MIDDLE HOUSING IN THE SINGLE-DWELLING ZONES

Progress Report – 2018-2024

January 2025

THE BUREAU OF PLANNING & SUSTAINABILITY

CASCADIA PARTNERS

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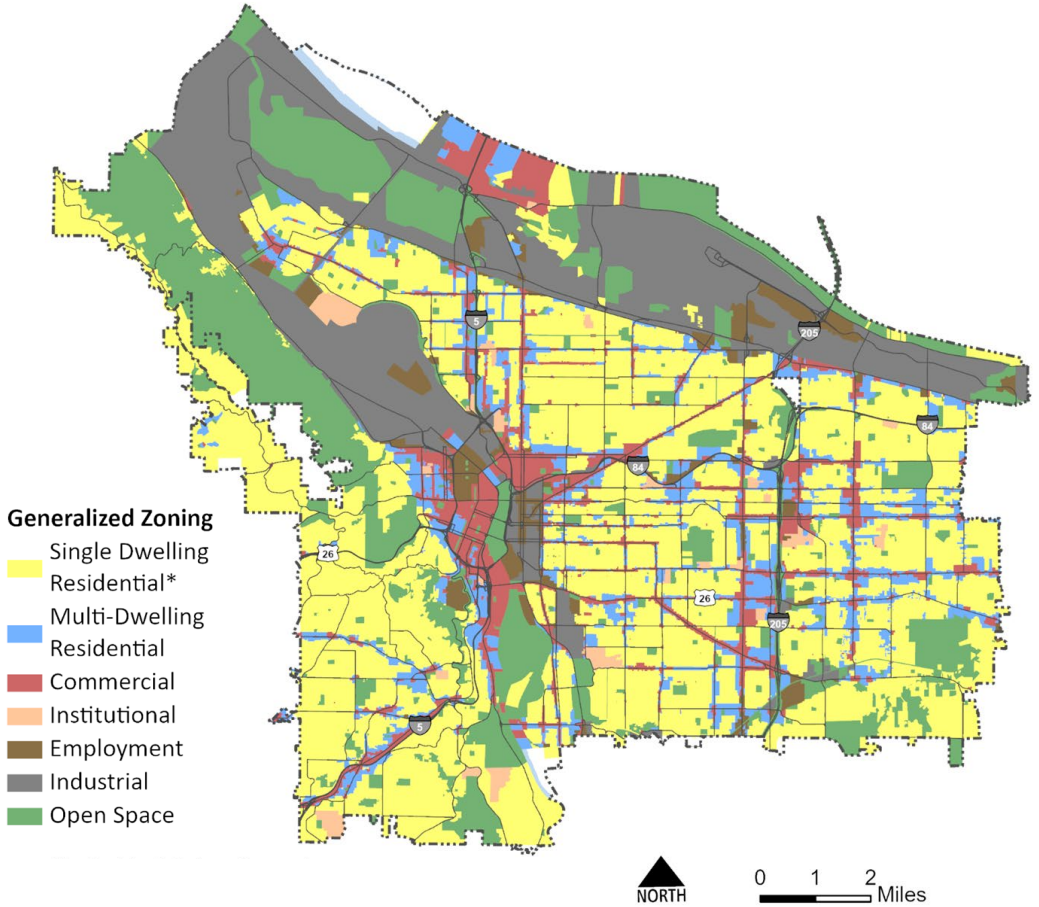
Project Context

The Middle Housing report was produced for the City of Portland's Bureau of Planning and Sustainability (BPS). It is an analysis of middle housing development activity in single dwelling zones affected by two packages of zoning code amendments adopted through the Residential Infill Project (RIP). Zones affected by the amendments include the R2.5, R5, R7, R10, and R20 zones. They comprise a majority of the city's residentially zoned land and are collectively referred to as Single-Dwelling Zones.

The report covers three time periods related to RIP:

- Pre-RIP: January 2018 - July 2021
- RIP 1: August 2021 - June 2022
- RIP 2: July 2022 - June 2024



**Single-dwelling residential zones (or "SD zones") on this map also show the RF Farm and Forest zone which is not eligible for middle housing.*

Section 01: Background

Key Findings and Methodology

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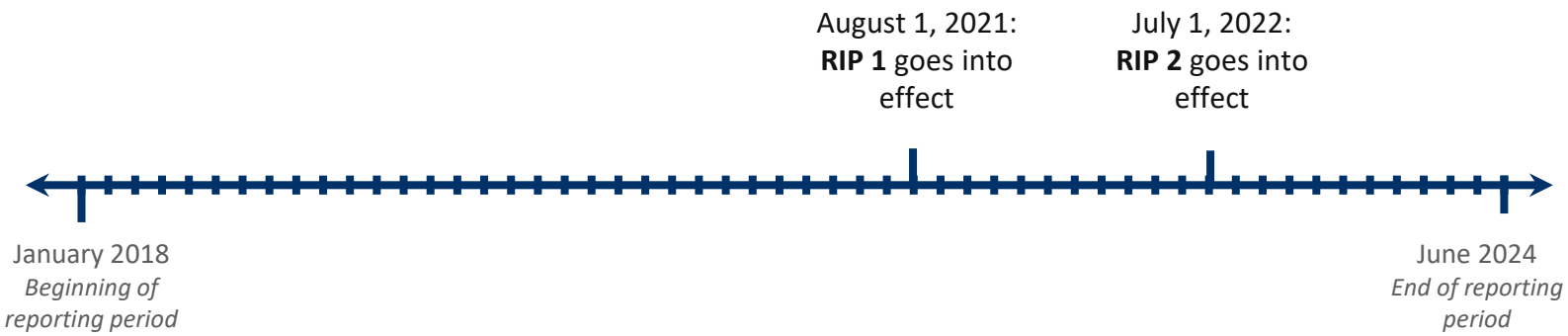
Key Findings

- Middle housing production has grown significantly since RIP went into effect, with the City permitting over 1,400 Accessory Dwelling Units (ADUs) and middle housing units between August 1, 2021 and June 30, 2024 in Single-Dwelling Zones. [page 12]
- Not counting ADUs, fourplexes were the most common middle housing type following RIP 1. However, in the first half of 2024, cottage clusters were more commonly permitted than fourplexes or ADUs. Since RIP went into effect, single detached houses which previously made up more than half of new units in Single-Dwelling Zones, now comprise less than 20% of new production in these zones. [page 13]
- Since RIP's adoption, demolitions have not increased above pre-RIP levels, and the number of units built per unit demolished has more than doubled to 1.64 in 2018 to 3.88 in the first half of 2024. [page 15]
- Due to the variety of types that fall within the category of middle housing (from duplexes to cottage clusters), there appears to be a middle housing product for every lot size. [page 17]
- Permitting activity since RIP's adoption has been largely focused on the same areas where it occurred pre-adoption: inner neighborhoods, particularly in SE, NE, and N Portland. [pages 21-22]
- The most common middle housing dwelling unit is a 2-bedroom, roughly 900 square foot for-sale unit. [page 30]
- In 2023-24, the average sales price of a new market-rate middle housing unit was about $250,000 less than that of a new single detached house, mostly due to size differences. [page 41]
- New middle housing units supported by Portland Housing Bureau's affordable homeownership programs sold for roughly $500,000 less than new market-rate single detached houses. [page 42]

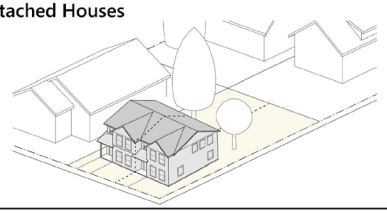
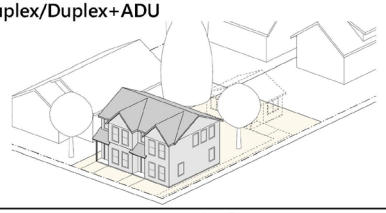
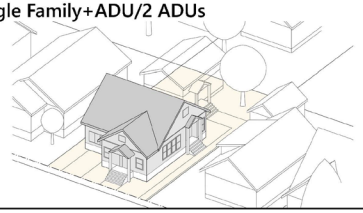
What is the Residential Infill Project (RIP)?

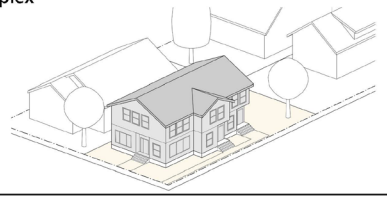
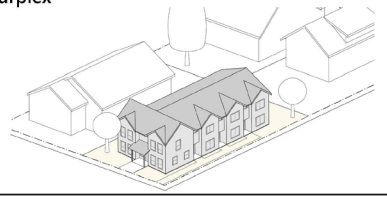
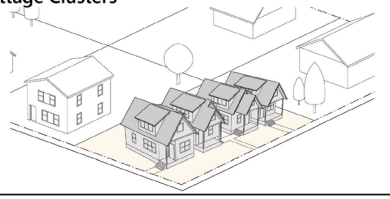
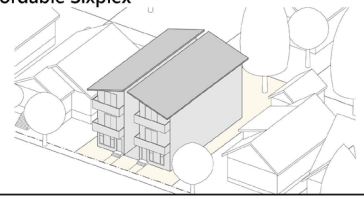
- In 2020, the City of Portland changed the rules that govern the types of housing permitted in single dwelling zones (the R2.5, R5, and R7 zones), allowing more housing options, more units per lot, while also limiting the size of new housing.
- The first phase of changes, RIP 1, went into effect on August 1, 2021. RIP 1 allowed duplexes, triplexes, fourplexes, and affordable sixplexes, as well as expanded ADU allowances in R2.5, R5, and R7 zones.
- RIP 2 took effect on July 1, 2022 and added policies that comply with state Senate Bill 458 and House Bill 2001. It expanded middle housing allowances to R10 and R20 zones, added cottage clusters, and created an expedited process for dividing infill lots to support fee-simple ownership of middle housing.



Middle Housing Types

Middle housing can refer to numerous types of housing. For this report, we use the term "middle housing" to refer to Accessory Dwelling Units in various configurations, Attached Houses, Duplexes, Triplexes, Fourplexes, Affordable Sixplexes and Cottage Clusters. These diagrams represent typical forms for these housing types and as well as information about maximum building sizes and heights in the R5 zone, the most common single-dwelling zone.

Attached Houses	Duplex/Duplex+ADU	Single Family+ADU/2 ADUs
		
30′ maximum height; generally up to 2-3 stories **0.6:1** maximum FAR for 2 total dwelling units	**30′** maximum height; generally up to 2-3 stories **0.6:1** maximum FAR for 2 total dwelling units (1 ADU) **0.7:1** maximum FAR for 3 total dwelling units (2 ADUs)	**30′** maximum height; generally up to 2-3 stories **0.6:1** maximum FAR for 2 total dwelling units (1 ADU) **0.7:1** maximum FAR for 3 total dwelling units (2 ADUs)

Triplex	Fourplex	Cottage Clusters	Affordable Sixplex
			
30′ maximum height; generally up to 2-3 stories **0.7:1** maximum FAR for 3 total dwelling units	**30′** maximum height; generally up to 2-3 stories **0.8:1** maximum FAR for 4 total dwelling units	**25′** maximum height; generally up to 2 stories **1400 sq. ft.** maximum average floor area per dwelling unit	**35′** maximum height; generally up to 3 stories **1.2:1** maximum FAR for 6 total dwelling units

Methodology

This Middle Housing Report summarizes an analysis of new construction, addition, and alteration building permits issued from January 1, 2018 through June 30, 2024 within Portland's R2.5, R5, R7, R10, and R20 single-dwelling zones. The analysis combines permit data with two additional datasets regarding:

- Home sales activity (Portland's Regional Multiple Listing Service, RMLS)
- Participation in the Portland Housing Bureau's affordable homeownership programs–the Homebuyer Opportunity Limited Tax Exemption (HOLTE) program and Systems Development Charge (SDC) Exemption for Home Ownership program–which provide tax and fee incentives for developers to build housing at prices capped to serve homebuyers between 80% and 120% of the Area Median Income.

The bulk of the report describes the above data. Section 3 includes additional data collected by manually reviewing development plan submissions for duplexes, triplexes, fourplexes, and cottage clusters for which permits were issued between August 1, 2022 and July 31, 2023. Manual review of development plans allowed the study team to describe bedroom counts, off-street parking availability, floor-to-area ratios, and visitability for the 514 middle housing units permitted during the first year of RIP 2.

When discussing affordability, the report necessarily focuses on home sales, as such transactions are recorded in widely available, reliable data. By contrast, comprehensive historical data on rental agreements and prices for specific units are not widely available.

Additional information regarding data joining, sales price attribution, and data cleaning are included in the appendix.

Glossary

For the purposes of this report, the following terms have these meanings:

- **Accessory Dwelling Unit (ADU):** A self-contained living unit that is secondary to the main dwelling on a residential property.
- **Floor-to-Area Ratio (FAR):** A measure of the total amount of indoor space that can be built on a particular piece of land, expressed as a ratio of indoor floor area to the total area of the lot.
- **Homebuyer Opportunity Limited Tax Exemption (HOLTE):** A program managed by the Portland Housing Bureau that provides a 10-year property tax exemption for certain qualifying properties and owners.
- **House:** Detached single dwelling on its own lot that is not middle housing.
- **Middle Housing:** For this study, middle housing refers to attached houses (i.e. townhomes), duplexes, triplexes, fourplexes, affordable sixplexes, and cottage clusters, see page 7.
- **Middle Housing Land Division**: A division of one lot into multiple lots to support "fee simple" ownership of middle housing, meaning each housing unit has its own separate lot.
- **RIP 1:** Package of zoning code updates that went into effect August 1, 2021 enabling triplexes through sixplexes on many lots throughout the City.
- **RIP 2:** Package of zoning code updates that went into effect July 1, 2022 that extended middle housing allowances and facilitated land divisions.
- **SD Zones:** Refers to the Single-Dwelling Zones where RIP expanded housing types are allowed: R2.5, R5, R7, R10, and R20.
- **System Development Charge (SDC) Exemption Program:** Waives payment of SDCs for units that are sold or rented at or below Portland Housing Bureau program required sales or rent levels.

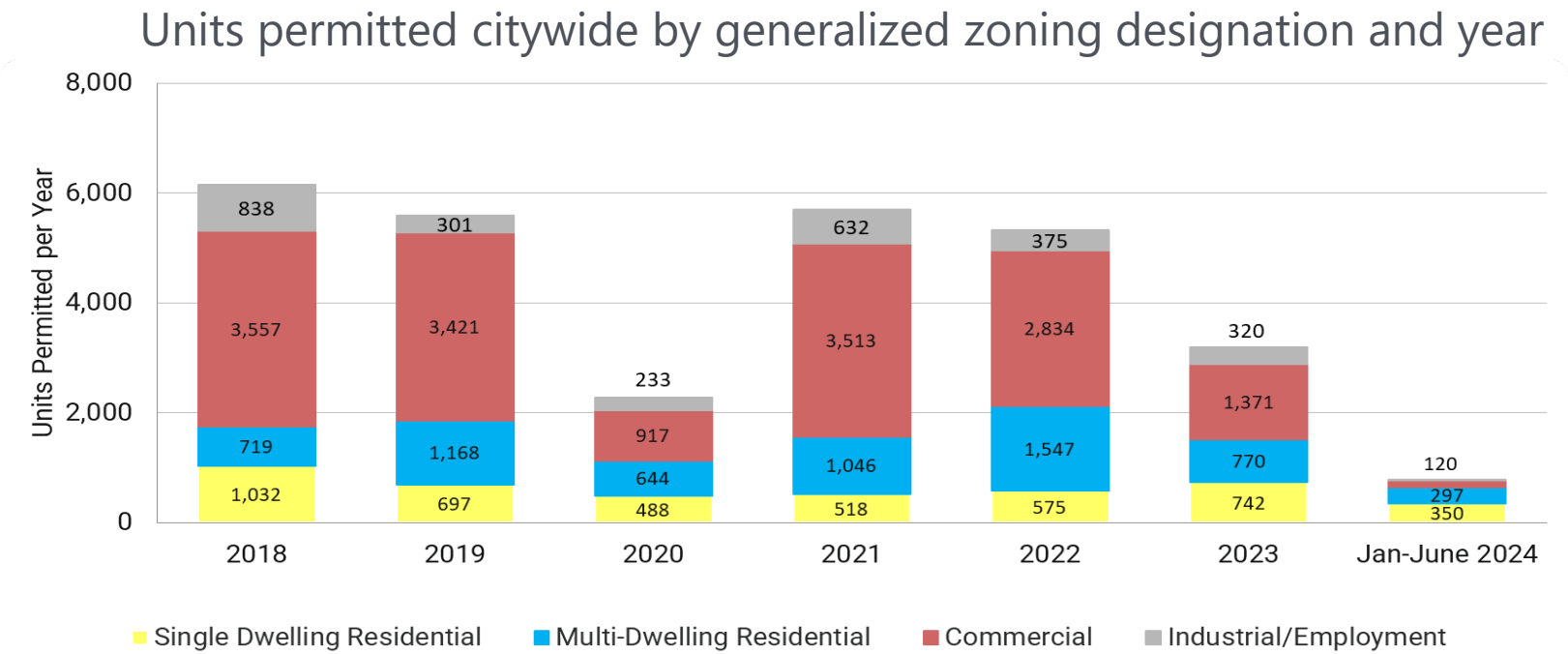
Section 02: Production

How much middle housing has been built in the single-dwelling zones?

This section describes the amount of housing permit activity observed in Portland's single-dwelling zones. The section focuses on middle housing permits, summarizing data on the types of middle housing that were permitted.

Housing production in single-dwelling zones has historically totaled under 1,000 units per year, or 10-20% of total city activity

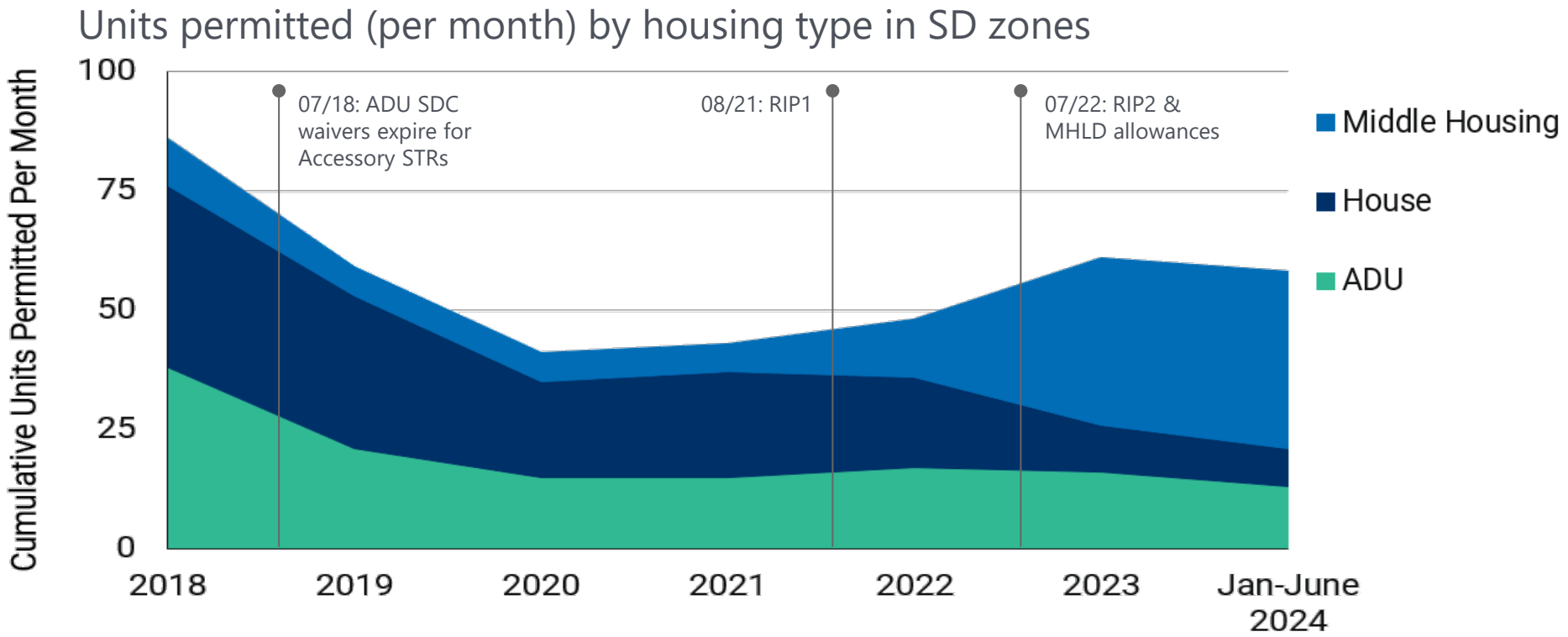
Middle housing has allowed for more housing production during a time of reduced development activity in commercial and multi-dwelling zones. Historically, permits in single dwelling zones have only accounted for 10-20% of the city's total housing production. As development activity slowed in commercial and multi-dwelling zones, single-dwelling zones have contributed a greater percentage to the city's overall housing permitting activity - 23% in 2023 and 43% in the first half of 2024.



Note: Permit data for Single-Dwelling Residential zones was extensively cleaned for this report. Extensive data cleaning was not conducted for other generalized zones in the chart above that were not this report's focus. This may cause permitting estimates for those zones to be inflated due to accidental double counting and other data entry errors that occur during permitting. See the Appendix for more information on the report's data cleaning process.

