

Coach Homes

A Tiny Way to Make a Big Impact on Economic Diversity

During the last 30 years, Wheeler Kearns Architects has designed some of Chicago's most noteworthy residential and not-for-profit institutional projects. As an outgrowth of our entry for the City's C40 competition, we are proposing a Tiny Home solution for East Garfield Park that could adapt to any City neighborhood. In a nod to Chicago parlance, we call it the Coach Home.

Our idea is not original. In fact, it borrows from Chicago's early post-fire history, when immigrants built family compounds on City lots over time. Before 1890, frame cottages housed the working class in Chicago. Many of these cottages, which averaged 500sf in size, were constructed without permanent foundations so they could be relocated to the rear of the lot when families could afford a brick house. Extended family often used the rear house or acquaintances rented it.

The resulting neighborhoods, with larger brick houses facing the street and tiny homes in the rear, **offered economic diversity on a single lot**. Decades later, when the cottages fell into disrepair and speculators amassed them on individual lots, they were condemned as a social evil. Consequently, urban renewal efforts demolished many of them. Ironically, handfuls

of surviving cottages remain in gentrified neighborhoods like Lincoln Park. Few have survived in impoverished areas.

Independent dwellings, comparable in size to worker cottages, were never again built in Chicago. Even the modest two-flat, which predominated from 1900 to 1920 to support a growing middle class, offered much larger dwellings, usually 900sf. From 1910 to 1940, single-family home ownership increased as Chicago's outer ring Bungalow belt was built. The houses in these subdivisions were all larger than 1,000sf.

When modern zoning arrived, it precluded the return of the tiny home, hindering the reappearance of economic diversity that once existed on single City lots. Chicago's newest neighborhoods tended to be homogeneous in their offerings. In two-flat neighborhoods like K-Town and or single-family neighborhoods in the Bungalow Belt, dwellings tended to be the same size.

In recent times, dwellings have increased in size, while density has decreased with deconversions of multi-family buildings. These trends dilute the advantage cities have over suburban

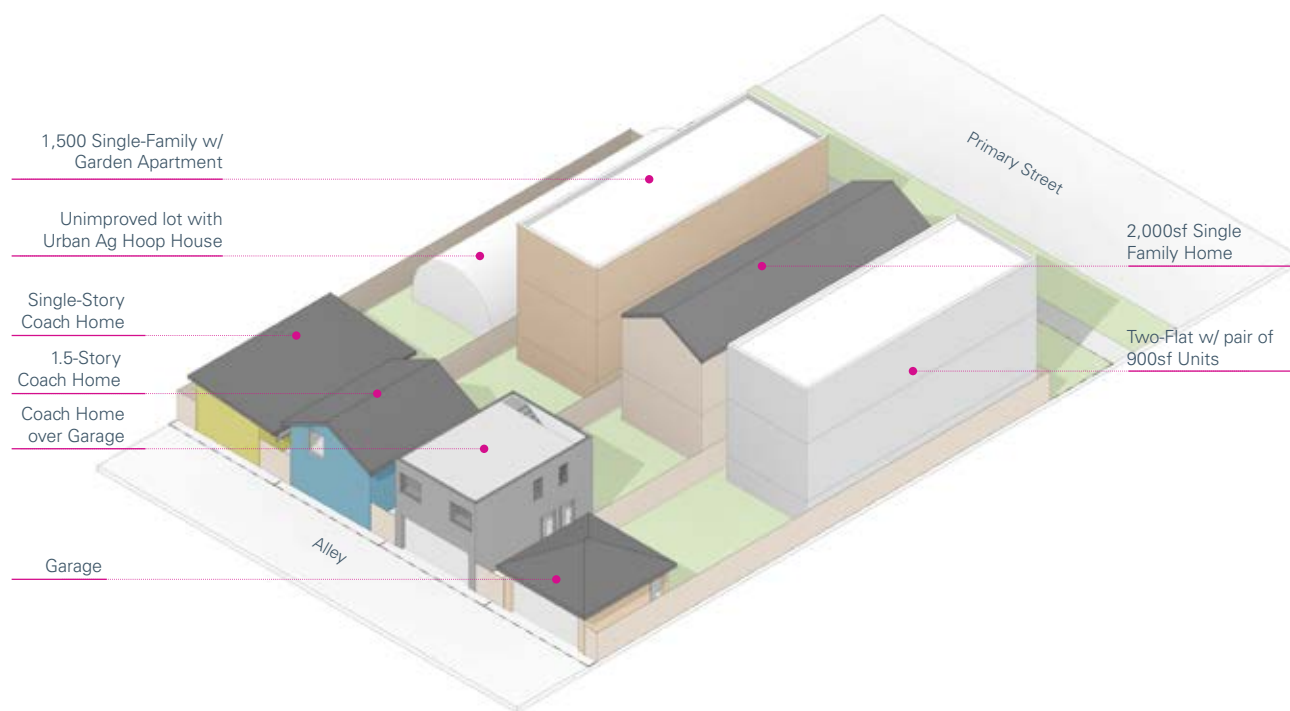


Figure 1 - An isometric of a Coach Home

sprawl, which squanders resources. The shift toward larger dwellings only exacerbates the affordability crisis.

In Figure 6, graphs of data from the United States Housing Market illustrate both the shrinking size of households and the increased per capital footprint for housing. These trends have conspired to make housing more expensive than ever.

To point Chicago toward a more sustainable future, we propose to discretely increase density while diversifying the sizes of dwellings possible on a single lot. On a traditional 25ft x 125ft footprint, **we envision collocating tiny homes with dwellings up to four times their size**, broadening economic diversity. Resilient neighborhoods, by definition, aren't dominated by uniformly-sized dwellings because residents need choices to upsize and downsize throughout their life.

