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### **FOREWORD**

Housing plays a pivotal role in determining the well-being and economic security of individuals and families in the Palouse Region. For that reason, it is fitting that discussions of housing challenges should have primacy over many other matters discussed in the public square. Our housing policies and strategies must also recognize the diversity of conditions existing within and across the region. As such, our local governments, institutions and businesses have a central role to play in defining specific community needs, crafting policies, and marshaling resources to support housing solutions. Addressing the scale and complexity of need requires a renewed regional commitment to expand the range of housing options available for an increasingly diverse population. Furthermore, since we (the residents of Whitman and Latah Counties) walk, talk, and act like a region, it's crucial to approach housing in the same way. The Palouse's shared workforce, economy, and infrastructure needs make it essential that we view housing as a regional imperative.

To better understand and to help alleviate these issues, The Partnership for Economic Prosperity (PEP), hired Thomas P. Miller & Associates (TPMA) to conduct this Regional Housing Assessment with the intent of gaining full understanding of the region's housing issues, uncovering potential solutions, providing a forecast of regional demand, and identifying a network of stakeholders who desire to be part of the solution.

Using this analysis as a springboard, PEP invites regional leaders to view the Palouse's housing situation with a fresh perspective, and in the process to jettison commonly recited justifications for the region's housing affordability issues. PEP challenges all community leaders, including major employers, government officials, real estate developers, builders, and rank-and-file citizens, to engage with the issue of housing on the Palouse, and participate in changing it. With this commitment and a group of impassioned leaders, the Palouse Region can create housing alternatives that support the dreams and desires for our region's residents for years to come.



Gina Taruscio, MPA Executive Director, The Partnership for Economic Prosperity, Inc. August, 2019



### **ACKNOWLEDGMENTS**

TPMA wishes to thank its regional partners in this effort: PEP, The Cities of Pullman and Moscow, Schweitzer Engineering Labs, Inc., the University of Idaho, Avista Utilities, and Washington State University. In addition, TPMA assembled a steering committee to provide data needs, feedback, and direction during this course of this study. However, the steering committee was not involved in the development or vetting of any of the proposed recommendations. We have been thankful for the input of the following individuals:

- Bill Belknap—City of Moscow
- Mason Burley—Innovia Foundation
- Michelle Fuson—Latah County
- Jeff Guyett—Community Action Center
- Paul Kimmell—Avista Utilities
- Sarah McKnight—Southeast Washington Economic Development Association (SEWEDA)
- Justin Rasmussen—Palouse Commercial Real Estate
- **Gina Taruscio**—Partnership for Economic Prosperity (PEP)

Thomas P. Miller & Associates (TPMA) is grateful for the advice, information, contributions, and guidance of the aforementioned individuals. However, it is important to note that any errors or omissions that exist in the following analysis are the sole responsibility of TPMA, not PEP or any other entities. In addition, the recommendations are those solely provided by TPMA and do not necessary express the views of PEP steering committee or any of its partnering entities.

It is also valuable to note that each state, county and city operates under different constitutional, statutory, and practical constraints such that not all recommendations may be feasible or legally permissible in all areas, see Appendix C for further details on challenges and limitations.



### **EXECUTIVE SUMMARY**

Thomas P. Miller & Associates (TPMA) contracted with the Partnership for Economic Prosperity (PEP) to perform the following Housing Needs Assessment for the Palouse Region (Whitman County, Washington and Latah County, Idaho). This analysis stems from ongoing conversations among regional leaders about housing affordability, in particular, how it limits the opportunities for many residents and dampens the region's potential economic growth. Based on conversations with project stakeholders, TPMA was provided several directives. Firstly, it is important to investigate all forms of housing in the region, rather than focusing on just one segment, such as affordable housing. Secondly, the assessment must be regionally focused, rather than giving preference to either of the primary cities, or urban areas in general.

Over the past nine months, TPMA has sought to identify unfilled gaps in the current housing market, provide recommendations supported by best practices, and outline an early road map for implementation. It has been TPMA's intent from the outset of this project, **not just to investigate the what and why of housing in the Palouse Region, but to leave leaders with answers on how to improve current circumstances**. Our desire is that this analysis provides clarity, guidance, and inspiration to the citizens of the Palouse Region to take on that challenge.

