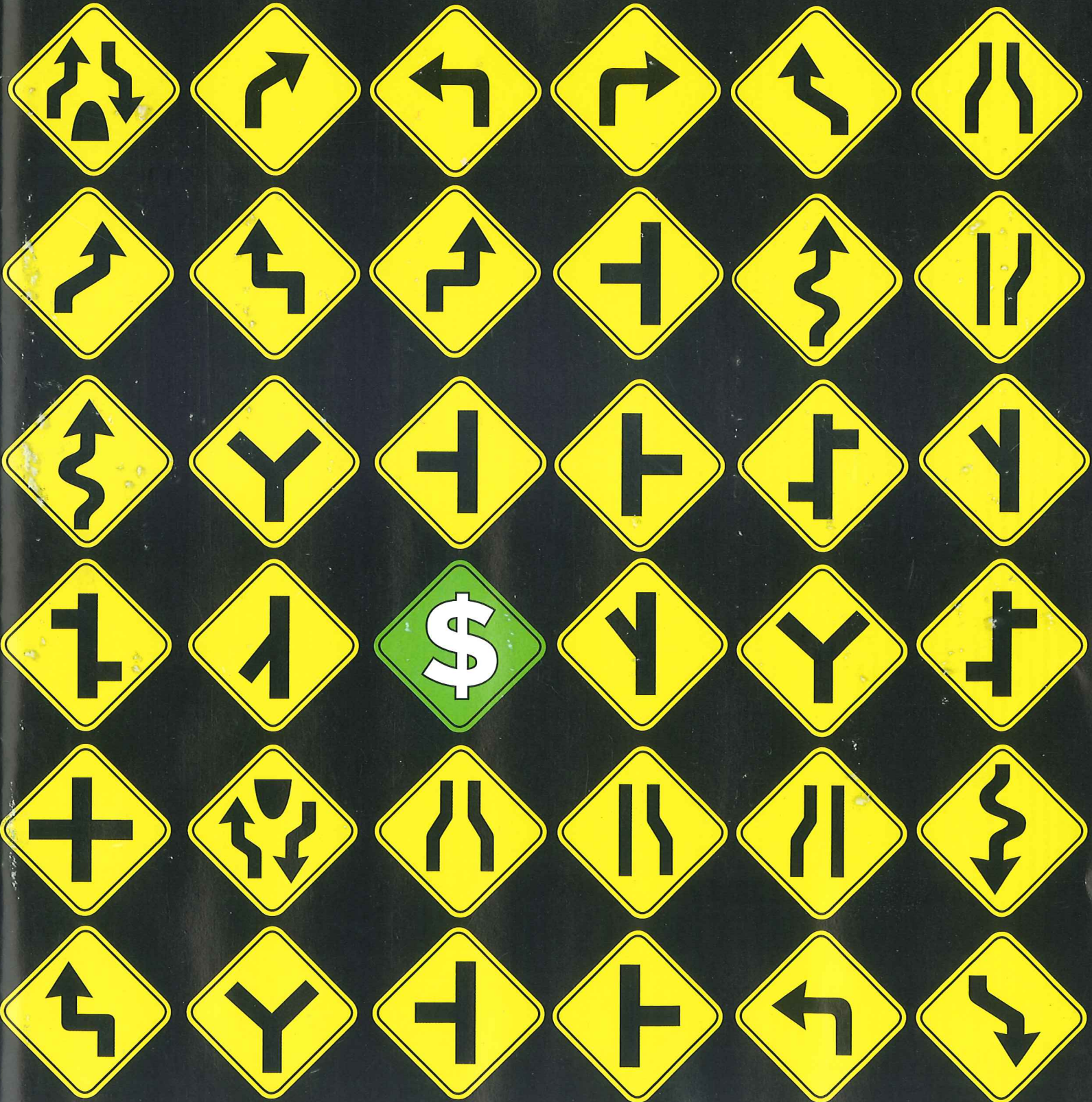


PLANNING

SPECIAL ISSUE ON TRANSPORTATION

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Putting a Cap on Parking Requirements

A way to make cities function better. By **DONALD SHOUP**, FAICP

Suppose the automobile and oil industries have asked you to devise planning policies that will increase the demand for cars and fuel. Consider three policies that will make cars essential for most trips. First, segregating land uses (housing here, jobs there, shopping somewhere else) will increase travel demand. Second, limiting density will spread the city and increase travel demand. Third, minimum parking requirements will ensure ample free parking almost everywhere, making cars the default way to travel.

American cities have unwisely embraced each of these car-friendly policies, luring people into cars for 87 percent of all their daily trips. Zoning ordinances that segregate land uses, limit density, and require lots of parking create drivable cities but prohibit walkable neighborhoods. Urban historians often say that cars have changed the city, but public policies have also changed the city to favor cars.