The monopoly of uniformly-sized dwellings in neighborhoods segregates residents economically by reducing their choices. Consequently, many cities are currently trying to disrupt the domination of single-family homes, which frustrates affordability for some of their residents. Policies that encourage economic integration will result in more resilient, connected communities.

Coach Homes will support sustainability by providing more **choices for people across the economic spectrum to live in the City close to jobs, transit, and services**. Rather than compelling outcomes with strict zoning regulations, we propose to incentivize them with strategic policy and good design examples.

The Coach Home

Starting in Chicago's East Garfield Park, we propose to reintroduce the worker cottage as a 21st-century solution to affordability and a proactive hedge against displacement. This modern iteration will have more in common with the laneway houses of Vancouver and Portland than Chicago's original. But, at an average of 500sf, Coach Homes will still be small.

Like Vancouver's laneway houses, they will locate along Chicago's alleys where, in neighborhoods like East Garfield Park, reductions in parking requirements are possible with Transit Oriented Development relaxations. In these neighborhoods, the City is prioritizing houses for people rather than cars. Bicycle garages will be easy to accommodate.

The most prevalent Coach Home will offer residents an accessible single-story dwelling on-grade with access to a green space shared with a more substantial dwelling. The larger dwelling on the street can be an existing or future single-family residence or two-flat.

On a typical 25-foot wide City lot, even a vacant one, it will be possible to construct a 500sf Coach Home at the rear. On vacant properties, improvements on the front of the lot could be contemporaneous or delayed. Either way, there are many options for the front of the lot. See the illustration in Figure 1.

First, with little capital, the front could be used as a productive landscape, hosting an urban agriculture tenant within Chicago's first bonafide Food District. Second, a new 2,000sf single-family residence could be constructed, with an option to use 500sf on the ground floor as a separate garden apartment. Finally, the front of the lot could accommodate a new two-flat with a pair of 900sf units.

If someone owns a lot that is already improved, they could construct a Coach Home in the rear of their lot if it provided sufficient open space. All of these options result in a spectrum of dwelling sizes on a single lot, anchored on the low end by the Coach Home. Without radically altering the nature of the street, this new "stealth density" will improve Chicago's long-term sustainability and resilience.

Allowable Coach Home Variations

Even though the vast majority of Coach Homes will be single-story accessible units as depicted in Figure 2 (top), variations will be possible.

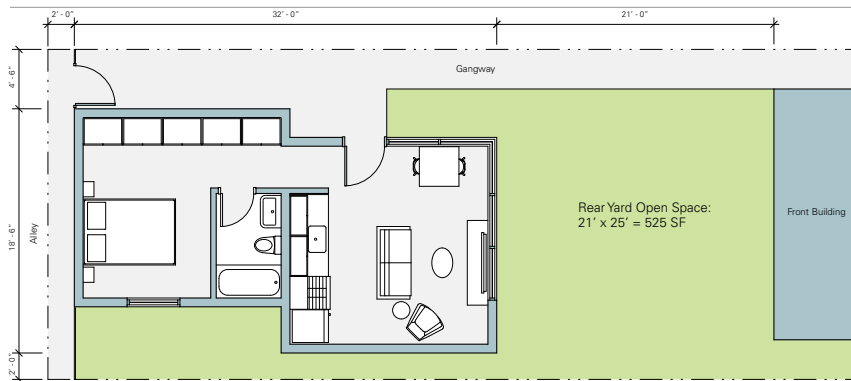
Two alternatives are depicted in Figures 1 and 2. For owners wanting to provide parking spaces in the rear, it will be possible to construct a Coach Home above a compliant garage or carport (Figure 2 middle). For those wanting or needing to preserve more green space between the front and rear residences, a Coach House with an additional half story will be possible, provided it is no more than 60% of the ground level footprint (Figure 2 bottom).

We propose to develop and promote prototype plans that owners can modify to respond to individual needs. These and other prototype plans, developed by third parties, can be shared on digital exchanges that will be explained later.

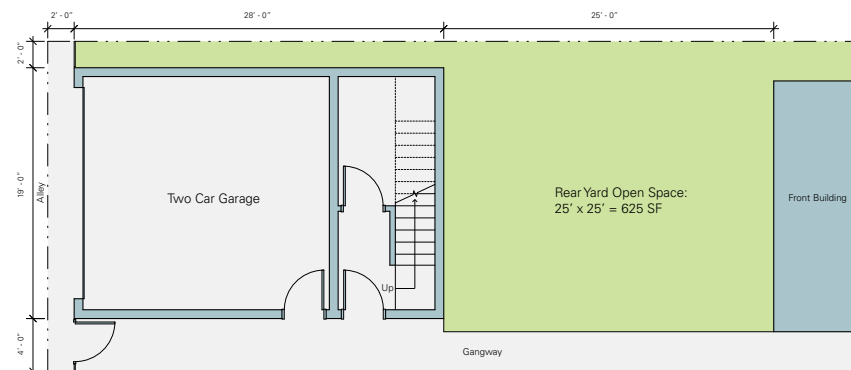
Research

In 2017, the Urban Land Institute studied similar types of dwellings, known generically as Accessory Dwelling Units (ADUs), in Seattle, Portland, and Vancouver. The study concluded that, **in cities which reformed zoning regulations, particularly for minimum lot size and floor areas, production of ADUs jumped**. Waiving permit and utility connection fees encouraged adoption, too.

