

ITS magazine

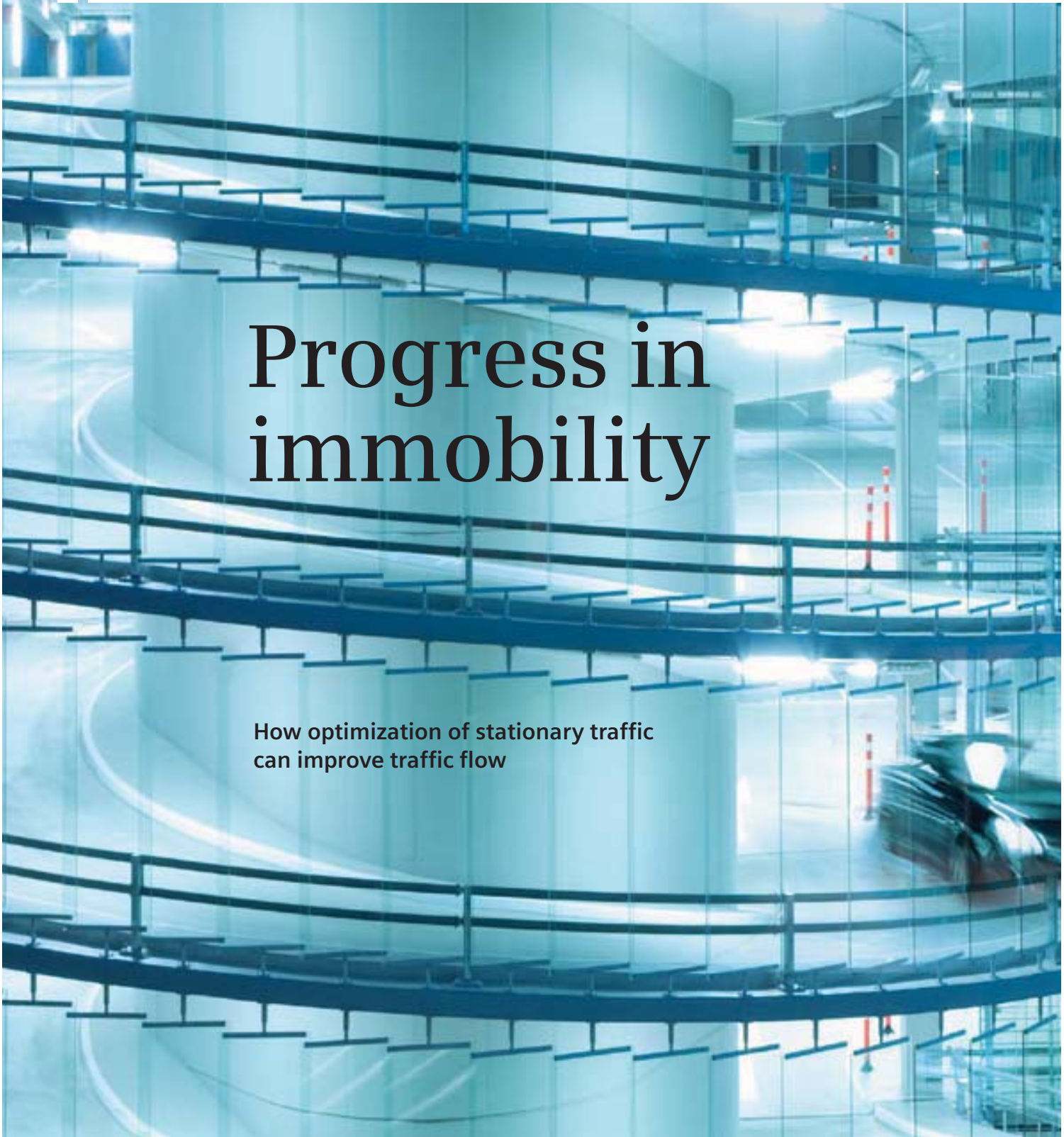
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