Zoning to Promote Garage Apartments

By Anne Brown, Vinit Mukhija, and Donald Shoup, FAICP

American cities have a large supply of garages that could be converted into affordable apartments, but off-street parking requirements prevent converting most of these garages into housing for people.

Converted garages in single-family neighborhoods are variously called second units, accessory dwelling units, garage apartments, granny flats, and backyard cottages. To convert a garage into an apartment, off-street parking requirements typically force a homeowner to replace the two garage parking spaces with two new off-street parking spaces, plus an additional off-street parking space for the new apartment. These parking requirements make it almost impossible—financially and physically—for most homeowners to legally convert garages into housing.

To make it easier to convert garages into housing, some cities have removed parking requirements for the second units. Although the residents of the garage apartments are less likely than others to own cars, many do own cars—some of which are parked on the street. Thus, converting a two-car garage into an apartment can add three cars parked on the street, and neighbors may fear that the conversions will congest on-street parking.

This dilemma can be resolved in neighborhoods with a residential parking permit district. We propose that cities remove the off-street parking requirements for single-family homes that have second units, and limit the number of on-street parking permits at that address to the number of cars that can park in front of the property. Managing on-street parking in this way can eliminate fears that converting garages into housing will flood the street with parked cars.

NOT IN MY NEIGHBOR’S BACKYARD

While reduced parking requirements for garage apartments can increase the supply of affordable housing, home owners often oppose garage conversions in their own neighborhood because of concerns about on-street parking. Explaining why she opposed garage apartments, one planning commissioner in a Southern California city said that she bought her house in a neighborhood “where I wouldn’t have to worry if I was going to be able to park in front of my own house.” Garage conversions can face severe political problems if local officials fear that the new residents will create parking problems.

This fear is exaggerated. A study of middle-income single-family home owners in the Los Angeles area found that 75 percent of garages were used to store old furniture or other household goods, not cars. Figure 1 shows two of these garages, where cars are out and just about everything else is in. In addition, many older garages are too small to accommodate larger modern vehicles such as pickup trucks or sports utility vehicles. Garage conversions are unlikely to displace many cars from garages because many cars are already in driveways or on the streets. Nevertheless, many residents fear garage conversions will lead to overcrowded on-street parking. How can cities remove off-street parking requirements for houses with garage apartments without crowding on-street parking and arousing political opposition?

TABLE 1. SHARE OF UNPERMITTED SINGLE-FAMILY UNITS IN THE LARGEST METROPOLITAN STATISTICAL AREAS, 2000–2014

<table>
<thead>
<tr>
<th>MSA</th>
<th>Increase in Number of Housing Units (1)</th>
<th>Number of Building Permits (2)</th>
<th>Number of New Units without Permits (3) = (1) - (2)</th>
<th>Percentage of New Units without Permits (4) = (3)/(1)</th>
<th>Wharton Regulatory Index (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Los Angeles</td>
<td>454,728</td>
<td>155,344</td>
<td>299,384</td>
<td>66%</td>
<td>0.51</td>
</tr>
<tr>
<td>New York</td>
<td>566,167</td>
<td>235,846</td>
<td>330,321</td>
<td>58%</td>
<td>0.63</td>
</tr>
<tr>
<td>Boston</td>
<td>205,337</td>
<td>86,102</td>
<td>119,235</td>
<td>58%</td>
<td>1.54</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>317,891</td>
<td>153,821</td>
<td>164,070</td>
<td>52%</td>
<td>1.03</td>
</tr>
<tr>
<td>Chicago</td>
<td>514,888</td>
<td>292,800</td>
<td>222,088</td>
<td>43%</td>
<td>0.06</td>
</tr>
<tr>
<td>Miami</td>
<td>298,554</td>
<td>188,632</td>
<td>109,922</td>
<td>37%</td>
<td>NA</td>
</tr>
<tr>
<td>Washington, D.C.</td>
<td>398,169</td>
<td>279,401</td>
<td>118,768</td>
<td>30%</td>
<td>0.33</td>
</tr>
<tr>
<td>Dallas</td>
<td>608,604</td>
<td>459,609</td>
<td>148,995</td>
<td>24%</td>
<td>-0.35</td>
</tr>
<tr>
<td>Atlanta</td>
<td>582,114</td>
<td>471,479</td>
<td>110,635</td>
<td>19%</td>
<td>0.04</td>
</tr>
<tr>
<td>Houston</td>
<td>581,674</td>
<td>526,312</td>
<td>55,362</td>
<td>10%</td>
<td>-0.19</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4,528,127</strong></td>
<td><strong>2,849,346</strong></td>
<td><strong>1,678,781</strong></td>
<td><strong>37%</strong></td>
<td></td>
</tr>
</tbody>
</table>

Complete sources and methodology available in “Converting Garages into Housing,” published in the Journal of Planning Education and Research.