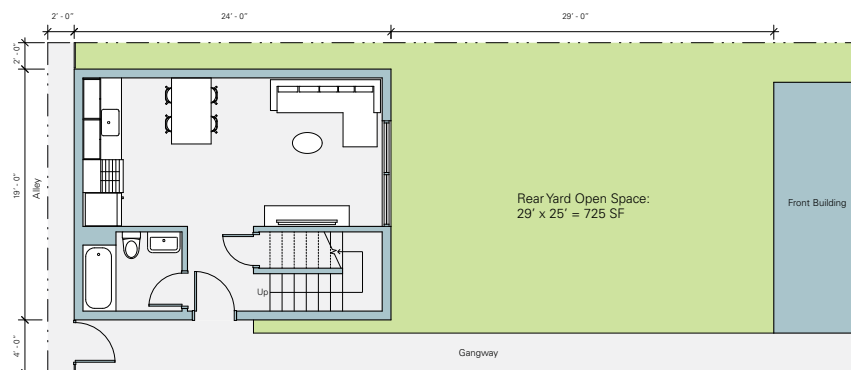
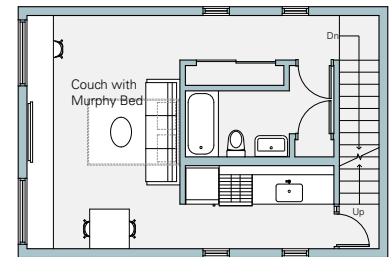
The study determined that ADUs were relatively inexpensive to build, with an average cost of \$156,000. Even with its modest



Single-Story Coach House



Coach Home over Garage



1.5 Story Coach House

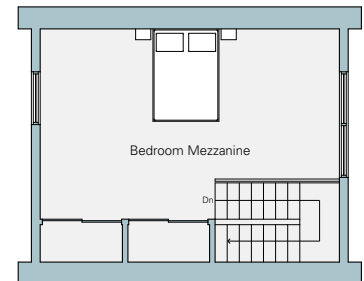


Figure 2 - Possible Floor Plan Configurations for a Coach Home; Top: A single story 500sf option; Middle: A 530sf Coach Home above a two-car garage; Bottom: A 750sf story and half Coach Home that preserves more green space than the single story option

price, given its small size, individual ADUs were almost twice as costly to build per square foot when compared with larger dwellings due to a lack of scale.

Sixty percent of the ADUs serve as permanent housing. Only 12 percent of the units were short-term rentals. In 46% of those cases, renters were unrelated to the homeowner.

The biggest challenge faced by homeowners wishing to construct an ADU was the lack of financing. Forty percent of homeowners used the equity in their property to finance the

construction. Consequently, affluent homeowners built the vast majority of ADUs.

Pilot Programs in North America

While the Pacific Northwest has led the tiny home movement in North America, cities in other geographical areas have modified zoning codes to allow ADUs. Austin, Texas has allowed ADUs since the 1980s but has recently promoted their construction to increase affordability with its Alley Flat Initiative. The city now has over 800 ADUs.

Los Angeles, Boston, and Durango, Colorado have all recently instigated pilot programs for ADUs in an attempt to improve affordability. After parking regulations were relaxed in California, San Francisco, Oakland and Santa Barbara all saw increases in ADU permits. In Los Angeles, the growth was explosive. **Permits for ADUs increased from 142 in 2016 to 2,000 in 2017.**

As part of California's budding YIMBY (Yes in My Back Yard) movement, Los Angeles is exploring a \$75,000 grant to owners who agree to dedicate their ADU to low-income individuals. In Boston, the neighborhoods of East Boston, Jamaica Plain, and Mattapan constitute the pilot program area for their ADU initiative.

Who Will Live in a Coach Home?

We are not expecting Chicagoans to aspire to live in a Coach Home for decades. For many, the Coach Home will be a residence that is the first step of an upsizing path or a final stage of a downsizing path.

Offering residents a chance to downsize within their neighborhood is a hedge against displacement. Another Midwest city provides a cautionary tale about displacement from neighborhoods that lacked downsizing options.

In the aftermath of the Great Recession, the City of Detroit repossessed over 100,000 homes from citizens that owned them outright but could not pay ever-increasing property taxes. Many residents were senior citizens on fixed incomes. Faced with few choices for relocation, they abandoned their neighborhoods.

Having a supply of Coach Homes in a neighborhood will allow Chicago to avoid this sort of economic cannibalism when runaway taxes outstrip a senior's ability to pay them. This phenomenon can happen when neighborhoods decline - as in Detroit - or when they rapidly gentrify.

In either case, Cook County currently only offers seniors exemptions of \$300 annually and only freezes evaluations - not tax bills. These policies leave seniors vulnerable.

If faced with exorbitant taxes, seniors could downsize to a Coach Home rather than suffer displacement from their neighborhood. As a more progressive alternative, Coach Homes could **offer seniors additional rental income from an investment secured by the equity in a home they already own.**

Either way, the Coach Home provides proactive housing safeguards for residents, particularly those on fixed incomes, so they can age in place when their neighborhoods gentrify or decline.

