MISSING OUT ON MISSING MIDDLE HOUSING

Eugene, Oregon's Opportunity To Create Housing Choice

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EXECUTIVE SUMMARY

Housing is a basic human need.

But as the cost of living continues to outpace the growth of incomes across the country, more and more people are having difficulty finding housing that appropriately meets this need.

Economic principles of supply and demand tell us that high prices reflect the intersection of strong demand and limited supply, and is exactly the situation Eugene, Oregon finds itself in.

Eugene is particularly impacted by widely unaffordable housing, but it is certainly not unique. Cities and researchers have scrambled to find solutions to this housing crisis. Many have fallen short due to the complexities of the issue, while other concepts have gained traction around the country. One of these is the concept of the Missing Middle.

A concept popularized by Daniel Parolek, Missing Middle Housing consists of a range of multi-unit or clustered housing types compatible in scale with single-family homes that help meet the growing demand for walkable, urban living. This concept can also be used as an affordable housing tool. Diversifying the housing stock to accommodate different income levels, lifestyles, and demographics can lead to positive affordable outcomes. Simply, Missing Middle Housing is about creating housing choice in a world that has little of it.

This study focuses on identifying why development of these housing types in Eugene has been so sparse in recent years, even while the housing market has continued to demand more housing stock.

It is thought that in a builder's market, where both consumer demand for walkable, urban housing and land values are high, there must be barriers within the regulatory system significant enough to be suppressing development of Missing Middle units. Therefore, emphasis in this study has been placed on identifying these restrictive regulatory barriers within the City of Eugene's Development Code and recommending solutions to overcoming them.

After applying sections of Land Use Chapter of the Eugene Code to eight sample developments, **it is found that Eugene's regulatory environment does, in fact, pose significant roadblocks to development of Missing Middle Housing.**

Most notably, development code regulations such as minimum lot sizes, maximum densities, and siting standards, remain particularly restrictive to Missing Middle Housing types. Many of these regulations were adopted into City Code long ago and are now out of date. The Code is neither dynamic enough to adapt to Missing Middle housing proposals nor is it forgiving enough to allow flexibility in the development process.

Additionally, it continues to be prohibitively expensive to building Missing Middle housing in Eugene. System Development Charges place Missing Middle units at a severe disadvantage and force developers to explore other opportunities that will provide them better return on their investment.

All people deserve access to the kind of safe, accessible, and adequate housing they need. Therefore, the City of Eugene must take swift and robust action to reverse this situation by opening up lines of communication with citizens, incorporating their comments and experiences, and by breaking down these regulatory barriers.

APPENDICES

INTRODUCTION

HOUSING AFFORDABILITY IS A NATIONWIDE PROBLEM

One of the most pervasive issues facing American citizens today, and over the past few decades, is the tightening of household budgets due to stagnant incomes and the increasing cost of living. Housing accounts for a significant portion of a household's budgets and often times is their single largest monthly expenditure.

Across nearly all income levels, the number of households considered to be "cost burdened" - those that spend 30% or more of their income on housing - is on the rise. The Joint Center on Housing Studies of Harvard University's annual *State of the Nation's Housing* report outlines the pervasiveness of this issue. In 2014, the number of American households considered to be cost burdened reached nearly 40 million - 18.5 million homeowner households and 21.3 million renter households - an all-time high[1]. Residents living in dwellings that are high-cost relative to their income are forced to make difficult, even unhealthy, budgetary trade-offs. This has vast and widespread consequences on the social, cultural, and economic vitality of our communities and only serves to jeopardize the ability of working families to afford the cost of living, further increasing income inequality and stifling economic growth.

If housing is a basic human need, then why are 1/3 of all households in the country living in unaffordable housing situations? While the full answer is undoubtedly complex and is comprised of many layers, it is often simplified as a calculation of supply and demand - there are not enough units to meet the demand for those units. This creates a problem - the available housing stock is not adapting to meet the growing needs of the market, and people are left vying for a limited number of units which pushes prices higher, leading to gentrification and ultimately, our nationwide housing affordability crisis.

Limited Supply

As individuals and households make decisions about what types of housing to consume, it is important to understand that their options are limited by the housing stock available. Analyzing the housing supply is a much easier process than understanding housing demand, thanks to the amount and scope of building data available. Even so, it is easy to see that, in the US, housing supply has been low ever since the beginning of the recent economic downturn in 2008. In 2009, the number of annual new housing starts for all housing types reached all-time lows and has yet to return to pre-recession levels[2].

That is not to say that construction of new units does not take place, it just seems to be of only certain types. Nearly four million of the 5.6 million new residential structures built between 2009 and 2015 were detached single family units[3]. An increase in

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1   The State of the Nation's Housing Key Facts, The Joint Center for Housing Studies of Harvard University, June 2016. Pp 4.

2   https://www.census.gov/construction/nrc/pdf/startsusintenta.pdf

3   American Community Survey

the overall number of units is encouraging, but World War Era land development patterns and systemic economic drivers have long dictated the type of housing that has been built in our cities. There is a distinct tilt towards both detached single-family homes and large multi-unit structures and virtually no notable gains have been made in the number of units built in any other category outside of these two.

It is estimated that 90% of the available housing stock in the US is in the form of single-family developments located in conventional suburbs[4]. Multi-family units have historically accounted for a very small percentage of the total housing stock. The building of these units slowed during the 2008 recession but to a much lesser extent than that of single family development. In recent years the multi-family market has seen an impressive rebound. In fact, the number of housing starts for structures with more than one unit has surpassed pre-recession levels each year since 2012.

This is good news for increasing the overall number of units available, but they can only quench the demand of those who can afford or want to live in those types of units. Demand for which has fallen significantly in recent years as more households seek affordable housing options and opportunities for urban living close to amenities like jobs, services, and cultural centers.

Increasing Demand

Much has been made over the past decade about the shift in American's desire to live in urban areas[5][6]. Cities all over the country have seen rapid population growth as a result. This increased urban population has generated a new demand for housing in cities. However, as has been outlined above, most housing stock remains in conventional suburbs. This has translated to an incredible transformation in our metropolitan areas, and especially in the cost of their housing units. The interplay of high demand for limited housing units has given rise to increasing rent and home prices, pricing out everyone but the most-wealthy.

Demand for Affordability

The lack of affordable housing is well known[7][8] and there are many factors at play, primarily the widening gap between the cost of housing and incomes. From 2011 to 2016, the median home price rose 42% compared to a median household income gain of only 17%[9]. As one can imagine, this combination most heavily impacts those in the lowest income bracket. Nationwide, households making $15,000 or less are universally cost-burdened by their housing options, with 83% of households in this income-range paying 30% or more

4   Dr. Arthur C. Nelson, "Missing Middle: Demand and Benefits," Utah Land Use Institute conference, October 21, 2014.

5   https://www.census.gov/newsroom/press-releases/2015/cb15-33.html
6   http://www.un.org/en/development/desa/news/population/world-urbanization-prospects-2014.html
7   http://www.nber.org/papers/w11129
8   http://econ.jhu.edu/wp-content/uploads/sites/27/2016/07/Olga_Baranoff_senior_thesis.pdf
9   https://www.forbes.com/sites/lawrenceyun/2016/12/13/housing-shortage-for-how-long/#-1466c5555ee4

of their income toward housing[10]. In large part, this is due to the shrinking number of adequately priced units available on the market. In 2012, the 11.5 million extremely low income households in the country – those who make only 30% or less than the area median income - were competing for a total of 3.3 million rental units that were affordable and available to them, creating a shortage of 8.2 million units[11].

Currently, housing stock caters to the needs of the high end of the market and largely only offers two types of units – single family detached and mid to high-rise apartment complexes. A large and growing number of households cannot afford these units but have no choice except to pay a premium for them. This raises serious concerns that need to be addressed if cities are to be ethical, equitable, and foster a high quality of life for all citizens.

Similarly, changing social preferences and demographics have begun to play a role in the housing demand conversation. There are entire segments of the population who may be able to afford living in traditional type units but have little interest in them and would prefer a different lifestyle than what is currently being offered.

Demand for Walkable, Urban Housing

Changing household demographics have also created an increased demand for urban housing. On a strictly nominal basis, natural population growth has more than doubled the number of American households since 1960 with most new household formation taking place in urban areas[12]. But it's not only the number of people moving to cities. Perhaps more importantly, the composition of these households is compounding housing demand. Average household size has steadily decreased over recent decades as couples have fewer children or delay having them all together. As the Baby Boomer generation becomes empty-nesters, the percentage of single-person households has been on the rise since 1970 and accounted for 28% of all households in the U.S. in 2015, the second largest proportion[13]. This data shows that there are more people living more independently, which seems to be a trend likely to continue into the foreseeable future. From 2010-2030 it is projected that only 13% of the net change in new household formations will have children[14], leaving 87% of new households childless.

Fast-growing segments of the population, like Millennials, Baby-Boomers, multi-generational households, and suburbanites unsatisfied with maintaining large yards and long driving distances, are all looking for housing that is close to amenities and offers them flexibility while still maintaining a level of affordability. Many households, whether starting their housing career or downsizing, are showing preference for walkable, urban housing options. A study by the National Association of Realtors found that 60% of households would prefer living in a neighborhood with a mix

10   *The State of the Nation's Housing Key Facts*, The Joint Center for Housing Studies of Harvard University, June 2016. Pp 5.
11   McCue, Daniel "The Burden of High Housing Costs". Cascade, No. 86, Winter 2015

12   US Census
13   US Census
14   "Reshaping Metropolitan America" Arthur C. Nelson. Congress for New Urbanism CNU21. June 17, 2013

of houses and businesses that are easy to walk to and 57% would prefer to live in a house with a small yard and shorter commute to work[15].

In comparing these demand data points to what is known about the largely suburban housing supply, a distinct mismatch begins to take shape. Consumers are becoming more and more interested in housing choices that are affordable, walkable, and urban, yet the construction industry hasn't been able to shift its attention away from single family developments.

In addition to an overarching demand for housing units of all types, there is an expressed demand for units that meet the desire and to a certain degree, the necessity,

to live close to amenities, services, and employment. There may be many avenues by which to encourage and create housing of this type in our cities. One new theory is the concept of Missing Middle Housing.

15   https://www.nar.realtor/sites/default/files/reports/2013/2013-community-preference-analysis-slides.pdf

Introduction

The Missing Middle as a Potential Soluiton to High Cost Housing

There is an increased sense that the way housing has historically been designed, planned, located, and regulated is not effectively meeting the needs of the market and hinders its ability to provide housing for those who do not fit the traditional household structure.

As evidenced by data previously in this reprot, the majority of housing units available in the US are detached single family homes in suburban environments. These units also continue to make up the majority of the housing stock being built in recent years. Development is also focused on the other end of the spectrum. Structures with 20 or more units have consistently been the second highest proportion of new housing stock built. Meanwhile, construction of units between these two categories is virtually non-existent and made up only 8% of new housing stock in 2016[16].

In 2010, Daniel Parolek, Co-founder and Principal at Opticos Design in Berkeley, CA, amidst research showing the rapidly changing demographics of households, began to formulate a new concept in housing. This concept focuses on moving away from the traditional thought that households largely consist of a married couple with children and towards the growing reality that households are made up of people with diverse lifestyles, incomes, needs, and values.

Parolek argues that neither of these two housing types will offer the kind of housing options demanded by households of the future. In this way, Parolek describes the importance of diversifying the housing stock with units that fill in the gap between single-family and high-rise apartments. These "middle" housing types can provide additional housing choices and can be effective in narrowing the gap between supply and demand.

Parolek defines these "middle" units as "a range of multi-unit or clustered housing types compatible in scale with single-family homes that help meet the growing demand for walkable urban living." The concept is characterized by eight attributes: Missing Middle Housing 1) creates walkable communities, 2) has a lower perceived density, 3) utilizes a small footprint, 4) is made up of smaller, well-designed units, 5) is not driven by off-street parking requirements, 6) consists of simple construction elements, 7) fosters community, and 8) is marketable[17].

He offers that nine types of housing make up the Missing Middle: side-by-side duplexes, stacked duplexes, triplexes, fourplexes, accessory dwelling units, courtyard apartments, bungalow courts, townhouses,

The Missing Middle is defined as

a range of multi-unit or clustered housing types compatible in scale with single-family homes that help meet the growing demand for walkable, urban living.

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16   https://www.census.gov/construction/nrc/historical_data/index.html

17   www.missingmiddlehousing.com

DETACHED SINGLE-FAMILY HOMES — DUPLEX — TRIPLEX & FOURPLEX — COURTYARD APARTMENT — BUNGALOW COURT — TOWNHOUSE — MULTIPLEX — LIVE/WORK — MID-RISE

— MISSING MIDDLE HOUSING — — —

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multiplexes, and live/work units. The figure above shows where each of these types fit along the housing spectrum.

Crucial to this concept is the design of the units. These units are built to fit within the footprint of a typical detached single family home, however they are designed to hold multiple units. The result is a residential development that is of higher density but looks and feels like an average home, unimposing to neighboring properties. The compatibility of these units with its surrounding uses makes the idea of higher density housing approachable to people who would otherwise raise issue.

These housing types are labeled "missing" because, for the past 70 years, development has largely focused on delivering a drivable, suburban way of life. This has historically left little need for middle housing types

and is why very few of them have been built since the early 1940's. Today, builders continue to run into a variety of barriers cities have put in the way of Missing Middle development. Regulatory constraints such as zoning and building codes, limited access to credit and financing, federal and local policies that incentivize single family homeownership, are just some of the hurdles developers must navigate if they wish to build Missing Middle housing.

Missing Middle and Affordability

Housing price varies greatly depending on a complex mixture of many factors. In particular, the cost of housing is directly correlated to its physical attributes such as square footage, age, geographic location, and access to services. What makes the Missing Middle concept appealing, other than creating new walkable, urban housing

stock, is that it can also be an effective tool in providing affordable housing just in its design alone.

Developers prefer Missing Middle housing because they have the ability to build more units within one property and therefore have the potential to earn more profit. Smaller units are not only cheaper to build for developers but are correspondingly cheaper to rent for residents. Additionally, retrofitting large, older homes into multi-unit apartments is a low cost option that provides property owners with the opportunity to earn passive rental income. The moderate density, small square footage, and construction costs of these units allow builders to sell these middle products at prices that would be more attainable to young families, first-time buyers, and middle-income buyers as opposed to a new detached product. Parolek calls this idea "affordability by design".

By increasing the supply of these Missing Middle housing types, a city's housing stock is diversified in a manner that can better serve its changing population. Therefore, solutions to the affordability crisis lie along the housing spectrum and Missing Middle Housing falls between the rigid ends of this spectrum.

What the Missing Middle housing movement is attempting to do is to balance the housing mix ratio. Not all housing is created equal. There is an expressed need and demand for housing options that are affordable to people of lower incomes. Single-family homes or luxury high-rise apartments do little to alleviate these demand pressures, and it is important to diversify

the housing stock available to households, giving them options. Including Missing Middle housing helps to provide another housing option for those in lower income brackets, which in turn helps to alleviate pressure on the entire spectrum of housing, theoretically making housing more affordable across the board. There are a variety of ways to do this, and the purpose of this study is to show that the Missing Middle is just one way to achieve overall housing diversity.

PURPOSE

The City of Eugene, Oregon seeks to understand the implications widely unaffordable housing has on its community.

The city has hypothesized that the core of this problem is largely a supply side problem - there are not enough housing units available, particularly the type of medium density units that make up the Missing Middle. This creates pressure, and artificial demand for, the current housing stock and therefore pushes rents and home values out of the reach of the average citizen or forces them into cheaper, substandard housing conditions. The city realizes that in order to address this problem, it must enact appropriate and robust policies to make housing more affordable to its citizens.

The city has yet to fully understand the depth of its housing affordability problem. To this end, this research sets out to ac-

curately describe the housing affordability problem of the City of Eugene based on a cross examination of the current housing stock, mix, tenure, and area incomes. This will be the first step in determining the extent of housing affordability in Eugene.

Additionally, after identifying and understanding the problem, this study provides explanation of why and how the Missing Middle concept can be used to help alleviate the problem. The first step in this process is to identify any barriers that may exist within the current Eugene context that impede the construction of Missing Middle housing units. Secondly, the study will provide potential policy recommendations for the City to consider as they attempt to overcome these barriers and create opportunities for the development of housing types that provide citizens more choice in their housing decisions.

EUGENE CONTEXT

THE CITY OF EUGENE'S UNIQUE HOUSING AFFORDABILITY PROBLEM

Cities like San Francisco, Seattle, and New York City have notoriously tight housing markets with skyrocketing rents. Unfortunately, Eugene may soon find itself in this conversation. In fact, the supply of housing is so low in Eugene that a recent study by Realtor.com listed the City as the second tightest buyer's market in the country. With only 0.6% of its housing stock for sale[1], the city would run out of available units in less than two months should residential development suddenly stop.

1   http://www.realtor.com/news/trends/top-10-housing-markets-constrained-by-tight-inventory/

In Eugene, and more broadly, Oregon, the issue of housing supply is compounded by its rapidly growing population due to in-migration and restrictive land conservation policies. Urban Growth Boundaries restrict the number of parcels available to develop, severely limiting a city's ability to keep pace with housing supply as more people migrate to their community.

In Eugene, it is not entirely true that the housing stock has not grown in recent years. The American Community Survey provides 5 year averages of the total number of housing units in Eugene and categorizes them by the number of units per structure. This data shows that overall, the net number of housing units in Eugene increased by nearly 4,000 over the time period from the 2005-2009 survey to the 2011-2015 survey. However, almost all of this growth was produced by increases in detached single-family units and high density (20 units per structure or more) developments. During that same time period, the City of Eugene actually lost 699 Missing Middle units as defined by attached single family units and structures with 2 - 19 units. This is on top of a 605-unit loss of other types typically considered affordable; such as manufactured homes and RV homes

Eugene Housing Structures by Number of Units

Housing Units	2005 - 2009	2011 - 2015	Nominal Change	Percent Change
1 unit	40,212	43,186	2,974	7%
Detached	35,115	38,835	3,720	11%
Attached	5,097	4,351	(746)	-15%
2	2,156	2,857	701	33%
3 or 4	4,313	3,962	(351)	-8%
5 to 9	4,702	4,768	66	1%
10 to 19	4,426	4,057	(369)	-8%
20 to 49	2,923	3,978	1,055	36%
50+	4,649	4,967	318	7%
Other (manf homes, RVs, etc)	3,032	2,427	(605)	-20%
Total	66,413	70,202	3,789	6%

Source: American Community Survey, 2005 - 2009 and 2011 - 2015

EUGENE CONTEXT

Demand for these Missing Middle housing types is at a high point in Eugene. Detached single family homes and luxury high rise apartment complexes are not affordable to many Eugene households and those people are left needing housing at a cheaper rate. For households with incomes at or below the Area Median Income, there exists an extreme shortage of affordable housing units in the City of Eugene.

