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Jake Wegmann and Alison Nemirow
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Secondary dwelling units are a form of small-scale infill almost by definition. However, few if any studies have examined the role that secondary units might be playing in urban infill development. A secondary unit is an accessory dwelling unit on a house lot that has an independent exterior entrance and is equipped with its own kitchen and bathroom. It can lie within the envelope of the main house, or it can be a separate structure, whether attached or detached from the primary structure. For the purposes of this paper, we will assume that the prototypical secondary unit is located on the same property as a single-family house, is significantly smaller and otherwise subordinate in design to the main dwelling, and that either the secondary unit or the main house is occupied by an owner-occupant.[1]

This literature review examines the research on both infill development in general, and secondary units in particular, with an eye towards understanding the similarities and differences between infill as it is more traditionally understood – i.e., the development or redevelopment of entire parcels of land in an already urbanized area – and the incremental type of infill that secondary unit development constitutes. The paper is intended to provide background to an ongoing study of secondary unit development potential in the East Bay.

Planners and researchers have traditionally considered secondary units a way for homeowners to generate extra income (Ruud and Nordvik, 1999; Rudel, 1984; Varady, 1988), or for "empty nesters" to use surplus residential space (Gellen, 1985; Hare 1989; Varady, 1990). These two approaches, which are not so much mutually contradictory as divergent in terms of emphasis, can be termed the "need" and "capacity" schools of secondary unit supply, respectively. Much of the interest in infill housing development, meanwhile, has had an altogether different emphasis, focusing on the potential for achieving regional social, environmental, and economic benefits. Smart growth advocates argue that directing growth to infill locations can help preserve open space while reducing traffic congestion, air pollution, and energy use, and bringing new investment into existing communities (Danielsen, Lang, & Fulton, 1999; McConnell & Wiley, 2010). Infill that takes the form of transit-oriented development (TOD) – relatively dense,

[1]"Secondary unit" is one name among many used to refer to the same phenomenon. Examples of other common nomenclatures include "granny flats," "accessory dwelling units," and "coach houses." For the sake of simplicity, we will use the term "secondary unit" throughout this paper. While the distinction between single family houses with secondary units, on the one hand, and duplexes, on the other hand, can at times be blurry, and while definitions distinguishing between the two vary across jurisdictions, generally a secondary unit is substantially smaller in size than the main dwelling. A secondary unit is also typically subordinate to the main dwelling in terms of design – for instance, entrances to secondary units are typically given less architectural emphasis than the entrance to the main unit, or are even completely invisible from view from the public street. Furthermore, many jurisdictions view duplexes as structures that can be legally held by absentee landlords, whereas secondary units are restricted to owner-occupants living onsite, whether in the main house or the secondary unit. To add one final note of complexity, secondary units can, on occasion, be found in conjunction with duplexes and triplexes, in addition to the single-family houses with which they are most often associated.

mixed-use development within walking distance of a transit station – may be particularly likely to result in reduced auto use and higher rates of transit ridership, walking, and bicycling (Arrington & Cervero, 2008; Dittmar & Ohland, 2004).

While secondary units, by contrast, have not traditionally typically been treated in the literature as a form of infill housing, there is evidence that they are already playing an important role in increasing residential density in urban and suburban neighborhoods. This paper briefly reviews previous efforts to quantify the extent to which secondary units and more traditional forms of infill already contribute to the nation's housing stock. We then discuss the demographic changes and changing preferences that are likely to influence housing demand in the short- to long-term, and what the implications of these trends might be for infill and secondary unit development. In the last two sections of the paper, we explore how traditional infill and secondary units may affect housing affordability and neighborhood stability, and the literature on barriers to the supply of both of these types of residential development.

Estimates of the share of total development that takes place in infill locations vary greatly, depending on how infill is defined. Most research counts as infill any development occurring inside the boundaries of a metropolitan area's central city (McConnell & Wiley, 2010). For example, Farris (2001) studied 22 metropolitan areas in the United States and found that while central cities accounted for 29 percent of the total housing stock in 1990, central cities attracted only 5.2 percent of the total new residential building permits in their metropolitan areas between 1989 and 1998.

