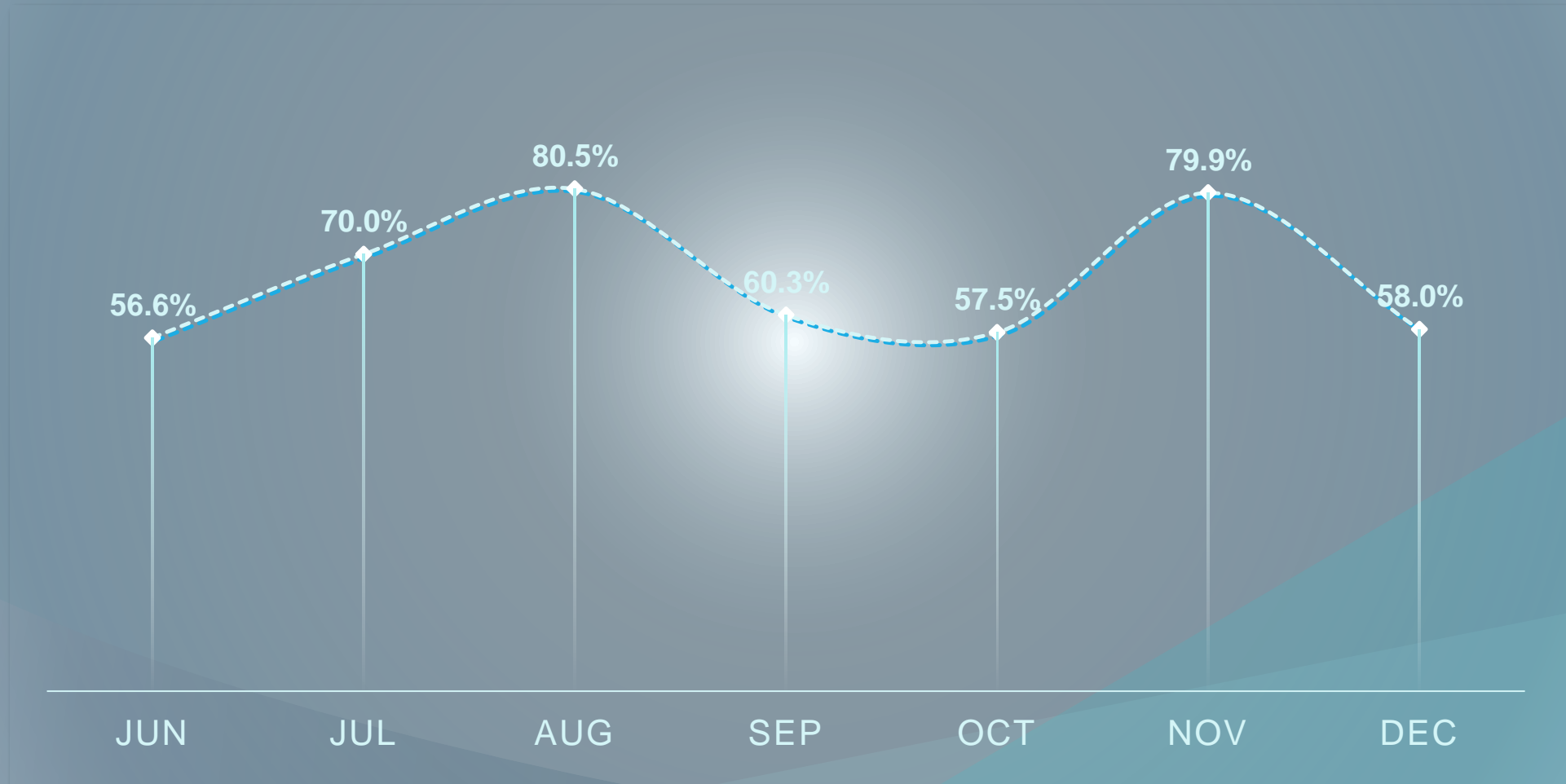
Executive Summary: Airline Specific Capacity Deployment and Traffic Impacts by Geographic Region and by Airport Type

▪ Southwest Airlines (pages 58 – 62):

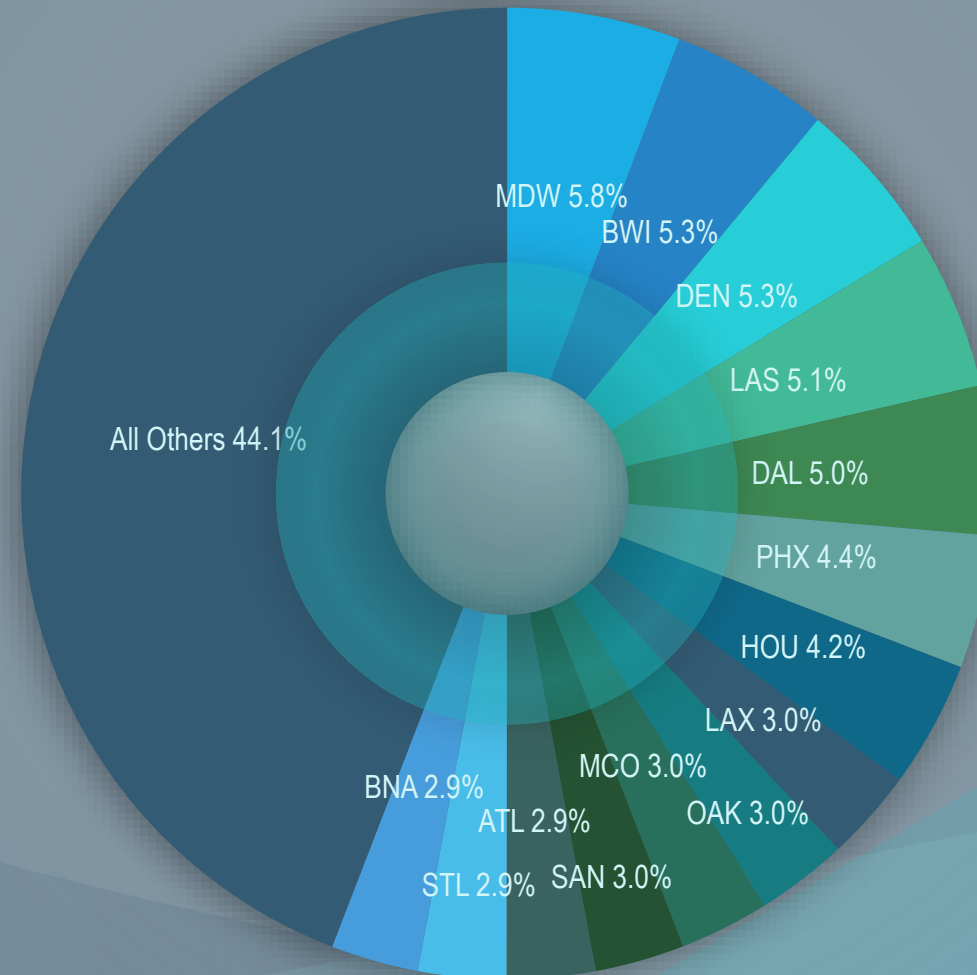
- In December 2020, Southwest is flying nearly 60% of its 2019 domestic seat capacity (page 59);
- Southwest's domestic schedule in December 2020 has been distributed evenly across the country and the markets identified as focus cities. This fact enables the carrier to maximize connectivity across its network. As the output shows, the December schedule results in Southwest improving its capture of 2019 inbound and outbound traffic. Like other carriers, the west coast markets are expected to suffer the highest absolute levels of traffic loss (page 60).
- Unlike most other carriers, Southwest shows little geographic imbalance as they restore capacity to their focus cities. Our analysis clearly finds that Southwest has built more connectivity into its network than history might suggest (page 61).
- Southwest's relative expected loss of traffic in 2020 v. 2019 is the least at Large Hub airports and the most at Nonhub airports (page 62).

Southwest's Outbound Domestic Seat Capacity Comparison By Month

2020 v. 2019



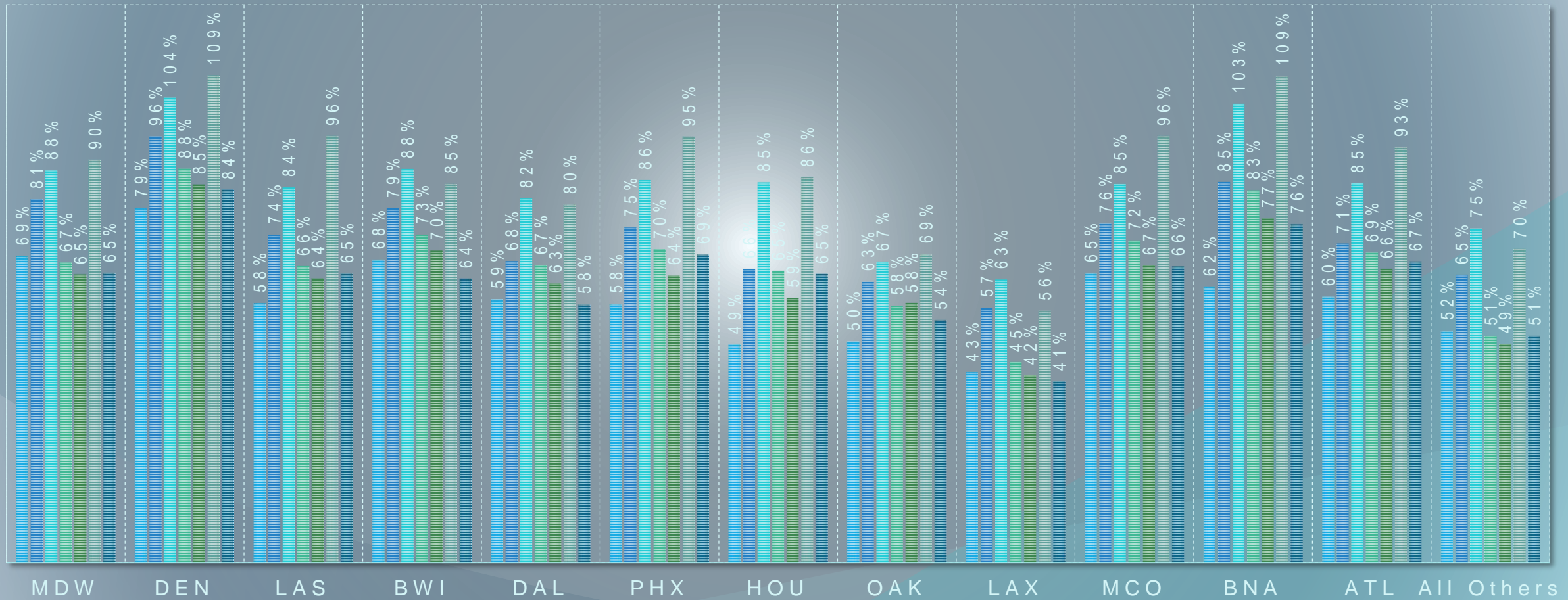
Southwest Airlines – Share of Domestic Departures CY 2019



Southwest's Hub Airports

WN's Outbound Domestic Seat Capacity Comparison by Month, 2020 v. 2019

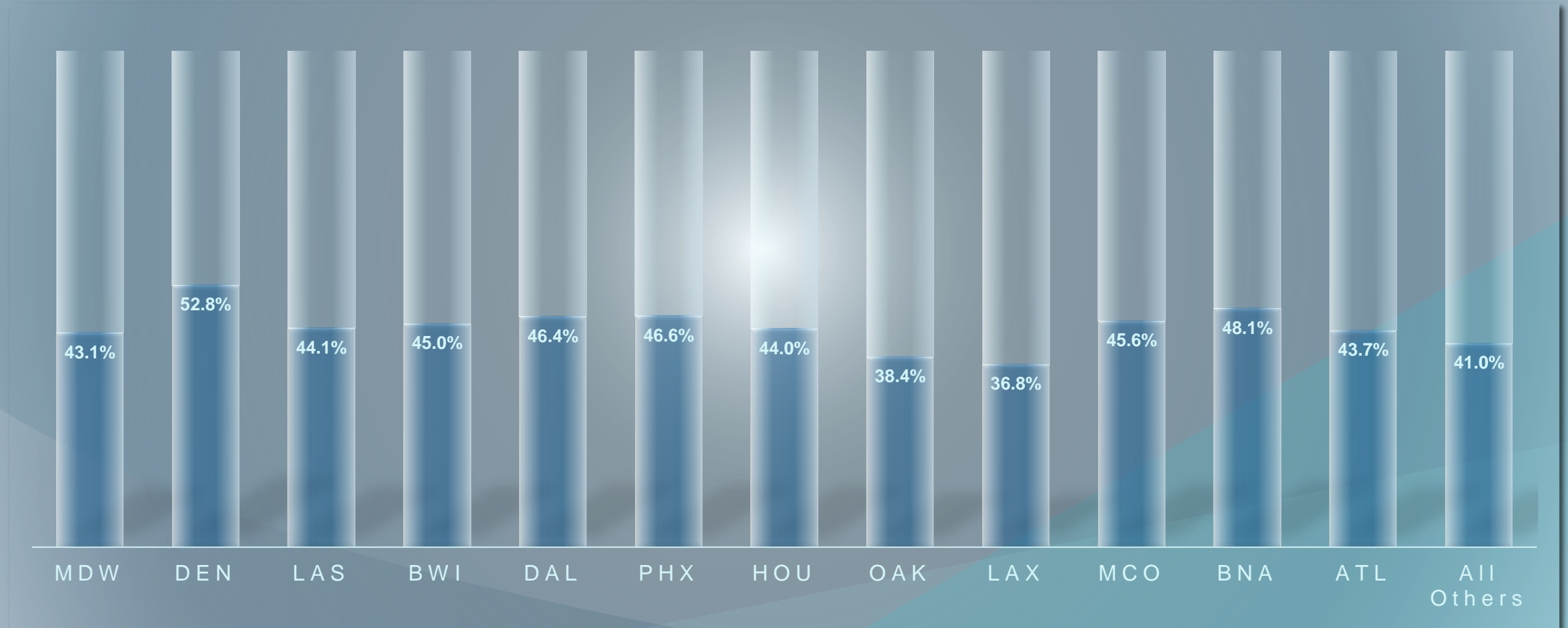
JUN JUL AUG SEP OCT NOV DEC



December update is based on published schedules as of November 20, 2020.



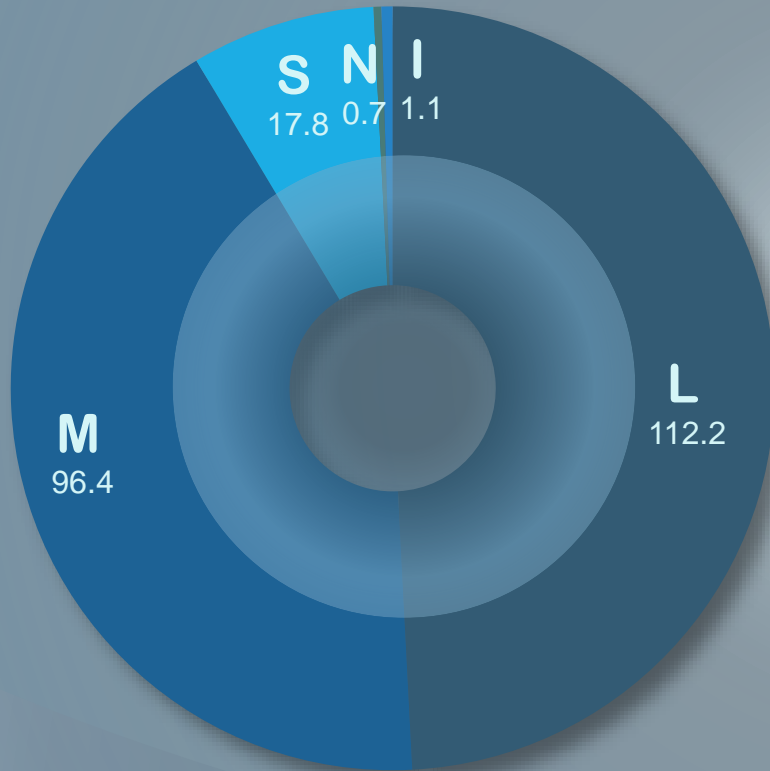
Actual Domestic Traffic Comparison January – September, 2020 v. 2019 Southwest Airlines at Its Hubs



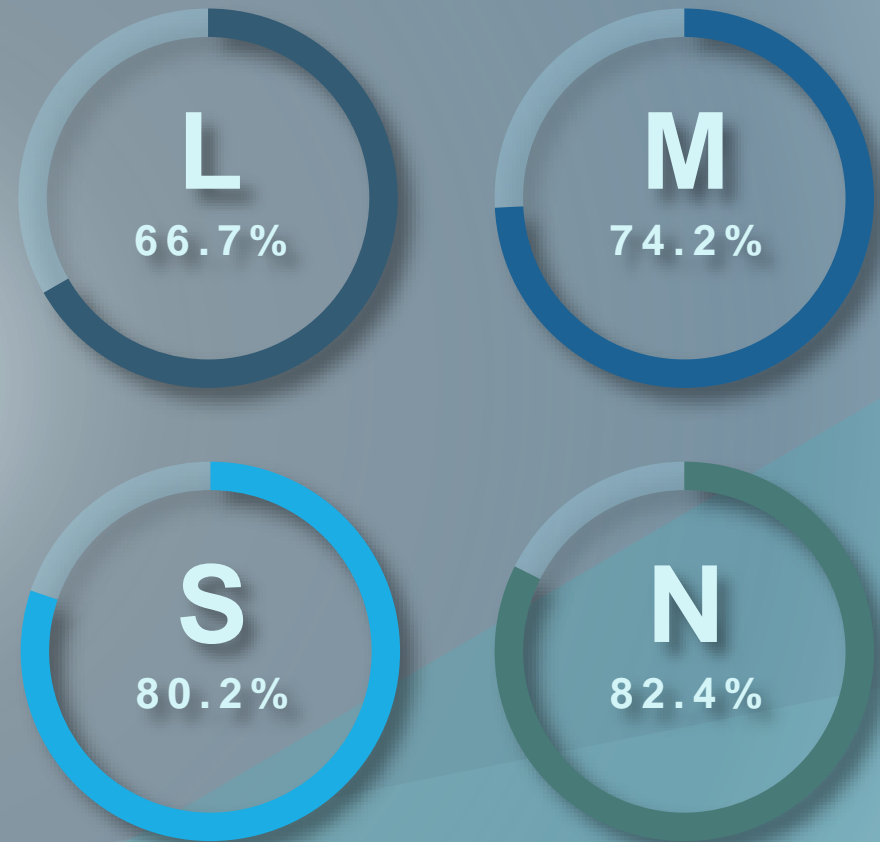
Source: U.S. DOT T-100 database.

Southwest: Estimated Domestic Traffic Impact by Airport Type

Annualized Airport Throughput
in Millions by Hub Group



Impacted Traffic As a Percent of *Southwest's*
Total Throughput by Hub Group



Reflects actual traffic for January – August 2020. September – December 2020 estimated based on September - December 2020 v. September - December 2019 published schedules. Impact on international traffic is for Domestic Portion of International Journey (DPIJ).

L=Large Hubs, M=Medium Hubs, S=Small Hubs, N=Non-hubs, I=International.



Alaska Airlines



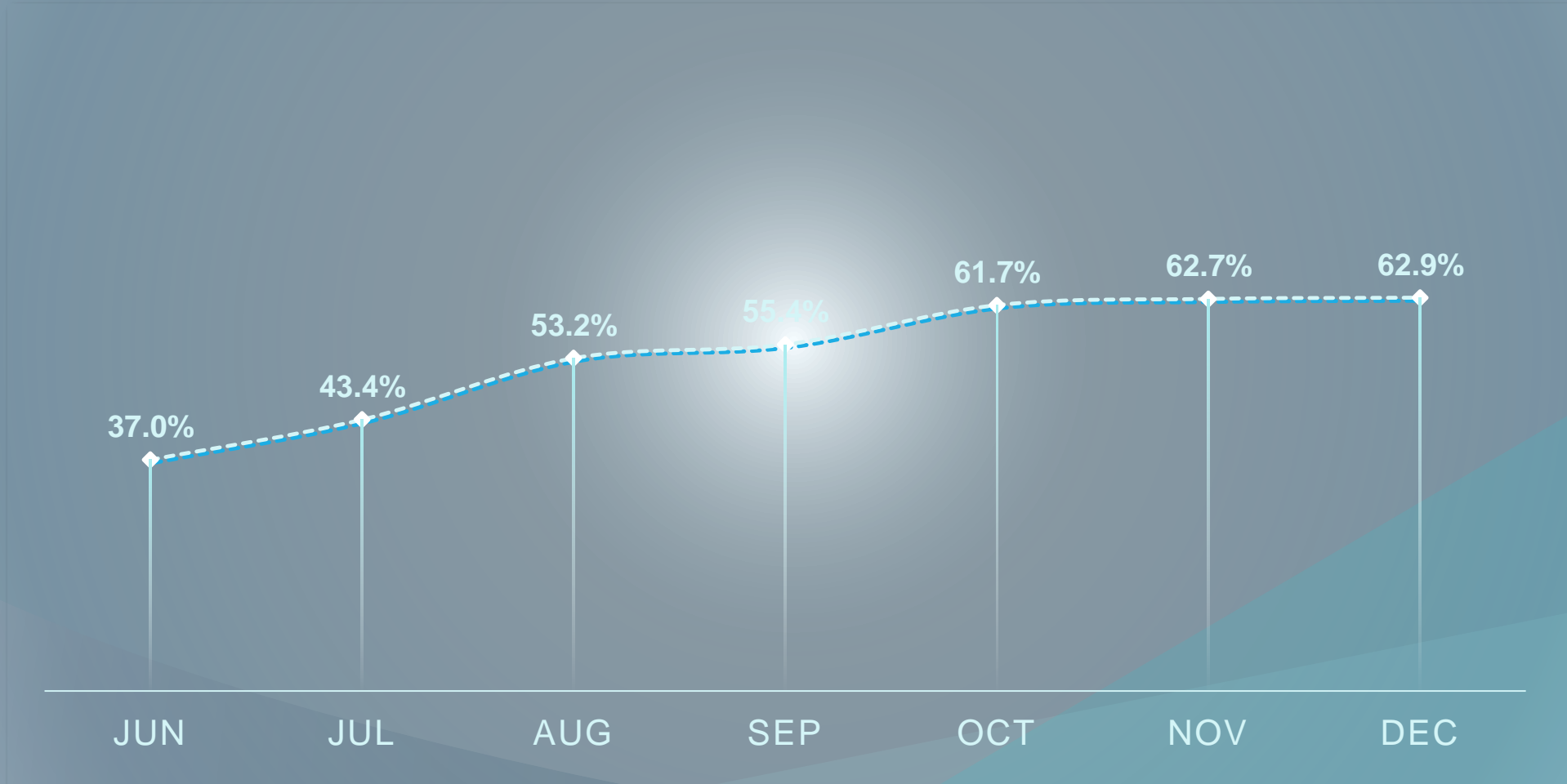
Executive Summary: Airline Specific Capacity Deployment and Traffic Impacts by Geographic Region and by Airport Type

▪ **Alaska Airlines (pages 65 – 69):**

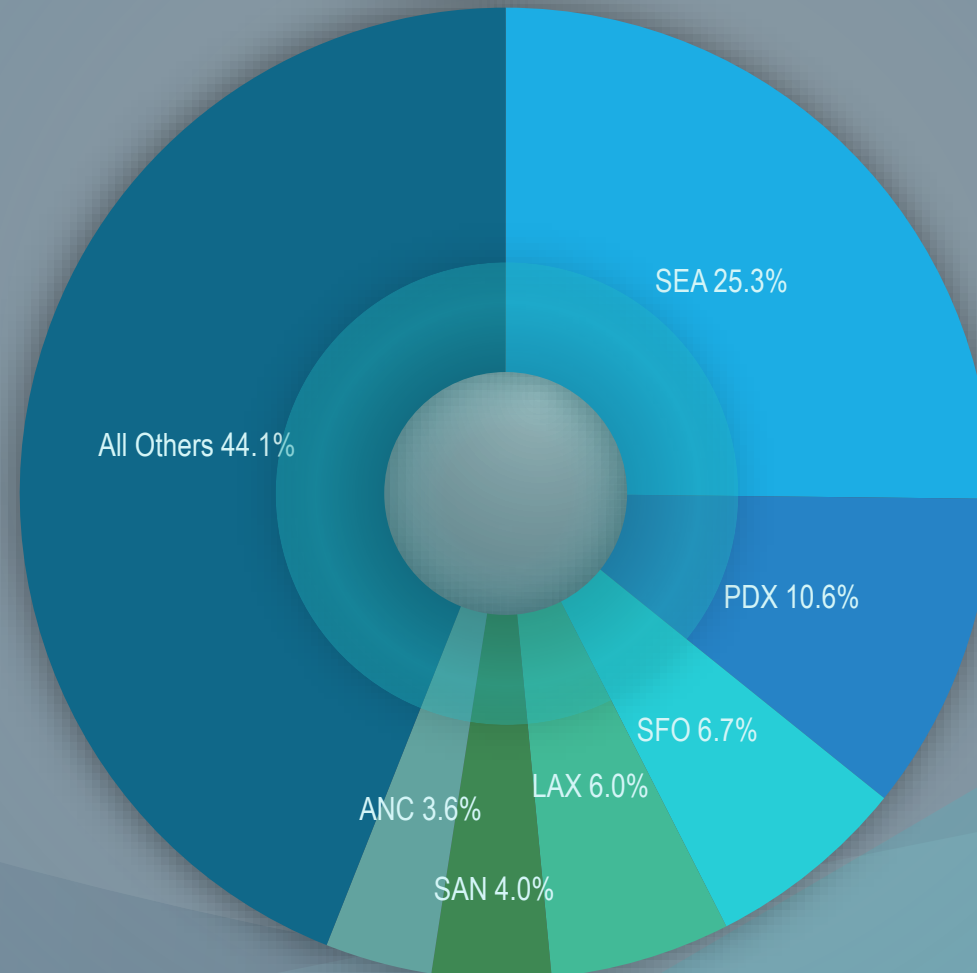
- In December 2020, Alaska is flying nearly 63% of its 2019 domestic seat capacity (page 69);
- Alaska's domestic schedule in December 2020 has been distributed evenly across Seattle and its focus cities in the western U.S.. As the output shows, the December schedule results in Alaska seeing a modest decrease in its capture of 2019 inbound and outbound traffic. Like other carriers, the west coast markets have been slow to come back online and the same is true for Alaska who calls its home in the western states. (page 67).
- Alaska is capturing most of its 2019 traffic at the traditional points of Anchorage, Portland and Seattle. Like the rest of the industry, Los Angeles and San Francisco have been slow to generate traffic. Given the importance of California to Alaska, and the additions of new service by Southwest, competitive skirmishes if not wars just might appear (page 68).
- Alaska's relative expected loss of traffic in 2020 v. 2019 is the least at Small Hub airports and the most at Medium Hub airports. Interesting to note is that Alaska's smallest markets on its network are the least affected. This is likely due to requirements under the CARES Act to continue serving if served prior to taking the government grant (page 69).

