



Enhance the
Customer Experience
with Technology and
Variable Parking

A DALLAS/FORT WORTH INTERNATIONAL AIRPORT CASE STUDY



DFW

The Dallas/Fort Worth International Airport (DFW) journey starts with the drive. Recognizing parking as an important aspect of the customer experience, DFW embarked on a capital improvement program to invest in the infrastructure and technology of its parking garages. The key component to the enhancement is a new system to guide customers to the nearest available parking spot.

In conjunction with the \$2.7 billion terminal renewal and improvement program initiated in 2011, the parking garages in terminals A, B, D and E have undergone major enhancements coinciding with the terminal renovations across the airport. With the objective to improve the travel experience from garage to terminal, aesthetics and performance became the

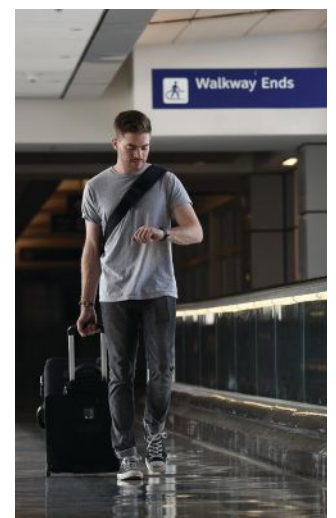
crux of renovation planning. DFW has invested more than \$300 million for parking improvements for terminals A, D and E.

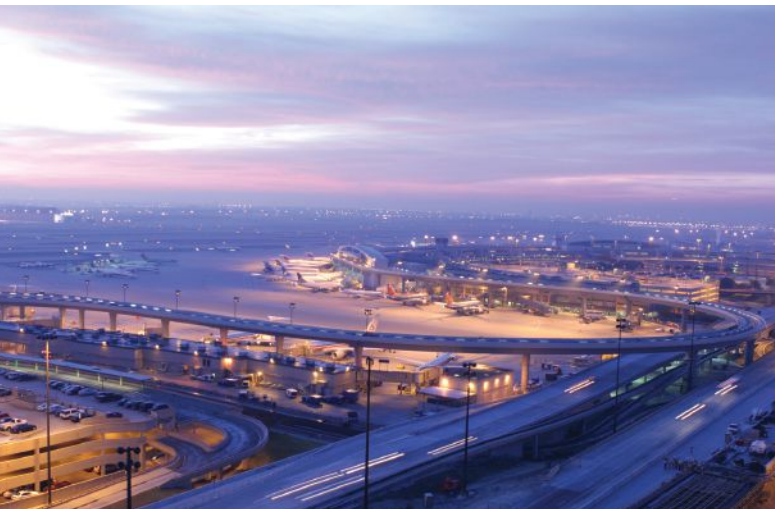
Parking Key to Increasing Airport Revenue

With 28,000 parking spaces across five terminals, boosting revenue is an ongoing endeavor for the world's ninth busiest

airport. The airport serves more than 64 million passengers annually, with 42 percent of those travelers starting their journey at DFW.

To capture the majority of originating passengers, understanding only 21 percent actually park on airport property, DFW also created a strategy to incentivize travelers to park at the airport to





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ultimately increase the number of travelers using terminal parking.

Technology Innovations Enhance Customer Experience

Gathering information from focus groups and surveys to better understand the customer parking experience, technology became a key focus to enhance the garages. DFW's parking guidance system (PGS) began installation in 2013 after extensive research and analysis of industry available state-of-the-art technology.

DFW invested nearly \$200 million into the construction of a five-level, 7,000-space garage for terminal A, including PGS technology. Terminal A became the first garage to be fitted with this ultrasonic detection sensor system, which

displays status lights over every individual parking space to inform the customer of its availability. The PGS also combines a variety of functions including wayfinding, traffic monitoring, and communication using variable message signs.

PGS Parks Customers Quickly, Provides Stats to Airport

This system directs drivers to available spaces quickly and efficiently through dynamic guidance displays placed strategically across the garage. LED sensors further aid in the identification of spaces for customers in real time. Fully equipped with the RGB spectrum, the hanging pendants installed at the end of each space displays green for available space and red for occupied.



PGS is also accessible via a web application for monitoring and allows remote control of the system from multiple locations. It provides statistical reports to analyze vehicular movement data.

In the near future, the system will accommodate customer reservations, resulting in guests pre-booking their trip down to the specific level and space for their vehicle. Currently, garages in terminal A, D and E have been fitted with PGS with more to follow.

Terminal parking entrances also feature covered walkways, higher clearances, vertical accessibility with high capacity elevators and innovative new roadway designs, including spiraled helix roads to provide easy access and reduced congestion.

Variable Pricing Entices Parkers to Airport Garages

In addition to technology investments, DFW has implemented variable pricing to increase awareness of terminal parking. Through a multi-department collaboration, variable pricing parking initiatives promoted deep discounts, as much as 50 percent, to entice travelers to use terminal parking.

Analytics Provided Capture Parking Habits

The variable pricing strategy revolves around capturing customers during busy and slow travel periods alike. As an example, DFW promoted spring break 2016 by offering 2,000 parking vouchers worth up to seven days of free terminal parking.

Customers started lining up close to 3:30 a.m. at the control plazas to ensure they were first in line to pick up the 5 a.m. start of the giveaway. DFW reached several generations of travelers through various communications channels, including social media, local and regional news sources, online advertising campaigns, as well as online assets.

The effects of the new strategy were immediate. In two months, parking revenues exceeded budget by \$500,000.

Variable pricing is not simply a trend or pilot program; it has become a proven strategy that is revolutionizing the way DFW prices terminal parking and its other parking options, including valet, express and remote. Tied with technology, DFW is

invested in the customer experience, ensuring smooth travel across all aspects of the trip.

Parking is a major strategic imperative at DFW Airport, as well as its single largest revenue source, highlighting the importance of these initiatives. By the end of the FY 2016, overall parking revenue is expected to top \$143 million. Further, the overall parking revenue is targeted to reach \$200 million by the end of FY 2020. ■



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