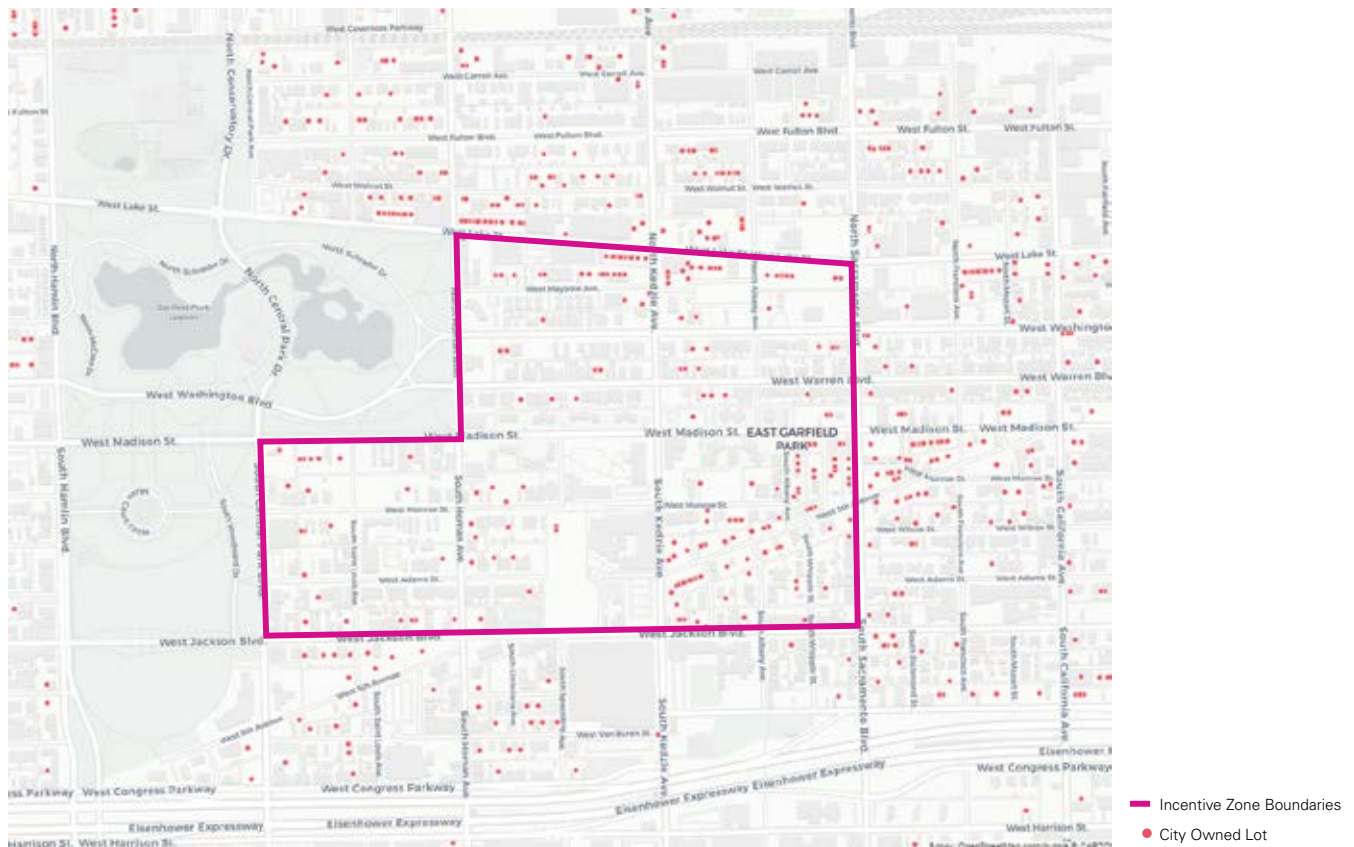


Figure 3 - An example of a possible boundary in East Garfield Park. City-owned lots are shown as red dots.

