



Councilmember Lori Droste

ACTION CALENDAR  
October 6, 2015

To: Honorable Mayor and Members of the City Council  
From: Councilmember Lori Droste  
Subject: Green Affordable Housing Package

### **RECOMMENDATION**

Refer that the Planning Commission and City Manager investigate the following two policies as ways to reduce barriers for the creation of affordable housing. City Council requests that commissions and staff address and propose solutions and/or an implementation plan using the following recommendations by September 1, 2016.

#### **Policy 1: Designate units and funding for affordable housing by prioritizing housing over parking spaces in new developments**

1. Reduce or eliminate minimum residential parking requirements if car-sharing spaces are provided.
2. Implement residential parking maximums.
3. Reduce or eliminate minimum parking requirements for new housing that serves populations that do not have high rates of car ownerships.
4. Reduce or eliminate minimum parking requirements for transit-intensive housing.
  - Transit-intensive housing is defined as within 1,200 feet of a transit hub or within 1,200 feet of the overlap between a major transit corridor and a commercial or mixed-use district.
  - Broadly defined, a *transit corridor* generally refers to a geographic area that accommodates travel or potential travel. A transit corridor is best defined as the areas around all of the stations along a transit line that have destinations or residences within reasonable distance for walking, biking, or other transit connections.
  - Broadly defined, a *transit hub* refers to a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or a major bus route with frequencies of service intervals of 15 minutes or less during the morning and afternoon peak commute periods.
5. Re-evaluate and/or reduce parking space requirements per new residential unit in areas within a ½ mile of a transit hub.

*Determine a process whereby the costs saved by parking reductions will be designated for affordable units or the Affordable Housing Trust Fund.*

**Policy 2: Remove the structural and procedural barriers to creating more housing**

1. Improve and streamline the development review process, particularly for permanently affordable housing and smaller residential housing proposals. Review and compare Berkeley's process to that of neighboring cities.

**BACKGROUND**

This recommendation adheres to many policy priorities from the City of Berkeley. Some examples follow:

*Housing Element*

- Objective A-1: HOUSING AFFORDABILITY Berkeley residents should have access to quality housing at a range of prices and rents. Housing is least affordable for people at the lowest income levels, and City resources should focus on this area of need.
- Objective A-3: EXPANSION OF THE HOUSING SUPPLY New housing should be developed to expand housing opportunities in Berkeley to meet the needs of all income groups.
- Objective A-4: SPECIAL NEEDS HOUSING AND HOMELESS PREVENTION Berkeley should expand the supply of housing for special needs groups, including housing affordable to households and individuals with extremely low incomes.

*Climate Action Plan*

- Goal 3: Expand car share and ride sharing
- Goal 4: Increase compact development patterns (especially along transit corridors)
- Goal 8: Create an effective parking management strategy

*Transportation Element*

- Policy 2.51– In locations well served by transit, permit the reduction or elimination of parking requirements in new residential developments or its location in existing parking structures.
- Policy 2.04– Conserve energy by initiating incentives to: a) reduce the number of vehicle trips; b) increase walking, transit and bicycle use; and c) develop energy efficient methods for moving people and goods.

*Land Use*

- Policy LU-3: Encourage infill development that is architecturally and environmentally sensitive, embodies principles of sustainable planning and construction, and is compatible with neighboring land uses and architectural design and scale.

## **RATIONALE FOR RECOMMENDATION**

### *Prioritizing housing over parking spaces in new developments*

Vast amounts of research show that excessive parking requirements reduce affordability and impose significant environmental costs (see attachments).<sup>1</sup> Parking spots often remain unused in housing complexes, thus taking up precious land for housing. *Eliminating or reducing parking requirements provides more flexibility to create more housing by getting rid of outdated requirements.*

It costs roughly \$1 million dollars to create 20 parking spaces when that money could be dedicated toward affordable housing. Zero-car households have increased tremendously over the last decade.<sup>2</sup> In order to design housing for the 21<sup>st</sup> century and beyond, the vast majority of urban design experts, affordability advocates, and environmentalists advocate for these kind of progressive and pragmatic changes.

