

**Statement of
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***The U.S. Payroll Support Program Successfully Met Critical Tests of Policy Effectiveness
December 13, 2021***

I thank the Committee for the opportunity to provide my thoughts on the federal pandemic Payroll Support Program (PSP) to protect the airline industry workforce, support the continuity of safe and essential travel, and ensure the industry's ability to remain viable to meet future air travel demand.

I understand that industry representatives have been invited to provide evidence on specific impacts on the industry's workforce and recent operational issues, hence I do not address these issues. I would like to provide comments on how the U.S. PSP compares to what other nations did. International comparisons can be insightful as different nations pursued different types of policies with different consequences.

In brief, it is my opinion, based on 40 years' experience with aviation economics (airline, airport, air navigation and manufacturing), that the U.S. PSP and overall policy response to the unprecedented severe impact of the COVID-19 crisis was exemplary, and I would suggest "best in class". While any policy dealing with a complex industry might not be perfect, the U.S. response met the standards of being:

- **Immediate;**
- **Certain, and therefore confidence building;**
- **Fair;**
- **Transparent;**
- **Focused on supporting economic and social connectivity and workforce retention;**
- **Comprehensive in coverage of the aviation supply chain;**
- **Grounded in retaining competition and market forces as the primary driver of sector activities; and**
- **Designed to position the U.S. aviation sector for recovery and for competing globally**

These criteria are appropriate for assessing the U.S. policy response to the COVID-19 crisis. Several nations have done well on one or more of the criteria, but the U.S. is unique in achieving top marks in every category. Especially compared to many other nations, the PSP will enable the aviation sector to meet the current and future economic and social connectivity needs of Americans. The industry will also be positioned to compete globally and weather future challenges.

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² The views I express in this report are those of the author alone, and do not necessarily represent opinions of InterVISTAS Consulting Inc.

I briefly look at each criterion – but first, I wish to discuss the importance of aviation for economic, social, medical, disaster response and other connectivity. This is why a transition support program³ for aviation was warranted.

Importance of Aviation

Developing an aviation specific support program like PSP can only be justified if the industry is of broad importance to the nation. Aviation is a critical infrastructure sector, not merely for the economy but for social purposes as well.

- **1.3 million direct on-airport jobs and above average wages.**

Many organizations have put forward measures of the economic impact of aviation, both in terms of the number of direct jobs in the sector and its direct gross domestic product. I focus on job impacts, since preserving jobs were the key focus of the PSP. The U.S. Bureau of Labor Statistics reports that in December 2019 there were 750,000 direct jobs at U.S. airlines. Airports Council International – North America reports that in 2017, including airline, airport, ground support and other jobs, there were more than 1.3 million U.S. direct jobs on commercial airports. On average, aviation direct jobs pay above average wages.

- **Jobs in other sectors depend on aviation connectivity.**

The economic impact of aviation is larger than on-airport jobs. Many U.S. economic sectors depend on aviation's connectivity. The ACI study identified roughly 4.4 million *direct* U.S. jobs dependent on visitors that use airports and spend \$250 billion. These visitor-based jobs include not only tourism jobs, but jobs dependent on individuals travelling for business, visiting friends and relatives, education, medical care, disaster support, etc. The wholesale and retail distribution sectors increasingly are dependent on rapid resupply as supply chains are challenged and the emerging e-commerce sector makes heavy use of air cargo.

Economists also identify indirect and induced jobs in other economic sectors dependent on the spending of the airlines and airports. These are the “multiplier” impacts. While direct jobs are straightforward to measure (as these individuals are employed directly by airlines, airports, etc.), multiplier effects have to be “modelled” and the measures can vary, with some economists being skeptical of any specific measure. I do not put forward specific multiplier impacts but note that a) in general they more than double the number of jobs linked to aviation, b) two Nobel prizes have been awarded for development of the data and methodology for multiplier impacts, and c) the

³ It is important to distinguish different categories of support for businesses. *Bailouts* are payments to business whose business model and/or management has failed. That is not the case with U.S. airlines, airports and other aviation supply chain members who began to incur massive losses from the pandemic and government imposed travel restrictions. *Compensation* is payment to businesses to offset losses incurred by the business due to government decisions. *Transition support* are payments to businesses that are well managed and pursuing economically efficient business models, but were subjected to an unanticipated event that threatens their ability to continue to serve the market. More on these distinctions can be found in my report titled “Observations Regarding the Economics of Enterprise Bailouts,” available at <https://www.intervistas.com/observations-regarding-the-economics-of-enterprise-bailouts/>

COVID-19 economic experience should make clear to everyone that when times are bad, multiplier effects are genuine – as each sector of the economy weakened, their suppliers suffered job losses of their own – as recovery begins, jobs grow in support sectors.