Instead of requiring off-street parking to prevent crowded on-street spaces, cities can better manage the on-street parking. Parking is not the only reason why neighbors may object to garage conversions, but it is a major reason and a politically powerful one. If cities remove on-street parking problems as an objection to garage apartments, the other issues (such as concerns about noise or attracting lower-income residents to high-income neighborhoods) can be discussed more openly. Other zoning regulations for second units (location, size, safety, construction materials, and occupancy limits) can remain largely unchanged.

**REFORMING OFF-STREET PARKING REQUIREMENTS**

One way to manage on-street parking is to limit the number of cars permitted to park on the street. In residential permit parking (RPP) districts, the city can limit the number of on-street parking permits for cars registered at any address with a second unit. An RPP district is necessary but not sufficient to prevent garage conversions from crowding the curb. Although cities create permit districts only where parking is already scarce, they can be irresponsible about the number of permits issued.

For example, a political firestorm erupted in San Francisco when journalists discovered that romance novelist Danielle Steel had 26 residential parking permits for her mansion in Pacific Heights.

To solve the on-street parking problem, cities can impose an if-then condition for garage conversions: if an owner receives a permit to convert a garage into housing, then the owner accepts a limit on the number of on-street parking permits at that address. This if-then condition can be included in the zoning for single-family neighborhoods with RPP districts.

There are good precedents for this if-then policy. In 2016, Washington, D.C., halved its off-street parking requirements for multifamily buildings near transit with the proviso that the residents cannot receive residential parking permits (§702.1(C)). In 2017, California adopted legislation that prohibits local governments from requiring any off-street parking for some multifamily developments “when on-street parking permits are required but not offered to the occupants of the development” (Government Code §65913.4(d)(1)(C)). Limiting the number of on-street parking permits at every address with a converted garage can eliminate the parking-related concerns of neighbors and thus reduce the political opposition to garage conversions.

The option to convert a garage into housing in exchange for a limit on parking permits is far less restrictive than prohibiting garage conversions entirely. Furthermore, if a city limits the number of on-street parking permits only at addresses with second units, the neighbors without second units can continue receiving permits as usual. Because the if-then permit solution does what off-street parking requirements were intended to do—manage on-street parking congestion—cities can remove the off-street parking requirements altogether.

Some cities offer permits that allow residents to park on the street in front of their own driveway, effectively creating a reserved curb space in front of every house and substantially increasing the on-street parking supply. If residents convert their garages into housing, these block-your-own-driveway permits can give property owners a guaranteed on-street parking space for themselves, guests, home help, and service vehicles.

**LEGALIZING UNPERMITTED GARAGE CONVERSIONS**

After a city has created a clear path for legal garage conversions, it can begin targeted code enforcement for illegally converted garages following a grace period, during which home owners may comply with new regulations. While heavy-handed enforcement would previously have been “inhumane” due to the widespread displacement it would have caused, enforcement can now encourage...
TABLE 2. COST AND REVENUE FOR CONVERTING A TWO-CAR GARAGE INTO A 400-SQUARE-FOOT APARTMENT

<table>
<thead>
<tr>
<th></th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Construction Cost</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architectural plans</td>
<td>$3,000</td>
<td>$5,000</td>
</tr>
<tr>
<td>Permit fees</td>
<td>$2,000</td>
<td>$3,000</td>
</tr>
<tr>
<td>Construction</td>
<td>$45,000</td>
<td>$60,000</td>
</tr>
<tr>
<td>Fixtures</td>
<td>$10,000</td>
<td>$12,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$60,000</td>
<td>$80,000</td>
</tr>
<tr>
<td><strong>Monthly Cost</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mortgage payment</td>
<td>$474</td>
<td>$633</td>
</tr>
<tr>
<td>Maintenance</td>
<td>$50</td>
<td>$67</td>
</tr>
<tr>
<td>Insurance</td>
<td>$73</td>
<td>$73</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$597</td>
<td>$772</td>
</tr>
<tr>
<td><strong>Monthly Gross Revenue</strong></td>
<td>$1,440</td>
<td>$1,440</td>
</tr>
<tr>
<td><strong>Monthly Net Revenue</strong></td>
<td>$843</td>
<td>$668</td>
</tr>
</tbody>
</table>