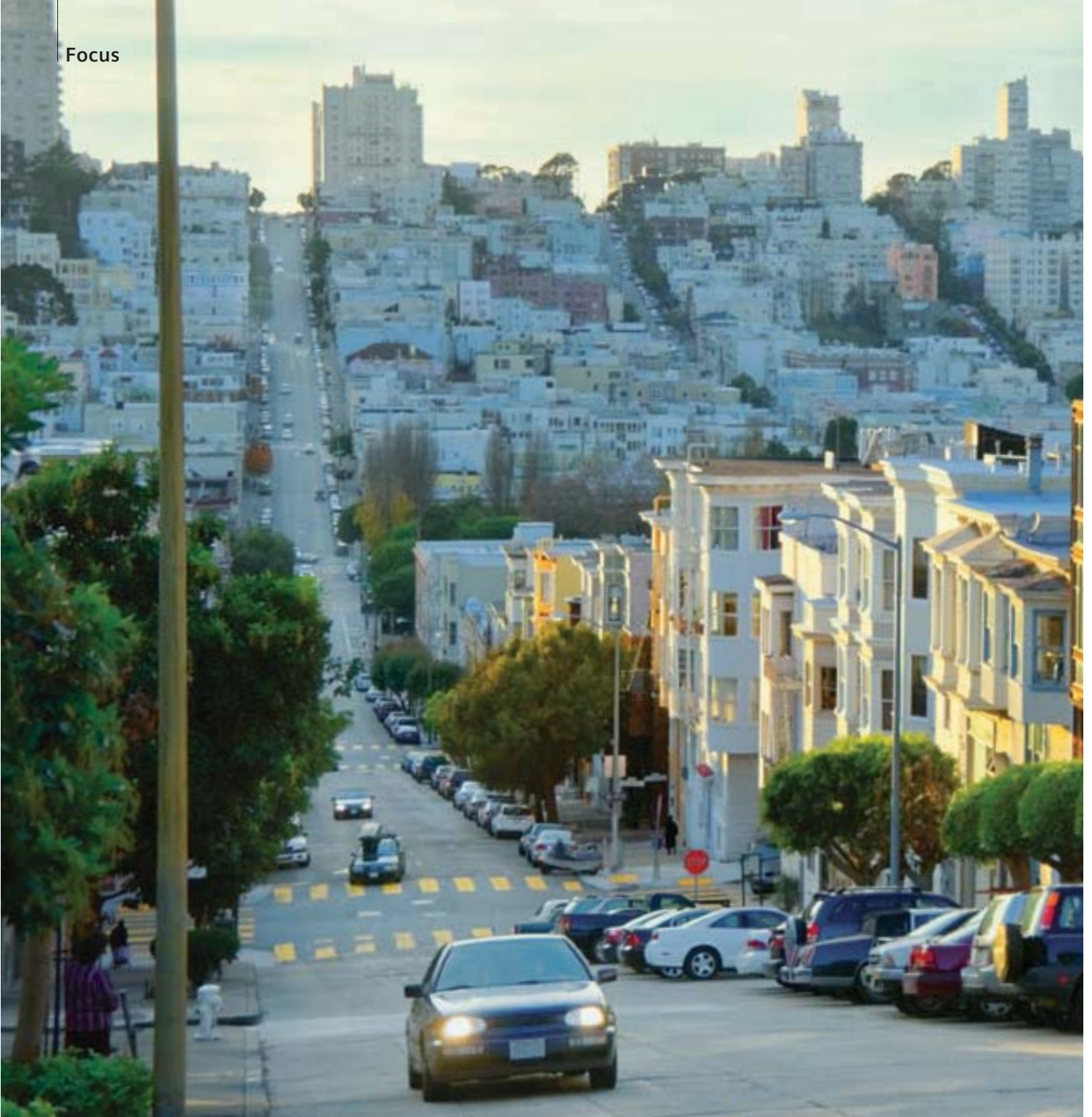
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