In a study of residential development in California, Johnson and Hayes (2003) used a broader definition of infill development based on neighborhood age. Using 2000 Census data, the authors calculated that 36 percent of housing units built in the 1990s in California were located in neighborhoods where most housing was developed between 1980 and 1989. Twenty-two percent were located in neighborhoods with either a mix of housing from different decades, or where most housing predated 1980. Landis et al. (2006) conducted the most thorough accounting of infill development *potential*, finding that California has nearly 500,000 potential infill sites comprising approximately 220,000 acres of land. Landis et al. (2006) define prospective infill locations as vacant and underused parcels located either within incorporated cities, or in unincorporated areas with a residential density of at least 2.4 dwelling units per acre. This analysis assumed that entire parcels would be redeveloped.

Evaluating the scale of the secondary unit stock and the rate of secondary unit development is, if anything, more difficult and imprecise. The calculations are muddled by the fact that many jurisdictions do not track secondary unit permit applications, and by the widespread prevalence of illegal secondary units that do not conform to local building codes and that have never been subjected to inspections by code enforcement officials. Despite these methodological challenges, however, researchers have found that this form of "shadow" housing stock accounts for a surprisingly large share of the housing market, serving as a particularly significant source of housing for low- and very-low-income households (Baer, 1986). Table 1 summarizes the results of various studies on the prevalence of secondary units in various localities.

Table 1. Estimates of secondary unit prevalence within various geographies.

secondary unit prevalence estimate	Location	Source	Methodology
26,000 secondary units in a city of under 450,000 people; secondary unit prevalence ranges from 10% to 50% of housing stock in residential neighborhoods.	Vancouver	Michael Lytton (in Hare, 1991b)	Unspecified (study undertaken by city)
90,000 secondary units.	Suffolk and Nassau Counties, Long Island, New York	Hare, 1991	Unspecified
200,000 people reside in illegal garage conversions; garage conversions account for 2.5% of the county's housing stock.	Los Angeles County	Chavez and Quinn, 1987	Site visits to houses randomly selected from a sample of all single-family properties in LA County, using visual inspection and interviews.
25% of the population of a city of approximately 100,000 resides in illegally-converted garages.	South Gate (Los Angeles County)	Chavez and Quinn, 1987	Same as above
Illegal secondary units comprise 8% of citywide housing stock (lower-bound estimate).	San Francisco	SPUR, 2001	SF building department study based on visual inspection of building exteriors
Illegal secondary units comprise 5,000 out of 21,000 housing units.	Daly City (California)	Hare, 1989	Daly City study (methodology unspecified)
secondary units (mostly legal) comprise 6% of the nation's housing stock.	Norway	Ruud and Nordvik, 1999	National census records
25% of houses include secondary units.	South End neighborhood, Boston	Hardman, 1996	Boston Redevelopment Authority studies (methodology unspecified)

Perhaps most notably, Baer (1986) and Gellen (1985) analyzed the U.S. Census Bureau's Components of Inventory Change (CINCH) reports[2] to arrive at striking estimates of

[2] CINCH reports are released by HUD, currently on a biannual basis. They were originally instituted to account for the widening gap between, on the one hand, additions to the housing stock as reported in American Housing Survey and decennial Census reports, and, on the other, nationwide figures of housing completions. The category accounting for the significantly higher numbers in the former category over the latter is what is known as the "shadow market" (Hardman, 1996). Note that these figures make no distinction between secondary units or other shadow market units that are legally permitted versus those that are illegal; they are tabulated by the Census without regard to legal status.

secondary unit stocks on the scale of the entire United States. Baer (1986) estimated that the shadow market – the category of housing units, including secondary units, not accounted for by housing industry production as reflected in typically-cited figures of "housing starts" -- comprised 65% of net additions to the national housing stock serving low-income households between 1973 and 1980, and 40% of additions to the very-low-income housing stock[3]. (The latter presumably constituted a smaller share because of the high level of supply of federally subsidized housing serving the lowest income levels during this period.) Gellen (1985) estimated an annual rate of 50,000 and 100,000 net secondary unit conversions[4] in the U.S. during the same seven-year period. Fifty thousand conversions a year – Gellen's lower-bound estimate – would have, remarkably, comprised approximately one quarter of the net annual increase to the national rental housing stock between 1973 and 1980. Note that the flows, or net rates of addition, estimated by both Baer and Gellen make no distinction between legal and illegal "shadow market" housing units or secondary units.

Hare (1991b), estimating from 47 responses to a survey sent to all municipalities around the United States known at the time to permit secondary units, derived a production figure for *legal* secondary units. Based on these results, he estimated that municipalities that do not place onerous restrictions on secondary unit production can expect to see net additions at the rate of roughly one legal secondary unit per one thousand single family house lots per year.

