



LIVABLE CITY YEAR 2017–2018
IN PARTNERSHIP WITH
CITY OF TACOMA

CITY OF TACOMA

INFILL HOUSING
PROGRAM DEVELOPMENT

UNIVERSITY OF WASHINGTON
URBAN DESIGN AND PLANNING

URBDP 507A: PLANNING STUDIO

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WINTER – SPRING 2018



LIVABLE
CITY YEAR

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ABOUT LIVABLE CITY YEAR

The University of Washington's Livable City Year (LCY) initiative enables local governments to engage UW faculty and students for one academic year to work on city-defined projects that promote local sustainability and livability goals. The program engages hundreds of students each year in high-priority projects, creating momentum on real-world challenges while enabling the students to serve and learn from communities. Partner cities benefit directly from bold and applied ideas that propel fresh thinking, improve livability for residents and invigorate city staff. Focus areas include environmental sustainability; economic viability; population health; and social equity, inclusion, and access. The program's 2017–2018 partner is the City of Tacoma; this follows a partnership with the City of Auburn in 2016–2017.

The LCY program is led by faculty directors Branden Born (Department of Urban Design and Planning), Jennifer Otten (School of Public Health) and Anne Taufen (Urban Studies Program, UW Tacoma), with support from Program Manager Teri Thomson Randall. The program was launched in 2016 in collaboration with UW Sustainability and Urban@UW, with foundational support from the Association of Washington Cities, the College of Built Environments, the Department of Urban Design and Planning, and Undergraduate Academic Affairs.

LCY is modeled after the University of Oregon's Sustainable City Year Program, and is a member of the Educational Partnerships for Innovation in Communities Network (EPIC-N), the collection of institutions that have successfully adopted this new model for community innovation and change.

For more information, contact the program at uwlcy@uw.edu.



ABOUT TACOMA

The third largest city in the state of Washington, Tacoma is a diverse, progressive, international gateway to the Pacific Rim. The port city of nearly 210,000 people has evolved considerably over the last two decades, propelled by significant development including the University of Washington Tacoma, the Tacoma Link light rail system, the restored urban waterfront of the Thea Foss Waterway, the expansions of both the MultiCare and CHI Franciscan health systems, and a significant influx of foreign direct investment in its downtown core.

Washington State's highest density of art and history museums are found in Tacoma, which is home to a flourishing creative community of writers, artists, musicians, photographers, filmmakers, chefs, entrepreneurs, and business owners who each add their unique flair to the city's vibrant commercial landscape. The iconic Tacoma Dome has endured as a high-demand venue for some of the largest names in the entertainment industry.


A magnet for families looking for affordable single-family homes in the Puget Sound area, Tacoma also draws those seeking a more urban downtown setting with competitively priced condos and apartments that feature panoramic mountain and water views. The city's natural beauty and proximity to the Puget Sound and Mount Rainier draws hikers, runners, bicyclists, and maritime enthusiasts to the area, while its lively social scene is infused with energy by thousands of students attending the University of Washington Tacoma and other academic institutions.


The City of Tacoma's strategic plan, Tacoma 2025, was adopted in January 2015 following unprecedented public participation and contribution. The plan articulates the City's core values of opportunity, equity, partnerships, and accountability, and expresses the City's deep commitment to apply these values in all of its decisions and programming. Each Livable City Year project ties into the principles and focus areas of this strategic plan. The City of Tacoma is proud of its 2017–2018 Livable City Year partnership with the University of Washington and of the opportunity this brings to its residents.





TACOMA 2025 STRATEGIC PLAN


The *Infill Housing Program Development* project supports the Livability and Economy and Workforce goals of the Tacoma 2025 Strategic Plan and was sponsored by the City's Planning and Development Services Department.

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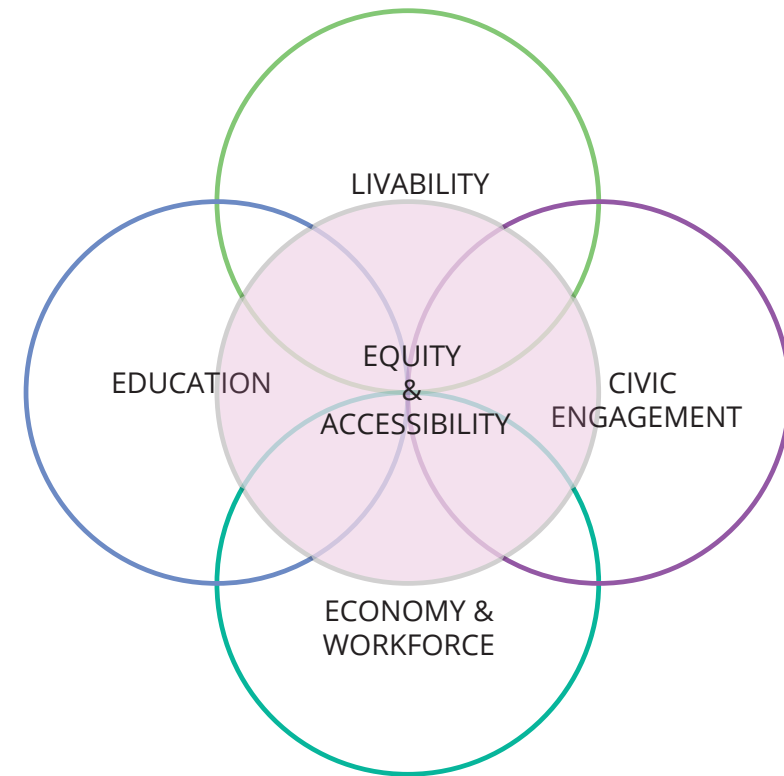
Goal #1 Livability
The City of Tacoma will be a city of choice in the region known for connected neighborhoods, accessible and efficient transportation transit options, and vibrant arts and culture. Residents will be healthy and have access to services and community amenities while maintaining affordability.
- 

Goal #2 Economy and Workforce
By 2025, Tacoma will be a growing economy where Tacoma residents can find livable wage jobs in key industry areas. Tacoma will be a place of choice for employers, professionals, and new graduates.
- 

Goal #3 Education
Tacoma will lead the region in educational attainment amongst youth and adults. In addition to producing more graduates from high school and college, more college graduates will find employment in the region. Lifelong learning and access to education will be prioritized and valued.
- 

Goal #4 Civic Engagement
Tacoma residents will be engaged participants in making Tacoma a well-run city. The leadership of the city, both elected and volunteer, will reflect the diversity of the city and residents and will fully participate in community decision-making.
- 

Goal #5 Equity and Accessibility
Tacoma will ensure that all residents are treated equitably and have access to services, facilities, and financial stability. Disaggregated data will be used to make decisions, direct funding, and develop strategies to address disparate outcomes.



RESOURCES

Tacoma 2025 Strategic Plan: https://www.cityoftacoma.org/tacoma_2025

City of Tacoma Planning and Development Services:
http://www.cityoftacoma.org/government/city_departments/planning_and_development_services

Livable City Year: <https://www.washington.edu/livable-city-year/>

UW Department of Urban Design and Planning:
<http://urbdp.be.washington.edu/>

In 2015, the City of Tacoma established the Infill Housing Pilot Program as an element of a larger affordable housing ordinance. The program worked toward a central goal: to “promote innovative residential infill while ensuring that such infill demonstrates high-quality building and site design that is responsive to and harmonious with neighborhood patterns and character.” After its launch, University of Washington students were tasked to craft recommendations for the Infill Pilot Program, to help the initiative increase uptake and affordability.

Students conducted research to develop an understanding of the City, as well as the initial outcomes of the Infill Pilot Program. We used precedent studies, GIS analysis, and community feedback on housing affordability to inform recommendations. Our research was also grounded in a demographic trend: due to the region’s massive population increase, vulnerable residents face high displacement potential. All of these factors informed equity-grounded recommendations that seek to increase uptake with the Infill Pilot Program. We proposed five future strategies to build a robust and equitable program:

- **Code changes** to remove barriers to development. These include removing parking requirements, creating small lot subdivisions, and reducing the minimum lot size.
- **Program enhancement** through increased community outreach. Activities include workshops, a social media presence, applicant support with streamlined permitting, and dedicated staff to guide applicants through the application process.
- **Land acquisition** to encourage the development of affordable housing in targeted areas with access to opportunity, and to facilitate a community land trust to build community wealth.
- **Financing tools** to increase uptake, build program accessibility to those with limited capital and stem displacement of vulnerable populations..
- **Focused growth** in defined areas to use existing physical and social infrastructure. We identified transport, schools, parks and grocery stores as essential elements ripe for investment..

We recognize that the implementation of these recommendations will require a combination of partnerships and strategic tools in the short and long term. By incorporating a combination of strategies to address both programmatic and systemic housing issues, Tacoma has the opportunity to advance infill housing with a more equitable outcome.

By incorporating a combination of strategies to address both programmatic and systemic housing issues, Tacoma has the opportunity to advance infill housing with a more equitable outcome.



Infill housing offers an equitable approach to solve housing issues in urban areas. SER AMANTIO DI NICOLAO

The Puget Sound region has experienced rapid population growth in the last few years. As a result, cities like Tacoma face unprecedented development pressures; more than 3,000 residents have moved to the area in the past year. In a city dominated by single-family housing, multiunit properties – such as townhomes, duplexes, and backyard cottages – can address the “missing middle” of housing types. Many municipalities across the country use infill housing as a tool to infuse additional housing into the existing fabric of the City.

As the City of Tacoma continues to grow, it is essential that equity be a core value of the Infill Pilot Program. This will ensure that all neighborhoods within the city benefit from investment, with a mix of housing types located near parks, stores and transit.

The City of Tacoma faces a balancing act. On one hand, it needs to provide an influx of renters and homeowners with a variety of housing options. But it also needs to ensure that its long-term residents can age in place. Infill housing is nimble; it effectively addresses issues such as housing choice and affordability, access to amenities, and intergenerational living. Gentrification, the process of changing cultural and economic demographics, is often the precursor to displacement. As urban areas become centers of investment and transportation infrastructure, the risk of displacement of vulnerable populations increases. Infill housing can stabilize neighborhoods vulnerable to displacement through innovative financing and partnerships.

Last year, Forbes Magazine named the Tacoma-Lakewood region as the 10th fastest growing metropolitan area in the nation.

The City of Tacoma launched the Infill Pilot Program to address issues of housing choice and affordability. In response to the outcomes of the Pilot Program, the City of Tacoma partnered with Livable City Year to identify ways to increase program participation, accessibility, and affordability. We have identified key ways to ensure the success of the Infill Pilot Program

through small scale adjustments, innovative policy options, and impactful program delivery methods. To arrive at these recommendations, we examined policy instruments to promote housing affordability, process improvements and public information to increase program awareness, and zones to increase the viability of infill housing. As a city on the cusp, Tacoma is well poised to create an infill housing program that ensures a healthy and equitable future for all residents.

Infill housing can stabilize neighborhoods vulnerable to displacement through innovative financing and partnerships.



An infill housing program can ensure a healthy and equitable future for all residents. CALDER OLIVER

We constructed recommendations from three primary resources: community feedback on housing affordability, precedent studies, and GIS analysis.