Alaska's Outbound Domestic Seat Capacity Comparison By Month

2020 v. 2019



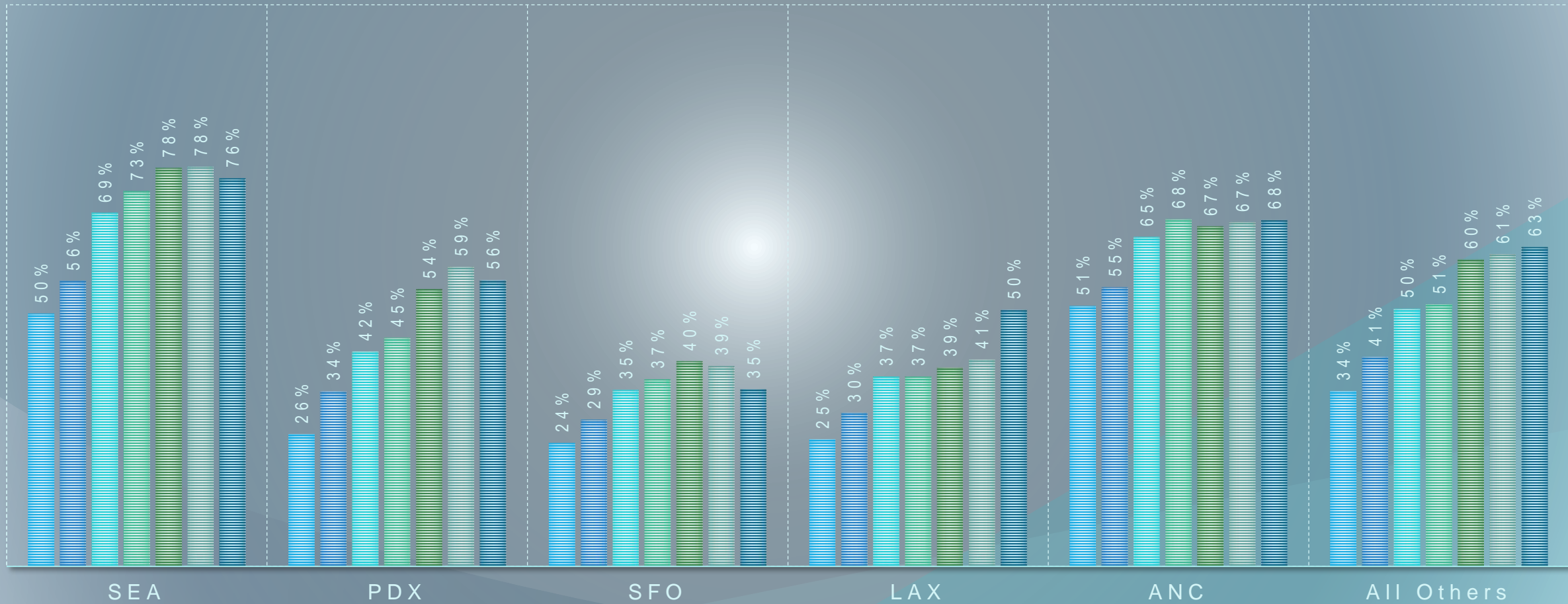
Alaska Airlines – Share of Domestic Departures CY 2019



Alaska's Hub Airports

AS's Outbound Domestic Seat Capacity Comparison by Month, 2020 v. 2019

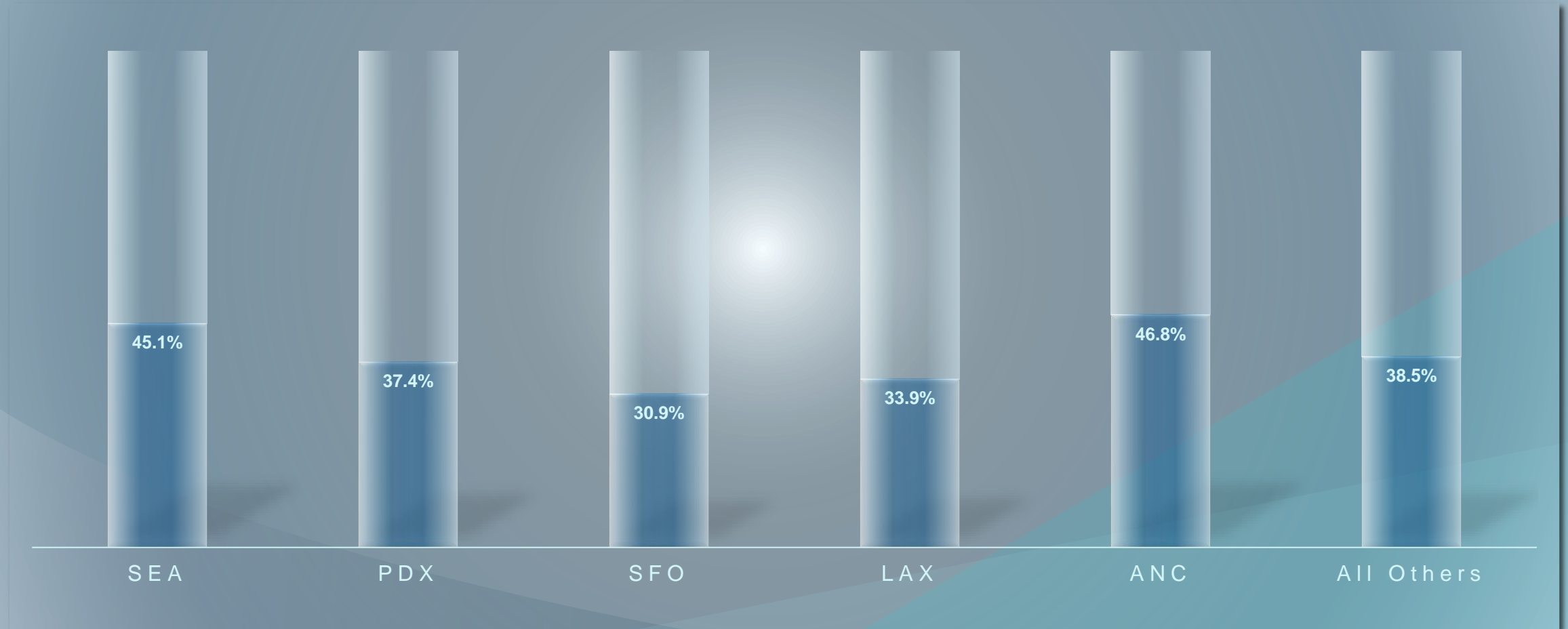
JUN JUL AUG SEP OCT NOV DEC



December update is based on published schedules as of November 20, 2020.



Actual Domestic Traffic Comparison January – September, 2020 v. 2019 Alaska Airlines at Its Hubs

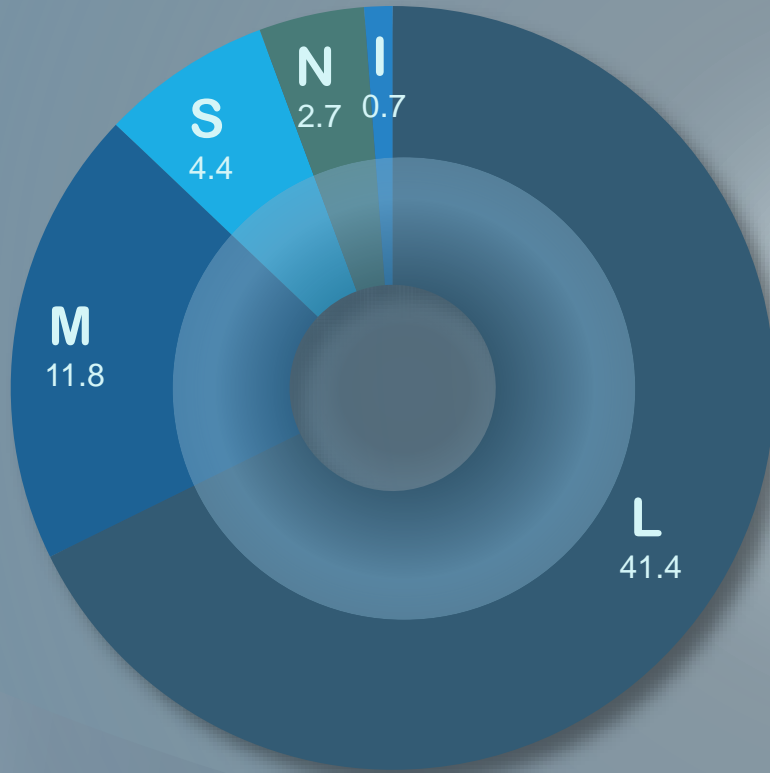


Source: U.S. DOT T-100 database.

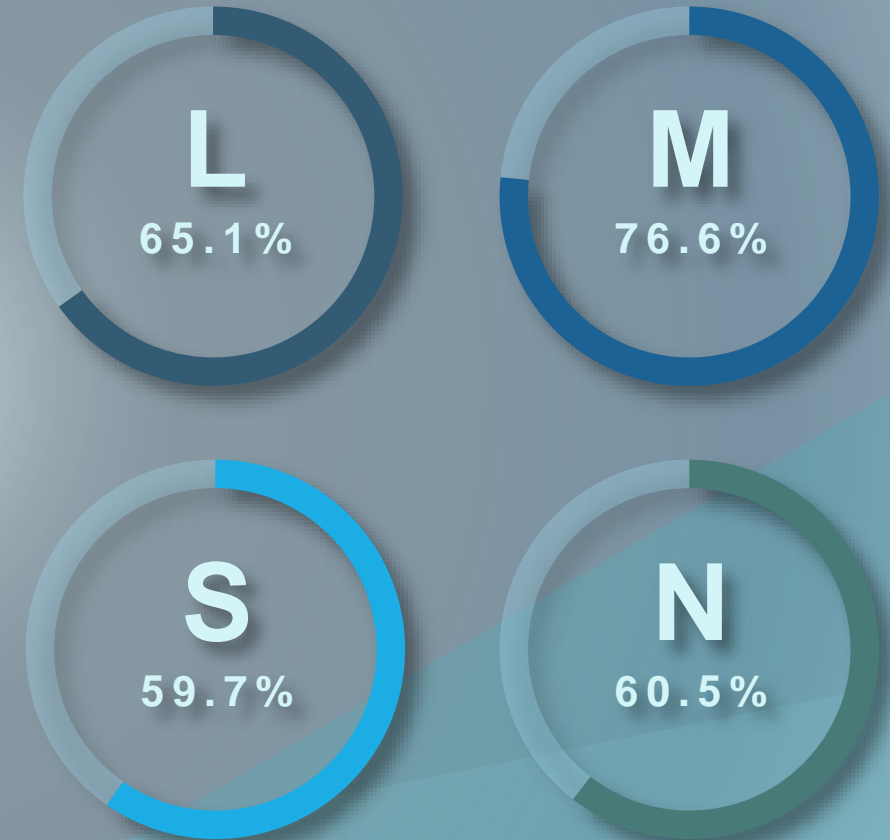


Alaska: Estimated Domestic Traffic Impact by Airport Type

Annualized Airport Throughput in Millions by Hub Group



Impacted Traffic As a Percent of *Alaska's* Total Throughput by Hub Group



Reflects actual traffic for January – August 2020. September – December 2020 estimated based on September - December 2020 v. September - December 2019 published schedules. Impact on international traffic is for Domestic Portion of International Journey (DPIJ).

L=Large Hubs, M=Medium Hubs, S=Small Hubs, N=Non-hubs, I=International.

jetBlue Airways



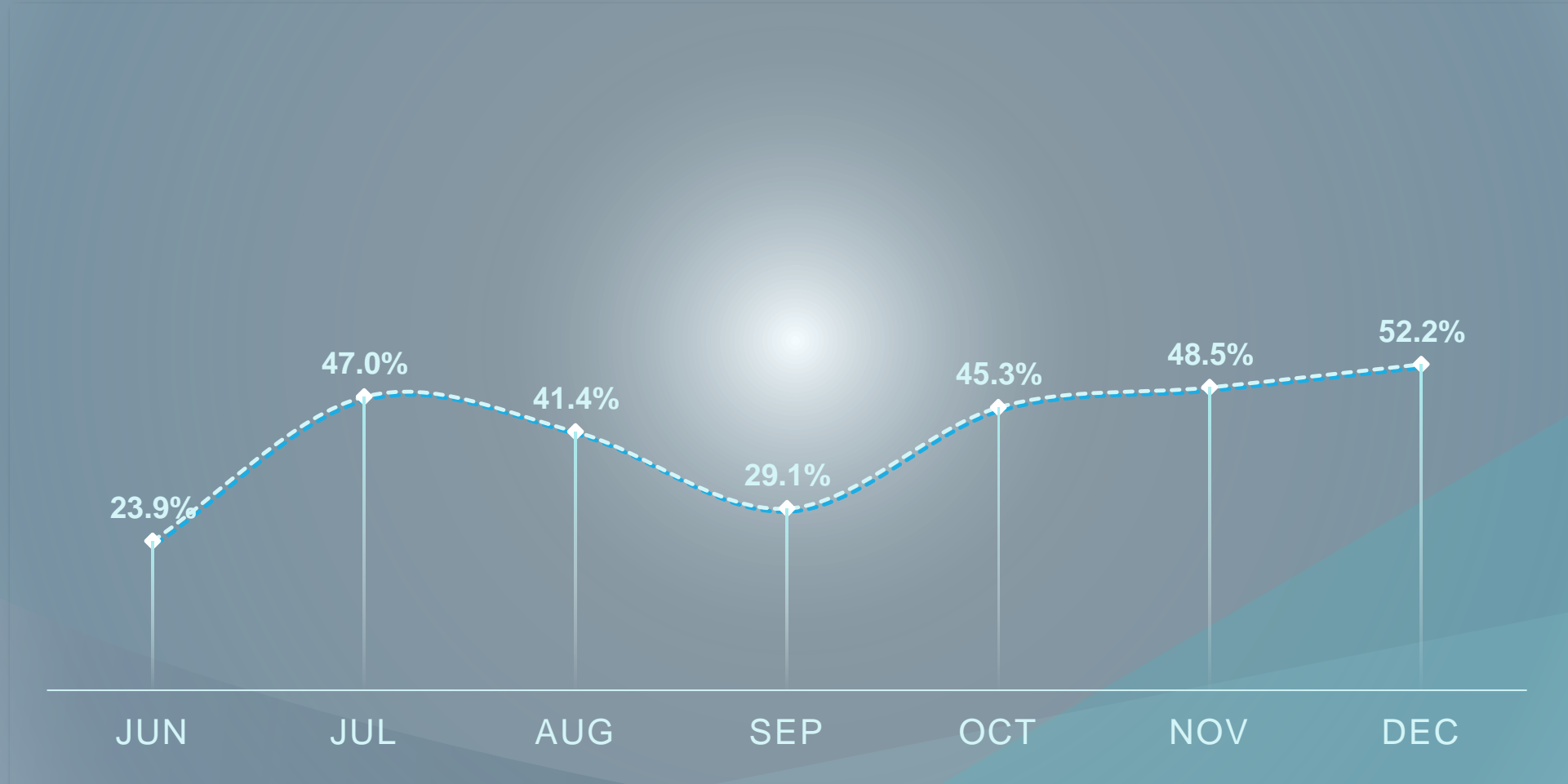
Executive Summary: Airline Specific Capacity Deployment and Traffic Impacts by Geographic Region and by Airport Type

▪ jetBlue Airways (pages 72 – 76):

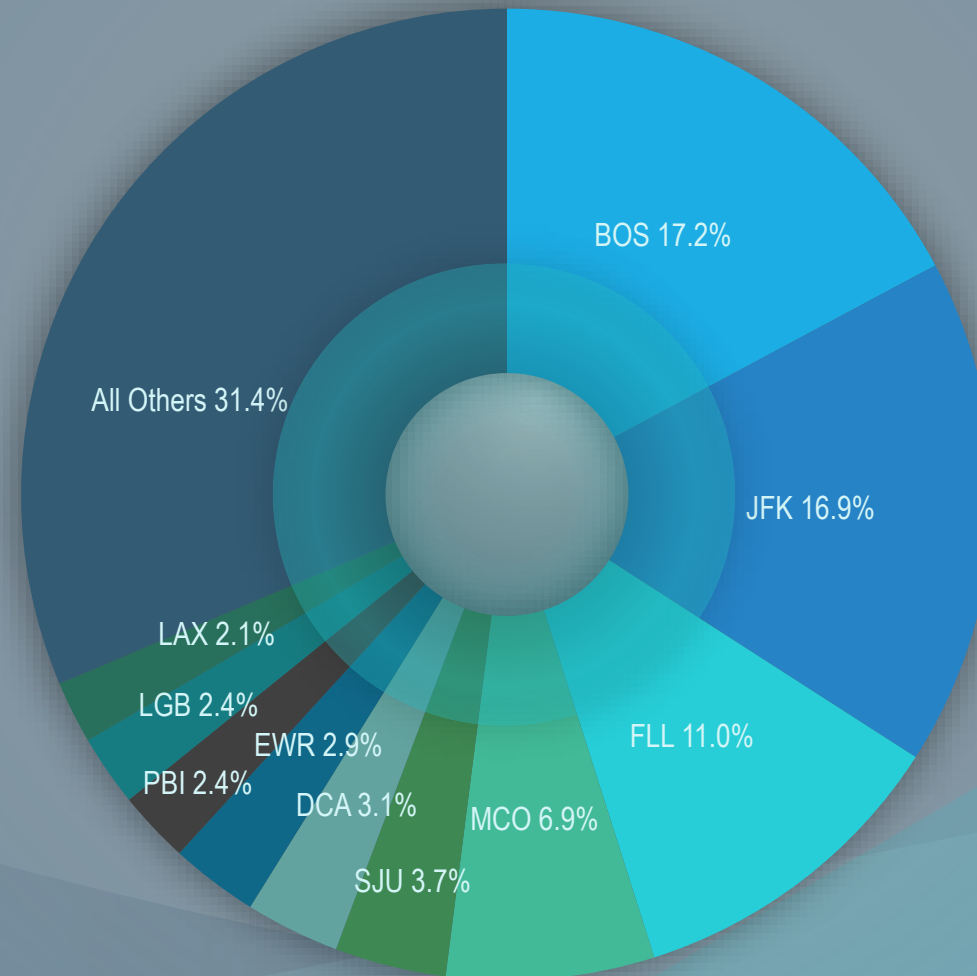
- In December 2020, jetBlue is flying more than 52% of its 2019 domestic seat capacity (page 72).
- jetBlue's domestic schedule in December 2020 reflects the very early stages of network changes the carrier is implementing. For example, jetBlue exited Long Beach choosing to offer SoCal service from Los Angeles LAX. In addition to its hub at New York JFK, jetBlue has been offering capacity from Newark as well. As the output shows, the December schedule results in jetBlue suffering in core markets Boston, New York JFK and Ft. Lauderdale. Whereas the west coast markets have been slow to come back online, the carrier clearly sees opportunity to add capacity where constraints existed pre-Pandemic (page 74).
- Based on the number of departures operated by jetBlue at airports on its system, the carrier is larger at Newark than it was in 2019 and the same can likely be expected at Los Angeles LAX. jetBlue is less than 50% of its 2019 size at critical east coast markets Boston, New York JFK and Washington DCA (page 74).
- For the first 9 months of 2020, pre-Pandemic markets on jetBlue's system like Boston, Ft. Lauderdale and New York JFK shows the carrier generating less than 40% of its 2019 traffic in those markets. jetBlue is re-thinking its network approach. We expect more change is ahead as the carrier navigates a world without transcon markets on either end producing historical levels of traffic (page 75).
- jetBlue's relative expected loss of traffic in 2020 v. 2019 is the least at Small Hub airports and the most at Medium Hub airports. The trend of Medium Hub markets underperforming other airport sizes is clear and distinct (page 76).

JetBlue's Outbound Domestic Seat Capacity Comparison By Month

2020 v. 2019



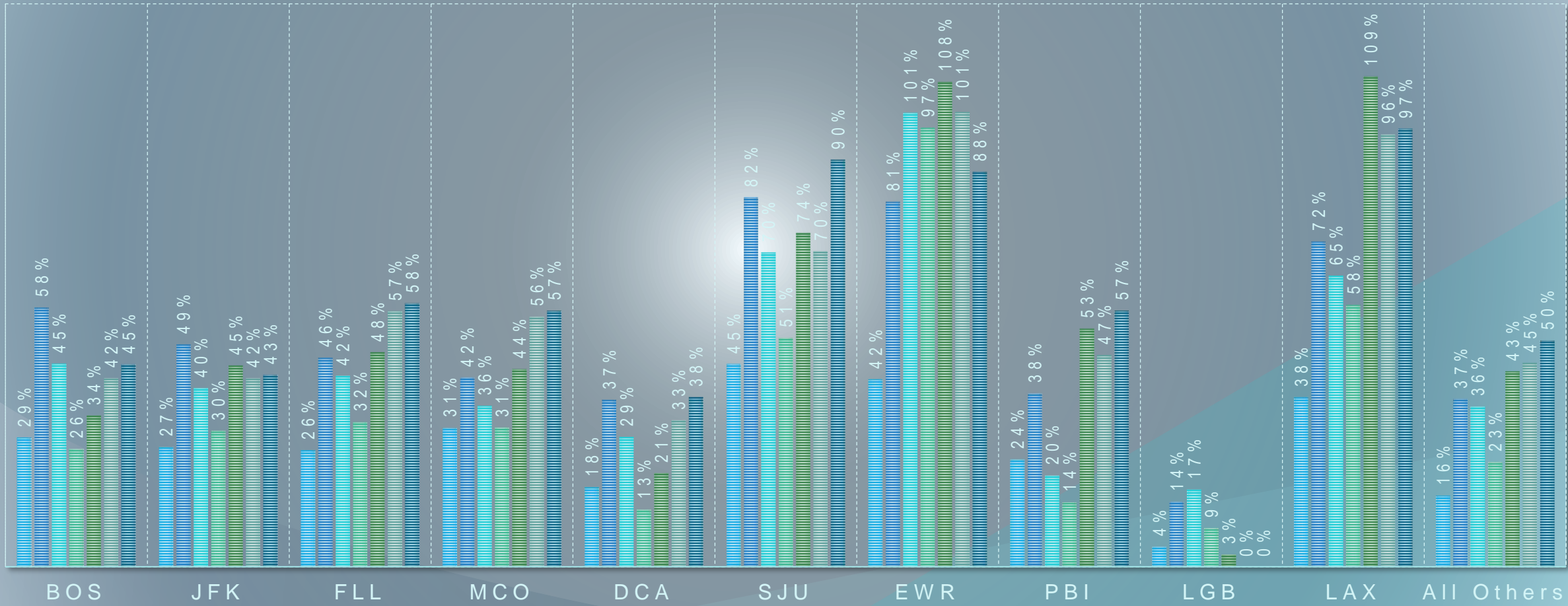
JetBlue Airways – Share of Domestic Departures CY 2019



JetBlue's Hub Airports

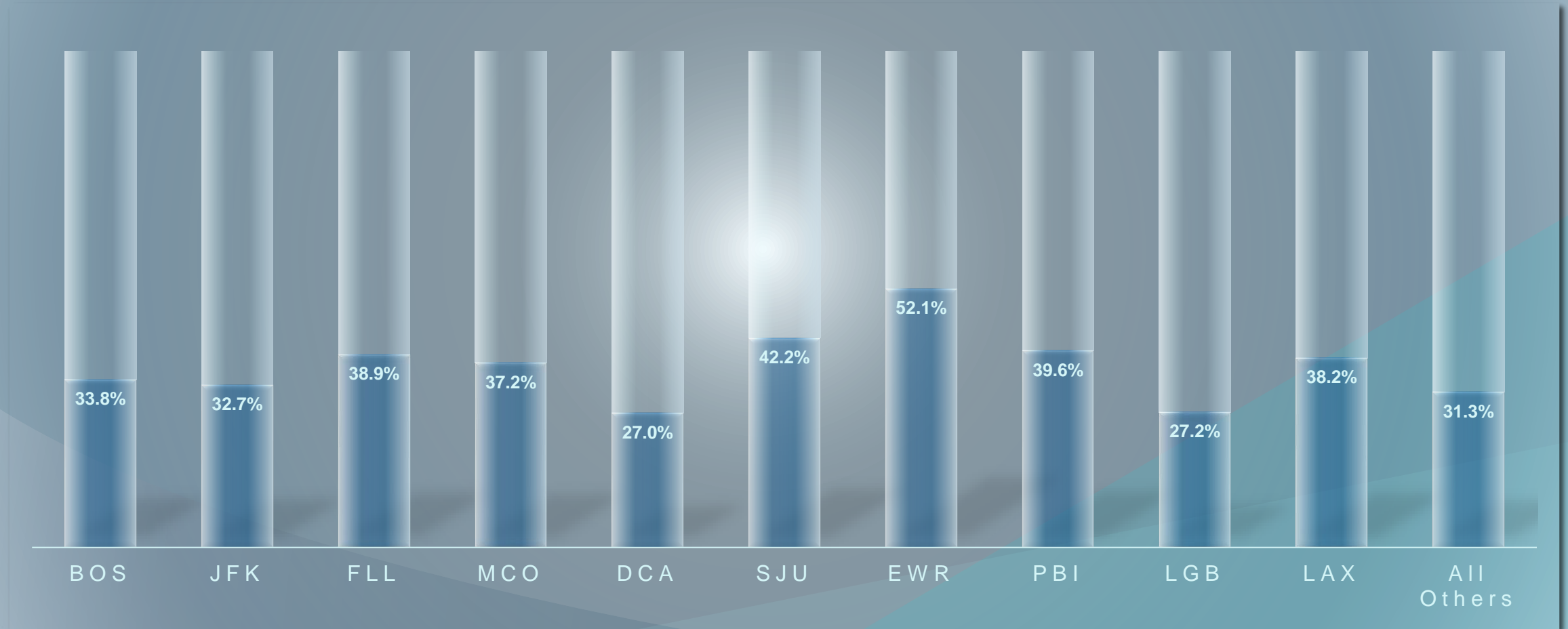
B6's Outbound Domestic Seat Capacity Comparison by Month, 2020 v. 2019

JUN JUL AUG SEP OCT NOV DEC



December update is based on published schedules as of November 20, 2020.

Actual Domestic Traffic Comparison January – September, 2020 v. 2019 jetBlue Airways at Its Hubs

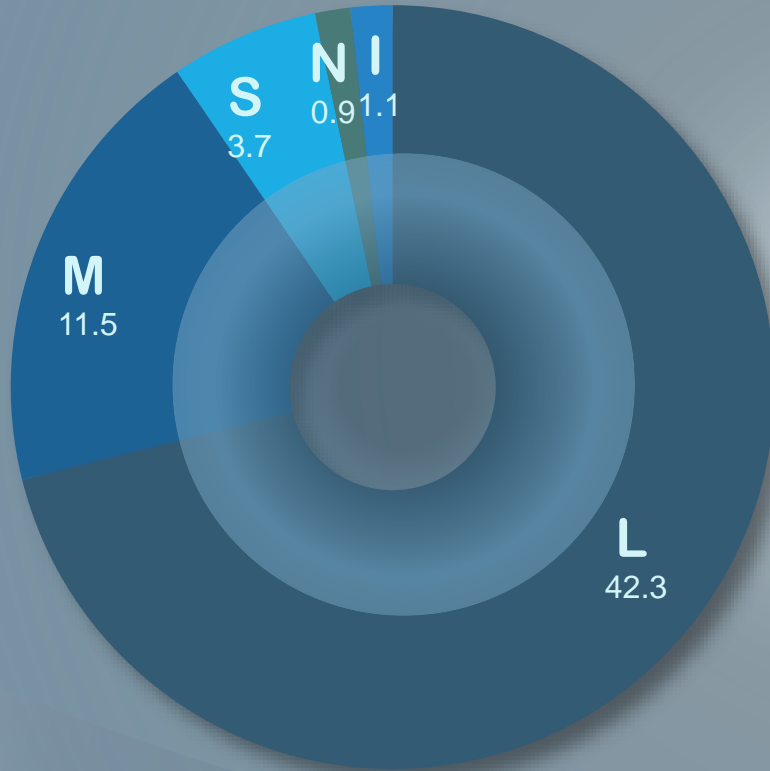


Source: U.S. DOT T-100 database.

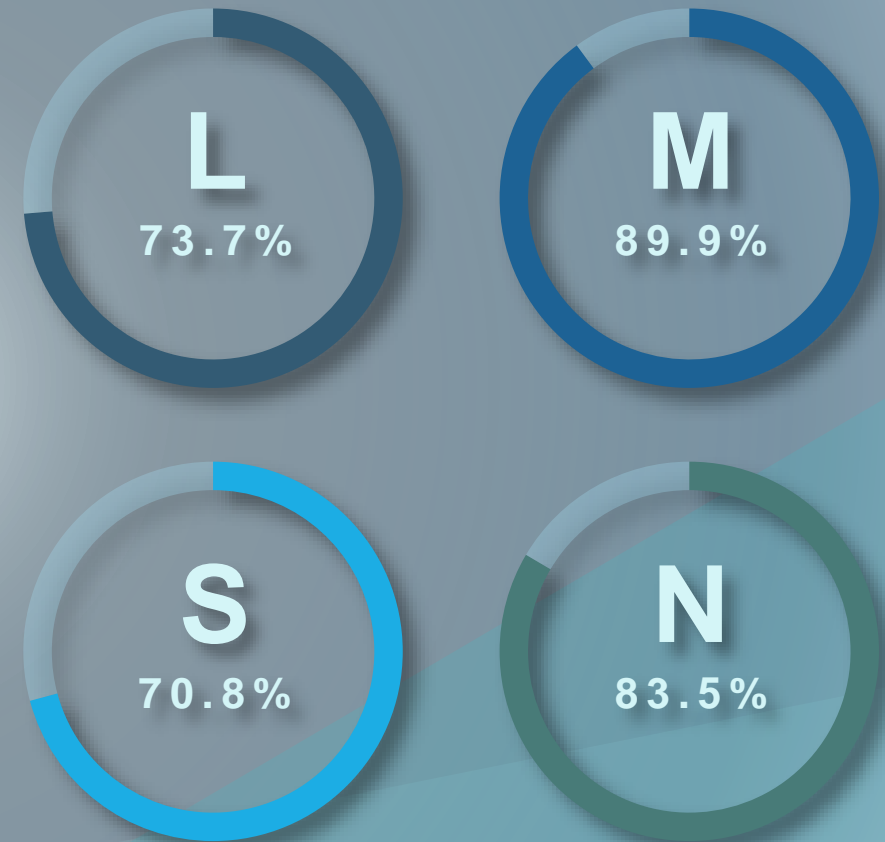


JetBlue: Estimated Domestic Traffic Impact by Airport Type

Annualized Airport Throughput
in Millions by Hub Group



Impacted Traffic As a Percent of *JetBlue's* Total
Throughput by Hub Group



Reflects actual traffic for January – August 2020. September – December 2020 estimated based on September - December 2020 v. September - December 2019 published schedules. Impact on international traffic is for Domestic Portion of International Journey (DPIJ).

