



# WHEN PARKING TRANSFORMED A CITY

*How Steel City morphed into an innovation powerhouse:  
A follow-up on the Pittsburgh Parking Authority.*

By Julianne Wilhelm

**ONCE AN AMERICAN MANUFACTURING EPICENTER** known for its smoke-billowed steel mills, the City of Pittsburgh, Pa., has become one of the top innovation cities in America, positioning itself as a city of tomorrow.

To date, the region's per capita research and development (R&D) spending is nearly two and a half times the national average. After the turn of the millennium, Pittsburgh began investing in all the typical ingredients of the modern American urban success story: a diverse and educated workforce, universities and research institutes, and restored neighborhoods. Leading in Pittsburgh's innovative force was the Pittsburgh Parking Authority (PPA), a key player in the city's striving economy.

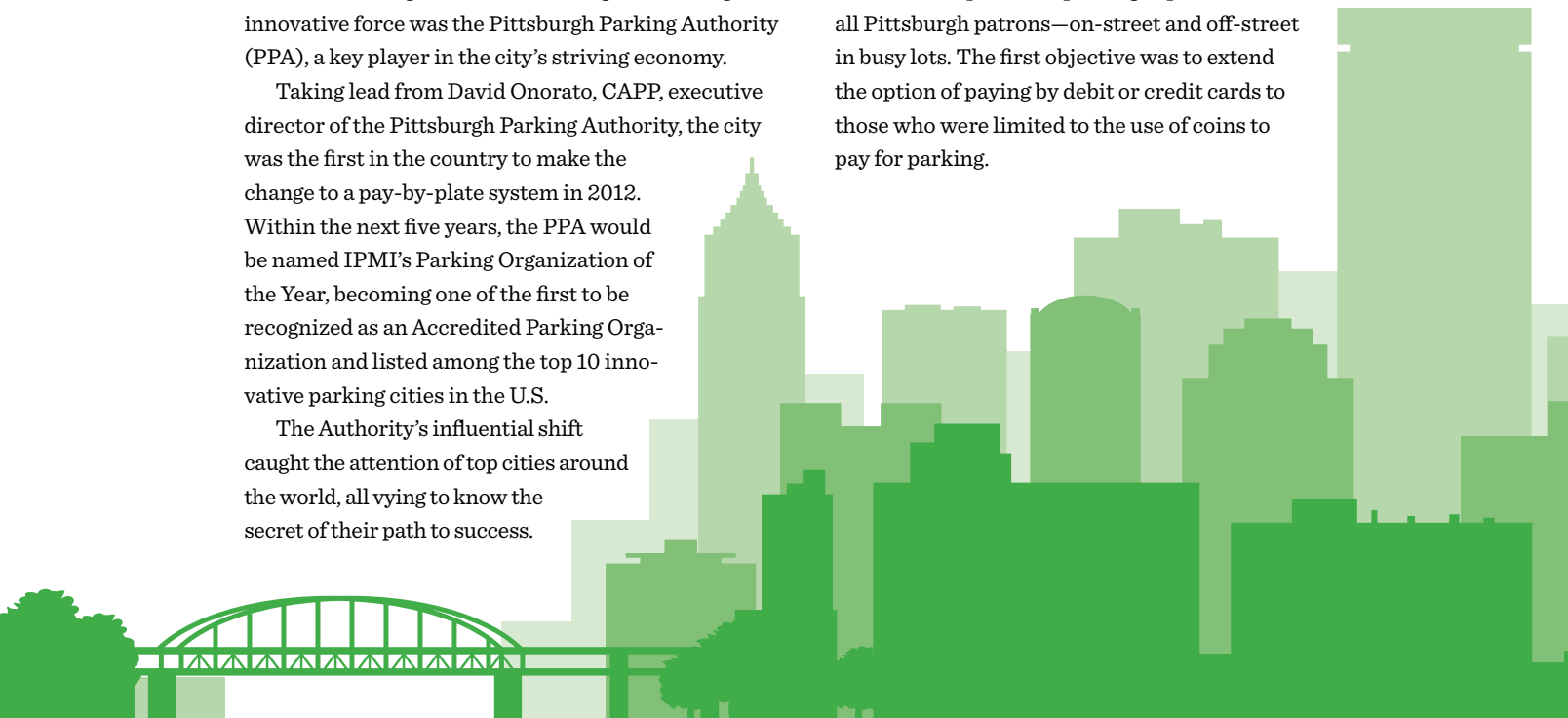
Taking lead from David Onorato, CAPP, executive director of the Pittsburgh Parking Authority, the city was the first in the country to make the change to a pay-by-plate system in 2012. Within the next five years, the PPA would be named IPMI's Parking Organization of the Year, becoming one of the first to be recognized as an Accredited Parking Organization and listed among the top 10 innovative parking cities in the U.S.