Assembly Bill 744, which is awaiting the Governor Jerry Brown's signature, provides an appropriate model of this type of legislation to address affordability concerns, particularly for populations who don't typically have high rates of car ownership.<sup>3</sup>

### *Remove the structural barriers to creating more housing*

One of the core causes of Berkeley's housing crisis is that the building and approval process often takes years despite our city's critical need to provide housing for the community now. Berkeley has grown by approximately 10,000 people in the past ten years but Berkeley has only created half of the housing we need according to the Regional Housing Needs Allocation.<sup>4</sup> If affordable or smaller projects fit within the current zoning standards and have undergone an architectural design review, they should be fast-tracked for approval.

## **FISCAL IMPACT OF RECOMMENDATION**

The Affordable Housing Package will create a long-term strategy that will sustainably generate millions of dollars for affordable housing. In the short-term, staff time would be increased to implement changes. Over the long-term, this

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<sup>1</sup> <http://www.eastbayexpress.com/oakland/a-green-solution-to-oaklands-housing-crisis/Content?oid=4443594&showFullText=true>  
<http://www.reinventingparking.org/2015/06/how-much-does-one-parking-spot-add-to.html>  
[http://www.mtc.ca.gov/planning/smart\\_growth/parking/parking\\_seminar/Toolbox-Handbook.pdf](http://www.mtc.ca.gov/planning/smart_growth/parking/parking_seminar/Toolbox-Handbook.pdf)  
[http://www.uctc.net/access/42/access42\\_almanac.pdf](http://www.uctc.net/access/42/access42_almanac.pdf)  
<http://www.citylab.com/cityfixer/2015/05/how-parking-keeps-your-rent-too-damn-high-in-2-charts/392894/>  
<http://www.governing.com/columns/urban-notebook/col-minimum-parking-requirements-affordable-housing.html>  
<http://www.spur.org/publications/spur-report/2006-06-01/reducing-housing-costs-rethinking-parking-requirements>  
<http://www.vtpi.org/park-hou.pdf>

<sup>2</sup> [http://www.nytimes.com/2013/06/30/sunday-review/the-end-of-car-culture.html?\\_r=0](http://www.nytimes.com/2013/06/30/sunday-review/the-end-of-car-culture.html?_r=0)

<sup>3</sup> [http://leginfo.ca.gov/faces/billNavClient.xhtml?bill\\_id=201520160AB744](http://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB744)

<sup>4</sup> [Berkeley Housing Element](#) , p.8

type of legislation may also significantly reduce staffing time and costs associated with the planning process.

**ENVIRONMENTAL SUSTAINABILITY**

This policy reflects the principles in the City of Berkeley's Climate Action plan and will significantly reduce greenhouse gas emissions.