L=Large Hubs, M=Medium Hubs, S=Small Hubs, N=Non-hubs, I=International.



Spirit Airlines



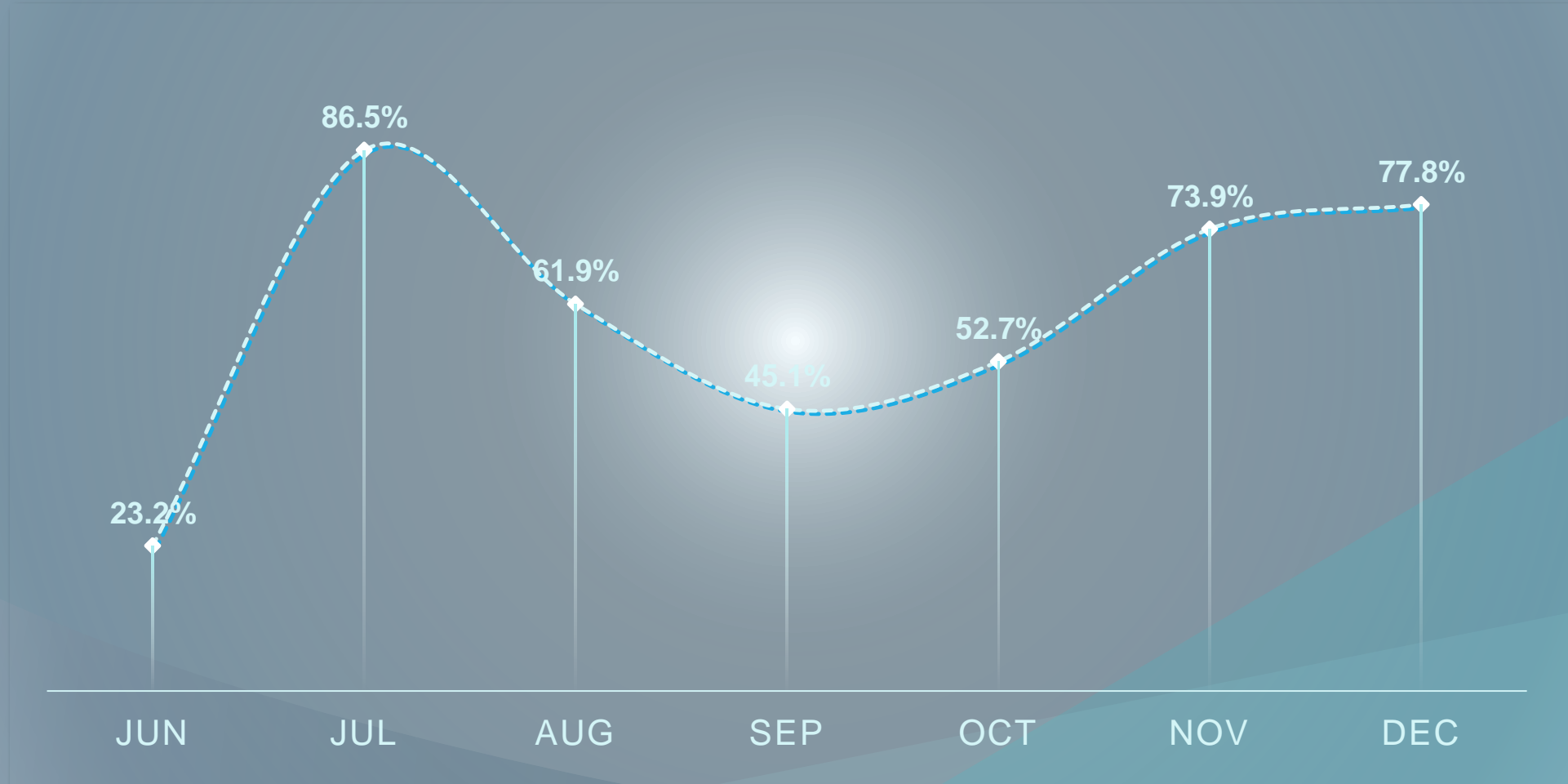
Executive Summary: Airline Specific Capacity Deployment and Traffic Impacts by Geographic Region and by Airport Type

▪ Spirit Airlines (pages 79 – 83):

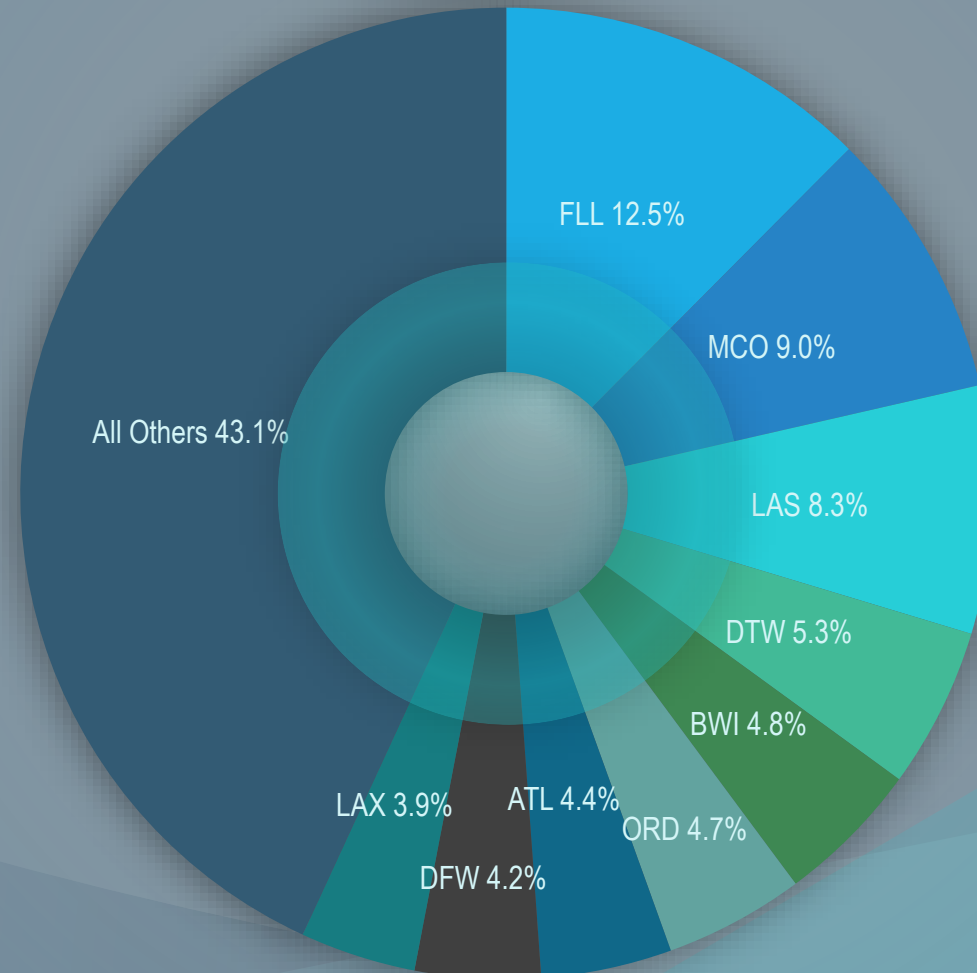
- In December 2020, Spirit is flying more than 75% of its 2019 domestic seat capacity and it is expected that the carrier will likely be more aggressive in the coming months (page 79).
- Spirit has been consistent in its capacity deployment since June when it added significant capacity only to cut that capacity back by the end of August. Recently the carrier has been adding capacity back into the system. Like jetBlue, Spirit seems to be taking advantage of incumbent carriers being slow to build back Los Angeles LAX. Whereas Spirit is putting capacity back into leisure points, it is also adding capacity at Delta's hub at Atlanta (page 81).
- With one exception, Spirit is generating levels of traffic equating to 50% of its 2019 traffic carried. Unlike the network carriers, Spirit is generating respectable levels of traffic in Los Angeles. For any carrier to mount any kind of meaningful competitive presence, at least 40-50 operations are needed. In 2019, the infrastructure to accommodate that level was not available. We should anticipate competitive incursions into constrained markets by Spirit and other ULCCs (page 82).
- As Spirit's fleet is not configured for the smallest markets, its focus must remain on the Large and Medium Hub airports across the system (page 83).

Spirit's Outbound Domestic Seat Capacity Comparison By Month

2020 v. 2019



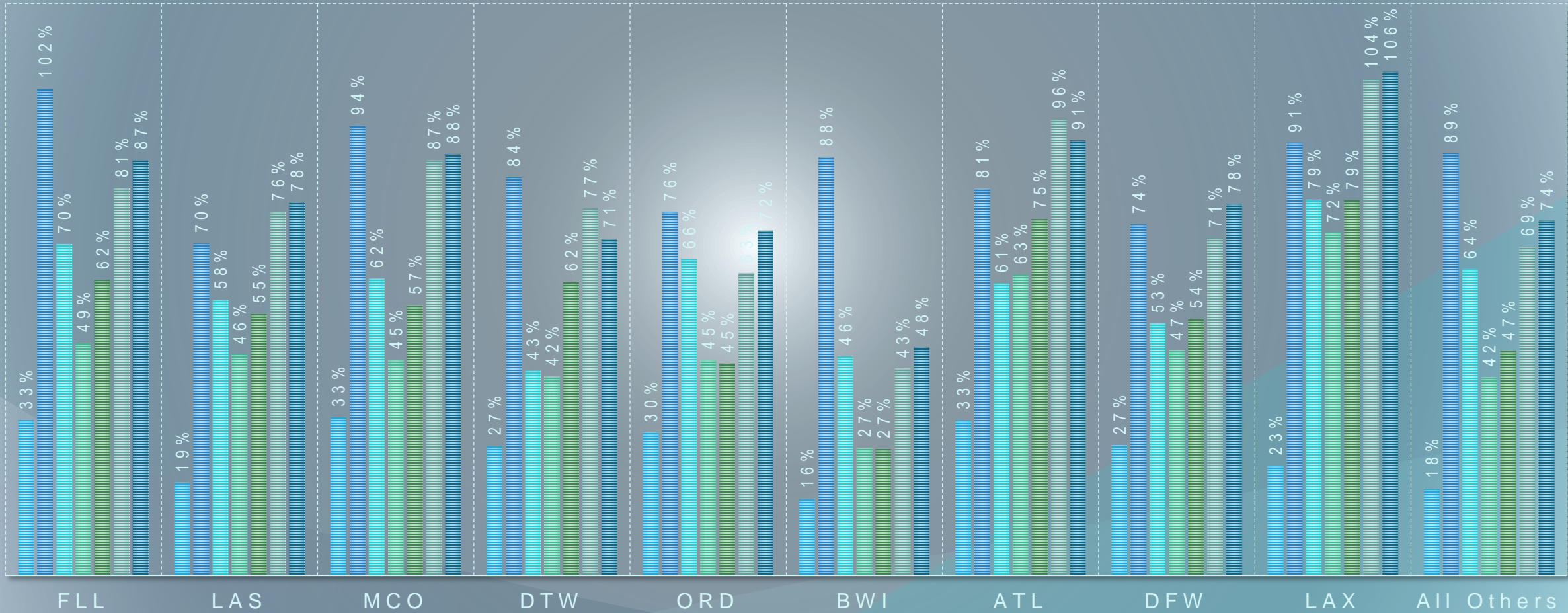
Spirit Airlines – Share of Domestic Departures CY 2019



Spirit's Hub Airports

NK's Outbound Domestic Seat Capacity Comparison by Month, 2020 v. 2019

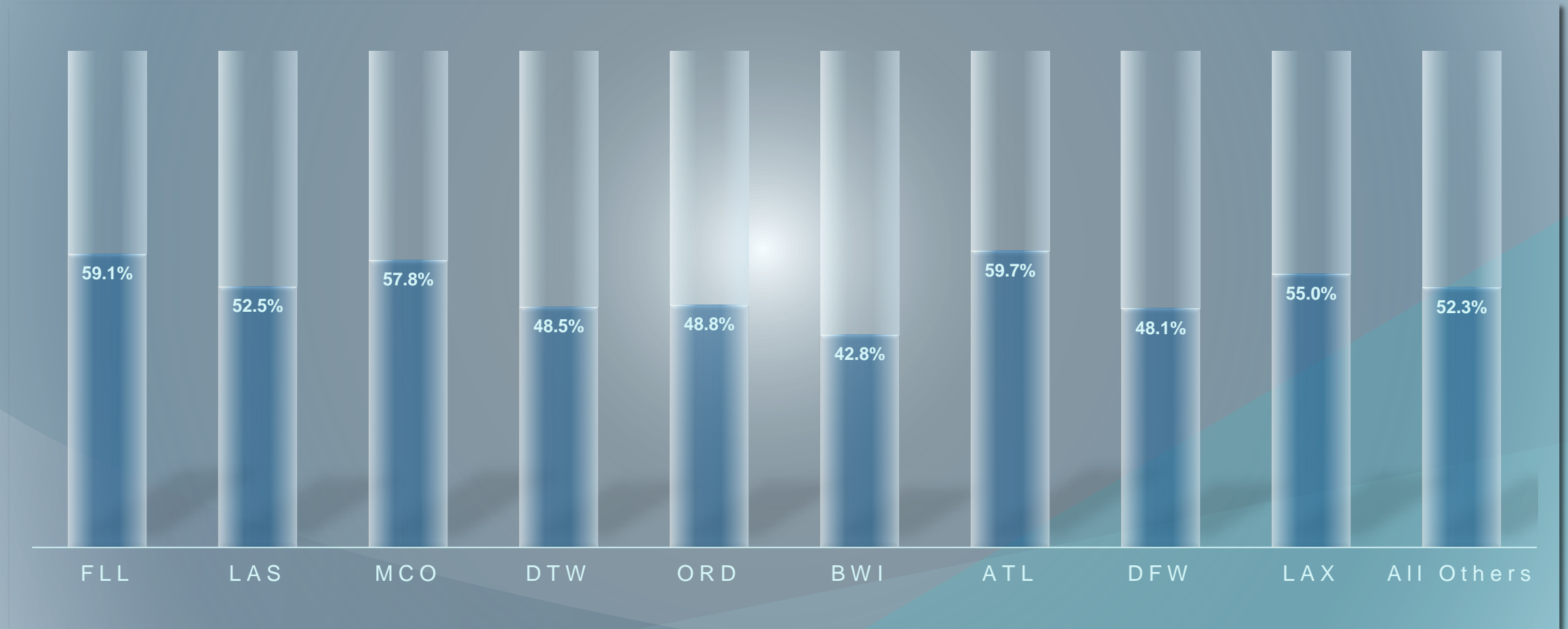
JUN JUL AUG SEP OCT NOV DEC



December update is based on published schedules as of November 20, 2020.



Actual Domestic Traffic Comparison January – September, 2020 v. 2019 Spirit Airlines at Its Focus Cities

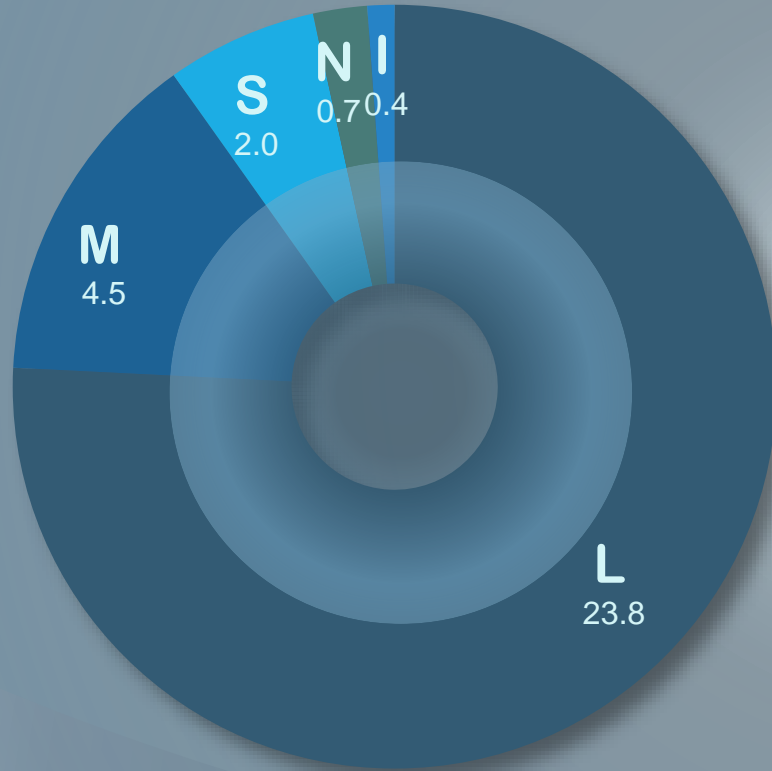


Source: U.S. DOT T-100 database.

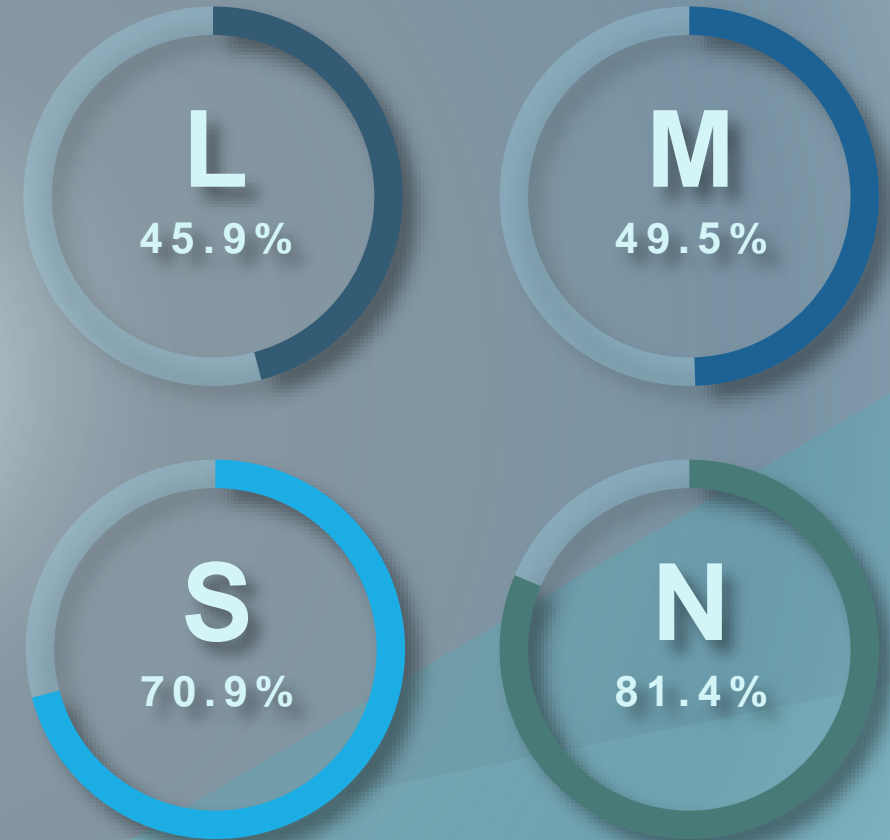


Spirit: Estimated Domestic Traffic Impact by Airport Type

Annualized Airport Throughput in Millions by Hub Group



Impacted Traffic As a Percent of Spirit's Total Throughput by Hub Group



Reflects actual traffic for January – August 2020. September – December 2020 estimated based on September - December 2020 v. September - December 2019 published schedules. Impact on international traffic is for Domestic Portion of International Journey (DPIJ).

L=Large Hubs, M=Medium Hubs, S=Small Hubs, N=Non-hubs, I=International.



Frontier Airlines



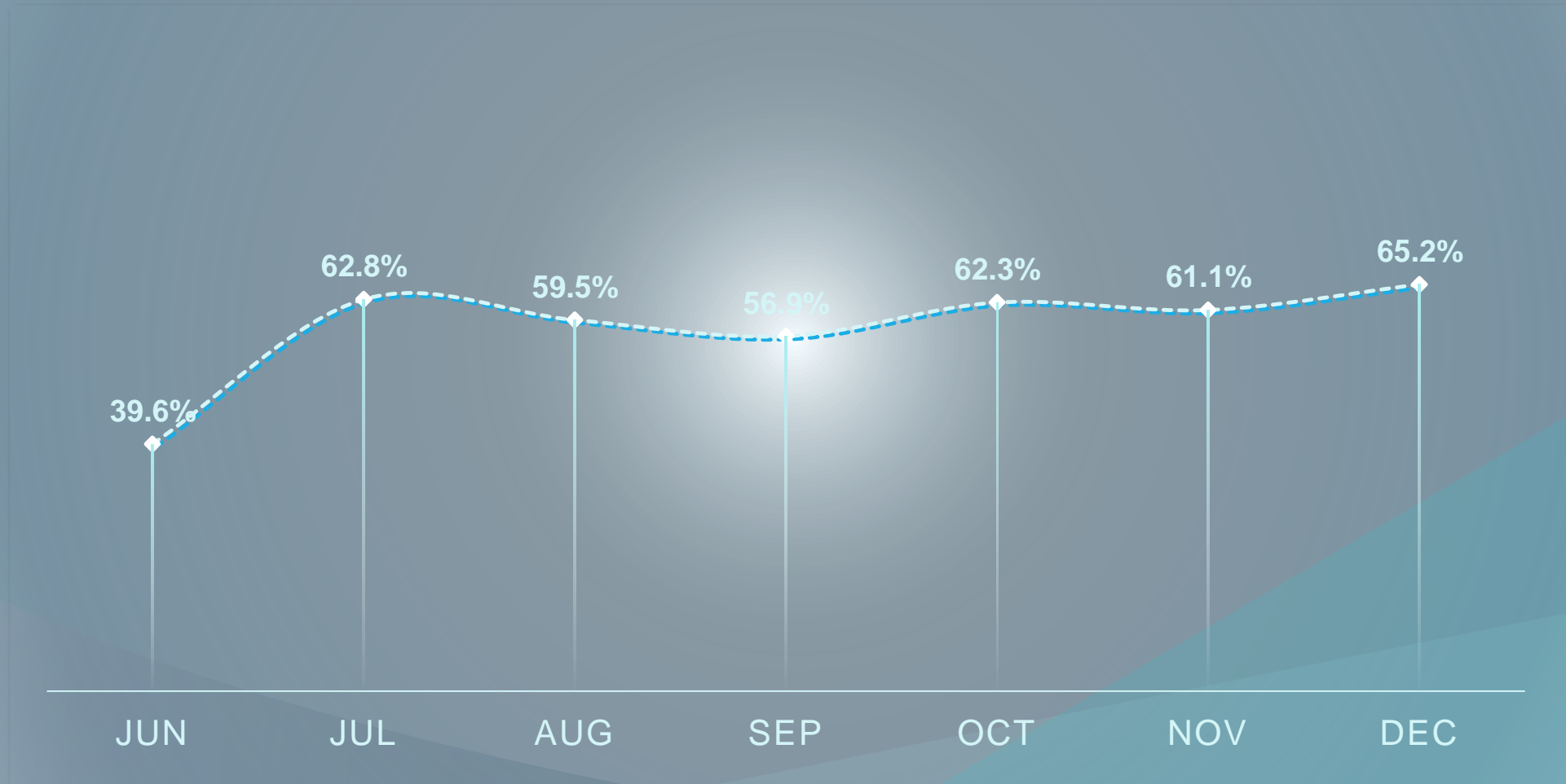
Executive Summary: Airline Specific Capacity Deployment and Traffic Impacts by Geographic Region and by Airport Type

▪ Frontier Airlines (pages 86 – 90):

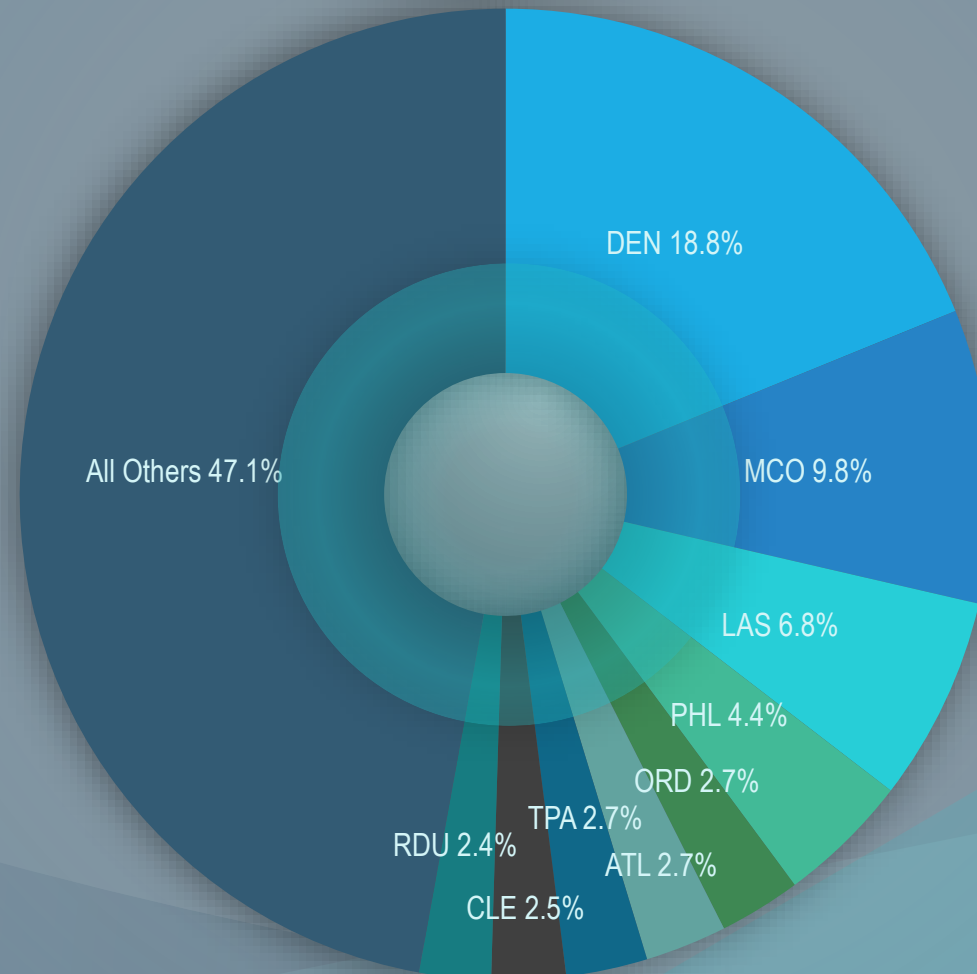
- In December 2020, Frontier is flying 65% of its 2019 domestic seat capacity. Based on public announcements, Frontier is expected to be more aggressive in the coming months (page 86).
- Frontier has a history of rapid market entry and exit depending on the performance. Cleveland and Philadelphia are the new additions to the Frontier network. There is a clear refocus on Pre-Pandemic market Denver. Of note is that Frontier grew rapidly at Raleigh-Durham prior to the Pandemic only to see very little of the capacity being returned to date (page 88).
- Through the first 9 months of 2020, pre-Pandemic markets at Chicago – ORD and Raleigh-Durham are generating the least amount of Frontier’s traffic carried in those markets in 2019. After a big splurge of capacity added at RDU in 2019, Frontier is clearly focused on other points on its system. Nevada, Florida and Denver have been important. Given Frontier’s recent activity in growing Phoenix, it should be added to the list of focus cities (page 89).
- As Frontier’s fleet is not configured to serve the smallest markets, its December schedule accommodates the most 2019 traffic at its Large Hub airports (page 90).