COMMUNITY LISTENING SESSION

In March 2018, we organized a community listening session on housing affordability in the Hilltop neighborhood of Tacoma. Residents, non-profit agency members, and developers attended, all of whom provided a wide range of perspectives. We focused the discussion around three core questions: *What is affordable housing? Why do we need it? How do we address the need for it?*

Some residents were some concerned about the peripheral aspects of affordable housing. Some drew these concerns from personal experience, while others' concerns were grounded in the negative perception of affordable housing as being a place of drug use and crime. Other attendees were concerned about the quality of construction and the availability of social and support services for residents.

Many residents were also concerned about displacement, who cited a fear of being priced out of their homes. One attendee, who works with evicted constituents, noted that individuals have difficulty finding any housing, much less affordable housing. Many attendees agreed that communities need affordable housing, but that they also need generational continuity in neighborhoods. They noted that the disruption of established social networks can harm the framework of communities.



Residents also discussed high-level issues around housing affordability, such as the role of market forces and legislative policy in influencing housing affordability. Over the course of the session, we heard many attendees bring up community land trusts, tenant-owned apartments, and co-op development as a solution to give more power to low-income residents.

Many attendees were not familiar with the Infill Pilot Program. Most were receptive to infill housing, but did indicate concern about how to ensure the units would be affordable and if they would generate disagreements amongst neighbors.

The session made it evident that the City of Tacoma needs to address displacement, housing affordability, and Infill Pilot Program accessibility. Many attendees cited community engagement as a key element to address housing affordability. In doing so, attendees noted that the City could build lasting relationships with the community to effect more meaningful change for those impacted most by the housing market.

Themes from the Community Listening Session

- Displacement of vulnerable populations
- Housing affordability
- Community engagement
- Program accessibility + awareness
- Context specific design
- High cost of transportation



(left and above) The LCY team held several community input meetings. To ensure that these meetings were accessible to a variety of residents, we provided childcare while parents and caregivers took part in the conversation. BRANDEN BORN

DISPLACEMENT RISK INDEX

As Tacoma continues to grow and investment reaches neighborhoods affected from years of disinvestment, the risk of displacement increases. By mapping indicators of displacement risk, we can identify areas of the City to focus on policy interventions that will help residents to stay in place. Based upon a similar analysis conducted by Enterprise in the Hilltop neighborhood, our model expands the reach to analyze the risk of displacement citywide. We used for proportional indicators: educational attainment, racial composition, household income, and renter-occupied housing units.

We have drawn two main conclusions from this analysis. First, 98 of the City's 203 block groups are considered "vulnerable to displacement" under Enterprise's criteria. This accounts for almost 50% of the City. Such a high rate of risk validates our belief that there is an immediate need for meaningful policy intervention.

Second, as shown on the map, the majority of high-risk block-groups are in close proximity to the potential (and unfinalized) future alignments of a Pierce County Bus Rapid Transit (BRT) line and the Sound Transit 3 (ST3) link light rail extension stations. These future stations will be highly desirable public amenities, and the cost of housing nearby will likely increase as a result. Respondents at our March community listening session repeatedly indicated that the high time costs and transportation costs associated with otherwise "affordable" housing in Tacoma present a significant obstacle to housing stability. The session's feedback, combined with our analysis, informed recommendations that address the threat of displacement related to increased investment in infrastructure.

MINIMUM LOT SIZE ANALYSIS

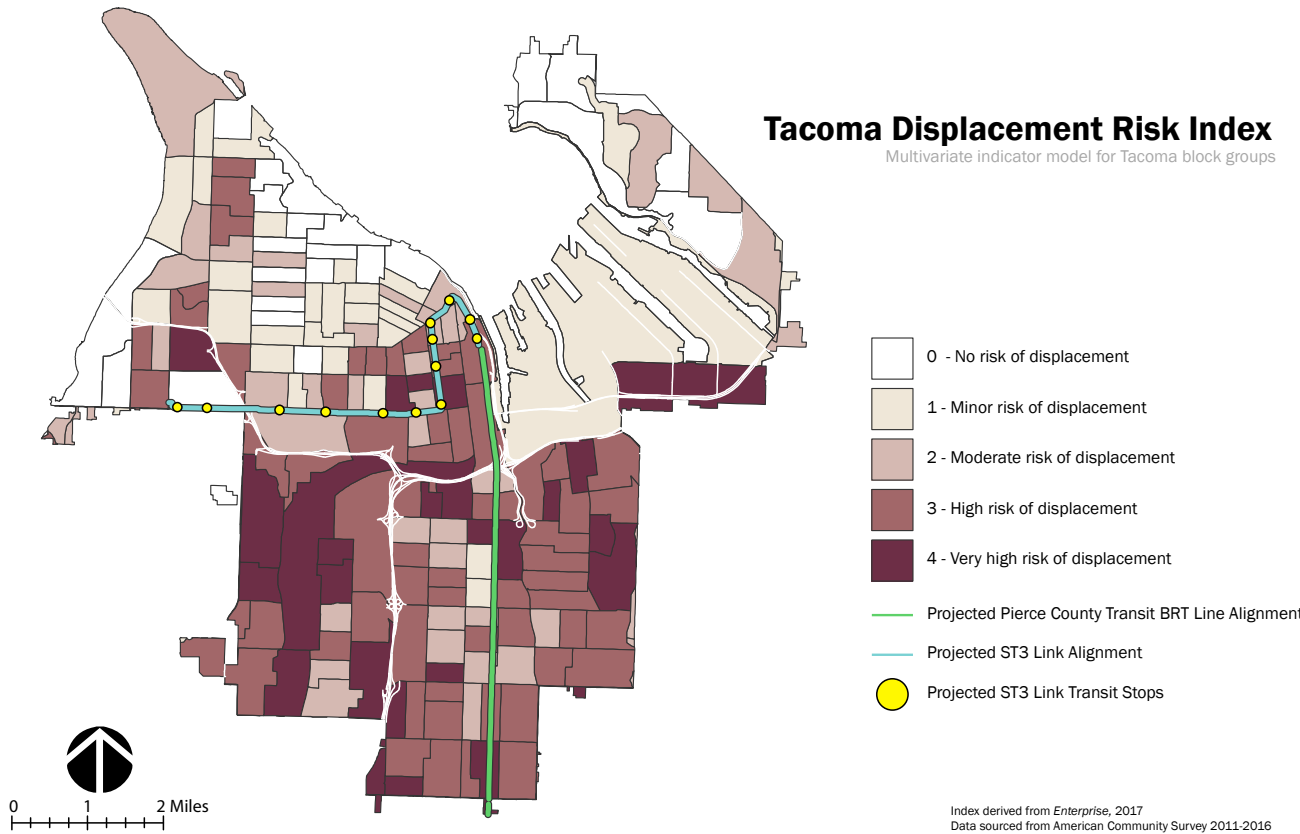
We used precedent studies to assess how to reduce the minimum lot size eligible for infill housing; this was a key element to increase the viability of the program. For the City of Tacoma, we focused on the reduction of minimum lot size for detached accessory dwelling units (ADU) and cottage housing developments.

Detached Accessory Dwelling Units

Per City code, lots in the R-1 zone must be a minimum of 7,500 square feet and lots in R-2, R-2-SRD, HMR-SRD zones must be a minimum of 5,000 square feet in order to have DADUs. While these minimum lot size restrictions retain a majority of appropriately zoned parcels eligible for development of DADUs, it prevents many homeowners from participating in the pilot program.

Detached accessory dwelling units are allowed in the following zones: R-1, R-2, R2-SRD, HMR-SRD.

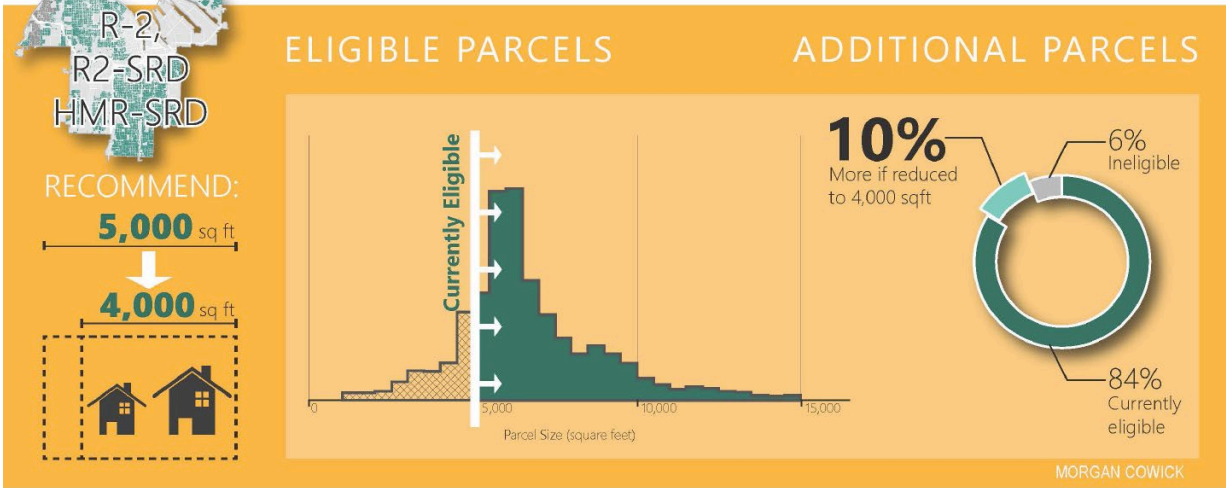
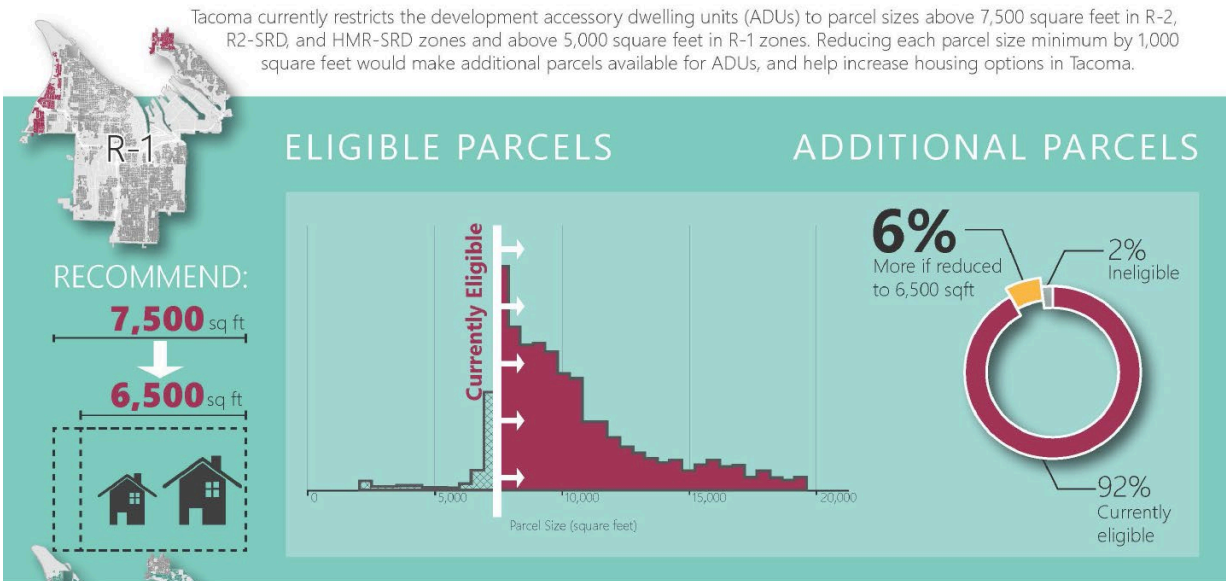
Many of the parcels that become available when the minimum lot size is reduced are proximate to mixed-use centers in Tacoma. Considering desire for infill near mixed-use centers, reducing minimum parcel size would help the city achieve its goal of focusing development of additional infill housing types near these centers.



