



FUELLING AIRPORT RECOVERY VIA NON-AERONAUTICAL REVENUE

Agile approaches to develop innovative services and enhanced experiences for passengers

New non-aeronautical revenue streams are critical to airport recovery from the COVID-19 pandemic. Non-aeronautical revenue—airport revenue from sources other than airlines—typically includes retail concessions,¹ car parking, and property and real estate.



For aviation, global recovery to 2019 levels is projected to take several years, into 2023 for markets with significant domestic air travel, especially leisure travel, and 2024 for markets that have significant international traffic.²

How to improve revenue generation as demand rebounds is a key question for airlines and airports. Before COVID-19, global airport revenue was rising but with a decline in revenue per passenger. Major organizations, such as the International Civil Aviation Organization (ICAO) and Airports Council International (ACI), cite the importance of developing sources of non-aeronautical revenue to bolster revenue from aeronautical activities.³

In the following article—to help drive this process forward today—WSP aviation advisors explore how to develop innovative services to

support enhanced passenger experiences and strengthen non-aeronautical revenue streams.

WSP aviation advisors: Marco Mejia, Vice President, Aviation, Canada; John van Woensel, Vice President, National Aviation Planning Manager, United States; Tracy Beach, Senior Aviation Financial Planner, United States.

Airport Economics at a Glance

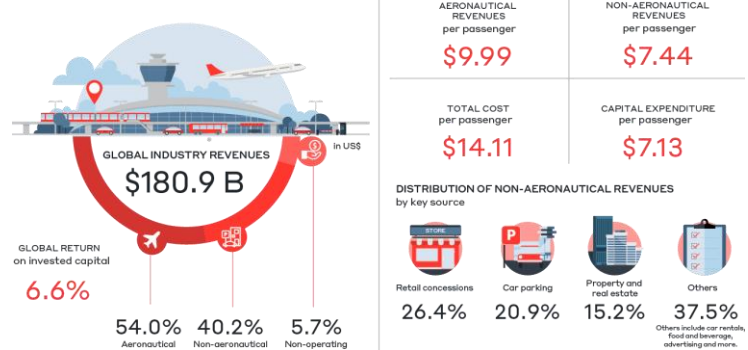


Figure 1- The numbers above are from the Airports Council International (ACI) global diagram for the financial year 2019.

For comparison, in the United States, retail concessions accounted for approximately 8% of non-aeronautical revenue in 2019, while car parking was approximately 43%. Source: Federal Aviation Administration (FAA) Certification Activity Tracking System (CATS) data

What opportunities will exist for non-aeronautical revenue growth at airports around the world, and how can airports plan accordingly?

¹ Retail concessions include food and beverage as well as news and gifts.

² [Airports Council International \(ACI\), Advisory Bulletin, March 25, 2021](#)

³ [ACI, April 22, 2020; ICAO, Economic Development, Guidance on Economic and Financial Measures, p. 7](#)

Marco Mejia: There will be a mix of opportunities for airports that will require flexible strategic planning and investments in technology and infrastructure, to enable airports to be more attractive, competitive and future proof. Areas to explore include diversification of airport land use, parking, central processing as well as new models for purchases such as food and beverage. Airports will need to be more agile to understand the passenger segmentation, to provide the services that are required for different travellers' wants and needs throughout the day.

In larger cities, airports should consider partnering with urban air mobility companies to transport passengers efficiently onto their premises. Partnering with air mobility companies will minimize the travel time to airports for travellers and the time at the airport, as all the passenger processing can be done in advance. Importantly, airports will have another way to generate revenue.

John van Woensel: Some U.S. airports are rethinking tradition and taking over some services previously not controlled by them and from which they currently only derive a small fee, if that. In this way, airports can not only increase their control and involvement in operations but retain more of the associated revenue.

These services include baggage handling systems, which are usually run by the airlines through a consortium; ground handling services and fuelling, usually contracted by the airlines; and sometimes these services will be offered by fixed-base operators. Jet bridge operation is another potential opportunity.

Often, when considering nonaeronautical opportunities, the reference is to revenue that is in some way passenger dependent. An ideal nonaeronautical revenue source is one that is not affected by a downturn in air travel. One thing we are seeing more recently in the United

States is an increased focus on airport resilience through diversification of land use.

As a result of the last Federal Aviation Administration Airport Improvement Program reauthorization, it has become easier for airports to respond quickly to opportunities to bring certain land parcels to market for uses not related to air travel. A potentially lucrative example is a plaza with a gas station and a convenience store located on a road that is on airport land. Many airports have roads on their property that are not or only partially related to airport traffic. Another example of a non-passenger-related service offering is pet-lodging facilities near the airport. These could be used by people on their way to the airport as well as area residents.

The United States is unique in that our airports are governmental units, but usually more independent and business-like than a typical local or state government department. They are primarily focused on providing adequate facilities for tenants and users, and, of course, a safe operating environment. Generally, U.S. airports function as non-profit landlords and airfield operators more than service-providing businesses, whereas, in much of the world, airports are operated by privatized corporations that have always had an additional focus on making a profit and a return to shareholders.

How can airports develop revenue-generating services that will enhance the passenger experience?

John van Woensel: Overall planning and design should consider that patrons may want different types of experiences for say a meal. It is not always about providing more lavish environments; sometimes people want something specific quickly. Vending machines for electronics, for example, are very good revenue sources—especially when considering the small space they occupy, and they also

provide another way to serve passenger needs. So, airports should provide passengers with convenient choices, whether sitting down for a meal, grabbing something on the go or having a meal or product delivered at the gate. To make these changes and choices possible, airports need to be flexible in their long-term planning.