According to the 2009 - 2013 American Community Survey, the median home value in Eugene was $238,700. The owner-occupied housing stock in the city of Eugene are comprised mostly within the $100,000 to $499,999 ranges encompassing 85% of all homes. HUD (Housing and Urban Development) estimated the Fair Market Rent for a 2-bedroom unit in Eugene was $821. Over half of the units in the city rent for between $600 and $999.

Understanding the distribution of households in each income bracket helps to explain the demand for housing at different prices. In 2013, HUD Area Median Family Income (HAMFI) for Eugene-Springfield was $55,800. Using this income figure, HUD illustrates different income brackets based on their percentage of the HAMFI. The lowest income bracket, the Extremely Low Income bracket, includes households that make $16,740 or less annually.

Select housing characteristics and data for the City of Eugene are included below to illustrate this point However, Appendix A of this report provides an in depth analysis of the current state of housing affordability in Eugene and should be referenced as needed.

Eugene Home Value Distribution

Home Values	Number of Units	Percentage
Less than $20,000	890	3%
$20,000 to $49,999	905	3%
$50,000 to $99,999	995	3%
$100,000 to $149,999	2,588	8%
$150,000 to $299,999	17,806	54%
$300,000 to $499,999	7,390	23%
$500,000 to $749,999	1,572	5%
$750,000 to $999,999	418	1%
$1,000,000 or More	194	1%
Total	32,758	100%

Source: Comprehensive Housing Affordability Survey, 2013

Eugene Gross Rent Distribution

Rents	Number of Units	Percentage
Less than $300	1,150	4%
$300 to $599	5,246	16%
$600 to $799	7,670	24%
$800 to $999	7,264	22%
$1,000 to $1,249	5,386	17%
$1,250 to $1,499	2,618	8%
$1,500 to $1,999	2,031	6%
$2,000 or More	953	3%
Total	32,318	100%

Source: Comprehensive Housing Affordability Survey, 2013

Eugene Income Distribution

Income Bracket	Income Range
2013 Eugene-Springfield HUD Area Median Family Income = $55,800	
Above Middle Income	Over $55,800
Middle Income *(80% - 100% HAMFI)*	$44,640 - $55,800
Low Income *(50% - 80% HAMFI)*	$27,900 - $44,640
Very Low Income *(30% - 50% HAMFI)*	$16,740 - $27,900
Extremely Low Income *(Less than 30% HAMFI)*	$0 - $16,740

Source: Comprehensive Housing Affordability Survey, 2013

By creating a "housing budget" for each income bracket, it can be extrapolated approximately how many units in Eugene are available at affordable rates within each income bracket. Based on generally accepted principles, when attempting to find "affordable housing", households are limited to units that are 30% or less of their income. Below is the projected housing budget for each bracket's income range as based on HAMFI percentage. Based on the Eugene-Springfield FY2013 Median Family Income (HAMFI) of $55,800, a household could afford to spend $1,395 a month on housing without being cost-burdened.

As an example, the Very Low Income bracket includes households earning between $16,740 and $27,900 annually. These households can theoretically afford to spend up to $697.50 each month on housing without being cost-burdened. There are approximately 17,905 households living within this income bracket. However, within the City of Eugene, there are only 12,341 units affordable to these households, leaving a shortage of nearly 5,600 units.

Eugene Housing Budget by Income Bracket

Income Bracket	Housing Budget
2013 Eugene-Springfield HUD Area Median Family Income = $55,800	
Above Middle Income	More than $1,395
Middle Income *(80% - 100% HAMFI)*	$1,116 - $1,395
Low Income *(50% - 80% HAMFI)*	$697.50 - $1,116
Very Low Income *(30% - 50% HAMFI)*	$418.50 - $697.50
Extremely Low Income *(Less than 30% HAMFI)*	$0 - $418.50

Source: Comprehensive Housing Affordability Survey, 2013

Multi-unit structures and other Missing Middle housing types can provide a path to affordable housing because they can be built to be affordable by design: smaller units and creative uses of space reduce actual construction costs. Developers receive higher return on investment that can be passed along to the consumer in the form of cheaper rents and lower home values. Similar to what has been seen throughout the country, the bulk of the units that have been added in the City of Eugene are either detached single family homes on the urban periphery or large scale multi-unit high rises in desirable neighborhoods. This leaves moderate to low income cost-burdened households at a crossroads.

Diverse household configurations need housing that is compatible with their lifestyles, family makeup, values, and incomes. Specifically, these households demand better housing options, not more housing. So far, the market has been excellent at supplying more housing on the end of the housing spectrum but in large part has failed to provide the cheaper, more adaptable housing that makes up the middle. Perhaps more concerning, at its current rate, the Eugene housing stock is actually losing these more attainably priced units.

THE MISSING MIDDLE WITHIN THE EUGENE CONTEXT

Eugene's current housing stock largely consists of single-family detached homes (55%). Most neighborhoods in Eugene are made up of one to two story homes, making neighborhoods feel open and small scale. More recently, some larger, multi-unit developments have been built, mostly to serve an increased student population at the University of Oregon and near the downtown core. This environment that includes the combination of small single family homes further from the downtown core and mid-rise developments closer in, lends itself to a variety of Missing Middle opportunities that can serve as smooth transitions between the two. Additionally, Missing Middle housing types have the ability to both maintain the look and feel of single-family developments while also creating additional affordable housing options.

Recent efforts by the City to update small area plans allowing for denser development seem to show that citizens hope to preserve the existing single-family scale of development. For property owners in these neighborhoods, maintaining the character of the neighborhood is a top priority. Moderate to high-density developments typically generate pushback from neighbors. There is an overarching fear by these neighbors that, by allowing higher density developments the neighborhood will be overtaken by tall, sun-blocking apartment complexes and will negatively impact their home values. A substitute to these high-rise apartments are Missing Middle housing types like duplexes, triplexes, or courtyard apartments. There are also opportunities to encourage the development of housing that utilizes shared private space, with bungalow court-type housing.

In areas throughout Eugene where densities are higher, such as within or near downtown, Missing Middle housing types can mix commercial and residential uses. Live/work developments allow opportunities for small businesses to have access to a working office without having to rent separate professional and personal spaces. Additionally, Missing Middle housing types can serve as a buffer on the fringes of downtown areas as more intense uses gently transition to lower densities. Townhomes and multiplexes have the potential to house large numbers of people close to services and amenities while not imposing on surrounding homeowners.

A fundamental aspect of Missing Middle housing is that it is intended to be built to be compatible with, and nearly indistinguishable from, the current urban fabric. As such, there are Missing Middle units all throughout the City of Eugene that may have gone unnoticed to neighbors or passersby. This is promising because it means there may be possibilities within the current system that allow for these units to be built.

Eugene Context

Missing Middle Housing Types Already Exist in Eugene

Defining what Missing Middle Housing looks like in Eugene is an important step in the process towards increasing housing choice in the city. Many of these housing types are often the foundation of some of our most active neighborhoods in Jefferson Westside, Friendly, West University, and Downtown. These are great resources not only to model future development after but also show neighbors, who may be opposed to the idea of density, that density can be achieved in way that has little impact on their neighborhood identity. Witnessing examples of these housing types done well can quickly change the perceptions of what density actually looks like.

Included here are examples of each of the 9 Missing Middle Housing types from Eugene:

Side-by-Side Duplex

A small- to medium-sized structure that consists of two dwelling units, one next to the other, both of which face and are entered from the street.

Stacked Duplex

A small-to medium-sized structure that consists of two stacked dwelling units, one on top of the other, both of which face and are entered from the street.

Triplex/Fourplex

A medium structure that consists of three to four units. These can have independent or shared entrances

EUGENE CONTEXT

Accessory Dwelling Unit

An accessory structure typically located at the rear of a lot providing space for a small residential unit, home office, or other small commercial or service use. This unit could be above a garage or at ground level.

Courtyard Apartments

A medium- to large-sized structure consisting of multiple side-by-side and/or stacked dwelling units accessed from a courtyard or series of courtyards.

Bungalow Courts

This building type consists of a series of small, detached structures, providing multiple units arranged to define a shared court that is typically perpendicular to the street.

Townhouse

A small- to medium-sized structure, consisting of two to eight (usually) attached single-family homes placed side by side.

Multiplex

A medium structure that consists of five to 10 side-by-side and/or stacked dwelling units, typically with one shared entry or individual entries along the front.

Live/Work

A small- to medium-sized attached or detached structure consisting of one dwelling unit above or behind commerical ground floor space.

Compiled in Appendix B is a more extensive inventory of Missing Middle units that currently exist in Eugene. This inventory can be used as its own standalone document to showcase some of the developments the city is looking to incentivize in the future. While this inventory is certainly not comprehensive or complete, city officials, developers, housing advocates, and various other stakeholders could use it as a tool to assist in beginning community conversations about what kind of housing they envision being built in their neighborhoods.

Included is an example of a page from the booklet. Each page showcases the details of a Missing Middle home currently in Eugene including the type, lot features, building footprint, and land use. The inventory can quickly be used to show the surprising number of units per acre that Missing Middle housing types can achieve.

In the end, these are too few and to far between. Regulations, social preferences, and development conditions need to sync perfectly in order to produce a considerable increase in Eugene's housing diversity. Identifying which barriers continue to block the development of Missing Middle housing is an important first step in the City of Eugene being able to answer Parolek's call to action: "We need to think outside the box and begin to create immediate, viable solutions to address the mismatch between the housing stock and what the market is demanding".

ADDRESS: 1491 MILL STREET	DOCUMENTATION DATE: 4/30/17	Pg. 4

MISSING MIDDLE HOUSING TYPE:
☐ DUPLEX: SIDE-BY-SIDE ☒ DUPLEX: STACKED ☐ TRIPLEX/FOURPLEX ☐ COURTYARD APARTMENTS
☐ BUNGALOW COURT ☐ ACCESSORY UNIT ☐ MULTIPLEX ☐ LIVE/WORK

QUICK FACTS
SQ. FEET: 3,340 FT²
OF UNITS: 2 UNITS
LOT ACRES: .076 ACRES
DENSITY: 26.3 DU/A

LOT SIZE
WIDTH: 50 FT DEPTH: 66.8 FT- SQ. FT.: 3,340 FT²
LOT FEATURES
CORNER: ☒ YES ☐ NO PARKING: 2, Driveway
BUILDING FOOTPRINT
BUILT SQ. FT: 1,969 FT² NUMBER OF FLOORS: 2
INTENSITY
OF UNITS: 2 DENSITY: 26.3 DU/Acre

LAND USE
ZONING: R-3
NEIGHBORHOOD: West University
NONCONFORMING USE? ☒ YES ☐ NO
NOTES: CORNER LOT. NON-CONFORMING USE DUE TO THE SMALL LOT SIZE, DUPLEXES MUST BE ON LOTS 8,000 SQ FT OR LARGER.

WHY IS THE MIDDLE MISSING?

WHY IS THE MIDDLE MISSING IN EUGENE?

With all of the growing evidence of the positive impacts, there are still regulatory, systemic, social, and economic barriers to advancing the production of Missing Middle housing units.

Housing is a market driven commodity. Developers will only build housing when the demand is high enough to make the investment and risk worth it. Cities do play a role in this equation, however. Builders and developers must balance not only the cost and demand of each unit but must also consider how their development interplays with zoning regulations that have been put in place. Often times this is referred to as a "zoning tax". What is seen in today's development climate is a high demand for units and land due to an increase in consumer preferences. However, the third piece - restrictive zoning regulations and expensive permitting processes - make the calculations difficult to pencil out.

Source: Todd LaRue, RCLCo.

To determine the extent of this "zoning tax" and how that impacts a builder's ability to build, this study largely focuses on the barriers that exist within Eugene's regulatory climate, specifically development standards in the Eugene Code and System Development Charges imposed on new development.

While understanding their importance in the development process, consumer preferences and market barriers can vary greatly based on any number of variables. A more comprehensive study on the matter would need to be conducted in order to make generalizations and educated recommendations on how to overcome specific social systems or economic drivers.

Barrier One: The Eugene Development Code

Eugene's development code, as with the majority of cities across the country, is largely a land use/density based code. This conventional, or Euclidean zoning practice assigns blocks and/or large areas of a city based on land use or allowed activities, often times categorizing uses as either residential, commercial, or industrial. The single-use zoning strategy became popular in the early 1900s due to its development predictability and ease of enforcement. It has since become the dominant method of conducting land use planning in the United States. However, critics of this system argue that segregating uses does not create appropriate solutions for the increasing complexity of cities and that its inefficiency
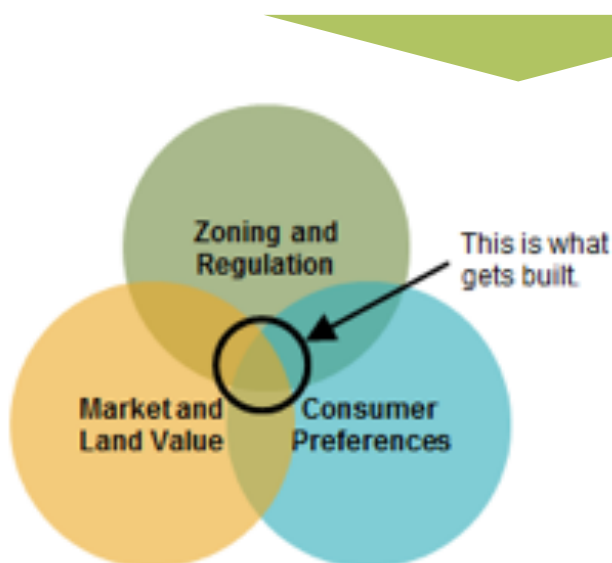
is one of the driving forces behind urban sprawl.

Euclidian zoning also creates problems for the Missing Middle. These units are fundamentally moderate in density and are often out of compliance with maximum density limits in single family zones. Inversely, the small footprints and low heights of these buildings rarely meet the minimum requirements of high-density, multi-family zones. Even infill development of Missing Middle Housing is constrained by the regulations like Small Lot maximum lot size and strict rules on accessory dwelling units.

This creates a gap in the range of housing types that a city's zoning districts allow, and more importantly, encourage shifting from R-1 low-density zones, which allow single-family detached uses, to the R-2 or R-3 medium density/multifamily zones that allow much bigger buildings (taller and wider). This forces housing to act as rungs on a ladder that fall within predetermined categories rather than flow on a spectrum based on need and market demand. Additionally, density-based zoning districts cannot allow the blended densities that are typically inherent in neighborhoods where Missing Middle housing exists. The Missing Middle types have compatible forms but often vary dramatically in their densities, making them difficult to regulate within a Euclidean density-based system.

In addition, density-based zoning treats all units the same, regardless of size. Because Missing Middle housing is defined by being many small square footage units within one structure, the net density will be perceived as much higher and will be out of

compliance with zone requirements. Given all of the barriers present in the Eugene development code as listed above, the Eugene Code is actually fairly advanced in its regulations to encourage housing options. One example is the inclusion of single-family attached housing as its own

CONSIDER THIS THOUGHT EXPERIMENT:

Imagine a 2,400 square foot home in a single family neighborhood. There are three unrelated students living in this house who all own a car. This is an acceptable scenario under a density-based code because the one dwelling unit likely creates a net density well within the range allowed.

Now imagine this dwelling is reconfigured into three 800-square foot apartments with these same three unrelated students living in their own unit. Suddenly, this development may not conform to code after the number of units increased to three and may now exceed the maximum density requirement.

Does this change intensify the use of the land? Does this have averse impacts on adjacent property owners or their neighborhood?

stand-alone zone R-1.5 Rowhouses (EC 9.2740). This is a significant step in the process towards more housing variety. Additionally, the Code seems to prohibit very few housing types. Many of the permitted structures have special requirements attached without obstructing developers from building certain units outright.

Barrier Two: System Development Charges

Part of the regulatory process are the fees imposed on new development to mitigate impacts on infrastructure systems. In Oregon, these fees are called System Development Charges (SDCs) which are generally collected when expansion, new development, or an intensification of use occurs on property served by City infrastructure. SDCs are an important revenue source for Eugene and any other city. They fund the construction of infrastructure (wastewater, storm water, transportation and park facilities) needed to support community growth and recoup a portion of the community's investment in the infrastructure already in place.

Since SDCs play such an important role in helping cities manage growth and afford expansion, the fees are sometimes prohibitively high. Developers incur thousands of dollars in fees on each project which are typically passed along to the consumer in the form of a higher sale price or rent. Eugene charges five different SDCs on top of a 9% administrative fee: streets, local wastewater, regional wastewater, storm water, and parks. Each of these charges vary on how they are calculated depending on development type, but are largely a function of the number of dwelling units in the structure. While, there are avenues cities can take to reduce SDCs for certain types of development, to reduce revenues and risk delaying much needed infrastructure improvements is a difficult decision to justify.

DEVELOPMENT CODE

ANALYSIS OF THE EUGENE CODE

In this section, this report will analyze sample Missing Middle developments, one for each Missing Middle housing type. Each sample development will be subjected to the requirements within the Land Use chapter of the Eugene Code to determine which standards would block their hypothetical approval. Throughout this process, any regulations that would result in the denial of the sample building permit will be highlighted in a policy crosswalk. Additionally, a study of Special Area Zone regulations will help to provide a glimpse into the development climate within areas of interest.

Methodology

To ensure the most consistent analysis of the zoning code, each sample Missing Middle development should be applied under similar parcel conditions. However, in practice, each parcel has a unique set of conditions that impact the extent to which it can be developed. To compensate for this variation, this analysis will attempt to apply the regulations as generally as possible and make assumptions as needed to complete the review.

The most important factor in determining which zoning regulations are applicable, is the underlying zoning of the subject parcel. Mimicking an actual building application process, the development must first be a permitted use within the zoning district and must meet all standards set forth therein. The City of Eugene has five residential zoning designations: R-1 Low Density,

R-1.5 Rowhouse, R-2 Medium Density, R-3 Limited High Density, and R-4 High Density. Because these zones are categorized by minimum and maximum unit per acre densities, some Missing Middle housing types would immediately fail to meet this basic requirement. Therefore, base zoning will vary to match which is most appropriate for each development based on uses permitted and density requirements.

For the purposes of this study, the R-1.5 Zone will not be reviewed because of its limited focus on rowhouse developments.

Additionally, because Missing Middle housing types are primarily developed as infill and not as part of a new subdivision development, if a use is only allowed as part of a Planned Unit Development, this will be highlighted as a barrier.

Another important factor to be considered in this hypothetical application review process is the minimum size of the subject parcel. Because the Missing Middle concept is focused on developing density within a small scale structure, lot sizes of sample developments are equally as small. Minimum lot size in each of the City's four zones is 4,500 square feet but varies depending on the housing type with some exceptions for small lot developments, Planned Unit Developments, and within some Special Area Zones.