The housing affordability issue in the Palouse Region is clear to any resident but can be further crystalized with a small handful of national and regional data points:

Recent survey research indicates that over half of the region's residents agree
that "affordable, decent housing" is an aspect of the community that needs
improvement, ranking among the top three issues in both counties.<sup>1</sup>



- According to the United Way, more than half of all households in Whitman and Latah counties are either in poverty or Asset Limited, Income Constrained Employed (ALICE).<sup>2</sup>
- A large portion of residents' expenses are due to housing, which are higher than the national average in Pullman and Moscow (by 44% and 34%, respectively).<sup>3</sup>
- Housing is rapidly becoming less affordable. Nationally, construction cost per square foot for single-family homes has increased 32% since the end of the last recession.<sup>4</sup>
- Values are escalating even more rapidly in the Palouse Region. In 2018 Whitman County was among the nation's top 20% in increased cost of single-family homes, and Latah County in the top 40%.<sup>5</sup>
- As noted by numerous realtors and employers, housing quality and costs are noted as regular deterrents for high-talent individuals entertaining job offers in the region.





Based on thorough analysis of regional data, TPMA concludes that there is currently a gap in supply for single-family housing that far exceeds the minor gap for multifamily housing. Forecasting demand is difficult because of the substitutability of use between housing types, especially in regions where housing affordability is a challenge. Despite this challenge, TPMA wishes to provide an outline of current and future demand. TPMA estimates that the region is currently short of the needed number of single-family

homes by roughly 340 units; and over the ten-year period from 2017 to 2027, the region will need over 2,600 additional single-family units (or roughly 270 per year). If accomplished, this change would result in a nearly two-fold increase in single-family housing production over the prior ten-year period of time.

Accomplishing a greater level of housing development while still maintaining a high quality of place will require deliberate planning and coordinated action. TPMA proposes the following strategies for improving and expanding housing options in the Palouse Region, which are explained in more detail in the body of the Regional Housing Assessment.

- Identifying & Deputizing a Palouse Housing Leadership Team
- Development of Priority Land Set-Asides
- Development of an Attainable Housing Program
- Assignment of Student Housing Districts
- Establishing Rural Housing Transition Zones
- Use of Grants, Sponsorship & Incentive Programs
- Improved Clarity in Development Standards
- Increased Use of the Land Trust Model
- Development of Skilled Labor

In addition, TPMA proposes that regional leaders consider enabling and facilitating increased access to each of the following housing types. The body of the Regional Housing Assessment explains benefits of each housing type, strategies for mitigating community risks, ideal locations, successful best practices, recommended changes to zoning codes, and recommended first steps.

- Small Single-Family Homes—Also called pocket neighborhoods, micro homes, high-density detached, and cluster housing. These homes are smaller in size than conventional single-family homes and often exist in neighborhoods with shared spaces.
- Agrihoods—Neighborhoods which mix agriculture and residential land uses by surrounding a farm, garden, or orchard with residences.
- Tiny Home Neighborhoods—Tiny homes are generally 500 square feet or smaller, lower cost and frequently more environmentally friendly than traditional single-family homes. Tiny homes can be either on-wheels or installed on a foundation. But, those on foundations are generally easier for communities to permit and manage.



- Accessory Dwelling Units—Accessory Dwelling Units (ADUs) share a parcel with an existing
  housing unit and possess the necessary features of a legal residence, such as independent
  plumbing, parking, etc.
- Modular Built Homes—Modular Built Homes can be developed faster, and often cheaper, than traditional stick-built homes, and allow labor-constrained regions to add housing supply.
- Large-Scale Single-Family Housing Developments—Traditional large single-family homes are on standard large residential lots, with independent parking and yards for each unit. Continued development of large-scale single-family housing is necessary to support the growing professional, middle- to high-income workforce of the region.
- Senior Housing—Senior Housing includes an array of housing options that are more suitable for those over the age of 55 such as fully independent, assisted living, and nursing homes.