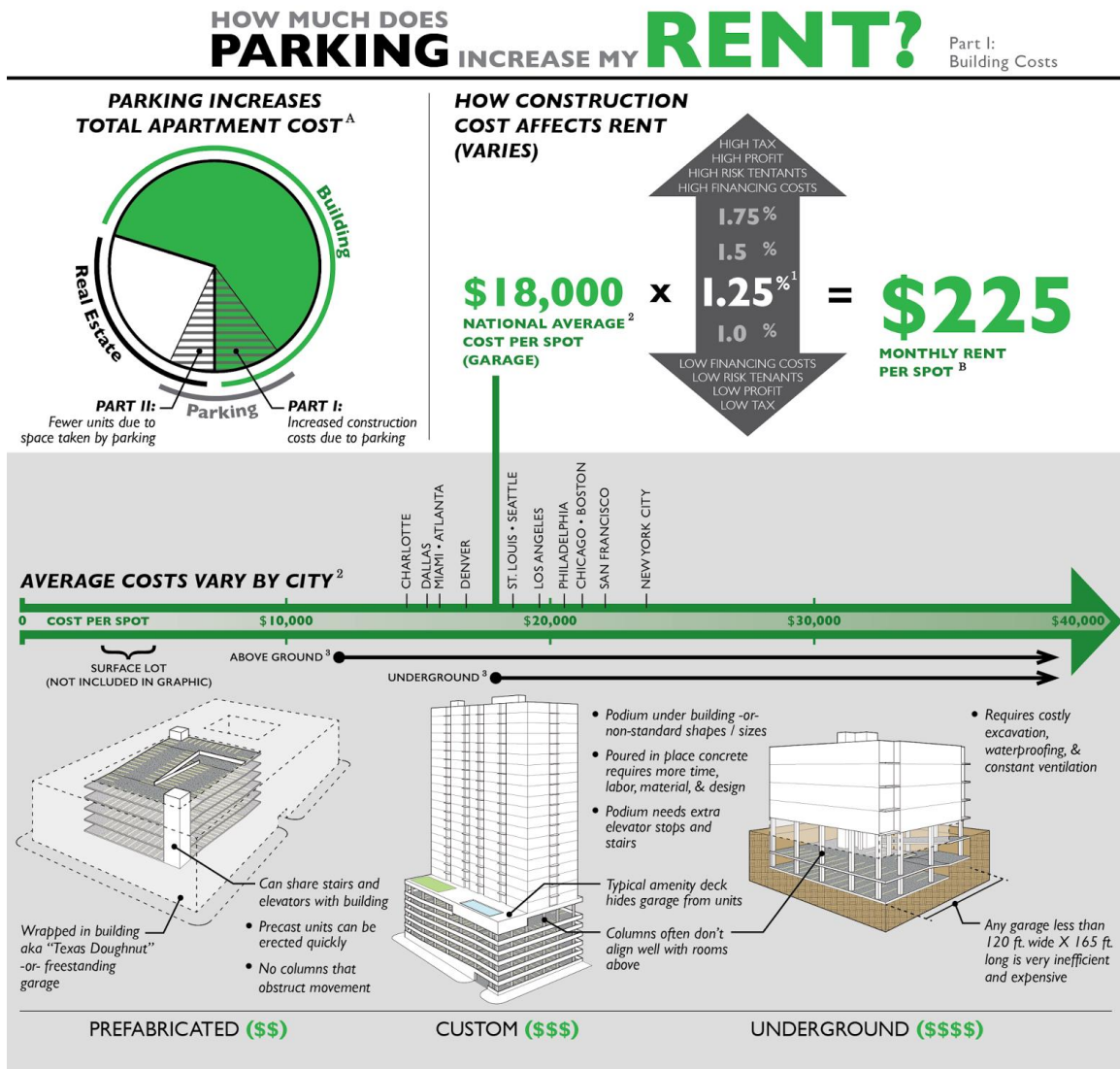
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## Attachment 1 (link only)

Levin, Sam. "A Green Solution to Oakland's Housing Crisis," *East Bay Express*. 8.5.2015 <http://www.eastbayexpress.com/oakland/a-green-solution-to-oaklands-housing-crisis/Content?oid=4443594&showFullText=true>

## Attachment 2

Goodman, Seth. "How Much Does One Parking Spot Add to Rent?" *Reinventing Parking*. 6.2.2015 <http://www.reinventingparking.org/2015/06/how-much-does-one-parking-spot-add-to.html>



#### SOURCES

- Factor is a rule of thumb approximation. For a more rigorous calculation see the VPI "Parking Cost, Pricing and Revenue Calculator" ([www.vpi.org/parking.xls](http://www.vpi.org/parking.xls))
- Carl Walker "Parking Structure Cost Outlook" 2014
- Lower bounds assume 300 SF of space and use the lowest per SF cost given for any city in Rider Levett Bucknall "Quarterly Construction Cost Report" Q1-2015

#### NOTES

- Chart is conceptual; assumes soft costs, financing, profit, etc. are distributed proportionally.
- Even buildings that charge for parking often assess a subsidized price.
- Links to sources at ReinventingParking.org

#### ALSO READ

- Shoup (2014) *Parking Issues and Policies*, Ch. 5 "The High Cost of Minimum Parking Requirements"
- VPI (2013) "Transportation Cost and Benefit Analysis II - Parking Costs"
- Portland, OR Bureau of Planning and Sustainability (2013) "Cost of Onsite Parking + Impacts on Affordability"

Parking is expensive. It costs thousands of dollars per stall to build. It occupies valuable real estate. It is ubiquitous, accompanying nearly every building built across the United

States. Yet at nearly every destination, drivers don't directly pay for the parking they use. Instead the cost is hidden, bundled into the grocery bill, benefits package, and rent of every shopper, employee, and tenant.