The analysis studies eight different Missing Middle sample developments: side-by-side duplexes, stacked duplexes, triplexes, fourplexes, multiplexes, bungalow courts, live/work mixed use developments, and accessory dwelling units. Each of these sample developments are actual examples of Missing Middle Housing that have been built in other communities and the building specifications outlined below are specific to the units pictured. This helps to contextualize the structures to the audience and also serves as the basis for identifying any regulations that would serve as a barrier in the application process. Policy crosswalks of applicable code standards have been included to show which of them would deny the proposed development's permit approval.

SIDE-BY-SIDE DUPLEX

Duplexes such as this one in Phoenix, Arizona provide an opportunity for small or independent households to rent outside of the traditional apartment arrangement. This duplex was originally built as two, mirrored units decreasing the construction cost, and therefore, its rent. Each unit is fairly small, around 600 square feet, and the design of the building can be adapted to fit on small lots. The exterior design and façade can easily be modified to be compatible with the character of many parts of Eugene. Its one story design with ample front yard space fit the aesthetic of neighborhoods like Jefferson Westside, South University, and Friendly.

Building Specs	
Number of Units	2
Width	36'
Depth	34'
Building Size	1,224 sq. ft.
Unit Size	612 sq. ft.
Parking Ratio	2 per unit
Front Setback	30'
Side Setback	10'
Lot Size	6,500 sq. ft.
Net Density	13.4 DU/acre

DEVELOPMENT CODE

BARRIERS TO APPROVAL

Eugene Code	R-1 Standard	Side-by-Side Duplex
Density		
Minimum	none	-
Maximum	14 DU/acre	13.4 DU/acre
Minimum Setbacks		
Front Yard (excluding garage)	10'	30'
interior yard setback	5'	10'
Maximum Lot Coverage		
All Lots, except secondary dwellings	50%	18%
Maximum Bedrooms Per Unit		
Within Amazon, Fairmount, and South University	not more than 3	2
Parking Standards (Minimum)	Per Dwelling	Per Dwelling
Duplex	1	2
Lot Area Minimum (Sq. Ft.)		
All lots, except below	4,500	-
Small Lots	PUD	-
Duplex	8,000	6,500
Lot Frontage Minimum (ft.)		
Interior Lot	50'	50'
Housing Mix Maximum (Within a Single Subdivision)		
Duplex	25%	-

Duplex developments are only allowed in the R-1 zone (EC 9.2740(4)). The sample side-by-side duplex shown above fares reasonably well when submitted to the Eugene Code. While being at the high end of the range, net density created by this development is within what is permitted in this zone. It also fits within the building envelope created by minimum setbacks, maximum building heights, and outdoor open space requirements for duplexes in the R-1 zone (EC 9.2750).

The only barrier for this sample is that it was built on a 6,500 square foot lot. While this provides plenty of space for the setbacks, frontage, and private open space, it would not meet the Eugene Code minimum lot size requirement. The code requires that duplex developments be built on lots 8,000 square feet or larger (EC 9.2750). Surely, this development could be adapted to a lot this size and would allow for building a larger structure. However, from an affordability standpoint, larger units are typically more expensive.

STACKED DUPLEX

Stacked duplexes are larger buildings than side-by-side duplexes. The additional height can give the appearance of a more intense development than it actually is. This makes it ideal for neighborhoods that serve as a transition away from intense downtown development. The stacked concept is a great opportunity for property owners to convert their large home into two dwelling units. Older homeowners who want to age in place or need to downsize can take advantage of earning rental income while also creating new, affordable housing stock. Because these developments typically take place in areas near downtown or commercial corridors, tenants have the added benefit of living in a home within walking distance to many important services and amenities. Stacking the two units vertically allows for a larger unit than the side-by-side design because the building envelope can be maximized horizontally and duplicated on the second story. Transition neighborhoods are ideal locations for this housing type such as Downtown, Whitaker, West University, and Jefferson Westside.

Building Specs	
Number of Units	2
Width	24'
Depth	42'
Building Size	2,016 sq. ft.
Unit Size	1,008 sq. ft.
Parking Ratio	2 per unit
Front Setback	14'
Side Setback	3'
Lot Size	5,625 sq. ft.
Net Density	15.5 DU/acre

DEVELOPMENT CODE

BARRIERS TO APPROVAL

Eugene Code	R-1 Standard	Stacked Duplex
Density		
Minimum	none	-
Maximum	14 DU/acre	15.5 DU/acre
Minimum Setbacks		
Front Yard (excluding garage)	10'	14'
interior yard setback	5'	3'
Maximum Lot Coverage		
All Lots, except secondary dwellings	50%	35%
Maximum Bedrooms Per Unit		
Within Amazon, Fairmount, and South University	not more than 3	2
Parking Standards (Minimum)	Per Dwelling	Per Dwelling
Duplex	1	2
Lot Area Minimum (Sq. Ft.)		
All lots, except below	4,500	-
Small Lots	PUD	-
Duplex	8,000	5,625
Lot Frontage Minimum (ft.)		
Interior Lot	50'	45'
Housing Mix Maximum (Within a Single Subdivision)		
Duplex	25%	-

As noted previously, the R-1 zone regulations require duplex lots be 8,000 square feet or larger (EC 9.2740(4)). In the sample development from Berkeley, CA, the stacked duplex fits comfortably on its 5,625 square foot lot. Lot dimensions vary widely in Eugene and the design can be adapted to fit many of these lots. However, it should be noted that a minimum lot size of 8,000 square feet is a roadblock to affordable Missing Middle housing development. In a duplex scenario with 2 units per lot, the city can achieve 14 units per acre, the maximum for the R-1 zone, on lots 6,222 square feet in size. Lots of 8,000 square feet are unnecessarily prohibitive. If the lot is large, the house on that lot will likely also be large and therefore costlier.

Lastly, Eugene Code places severe constraints on the location of duplexes, side by side, stacked, or otherwise. Section 9.2740(4) of the Code outlines that duplexes shall only be permitted on corner lots or on parcels that have been identified as being developable as such within a subdivision final plat. Additionally, new duplexed developments are prohibited within the city's recognized boundaries of entire neighborhoods including Amazon, Fairmount, and South University. This reduces the already limited supply of parcels ripe for duplex development.

TRIPLEX

Like duplexes, triplexes give smaller and single households a chance to live in a multi-family setting without the cost and reduced space of an apartment complex. Triplexes are ideal infill development because they are large enough to significantly contribute to the housing stock but small enough to remain nearly undetected within a single-family neighborhood context. This sample development from California showcases the ability of triplexes to be a positive addition to neighborhoods. While this sample was developed to be a three unit dwelling originally, many triplexes are converted from large one unit dwellings.

Building Specs	
Number of Units	3
Width	30'
Depth	34'
Building Size	3,060 sq. ft.
Unit Size	1,020 sq. ft.
Parking Ratio	1 per unit
Front Setback	30'
Side Setback	10'
Lot Size	6,000 sq. ft.
Net Density	21.6 DU/acre

DEVELOPMENT CODE

BARRIERS TO APPROVAL

Eugene Code	R-1 Standard	Triplex
Density		
Minimum	none	-
Maximum	14 DU/acre	21.6 DU/acre
Minimum Setbacks		
Front Yard (excluding garage)	10'	30'
interior yard setback	5'	10'
Maximum Lot Coverage		
All Lots, except secondary dwellings	50%	17%
Maximum Bedrooms Per Unit		
Within Amazon, Fairmount, and South University	not more than 3	2
Parking Standards (Minimum)	Per Dwelling	Per Dwelling
Triplex	1	1
Lot Area Minimum (Sq. Ft.)		
All lots, except below	4,500	-
Small Lots	PUD	-
Triplex	12,000	6,000
Lot Frontage Minimum (ft.)		
Interior Lot	50'	50'
Housing Mix Maximum (Within a Single Subdivision)		
Triplex	15%	-

Triplexes are only allowed in the R-1 zones (EC 9.2740). By their nature triplexes are of a higher density than single family developments. Eugene Code's maximum net density of 14 units per acre in the R-1 zone limits the possibility of triplex development. The sample development has a density of nearly 22 units per acre. In order to meet maximum density requirements in Eugene, this structure would require a lot around 9,300 square feet. Put another way, a 3-unit structure built on a 9,334 square

foot lot results in 14 units per acre. This is more than 3,300 square feet larger than what was needed to accommodate the sample structure pictured. But 9,334 square feet is still too small of a lot to meet the minimum lot size required in Eugene Code.

New triplex construction is only permitted on lots of 12,000 square feet or more (EC 9.2740(5)). A lot size of over ¼ of an acre creates a significant barrier to the development of these units because the number of lots this size is limited in the City of Eugene and are costly to purchase. Conversion of large older homes along or near commercial corridors are an ideal location for triplexes. By creating opportunities for more people to live near these corridors, Eugene can not only encourage affordable housing but begin to foster commercial sector growth. Finally, like duplexes, triplexes are currently only allowed on corner lots or as part of subdivision final plat. They are also prohibited from being built in the Amazon, Fairmount, and South University Neighborhoods.

FOURPLEX

Along with both triplexes and duplexes, fourplexes are explicitly called out in the Eugene Code as a permitted housing type in the R-1 zone. Fourplexes are an important part of the housing stock. These units fill a void that is left by developers attempting to maximize the build-out of their development, overlooking fourplexes in favor of larger and more profitable multiplexes or mid-rise apartment complexes. Fourplexes are obviously larger buildings than their two and three unit counterparts but they are still within the scale of a two story single-family house that is seen in areas like Jefferson Westside or in the South Hills of Eugene. The shared single entrance that is common in fourplex developments can disguise the fact that there are multiple units in the structure. Fourplexes are best-suited for areas near active commercial corridors because they are a more intense use than other Missing Middle housing types allowed in the R-1 zone.

Building Specs	
Number of Units	4
Width	36'
Depth	60'
Building Size	4,320 sq. ft.
Unit Size	1,080 sq. ft.
Parking Ratio	2.5 per unit
Front Setback	25'
Side Setback	3'
Lot Size	7,750 sq. ft.
Net Density	22.5 DU/acre

DEVELOPMENT CODE

Barriers to Approval

Eugene Code	R-1 Standard	Fourplex
Density		
Minimum	none	-
Maximum	14 DU/acre	22.5 DU/acre
Minimum Setbacks		
Front Yard (excluding garage)	10'	25'
interior yard setback	5'	3'
Maximum Lot Coverage		
All Lots, except secondary dwellings	50%	29%
Maximum Bedrooms Per Unit		
Within Amazon, Fairmount, and South University	not more than 3	2
Parking Standards (Minimum)	Per Dwelling	Per Dwelling
Fourplex	1	2.5
Lot Area Minimum (Sq. Ft.)		
All lots, except below	4,500	-
Small Lots	PUD	-
Fourplex	16,000	7,750
Lot Frontage Minimum (ft.)		
Interior Lot	50'	50'
Housing Mix Maximum (Within a Single Subdivision)		
Fourplex	10%	-

The sample development lacks a certain aesthetic and may be off-putting to some neighbors, but design should be flexible so that it can adapt to its built environment.

In practice, many regulations hinder the actual development of a fourplex. The sample development is able to nicely fit on a lot of 7,750 square feet and represents almost 23 units per acre. Compare this to the minimum lot size for fourplexes outlined in the Eugene Code (EC 9.2740(6)). The minimum lot size of 16,000 square feet is nearly 3,000 square feet larger than what is needed to achieve the maximum density. In the R-1 zone, developers can achieve 14 units per acre by building a fourplex on a 12,445 square foot lot.

As with both duplexes and triplexes, four-plexes are strictly regulated in their location. New fourplexes are only allowed on parcels identified as such on a subdivision final plat and are totally prohibited in the Amazon, Fairmount, and South University Neighborhoods.

The fourplex is the first Missing Middle housing type studied here that looks and feels like "density". NIMBYism and concerns about neighborhood character are often the most common barrier these developments face even before the application is submitted. Therefore, the design of four-plexes is crucial to the process. Creating compatibility within surrounding properties using design elements like shared entrances, setbacks, and façade features are important to stress in the approval process.

MULTIPLEX

Multiplexes are on the upper end of Missing Middle Housing in terms of density and number of units. These structures are typically between 5 to 12 units and may have up to three stories. As such, they are ideally located within the downtown core of cities or along active commercial or transit corridors. Like fourplexes, there are design elements that can be employed to lessen their perceived impact on neighborhood character. Shared common entrances, roof sloping, window breaks, and landscaping can make the building appear more "residential" if their location allows. But unlike lower density Missing Middle housing types, the size of multiplexes may actually be their greatest asset. Acting as stepping stones from intense downtown developments to more traditional neighborhoods, these units can actually ease the transition if one travels away from the central core of the city.

Building Specs	
Number of Units	6
Width	42'
Depth	62'
Building Size	5,208 sq. ft.
Unit Size	868 sq. ft.
Parking Ratio	2 per unit
Front Setback	20'
Side Setback	0'
Lot Size	7,800 sq. ft.
Net Density	33.3 DU/acre

Barriers to Approval

Eugene Code	R-3 Standard	Multiplex
Density		
Minimum	20 DU/acre	33.3 DU/acre
Maximum	56 DU/acre	-
Minimum Setbacks		
Front Yard (excluding garage)	10'	25'
interior yard setback	5'	3'
Maximum Lot Coverage		
All Lots, except secondary dwellings	n/a	29%
Maximum Bedrooms Per Unit		
Within Amazon, Fairmount, and South University	n/a	2
Parking Standards (Minimum)	Per Dwelling	Per Dwelling
Multiple Family - 1 space for each studio, 1 bedrm, or 2 bedrm dwelling.	1	2.5
Lot Area Minimum (Sq. Ft.)		
All lots, except below	4,500	7,800
Small Lots	PUD	-
Lot Frontage Minimum (ft.)		
Interior Lot	50'	52'
Housing Mix Maximum (Within a Single Subdivision)		
Fourplex	10%	-

Multiplexes are medium to high density developments. As such, these are typically developed in the R-2, R-3, or R-4 zones. For multiplexes the density range is the most important aspect of the development application. If a proposed development produces a density outside of this range, either the underlying zone must be changed to be appropriate or the development scale must adapt by reducing the number of units. The sample development shown here includes three floors, one partially below ground level, with 2 units on each floor. The density of this development is 33.3 units per acre, excluding it from the R-2 zone but falling within the range of both the R-3 and R-4 zones (EC 9.2750). Unfortunately, even though this sample development fairs well when subjected to the Eugene Code, it faces other types of barriers.

Developers build structures as investments and they seek to maximize their return on this investment. If a developer owns a parcel of land zoned R-3 and the maximum density is 56 units per acre, they are most likely to build a structure that fits at the high end of this density range. Multiplexes do not fit well within the current Eugene Code categories because they can't provide the high densities allowed in the upper residential zones but are too dense for the lower zones.

Missing Middle Housing Types, Continued

The final three sample housing types are analyzed using a different method than the previous due to the unique conditions that need to be met in order to approve their development application. A comprehensive review of these conditions are listed for each of the developments, these include reviewing overlay zones, special development standard provisions, and neighborhood refinement plans.

DEVELOPMENT CODE

BUNGALOW COURTS

Bungalow court developments experience substantial regulation opposition. These small lot, detached, single-family units are a unique opportunity to not only increase density but make homeownership affordable for people with limited income. The cost of these units is limited because of their size and the shared courtyard green space is less expensive to maintain for an individual household. However, their size is also their regulatory opponent. These cottages are typically 500-800 square feet on lots between 2,000-2,500 square feet.

There are a few avenues that developers could consider when attempting to build bungalows. The Eugene Code allows developments of 6 dwelling units or more to be "clustered" under Cluster Subdivision Section EC9.8040. The section outlines approval criteria for the clusters including that the proposed subdivision meets all of the development standards of the underlying zone. Parcels zoned R-1 must comply with the 4,500 minimum lot size regardless if it's approved through the Cluster Subdivision or Planned Unit Development process. The small lot size of typical bungalow court developments would fail to meet this regulation and would require a variance or exception to the minimum lot size standard. The Eugene Code does allow Small Lot Developments of 2.250 square feet but only in the R-2, R-3, and R-4 zones (EC 9.2760).

Permitted in only the R-1 zone, bungalow courts are also subject to density minimums and maximums. The R-1 zone allows a maximum density of 14 units per acre. Developments of this type often times measure between 15-20 units per acre, exceeding what is allowed in the Eugene Code.

In the end, bungalow court proposals are subject to a plethora of standards. Many of these are difficult to meet, given the unique design and site specifications of the housing type. Small lot sizes and maximum densities are especially great barriers to the approval of bungalow court applications. However, under the Cluster Subdivision and Planned Unit Development processes, city planning staff has the ability to closely review each aspect of the application and decide to grant variances or exceptions to these standards. These are practically a requirement in order to see the approval of a bungalow court development, as they are dependent on these exceptions.

LIVE/WORK MIXED-USE

Live/work housing is a growing trend in urban areas because it has the ability to not only add to the affordable housing stock but provides office or retail space that can contribute to the economic health of the neighborhood. Small business owners or entrepreneurs can choose to either live on-site at their place of business or rent out the dwelling to a tenant. Like other Missing Middle Housing types, live/work housing is cheaper to rent because of its small footprint. Since these developments are usually located along high activity corridors, they have easy and quick access to a large range of services and amenities, keeping transportation costs low for residents.

In Eugene, there is evidence of live/work development taking place along high volume corridors like Willamette Street, 6th Ave, and Hilyard. On the basis of zoning,

live/work developments are fairly uncomplicated. Residential developments are allowed in many commercial zones, while commercial development permitted in the C-1 zone is allowed, with conditions, in any residential zone.

Mixed use developments are a common thread in many Special Area Zones created by the city over recent years. The Chase Garden Node, Downtown Riverfront, Historic Blair Boulevard, Royal Node, Whitaker, and Walnut Station Special Area Zones all allow mixed-use developments.

DEVELOPMENT CODE

SECONDARY DWELLING UNITS

Carriage homes are a form of Secondary Dwelling Unit (SDU) where a single dwelling unit is created above a garage or storage space. This type of unit is ideal for a single person who does not require a lot of space. Secondary Dwelling Units are gaining popularity in large cities because they are much less expensive to build than a full-sized, primary residence. Additionally, low income households have the opportunity to live in highly desirable, fully built-out neighborhoods because SDUs add new housing within the already built environment without requiring more space. There are a variety of different types of SDUs that can either be attached to the primary dwelling or detached within the same lot. Tiny homes, converted storage facilities, attic conversions, or carriage houses give property owners options, should they consider developing a SDUs. These types of developments would be ideal in some of the older neighborhoods in Eugene that are close to being fully developed: the Whitaker, Friendly, and West University.

Secondary Dwelling Units like this sample development have been a point of conversation in Eugene for some time now. The City has strict regulations on location, size, orientation, ownership, and access to secondary dwelling units that may be responsible for the low number of these units approved in the average year.

