

BUILD



BABY

BUILD



Unlocking 1.4 Million New Homes in Cascadia

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Letter from Cascadia Innovation Corridor Co-Chairs

The Cascadia Innovation Corridor is built on the belief that **British Columbia, Oregon, and Washington can work together to create one of the most dynamic, inclusive, and sustainable mega-regions in the world.** At the heart of this vision is a simple truth: everyone deserves access to safe, affordable housing. But our housing crisis has reached a breaking point. Home prices and rents have skyrocketed 2-4 times faster than incomes since 2019, and British Columbia, Oregon, and Washington now have some of the tightest housing markets in North America. We simply don't have enough housing. The time for bold thinking, bold action, and bold execution is now—before it's too late.

We are proud to introduce “Build, Baby, Build: Unlocking 1.4 Million New Homes in Cascadia,” a comprehensive set of policies designed to tackle this challenge head-on. While good strides have been made across all three jurisdictions, particularly in addressing homelessness and investing in affordable housing, we need to double down on workforce housing. The housing shortage is a complex issue, and there is no single solution. However, forward-looking policy and actions along with a public-private partnership can solve this crisis and ensure that Cascadia remains a place where everyone can thrive. Smart investments in workforce housing today will build the infrastructure we need for tomorrow. That tomorrow is coming fast—by 2050, an additional 3-4 million people will call Cascadia home. The time to act is now.

This report builds on progress in housing for those who are homeless and low-income. It outlines the actions we must take to address the growing crisis of workforce housing. To meet the housing demand of the next 20 years, Cascadia needs to build approximately 3 million new housing units, but we are on track to miss that target by about 1 million units. Addressing this gap will require a significant ramp-up in housing production, far exceeding historical rates. Achieving this ambitious goal will require public-private partnership and a combination of strategies: expanding zoning for higher-density development along underutilized commercial corridors, streamlining permitting and other local processes to cut through red tape, and ensuring that financing is available to make housing projects viable.

Our ultimate recommendation is **comprehensive action to address the need for land, financing, and efficient and effective government permitting, along with a culture of openness to new ideas in technology and housing construction.** California has taken such an approach and, if we work together, we have the potential of building up to 1.4 million new housing units in Cascadia.

This challenge is immense, but we have the power to confront it head-on. Public sector leaders must take bold, transformative action to create a landscape that truly supports increased housing production. But this isn't just a government issue—it demands a united effort from all of us. Governments, businesses, and residents must rally together with an unwavering commitment to tackle this crisis with the urgency and determination it demands. The future of our communities depends on it, and the very qualities that make Cascadia an attractive place to live and work are at risk.

We urge you to join us in this essential effort. Thank you to those who have been doing this hard work already. The future of Cascadia hangs in the balance, and the choices we make today will determine whether our region thrives or falters. Together, we have the power to ensure Cascadia remains a place where everyone can prosper.

Gov. Chris Gregoire
Co-Chair, Cascadia Innovation Corridor
CEO, Challenge Seattle

Laura Jones
Co-Chair, Cascadia Innovation Corridor
CEO, Business Council of British Columbia

Acknowledgements

We thank the team at Boston Consulting Group (BCG), whose rigorous approach and dedication to solving our community's most intractable challenges was instrumental to the success of this project. We also want to thank our Cascadia housing roadmap advisory group, who provided invaluable input and guidance throughout this process. Comprised of outstanding regional leaders, they dedicated their time and insights to this report, and we are grateful to each of them for their commitment to ensuring safe, affordable housing is accessible to everyone in Cascadia. We thank the team at HDR that put together thoughtful, data-driven analysis on the commercial corridor rezoning opportunity in Cascadia, and whose findings form the foundation for the comprehensive recommendation in this report. Finally, we express our thanks to the many other experts consulted by BCG, who lent their time and expertise to this project.

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Executive Summary

Across our region individuals and families feel the impacts of our housing crisis every day. When affordable housing is out of reach, it affects everything: traffic worsens, families have less money to spend on groceries and childcare, and communities become less inclusive and more fragmented. Adequate housing is critical to the vibrancy of local economies and communities. It’s not just about providing shelter—it’s about ensuring that families can put down roots, teachers, nurses, and first responders can live near those they serve, and businesses can attract and retain the talent they need to grow. Without timely action to build more housing, economic inequality will deepen, and our region’s competitiveness will erode.

This crisis extends across the entire Cascadia region. This roadmap builds on two previous reports by Challenge Seattle—[“The Invisible Crisis: A Call to Action on Middle-Income Housing Affordability”](#) (2019) and [“The Conspicuous Crisis: Addressing Housing Affordability in Washington”](#) (2022)—and provides fresh insights into the worsening housing crisis. It also offers tactical guidance to boost workforce housing supply over the next two decades. Government efforts to end homelessness and expand low-income housing are vital and must continue. Now is the time to build on this strong foundation and address the housing crisis affecting the majority of Cascadians. This is the moment to commit to strong public-private partnerships and unleash the private sector to tackle the housing crisis for middle-income families. The longer we delay bold action, the more precarious economic and housing security becomes.

The Growing Crisis: A Widening Housing Supply Gap

Despite heavy emphasis from policymakers and billions of dollars of public and private investment, the lack of affordable housing has worsened dramatically over the last five years. By all accounts, our affordable housing crunch has deteriorated further over the last several years:

- ▶ Vancouver, BC leads Canadian cities for highest average two-bedroom rental price, with the lowest vacancy rates.¹
- ▶ Washington and Oregon have the two tightest housing markets in the U.S. in terms of housing availability.



- ▶ The share of housing stock affordable to households earning less than 120% Area Median Income (AMI) in Washington and Oregon has decreased from 80%-85% in 2019 to 45% in 2024.

Over the last several decades, housing production has been cyclical, with a major building boom preceding the Great Recession and a huge slowdown in the years following 2007. Today’s estimates indicate that Cascadia currently faces a deficit of at least 250,000 housing units.

Now, just as building started to approach pre-recession levels, permits requested in 2023 and the first half of 2024 suggest that we may see production falling once again. Estimating average production across the last 20 years smooths these highs and lows to allow us to realistically understand what is likely to be built and the future gap. Simply put: We need to build 130,000 units annually across Cascadia to meet demand, but we are currently only building 85,000 every year, and even this is not a guarantee. Status quo production—with annual fluctuations in housing starts and completions due to market conditions and other factors—will produce roughly 2 million housing units over the next 20 years, but our region needs 3 million to house everyone², creating a deficit of about 1 million homes by 2044.

Cascadia’s current shortage and the widening gap in available units will have dramatic impacts for individuals, families, and our economy. And this shortfall persists and will continue to grow despite historic efforts by policymakers to build low-income housing, support missing middle and infill development, address homelessness, and ease affordability concerns for Cascadia residents.

Executive Summary (cont'd)

Why are we underbuilding now?

Three factors drive the root causes of our production challenges:

1. The cost of an average multifamily development has skyrocketed by 36% since 2019, which means only luxury units “pencil” for developers, financing for workforce developments is difficult to compile, and investments for affordable housing don’t go as far. We cannot scale to meet the crisis by building multifamily homes at \$525,000 a unit when they need to be built at a cost below \$370,000 to be affordable to 80% AMI household.
2. Restrictive and outdated zoning limits access to developable land. Scarcity drives higher land costs, which typically make up 10% of the cost of development.
3. State and local policies and permitting processes create additional timing uncertainty, risk, and costs. Statewide in Washington, the average permit delay adds an additional 6.5 months to a project, with delays of 17-18 months in some jurisdictions.

Roadmap to Build 3 Million Housing Units

Building 3 million homes over the next 20 years will cost at least \$1.5 trillion—far more than the government or private sector alone can handle. Solving this crisis demands an unprecedented public-private partnership and aggressive policy changes to address land, economics, and permitting challenges.

To meet our housing goals, we need a culture of partnership that fosters strong collaboration between government and the private sector. This will require breaking through any historical distrust to establish the regulatory conditions necessary to unleash development of workforce housing, recognizing that we all share the goal of increasing housing affordability and access for the Cascadia residents of today and tomorrow.

Success also hinges on robust tracking and accountability mechanisms at the state and provincial level to ensure local jurisdictions are meeting their housing targets. This includes detailed, transparent progress reporting, with regular assessments of housing production relative to established goals.

The path forward includes these key recommendations to increase production to fill our housing gap:

- ▶ **Land—Unlock developable land through zoning reform:** Sweeping zoning reforms, particularly by rezoning commercial corridors for mixed-use development—a move that could unlock capacity for 5 million new housing units, with 1.4 million new units considered developable by 2044. California’s recent bipartisan effort to rezone commercial corridors, strip retail, and big-box sites paved the way for 1.6 to 2.4 million new housing units. Additional efforts, including transit-oriented development and building on underutilized government and religious properties, can unlock tens of thousands of additional units
- ▶ **Economics—Deploy low-cost capital and incentivize workforce housing development:** In recent years, there have been new, innovative financing models developed through public-private collaboration. We recommend building on this work to address the financing constraints that hinder development by deploying low-cost capital, including leveraging local governments’ bonding capacity and providing time-limited tax exemptions to workforce housing projects. These programs—which reduce development costs, fill funding gaps, and help simplify developers’ capital stacks—could unlock 65,000 units that are affordable to an 80% AMI household over 20 years.
- ▶ **Permitting—Remove barriers to development, including timely, standardized permitting across land use and building permits:** Prioritization of affordable and workforce housing, including ministerial review, and the use of preapproved plans for multifamily development could contribute to the creation of roughly 120,000 units over the next two decades. One Vancouver developer estimated that he could sell duplex units for \$100,000 less if six months were shaved off the permitting process.³
- ▶ **Innovation—Adopt supportive strategies, including technology solutions and innovative construction methods, to improve process efficiency and bring down development costs:** Additional strategies, such as implementing technology solutions across the development lifecycle and adopting modular and offsite construction methods, offer further opportunities to add tens of thousands of units.

Executive Summary (cont'd)

Build, Baby, Build: Unlocking 1.4 Million New Homes in Cascadia

Cascadia's housing crisis cannot be solved with piecemeal efforts or incremental changes. We need a comprehensive, all-in approach that tackles every aspect of the problem simultaneously—anything less will fall short. Our best opportunity to close our widening housing supply gap is to act comprehensively, addressing land, economics, and permitting in a coordinated, self-reinforcing way. Such action creates the potential to redevelop underutilized commercial properties for 1.4 million new housing units over the next 20 years, which provides a needed buffer to meet our 1-million unit gap. 1.4 million new units represent high-potential parcels for redevelopment, but not every parcel may be viable for redevelopment due to the market conditions, ownership, or economic viability.

