PLANETIZEN

How Parking Management Can Help Cities Grow Smarter

An excerpt from the introduction to "Parking Management for Smart Growth," by Richard W. Willson, Ph.D., FAICP. Here Willson argues for parking management strategies as a critical tool for communities to get more out of the space devoted to cars.

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For most members of the public, a substantive discussion on parking policy should focus only on how to make parking cheaper and easier (the list of suggested parking reforms as a result of a city of Los Angeles study in October is a perfect example). Recent years and decades, however, have revealed the many inadequacies of planning and development that prioritizes convenient parking above all other considerations. The public conversation and the will of politicians has yet to catch up to the preponderance of evidence about the negative effects of parking, and more work will be required in implementing rational parking policies in communities of all shapes and sizes.

That's where Parking Management for Smart Growth*, by Richard Willson, Ph.D., FAICP, comes in. Building on the groundwork of the seminal* The High Cost of Free Parking *by Donald Shoup, Willson provides a practical guide to implementing new models of parking management—strategies that make more productive uses of the spaces that have been inefficiently devoted to the storage of cars for so long.*

Planetizen *shares this excerpt from the first chapter of* Parking Management for Smart Growth *in the hopes of keeping the discussion about parking at the forefront of contemporary planning practice, and in the hopes that the public will have more opportunities to inform their opinions about the impacts of parking on the quality of life of their communities. -James Brasuell*

From “Chapter 1. Introduction: What is a Parking Space Worth?”

On the surface (pun intended), the parking space is mundane. It sits passively, is often unsightly, and performs one function—storing a vehicle. Worse, it is empty much of the time. Residential parking is underused during the day when people are at work, and workplace parking is underused in the evening when people are at home.

Yet parking is a central issue in community development and a big part of the daily lives of city administrators, residents, employers, employees, and retailers. Disparate stakeholders who agree on nothing else unite in their dissatisfaction with parking.

For many, a free parking space is a right, and it should be available directly in front of their destination. So, while the parking *space* is passive, the opportunity and excitement lies in how it is *used*. Recognizing the importance of the “sharing” economy, in which technology facilitates frictionless sharing of resources rather than ownership, provides a model for parking management opportunities. Downtown curb parking (on-street surface parking in the public right-of-way), for example, has always had qualities of the sharing economy—it is collectively owned, managed for efficient use, used by many different people over the course of the day. The question is: how can sharing economy concepts make better use of existing parking?

The “worth” of a seemingly generic parking space varies. Some spaces serve dozens of parkers per day, whereas others are seldom or never used. A never-used parking space is worthless—in the sense of not serving any transportation purpose. At the same time, that parking space has onetime and ongoing costs for land, construction, administration, and maintenance. A recent estimate placed the annualized capital and operating cost of one space at $8,235 for a suburban surface lot, $28,778 for an urban three-level structure, and $54,000 for an underground central business district (CBD) space (Nelson\Nygaard and Dyett & Bhatia 2012). Parking also has opportunity costs, such as other forgone uses for that land or building area, and negative externalities, including polluted storm water runoff, heat island effects, and negative design impacts. Strategic parking management reduces the number of worthless spaces so that less total parking can provide the desired land use and transportation benefits.

This era of tighter parking supplies requires strategic parking management. Parking management reduces the need to build parking for future development and allows parking supply to be reduced if better uses exist for the land or building area. The latter instance occurs when on-street curb spaces are converted to parklets, bicycle corrals, sidewalks, outdoor dining, or bus lanes, and more productive land uses replace off-street surface parking. Finally, parking management improves the prospects for the development and use of alternative travel modes. For example, higher parking charges induce some travelers to walk, bicycle, use transit, or be dropped off.

The benefits of strategic parking are broad and meaningful and extend beyond parking itself. Strategic parking management memorializes goals, implementation commitments, and phasing. It offers a managed implementation process as well as stakeholder and public agency accountability. As with any plan or strategy, however, benefits are not limited to the direct outcomes. Strategic parking management also has benefits as a process: it brings stakeholders together to share concerns, educates stakeholders about parking management and broader community development issues, and coordinates the many parties involved in parking. This can lead to new forms of coordination and collaboration, new institutional relationships, and heightened deliberative capacity concerning parking. Finally, strategic parking management bridges product and process in generating ongoing management of parking resources and systems with real-time information, adjustment procedures, and coordination protocols.