All SDUs must be on a rent-only basis and are not allowed to be purchased separately from the primary dwelling. All secondary dwelling units must be built in the R-1 zone as a detached or attached addition to a single-family home. Attached SDUs (within the primary dwelling) must have lots 6,100 square feet or larger while detached SDUs (separated from the primary dwelling) must have lots 7,500 square feet or larger. SDUs are permitted on all R-1 parcels but have additional requirements if the parcel is located within the City recognized boundaries of Amazon, Fairmount, or South University Neighborhoods.

DEVELOPMENT CODE

SPECIAL AREA ZONES

The Eugene Code (EC 9.3000-9.3980) details 13 special area zones that are unique in some manner. The zones provide procedures and criteria for recognition of areas of the city that possess distinctive features or have significance for the community and require special consideration of development measures that cannot be achieved through application of the standard base zones. The Special Area Zone describe standards that supersede the base zoning standards during the application process. Many of these standards are related to residential and commercial development and some Special Area Zone standards relax the ones articulated in the base zone. A short review of the standards related to Missing Middle Housing is shown below.

Special Area Zone	Standards Related to Residential Development
Chambers	No changes in density or minimum lot size, few changes to secondary dwelling unit standards
Chase Node	Minimum density is 20 units per acre and maximum is 112 units per acre
Downtown Riverfront	Single family detached and duplexes are not allowed in this zone.
Downtown Westside	No density standards in this zone. Lot standards still 4,500 square feet
Elmira Road	All residential is subject to standards in the R-1 zone.
Fifth Ave	No changes in development standards for residential
Historic Zone	No changes in development standards for residential
Blair Boulevard Historic	No changes in development standards for residential
Jefferson Westside	Minimum lot size is reduced to 4,500 square feet.
Riverfront Park	No residential allowed in this special area.
Royal Node	Minimum lot size reductions: Duplex – 6,400 sq. ft.; Triplex – 9,600 sq. ft.; Fourplex – 12,800 sq. ft.; Multiplex – 13,200 sq. ft.
Whitaker Special Area	Lot standards are 4,500 for all lots but the density for all residential is equal to the R-4 zone.
Walnut Station Special Area	Form-based code approach, can approve development based on design code review rather than development standards.

Development Code

Synthesizing the Barriers in the Eugene Code

As found, the most common regulatory barriers for Missing Middle housing were minimum lot size and maximum density. These two standards are closely tied - allowing units to be built on smaller lots means the density of that development correspondingly increases. The Eugene Code attempts to simultaneously allow denser development by outright permitting duplexes, triplexes, and fourplexes in the R-1 zone, while also effectively prohibiting it by requiring these developments be built on large lots that are limited in quantity and location. This represents an impassable roadblock to Missing Middle housing types since they are simultaneously the right density and too dense.

Another regulatory barrier for Missing Middle Housing is the location in which it is allowed to be built, specifically duplexes, triplexes, and fourplexes. The Eugene Code outlines specific instances in which these developments are allowed and they are few and far between. In addition to meeting the lot size and density requirements outlined above, Missing Middle housing is only allowed to be built within certain neighborhoods and sometimes only on certain parcels on a block.

Development standards such as side and front setbacks seemed to pose a lesser barrier to development of Missing Middle Housing. This may be due to the small size of these structures as they do not encroach on the property lines of the parcel. Maximum heights rarely were an issue in examining the sample developments. What this shows is that the Eugene Code allows a fairly large building envelope for developments to take place within. While this can be beneficial in allowing creativity and flexibility in the process it also lends itself to being taken advantage of.

Lastly, some Missing Middle Housing types experience a bit of an identity crisis when subjected to the Eugene Code. The Code is structured in a way that easily allows for a handful of residential types, but anything outside of those select types must bend and adapt to rigid standards. Many Missing Middle Housing types such as multiplexes, bungalow courts, and accessory dwelling units are subject to a wide array of additional development regulations that are applied inconsistently and offer no standardized path for developers to travel should they be interested in building these units.

Most Common Barriers to Missing Middle Housing:

- **Maximum Density requirements are too low for many Missing Middle types**

- **Large minimum lot size requirements limit the number of lots available for development**

- **Most Missing Middle Housing types are excluded from some of the most desirable neighborhoods in the City**

SYSTEM DEVELOPMENT CHARGES

Cost Prohibitive System Development Charges

Building Missing Middle Housing is expensive. Not only do developers need to purchase available lots, acquire financing to construct the actual building, they also need to pay System Development Charges to mediate the impacts their development has on infrastructure systems.

As with most cities in Oregon[1], Eugene calculates SDCs based on the number of dwelling units in a new residential development. This puts Missing Middle developments at a significant disadvantage because they have higher number of units per structure than single family

developments. Additionally, these units are typically smaller in square footage than traditional developments and would likely have a lesser impact on infrastructure systems. Calculating SDCs by dwelling unit treats 600 square foot studio apartment the same as a four bedroom 2,500 square foot single family home. Both developments would be charged the same amount in fees. Meanwhile, the case can be made that the impact the single family home has on infrastructure is much greater than that of a studio apartment.

1   https://www.orcities.org/Portals/17/Premium/SDC_Survey_Report_2013.pdf

System Development Charges	1 & 2 Family	Stacked Duplex	Side-by-Side Duplex	Multifamily	Triplex	Fourplex	Multiplex
Transportation	$2,041.67 Cost Per Trip x Number of DUs x 1.00 trip rate	$4,083.34	$4,083.34	$2,041.67 cost per trip x number of units x 0.58 trip rate	$3,552.51	$4,736.67	$7,105.01
Wastewater (local)	($446.07 x Number of DUs + ($0.1081 x Living Area (sq. ft.))	$1,024.45	$1,110.07	($446.07 x number of DUs + ($0.1081 x living area (sq. ft.))	$1,669.00	$2,251.27	$3,239.40
Wastewater (MWMC)	$1,669.86 x Number of DUs	$3,339.72	$3,339.72	$1,431.31 x number of DUs	$4,293.93	$5,725.24	$8,587.86
Storm water	Small 1& 2 Family = < 1,000 sq. ft. (Number of DUs x $399.73) Medium 1& 2 Family = >1,000 & < 3,000 sq. ft. (number of DUs x $644.01)	$1,288.02	$1,288.02	Actual Impervious Surface Area (sq. ft.) x. $0.2221	$679.63	$959.47	$1,156.70
Parks	$3,328 x Number of DUs	$6,656.00	$6,656.00	$2,597.00 x number of DUs	$7,791.00	$10,388.00	$15,582.00
Administrative Fee	9%	$1,475.24	$1,482.94	9%	$1,618.75	$2,165.46	$3,210.39
Total SDC		$17,866.77	$17,960.09		$19,604.81	$26,226.12	$38,881.36

To illustrate this point, SDC calculations have been estimated for some of the sample developments defined earlier. Figure XX shows the calculations and compares them across each sample.

Logically, as the development grows in number of units, as too does the total SDC amount. In comparing the SDCs charged to a 2,000 square foot single family home, which total $9,096.93, multi-unit structures face disproportionately high fees.

Most Missing Middle units are developed as infill on vacant or underdeveloped parcels within the already built neighborhoods of cities. While they certainly do contribute to increased loads on infrastructure, it is to a much lesser extent than a new subdivision development on the urban fringe. Keeping fees and SDCs proportionate to impacts would be a good first step in encouraging small developers and homeowners to begin considering Missing Middle housing as a financially feasible possibility on their properties.

Recommendations

After reviewing the regulatory framework that exists for potential Missing Middle housing types, this report has identified a number of barriers that further impede their development. These barriers are significant to the extent that no sample development studied would have passed the permitting process of the City. In order to encourage the development of these housing types and to create more variety in the housing stock of Eugene, the follow recommendations are made.

Decrease Minimum Lot Size and Allow Housing to be Built More Densely

As it is currently written, the Eugene Code requires a minimum lot size of 8,000 square feet (.18 acres) for duplexes, 12,000 square feet (.28 acres) for triplexes, and 16,000 square feet (.38 acres) for fourplexes. As was outlined in the previous section of this report, sample Missing Middle developments can easily be situated on lots much smaller than these, and still allow room for front and back yards, side setbacks, and off-street parking. Requiring developers to build these housing types on large lots incentivizes them to build to the maximum potential of the lot, which is likely incompatible with the character of many neighborhoods in Eugene.

Minimum lot size also creates a problem for developers who are looking for infill parcels to purchase and redevelop into Missing Middle Housing. Large lots are limited in number in Eugene and especially limited in areas within walkable distances to active corridors and other amenities. Reducing the size of the lot requirement will potentially increase the number of parcels available and ripe for development.

Using minimum lot sizes, minimum setbacks and maximum lots coverages to create a building envelope, a better picture can be drawn to illustrate the structures allowed in the R-1 zone. On an 8,000 square foot lot with a 10-foot front yard setback and a 5-foot side setbacks on each side, the current code allows the building of a 4,000 square foot duplex structure. Maximizing the size of a triplex on a 12,000 square foot lot results in a 6,000 square foot structure. Similarly, an 8,000 square foot fourplex could be built on a 16,000 square foot lot. Each of these situations would result in multiple 2,000 square foot units per structure. Units this size are not only unneeded; they would also be unaffordable to the majority of the market.

Additionally, using the smallest lot a structure could be built on, these housing types achieve fairly low densities compared the range allowed in the R-1 zone (0 to 14 units per acre). Current minimum lot sizes hinder the ability of builders to fully achieve the maximum potential of their investment. If a developer sets out to build in the R-1 zone and adheres to all minimum standards, the highest density they can achieve is around 10 units per acre. Figure XX shows the maximum achievable densities for certain housing types in the R-1 zone.

This is an inefficient use of land when the

Housing Type	Minimum Lot Size	Number of units	Maximum Achievable Density
Single Family	4,500 sq.ft. (.10 acres)	1	10 units per acre
Duplex	8,000 sq. ft. (.18 acres)	2	11.1 units per acre
Triplex	12,000 sq. ft. (.28 acres)	3	10.7 units per acre
Fourplex	16,000 sq. ft. (.38 acres)	4	10.5 units per acre
Total	**66,413**	**70,202**	**3,789**

maximum allowed density is 14 units per acre. If the city wants to encourage efficient use of land, allow more opportunity for parcels to be developed into Missing Middle Housing, but keep maximum density requirements constant, minimum lot sizes should be reduced to match the highest allowed density in the zone. For example, 14 units per acre can be met by building a duplex on 6,222 square foot, triplexes on 9,334 square foot, and fourplexes on 12,445 square foot lots, minimum lot standards should be reduced to these sizes.

Lastly, it is important to note that having a conversation about changing the code to incorporate smaller minimum lot sizes is also a conversation about density, which is a controversial subject many cities prefer to avoid. However, if the City of Eugene is serious about encouraging the expansion of Missing Middle housing options, it is a conversation they must have.

The Location of Missing Middle Housing

Duplex developments are the least restrict-ed of the sample developments studied. Chapter 9.2741(4) of the Eugene Code outlines that duplexes are allowed if they conform to at least one of the following standards: 1) the duplex was established prior to August 1st, 2001; 2) the duplex is on a corner lot at least 8,000 square feet in size and abutting public streets; 3) the duplex is on a parcel identified for that use on a subdivision plat. Triplexes and fourplexes experience stricter scrutiny in their location and are only allowed on parcels designated for that use on a subdivision plat.

Additionally, the standards are applied differently within specific areas of the city. These area-specific standards prohibit the development of any new duplex, triplex, fourplex, or multi-family structure in the city-recognized boundaries of the Amazon, Fairmount, and South University neighbor-hoods.

These units are so strictly limited to corner lots, large lots and within subdivisions that they have effectively been regulated out of possibility. Additionally, area-specific siting standards let whole neighborhoods off the hook from housing choice conversations.

In order to see an increase in the supply of these units, the city must take steps to free-up developable parcels that are currently slated for single family development. The simplest version of this recommended policy change would be to allow duplexes mid-block outright while understanding that triplexes and fourplexes may still need to be subject to special standards and individually reviewed to ensure compatibility with adjacent properties.

Calculate System Development Charges by Dwelling Unit Size

In the current regulation system in Eugene, System Development Charges are largely calculated by the number of dwelling units in a structure. This the most common method of calculating these fees[1]. However, calculations of this manner misrepresent the actual strain on infrastructure systems seen by units of different size. Under the current system, a 400 square foot tiny home in a close-in neighborhood is seen to have the same impact on infrastructure as a 3,000 square foot, 4-bedroom single family detached home on the perimeter of town. While this fee structure clearly does not accurately depict the impact different unit types have, it has deeper implications. Because the cost is the same for any single unit regardless of size, there is a monetary incentive for developers to build the largest unit possible because they can sell the unit for more.

By restructuring the SDC fee schedule to scale upwards with increasing unit square footage, the City can quell this maximizing mindset. Making SDCs less expensive for smaller units compared to large units will allow developers to seriously consider them as a viable option as opposed to one that is cost-prohibitive.

Provide a Clear Path to Development

As shown by the Missing Middle Photo Inventory Booklet, these types of developments are technically possible within Eugene's current regulatory climate. A number of these housing types have been disbursed throughout the City as unique situations make the development possible. However, it remains prohibitively difficult and expensive to navigate the process.

A significant portion of development of Missing Middle housing types, especially multiplexes, carriage homes, live/work scenarios, and bungalow courts, are dependent on the issuance of a long list of variances and code exceptions. While this is certainly an acceptable process which allows the City to have oversight control of dense developments, it may be a primary reason so few of these units exist in the city and why the overall number of them have decreased recently. The application process for residential development gets significantly more difficult as you add these exceptions. Variances are considered independently in the application process and the denial of one of them could hold up the entire project. A streamlined process that includes a more direct path to approval could potentially spark infill development of this kind.

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1   https://www.orcities.org/Portals/17/Premium/SDC_Survey_Report_2013.pdf

Conclusion

Missing Middle Housing is About Creating Housing Choice

Housing affordability remains a problem not just in Eugene or the State of Oregon but also nationwide. On a macro-economic level, fast increasing demand for units has outpaced the relatively stagnant increase in supply of housing stock. As more people move to cities in search of employment or changing lifestyle preferences, they scramble to find one of the limited housing units available. This seller's market pushes home prices and rents higher and higher as they can easily find a buyer willing to pay. Compounding this issue is the lack of growth in incomes relative to housing prices. This has drastic implications on people's ability to afford not only adequate housing but all other aspects of life. Housing cost-burdened individuals pay a significant portion of their income on shelter and often times have to make difficult, even unhealthy, budgetary trade offs as a result.

In Eugene, the shortage in housing supply is creating wide-spread affordability problems for households. For too long, development patterns in Eugene have eliminated housing diversity and created a housing stock that is accessible only to those wealthy enough to afford it. Expensive-to-purchase and maintain single family homes and luxury high-rise apartment complexes have seen significant growth in numbers during recent years, while typically less expensive, small-to-mid-size multi-unit developments in the walkable urban core have seen a decrease in overall numbers.

If single family and high-rise units punctuate the ends of the housing spectrum, small-to-mid-size multi-unit homes must make up everything in between. This particular type of housing is known as The Missing Middle. The concept is a fairly new one but is being heralded as a tool to increase housing supply and options that could alleviate built-up pressure along the rest of the housing spectrum. Adding Missing Middle units could give households, especially moderate to low income households, choice in their housing decision, potentially leading to affordable outcomes.

So why are these housing products missing from the City? Researchers have found that development standards, costs associated with complying to those standards, market preferences, and incentives to build home ownership units are responsible for so few of these types being built. In short, building these units is difficult, expensive, and risky.

CONCLUSION

At the end of the day, it is true that housing is mostly a market-driven commodity. But, the city plays a part in this by ensuring that they provide a path for the housing that citizens want, need, and demand. However, in terms of housing, Eugene zoning codes are largely mismatched between what the market wants and what the city allows. These regulatory barriers are one of the main reasons the Middle is Missing. They present impassable roadblocks that make building these housing types unprofitable and therefore, infeasible.

An in-depth review of how the current Eugene Code applies to specific Missing Middle housing types provides a direct and educated approach to identifying portions of the code that could be modified to be more open to Missing Middle Housing. While a move away from conventional, Euclidian zoning to a dynamic, form-based system would likely foster the development of more Missing Middle units and increase housing diversity, a change in Eugene's zoning code of this magnitude is most likely politically and economically unattainable. Therefore, incremental changes to and within Eugene's current zoning and development code, such as those recommended in this report, remain the most viable way to address the growing deficit of housing stock in the city.

It will take a directed and educated approach to diversify the city's housing stock so that households can find units that are appropriate for their lifestyle and income. Moving forward, the city should engage in community conversations about the importance of housing choice. Educating the community on these issues is crucial to securing their support during policy discussions and understanding what their needs are as it relates to housing in their neighborhoods. After a series of open and honest conversations, the city should consider the information, knowledge, and feedback gleaned to develop a plan of action for implementing regulatory changes needed to provide a clear path for the development of Missing Middle units.

There is no singular silver bullet to solving housing affordability. Potential solutions to this problem are heavily debated and uncertain. What is certain however, is that the City of Eugene needs to engineer the dedicated and community-supported movement that is necessary to change. Housing is a basic human need and all households should have access to a variety of housing options that meet that need. It is understood that removing barriers to Missing Middle housing is just a small first step in this process, but a step in a very rewarding journey towards fulfilling that basic human need for all people of Eugene.

1 Engage in community conversations about the importance of providing housing choice

2 Incorporate the needs and wants of the community in a directed and educated housing plan

3 Implement regulatory and non-regulatory changes to provide a clear path for the development of Missing Middle units

APPENDIX - A

Current Housing in Eugene

Housing Stock (Occupied vs. Vacant)
AND   Household Size
AND   Housing Mix (by number of units in structure)
AND   Housing Tenure (Renter vs. Owner)
AND   Housing by HUD Area Average Value and Rent
AND   Number of households considered to be substandard (Experiencing 1 or more of the 4
housing problems as defined by CHAS[1])

_____

=   The current state of housing in Eugene

Housing Stock

The 2009-2013 5-Year American Community Survey estimates that the City of Eugene has 70,003 housing units within its boundaries. Of those units, 4,189 units are considered vacant, a vacancy rate of 6.0%. For comparison, the State of Oregon's average vacancy rate is 9.6%, Portland's vacancy rate is 6.2%, while Salem's is 6.0%. More recently, the housing market in Eugene has accelerated substantially, particularly the ownership market. According to a realtor.com study, Eugene had the second tightest homeownership market in the nation with only 0.6% of its housing stock available for sale[2]. The vacancy rate listed in the American Community Survey doesn't represent this change and may be overestimating the true availability of housing.

