Campus Wayfinding

Enters a New Digital Age

Advanced guidance systems push info to parkers when and where they need it.

University parking professionals have long used the 'hunting license' method of allocating parking spaces on campuses: a parker receives a permit or access card that is valid at any number of parking facilities on campus. Parkers then cruise a series of facilities until they find an open space.

This approach helps ensure parkers are always able to find parking in crowded campus facilities. A corollary benefit is that it spreads demand over the entire inventory.

But the downsides are unnecessary congestion, excess emissions, and frustrated customers who are late for class or work.

The fix is obvious: how can information regarding the availability of parking be pushed out to parkers?

Some campus parking managers have used temporary signage and flagmen at decision points to help steer patrons away from full facilities and toward lots where parking is available. However, these low-tech approaches rely on cursory observational or historical data to tell managers when a facility is 'full.' In multi-level parking structures, this is particularly difficult to determine.

First, Variable Electronic Messaging

In the past decade, many campuses added variable messaging signage to the mix. In advanced applications, message boards outside a facility, driven by loop-based count systems, displayed whether a particular facility was full. In some cases, the counts might even inform a customer on what floors parking might be found.

"Entrance signs only display how many spaces there are, provided the counting is correct," says Chris Mielke, owner of SoniPark, a leader in parking guidance systems.

"With entrance counters, the best are only 60-70 percent accurate," Mielke says. "If spaces are individually counted, then the garage can be broken into zones and the interior garage signs can guide motorists to open spaces within those zones. Basically it provides information at decision points."

Next, Advanced Parking Guidance Systems

Getting more accurate data and pushing it out to customers at those decision points are more steps forward.

"Sensor networks for parking, such as Park Assist's M3 System, collect and distribute granular information about parking," says Richard Joffe, Co-CEO of Park Assist, another leader in parking guidance. "Imaging technology is replacing older technology across the board, with the M3 the first example within parking technology, capable of data collection like never before. Visitors know before they arrive where they can park, and get guidance down to the individual aisle and space. The same set of data can find a car that's been lost; help security watch for threats; and even help raise parking revenues."

SoniPark's system, while a different technology, also focuses on the individual space and has made significant installations at several airports.

"We currently have the largest system in the country at Baltimore-Washington International Airport," says Mielke. "It's the ultimate in customer service as people can always find a space; if they lose their car, the system can help them find it; it can place surveillance on a vehicle; it can control short term parking and can also direct customers to specific spaces like ADA spaces, electric car spaces or Zip Car spaces.

Now, Pushing Data Further Out

As sensors communicate individual space availability with central computers, not only signage is in play.

"Because the system is PC-based and our communication protocol is open," says Mielke, "we can push our availability data anywhere, including to mobile devices, websites, remote viewing, etc."
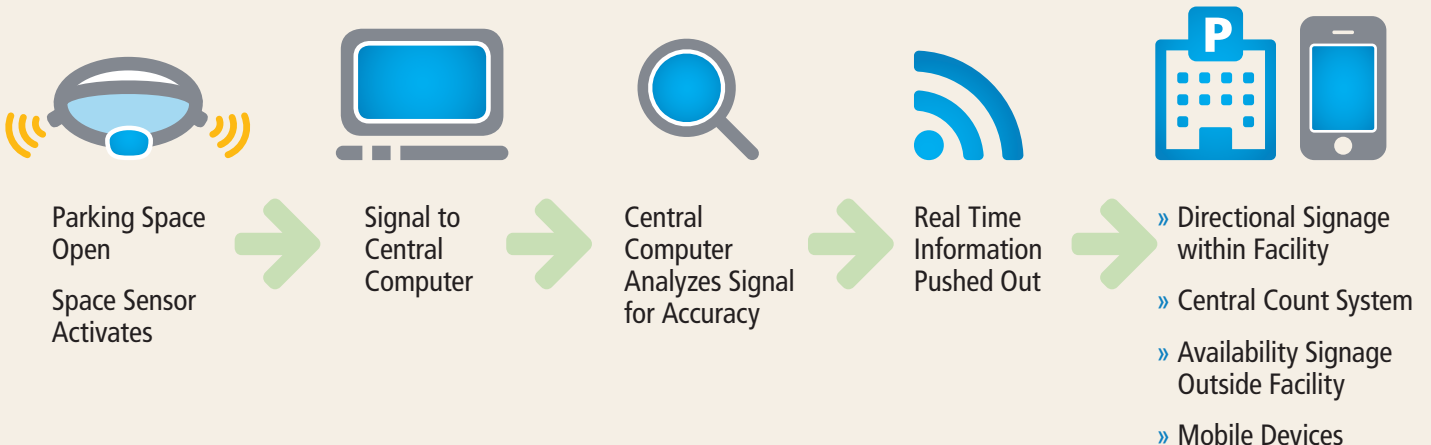

Enter the mobile app. "We've developed our own app for finding parking availability, even down to the individual floors of a garage," says Joffe. "Plus it uses our "Find Your Car" feature to locate where you parked—a major benefit. Other customers choose to integrate parking data access into a multifunction app."