To unlock this potential, we recommend a comprehensive, statewide or provincial approach that includes:

► LAND

Rezoning underutilized or vacant commercial areas such as parking lots, office parks, strip malls, and big box retail, which are best prepared to absorb density and typically have good transit connectivity.

► ECONOMICS

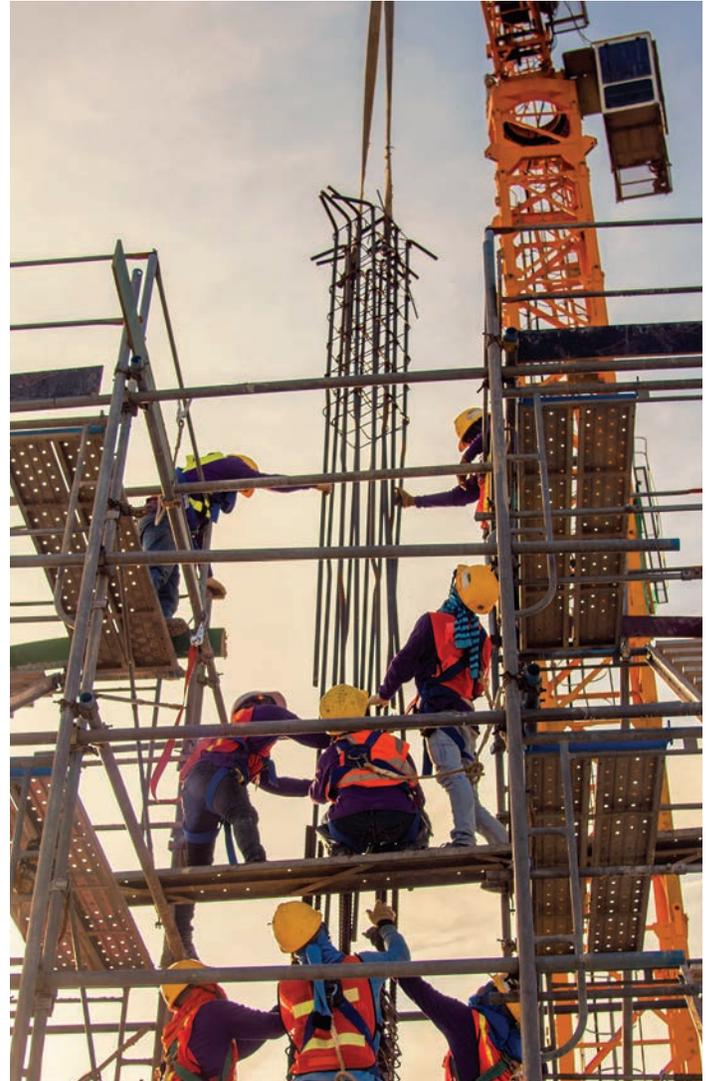
Lowering the cost of housing using creative financing mechanisms like bonds and incentives such as the reduction of parking minimums and time-limited tax exemptions.

► PERMITTING

Prioritizing affordable and workforce housing development and creating a fast-track permitting process for projects that meet affordability criteria, such as by exempting projects from certain discretionary review processes, creating a by-right or ministerial review process, or developing a catalog of preapproved plans that can be automatically approved.

► INNOVATION

Supporting innovation and adoption of technology solutions and novel construction methods and materials, which create opportunities to lower costs and increase timeliness of development projects.



Cascadia has the unique opportunity to integrate these solutions and build on innovative policies implemented elsewhere, such as commercial corridor rezoning undertaken in California. By upzoning undervalued strip commercial lands, mixed-income housing would be integrated in locations close to existing services and jobs, away from climate hazard zones, and along transit-rich corridors.

This requires a united public-private partnership, bold action from every level of government, and collaboration across sectors. The stakes couldn't be higher, and the urgency for action is critical. Only by working together and implementing these solutions as a cohesive strategy can we close the housing supply gap and secure Cascadia's future growth and prosperity.

Definitions

Affordable Housing: Affordable housing is generally defined as housing on which the occupant is paying no more than 30% of gross income for housing costs, including utilities.

Area Median Income (AMI): The midpoint of a region’s income distribution. Half of the households in an area earn more than the AMI, and half earn less. AMI in Cascadia ranges from \$72,000 USD in British Columbia to \$77,000 USD in Oregon to \$90,000 USD in Washington in 2022.

Housing Cost: Monthly costs of housing for a household, which includes rent and utilities for renter households, and mortgage, insurance, taxes, and utilities for owner households.

Housing Unit: A residential space used as a dwelling by one or more individuals and used synonymously with the word “home.” It encompasses a variety of residential structures including apartments, condominiums, single-family homes, accessory dwelling units (ADUs), and other similar forms of housing.

Housing Cost-Burdened: A household that spends more than 30% of gross monthly income on housing costs.

Workforce Housing: For purposes the report, we define workforce housing as housing for moderate-income households making between 60%-120% AMI. These households often earn too much to qualify for traditional affordable housing subsidies. Some other sources may refer to housing for households in these income bands as “middle-income housing.” Housing includes ownership and rental opportunities and a variety of housing types.

Scope of this Report

While supporting the production of all housing is critical, this report has a particular focus on the 60-120% AMI bracket, which this report defines as “workforce housing.” In the current market environment, developing housing for below 60% AMI typically requires subsidies. Roughly 30-35% of households in Cascadia fall within the 60-120% AMI income brackets, yet there have been more limited mechanisms and programs to support housing development affordable for these income levels.

<p>Profiles:</p> <p>The scope of this report covers middle-income households that are essential to the fabric of our society</p>					
	<p>RETAIL CASHIER</p> <p>She manages a department store in downtown Vancouver and is a part-time Management student living with two roommates.</p>	<p>CONSTRUCTION WORKER</p> <p>As a fourth-year electrician apprentice who grew up near Seattle, she is hoping to move out of her parents’ house to have more space for her dog.</p>	<p>SCHOOL TEACHER</p> <p>A second-grade teacher, in his third year of teaching in Portland Public Schools, he enjoys hiking on the weekends and is an avid reader.</p>	<p>DENTAL HYGIENIST</p> <p>She works at a clinic in Surrey, has a Diploma in Dental Hygiene, and lives in a studio apartment walking distance from her office.</p>	<p>COMPUTER SYSTEMS ANALYST</p> <p>He works at a tech company in Bellevue, has a degree in Computer Science, and lives in Redmond.</p>
	<p>Estimated Household Income (USD)</p> <p>~\$45,000</p>	<p>~\$60,000</p>	<p>~\$64,000</p>	<p>~\$78,000</p>	<p>~\$110,000</p>
	<p>As a % of median household income</p> <p>~60%</p>	<p>~70%</p>	<p>~80%</p>	<p>~100%</p>	<p>~120%</p>

The Growing Crisis: A Widening Housing Supply Gap

Facing record home prices and some of the highest rents in our countries, housing affordability continues to be the top concern facing our region. Even as policymakers pursue myriad solutions to address the crisis, housing costs have continued to skyrocket, with the problem exacerbating an already challenging situation. Rent and home prices have increased at a higher rate compared to incomes since 2019 across Cascadia, and between a third and half of households are housing cost burdened across the three jurisdictions.⁴ At the same time, changing demographics, such as later marriages and smaller family sizes, are reshaping housing demand with a growing need for multifamily housing options that are accessible and affordable. As more people seek smaller, centrally located homes that align with evolving lifestyle and financial priorities, demand has surged for urban multifamily housing designed to meet these needs affordably.

In today’s housing-constricted environment, worsening affordability is forcing people to pay more and make difficult sacrifices, with many making do with less space or making tradeoffs between critical household expenses, such as gas, groceries, childcare, and paying off other debt. Some are priced

out of major metro areas and are moving further away. In Portland, just one in five residents can afford to buy a home in the area, forcing decisions between home ownership and manageable commute times.⁵ In Washington, a minimum wage worker would need to work 99 hours per week to afford a two-bedroom rental property; in Oregon, he or she would need to work 88 hours per week.⁶ We cannot expect our neighbors to continue making these quality-of-life tradeoffs if we aspire to remain a desirable place to live and a globally competitive mega-region.

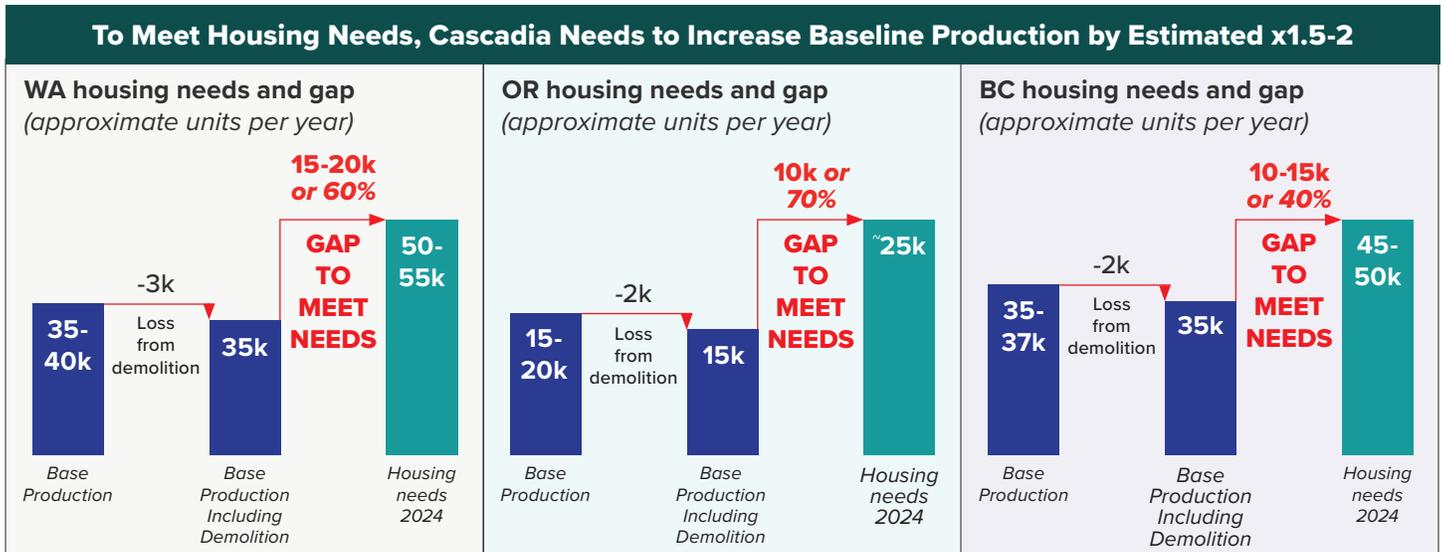
But why is affordability continuing to plummet and forcing families to make these tradeoffs? To put it plainly: We simply do not have enough housing units, and in recent years, it has become too expensive for developers to build more. Our affordability crisis is due to an undersupply of housing units, and this gap is only set to widen over the coming two decades. As our economy and population have grown, our limited housing supply has been stretched thin, and new production cannot keep up with growing demand. In 2022, Washington and Oregon had the two tightest housing markets in the country when comparing the ratio of housing units to households.