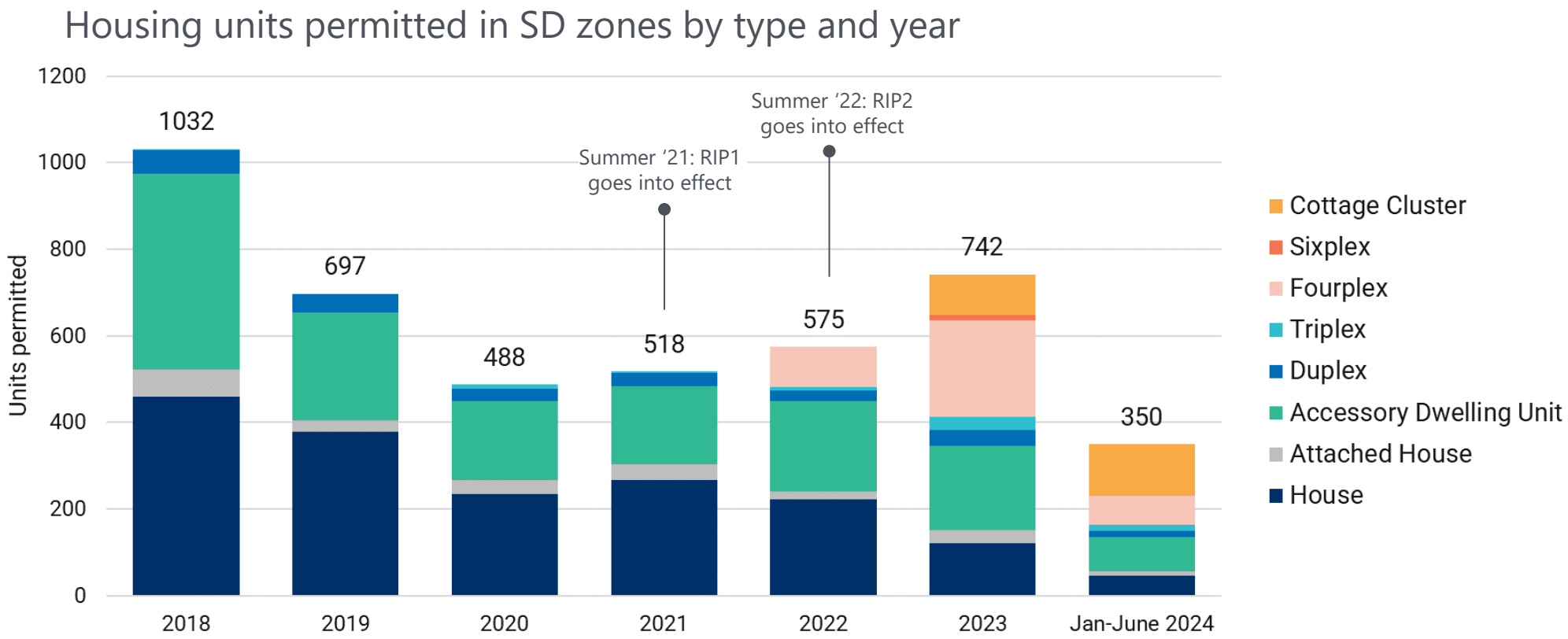
Middle housing production in single-dwelling zones has accelerated since adoption of RIP in 2021

From 2018 through 2021, middle housing production was consistently low. In 2021 and 2022, RIP Parts 1 and 2 came into effect and the state legislature adopted an expedited land division process for middle housing (MHLD). These factors marked a shift in permitting in the R2.5, R5, R7, R10, and R20 zones away from single detached houses toward middle housing.



After RIP, developers began experimenting with new middle housing types, focusing on fourplexes & cottage clusters

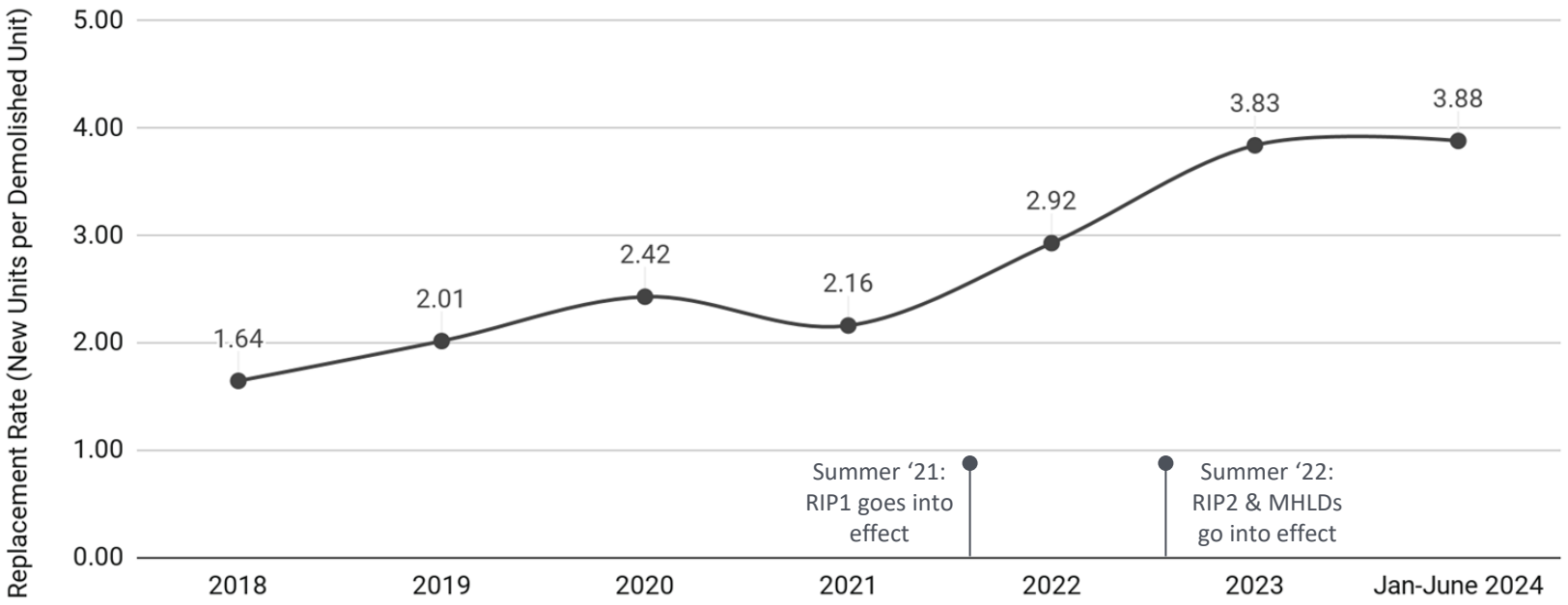
RIP rules were developed with broad input from Portlanders. Shortly following adoption of RIP1, the development community responded by building a greater variety of "plexes." With the adoption of RIP2, an even more diverse array of housing types have become the norm for new home construction in Portland's residential neighborhoods. Consequently, the share of detached houses has fallen from nearly half of new units in SD zones to less than 20% of new units in the 2023-June 2024 period.



About twice as many units are produced per demolition compared with before RIP's adoption

Before RIP's adoption, for every demolition in an R2.5-R20 zone that resulted in new construction, about two homes were built on average. After RIP's adoption, that figure rose to roughly four homes per demolition. This realizes a goal of RIP reforms: when a demolition occurs, the community receives the benefit of greater housing production in return.

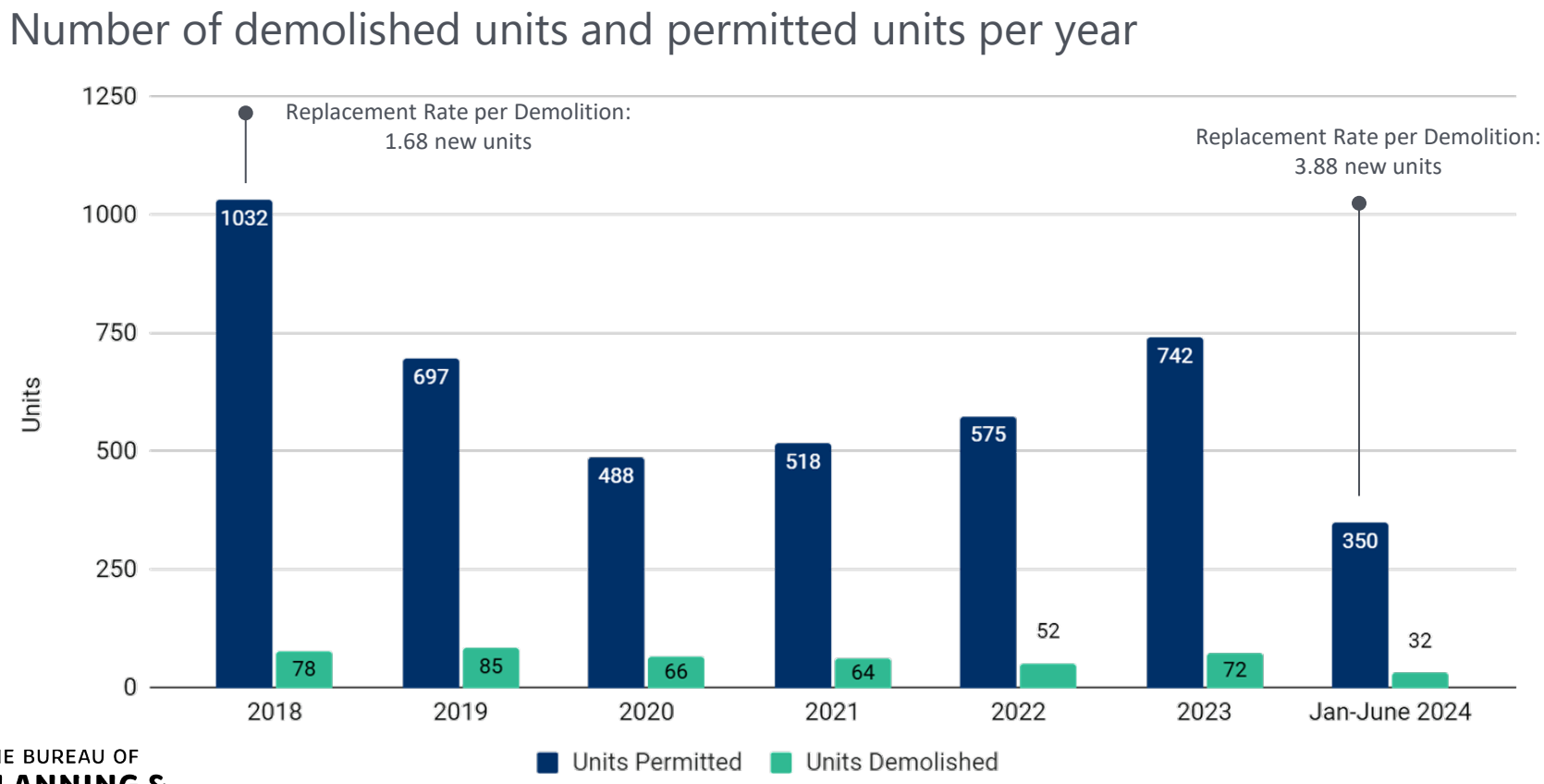
Count of units permitted per demolished unit, annualized average



Note: The replacement rate reflects the count of units developed only on sites with demolitions, not total units built to total demolitions per year.

Demolitions associated with new home construction have not risen since RIP's adoption

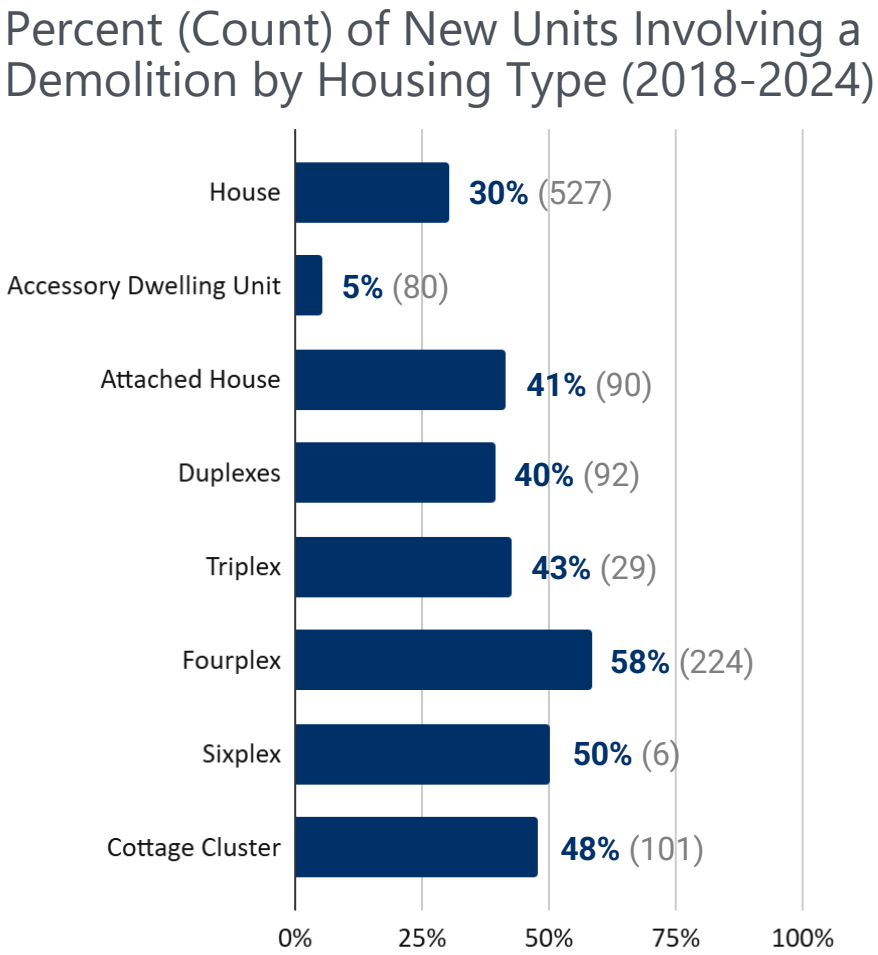
From January 1, 2018 through June 30, 2024, demolitions associated with new home construction in the R2.5-R20 zones remained flat, despite middle housing allowances. This confirms the idea that significantly more infill housing production is possible without major spikes in demolitions.



New fourplexes are the middle housing type most likely to involve a demolition

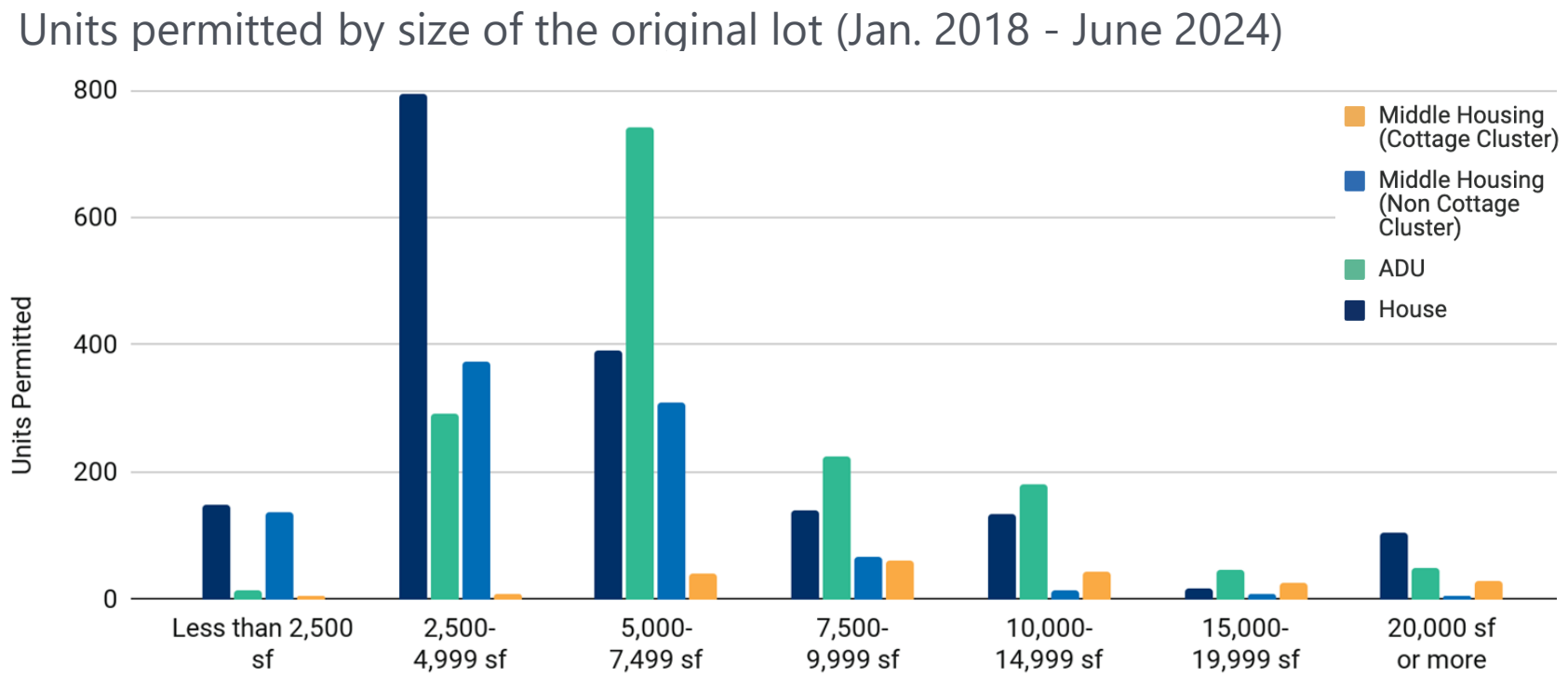
In the R2.5-R20 zones from January 2018 through June 2024:

- About 30% of newly built houses (i.e. single detached units) involved a demolition
- Less than half of new units belonging to certain middle housing types involved a demolition: attached houses (i.e. townhomes), duplexes, triplexes, and cottage clusters
- Fourplexes and sixplexes most commonly involved a demolition (58% and 50% respectively)
- New accessory dwelling units rarely involved a demolition, as they are commonly placed in empty yard space adjacent to a main house. Those ADUs that the permit data flagged as involving a demolition almost always were part of a broader development project that added single detached houses or middle housing units along with the ADUs.



Over the past five years, new detached single houses have tended to be built on smaller lots and ADUs on larger lots

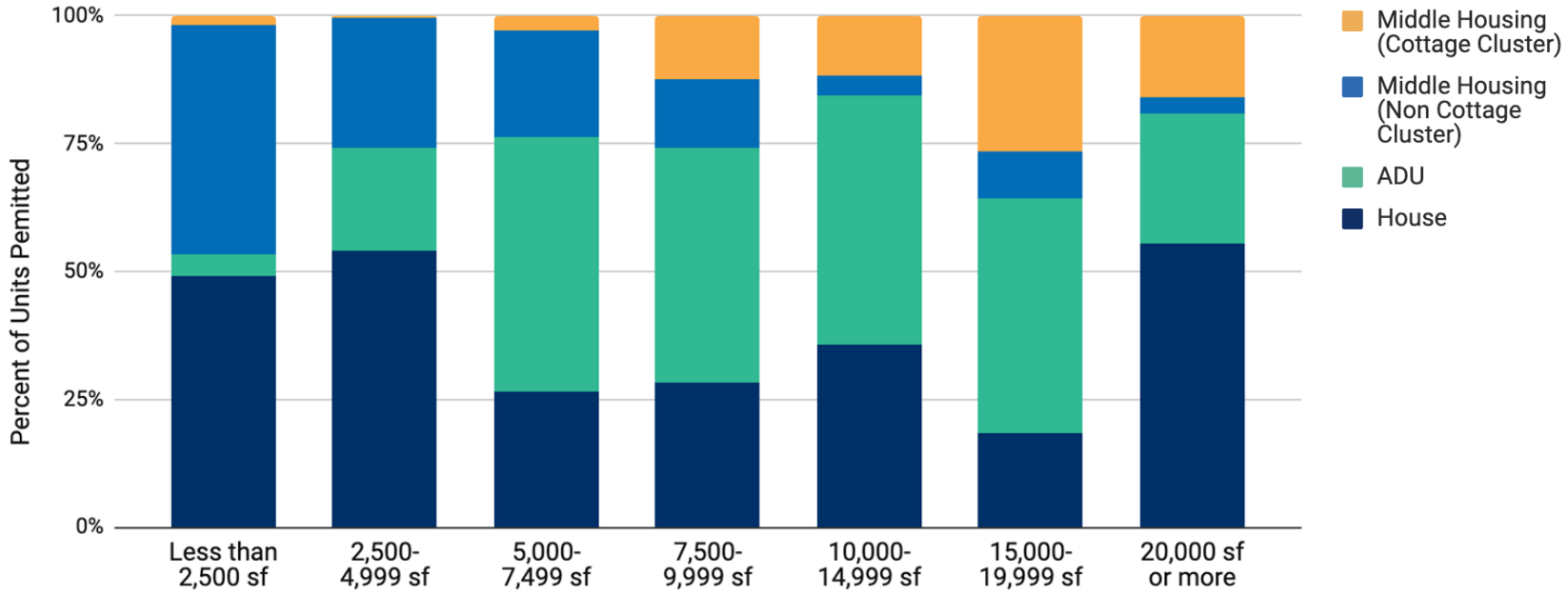
Detached houses tend to be built on smaller lots, perhaps due to rising costs of infill land in Portland's residential neighborhoods. Conversely, the extra lot area needed to comfortably fit a detached ADU favors larger lots. Middle housing projects appear to work across a range of lot sizes. Due to the variety of types that fall within the category of middle housing (from duplexes to cottage clusters), there appears to be a middle housing product for every lot size.



Cottage clusters make up a significant portion of permits issued on larger lots

While middle housing is being built on lots of all sizes, cottage clusters are the most prevalent type of middle housing receiving permits on larger lots. Cottage clusters make up the most substantial portion of middle housing units built on lots larger than 10,000 square feet, and they make up over a quarter of all permits issued on lots from 15,000 to 20,000 square feet.

Share of units permitted by size of the original lot (Jan. 2018 - June 2024)

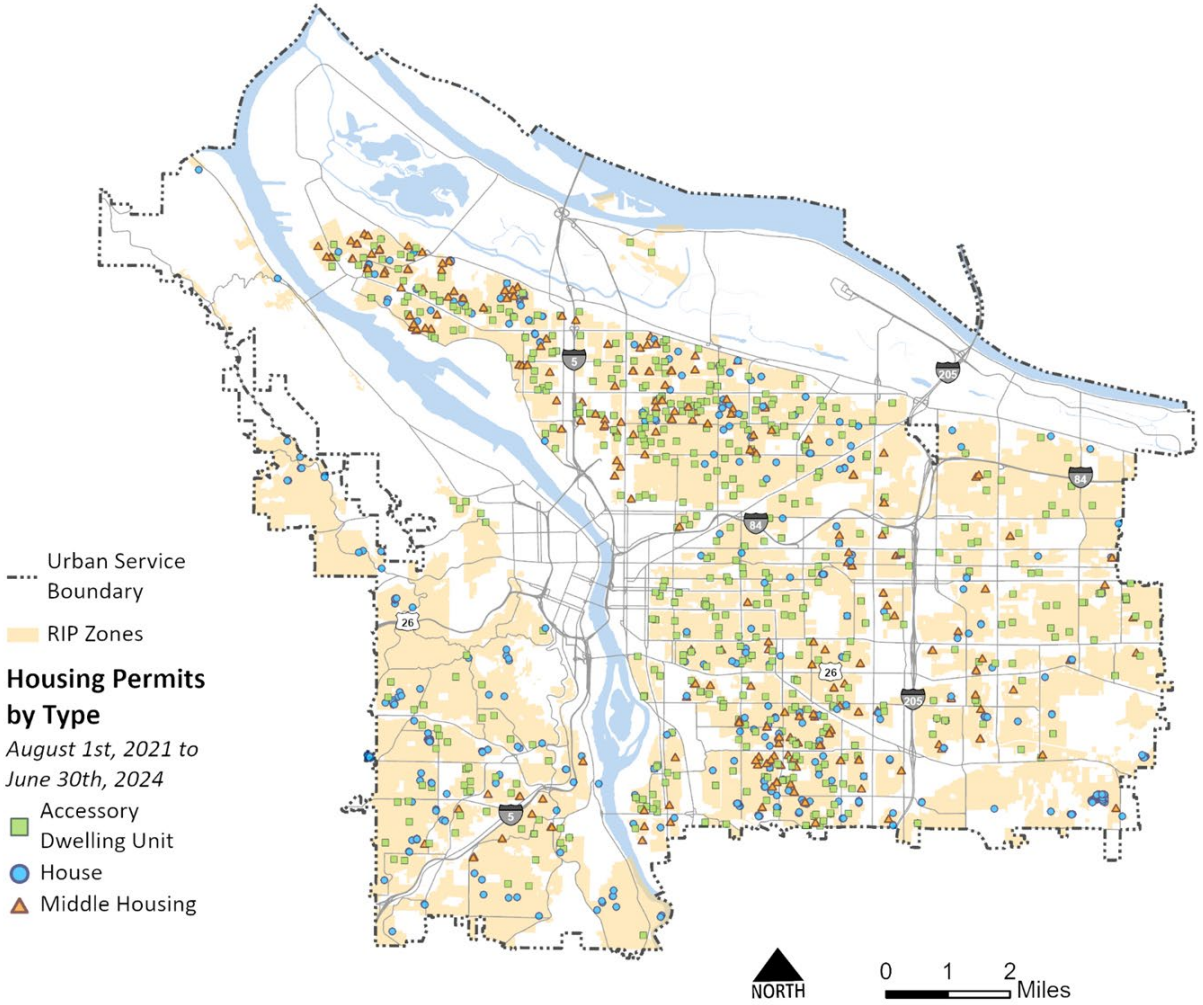


Section 03: Location

Where in the single-dwelling zones is middle housing being built?