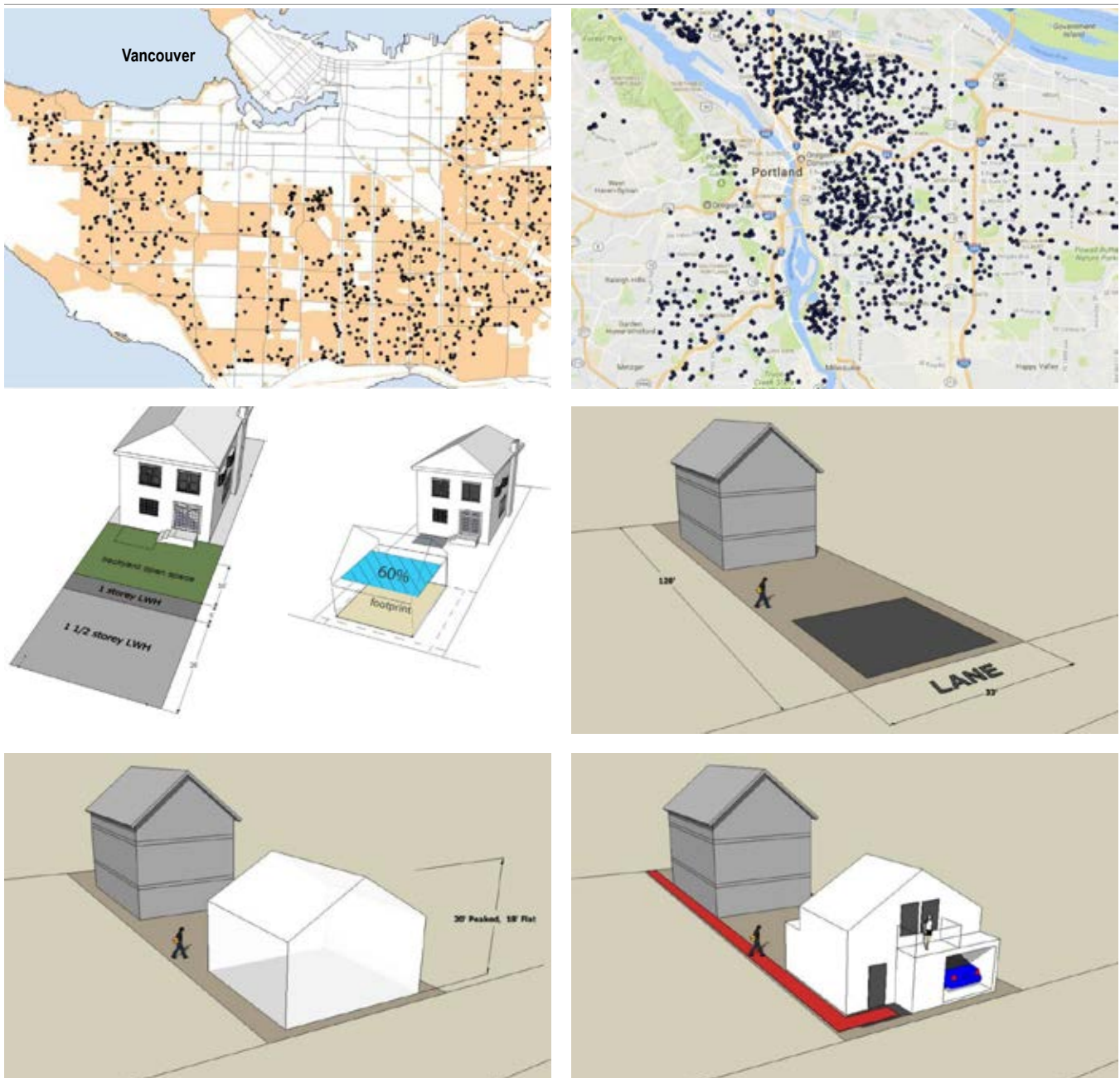


Figure 4 - Upper: Maps locating existing Laneway homes in Vancouver (left) and ADUs in Portland (right). Below: A visual guide to Vancouver's Laneway House regulations, which are based on a typical 33-foot wide lot. In addition to single story homes, Vancouver allows story and a half homes and adds bonus area for providing parking. The average Laneway home is 550sf.

On the upsizing path, first time home buyers such as millennial college graduates can start to establish a credit history and build equity with a purchase. An older adult recovering from homelessness could possibly relocate from a traditional SRO as a renter.

For others, Coach Homes could provide housing for aging family members and caregivers. Still others, like those in Seattle, may choose to construct a Coach Home for adult children priced out of home ownership in an affluent neighborhood.

Incentives, Costs, and Innovation

Entrepreneurial residents and local developers could be enticed to build Coach Homes. But convincing developers to invest capital to build a single tiny home - without an economy of scale in an unproven area - holds unacceptable risk and little appeal. Consequently, we are proposing ways to scale Coach Homes beyond one-off projects for both developers and residents. Benefits of the same scale will accrue to the neighborhood.

In addition to leveraging existing financing tools such as Low Income Housing Tax Credits, HUD's Home program, and Illinois

Affordable Housing Tax Credits, we envision bundling of series of hyper-local incentives to jump start investment in East Garfield Park. Developers could take benefit from a modified version of the City Lots for Working Families (CL4WF) program. Other incentives can be regulatory, financial, or entitlement focused.

As reported by DePaul University's Institute for Housing in 2015, **East Garfield Park ranked 72nd out of Chicago's 77 Community Areas for home ownership**, including both single family homes and condominiums. In contrast to Mount Greenwood, where over 90 percent of residents own their home, only 17 percent of East Garfield Park residents do.

To invigorate home ownership, we propose to designate East Garfield Park as the real estate equivalent of 1871, Chicago's home to innovative startups. Most startups attempt to disrupt the status quo by asking more questions, embracing change, and allowing themselves leeway to make mistakes. If they fail, they quickly pivot in a new direction.

There will be headwinds to overcome. As Mayor Emmanuel frequently reminded President Obama when pursuing universal health care, "People hate the status quo, but they're not too excited by change, either."

With so many vacant lots, East Garfield Park is a prime candidate for rebooting types of home ownership and catalyzing economic diversity. A Coach Home can serve as contemporary starter house woven into a neighborhood with homes four times as large.

While we see Coach Homes as a centerpiece of the innovations, we think framing it within a broader startup mentality will invite others to generate good ideas. This mentality will foster faster, more creative, and mission-driven problem-solving.

To enhance collective impact, we propose to limit innovations to a defined area within East Garfield Park. This intentional limit of opportunity will hopefully spike demand, concentrating investment in a narrow footprint to enhance returns and encourage grassroots participation.

This approach should alienate out-of-town institutional developers that diminish risk by building projects in different geographical neighborhoods of cities. In Figure 3, we have illustrated a proposed boundary that aligns with our C40 proposal, which attempts to create Food Industry jobs to catalyze the need for housing.



Figure 5 - Above: Photos of ADUs in Vancouver. Lower Left: A two-story ADU over a garage in Japan. Lower Right: Photo of an annual Laneway House tour in Vancouver.

To vet startup ideas other than the Coach Home, the innovation zone could have a facilitated process for a “mini-PD”. This policy would encourage innovation on a scale smaller than current zoning allows. Property owners currently need to own more than an acre to solicit site-specific regulatory relief.

Financial incentives could include a “pioneer” tax-freeze, that would reward early adopters by freezing their property taxes for ten years. The City and County currently successfully use this technique to induce investment in historic properties. The tax-freeze incentive could have a predetermined sunset to create urgency and spur action.

Once the tax freeze sunsets, future improvements taxed at standard rates will start accumulating TIF funds that can be used to invest in the neighborhood infrastructure.

Another possible financial incentive would reduce the capital expense of building on the rear of a vacant lot. The City could rebate the premium costs for extending street utilities, such as sewer and water, to the rear of a lot, paid out of the City’s Neighborhood Opportunity Fund. These rebates would ensure that services be sized for a future front dwellings, making follow-on development more attractive.

Similarly, alley utilities, such as electrical and communications, could be sized to serve future front residences, obviating future redundant drops. The City could rebate these premium costs, too.

To allow Coach Homes to be developed at scale, we propose to combine benefits of the City’s CLWF and Self-Certified Prototype programs to streamline the bundling of properties at scale within the innovation zone. Property acquisition and construction permitting can be integrated in the same work flow process to increase trust and encourage investment.

To further reduce construction costs, the City could allow the reintroduction of prefabricated “kit homes” that prevailed during the early part of the 20th century. The City’s Committee on Standards and Tests could memorialize approvals for each candidate manufacturer. Modern versions of “flat pack” Coach Home kits could be shipped in bulk on semis that would deliver to multiple sites in the same zone on the same day.