It's not just economics: Social, medical, disaster response, education as well as business depend on aviation connectivity.

While the aviation industry has tended to focus on its economic importance, there are other equally or more important impacts:

- *Remote and isolated communities.*
Commercial and general/business aviation provide essential connectivity to remote and isolated communities. These communities depend on aviation for nutrition, medical care, education, and social services, as well as selling products and services to the national and global economy.⁴
- *Medical connectivity.*
Commercial and private aviation transport patients (and their families), medical practitioners, essential maintenance technicians and essential medicines, personal protective equipment, and other supplies, etc.
- *Education connectivity:*
Air transport supports the movement of students and instructors. In person human interaction is increasingly being found to be essential to knowledge exchange and expansion.⁵
- *Disaster response.*
Both commercial and general aviation provide the immediate connectivity of supplies, rescue and medical personnel and medevac when disaster strikes.
- *The pick-up truck of remote locations.*
Aviation is a critical element of many businesses in remote regions. Helicopters play critical roles for electric power and pipeline systems. Many sectors of agriculture – including forestry management -- depend on fixed wing, helicopter and remote piloted aircraft. Business aviation moves technicians and parts for urgently needed repairs and installation, ...
- *Social connectivity.*
Saving the best for last, aviation is critical for social connectivity. This includes visiting friends and relatives, cultural experiences, the arts, and government administration. 100 to 150 years ago, maritime and rail transport were the nation builders. Today, aviation is what directly connects people.

⁴ See the recent OECD International Transportation Forum Report <https://www.itf-oecd.org/connecting-remote-communities>.

⁵ See for example: "New Harvard Research Identifies Business Travel as Driver of Economic Growth," August 2020, <https://growthlab.cid.harvard.edu/news/new-harvard-research-identifies-business-travel-driver-economic-growth>

Immediate

I now turn to my assessment of the policy. The COVID-19 crisis emerged suddenly. The first cases were found overseas in November 2019, and by the end of March 2020, the number of U.S. air passengers had declined by 90%, with the collapse contained in roughly a one-month period. (See Figure 1.) Unlike manufacturing sectors where unsold product can be placed in inventory (and financed) for later sale, aviation services are perishable and non-recoverable. In 2019, U.S. airlines spent roughly \$70 million *every day* on fuel, labor, aircraft, fees, and finance. Without incoming revenue from ticket sales and passenger activity, even those airlines (and airports) with strong cash positions would rapidly exhaust their financial resources.

What was more pressing was that aviation is a complex industry which has built an incredible safety knowledge base that is dependent on a highly trained and experienced workforce. Without some sort of financial support, in the face of a 90% collapse in demand, airlines would be compelled to lay off a large portion of their trained and experienced staff, and this indeed happened in many nations. Doing so immediately reduces national connectivity for economic, social, medical and other vital needs and undermines the ability to rapidly restore capacity.

The U.S. Congress reacted quickly to maintain both connectivity and to retain a vital workforce. There was no vacillation about the need to support aviation connectivity and its workforce. Few other nations in the world reacted as quickly. As a result, connectivity of their domestic and international air services fell precipitously. In contrast, the U.S. was able to retain an effective degree of connectivity and workforce continuity throughout the pandemic. No other nation responded as quickly with a broad aviation program focused on the goals of connectivity and workforce retention.

Certainty and Confidence

The U.S. Congress not only reacted immediately, but it also provided sufficient support to the entire aviation sector to provide certainty that national connectivity would be sustained. This provided confidence that employees could retain their skill sets in aviation and not need to migrate to other sectors. Some nations eventually provided support to their aviation industries, but without the immediate certainty and confidence that the U.S. achieved. For example, Canada treated aviation like any other economic sector and did not develop an aviation specific program. The focus was on wages, a worthy goal, but without a policy to maintain connectivity. While eventually the Canadian level of support to aviation rose to levels per capita not dissimilar to the U.S., the lack of an immediate aviation specific program early in 2020 resulted in uncertainty for communities, carriers, and workers. The result was that some Canadian carriers ceased operating (e.g., Porter Airlines), and a number of communities lost all scheduled commercial air service, leaving them unconnected for an extended period.⁶ There were also financial capital benefits of the certainty and confidence created by the PSP. When there is uncertainty that individual carriers (and airports

⁶ To its credit, the Canadian government did recognize the importance of connectivity to remote and isolated northern communities and provided support for continuity of these services.

and support businesses) will be able to weather a crisis and return to service, it is difficult to raise private equity and debt for survival and resurrection.