The Authority's influential shift caught the attention of top cities around the world, all vying to know the secret of their path to success.

## **A Bold Move Forward**

Up until 2012, Steel City was just that, a metropolis vast with steel, coin-operated single-space meters. The slow-paced meters had been a part of the city's landscape for nearly 75 years and were becoming difficult to support.

Onorato led the modernization for the authority with a vision to improve the parking experience for all Pittsburgh patrons—on-street and off-street in busy lots. The first objective was to extend the option of paying by debit or credit cards to those who were limited to the use of coins to pay for parking.





METERS STRICTLY ENFORCED MONDAY - SATURDAY  
Pittsburgh Parking Authority  
ENTER LICENSE PLATE NUMBER ENTER PAYMENT  
IF THIS METER IS TEMPORARILY OUT OF SERVICE, PLEASE PROCEED TO NEAREST METER TO PURCHASE YOUR TIME.

\$3.00/HR \$0.25 = 5 MINS  
8AM TO 6PM 2HR MAX  
MONDAY - SATURDAY

NO PARKING  
BETWEEN  
7-9AM  
AND  
4-6PM  
MON. - FRI  
YOU WILL  
BE TOWED

David Onorato, CAPP,  
executive director  
of the Pittsburgh  
Parking Authority.

Facility renovations were a huge step toward modernizing the Pittsburgh Parking Authority.



The authority began installation of 500 pay-by-plate terminals, the largest CWT installation in the U.S. at the time. The terminals were all connected to a back-office system that monitored the status of the terminals and tracked revenue generated.

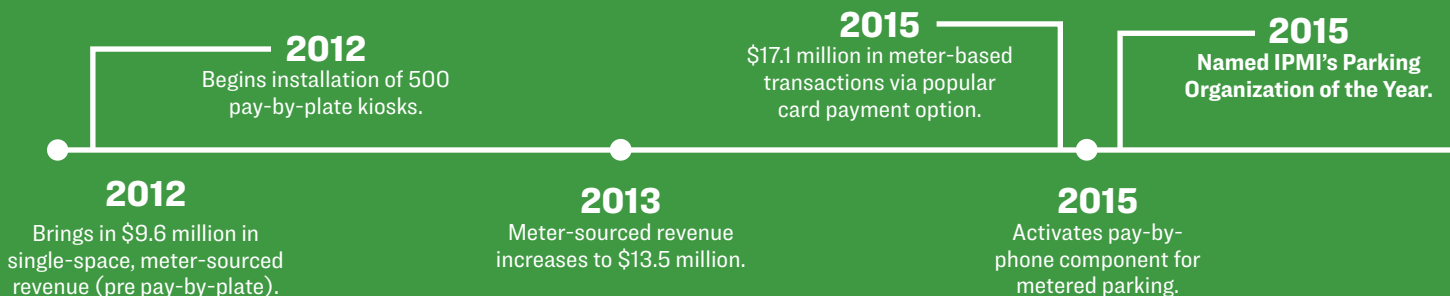
### Leading the Transition

With the first large-scale implementation of its kind, the authority sought a seamless customer transition from single-space mechanical meters, as well as several pay-and-display meters, to a full-scale, pay-by-plate operation. Knowing many vehicle owners didn't have their license plate number memorized, the authority worked with city businesses to distribute key fobs. Each fob had space for patrons to record their license plate information for reference during parking transactions.