This table describes the number of block groups in the city at each level of risk displacement.

As shown in the figure below, reducing the minimum lot size for R-1 zoned parcels could increase eligibility by 6%. Similarly, reducing the minimum lot size for R-2, R2-SRD, and HMR-SRD zoned parcels could increase the amount of available parcels by 10%.

ENCOURAGING MORE ADUS IN TACOMA



Cottage Housing

Per the City of Tacoma's current Infill Pilot Program restrictions, a lot must be at least 10,000 square feet in order to be eligible for cottage housing development.

Current minimum lot size restrictions limit cottage housing development to just 15% of the City's residentially zoned parcels (excluding HMR-SRD). Were the City to reduce the minimum lot size to 7,500 square feet or 5,000 square feet, 35% or 85% of parcels, respectively, would be eligible for cottage housing. The current lot size restrictions limit the bandwidth of the program; reducing the minimum lot size is a key strategy to promote infill and additional housing options throughout the City of Tacoma.

Cottage housing developments are allowed in all residential zones besides HMR-SRD, including R-1, R-2, R2-SRD, R-3, R-4, R-4L, R-5.



Cottage housing blends elements of single family homes and multi family living in housing that works for families, seniors, or couples. COZY SMALL HOUSING COMMUNITIES

We conducted precedent studies in cities with established infill housing programs and examined their respective policy tools and implementation issues. Specifically, we looked for incentives and financing mechanisms to encourage the production of units (both affordable and market-rate), logistical roadblocks, zoning practices, and program marketing. The next section will focus on these studies.

SELECTION CRITERIA

Selection of precedent studies of accessory dwelling unit (ADU) programs embodied three key criteria.

Similar legal framework, history of development and geography

We focused on case studies in close proximity to Tacoma. All of the case studies are on the West Coast, although under different political, social, and economic frameworks.

Similar community values and program goals

All cities selected for our case studies have expressed similar values that guide their policy decisions as they seek solutions to housing affordability issues.

Range of program maturity

Drawing on a broad spectrum of program maturity, we were able to understand how cities have refined their programs over time, as well as recent issues cities have faced and addressed.

ACCESSORY DWELLING UNIT PROGRAMS

San Diego, California

Population: 1.4 million
Year of program inception: 2016
Median household income: \$68,217

In response to its affordable housing crisis in 2017, the City of San Diego approved new regulations to make it easier and cheaper to build accessory dwelling. By October 2017, the City passed the Accessory Unit Ordinance, which enabled:

- Accessory Dwelling Units (ADUs), both attached and detached, up to 1,200 square feet
- Junior Dwelling Units (JDUs) up to 500 square feet

Table of cities studied and key takeaways from each

	Reduced Parking Requirements	Put in Place Short-term Rental Restriction	Increased Appeal Costs	How to Guide or Manual	Provide Incentives for Affordable Units	Waive Fees for All Applicants	Allow both DADU and ADU on Same Lot	Eliminated Owned Occupancy Requirement
San Diego	X	X	X					X
Santa Cruz	X			X	X			
Seattle	X						X	X
Portland	X			X	X	X	X	X
Vancouver				X			X	X

This ordinance also made it possible for homeowners to construct either a companion unit (ADU) or a JDU on their property, so long as an existing primary residential unit was already on the lot.

- The Accessory Unit Ordinance also included changes to parking requirements, short-term rental restrictions, and appeals costs:
- **Parking requirements:** Before the City of San Diego Municipal Code was updated, two parking spaces were required per companion unit. After the update, the requirement was decreased to .5 spots per bedroom, with a minimum of one off-street parking space per unit. No parking spaces are required for JDUs.
 - **Short-term rental restrictions:** A minimum 30-day stay is required for any newly constructed companion unit. This exists to combat the growing number of Airbnb units present in the City, which do not contribute to the supply of affordable long-term rental units – and, indeed, exacerbate affordability issues.
 - **Permit appeals:** Unique among our cases, San Diego sought to discourage permit decision appeals by increasing the cost of appeal for construction permits, companion units, or JDUs. Before the ordinance passed, the cost to appeal a proposed unit was \$100; the cost is now \$1,000. The reasoning behind this was to streamline the application process and discourage resistance to new units.

The City of San Diego also relaxed owner occupancy requirements. Now, owners are not required to live on the property and can rent out both the primary dwelling and an accessory dwelling unit.

Key Questions:

1. Why and when did the city initiate an infill housing program?
2. What form did their program take? Was it a pilot or implemented city-wide?
3. What policy tools were most notable for their successful or unsuccessful implementation?
4. What are the most important lessons to draw for the Tacoma program?

Vancouver, British Columbia

Population: 603,502
Year of program inception: 2009
Median household income: \$65,327

Vancouver initiated the Laneway Housing Infill Program in 2009 as a means to increase density, reduce carbon emissions, and increase accessible rental housing (Ranjan, 2014). Although the program began in two single-family residential zones, it expanded city-side in 2013. Laneway Housing Infill Program allows homeowners in single-family lots to build a smaller, detached structure in place of a garage unit.

The Laneway Housing Infill Program has produced the most units of all the cities in our precedent studies. Although this is partially attributed to the age of the program, its success is also due to:

- **A streamlined and straightforward permit process:** As long as applicants meet the programs basic requirements – having a single-family residential zone and a lot at least 32 feet wide – they are eligible for a building permit. Moreover, the City combined the development and building permits to further streamline the application process, and they do not require neighborhood feedback or consent.
- **The Laneway How-To Guide:** To help homeowners through the application process, the City issued a 58-page Laneway How-To Guide. The comprehensive guide covers the principles of laneway housing, a step-by-step breakdown of the application process, and a complete guide to design principles for laneway housing. This manual is engaging and provides clear instructions and illustrations.

The Laneway Housing Infill Program also allows for both an attached and a detached unit on a single lot and eliminated owner occupancy requirements. Their current laws allow for a homeowner to have up to three separate rental units on the one lot.

Vancouver’s laneway housing program has been very successful. Since its inception, more than 3,000 permits have been issued for the construction of laneway housing units – the highest number of any program in our precedent studies.

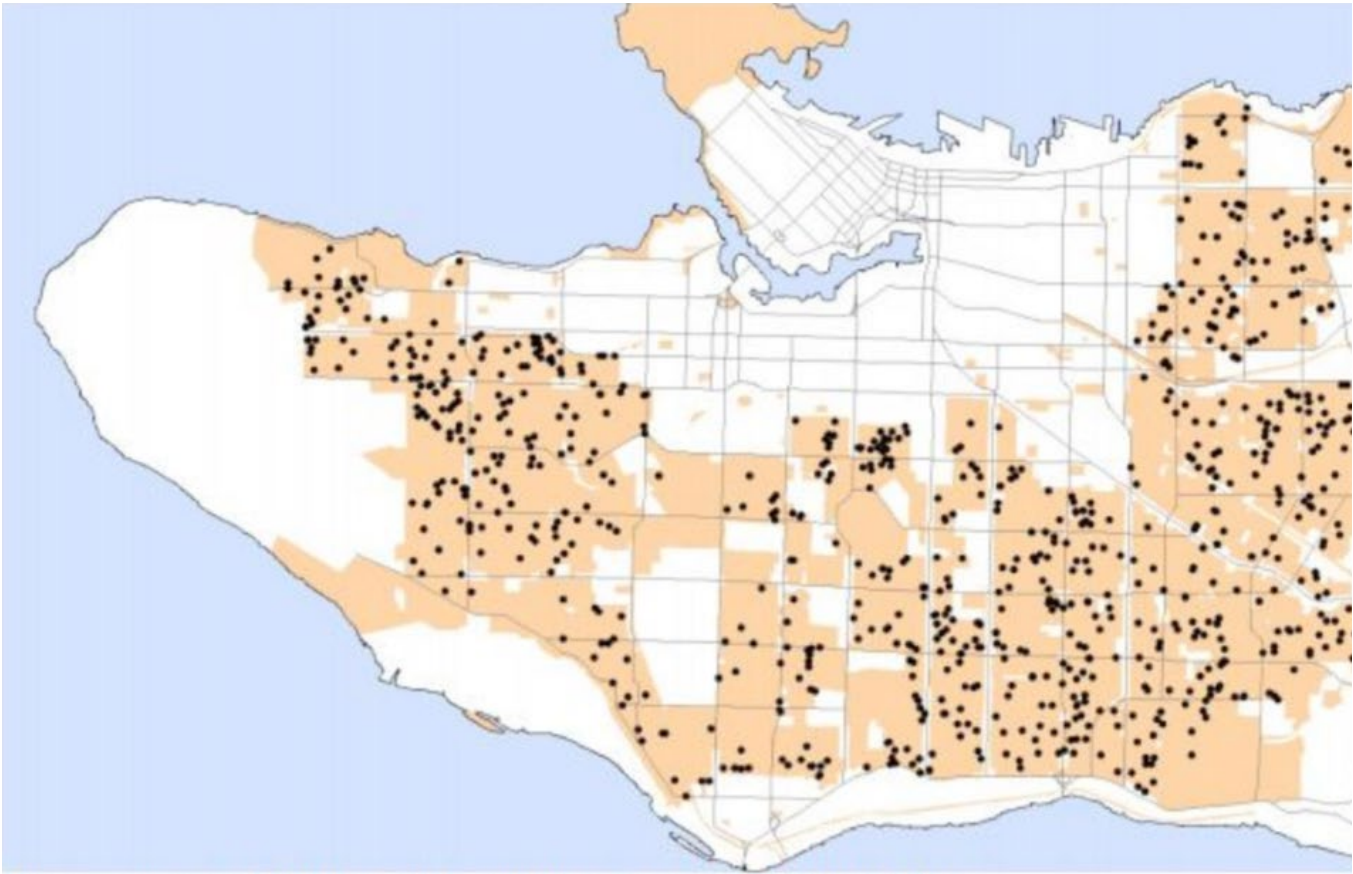
Santa Cruz, California

Population: 65,021
Year of program inception: 2003
Median household income: \$62,471

In 2003, the City of Santa Cruz introduced the Accessory Dwelling Unit Development Program to help minimize the impact of population growth. The program was informed by three goals; to:

- Provide more rental housing options
- Promote infill to help preserve the surrounding greenbelt
- Foster the use of public transportation within the City

ADUs are allowed in Santa Cruz on residentially zoned lots larger than 4,500 square feet and must meet minimal setback, parking and height requirements. Accessory dwelling units are exempt from parking



Map 1. Approved LWHs in RS-1 and RS-5 Zones to February 2013

Distribution of 1,049 units of laneway housing constructed during the 2009–2013 pilot program. VANCOUVER MAYORS OFFICE, 2013

requirements if they are located in a historic district, within an existing single-family structure, within half a mile of a transit station, or within a block of a car-share vehicle. The success of the program is due to:

- **Fee waivers:** free. This is significant: although estimated fees for a 500 square foot ADU amount to \$14,000, eligible applicants get a 100% fee waiver if they rent to very low-income earners (incomes at 0-50% of area median income), and a 40% fee waiver if the unit is rented to low-income earners (51-60% of area median income).
- **Marketing materials:** The City of Santa Cruz invested in extensive materials to support the program. This includes a 77-page Accessory Dwelling Unit Manual detailing how the program works, how to join, how to design ADUs, and how to manage rentals. Fee waiver applications are also available online. The City also publishes an annual ADU Cheat Sheet, which summarizes ordinance changes.