Demographic Trends, Household Preferences, and Housing Demand

A great deal of literature on infill development has focused on how changing demographic trends and household preferences may influence future housing demand. In particular, the aging of the U.S. population and the declining share of married-couple households and households with children are likely to have significant consequences for the housing market (Masnick, 2002; Myers & Pitkin, 2009).

The majority of respondents to consumer preference surveys consistently prefer single-family homes located in low-density, suburban neighborhoods over compact, neotraditional, and other alternative neighborhood types (Baldassare, 2004; Morrow-Jones, Irwin, & Roe, 2004; Myers & Gearin, 2001). However, households without

[3] The six components of housing stock change to the "shadow market" are a) restoration of previously inhabitable units; b) conversion of group quarters into individual dwellings; c) merger of two or more units into a smaller number of units; d) moving a home or mobile home to a new site (which results in one addition and one removal and thus no net change to the national stock); e) the transformation of nonresidential space into a dwelling; and f) the conversion of one or more units into a larger number of units (Baer, 1986). Note that categories e and f are the most common sources of secondary unit production, although category d is a possibility as well in rare cases (including in Echo housing, as discussed below). Confusingly for our purposes, not all units gained or lost via mechanisms d, e, and f are secondary units. In addition, the addition of newly constructed detached secondary units would not appear in these numbers.

[4] Here "net conversions" refers to the number of secondary units gained via shadow market stock change mechanism f (see footnote 2 above) less the secondary units lost via mechanism c. Thus Gellen is only discussing secondary units gained via the conversion mechanism, and not those gained by new construction or by the conversion of garages to secondary units (an example of mechanism e from footnote 2).

children and retirement-age households are more likely than other groups to prioritize decreased auto dependency and proximity to public transportation, work, and shopping. These same types of households are also more receptive to smaller lot and house sizes (Myers & Gearin, 2001). In the short- to mid-term, as members of the giant "baby boom" generation begin to retire and their children (the "echo boomers") enter their 20s and 30s and delay forming families, these preferences may lead to increased demand for the relatively small-lot, high-density housing types that characterize infill development (Myers & Gearin, 2001; Myers & Pitkin, 2009). Based on similar population trends, the Center for Transit-Oriented Development (2004, 2007) projects that the demand for housing near transit will more than double between 2000 and 2030.

The foreclosure crisis and economic recession that began in 2007 and 2008 may be hastening the transition of the housing market away from large-lot, low-density residential development. A series of recent articles has noted a slight decline in the size of the few new homes built between 2008 and 2010, and predicted that the trend may augur a structural shift in the market driven by demographic change (Dunham-Jones & Williamson, 2010; Flisram, 2010; Rice, 2010). Others warn that the foreclosure wave is ushering in a large-scale shift away from homeownership and suburban lifestyles in general, potentially resulting in severe disinvestment in certain suburbs (Florida, 2009; Kiviat, 2010; Leinberger, 2008). Myers and Ryu (2007) project that overall demand for housing will begin to contract by 2030 as the baby boomers age and home sellers start to exceed buyers in all 50 states.

However, while the market for infill and TOD is projected to grow, and demographic trends – as well as changing preferences and concerns about the environment – may change the structure of the housing market over the long-term, one fact is clear: as many as 70 to 80 percent of baby boomers express a preference for staying in their current homes as they age (Kochera et al., 2005; Koppen, 2009). For these individuals, the major housing challenge will be adapting their homes to allow them to "age in place" (Lawler, 2001).

How might these trends affect the market for secondary units in particular? Literature from the 1980s and 1990s focused on the specific topic of secondary units and the elderly. Several surveys suggested that secondary unit converters tend to undertake such projects while they are still middle aged or in their 50s and 60s, but also that the resulting secondary units tend to be increasingly both rented out by and occupied by elderly people (Chapman & Howe, 2001; Rudel, 1984; San Francisco Development Fund, 1988). In other words, while elderly homeowners may be unlikely to add secondary units to their property, they are likely to rent them out or live in them if they are already in place.