Frontier's Outbound Domestic Seat Capacity Comparison By Month

2020 v. 2019

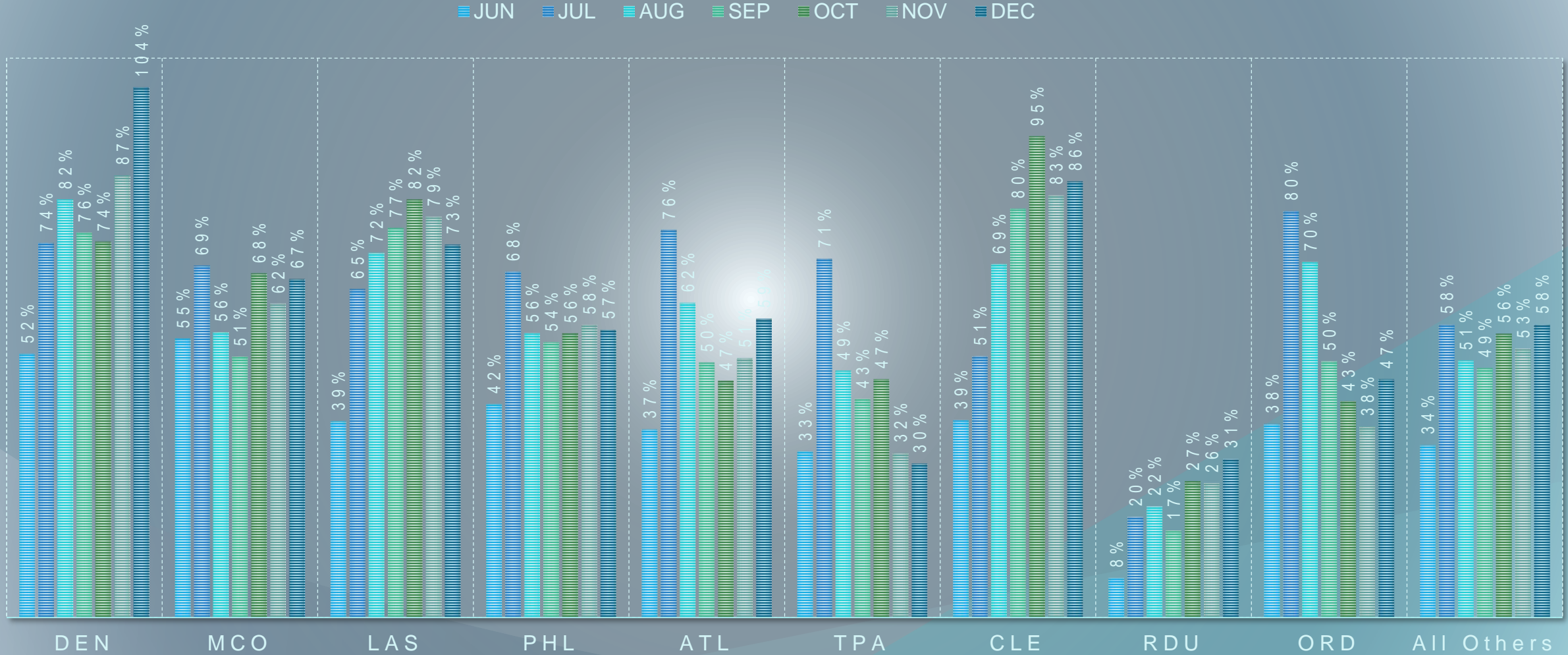


Frontier Airlines – Share of Domestic Departures CY 2019



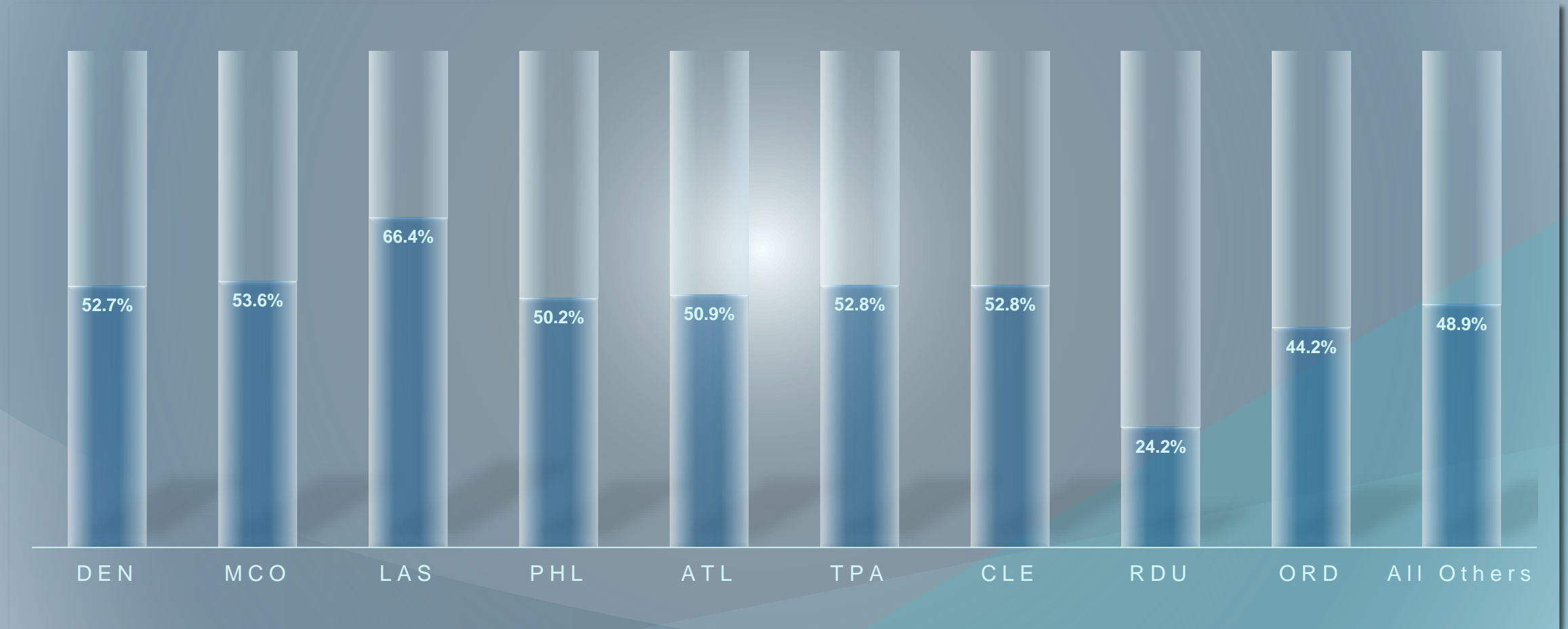
Frontier's Hub/Focus Airports

F9's Outbound Domestic Seat Capacity Comparison by Month, 2020 v. 2019



December update is based on published schedules as of November 20, 2020.

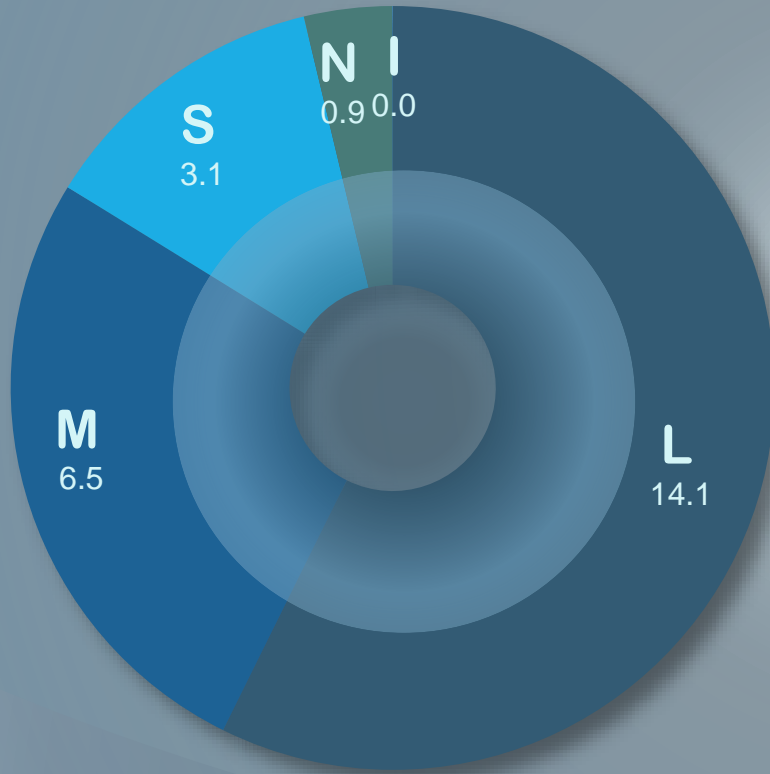
Actual Domestic Traffic Comparison January – September, 2020 v. 2019 Frontier Airlines at Its Focus Cities



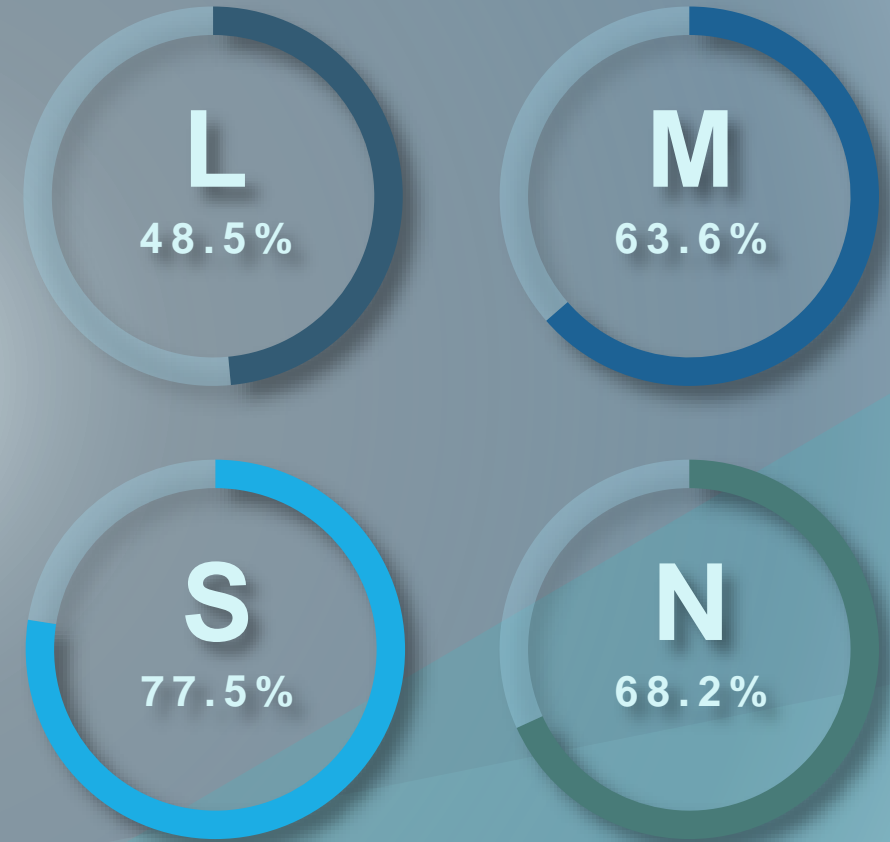
Source: U.S. DOT T-100 database.

Frontier: Estimated Domestic Traffic Impact by Airport Type

Annualized Airport Throughput in Millions by Hub Group



Impacted Traffic As a Percent of *Frontier's* Total Throughput by Hub Group



Reflects actual traffic for January – August 2020. September – December 2020 estimated based on September - December 2020 v. September - December 2019 published schedules. Impact on international traffic is for Domestic Portion of International Journey (DPIJ).

L=Large Hubs, M=Medium Hubs, S=Small Hubs, N=Non-hubs, I=International.

Allegiant Airlines



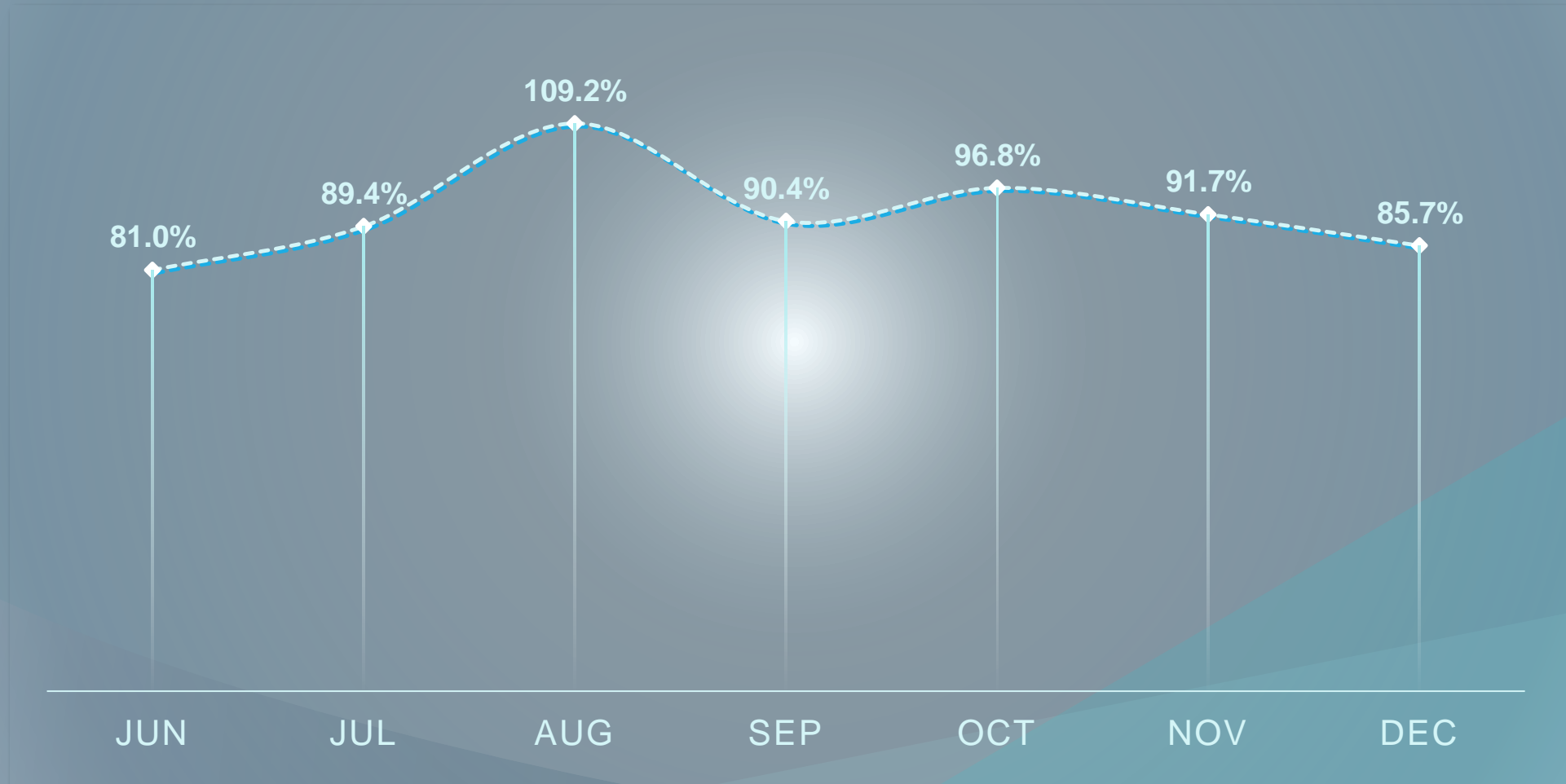
Executive Summary: Airline Specific Capacity Deployment and Traffic Impacts by Geographic Region and by Airport Type

▪ Allegiant Airlines (pages 93 – 97):

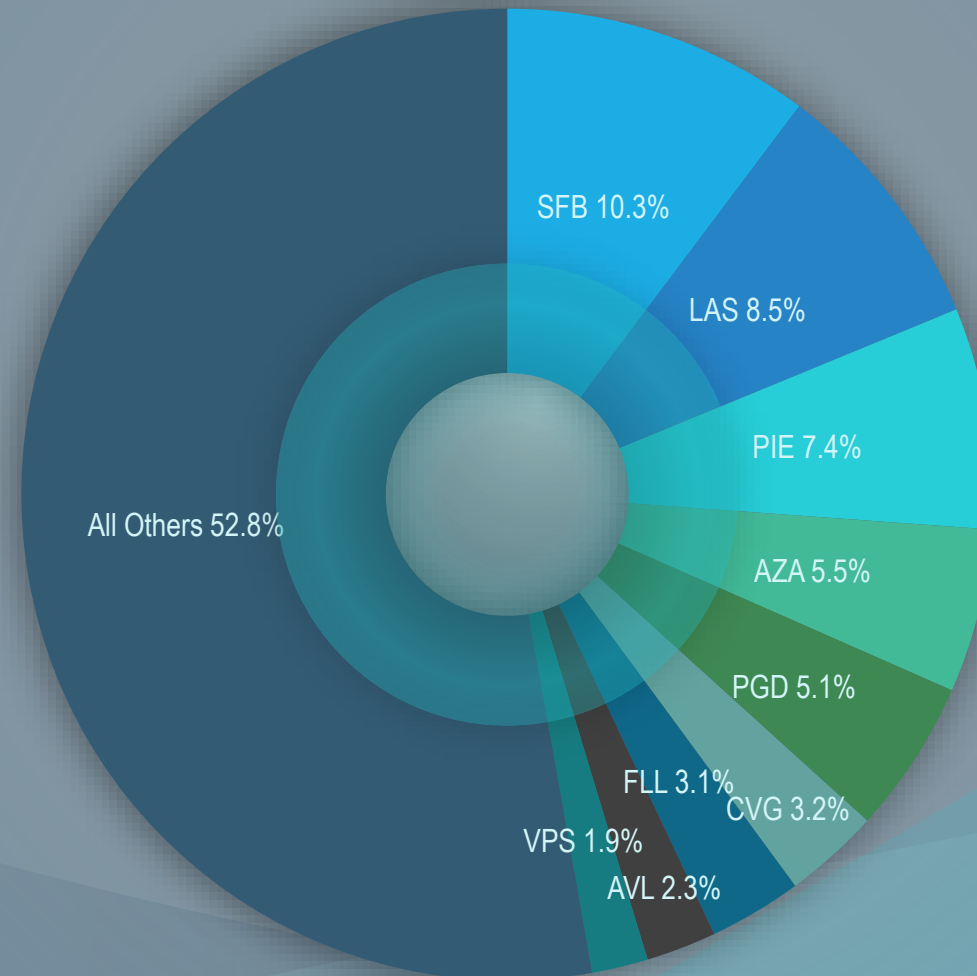
- In December 2020, Allegiant is flying nearly 86% of its 2019 domestic seat capacity (page 93).
- Allegiant is simply different than the rest of the system. In nearly all the 9 markets identified as focus cities, the current schedule accommodates slightly less 2019 traffic than its November 2020 schedule (page 95).
- Allegiant has a history of serving smaller markets. In recent years, the carrier has looked more for opportunities in larger metro areas. The carrier has been masterful in finding secondary leisure destinations like Savannah and the Florida Panhandle to add to its portfolio (page 95).
- Allegiant has carried at least 60% of its 2019 traffic in traditional leisure-oriented points in Florida and Arizona. Likewise, the carrier is generating significant amounts of traffic in Cincinnati which is a relatively new point on its system (page 96).
- The vast majority of Allegiant's airport traffic can be found at Small and Non-Hub airports. Based on the analysis, the carrier will carry at least 2/3 of its 2019 traffic during this very difficult 2020 (page 97).

Allegiant's Outbound Domestic Seat Capacity Comparison By Month

2020 v. 2019



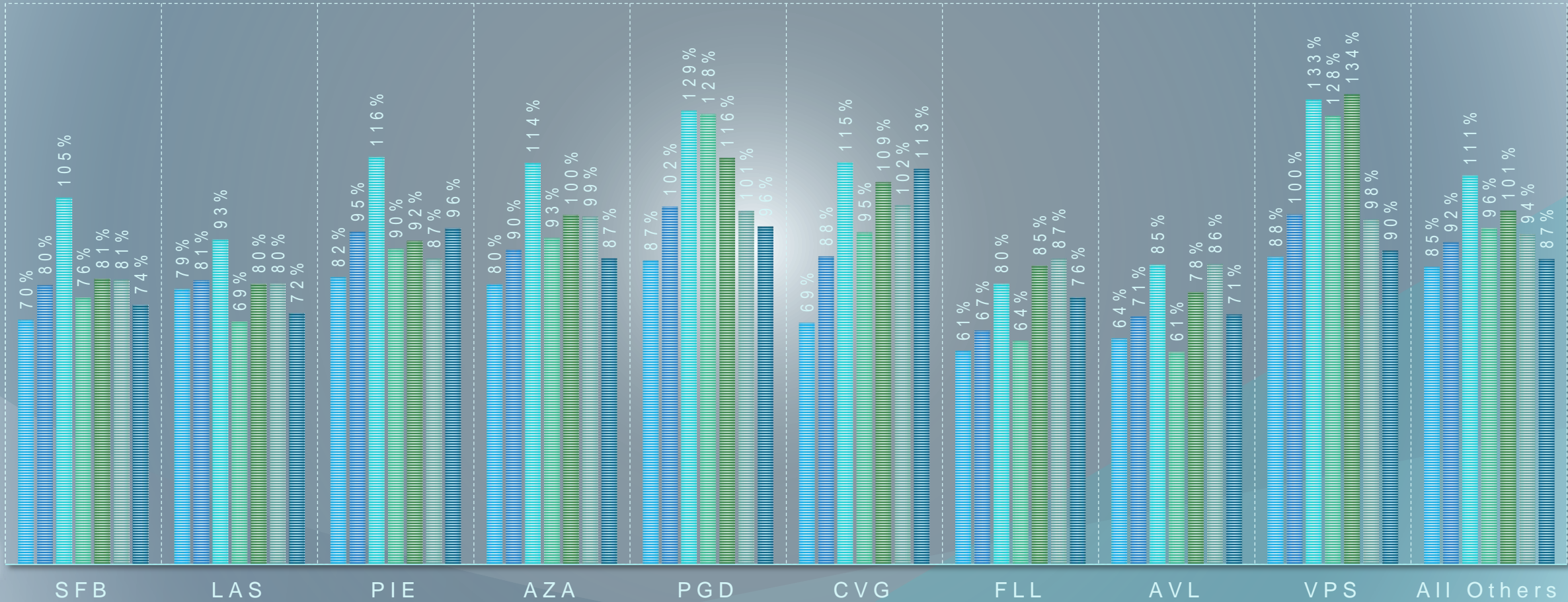
Allegiant Airlines – Share of Domestic Departures CY 2019



Allegiant's Hub Airports

G4's Outbound Domestic Seat Capacity Comparison by Month, 2020 v. 2019

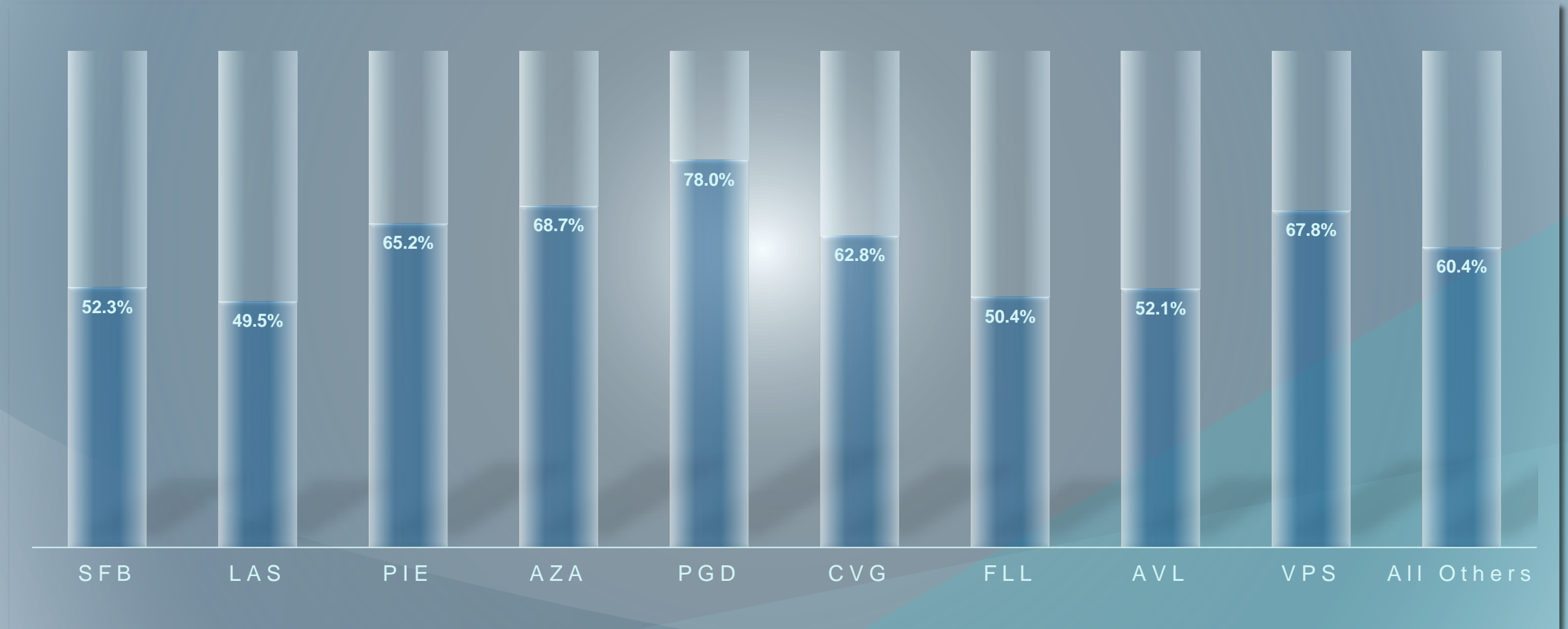
JUN JUL AUG SEP OCT NOV DEC



December update is based on published schedules as of November 20, 2020.



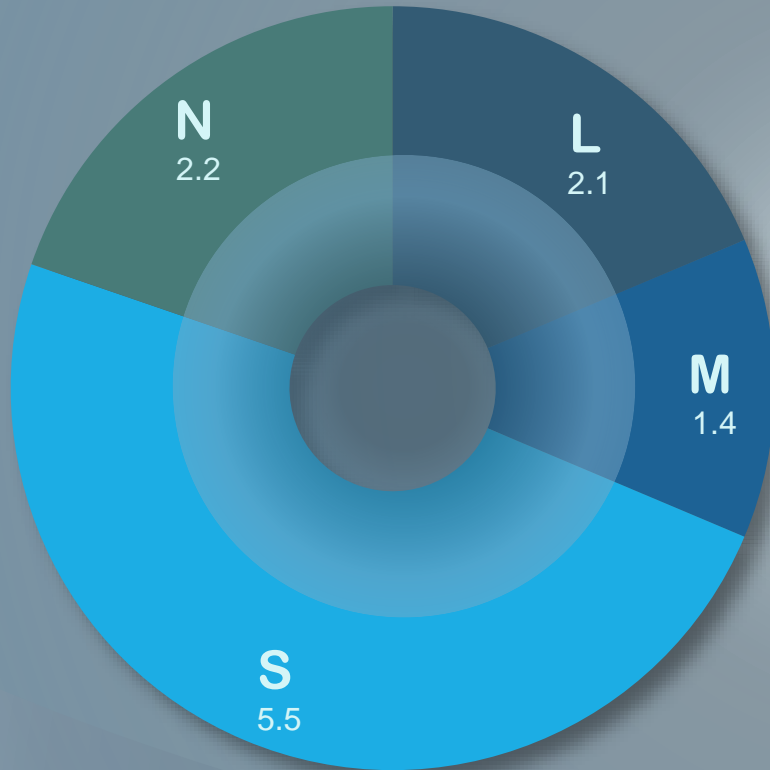
Actual Domestic Traffic Comparison January – September, 2020 v. 2019 Allegiant Airlines at Its Hubs



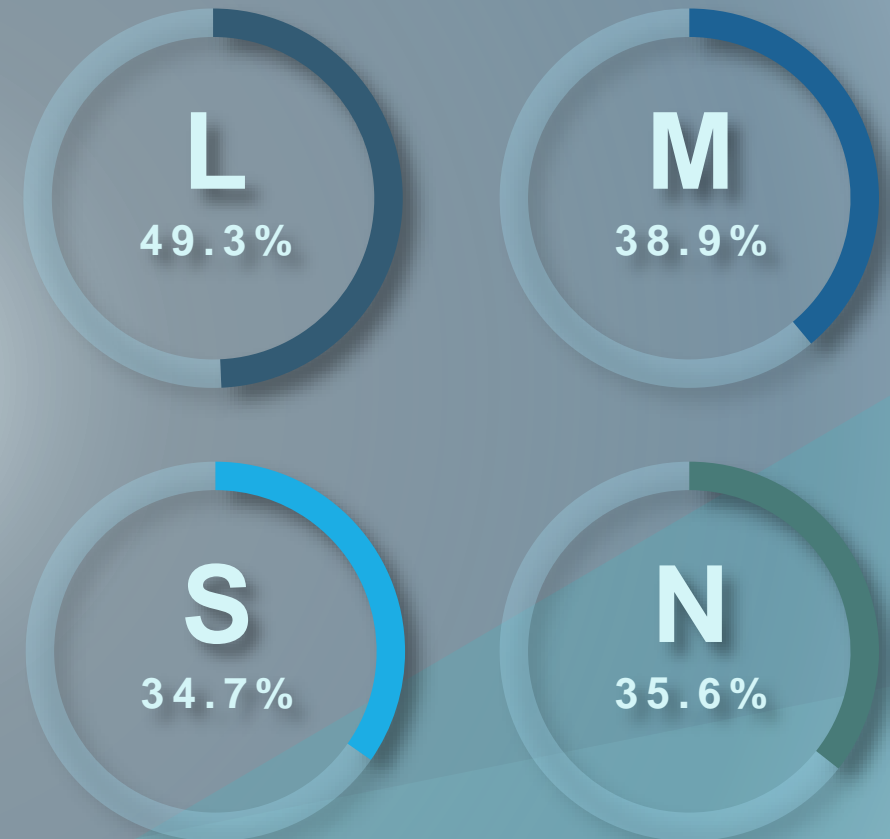
Source: U.S. DOT T-100 database.