The Accessory Dwelling Unit Development Program is also continually updated. In 2014, for example, the City reduced the minimum lot size required to build an ADU decreased from 5,000 square feet to 4,500 square feet. In 2017, they also increased the unit size to 1,200 square feet, with the provision that the unit could not exceed 10% of the lot size or 50% of the primary unit.

Portland, Oregon

Population: 647,805
Year of program inception: 2010
Median household income: \$58,423

In response to rapid population growth, Portland officials began to revise the laws pertaining to infill housing in 2010. The City is projected to grow by 100,000 by 2035, and 20% of that population is projected to be in single-family zones. Guided by this growth mindset, the City sought to revise their zoning laws to encourage ADUs and small multi-unit development in single-family neighborhoods.

The City sought to increase small-unit construction without replacing units in single-family zones one-to-one. Part of the code revisions have discouraged one-to-one replacement by changing maximum allowed



Guided by a growth mindset, the City of Portland sought to revise their zoning laws to encourage ADUs and small multi-unit development in single-family neighborhoods. HAMMER AND HAND

floor-area-ratio (FAR) and lowering the minimum lot size in certain zones. Portland also has a program to waive fees for developers of ADUs and DADUs that has helped reduce costs and make constructing ADUs more viable to small developers. In addition, the City has eliminated parking requirements, eliminated owner occupancy, and allowed both an ADU and DADU to be built on the same lot. These measures have helped spur production in recent years.

- The city council is currently considering further changes to their code to encourage more production of infill units. That legislation includes:
- Lowering the maximum allowed FAR in residential zones
 - Allowing a wider variety of housing types on different types of lots in residential zones
 - Establishing clear and fair rules for narrow lot development
 - Extending the permit fee waiver program

The code revisions in recent years have led to a dramatic increase in the number of infill units produced annually in Portland. The City has also implemented a housing opportunity overlay zone to provide further encouragement of ADU/DADU production. These zones are located near public transit and other community assets that support walkability and livability. Other incentives include allowance of additional ADUs, triplexes on corner lots, reduced minimum lot size, bonus units for age-friendliness, affordability, and tree preservation.

Seattle, Washington

Population: 730,400
Year of program inception: 2010
Median household income: \$83,476



Pike's Follies is a three-home infill project that replaced a small, early-20th-century home in Seattle's Central District. JOE WOLF

Although Seattle introduced legislation to allow the construction of ADUs in 2010, production of accessory units continues to lag behind peer cities like Vancouver and Portland. City leaders recognized the need to revise laws around ADUs, particularly in light of the rapid housing cost spike since the 2008 recession. Because legislative changes have not yet been implemented, Seattle does not offer substantial lessons on successful policy tools. However, it does serve as a useful precedent to consider in terms of the legal restrictions, barriers, and state policy challenges around ADUs and infill housing communities face in Washington State.

As part of the Housing Affordability and Livability Agenda, the City has attempted to pass legislation to relax restrictions on accessory dwelling units. If passed, the law will:

- Eliminate off-street parking requirements
- Allow both an ADU and DADU on the same property
- Relax owner-occupancy requirements 12 months after construction
- Increase allowed size for DADUs to 1,000 square feet and reduce minimum lot size

However, these efforts have met with resistance from single-family residents, who see the changes as a threat to the character of their communities. The legislation currently being considered is going through an environmental review process. Seattle has been the slowest among its peers in the Pacific Northwest to embrace an infill program.

Kirkland, Washington

Population: 88,630
Year of program inception: 2007
Median household income: \$95,939

Successful cottage housing programs were much less common than ADU programs. In Washington, many cities have included cottage housing into code – however, they lack specific measures to encourage development. Kirkland is a notable exception.

The City of Kirkland has experienced a steady growth in population over the last few decades, which can largely be attributed to its geographical boundaries of the city. Informed by its population increase and smaller-

than-average household size, Kirkland created a cottage housing ordinance with the goal of creating a larger supply of smaller and more affordable housing units.

In 2002, the City launched a demonstration program to promote innovative housing choices. Two cottage housing projects – Danielson Grove and Kirkland Bungalows – were constructed in 2005. The City invited stakeholders and the general public to tour the properties and provide feedback.

Informed by this feedback, the City passed the final ordinance in November 2007. The ordinance was grounded in values to increase the supply of affordable housing. They broke it up into two spectrums:

- At the low end of the scale, any project with ten units must provide one unit affordable to households earning 100% of King County area median income.
- At the high end of the scale, any project with twenty-four units must provide two units affordable to households earning 92% of King County area median income.

Although the ordinance received positive feedback from residents, only one cottage has been constructed as of 2017. This lack of uptake may be due to the economic recession and subsequent housing crisis in 2008. Another obstacle for developers is the cost of utilities installations, as well as the logistical challenge that comes with subdividing land for private ownership. These barriers should be considered by the City of Tacoma as potential obstacles to cottage housing developments.

- Kirkland developed a demonstration program titled innovative Housing Demonstration Project to gain resident feedback to new varieties of housing. It showcased housing types, such as cottage housing, not traditionally found in the single-family neighborhoods of the city.
- Minimal provisions for affordable housing were put in place with 10 units of housing must provide one unit of affordable housing at 100% King County Median Income and 24 units must provide 2 units at 92% of the King County Median Income.
- Barriers to cottage housing developments include the cost of permits and utility connection and lack of a standardized process for subdivision of land for individual ownership.



Kirkland is one of the only municipalities to introduce code that encourages cottage housing development. JT MORGAN

Building off the precedent research and analysis, we identified tools and approaches applicable to the City of Tacoma. The following recommendations were crafted for increased uptake through an equity lens. The City has an opportunity to reconstruct the pilot program to innovatively increase density and simultaneously address displacement and affordability.

The recommendations are organized into five categories:

- 1.Code
- 2.Program enhancement
- 3.Land acquisition + community wealth
- 4.Financing
- 5.Encouraging growth in defined areas

Code

Residential Small Lot Subdivision Ordinance

This ordinance is intended to incentivize infill housing for small single-family homes and townhomes that are owned through fee simple ownership. Small lots allow for the creation of increased home ownership opportunities and density in neighborhoods with established infrastructure and amenities. The small lot development also can allow for multi-generational living and shared spaces that cultivate community.

In practice: The City of Los Angeles’ small lot subdivision ordinance has been largely successful. However, it also triggered a number of tear-downs. As a result, new construction has been financially out of reach for Angelinos. In response to community concern, the City recently committed to re-evaluate the ordinance. Community-based organizations suggest emphasizing under-used lots to discourage tear-downs, and also recommend including a ground floor apartment to defray costs.



Row of homes in the Silver Lake neighborhood of Los Angeles built under the small lot subdivision ordinance. WENDY GILMARTIN

Removal of off-street parking requirements

Parking requirements represent a barrier to the uptake of infill. While accessory dwelling units have no minimum parking requirement in the Infill Pilot Program, minimums remain for multifamily and cottage housing. Removing minimum parking requirements increases the viability of construction by reducing construction costs, making more space available for green space, and encouraging pedestrian-oriented development in residential neighborhoods. While removing the requirement for off-street parking can be met with resistance in some neighborhoods, scarcity of street parking is often in large part an issue of perception.

Mid-Block Duplex

Under Tacoma’s current Infill Pilot Program, two-family (duplex) housing is restricted to corner lots in single-family R2 zoned areas. Currently, each unit is must either have an entrance oriented onto a different street or be accessed through a shared entrance.

In order to better support the goals of the infill housing program and provide a larger number of possible locations for potential affordable infill units, we suggest allowing two-family units to be built on mid-block/ interior lots.

Program Enhancement

Community engagement

Feedback from our listening session cited community engagement was cited as a key element to address housing issues. Infill housing often generates a negative perception at the neighborhood level, particularly as it relates to decreased property values or reduced parking availability. Interestingly, many residents at the session were not aware of the program – and this provided us with ample opportunity to frame the program in a more positive light. A multi-faceted community engagement program can increase awareness of the program, increasing uptake. This can be achieved through the following strategies:

Increase prominence on city website

The residential infill housing program’s section within the City of Tacoma website is currently contained in the Planning and Development Services portion of the site and requires multiple levels of searching to locate program information.

Conventional and creative media campaigns

Traditional media campaigns have the power to reach large populations through physical and media advertisements, local news media and flyers at neighborhood social spots. These methods can quickly spark conversation and widespread interest in the program.

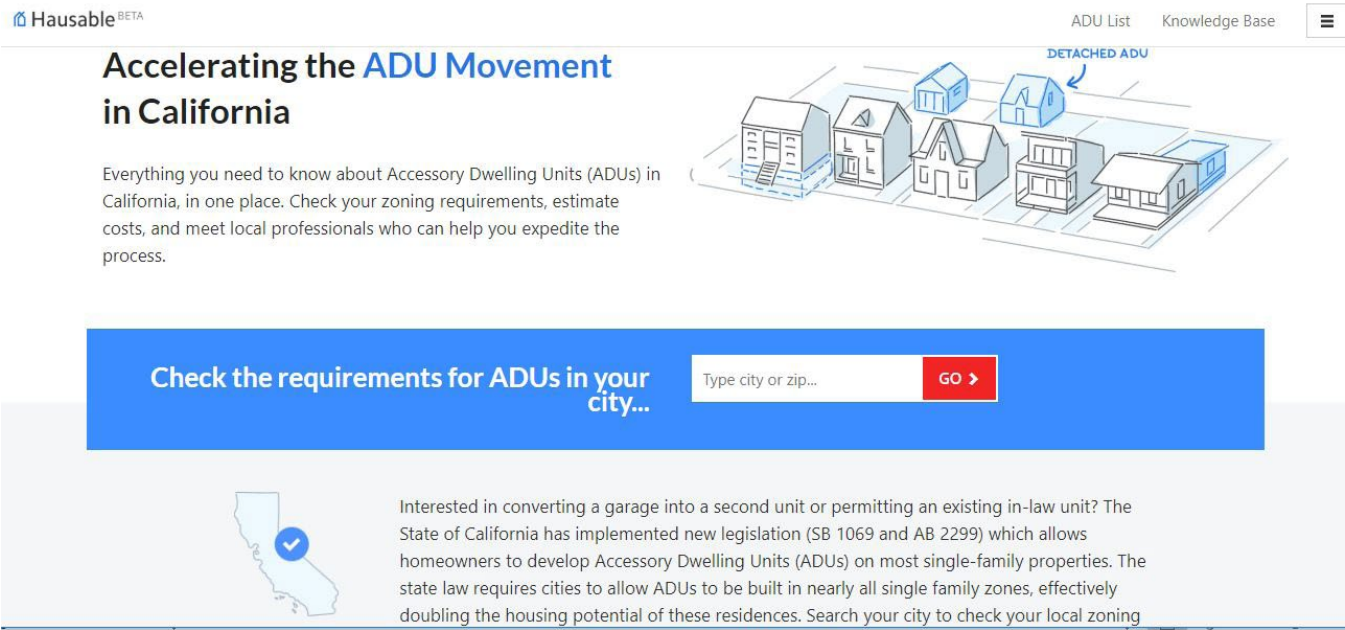
Community workshops and listening sessions

In-person events are fundamental to reach residents who do not have access to the internet or prefer face-to-face interaction. Community listening sessions and workshops are spaces to ask questions and build a level of trust between the community and the City.