“It’s never been as expensive to own a home anywhere, anytime in Canada as it was in Vancouver in the fourth quarter [of 2023]. At a staggering 106.4%, the share of a median income needed to cover ownership costs means that only a select few high-income earners can afford to buy.”

ROYAL BANK OF CANADA REPORT

The Growing Crisis (cont'd)



Understanding Our Housing Supply Crisis

To fill our existing housing gap of 250,000 units across Cascadia, accommodate 3-4 million new residents over the next 20 years, and replace units lost to demolition, we need to build approximately 130,000 homes every year. Yet we are building just 85,000, a number averaged across the last two decades to account for the cyclical nature of the housing production industry. It is simply not enough. We need to build over 50% more housing units than we are currently building every year across Cascadia.

Without action, every year, we are falling further behind and the crisis worsens. By 2044, we need roughly 3 million additional housing units, yet we are likely to only build 2 million, leaving a gap of approximately 1 million homes.

Our current undersupply problem has been years in the making. Housing production plummeted in the wake of the Great Recession. Building slowly increased over the next decade, but it only began to reach pre-Great Recession levels when it was once again slowed by the COVID-19 pandemic and its impacts. Rising material costs, supply chain issues, labor shortages, and economic uncertainty suppressed new construction. Coming out of the pandemic, inflation further exacerbated material and labor cost challenges, and rising interest rates increased the cost of financing for developers.

At the same time, we have failed to address some of the underlying cost drivers that make development so costly, from outdated land use policy that creates

scarcity of affordable, developable land to local permitting processes that create delay, risk, and added costs for developers.

The High Cost of Every Unit of Housing

Cascadia is facing some of the highest per unit costs of development, and since 2019, the cost per unit for a typical multifamily development has grown from approximately \$385,000 to \$525,000⁷—or 36%.

In places like Arizona, Michigan, or Virginia, the cost of housing is significantly lower. Nationally, the cost per unit of housing in a multifamily building is closer to \$232,000-\$280,000.⁸ These differences in development costs have a direct impact on households' ability to rent or buy a unit. Nationwide, for each \$1,000 added to the cost of constructing a home, it's estimated that 465 households are priced-out of their ability to purchase a home.⁹



The major costs of building housing include:

- Land acquisition and holding
- Construction, primarily comprised of materials and labor and the cost of constructing parking
- Financing (e.g., interest, fees)
- Regulatory costs (e.g., permitting fees, impact fees, cost of delays)
- Other soft costs, including professional services, sales tax, and developer overhead

Roadmap to Build 3 Million Housing Units

“I really think the focus has to be on the supply side. The challenge is that there’s not a lot that the federal government can do. A lot of it is sort of local zoning, local regulatory hurdles.”

MARK FLEMING, CHIEF ECONOMIST, FIRST AMERICAN FINANCIAL CORP.

There is no single solution to solving Cascadia’s housing supply crisis, but there are identified key policy changes—focused on land, economics, permitting, and innovation—that could make the biggest impact at the state and local levels. These recommendations are designed to generate the highest return on housing supply over the next 20 years—without them, we cannot meet our region’s needs.

To zero in on the most effective solutions, two main criteria were used to identify the most effective solutions: impact to housing supply and feasibility. Impact was analyzed by looking at how many units could be added with the policy change, as well as how the policy lowers per unit development costs, which directly impacts affordability for renters or buyers. Feasibility was assessed by looking at whether the policy or solution had been successfully implemented

elsewhere or in Cascadia, how much capital investment is required, and how time-consuming and difficult implementation would be.

By focusing on these metrics, we have identified the most actionable and high-impact steps to solve Cascadia’s housing shortage. However, none of these alone can bridge our housing supply gap – we must pursue all in concert if we hope to address the critical housing needs of our region. The individual components of this strategy are outlined here, with a recommendation for a comprehensive solution that integrates these opportunities described in the following section.

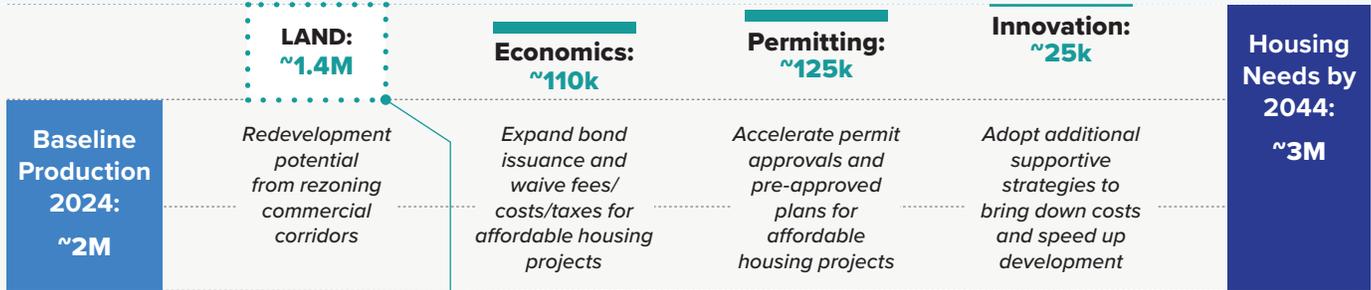
- 1. Land: Unlock developable land through zoning reform**
- 2. Economics: Deploy low-cost capital and incentivize workforce housing development**
- 3. Permitting: Remove barriers to development, including timely, standardized permitting across land use and building permits**
- 4. Innovation: Adopt supportive strategies, including technology solutions and innovative construction methods, to improve process efficiency and bring down development costs**

All of these opportunities should be supported by public-private partnerships and robust tracking and accountability mechanisms to ensure they are implemented thoughtfully, thoroughly, and efficiently.



Build Up of Potential Impact from Baseline Housing Production to 2044 Housing Needs Target

Housing baseline production to needs — individual contribution of key actions, 2024-2044 directional



Radical zoning changes are necessary to bridge the supply gap yet not sufficient to meet 2044 housing need; additional policy changes enabling to decrease cost of developing affordable housing units are equally critical.

LAND

Commercial Corridor Rezoning and Transit-Oriented Development

Goal: Expand access to developable land

Summary: Allow mixed-use, high-density developments in underutilized commercial areas and near transit hubs, and support building housing on idle or underused religious and government property

Housing Units Unlocked: Up to 1,440,000 across Cascadia by 2044

Across Cascadia, developable land is scarce and one of the most expensive components of any project. Topographical constraints like mountains, forests, and bodies of water limit options, while restrictive zoning laws and environmental regulations further reduce the pool of suitable sites. Even when land is identified, the lack of necessary infrastructure such as roads, utilities, and public services can delay projects and inflate costs, rendering many potential developments financially unfeasible. Rezoning commercial corridors and upzoning near mass transit are among the most impactful ways to unlock underutilized land for much-needed housing.

Commercial Corridor Rezoning

Communities grappling with a lack of affordable housing are also plagued by a surplus of vacant, underused retail spaces. These eyesores are everywhere: empty Toys R Us and other big box

stores surrounded by empty parking lots, strip malls with shuttered storefronts, and abandoned shopping centers on city outskirts. Zoned solely for commercial use, these spaces are left blighted and wasted as consumer habits shift away from brick-and-mortar retail, accelerated by the Great Recession and COVID pandemic. This is not just a Cascadia issue; it is a nationwide problem. The US has six times more retail space per capita than Europe, and both Canada and the US lead the world in retail space per capita. This overbuilding of retail capacity is leading to decaying properties, falling commercial real estate values, and shrinking local tax revenues as shopping increasingly moves online.



Shuttered and vacant retail space and parking lots are the types of commercial properties that could be strong candidates for mixed use redevelopment.

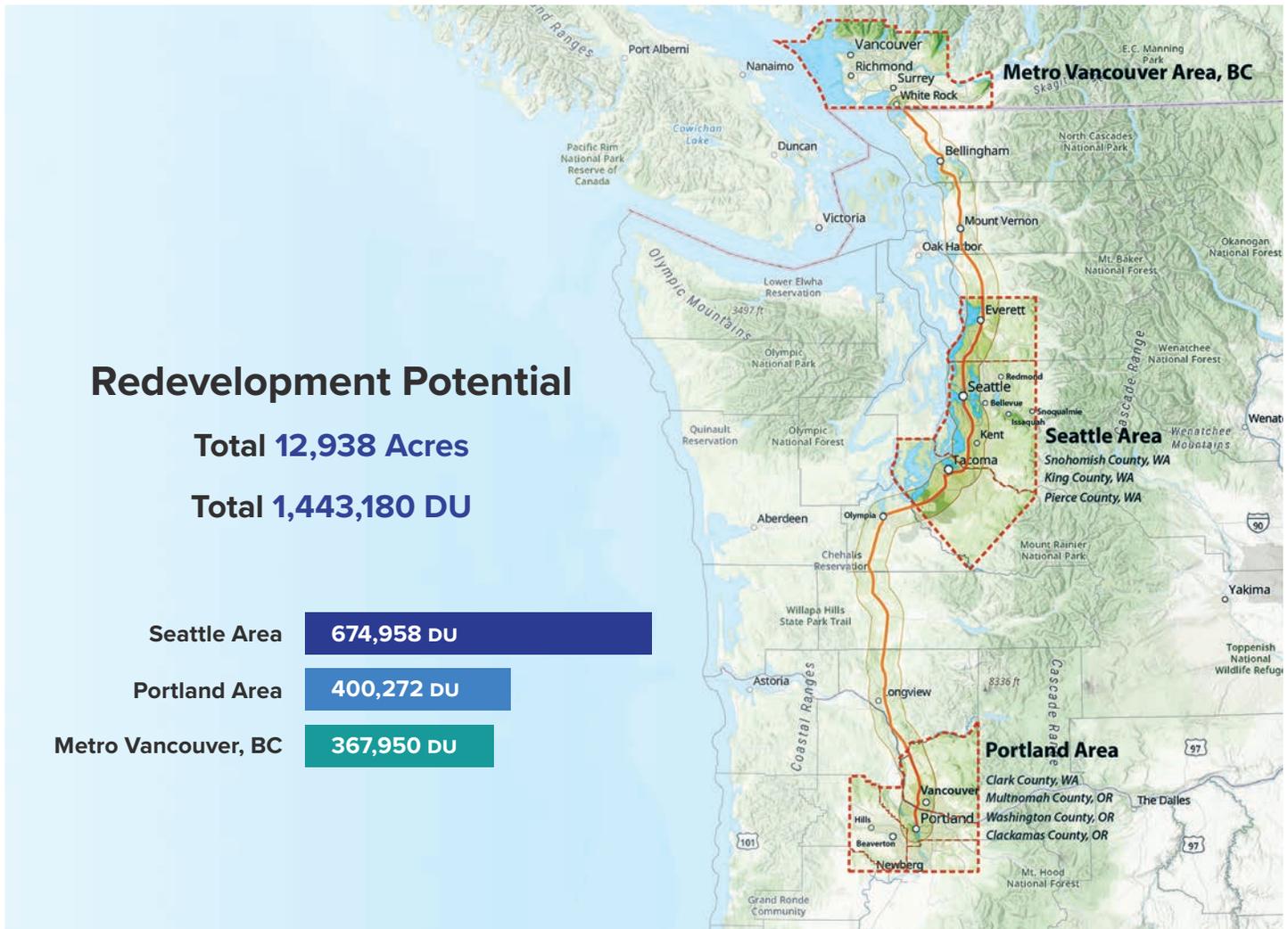
The Roadmap to Build (cont'd)