Allegiant: Estimated Domestic Traffic Impact by Airport Type

Annualized Airport Throughput in Millions by Hub Group



Impacted Traffic As a Percent of *Allegiant's* Total Throughput by Hub Group



Reflects actual traffic for January – August 2020. September – December 2020 estimated based on September - December 2020 v. September - December 2019 published schedules. Impact on international traffic is for Domestic Portion of International Journey (DPIJ).

L=Large Hubs, M=Medium Hubs, S=Small Hubs, N=Non-hubs, I=International.

Sun Country Airlines



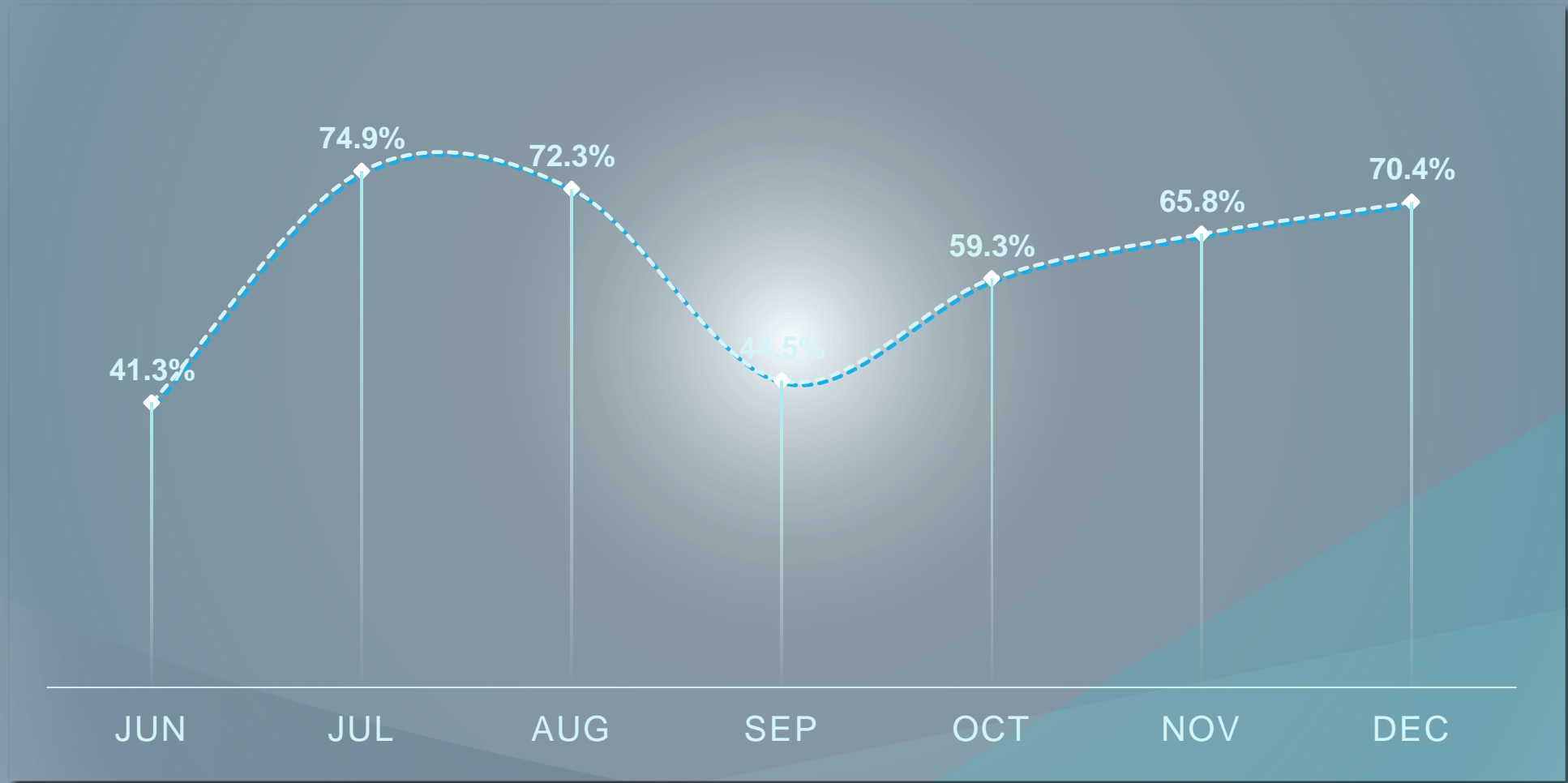
Executive Summary: Airline Specific Capacity Deployment and Traffic Impacts by Geographic Region and by Airport Type

▪ **Sun Country Airlines (pages 100 – 104):**

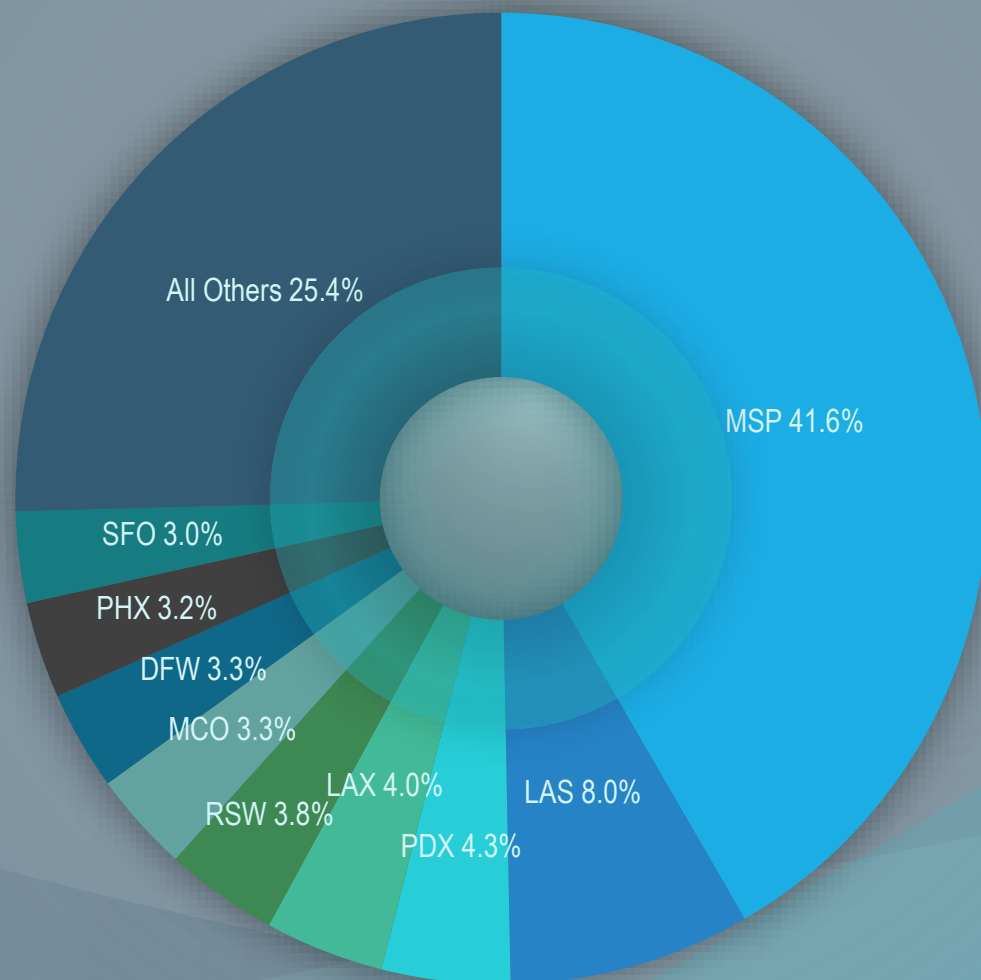
- In December 2020, Sun Country is flying more than 70% of its 2019 domestic seat capacity (page 100).
- It should be noted that Sun Country made a strategically smart decision to fly cargo for Amazon. This decision has likely weighed on development of its 2020 passenger schedule; however the decision has proven to be a very smart one from a financial perspective (page 102).
- Whereas Sun Country calls Minneapolis/St. Paul home, its 2020 schedule footprint as a percent of 2019 is biggest in Dallas/Ft. Worth, Orlando and Ft. Myers. With a few exceptions, Sun Country is offering schedules that can accommodate at least 70% of 2019 traffic in most focus city markets (page 102).
- Pre-Pandemic markets in the western U.S. at Portland, San Francisco and Las Vegas have produced the least amount of traffic in the first 9 months of 2020 as compared to 2019 (page 103).
- The vast majority of Sun Country's airport traffic can be found at Large and Medium Hub airports (page 104).

Sun Country's Outbound Domestic Seat Capacity Comparison By Month

2020 v. 2019



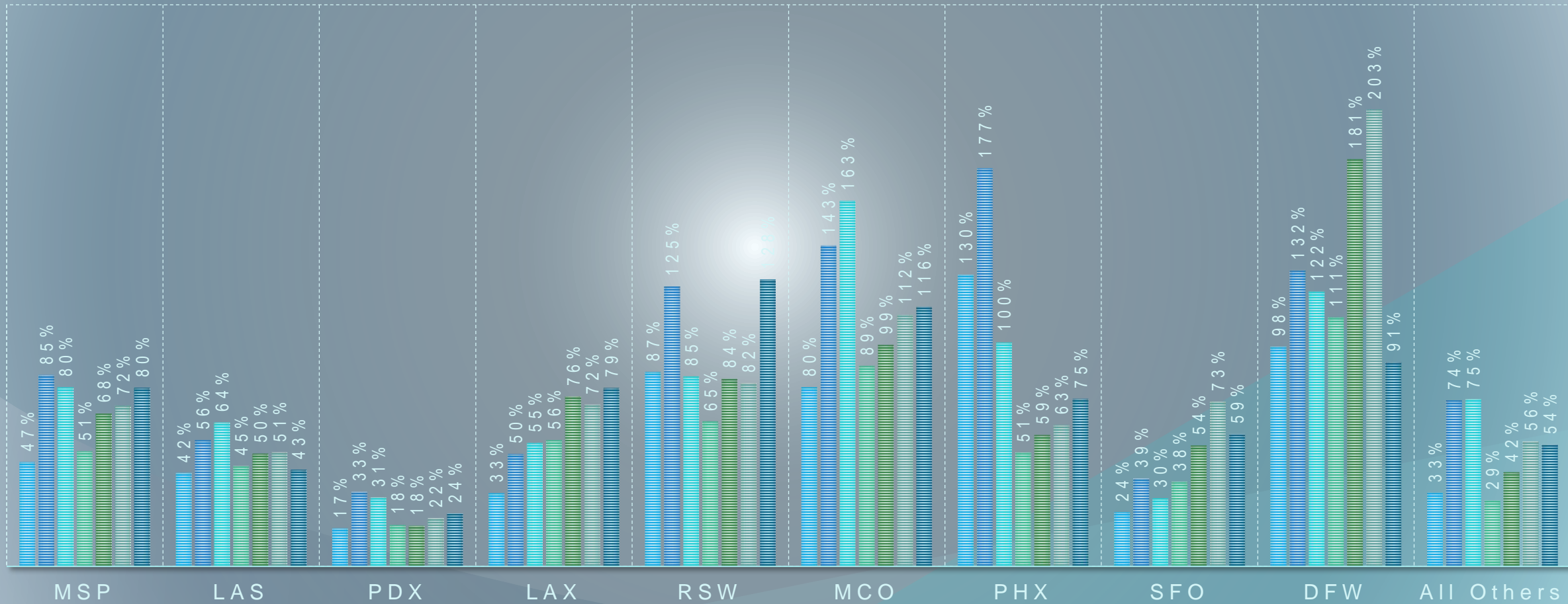
Sun Country Airlines – Share of Domestic Departures CY 2019



Sun Country's Hub Airports

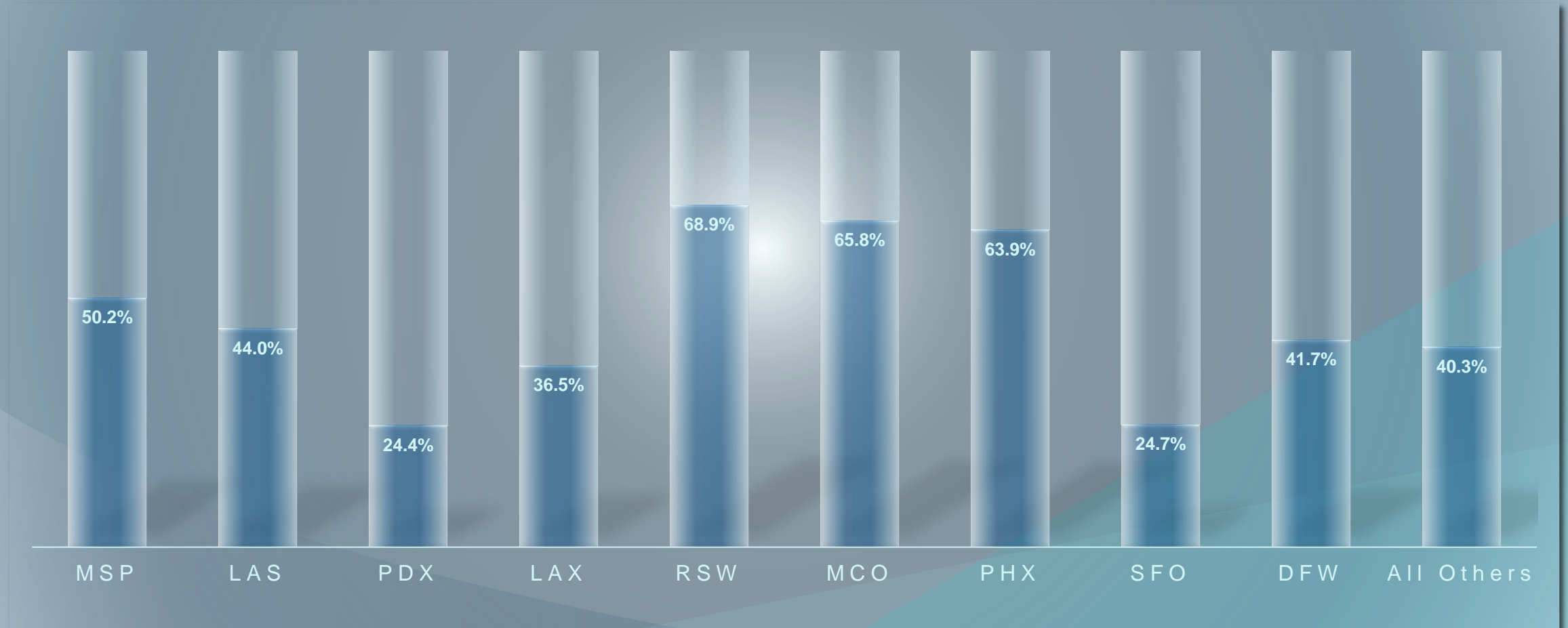
SY's Outbound Domestic Seat Capacity Comparison by Month, 2020 v. 2019

JUN JUL AUG SEP OCT NOV DEC



December update is based on published schedules as of November 20, 2020.

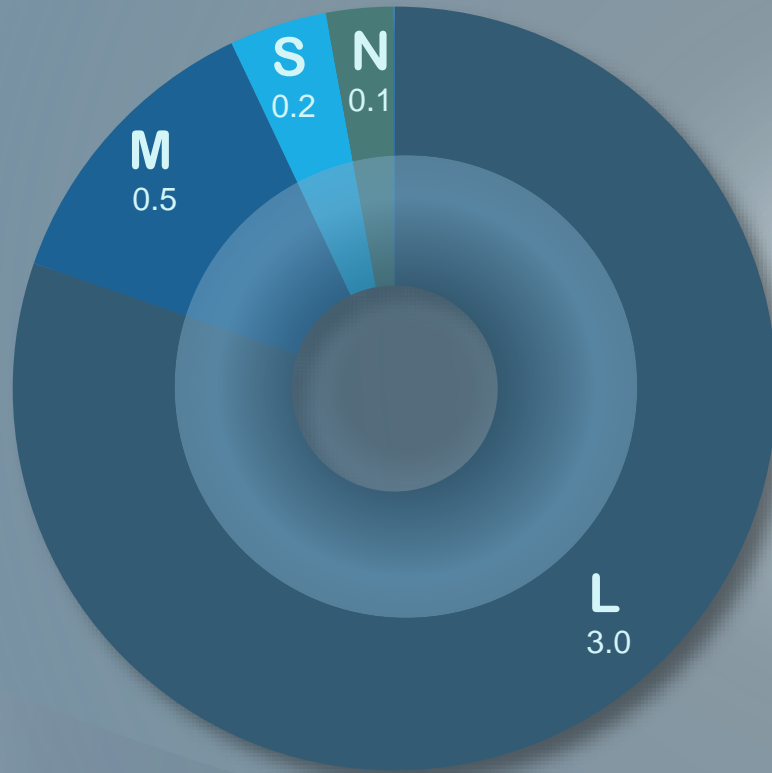
Actual Domestic Traffic Comparison January – September, 2020 v. 2019 Sun Country Airlines at Its Focus Cities



Source: U.S. DOT T-100 database.

Sun Country: Estimated Domestic Traffic Impact by Airport Type

Annualized Airport Throughput in Millions by Hub Group



Impacted Traffic As a Percent of *Sun Country's* Total Throughput by Hub Group



Reflects actual traffic for January – August 2020. September – December 2020 estimated based on September - December 2020 v. September - December 2019 published schedules. Impact on international traffic is for Domestic Portion of International Journey (DPIJ).

L=Large Hubs, M=Medium Hubs, S=Small Hubs, N=Non-hubs, I=International.

U.S. Regions & Airports by Hub Size



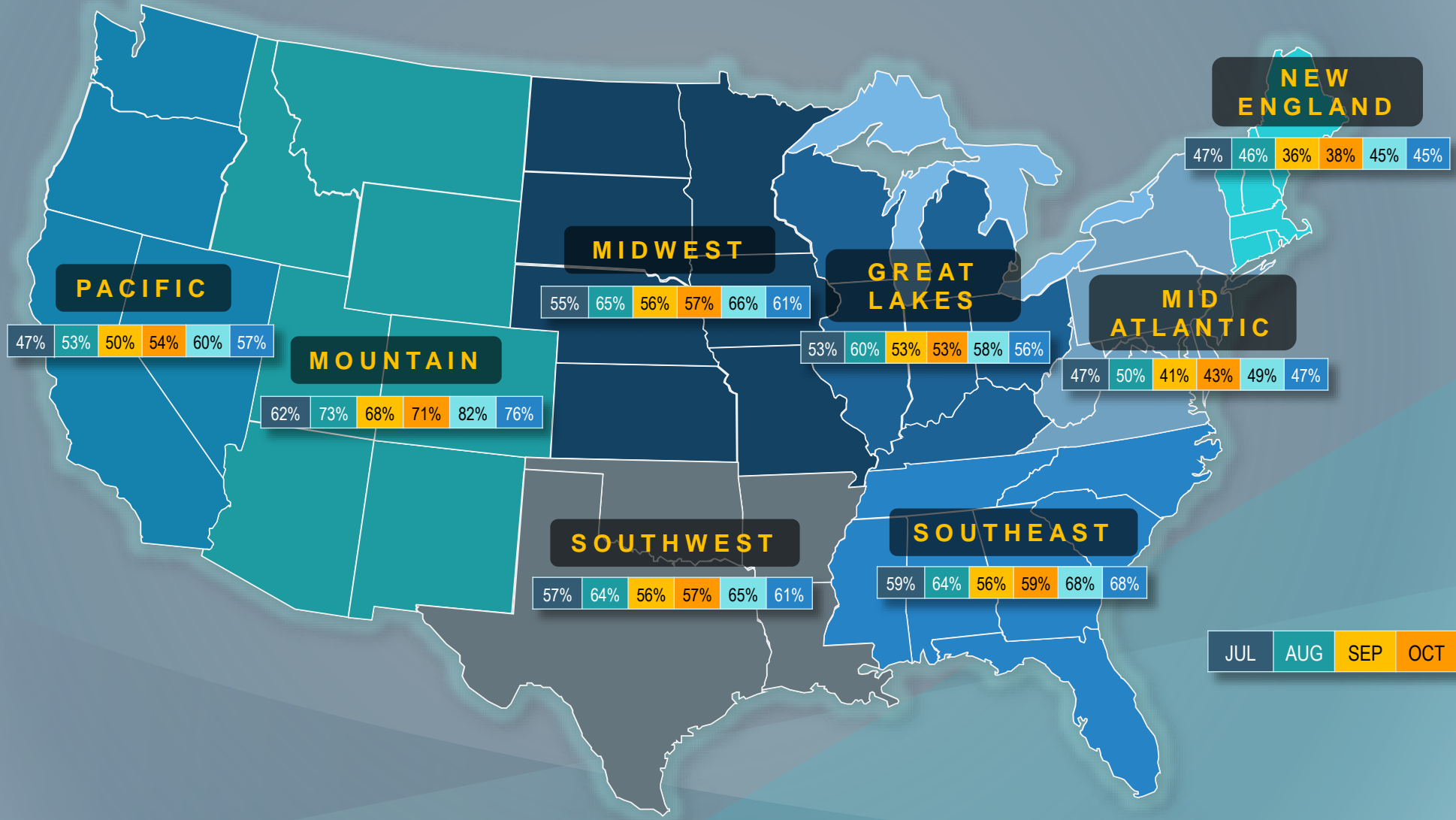
Executive Summary: Capacity Deployment and Traffic Impacts by Geographic Region and by Airport Type

- 76% of 2019 domestic outbound seats are being flown in the Mountain Region and 68% are being flown in the Southeast Region. (Page 107)
 - But only 57% of 2019 domestic outbound seats are being flown in the Pacific Region; 47% in the Mid-Atlantic Region (think New York, Philadelphia and Washington); and only 45% in New England (think Boston).
 - It is difficult to build out a network without these traffic and revenue rich regions being online when compared to 2019.
- Putting the lack of 2019 domestic airport throughput (enplaned and deplaned) into perspective: despite nearly 70% of seats being operated in the Southeast Region in December, for the year the Southeast Region airports will see more than 240 million fewer passengers in their airports. (Page 109)
 - The Pacific Region will experience nearly 200 million fewer passengers passing through their airports, and the Mid-Atlantic Region will experience a loss of nearly 180 million inbound and outbound passengers.
 - The damage done to the concession industry cannot be overstated.
- Large Hub airports (page 110) are estimated to see nearly more than 725 million fewer inbound and outbound passengers in 2020 as compared to 2019; Medium Hub airports (page 111) 223 million fewer passengers; Small Hub airports (page 112) more than 100 million fewer passengers; and Non-hub airports (page 113) are expected to see 38 million fewer inbound and outbound passengers.



Capacity Change by U.S. Region

- Domestic Outbound Seats, 2020 v. 2019



JUL AUG SEP OCT NOV DEC

Number of Airports Within Each Region By Hub Size

PACIFIC	State	Large	Medium	Small	Nonhub	Total
	California	3	6	4	15	28
	Nevada	1	0	1	2	4
	Oregon	1	0	3	2	6
	Washington	1	0	1	12	14
	Total	6	6	9	31	52

GREAT LAKES	State	Large	Medium	Small	Nonhub	Total
	Illinois	2	0	0	10	12
	Indiana	0	1	0	3	4
	Kentucky	0	0	2	2	4
	Michigan	1	0	1	14	16
	Ohio	0	3	1	5	9
	Wisconsin	0	1	1	6	8
	Total	3	5	5	40	53

NEW ENGLAND	State	Large	Medium	Small	Nonhub	Total
	Connecticut	0	1	0	1	2
	Maine	0	0	1	5	6
	Massachusetts	1	0	0	7	8
	New Hampshire	0	0	1	2	3
	Rhode Island	0	0	1	2	3
	Vermont	0	0	1	1	2
	Total	1	1	4	18	24

MOUNTAIN	State	Large	Medium	Small	Nonhub	Total
	Arizona	1	0	2	9	12
	Colorado	1	0	1	11	13
	Idaho	0	0	1	5	6
	Montana	0	0	1	12	13
	New Mexico	0	1	0	6	7
	Utah	1	0	0	7	8
	Total	3	1	5	59	68

MID-ATLANTIC	State	Large	Medium	Small	Nonhub	Total
	Maryland	1	0	0	2	3
	New Jersey	1	0	1	3	5
	New York	2	1	5	10	18
	Pennsylvania	1	1	1	11	14
	Virginia	2	0	2	5	9
	West Virginia	0	0	0	7	7
	Total	7	2	9	38	56

SOUTHEAST	State	Large	Medium	Small	Nonhub	Total
	Alabama	0	0	2	5	7
	Florida	4	3	8	7	22
	Georgia	1	0	1	7	9
	Louisiana	0	1	0	6	7
	Mississippi	0	0	1	6	7
	North Carolina	1	1	3	6	11
	South Carolina	0	1	3	2	6
	Tennessee	0	1	3	2	6
	Total	6	7	21	41	75

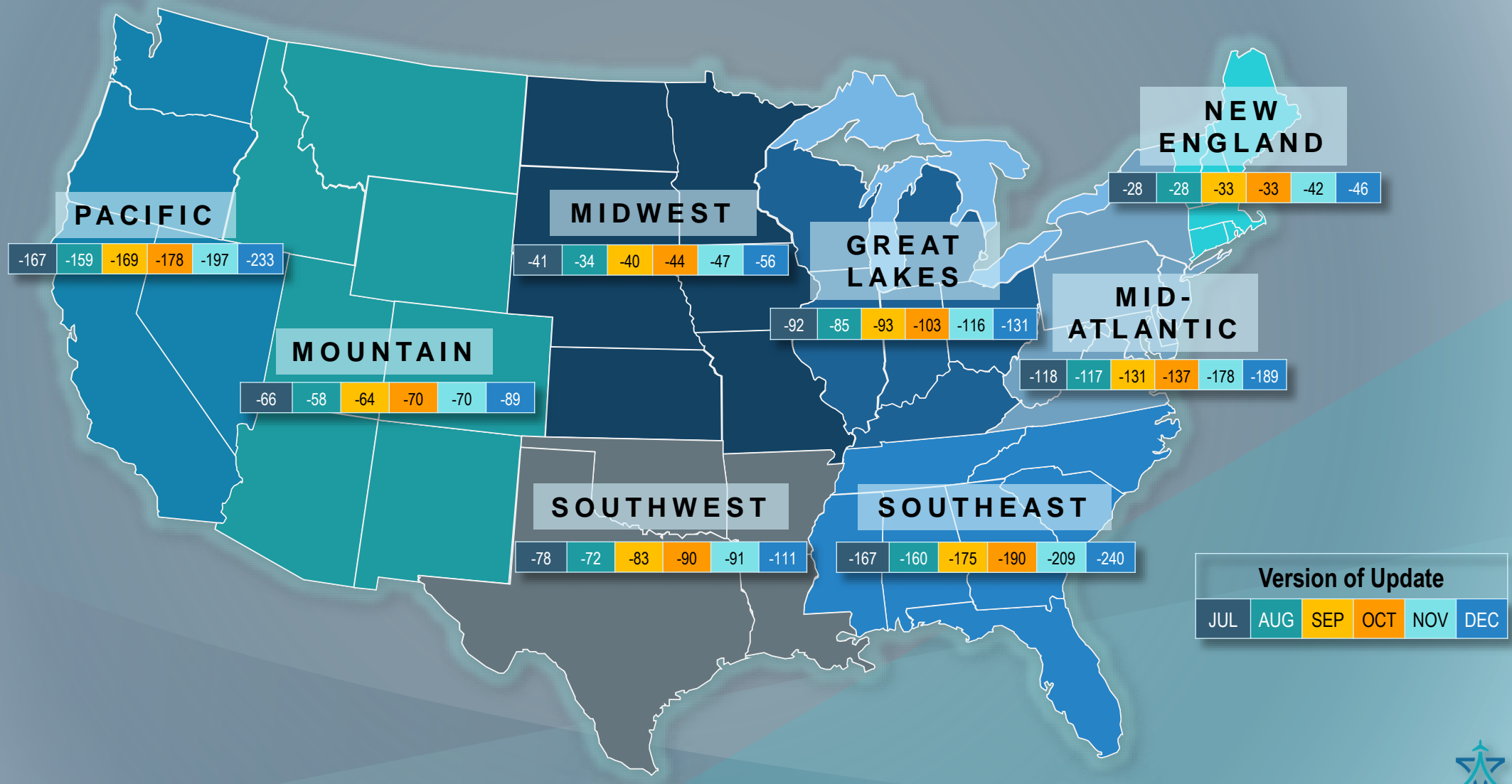
MIDWEST	State	Large	Medium	Small	Nonhub	Total
	Iowa	0	0	2	6	8
	Kansas	0	0	1	7	8
	Minnesota	1	0	0	8	9
	Missouri	0	2	1	8	11
	Nebraska	0	1	0	7	8
	North Dakota	0	0	1	8	9
	South Dakota	0	0	1	4	5
	Total	1	3	6	48	58

SOUTHWEST	State	Large	Medium	Small	Nonhub	Total
	Arkansas	0	0	2	6	8
	Oklahoma	0	0	2	2	4
	Texas	2	4	3	17	26
	Total	2	4	7	25	38

Based on U.S. DOT T-100 database, CY 2019.