Once the new system was installed, meter greeters—staff and local students who came out to educate patrons about the modernized process—began appearing around town.

“With the support of my IT Department, the decision was made that pay-by-plate was the way to go,” says Onorato. “We decided we were about to make a drastic change from the coin meters.” The authority made the bold move to transition the meters with a vision of increasing revenue, capitalizing on new technologies, and improving efficiency, effectiveness, and transparency.

In 2012, Pittsburgh became the first U.S. city to implement an on-street pay-by-plate system on a large scale. The authority made the decision to manage its network of metered spaces with Flowbird's Cale Web Terminal (CWT) multi-space kiosks.



“The customers needed to know the why,” says Onorato. “When you pay for a parking spot using pay-by-plate, you can park anywhere else within that area with the time you have left over. No new transactions.”

The new system also eliminated wasted parking space that had been unknowingly idle for years. The old parking spaces drawn out for pay-and-display were measured for car lengths that were outdated, fitting 15 cars to a block. With the newly implemented pay-by-plate zone system, patrons easily fit 18 cars to a block. This contributed to a major increase in revenue, allowing the authority to self-fund structural repairs.

### Effects beyond the City

By 2014, the authority collected \$47,000 a day from the pay-by-plate system, up from \$22,000 from the old coin machines. The market’s response was favorable.

Other cities across the U.S. began to take notice. After the 2012 pay-by-plate transition, many requests for proposals (RFPs) for multi-space parking meters asked for pay-by-plate as at least as an option, if not the primary mode of operation.

### Advancing toward Organization of the Year

In 2015, the Authority saw another opportunity to expand its progress by adding a mobile payment application to the system. Users were quick to adapt to it.

Pittsburgh’s acceptance of the new payment feature easily outpaced market response elsewhere. Just five months after its introduction, the city’s use of the app rose to fourth among all the app’s roster of metropolitan clients. By 2016, transactions reached the half-million mark to account for more than \$1.2 million of meter-sourced revenue. Previous downtime of the old meters of 20 to 30 percent was reduced to less than 1 percent with the new meters and the introduction of the phone app.



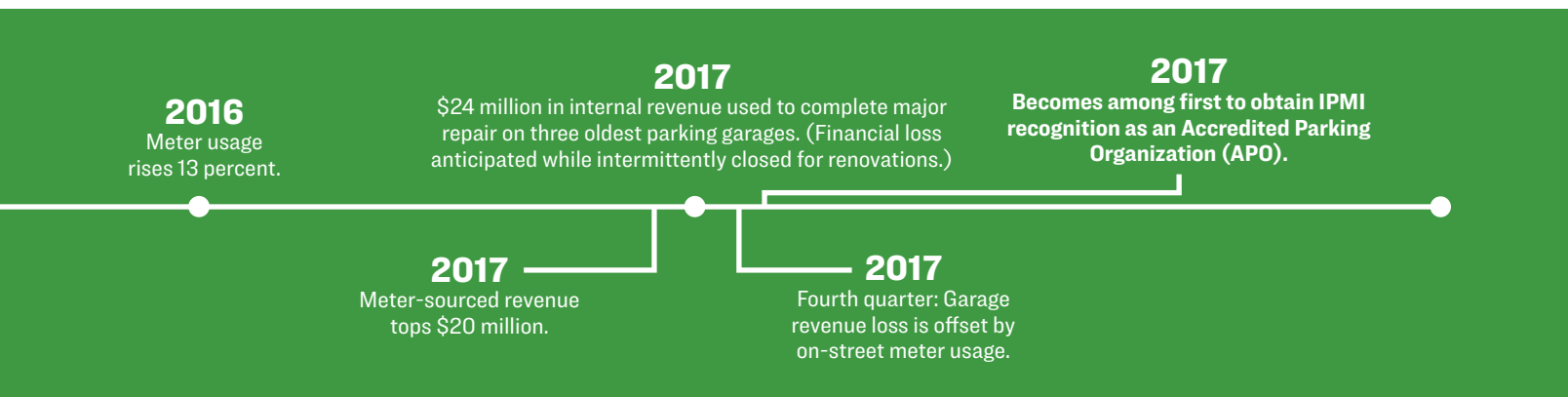
Parkers took advantage of key fobs that helped them remember their plate number while they got used to pay-by-plate meters.