Estimates for Cascadia, focused on the corridor surrounding I-5, indicate that rezoning of commercial corridors on main streets in small towns, strip retail, office parks, big-box sites on the edges of town, and other underutilized commercial areas—not including any industrial lands, which would be excluded from rezoning—could unlock capacity for up to 5.1 million housing units across the Cascadia corridor. Of these units, we expect that roughly 1.4 million have redevelopment potential, which means those units are most likely to be economically viable for redevelopment. This was done by examining which parcels have a land value that exceeds the building value, with twofold benefits to this methodology: First, it excludes those properties that are already occupied by productive businesses, and second, it indicates where rezoning has the greatest potential to increase property values. For example, when similar estimates were done in California, it was found that the value of all market-feasible development opportunities

across all eligible parcels was 20 times greater than the existing assessed values. This indicates cities can expect to see an increase in property taxes in rezoned and redeveloped commercial corridors.

Broad rezoning of commercial areas allows market forces to determine the areas that make the most financial sense for redevelopment. For example, vibrant stretches of retail or hubs of community activity would remain, while redevelopment of a shuttered strip mall in a suburban area would likely “pencil” for a developer.

Analysis also shows that multifamily developments in rezoned commercial corridors have the potential to have lower environmental impacts than average household use, ranging from 45% lower energy use to 60% lower water use.¹¹ These corridors also tend to be located away from climate hazard zones such as flooding and wildfires, increasing their resilience.



The Roadmap to Build (cont'd)

Transit-Oriented Development

While commercial corridor rezoning is one piece of the puzzle in unlocking more developable land for new housing units, Cascadia’s jurisdictions can also learn from one another on how to increase density in the places best equipped to support it. Transit-oriented development (TOD) presents a significant opportunity to encourage and support housing growth near mass transit options like light rail and bus rapid transit. By increasing density near transit hubs, Cascadia can unlock thousands of new housing units while reducing reliance on cars and promoting sustainable urban growth. TOD supports the creation of vibrant, walkable communities where residents can live, work, and access essential services without the need for long commutes.

Oregon and British Columbia have already taken bold steps to encourage TOD. In 2019, Oregon passed legislation eliminating single-family zoning in many cities and promoting higher-density development

near transit. Portland has seen significant growth in transit-oriented projects, with incentives designed to boost housing supply and affordability near transit corridors. British Columbia offers another model. The province’s approach focuses on TOD through its Metro Vancouver 2040 strategy, which integrates transit planning with housing development. Key transit corridors have been rezoned to prioritize mixed-use and higher-density housing, contributing to both housing affordability and environmental sustainability.

Washington has begun taking steps in this direction with policies aimed at streamlining zoning and permitting processes near transit corridors. The University of Washington Mobility Innovation Center’s 2023 Report, [“Finding Common Ground: Best Practices for State Policies Supporting Transit-Oriented Development,”](#) shares detailed recommendations for how Washington can take advantage of the low-hanging fruit offered by thoughtfully implemented TOD policies.

Redeveloping Underutilized Government and Religious Property

In addition to broad rezoning of commercial corridors and supporting transit-oriented development, underutilized government and religious properties offer a prime—though less scalable—opportunity for housing development. Land, which comprises about 10% of developments costs, is finite and scarce in centrally located and desirable urban areas, driving up expenses and limiting development opportunities. In a post-COVID, hybrid work environment, about 20-30% of government buildings are vacant in Washington State.¹² At the same time, declining birth rates and public school enrollment have led to 0.5-1.5% of schools closing every year,¹³ and religious congregations are shrinking. Church leaders across Cascadia have expressed interest in repurposing their large properties and land holdings for affordable housing, which many religious leaders view as aligned with their organization’s mission. In Seattle, religious groups own roughly 1% of all land in the city,¹⁴ and Vancouver has at least 323 lots owned by faith-based groups.¹⁵

Examples of successful redevelopments and existing policies:

- ▶ **Government office redevelopment:** Ireland’s Land Development Agency identified vacant government properties that could be converted into affordable housing units. In 2022, approximately 5,500 were created across ten sites.
- ▶ **Schools:** The NY Housing Plan has created 39 apartments in the former Bryant School in Hornell, NY, for households earning 60% AMI or below. The project used \$14.3 million sourced from federal and state tax credits, subsidies, and local agreements, with a focus on sustainability. The property contains studios, 1-bedroom and 2-bedroom units, a community kitchen, fitness center, laundry room, storage facilities, playground, and green space.
- ▶ **Churches:** Washington HB 1377 allows municipalities to provide a density bonus for housing on church-owned properties that is affordable for households making up to 80% AMI. The City of Bellevue amended its land use code to allow properties owned by religious organizations and located in single family land use districts to be rezoned to permit permanently affordable multifamily housing.



School converted to senior housing.

The BC Builds program offers a roadmap for how government property can be put to its best use. BC Builds identifies underutilized government, community, and non-profit properties, partners with developers, and facilitates financing to optimize land use and provide affordable housing to low and middle-income households. Washington State ranks third in the US for the number of government-owned parcels in transit accessible urban areas,¹⁶ and redeveloping just a fraction of these could yield thousands of additional housing units. Using conservative estimates for vacancy rates and feasibility, government offices, schools, and church properties could be converted or redeveloped to create 1,700-2,000 new housing units across Cascadia every year. These conversions and new developments are aligned with the missions of government and religious landowners and allow us to optimize existing infrastructure and utilities, which can be another barrier to new development.

To streamline the conversion of unused government and religiously owned property into residential housing, government agencies at all levels will need to collaborate with community organizations and religious institutions to identify potential structures. A proactive feasibility assessment focusing on structural integrity, zoning allowances, and layout suitability is a prerequisite for development. For eligible government parcels, standardized guidelines for redevelopment, including affordability expectations, need to be developed and supported by clear public bidding processes. Additionally, expedited permitting should also be applied to these conversion projects, with progress tracked through annual reports detailing costs, timelines, and outcomes.

The Roadmap to Build (cont'd)

ECONOMICS

Provide Low-Cost Capital and Incentives to Help Finance Workforce Housing

Goal: Help make projects “pencil” by increasing access to low-cost financing and reducing development costs

Summary: Expand bond issuance to fund new and existing government programs with relevant expertise and track records to provide low-cost loans to developers across the project lifecycle. Deploy other incentives, including time-limited tax exemptions, reduction of parking minimums, and reduction of impact fees to reduce development costs and encourage new construction

Housing Units Unlocked: 110,000 units across Cascadia by 2044

The complexity of securing funding for affordable and workforce housing projects, combined with the challenges of making a pro forma “pencil,” further restrict housing production. Capital stacks often involve multiple layers of financing, each with its own set of requirements, timelines, and risks. Today’s high interest rates and the conservative lending practices of commercial banks add another layer of difficulty. This challenging environment underscores the need for new innovative financing solutions that streamline funding processes and reduce reliance on traditional capital markets, which are ill-suited to the current demands of affordable and workforce housing development.

Deploy Low-Cost Capital

Providing additional low-cost capital to developers would help them circumvent the burden of high financing costs, especially as construction loan interest rates have risen by 2 percentage points between 2022 and 2024. This need is amplified by the over-subscription of programs like the Low-Income Housing Tax Credit (LIHTC) program and tax-exempt bonds. At the same time, private companies are increasingly drawn to safer investment vehicles. The challenge is further compounded by the timing issues related to pre-development funding, which is critical for getting projects off the ground but is often the hardest to secure.

One key mechanism for raising additional capital is to expand the use of taxable housing bonds issued by housing authorities or local governments to

provide low-cost loans to developers and expand the pool of available capital for 60-120% AMI housing. Microsoft pioneered this effort with Renton Housing Authority, and taxable bonds for housing purposes have been implemented in many municipalities in the U.S. (e.g., New York, Denver, Philadelphia) and internationally. State-level legislative action to support local governments and housing authorities to leverage their bonding authority for this purpose could include funding or technical assistance to cover or reduce bond issuance costs or matching funds for housing bonds for affordable and workforce housing.

“Securing financing is incredibly challenging right now due to high interest rates and lenders’ low risk tolerance. Affordable housing developers often need to obtain funding from up to 15 different sources.”

DEVELOPER

To launch a successful bond-financed housing initiative, it is essential to pinpoint the right intermediaries and fund managers. Large urban housing authorities—like Metro Vancouver Housing, King County Housing Authority, and Home Forward in Multnomah County—are ideally positioned to lead these efforts, thanks to their ability to integrate local policy changes that maximize the effectiveness of funding. State and local housing authorities will act as key intermediaries, issuing bonds, managing debt repayment, and directing funds to developers. Financial institutions can help facilitate bond sales, while large companies with an interest in housing (e.g., Microsoft, Amazon) may invest in bonds directly. Private developers can team up with nonprofits to ensure capital raised turns into housing on the ground.

