

April 2002

Putting on Their Parking Caps

Cities around the nation are saying they want less parking, not more.

By Adam Millard-Ball

Affordable housing, transit-oriented development, smart growth, better water quality, reduced congestion, and more walkable, livable communities. The connection? All are issues that planners are seeking to tackle through parking policy, by limiting the number of spaces that may be provided as part of new development.

Parking is no exception to the rule that you can have too much of a good thing. The past few years have seen cities such as Eugene, Oregon, Cambridge, Massachusetts, and Gainesville, Florida, adopt limits on parking.



San Francisco is poised to follow suit, while Seattle is considering extending its parking restrictions to the areas around new light rail stations. In Portland, Oregon, maximum parking standards have been adopted on a regionwide basis by 30 cities and counties, as mandated by Metro, the region's metropolitan government.

Such moves may signal a complete reversal of direction in planners' attitudes. For the last half century at least, planners have been specifying minimum parking requirements for a myriad of different land uses, from convents to massage parlors, in a bid to ensure that developers will provide sufficient off-street parking.

These minimum requirements are simply a recipe for more cars, says Donald Shoup, professor of urban planning at the University of California Los Angeles, who has published extensively on the subject. In an effort to limit traffic overspill, he notes, minimum standards require developers to provide unlimited free parking, attracting more cars and resulting in lower development densities.

Shoup draws an analogy between minimum parking requirements and the 18th century practice of using lead to treat gunshot wounds, ulcers, and other ailments. While lead has local antiseptic properties, its toxic effects come at a high price to the rest of the body.

"Like lead therapy, minimum parking requirements produce a local benefit — they ensure that every land use can accommodate all the cars 'drawn to the site,'" Shoup wrote in a 1999 paper published in *Transportation Research*. "But this local benefit comes at a high price to the whole city." This price is paid in the form of traffic, congestion, and a less dense, auto-oriented city.

Drugs for cars

"Minimum parking requirements are truly drugs for cars," says Dom Nozzi, senior planner for the city of Gainesville, Florida. "They ought to be a controlled substance. They breed car trips."

Consequently, Gainesville has sought to turn the logic of parking standards on its head by introducing maximum parking requirements as a tool for limiting automobile trips, and persuading people to use carpools, transit, bicycles, and their own two feet.

"Unless we have priced parking, which we generally don't, the only way to discourage people from driving is to restrict the supply," says Nozzi. "If we're really serious about reducing single-occupancy vehicle trips, and we don't have the political will to charge for parking, we need to control the supply."

Maximum parking standards also are being used to support a range of other objectives. Work on

Portland's regional standards was initiated by the state Department of Environmental Quality in 1993 to help meet air quality standards for ozone. Subsequently, the work was moved forward by Metro as a tool to encourage compact development. Final standards were adopted in 1996.

Some suburban Portland cities, such as Beaverton, also see the parking standards as a way to raise densities, tackling sprawl and creating more compact, walkable neighborhoods. Beaverton's regulations target the amount of land devoted to parking, rather than the number of spaces provided, by allowing developers to build parking structures rather than surface lots, and thus exceed the maximum.

In Eugene, Oregon, the focus is as much on promoting greater densities and reducing the amount of land paved over for parking — and hence reducing surface runoff and improving water quality — as on reducing traffic.

And in Seattle, planners are now considering applying maximum parking standards outside the downtown core to bolster transit-oriented development around stations on the planned light rail system, where construction is due to start this year. "We see reduced parking as driving the success of transit," says Jemae Hoffman, strategic advisor for the city of Seattle.

"A lot of us would be really interested in switching to maximums," she continues. But even if they prove to be politically infeasible, she adds that the city will almost certainly take other steps to restrict the supply of parking.

Seattle is lucky to be considering these issues well in advance, rather than waiting for the first trains to start running, she notes, with station area overlay zoning ordinances in place since last July to prohibit auto-oriented uses. "I think that most other places with light rail are more reactive," Hoffman says.



Cambridge, Massachusetts, just outside Boston, has taken perhaps the most radical steps in limiting parking. While it has had parking maximums in place for around 20 years, a few years ago it adopted an ordinance forcing developers to reduce auto use to 10 percent below the 1990 average for that census tract, with a resulting decrease in the need for parking. The initial program was adopted in 1998 for an evaluation period of three years, but its success led to a reauthorization in fall 2001.