Table 1. Housing Stock by Housing Status

Housing Stock by Housing Status		
City of Eugene, Oregon		
Source: ACS 2009-2013		
Housing Status	**Number of Units**	**Percentage**
Occupied	65,814	94%
Vacant	4,189	6%
Totals	**70,003**	**100%**

Housing Mix

Of the 70,003 units in the City of Eugene, the majority (62%) are single-family units with only unit in the structure. Nearly a fifth (18%) of all units are of a much higher density consisting of 5 units or more. Only 6,845 household units (10%) are lower density multi-family units of 2 to 4 units per structure and even fewer structures have 5 to 9 units (6%). While Brief #2 will discuss this in more detail, it is these medium density structures, typically between 2 to 9 units per structure, that define Missing Middle Housing[3].

_____

1   Household experiencing Housing Problems have one or more of the following: incomplete kitchen facilities; incomplete plumbing facilities; more than 1 person per room; or cost burden
2   http://www.realtor.com/news/trends/top-10-housing-markets-constrained-by-tight-inventory/
3   A range of multi-unit or clustered housing types compatible in scale with single-family homes.

Table 2. Housing Mix by Number of Units in Structure.

Housing Mix by Number of Units in Structure		
City of Eugene, Oregon		
Source: ACS 2009-2013		
Housing Units in Structure	**Number of Units**	**Percentage**
1 Unit:	43,380	62%
1, detached	38,710	55%
1, attached	4,670	7%
2 to 4	6,845	10%
5 to 9	4,441	6%
10+	12,571	18%
Mobile Home	2,721	4%
Boat, RV, van, etc.	45	0%
Totals	**70,003**	**100%**

Eugene's housing mix has a slightly higher percentage of multi-unit structures (2 or more units per structure) than the Oregon average (32%) but lower than the City of Portland (40%).

Housing Tenure

Interestingly, housing tenure in Eugene is nearly split evenly between those who rent (50.2%) and those who own (49.8%). This statistic makes Eugene unique in that it has a higher percentage of renters than owners. While this is likely due to the large student population present in the city, the amount of units dedicated to renters presents a constraint on the supply of units available to be owner occupied. Similarly, rental units, especially rental units targeted at students, are subject to frequent price fluctuations that serve to inflate the cost of housing throughout the rest of the city.

Table 3. Housing Stock by Tenure.

| Housing Stock by Tenure		
City of Eugene, Oregon		
Source: ACS 2009-2013		
Average Household Size		2.3
Housing Status	**Number of Units**	**Percentage**
Owner Occupied	32,758	49.8%
Renter Occupied	33,056	50.2%
Totals	**65,814**	**100%**

The 2009-2013 American Community Survey estimates that the Median Home Value was $238,700. This is only $700 greater than the State of Oregon median home value. Of owner-occupied units, the majority of units (72%) are greater than the HUD area average home value. Most significant is the number of units available that are considered low value. Only 14% of owner occupied units are valued at 80% or less of the area average.

The HUD Fair Market Rent for a 2-bedroom unit in the Eugene-Springfield MSA was $821 in 2013 and $889 in 2016. Of renters, most households live in units with rent between 50% and 80% of the 2013 area average. Renters who pay more than 80% of the 2013 area average rent make up nearly a third of all renters (33.6%).

Table 4. Housing Supply by Value by Tenure.

Housing Supply By Value by Tenure								
City of Eugene, Oregon								
Source: Comprehensive Housing Affordability Strategy Data. ACS 2009-2013								
Tenure Type	Total Tenure Units	Value < 50% of VHUD	Percentage	Value >=50-80% of VHUD	Percentage	Value >=80-100% of VHUD	Percentage	Value > 100% of VHUD	Percentage
Owner	32,910	2,465	7.5%	2,195	6.7%	4,430	13.5%	23,760	72.2%
Tenure Type	Total Tenure Units	Rent < 30% of RHUD	Percentage	Rent >=30-50% of RHUD	Percentage	Rent >=50-80% of RHUD	Percentage	Rent > 80% of RHUD	Percentage
Renter	33,000	2,055	6.2%	3,205	9.7%	15,180	46.0%	11,080	33.6%

Figure 1. Supply of Owner-Occupied Housing by House Value as Compared to Area Average

Supply of Owner-Occupied Housing by House Value As Compared to Area Average
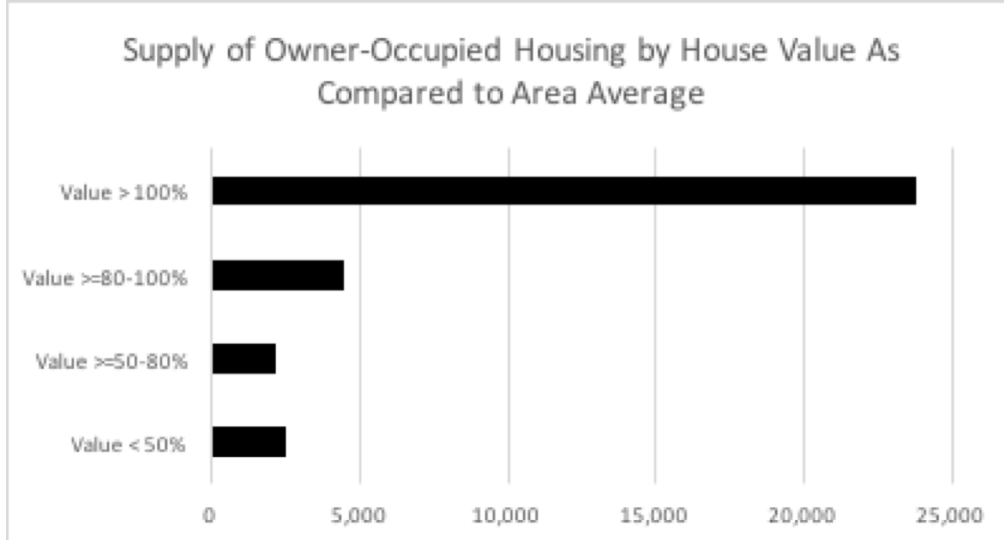
Figure 2. Supply of Rental Housing by Rent Price as Compared to Area Average.
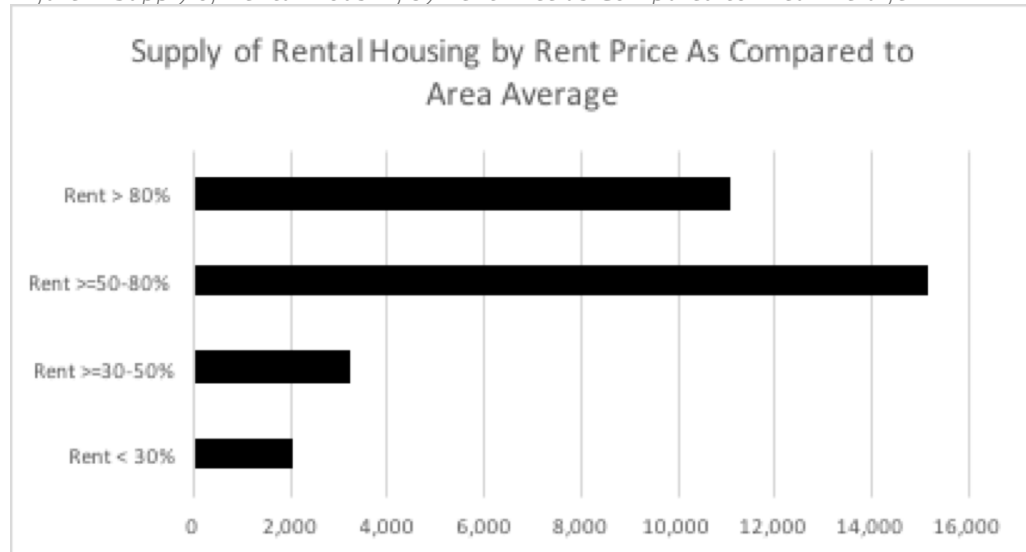
Substandard Housing

HUD's CHAS dataset measures if households are experiencing housing problems. CHAS defines four problems that make housing substandard. These include households with incomplete kitchen facilities, incomplete plumbing facilities, more than one person per room, and cost burden. There are nearly 30,000 housing units in Eugene that experience at least one housing problem, approximately 45% of all housing units.

Table 5. Substandard Units by Tenure.

Substandard Units By Tenure							
City of Eugene, Oregon							
Source: Comprehensive Housing Affordability Strategy Data. ACS 2009-2013							
Tenure Type	All Tenure Units	Household has 1 of 4 Housing Problems	Percentage	Household has none of the 4 Housing Problems	Percentage	Cost Burden Not Available	Percentage
Owner	32,910	10,005	15%	22,495	34%	255	0%
Renter	33,000	19,330	29%	12,325	19%	1,395	2%
Totals	**65,910**	**29,335**	**45%**	**34,820**	**53%**	**1,650**	**3%**

Affordability Metrics

Household Income (Area Median Income as defined by CHAS)
AND   Household Income by Household Units
AND   Household Income by Tenure
AND   Housing Units Available
AND   Average Home Value
AND   Average Rent
_____
=   The Ability of Households to Afford the Existing Housing Options

Household Income (Area Median Income as defined by CHAS)

The HUD CHAS data calculates housing cost burden based on incomes. This analysis uses the HUD Area Median Family Income (HAMFI) from fiscal year 2013 because it best correlates with most recently available CHAS dataset from 2009-2013 and takes into consideration additional income factors such as family size. The FY2013 HAMFI for Eugene-Springfield was $55,800. Using this income figure, HUD illustrates different income brackets based on their percentage of the HAMFI. The lowest income bracket, the Extremely Low Income bracket includes households that make $16,740 or less.

Table 6. City of Eugene Income Bracket as Percentage of HAMFI.

City of Eugene Income Brackets as a Percent of HAMFI	
City of Eugene , Oregon	
Source: Comprehensive Housing Affordability Strategy Data. ACS 2009-2013	
2013 Eugene-Springfield HUD Area Median Family Income = $55,800	
Income Bracket	**Income Range**
Above Middle Income	Over $55,800
Middle Income *(80% - 100% of HAMFI)*	$44,640 - $55,800
Low Income *(50% - 80% HAMFI)*	$27,900 - $44,640
Very Low Income *(30% - 50% HAMFI)*	$16,740 - $27,900
Extremely Low Income *(Less than 30% HAMFI)*	$0 - $16,740

Income by Tenure

Unsurprisingly, the section of the population that has the highest homeownership rate are those that are earning above the Area Median Income. The vast majority, over 71%, of those that own homes, earn above the median income. This section of the population has enough income to be able to afford the high cost of homeownership and maintenance. At other income brackets the homeownership rate drops off drastically. Only 5.6% of homeowners in Eugene are considered Very Low Income, earning more than 30% but less than 50% of HAMFI. Similarly, only 4% of homeowners fall into the extremely low income bracket, making less than 30% of HAMFI. For renters the distribution is more even across income brackets. Only about a quarter (26.6%) of renters are earning more than the median income and about the same percentage (28.5%) are
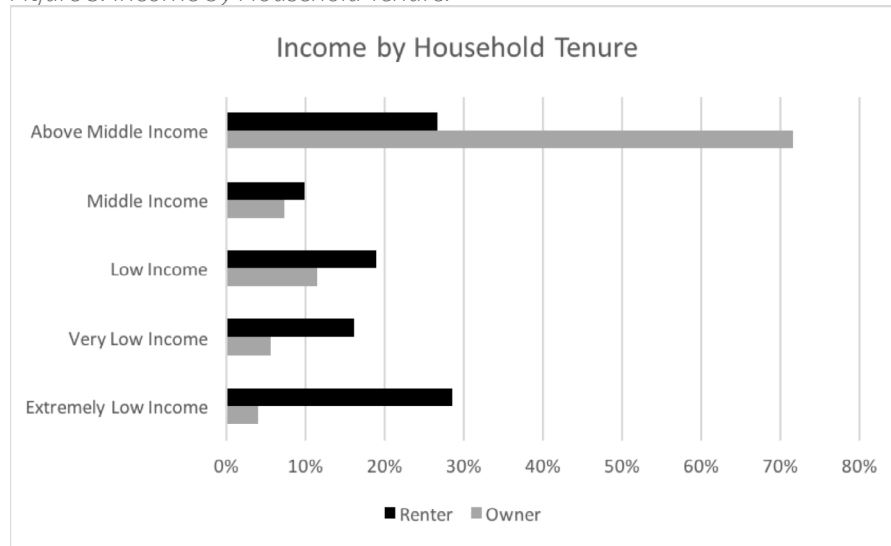
considered in the extremely low income bracket. This can likely be attributed to the wider range of rentals available in the market (anywhere from luxury high-rise apartments in downtown to cheap duplexes on the urban fringe) as compared to the ownership market that tends to have less variety.

Table 7. Income by Tenure.

Tenure Type	All Tenure Units	Extremely Low Income	Percentage Extremely Low Income	Very Low Income	Percentage Very Low Income	Low Income	Percentage Low Income	Middle Income	Percentage Middle Income	Above Middle Income	Percentage Above Middle Income
Owner	32,910	1,325	4.0%	1,845	5.6%	3,760	11.4%	2,415	7.3%	23,565	71.6%
Renter	33,000	9,420	28.5%	5,315	16.1%	6,230	18.9%	3,245	9.8%	8,785	26.6%
Totals	65,910	10,745	16.3%	7,160	10.9%	9,990	15.2%	5,660	8.6%	32,350	49.1%

Income By Tenure — City of Eugene, Oregon. Source: Comprehensive Housing Affordability Strategy Data. ACS 2009-2013

Figure 3. Income by Household Tenure.

Household Income by Tenure by Number of Units

The table below shows the household incomes of owners and renters by the number of units in the structure. The number of units in a structure is important in order to better understand the types of housing options that are currently available to households. Generally, structures with more units in them will be more affordable, as these units tend be smaller in size and cheaper to build. Unsurprisingly, rentals are more likely to have more than one unit per structure, whereas owner-occupied structures are typically a single unit. The value in this statistic is the distribution of units among income brackets. CHAS data provides information about owners who have a mortgage and those who have no mortgage, as well as information on renters. For owners,

most households have an income of over 100% of the HUD area median family income. In fact, of homeowners with a mortgage, nearly 82% have an income of over 100% of the HAMFI. Of renters, only 29% are in this category. In fact, renters are of considerably lower income than homeowners with 27% of them earning less than 30% of the HUD area median family income, as compared to only 3.6% of homeowners. The largest share of renters has income under 30% of HAMFI and lives in structures with 5 or more units in them.

Home Values for Owner-Occupied Units

The owner-occupied housing stock in the city of Eugene are disbursed mostly within the $100,000 to $499,999 ranges, encompassing 85% of all homes. The Area Average Home Value in Eugene is $238,700. The remaining distribution is described below.

Table 8. Home Values for All Owner-Occupied Housing Units.

Home Values for All Owner-Occupied Housing Units		
City of Eugene, Oregon		
2012 Population: 158,335		
Source: ACS 2009-2013		
Home Values	**Number of Units**	**Percentage**
Less than $20,000	890	3%
$20,000 to $49,999	905	3%
$50,000 to $99,999	995	3%
$100,000 to $149,999	2,588	8%
$150,000 to $299,999	17,806	54%
$300,000 to $499,999	7,390	23%
$500,000 to $749,999	1,572	5%
$750,000 to $999,999	418	1%
$1,000,000 or More	194	1%
Totals	**32,758**	**100%**

Gross Rents

Below is a description of the number of rental units in Eugene by their rental price. While this data doesn't take into account the number of bedrooms, the condition of housing, and location, it provides an idea of how much a person can be expected to pay when searching for rental housing. Over half of the units in the city are between $600 and $999. This is consistent with HUD's statistics on rental prices in the area, listing the Fair Market Rent for a two bedroom apartment in Eugene-Springfield as $821[4]. Unfortunately, only 43% of rentals in Eugene are $799 per month or less, potentially putting stress on lower income renters to find housing they can afford without being cost burdened.

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4   https://www.huduser.gov/portal/datasets/fmr.html#2013

Table 9. Gross Rents.

Gross Rents		
City of Eugene, Oregon		
2012 Population: 158,335		
Source: ACS 2009-2013		
Rents	**Number of Units**	**Percentage**
Less than $300	1,150	4%
$300 to $599	5,246	16%
$600 to $799	7,670	24%
$800 to $999	7,264	22%
$1,000 to $1,249	5,386	17%
$1,250 to $1,499	2,618	8%
$1,500 to $1,999	2,031	6%
$2,000 or More	953	3%
Totals	**32,318**	**100%**

Table 10. Household Income by Tenure by Units.

Household Income By Tenure by Units										
City of Eugene, Oregon										
Source: Comprehensive Housing Affordability Strategies ACS 2009-2013										
Housing Unit		Income < 30% HAMFI	Percentage	Income >=30- 50% HAMFI	>=30- Percentage	Income >=50-80% HAMFI	Percentage	Income >=80-100% HAMFI	Percentage	Income > 100% HAMFI	Percentage
Owner Occupied with a Mortgage											
One Unit in Structure		535	2.34%	560	2.45%	1,465	6.40%	1,230	5.37%	17,900	78.22%
2 to 4 Units in Structure		0	0.00%	10	0.04%	45	0.20%	4	0.02%	190	0.83%
5 or More Units in Structure		10	0.04%	0	0.00%	30	0.13%	30	0.13%	250	1.09%
Other Structure Types (Mobile home, etc)		40	0.17%	35	0.15%	110	0.48%	80	0.35%	360	1.57%
Total	22,884	585	2.56%	605	2.64%	1,650	7.21%	1,344	5.87%	18,700	81.72%
Owner Occupied Without a Mortgage											
One Unit in Structure		390	3.95%	680	6.89%	1,150	11.65%	700	7.09%	5,040	51.07%
2 to 4 Units in Structure		30	0.30%	10	0.10%	29	0.29%	40	0.41%	80	0.81%
5 or More Units in Structure		45	0.46%	10	0.10%	25	0.25%	10	0.10%	95	0.96%
Other Structure Types (Mobile home, etc)		140	1.42%	310	3.14%	440	4.46%	165	1.67%	480	4.86%
Total	9,869	605	6.13%	1,010	10.23%	1,644	16.66%	915	9.27%	5,695	57.71%
Renter Occupied											
One Unit in Structure		1730	5.23%	1360	4.11%	2260	6.84%	1130	3.42%	5280	15.97%
2 to 4 Units in Structure		1820	5.51%	995	3.01%	970	2.93%	665	2.01%	1440	4.36%
5 or More Units in Structure		5495	16.62%	2815	8.52%	2670	8.08%	1045	3.16%	2955	8.94%
Other Structure Types (Mobile home, etc)		105	0.32%	85	0.26%	55	0.17%	50	0.15%	130	0.39%
Total	33,055	9150	27.68%	5255	15.90%	5955	18.02%	2890	8.74%	9805	29.66%

Housing Affordability in Eugene

The number of people who are living in unaffordable housing by traditional cost-burden metrics
AND   Housing types (by number of units) that are unaffordable (Surplus or Deficit)
AND   Housing affordability by tenure
AND   Supply and demand of affordable housing units

_____

=   Housing Affordability in Eugene, or the lack thereof

Cost Burden by Tenure

Regardless of housing tenure, about 20% of households in Eugene are considered to be burdened by their housing cost. This section of the population pays over 30% but less than 50% of their income on housing. Notably, the amount of renters who are severely cost burdened, paying more than 50% of their income on housing, is more than triple the amount of homeowners. In the City of Eugene, the number of cost burdened households, those paying 30% or more of their income on housing, is 28,205. Of this number over half, 14,820 households are considered severely cost burdened. This number represents a major section of the population in Eugene that are at a significant disadvantage. Paying for expensive housing leaves even less money leftover for food, insurance, healthcare, and saving. It's important to note that there are limitations to using this calculation of housing affordability. This calculation does not take into account household size, location, or condition of housing (crowdedness, amenities, etc).