Establishing clear criteria for bond proceeds—such as 60-120% AMI and requirements around the inclusion of family-sized units—and aligning projects with local market needs, will ensure a streamlined, effective rollout. Incentives like tax exemptions for local institutional investors will further accelerate investment, ensuring the success of this critical housing strategy. Recently, King County in Washington has considered issuing \$1 billion in bonds to fund affordable housing, which could provide a proof point for other local governments and housing authorities.



CASE STUDY

Philadelphia’s Neighborhood Preservation Initiative

Funded by several rounds of social bond issuances by the City of Philadelphia, the Neighborhood Preservation Initiative (NPI) is investing \$400 Million in programs that expand and protect affordable housing options, keep Philadelphia owners and renters in their homes, improve housing quality, and promote homeownership. The Philadelphia Housing Development Corporation (PHDC) is responsible for administering many of the housing programs funded by NPI.



Local government mobilizes private & public resources to lower cost of financing to developers.



The Roadmap to Build (cont'd)

Provide Incentives to Build Workforce Housing

Beyond financing housing development directly, we also have a suite of tools we can use to incentivize production of affordable and workforce housing and further bring down development costs. Pairing these tax exemptions with additional state or local incentives—such as reducing fees for projects that meet affordability benchmarks or simplifying the permitting process—could create a holistic framework to make these developments financially feasible. Key opportunities for action include, but are not limited to:

Time-limited tax exemptions: Property tax exemptions – often referred to as incentives or abatement – for multifamily housing is a key tool for production of housing. Some jurisdictions in Washington State already use multi-family tax exemptions (MFTE) to provide time-limited property tax exemptions to affordable housing projects. Reconfiguring MFTE programs or exploring other options or configurations for property tax abatement (e.g., to fund inclusionary zoning) could also help incentivize affordable and workforce housing production. Understanding the high cost of housing in New York City, the state has long had a robust tax abatement program. In 2024, the state updated their program to include 100% exemption for 35-40 years while adding additional affordability and labor requirements. In 2024, Baltimore enacted new inclusionary zoning requirements that mandate a certain number of affordable units in buildings with more than 20 units, with the city offsetting the actual lost rent (i.e., the difference between market rate and affordable rent) for each calendar year as a property tax credit on the following year's tax bill.¹⁷

Waiving or reducing parking minimums: A single surface parking stall can cost \$20,000-\$60,000 to build, adding 5-10% to the cost of construction and over \$200 to monthly rent for tenants.¹⁸ At the same time, transit connectivity in urban centers has continued to improve, while car ownership rates have continued to decline in parts of the mega-region. Cascadia has made some progress on reducing parking minimums. Oregon mandates the elimination of parking minimums in 48 cities and 8 metropolitan regions, especially near high-frequency transit—one of the most progressive parking policies in the country. British Columbia restricts local governments from imposing parking requirements in transit-oriented



areas. By further reducing parking minimums—or eliminating them entirely—we can allow developers to build the parking needed by the local market without hewing to outdated parking mandates.

Waiving, reducing, or adjusting impact fees: Impact fees, also called development charges, are one-time charges imposed by local governments on new development projects to address the increased demand for services created by new residents. Fees vary significantly by jurisdiction, and in some areas, can exceed \$20,000 per unit, particularly in high-demand regions. Metro Vancouver recently approved an increase to development charges that will bring the cost per unit for a townhome and an apartment unit to over \$30,000 and \$20,000, respectively.¹⁹ High fees often disincentivize development, especially in areas where density is crucial to meet housing targets. To mitigate these adverse impacts, impact fees can be capped at a more manageable level or the cost of growth can be spread across broader tax bases, rather than disproportionately burdening new developments. Another option is to adjust when impact fees are assessed, as some developers have suggested that tying payment to receipt of the certificate of occupancy could ease some financing constraints. These approaches would help balance infrastructure needs with the necessity of accelerating housing production.

Sales tax exemptions: Sales tax exemptions for affordable and workforce housing can be used to further reduce the cost of development, allowing new construction to “pencil” for developers. They have been used in Washington State to encourage office-to-residential conversion and building affordable housing on state land. A broader exemption, tied to inclusionary requirements, could help increase development at desired affordability levels.

PERMITTING

Remove Barriers to Development

Goal: Ensure local governments use a timely and appropriate review process for housing projects for both land use and building permits

Summary: Expedite permitting by implementing standardized, fast-track review processes for affordable and workforce housing, using pre-approved building designs, allowing auto-approvals for compliant projects, and offering self-certification programs to accelerate housing development and remove unnecessary delays

Housing Units Unlocked: 125,000 units across Cascadia by 2044

Government requirements have a direct and often negative impact on the overall cost of housing development. Lengthy permitting processes for land use and building permits, coupled with the unpredictability of environmental and design reviews, introduce significant delays that can impair project timelines and budgets. These delays not only increase direct costs but also inject a level of uncertainty that can deter investment altogether. Costs associated with regulations are estimated to comprise 30-43% of the cost of multifamily development.²⁰ In a comparison between the cost of development in Portland and Denver, soft costs were estimated to be 16% lower in Denver due to a transparent and fast permitting approval process.²¹ A Canadian study



“Current timelines are roughly four years from design review to occupancy – this eviscerates our supply cycle. Every day you’re not building you’re just paying to hold land.”

DEVELOPER

found that a six-month longer approval timeline for residential development is associated with an almost 4 percentage point decrease in housing production.²² The root cause of these inefficiencies lies in outdated, overburdened regulatory frameworks and insufficient staffing in permitting offices, which are unable to keep pace with the urgency of the housing crisis. With meaningful reforms, government regulations can boost production.

For developers, time is money. Permitting delays are costly for developers because they increase financing costs due to extended loan periods and interest payments. Developers must also continue to pay other holding costs, like property taxes and security costs. These delays can drive up overall project expenses as labor and material costs escalate over time and market conditions shift, making developments less financially viable. In fact, the cost of delays is six times greater than the cost of permitting fees themselves—up to \$45,000 per unit in a typical 120-unit multifamily development. Additionally, uncertainty around permit timelines increases risk for developers, potentially deterring investment or leading to project cancellations.

Litigation during the land use permitting process, such as under Washington’s State Environmental Policy Act (SEPA) or Oregon’s Statewide Planning Goals, can significantly delay the approval and development of housing projects. Environmental regulations are critical to managing sustainability and conservation goals, but opponents of a project, such as community groups or environmental organizations, sometimes use state environmental and planning laws to file lawsuits or appeals for the intended purpose of slowing down the permitting process by months or even years. Such lengthy delays can increase costs for developers, and in some cases, prolonged litigation may deter developers from pursuing projects altogether, exacerbating the housing shortage.

The Roadmap to Build (cont'd)



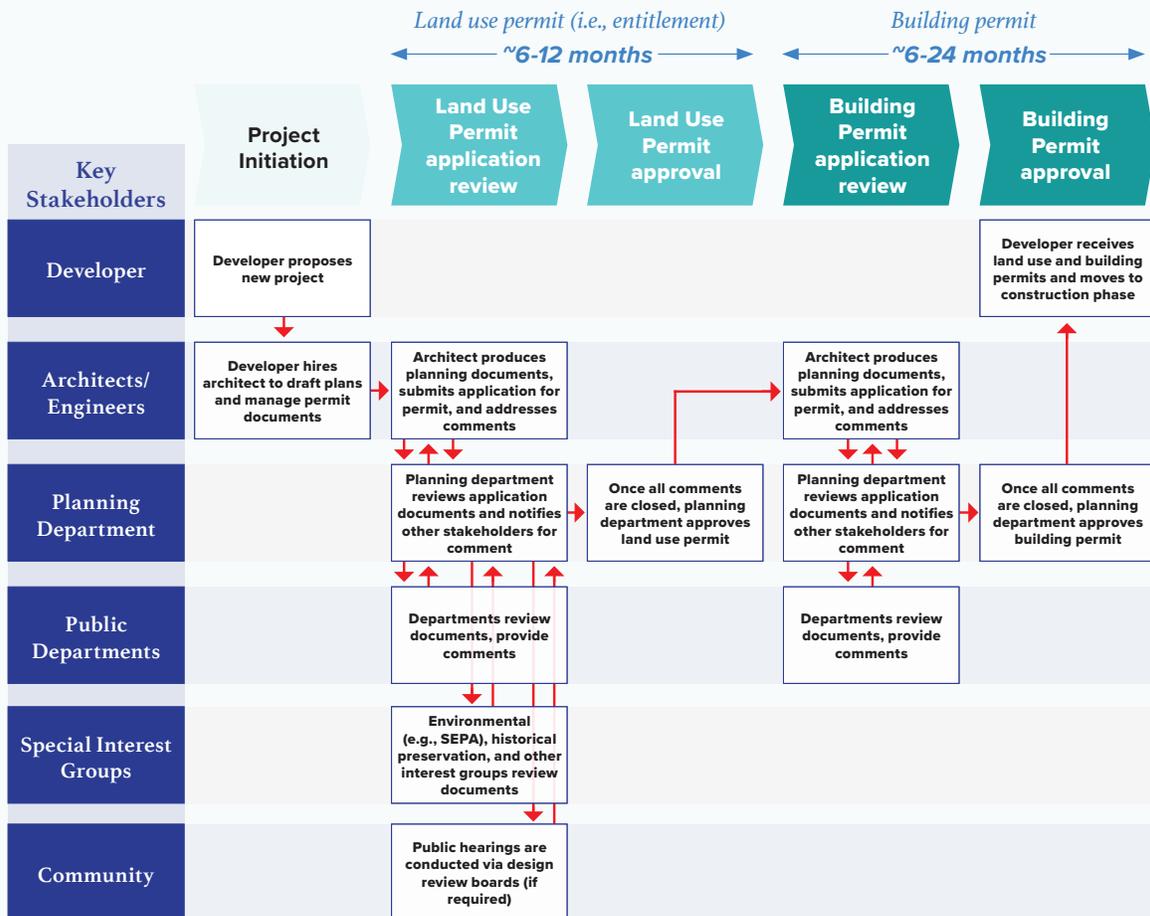
UNDERSTANDING THE PERMITTING PROCESS

Land use permits govern how a piece of land can be developed or used. They ensure that the proposed development aligns with local zoning laws, environmental regulations, and urban planning strategies. This process often includes reviews of site plans, environmental impact assessments, and adherence to zoning restrictions like height limits or density requirements. Public input and hearings may be required, and the timeline for approval can vary widely depending on the jurisdiction and complexity of the project.

Building permits focus on the technical aspects of construction. These permits ensure that the building design meets local safety codes and standards, covering areas like structural integrity, fire safety, electrical systems, plumbing, and accessibility. The building permit phase includes reviews of architectural drawings and engineering plans to verify compliance with building codes and regulations. Once the permit is issued, inspections are conducted throughout the construction process to ensure adherence to the approved plans.