Applicant support

It is evident from our research from precedent studies and conversations with developers that the success of an infill program lies in the ease of permitting. An inefficient and complicated permitting process can result in projects not coming to fruition. We recommend the following:

- **Creation of infill housing liaison:** We recommend creating this position within the planning and development services department. The Liaison will help guide applicants through the process, and can serve as a point of contact.
- **Pre-approve infill designs:** Implementing pre-approved designs streamlines the permitting process by reducing or removing possibility for proposed designs to be rejected. We recommend making 4-6 designs are available; this will minimize the number of options but allow for a variety of building sizes and types.
- **Interactive infill website:** We recommend the City build an interactive GIS map for public use for those considering an infill development project. The map would graphically indicate zones within Tacoma where infill development is permitted. A user could search for their home or property to determine eligibility.



For the State of California, Hausable is providing information on zoning requirements and estimated costs of construction to those interested in exploring the construction of an accessory dwelling unit on their property, just by entering your property address.

<https://www.hausable.com/>

COMMUNITY LAND TRUST AND LAND BANK

A long-term, community-based strategy to increase housing affordability would be beneficial for the City's goals to further implement the infill program. Through land banking and the creation or support of a community land trust, the City would be able to extend the ability for residents to build wealth and purchase homes developed through the infill housing program. Public acquisition of property is beneficial in most housing markets; in strong markets it is particularly useful, as mission-based organizations are unable to compete with larger market-based developers.

**In practice: Forterra and Africa Town Community Land Trust
Seattle, Washington**

Forterra works with communities in areas at imminent risk of displacement to fund the purchase of land for community development of permanently affordable residential and commercial development. The organization has funded land purchases with Africa Town Community Land Trust in Seattle and Abu Bakr Islamic Center in Tukwila. These projects will give the community more control over the development in their respective communities and mitigate displacement pressures from increasing land values.



Africa Town Community Land Trust. SEATTLE TIMES

The City can use funds from the Regional Equitable Development Initiative to purchase property for a Land Trust. The city could purchase vacant or underutilized lots, as well as existing affordable housing in proximity to transit. Community Land Trusts are flexible, and can consist of new construction or existing homes. It can comprise single-family, multi-family, and cottage housing.

FINANCING TOOLS

Partnership with Nonprofit Lending Organization

Inspired by the City of Santa Cruz, the City could establish a relationship with local credit union or non-profit lending organization to improve access to borrowing and subsidize lending rates. This has the potential to increase access to financing for populations that may not usually qualify for favorable lending terms. Similar to Santa Cruz, financial incentives could be conditioned to provide rent-restricted units. Subsidized interest rates can increase the viability of construction. Organizations such as Craft 3 are an example of nonprofit organizations with the mission of increasing access to the construction of accessory dwelling units in the region. May require low-to-moderate city financial support, depending on how much the lending institution can absorb risk.

Financial Models

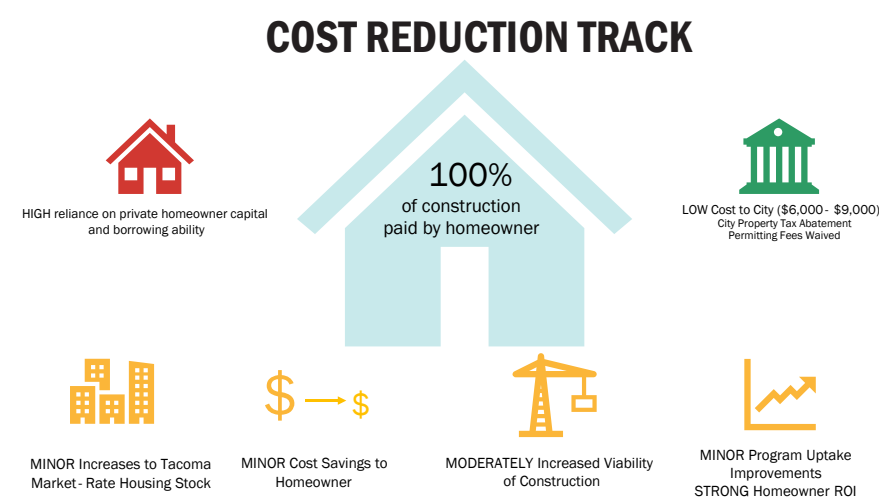
Construction of new infill housing units harnesses the power of private capital and land in order to deliver new housing units in Tacoma. However, units must be profitable enough to justify the cost and planning for construction. The following models use various financial tools to provide incentives for the construction of infill housing. These models represent various paths which can be taken to incentivize new infill housing, and the type of housing that might be created. Each model provides an example showing potential financial outcomes, as well as the financial implications for the City.

Note: These models account for 2% inflation. Further details regarding the models can be found in the appendix.

Track 1: Cost Reduction

This approach prioritizes small improvements targeted to improve uptake of the existing program without expanding its scope or aim. Homeowners reach unit profitability 1-2 years sooner than without fee and tax abatement. This strategy also aids housing affordability by adding to stock of market-rate housing but does not provide rent-restricted units.

- **Potential Benefits:** Cost reductions can help an owner earn back their down payment money up to a year earlier, which can potentially increase construction viability.
- **Potential Drawbacks:** Only adds to market-rate housing stock. City could forego up to \$10,000 in tax and permitting revenue.



Track 2a: Split Cost | Anti Displacement + Market Rate Housing

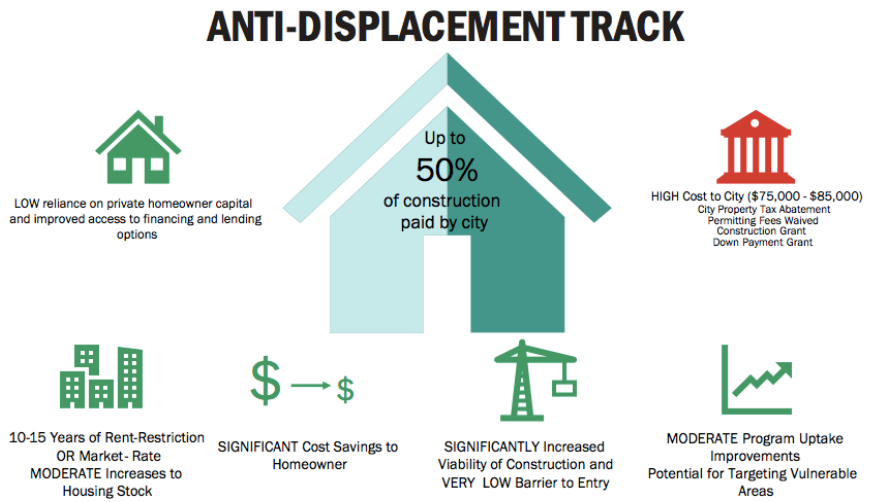
This approach focuses on policy changes targeted at reducing displacement of vulnerable homeownership residents. After identifying neighborhoods vulnerable to displacement, the city provides homeowners in the area with down payment assistance. They also provide cost reductions, permit streamlining, fee waivers, and potentially interest cost buydowns. This track drives housing affordability by adding to the stock of market-rate housing and gives a secondary income source to vulnerable residents. It also allows for potential intergenerational benefits as the property is passed on and addresses the serious issue of displacement.

- **Potential Benefits:** Addresses households at risk of displacement by giving these households an income source. Low or zero down payment upfront significantly reduces barrier to entry.
- **Potential Drawbacks:** Potentially cost-prohibitive. Likely necessary to limit eligibility by location, neighborhood, or displacement risk. It May be politically unpopular because of limited eligibility.

Track 2b: Split Cost | Anti Displacement + Affordable Housing

Policy changes targeted at reducing displacement of vulnerable homeowners and renters. Using a displacement risk index for the city, the city arranges to build infill housing on a resident’s property in these areas in exchange for the owner ultimately renting the unit out to a specific AMI level for a predetermined amount of time. The city also can assist in buying down interest costs. At the end of that period, the owner assumes full control over the unit and can choose how to use the unit. This supports housing affordability by providing rent-restricted units and gives a secondary income source to residents who may be vulnerable to displacement. This model allows for potential intergenerational benefits as the property is passed on, reduces barriers to entry into the program and addresses the issue of displacement. The owner retains the rental revenue and assumes full control over the unit at the end of the predetermined period, without having to secure the capital or arrange for construction at the outset.

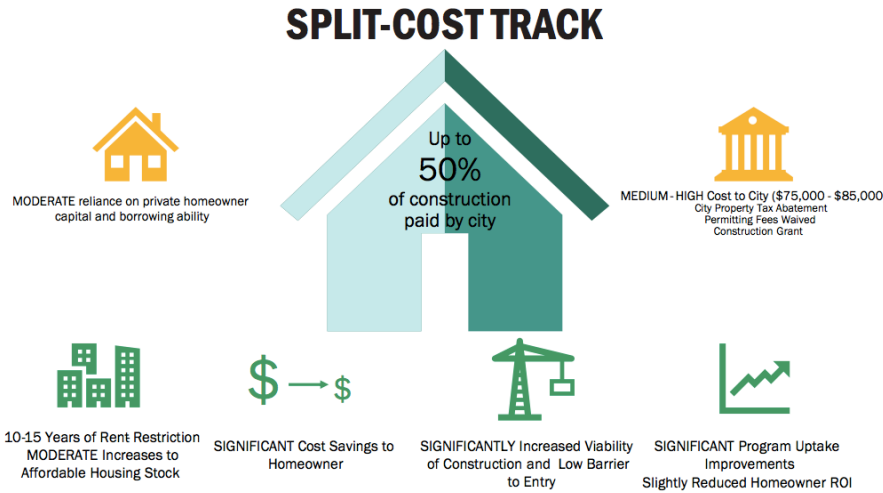
- **Potential Benefits:** Addresses households at serious risk of displacement by giving these households an income source. Adds needed rent-restricted affordable housing. Low or zero down-payment reduces barrier to entry.
- **Potential Drawbacks:** Owner’s rent revenue limited by rent restriction. Potentially cost-prohibitive. Needs political and financial support from city for upfront costs (50%+) to pencil out as profitable. Likely necessary to limit eligibility by location, neighborhood, or displacement risk. No down-payment required up front is risky, so necessary to design agreements carefully.