To allow individual property owners to share in an economy of scale, they could participate in a digital exchange where they could meet entrepreneurial contractors able to bundle Coach Home projects in the innovation zone. Only prequalified contractors would participate. The contractors would enjoy the

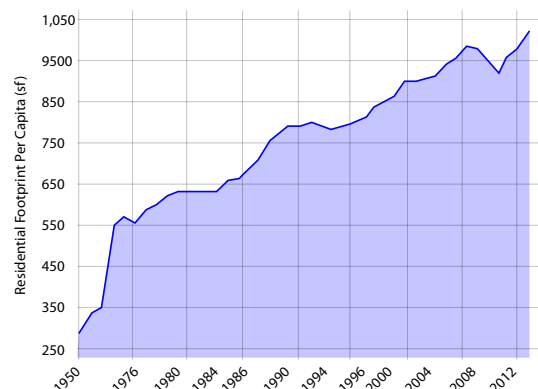
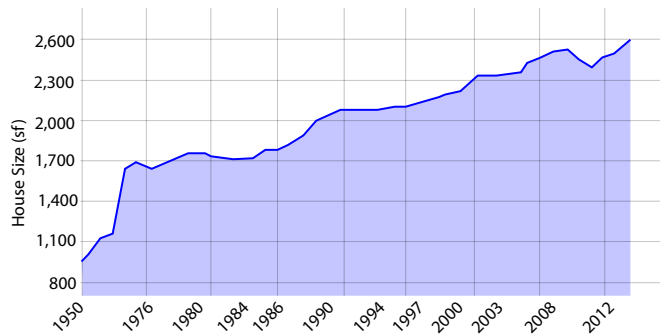
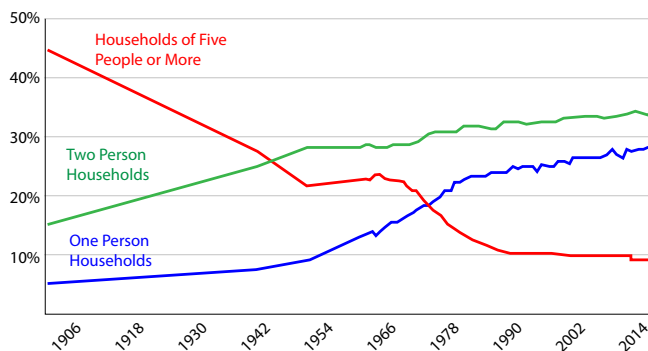
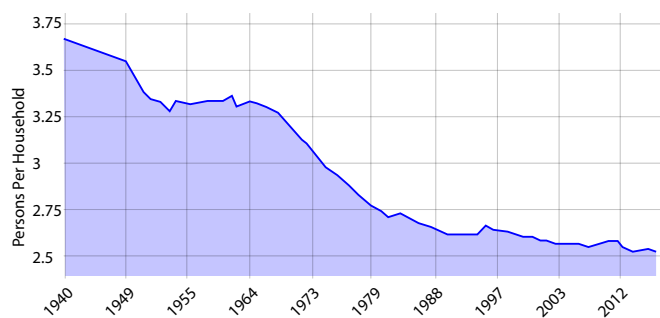


Figure 6 - US Housing Data Charts Clockwise from Top Left: Persons per Household, Single, Two, and Five or More Person Households, Residential Footprint per Capita, and House Size

same entitlement streamlining afforded to developers, **passing on the benefits of scale to individual owners.**

In our C40 competition entry, we proposed an online exchange for those in East Garfield Park's Food District ecosystem. An online exchange is an inexpensive way introduce buyers to sellers and vice versa.

In addition to incentives, we are proposing a single restriction that most cities include in their ADU policies. To discourage absentee speculation, an owner will only be able to rent a Coach Home if they occupy a residence on the same lot. This policy will ensure that revenue from rentals stays in the neighborhood.

Conclusion

We are not the first ones in Chicago to propose looking to Chicago's history to propel it forward. In 2003, the Metropolitan Planning Council advocated for the return of the coach house when the City was rewriting the Zoning Ordinance. Even though Chicago neglected to implement the change, many other cities have since. These cities have demonstrated that ADUs can contribute to a more resilient community while providing more affordable housing choices.

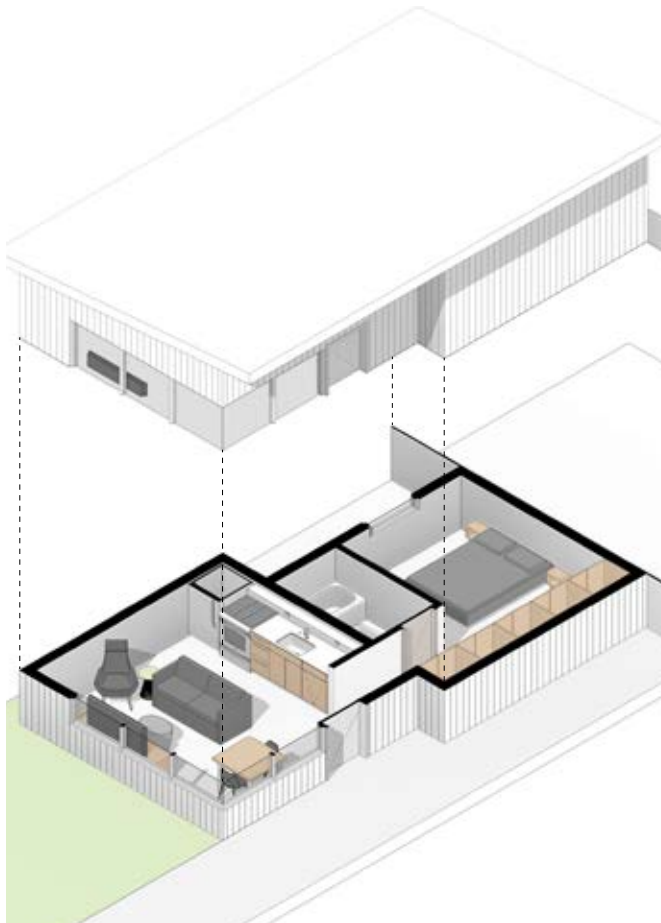


Figure 7 - Exploded drawing of single-story coach house, rear-yard open space, and alley.