Marco Mejia: In order to target a more personalized environment for passengers, there is opportunity for airports to repurpose many areas and deliver a special touch—for example, by creating centralized kitchens and distributing food to different areas within the airport.

Tracy Beach: It's the wave of the future—ghost kitchens. They provide multiple types of food in one place and offer convenience for passengers, who can use an app to order or visit one location for their food preferences; on the back end, this concept, while affecting planning for space, enables a more agile response from airports to passenger needs and expectations. These facilities can enhance passengers' perception of a safe and clean environment with contactless purchases and allow airport concessionaires to provide online food delivery services like Uber Eats or DoorDash from the ghost kitchen to the passenger at the gate.

Marco Mejia: A quick-change stand is another way to build agility in operations. The same stand can be reconfigured throughout the day to meet different demands, reflecting upcoming flight destinations; this is a flexible way for airports to target diversified groups of passengers.

Tracy Beach: One key thing to learn from downturns that have occurred in aviation is to be nimble. Moving away from longer-term leases and including opt-out clauses would allow airports to change the way a particular space in the terminal or land area on the airport is being used and maximize its revenue potential to react to the ever-changing environment of passenger

demand and preferences. For example, these efforts may include moving away from contracting methods that include both a minimum annual guarantee [MAG] and a percentage of revenue. During the COVID-19 pandemic, many airports suspended the requirement for MAGs of their concessionaires and parking operators, and obtained revenue only from the percentage of revenue. In the future, increasing the percentage of revenue from the standard 7 percent to 10 percent could allow for the capture of revenue through a higher percentage fee.

One way to ensure an airport's concessionaires can meet passenger demand for retail concessions is to plan for a consolidated receiving and distribution facility. This type of facility allows the concessionaires to have consolidated warehousing space near the terminal building to distribute food supplies and merchandise efficiently and quickly, and it also alleviates traffic on airport roadways. In some instances, concessionaires are using terminal loop roads and other highly used roadways to get the merchandise to the terminal to stock the shops and restaurants visited by their consumers, the passengers.

Marco Mejia: Another area to consider is automation. Even as processes become automated—for example, potentially including more chat boxes for customer needs—valet services can complement automation, in case passengers need extra help with a booking or any other type of assistance.

How can airports address the future impact from mobility-as-a-service options, such as ride-hailing, on parking revenue?

Marco Mejia: Ride sharing initially caught everybody off guard, and airports saw taxi revenue and parking drop. However, as these services have matured, two things have

happened—most airports now derive a fee from the ride-share transactions, at least making up for the loss in taxi revenue; and as the percentage of people parking cars dropped with the shift to ride sharing, overall travel grew. So, from 2015 to 2019, though parking revenue decreased, the number of travellers grew substantially. Most airports saw their garage occupancy recover because of this uptick. Parking demand remains strong in the United States and Canada, and many airports are now considering parking management systems to optimize associated revenue.

John van Woensel: The emergence of sophisticated parking management systems has allowed airports to get a handle on the different types of parking preferences people have and understand how different pricing can be applied to optimize parking revenues—while increasing options and the level of service to passengers.

Marco Mejia: With the increasing adoption of electric vehicles, airports should examine how to incorporate sufficient electric vehicle charging stations as part of a wider electrification strategy, which would include assessing the airport's ability to handle this type of amenity.

The presence of ride sharing has put added pressure on airports, as parking is still the most important non-aeronautical revenue source for an airport; for that reason airports need to protect it, attracting the traveller to look for a combination of services inside the airport such as “park and eat.” In that way, airports will encourage passengers to have both services at a more affordable price, which will generate both a better passenger experience and more airport revenue by maximizing the use of the facilities.

What are the ways that data and predictive analytics can help airports strengthen non-aeronautical revenue streams?

John van Woensel: More than ever before, more and more data can be gleaned from passengers and at a lower cost to airport operators. Technologies range from intelligent cameras to Bluetooth [anonymized] tracking. More efficient processes such as self-checking baggage can reduce space needs. So far, though, while various technologies have become more common since the 1980s, terminal building area per passenger in the U.S. has not shrunk, like you would expect; in fact, terminal areas have increased somewhat, most likely due to increased concession space. However, from an infrastructure perspective, new technologies still offer the potential to reduce the space for certain terminal processes, providing the operator with more flexibility in allocating space in the terminal for revenue-generating purposes.

Tracy Beach: Going forward, airports will need have a better understanding of passenger spending choices and patterns to target the best returns on investment for non-aeronautical revenue maximization. Apps used for pre-ordering food for delivery at the gate and pre-selecting a parking space can be a gateway to obtain this data from passengers and customers. Something like adding a simple question related to travel purpose to the app—concerning business or leisure—can allow airports to understand the behavior of these two market segments better and what options appeal to each segment. The data can provide opportunities for repeat purchases, thereby improving the customer experience and creating revenue-generating opportunities for airports.

Contacts

Marco Mejia
Vice President, Aviation
Canada



Marco.Mejia@wsp.com

John van Woensel
Vice President, National Aviation
Planning Manager
United States



John.VanWoensel@wsp.com

Tracy Beach
Senior Aviation Financial Planner
United States



Tracy.Beach@wsp.com

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