This section describes the geographic areas where middle housing development was located. The section summarizes data on the neighborhoods, zones, and lots where middle housing was built.

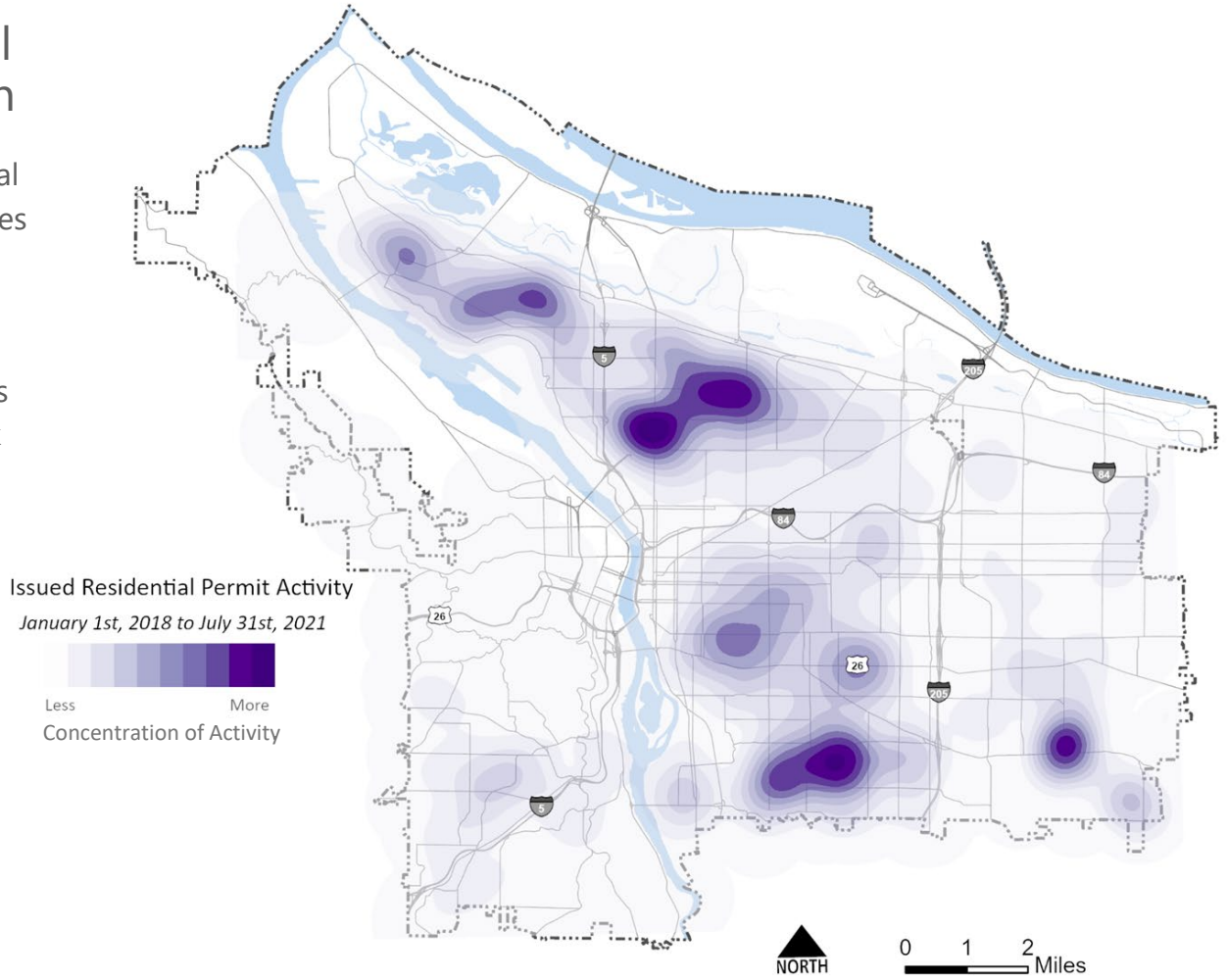
Housing production in single-dwelling zones is most common east of the Willamette River, with a mix of housing types being built



Prior to RIP adoption, residential permits in single-dwelling zones were concentrated in eastside neighborhoods west of I-205

Concentration of Residential Permits Before RIP Adoption

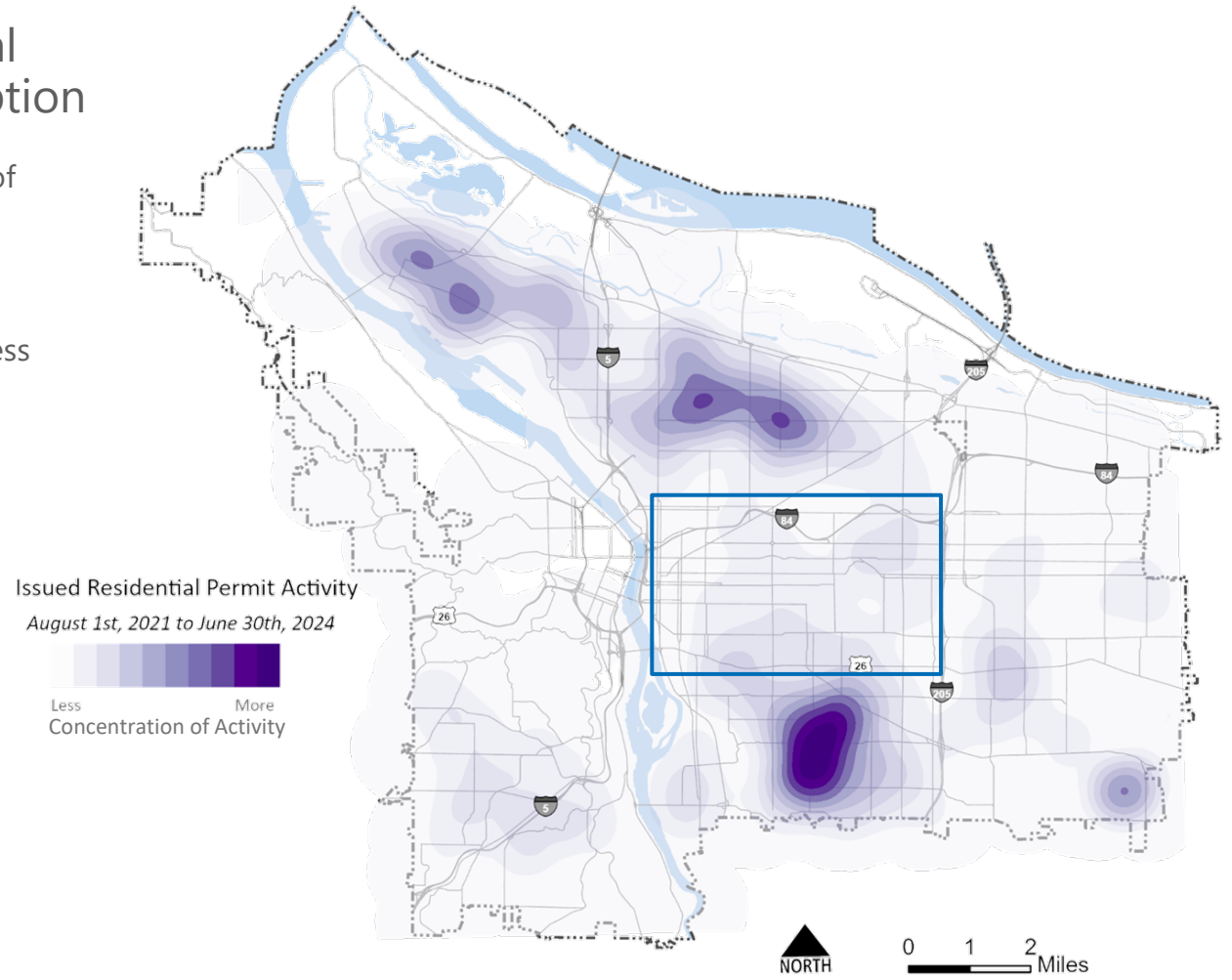
Prior to adoption of RIP in 2021, residential permit activity in the R2.5, R5, and R7 zones was spread fairly evenly across inner neighborhoods west of I-205. The two largest clusters were in and around the Concordia and Boise/Elliot neighborhoods in Northeast Portland and the Woodstock neighborhood in Southeast Portland. Powellhurst Gilbert in East Portland also saw significant activity.



Post RIP, permit distribution is similar, with less activity between the Willamette River, I-205, I-84, and Powell Boulevard

Concentration of Residential Permits Following RIP Adoption

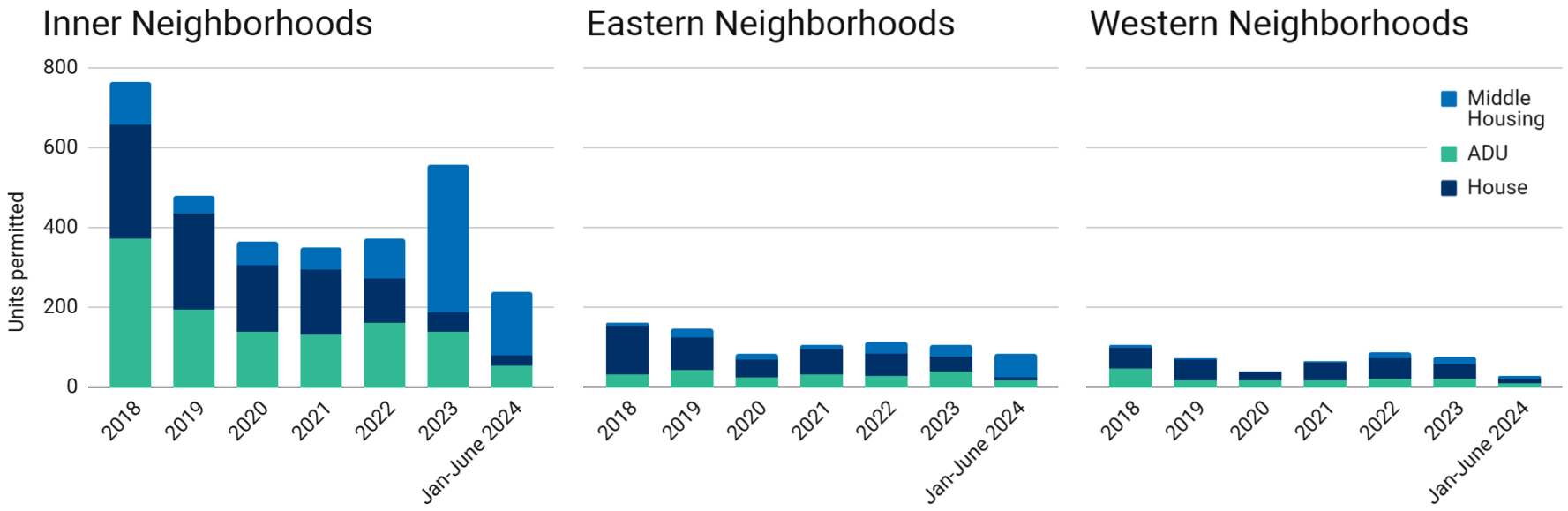
Following RIP adoption, the distribution of permit activity has remained quite similar with most activity occurring in inner neighborhoods between I-205 and the Willamette River. The main exception is less activity in Eastside neighborhoods like Richmond, Sunnyside, and Montavilla (highlighted by the blue box) as well as Powellhurst Gilbert.



Permit activity in SD zones is most common in inner Portland residential neighborhoods

Following RIP going into effect in 2021, permitting in Inner Neighborhoods rose for two years, powered in large part by middle housing. Middle housing now comprises a much larger share of permitting activity in residential neighborhoods than prior to RIP's passage. These data are limited to 2018 through the first half of 2024, but if 2024's pace continues, permitting in Inner Neighborhoods will land between 2022 and 2023 levels. Permitting in R2.5 through R20 zones in Eastern and Western Neighborhoods has remained low and fairly consistent over the past half decade. See the Appendix for a map of neighborhood pattern areas.

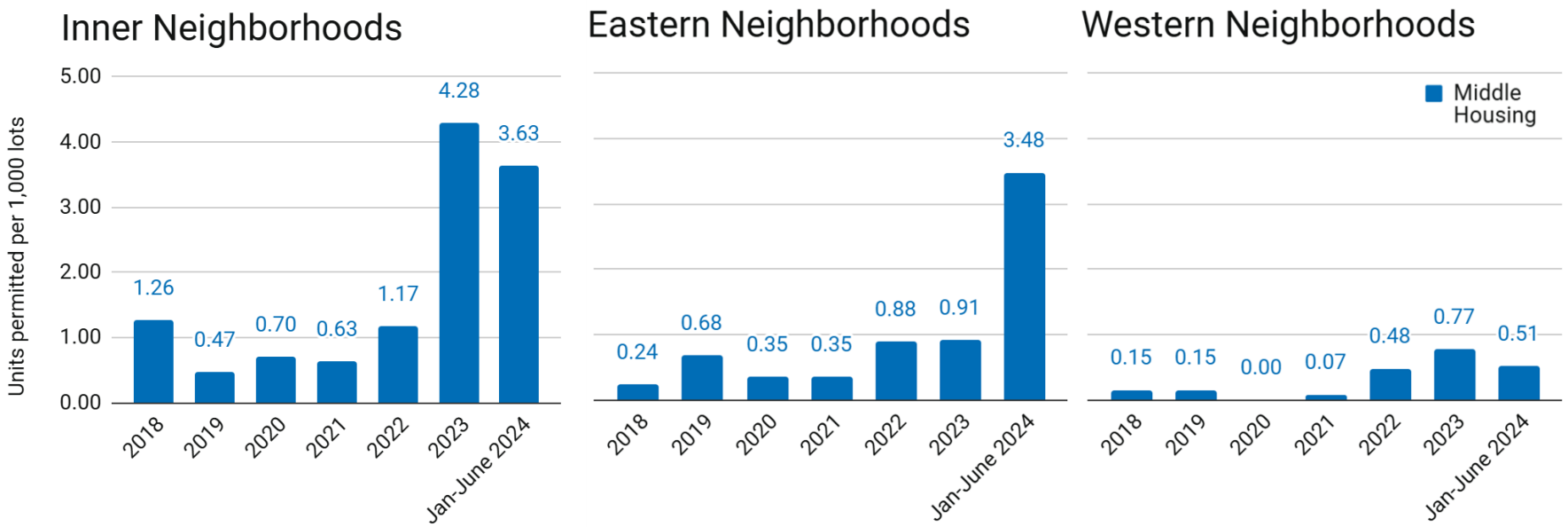
Permitted units by type and pattern area



Both Eastern and Western Neighborhoods have seen increases in middle housing permits on a per lot basis

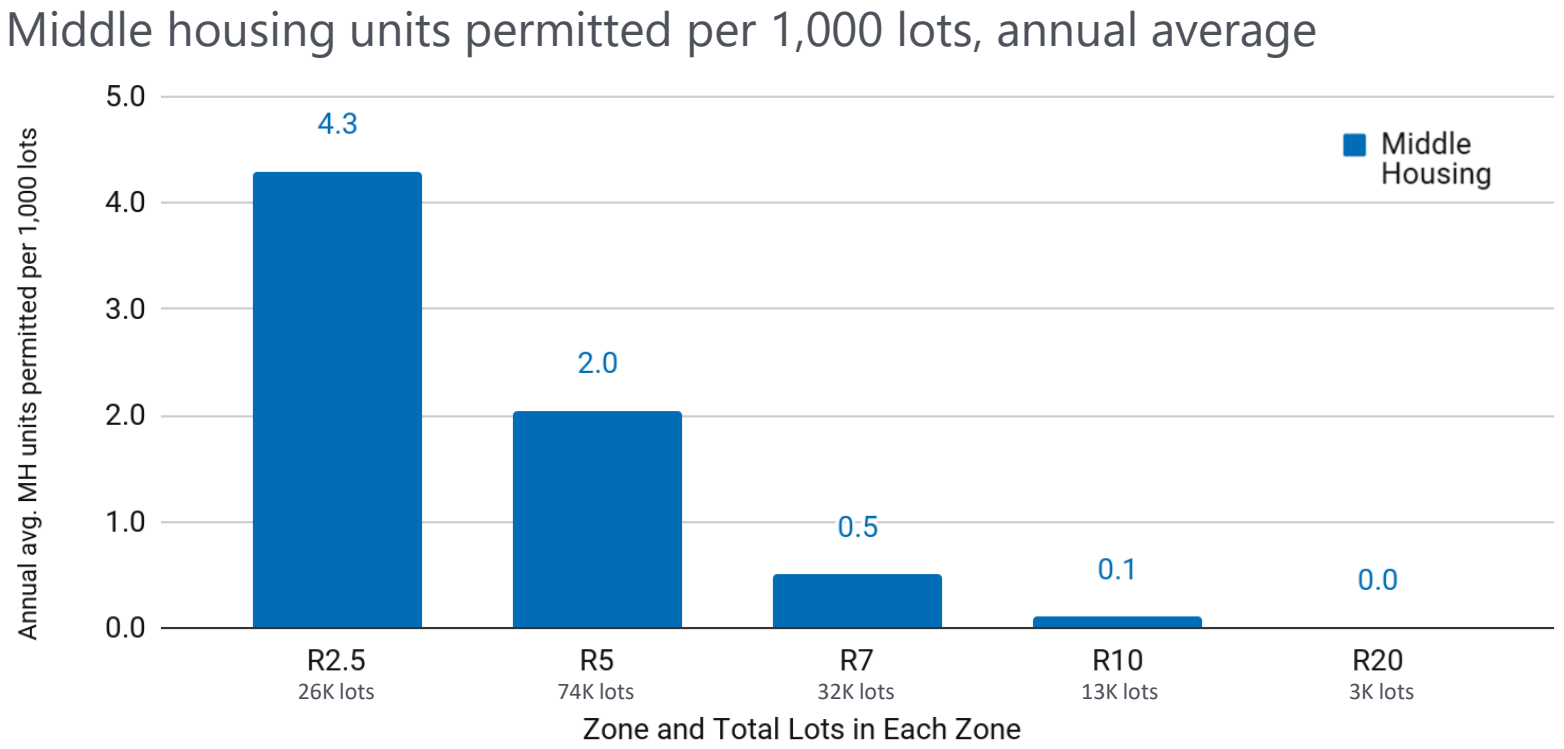
Inner Neighborhoods saw about 3 to 4 middle housing units permitted for every 1,000 lots in SD zones in 2023 and the first half of 2024. While this does not include permitting activity for single detached houses and ADUs, it does demonstrate that infill has occurred gradually in Portland's Single-Dwelling Zones. Furthermore, the data show that Eastern Neighborhoods saw significant increases in middle housing permitting rates on a per lot basis. Even Western Neighborhoods, which have relatively little activity, saw significant proportional increases, with per lot permitting activity increasing 5 to 10 times following RIP. See the Appendix for a map of neighborhood pattern areas.

Middle housing units permitted per 1,000 lots in SD zones by year



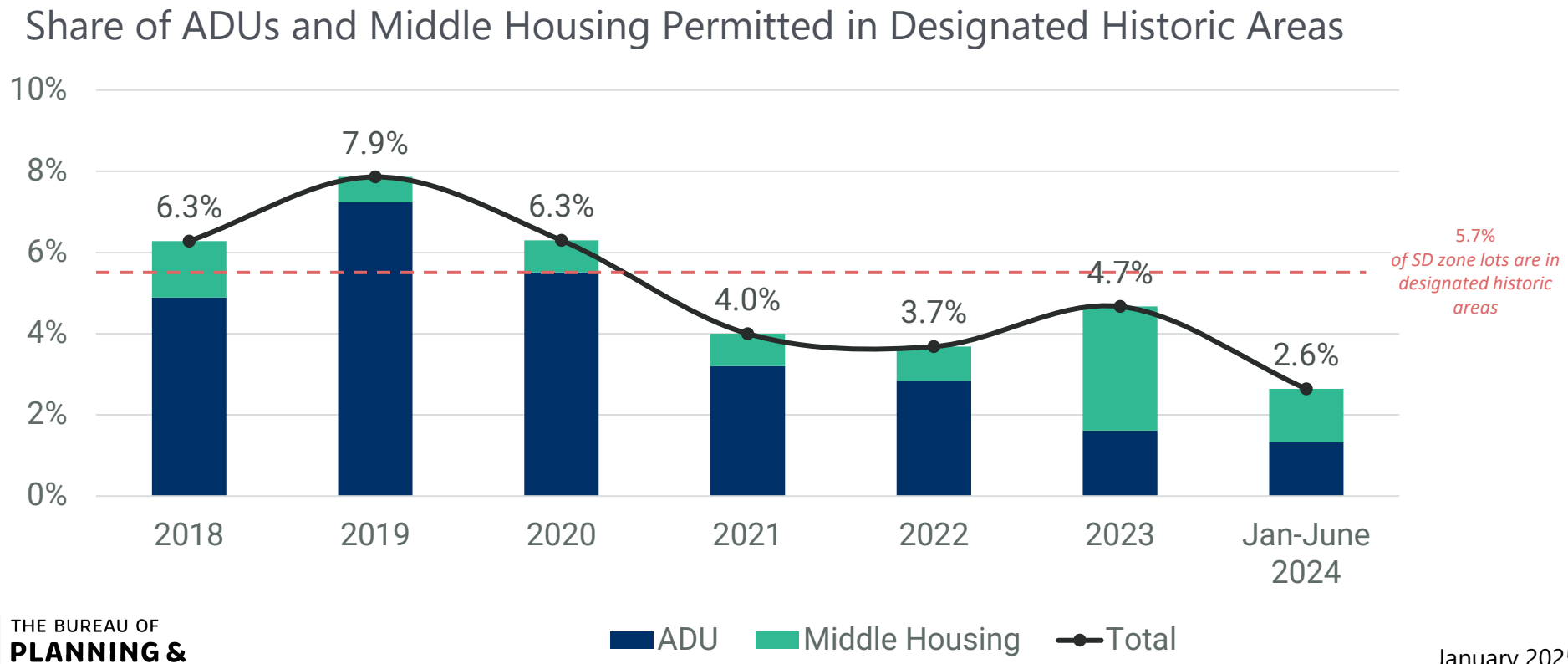
A higher concentration of middle housing has been built in the R2.5 zone

Developers of middle housing appear to prefer lots in the R2.5 zone by a factor of at least 2:1. Each year, just over 4 units of middle housing are permitted for every 1,000 lots in the R2.5 zone. This number is 2 units per 1,000 lots in the R5 zone and lower for remaining zones. This could be due to the higher incremental FAR granted for each additional unit in the R2.5 zone or a function of that zone's proximity to services, commercial districts, and public transportation.