The Palouse Regional Housing Assessment provides an abundance of data points and research to support the above listed strategies. A few of these key data points are listed below:

- Households that are cost-burdened by housing are common in the region. TPMA estimates that as of 2017, over 11,900 households were cost-burdened, equivalent to 37% of the region's population. This issue is not just isolated to college students, evidenced by the fact that 16% of homeowners earning between \$50,000 and \$74,999 are cost burdened.
- Construction of multi-family units has dominated over the past several years while single-family development is at an historic low. Multi-family building has occasional years of punctuated growth on both sides of the border. Overall, however, fully 44% of all new residential development in the region since 2012 has been multi-family housing in Whitman County.
- The region has seen dramatic increases in renter-occupied housing, which is only partially attributable to student populations. Renter-occupied dwellings surpassed owner-occupied dwellings as the norm in the region in 2011. Over the past ten years, among households headed by people 25-years and older, owner-occupied housing units have grown only slightly (7%), while renter-occupied housing units have increased by 46%. In other words, the number of adults renting housing has increased six-fold more than the number of adults who own homes.
- Pullman is leading the region in terms of population growth and employment growth, but
  Moscow is also holding its own. In addition, the daily exchange of residents across the state
  border reveals that residents commonly choose to live in Latah County and work in Whitman
  County. In fact, 13% of Pullman's workforce resides in Moscow; whereas 5% of Moscow's
  workforce resides in Pullman.
- The region's economy generally weathers recessions well. During the Great Recession employment in the Palouse Region expanded and home values remained stable, although both decreased slightly for two years following the recession. Therefore, a national recession could have the counter-intuitive result of making the Palouse Region more attractive to real estate developers who are currently pre-occupied with higher-growth real estate markets.



### **Recommendations & Best Practices Matrix**

The recommendations and best practices matrix listed below aligns TPMA's recommendations with the issues categorized in Chapter 1: Recommendations & Next Steps. The intent of this visualization is both to provide a clear portrayal of how each recommendation connects with identified issues, and to provide a simple method for locating best practices throughout this document. To provide a visual queue, best practices noted throughout this document are enclosed by the same orange text boxes used below.

Certain recommendations and best practices could fall into multiple categories but for simplicity, each is grouped into the most relevant category. For example, the various recommended housing types identified by TPMA are grouped according to the group who would take initial responsibility for enabling the concept.



#### Construction

Priority Land Set-Aside (pp. 12-13)
Access to Skilled Labor

• Construction Combine and Higher Education (p. 21)

Small Single-Family Housing (p. 24-26) Modular Built Homes (pp. 34-35)



### Economic

Attainable Housing Programming (pp. 13-14) Grants, Sponsorships and Incentive Programs

 Federal Funding, Foundations, and Renovation Grants (p. 17)

Increased Use of the Land Trust Model (p. 20)



# Community

Identifying and Deputizing a Palouse Housing Leadership Team (p. 12) Agrihoods (p. 27-28) Large Single-Family Homes (pp. 36-38) Senior Housing (pp. 39-41)



# Government

Student Housing Districting (p. 15)
Rural Housing Transition Zones (p. 16)
Clarity in Development Standards

 Unified Development Ordinances (pp. 18-19)

Tiny Home Neighborhoods (pp. 29-31) Accessory Dwelling Units (pp. 32-33)



# 1. RECOMMENDATIONS & NEXT STEPS

# **Defining the Issues**

Prior to detailing recommendations and next steps, it is helpful to outline TPMA's findings on the housing situation in the Palouse Region. Virtually every region of the United States is struggling to provide a sufficient amount of attainable housing for its citizens and workforce. In some ways, the Palouse Region is no different, but the region also has some unique opportunities and challenges as well.

The following list of key issues are a mixture of positive, negative, and neutral conditions. Subsequent sections of this report will both diagnose these issues and provide guidance on how they can be leveraged and improved.

#### Construction

- Nationally, home builders are facing some of the highest development costs in decades resulting from increased material costs and labor shortages. All of these issues are present on the Palouse and, in fact, are exacerbated by distance from major metropolitan areas, which possess larger labor pools, more vendors, and materials suppliers.
  - ges Ses
- Homebuilding on the Palouse presents some unique environmental challenges which increase the cost of building relative to other areas, including its rolling-hills topography, unusual soil structure, and drainage issues.
- In recent years, builders have adequately addressed the demand for multi-family housing, though improvements could be made in defining zones that favor student-focused housing as compared to community-focused multi-family housing.

### **Economic**

 The Palouse Region's economy is dominated by a handful of high-performing clusters including higher education, electronics manufacturing, healthcare, and technology. Though a positive for the regional economy, the shallow labor pool for construction and extraction workers presents a consistent challenge for home builders.