Some of the most direct evidence on the unlikelihood of secondary unit conversion by elderly homeowners came from Retsinas and Retsinas (1991). They reviewed six state-level efforts to provide secondary unit conversion financing to elderly homeowners. All of these programs were collaborations between state housing finance agencies (which provided financing) and state units on aging (which identified clients). The researchers found decidedly unimpressive levels of uptake of the programs, which by the time of

writing had led two of the six to cease operations. Retsinas and Retsinas argued that factors such as the bureaucratic complexity of the programs, daunting long-term loan commitments, the stresses of dealing with contractors and selecting tenants, and the tendency of elderly homeowners to not share researchers' belief that they are "overhoused" combined to severely limit their usefulness to their intended beneficiaries.

A different approach that arose during the 1980s involved housing the frail elderly as *tenants* in so-called Echo (Elder Cottage Housing Opportunity) units, or movable cottages, in residential backyards. Echo housing flourished in Canada, the United Kingdom, and Australia, but did not catch on in the United States. Reviewing this experience, Hare (1991) concluded that the bottleneck in the U.S. was marketing failure, rather than zoning and manufacturing capacity constraints, although international examples indicated that government ownership of such movable units was also an essential ingredient for success.

Antoninetti (2008) argued more recently that the Echo concept may have failed in part because elderly persons were required to move out of their homes to secondary units located in other areas. Based on the numerous survey results indicating that baby boomers overwhelmingly prefer to "age in place," however, Antoninetti predicts that secondary units will revive in importance, albeit in a different manner than that envisioned by the proponents of Echo housing. To him, secondary units benefit elderly homeowners by giving them the option to generate extra income by renting out a secondary unit, or even more income by moving into the secondary unit and renting out the main house to another household. In addition, according to this view, secondary units increase the possibility that elderly households will have helpful younger people, whether or not they are friends or family, living on their property and helping them with the daily tasks needed to allow them to continue to function in a mixed-age, residential community. Perhaps his approach can be reconciled with the findings of Retsinas and Retsinas if it does not rest on adding secondary units to houses owned by homeowners who have already become elderly, but rather seeks to have them installed while they are still middle-aged or "young old," or by a previous homeowner.

Infill, Secondary Units, Housing Affordability and Neighborhood Stability

One common hope for infill development is that it will bring new residents and investment to existing neighborhoods, creating new opportunities and stabilizing tax bases (Danielsen et al., 1999; McConnell & Wiley, 2010). Development that fosters mixed-income communities may help address poverty by promoting neighborhood safety and attracting new municipal services to a neighborhood (Joseph et al., 2007). On the other hand, infill development may also cause gentrification and displacement (Farris, 2001; Steinacker, 2003).

On a neighborhood scale, there is some support for the idea that communities with a fine-grained mix of owners and renters – a particular form of mixed-income communities that includes but is not limited to secondary units – can help promote neighborhood stability. Two studies, one of struggling mid-1960s Newark, NJ and the other in Montreal's much more stable housing market in the 1970s, found that owner-occupied rental properties are

generally more highly maintained than rental properties owned by absentee landlords (Sternlieb, 1966; Krohn et al 1977). While these studies were not about secondary units, they both analyzed housing types (the Newark tenement and Montreal "plex" housing) that share the key characteristic of secondary units of a mixture of rental and homeowner tenures within the same parcel.

On the other hand, a hedonic study of predominantly suburban, single-family housing located in low-density neighborhoods in the Philadelphia region found that the average property value of houses with secondary units was about 5 percent lower than the value of similar properties without secondary units (cited in Lang, 2004). In contrast, New Urbanist developments – which incorporate more city-like elements, often including secondary units – can command a 15 percent price premium over otherwise identical residential subdivisions. Lang speculates that this price differential may reflect the existence of dual housing markets: one composed of home buyers who dislike characteristics, such as secondary units, that are perceived to degrade the semi-rural atmosphere of low-density residential neighborhoods, and another of households that gravitate towards urban or suburban areas with some city-like characteristics. Demand from consumers with preferences for city-like characteristics could explain the results of earlier research by Ekos (cited in Hare, 1989) that used a comparative rather than hedonic property valuation methodology to conclude that secondary units had no influence, negative or positive, on property values in urban sections of Toronto and Ottawa.