Track 3: Split Cost | Affordable Housing Focus

This approach prioritizes policy changes targeted at increasing the stock of affordable housing. The city contributes part of the cost to build infill housing on a resident’s property in exchange for the owner renting the unit out to a specific AMI level for a predetermined amount of time. At the end of that period, the restriction relaxes, and the owner assumes full control over the unit and can choose how to use the unit. The innovation here is that the owner retains the rental revenue and assumes full control over the unit at the end of the period, all without having to secure the capital or arrange for construction at the outset.

- **Potential Benefits:** The city pays for a portion of construction costs, which can help an owner earn back their down payment money within one to two years. Cost-splitting upfront creates a lower barrier to entry. With cost-splitting, a fair case can be made to tie the rent-restriction to up to 15 years. Owner retains full control of unit after rent restriction ceases, which could be designed to fall at the time when the mortgage is fully paid off. Owners may pull back on rent restriction at any time by repaying outstanding portion of the city subsidy.
- **Potential Drawbacks:** Owner is leaving significant rent revenue on the table by rent-restricting the unit (yet receives major benefit up front which can mitigate this). Owners may not wish to rent their units to tenants who qualify via low income. The city does not create an affordable housing unit in perpetuity, but only for a limited amount of time. Cost to the city may be prohibitive.



June Grant is a practicing architect with BL!nk Lab in Oakland, California. In response to the number of residents being displaced out of the historically African American district of West Oakland, she devised “Asset Rich, Income Poor.” The concept aims to supplement the incomes of older residents who own their homes but who are at risk of displacement due to rising property values. This concept uses ADUs as a tool to help residents stay in place in the face of gentrification. BL!NK LAB

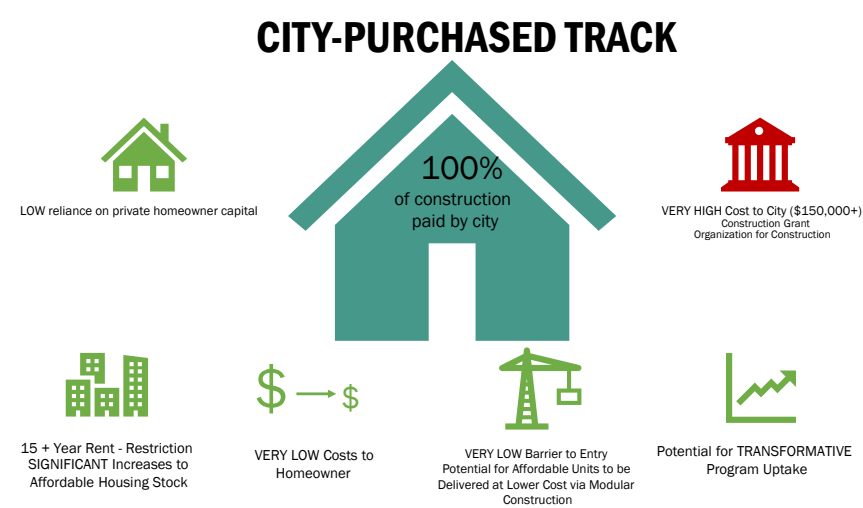
Track 4: City Purchased Acessory Dwelling Units

Potentially the most radical model, this model's costs are highest, but it has the greatest potential benefits. In this track, the city covers the full cost and arranges for construction of accessory units for landowners who wish to participate. The landowner does not need to be concerned with financing or permitting. In return, the unit is leased out at a rent-restricted level for a limited amount of years (approximately 15). At the end of this term, rent restrictions are lifted and the owner can then choose to lease their unit at market value or house a friend/family member at no cost. Potential construction cost savings can be attained by using modular construction, which can be scaled via contract with a modular manufacturer.

- **Potential Benefits:** This model creates the largest incentive for homeowners to participate in the program and thus could deliver the largest amount of affordable/rent-restricted units. These units could be delivered at a lower cost than it currently costs to provide affordable housing due to the smaller scale and potential for modular construction. Some cost estimates for these pre-fabricated units are just above \$100,000, putting them at almost half of the cost of what the city is currently spending on each affordable unit today (\$200,000). Because of the large benefits

to homeowners, it is still an attractive model for homeowners even if the city does not waive any permitting or abate any taxes. This model can create a win-win-win situation: homeowners gain a secondary source of income with little barrier to entry, below average-income residents gain access to new rent-restricted units, and the city expands the housing and tax base.

- **Potential Drawbacks:** While this model has the most potential units delivered, it is the costliest for the city. While some economies of scale could be achieved through large-scale production of modular units, costs for this model go up nearly linearly for each new participant in the program. Thus, it may be financially difficult for this model to scale up without major financial commitment from the city or housing authority. Additionally, this model may be politically controversial due to the high cost and high level of involvement by the city.



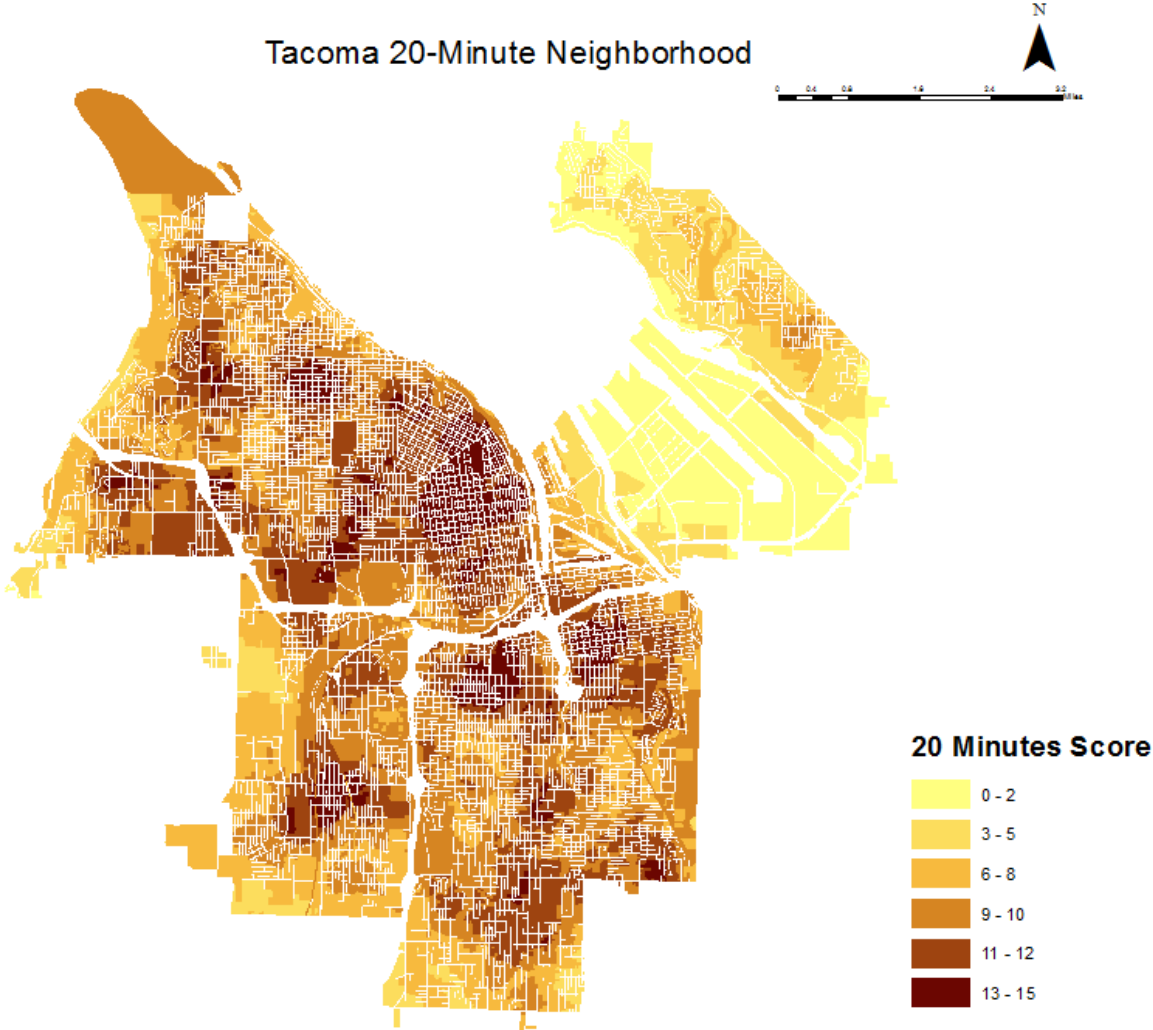
In practice: A Place for You | Multnomah County, Oregon

A Place for You is a pilot program that places homeless families with children in an ADU in a county resident's backyard for five years. During that period, the families will receive social services and support through the County. Families will have stability, and homeowners accrue no costs in the process and have the option to purchase the ADU at the end of the five years at an assessed fair market value. More than 1,000 homeowners have volunteered to take part in the pilot program since it began in 2017, a promising sign that the community is invested in supporting one other.

Encouraging Growth in Defined areas

20-minute neighborhood

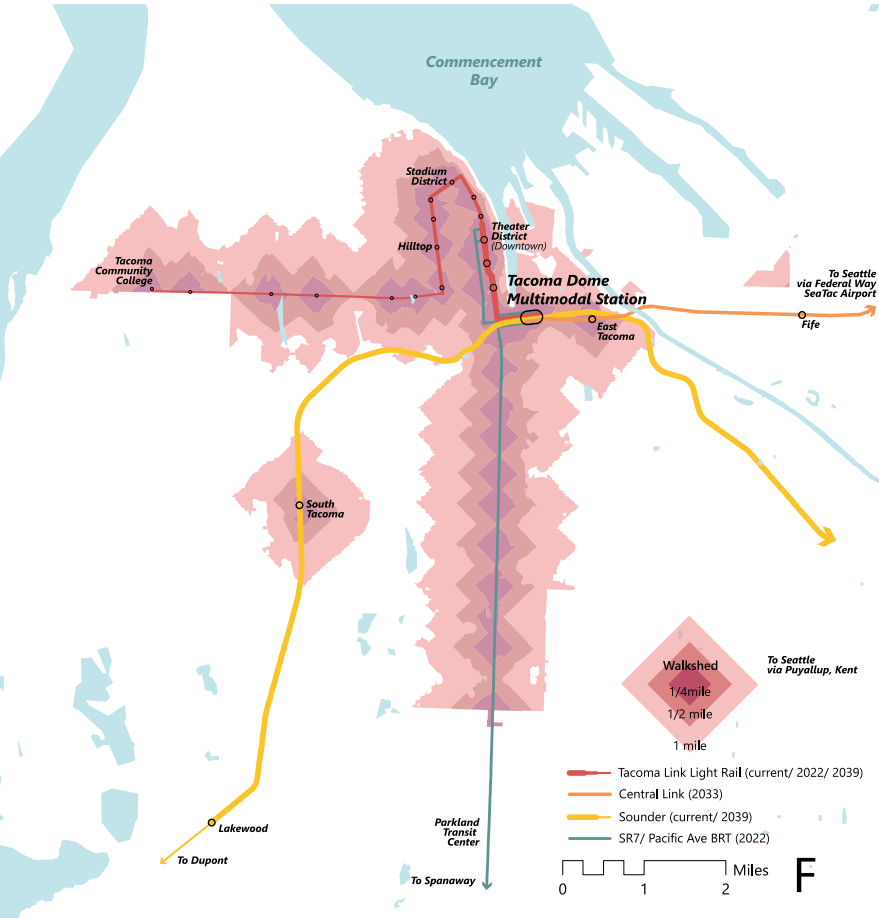
A 20-minute neighborhood is a community where residents can walk, bike, or take transit with ease to everyday elements. These neighborhoods have a range of services such as shops, grocery stores, childcare centers, parks, schools, and medical centers. We conducted an analysis using a similar methodology as the City of Kirkland to evaluate the locations of 20-minute neighborhoods in Tacoma. Due to the well-connected nature of these areas, they often have stronger local economies, better health and reduced traffic costs. The core of the 20-minute neighborhood is distance, density, and destination. The City of Tacoma can prioritize infill housing in these areas to capitalize on the existing infrastructure and increase access to the many benefits these neighborhoods provide.