Under Cambridge's regulations, developers must draw up a transportation demand management (TDM) plan to achieve this 10 percent cut, pledging measures such as appropriate parking supply, subsidized transit passes, and parking charges. In addition, parking maximums for office and research and development uses were revised to reflect the 10 percent reduction.

"It's a tough balance," says Catherine Preston, the city's parking and TDM officer. "We don't want to ratchet it down so much that there's overspill, but a surplus encourages people to drive."

Developers who don't meet the targets for car use can be fined. In a worst-case scenario, their parking facilities can be shut down by the city.

More parking means pricier housing

San Francisco is one of the most recent converts to maximum parking standards. While it has long maintained low maximum parking standards in the downtown core, in the rest of the city developers are generally required to provide at least one space per dwelling unit. Minimum standards also are set for commercial and industrial developments.

Here, the move to parking maximums is being driven in part by concerns over housing affordability. Even after the collapse of the dot-com boom, which many blamed for soaring home prices and rental vacancy rates of virtually zero, the San Francisco Bay Area is still suffering from an acute shortage of housing, particularly affordable housing.

"Parking requirements are a huge obstacle to new affordable housing and transit oriented development in San Francisco," says Amit Ghosh, the city's chief of comprehensive planning. "Nonprofit developers

estimate that they add 20 percent to the cost of each unit, and reduce the number of units that can be built on a site by 20 percent."

Pointing to census data and other studies that show low-income households tend to own far fewer cars than the parking requirements assume, he adds: "We're forcing developers to build parking that people cannot afford. We're letting parking drive not only our transportation policies, but jeopardize our housing policies, too."

San Francisco's current proposals, developed by the planning department and consultant Nelson\Nygaard, are to eliminate minimum parking requirements completely for projects within a half mile of rail stations or a quarter mile of major transit streets, and for all below market rate, elderly, and institutional units. These would be replaced by maximum standards, varying from one per unit for new housing in less developed parts of the city, to 0.5 in the central Market/Octavia neighborhood, where a bus or streetcar arrives every minute at peak times.

Interestingly, the link between restricting parking and encouraging new housing has caught the imagination of local residents, to the extent that spontaneous applause erupted at one neighborhood meeting when the parking plans were presented earlier this year.

Most innovative of all are the base standards of 0.75 per unit the city is considering in several downtown neighborhoods, with a slightly higher level of one space per unit allowed if developers apply through the city's conditional use permit process. The aim is to force developers and landlords to "unbundle" parking, by allowing tenants and homeowners to rent or purchase it separately from the housing itself.

The city's reasoning is that, with less than one space per unit, developers won't automatically add a parking space to the cost of an apartment, but will choose to unbundle instead. And if they want to provide one space per unit, unbundling parking and housing costs will be required as part of the conditional use permit.

"We want to get away from the situation where people are forced to pay for parking, regardless of whether they have a car," Ghosh says. "The true costs of car ownership need to be made visible to owners and renters."

Attacking the minimum

One concrete example of how to provide attractive housing with little or no parking is located across San Francisco Bay in downtown Berkeley. The \$11 million, seven-story Gaia Building was completed in fall 2001 by a for-profit developer, Panoramic Interests. The building houses 91 apartments, 10,000 square feet of commercial space (including a theater), and just 41 off-street parking spaces.

Patrick Kennedy, founder of Panoramic Interests, is clear about the benefits of eliminating as much parking as possible. The savings made in both dollar terms and floor area have allowed the addition of amenities such as the theater, and for 20 percent of the apartments to be rented at below market rates to low-income households.

"That would never have happened if we'd provided 1:1 parking," he says. "This project would never have been built."

While Berkeley still has minimum parking requirements, the Gaia Building benefited from one of the exemptions granted by the city on a case-by-case basis. Kennedy would prefer to see these minimums abolished altogether, as the city is in fact considering in some neighborhoods as part of its new general plan, now being written.

A case-by-case approach gives far more scope for local objectors to stop the whole development on the grounds of lack of parking, Kennedy says. "Parking is one of the favored weapons of obstructionists."