Table 11. Cost Burden by Tenure.

Cost Burden By Tenure							
City of Eugene, Oregon							
Source: Comprehensive Housing Affordability Strategy Data. ACS 2009-2013							
Tenure Type	All Tenure Units	Total Cost Burdened	Percentage Cost Burdened	Total Severly Cost Burdened	Percentage Severely Cost Burdened	Combined	Percentage Burdened
Owner	32,910	6,615	20%	3,550	11%	10,165	31%
Renter	33,000	6,770	21%	11,270	34%	18,040	55%
Totals	65,910	13,385	20%	14,820	22%	28,205	43%

Affordable Housing Types

As discussed earlier in this report, CHAS provides the number of households that fall within each of these income brackets. The breakdown is recalled below:

Table 12. Income by Tenure.

Tenure Type	All Tenure Units	Extremely Low Income	Percentage Extremely Low Income	Very Low Income	Percentage Very Low Income	Low Income	Percentage Low Income	Middle Income	Percentage Middle Income	Above Middle Income	Percentage Above Middle Income
Owner	32,910	1,325	4.0%	1,845	5.6%	3,760	11.4%	2,415	7.3%	23,565	71.6%
Renter	33,000	9,420	28.5%	5,315	16.1%	6,230	18.9%	3,245	9.8%	8,785	26.6%
Totals	65,910	10,745	16.3%	7,160	10.9%	9,990	15.2%	5,660	8.6%	32,350	49.1%

Income By Tenure — City of Eugene, Oregon. Source: Comprehensive Housing Affordability Strategy Data. ACS 2009-2013

Understanding the distribution of households in each income bracket helps to explain the demand for housing at different prices. When searching for housing that is affordable to them, households are limited to units that are 30% or less of their income. This report calculates a projected housing budget for each bracket's income range as based on HAMFI percentage. Based on the Eugene-Springfield FY2013 Median Family Income (HAMFI) of $55,800, a household could afford to spend $1,395 a month on housing without being cost burdened. Below is a table of the monthly housing budget for each income bracket.

Table 13. Housing Budget by Income Bracket.

Housing Budget by Income Bracket
City of Eugene , Oregon
Source: Comprehensive Housing Affordability Strategy Data. ACS 2009-2013
2013 Eugene-Springfield HUD Area Median Family Income = $55,800

Income Bracket	Income Range	Housing Budget
Above Middle Income	Over $55,800	More than $1,395
Middle Income (80% - 100% of HAMFI)	$44,640 - $55,800	$1,116 - $1,395
Low Income (50% - 80% HAMFI)	$27,900 - $44,640	$697.50 - $1,116
Very Low Income (30% - 50% HAMFI)	$16,740 - $27,900	$418.50 - $697.50
Extremely Low Income (Less than 30% HAMFI)	$0 - $16,740	$0 - $418.50

The 10,745 households in the Extremely Low Income bracket are limited in their housing budget and can only afford to spend up to $418.50 per month on housing to avoid being cost burdened. This is significant as the HUD Fair Market Rate for a two-bedroom unit is nearly twice this price at $821 per month. In comparing the housing budget of various households to the average price of a house and rents, we can see that there is a disconnect between what people can pay and what is available. The Median Home Value (ACS 2009-2013) is listed at $238,700. Under general assumptions[5], the monthly mortgage payment on this home would be $1,025.63[6]. This is on the upper

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5   The calculation assumes a 30-year mortgage with 10% down and a 4% interest rate with no early or additional payments.
6   Bankrate.com Mortgage Calculator

end of the housing budget for households in the Low Income bracket. Rental properties are generally more affordable and the majority fall near the middle of the housing budget for households in the Low Income bracket. Recall the distribution of rent and home values in Eugene below.

Table 14. Home Values.

Home Values for All Owner-Occupied Housing Units		
City of Eugene, Oregon		
2012 Population: 158,335		
Source: ACS 2009-2013		
Home Values	**Number of Units**	**Percentage**
Less than $20,000	890	3%
$20,000 to $49,999	905	3%
$50,000 to $99,999	995	3%
$100,000 to $149,999	2,588	8%
$150,000 to $299,999	17,806	54%
$300,000 to $499,999	7,390	23%
$500,000 to $749,999	1,572	5%
$750,000 to $999,999	418	1%
$1,000,000 or More	194	1%
Totals	**32,758**	**100%**

Table 15. Gross Rents.

Gross Rents		
City of Eugene, Oregon		
2012 Population: 158,335		
Source: ACS 2009-2013		
Rents	**Number of Units**	**Percentage**
Less than $300	1,150	4%
$300 to $599	5,246	16%
$600 to $799	7,670	24%
$800 to $999	7,264	22%
$1,000 to $1,249	5,386	17%
$1,250 to $1,499	2,618	8%
$1,500 to $1,999	2,031	6%
$2,000 or More	953	3%
Totals	**32,318**	**100%**

For homeowners and renters alike, the amount of housing available at an affordable price is limited. American Community Survey statistics show that there are only 1,150 rental units available in the less than $300 monthly rental price category and only 5,246 rental units in the $300 - $599 monthly rental price category. While the monthly rental and home price categories do not interchange evenly with the housing budgets by income bracket, there is still a clear lack of housing units available at affordable rates to households in all income brackets.

From this, the demand for units (the total number of households in each income bracket) and the supply of housing can be used to calculate the surplus or deficit of housing units in Eugene. To do so, the report uses each income bracket's housing budget to estimate the number of units a household in that bracket can purchase without being burdened by the cost. For rental units, this can be done by simply pulling the number of rental units available that are 30% or less than monthly income. For ownership units, this report uses methodology from the most recent City of Eugene Housing Needs Assessment that makes the assumption that an affordable home value is one that is 2.5 times a household's yearly income. Below are the supply and demand calculations for each of the income brackets.

Table 16 compares the supply of housing units affordable to those households above or below the HUD Area Median Family Income with the demand for those units, the number of households in the respective income brackets. This table helps to show a simplified snapshot of the current housing situation in Eugene by separating households into either below or above the HAMFI.

Table 16. Supply and Demand for Housing for Households Above and Below HAMFI.

Supply and Demand for Housing For Households Above and Below HAMFI		
City of Eugene		
Source: Comprehensive Housing Affordability Strategy Data. ACS 2009-2013		
Income Bracket	**Below 100% of HAMFI**	**Above 100% of HAMFI**
Household Income	Less than $55,800	More than $55,800
Renter Households	24,210	8,785
Owner Households	9,345	23,565
Total Households	**33,555**	**32,350**
Eugene Fair Market Rent	$821	$821
Affordable Monthly Rent	$1,395 or less	Greater than $1,395
Est. Supply at Affordable Rents	28,241	4,077
Rental Unit Surplus (Deficit)	**4,031**	**(4,708)**
Eugene-Springfield Average Home Value	$238,700	$238,700
Affordable Housing Values	$139,500	More than $139,500
Est. Supply at Affordable Prices	4,835	27,923
Owner Unit Surplus (Deficit)	**(4,510)**	**4,358**
Total Unit Surplus (Deficit)	**(479)**	**(350)**

Income seems to be a determining factor of a household's housing tenure as 72% of households with incomes below HAMFI are renters, while 73% of households with incomes above HAMFI are homeowners. Similarly, the supply of rental units affordable to households with incomes below HAMFI is much greater than the supply of rental units for income above HAMFI. In fact, of the 32,318 total rental units in Eugene, 87% are affordable to households earning the HAMFI of $55,800. Interestingly enough, for households with incomes below the HAMFI there exists a surplus of rental units but a deficit of owner units. While the inverse is true for households with incomes above the HAMFI. In both income brackets shown, there exists a small deficit in total the supply of housing units as compared to the demand.

However, this can be misinterpreted as a housing supply that is almost meeting the demands placed upon it. A caveat to this data is that it does not take size of the units, number of bedrooms or bathrooms. Therefore, the data may not reflect the needs of all households and is an aggregation of the data available. In order to understand the surplus or deficit of units by rent and housing value, the tables below show this calculation for three lower income brackets: Low Income (below 80 HAMFI), Very Low Income (below 50 HAMFI), and Extremely Low Income (below 30 HAMFI.)

The statistics in the tables below are separated to show the supply of housing units that are affordable to a person in each income bracket. It is important to note that these supply calculations include the supply in each of the lower income brackets. Therefore, the housing units that are affordable to those households in the Low Income bracket include all units that are 30% of

household income plus all of the units that are affordable to households in the Very Low Income and Extremely Low Income brackets.

Table 17. Supply and Demand for Affordable Housing for the Extremely Low Income Bracket.

Supply and Demand for Affordable Housing by Income Bracket	
City of Eugene	
Source: Comprehensive Housing Affordability Strategy Data. ACS 2009-2013	
Income Bracket	**Extremely Low Income**
30% HAMFI	$16,740
Renters Earning Below 30% HAMFI	9,420
Owners Earning Below 30% HAMFI	1,325
Total Households Earning Below 30% HAMFI	**10,745**
Eugene Fair Market Rent	$821
Affordable Monthly Rent	$418.50
Est. Supply at Affordable Rents	3,229
Rental Unit Surplus (Deficit)	**(6,191)**
Eugene-Springfield Average Home Value	$238,700
Affordable Housing Values	$41,850
Est. Supply at Affordable Prices	1,549
Owner Unit Surplus (Deficit)	**224**
Total Unit Surplus (Deficit)	**(5,967)**

In total, there are 10,745 households that are considered Extremely Low Income. There are households that earn less than $16,740, or 30% of the HAMFI, annually. Of these households, 88% are renters and only 12% are owners. A household earning $16,740 can only afford to spend $418.50 a month on rental housing or purchase a home valued at $41,850. Because these households earn such low income, their ability to find affordable housing is extremely limited, particularly rental units. There exists only an estimated 3,229 rental units for the 9,420 Extremely Low Income renter households, a deficit of 6,191 units. Ownership units exist in a surplus, likely due to the low number of households in this income bracket who can afford, or are interested in, owning a home.

Table 18. Supply and Demand for Affordable Housing for the Very Low Income Bracket.

Supply and Demand for Affordable Housing by Income Bracket	
City of Eugene	
Source: Comprehensive Housing Affordability Strategy Data. ACS 2009-2013	
Income Bracket	**Very Low Income**
50% HAMFI	$27,900
Renters Earning Below 50% HAMFI	14,735
Owners Earning Below 50% HAMFI	3,170
Total Households Earning Below 50% HAMFI	**17,905**
Eugene Fair Market Rent	$821
Affordable Monthly Rent	$697.50
Est. Supply at Affordable Rents	10,153
Rental Unit Surplus (Deficit)	**(4,582)**
Eugene-Springfield Average Home Value	$238,700
Affordable Housing Values	$69,750
Est. Supply at Affordable Prices	2,188
Owner Unit Surplus (Deficit)	**(982)**
Total Unit Surplus (Deficit)	**(5,564)**

Table 18 above shows the supply and demand of housing for households in the Very Low Income bracket, those who make 50% of HAMFI or less. Again, because households earning 50% of HAMFI can afford any housing that those making 30% can afford, this calculation is cumulative and includes the housing status discussed in the Extremely Low Income section above.

Of the 17,905 households earning 50% of HAMFI or less, 82% are renters and 18% are owners. A household making $27,900, or 50% of HAMFI, annually can afford to spend $697.50 a month on rent and can afford to purchase a home valued at $69,750. Similar to Extremely Low Income households, Very Low Income households are limited in their ability to find affordable housing. While there is less of a deficit of rental units available to these households as compared to the Extremely Low Income bracket, there is still a 4,582 unit shortage of affordable rentals. The outlook for homeowners is worse in this income bracket than in the Extremely Low Income bracket where there was a surplus of ownership units. Households in this income bracket experience a 982 unit deficit of owner occupied units. In total, there is a 5,564 unit deficit of affordable housing units, but is largely due to the small supply of rental units.

Table 19. Supply and Demand for Affordable Housing for the Low Income Bracket.

Supply and Demand for Affordable Housing by Income Bracket	
City of Eugene	
Source: Comprehensive Housing Affordability Strategy Data. ACS 2009-2013	
Income Bracket	**Low Income**
80% HAMFI	$44,640
Renters Earning Below 80% HAMFI	20,965
Owners Earning Below 80% HAMFI	6,930
Total Households Earning Below 80% HAMFI	**27,895**
Eugene Fair Market Rent	$821
Affordable Monthly Rent	$1,116
Est. Supply at Affordable Rents	23,839
Rental Unit Surplus (Deficit)	**2,874**
Eugene-Springfield Average Home Value	$238,700
Affordable Housing Values	$111,600
Est. Supply at Affordable Prices	3,618
Owner Unit Surplus (Deficit)	**(3,312)**
Total Unit Surplus (Deficit)	**(438)**

The table above shows the supply and demand for affordable housing for those households in the Low Income bracket. If a household is earning $44,640, 80% of HAMFI, annually, they are able to afford any rent at or below $1,116 or purchase any home valued at $111,610 or less. This includes all units available to those in the Very Low Income and Extremely Low Income brackets. Of the 27,895 households in the Low Income bracket, 75% are renters and 25% are homeowners. This is lower mix of renters than all previous income brackets and potentially solidifies the observed pattern that as income increases the more likely households are to be homeowners. This perhaps can explain the surplus of affordable rental housing that is present at this income level. Nearly 24,000 rental units are affordable to those in the Low Income bracket. This is a drastic supply increase when compared to the supply shown in the Very Low Income bracket. There may be many reasons for this but it should be noted that households earning 80% of HAMFI can finally afford HUD's listed Eugene Fair Market Rent of $821. Inversely, the supply deficit of affordable ownership units in this income bracket continues to increase. Almost 7,000 households in this income bracket are homeowners however there exists only 3,618 ownership units affordable to them, a deficit of 3,312 units. This deficit is exasperated by the fact that the affordable home value for households in this income bracket is $111,600, while the average home value in the Eugene-Springfield metro area is $238,700, over $100,000 more than what is considered affordable. In total, the rental surplus and the ownership unit deficit nearly offset each other to list only a 438 unit shortage.

For every income bracket, there exists a total unit deficit. Unsurprisingly, the largest unit deficit exists within the bottom income brackets, Extremely Low Income and Very Low Income. This may

be a result of increased focus on providing housing units, through public subsidies, for those at 80% HAMFI or higher. Many HUD and other Federal housing programs subsidize "market-rate" housing for those at the 80% HAMFI benchmark which might miss those at the very bottom. Rental housing in these lower income brackets is extremely limited, as a unit surplus does not exist until a household makes 80% of HAMFI. This also could possibly reflect the student population that often are classified in this income bracket and rarely are home owners. Additionally, there is a positive correlation with the availability of rental units and increasing incomes, but a negative correlation to owner unit availability. This signifies that as income increases, there is a surplus of affordable rental units available to meet demand but the demand for ownership units far outreaches the supply. Considering that the income brackets shown above are all below the Area Median Income of $55,800, it is important to note that there exists a strong demand for low cost ownership units that is going unmet. Even in the highest income bracket shown in this report, the Middle Income bracket, an affordable home value is calculated as $139,500 or less. With the average home price in Eugene is $238,700, there are likely very few new single-family homes being built near a range that is affordable to these income brackets. As a result, these households are either forced to spend more for housing that is coming available, risk purchasing an old and outdated home that has been poorly maintained, or live in an undesirable location far from services, employment, or amenities, increasing their transportation cost and decreasing their quality of life.
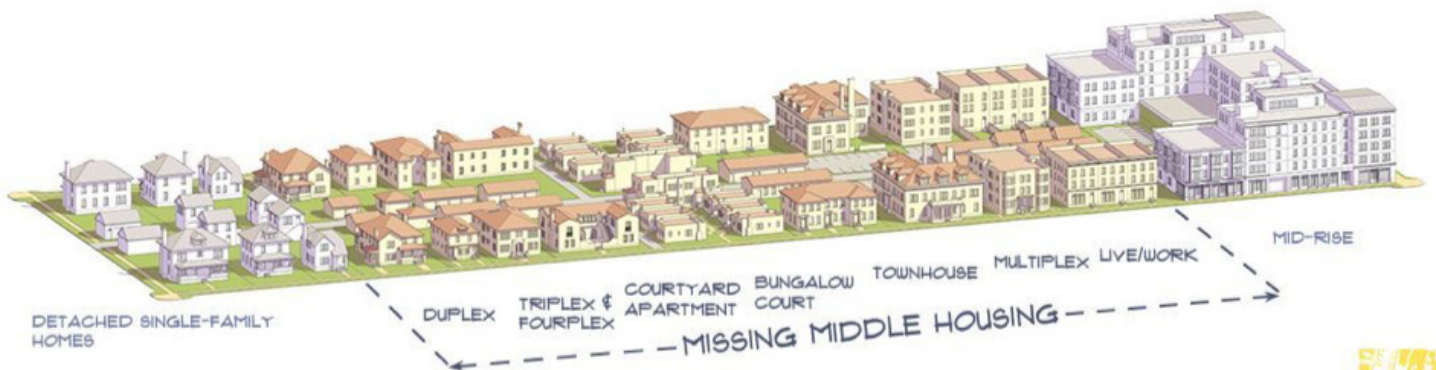
The statistics show that there is a need for additional housing in the city of Eugene. Specifically, there is a need for affordable housing, not just in the very lowest income brackets but even in the middle and higher. The statistics are an important first step in beginning to understand the problem so that solutions can be identified and implemented. Quantitatively, the City of Eugene's housing problem is supply-side in nature, there are not enough units to balance the housing mix and to provide options for people who are stuck between expensive housing and inadequate housing. The solutions to this problem are many and can it can be addressed in multiple ways. However, the city has a unique opportunity now to research, and put into action, policies that innovatively add to the supply of housing that makes the most sense for Eugene.

