



# HOUSTON AIRPORT SYSTEM TURNS BIG DATA INTO ACTIONABLE PASSENGER INSIGHTS

While many airports have initiated data collection projects, few have turned that data into actionable insights. Houston Airport System is a notable exception as the organization has leveraged unique data analysis from Buxton to better understand the passengers it serves.



Structured as an enterprise fund, Houston Airport System comprises three airports, including the

passenger airports William P. Hobby Airport and George Bush Intercontinental. The system sees a combined total of almost 55 million passengers per year.

Historically, the system had only rudimentary demographics for its passengers drawn from its customer satisfaction research. Although airlines have passenger information from tickets and frequent flyer programs, and concessionaires have transaction information, that information is typically not shared with airports. After hearing Buxton present at a conference, Houston Airport System’s Head of Marketing Kathleen Boyd realized that there was an opportunity to leverage analytics to gain deeper insights into who is visiting the airports - insights that could assist with strategic planning.

## CLIENT:

- Houston Airport System, which includes William P. Hobby Airport and George Bush Intercontinental airports

## PROJECT OBJECTIVES:

- Gain insights into each airport’s passengers and parkers to drive decision making

## BUXTON’S SOLUTION:

- Leverage credit card and license plate data to develop psychographic profiles of travelers

## Developing Passenger Profiles

The system leveraged Buxton’s data relationships to access and analyze credit card spending information at its two passenger airports. Buxton used the data to develop passenger profiles for each airport. The profiles went beyond basic demographic information to provide Houston Airport System with insights into the psychographics, which includes lifestyles and purchasing propensities, of its travelers.

Additionally, Buxton showed Houston Airport System a way to more fully leverage the license plate data that it was already capturing through its parking services. Buxton used the de-identified license plate information to determine the primary zip codes where parkers originated and to develop psychographic profiles.

## From Data to Insights

The passenger and parker profiles provided Houston Airport System with some unexpected insights into its travelers. As at many airports, it was easy to assume that the primary traveler was a wealthy businessman in his 40s. The data helped demonstrate that customer profiles were much more varied – and how consumer groups differed between the two airports.

“What this research has helped me communicate is that we have all different kinds of people traveling for different reasons, and that we need to think of the needs of these different groups,” notes Boyd.

Surprisingly, while the overall passenger profiles for the airports are different, the parking profile for both airports is the same. Additionally, the profiles debunked the myth that only affluent travelers pay to valet park; consumers from a variety of income levels utilize each of the airports’ parking options.

## Applying Passenger Data for Future Success

Buxton’s research has confirmed certain strategies the system already had in place. For example, Houston Airport System had already decided to bring Einstein Bros. Bagels to both Hobby and Bush Intercontinental; the Buxton profile insights confirmed that choice. When the locations opened, they were enormously popular, which validated the study’s recommendation.

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**Kathleen Boyd**  
**Houston Airport System’s Head of Marketing**

Houston Airport System is now working to integrate the insights into its decision-making processes. When a new duty-free purveyor opened, Boyd’s team developed a custom report leveraging the Buxton analytics to provide the vendor with insights on passenger retail habits and behaviors. The team is now working on a similar report on eating/drinking habits to be used in concessions planning for George Bush Intercontinental Airport’s new international terminal.

Another way that data is being used to drive decision making is in the system’s technology offerings. Since the profiles showed that many of Houston’s passengers are digitally savvy, the system is working on initiatives to ensure that WiFi bandwidth is set at appropriate levels and to expand availability of web-based in-airport maps.

In summary, by using Buxton’s analytics to better understand the passengers it serves, Houston Airport System can target spending to maximize revenue production opportunities and to further its strategic objective to “Make Our Passengers Happy.”

As Boyd explains: “Buxton has the relationships with a variety of data vendors to give us the best flexibility in pursuing the analytics that we need to make good decisions at our airport. We’ve had a very positive experience working with Buxton in this whole world of big data.”