Spillover can be avoided

The Gaia Building is located in downtown Berkeley, where on-street parking is metered or otherwise heavily

controlled. This means there is little chance of spillover parking — that is, parking from a development that overflows into surrounding areas. Spillover parking can infuriate neighbors and other local residents. Communities that allow reduced parking or introduce maximum parking standards should pay attention to possible spillovers.

After all, avoiding spillover was the justification for specifying minimum requirements in the first place. Forget about setbacks and design guidelines. What the public wants to know is this: Will a new development increase traffic, and, above all, will it make it harder to find a parking spot?

For many planners, regulating on-street parking is an essential complement to the introduction of parking maximums. Seattle's Jemae Hoffman points to meters and time limits, as well as effective enforcement, as crucial to the success of parking restrictions around future light rail stations.

And then there are residential permit parking programs, which restrict on-street parking to local residents. "The program has really reduced spillover problems," says Teresa Bishow, senior planner with the city of Eugene.

In San Francisco, planners are considering radical surgery for the city's residential permit parking program, as a complement to maximum parking requirements. These changes would acknowledge that parking woes are often caused by the number of cars owned by residents themselves, not just the commuters that the program targets for restrictions.

The proposed legislation would restrict the number of permits issued to the number of on-street spaces, and — this is controversial — charge for them at market rates, with revenue channeled to neighborhood improvements and transit.

In some dense residential neighborhoods, planners estimate the price could rise from the current \$27 per year flat rate to \$200 per month. City officials are currently trying to determine whether the revised permit charges can be treated as a fee rather than a tax, and therefore avoid the state requirement for approval by a two-thirds popular vote.

Part of Ghosh's aim is to persuade people to clear the junk from their garages and use them for cars — and in the longer term to achieve a better match between households with cars and housing with parking. Market pricing of on-street parking means that automobile owners will be willing to pay extra for a garage, and at the same time help car-free households to find cheaper housing.

This matching of cars to parking spaces helps to explain the Gaia Building's success in attracting 237 residents with just 20 cars among them. "It's a matter of self-selection," says Patrick Kennedy. After all, how many car owners would want to live in a building marketed as a "car-free development" and on top of that pay \$150 a month for one of the limited number of parking spaces?

There is nothing to stop developers and landlords giving preference to households that don't have a car, Kennedy adds. Because car owners are not a protected class under state or federal law, this practice is perfectly legal. Alternatively, as in some of Kennedy's other Berkeley developments, the city can prohibit residents from obtaining an on-street resident's parking permit.

Many cities, such as Eugene, Cambridge, and Portland, have elected to retain some minimum parking requirements alongside maximums, to alleviate concerns about spillover parking.

"It's a comfort zone," says Susan Christensen of Oregon's Department of Environmental Quality, which was instrumental in developing Portland's regional standards. "This was still a fairly radical idea when we introduced it, and the minimums gave the comfort of knowing there won't be parking in the neighborhoods."

Developers save money

One of the hallmarks of the Portland process for drawing up maximum parking standards was the involvement of developers and the wider business community. The state Department of Environmental Quality established three advisory committees, bringing lenders, developers, real estate brokers, and other

private sector interests to the table, as well as city officials and environmentalists.

While it meant the standards took longer to create — a year and a half in the Portland case — the region is now reaping the benefits of including the business community, says Susan Christensen. "They're the ones that have to live with it. They're the ones that have to make this work," she says. "Our approach was to get buy-in before the ink was dry, rather than shove it down people's throats."

In many cases developers may realize major rewards from new parking standards that force them to think more creatively about the amount of parking they actually need. After all, substantial amounts are at stake, with each space in a parking garage in urban centers such as Los Angeles costing about \$30,000.

"Developers assume a certain travel mode mix," says Eugene's Teresa Bishow. "If they understand the local area and its travel patterns, they can build less parking and save money."

In Cambridge, the new parking and transportation demand management (TDM) legislation has helped developers overcome public anti-growth sentiment by demonstrating that they were taking action to reduce traffic impacts. "There was a real surge of support in the community for measures to reduce traffic," says the city's Catherine Preston.