Everyone pays the same amount for parking whether she or he walked, rode transit, carpooled, or drove alone, but rarely does anyone see that price itemized on a receipt. As a result, most people are unaware of the heavy financial burden they bear for the sake of parking. The above graphic takes a look at one area where parking adds significantly to a household's expenses: Rent.

So how much does one parking spot add to an apartment's rent? There is no single answer to that question. Construction costs are affected by local soil conditions, zoning requirements, site constraints, regional differences in construction costs, and the type of parking to be built. On the other hand, the rent needed to justify an initial capital investment varies according to local property taxes, financing costs, resident turnover and delinquency rates, et cetera. The graphic attempts to present the range covered by these variables while providing numbers that might be considered typical for structured parking in the United States.

The effect of each parking spot on affordability is significantly higher in urban communities than suburban ones both because the land occupied by parking is more expensive in urban areas and because building structured parking is many times more costly than paving surface lots. This reality affects the ability of lower income households to live in urban areas since parking costs roughly the same to build whether an apartment is luxury grade or modest. An \$18,000 spot might not have a noticeable impact on the rent of a \$300,000 unit, but it would definitely be noticed by someone renting a \$75,000 unit.

Even when minimum off-street parking requirements are eliminated (and on-street parking is properly managed), the practice of bundling parking with rent may persist. It is imperative that cities find a way to separate rent for cars from rent for people either by encouraging or mandating that parking be rented separately.

People should be allowed to make their own transportation choices, especially when all the other choices are more sustainable and equitable. When renters have no choice other than to pay for car storage regardless of whether they possess a car, they are not truly given that freedom. People with the means to own a car OR to live centrally but not to do both, should be allowed to choose the latter.

Cities have many reasons to encourage their citizens to live with fewer cars. Fewer cars owned and operated in a city reduces pollution and greenhouse gas emissions, eases traffic and infrastructure burdens, and increases households' disposable income. Hiding parking costs in rent runs in direct opposition to those goals.

There are some who have argued that construction costs, whether higher or lower, have a negligible effect on rents because property owners will charge whatever the market will

bear regardless of upfront costs. This might be true if one assumed that construction costs have little effect on local supply. Furthermore, any one building is unlikely to strongly affect rents in an area. A lone developer who constructs a new apartment building in a market with strong demand will not undercut existing rents simply because the new units cost less to build. Over time however things will change as long as there is available land to be redeveloped at a higher density.

Every dollar invested in creating an apartment translates to a higher minimum rent required just to break even. If a developer does not expect a new unit will command this target rent, that potential project will not be built. If the amount of parking can be reduced or eliminated, the money saved on construction will lower the required rent to break even and make some projects viable that were not viable before. More viable projects translates to more units getting built resulting in greater competition and thus lower local rents if demand holds constant.

**Attachment 3 (link only)**

“Reforming Parking Policies to Support Smart Growth,” *Metropolitan Transportation Commission*. June 2007.

[http://www.mtc.ca.gov/planning/smart\\_growth/parking/parking\\_seminar/Toolbox-Handbook.pdf](http://www.mtc.ca.gov/planning/smart_growth/parking/parking_seminar/Toolbox-Handbook.pdf)

**Attachment 4 (link only)**

“Reducing Housing Costs by Rethinking Parking Requirements” *SPUR*. 6.1.2006.

<http://www.spur.org/publications/spur-report/2006-06-01/reducing-housing-costs-rethinking-parking-requirements>

**Attachment 5 (link only)**

Litman, Todd. “Parking Requirement Impact on Housing Affordability.” *Victoria Transit Policy Institute*. 8.11.2014. <http://www.vtpi.org/park-hou.pdf>

**Attachment 6 (link only)**

AB 744 (Chau and Quirk) 2015-2016 Regular Session.

[http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=201520160AB744](http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB744)

## Attachment 7

Shoup, Donald. "On Street Parking Management V. Off Street Parking Requirements," *The Access Almanac*. Spring 2013.

[http://www.uctc.net/access/42/access42\\_almanac.pdf](http://www.uctc.net/access/42/access42_almanac.pdf)

Why do cities require so much off-street parking for new apartment buildings? Many urban planners argue that residents who own cars will park on the streets if a building doesn't have enough off-street spaces. Others counter that parking requirements increase housing costs and subsidize cars. A third group says that banks will not finance new apartment buildings without parking, developers will not build them, and tenants will not rent them.