Evidencing the success of its efforts, the authority was named the 2015 Parking Organization of the year by the International Parking and Mobility Institute (IPMI). It was recognized for not only their ability to be financially self-sufficient but for funding other city services and activities. Revenues from the new parking system continued to increase, and in that same year, the authority signed a co-op agreement with the city, giving them more than \$28 million each year.

### Innovation for the Long-Term

Perhaps the greatest factor of the Pittsburgh Parking Authority’s success is its ability to always be two steps ahead, innovating for the long-term. With the knowledge that approximately one-fifth of the city’s metered spaces were in off-street lots, the condition and appearance of those locations were closely monitored, with any necessary repair or improvement funds set aside annually.

During a 14-month period starting mid-2015, the authority began the largest capital repair project in the





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organization’s 73-year history. Among those restored would be four neighborhood facilities, a project that would add a 25-year lifespan to each structure. Each public repair would be a major investment, but by the end of 2017, nearly \$24 million—all internally funded—would be invested to enhance these valuable parking assets.

“One of the major factors in our ability to self-fund our capital repair and to enter into a co-op agreement with the city was the major overhaul to our meter operation system,” says Onorato. “The drastic meter revenue increase can be directly related to the installation of [the] pay-by-plate system with pay-by-phone technology, along with the introduction of credit cards, three years of minor rate increases, elimination of marked spaces, and the ability to maintain the meters through data.”

The largest repair was done on the popular Third Avenue Garage, a facility going on six full decades of continuous operation. The project faced the obstacle of long-term heavy repair with the requirement that parking operations be continued throughout construction. Through careful planning by the authority, the project adopted a white noise method of hydro-drilling that wouldn’t hinder nearby businesses and schools—a sharp contrast to jackhammer drilling. Evidencing the effectiveness of the authority’s proactive approach to capital repair, the Third Avenue project received top honor in the Large Facility Renovation category by IPMI in May 2017.


## Maintaining the Standard

By mid-2017, the Pittsburgh Parking Authority had come a long way from where it was five years before. A city that had spent 60+ years using the same mainstream process, had been converted by the authority’s bold moves forward. Steel City was now the City on the Move and became one of the first municipal providers to obtain IPMI recognition as an Accredited Parking Organization (APO), the certification that recognizes best practices in responsible parking management, innovation, customer service, safety, and security.

Onorato views the pursuit of accreditation as having been highly beneficial, both as a management resource and as an aid in sharpening employee awareness to continuously improve all aspects of customer service.

Holding true to APO standards, the authority continues to work with others to enhance economic and quality-of-life values. In the years since initial pay-by-plate installation, Onorato continues to upgrade the city’s mobility structure. Currently, the city has increased its multi-space kiosks to 1,040 units, responding to the need for convenience in more locations.

“The purchase of advanced revenue control equipment and complementary software support improved operating performance across the board,” says Onorato, “The adoption of [the] pay-by-plate system enhanced virtually all aspects of that function, from customer convenience and revenue generation, to enforcement effectiveness and resolution of ticket violations.”

Today, the City of Pittsburgh is witnessing a decrease in citations with an increase in revenue, reflecting that compliance with pay-by-plate is higher than ever. The authority is happy to report it has surpassed \$20 million in revenue, compared to \$7 million in 2012. Given the sequential investments in technology, the authority is now among the most technologically advanced operators in its field. 



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