The key difference between these two permits is that **land use permits** address *what* can be built and *where*, while **building permits** deal with *how* the construction is carried out in a safe and compliant manner. Delays in either phase can slow down housing development, with many jurisdictions struggling to manage prolonged review timelines.

Several revision cycles occur between multiple departments from start to finish in the entitlement and permitting processes (~12-36 months total permitting timeline in many jurisdictions)



The Roadmap to Build (cont'd)

While permitting is the mandate of local governments, both local jurisdictions and state/provincial governments can take action that could expedite review processes to encourage additional housing production. We have successful precedents on the West Coast and beyond, and Oregon has already taken state-level action to ensure local governments are issuing final decisions on land use permits within 120 days of receiving a complete application. However, more can be done, and key opportunities include:

Ministerial review process: A state-level ministerial review process provides an administrative evaluation of development projects based on objective, established criteria without requiring discretionary judgment by local officials. In this process, if a project complies with all relevant zoning, building codes, and other regulations, it must be approved as a matter of right. This type of review contrasts with discretionary review, where decision-makers can exercise judgment and take public input, often resulting in longer approval times and the potential for rejection. Removal of discretionary processes can also help reduce workloads for overburdened local permitting offices, freeing up capacity for other work. In California, SB 35 established a ministerial review for the entitlement process, which applies to infill affordable housing projects in jurisdictions that are not meeting state affordable housing goals. The process expedited the entitlement process for 156 projects between 2018 and 2023, allowing for the creation of 18,000 new housing units, and it was extended to 2036 and expanded to include mixed-income development by follow-up legislation.²³

Other examples take ministerial review a step further, offering auto-approval for projects that meet certain criteria. Minnesota has default approval on certain types of zoning variance and land use permits, while Japan has a “by-right” system: if a plan satisfies the standards, project is permitted without discretionary review.

Design review changes: Design review is a process in which development projects are evaluated for their aesthetic, architectural, and environmental impact before approval. This review ensures that new buildings and developments align with the design standards, visual character, and overall goals of the community or city. However, design review processes are often highly subjective and create a high level of timing uncertainty during the permitting process. The City of Seattle has temporarily exempted some

housing developments that include affordable units from the city’s design review process, which is estimated to save nine months during the permitting process,²⁴ and other jurisdictions could follow suit to shave time off development timelines and increase the speed to occupancy for new housing.

Pre-approved building plans: While preapproved building plans for accessory dwelling units (ADUs) have become popular policy in many local jurisdictions, policymakers can extend this to multifamily development, too. Kelowna and North Okanagan, British Columbia have adopted pre-approved building plans for multiplexes up to sixplexes as part of their efforts to densify via infill development. An early version of the program was so popular in Kelowna that they stopped offering fast-track approval for preapproved designs because planners were concerned about increasing homogeneity in infill development. Now, the program has relaunched, and as developers submit new plans for approval, they are added to the binder of preapproved options for future development to ensure increasing diversity and variety of designs. The state and provincial governments could support local jurisdictions by offering preapproved designs for multifamily developments that could be easily adopted by local jurisdictions to accelerate building permit review.

Self-certification of building plans: Outside of Cascadia, some jurisdictions—including Phoenix and New York City—have instituted programs to allow qualified architects and engineers to self-certify that building plans comply with municipal building construction codes. Phoenix’s self-certification program, in place since 2010 and expanded in 2012 to include all buildings except high-rises and stadiums, has successfully reduced the burden on public departments while accelerating building permit issuance. Right now, processing of self-certified building plans is averaging 14 calendar days. The program includes both random and required audits depending on the nature and complexity of each project. Permit submission requirements include structural and electrical peer reviews, and failure to submit corrections to building violations may result in loss of self-certification privileges.²⁵ Funding from state or provincial government sources could support the development of a pilot self-certification program in select Cascadia jurisdictions.



CASE STUDY

Los Angeles Mayor Karen Bass's Executive Directive 1 to Fast-Track Entitlement

Mayor Karen Bass's Executive Directive 1 (ED 1), introduced in December 2022, is a bold effort to expedite affordable housing development in Los Angeles by streamlining the permitting process for 100% affordable housing projects. ED 1 aims to reduce delays by cutting through bureaucratic red tape, prioritizing projects, and offering a 60-day timeline for approvals on eligible developments. This initiative addresses LA's housing crisis by removing barriers such as discretionary reviews and California Environmental Quality Act (CEQA) processes for qualifying projects, allowing developers to accelerate their affordable housing plans.

To qualify for the expedited review process, submitted projects must have specific affordability requirements, meet overall design standards, and adhere to environmental safety measures, among other key requirements.

As of summer 2024, over 18,000 affordable housing units have been approved under this directive in its first 18 months, with a median approval timeline of 96 days—above the target timeline but still substantially better than non-fast tracked projects.²⁶ This is more than three times the number of approved affordable units in 2020, 2021, or 2022. Projects are typically eligible for a state-level density bonus or city-level transit-oriented communities program, and 85% of projects utilize incentives under one of these two programs. However, between 65-75% of projects approved under ED 1 do not require direct public investment.²⁷

By eliminating bottlenecks and creating clear timelines, ED 1 provides a powerful model for other cities seeking to address their housing crises through expedited permitting processes.

INNOVATION

Adopt Additional Supportive Strategies to Bring Down Building Costs and Speed Up Development

Goal: Reduce development costs and improve development processes by holistically addressing the largest costs and most time-consuming processes for developers.

Summary: Construction costs, including materials and labor, are one of the largest cost drivers for developers. It is an area ripe for innovation to speed up processes and reduce costs. At the same time, technology can be applied throughout the development process to improve timeliness, address labor shortages, and streamline processes for all stakeholders.

Housing Units Unlocked: 25,000 units across Cascadia by 2044.

The lack of advanced technology in housing development across Cascadia presents a significant challenge to addressing the region's growing housing crisis. Outdated permitting processes, reliant on manual paper-based workflows, slow down project approvals and add costly delays. Without integrated systems that streamline communication between developers, local governments, and regulatory bodies, housing projects are bogged down by inefficiencies and inconsistent reviews. In areas like modular construction and mass timber, the adoption of tech-driven innovations is critical to reducing construction timelines and costs, but the region has been slow to scale these methods.

Adopt Technology Solutions that Increase Efficiency throughout the Development Process

Technology can be a game-changer in the housing development process by streamlining permitting, improving manufacturing efficiency, and supporting customer service in permitting offices. It can also be critical to supporting local governments struggling with adequate resourcing. Deploying digital tools such as automated permit review systems, artificial intelligence (AI), and cloud-based platforms allows permitting offices to manage their backlog and approve compliant projects more quickly. For example, automated software can flag areas where projects

meet zoning and building code requirements, which accelerates the approval of routine permits. Self-certification programs, enabled by digital platforms, also empower developers to submit pre-approved plans without requiring exhaustive manual review, freeing up staff to focus on more complex cases.

Customer service within permitting offices can benefit from technology-driven solutions such as digital chatbots or AI-powered response systems to handle routine inquiries and guide applicants through the process. This reduces the strain on staff, allowing them to focus on higher-value tasks, and provides quicker response times to developers, speeding up project progress. Additionally, integrated online portals allow developers to track permit progress, pay fees, and submit required documentation, reducing bottlenecks caused by paperwork and in-person meetings.



EXAMPLE: KELOWNA'S CHATBOT

Kelowna has implemented an AI chatbot to streamline its permitting processes, significantly speeding up application reviews. Partnering with Microsoft, the city has piloted an AI-powered bot that processes digital permit applications in minutes, rather than weeks, by automatically checking submissions for compliance with zoning bylaws, community plans, and lot specifications. This allows the system to quickly approve compliant applications or flag non-compliant ones with detailed feedback for corrections. This technology reduces the workload on human staff, allowing them to focus on more complex permits and inspections. This approach not only cuts down on waiting times but also reduces the costs associated with prolonged development timelines.

The Roadmap to Build (cont'd)

In the manufacturing stage, the integration of technology such as prefabrication and modular construction methods can drastically reduce build times by up to 50% and construction costs by up to 20%. These methods use offsite construction in controlled environments, allowing for faster assembly on-site. Advanced construction technologies, such as robotics and 3D printing, can also help reduce labor demands in the field, addressing ongoing workforce shortages in the construction industry. These techniques not only speed up production but also result in more consistent quality and reduced waste, offering cost efficiencies to developers and reducing overall project timelines.

Right now, modular and panelized construction in Cascadia holds the most promise for reducing construction costs but faces two key barriers: regulatory gaps in supporting these construction methods, and lack of scalability primarily due to the difficulty in securing financing and insurance. Local authorities have limited understanding of how to inspect the quality and safety of modular units, and

our regulatory framework lacks elements supporting modular/panelized construction (e.g., design codes are not adapted for mass timber). On the financing side, some banks are unfamiliar with the modular construction process and unwilling to risk financing less familiar development methods. Local funding opportunities often do not include modular/panelized construction methods in their requests for proposals (RFPs), while insurers are unclear on the long-term durability of the structures.

By leveraging these technologies across various stages of development—from permitting to construction—municipalities and developers can increase project timeliness and lower costs. Success will require standardized and streamlined regulation to provide clear, consistent guidelines across jurisdictions, which can reduce confusion and encourage the widespread use of new technologies. Facilitation of data sharing across platforms and between public and private entities can also help optimize technology usage.

EXAMPLE: AUTOVOL'S ROBOTIC MANUFACTURING

Autovol, based in Nampa, Idaho, uses an innovative manufacturing technique dubbed automated volumetric modular construction. This process uses advanced robotics to assemble six-sided modular units in a controlled environment, complete with appliances, fixtures, and mechanical, electrical, plumbing (MEP) systems. Once these modules are built, they are shipped to the job site for final assembly.

The use of robotics has significantly accelerated construction timelines while reducing costs. For example, Autovol's Virginia Street Studios project in San Jose, which used 160 modules to create 301 affordable housing units, was completed 40% faster than traditional methods. Additionally, the cost per square foot for this project was reduced by \$100, yielding a 20% savings compared to conventional construction in high-cost areas like the Bay Area.

By integrating technology, Autovol not only addresses the construction labor shortage but also makes it possible to scale affordable housing more efficiently.



The Roadmap to Build (cont'd)

Support Use of Innovative Construction Materials

Materials make up roughly 25% of the cost of development for new housing units on average, with labor comprising another 23%. These costs are typically difficult to change without sacrificing quality, but novel construction materials—paired with technological innovation and new construction methods—offer an opportunity to do just that.