Portland, Oregon, tested these claims by removing the parking requirements for apartment buildings located within 500 feet of frequent transit service—38 percent of all parcels in the city. What happened next? Banks are lending, developers are building, and tenants are renting new apartments without parking. The market for these apartments is large because almost a quarter of Portland's renter households do not own a car.

Between 2006 and 2012, developers built 122 apartment buildings on lots exempt from parking requirements. Fifty-five of these buildings have no off-street parking, and the other 67 have an average of 0.9 parking spaces per apartment. Altogether, the 122 buildings have an average of 0.6 parking spaces per apartment.

As predicted, however, many tenants in apartments without off-street parking do own cars, and park them on the nearby streets. Residents of the surrounding neighborhoods understandably complain about parking spillover, and who can blame them? They want to keep parking easy for themselves and fear their home values will fall if the curb parking is crowded. As a result, they want the city to require off-street parking for all new apartments.

If parking requirements merely ensured enough parking spaces to prevent spillover, they wouldn't create problems. But they also increase housing costs, subsidize cars, and degrade urban design. Are off-street parking requirements worth these costs?

No, because there is a cheaper and better way to prevent parking spillover. Instead of requiring off-street parking, cities can better manage on-street parking. One simple strategy is to allow the residents of any block to adopt an Overnight Parking Permit District. These districts prohibit overnight parking on the street except by residents and thus prevent nonresidents from storing their cars in front of residents' homes.

Los Angeles, for example, charges residents \$15 per year (less than half a cent per day) for an overnight permit. Residents can also buy guest permits for \$1 per night. Enforcement is easy because officers need to make only one visit during a night to cite all cars parked without permits. 39 A C C E S S NUMBER 42, SPRING 2013 Portland removed parking requirements from all the shaded areas of this map. A C C E S S 40 If everyone can easily park free on the street, developers have little incentive to build off-street parking and little ability to charge for the parking spaces they do build. Overnight permit districts, however, give developers a strong incentive to build as much off-street parking as tenants demand.

If nearby residents don't want an overnight permit district on their block, the spillover problem from apartments without parking can't be that bad.

Some cities, like Boulder, Colorado, also sell a few permits to nonresidents on blocks that regularly have a vacancy rate greater than 25 percent. Nonresidents pay market prices for the permits, each permit is valid for a specific block, and the city sells no more than four nonresident permits on any block.



To encourage residents to accept a few nonresident permits on their block, the city can dedicate the resulting revenue to pay for added public services on the block. For example, a block that allows overnight parking by four nonresidents at \$50 a month will raise \$2,400 a year for public services such as repairing sidewalks or undergrounding the overhead utility wires. Residents can keep all the on-street parking on their block for themselves, but blocks that allow a few nonresident permits will receive new public investment.

When the tenant of an apartment without parking buys an overnight permit in a nearby neighborhood, the money saved by not building off-street parking will indirectly finance public investment in the nearby neighborhood. And because an apartment without parking will have a lower market rent than an otherwise identical apartment with parking, tenants who do not own cars will no longer subsidize parking for tenants who do.

To attract tenants without cars to apartments without parking, the city can require landlords to include a free transit pass in the lease for each unit. This requirement will not burden development because providing a transit pass costs far less than building a parking space. The combination of apartments without parking, overnight permit districts, and free transit passes will encourage residents to ride public transit, cycle, and walk.

Overnight parking permits will not solve all the problems that removing off-street parking requirements can create. For example, drivers who visit or work in buildings without off-street parking may park in nearby neighborhoods during the day. In this case, the city can add a daytime permit district on blocks that request it. If the residents agree, the city can also allow nonresidents to pay for parking on blocks that have daytime vacancies, and the revenue will pay for better public services.

Cities should manage the on-street parking supply before they remove their off-street parking requirements. Parking permit districts are a politically feasible way to begin managing on-street parking because they protect each neighborhood by charging nonresidents. Favoring insiders over outsiders for parking on public streets may seem unfair, but political reforms must start from the status quo, and progress is often merely a small step in the right direction. As Supreme Court Justice Benjamin Cardozo wrote, “Justice is not to be taken by storm. She is to be wooed by slow advances.”

Attachment 8:

Glaeser EL, Gyourko J. [“The Impact of Zoning on Housing Affordability”](#), 2002.