- As various cities in the Pacific and Inland Northwest have boomed over the past decade, regional
  housing developers have focused their attention on higher growth markets, which are both closer
  to where these businesses are located and offer higher profit margins.
- The Palouse Region has no metropolitan statistical areas (MSAs) and is therefore largely 'off-the-radar' to both regional and national housing developers.
- The region needs housing at numerous cost levels. In order to continue fueling the economy and discourage outmigration, the region requires both traditional affordable housing, for new entrants to the workforce and other low-income workers, and attainable housing, for middle-aged and mid-career workforce.
- The Palouse Regional economy and housing market have historically been fairly insulated from negative economic shocks, so a potential national recession in coming years should not discourage real estate development from occurring in the region.



### **Community**

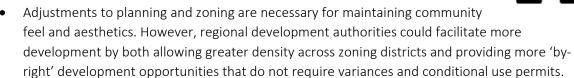
Much of the Palouse Region's land is committed to highly productive
agricultural use. As cities expand outward, conversations related to housing
development arise between developers, landowners, and city/county officials.
The success of such conversations is varied, and at times communities' growth
is slowed by landowners' willingness to sell and/or develop their lands.



- The Palouse Region is host to an educated and highly passionate population base. This study has uncovered countless community members who are interested in working together to develop solutions for the region's housing issues.
- Given the cost challenges inherent to building in the Palouse Region, it is likely that to accomplish some of the recommended housing options, a mixture of public-private partnerships, grants, and use of tax-credit programs will be required to off-set development costs.

### **Governmental & Regulatory**

• Some communities in the Palouse Region have recently updated development strategies and regulations (e.g., comprehensive plans, building codes, and planning and zoning regulations), while other communities have been slower to adapt. The lack of guidance on issues such as building density and innovative housing options has slowed real estate development in some communities.



• A handful of real estate developers and home builders, both from within and outside of the region, have expressed concerns with the "ease of doing business" with regulatory agencies in the Palouse Region, which has discouraged them from developing housing in the region.



### Toward a Regional Housing Strategy Plan

Though there are multiple pockets of unmet demand both geographically and demographically within the Palouse Region, both attainable (middle-income) and affordable (low-income) single-family housing is the most significant unmet need. Despite significant demand from current and prospective residents, the response by home builders both from within and outside of the region has been anemic, particularly between 2015 and 2019.

Including this top-line priority, significant market needs that should be considered when establishing a long-term housing strategy include the following:

- Attainable and affordable single-family housing;
- Allowance for higher-density housing without special permitting processes;
- Proper placement of multi-family student housing;
- Senior housing;
- In-fill development;
- Increased production of premium large footprint single-family housing; and
- Rural transitional living zones.

Each of these needs demonstrate the opportunity to impact the Palouse Region's housing profile in a demonstrable manner over the next ten to fifty years. Without leadership and intervention, the housing market will add just short of 3,000 housing units over the next decade. This number is close to the roughly 3,273 units that TPMA forecasts as needed; however, the status quo of housing production would generate a blend of units higher in multi-family than would be ideal for the region. TPMA believes that with proactive leadership, housing production can be scaled to meet demand, and tailored to the needs and goals of the Palouse Region. Determining how to expand the housing inventory in a manner that addresses the following objectives will be the challenge.

# **Key Palouse Regional Housing Objectives**

The following objectives are of central importance as regional leaders take on the challenge of meeting the needs listed above. Using the strategies recommended by TPMA, as well as others yet to be determined by regional leadership, action should be taken in a way that ensures that future housing development helps to build upon the Palouse Region's outstanding quality of place and reputation.

- 1. **Identify** the Palouse Housing Leadership Team and partners that will assist in responding to a variety of housing needs;
- 2. Develop a collaborative vision that includes the housing needs and strategies for Pullman, Moscow, and all surrounding suburbs and rural areas;
- 3. Address existing and future demand with a focus on increased density and affordability;
- 4. **Diversifying** housing choices in terms of size, style, and price;
- 5. Reinforce neighborhoods and community through housing design and investment; and
- 6. Treat housing not just as an infrastructure issue but also as an economic and community development issue.



# Suggested Strategies

There are several strategies that, if developed and executed upon, should provide momentum in accomplishing the objectives listed above. These strategies are outlined as follows.