Equitable Transit Supported Development

Equitable transit ensures that the benefits of transit improvement are distributed equitably amongst residents. Evidence from other cities indicates that, as transportation improvements move into cities, communities of color and those most vulnerable to displacement often are pushed out. Infill housing can provide missing middle housing choices to increase density and access to transit-rich neighborhoods and address the risk of displacement for existing residents in proximity to transit. To ensure that transportation improvements are accessible to all segments of the population, it is recommended that the City enact code, policy changes, and financial incentives to develop and preserve affordable infill housing within a half-mile of transit. The focus should be on Link Light Rail, as well as the BRT and ST commuter rail station.

A Model for Equitable Neighborhoods: Walksheds to Public Transit Options in Tacoma



What is equitable development?

Equitable development is an approach to creating healthy, vibrant communities of opportunity for everyone. Equitable outcomes result when intentional strategies are put in place to ensure that existing low-income communities and communities of color participate in and benefit from decisions that shape their own neighborhoods.

Historic and Cultural Preservation

The City of Tacoma prides itself on historic preservation. The City can use a variety of tools to better support the retention of existing built forms and neighborhood culture, as well as density. An unintended outcome of infill housing can be the loss of naturally occurring affordable housing. This housing is older housing stock and is vulnerable to demolition as land values increase and policies to densify are put in place. Tools to preserve while simultaneously densify existing housing stock allow for the conservation of neighborhood vernacular and community connection to place.

We recommend subsidies to make property more economically viable to support historic preservation of residential urban form and tools, such as flag lot subdivision, to facilitate the retention of existing structures with an increase in density within the structure and property.

A conservation overlay district can be used to provide neighborhood protection of character and allow for less strict guidelines on physical changes. Overlay districts such as these are used in Seattle's Pike-Pine corridor and the City of Los Angeles.

Through communication with the Historic preservation studio for Livable City Year, we identified the Edison as an ideal location to focus infill housing due to the large lot sizes and street car era vernacular. The neighborhood is in walking distance to an elementary school, parks, library, transit and other amenities.

Key Strategies for equity and uptake

- Small lot subdivision
- Reduction in minimum lot size
- Streamlined permitting process
- Removal of parking requirement
- Land acquisition for affordable infill housing
- Community workshops and engagement
- Shared or full payment of ADU cost for anti-displacement and affordable housing

Historically, Tacoma neighborhoods have had a combination of duplexes, backyard cottages, and small multi-family buildings sharing a block with single-family homes. As the City plans for population growth, revisiting the historical pattern of infill housing could be a powerful tool to accommodate a burgeoning community. We have crafted recommendations that place Tacoma in a position to be innovative in how it addresses housing affordability and managed growth for a more equitable and livable city through infill housing.

We have crafted recommendations that place Tacoma in a position to be innovative in how it addresses housing affordability and managed growth for a more equitable and livable city through infill housing.



Infill housing can be a effective tool for cities to promote equitable development and vibrant communities. CASCADIA HOMES

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Glossary

Affordable/Affordability

Ability for an individual or family to rent a unit for 1/3 or less of monthly income. In this case, it specifically refers to those whose incomes fall below the area median income, necessitating below-market-rate housing or housing whose rental costs are limited/restricted.

Developer – Either a for-profit or non-profit corporate entity for whom constructing buildings is a primary line of activity. For our purposes, this does not refer to a private individual home-owner seeking to construct a unit on a lot that they own.

Displacement

When residents are forced out of their neighborhoods through higher cost of living, higher tax burden, or scheduled demolition of a residence. Can be an outcome of gentrification.

Gentrification

A simultaneous influx of capital (real estate investment) and higher income residents to an area or neighborhood. Can lead to displacement of existing residents.

Incentive

Financial or monetary instrument provided to subsidize or catalyze infill development that is tied to affordable housing requirements. Could refer to instruments provided by the public, private, or non-profit sector.

Subsidy

Financial or monetary instrument provided to subsidize or catalyze infill development that is not tied to affordable housing requirements. Specifically refers to instruments developed and provided by the public sector (government).

Transit-Oriented Development

Creation of mixed-use centers to maximize access to transit and other non-motorized modes of transportation. TOD exists around high-capacity transit facilities such as rail stations, bus rapid transit stops or neighborhood transfer stations. Typically, a TOD project has the following characteristics: planning boundaries within a quarter- to a half-mile radius of a transit facility (a comfortable walking distance); compact development; mixed land uses, including neighborhood-oriented commercial, public

services and spaces, and higher-density residential development; limited parking; and pedestrian- and bicycle-friendly designs.

Transit-Supported Development

A development pattern (broader than Transit-Oriented Development) intended to establish or boost residential and commercial densities to support existing or planned transit service. TSD is not limited to planning around a station or transit node like TOD, but more broadly intensifies compact and mixed-use development along transit routes and broader neighborhoods to facilitate and support transit services and lessen automobile-dependent travel.

Viable/Viability

Refers to the economic feasibility for a homeowner or developer to construct a new unit, factoring in the upfront cost, recurring costs, and potential rental revenue that can be gained. It is assumed that all new developments must be economically viable – that is, ultimately profitable – for construction to go forward.

Zone

A spatial area for a defined purpose, intention or use. In this case, can refer to a broader area rather than specific coded zones of development established by a municipality.

Precedent Studies

Each of the following precedent studies will cover the following.

- Why and when did the city initiate an infill housing program?
- What form did their program take? Was it a pilot or implemented city-wide?
- What policy tools were most notable for their successful or unsuccessful implementation?
- What are the most important lessons to draw for the Tacoma program?

Selection of precedent studies of ADU/DADU programs needed to meet three key criteria.

Similar legal framework, history of development and geography

When selecting precedents with accessory dwelling units (ADU) programs we first looked to case studies in close proximity to Tacoma. Seattle was an obvious choice given its close proximity to Tacoma and the fact that its program operated under the same Washington State laws, in particular the Growth Management Act (GMA). Likewise, Portland shares similar geographic and socio-cultural characteristics and, though not in Washington State, also operates under state mandated growth management requirements. Vancouver, though under entirely different local and national laws, also offered some lessons in terms of infill housing because of its long established program and similar Pacific Northwest culture and history. We then looked further afield to California to see what programs were established in cities with similar population growth and housing shortages. The infill housing programs in San Diego and Santa Cruz were chosen as both cities are smaller nearby cities to the major hubs of Los Angeles and San Jose, as Tacoma is to Seattle.

Similar community values and program goals

All the cities selected for these precedent studies have expressed similar values that guide their policy decisions as they seek solutions to housing affordability issues. The above-mentioned cities in the Pacific Northwest all similarly espouse the importance of incorporating social justice as well as market consideration into solutions in their policy documents as well as the environmental benefits of density. California cities also met this criterion as many cities are facing even greater pressure in their housing markets than cities in Washington and Oregon. As well, these Californian cities base their policies on goals that focus on social justice, environmental sustainability, and overall reduction in the cost of housing.

Range of program maturity

As we sifted through different programs that matched the above criteria we also noted the age of each program. Having precedents with a wide range of program maturity helped us draw a wider range of takeaways in-terms of both how cities have refined their programs over time and, for newer programs, what recent issues cities have faced that may also come up in Tacoma as it expands its infill program. However, for the newer programs, we did establish a minimum level of program maturity when selecting precedents based on what information was available in implementation of the program and initial success. The programs discussed below all specifically target increasing production of accessory dwelling units. We excluded cities that only had scattered policies related to infill housing and lacked a cohesive program.

San Diego, California

The city of San Diego approved new regulations to make it easier and cheaper to build accessory dwelling units to address its affordable housing crisis in July of 2017. In October 2017 the city passed its Accessory Unit Ordinance without modifications thus loosening restrictions on Accessory Dwelling Units (both attached and detached) up to 1200 square feet and Junior Dwelling Units (JDU), up to 500 square feet. With the passing of the ordinance, homeowners in the City of San Diego were able to construct either a companion unit (ADU) or a JDU on their property provided there was an existing primary residential unit on the lot. The key policies of San Diego's Accessory Dwelling Unit program were the changes to parking requirements, short-term rental restrictions, and the increasing cost of appeals.

Before the City of San Diego Municipal Code was updated, parking requirements for companion units were two spaces per unit. This has been decreased to 0.5 per bedroom, with a minimum of 1 off street parking space per unit. No parking is required for JDUs.

For any newly constructed companion units short term rental restrictions apply. This is to combat the growing number of Airbnb units in the city do not contribute to the supply of affordable long term rental units and make affordability issues worse. Any newly constructed units in San Diego under the ordinance must not be used as short term rentals and require a 30 day minimum stay.

Unique among our precedent cases, San Diego sought to discourage appeal of permit decisions by increasing the cost of appeal for construction permits for companion units or JDUs. Before the ordinance passed the cost to appeal

a proposed unit was \$100. With the new ordinance this cost has significantly risen and is now \$1000. The reasoning behind this was to streamline the application process and discourage resistance to new units. Because the ordinance was passed only late last year, the effects of this policy aren't yet known but it may be something to consider in Tacoma if permit process delays due to appeals of department decisions to grant permits are an issue. However, as we'll discuss in later chapters, other measures such as public information campaigns, can be taken to discourage neighbors from appealing permit decisions.

It should also be noted that alongside these measures the ordinance also relaxed owner occupancy requirements meaning the owner did not have to live on the property and can rent out both the primary dwelling and an accessory dwelling unit. Restrictions on maximum unit sizes have also changed. Prior to the ordinance maximum ADU size was 700 sq. ft. This has changed to either 50% of the primary residence size, or 1200 sq. ft., whichever is less.