As a housing type that realizes affordability with its modest size, Coach Homes are a way for Chicago to **organically reduce its per capita residential footprint without over-stressing its infrastructure.** Bolstered by initiatives like CDOT's Green Alley program, Chicago's alleys can transcend their utilitarian image to become an integral part of the City's sustainable public spaces.

When private cars yield their dominance of alleys in the future, Chicagoans can reclaim them as places to reconnect with one another, reinforcing their stature as part of the City's "connective tissue". As Jane Jacobs wrote her influential 1961 "The Death and Life of Great American Cities" - "The trust of a city street is formed over time from many, many little public sidewalk contacts. Most of it is ostensibly trivial but the sum is not trivial at all". As an urban design tactic, Coach Homes will increase the likelihood of meaningful face to face transactions in the public realm. **These connections will make Chicago more resilient.**

Most important, Coach Homes will represent a quantum leap in affordability. Since 2003, the City has pursued a 10% affordability target for new developments. There are current discussions about doubling that figure to 20%. In contrast, when constructed on traditional single family lots, Coach Homes will deliver affordable dwellings that comprise between 30% to 50% of the total number of units.

While Coach Homes are not a panacea for larger families, they are perfect for single and two-person households, based purely on their modest size. As shown in Figure 6, the number of single and two person households continues to climb in urban America. Chicago is no different.

We hope the City of Chicago Department of Planning will consider the merits of the ideas we have proposed. The devil is always in the details but we think Coach Homes can be a tiny way for Chicago to make a big impact on economic diversity.

-Wheeler Kearns Architects

Coach Homes

A Tiny Way to Make a Big Impact on Economic Diversity

01 Organizational Background

During the last 30 years, Wheeler Kearns Architects has designed some of Chicago's most noteworthy residential and not-for-profit institutional projects. Our office is devoted to a critical pursuit and practice of architecture. We believe in the search for spaces which define a full, rich and dignified way of life.

02 Framework Feedback

We envision collocating tiny homes with dwellings up to four times their size on a single Chicago lot, broadening economic diversity. Resilient neighborhoods, by definition, can't be dominated by a uniform dwelling size because residents need choices to upsize and downsize throughout their life.

03 Targeted Population

We anticipate residents will be those on the first step of an upsizing path or a final stage of a downsizing path. This could be a millennial beginning his or her career looking to establish credit or an elderly individual looking for a more economical option to stay in their current neighborhood. We also envision adults recovering from homelessness could relocate here from a traditional SRO as a renter.

04 Costs

Estimated cost of roughly \$150,000. Funding by property owner or developer with aid of Low Income Housing Tax Credits, HUD's Home programe and Illinois Affordable Housing Tax Credits. Other programs such as modified version of City Lots for Working Families (CL4WF) could be developed.