# **Identifying & Deputizing a Palouse Housing Leadership Team**

Most high priority community issues are aligned with an incumbent regional government and/or non-profit agency to address the given need (e.g., safety, education, economic development, etc.). In the Palouse Region, as with most regions, housing does not have an explicit leadership group who is assigned with maintaining and growing the region's potential. Clearly, there are multiple groups who are concerned with some aspect of housing (e.g., affordable housing, community development, etc.), but these groups' oversight over too many additional issues, or too narrow of a focus on just a segment of the housing issue, necessarily dilutes focus on the topic of housing, writ large. It must be emphasized that the strategies and recommended housing types outlined in this report will likely gain little traction unless such a group is organized. Given that this housing assessment is focused on multiple counties and a multitude of cities across state boundaries, the group should include expertise from both sides of the Washington-Idaho border, and both urban and rural communities. Expertise should be leveraged from multiple stakeholders including real estate development, construction, finance, community and economic development, and

Actions to be taken by this group include:

structure.

 Conducting discussions and pursuing funding with federal and state entities focused on housing topics;

landowners. Also given this broad array of issues and geographic areas, an organization that is separated from city and local government, and which directly interfaces with these entities, would be the ideal

- Researching and pursuing housing developers from outside of the Palouse Region;
- Facilitating conversations between landowners, real estate developers and builders;
- Coordinating with community development, and planning and zoning entities to pass on research, feedback, and concerns based on said research and conversations.

# **Priority Land Set-Aside**

There are areas throughout the Palouse Region that offer excellent housing development potential. Yet, in both the cities of Pullman and Moscow, developable land is somewhat scarce. Using the research from this analysis, as well as further research by the Palouse Housing Leadership team, thought should be given to where such housing should ideally be located. This can be done both via proactive planning, landuse policy, and possibly strategic land acquisitions.

Beyond just identifying zoning districts and boundaries, this task is about identifying land owned by the cities, counties and/or partnering entities (e.g., ports, private landowners, universities, etc.) that can be specifically designated for the purpose of attainable housing. Though Whitman and Latah counties do not abound with underutilized public lands, each county possesses a degree of state trust lands, which are likely designated for the two universities. In Latah County, there are over 31,000 acres of state trust lands, and in Whitman County there are over 32,000 acres. However, this action can also be taken on



lands already within cities or areas of impact where communities would like to see more affordable development, a process called "overlay zoning" which is now frequently being used to encourage denser and more affordable development.<sup>8</sup>

Taking action on priority land set-asides will allow regulatory agencies to make specific rules for that property that do not necessarily apply outside of that zone, thereby significantly easing the entitlement and development process in that location. Furthermore, these actions will help to guide the private market to align its development objectives with those of the broader community.

### **Attainable Housing Programming**

As observed from conservations with home builders as well as the shape of the existing real estate market, there is currently little incentive for builders to pursue the middle- and lower-income housing markets. Recent housing developments are either designed to cater to the captive student market, or upper-middle to upper-income families for custom and spec homes. The costs associated with housing development, starting with land and site preparation, and including local/state regulations, labor, and materials, serve to impede attainable housing development.

No one response will remedy what is a systemic and market problem that most communities face. Those communities that have responded with some success have **taken a multi-faceted and customized approach to this issue**. The following Attainable Housing Programming elements should be considered to address the housing demand for middle- and lower-income residents.

- 1. Cost Reduction Program—Public policy that reduces the cost of developing attainable housing. This may include development line items such as: permit fee reductions, impact fees waivers, utility improvement and hook-up fee reductions, etc. In some cases, the costs may be reduced or deferred until sometime after completion of the project, thus reducing the amount of debt required during the construction period.
- 2. **Construction Loan Guarantee Program**—For qualified contractors, provide a partial guarantee (up to 25%) of a construction loan for an attainable housing project. The guarantee will ease access to construction capital as well as reduce its costs. Where city/local government are limited on this front, partnerships with foundations, non-profits and lending agencies may be helpful.
- 3. Land Cost Reduction—This initiative could align with the first strategy (Priority Land Set-Aside). Land costs and preparation serve as a significant upfront cost. This cost often makes it difficult for attainable housing projects to "pencil out." For land owned, or strategically acquired by active partners, reduction or deferral of the land and preparation cost burden could be helpful in encouraging attainable housing projects.
- 4. **Prioritize Incentives**—Incentives that effectively reduce the equity/debt needed either to build or buy a house will help lower the bar of entry for attainable housing production. Programs such as fee waivers and tax abatement and down payment assistance can be effective in encouraging housing production and home purchases.
- 5. Attainable Housing Builders' Tool Kit—The designated Palouse Housing Leadership team could utilize the resources listed in this report, and further build upon them, to provide a resource kit for local builders who are interested in how to utilize state, federal, and local incentives to enable their attainable housing projects, including recent and not well understood options such as Opportunity



Zones. In addition, the Palouse Housing Leadership team should consider organizing a seminar that convenes local builders and real estate developers to learn from experts on these topics.