## Attachment 8

Jaffe, Eric. "The High Cost of Residential Parking." *Citylab*. 5.11.2015

<http://www.citylab.com/cityfixer/2015/05/how-parking-keeps-your-rent-too-damn-high-in-2-charts/392894/>

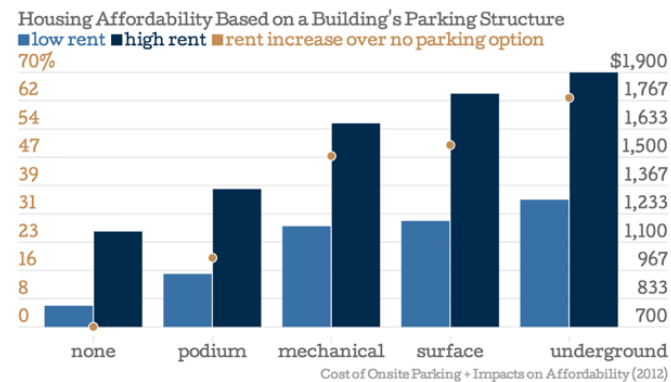
Seattle's smart new plan to give tenants transit passes instead of parking spaces should help housing stay more affordable down the line. To get a sense just how much money renters might save, the city relied on a 2012 study of how parking impacts affordability from its neighbor in the Pacific Northwest, Portland. That work is striking for both its clarity and its conclusions, so let's take a closer look.

Portland's Bureau of Planning and Sustainability modeled what happens to unit prices when a building developer decides to include parking. A few specs if you're into that sort of thing: the sites were 10,000 square feet (so, about 4 stories tall), zoned for mixed-use (so, shops on the ground floor), with units averaging 550 square feet (so, depending on your persona, cozy or cramped).

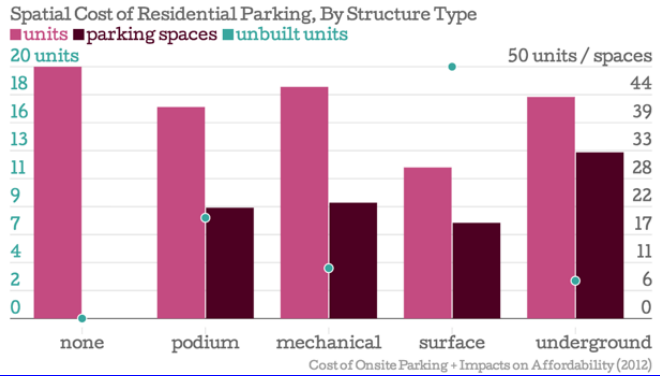
### Solutions for an Urbanizing World

The report looked at several types of parking, including a surface lot, podium (a partial cut of ground floor) style, mechanical lifts that maximize space, or underground parking. All are compared to a 50-unit development option with no parking at all. The low-end rents assume developers make a 7 percent profit on the project; the high-end assumes 10 percent.

Charting the data on cost, we can see rents climb as the parking options become more complex, and thus expensive for the developer. A low-end rent in a building with no parking comes to \$800 a month. Rent in the same unit in a building with the cheapest parking option, surface spots, comes to \$1,200—a 50 percent jump. In a building with underground parking, the low-end rent hits \$1,300, a spike of 62.5 percent.



Of course, more parking in a building doesn't just mean higher unit rents—it means fewer units, period. Below we chart the rental units that are sacrificed to various parking types. Again, in the no-parking scenario, a building can have all 50 possible units. This time the underground lot actually fares best among the parking options, since it preserves all but 3 units. The surface lot removes 20 potential homes—that on top of whatever commercial development space it might lose on the ground floor.



So we see how parking (especially surface parking) becomes a scourge on a city. Residential lots and spaces make individual units less and less affordable for tenants. They also result in fewer units as a whole, meaning the supply of housing across the city takes a hit. That too jacks up rents over time, as neighborhoods run out of sites to develop, and families run out of places to live. For decades, cities have required developers to include parking as part of their building plans, a "minimum" standard that's only now starting to relax in places. That shift in focus does create new challenges: cities must find other places for parking (ideally, shared facilities), or better yet, craft programs that discourage residents from driving in the first place (like Seattle's). But for metros struggling to make housing more affordable, rethinking parking policy is a clear place to start.