Modular and panelized construction can make use of one of the most exciting materials innovations and an area where Cascadia is a leader: mass timber.

Mass timber is an innovative construction material made from layers of wood that are compressed and bonded together to create large, strong panels. It offers a sustainable alternative to steel and concrete, with a significantly lower carbon footprint. Oregon, Washington, and British Columbia—known for their vast forestry resources—have already embraced mass timber as a key component of their housing and construction strategies, but it has not yet achieved widespread adoption. Oregon and British Columbia have led by incorporating mass timber into both public and private developments, positioning the region as a global leader in sustainable construction.

BENEFITS OF MASS TIMBER PREFABRICATION



High strength-to-weight ratio

Best suited for mid-rise projects up to 18 stories



Prefabricated as large but light weight panels

Easier to handle and requires less foundational support



Biophilic structure

Low carbon footprint materials with natural aesthetics



Time and cost savings

Rapid onsite assembly & efficient factory manufacturing help reduce labor cost

EXAMPLES OF AFFORDABLE MULTI-FAMILY MASS TIMBER BUILDINGS



1510 Webster, Oakland, CA

Key figures

- ▶ 19 stories with 222 units
- ▶ 35 are affordable to households at 80% AMI
- ▶ Comparable concrete option would have cost \$30M more

Key facts

- ▶ The light weight yet structurally strong mass timber reduced the foundation needs and supporting columns (-47 per floor)
- ▶ All 16 floors of mass timber were installed in <4 months, with the entire project finished 1-month earlier than scheduled



1470 Block Line Road, Ontario, BC

Key figures

- ▶ 4 stories, 23K sq ft, 41-unit residential to support women who experienced homelessness

Key facts

- ▶ A core requirement of the funding is that the project is built quickly
- ▶ Mass timber concept outbid all other affordable designs
- ▶ Design, approval and construction were completed in 1 year of contract award, where the assembly itself was 20 days
- ▶ Won 2 city awards for innovation and sustainability

Foundational Elements for Success



Achieving Cascadia’s ambitious housing targets will require more than just policy changes; it will require a strong foundation of public-private partnership and robust accountability measures. Governments can create favorable policy conditions, reduce barriers, and provide financial incentives, while private developers, investors, and nonprofits can deliver housing solutions with efficiency and innovation. At the same time, tracking progress, evaluating outcomes, and holding each stakeholder accountable to their commitments will be critical in closing the housing gap on time and within budget.

The Necessity of Public-Private Partnership

Too often, government stakeholders, developers, and community members view one another as adversaries in managing land use policy and addressing our region’s need for more housing to accommodate a growing population. However, the scale of the problem necessitates a cultural shift and reemphasis on true public-private collaboration and partnership if we hope to achieve the housing production scale required to increase affordability for current and future Cascadians.

Public-private partnership takes a variety of forms. One clear example of their power is the use of government-provided low-cost capital and tax-exempt bond financing, which can make housing projects financially feasible for developers. At the same time, private sector innovation—in everything from technological solutions to construction methods—can help speed up housing production, while public entities provide the necessary legal and regulatory framework to facilitate large-scale developments. This collaborative approach also fosters a culture of shared responsibility across sectors, ensuring that all stakeholders—including governments, developers,

investors, and communities—work toward the common goal of increasing housing supply.

Tracking Progress and Ensuring Accountability

Accountability is essential to ensure leaders at all levels of government deliver on our housing targets. To solve Cascadia’s housing crisis, we must strike the right balance between incentives and enforcement—using both carrots and sticks to drive progress. Transparent tracking of housing production and policy outcomes will hold governments accountable, maintaining urgency to meet our ambitious goals. This is not a set-it-and-forget-it challenge; we must regularly evaluate our efforts, be willing to course-correct when needed, and ensure no jurisdiction falls behind.

British Columbia, Washington, and Oregon have each set housing targets at the local level, either by county or municipality. Local governments are expected and encouraged to develop comprehensive plans to meet their targets, but effective tracking mechanisms are still emerging or in development, and reinforcement of these efforts is critical to ensure we are making progress. Objective housing targets and shared reporting standards are important tools to provide clarity to jurisdictions on desired and expected outcomes, and incentive and enforcement mechanisms are also needed to ensure delivery on housing goals.

So far, Washington, Oregon, and British Columbia have largely used incentives or voluntary, opt-in policies to encourage development-friendly local regulations in local jurisdictions. The depth of our affordability challenges and the wide gap between our current housing production levels and the targets we’ve set indicate the need for better tracking and enforcement.

Foundational Elements to Success (cont'd)

One effective mechanism used elsewhere is a builder’s remedy, which allows developers to bypass certain local zoning regulations if a jurisdiction is not meeting its housing production targets. By removing obstacles, a builder’s remedy can fast-track housing development, increasing supply in regions where local restrictions have historically stalled progress. Support for adequate resourcing for local governments—such as via investments in technology that can reduce the workload for overburdened permitting staff—are critical to ensuring that the builder’s remedy is used as an effective policy tool to encourage compliance with state housing law. The builder’s remedy has been successfully used in California to spur local jurisdictions into compliance, most notably in Santa Monica, where some 16 projects with over 4,500 housing units secured their approvals under the builder’s remedy before the city came into compliance with state requirements.²⁸

Yet, enforcement requires a robust, timely understanding of how local jurisdictions are doing in meeting their housing targets. Some jurisdictions, like Kirkland, Washington, already use effective online dashboards to track progress, including metrics like the gap to target affordable housing units, breakdown of housing supply neighborhood, and breakdown of new housing permits by type (e.g., multifamily, single-family, ADU). The State of California also provides a statewide exemplar that leverages standardized, mandatory housing reporting requirements to provide additional granularity and oversight.

Beyond tracking progress, California and Oregon have set up housing accountability offices to help local

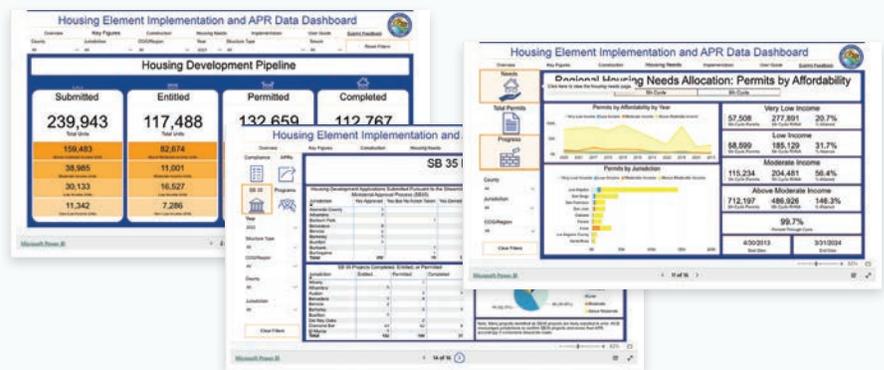
governments implement policies that will increase housing supply. California’s Housing Accountability Unit, created during the 2021-2022 budget cycle, is composed of a team of housing policy experts that help local planning departments and other stakeholder navigate new policies. Developers and local governments can appeal to the unit to advise on projects and assess policy compliance, and the Housing Accountability Unit acts as a mediator to review projects and provide recommendations. The Unit also has the power to refer unresolved issues to the state Attorney General if corrective actions are not taken.

Oregon’s new Housing Accountability and Production Office, launching in July 2025, aims to bridge the gap between state housing laws and local implementation by providing critical partnership, funding, and technical support to reduce barriers to housing production. This office will play a key role in helping local governments navigate regulations, share best practices, and stay on track to meet housing production targets by ensuring compliance with state policies.

Tracking, enforcement, and accountability are essential to making sure that jurisdictions stay on course to meet their housing targets. By transparently monitoring housing progress and ensuring adherence to targets, the state will be able to quickly identify issues, make necessary adjustments, and guarantee that housing policies lead to measurable outcomes. This model fosters stronger state-local partnerships, aligning both levels of government to meet the pressing housing needs across the state.

EXAMPLE: CALIFORNIA’S HOUSING ELEMENTS ANNUAL PROGRESS REPORT DATA DASHBOARD

California’s APR dashboard provides a robust example of how well-organized, granular data tools can improve housing reporting requirements. Cascadia could improve on this tool by making the tools more visually intuitive.



<https://www.hcd.ca.gov/planning-and-community-development/housing-element-implementation-and-apr-dashboard>

Build, Baby, Build: Unlocking 1.4 Million New Homes in Cascadia

Filling Cascadia's projected housing gap of roughly 1 million units over the next 20 years will require an integrated strategy that brings together multiple solutions to unlock developable land, streamline permitting, improve the economics of housing development, and support adoption of innovative technology. We need to start with a bold, public commitment to prioritize for affordable and workforce housing and break down barriers to development. To realize this commitment, we recommend a comprehensive, statewide or provincial approach that includes:

LAND: Rezoning underutilized and vacant commercial areas such as parking lots, office parks, strip malls, and big box retail, which are best prepared to absorb density and typically have good transit connectivity

Across the region, idle commercially zoned parcels—overbuilt in today's era of e-commerce—presents our greatest opportunity for unlocking developable land for new housing. These corridors, consisting primarily of properties such as parking lots, strip malls, and outdated office parks, can be transformed into lively, mixed-income, mixed-use boulevards, with preexisting connectivity to transit, jobs, and amenities.

ECONOMICS: Addressing the challenging cost structure of workforce housing development using creative financing mechanisms, such as bonds, and incentives such as the reduction of parking minimums and time-limited tax exemptions

This comprehensive solution would need strong public-private partnerships to provide low-cost capital for these projects, ensuring developers have the financial tools needed to succeed. Taxable bonds, tax exemptions, or direct government support, as well as partnerships with private firms, could help fund projects, particularly in high-demand urban areas.

Incentives, such as density bonuses, reducing parking minimums, waiving impact fees, and offering time-limited tax exemptions, can further improve the economics of redevelopment, making housing production a more viable endeavor for developers.



PERMITTING: Prioritizing affordable and workforce housing development and creating a fast-track permitting process for projects that meet affordability criteria, such as by exempting projects from certain discretionary review processes, creating a by-right or ministerial review process, or developing a catalog of preapproved plans that can be automatically approved

By pairing zoning with streamlined building and affordability guidelines and fast-track land use permitting process, jurisdictions can accelerate housing production on underutilized parcels and reduce costly bottlenecks and discretionary reviews in the process. A by-right or a ministerial approval process can fast-track land-use permits, allowing developers to avoid costly delays and NIMBY opposition accelerating the time it takes to break ground on new housing. Jurisdictions could also expand the use of preapproved building plans or creating a self-certification program for qualified architects and developers.