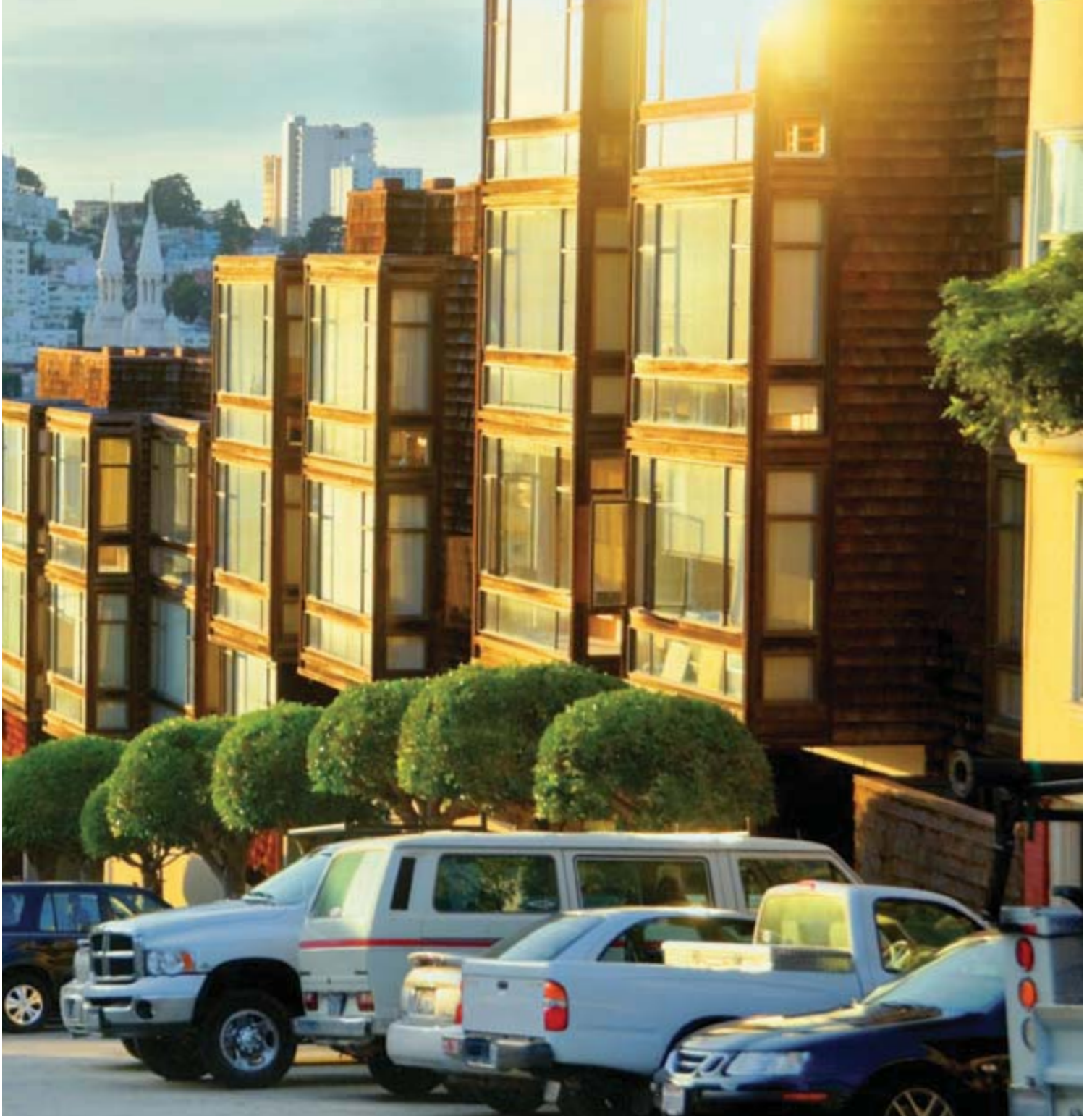
Progress in immobility