Appendix - B

The Missing Middle in Eugene

An Inventory Of Missing Middle Type Homes In Eugene, Oregon

DETACHED SINGLE-FAMILY HOMES

DUPLEX

TRIPLEX & FOURPLEX

COURTYARD APARTMENT

BUNGALOW COURT

TOWNHOUSE

MULTIPLEX LIVE/WORK

MID-RISE

MISSING MIDDLE HOUSING

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OPTICOS

APPENDIX - B

What is the Missing Middle and Why is it Important?

To understand the full depth and scope of the Missing Middle concept, it is encouraged that you read the full *Missing Out on Missing Middle Housing* report prepared for the City of Eugene in June of 2017.

In short, The Missing Middle is **a range of multi-unit or clustered housing types compatible in scale with single-family homes that help meet the growing demand for walkable urban living**. Because it encompasses a variety of different unit types, encourages creative and thoughtful use of space, and can be affordable just in its design alone, the Missing Middle has the intriguing potential to acheive positive affordable outcomes.

But few of these middle housing units exist in Eugene and other cities. They are "missing" due to a number of factors including outdated regulatory constraints, auto-dependent patterns of development, and the incentivization of single-family home ownership through federal and state subsidies.

In light of recent housing affordability headlines, researchers and cities are coming the realization that the traditional way of designing, planning, locating, and regulating housing no longer effectively meets the needs of a large portion of the market and hinders our ability to provide housing for those who do not fit the traditional household structure.

The good news is that some Missing Middle types are already present in Eugene. While few and far between, duplexes, triplexes, fourplexes, and secondary dwelling units have been mixed throughout the City as unique situations have given way to their development. These existing units are extremely valuable resources in the City's effort to encourage new development of this kind.

What Is The Purpose Of Creating This Inventory?

The purpose of this inventory is threefold:

1. It helps to describe the concept of the Missing Middle in a tangible and familar context to those who have not heard of it previously. Being able to point to specific, real world examples of the concept can assist in understanding.
2. People have a hard time thinking in terms of "dwelling units per acre" and often surprised to learn the density of some of their favorite developments are higher than expected. This inventory can serve as a reference catalog of example housing types at different densities.
3. Lastly, and maybe most importantly, this inventory will demonstrate to developers and property owners that navigating the development code process to build Missing Middle housing is possible. The homes included in this inventory can be used as examples of the types of development allowed and can be the starting point for their own development ideas.

WHAT IS INCLUDED IN THE INVENTORY?

The inventory is a collection of Missing Middle Housing types in Eugene. Each housing unit is included within a uniform template that will provide consistency and clarity while in use.

The template includes details that will help the user identify the property such as address, documentation date, its Missing Middle type classification, photo of the front access, an aerial image of the subject property, and a map showing the general location of the property within the City of Eugene.

At the bottom of the template are specific building statisitcs that are important in understanding how the property was developed and how it fits within its own site context. Public records resources on the City of Eugene and Lane County Assessors websites provided parcel statistics on a taxlot by taxlot basis and are used to show lot and builing specificatins. These specifications include lot size, lot features such as parking and location, building footprint, building intensity, and land use. Important specifications are pulled out of this and into a "Quick Facts" table that can used to quickly get an overview of each Missing Middle unit.

IS THE INVENTORY COMPREHENSIVE?

Most certainly, no.

Time and scope restrictions of this study unfortunately limited the number of homes able to be inventoried here. There are many, many more Missing Middle units to be documented and adding to this limited list would be beneficial to its users.

This is the type of project that can best be completed using collective effort. This inventory should not be seen as rigid, but rather something that should be added to, subtracted from, or adapted depending on need. All data collection materials can be provided to any interested party should they want to inventory units themselves.

Address: **608 E 15th Ave**	Documentation Date: **4/30/17**	Pg. 63

MISSING MIDDLE HOUSING TYPE:

☐ DUPLEX: SIDE-BY-SIDE   ☐ DUPLEX: STACKED   ☒ **TRIPLEX/FOURPLEX**   ☐ COURTYARD APARTMENTS

☐ BUNGALOW COURT   ☐ ACCESSORY UNIT   ☐ MULTIPLEX   ☐ LIVE/WORK

QUICK FACTS

SQ. FEET:	**5,344 FT²**
# OF UNITS:	**4 UNITS**
LOT ACRES:	**.12 ACRES**
DENSITY:	**33.33 DU/A**
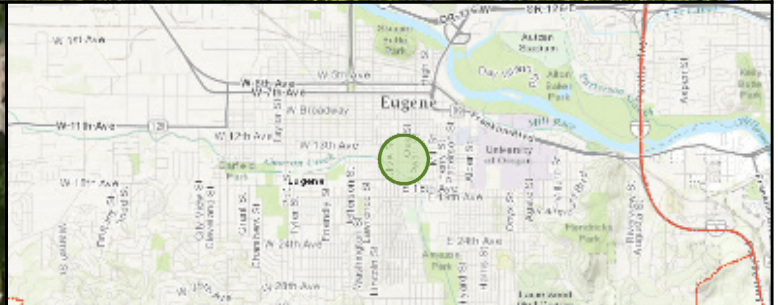
LOT SIZE

WIDTH: **66.8 FT**   DEPTH: **80 FT**   SQ. FT.: **5,344 FT²**

LOT FEATURES

CORNER: ☒ YES ☐ NO   PARKING: **1, Driveway. 3, Rear**

BUILDING FOOTPRINT

BUILT SQ. FT: **FT²**   NUMBER OF FLOORS: **2**

INTENSITY

OF UNITS: **4**   DENSITY: **33.33 DU/Acre**

LAND USE

ZONING: **R-3, Limited High Density Res.**

NEIGHBORHOOD: **West University**

NONCONFORMING USE? ☐ YES ☒ NO

NOTES: 3 UNITS DOWNSTAIRS ONE UNIT UPSTAIRS. HAS DRIVEWAY AND ADDITIONAL PARKING IN BACK

MISSING MIDDLE HOUSING TYPE:

☐ DUPLEX: SIDE-BY-SIDE   ☒ **DUPLEX: STACKED**   ☐ TRIPLEX/FOURPLEX   ☐ COURTYARD APARTMENTS

☐ BUNGALOW COURT   ☐ ACCESSORY UNIT   ☐ MULTIPLEX   ☐ LIVE/WORK

QUICK FACTS

SQ. FEET:	3,340 FT²
# OF UNITS:	2 UNITS
LOT ACRES:	.076 ACRES
DENSITY:	26.3 DU/A

LOT SIZE

WIDTH: **50 FT**   DEPTH: **66.8 FT-**   SQ. FT.: **3,340 FT²**

LOT FEATURES

CORNER: ☒ YES   ☐ NO   PARKING: **2, Driveway**

BUILDING FOOTPRINT

BUILT SQ. FT: **1,969 FT²**   NUMBER OF FLOORS: **2**

INTENSITY

OF UNITS: **2**   DENSITY: **26.3 DU/Acre**

LAND USE

ZONING: **R-3**

NEIGHBORHOOD: **West University**

NONCONFORMING USE?   ☒ YES   ☐ NO
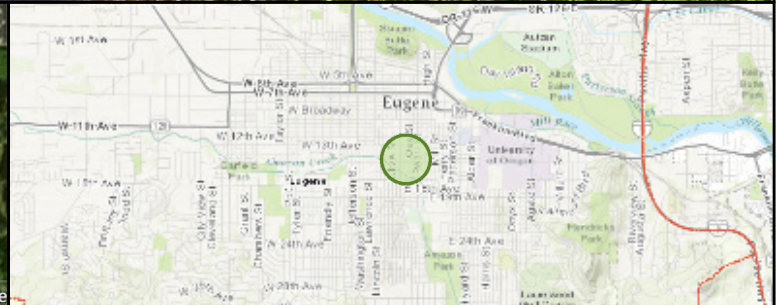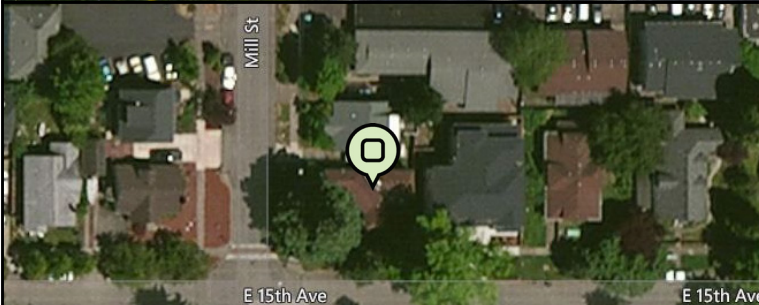
NOTES: CORNER LOT.
NON-CONFORMING USE DUE TO THE SMALL LOT SIZE, DUPLEXES MUST BE ON LOTS 8,000 SQ FT OR LARGER.

MISSING MIDDLE HOUSING TYPE:

☐ DUPLEX: SIDE-BY-SIDE ☐ DUPLEX: STACKED ☐ TRIPLEX/FOURPLEX ☐ COURTYARD APARTMENTS
☐ BUNGALOW COURT ☐ ACCESSORY UNIT ☐ MULTIPLEX ☒ **LIVE/WORK**

QUICK FACTS

SQ. FEET:	**5,344 FT²**
# OF UNITS:	**3 UNITS**
LOT ACRES:	**.12 ACRES**
DENSITY:	**24.45 DU/A**

LOT SIZE

WIDTH: **33.4 FT** DEPTH: **160 FT** SQ. FT.: **5,344 FT²**

LOT FEATURES

CORNER: ☐ YES ☒ NO PARKING: **In Rear, Off Alley**

BUILDING FOOTPRINT

BUILT SQ. FT: **UNKNOWN FT²** NUMBER OF FLOORS: **2-3**

INTENSITY

OF UNITS: **3** DENSITY: **24.45 DU/Acre**

LAND USE

ZONING: **C-2, Community Commercial**

NEIGHBORHOOD: **Jefferson Westside**

NONCONFORMING USE? ☐ YES ☒ NO

NOTES: Within the Transit Oriented Development Overlay Zone. 3 different parcels 1460, 1462, and 1464.

MISSING MIDDLE HOUSING TYPE:

☒ **DUPLEX: SIDE-BY-SIDE** ☐ DUPLEX: STACKED ☐ TRIPLEX/FOURPLEX ☐ COURTYARD APARTMENTS
☐ BUNGALOW COURT ☐ ACCESSORY UNIT ☐ MULTIPLEX ☐ LIVE/WORK

QUICK FACTS

SQ. FEET:	**5,227 FT²**
# OF UNITS:	**2 UNITS**
LOT ACRES:	**.119 ACRES**
DENSITY:	**16.68 DU/A**
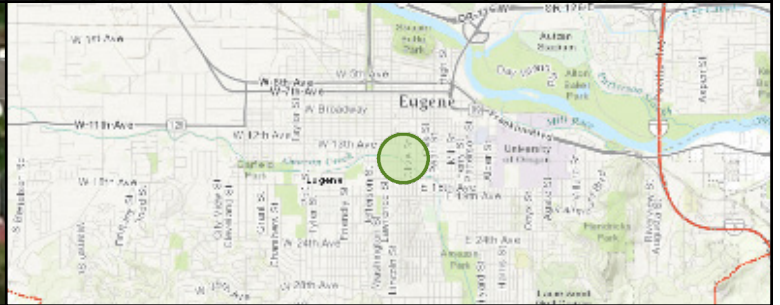
LOT SIZE

WIDTH: **136 FT**   DEPTH: **42.3 FT**   SQ. FT.: **5,227 FT²**

LOT FEATURES

CORNER: ☒ YES ☐ NO   PARKING: **Garage**

BUILDING FOOTPRINT

BUILT SQ. FT: **3,440 FT²**   NUMBER OF FLOORS: **1**

INTENSITY

OF UNITS: **2**   DENSITY: **16.68 DU/Acre**

LAND USE

ZONING: **S-JW, Jefferson Westside Special**

NEIGHBORHOOD: **Jefferson Westside**

NONCONFORMING USE? ☐ YES ☒ NO

NOTES: GARAGES SEPARATE THE UNITS FOR ADDED PRIVACY. ODD SHAPED LOT.

MISSING MIDDLE HOUSING TYPE:

☐ DUPLEX: SIDE-BY-SIDE   ☐ DUPLEX: STACKED   ☐ TRIPLEX/FOURPLEX   ☐ COURTYARD APARTMENTS

☒ **BUNGALOW COURT**   ☐ ACCESSORY UNIT   ☐ MULTIPLEX   ☐ LIVE/WORK

QUICK FACTS

SQ. FEET:	**5,000 FT²**
# OF UNITS:	**2 UNITS**
LOT ACRES:	**.114 ACRES**
DENSITY:	**17.42 DU/A**
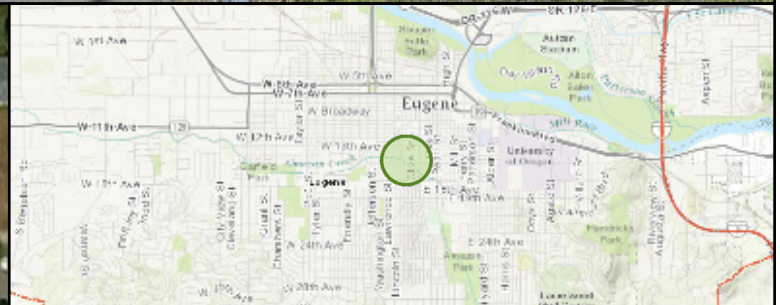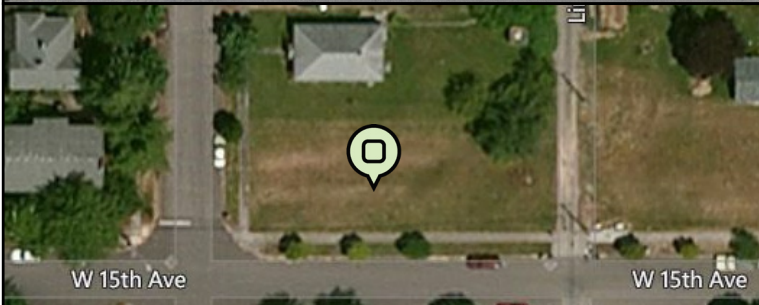
LOT SIZE

WIDTH: **100 FT**   DEPTH: **50 FT**   SQ. FT.: **5,000 FT²**

LOT FEATURES

CORNER: ☒ YES   ☐ NO   PARKING: **On Side, Off Alley**

BUILDING FOOTPRINT

BUILT SQ. FT: **2,396 FT²**   NUMBER OF FLOORS: **1**

INTENSITY

OF UNITS: **2**   DENSITY: **17.42 DU/Acre**

LAND USE

ZONING: **R-1, Low Density Residential**

NEIGHBORHOOD: **Jefferson Westside**

NONCONFORMING USE? ☒ YES   ☐ NO

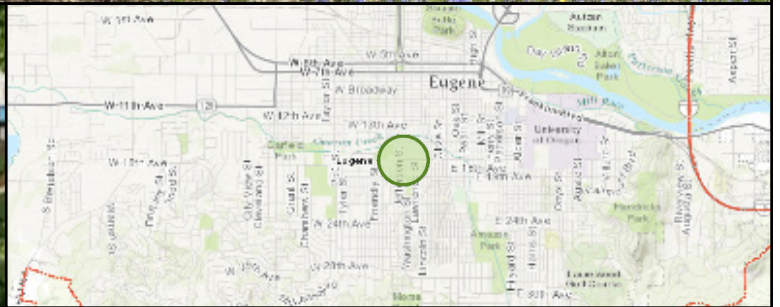**NOTES:** TWO SEPARATED UNITS WITH A SHARED COURTYARD TYPE OPEN SPACE. FAIRLY NEW DEVELOPMENT, BUILT IN 2014.

MISSING MIDDLE HOUSING TYPE:

☐ DUPLEX: SIDE-BY-SIDE ☒ **DUPLEX: STACKED** ☐ TRIPLEX/FOURPLEX ☐ COURTYARD APARTMENTS

☐ BUNGALOW COURT ☐ ACCESSORY UNIT ☐ MULTIPLEX ☐ LIVE/WORK

QUICK FACTS

SQ. FEET:	**5,227 FT²**
# OF UNITS:	**2 UNITS**
LOT ACRES:	**.15 ACRES**
DENSITY:	**13.2 DU/A**

LOT SIZE

WIDTH: **60 FT**   DEPTH: **110 FT**   SQ. FT.: **6,600 FT²**

LOT FEATURES

CORNER: ☐ YES ☒ NO   PARKING: **2, Driveway**

BUILDING FOOTPRINT

BUILT SQ. FT: **3,564 FT²**   NUMBER OF FLOORS: **2**

INTENSITY

OF UNITS: **2**   DENSITY: **13.2 DU/Acre**

LAND USE

ZONING: **R-1, Low Density Residential**

NEIGHBORHOOD: **Jefferson Westside**

NONCONFORMING USE? ☒ YES ☐ NO

NOTES: BUILT IN 2006. UPPER AND LOWER IDENTICAL UNITS. NOT ON CORNER LOT.

MISSING MIDDLE HOUSING TYPE:

☒ **DUPLEX: SIDE-BY-SIDE** ☐ DUPLEX: STACKED ☐ TRIPLEX/FOURPLEX ☐ COURTYARD APARTMENTS
☐ BUNGALOW COURT ☐ ACCESSORY UNIT ☐ MULTIPLEX ☐ LIVE/WORK

QUICK FACTS

SQ. FEET:	**9,000 FT²**
# OF UNITS:	**2 UNITS**
LOT ACRES:	**.20 ACRES**
DENSITY:	**9.71 DU/A**
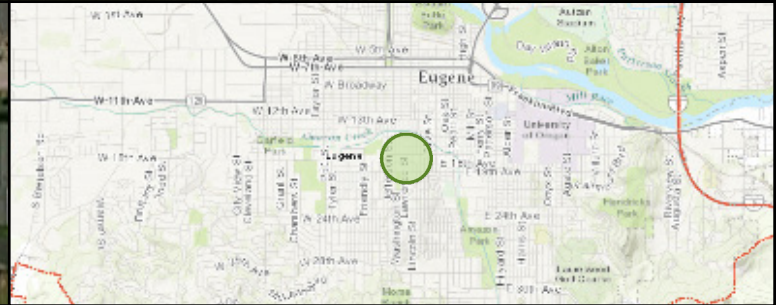
LOT SIZE

WIDTH: **60 FT** DEPTH: **150 FT** SQ. FT.: **9,000 FT²**

LOT FEATURES

CORNER: ☒ YES ☐ NO PARKING: **On Side, Off Alley**

BUILDING FOOTPRINT

BUILT SQ. FT: **2,144 FT²** NUMBER OF FLOORS: **1**

INTENSITY

OF UNITS: **2** DENSITY: **9.71 DU/Acre**

LAND USE

ZONING: **R-1, Low Density Residential**

NEIGHBORHOOD: **Jefferson Westside**
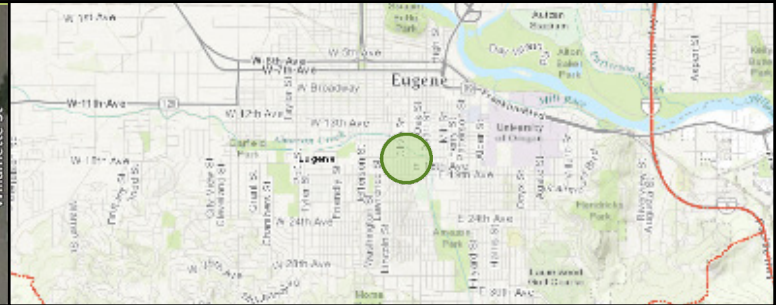
NONCONFORMING USE? ☐ YES ☒ NO

NOTES:

MISSING MIDDLE HOUSING TYPE:

☐ DUPLEX: SIDE-BY-SIDE   ☐ DUPLEX: STACKED   ☒ **TRIPLEX/FOURPLEX**   ☐ COURTYARD APARTMENTS

☐ BUNGALOW COURT   ☐ ACCESSORY UNIT   ☐ MULTIPLEX   ☐ LIVE/WORK

QUICK FACTS

SQ. FEET:	**8,240 FT²**
# OF UNITS:	**4 UNITS**
LOT ACRES:	**.189 ACRES**
DENSITY:	**21.15 DU/A**

LOT SIZE

WIDTH: **103 FT**   DEPTH: **80 FT**   SQ. FT.: **8,240 FT²**

LOT FEATURES

CORNER: ☒ YES ☐ NO   PARKING: **Garage Behind**

BUILDING FOOTPRINT

BUILT SQ. FT: **3,564 FT²**   NUMBER OF FLOORS: **2**

INTENSITY

OF UNITS: **4**   DENSITY: **21.15 DU/Acre**

LAND USE

ZONING: **R-4, High Density Residential**

NEIGHBORHOOD: **Jefferson Westside**

NONCONFORMING USE? ☒ YES ☐ NO

NOTES: BUILT AS CONDOMINIUMS. ON THE SAME LOT AS NEWER BUILDINGS TO THE NW.