Minimum parking requirements are particularly ill-advised. In my book *The High Cost of Free Parking*, I argued that parking requirements subsidize cars, increase traffic congestion and carbon emissions, pollute the air and water, encourage sprawl, raise housing costs, degrade urban design, reduce walkability, exclude poor people, and damage the economy. To my knowledge, no one has argued that parking requirements do not have these harmful effects. Instead, a flood of recent research has shown that parking requirements do have these effects.

The high cost

Planners are put in a difficult position when asked to set parking requirements in zoning ordinances, largely because they do not know the parking demand at every site, or how much the parking spaces cost, or how the requirements increase the cost of development. Nevertheless, cities have managed to set parking requirements for hundreds of land uses in thousands of cities—the Ten Thousand Commandments for off-street parking.

Not knowing how much required parking spaces cost, planners cannot know how much the parking requirements increase the cost of housing. Small, spartan apartments cost much less to build than large, luxury apartments, but their parking spaces cost the same. Because many cities require the same number of spaces for all housing, the cost of required parking can consume the entire

subsidy intended for affordable housing.

Minimum parking requirements resemble an Affordable Parking Act. They make parking more affordable by raising the cost of housing and everything else. Using data on the cost of constructing parking spaces and shopping centers, I estimated that the parking requirement of four spaces per 1,000 square feet for a shopping center in Los Angeles increases the cost of building a shopping center by 93 percent if the parking is underground and by 67 percent if the parking is in an aboveground structure.

This cost increase is passed on to all shoppers. Parking requirements raise the price of food for people who are too poor to own a car to ensure that richer people can park free when they drive to a grocery store.

The median is the message

A single parking space can cost far more than the entire net worth of many American families. In recent research, I estimated that the average cost per space for parking structures in the U.S. is about \$24,000 for aboveground parking and \$34,000 for underground parking. We can compare the cost of a parking space with the net worth of U.S. households (the value of all assets minus all debts). In 2011, this median net worth was \$68,828 for all U.S. households, \$7,683 for Hispanic households and \$6,314 for black households.

Thus one underground parking space can cost five times more than the median net worth for all black households in the country. Nevertheless, cities require several parking spaces (at home, work, shopping, recreation, churches, schools, and many other places) for every household.

Many families have a negative net worth because their debts exceed their assets. Eighteen percent of all households, 29 percent of Hispanic households, and 33 percent of black households had zero or negative net worth in 2011. The only way these families can take advantage of all the parking cities require is to go further into debt to buy a car, which they must then support, often by financing it at a high subprime interest rate on a car loan.

In other words, cities require parking for every building without noticing the high cost of the required spaces or the burden placed on families who have little or no wealth.

Time for reform

Perhaps because of the growing doubts about minimum parking requirements, a few cities have begun to backpedal, at least in their downtowns. They recognize that parking requirements prevent infill redevelopment on small lots, where it is difficult and costly to fit both a new building and the required parking. And they see that parking requirements prevent new uses when older buildings lack the parking spaces required for those new uses.

'A city can be friendly to people or it can be friendly to cars, but it can't be both.'

—ENRIQUE PEÑALOSA, FORMER MAYOR OF BOGOTA, COLOMBIA

According to recent newspaper articles, many cities have reduced or removed their parking requirements. Some of the reasons: "to promote the creation of downtown apartments" (Greenfield, Massachusetts), "to see more affordable housing" (Miami), "to meet the needs of smaller businesses" (Muskegon, Michigan), "to give business owners more flexibility while creating a vibrant downtown" (Sandpoint, Idaho), and "to prevent ugly, auto-oriented townhouses" (Seattle).

Given this policy momentum, I thought the time to reform parking requirements in California had arrived when the legislature considered Assembly Bill 904 (the Sustainable Minimum Parking Requirements Act of 2012). AB 904 would have set an upper limit on how much parking cities can require in transit-rich districts: no more than one space per dwelling unit or two spaces per 1,000 square feet of commercial space. The bill defined these districts as areas within a quarter-mile of transit lines that run every 15 minutes or better.

AB 904 would limit how much parking cities can require, but it would not limit the parking supply. Developers could provide more than the required parking if they thought the demand justified the cost.

Why would a state want to adopt this policy? Federal and state governments give cities billions of dollars every year to build and operate mass transit systems, yet most cities require ample parking on the assumption that almost everyone will drive almost everywhere, even where public transit is available.

Twenty public transit lines serve the UCLA campus in Westwood, with 119 buses per hour arriving during the morning peak (7 to 9 a.m.). Nevertheless, across the street from campus, Los Angeles requires 3.5 parking spaces for every apartment that contains more than four rooms.