### Best Practices: Attainable Housing Programs

Buncombe County—A combination of strategies has been implemented with success in Buncombe County, North Carolina. Buncombe County is in a mountainous part of North Carolina and experienced 25% population growth from 2000 to 2017, which raised the land and housing prices to an unaffordable level—especially for the mid- to low-income residents in the area. Through the years, Buncombe developed a comprehensive land use plan, a point-based program that incentivizes density, and an Affordable Housing Services Program (AHSP). For construction loans, the AHSP offers low-interest loans that draw from the county's annually allocated general fund. The loans are only given to those developers constructing new affordable units or converting existing non-residential structures to homes. In addition to the loans, AHSP offers rebates for the building permit fee for affordable units and expedites the review process. Then on the consumer side, they provide down payment assistance, funding for emergency repairs, and rental assistance for those at risk of homelessness. Alongside the other strategies Buncombe has put in place, the AHSP has been successful as it has assisted 692 families since 2012 and supported 580 new rental units.<sup>9</sup>

King County—King County, Washington has also taken a comprehensive approach to better their affordable housing stock. They are a part of A Regional Coalition for Housing (ARCH) which coordinates efforts of 15 different cities on the east side of the county. They are involved directly by providing loans and grants to developers of affordable housing; waiving impact and permit fees; and making surplus public land available for development. ARCH is part of a larger organization, the Housing Development Consortium of Seattle-King County (HDC), and as of 2017, members of HDC built and preserved more than 45,300 affordable homes to house 122,900 individuals, most of whom are making below 50 percent of the area median income.<sup>10</sup>

Oregon—Oregon has a implemented a policy approach as part of their strategy towards affordable housing. The Oregon Single Family New Construction Limited Tax Abatement (LTA) program allows cities to abate property taxes on improvement value of newly constructed homes in targeted neighborhoods and distressed markets. The property must have a set percentage of units based on the size of the property to be affordable to tenants with incomes of 60% of median area income or less. This helps to incentivize developers to build in target areas while ensuring the housing stock they are introducing includes affordable options.



### **Student Housing Districting**

TPMA is aware that it is neither legal nor beneficial for cities or landlords to explicitly prohibit students from living where they choose. This recommendation, therefore, is of the nature of encouraging and incentivizing students to locate in certain areas through zoning, building and development practices.

Student housing demand plays a major role in both Moscow and Pullman. In fact, in recent years the majority of major multi-family development projects have been customized to cater to students. Developers have responded to the student demand by building more profitable "student suite" multi-family units. Though it is a helpful contribution to local real estate supply to have market segments focused on the student market, these developments have increasingly crept into commercial and residential districts, which may have a long-term crowding out effect for other types of commercial and residential use. In addition, older neighborhoods that were previously primarily single-family homes have been permeated with student-catered rental properties (e.g., Sunnyside Hill in Pullman, and City Center South in Moscow). As a result, over the past 10-15 years the Moscow/Pullman real estate markets have skewed towards student housing production which has impacted costs and neighborhood character in some areas.

A more deliberate response is needed in addressing future student housing demand. This is more likely to be achieved with a strengthening of the university-community partnerships. Established student housing zones should be considered. One approach might include higher density student housing development allowances near the universities and along transit-oriented corridors. This type of strategic housing development is becoming more common in major university settings across the country. The ability to concentrate and locate student housing on or adjacent to commercial corridors creates convenience and improved access services for the students. Local merchants and service providers benefit from the concentrated demand realized by the strategic placement of students. Such an approach also relieves the pressure put on single-family neighborhoods, which often serve as student overflow areas when student housing is scarce.