regularizing illegal conversions along with a limit to on-street parking. For example, Lawndale, California, requires an inspection and a report that “states whether the property is in compliance with the requirements for off-street parking” before any residential property is sold. A similar inspection-at-sale requirement in other cities would lead home owners to upgrade or remove conversions.

Garages converted without a legal permit are surprisingly widespread in the U.S. To estimate the increase in the number of unpermitted single-family housing units in the 10 largest Metropolitan Statistical Areas (MSAs), we compared the number of new single-family housing units reported in the U.S. Census with the number of single-family building permits reported by the U.S. Department of Housing and Urban Development. (Detached inhabited garages are counted as single-family housing units in both data sets.) Column 4 in Table 1 suggests that, between 2000 and 2014, 37 percent of new single-family units were unpermitted. In total, 1.7 million unpermitted housing units were added in the 10 largest MSAs.

Column 5 shows the Wharton Residential Land Use Regulatory Index, which measures the strictness of land-use regulation. MSAs with more regulation have higher values and those with less regulation have lower values. The MSAs with more regulatory barriers to new housing (Boston, Los Angeles, New York, and Philadelphia) have high shares of unpermitted units in their metropolitan areas, while the MSAs with fewer barriers (Atlanta, Dallas, and Houston) have low shares. Providing a pathway to legalization can greatly reduce the number of illegal garage conversions.

THE ECONOMICS OF GARAGE CONVERSIONS
Converting garages into housing can have far-reaching benefits for home owners, including an improved financial footing. According to Pearl Remodeling, a company that converts garages into livable space in Los Angeles, the cost of converting a two-car garage into a 400-square-foot apartment ranges from $60,000 to $80,000. If the home owner finances the conversion at five percent interest over a 15-year period, monthly loan payments would be between $474 and $633 per month. Using Craigslist, we surveyed rental listings of second units in Los Angeles County in May 2016 and estimated that the average rent for a 400- to 450-square-foot second unit in Los Angeles is $1,440, so the rent from a garage apartment can cover the mortgage payments and give the home owner between $602 and $793 a month in additional income. If the owner pays $60,000 for the conversion without borrowing, the rate of return on the investment is 25 percent per year and the payback period is 3.9 years; if the conversion cost is $80,000, the rate of return is 18 percent per year and the payback period is 5.4 years.

Some owners may not want to borrow money to convert a garage, or may have too little equity to do so. A policy that can help in this case is being tested in Portland, Oregon. The government offers to build a second unit on a single-family property if the home owner agrees to allow a homeless family to live in it rent-free for five years, after which the home owner has unrestricted use of the property. The sites considered for the second units are close to public transit, schools, grocery stores, and day care, and the formerly homeless families receive full support from social services.

The government’s cost to build the second unit is around $75,000, about the same as the cost to convert a garage into a second unit—far less than the average $372,000 per unit. It costs to build subsidized affordable housing in California.

If a city wants to provide housing for homeless families, subsidizing second units can be cheaper than subsidizing the rent for existing apartments.

Unlike rent subsidies, which increase the demand for affordable housing, subsidized second units increase the supply of affordable housing. After five years, home owners get the second units at no cost.

If an agency is committed to providing shelter for a specific group, subsidized second units can be a cost-neutral or even a less expensive alternative.

For example, because the U.S. Department of Veterans Affairs offers a wide array of programs to help homeless veterans, it can also offer to pay for converting garages into housing in exchange for letting veterans occupy the new housing rent-free for a specified period. This offer seems especially appropriate if the home owner appreciates a veteran’s service to the country and if the neighbors approve of (or at least hesitate to publicly oppose) allowing a formerly homeless military veteran to live nearby.
Garages converted to housing because it would be obvious to everyone, including city inspectors. The investment would be risky because of the high chance of being cited for two violations: converting the garage to housing and not having the required off-street parking. Nevertheless, street-facing garages may be the most suitable for conversion to housing, for several reasons.