Los Angeles is building its Subway to the Sea under Wilshire Boulevard, which already boasts the city's most frequent bus service. Nevertheless, along parts of Wilshire the city requires at least 2.5 parking spaces for each dwelling unit, regardless of the number of rooms.

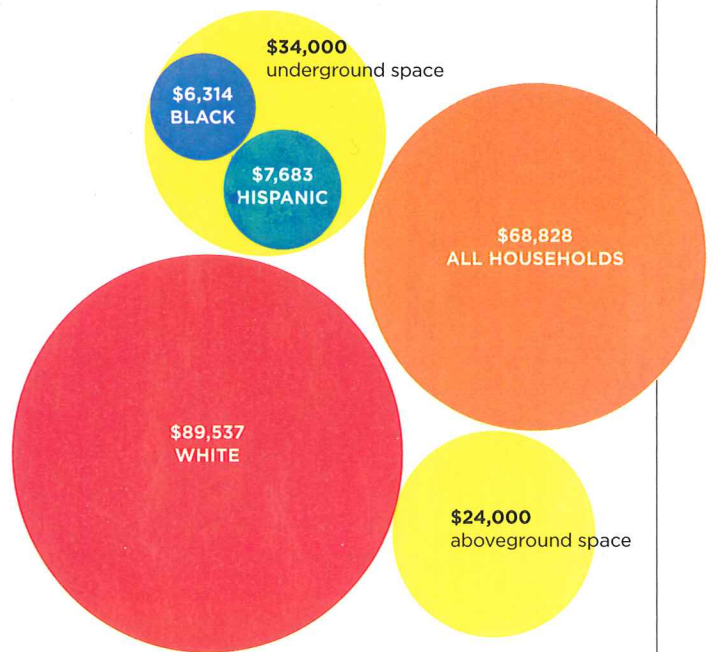
Also on Wilshire Boulevard, Beverly Hills requires 22 parking spaces per 1,000 square feet for restaurants, which means the parking lot is seven times larger than the restaurant. Public transit in this parking environment resembles a rowboat in the desert.

Why limit parking requirements?

The rationale for a limit on parking requirements in transit-rich districts is the same as the rationale for most city planning: The uncoordinated actions of many individuals can add up to a collective result that most people dislike. In this case, minimum parking requirements create an asphalt wasteland that blights the environ-

Parking inequity

The cost of one structured parking space far exceeds the median net worth of minority households.



SOURCES: U.S. CENSUS BUREAU, NET WORTH AND ASSET OWNERSHIP, 2011; DONALD SHOUP, IN *PARKING: ISSUES AND POLICIES*, 2014; GRAPHIC BY JOAN CAIRNEY

ment and compels people to drive. Limits on the parking requirements in transit-rich neighborhoods can reduce this blight by making redevelopment more feasible near transit stations.

How will reducing off-street parking requirements affect development? Zhan Guo and Shuai Ren at New York University studied the results when in 2004 London shifted from minimum parking requirements with no maximum to maximum parking limits with no minimum. Comparing developments completed before and after the reform, they found that the parking supplied after the reform was only 68 percent of the maximum allowed and only 52 percent of the previous minimum required.

This result implies that the previous parking minimum was almost *double* the number of parking spaces that developers would have voluntarily provided. The researchers concluded that removing the parking minimum caused 98 percent of the reduction in parking spaces, while imposing the maximum caused only two percent of the reduction. Removing the minimum was far more important than imposing a maximum.

Cities usually require or restrict parking without considering the middle ground of neither a minimum nor a maximum. This

behavior recalls a Soviet maxim: "What is not required must be prohibited." AB 904, however, was something new. It did not restrict parking but simply imposed a cap on minimum parking requirements, a far milder reform.

Aided by lobbying from the California Chapter of APA, opponents succeeded in defeating AB 904 in the legislature, but it has since been resurrected and revised, and will be reintroduced as a new bill in the next session.

There have been precedents for statewide limits on parking requirements. Oregon's *Transportation Systems Plan* requires local governments to amend their land-use and subdivision regulations to achieve a 10 percent reduction in the number of parking spaces per capita. The United Kingdom's transport policy guidelines for local planning specify that "plans should state maximum levels of parking for broad classes of development. . . . There should be no minimum standards for development, other than parking for disabled people."

These attempts to take state and national concerns into account suggest that, when left to their own devices, local governments require too much parking.

An arranged marriage

Many people believe that America freely chose its love affair with the car, but I think there was an arranged marriage. By recommending minimum parking requirements in zoning ordinances, the planning profession was both a matchmaker and a leading member of the wedding party.

Unfortunately, no one provided a good prenuptial agreement. Planners can now become marriage counselors or divorce lawyers where the relationship between people and cars no longer works well. Putting a cap on parking requirements is a good place to start.