## Attachment 9

Newcombe, Tod. "Do Parking Minimums Hurt Affordability?" *Governing.Com*. 7.18.2013.  
<http://www.governing.com/columns/urban-notebook/col-minimum-parking-requirements-affordable-housing.html>

### **Do Parking Minimums Hurt Housing Affordability?**

Affordable housing is a big issue for many cities, especially top-tier urban areas like New York and Los Angeles, to name a few. And it's only grown worse in recent years as the gap between what people can afford and what they earn has increased.

The National Low Income Housing Coalition says the average renter earns \$14.38 an hour, but needs to earn \$18.79 an hour [to afford a decent apartment](#), according to the U.S. Department of Housing and Urban Development's fair market rent estimate. The coalition figures that another 4.5 million rental units are needed to satisfy the demand for affordable living. But getting even a fraction of that number of apartments built won't be easy.

The problem can be tied to a number of factors, including restrictive land-use regulations that can drive up land and construction costs. One often overlooked regulation is the parking mandate. Most cities require developers to set aside a parking space for every unit they build in an apartment building; in some cities, requirements call for a parking slot for every bedroom. Cities impose parking mandates to keep street parking to a minimum, essentially in order to leave spaces open for temporary parking. But setting aside the land for all that parking, or adding a garage beneath the building, can jack up the overall price of an apartment.

These mandates, or parking minimums, have been dubbed a [driving subsidy](#) by some critics, who charge that they distort transportation choices in favor of automobiles and increase traffic congestion, air pollution and energy consumption. Harvard economist [Edward Glaeser](#) points out that cities have "kept street parking artificially cheap and then mandated more off-street spots, wasting scarce common space, encouraging automobile congestion and raising the cost of construction" for housing.

Research by UCLA's [Institute of Transportation Studies](#) found that "when parking requirements are removed, developers provide more housing and less parking, and also that developers provide different types of housing: housing in older buildings, in previously disinvested areas, and housing marketed toward non-drivers. This latter category of housing tends to sell for less than housing with parking spaces."

The findings are getting noticed as urban populations rebound in some areas with new residents who don't want or need cars, relying instead on transit, bikes, car rentals and, of course, walking to get around. A small but growing number of cities are beginning to loosen parking regulations in hopes that developers can reduce the price of their rental units. Cambridge, Mass., has cut back on parking requirements and now its neighbor, Boston, is doing the same. Portland, Ore., was one of the first cities in the country to remove parking requirements, which has led to a spate of new development along transit lines.

But just as more city bike lanes means fewer parking spaces and more unhappy drivers, doing away with apartment parking requirements can lead to some nasty squabbles in some jurisdictions. Residents of Boston neighborhoods are angry about the changes the city government has made regarding parking mandates, fearing a flood of cars on their side streets. Washington, D.C.'s planning director has reassured its neighborhood residents that minimum parking requirements will remain in effect in its transit-oriented neighborhoods (although the city still plans to remove the mandate for its downtown area). And even in Portland -- perhaps the nation's most progressive urban city -- has had to pull back on its grand plans to eliminate parking requirements. In April, the city council okayed minimum parking requirements for large apartment buildings. Neighborhood residents are relieved. Urbanists are aghast. For now, Portland's working class will have to wait a while longer before developers can build affordable rental apartments that don't subsidize parking.

## Attachment 10

Rosenthal, Elisabeth. "The End of Car Culture." *New York Times*. 6.29.2013.  
[http://www.nytimes.com/2013/06/30/sunday-review/the-end-of-car-culture.html?\\_r=1](http://www.nytimes.com/2013/06/30/sunday-review/the-end-of-car-culture.html?_r=1)

PRESIDENT OBAMA'S ambitious goals to curb the United States' greenhouse gas emissions, [unveiled last week](#), will get a fortuitous assist from an incipient shift in American behavior: recent studies suggest that Americans are buying fewer cars, driving less and getting fewer licenses as each year goes by.

That has left researchers pondering a fundamental question: Has America passed peak driving?

The United States, with its broad expanses and suburban ideals, had long been one of the world's prime car cultures. It is the birthplace of the Model T; the home of Detroit; the place where Wilson Pickett immortalized "Mustang Sally" and the Beach Boys, "Little Deuce Coupe."