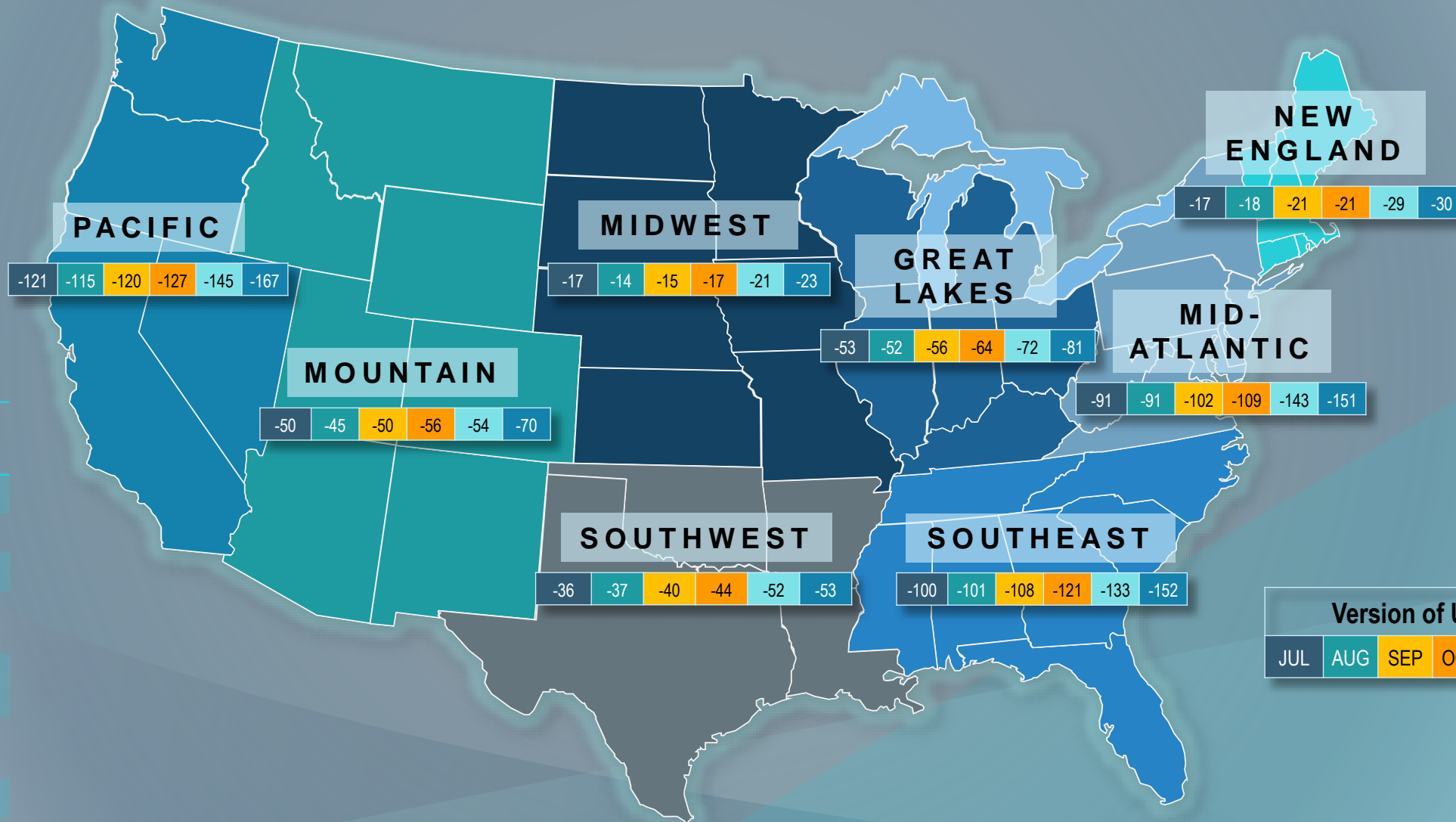
Traffic Impact by U.S. Region – Domestic Throughput in Millions

- All Airports



Traffic Impact by U.S. Region – Domestic Throughput in Millions

- Large Hub Airports Only



Number of Large Hubs

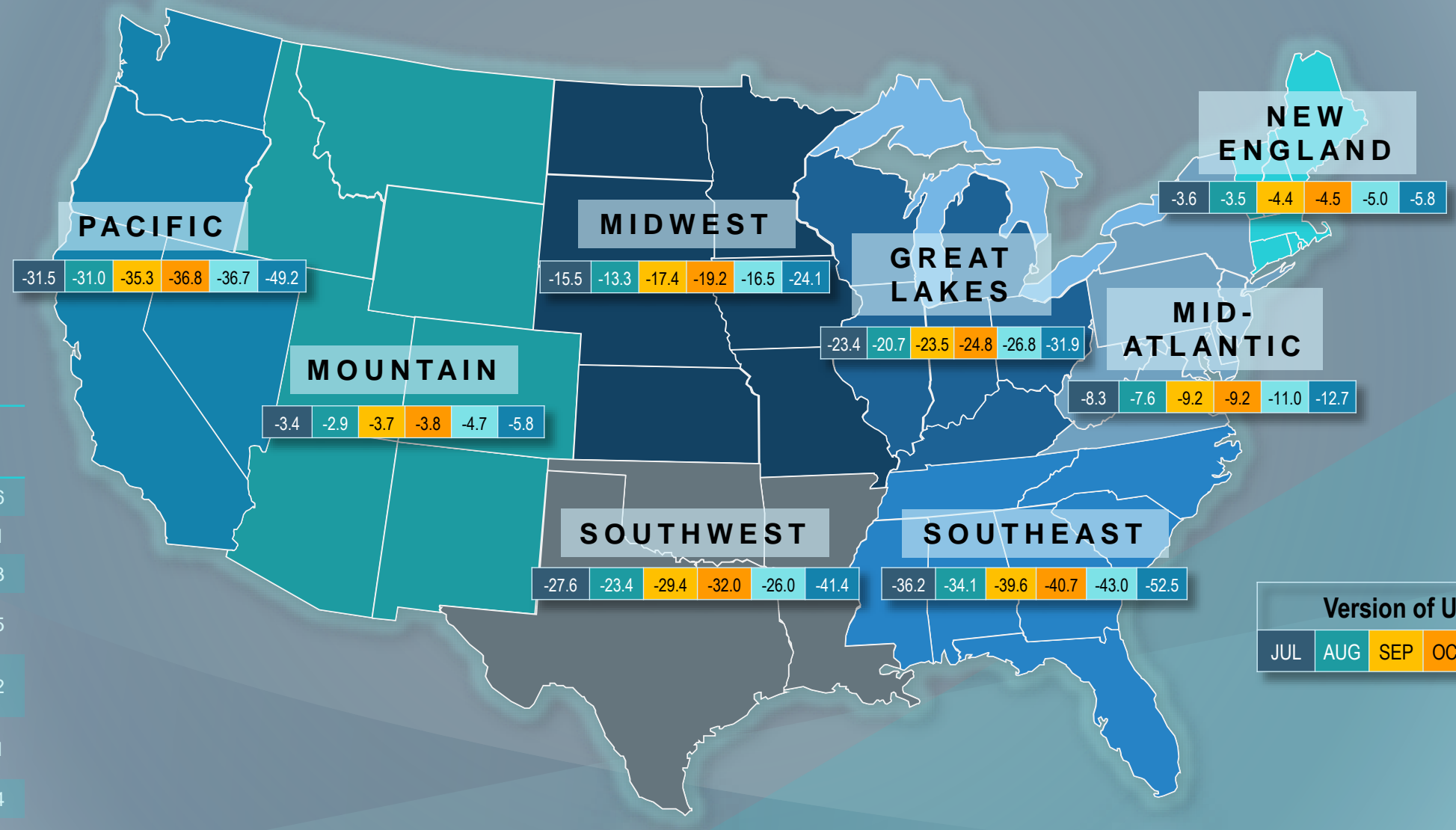
Pacific	6
Mountain	3
Midwest	1
Great Lakes	3
Mid-Atlantic	7
New England	1
Southwest	2
Southeast	6

Version of Update

JUL	AUG	SEP	OCT	NOV	DEC
-----	-----	-----	-----	-----	-----

Traffic Impact by U.S. Region – Domestic Throughput in Millions

- *Medium Hub Airports Only*



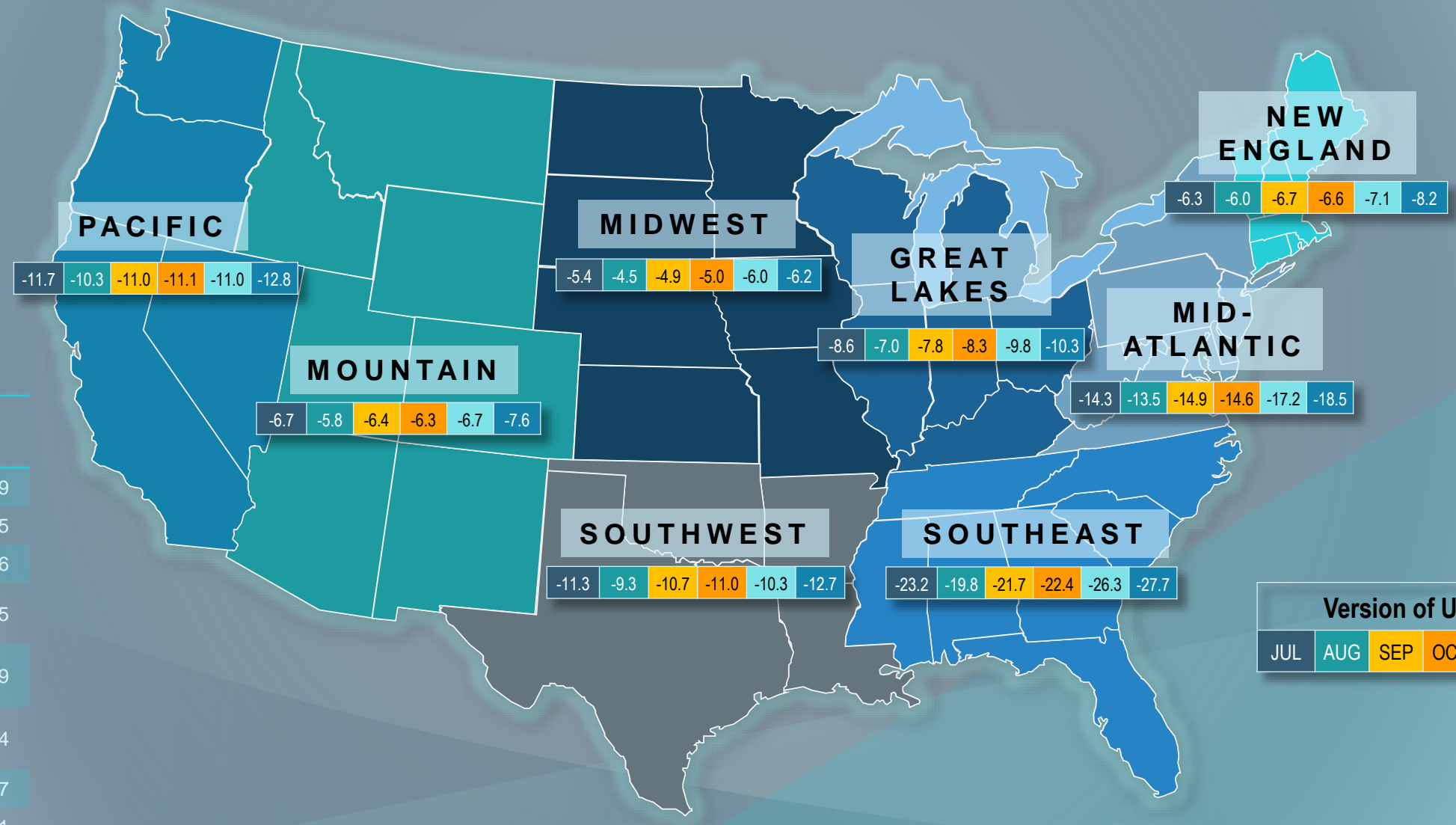
Number of Medium Hubs	
Pacific	6
Mountain	1
Midwest	3
Great Lakes	5
Mid-Atlantic	2
New England	1
Southwest	4
Southeast	7

Version of Update

JUL	AUG	SEP	OCT	NOV	DEC
-----	-----	-----	-----	-----	-----

Traffic Impact by U.S. Region – Domestic Throughput in Millions

- Small Hub Airports Only

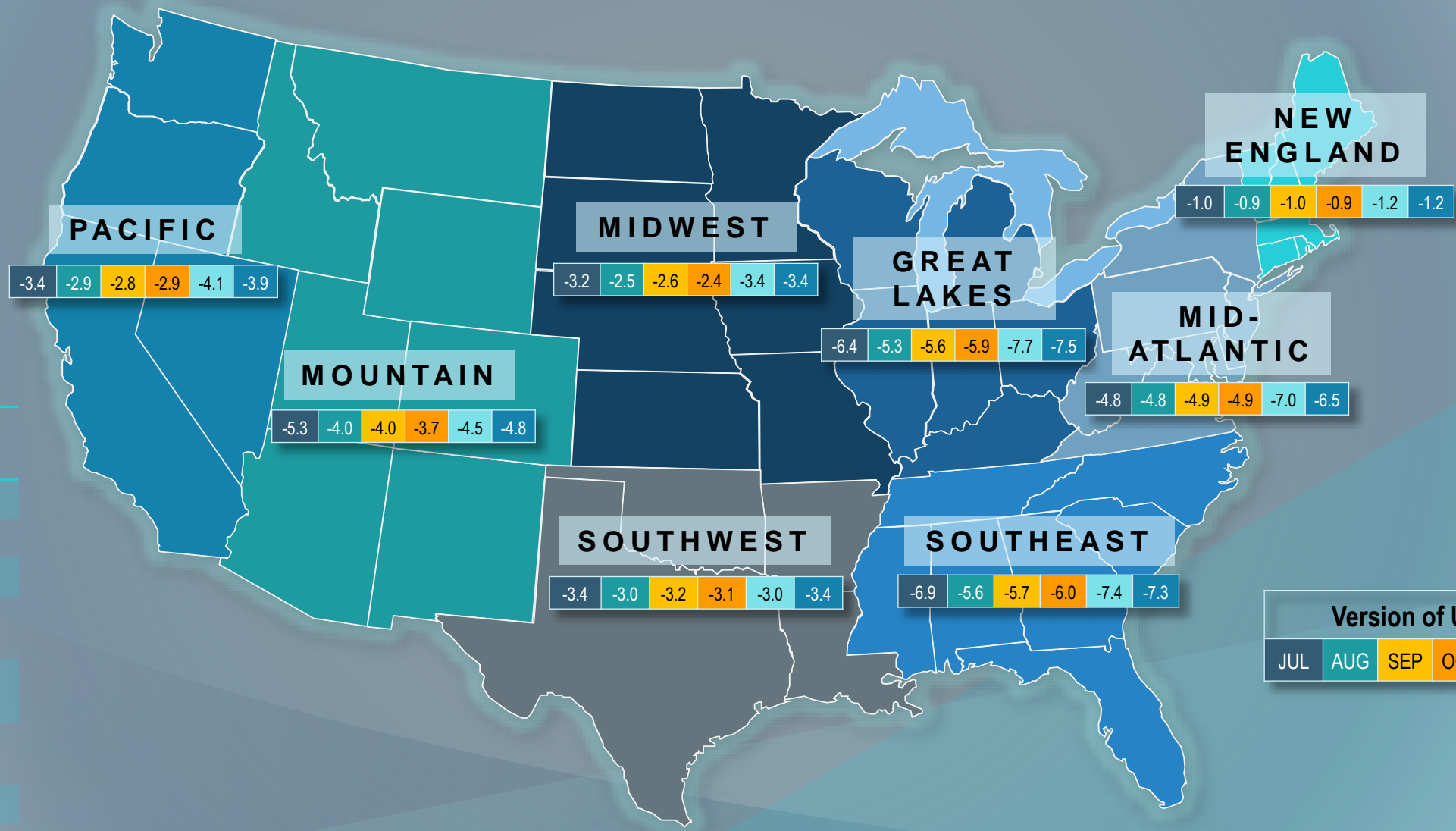


Number of Small Hubs	
Pacific	9
Mountain	5
Midwest	6
Great Lakes	5
Mid-Atlantic	9
New England	4
Southwest	7
Southeast	21

Version of Update					
JUL	AUG	SEP	OCT	NOV	DEC

Traffic Impact by U.S. Region – Domestic Throughput in Millions

- *Nonhub Airports Only*



Number of Non-Hubs	
Pacific	31
Mountain	59
Midwest	48
Great Lakes	40
Mid-Atlantic	38
New England	18
Southwest	25
Southeast	41

Version of Update					
JUL	AUG	SEP	OCT	NOV	DEC

Section 4: The Recovery of U.S. - International Travel



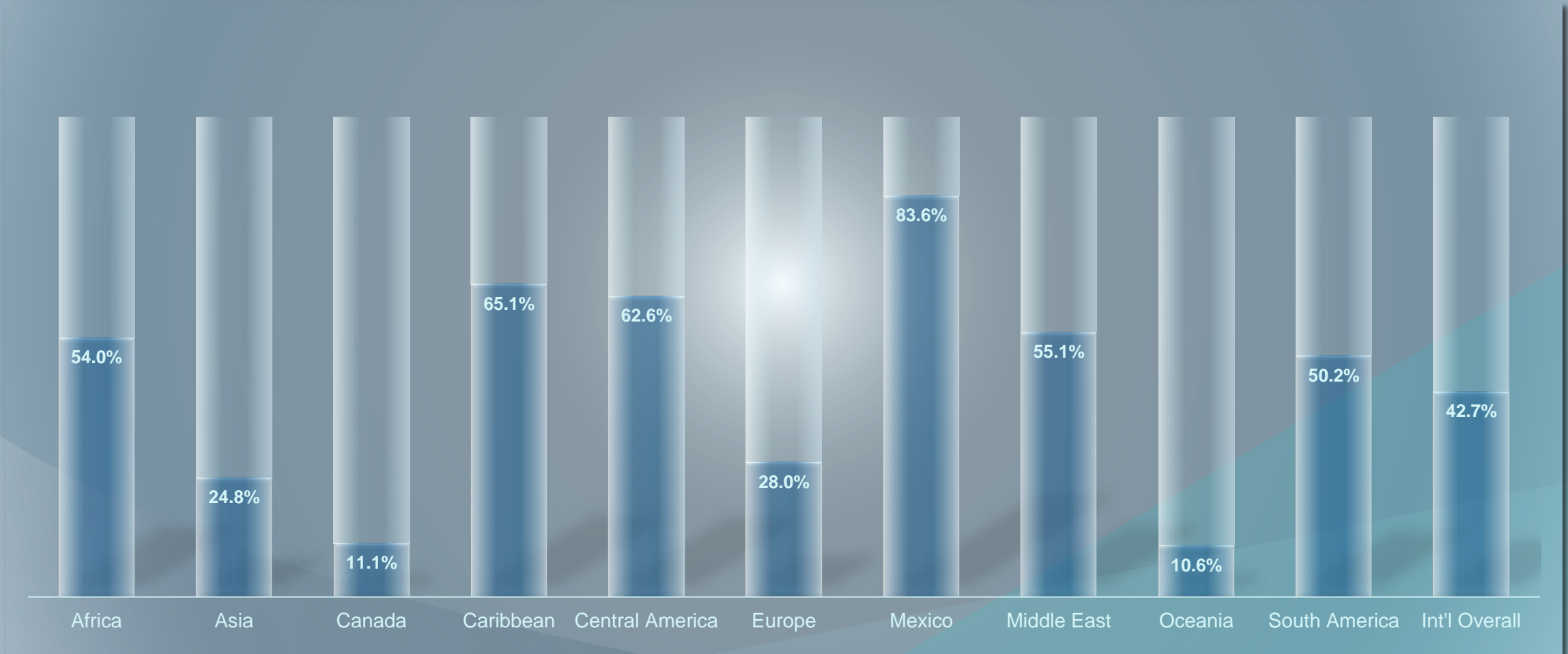
The Recovery of U.S. – International Traffic

- **Given the many exogenous factors having an impact on international commercial airline service, this section has been developed to provide context for the reader.**
- Given the restrictions in place as well as increased COVID cases, Europe capacity in December 2020 is 28% of December 2019 capacity. Mexico, the Caribbean and Central America (note: many leisure-oriented destinations) have the highest percentage of December 2019 capacity flying in December 2020 (page 116).
- Secondary international gateways are realizing the largest impacts on their 2019 traffic levels (page 117).
- United, American and Delta will suffer the most significant losses of international traffic as of December 2020 (page 118).
- While U.S. international traffic has grown faster than domestic traffic since the end of the Great Recession, its relationship to domestic traffic is relatively constant (pages 119 and 120).
- Any U.S. – International traffic recovery will lag the domestic recovery. The historic relationship of international traffic to domestic traffic forecast is provided for historical context (page 123).



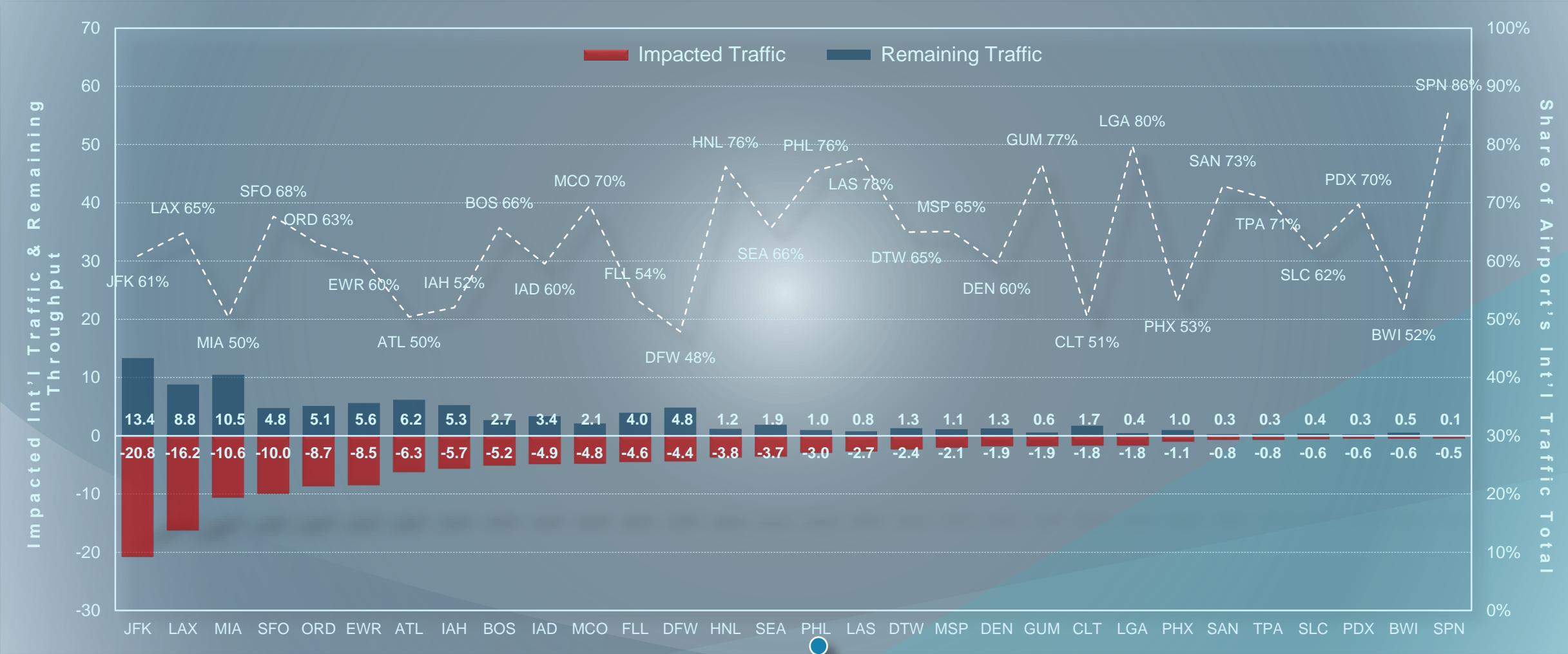
Carriers Start To Add More International Flights Back in the System

- 2020 International Departures As % of 2019 Based on *December Schedules* at U.S. Gateways



Large Hubs: Impact on International Throughput

- Annualized in Millions and As a Percentage of the Airport's International Total



Reflects actual traffic for January – May 2020. June – December 2020 estimated based on December 2020 v. December 2019 published schedules.