Donald Shoup is a distinguished professor of urban planning at the University of California, Los Angeles, and the author of *The High Cost of Free Parking*, published in paperback by APA's Planners Press in 2011. He will retire later this year, and UCLA is launching a scholarship in his name. Details are at shoupista.com.

RESOURCES

FROM APA

The High Cost of Free Parking, by Donald Shoup, APA Planners Press, 2011 (paperback).

MORE

California Assembly Bill 904. The Sustainable Minimum Parking Requirements Act of 2012: shoup.bol.ucla.edu/AssemblyBill904.pdf.

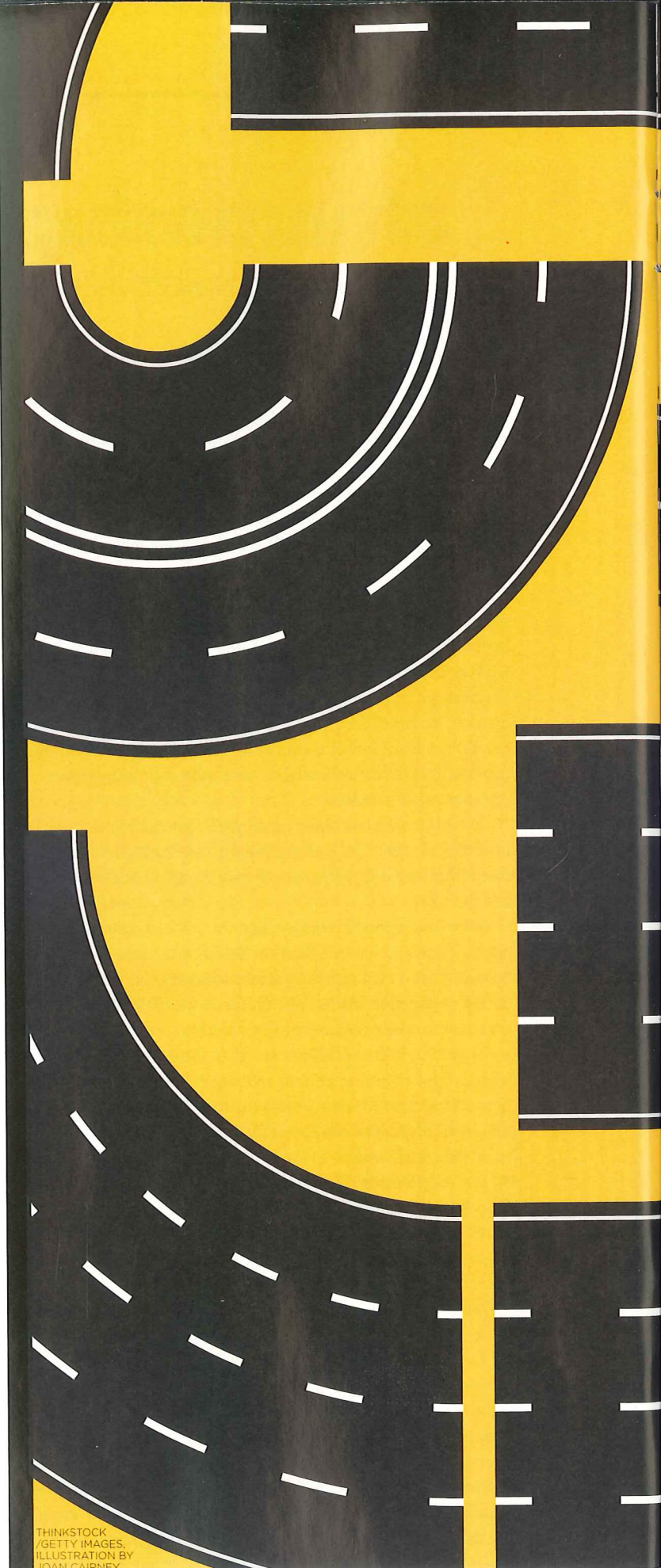
Zhan Guo and Shuai Ren. 2013. "From Minimum to Maximum: Impact of the London Parking Reform on Residential Parking Supply from 2004 to 2010." *Urban Studies* 50(6): 1183-1200.

Letters about AB 904 from mayors, planning academics, planning practitioners, and the California Chapter of APA are available here: shoup.bol.ucla.edu/LettersAboutAssemblyBill904.pdf.

Donald Shoup. "The High Cost of Minimum Parking Requirements," pp. 87-113 in *Parking: Issues and Policies*, Stephen Ison and Corinne Mulley (eds.). Emerald Group Publishing, 2014. shoup.bol.ucla.edu/HighCost.pdf.

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