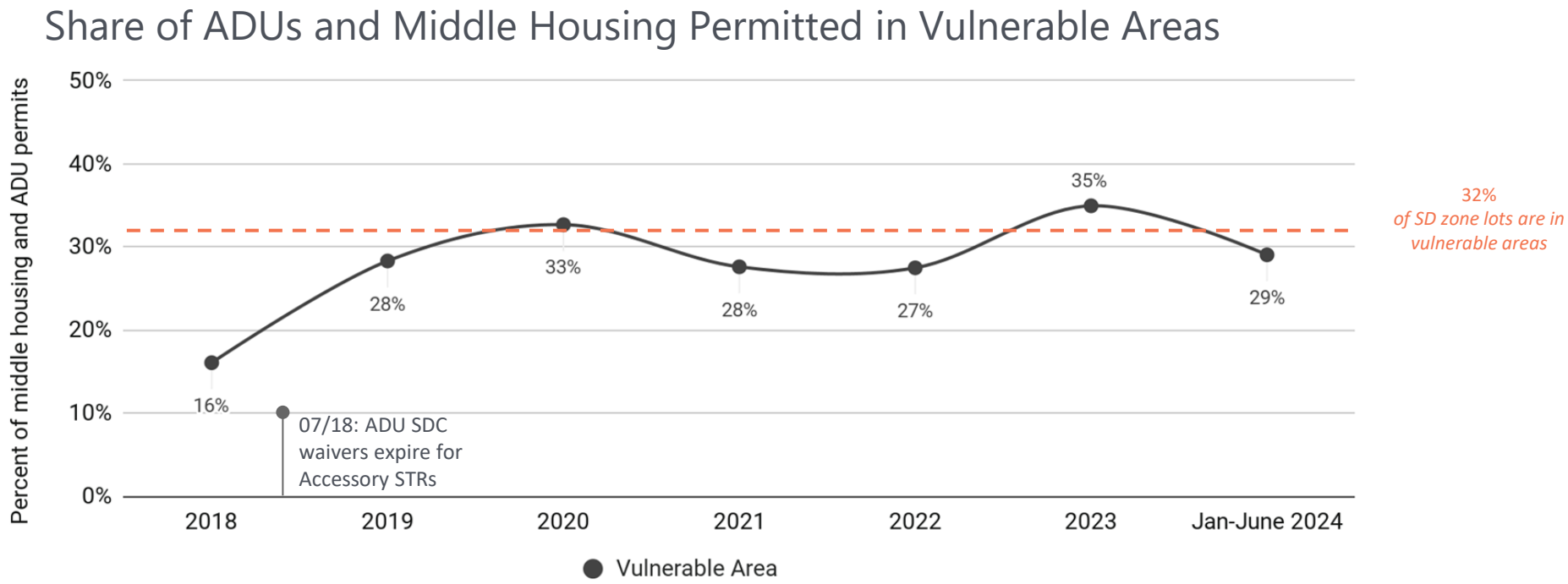
Designated Historic Areas experience less middle housing and ADU production

Since 2018, more than 90% of middle housing and ADU permits have been granted outside of designated Historic, Conservation, and National Register Districts. Since 2021, permitting in these designated historic areas has fallen below those areas' share of RIP zone lots. If this trend holds, it may be explained by builders seeking to avoid additional layers of regulation and discretionary approval that may be required for some types of development in these areas. See the Appendix for a map of Designated Historic Areas.



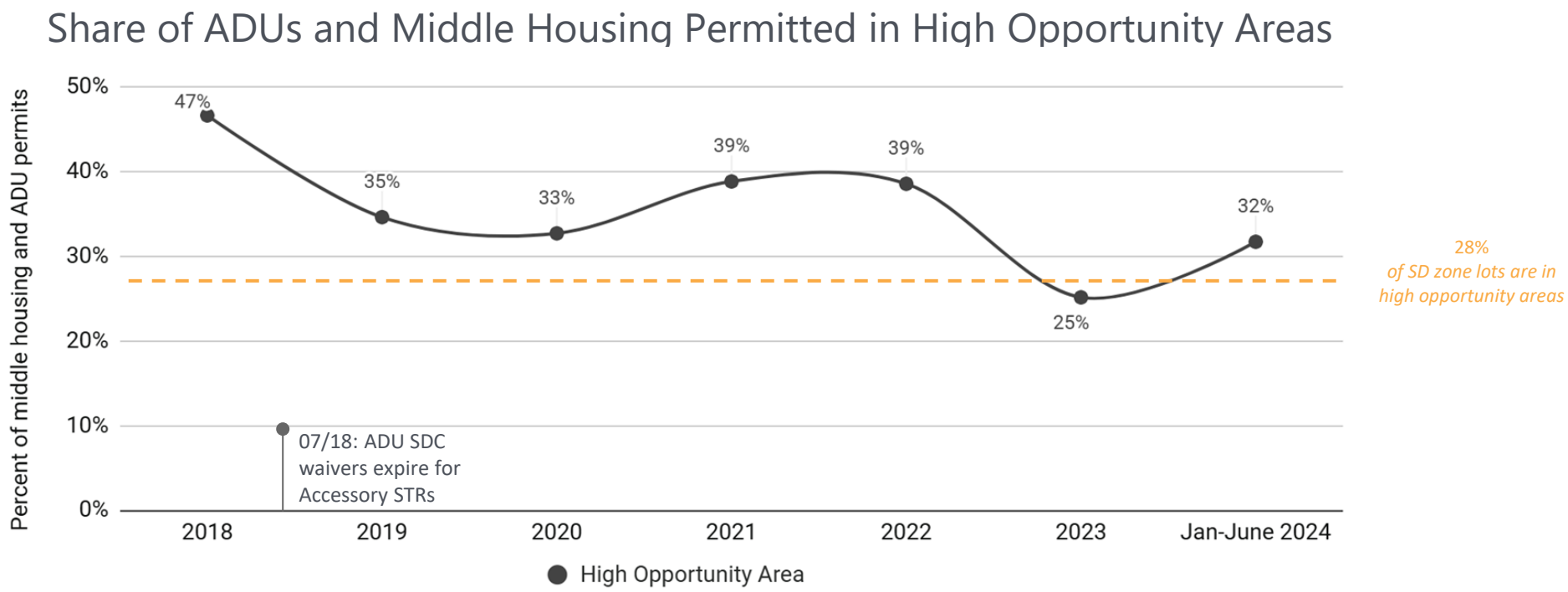
Neighborhoods vulnerable to displacement see middle housing and ADU permitting in line with their share of single-dwelling zone lots

32% of all the lots within SD zones are located in vulnerable areas–meaning neighborhoods that have more people at risk of displacement than usual (e.g. cost-burdened renters). Vulnerable areas tend to see middle housing and ADU permitting in line with their share of such lots. One could assert that since 2018 permitting in vulnerable areas has risen. However, 2018 could be an outlier year, as it was the last year that SDC waivers were offered for ADUs that became accessory short-term rentals (ASTRs). Historically, many ADUs were built in high opportunity areas, which reduces the share of permitting activity shown in vulnerable areas. See the Appendix for a map of vulnerable areas.



High opportunity areas have historically seen more middle housing and ADU permitting than their share of RIP-zone lots

High opportunity areas contain 28% of RIP-zone lots. However, high opportunity areas generally tend to receive more than 28% of permitting activity for middle housing and ADUs. The data does not yet show a definitive chronological trend. One could assert that since 2018 permitting in high opportunity areas has fallen. However, 2018 could be an outlier year, as it was the last year that SDC waivers were offered for ADUs that became accessory short-term rentals (STRs), many of which have been built in high opportunity areas. See the Appendix for a map of high opportunity areas.



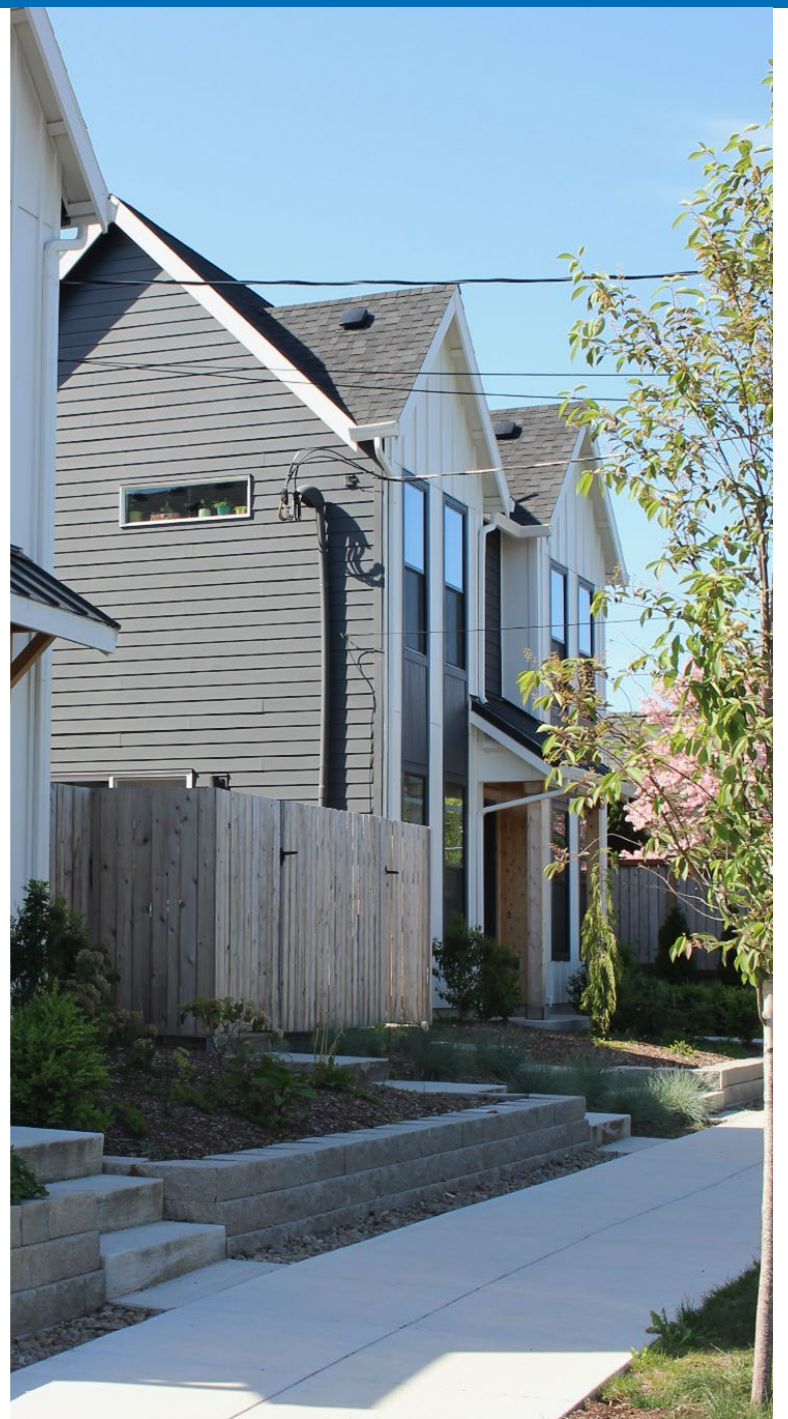
Section 04: Housing Type

What kinds of middle housing were built in single-dwelling zones?

This section explores in greater detail the middle housing typologies developers are building.

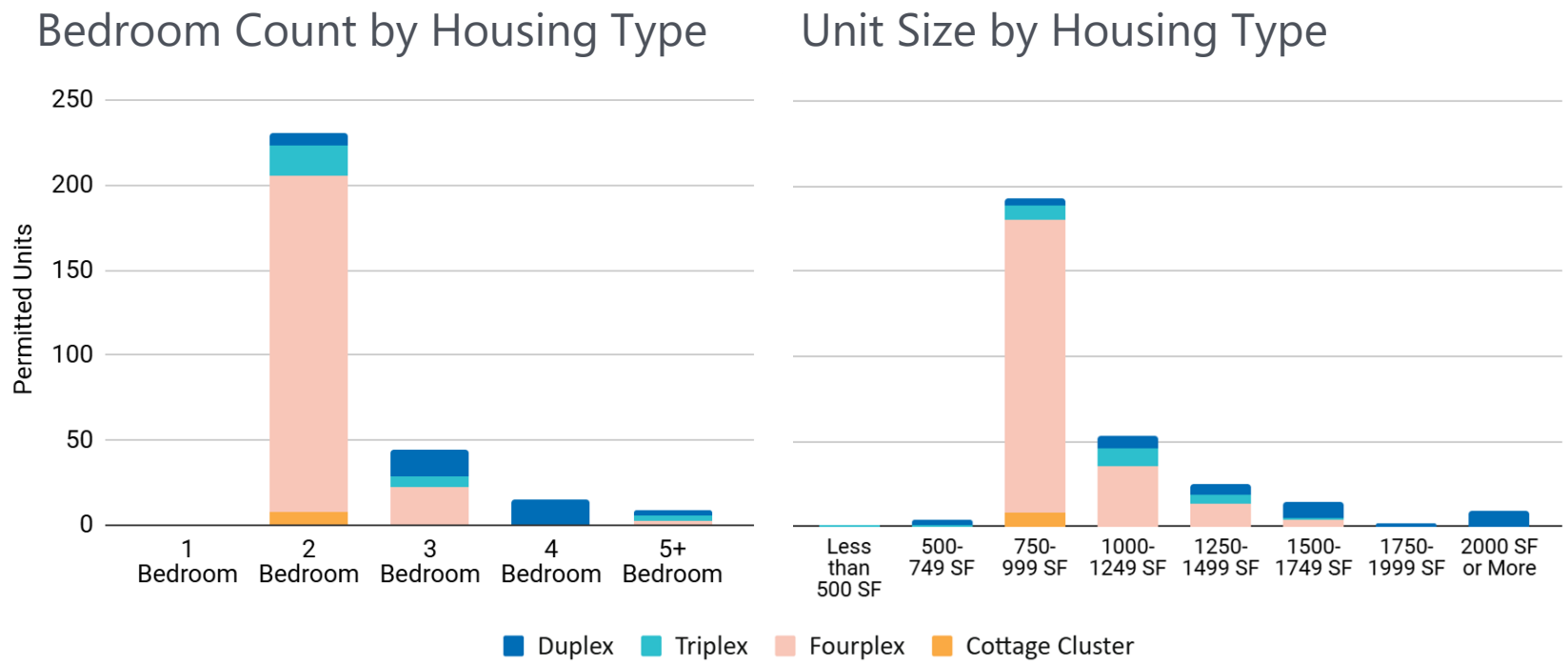
The data in this section draws from a different time period than the data reflected in other sections of this report, to more closely examine the types of units produced in the first year following the adoption of RIP2.

The data was gathered through a manual review of permits issued between August 1, 2022 and July 31, 2023 for new construction and alteration projects in SD zones, covering 514 new duplex, triplex, fourplex, and cottage cluster units.



In the first year of RIP2, 2-bedroom units at roughly 900 square feet were the most common permitted product type

The vast majority of these 2-bedroom units were built in fourplexes, with each unit being roughly 900 square feet in size and having a small back patio or yard.



Note: This data reflects permits issued between August 1, 2022 and July 31, 2023 for new construction and alteration projects encompassing 514 new duplex, triplex, fourplex, and cottage cluster units. This data does not characterize all development in RIP-affected zones, nor market activity after July 2023.

RIP is helping to provide housing that is more accessible for older adults and people with mobility issues, but the units are still not fully accessible.

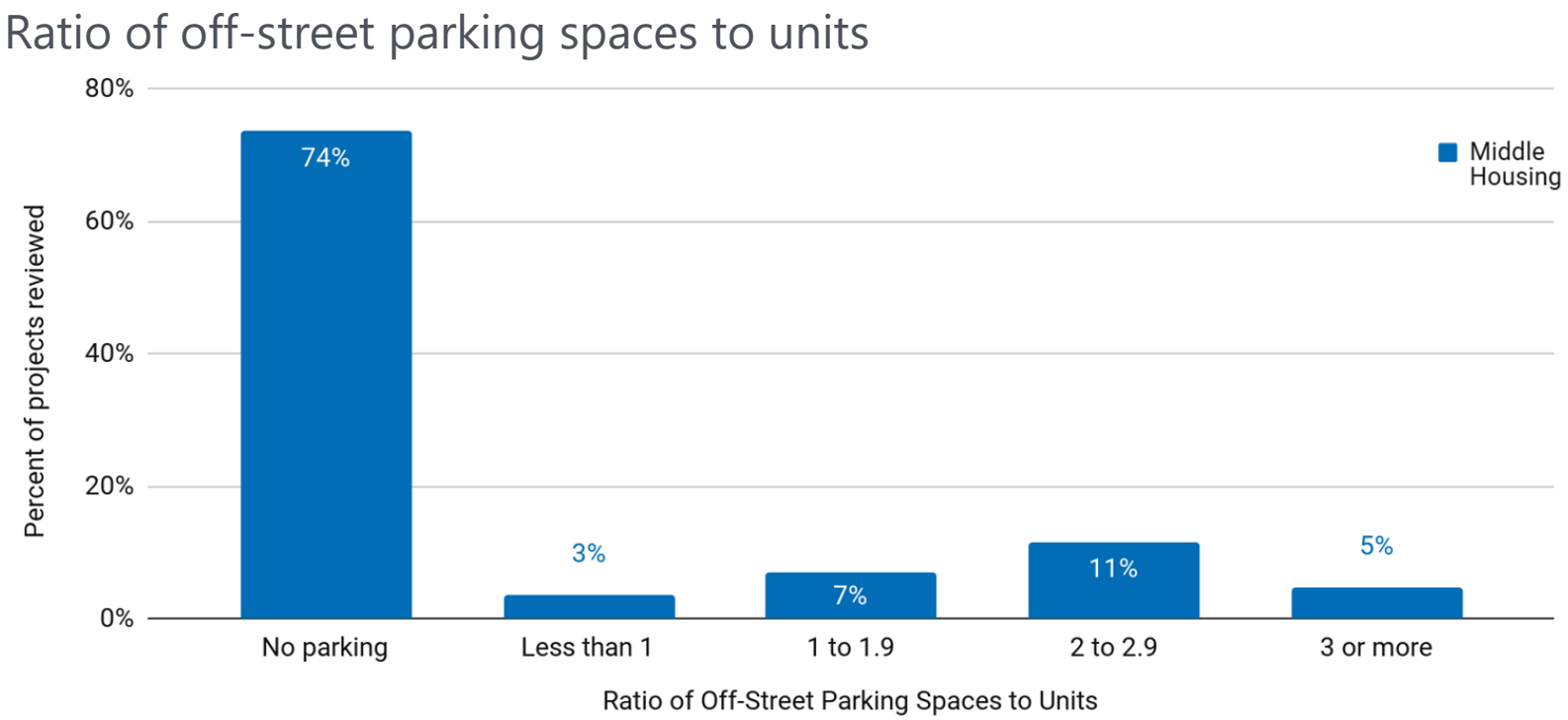
For new middle housing projects with three or more units on a site (including ADUs), one unit must be "visitable." In cottage clusters, one-third of the units must be visitable.

Visitable units are more physically accessible than typical units, as they must include a no step, barrier-free main entrance as well as other accessibility features like a ground-floor bathroom that accommodates a wheelchair turn radius.

The study team assessed triplexes, fourplexes and cottage clusters permitted between August 1, 2022 and July 31, 2023 and found that 30 of 122 units met these visitability requirements. However, only two of those units included ground floor bedrooms. This is likely due to their side-by-side format which results in smaller unit footprints, as opposed to being stacked (where one unit sits atop another) which would offer more ground floor space for one unit to be more accessible. However, none of the plans included stacked units.

Off-street parking is not provided in nearly three quarters of middle housing projects

As was the case with projects studied prior to the adoption of RIP2, the vast majority of middle housing projects are built without off-street parking. This is confirmed by developers who cite space constraints as the primary factor.



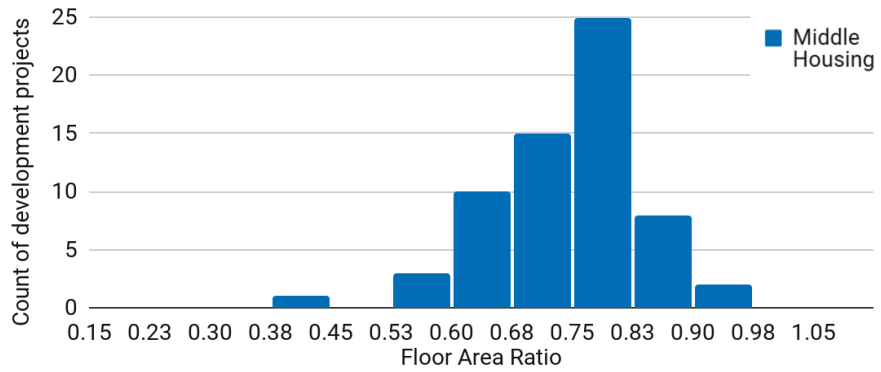
Note: This data reflects permits issued between August 1, 2022 and July 31, 2023 for new construction and alteration projects encompassing 514 new duplex, triplex, fourplex, and cottage cluster units. This data does not characterize all development in RIP-affected zones, nor market activity after July 2023.