Fair

The U.S. PSP was fair in that it provided support for all eligible firms. Unlike the case of many other nations, it was not a program that chose a champion carrier and supported it with transitional funds, leaving other carriers to fend for themselves. Sometimes the support of the champion was subtle. E.g., some modest general support programs may have been put in place, but the champion carrier received a different, much larger financial support package, often involving government equity investment in the champion carrier, but not in other carriers. Germany is only one of several cases where the champion carrier received substantial support, but other carriers received little or no support. Singapore, several Middle East countries, France and the Netherlands are other oft-cited cases. The champion carrier received substantial support and other carriers, such as low cost or ultra low-cost carriers that had provided substantial national connectivity did not. This implication is that in the recovery and post-recovery period, the playing field will not be level. I will comment further on this momentarily. This is not to say that there have not been issues with the U.S. PSP about how the support criterion apportioned grants and debt access among industry participants, but the U.S. Congress was fair in the sense that it did not choose winners and losers – this is left to the market.

Transparent

Another key attribute of the PSP program is that it is transparent. The legislation was clear in specifying how much funding was available, which sub-sectors (airlines, airports, air cargo, business aviation) were to receive which amounts, what the criteria was for applicants and how much individual carriers, airports and other business actually received.⁷ This is not to say that every element of the program is without controversy, but the rules were clear and for all to see. This was not the case in many other nations. In Canada, while meaningful support was eventually made available to carriers and airports, in many cases the amounts involved were matters of press releases from the carriers and airports. Delays in financing resulted because of issues such as whether carriers were going to refund non-refundable tickets and whether such refunds were to be financed by grants or not.

Focused

The PSP was not developed as a bailout of failing firms.⁸ It was a policy focused on providing transitional support for two key short- to long-term objectives. The first key objective was of continuity of air service for almost every community previously served. Service continuity was a requirement for the air carriers. This was to provide economic and social connectivity at a critical point in the nation's economic, social, and medical experience. The second key objective was workforce retention of a highly skilled workforce, critical

⁷ The U.S. Government Accountability Office has provided a series of reports to Congress during the pandemic documenting the U.S. COVID-19 support policies and observations on their impacts. See for example, <https://www.gao.gov/products/gao-22-104429>

⁸ It is important to recognize three terms regarding support for businesses. See footnote 3.

for safety, and which requires years of training and experience. Again, workforce continuity was a requirement. The experienced, safety-oriented aviation workforce is needed to support the recovery of air travel, and with the long lead times to develop necessary skills and experience, the continuity of the aviation labor force will pay great dividends to the nation. It is my observation that few, if any, other nations articulated focused objectives for the aviation support programs. For them, the objective of continuity of airlines was stated, but the programs did not tie support to the more fundamental objectives of maintaining service and connectivity during the crisis. The consequence was that a) some employees sought employment elsewhere and either will not return to the aviation industry as recovery unfolds or will require time and expense to become qualified and refresh skills; and b) many communities lost their air connectivity.

Comprehensive

The U.S. PSP program was comprehensive in that it recognized that aviation is an eco-system involving not only the air carriers, but also airports, general and business aviation, independent maintenance providers, ground handlers and manufacturers. The entire supply chain needs to survive the crisis and be ready for the recovery. Post pandemic aviation economic and social connectivity and service to the nation will only be as strong as the weakest link. I know of no other nation that articulated its aviation pandemic transitional support with a comprehensive understanding of the entire aviation eco-system.

Retaining competition and market forces as the primary driver

As a market economist I place great importance on economic decisions being made by the market and competition. The evidence is not only strong, but very strong of the benefits to the travelling public and to aviation-dependent businesses from market-oriented policies for aviation such as deregulation, privatization and liberalization. The 1978 U.S. deregulation policy was passed near unanimously by Congress and its rapid success became the model for the entire world. The U.S. reliance on private enterprise for airlines led many nations to privatize their carriers. The U.S. pursuit of liberalized air service agreements to allow market forces to prevail over government edicts on fares, service levels and even sandwich sizes have created unprecedented access to air connectivity for economic and social pursuits. I, and many of my colleagues around the world, are apprehensive about the post-pandemic aviation playing field being unlevel. In too many nations, massive government grants and equity investments in champion carriers but not others raise a question as to whether the post-pandemic industry will provide the same consumer and social benefits. The PSP was intentionally designed to maintain the market and all of its pre-pandemic carriers and airports. It did not use the crisis to impose government judgement of which carriers should survive. While it is now too late for other nations to pursue level playing field responses during the crisis, hopefully they will observe and heed U.S. 2020-21 leadership on the design of aviation policy.