MISSING MIDDLE HOUSING TYPE:

☒ **DUPLEX: SIDE-BY-SIDE**   ☐ DUPLEX: STACKED   ☐ TRIPLEX/FOURPLEX   ☐ COURTYARD APARTMENTS
☐ BUNGALOW COURT   ☐ ACCESSORY UNIT   ☐ MULTIPLEX   ☐ LIVE/WORK

QUICK FACTS

SQ. FEET:	7,757 FT²
# OF UNITS:	2 UNITS
LOT ACRES:	.17 ACRES
DENSITY:	11.5 DU/A
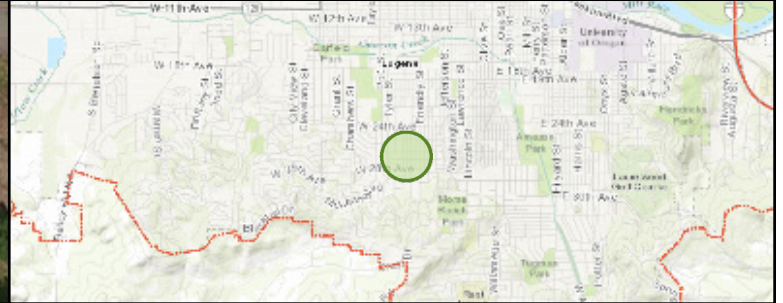
LOT SIZE

WIDTH: **75 FT**   DEPTH: **101 FT**   SQ. FT.: **7,575 FT²**

LOT FEATURES

CORNER: ☐ YES ☒ NO   PARKING: **On Side, Off Alley**

BUILDING FOOTPRINT

BUILT SQ. FT: **2,144 FT²**   NUMBER OF FLOORS: **1**

INTENSITY

OF UNITS: **2**   DENSITY: **11.5 DU/Acre**

LAND USE

ZONING: **R-1, Low Density Residential**

NEIGHBORHOOD: **Friendly**

NONCONFORMING USE? ☒ YES   ☐ NO

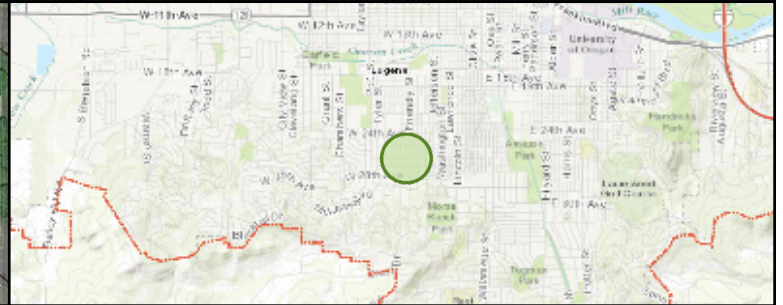**NOTES:**   NOT ON A CORNER LOT. STRUCTURE IN BACK HAS SECOND STORY.

MISSING MIDDLE HOUSING TYPE:

☐ DUPLEX: SIDE-BY-SIDE   ☐ DUPLEX: STACKED   ☒ **TRIPLEX/FOURPLEX**   ☐ COURTYARD APARTMENTS
☐ BUNGALOW COURT   ☐ ACCESSORY UNIT   ☐ MULTIPLEX   ☐ LIVE/WORK

QUICK FACTS

SQ. FEET:	**41,860 FT²**
# OF UNITS:	**12 UNITS**
LOT ACRES:	**.96 ACRES**
DENSITY:	**12.5 DU/A**

LOT SIZE

WIDTH: **260 FT**   DEPTH: **161 FT**   SQ. FT.: **41,860 FT²**

LOT FEATURES

CORNER: ☒ YES ☐ NO   PARKING: **Garage, Behind**

BUILDING FOOTPRINT

BUILT SQ. FT: **3,564 FT²**   NUMBER OF FLOORS: **2**

INTENSITY

OF UNITS: **12**   DENSITY: **12.5 DU/Acre**

LAND USE

ZONING: **C-1, Neighborhood Commercial**

NEIGHBORHOOD: **Friendly**

NONCONFORMING USE?   ☒ YES   ☐ NO
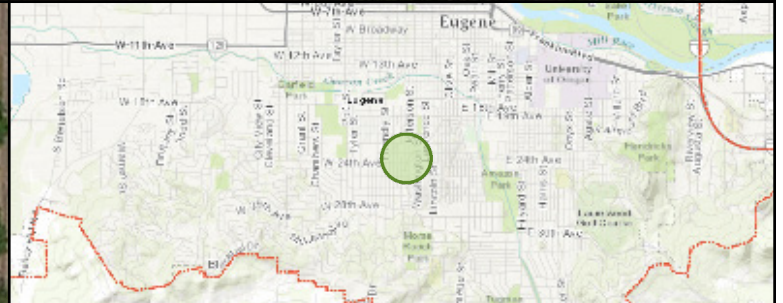
NOTES: More of a Rowhouse/Condo Development. Each unit has separate Ownership.

MISSING MIDDLE HOUSING TYPE:

☒ **DUPLEX: SIDE-BY-SIDE** ☐ DUPLEX: STACKED ☐ TRIPLEX/FOURPLEX ☐ COURTYARD APARTMENTS
☐ BUNGALOW COURT ☐ ACCESSORY UNIT ☐ MULTIPLEX ☐ LIVE/WORK

QUICK FACTS

SQ. FEET:	**7,000 FT²**
# OF UNITS:	**2 UNITS**
LOT ACRES:	**.16 ACRES**
DENSITY:	**12.5 DU/A**

LOT SIZE

WIDTH: **50 FT**   DEPTH: **140 FT**   SQ. FT.: **7,000 FT²**

LOT FEATURES

CORNER: ☐ YES ☒ NO   PARKING: **GARAGE**

BUILDING FOOTPRINT

BUILT SQ. FT: **2,144 FT²**   NUMBER OF FLOORS: **2**

INTENSITY

OF UNITS: **2**   DENSITY: **12.5 DU/Acre**

LAND USE

ZONING: **R-1, Low Density Residential**

NEIGHBORHOOD: **Friendly**

NONCONFORMING USE? ☐ YES ☒ NO

NOTES: Well Designed SDU. Primary structure is on the back of the lot

APPENDIX - C

LITERATURE REVIEW

As the cost of living continues to outpace the growth in incomes nationwide, the issue of housing affordability has become one of national scale. Across nearly all income levels, the numbers of household that are considered to be "cost burdened", those that spend 30% or more of their income on housing, is on the rise. Household living in dwellings that are considered to be high-cost relative to their income are forced to make difficult, even unhealthy, budgetary trade-offs. This has vast and far spread consequences on the social, cultural, and economic vitality of our communities which "jeopardizes housing affordability for working families, increases income inequality by reducing less-skilled workers' access to high-wage labor markets, and stifles GDP growth by driving labor migration away from the most productive regions. For these reasons, housing affordability is a crucial indicator of social well-being and is a pervasive problem in recent times.

Social Science's Understanding of Affordability

Social scientists have long strived to formulate scientific laws with the objective of gaining knowledge into the social and economic phenomena that dictate human behavior. It was assumed that if natural scientists could discover the laws of nature so as to control and harness natural phenomena, then social scientists should be able to discover the laws governing social behavior so as to control and regulate aspects of society (Hulchanski, 1995, pp. 3). Two such social scientists, Ernst Engel and Herman Schwabe, set out to formulate a set of laws that described the relationship between household incomes and expenditures.

Engel pioneered research into the arena of household budgetary expenditure laws by investigating the proportion they spent on food. He found that "the poorer a family, the greater the proportion of total expenditure that must be devoted to the provision of food" (Stigler, 1954). The law attributed to Engel states that as income increases, the proportions of expenditures on different budget items change and the proportions devoted to the more urgent needs (such as food) decrease while those devoted to luxuries and semi-luxuries increase.

Similarly, Schwabe studied the relation of housing expenditure to income, but arrived at slightly different results. Schwabe finds that as total family income rises, the amount allocated to housing increases at a lower rate. The key distinct here is that it suggests a correlation between rising incomes and expenditures, whereas Engel viewed expenditures as remaining equally proportionate to income.

While these studies focus on other household expenditures and are not directly related to housing, they provide conclusions and generalizations that can easily be applied to the topic, which are important not only in understanding the conditions in which households make housing decisions, budget, and spend, but also to informing housing policy decisions.

Defining Housing Affordability Today

There has historically been debate over which approach is best at capturing the severity, breadth, and extent of housing affordability in the United States.

For decades, housing affordability has been defined as a ratio of a household's income to the amount they spend on rent or mortgage. This conventional ratio concept is the prevailing approach used to define and measure housing affordability because it is simple to understand and apply, and because it has a long tradition as the officially accepted method by most governments (Stone, 2006, pp. 179). The United States Department of Housing and Urban Development uses the conventional ratio approach to define households as "cost-burdened" by their current housing situation if they spend 30% of their income on rent or mortgage payments. Many researchers continue to use 30% of income as the threshold of affordability as they analyze the issue. The Joint Center for Housing Studies of Harvard University also uses this 30% expenditure-to-income ratio threshold to describe housing affordability in the organization's annual State of the Nation's Housing report. While this ratio is generally widely accepted as the norm, there exists methodological flaws in its approach that have led some researchers to propose alternatives.

Stone (2006) argues that this conventional ratio method generalizes too broadly across the population and assumes that all households with the same income exist under the same spending circumstances. He uses the example of two households that have identical incomes: one is comprised of a single person and one is comprised of a couple with three children. If both of these households spend 30% of their income on housing, the remaining 70% of their income is to be split between nonshelter necessities like food, utilities, and transportation. Obviously, the larger household would have to spend substantially more for its nonshelter necessities than the small household to achieve a comparable quality of life. The conventional ratio method does nothing to normalize this situation but rather includes both of these households within the "cost burdened" category.

Stone proposes the use of the residual income approach, wherein housing is considered affordable only when a household has enough residual income after rental/mortgage payments to cover any, and all, non shelter necessities. Such a concept highlights the interaction among incomes, housing costs, and the costs of nonhousing necessities. This residual income approach does not yield a simple rule of thumb ratio. Instead, it leads to a sliding scale, which recognizes that true affordability is sensitive to differences in household composition and income (Stone, 2006, pp 179). He quickly realizes however that this method would be difficult to operate on a large, national scale due to the minute detail required to understand each household's unique circumstances, stating that it is "to be sure, more complex than simply adopting a fixed percentage of income".

All of these methods are purported to act as indicators that provide researchers and public policy makers the ability to interpret social and individual experiences. While these indicators and standards help come to conclusions on a demographic and geographical scale, they often over-generalize the individual experience. Hulchanski (1995) concludes that this is inescapable: "There is simply no escaping the fact that household consumption patterns and the means by which

Appendix - C

households meet their needs are as diverse as the individual humans and their life situations who comprise these households."

Understanding the strengths and weaknesses of the different approaches to defining housing affordability is an important step in the data analysis process. The indicators also provide an important foundation for the at least somewhat rational formulation, implementation, and evaluation of policies and practices that deal with affordability. The literature provides a tried and tested indicator process under which policy decision makers and researchers can operate to study the impacts of the cost of housing while recognizing that circumstances of the individual may differ from the aggregate.

Housing As A Spectrum

Understanding the affordability of housing means understanding the path one takes to their current housing. This general progression through housing types is often referred to as one's "housing trajectory" or "housing career". There has been extensive research into housing careers on both the micro (Kendig, 1990) and macro (Michelson, 1977) levels, generally concluding that households continually take distinct steps over the course of their housing career to improve their housing circumstances. When describing this path, Mulder (1993) explains that "housing careers are parallel to and interwoven with family, employment, and other 'life careers' which structure experiences over the life course." Expanding on this, over the course of an individual's life career they will follow a path wherein they will require different housing situations based on income, marital status, number of children, and age.

Kending (1990) lends a significant observation to this generally accepted concept, in that the housing career is not, fundamentally, a linear path. When pursuing their housing trajectory, households have the ability, depending on circumstances, to move sideways, upwards, or backwards. This is an important consideration given that individuals encounter events over the course of their life career that trigger changes in housing consumption. The notion of households following a predefined housing career path doesn't take this consideration into account, as it assumes a linear upward progression towards the housing ideal of a single-family detached dwelling (Michaelson, 1977). Recently, because of an unprecedented decades-long decline in homeownership[1], this concept of the housing ideal is changing.

As individuals and households make decisions about what types of housing to consume, it is important to understand that their options are limited by the housing stock available. The variable types of all housing available to households is called the housing continuum. The housing continuum includes such housing types as supportive housing, rental housing, and owner-occupied housing[2]. As households consume housing that is affordable to them in their current economic or social situation, they have the opportunity to move throughout the continuum rather than strictly linearly. As a whole, the continuum constantly reacts to changes that take place on the

1   The State of the Nation's Housing, The Joint Center for Housing Studies of Harvard University, June 2016. Pp 20
2   An Affordable Continuum of Housing...Key to a Better City, Coalition for Nonprofit Housings and Economic Development, 2010. Pp. 7

individual level. If a single young professional decides to return to post-secondary education and they choose to move from their private market apartment unit into a non-profit rental unit, it simultaneous creates a vacancy in the private apartment market but reduces housing options for low-income households. The housing choices made by individuals have broader implications of creating pressures across the housing continuum. The housing stock, and ensuring that there is enough housing for households of all incomes, is a crucial piece to understanding housing affordability.

The Missing Middle

Often times the conversation about supplying affordable housing and housing policy decisions circulate around either high-rise, multi-unit developments or variations on the single family detached home. Single-family homes are exclusive in nature because they are expensive to purchase and maintain, in addition to the difficulty some find in getting approved for mortgages[3]. While high-rise, multi-unit developments are typically too small for households with children and are oftentimes scarce due to being somewhat unpopular with the public. This dynamic creates limited options for households seeking affordable housing. Often these households are forced into situations where they are either over-housed or living in substandard conditions. The lack of a mid-range housing option that is affordable to a large population in many cities across the US only serves to add to the housing crunch[4].

Daniel Parolek argues that neither of these two housing types will offer the kind of affordability demanded by households. He coins the term "missing middle housing" to describe housing that fills the void in the continuum that falls between single-family homes and high-rise units. His concept takes into consideration other factors that play into the "affordability" calculation and is characterized by eight attributes 1) creates walkable communities 2) is medium density but has lower perceived density 3) utilizes a small footprint 4) smaller, well-designed units 5) not driven by off-street parking requirements 6) consists of simple construction elements 7) fosters community and 8) is marketable. Including Missing Middle housing helps to provide another housing option for those in the income bracket, which in turn helps to alleviate pressure on the entire spectrum of housing, theoretically making housing more affordable across the board.

Parolek understands that there may be historical, systemic, social, and economic barriers to advancing the production of these types of units but uses this as a call to action for planners, architects, and developers. "Think outside the box and to begin to create immediate, viable solutions to address the mismatch between the housing stock and what the market is demanding – homes within vibrant, diverse, sustainable, walkable urban neighborhoods."

Furthering the Research

This study differs from previous housing literature in that it will examine housing affordability on a local level, offering the ability to delve deeper into the true state of housing in the City of Eugene, Oregon. This study will be able to be easily compared to previous studies in that the meth-

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3 The State of the Nation's Housing, The Joint Center for Housing Studies of Harvard University, June 2016. Pp 20
4 Ibid.

odology for this process will be consistent with the generally accepted expenditure-to-income approach. However, this study will also include a close examination of the unique circumstances created by Eugene's social, cultural, political, and economic as to better inform policy decisions made as a result of the findings.

Additionally, this study will serve as the first step in the process to answer the call to action offered by Parolek related to the missing middle. This study will attempt to identify any barriers that may exist within the current Eugene context that impede the construction of housing units that meet the eight missing middle characteristics. Secondary to this, the study will provide potential housing policy recommendations to the City based on best management practices that have identified through case study research.

It is the hope of this study to provide a model and methodology for other jurisdictions to use in order to understand the state of affordable housing in their community as well as ways to break down barriers to addressing the issue.

Appendix - D

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APPENDIX - D

WORKS CITED

Page 4	- Photo: Ethan Stuckmayer
Page 6	- Diagram: Daniel Parolek, missingmiddlehousing.com
Page 8	- Photo: Ethan Stuckmayer
Page 12	- Photo: Ethan Stuckmayer
Pages 14, 15	- Photos: Ethan Stuckmayer
Page 19	- Photo: Ethan Stuckmayer
Page 21	- Photo: Ethan Stuckmayer
Page 22	- Photo: missingmiddlehousing.com
Page 24	- Photo: missingmiddlehousing.com
Page 26	- Photo: www.equipemcdougall.com
Page 28	- Photo: missingmiddlehousing.com
Page 30	- Photo: missingmiddlehousing.com
Page 32	- Photo: missingmiddlehousing.com
Page 33	- Photo: missingmiddlehousing.com
Page 34	- Photo: missingmiddlehousing.com