

INFRASTRUCTURE LEADERSHIP IN SAN FRANCISCO, CALIFORNIA

The Price Is Right: Parking Goes High Tech in San Francisco

Circling a busy city district in search of an on-street parking space? San Francisco wants to make your life easier. A pilot program, called SFpark, uses variable pricing to match demand and supply, providing a glimpse at the technology-rich future of parking.

SFpark, launched in San Francisco in April 2011, operates on 7,000 on-street spaces and 12,250 garage spaces throughout the city. It combines dynamic pricing with technology that uses embedded roadway sensors to track the availability of parking spaces and transmit the information wirelessly to a data feed. Tech-savvy Bay Area drivers can check online via smartphone app or text message, or call a phone hotline to see where spaces are available, then pay for parking by credit card or phone.

SFpark gives drivers choices: pay more and walk less, or pay less and walk an extra block or two. The price of parking is adjusted according to demand and varies based on location, time of day, and day of week. Hourly rates can reach as high as \$6.00 but can be as low as 25 cents during nonpeak times in low-demand areas. As SFpark gathers information about the effect of pricing on parking supply and demand, it periodically adjusts rates, which are displayed at garages and meters and online. The \$25 million program, which received a \$20 million federal grant from the U.S. Department of Transportation's Urban Partnerships program, is in a pilot phase through summer 2012.

Making parking easier and more convenient is SFpark's primary goal, but its planners have bigger things in mind. The new pricing schemes should improve access to local businesses; removing circling vehicles from the traffic lanes should reduce congestion, increase traffic flow, improve the reliability of city buses, and improve air quality. "SFpark is helping us to realize the promise of using data to make smarter decisions," explained Jay Primus, SFpark manager for the San Francisco Municipal Transportation Agency (SFMTA).

Thus far, the program has helped boost meter revenue; income from SFpark meters increased by 20 percent in 2011 over 2010. One unexpected outcome: all the upgrades are driving down citation fees from parking violations. These fees declined by more than 30 percent in 2011.

CREATING SFPARK

SFpark was championed and administered by SFMTA. In some cities, separate departments manage on-street parking, city-owned garages and lots, and parking enforcement. In San



San Francisco's SFpark parking management system uses sensors to adjust meter prices based on demand. Users can access information with smartphones. (Photo courtesy SFpark)

Francisco, SFMTA is the sole agency responsible for these tasks and thus was in a strong position to focus on delivery of the project. The Port of San Francisco, which has jurisdiction over 1,000 metered on-street spaces along the city's waterfront, was also involved.

SFMTA enlisted the help of several partners to develop and launch the program, including an academic advisory team and a variety of private sector players. The academic advisory team, which included parking management guru Donald Shoup, provided early consultation on program design and data collection. Private sector contributors helped create supporting technology, including software, smartphone applications, parking sensors, mapping, and redesigned meters.

THE IMPORTANCE OF MESSAGING AND DATA

Effective communication has been a key component of the *SFpark* program. Helping the public understand that the program was about managing transportation in smarter ways—not just about increasing the price of parking—was crucial. “So far, public reception has been very positive,” reported Primus. “We really haven’t received any complaints. In large part, it’s

because there’s a strong value proposition. Parking is easier to find, easier to pay for, and more convenient, with longer parking time limits,” he explained.

SFpark periodically evaluates the program’s effect on parking availability, revenues, and congestion. In 2012, SFMTA will take a look at how well the pilot program achieved its broader goals of reducing congestion and improving bus reliability. The agency also hopes to produce a comprehensive guide on the technical aspects of the project that can aid other cities interested in replicating the effort.

INNOVATIVE APPROACHES AND TECHNOLOGY

As the country’s first large-scale application of smart technology and pricing to manage parking, strong leadership from the agency in charge was critical, as was the federal funding that helped underwrite the program. But going first also raises risks, which SFMTA mitigated by tapping into the region’s wealth of knowledge and private sector technological prowess. *SFpark* is attracting attention: the Institute for Transportation and Developmental Policy gave San Francisco its 2012 Sustainable Transport Award, in part for the innovative parking management program.

***SFpark* adjusts parking rates in San Francisco’s Moscone Garage in response to demand. (Photo courtesy of SFpark)**