At the household level, secondary units can affect housing affordability in two ways: by providing an income stream to homeowners, and by providing relatively low-cost rental housing. Ruud and Nordvik (1999) found that Norwegian homeowners renting out secondary units had on average 30% more mortgage debt than their counterparts who were not renting out secondary units, a result that they argued supported the "need" theory of secondary unit supply over the "capacity" theory more often emphasized by American researchers in the 1980s and 1990s. Further evidence came from a subsequent econometric analysis, also in Norway, that treated the decision to *not* rent out a secondary unit as evidence of a homeowner's demand for space within her own house. The study revealed an income elasticity of demand that averaged 0.39 but that ranged drastically from 0.26 to 1.49 for households in the last and first deciles, respectively, of likelihood to rent out secondary units as modeled by a household utility function. Price elasticity of demand was even more responsive, averaging -0.77 and varying from -0.27 to -2.52 for the last and first deciles, meaning that homeowners, particularly those already predisposed to rent out secondary units due to their household characteristics, became *very* likely to rent out rather than consume extra space in their own homes as rental prices rose (Nordvik, 2000).

Secondary units may rent for less than other rental units because of the informal way they are often supplied and managed. For instance, federal Fair Housing law, which places restrictions on the ability of landlords to discriminate against tenants on the basis of race and certain other characteristics, does not apply to properties with four units or fewer. In a study of Babylon, Long Island, New York, Rudel (1984) found that secondary units rented, on average, for 35% less than non-secondary unit apartments, despite the

secondary unit renter households being, on average, larger and including more children than the non-secondary unit renter households[5]. Tenants who were relatives of their landowners accounted for 30 percent of secondary unit residents, and paid an average of 37 percent less in rent than those secondary unit tenants not related to their landlords. One side effect of this informality was a striking racial division: although African-Americans made up 20 percent of Babylon's population, the survey found almost no African-Americans living in secondary units. Survey work in Connecticut and New York suggests that because secondary unit owners charge family members less, relatives occupying secondary units often perform chores and provide other forms of assistance to homeowners (Hare, 1989).

Similarly, Krohn et al. (1977) described a Montreal neighborhood in which informal understandings, non-monetary exchanges (especially of labor), ethnic and other kinship networks, and a lack of former legal mechanisms and contracts characterized the market for flats within "triplex" houses and other mixed-tenure housing. This "local-amateur" (or informal) housing economy provided units for far lower rents than the rental housing supplied by the formal economy. Hardman (1996) cites evidence that only 57% of rental housing stock in Boston was owned by professional investors in the mid 1990s. She argues that the other, local-amateur-owned 43% of rental units, which includes a significant though unknown proportion of secondary units, is critical to meeting the city's need for modestly-priced housing.

Constraints on Secondary Unit and Infill Residential Development

The informal way in which secondary units are supplied has important implications for the development process. While medium- or large-scale infill projects are typically undertaken by professional developers, secondary units are usually built by individual homeowners, sometimes with the assistance of contractors or family members. Developers of traditional infill projects often confront complications such as parcel assembly and brownfield cleanup, aging infrastructure, restrictive land use regulations, and neighborhood opposition (Farris, 2001; Fulton, 2001). In California in particular, environmental review requirements, combined with the complexity and uncertainty of local approvals processes, make a costly and time-consuming development process even more so (Landis, 2002). Glaeser et al. (2005) argue that in high-priced metro areas such as San Francisco, Los Angeles, and San Diego, home prices have vastly outpaced construction costs because of these types of regulatory constraints.

By and large, adding a secondary unit does not require a homeowner to assemble property, conduct an Environmental Impact Report, or replace local infrastructure. Homeowners may face specific design challenges, however, that are related to path-dependencies imposed by the character of the pre-existing housing stock. A survey in

[5] The Babylon study does not attempt to compare the number of bathrooms, square footage, or other characteristics of secondary unit housing versus non-secondary unit rental housing available in the town; it therefore does not provide direct evidence that secondary unit housing is being provided at a cheaper price, normalized for housing quality, than non-secondary unit housing. It does provide strong evidence, however, that secondary unit rental housing offers a lower-priced housing package than otherwise commonly exists in the town apart from subsidized rentals.

suburban Washington suggested that homeowners living in pre-World War II neighborhoods were considerably more open to secondary unit conversion, in part because the existing housing stock was more suitable for such an alteration (Varady, 1988). Rudel's survey (1984) in Babylon, New York found dramatically higher rates of conversion of particular single family house architectural styles, such as raised ranches, than others, such as Cape Cods.

Local regulatory treatment also affects legal secondary unit production enormously. In the mid-1980s, a foundation-backed effort to encourage secondary unit development in five Bay Area jurisdictions found that local regulatory barriers were by far the most frequent reason homeowners gave for dropping out of the program after initially expressing interest. The sponsors concluded that zoning and planning regulations, particularly onerous parking requirements, were the most significant barrier to legal secondary unit development (San Francisco Development Fund 1988).