Positioning the aviation eco system for a more rapid recovery

My last key point is that the PSP policy of Congress was well designed in positioning the aviation sector for a more rapid recovery.

- In many other nations, airlines and airports have survived but with massive new debt that will have to be serviced and retired. The PSP found a balance between direct support (linked to continuity of community connectivity and the trained aviation workforce) and debt.
- Outside the U.S., those airlines and airports with substantial increases in debt will suffer higher costs.
- The higher costs may result in higher fares, especially in those nations where the playing field was unlevelled in favor of champion carriers.
- The more balanced U.S. transitional support of its carriers may better position them competitively during the recovery and post-pandemic periods.
- Alternatively, carriers elsewhere will be more vulnerable to failure with their greater financial burden.
- Foreign carriers whose labor forces were dispersed during the pandemic will incur higher expenses to re-attract, train and requalify workers to an industry which in their cases will be viewed as now having greater uncertainty. The U.S. aviation sector has greater continuity and thus lower costs. This is not to say that there will not be case-by-case challenges in the U.S. industry during the recovery, but the U.S. industry is better positioned than almost all others that rely on market forces.

Market recovery progress. Comparing the current degree of market recovery of the U.S. versus other nations is complex. Nations differ in terms of current travel restrictions and processes. The relative shares of domestic versus international travel is also a factor as domestic markets are recovering more quickly while international travel faces continued and changing restrictions. Nevertheless, a few figures of the current state of affairs may be useful.

Figures 1 and 2 compare the recovery of traffic to 2019 levels for the U.S. versus Canada. U.S. passenger traffic U.S. is 77% that of 2019 as of the first week of December. Canada, which has a higher international portion of travel, is only at 58% recovery, and only a few months ago was at 10% recovery while the U.S. was well ahead.

The table below provides a comparison for a few other nations of *domestic* seat capacity in November 2021 versus the same month in 2019 of nations with large domestic markets.⁹

Degree of domestic seat capacity recovery

U.S.	89%
Brazil	84%
China	74%
Japan	51%
Australia	19%

⁹ Capacity recovery is higher than recovery of passenger numbers as load factors (percent of seats filled with paying customers) is down, but increasing in the U.S.

Forecasts. There are a number of forecasts available of commercial airline traffic and when recovery will take place.¹⁰ While they differ somewhat, there are common findings.¹¹

- Domestic markets will recovery more quickly, likely achieving full recovery to 2019 levels by 2024, possibly late 2023 for the U.S.
- International markets will recover more slowly, possibly delayed by one to two years, longer for regions with lower vaccine rates.
- While traffic is expected to recover *to 2019 levels* within the next 1-3 years, it will be longer before traffic returns to its *previous long-term trend*. But all the forecasts expect that air connectivity and traffic will continue to grow. Thus, infrastructure challenges that were present in 2019 will still need to be addressed.
- There will be differences in recovery rates of market segments.
 - “Visiting Friends and Relatives” travel is expected to recover strongly and quickly, as is leisure travel. Social connectivity is a priority for many families.
 - Business travel will take longer to recover, and some parts of business travel may recover weakly. Conferences and other knowledge and networking travel are expected to recover almost fully, while intra-corporate travel may recover only partially.¹²
- A recent study by Airport Council International – World identified that recovery rates will be slower for those individuals who did not travel at all during the pandemic. This identifies a challenge for the industry and for governments in providing clarity and consistency in border and health policy for air travel.¹³
- The U.S. will be one of the fastest markets to recover.

Closing Comment

I close with the question I was asked to address: my thoughts on the issue of “the federal pandemic Payroll Support Program (PSP) to protect the airline industry workforce, support the continuity of safe and essential travel, and ensure the industry’s ability to remain viable to meet future air travel demand,” I observe:

- The PSP was not focused merely on proving financial support for carriers. It was correctly focused on the key objectives of retaining the airline industry work force and ensuring the continuity of economic and social connectivity. Other nations largely conceptualized their support programs as one of supporting carriers and worker incomes, rather than supporting connectivity and employment continuity.

¹⁰ Forecasts are available from, among others, Airports Council International – World, the International Air Transport Association, Boeing and InterVISTAS Consulting.