How optimization of stationary traffic
can improve traffic flow





A quiet revolution



Essay ■ In the U.S., his famous book *The High Cost of Free Parking* is compulsory reading for local politicians today – and Professor Shoup is in high demand as a consultant for urban planning projects. The ideas of Professor Dr. Donald Shoup from the University of California are behind *SFpark*, an innovative system that uses sensors to monitor curb space occupancy and adapt parking prices to demand. For the ITS magazine, he has written an essay to explain his three key recommendations. He also presents the first success stories.

Everybody can profit from performance parking prices.

“Paying for parking is like going to a prostitute,” George Costanza, one of the most prominent cheapskates in the history of TV, once said. “Why should I pay when, if I apply myself, maybe I can get it for free?” Although most people would probably choose more subtle analogies, this punch line of the short and chubby Seinfeld sidekick aptly sums up most Americans’ attitude toward paying for parking.

And where has this attitude led us? Where curb parking is underpriced and overcrowded, a surprisingly large share of traffic may be cruising in search of a place to park. Sixteen studies conducted between 1927 and 2001 found that, on average, 30 percent of the cars in congested traffic on city streets were cruising for parking. For example, when researchers interviewed drivers who were stopped at traffic signals in New York City, they found that 28 percent of the drivers on a street in Manhattan and 45 percent on a street in Brooklyn were cruising for curb parking. In another study, the average time to find a curb space on 15 blocks in the Upper West Side of Manhattan was 3.1 minutes and the average cruising distance was 0.6 kilometers. These findings were used to estimate that cruising for underpriced park-

ing in this small area alone creates about 590,000 excess vehicle kilometers of travel and 295 tons of CO₂ per year.

Free curb parking in a congested city gives a small, temporary benefit to the few drivers who happen to be lucky on a particular day, but it creates huge social costs for everyone else every day. To manage curb parking, some cities have begun to adjust their curb parking prices by location and time of day to produce an 85 percent occupancy rate for curb parking, which corresponds to one vacant space on a typical block with eight curb spaces. The price is too high if many spaces are vacant and too low if no spaces are vacant. Some call it the Goldilocks principle of parking prices, others refer to it as performance pricing. But by whatever name you call it, the effect remains the same: performance improves in three ways. First, curb parking will perform more efficiently; second, the transportation system will work more smoothly; and third, the economy will profit. In business districts, drivers will park for their errands and leave promptly afterwards, allowing other customers to use the spaces and do their shopping.

San Francisco has embarked on an ambitious program, called *SFpark*, to get the prices of curb parking right. The city has installed meters that can charge variable prices, and sensors that can report the occupancy of each space in real time. The occupancy data enable the city to adjust curb parking prices in response to demand. The city’s declared goal is to charge the lowest prices possible without creating a parking shortage. This principle can help to depoliticize parking prices. If cities shift from a revenue goal to an outcome goal and choose the occupancy rate as the desired outcome, city councils no longer need to vote on parking prices. Instead, impersonal market tests set the prices.

Parking Day in San Francisco: Since 2005, campaigners in many cities around the world buy parking tickets and use the parking space for different campaign activities



Parking meter for *SFpark*: Parking fees are adapted in relation to demand



Continental Building in Spring Street in Los Angeles, "Arts Bus" in Pasadena: Reforms include not only adopting good policies but also repealing bad policies.

The simplest way to convince people to charge for on-street parking is to dedicate the resulting revenue to paying for civic improvements in the neighborhood, such as repairing sidewalks, planting street trees, and putting utility wires underground. The people who live and work and own property in the neighborhood will see the meter money at work, and the meters-plus-services package will be much more popular than the meters alone.

