



The City of Houston, Texas

Case Study

On-Street Multi-Space Meters Deliver Results in Houston

DPT's cutting-edge parking technology boosts revenues, lowers operating costs, improves productivity, and garners award for City of Houston

During the annual International Parking Institute (IPI) conference in Dallas, Texas, in June 2008, the City of Houston garnered an honorable mention award in the IPI Award of Excellence Category III for its deployment of smart meters. This case study examines how the product lineup from Digital Payment Technologies (DPT) helped the City achieve this honor.

The City of Houston, the fourth largest city in the United States, faced a number of challenges common to municipalities attempting to transition to smart meter technology. Primarily, how to retain a loyal customer base in the face of new technology while still benefiting from increased revenues, lower operating costs, and overall improved productivity

The City's Parking Management division identified five key areas that could be improved by implementing cutting-edge technology that would benefit the municipality and its customers:

1. Replace an outdated meter plant and reduce meter downtime.
2. Provide a consistent method of parking to central business district customers. Prior to this, the City had eight types of meters and a mix of Pay-By-Space and single-head meter parking.
3. Add multiple payment options beyond coins.
4. Gain improved auditing functionality.
5. Increase staff productivity.

Driven by escalating customer service complaints stemming from inadequate meter maintenance, Houston's City Council unanimously approved a \$15.4 million budget in 2006 to overhaul its parking meter technology to multi-space technology that encompassed Pay-And-Display meters. The first phase called for 750 smart meters to be linked through a Wi-Fi



network that offered various payment methods. DPT was selected the vendor of choice to supply its LUKE pay station for Phase 1 and a further 250 LUKE pay stations thereafter to supply Phase 2.

Rapid Return on Investment

The deployment of DPT's parking management solutions quickly paid off in several areas:

Improvement in overall productivity

The productivity of meter operations staff (up 33-percent) and customer service rapidly improved. Prior to installing the LUKE pay stations, the City's Parking Management fielded 206 out-of-service meter complaints in one month alone. A year after installation, there was a 13-percent drop in such complaints because of significant improvements in meter maintenance.

Better allocation of resources

The Wi-Fi network together with DPT's best-in-class software, BackOffice Support System (BOSS) and Enterprise Management System (EMS) enabled staff to effortlessly adjust the

meter settings. This allowed maintenance time to focus on minimizing meter downtime instead of physically working with each meter to update the settings.

Decreased Payroll costs

The City's annual payroll costs have decreased by \$120,000

Remote meter configuration

Reports generation and meter settings could now be configured remotely.

Increased Citation revenue

Improvement in meter operation time resulted in an average increase in the number of paid citations. This resulted in a decrease in citations found not liable by a hearing officer because of a defective meter. The benefits accrued showed an increase of 1,000 citations paid per month with a \$58,000 monthly revenue increase (based on the average value of a citation of \$58).

Faster cash collections

The removal of single space meters in favor of multi-space meters decreased the amount of time staff spend on collections. Instead of collecting eight to 10 meters, collections personnel had to service only one or two meters per block.

Reduced bagging operations

The reduction in the total number of meters meant an improvement in meter bagging operations. With the previous old-style meters that were rented to customers, the City's enforcement personnel were spending a considerable amount of time bagging every meter on a requested block face due to maintenance operations. Switching to DPT's multi-space meters meant bagging operations dropped by 25 percent thus freeing personnel to focus on enforcement operations.

More environmentally friendly

Going smart meant going green, and by deploying LUKE solar-powered pay stations, the City reduced its dependency on electricity and batteries. Previously, batteries were consistently replaced or disposed of in older units.

Reduced street clutter

Since the new meters required no space markings on the pavement, more vehicles could be parked per city block. This significantly reduced

visual on-street clutter and multiple signage.

Benefits for the City

There's no doubt the City's decision to switch to sustainable parking management technology has been a bold and prudent one. Take, for example, the City's 52-percent increase in parking revenues in just five months of deployment in 2008. This can be attributed to:

1. Customers unable to piggy-back on remaining time left over from a previous transaction. DPT's Pay And Display meter resets the space back to zero.
2. Meters configured to accept bill and credit card payments. Since deployment, the City's new meters have registered an average 32-percent penetration on credit card payments.
3. A Downtown Hopper parking pass, improved customer service levels. The Downtown Hopper is based on a flat fee rate and allows for all-day parking at multiple locations.. It has proved a hit with businesses and visitors alike.

The City of Houston has realized the benefits of pairing its DPT pay stations with DPT's online management system, EMS. Instead of relying on calls from upset customers who have been cited at an out-of-order meter, EMS now sends real-time alarms to maintenance staff alerting them to troubleshooting issues. As a result, the number of meter check requests from citation officers has decreased by 35-percent. This means maintenance has been efficiently streamlined to troubleshoot the exact meter prior to a complaint.

Benefits for the Community

The City of Houston is currently exploring the creation of a program called the Parking Benefit District. It would be open to neighborhoods experiencing parking problems. Because revenue is easily tracked by location, the municipality can transfer a portion of the revenue back into neighborhoods to improve lighting, sidewalks, and landscaping. Talks are also underway between the local transit authority and Parking Management to open up parking along new transit corridors.

Through its new smart meters, the City has highlighted the positive impact the technology can have as community leaders recognize the system's importance to the city's economic development and quality of life issues.

On The Campaign Trail

Key to sustaining this realization is effective communication.

Prior to and during project roll-out, the City of Houston Parking Management engaged in a targeted public relations (PR) campaign to educate stakeholders—downtown businesses, media, and the general public—on the benefits and values of its new metered system. A dedicated web site kept stakeholders updated on project status, while a dedicated e-mail address served as a forum for question-and-answer sessions.

Parking Management staff also met face-to-face with business owners to discuss the new metered system and its benefits to business and patron alike.

Because the new meters were such a dramatic change from the old system, education was vital to getting the public and City authorities on board this enterprising venture. Collaborating with the local media to sound off the project, Parking Management launched a series of effective PR campaigns to highlight the benefits and the use of the new multi-space meters. A “meter unveiling” ceremony kicked off the campaign and periodically featured project updates. An information card detailing step-by-step use of the new smart meter technology was disseminated to the public as Phase 1 of the project got underway.

Parking enforcement personnel were engaged in a two-week Ambassador Training program where they received intense customer service training and schooled in how to operate the new meters. As an all-round awareness campaign, owners whose vehicles violated parking regulations received warnings and an information card on how to use the meters.

A community outreach program was initiated by Parking Management to educate residents about the new meters. This ongoing program interacts with civic and home owner groups to discuss parking issues. Since the program's

inception, 134 community outreach sessions have taken place.

New meter instructions were also communicated to the City helpline to aid in customer service.

Tried, Tested, and Successful

The City of Houston's deployment of DPT smart meters has proven that though the technology is advanced, it can still be easily adapted and challenges creatively overcome through cooperative ventures between client and customer. The biggest stumbling block remains funding such an ambitious project. Here again the City proved its resourcefulness by opening the lines of communication with locally elected officials. This paved the way for improved performance as officials trusted the Parking Management division to work in the interest of the public. The transparency signaled a trust for the allocation of future public resources.

About Digital Payment Technologies

Digital Payment Technologies (DPT) is an innovative leader in the design, manufacture and distribution of multi-space parking meters, parking management software, and online services for the North American parking industry. The company's products provide complete financial tracking, control and reporting for parking revenue collected by municipalities, universities, parking management companies, and national parks, from customer payment through to bank deposit.

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