the Same, Only

By Clement Gibson, CAPP, and Adam Isen, CAPP

CASE STUDY

Motor sports may not be the only thing Charlotte, N.C., and Indianapolis, Ind., have in common. Meter modernization has been happening in Charlotte since 2006, while Indy hit the tracks in 2011, setting and accomplishing its goals quickly. The two cities are very different in many ways, and their approaches to meter modernization differed as well, but in the end, upgrading and updating systems led to more efficient and effective on-street parking for both. Here's how they each approached their challenges and changes.

Pay Stations

Charlotte is very customer-focused. As new technologies became available, Charlotte's on-street program jumped at the chance to offer its customers a credit card option to pay for parking. Pay stations were appealing because they could offer the additional payment option along with an opportunity to remove meter poles and meter heads from the streetscape, which was especially attractive on some of the city's core uptown streets.

To ensure the public was ready to embrace the credit card payment option and use a more complicated payment process, in 2004 the city installed six pay

Different

How two cities approach meter modernization in different ways to get similar great results.

stations covering 37 parking spaces for three months in the technology-savvy area of uptown. While there was a slight learning curve, it was short-lived. Motorists read the signs posted to assist, followed the pay-station screen prompts, and pulled out their credit cards.

The data gathered supported the decision to invest in this product. The city absorbed the credit card fees rather than passing them on to the public and budgeted to cover the operating costs.

During the trial, the city also paid close attention to whether motorists preferred pay-by-space to pay-and-display (they did). As a courtesy, printed receipts are available to motorists today, though drivers still don't need to return to their cars and display them while parked.

Ultimately, managers of the on-street parking program decided to:

- Purchase 45 pay stations covering 428 on-street spaces.
- Offer credit card and coin-only payment options to reduce dollar bill-related maintenance.
- Require the highest level of PCI compliance.
- Use solar power in all possible locations.

The pay stations have been a success. Having access to real-time data serves the program well for audit purposes and for getting motorists answers to their payment questions.

Smart Meters

What could possibly be next for a municipality such as Charlotte? After nearly 15 years, the city's original coin-only meters reached end of life, and maintenance calls and revenue losses were noticeable. The city needed new meters and began a search for new equipment.

The parking industry is amazing. Already available for municipalities still limping along with coin-only equipment is the credit card-enabled, single-head meter. The city's interest was piqued. But first things first. As with the pay stations, customer acceptance of the newer technology is critical. Another trial was in the offing, so managers decided to:

- Test two smart meter products for three months on a street that was highly used with no rush-hour restrictions.
- Look for functionality and operational effectiveness. Both tested meters performed well.
- Conduct public outreach to gauge customer satisfaction. Drivers filled out an online survey designed to better understand motorists' payment preferences and experience. Sixty-three percent of responders wanted meters that accept both credit cards and coins. Ninety-five percent said the credit card feature was easy to use. Feedback from the public and Park It! staff was gathered. As a result of the positive experience, the city decided to move forward with the purchase of smart meters, if it could find the funding.

As it turned out, the city found the funding, but it had to be spent quickly—before the end of the fiscal year—or the funding source would evaporate. To move quickly on the purchase, the city utilized an existing contract between a city in California and one of the tested smart-meter companies without competitively bidding, in accordance with the previously bid or "piggybacking" exception authorized by state statutes (N.C. G.S. 143-129(g)).

The city may have entered into a contract for new meters, but as the old adage says, good things come to all who wait. And it was a waiting game, as the city was in the process of rebidding its on-street parking program. The decision was made to wait for installation when a new contract was in place. The city was ready, but the installation of on-street meters can't happen in the middle of winter until a window of good weather appears. Finally, in February 2015, the city installed 600 new credit card-enabled, single-head meters.

Charlotte is striving to stay in step with the evolving parking industry. Desire often outpaces reality. Reality slows modernizing a program. Funding plays a crucial role, especially because new technology costs more upfront and then has a greater operating cost than old coin-only meters. Changes require buy-in from city leaders, too. A year has passed since the installation of the smart meters and Charlotte can now see that by using up to date equipment the on street parking program is experiencing efficiencies sooner than later. At those locations, meter revenue has increased 35 percent and maintenance calls from motorists have been effectively eliminated. For now, Charlotte has a more satisfied public.

In Indianapolis, parking customers took advantage of clear directions posted on meters to get used to the new system.

Meanwhile, in Indianapolis

In December 2010, ParkIndy LLC, a Xerox Company, entered into a long-term parking management agreement with the city of Indianapolis to manage 3,800 metered parking spaces, providing systems integration and advanced analytics, state-of-the-art technology, and business process improvements to reinvigorate the parking program. This public-private partnership modernized the parking system and made parking more convenient for the motorists and businesses of Indianapolis. The project's goal was to implement new meter policies, including new rates (rates had been stagnant for 35 years) and hours of operation, but not before refreshing every parking meter.

After a careful cost-benefit analysis and a critical customer survey, ParkIndy opted to deploy a hybrid system of 1,400 advanced single-space meters and 325 pay boxes. The company selected sites for the various technologies based on street configuration and paid use patterns. No printers were deployed, which reduced paper waste and ensured that customers need not return to their cars to display receipts. This configuration further reduced power consumption and battery use; printers can quickly deplete batteries, especially in high traffic areas.