Projects that do not provide parking generally achieve a higher floor-to-area (FAR) ratio

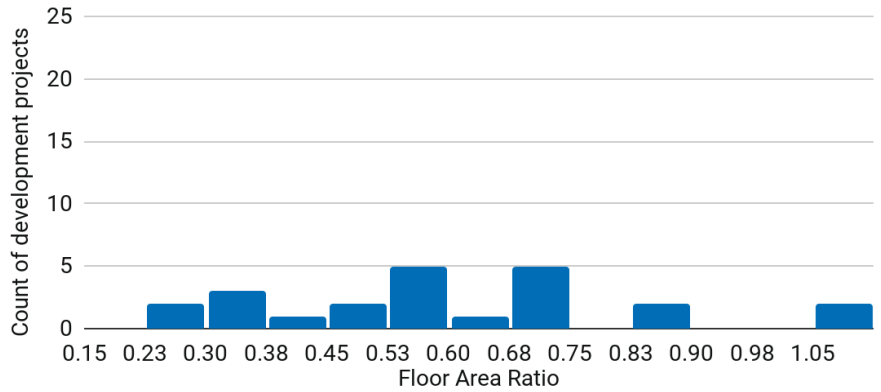
The FAR achieved by projects that do not provide off-street parking is generally higher than those that do. This is likely due to space constraints on smaller lots that create a tradeoff between leasable/sellable space and parking. For developers, maximizing leasable/sellable indoor space while complying with open space requirements is typically more profitable than providing off-street parking. Furthermore, selling or leasing properties without parking serves as proof to developers that some buyers will accept no on-site parking in favor of lower housing cost or a more attractive location.

Note: This data reflects permits issued between August 1, 2022 and July 31, 2023 for new construction and alteration projects encompassing 514 new duplex, triplex, fourplex, and cottage cluster units. This data does not characterize all development in RIP-affected zones, nor market activity after July 2023. Projects typically encompass multiple new units.

FAR of projects without off-street parking (n = 64)

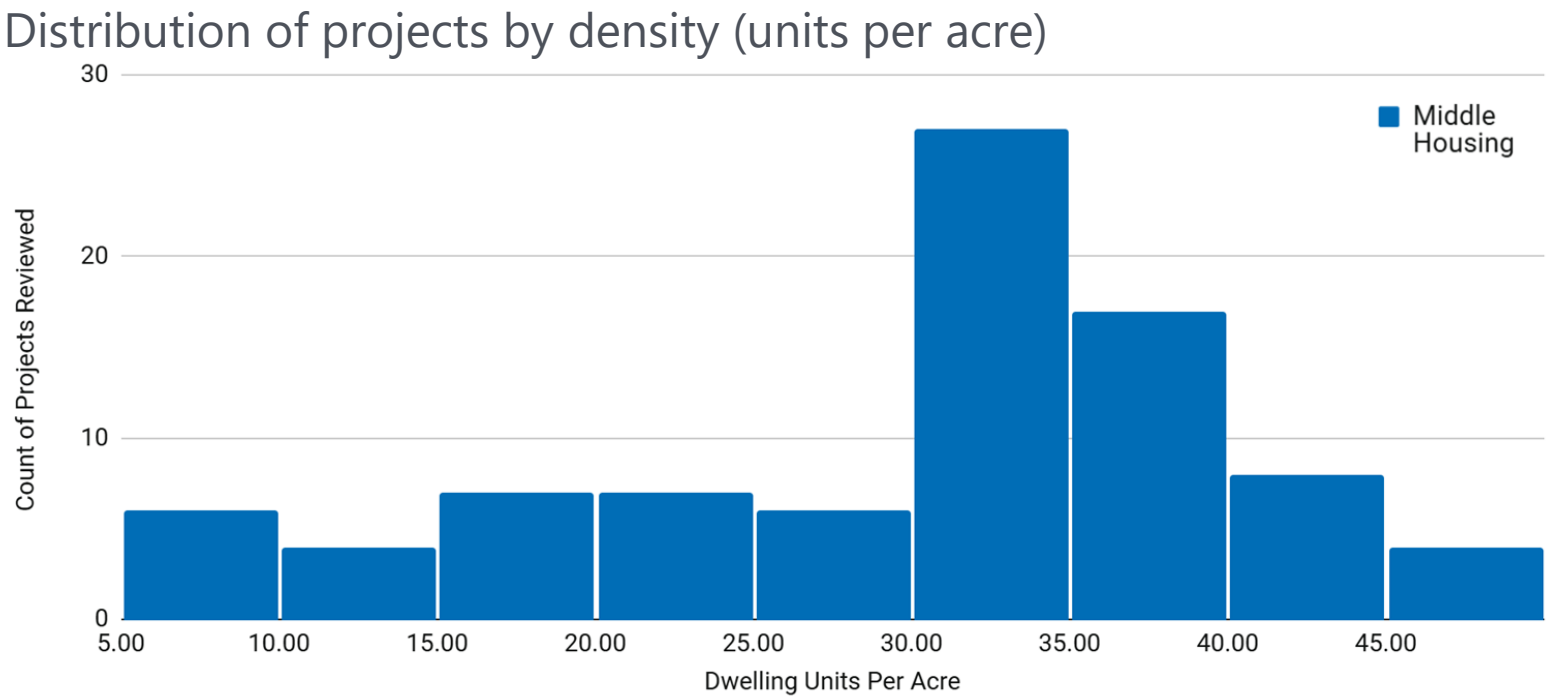


FAR of projects with off street-parking (n = 22)



The most common density among middle housing projects was 30-40 dwelling units per acre

Middle housing projects varied in their dwelling unit density, from as few as 5 units per acre to as many as 48 units per acre – a new fourplex on a 3,625 sf lot in the R2.5 zone. The most common density, 30-40 dwelling units per acre, likely reflects the many fourplexes built on ~5,000 square foot lots.



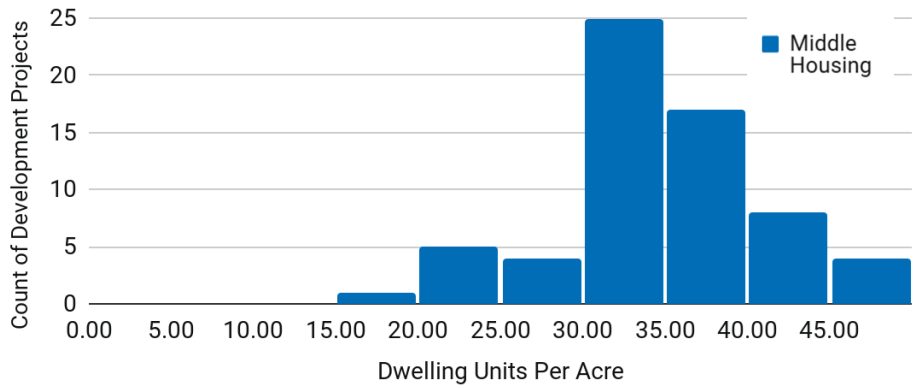
Note: This data reflects permits issued between August 1, 2022 and July 31, 2023 for new construction and alteration projects encompassing 514 new duplex, triplex, fourplex, and cottage cluster units. This data does not characterize all development in SD zones, nor market activity after July 2023.

Projects that do not provide parking generally achieve a higher density of units per acre

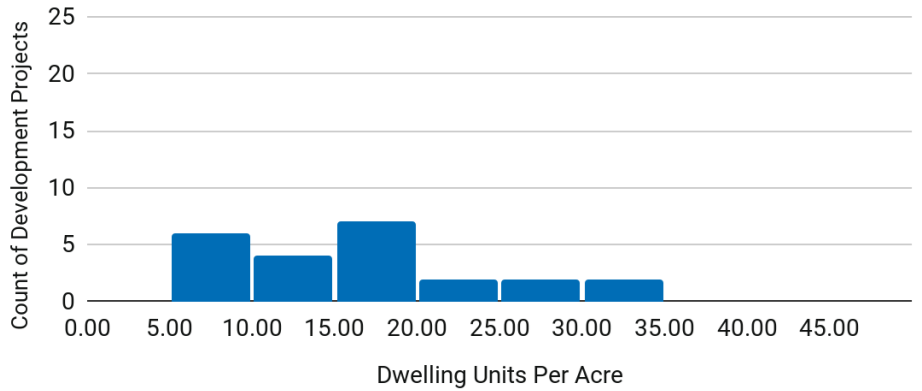
Similar to trends in FAR, the per-acre unit densities achieved by projects that do not provide off-street parking are generally higher than the densities of projects that do. For developers, maximizing units is typically more profitable than providing off-street parking.

Note: This data reflects permits issued between August 1, 2022 and July 31, 2023 for new construction and alteration projects encompassing 514 new duplex, triplex, fourplex, and cottage cluster units. This data does not characterize all development in RIP-affected zones, nor market activity after July 2023. Projects typically encompass multiple new units.

Density of projects without off-street parking (n = 64)



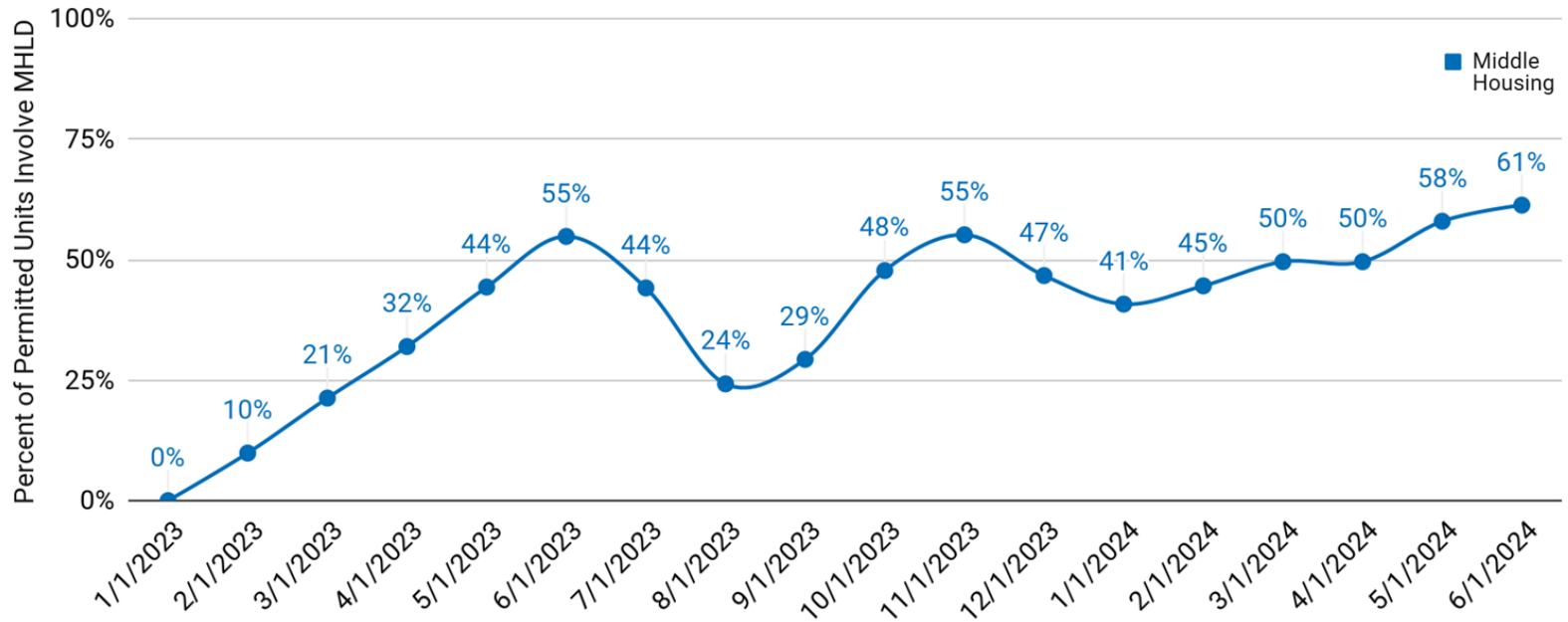
Density of projects with off street-parking (n = 22)



Over 50% of new middle housing units are now on their own lot due to a middle housing land division

Middle housing land divisions (MHLD) are an expedited land division of a lot containing middle housing. The benefit of MHLD is that each unit ends up on its own subdivided lot. This allows units to be sold individually without condoization or a homeowner's association. Typically, all that is needed are common element easements and maintenance agreements. MHLDs are more attractive to buyers and the streamlined process created by the City has increased its popularity among builders.

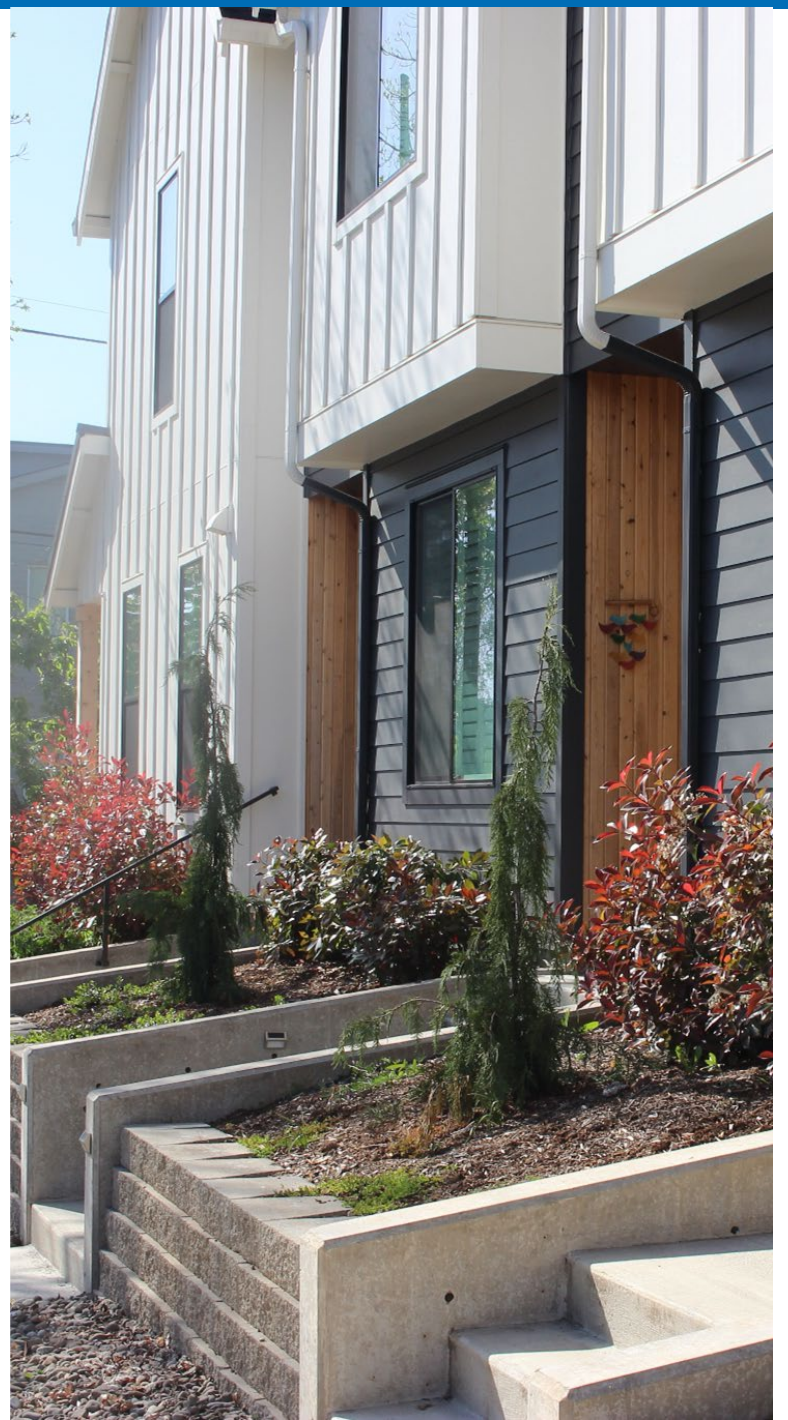
Percent of permitted middle housing units on middle housing land division lots (3-month rolling average)



Section 05: Cost

What price point is middle housing available at and how does this compare in affordability to alternatives?

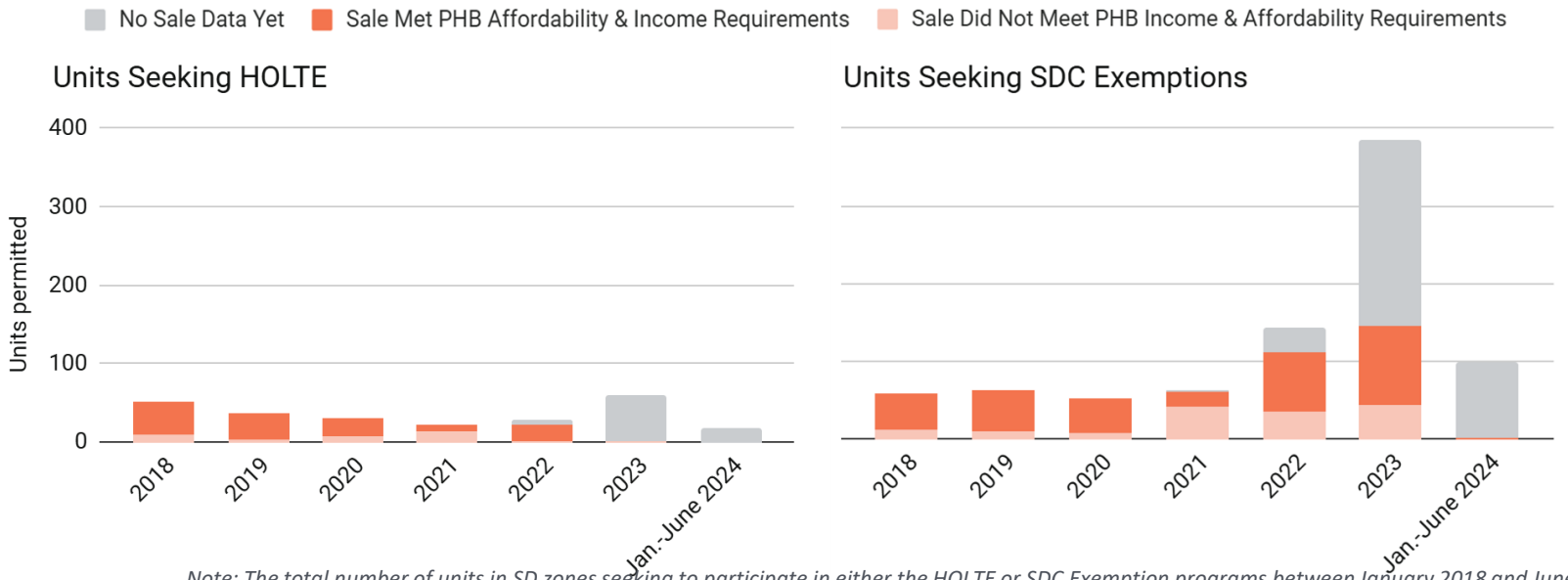
This section explores the affordability of new units in SD zones by analyzing the sales prices of units permitted and sold between January 1, 2018 and June 30, 2024. The section focuses on home sales rather than rents, as sales transactions are recorded in widely available reliable data, whereas comprehensive historical data on rents for specific units are not widely available. This section also unpacks the discounted sales prices achieved for new units that participated in Portland Housing Bureau's affordable homeownership programs, which provide financial incentives to developers that build price-capped for-sale housing.



Since 2021, participation in one of PHB's affordable homeownership incentive programs skyrocketed in single-dwelling zones

PHB's Homebuyer Opportunity Limited Tax Exemption (HOLTE) and System Development Charge (SDC) Exemption programs provide tax and fee relief to developers and homeowners in exchange for meeting several requirements – importantly, selling units to income-qualified buyers (households up to 120% AMI) at or below a price cap ($455,000 as of publication). Following RIP's adoption, participation in PHB's SDC Exemption program in SD zones increased dramatically. In 2022, the majority of sales met program affordability and income requirements. Many units approved to participate in the programs in 2023-24 have not yet been finished and sold and therefore have not been counted as meeting buyer-income and affordability requirements.

Count of permitted units seeking to participate in PHB affordable homeownership programs by year of application approval (SD zones only)

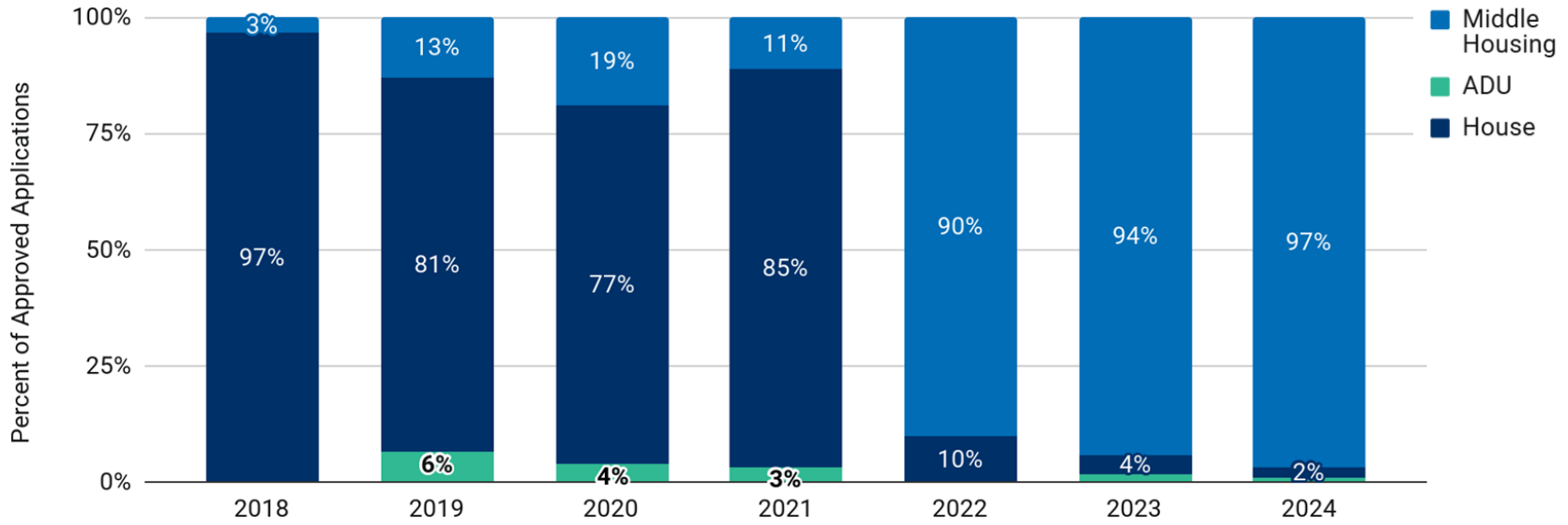


Note: The total number of units in SD zones seeking to participate in either the HOLTE or SDC Exemption programs between January 2018 and June 2024 was 868. 251 of those units sought to participate in both the HOLTE and SDC Exemption programs and therefore appear in both charts above.

