

September 13, 2001, Thursday

CIRCUITS

In Parking Garages, Putting an End to the Space Race

By JEFFREY SELINGO (NYT) 1074 words

BALTIMORE -- IT is a common annoyance for air travelers: you are already late for a flight and you can't find a space anywhere in the airport parking garage. As the minutes tick away to takeoff, you trail travelers strolling back to their cars as you scout out the next aisle.

For years, that scene had been too familiar to travelers at Baltimore-Washington International Airport, one of the fastest-growing airports in the country. The airport's sole parking garage within walking distance of the terminal often filled quickly, forcing officials to close off entry to the garage during peak travel times and holidays.

But just because the garage was closed didn't mean that every one of its 5,600 parking spaces was filled. Gauging the availability of spaces in a parking garage at any one time was an inexact science, so the airport, like most garage operators, closed the garage when it was about 85 percent full.

"We were losing revenue and upsetting travelers even though there were a few spaces available," said Bill Lins, director of the airport's technology division.

So officials imported a solution from Europe. On a visit to Dublin, Maryland's secretary of transportation, John D. Porcari, discovered a system of electronic signs that directed drivers to open spaces. In April, the Baltimore-Washington airport installed a similar system in 1,000 spaces on the second level of its main parking garage.

The system, the first of its kind in the United States, informs drivers of the number of available spaces in each aisle. It points out the open spots with green lights above the spaces that can be seen from 1,000 feet away.

The technology has allowed the airport to keep the second level of the garage open until it reaches its true capacity. The airport also added some 40 spaces on the level by eliminating a turn-around lane that had been necessary for drivers who couldn't find spaces. The revenue generated from the improvements has helped pay for the system, which costs about \$500 per space to install.

The airport plans to expand the system to the rest of the main garage by 2003 and incorporate it into a new 8,400-space garage under construction nearby.

"We can at least make getting to the airport a little less stressful," Mr. Lins said. "The last thing you need when you're traveling is to spend 25 minutes trying to find a parking spot."

The parking system also provides statistics on the parking habits of customers, since airport officials now know how long each space is occupied. For instance, Mr. Lins said, officials have found that travelers use the garage for long-term parking despite its hefty daily rate of \$30 (a long-term lot further away requires travelers to board a shuttle bus).

In the future, the airport may allow customers to check the availability of spaces on the Web and maybe even reserve a spot.

"We want to make parking in a garage as easy as parking at your house," said Jerry E. Fondaw, whose company, Signal-Park USA, based in Tempe, Ariz., sells the system in the United States.

On a recent afternoon at the Baltimore-Washington airport, some customers entering the second level of the parking garage seemed confused by the new system. A few drivers entered aisles marked with triple red X's that indicated no spaces were available. A few others bypassed open spots, convinced that there were more spaces closer to the terminal although all the indicators farther down the aisle were red.

But for the most part, travelers rushing to their planes said that the parking system helped them find a spot quickly. "Parking has never been easy at this airport," said Chris Rabbu of Baltimore. "This helps you find that miracle spot you're always looking for when you're in a hurry."

The parking system was developed in the 1970's by Philippe Schick of Switzerland, who was frustrated by his wife's habit of parking her car on a different side of their two-car garage every day and then closing the door. "I'd stop my car on the right or left side before opening the garage door and 85 percent of the time I was on the wrong side," Mr. Schick recalled. "So after years of torture, I decided to develop a car detector with the indication outside."

Today more than 60,000 spaces are covered by the parking system in Europe, Mr. Fondaw said. "I'm not quite sure why it took so long to catch on in the U.S.," he added.

Mr. Fondaw's company is installing the system in a parking garage at the airport in Jacksonville, Fla. Several other airports and a few hospitals have also inquired about the technology, he said.

Gary Shultis, a traveler from New Jersey who uses the Baltimore-Washington airport frequently, said he would probably favor the second level of the garage until the technology was installed on the other floors. "I'm impressed," he said. "Newark ought to have it."

CAPTIONS: Photos: DIRECTING TRAFFIC -- The sensors are connected to a computer system that monitors the status of all the spaces and controls signs throughout the garage. If a particular aisle is full, red X's are displayed.; STATUS SYMBOL -- If there are empty spaces, the sign at the beginning of the aisle displays a green arrow and the number of spaces, above. Once a car enters the aisle and parks, the computer system changes the number on the sign for the next driver, left.; SILENT SENTRIES -- A parking garage at Baltimore-Washington International Airport uses a system of sensors, computers and electronic signs to direct drivers to empty spaces, eliminating the need to circle endlessly through the garage to find a place to park. The sensors, one above each space, emit ultrasonic signals and measure the time it takes for them to be reflected back. If a car enters a space, the reflection time changes, and lights on the sensor change from green to red to let drivers know the space is empty. (Photographs by Marty Katz for The New York Times)

Copyright 2003 The New York Times Company