"Developers started to realize that they had to be part of the solution," she continues. "When push comes to shove, they would prefer to implement TDM programs and provide less parking than lose leasable space."

Nor have the new requirements risked pushed development to other parts of the Boston region, according to Preston. "Cambridge is a uniquely attractive place to do business," she says.

Indeed, parking policies that reduce traffic and help raise densities will ultimately create a city more attractive to business, argues Gainesville's Dom Nozzi. "To the extent we build in a compact, walkable ambience, we're encouraging people to locate in the downtown because of the higher quality of life," he says. "We're saying to developers that we want to provide a walkable, human-scale community, and if you don't want to go along with that, we're not going to kill ourselves trying to keep you here."

Standards out of thin air?

Any city that seeks to introduce maximum parking standards should learn from the mistakes made in establishing minimums, advises Donald Shoup of UCLA. Often the minimums are simply copied from nearby cities, a practice that runs the risk of repeating someone else's mistakes.

Alternatively, they are based on parking generation rates published by the Institute of Transportation Engineers, which typically draw on survey data for peak demand at suburban sites that offer ample free parking and little in the way of public transit. Although demand is heavily influenced by price, the ITE takes no account of this-but simply assumes there will be no charge to the user, says Shoup.

Moreover, the sample sizes used to calculate these rates are often tiny; half are based on only four or fewer surveys, Shoup continues. "Without training or research, urban planners know exactly how many parking spaces to require for bingo parlors, junkyards, pet cemeteries, rifle ranges, slaughterhouses, and every other land use," he wrote in *Transportation Research*.

Rather than simply abolish these minimums and leave developers to determine how many spaces they want, however, many cities jump to replace them with maximums, even though they may still have little idea of demand. "Planners simply do not know how many parking spaces are needed," he says. "It's the old Soviet maxim: 'What is not required must be prohibited.'"

However, many cities — particularly Portland and Cambridge — have based their new maximums on significant research. And maximum standards are appropriate in many instances, Shoup argues.

But, he suggests, in the absence of hard data, a more sensible approach might be simply to take an intermediate step and abolish parking minimums. Leaving parking supply up to developers, who have a financial interest in not overbuilding, may lead to better planning than what's in place now, Shoup says.

Adam Millard-Ball is a San Francisco-based transportation planner with Nelson\Nygaard, a consulting firm specializing in transit, multimodal transportation, and transit-oriented development. Contact him at 415-284-1544, or via e-mail at amillard-ball@nelsonnygaard.com.

Resources

Photos. Top: San Francisco's 1:1 parking requirement is said to reduce the number of residential units that can be built on a given parcel by 20 percent and add 20 percent to rent. A community advocate drew attention to the policy by moving into a makeshift "home" in a parking space. Picture by Marshall Foster, San Francisco Planning Department. Bottom: Cambridge, Massachusetts, requires developers to reduce auto use to 10 percent below the 1990 average Harvard Law School and the U.S. Postal service share space at 125 Mount Auburn Street, developed by the Bulfinch Companies. Picture by Catherine Preston, City of Cambridge.

Reading. Donald Shoup's "Truth in Transportation Planning" is forthcoming in the *Journal of Transportation and Statistics*. His "The Trouble With Minimum Parking Requirements" was published in *Transportation Research* in 1999.

"Reducing Housing Costs by Rethinking Parking Requirements" is a policy paper from the San Francisco Planning and Urban Research Association.

"Parking Requirement Impacts on Housing Affordability" is by Todd Litman of the Victoria Transport Policy Institute.

Planning's last story on residential parking was "Don't Park Here," October 2000.

Local ordinances. Click here for information about the Portland region.

Contact Susan Christensen, Oregon Department of Environmental Quality, 503-229-5518; christensen.susan@deq.state.or.us.

Click here for information about Cambridge, Massachusetts.

Click here for Eugene, Oregon's city site

Click here for the Gainesville, Florida, website.

Models. The computer model created by the Non-Profit Housing Association of Northern California helps developers and planners to assess likely parking demand. The site also includes a policy briefing, "Rethinking Residential Parking."

©Copyright 2007 American Planning Association All Rights Reserved

Reprinted with permission from [Planning](#), the magazine of the American Planning Association.