But America's love affair with its vehicles seems to be cooling. When adjusted for population growth, the number of miles driven in the United States peaked in 2005 and dropped steadily thereafter, according to an analysis by Doug Short of [Advisor Perspectives](#), an investment research company. As of April 2013, the number of miles driven per person was nearly 9 percent below the peak and equal to where the country was in January 1995. Part of the explanation certainly lies in the recession, because cash-strapped Americans could not afford new cars, and the unemployed weren't going to work anyway. But by many measures the decrease in driving preceded the downturn and appears to be persisting now that recovery is under way. The next few years will be telling.

"What most intrigues me is that rates of car ownership per household and per person started to come down two to three years before the downturn," said Michael Sivak, who studies the trend and who is a research professor at the University of Michigan's Transportation Research Institute. "I think that means something more fundamental is going on."

If the pattern persists — and many sociologists believe it will — it will have beneficial implications for carbon emissions and the environment, since transportation is the second largest source of America's emissions, just behind power plants. But it could have negative implications for the car industry. Indeed, companies like Ford and Mercedes are already rebranding themselves "mobility" companies with a broader product range beyond the personal vehicle.

"Different things are converging which suggest that we are witnessing a long-term cultural shift," said [Mimi Sheller](#), a sociology professor at Drexel University and director of its Mobilities Research and Policy Center. She cites various factors: the Internet makes telecommuting possible and allows people to feel more connected without driving to meet friends. The renewal of center cities has made the suburbs less appealing and has drawn empty nesters back in. Likewise the rise in cellphones and car-pooling apps has facilitated more flexible commuting arrangements, including the evolution of shared van services for getting to work.

With all these changes, people who stopped car commuting as a result of the recession may find less reason to resume the habit.

On top of that, city, state and federal policies that for more than half a century encouraged suburbanization and car use — from mortgage lending to road building — are gradually being diluted or reversed. "They created what I call a culture of 'automobility,' and arguably in the last 5 to 10 years that is dying out," Ms. Sheller said.

New York's new bike-sharing program and its skyrocketing bridge and tunnel tolls reflect those new priorities, as do a proliferation of car-sharing programs across the nation.

Demographic shifts in the driving population suggest that the trend may accelerate. There has been a large drop in the percentage of 16- to 39-year-olds getting a license, while older people are likely to retain their licenses as they age, Mr. Sivak's research has found.

He and I have similar observations about our children. Mine (19 and 21) have not bothered to get a driver's license, even though they both live in places where one could come in handy. They are interested, but it's not a priority. They organize their summer jobs and social life around where they can walk or take public transportation or car-pool with friends.

Mr. Sivak's son lives in San Francisco and has a car but takes Bay Area Rapid Transit, when he can, even though that often takes longer than driving. "When I was in my 20s and 30s," Mr. Sivak said, "I was curious about what kind of car people drove, but young people don't really care. A car is just a means of getting from A to B when BART doesn't work."

[A study last year](#) found that driving by young people decreased 23 percent between 2001 and 2009. The millennials don't value cars and car ownership, they value technology — they care about what kinds of devices you own, Ms. Sheller said. The percentage of young drivers is inversely related to the availability of the Internet, Mr. Sivak's research has found. Why spend an hour driving to work when you could take the bus or train and be online?

From 2007 to 2011, the age group most likely to buy a car shifted from the 35 to 44 group to the 55 to 64 group, he found.

Whether members of the millennial generation will start buying more cars once they have kids to take to soccer practice and school plays remains an open question. But such projections have important business implications, even if car buyers are merely older or buying fewer cars in a lifetime rather than rejecting car culture outright.

At the [Mobile World Congress](#) last year in Barcelona, Spain, Bill Ford, executive chairman of the Ford Motor Company, laid out a business plan for a world in which personal vehicle ownership is impractical or undesirable. He proposed partnering with the telecommunications industry to create cities in which "pedestrian, bicycle, private cars, commercial and public transportation traffic are woven into a connected network to save time, conserve resources, lower emissions and improve safety."

While President Obama's efforts to reduce emissions will benefit from Americans' reduced interest in driving, China's leaders will have no such luck: there, personal car ownership is growing by more than 10 percent annually.