TAKE THE PATH TO EXCELLENCE
GET CERTIFIED.

NEW

ACCREDITED PARKING ORGANIZATION
ACCREDITATION GUIDELINES

Green Garage Certification Standard

CAPP
Respected worldwide as the leading credential in parking

CAPP Certification Program
CANDIDATE HANDBOOK

Presented by the
CAPP Certification Board
of the International Parking Institute

IPI INTERNATIONAL PARKING INSTITUTE · UNIVERSITY of VIRGINIA

[ORGANIZATIONS]   [FACILITIES]   [PROFESSIONALS]

Now Parking Organizations Can Become Accredited Too.

IPI is launching a new program to enable parking organizations that meet rigorous standards to become Accredited Parking Organizations (APO). Accredited Parking Organizations demonstrate excellence in parking management and operations, customer service, professional development, safety, and security. Download the *Accreditation Guidelines* to review criteria and learn how to apply at **parking.org/APO**.

IPI **INTERNATIONAL PARKING INSTITUTE**™
Advancing the parking profession™

The Experience

Decisions concerning the layout of a multi-space meters can provide additional conveniences to the customer. Despite claims to the contrary, the use of video analytics has demonstrated that parking spaces may actually be lost in undemarcated, free-flow parking environments because drivers park in a manner that doesn't leave enough space for other cars. This inefficiency leads to fewer available spaces during peak periods, which can exacerbate congestion. Armed with this data, ParkIndy promoted a pure pay-by-space configuration and eschewed zone classifications. We established distinct four-digit space numbers and distributed the inventory in a way that preserved the ability to add more spaces on each block in the future. Further, these configurations eliminated the need for customers to enter zone numbers when paying by phone. Motorists who walk a few blocks and find they need to add value can do so simply. They can enter their parking space in any multi-space unit. Walk up to a pay box, enter the number, and the correct rate displays, even if that rate is different from that of the block where they parked.

How many informational stickers are needed on the meter and pay box to inform customers and help them understand how to use the technology? Yes, this is a trick question. More stickers do not equate to better information. The content and design of messaging is critical. Using analytics to determine use patterns and the needs of customers, Indianapolis regularly examines the need for new instructions. The latest implementation in July 2014 offered graphical depictions and reduced the number of necessary customer button pushes by 300 percent by defaulting meters to the average-purchase value. The new overlays on the front of the pay boxes offered much more direction to customers despite having fewer words overall than the previous stickers.

Some take-aways:

- Use simple instructions and graphical depictions.
- Challenge the current configuration using data analytics to focus decisions on saving customers time.
- Display important information on the unit such as meter holidays, free times, and assistance phone numbers.
- Review system data to determine variables such as rates, special events, and restrictions.
- Plan on updating the entire graphic by performing routine holistic reviews with the public, stakeholders, and the transactional data.

The Finish Line

It would be easy to say that both Charlotte and Indianapolis have arrived at the 21st century finish line. But doing so would be wrong. These programs recognize that there is no one correct answer to implementing parking technology—programs must be adaptable and evolve. The work of making parking and mobility easier for customers never ends, and the use of analytics can continue to improve parking for stakeholders such as drivers, merchants, bicyclists, and pedestrians. ℗

CLEMENT GIBSON, CAPP, is the special programs manager for Charlotte's Park It! Program. She can be reached at cgibson@ci.charlotte.nc.us.

ADAM ISEN, CAPP, is director of ParkIndy, LLC, a Xerox Company. He can be reached at adam.isen@xerox.com.

BEFORE YOU DEPLOY

The Indianapolis parking system change was a big one. Now that it's done, here are the top 10 items partners say other cities should consider for their deployment schedules:

1. Vendor contract terms with allotted production schedules (don't forget to account for freight delivery delays).

2. Secondary items that may need to be fabricated or preapproved: installation permits, stickers, street signs, and number caps.

3. Seasonality. Factor in all types of inclement weather and events based on your city and geographic location.

4. A thorough system space inventory/count, down to the block, space orientation, and ADA or other restriction designations.

5. Rate configuration. Confirm all rates, zones, card types, messaging, and receipt printing, and get the necessary sign-offs.

6. Confirm how the ticket issuing process will be performed under the new meter technology or through integration to current handheld devices, while ensuring that enforcement has scheduled training on the technology.

7. Walk the install locations and pre-mark the desired spots while making sure there are no encroachments. Allow additional time for necessary cement bases to be installed.

8. Set your daily desired unit installation rate schedule by working through your contractor or integrator resources. The daily pace needs to be achievable or other moving parts (such as the final coin collection) will cause process congestion or potential customer confusion.

9. Schedule marketing efforts and stakeholder meetings to showcase the new technology.

10. Use analytics to improve your operation. By studying payment patterns, the Indianapolis team was able to extend time limits up to 10 hours on blocks where utilization was less than 50 percent, leading to an 18.2 percent increase in paid stays, a 21.6 percent decline in transactions (resulting in less wear and tear on the meters), and a 23.3 percent increase in the revenue per transaction.