Middle housing is now the most common housing type in PHB's affordable homeownership programs in SD zones

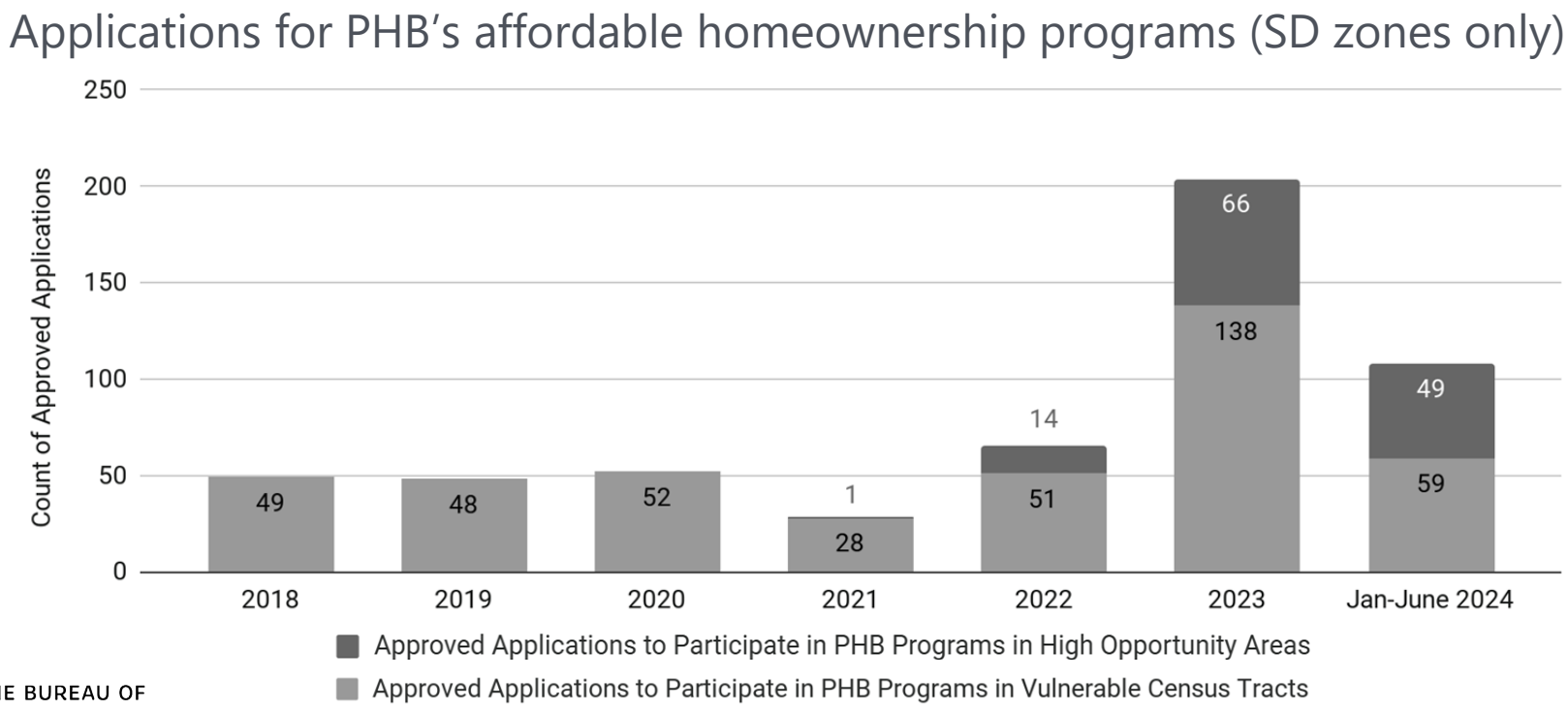
Following RIP's adoption in 2021, approved applications to PHB's affordable homeownership programs shifted from being mostly for single detached houses to mostly for middle housing. Middle housing is a typology that, in economizing on land and promoting smaller unit sizes, appears to make it easier to provide relatively more affordable homes for ownership.

Applications for PHB's affordable homeownership programs in SD zones by housing type



Since RIP, affordable homeownership program applications have risen in high opportunity & vulnerable areas alike

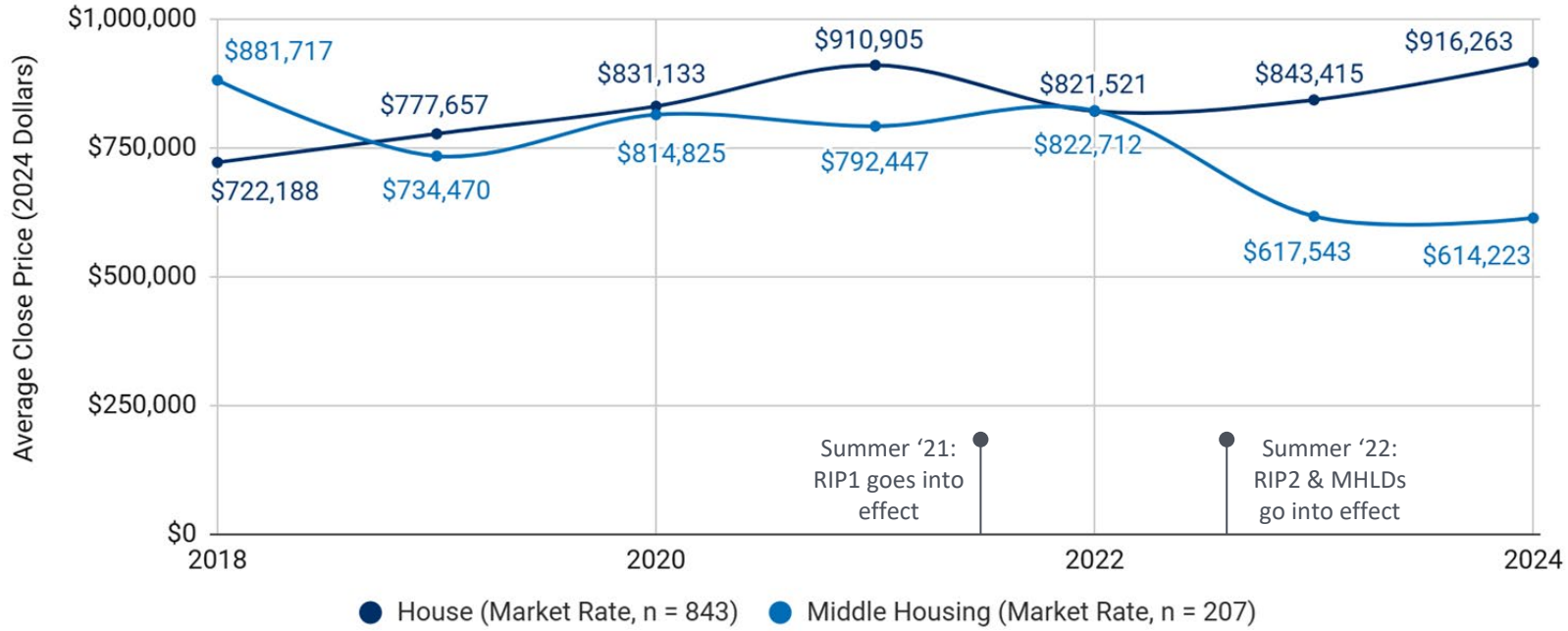
Prior to RIP's adoption, PHB's affordable homeownership programs did not commonly receive and approve applications in high opportunity areas within Single-Dwelling Zones. Since RIP's adoption, that trend has changed, and dozens of units each year participating in PHB's affordable homeownership programs within High Opportunity areas in SD zones. Meanwhile, PHB program applications have also grown in SD-zone Census Tracts with populations vulnerable to displacement. See the Appendix for a map and description of High Opportunity and Vulnerable Areas.



Average sales prices for new middle housing is now trending $250,000-$300,000 less than sales prices for new houses

Prior to adoption of RIP, middle housing was limited to duplexes that could be built to a relatively high FAR. As a result, middle housing units built at that time tended to be similar in size to single-dwellings with similar pricing. Following the adoption of RIP and its limits on FAR, the economic motive for developers shifted from building the largest units possible to building the greatest number of units possible. This led to smaller and less expensive middle housing units.

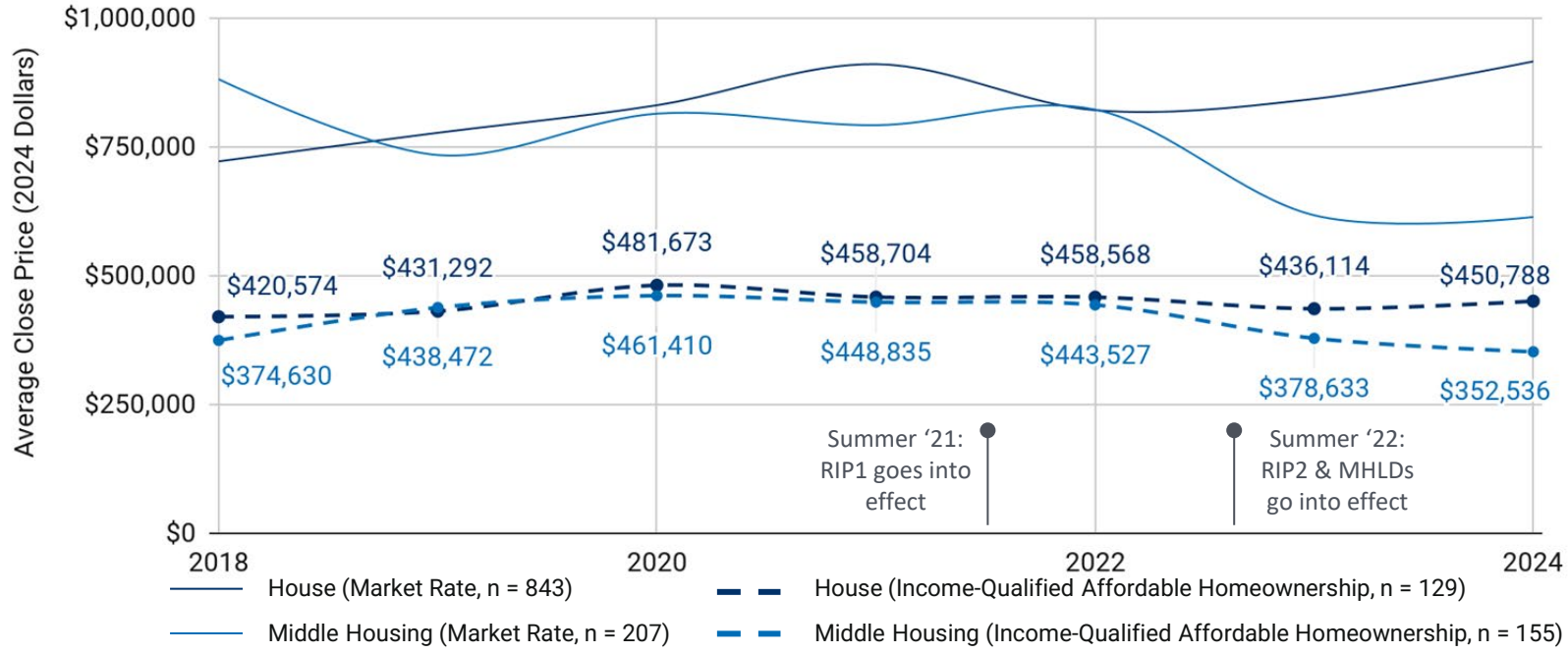
Average closing price (2024 dollars) by housing type



RIP helped lower prices for new middle housing sold under the Portland Housing Bureau's affordability programs

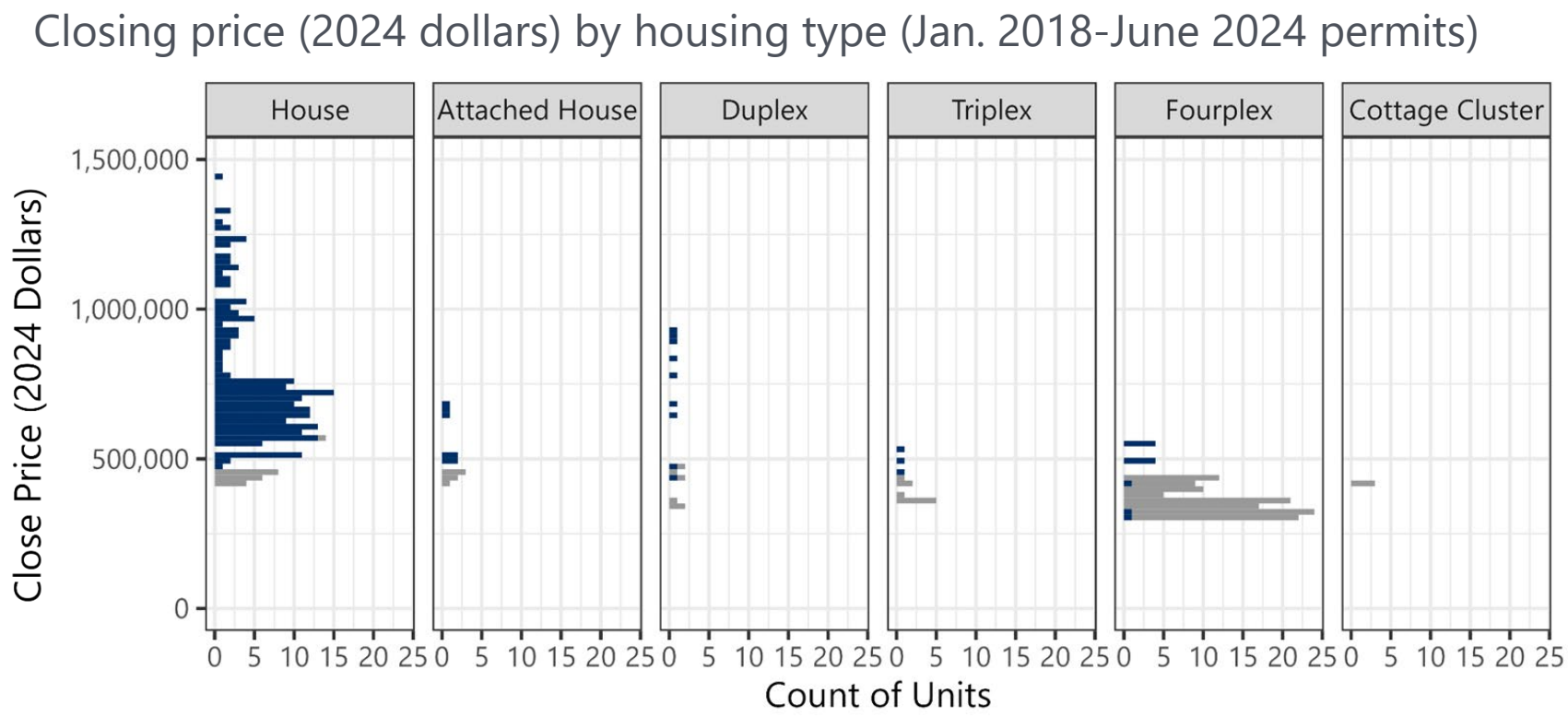
The same relationship discussed on the previous page also holds for homes sold under the Portland Housing Bureau's HOLTE and SDC Exemption affordable homeownership programs. Middle housing allowed developers to build more units that are smaller in size than the previous status quo. This has helped lower prices overall *but also* for income-qualified buyers, with middle housing sold through affordable homeownership programs selling for an average of about $350,000 per unit in 2024.

Average closing price (2024 dollars) by housing type



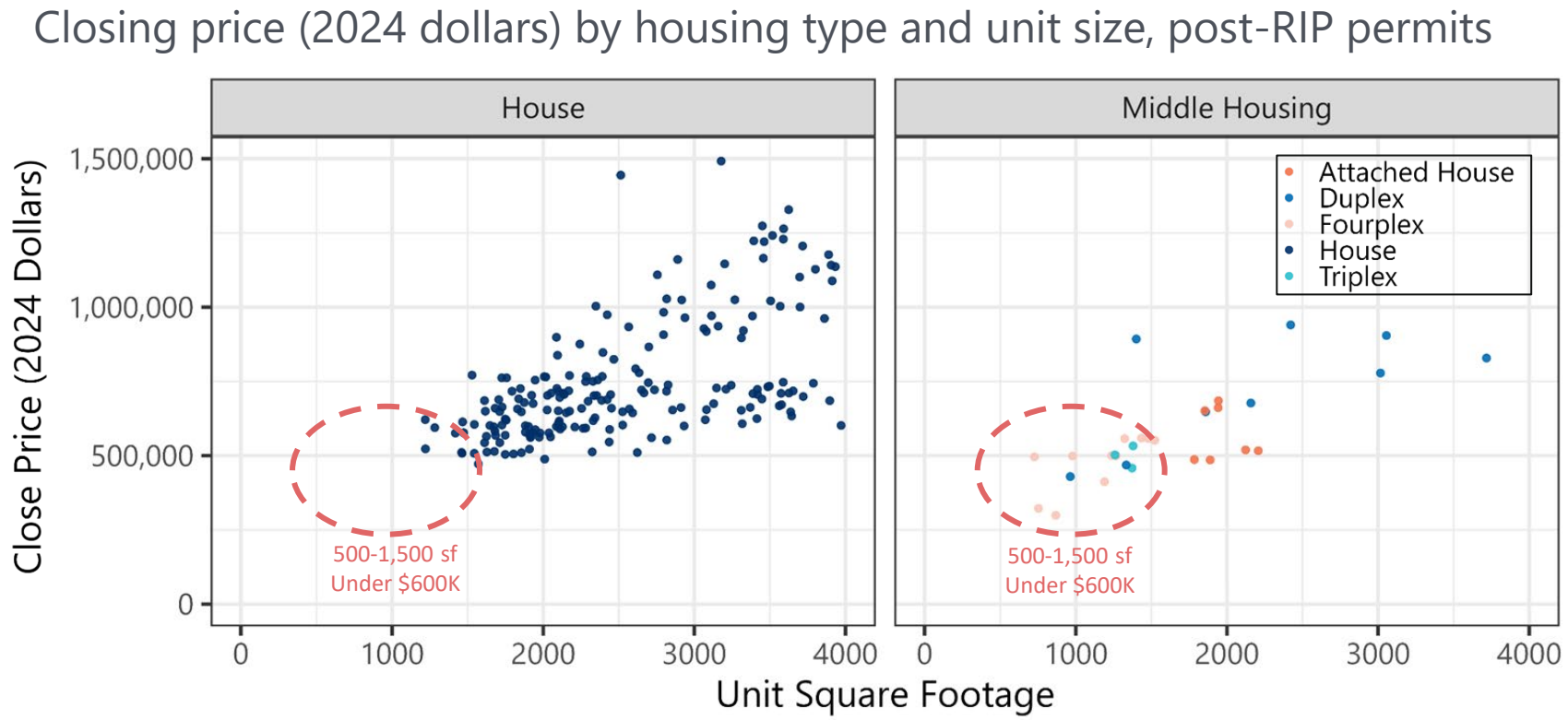
Sales prices for newly built single detached houses tend to be considerably higher than sales prices for middle housing

The distribution of sales prices for single detached houses skews much higher than for various kinds of middle housing, clustering around $700,000. By contrast, most middle housing units are being sold for below $500,000, many of them to income-qualified buyers through Portland Housing Bureau's homeowner affordability programs. Fourplexes appear the most affordable typology.



Middle housing produced after RIP's adoption hits a lower average price primarily because units are smaller

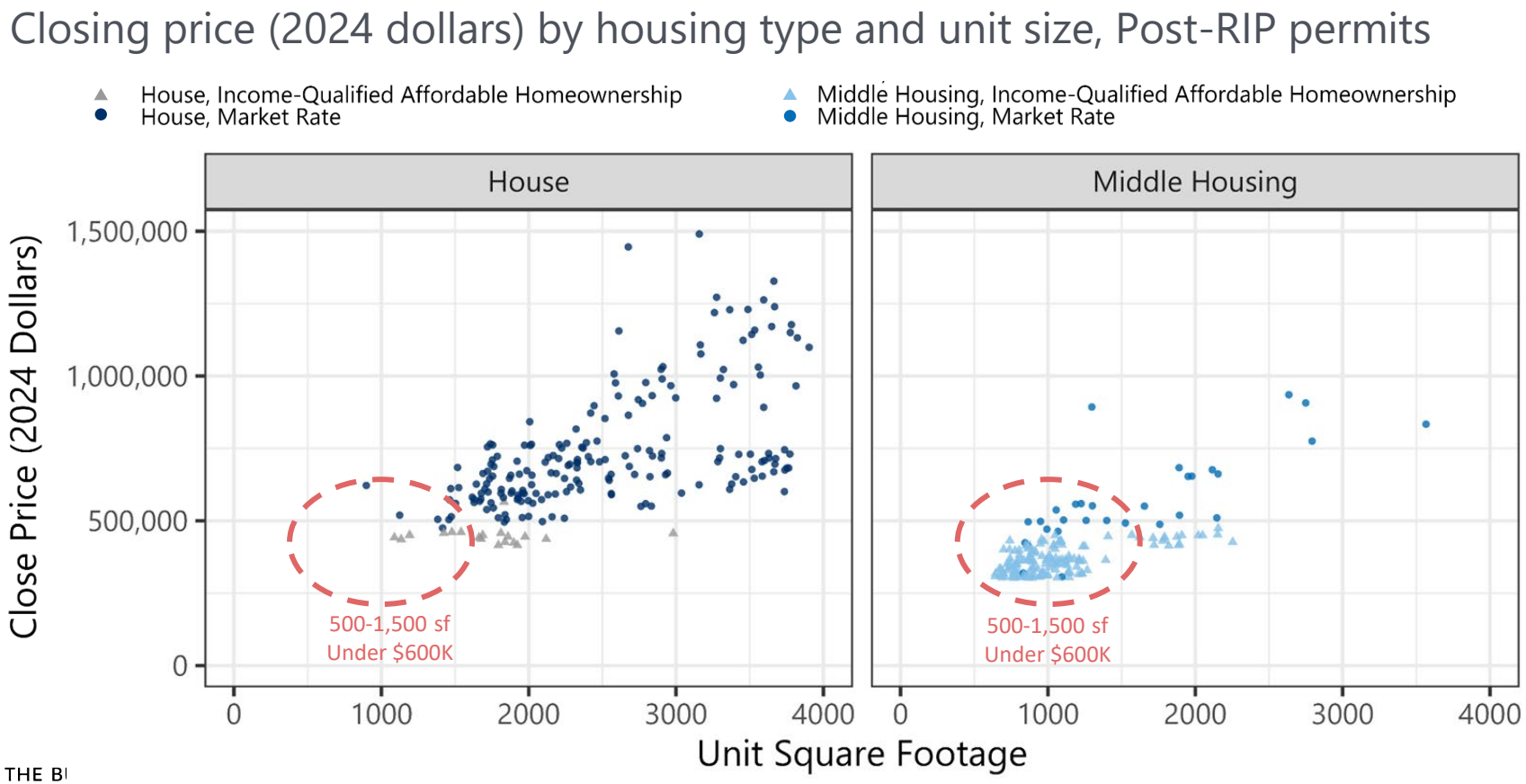
The red ovals help highlight the type of new market-rate home that was uncommon prior to RIP when single detached homes were the most common infill units built in SD zones: small homes under 1,500 sf, priced around or under $600,000.