California has undertaken arguably the most aggressive action at the statewide level to lower local regulatory barriers to legal secondary units, beginning with the Second Unit Law of 1982. The most recent state law addressing secondary units, Assembly Bill 1866 of 2003, requires that each city in the state have a ministerial process for approving secondary units. However, cities are still free to insist that certain conditions be met before issuing an over-the-counter permit for a secondary unit. The resulting outcomes on the local level are widely varied, ranging from San Diego, a large city with virtually no legal secondary unit production whatsoever, to Santa Cruz, which saw its legal secondary unit production triple after implementing a comprehensive package of zoning reforms, pre-approved designs, a how-to manual for homeowners, and a low-interest loan program (Antoninetti, 2008).

Despite – or perhaps, because of – local regulations, illegal secondary unit conversions are a vexing issue for many local governments. A study in the 1980s estimated that 200,000 people reside in illegal garage conversions in Los Angeles County, comprising approximately 2.5 percent of the county's housing stock; one-quarter of the population in the suburb of South Gate lived in such conditions (Chavez & Quinn, 1987). Another study in Daly City, immediately adjacent to San Francisco, found 5,000 illegal secondary units, in a city with 21,000 single-family homes (Hare, 1989). In a review of studies that the Boston Redevelopment Authority had undertaken on secondary unit conversion, Hardman (1996) concluded that existing zoning regulations provided virtually no deterrent whatsoever to illegal conversions, which were rampant in certain neighborhoods; secondary units routinely received building department approval without zoning permission. The experience of the Babylon amnesty program, on the other hand, suggests that a well-crafted legalization program can engender a strong response, as 1,500 of the 4,000 estimated illegal units were brought into compliance within several years (Rudel, 1984).

Conclusion

The preponderance of U.S. housing policy, at all levels of government, can be plausibly seen as acting to reinforce the "myth of single family homeownership," characterized by

the prototypical "American Dream" configuration of a single nuclear family occupying a detached house containing but a single unit (de Neufville and Barton, 1987). A myth is not necessarily mostly or even partly untrue, and it can serve a vital function of organizing needed collective action. But a myth can also become so well-entrenched that it thwarts needed reforms, even as the status quo becomes increasingly untenable and exhibits evermore internal contradictions (ibid). Whether seen from the standpoint of homeowners who would benefit from extra income from secondary units, or through a lens of "Smart Growth," there is abundant evidence that the dominant model of single family homeownership meets the needs of a shrinking proportion of Americans, and imposes costs on society as a whole.

Sharing is a term often used to describe arrangements that deviate from single family houses and from apartments occupied by single households. Sharing arrangements are growing in prominence and prevalence in American society, motivated by choice for some and necessity for others. Marris (1996), however, cautions that we have to be cognizant of what he calls "the trouble with sharing." Sharing often works best when people share *out* (i.e., alternate the use of) common facilities, and when interior physical spaces are reserved for separate households as much as possible. Within the spectrum of different sharing arrangements, secondary units seem to offer the most potential for privacy and separation of this sort (Hemmens et al, 1996).

Gellen (1985) argues that the seminal *Euclid v. Ambler Realty* court case of 1926, the U.S. Supreme Court case that irrevocably established the legal legitimacy of zoning, in no way argues against the exclusion of *two*-unit houses from single-family house neighborhoods, as is so often thought to be the case. Gellen offers an intriguingly amended vision of "single" family housing *with* included secondary units in the United States of the 20th century that could have been incorporated into the American Dream. Indeed, the various secondary unit estimates shown in Table 1 suggest that homeowners throughout the United States have indeed actualized this arrangement in numerous cases, regardless of the legal status of secondary units in the jurisdictions in which they live.

We conclude by calling for a revival of scholarly and policy attention to secondary units, which flickered briefly in the United States in the 1980s and early 90s and then largely dissipated. We would furthermore suggest that these new efforts explicitly focus on the connection between secondary units and urban infill, which was more or less ignored by the earlier generation of scholars focusing on secondary units. Urban infill has steadily increased in prominence in recent decades as an area for research and praxis, but those studying this topic have had little or nothing to say about its manifestation at the smallest spatial scale, and with possibly the potential for greatest ubiquity, namely the secondary unit. As policymakers and planners struggle to finance and win neighbor approval for large-scale infill development, it is time to revisit the invisible density approach.

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