05 Design

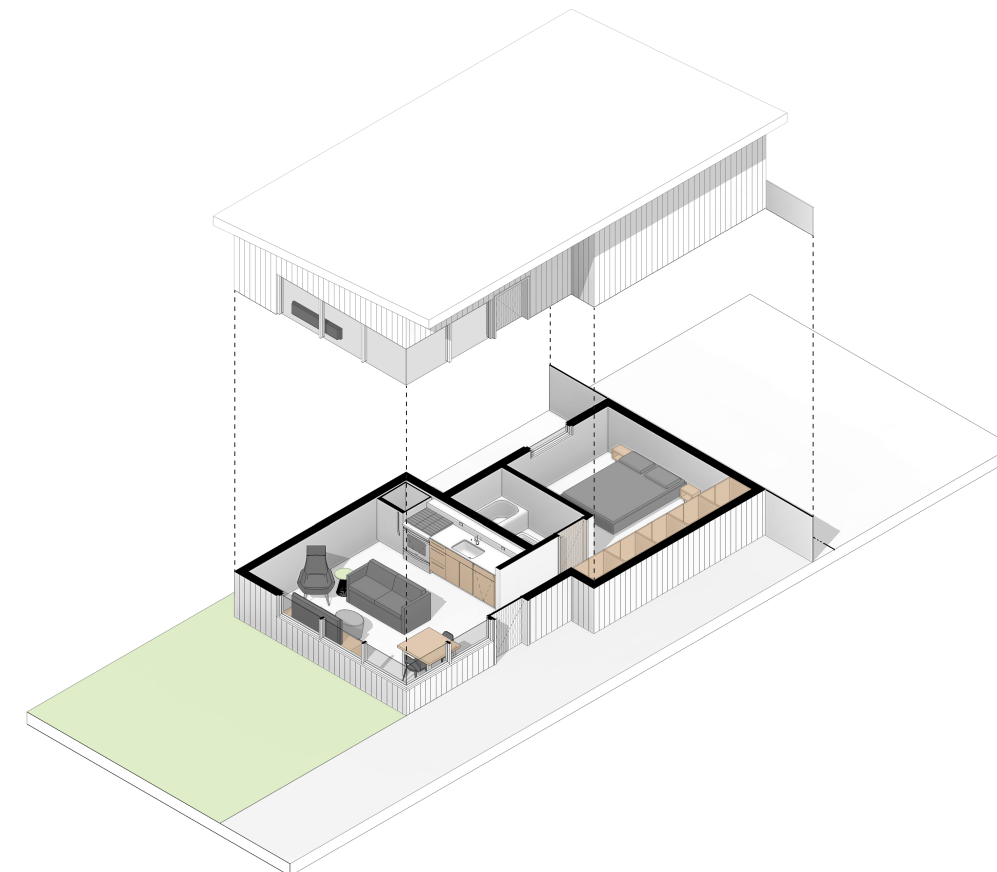
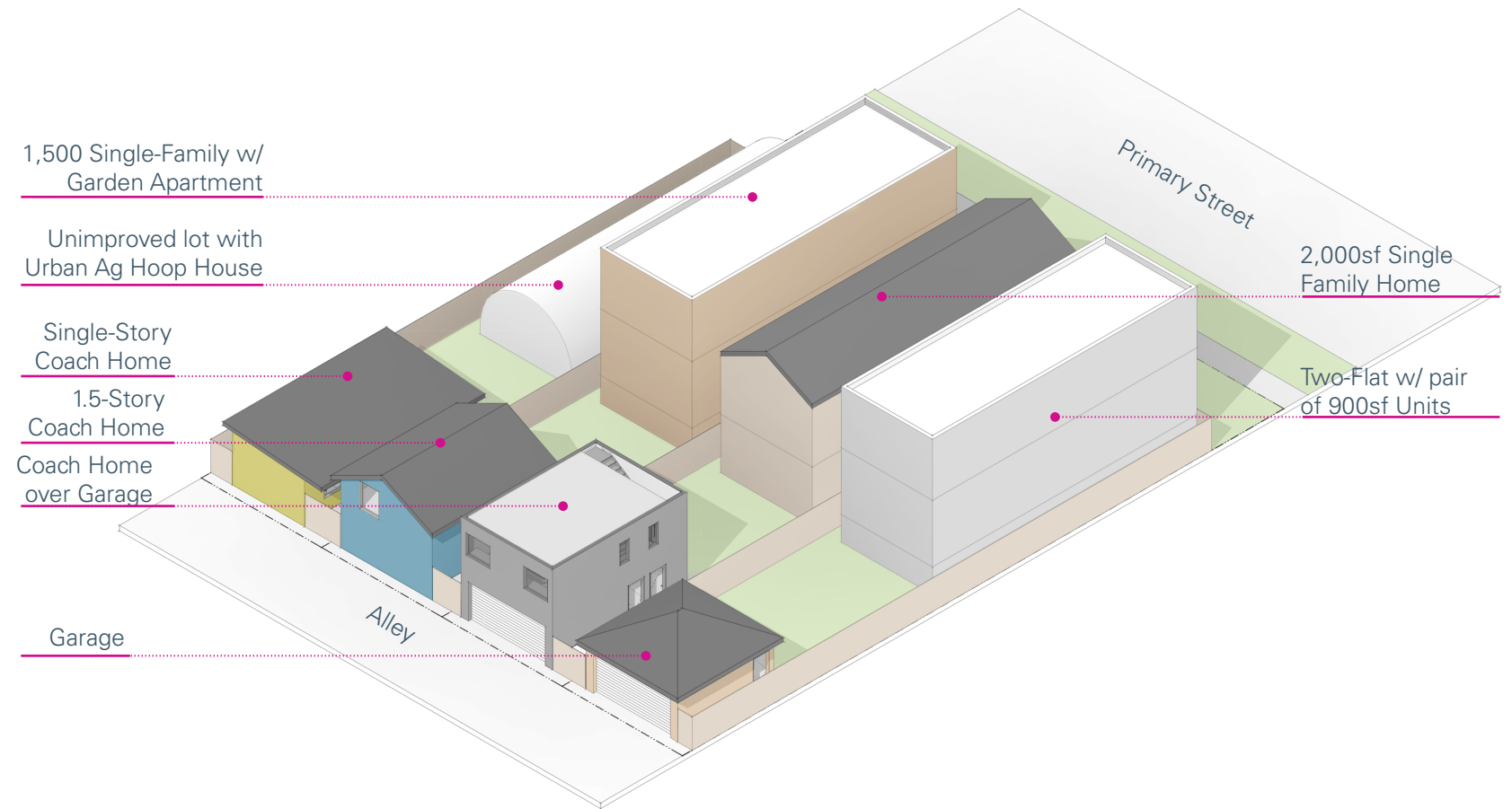
Coach houses can be adapted to meet each individuals needs. We propose three possible prototypes, single-story, 1.5 story and two-story over garage. Each design could be partially or entirely prefabricated. Type IV construction techniques.

06 Location

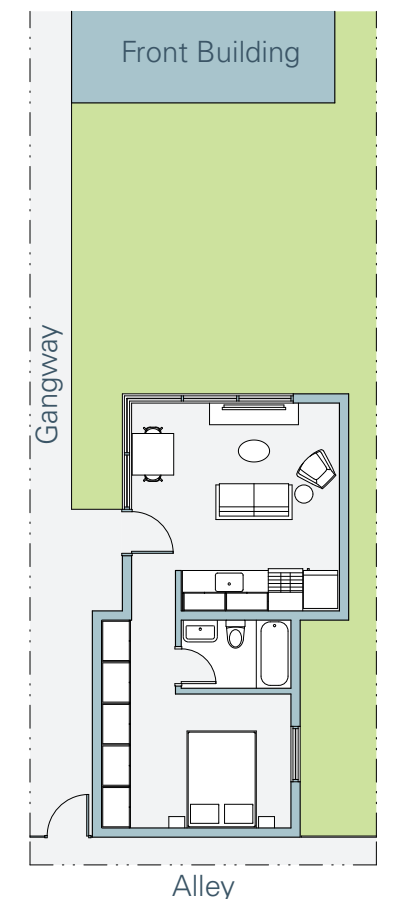
We propose to develop an innovation zone within East Garfield Park where coach homes can begin to be introduced that ultimately could adapt to any neighborhood in the city.

07 Suitability for Target Population

Cities like Vancouver, Seattle and Portland which have reformed zoning regulations have seen large numbers of Accessory Dwelling Units (ADUs) created. Los Angeles, Boston and Durango, Colorado have begun developing ADUs to improve affordability. Los Angeles is exploring a \$75,000 grant to owners who agree to dedicate their ADU to low-income individuals.



Single-Story Coach Home Exploded Isometric



Single-Story Coach Home Plan