Vancouver, British Columbia

Vancouver started its Laneway housing infill program in 2009 as a means to increase density, reduce carbon emissions, and increase accessible rental housing (Ranjan, 2014) The Laneway housing pilot program began in 2009 in two selected single family residential zones in the city, and was expanded city wide in 2013. Laneway housing allows homeowners in single family zones to build a smaller, detached home located where the garage unit would normally go on the property. Laneway houses may be constructed on any single family zoned lot that is 32 feet or wider. Vancouver's laneway housing program has produced the most units of all the cities in our precedent studies, and this can be partially attributed to its longer program length but also due to its streamlined permit process, and city produced useful information in its how-to guides for homeowners wishing to construct accessory units. Contributing to the success of the Laneway Housing project is the streamlined application process. No special approval is required by the council as every applicant who meets the requirements of being in a single family residential zone and having a lot 32 feet or wider is eligible for a building permit. Maximum unit size is based on lot size up to a maximum unit size of 750 sq. ft. The development and building permit are combined into one to further streamline the application process. In addition, no neighborhood feedback or consent is required, which in turn contributes to the streamlining of the application process.

To help homeowners through the application process the City of Vancouver issued a 58 page, Laneway How To Guide, last updated in November 2016. The

comprehensive guide covers the principles of laneway housing, planning of laneway housing (determining if a homeowner is eligible), step by step break down of the application process and a complete guide to design principles for laneway housing. This manual is easy to follow, colorful and provides clear instructions and illustrations as to how a homeowner can apply for a building permit and what is required for the application. The complete guide book is available on the City of Vancouver's website at this address <http://vancouver.ca/files/cov/laneway-housing-howto-guide.pdf> .

Vancouver's laneway housing program also allowed for both an attached and a detached unit on a single lot and eliminated owner occupancy requirements. Their current laws allow for a home owner to have up to three separate rental units on the one lot.

Vancouver's laneway housing program has been widely successful. Since its inception there have been over 3000 permits issued for construction of laneway housing units as of November 2017. Even during the pilot program years when only home owners in two residential zones were able to apply for the permit, the program was hugely successful with over 1000 permits being issued, and applications were evenly spread throughout neighborhoods surrounding the city center. This is the highest number of units produced of any program we looked at.

Portland, Oregon

With rapid population growth and development restrictions established by Oregon's growth management program, city officials began to revise their laws pertaining to infill housing in the city in the early 2010s. The city is expected to grow by 100,000 residents by 2035 and twenty percent of the that growth is expected to be in single family zones. As well, the population is growing older and household size is shrinking. With this in mind, the city sought to revise their zoning laws and incentives to encourage the production of accessory dwelling units and small multi-unit development in single family neighborhoods while also being conscious of concerns about demolition of housing stock in those neighborhoods and how that affects housing prices in the city.

Since 2012 Portland has relaxed requirements to allow more and smaller units in single family zones and made construction of units more viable for small or individual developers. Of particular concern in Portland has been replacing units in single family zones one for one. Part of the code revisions have discouraged one-to-one replacement by changing maximum allowed FAR and lowering the minimum lot size in certain zones. Portland also has a program

to waive fees for developers of ADUs and DADUs that has helped reduce costs and make constructing ADUs more viable to small developers. In addition, the City has eliminated parking requirements, eliminated owner occupancy, and allowed both an ADU and DADU to be built on the same lot. These measures have helped spur production in recent years.

The city council is currently considering further changes to their code to encourage more production of infill units. That legislation includes the following measures.

1. Lower the maximum allowed FAR in residential zones
2. Allow a wider variety of housing types on different types of lots in residential zones
3. Establish clear and fair rules for narrow lot development
4. Extend the permit fee waiver program

The code revisions in recent years have led to a dramatic increase in the number of infill units produced annually in Portland. The city has also implemented a housing opportunity overlay zone to provide further encouragement of ADU/DADU production. These zones are located near public transit and other community assets that support walkability and livability. Other incentives in place in the zone include allowance of additional ADUs beyond one, triplexes on corner lots, reduced minimum lot size, bonus units for age-friendliness, affordability, and tree preservation.

Seattle, Washington

Code changes to allow denser types of housing in single family zones were first implemented in the 1990s with passage of the Growth Management in Washington State. Accessory Dwelling Units were allowed city wide in 2010. Production of accessory units in the city has lagged behind peer cities like Vancouver and Portland so city leaders have recognized the need to revise laws around accessory units with the rapid rise in housing costs since the 2008 recession. City leaders hope legislation currently being considered will make accessory units viable for a wider range of homeowners in the city. Because the changes have not yet been implemented, Seattle does not offer substantial lessons on successful policy tools but is a helpful and useful precedent to consider in terms of what legal restrictions, barriers and state policy challenges around ADUs and infill housing may be faced in Washington State.

As part of the Housing Affordability and Livability Agenda, the city has attempted to pass legislation to relax restrictions on accessory dwelling units

but those efforts have met with resistance from single family neighborhood residents. The legislation currently being considered is going through an environmental review process. This law would eliminate off-street parking requirements, allow both an ADU and DADU on the same property, relax owner-occupancy requirements 12 months after construction, increase allowed size for DADUs to 1000 square feet and reduce minimum lot size.

Seattle has been the slowest among its Pacific Northwest large-city peers to take up an infill program. The most recent code revisions have faced steep resistance by residents in the affected neighborhoods who see the changes as a threat to their neighborhood character. One of the city's neighborhood councils successfully appealed the city's decision to grant a Determination of Non-significance for environmental review. The city recently released a draft EIS for their proposed ADU legislation that found the city's program would have little environmental impact including on traffic and parking. You can read the draft Environmental Impact Statement (EIS) the city conducted for the program here: <http://www.seattle.gov/council/adu-eis>

Kirkland, Washington

City of Kirkland ordinance emphasized increasing housing supply and providing choices that are combatable with the existing single family housing community.

The city of Kirkland has experienced a steady growth in population over the last few decades, this has largely been attributed to the growing geographical boundaries of the city, with the most recent annexation in 2009 adding 7 square miles and 33,000 residents to the population. Prior to this annexation Kirkland household sizes had been decreasing slowly but steadily since the 1980s and was hovering around 2.09 residents per house in 2009 (PD&R, 2009). As a result of both population increases and smaller household sizes the City of Kirkland created a cottage housing ordinance with the goals to creating a larger supply of smaller and more affordable housing units.

The interim ordinance outlined goals of increasing housing supply and housing style choices that are compatible with the existing single family communities, promote housing affordability by encouraging smaller homes and encourage innovative housing projects through a permanent ordinance.

In preparations for the ordinance the city of Kirkland implemented a demonstration program titled Innovative Housing Demonstration Project. An interim zoning ordinance was put in place in 2002 to allow development of a

limited number of projects that demonstrate housing choices not currently available in Kirkland's single family housing neighborhoods. Two cottage housing projects were selected for the demonstration program Danielson Grove, and Kirkland Bungalows, both of which were constructed in 2005. Once completed, representatives from various stakeholder groups were invited by the city on an innovative housing tour visiting four sites (including the two demonstration cottage housing projects) where informative tour packets were distributed to provide education about the projects. It was also an opportunity to receive feedback on the housing projects from representatives of the public before the final ordinance was created.

After taking on the feedback of the public the final ordinance was passed in November 2007. As the goals of the ordinance was to increase the supply of affordable housing the ordinance mandates that a certain percentage of units in a project must be accessible to households earning certain percentages of area median income. At the low end of the scale any project with 10 units must provide 1 unit affordable to households earning 100% of King County area median income. At the high end of the scale a project with 24 units must provide 2 units affordable to households earning 92% of King County area median income. The ordinance allows cottages up to 1,500 sq. ft. and a density of twice the underlying zone.

As of 2017 only one additional cottage development had been constructed in the City of Kirkland. This has come as somewhat of a surprise to the council as before the ordinance was passed two demonstration cottage projects were positively received by residents (ECONorthwest, 2017). This lack of uptake may however be partially due to the economic recession and subsequent housing crisis in 2008. At least two developments are currently in application and permitting phases as of May 2018.

When observing this and other cottage housing programs one of the biggest obstacles for developers is the high utilities installation costs. As installation costs are based on a per unit measure this quickly becomes much higher in cottage developments than that of a single family home. This along with the difficulty of subdividing land for private ownership cottage units should be considered in Tacoma as possible obstacles to be overcome before encouraging cottage housing developments.

Financial Models

Current/Status Quo

Construction Cost of Unit	\$150,000.00
Down Payment % Paid by Owner	10%
Mortgage Term (years)	15
Annual Interest	4.145%
Annual Payment	\$13,063.02
Market Apartment Rate (2018)	\$1,600.00
Down Payment Recovered By	Year 6
Net Return by Year 15	\$54,669.96
Total City Subsidy	\$0

Marginal Cost Reductions

Construction Cost of Unit	\$150,000.00
% Property Tax Abated (Max Tacoma Portion)	2.841%
Permitting Waived	\$3,000.00
Down Payment % Paid by Owner	10%
Mortgage Term (years)	15
Annual Interest	4.145%
Annual Payment	\$12,794.11
Market Apartment Rate (2018)	\$1,600.00
Down Payment Recovered By	Year 5
Net Return by Year 15	\$62,540.96
Total City Subsidy (Depend on Length of Tax Abatement)	\$6,500-\$9,000

Shared Cost (Affordable Housing Focus)

Construction Cost of Unit	\$150,000.00
Tacoma Share (%)	50%
Remaining Construction Cost	\$75,000.00
% Property Tax Abated (Max Tacoma Portion)	2.841%
Permitting Waived	\$3,000.00
Down Payment % Paid by Owner	10%
Mortgage Term (years)	15
Annual Interest	4.145%
Annual Payment	\$6,383.61
Target AMI	80%
Restricted Rent (2018)	\$1,071.06
Down Payment Recovered By	Year 3
Net Return by Year 15	\$59,157.39
Total City Subsidy	\$75,000-\$90,000

Shared Cost (Anti-Displacement/Market Rate Focus)

Construction Cost of Unit	\$150,000.00
Tacoma Share (%)	10%
Remaining Construction Cost	\$135,000.00
% Tax Abated	2.841%
Permitting Waived	\$3,000.00
Down Payment % Paid by Owner	0%
Mortgage Term (years)	15
Annual Interest	4.145%
Annual Payment	\$12,749.00
Market Rate Rent (2018)	\$1,600.00
Down Payment Recovered By	N/A
Net Return by Year 15	\$81,242.69
Total City Subsidy	\$50,000-\$60,000

Shared Cost (Affordable Housing Focus)

Construction Cost of Unit	\$150,000.00
Tacoma Share (%)	50%
Remaining Construction Cost	\$75,000.00
% Tax Abated	2.841%
Permitting Waived	\$3,000.00
Down Payment % Paid by Owner	1%
Mortgage Term (years)	15
Annual Interest	4.145%
Annual Payment	\$6,945.63
Target AMI	80%
Restricted Rent (2018)	\$1,071.06
Down Payment Recovered By	Year 1
Net Return by Year 15	\$56,997.03
Total City Subsidy	\$90,000-\$125,000

City-Purchased Units Track

Construction Cost of Unit	\$150,000.00
Tacoma Share (%)	100%
Remaining Construction Cost	\$0.00
% Property Tax Abated (Max Tacoma Portion)	0.00%
Permitting Waived	\$0.00
Down Payment % Paid by Owner	N/A
Mortgage Term (years)	N/A
Annual Interest	N/A
Annual Payment	\$0.00
Target AMI	80%
Market Apartment Rent (2018)	\$1,071.06
Down Payment Recovered By	N/A
Net Return by Year 15	\$220,000.00
Total City Subsidy (Depend on Length of Tax Abatement)	\$150,000.00