Note: Points differ slightly in their placement on subsequent charts due to intentional "jittering" added when plotting, which reduces points from being placed atop one another.

Middle housing sold via Portland Housing Bureau's affordability programs leverage RIP to deliver smaller, more affordable homes

Adding non-market rate, income-qualified housing to the diagram helps show how RIP – when combined with affordable homeownership programs – has filled a once missing niche in Portland's new housing production.

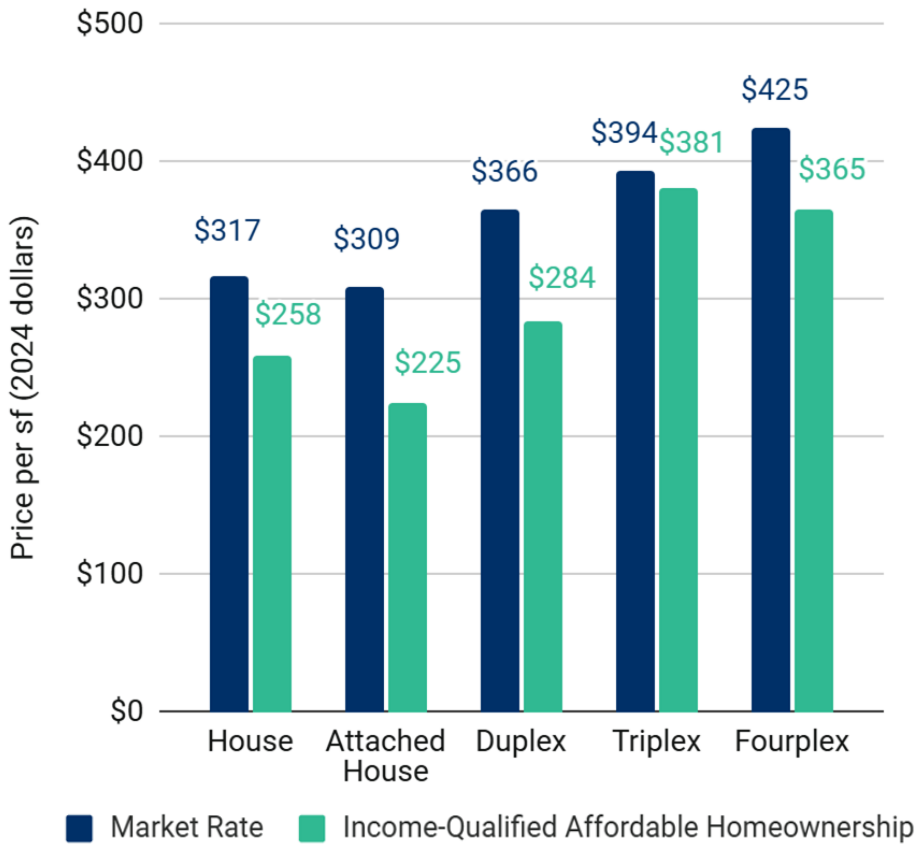


Middle housing types that tend to have smaller units are more affordable overall but more expensive per square foot

Smaller units tend to be more expensive per square foot to buy because they are more expensive per square foot to build. Smaller units carry most of the same fixed costs (e.g. utility hookups) as larger units. Also, they minimize the least expensive spaces– bedrooms and general living space–while still providing the most expensive spaces–kitchens and bathrooms. As a result, in the chart to the right, triplexes and fourplexes are most costly to buy per square foot.

Buyers purchasing homes through Portland Housing Bureau's income-qualified affordable homeownership programs do pay a discounted rate on a per-square-foot basis. This indicates that those buyers are not simply saving money by purchasing smaller homes than the market tends to provide. The lower price per square foot to buy stems from lower costs to build, through things like City-provided SDC exemptions, Habitat for Humanity's volunteer labor pool, or the lack of need for profit among non-profit builders.

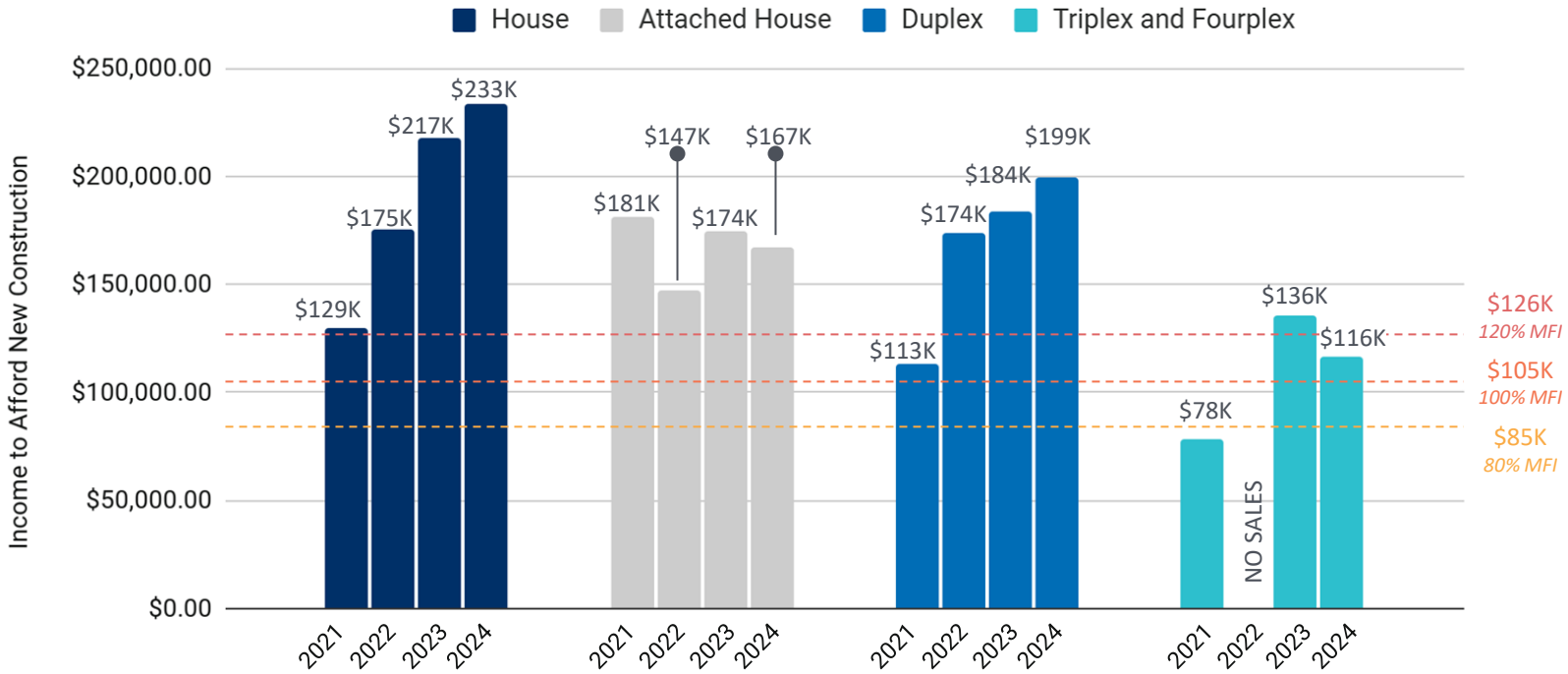
Price per square foot by type of sale



Expanding middle housing allowances enabled more households to afford new homes as interest rates rose

Interest rates spiked from roughly 3% to 7% between 2021 and 2023. This summary of 457 sales since 2021 show that middle housing, particularly newly allowed typologies like triplexes and fourplexes played a key role in providing more affordable options for consumers.

Income (2024 dollars) required to afford average monthly mortgage, taxes, and insurance for market-rate new home sales



Note: The above calculations assume a 10% down payment, 1% effective property tax rate, and $50 per month in insurance costs per $100K in home value. All MFI's cited are for 3-person households and come from Portland Housing Bureau's 2024 Income and Rent Limits.

Section 06: Case Studies

Four examples of recent middle housing development

This section describes four in-depth examples of middle housing projects in Portland. It offers examples of floor plans, site plans, list and sale prices, and unique features of each development, showing the range of housing being produced under RIP 2.

Image Source: NW Natural Street of Dreams 2024.

Two Townhomes, Each with a Rear ADU

4 Units | 849-1,252 SF per Unit

R2.5 Zone | 5,750 SF Lot | 0.73 FAR

2-3 Bedrooms | 2.5 Bathrooms

Sold: $755K per Townhome/ADU Pair

This project has four homes. It is comprised of 2 townhomes discreetly adjoined at the rear, where they are each further attached to an ADU. While the homes are technically all attached, they share few walls, and likely function more as detached units for the residents. The primary townhomes have 3-bedrooms and 1,250 sf. The rear ADUs have 2-bedrooms and 850 sf.

This project offers an excellent example of how developers are experimenting with middle housing designs and sales models to maximize their appeal and buyer pool. The project offers a mix of 2- and 3-bedroom homes, which may attract different buyers. Furthermore, homes can be sold either individually or in townhome-ADU pairs. Put another way, the design offers a modular sales approach, where units can be bought individually or as a package.

Ultimately, the developer found two buyers that each wanted two units. As of this report's publication, one set of buyers has the ADU unit listed for rent at $3,850 per month. The other set of buyers either already rented their ADU, occupy it themselves, or has family or friends that occupy it.

Two Townhomes, Each with a Rear ADU (Floorplans)

Image Source: NW Natural Street of Dreams 2024.

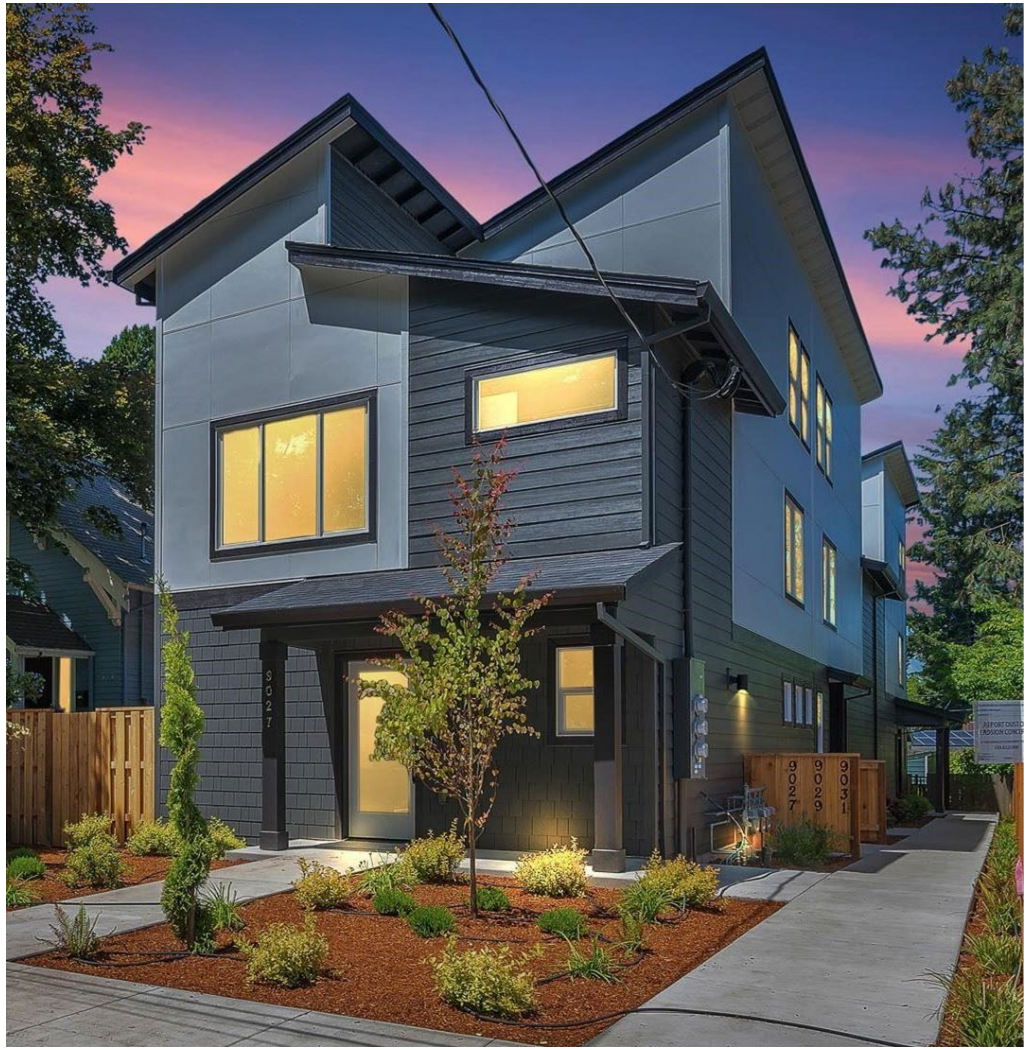


Image Source: NW Natural Street of Dreams 2024.

Three-Story Triplex in North Portland

3 Units | 1,550 SF per Unit

R2.5 Zone | 5,250 SF Lot | 0.89 FAR

3 Bedrooms | 2.5 Bathrooms

Sold: $435K-$490K

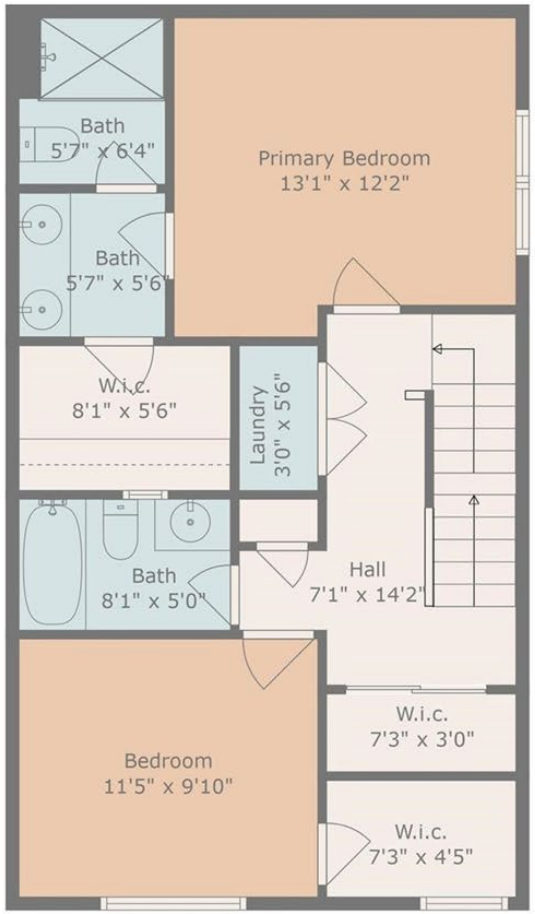
This project has three attached homes with 1,550 sf and 3-bedrooms apiece. Each home sits on its own ~1,700 sf lot with a private yard, subdivided from an original 5,000 sf lot. The three homes do not have an HOA.

As shown in this report, 800-sf two-bedroom home are the most common type built under RIP to date, typically within an attached two-story fourplex. This triplex experimented with a different approach by including a third story and subtracting one home from the allowed total to attract buyers seeking more space. The second story includes a walk-in closet with a window that could also function as a small home office. The homes do not have off-street parking but are a 5- to 10-minute walk from a park and neighborhood commercial center with a grocery, hardware store, restaurants, bars, and transit.

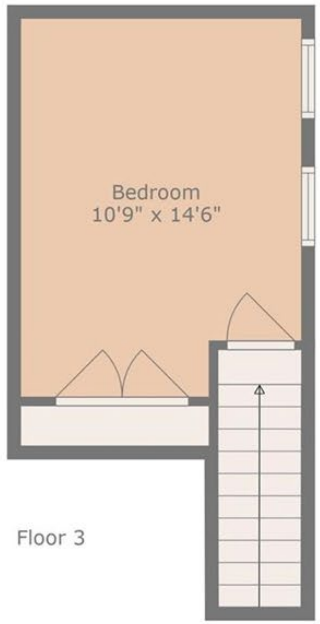
The homes sold 3-6 months after initial listing for between $435-$490K.

Three-Story Triplex in North Portland (Unit Floor Plan)

Floor 1



Floor 2



Floor 3

Image Source: NW Natural Street of Dreams 2024.

This photo shows an already completed 3-unit cottage cluster with a similar design by the same developer. Image Source: Zillow.

Concordia Cottage Cluster

4 Units | 1,200 SF per Unit

R5 Zone | 7,000 SF Lot | 0.69 FAR

3 Bedrooms | 2.5 Bathrooms

List Price: $550K-600K Per Unit

This project has four detached homes with 1,200 sf and 3-bedrooms apiece. Each home sits on its own ~1,750 sf lot with a patio and private yard, subdivided from an original 7,000 sf lot. The homes are clustered along a community walkway where each has access to a raised garden bed to add individual personality to the shared space and landscaping. The homes do not have off-street parking but are situated a 5- to 10-minute walk from two commercial corridors with a grocery, pharmacy, restaurants, gyms, schools, and transit.

The homes intend to respond to the needs of first-time buyers, young couples, and downsizers, particularly those who prefer a detached home but still want to be in a walkable or bikeable area. For the developer, cottage clusters help them reach more buyers by diversifying their portfolio, which includes custom homes but also more compact, attached home types like stacked-flat condominiums and townhomes.

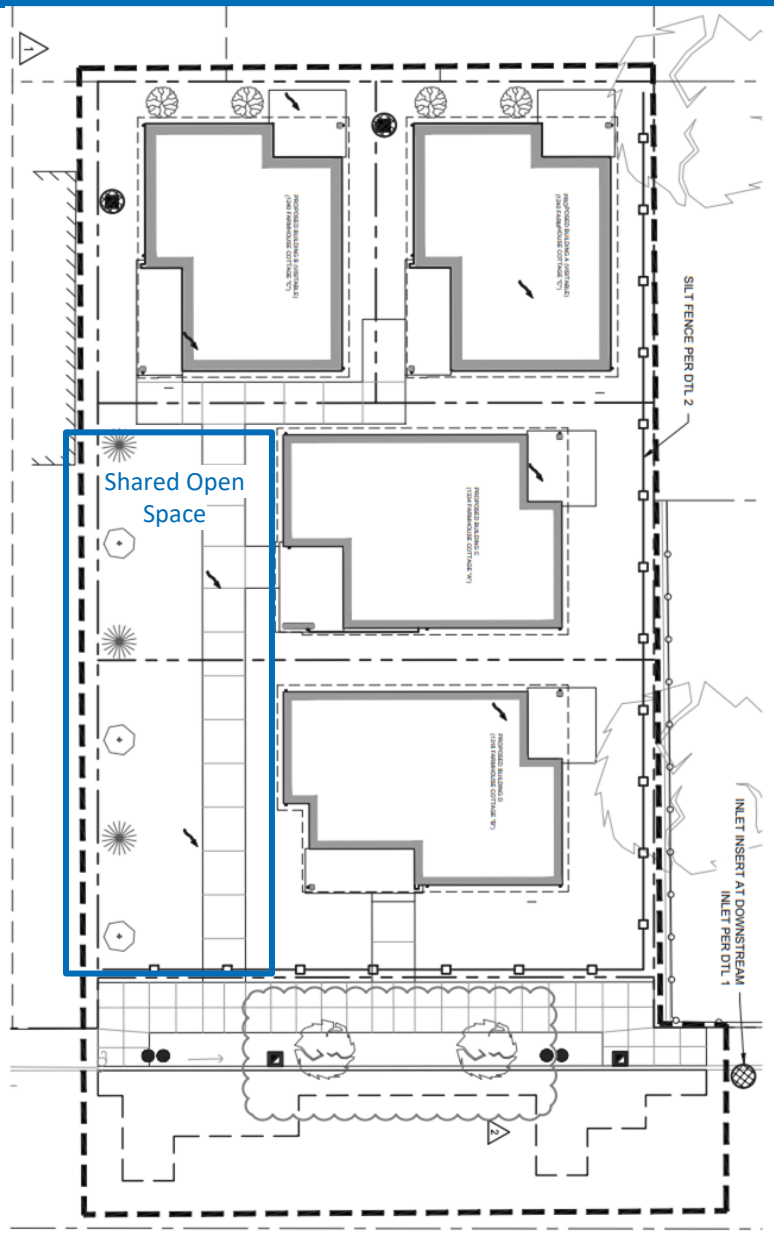


Image Source: PortlandMaps.com. Via submitted permit planset.

Concordia Cottage Cluster (Site Plan Commentary)

The developer noted that this site plan includes a lot of what they hear buyers asking for: starter homes that feel spacious, that are located in a walkable neighborhood, and that have private patio and yard space. The site plan also meets the code's shared open space requirements through community garden beds along the shared, landscaped walkway.

The developer also noted that cottage clusters like this one offer the advantage that they can sometimes preserve existing structures that are well positioned on the original lot to allow building on the remainder of the site. When preserving existing homes, however, the developer noted that complying with visitability requirements becomes a challenge, because preservation necessarily means the builder has less site area, flexibility, and fewer new structures in which to provide a visitable unit. The alternative – retrofitting the preserved existing home for visitability – tends to be complicated and costly and can sometimes yield clunky floorplans. These realities mean sites where preservation is an option (or financial necessity) aren't as workable as they could be. The developer suggested that a one-unit exemption from the visitability standard for each home preserved on a site could balance the desires to grow the visitable housing stock and preserve existing homes, making it feasible to build cottage clusters on as many sites as possible.

This photo shows a 10-home community in Cully already completed by Habitat for Humanity prior to RIP's adoption. For more information on Habitat's work to date in Cully, visit: https://habitatportlandregion.org/donate/build-an-inclusive-cully/
Image Source: Habitat for Humanity Portland.

Cully Affordable Homeownership

Strategy for Using New Residential Infill Project Allowances to Deliver Affordable Homeownership

Since the 1990s, Habitat for Humanity has built and repaired over 100 homes in Portland's Cully neighborhood. While Habitat's model usually requires sites larger than a half-acre and follows a traditional subdivision process, RIP's adoption provides a new avenue for delivering affordable homeownership: acquiring and developing adjacent (or even scattered) sites in existing residential neighborhoods.