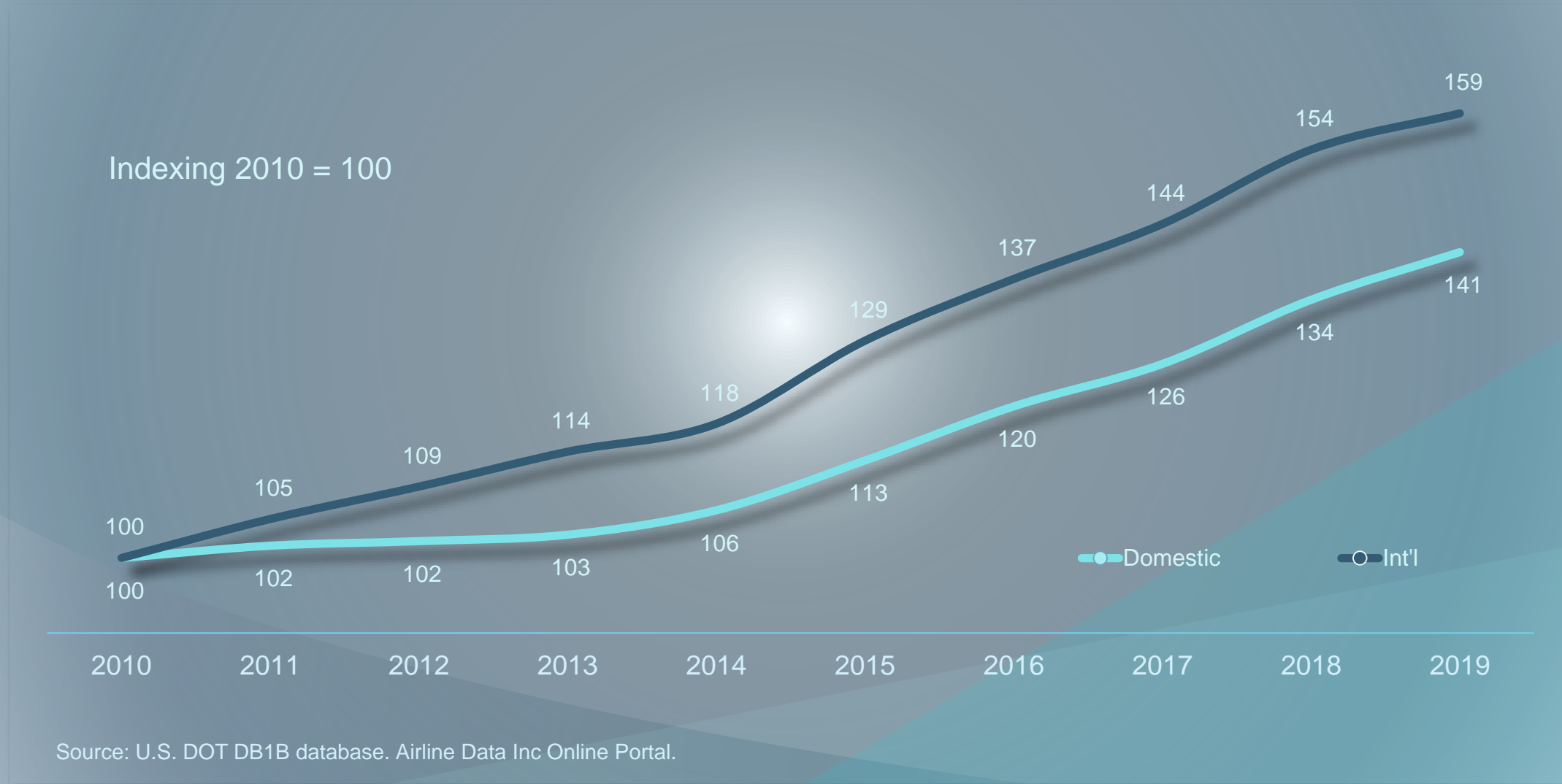
Top 15 Carriers Ranked by Overall International Traffic Impact at U.S. Gateway Airports

- Annualized in Millions



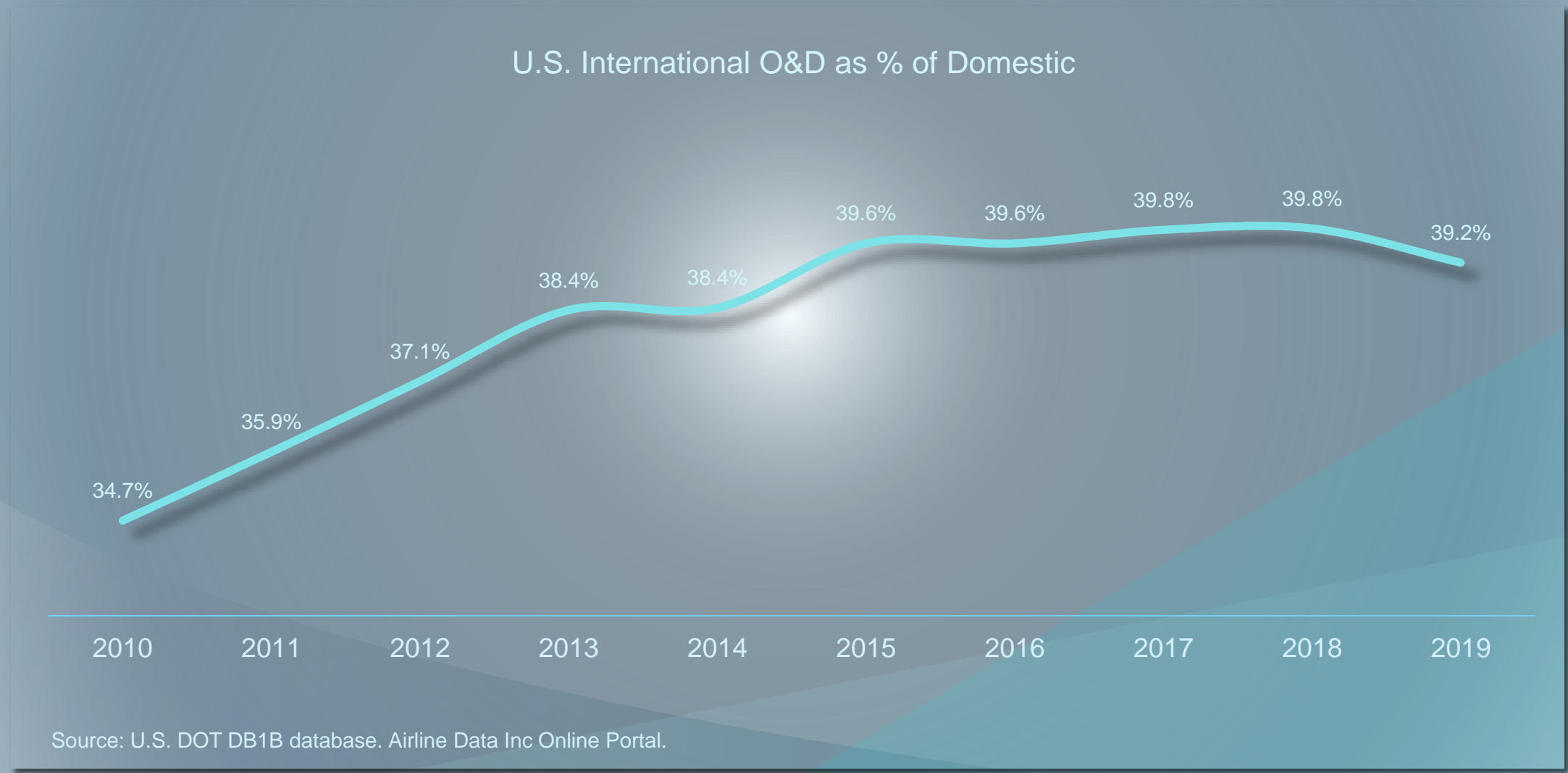
Reflects actual traffic for January – May 2020. June – December 2020 estimated based on December 2020 v. December 2019 published schedules.

Since the Last Recession, U.S. - International Traffic Has Grown at A Faster Pace When Compared to Domestic Traffic



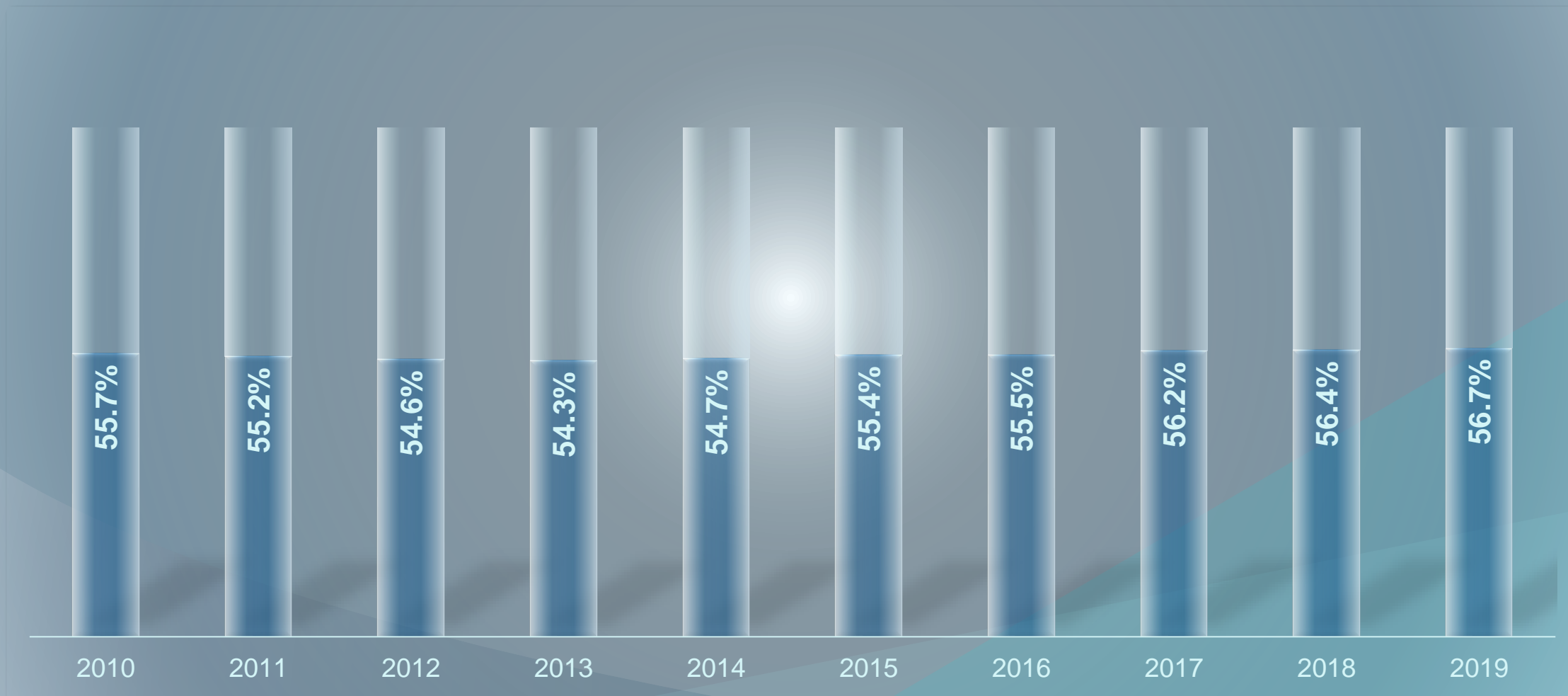
Source: U.S. DOT DB1B database. Airline Data Inc Online Portal.

The International: Domestic Traffic Relationship Has Remained Stable Since 2015

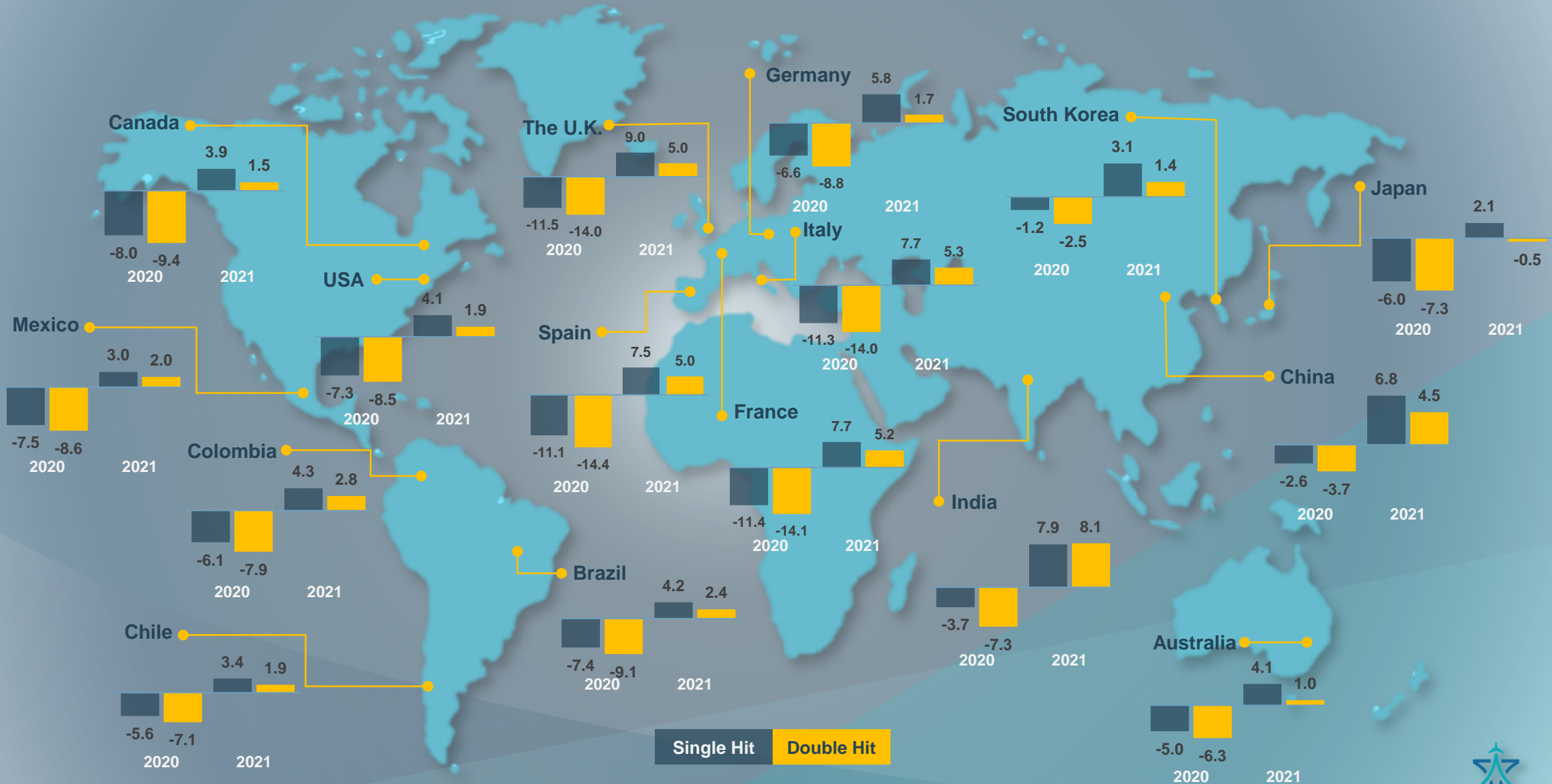


Source: U.S. DOT DB1B database. Airline Data Inc Online Portal.

The Share of U.S. Originated Travelers is Trending Up...

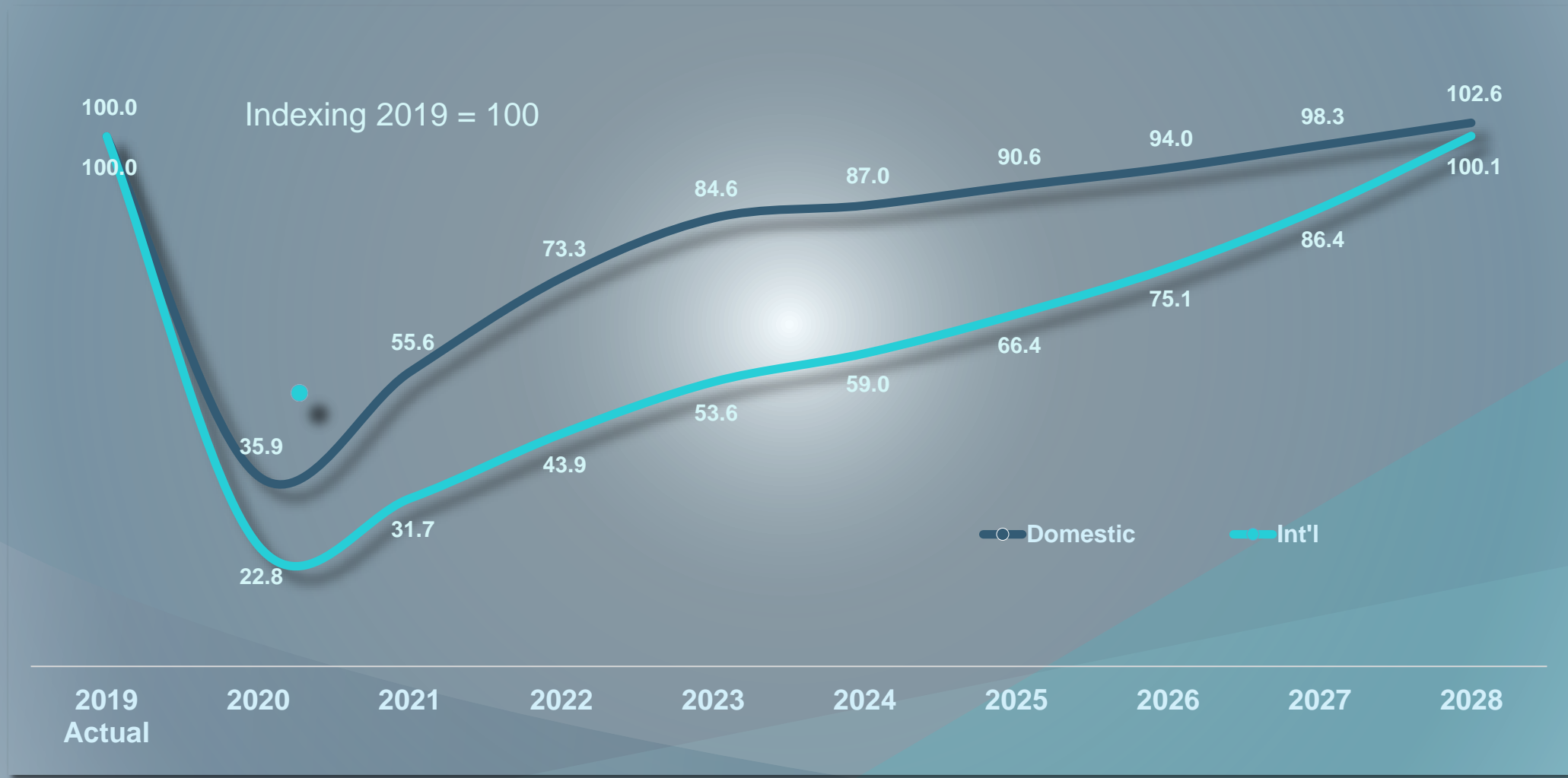


Select Country Forecast of Real GDP (%) Within the Region



Source: Organization for Economic Cooperation and Development.

U.S. International Traffic Recovery Projection Assuming That The Historical Relationship Remains Intact



Concluding Thoughts

- History can be a guide even if there is no historical precedent for a pandemic-induced recession. Combining the demand shock of 9/11, the length of the economic recovery from the Great Recession and the thought that the airlines will be judicious on deploying capacity until balance sheet repair has begun has been a guide.
- The interdependencies of international traffic and domestic service cannot be overstated. International passengers account for 15% of the passengers that fly on domestic flights to and from international gateways. Therefore, any significant buildout of the domestic system will require international service to return to some level of normalcy.
- While not all individual airlines will be significantly smaller, the network carriers (American, Delta and United) will be. Therefore, certain hubs will be smaller and not all hubs may return. Smaller hubs mean less connectivity. Less connectivity likely means less service to small communities.



**Section 5:
Like Post-9/11, The Scope and Scale
of Short-haul Flying Will Likely be
Reconsidered**

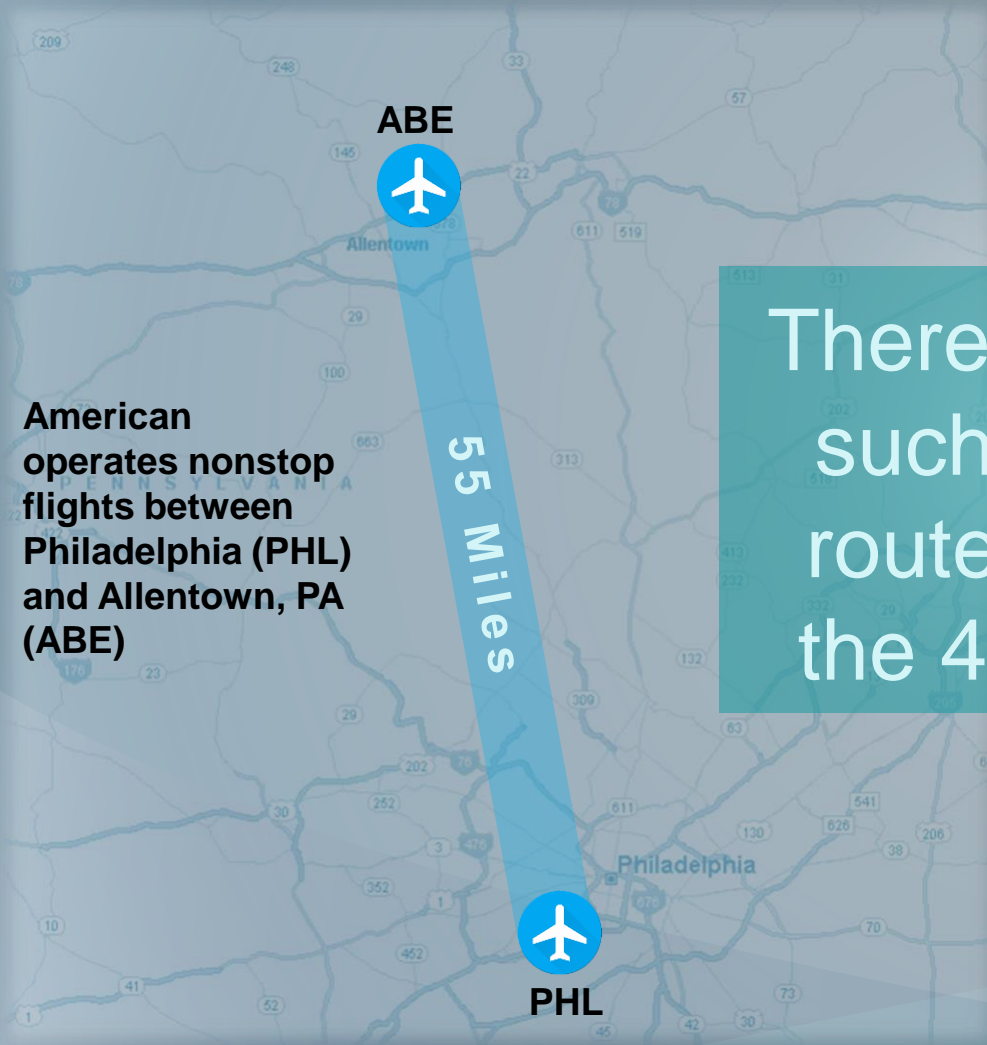


The Pandemic Will Potentially Cause Airlines To Make Decisions About Operating Shorter-Haul Flights...

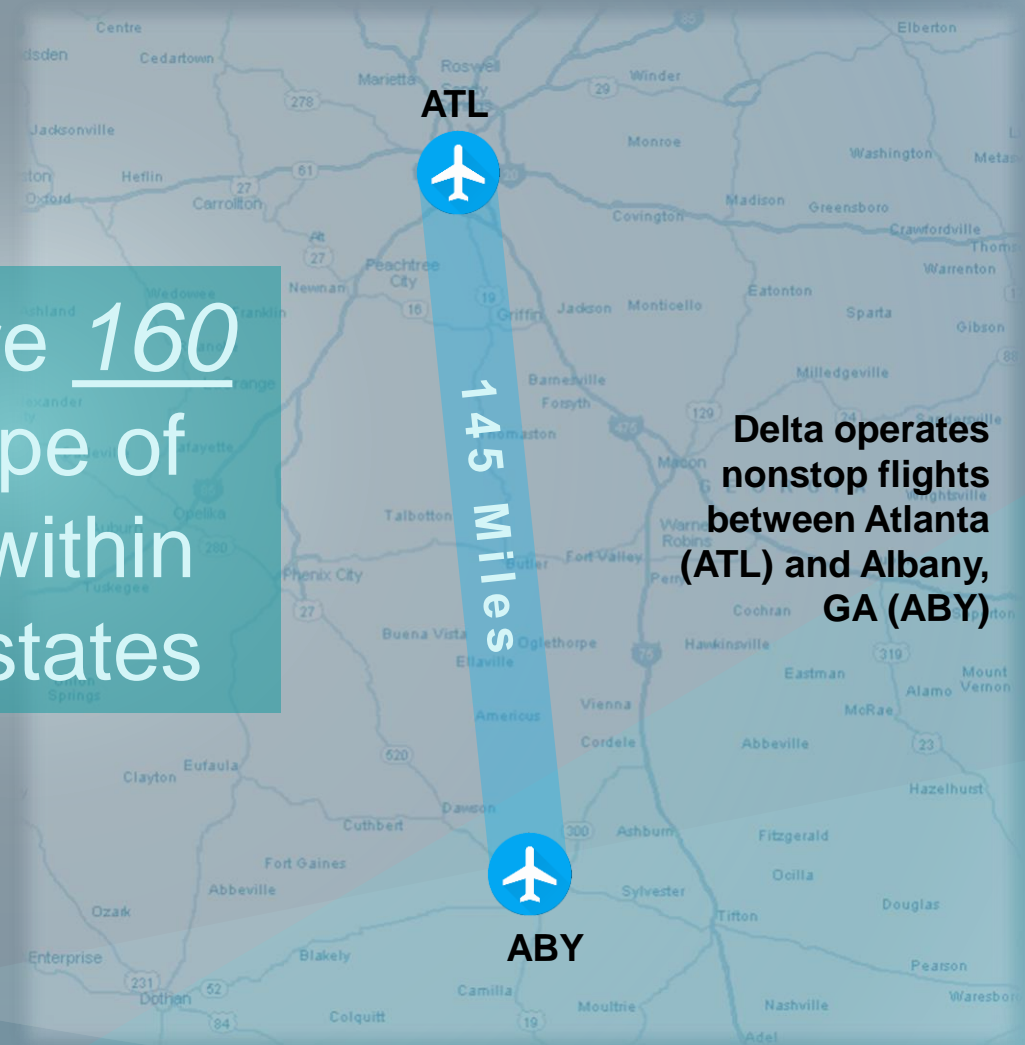
... Measuring The Impact If Carriers Stop Operating Shorter-haul Flights If A Small Community Airport Is 180 Miles Or Less From A Large Or Medium Hub Airport



Shorter-Haul Route Examples: Proxy's For Routes That Could Be Considered For Elimination



American operates nonstop flights between Philadelphia (PHL) and Allentown, PA (ABE)



Delta operates nonstop flights between Atlanta (ATL) and Albany, GA (ABY)

There are 160 such type of routes within the 48-states

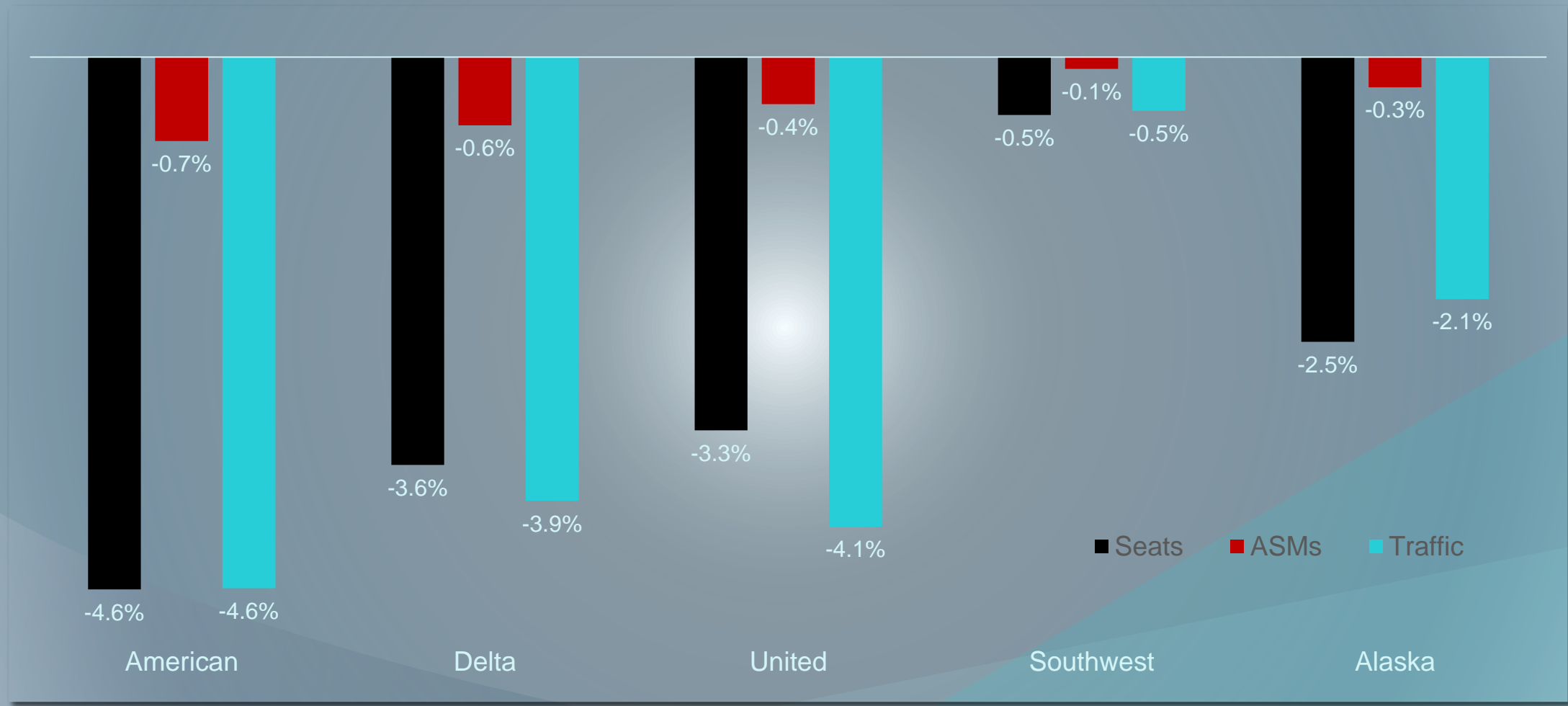


A Likely Scenario

- The return of the Post-9/11 “Hassle Factor”. (Airports are mitigating this potential)
- While not included in our hub impact assessment due to announced fleet changes, there are over 160 routes/airport pairs being served today that lie within a reasonable (180 mile) driving distance to a large or medium hub airport.
- In the Great Recession, the network carriers reduced frequencies to small community airports nearly 40%. Frequency reductions below three per day leave a route vulnerable to financial sustainability.
- Delta and United have talked of parking some of their small regional equipment. American has teetered. As the numbers dwindle in terms of small regional jets being operated by the network carriers, it is believed that small markets that lie in the shadow of a larger airport, or within the proximity of another airport served by the same carrier, a service will be deemed redundant.
- The impact on carrier hubs/focus cities is analyzed should this prove to be a strategy undertaken by the network carriers.



