Parking Gets Smart

EMILY WASHINGTON

Parking Gets Smart
How to make sure a spot is available when you need one

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Cities across the country are adopting parking systems that allow drivers to pay for metered spots with their smart phones. With parking meters connected to a central computer system, “smart parking” enables drivers to extend their parking time remotely and creates the potential for cities to charge for valuable street parking spots according to demand. A new smart-parking pilot program is now under consideration in Staten Island.

As all New York City drivers know, parking spots are scarce. Why? Because in many parts of the city, parking on the street is free. Donald Shoup, perhaps the world’s foremost parking expert, made a career of explaining how underpriced parking causes problems. In his book *The High Cost of Free Parking*, he demonstrates that cheap street parking gives drivers an incentive to circle a neighborhood looking for an empty spot rather than ponying up to park in a garage. Shoup analyzed several studies of cruising behavior and found that in central business districts, up to 30 percent of cars driving at any time are looking for parking spots. This leads to wasted time, wasted gasoline, clogged traffic, and higher greenhouse-gas emissions.

Several cities, including Washington, D.C., and Los Angeles, have implemented versions of smart meters. However, many cities with smart meters in place haven’t taken advantage of the real benefit of smart parking: the potential it creates for the price of parking to vary seamlessly with changes in demand.

The San Francisco Municipal Transportation Agency (SFMTA) implemented its SFpark system in 2011. Started as a pilot project on 5,100 meters, SFpark has now updated all 29,000 of the city’s meters to be included in the program. The system operates with the stated objective of
maintaining a parking occupancy rate of 60 to 80 percent. While the program has led to higher pricing for street parking in areas of high demand, it has reduced collections from street parking as a whole, since prices have fallen in those areas where higher prices aren’t needed to ration supply. Rather than letting prices fluctuate in real time based on parking availability, SFMTA manually adjusts parking rates from time to time based on data from the meters. The most an SFpark meter can charge is $6 per hour.

New York City has seen one short-lived experiment in smart parking. In 2013, the Bloomberg administration implemented a pilot program in the Belmont Business Improvement District, the Bronx’s Little Italy. The BID manager said that the pilot was a failure. By the time drivers got to a spot that showed up as available on the app, it would often be taken. This problem could have been solved by varying prices according to demand. While the street sensors in the Bronx had the capacity for variable pricing, the pilot program didn’t implement it. With a variable pricing system (at least one that is working well), drivers don’t need an app to show them where open spots are because they’ll usually be able to find one, as higher prices keep spaces available to those willing to pay a bit more.

Smart parking may now be coming to Staten Island. Borough president James Oddo says that he sees potential for smart parking to reduce congestion on some of the most clogged thoroughfares. The program under consideration is called Fastprk. Roberto Ponce, who represents the company behind the potential Staten Island initiative, said that the Fastprk technology is in operation in 42 American cities, including pilots in Indianapolis, Seattle, and Orlando. Ponce recommends that cities start a pilot with a minimum of 500 spots to get a sense of how traffic conditions change with the implementation of smart parking. He also suggests that cities implement smart parking with variable pricing.

American drivers are accustomed to a culture in which parking is often free or underpriced. However, the high demand for New York City street parking means that spots will go primarily to drivers willing to drive around long enough to find one. New Yorkers are busy. They can’t afford to waste time. With smart parking technology, they won’t have to.

Emily Washington writes for the blog Market Urbanism.