Parking: The Last Step of the Journey

App developers are helping transition this data to campus smartphones and desktop PCs. "Navigation is fundamentally incomplete without accounting for parking, the last and oftentimes most crucial

DIAGRAM OF CAMPUS MOBILE WAYFINDING & GUIDANCE SYSTEMS:

Parking Space Open

Space Sensor Activates

→ Signal to Central Computer

→ Central Computer Analyzes Signal for Accuracy

→ Real Time Information Pushed Out

→ » Directional Signage within Facility

» Central Count System

» Availability Signage Outside Facility

» Mobile Devices

step of the journey," says Kevin Blomberg of Los Angeles-based ParkMe.

"ParkMe equips drivers with actionable, real-time parking information about rates and occupancy. We work with cities, universities, and private operators to maintain the best and most accurate data.

"Texas A&M (TAMU), home to one of the nation's most efficiently run transportation services, recently tapped ParkMe to help optimize its smart parking management."

TAMU has long been known for its efforts to apply cutting-edge technologies.

"Our campus community is excited about seeing real time parking availability on their smartphones that saves them time and frustration," says Peter Lange, executive director of Transportation.
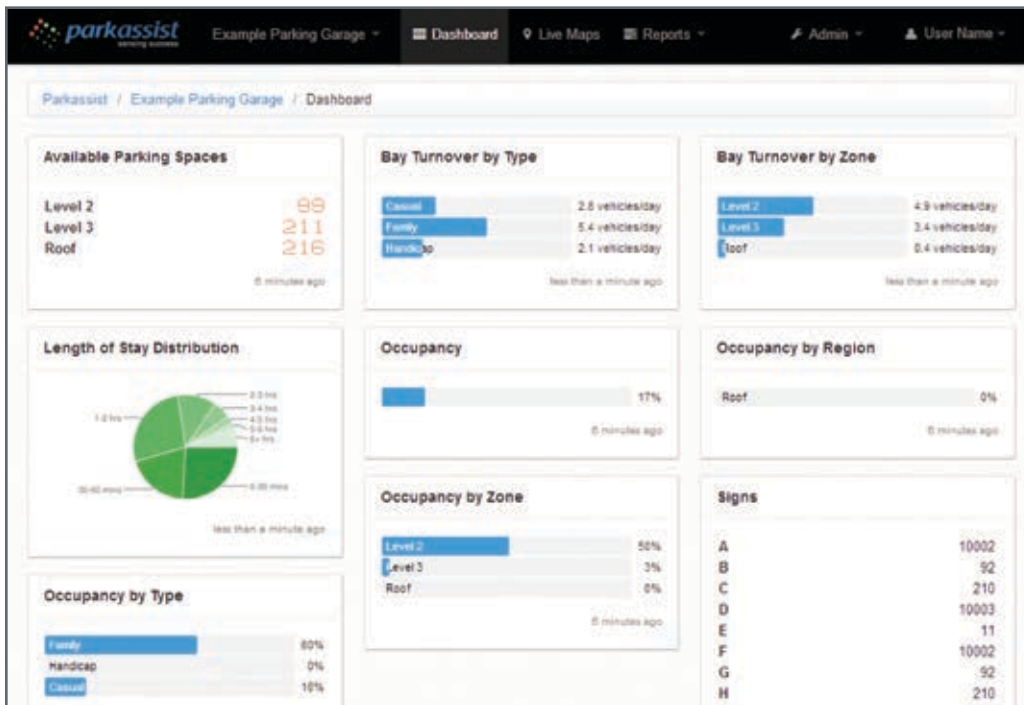
Dashboard showing parking availability and usage data.

"ParkMe also made it easy to upload static information about our campus parking facilities so customers have ready access to details about the rules associated with the area where they want to park."

"The drive to parking information via smartphone is borne out of efficiency," says Mielke. "Rather than driving to a parking place only to find limited availability, mobile parking data lets the customer plan ahead. With smartphone market penetration well over 50 percent in the U.S., mobile access is becoming an expectation, not just a nicety." ∎

Charles R. "Charlie" Munn III, CAPP, CPP, is a former commercial parking executive and operations consultant. He is now a customer service management consultant and freelance writer. Contact him at **cmunn3@aol.com**.