Impact on Carrier's Domestic Operations and Traffic* Should Short-Haul Flying as Defined Be Considered Redundant



* Include Domestic Portion of International Journey (DPIJ) Traffic.

Section 6: Traffic and Capacity Recovery Relative to GDP and Consumer Confidence In The Past 2 Recessions

**Portions of History Were
Influential In the Forecast**



Post Deregulation Pandemics And Recessions

- The U.S. airline industry has suffered the economic consequences of pandemics
 - 1981: HIV/AIDS
 - 2003: SARS
 - 2019: COVID - 19
- The U.S. airline industry has suffered the economic consequences of recessions
 - January 1980 – July 1980: Duration, 6 months; GDP decline, 1.1%; Unemployment rate, 7.8%
 - July 1981 – November 1982: Duration, 16 months; GDP decline, 3.6%; Unemployment rate, 10.8%
 - July 1990 – March 1991: Duration, 8 months; GDP decline, 1.5%; Unemployment rate, 6.8%
 - March 2001 – November 2001: Duration, 8 months; GDP decline, 0.3%; Unemployment rate, 5.5%
 - December 2007 – June 2009: Duration, 19 months; GDP decline, 4.3%; Unemployment rate, 9.5%



Since The End Of The Great Recession In June 2009

▪ The U.S. Economy

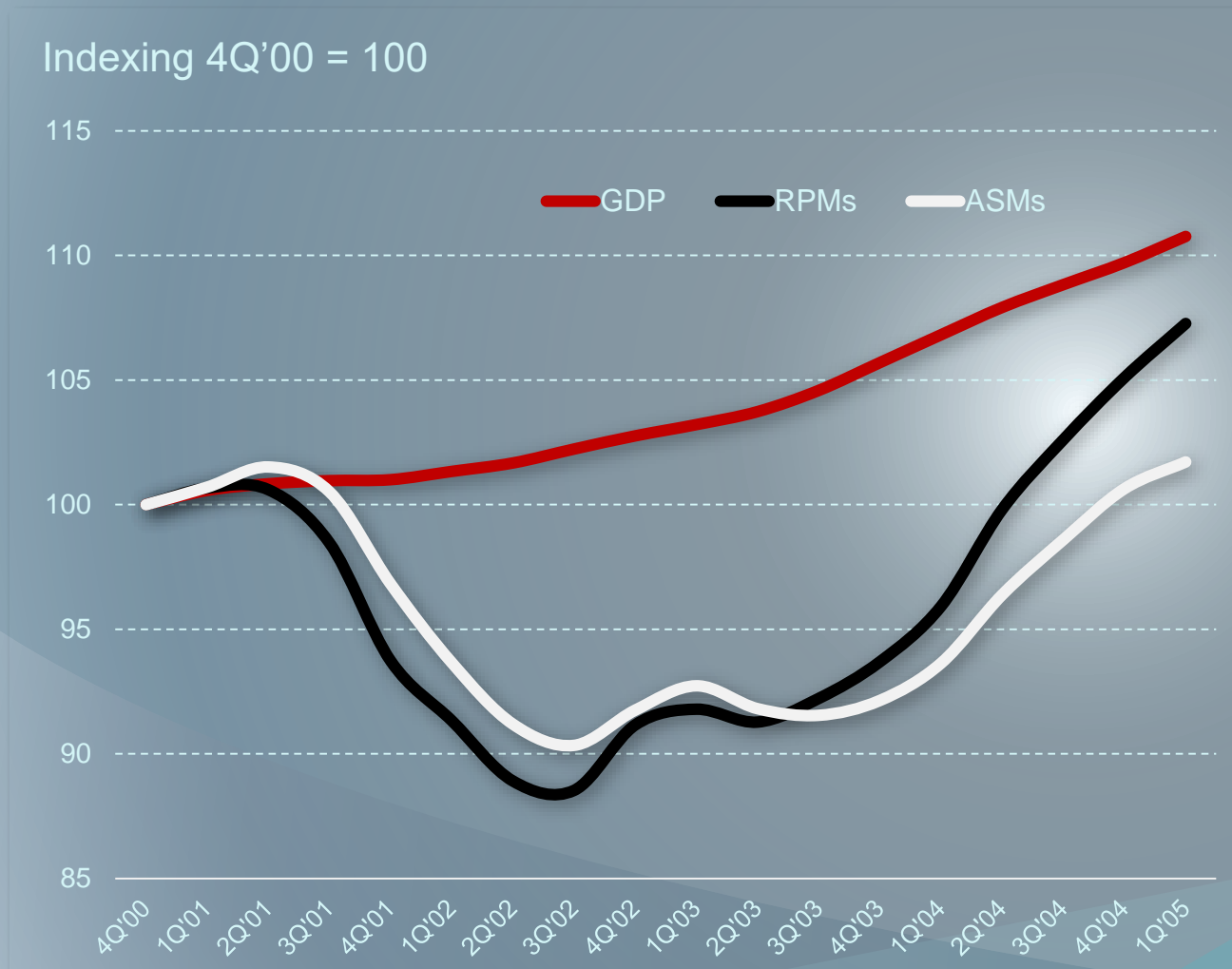
- U.S. Real Gross Domestic Product (SAAR) had grown from \$15.134tn to \$19.222tn or 27%
- U.S. Unemployment Rate had decreased from 9.5% to 3.5% in February 2020
- U.S. Nonfarm Employment increased from 131.0M to 152.5M
- Real Personal Consumption Expenditures (SAAR) increased from \$10.489tn to \$13.414tn

▪ The U.S. Airline Industry

- Between the 3rd quarter of 2009 - 3rd quarter of 2019, the industry earned \$113.4B pre-tax profits
- The industry grew from 383,666 full time equivalent employees to 449,991 by the 3rd quarter of 2019
- Annualized compensation increased from \$82,007 to \$128,292 by the third quarter of 2019
- Traffic in terms of Revenue Passenger Miles (RPMs) increased by 34.3% to 1.040tn



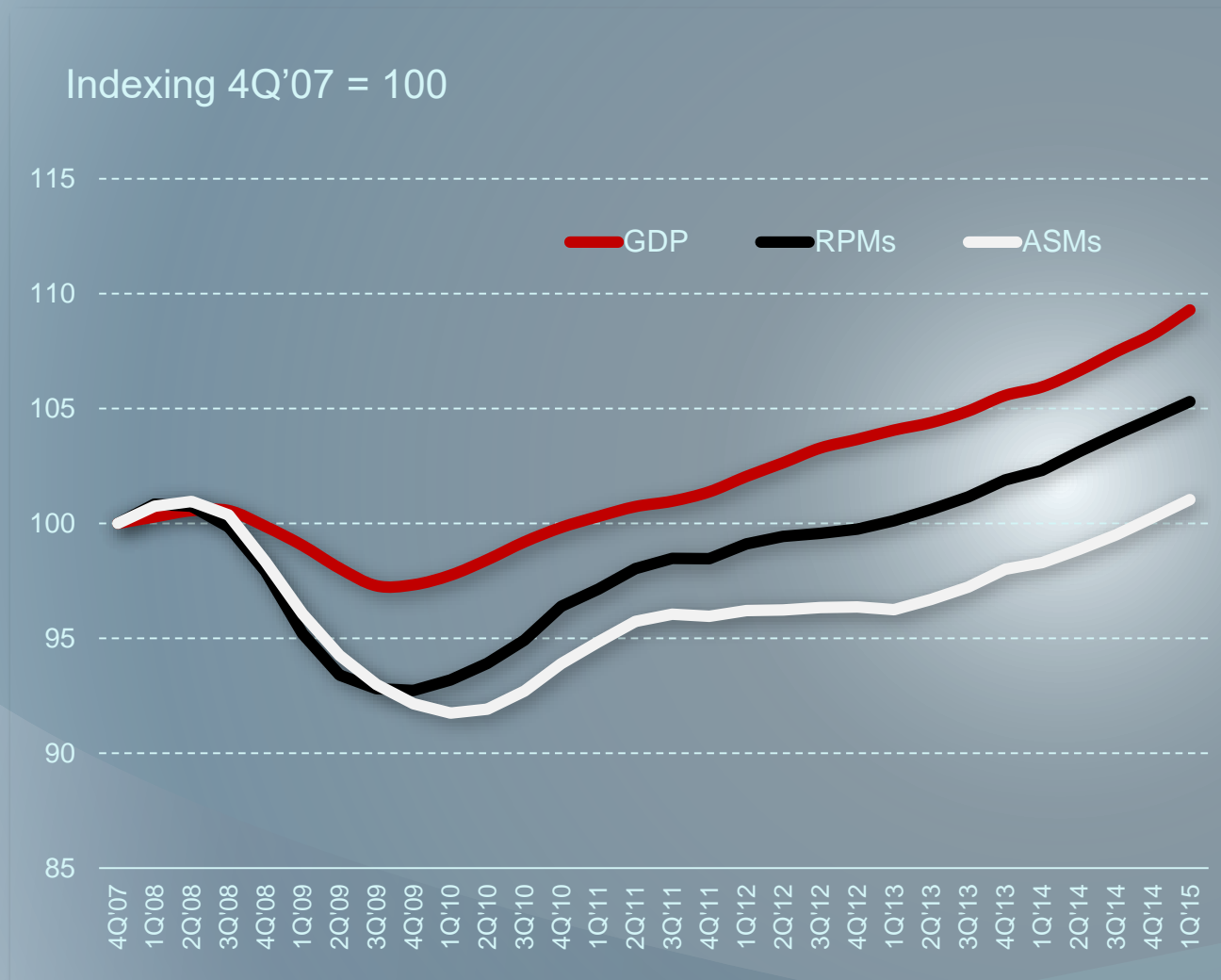
9/11 Recession: Gross Domestic Product, Traffic and Capacity



- By historic measures, the recession was very mild
- This period in U.S. airline history was unique:
 - 9/11 was a shock
 - 9/11 most impacted international travel
 - The Low Cost Carriers (LCCs) began to grow rapidly exploiting the increasing cost structures of the network carriers. Domestic traffic was being stimulated as a result.
 - The internet was becoming the distribution vehicle for air travel making pricing transparent further stimulating air travel
 - US Airways filed for bankruptcy twice and United filed for Chapter 11
- Conclusion: slope of the traffic/capacity recovery impacted by events other than the economy



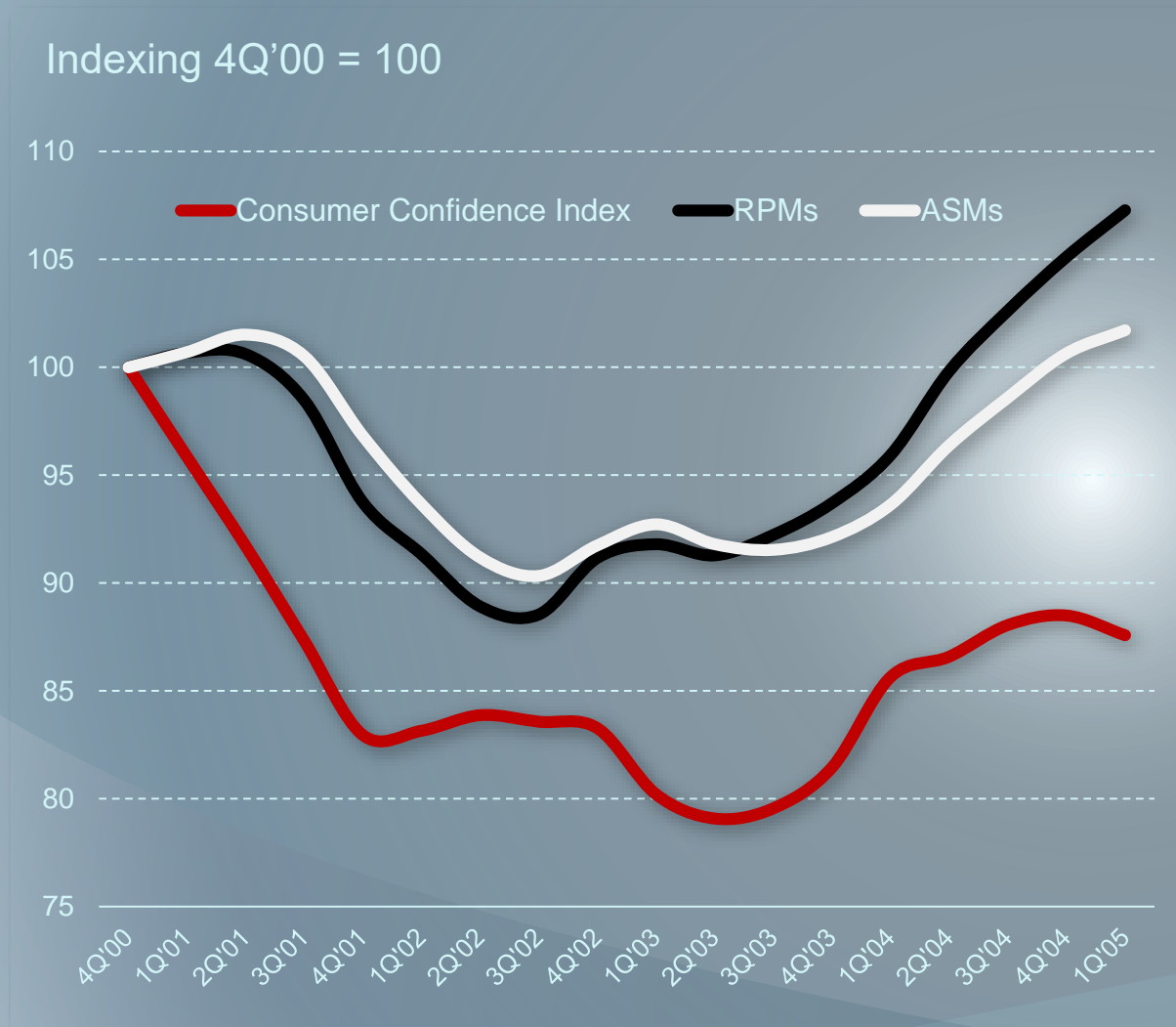
Great Recession: Gross Domestic Product, Traffic and Capacity



- By historic measures, a more textbook recession
- The decline in traffic in 2008 was partially influenced by an unprecedented increase in jet fuel prices and not just the economy
- The recession was more a financial event as large banking institutions were being restructured
- There were two carrier capacity deployment strategies at play:
 - Carriers were finding international flying to be more lucrative and were diversifying away from domestic flying; and
 - As the recession waned, carriers were much more stringent on deploying capacity in the US domestic market despite the fact that traffic was growing
- It is deemed that the carrier strategies employed during this period will be the rule in the COVID recovery as well.



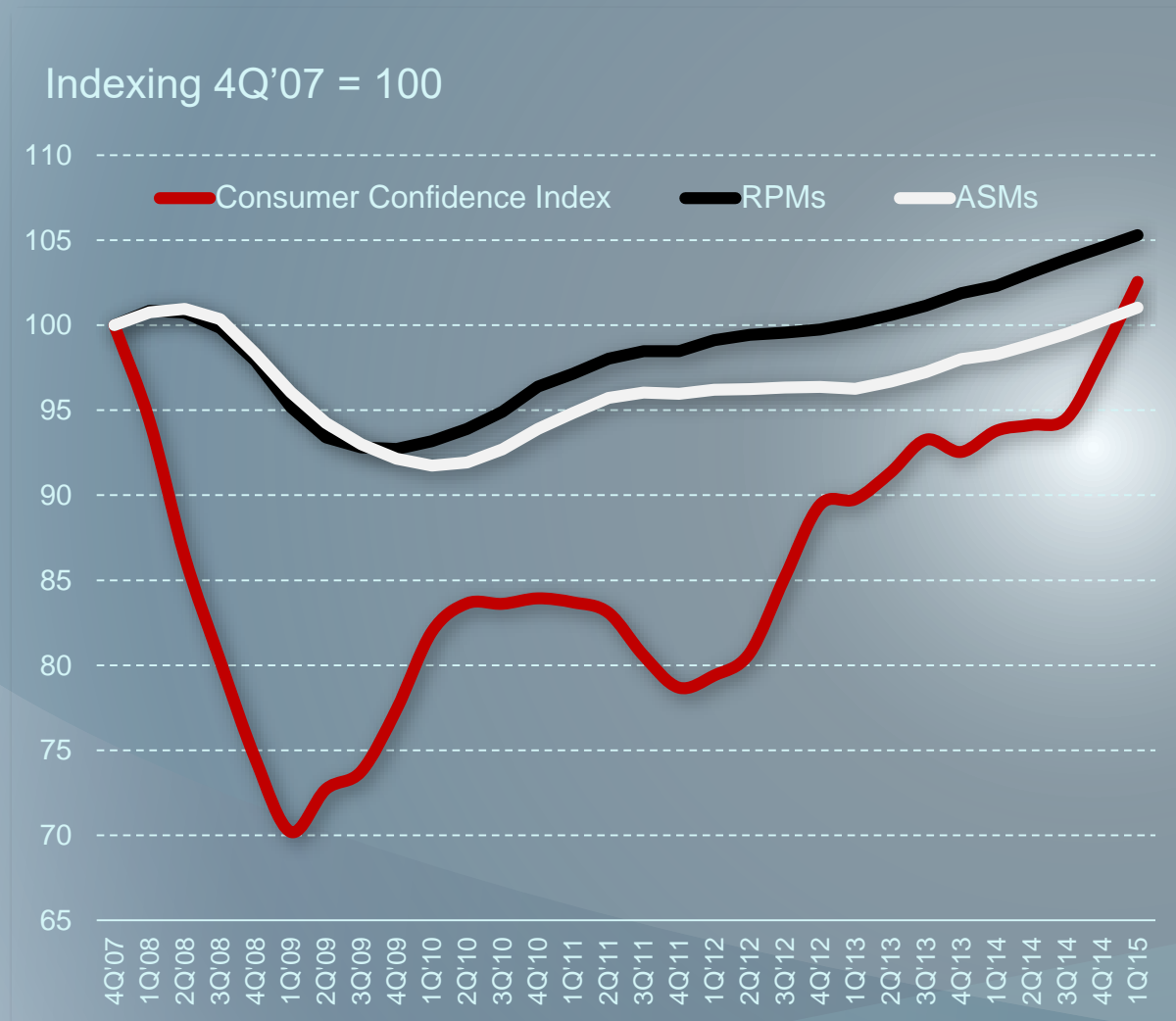
9/11 Recession: Consumer Confidence, Traffic and Capacity



- The shock of 9/11 to consumer confidence was swift just as the shock to consumer confidence is with COVID-19
- The recovery in international demand lagged that of domestic demand
- Domestic demand was being influenced by the growth of the LCCs and the low fares they were bringing to the marketplace.
- Domestic traffic, or demand, had fully recovered to year-end 2000 levels by mid-2004.
- Capacity growth recovered to year-end 2000 levels by year-end 2004.
- While consumer confidence is an important indicator, in the 9/11 instance and particularly in the domestic market, other factors were more prevalent in the recovery of demand.

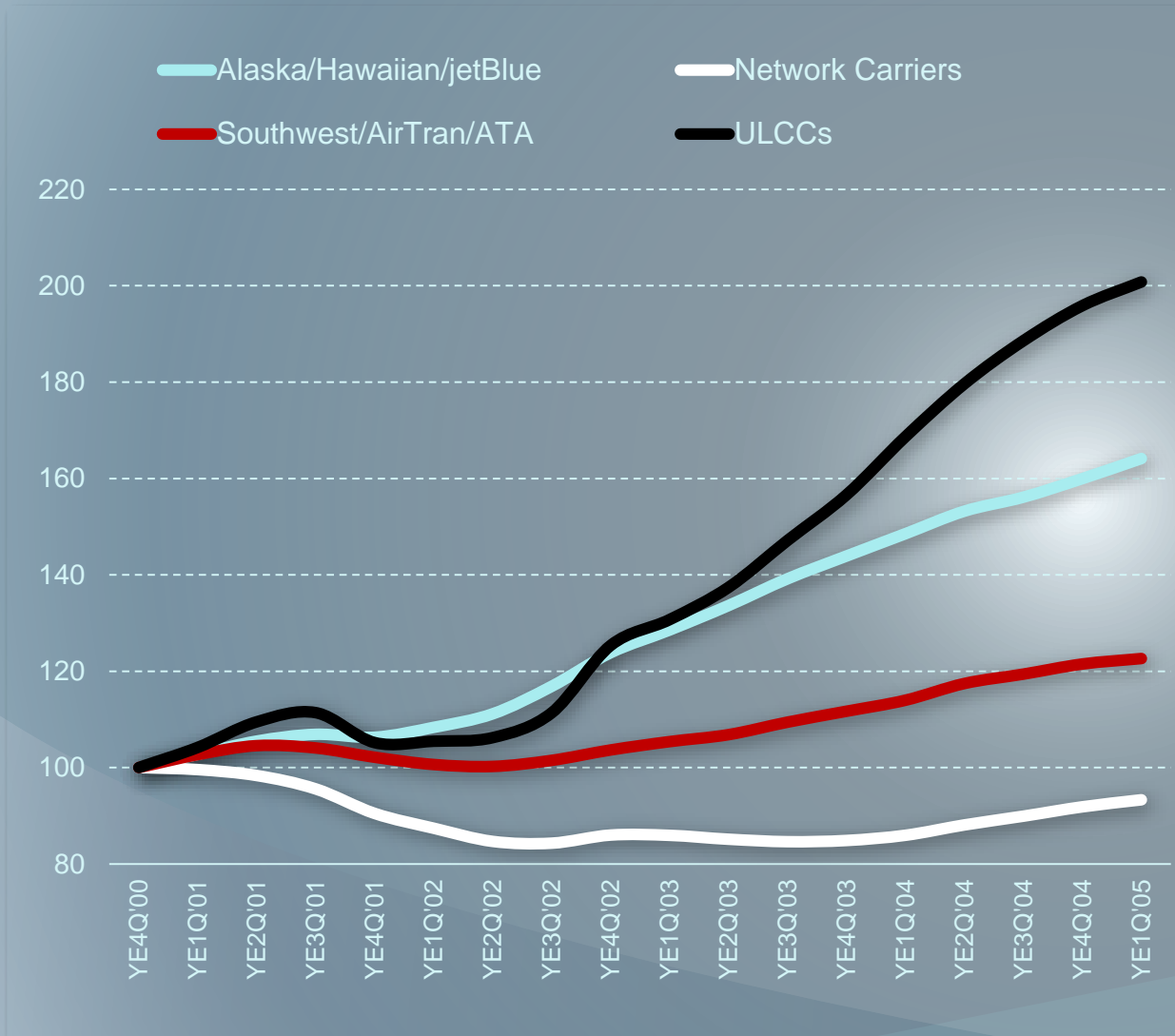


Great Recession: Consumer Confidence, Traffic And Capacity



- The initial 30 point drop in consumer confidence coincided with each the rapid rise in the cost of jet fuel as well as an economy in recession.
- There is a view, that is not shared in this work, that the domestic airline industry traffic recovery took until 2012 to complete and domestic industry capacity did not fully return until late 2014.
- Again, carrier capacity deployment strategies were prevalent. Despite the fact that the economy was growing again and that traffic was growing faster than capacity, the industry's 4 largest carriers were adding capacity at a slower rate.
- It is supposed that any COVID-19 recovery will be a recovery based on the air travel consumer's confidence.

9/11 Recession: How Traffic Recovered By Carrier Type

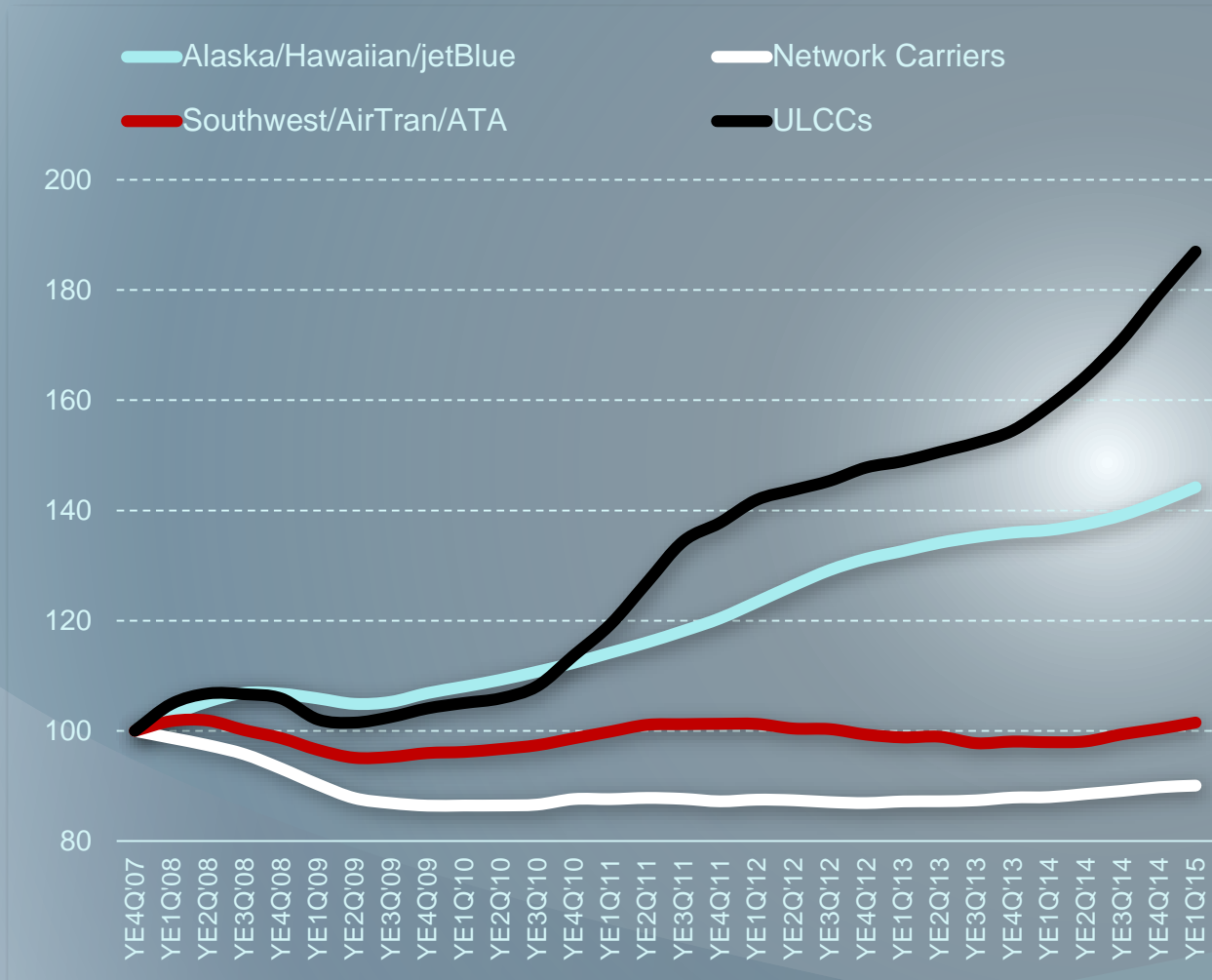


Note: Network Carriers include Delta/Northwest, American/US Airways/America West/TWA, and United/Continental; ULCCs include Frontier, Spirit, and Allegiant.

- Network Carriers:** The network carriers were the group that was hobbled the most by 9/11. Not only were domestic markets impacted, but international markets were as well. Weak balance sheets and high cost structures were prevalent.
- Southwest:** Southwest took full advantage of the network carrier's weakness and grew aggressively. Whereas transcon markets were critical to the network carriers, Southwest and others added significant new flying in those markets.
- Hybrids:** Much of the growth can be attributed to Alaska and jetBlue. jetBlue was an upstart at the time and Alaska was in the early stages of increasing the scope of its Seattle hub and building presence in the California Corridor.
- ULCCs:** The ULCCs were also in their infancy and took full advantage of the environment to grow aggressively.



Great Recession: How Traffic Recovered By Carrier Type



- Network Carriers:** Two significant factors caused the network carriers to grow slowly following the Great Recession: 1) the group was growing their international operations at the expense of domestic service; and 2) Capacity Discipline became the strategy between 2010 – 2014 whereby the group grew capacity at rates less than the economy.
- Southwest:** Unlike the 9/11 recession, Southwest also adhered to the capacity discipline strategy over the period.
- Hybrids:** The group continued to take advantage of the Big 4 carriers and build presence in markets important to their network focus.
- ULCCs:** Spirit and Frontier continued to grow aggressively at the expense of the Big 4. Secondary leisure destinations were being established by Allegiant.

Note: Network Carriers include Delta/Northwest, American/US Airways/America West/TWA, and United/Continental; ULCCs include Frontier, Spirit, and Allegiant.





SWELBAR·ZHONG
CONSULTANCY

William S. Swelbar
Swelbar@Swelbar-ZhongAir.com

Albert Zhong
Zhong@Swelbar-ZhongAir.com

C +1-703-625-1130

www.Swelbar-ZhongAir.com