¹¹ All are dependent to a large extent on no new outbreak of COVID-19 variants that evade current vaccines and the continuation of social distancing measures on aircraft.

¹² A good discussion of the potential scenario for business travel recovery can be found in the report by IdeaWorks, “The Journey Ahead: How the Pandemic and Technology Will Change Airline Business Travel.” IdeaWorks forecasts that in the medium term, business travel is likely to only recover between 19% and 38%. <https://ideaworkscompany.com/the-journey-ahead-how-the-pandemic-and-technology-will-change-airline-business-travel-report/>

¹³ <https://aci.aero/events/asq-2021-global-traveller-survey-evolution-of-sentiment-and-behaviours-part-1/>

- Congress provided an *immediate* (relative to other nations) response to the COVID-19 crisis for aviation, creating certainty and confidence. This enabled the market to continue to function.
- The PSP was designed to be a *fair* program for the entire aviation eco-system and all carriers and airports. Unlike several other nations the U.S. did not select and favor a champion carrier.
- The PSP is a *transparent* program with clear rules, amounts, decision making processes and disclosure. This is not the case at many other nations.
- The PSP maintained the aviation level playing field. It relied on and did not distort the *market* and competitive forces.
- The PSP has positioned the U.S. aviation industry for a more *rapid recovery*, and a faster ability to restore financial resilience to support growth and future challenges the industry will face.

Comparison of Daily U.S. and Canadian Passenger Traffic 2019-2021, Year to Date
 Figure 1: U.S.

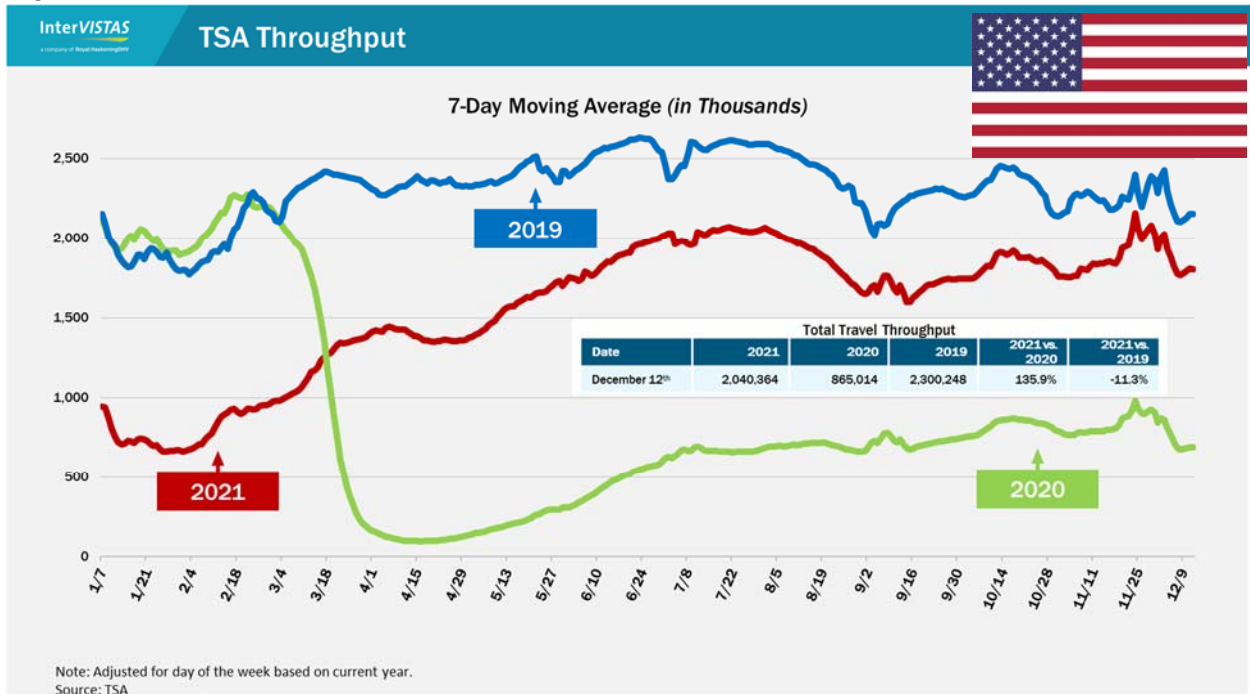
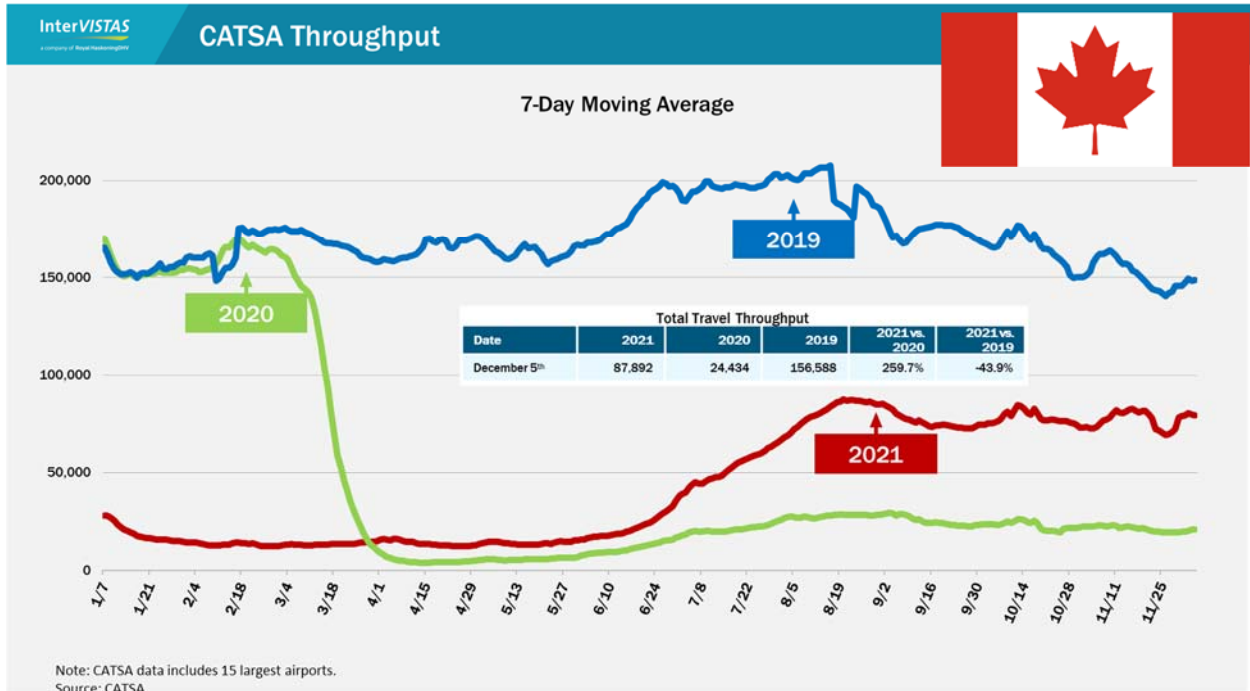