First, street-facing garages already comply with zoning-required setbacks and height limits. Second, converting a street-facing garage into an apartment will not reduce privacy in the home owner’s or the neighbors’ backyards. The garage apartment’s resident will also have more privacy with a separate entrance to the street. Third, converting a street-facing garage that is part of the house into an apartment should be cheaper than converting a freestanding backyard garage. The apartment can connect with the electricity, central heating, air conditioning, and plumbing in the main house, and can have a door into the main house if the apartment is occupied by a family member or caregiver. Fourth, fire engines or ambulances can easily access a garage apartment in the front, removing an objection often raised against backyard cottages. Fifth, garage residents will provide more eyes on the street, and the home owners can feel safer while they are away if someone is living in the former garage. Sixth, converting a street-facing garage into an apartment can improve both the architecture of the house and the urban design of the street. Street-facing garages can be much more valuable for people than for cars.

All this can be accomplished with little effect on parking or aesthetics. Cars can still park side-by-side in the driveway of a front-facing converted garage. If a garage abuts the sidewalk and has no driveway, the city can issue a block-your-own-driveway permit to provide a guaranteed on-street parking space along the curb cut in front of the house. Moreover, a city can require design review for any garage conversion to ensure that it is consistent with the design of both the house and the neighborhood.

The two renderings in Figure 3 illustrate the improvements possible when a residential facade replaces a garage door that formerly dominated the front of a house. (The entry door to the second unit can be in the side setback.)

Affordable Housing

Off-street parking requirements in single-family neighborhoods prevent on-street parking congestion mainly by preventing second units, and most garage conversions that do occur are confined to the unregulated housing market rather than the formal market. Some home owners ignore not just parking requirements but also important safety precautions when converting their garages without building permits. These unregulated garage units may then not adhere to building codes, thus exacerbating existing concerns over the safety of converted garages.

Urban economists have argued that high housing prices result not from a shortage of land, but from a zoning-induced shortage of building permits. Parking reforms that allow second units can provide a new supply of small, well-located, and high-quality dwellings within walking distance of stores and public transit. Allowing home owners to convert their garages into second units will allow the market to supply more housing with less parking and less traffic.

By creating new affordable housing, garage conversions can reduce the demand for existing affordable housing—which is in short supply—by increasing both the number of units and their geographical availability. If reforms parking requirements...
allow it, garage apartments can create income-integrated communities not only in the sense of income diversity within a neighborhood but also of people with different incomes living on the same piece of property. The garage apartments will be what has been called naturally occurring affordable housing (NOAH): units that are affordable without being supported by public subsidies. Because the residents of the new garage apartments will not be competing for the existing supply of affordable housing, the benefits of the new NOAH units will trickle sideways and benefit everyone seeking affordable housing.

**ALL PARKING IS POLITICAL**

Diverse interests from across the political spectrum may support reducing the off-street parking requirements for second units if a city limits the number of on-street parking permits at any address with a second unit. Taken together, reforms for both on-street and off-street parking regulations are likely to appeal to important interest groups. Housing advocates can see that allowing garage conversions will create affordable homes without requiring any subsidy. Property-rights advocates can see that it will increase owners’ ability to manage their property. Environmentalists can see that it will reduce energy consumption, air pollution, and carbon emissions. Elected officials can see that it will encourage infill development and reduce traffic congestion without any new taxes. Contractors can see that it will increase investment in new housing. Urban designers can see that unobtrusive microapartments will enable people to live at higher density without being overwhelmed by cars. Libertarians can see greater opportunities for individual choice. Older people can see the potential to have on-site housing for caregivers or boomerang children. Opponents of illegal second units can see the potential for cities to legalize or remove these units.

Home owners can see the opportunities for guest quarters or rental income. Potential residents can see the prospect of affordable housing close to their workplace. Across the political spectrum, the left can see that garage conversions provide affordable, mixed-income housing in good neighborhoods, while the right can see they are 100 percent capitalist.

If many home owners convert their garages into apartments, cities can consider charging market prices for the on-street parking permits and spending the revenue to improve public services in the neighborhood. Everyone will have an incentive to economize on curb parking. Some residents who formerly parked their cars at the curb will park in the driveway, and others might sell an old car that isn’t worth the price of an on-street parking permit. If more home owners convert their garages into apartments, rising permit prices will prevent a curb parking shortage, and will increase the revenue to pay for neighborhood public services.