Table 1-2. Benefits of Strategic Parking Management

Benefit	*How It Occurs*
Efficiently use existing parking	Produces faster turnover in the most popular spaces and better use of less-popular spaces. Pricing schemes produce vacancies on each block face. Information systems guide parkers to available spaces.
Avoid excessive expenditures on parking	Reduces the need to build additional public or private parking, which saves money and land, facilitates compact development, and reduces land consumption.
Enhance economic development	Supports new business formation and business expansion by reducing the burden of providing parking. Districts with active parking management have a good image; access is easier. The parking experience is an integrated part of the experience in stores, restaurants, and businesses. Improve consumer parking and access options. Improve facility design and smart growth implementation.
Reduce traffic, safety, and environmental problems	Supports broad mobility management. Management tools reduce overall parking demand and cruising for parking—the process of circling for parking spaces. Reduced cruising lessens vehicle miles traveled, congestion, and instances of distracted drivers, which makes pedestrians and cyclists safer. Parking management supports transit use, walking, and bicycling and lowers energy use, pollution, and greenhouse gas emissions. Reduces total parking lessens stormwater runoff, water pollutions, and heat island effects.
Reduce conflicts between districts	Residential permit programs prevent intrusion by parkers destined for retail districts, medical centers, universities, and other activity centers. Alternatively, parking can be allowed with pricing mechanisms that return revenue to neighborhoods.
Generate revenue and improve social equity	Revenue from parking fees and fines is directed to parking, other forms of access, and district improvements. Revenue can be used as matching funds for grants, and reduces prevalence of cross subsidies from nondrivers to drivers.

Without parking management, parking is a free-for-all—a competitive sport—with arbitrary winners (those lucky enough to find a prime space) and losers (those who don't find one). In mixed-use districts, shoppers, employees, and residents compete for the same spaces. The classic case is on-street parking in front of a store. The store owner may arrive first thing in the morning and enjoy the convenience of parking there, as may the store's employees. Over the course of the day, though, perhaps ten or fifteen customers could park in each of the spaces, or the space could be used by many more customers picking up bulky items or by trucks delivering inventory.

Which of these is the better use? Without parking management, that question is not asked. Instead, parking is on a first-come, first-served basis, resulting in costly unintended impacts.

Parking is a contested space because many uses compete for the land or building area the parking occupies. An on-street parking space can be used for traffic lanes, bus lanes, bus stops, bicycle lanes, sidewalks, or sidewalk bulb outs. Tactical urbanists propose parklets, sidewalk cafés,

performance spaces, and many other uses. Spurred by the “complete streets” movement, communities are considering the *opportunity cost* of devoting scarce public rights-of-way to parking. In the suburbs, urban designers, economic developers, investors, and real estate developers consider vast swaths of underused off-street parking and envisage other uses—parks and open space, bioswales, street-oriented infill development, mixed-use development, transit terminals and the like.

Parking is also a contested space because it is an extension of the driver’s personal domain. Unlike walking, bicycling, or transit—where people share public spaces—drivers experience their car as an extension of personal space, a part of their home. Improvements in vehicle technology have reinforced this feeling. Drivers view the world through the windshields of dimensions similar to their high-resolution televisions, with windows up, air-conditioning or heat on, audio entertainment provided, and perhaps their e-mails being read to them. Considering these features and the time spent in the car, it is easy to see how this space is an extension to the driver’s home. Seen this way, a driver’s perspective when looking for a parking space is that what is at stake is the driver’s home, rather than finding storage for a mobility machine. The heightened emotions brought to parking issues highlight this critical perception.

Parking management should anticipate the future because economic, social, technological, and environmental conditions affect the types of strategies that should be used. Thinking about parking’s use value is an important step in creating better land use and transportation policy. This perspective is reflected in the transition from parking as a component of real estate to parking as a service that is responsive to neighborhood or district goals (Gander 2014). Even if a parking space is well used, however, that does not mean that it should exist. Parking spaces are often occupied because the deck is stacked against alternative transportation modes—they are not available or convenient. Communities with aggressive plans for transit and active transportation need strategic parking management to make those plans effective.

The aim of *Parking Management for Smart Growth* is to guide practitioners to use the existing parking supply to produce the maximum community benefit and open the door to parking requirement reform and future shrinking of the parking supply. Obviously, the ratio of spaces per vehicle could never be 1:1, since private garages in single-family homes will never be shared by different uses, but many other forms of sharing are possible. Strategic parking management reduces the ratio of parking spaces per vehicle while increasing economic vitality and stakeholder satisfaction. Local public agencies and private/public partnerships should fully exhaust strategic parking management before resorting to requiring or building additional parking. This is a reversal of traditional practice, which mandates parking first (through ordinances and public parking construction) and then adopts minimal parking management techniques, if any. Rather, we should fully use available parking management measures to address parking issues before building any more parking.

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