INNOVATION: Supporting innovation and adoption of technology solutions and novel construction methods and materials, which create opportunities to lower costs and increase timeliness of development projects

Unlocking 1.4 Million New Homes (cont'd)

Finally, support for technology that can provide additional capacity for local governments (e.g., in the form of software to support permitting processes and customer service) and help reduce costs of development while reducing construction time can improve the feasibility of new development pursued under this strategy.

Cascadia has the unique opportunity to integrate these solutions and build on innovative policies implemented elsewhere, such as commercial corridor rezoning undertaken in California. Throughout Cascadia, roughly 1.4 million units are likely to be developed via this comprehensive strategy, which is built on a foundation of commercial corridor rezoning but—critically—incorporates opportunities to increase the timeliness of permit approvals and improve the economic viability of workforce housing development for developers. For

each of the parcels considered developable, the land is worth more than the commercial buildings sitting on the parcels, indicating that even with some time-limited tax exemptions, property tax revenue would increase after redevelopment. Together, these strategies could significantly increase the housing supply in Cascadia while maintaining affordability and creating vibrant communities.

This requires a united public-private partnership, bold action from every level of government, and collaboration across sectors. The stakes couldn't be higher, and the urgency for action is critical. Only by working together and implementing these solutions as a cohesive strategy can we close the housing supply gap and secure Cascadia's future growth and prosperity.



CASE STUDY

California’s AB 2011 – The Affordable Housing and High Road Jobs Act²⁹

In 2022, California enacted Assembly Bill 2011 (AB 2011), the Affordable Housing and High Road Jobs Act, a pivotal and comprehensive approach aimed at addressing the state’s critical housing shortage. AB 2011 was designed to unlock underutilized commercial land for housing development, streamline the approval process for projects, and ensure that new developments meet both affordability and labor standards.

THE CHALLENGE

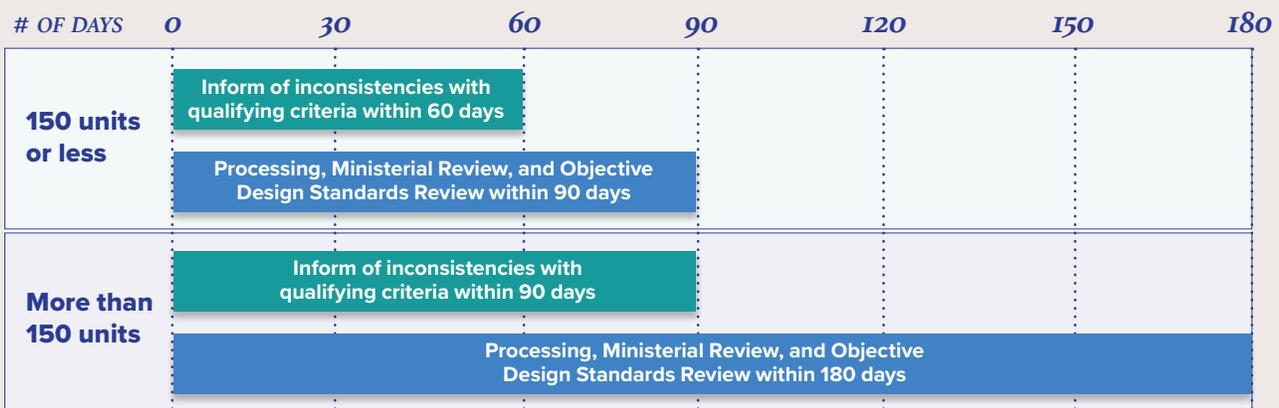
Like Cascadia, California faces a severe housing deficit, with a current shortage of hundreds of thousands of homes.³⁰ High development costs, restrictive zoning laws, and lengthy approval processes have slowed housing production. As a result, valuable land in commercial corridors often sits idle while housing shortages worsen, particularly for affordable units.

THE SOLUTION

AB 2011 provides a clear pathway to transform underused commercial land into affordable housing. The law allows for by-right development of housing projects on land zoned for commercial uses, such as retail spaces and parking lots, which have historically been off-limits for residential construction. By bypassing discretionary reviews—including limiting challenges under the California Environmental Quality Act (CEQA)—AB 2011 cuts through the red tape that typically delays projects. This streamlined process sets fixed timelines for land use permit issuance—requiring land use permits issued in 90 days for buildings with <150 units and 180 days for 150+ unit buildings—ensuring that developers receive swift, predictable outcomes.

The legislation provides for a range of housing types and densities based on road infrastructure and includes a provision that projects include no parking minimums. AB 2011 includes affordability requirements for both mixed-income and 100% affordable housing projects. *(Continued on next page)*

Timeline of Permit Review AB 2011 Process



If applicants are not notified of inconsistencies within applicable timeline, then project is deemed compliant with qualifying criteria



CASE STUDY *(cont'd)*

California's AB 2011 – The Affordable Housing and High Road Jobs Act

THE IMPACT

AB 2011 has the potential to significantly increase housing production across California. By repurposing commercial land, the legislation is expected to unlock the potential for over 2 million new housing units, including hundreds of thousands of affordable homes. This repurposed land is often located near transit and job centers, allowing for more sustainable, transit-oriented developments that reduce car dependency and lower greenhouse gas emissions.

EXAMPLE PROJECT

A mixed-use development in South Los Angeles, which combines a Costco store with 800 residential units, was the first project to advance under AB 2011 and highlights its impact. Located at former site on a 5-acre lot in the Baldwin Hills neighborhood, the project sits less than a half-mile south of the Expo/La Brea Station, which is served by Los Angeles Metro Rail's E Line. The development includes 184 units designated for low-income residents—households making under \$41,610 per year—and the remaining units are dedicated to nonsubsidized affordable and workforce housing³¹ AB 2011's fast-track ministerial approval process allowed the development to proceed roughly 30% more quickly through the entitlement process, with a predictable and appropriate timeline for receiving land use permits, according to estimates from Costco representatives. The development (artist's rendering below) broke ground in September 2024 and will be composed of prefabricated modular units.



Call to Action

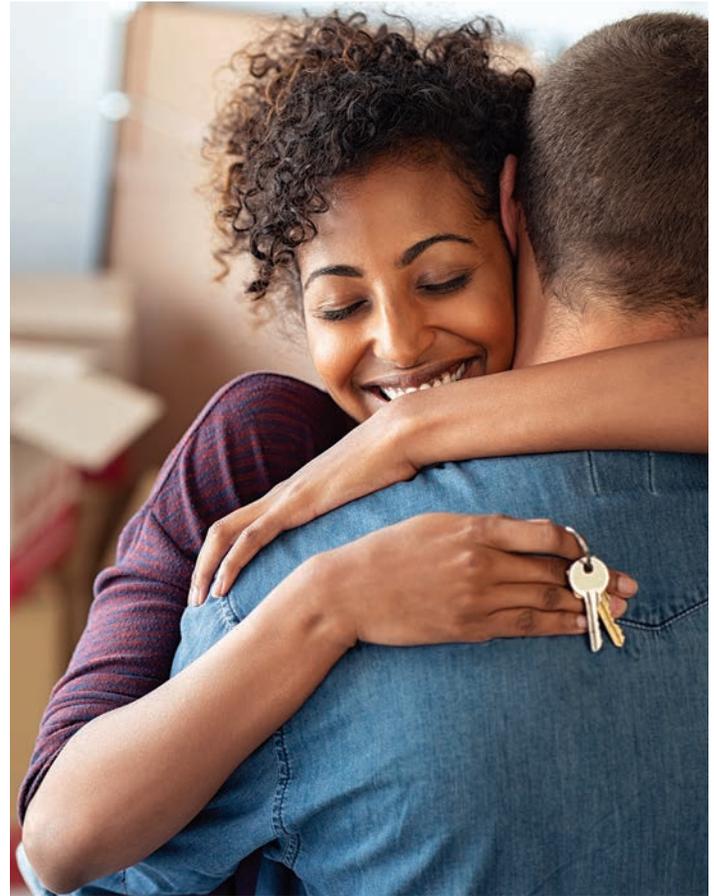
Build, Baby, Build: Unlocking 1.4 Million New Homes in Cascadia” offers a comprehensive, actionable path forward to tackle the region’s workforce housing crisis. However, achieving success requires more than isolated policies or piecemeal efforts. It demands a holistic approach and coordinated effort across public, private, and nonprofit sectors. Government agencies, developers, investors, housing advocates, and community groups must align to create the conditions necessary for substantial housing development.

This starts with bold policy change: commercial corridor rezoning accompanied by a fast-track permitting process and thoughtful financial incentives that will unlock up to 1.4 million new housing units across our region. A comprehensive, holistic solution can jumpstart housing production despite challenging market conditions, and we can continue to work collaboratively to identify, refine, and implement creative solutions that unlock additional housing supply.

Public-private partnership is the backbone of the solution to our affordable housing shortfall. Collaboration across stakeholders is essential to mobilizing the necessary resources and expertise from all sectors—government, private industry, and nonprofits—working together to scale housing development across Cascadia. By aligning public policies and private investment, we can create solutions that not only increase housing supply but also ensure affordability and long-term viability. Whether through joint ventures in financing, streamlined permitting processes, or shared innovation in building techniques, public-private partnerships provide the muscle needed to overcome the barriers that have historically slowed down housing production.

These partnerships foster an environment in which developers, policymakers, and housing advocates approach barriers to increasing housing supply with a unified vision. The roadmap calls for collective action, ensuring that governments create the conditions for success while the private sector delivers on development at scale, making this a truly collaborative solution to a shared regional challenge.

This roadmap is just one part of a broader strategy to address the region’s housing needs, complementing ongoing efforts to expand permanent supportive housing and homelessness services. These initiatives must work in tandem to ensure every individual has



access to safe and affordable housing, whether they are part of the workforce or facing the challenges of homelessness.

In recent years, state, provincial, and local governments have made progress through legislative reforms and financial investments. However, the housing crisis has intensified in the face of rising costs, economic uncertainty, and a slowdown in development. We cannot afford to lose momentum. Policymakers must continue to prioritize housing solutions, and the private sector must play an essential role in delivering the units necessary to meet our ambitious targets.

The time to act is now. We must unite around this shared goal, leverage every available resource, and implement a comprehensive policy solution with urgency. Only by working together can we ensure Cascadia remains a place where everyone—regardless of income—can find a home and thrive. Let this roadmap be our guide as we embark on this critical journey to build the housing infrastructure necessary for a vibrant and inclusive future.

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