This theoretical rule has already been put to the practical test in several cities. The most impressive success story may be the dramatic improvement of Old Pasadena. What a few years ago was a commercial skid row is today one of the most popular tourist destinations in southern California. The recipe for success: spending more than \$1 million a year generated by the parking meters to pay for new public services right in the neighborhood. Reforms are not only adopting good policies but also repealing bad policies. Requiring all buildings to provide ample off-street parking is one such bad policy that cities should repeal. In Greek mythology, a cornucopia always overflowed with whatever its owner wanted. Requiring ample parking does give us all the free parking we want, but it also distorts transportation choices, debases urban design, damages the economy, and degrades the environment. Consequently, some cities have begun to remove minimum parking requirements, at least in their downtowns, for two reasons.



People should see the meter money at work in their own neighborhood.

First, parking requirements prevent infill redevelopment on small lots, where fitting both a new building and the required parking is difficult and expensive. Second, parking requirements often prevent new uses for many older buildings that lack the parking spaces required for the new uses.

Removing a parking requirement is not the same, however, as restricting parking

or putting the city on a parking diet. Quite the contrary. Rather, parking requirements force-feed the city with parking spaces, and removing a parking requirement simply stops the force-feeding. Ceasing to require off-street parking gives businesses the freedom to provide as much or as little parking as they like.

A prime example for the practical relevance of these mechanisms is Spring Street in Los Angeles, once known as the Wall Street of the West. It has the nation's largest collection of intact office buildings built between 1900 and 1930. Starting in the 1960s, the city's urban renewal »

program moved most office uses a few blocks west to Bunker Hill and left many splendid Art Déco and Beaux Arts buildings on Spring Street vacant except for retail uses on the ground floor. For several decades, nothing much changed ... until 1999, when Los Angeles adopted its Adaptive Reuse Ordinance (ARO), which allows the conversion of economically distressed or historically significant office buildings into new residential units – with no new parking spaces. Developers used the ARO to convert historic office buildings into at least 7,300 new housing units between 1999 and 2008.

Academic research has repeatedly shown that minimum parking requirements inflict widespread damage on cities, the economy, and the environment. Requiring Peter to pay for Paul’s parking, and Paul to pay for Peter’s parking, was a

Force-feeding our cities with parking spaces was a bad idea.

bad idea. People should pay for their own parking, just as they pay for their own cars, tires and gasoline. Parking requirements hide the cost of parking, but they cannot make it go away. They have misshaped our cities into motor-friendly, sprawling agglomerations – almost without planners’ noticing it. Free parking often means fully subsidized parking.

Paradigm shifts in urban planning are often barely noticeable while they are happening. More often than not they take the form of a quiet revolution. And a quiet revolution is probably what we are witnessing right now. Of course, all parking is political, but this political background may actually provide fertile soil for a reform of parking policies. Charging performance prices for on-street parking, spending the revenue for local public services, and removing off-street parking requirements will achieve the goals of almost all interest groups. Different people can support performance parking policies for very different reasons: because they increase local public spending without increasing taxes or because they reduce government regulation, cut energy consumption, air pollution and carbon emissions, unburden enterprise, and enable people to live at high density without being overrun by cars. There are many good reasons to reform parking policies – what we need now is the will to do it. Parking wants to be paid for. «



Curb parking: There are many good reasons to reform parking policies



Personal background

Since 1980, Professor Dr. Donald Shoup is Professor for Urban Planning at the University of

California in Los Angeles, where he also served as Chair of the Department of Urban Planning from 1998 to 2002 and as Director of the Institute of Transportation Studies from 1996 to 2001. His influential book, *The High Cost of Free Parking*, is leading a growing number of cities to charge fair market prices for curb parking, dedicate the resulting revenue to finance public services in the metered districts, and reduce or remove off-street parking requirements. His research on employer-paid parking has already led to changes in parking-related laws in California.