Figure 2: Canada



Sources: InterVISTAS comparisons based on TSA and CATSA daily numbers of passengers through security points.

Biography

Michael Tretheway

Chief Economist
& Executive Vice President



Dr. Tretheway is Executive Vice President & Chief Economist with the InterVISTAS Consulting Group. He is a co-founder of the InterVISTAS Consulting Group and has served as its Chief Operating Officer.

Dr. Tretheway earned a Ph.D. in economics from the University of Wisconsin and served for 14 years as Associate Professor of Transportation and Logistics in the Sauder School of Business at the University of British Columbia. He was engaged as a Visiting Fellow at the Australian Bureau of Transport Economics and has taught aviation economics/management and supply chain management in the Americas, Europe and Asia.

He is frequently an expert witness in regulatory hearings, court cases, competition tribunal hearings and in arbitrations, with 100 engagements. He was a member of the Board of Experts of the United Nations World Tourism Organization. He has been an advisor to governments in North America (Canada, US, Mexico), Europe, Asia, Australia and New Zealand.

Years of experience

40

Years with InterVISTAS: 20

20

Mike has worked with over 100 airports ranging in size from megahubs, to regional hubs to small general aviation airports. He has been engaged by 25 airlines and by Boeing and Bombardier. In his consulting career he has been engaged by industry organizations and NGOs on all part of the industry. These include IATA, A4A, ACI, the World Economic Forum, the World Tourism Organization, the International Transportation Forum of the OECD, general and business aviation associations, manufacturers, a consumer group, as well as national, state/regional and municipal governments.

The continuity of the aviation spectrum is an important theme for him. His view is that the large airports depend upon the medium and smaller airports, just as large carriers depend on smaller carriers. All are part of regional/national/global connectivity, along with manufacturers, maintenance and repair, and aviation support services.