**CONCLUSION**

One goal of city planning is to avoid conflicts before they happen, such as by regulating setbacks, fence heights, signs, and other features of real estate. Off-street parking requirements help to avoid conflicts about on-street parking, but they have serious unintended consequences, one of which is reducing the supply of housing. Garage conversions can increase the supply of housing but off-street parking requirements inhibit converting garages into housing.

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**SAMPLE LOCAL LEGISLATION**

Off-street parking requirements shall be removed where the following conditions are met:

- The lot sits within a residential parking permit district; and
- On-street parking permits are limited.
- This condition shall remain in effect so long as the normally required number of off-street spaces are not provided on the lot.

**SAMPLE STATE LEGISLATION**

[A] local agency . . . shall not impose parking standards for an accessory dwelling unit in any of the following instances:

- The accessory dwelling unit is located within one-half mile of public transit.
- The accessory dwelling unit is located within an architecturally and historically significant historic district.
- The accessory dwelling unit is part of the proposed or existing primary residence or an accessory structure.
- When on-street parking permits are required but not offered to the occupant of the accessory dwelling unit.
- When there is a car-share vehicle located within one block of the accessory dwelling unit.

**COMMENTARY**

In California, all cities and counties must allow garage conversions and other second units through a ministerial review process (Government Code §65852.2).

Additionally, the California Vehicle Code authorizes block-your-own driveway permits (§22507.2):

A local authority may, by ordinance, authorize the owner or lessee of property to park a vehicle in front of the owner’s or lessee’s private driveway when the vehicle displays a permit issued pursuant to the ordinance authorizing such parking.

The local authority may charge a nonrefundable fee to defray the costs of issuing and administering the permits.

Cities can issue block-your-own-driveway permits in neighborhoods zoned for single-family residential use. Block-your-own driveway permits substantially increase the on-street parking supply and give property owners a guaranteed on-street parking space for themselves, guests, home help, and service vehicles.

This is not an unprecedented approach. Hermosa Beach, California, has authorized block-your-own driveway permits since 1989 ($10.32.080). Here is the city’s permit application and the original ordinance: http://bit.ly/2uyCyXT.
Off-street parking requirements put space for cars ahead of housing for people by making it difficult to convert garages into apartments. Instead, cities should remove off-street parking requirements for houses within RPP districts and limit the number of on-street parking permits at any address where a garage has been converted to housing. Limiting parking permits will prevent on-street parking congestion and help make garage conversions politically feasible. By increasing both home values and the supply of affordable housing, this parking reform can achieve individual and collective benefits of converting garages into housing without creating costs to neighboring home owners.

Parking reform for garage conversions can be offered first as a pilot program in one district. If the first district where garage conversions are allowed is successful, the policy can be offered in other parts of the city. Because they offer flexibility and may be adopted on a piecemeal basis, the parking reforms can allow residential districts to implement gradual change at the neighborhood level. The policy can also be expanded to allow other kinds of second units such as new detached structures, additions to the main house, or carve-outs in the main house, such as basement apartments. Parking reform can reduce the barriers to all forms of second units in both old and new housing while removing concerns about on-street parking congestion.

Parking reforms offer a simple solution to encourage the addition of affordable housing while also providing home owners with improved choice and opportunities for mortgage financing and home equity loans. While parking regulations will change, other city regulations for second units, particularly building and safety codes, can remain the same. Existing garage conversions can be grandfathered if they are brought up to code, as is often done with other nonconforming land uses. New houses can also be built with second units or designed with garages and other spaces that are ready for conversion to second units.

The most appropriate method of managing on-street parking for houses with second units will depend on the nature of the neighborhood. In older neighborhoods with narrow lots, for example, only one on-street parking permit may be possible for a house with a second unit. In newer neighborhoods with wider lots, several parking permits for a house with a second unit may not cost the street. Even in the densest neighborhoods, cities can allow second units such as basement flats if they manage the on-street parking properly. In this way, relatively minor parking reforms can allow home owners to create second units and adapt the urban landscape to a new future, one garage at a time.

Note: This article is condensed from “Converting Garages into Housing,” in the Journal of Planning Education and Research.
ARE YOUR PARKING STANDARDS BLOCKING GARAGE APARTMENT CONVERSIONS?