For one of its next investments in the Cully community, Habitat for Humanity is exploring a 16-home development on ¾ acres of R7 land, leveraging RIP allowances. The Habitat team works to provide the deepest affordability to its buyers as possible. They will make use of any flexibility available in zoning and development code that helps them access affordable land and develop with minimal infrastructure costs.

Builders' Perspectives on Middle Housing Policy

In preparing this report, the project team spoke with over 20 middle housing developers, general contractors, architects, and site planners working in Portland (collectively referred to below as builders). The points below summarize perspectives they shared on how the City can support more middle housing production:

Theme 1: Trying to meet demand for small detached for-sale homes. Builders of for-sale middle housing view cottage cluster provisions as the best avenue available to deliver what they feel many buyers want: 2-4 bedroom, 800-1,600 sf starter (or downsizer) homes, available on their own small lots with small private yards. Builders suggest two broad areas for improving cottage cluster provisions to help them better serve buyers:

- For small lots, provide a new avenue to build small detached homes. Builders expressed that buyers are often confused by the shared open space (i.e. "common green") required on sites with cottage clusters. Buyers seem to prefer clear ownership, especially when there are only a few households to share maintenance responsibilities for common space. Builders said that the result was that in order to attract buyers, they're tending to build shared open space that meets the code but has low ownership ambiguity and few maintenance obligations. That means rather than lawns that require mowing or play areas that require maintaining, builders opt for wood chips and low-maintenance landscaping while setting aside as much area as possible for private yards. The builders requested that Portland's Bureau of Planning and Sustainability instead revise the code to allow them to more directly meet buyers' expectations. This could be accomplished by creating a new middle housing allowance for 3+ unit detached developments on small lots (under 10K sf), without a required common green. One builder referred to this as allowing detached fourplexes on small lots.
- For larger lots, provide flexibility to other details of the cottage cluster code: When builders are aiming to deliver true cottage clusters with common space and co-housing elements, they ask for more flexibility to make developments feel intimate and unique. They suggest that porches and eaves be allowed to extend into circulation and common areas. They suggest that attached units be allowed, minimizing narrow, not-very-useful side yards. They suggest more flexibility in allowing buildings to orient toward the street or common area, depending on what makes the most sense for a specific site. They suggest finding alternative ways of providing a "community-feel" other than the common green (e.g. through a mix of amenities). Finally, they suggest creating parking rules specific to cottage clusters rather than applying multifamily rules.

Builders' Perspectives on Middle Housing Policy

Theme 2: Getting help addressing cost and delay drivers. Builders highlighted a few areas where City bureaus' help could meaningfully reduce builders' costs and delays:

- Builders noted that time to permit issuance can be inconsistent and slow. Several builders shared that for at least one project, they had completed construction only to find their middle housing land divisions had not yet been approved. This prevented them from selling the homes and starting new projects. Many expressed support for more and consistent funding for permit review staff. One builder suggested that that Portland Permitting and Development (PP&D) revisit which tasks it completes during preliminary plat approval vs. final plat approval within the MHLD process as that could help the second (critical) approval move faster.
- Some builders shared that they usually avoid building middle housing on corner lots due to a requirement to build ADA ramps through the Portland Bureau of Transportation's (PBOT) public works process. While they understand the need for ADA ramps, they shared that undergoing a full public works process is costly, slow, and not common for curb ramps in other jurisdictions. They estimated it cost twice as much as using private-sector engineers and adds 6 to 9 months of permitting time. They suggested a fix would be setting City standards, allowing private engineers to design to those standards, then having PBOT or PP&D inspect the results–the same process as for housing construction itself.
- Builders largely understood the BPS and PBOT's motivation to have infrastructure requirements for areas without existing infrastructure. At the same time, they felt the requirements were onerous and costly, beyond levels seen in other jurisdictions. As a consequence, builders tended to avoid areas without existing infrastructure in Eastern and Western Neighborhood Pattern Areas.

THE BUREAU OF **PLANNING & SUSTAINABILITY**

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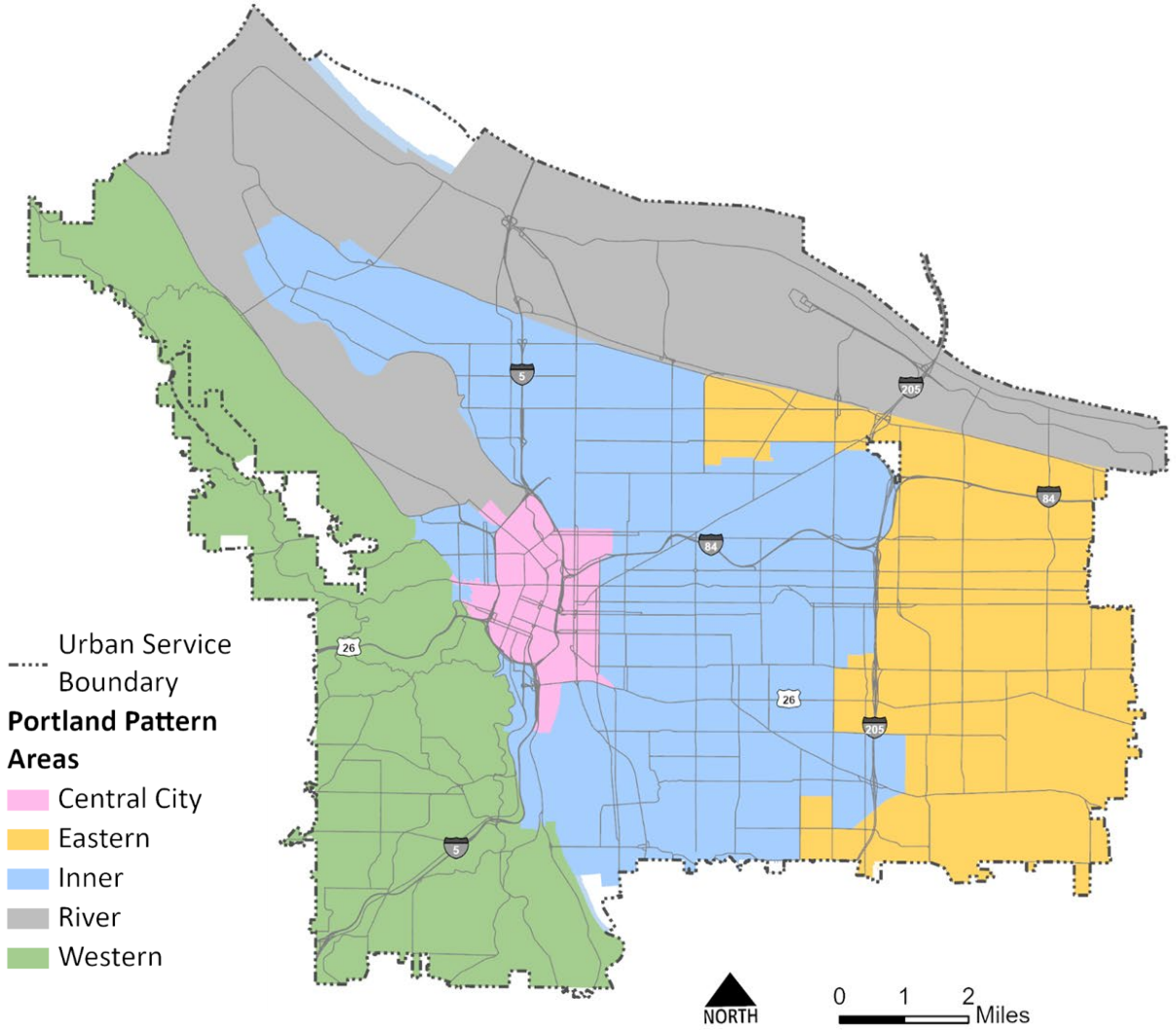
Appendix

- Portland's Pattern Areas Map
- Historic Resource Areas Map
- Housing Opportunity Areas Map
- Vulnerable Populations by Census Tracts Map
- Additional Methodological Details

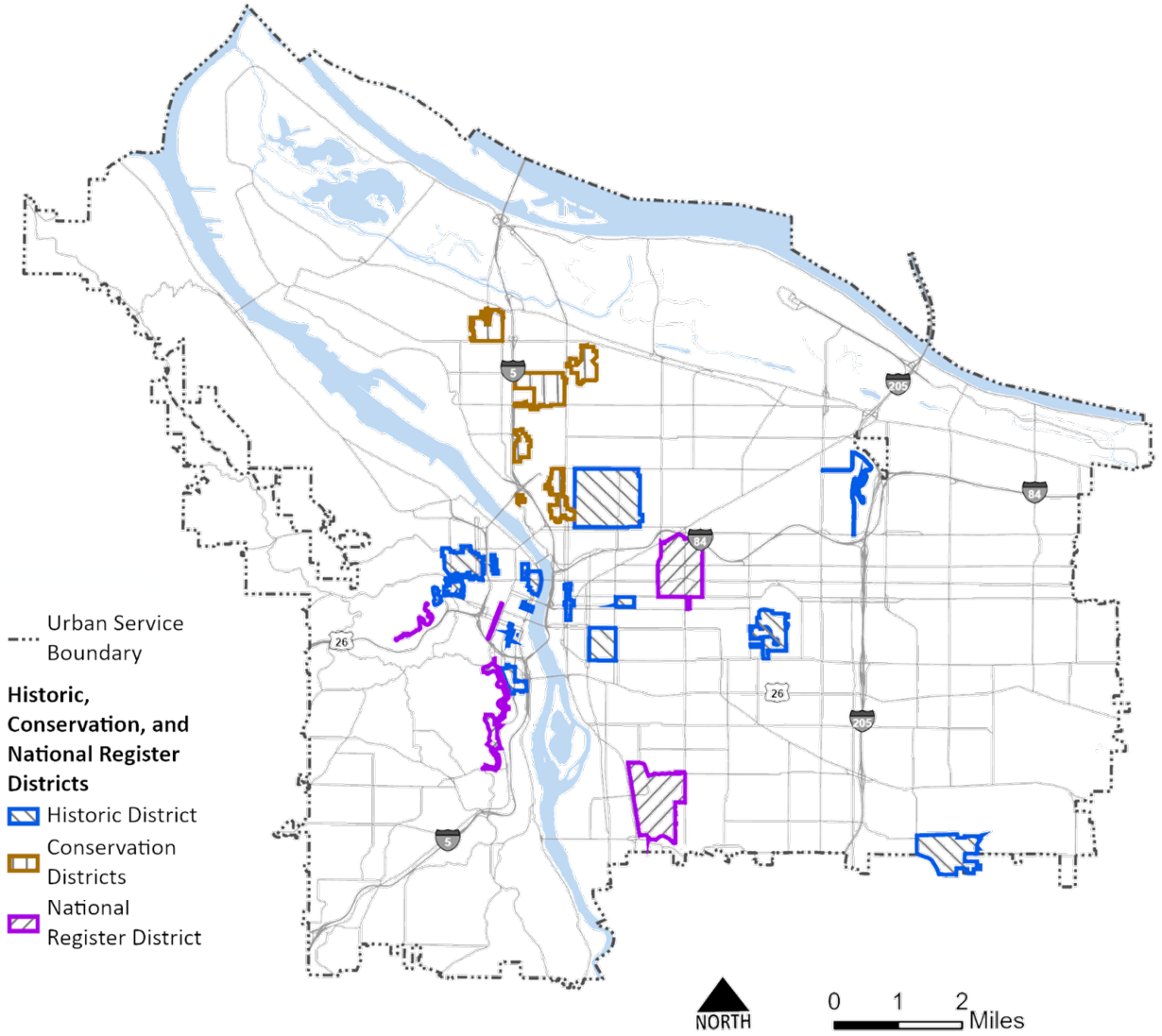
Portland's Pattern Areas

Description:
Portland has five distinct Pattern Areas. The development patterns and characteristics of these areas are influenced by the natural landscape and how and when these parts of the city were developed. The Portland Pattern Areas are identified in Chapter 3 of the 2035 Comprehensive Plan.



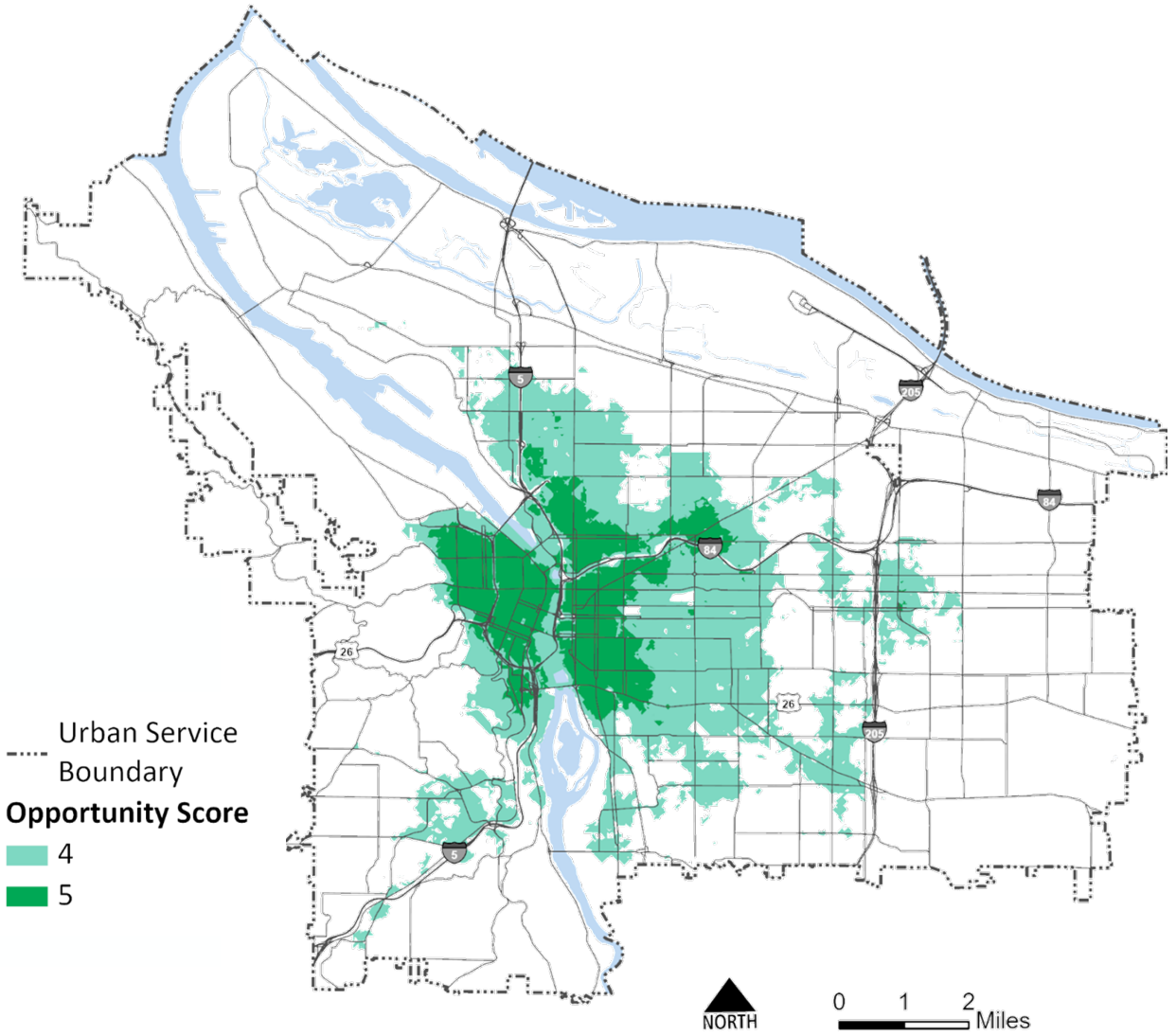
Designated Historic Areas

Description:
The Portland Zoning Code provides for the designation and protection of historic resources. Since 1968, several thousand properties— including individual landmarks and contributors to districts—have been designated and protected for their architectural, cultural, and historical significance. These special places help retain a sense of place, contribute to neighborhood identity, and recognize different aspects of Portland's history. Chapter 4 of the 2035 Comprehensive Plan includes policies pertaining to the importance these designated resources.



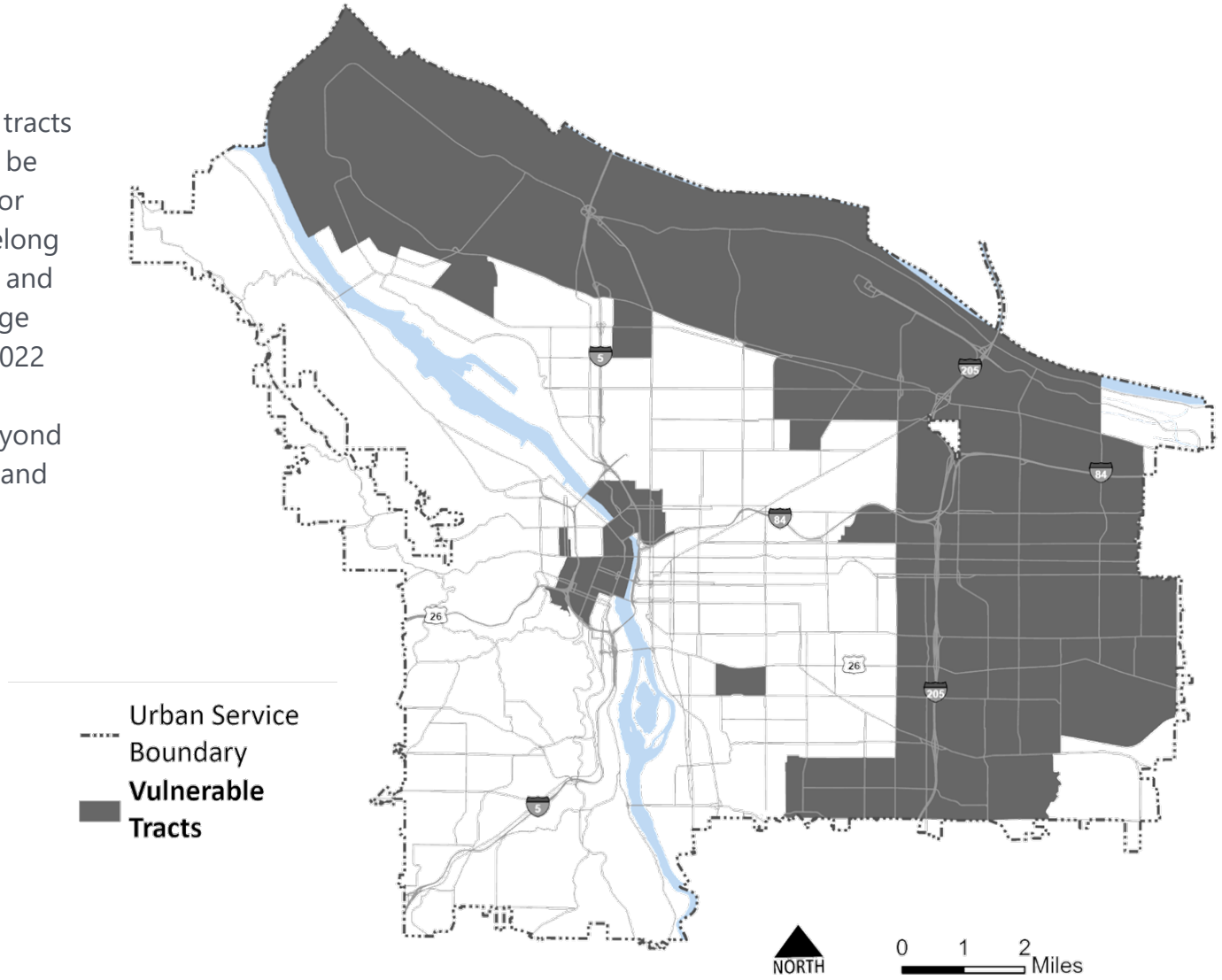
Housing Opportunity Areas

Description:
Using a methodology developed by the Portland Housing Bureau, Chapter 5 of Portland's 2035 Comprehensive Plan seeks to locate new affordable housing in areas that have high levels of opportunity. On a 5-point scale, with 4 and 5 being considered medium high and high opportunity areas, areas of High Opportunity are determined based on variables that include access to childhood education, employment, transportation, living/family wage jobs, and community amenities that promote healthy, active living.



Vulnerable Populations

Description: Vulnerable Tracts are census tracts that have residents who are more likely to be "housing cost-burdened," pay 30 percent or more of their income on housing costs, belong to communities of color, particularly black and indigenous communities, lack 4-year college degrees, and have lower incomes. Using 2022 data, areas of economic vulnerability are primarily concentrated in East Portland beyond I-205, Roseway-Cully, St. Johns, Old Town and Downtown, and Brentwood-Darlington.



Additional Methodological Details

Real Estate Multiple Listing Service (RMLS) Data Join & Price Attribution

RMLS data was joined to permit data via a spatial join, as it did not contain any identification fields that could be reliably joined with the City's permit data (e.g. due to lot splitting, new addresses). However, XY coordinates for point-level home-sales data did not reliably overlap with XY coordinates for point-level permit data. That meant individual sales could not be matched with permits for individual units within a development project, but only with a parent lot (and thus development project) as a whole. To correct for this, the study team averaged sales prices for each development project for which sales data were available and assigned that average to each unit within the project. For example, if a fourplex had an average sale price of $425,000, each individual permit record was assigned that sale price rather than the exact price that unit contributed to the average. For consistency and interpretability, the report focuses on average rather than median prices.

PHB Affordable Homeownership Program Data Join

Permit and RMLS data was also joined to data indicating which newly permitted units applied to participate in PHB's affordable homeownership programs and which ultimately did (or did not) meet program criteria at sale. For Section 4 of this report, unit sales that met PHB's affordable homeownership program criteria were kept separate from purely market-rate transactions. This is because sales prices of those units are lower than for units the market provided due to subsidies like SDC exemptions and developer motivations that put mission over profit.

Inflation Adjustment

All financial data is adjusted to 2024 dollar values using the Federal Reserve Bank of St. Louis' average annual consumer price index for all urban consumers and all items less shelter.

Additional Methodological Details (Cont’)

Data Cleaning Process

The permit dataset was filtered for residential and commercial permits issued for lots zoned R2.5, R5, R7, R10, and R20 between 1/1/2018 and 6/30/2024, involving new construction, alterations, or additions resulting in new units. Permit types included Accessory Dwelling Units, Accessory Structures, Duplexes, Single-Family Dwellings, Townhouses (2+ units), and Apartments/Condos (3+ units). 'Revision' and 'Deferred Submittal' permits were excluded. Additional cleaning included:

- Manually reviewing and removing addition, alteration, and accessory structure permits that incorrectly report new units.
- Manually reviewing and correcting new unit counts associated with townhouse permits that commonly overcount new units due to a known permitting system error.
- Manually reassigning unit types for plex and cottage cluster developments that are commonly labeled as single family or townhouse in the permitting system.