#### Best Practices: Student Housing Districting

Seattle, Washington – An example of handling student housing demand levels is seen by the University of Washington in Seattle. The Office of Planning & Community Development laid out highly specific zoning areas all around the university. These zones are ones such as Commercial, Neighborhood Commercial, Midrise Multifamily, Low-rise Multifamily, Single-family, etc. The zoning was adjusted in 2016 to allow for greater density and encouragement of development around the light rail station to provide a pedestrian and transit-oriented center. The zoning has allowed for the University to keep its student population closer to campus and has worked better with the surrounding communities. <sup>11</sup>



### **Rural Housing Transition Zones**

The secondary cities and rural neighborhoods of the Palouse Region have experienced moderate benefit from the growth of Pullman and Moscow. For example, communities such as Albion and Palouse have developed reputations as places where many professors live. On the Idaho side of the border, increasingly, families are settling in communities such as Voila and Troy where they can have more space and still access the amenities of Moscow and Pullman. Their rural setting, lower cost housing, and tight-knit communities are appealing to many professionals who work in Pullman and Moscow. Yet, commercial, population, and real estate changes have yet to generate strong market momentum in any of these towns. Some new housing has been developed, but it is frequently of a lower quality than in urban settings, and many historic homes remain in a state of disrepair and deferred maintenance. In addition, many smaller towns were not well planned, creating an ad hoc housing and commercial environment with inefficient land-use patterns, which ultimately detracts from these potentially quaint and picturesque rural settings.

The creation of planned and well-defined rural housing transition zones could help to attract families and growth to the Palouse Region's smaller towns while offering more attainable housing choices to the broader housing market. The rural transition zones would identify land that would be designated for housing development guided by rural land-use policy. The land-use policy would establish standards intended to improve the quality of housing to be developed, preserve rural open space, make it easier to serve the housing community with utilities and infrastructure, and establish a sense of a vibrant and strong community.

### Best Practices: Rural Housing Transition Zones

**Greeley County, Nebraska** – Greely County has a small rural population and has faced a critical issue of cost burden households. The county preformed a needs survey, analyzed demand, and put action in place to expand its rural affordable housing stock. Originally, the county required that if a house was being built to sell, it also had to come with 20 acres. The county reduced this requirement to 3 acres as well as allowed for construction of ADUs, including trailers, with no acreage requirement. These slight zoning and regulation changes led to a shift in incentives and has created more development in rural areas and successfully increased the housing stock.<sup>12</sup>



### **Grants, Sponsorships & Incentive Programs**

Developers and government agencies in the Palouse Region will need to be resourceful in developing project budgets to address attainable housing, including utilizing grants, sponsorships, and incentives. At the federal level, both the U.S. Department of Agriculture (USDA), and the U.S. Department of Housing and Urban Development (HUD) are potential sources of funding and information. USDA offers programs for housing assistance as well as rural development loan and grant assistance. They also offer loans and grants for housing preservation along with multi-family housing developments. HUD also provides grants and funding for various housing and neighborhood needs based on various eligibility requirements such as their HOME program, the Community Development Block Grant (CDBG) program, and Low-Income Housing Tax Credits (LIHTC). Several national non-profits can also be assessed for helpful content and funding options including Rural Local Initiatives Support Corporation (LISC), and National Rural Housing Coalition (NRHC). At the state level, the Idaho Housing and Finance Association (IHFA) and the Washington Department of Commerce are the states' designated housing resources.

On the local level, grants and scholarships may be available through community and corporate foundations. Though each would need to be examined for viability, the Idaho Community Foundation and the Innovia Foundation are potential donors and organizers of community resources. The opportunity to partner with such foundations should also be considered in connection with more niche housing issues such as assistance for the disabled, veteran housing, and career and technical training for trades workers.

Recently, Washington passed House Bill 1406 which focuses on affordable housing and allows for cities and communities to impose a local sales and use tax for affordable housing related activity. Currently, Whitman County is being active and taking a step toward utilizing it. The tax would be credited against sales taxes, so the tax amounts paid by consumers would stay the same and part of the collected sales tax would be directed towards affordable housing. To make the impact to the Palouse Region even larger, Pullman could implement this legislation as well. Although, in order to do so, they would have to enact a qualifying local tax, which Whitman County was not required to do. <sup>13</sup> There is also the option of raising funds from tax-increment financing or other local tools that could be set aside to seed fund local programming.

### Best Practices: Grants, Sponsorships & Incentives

An example of this is seen in **Heppner, Oregon**, just an hour south of the I-84 Columbia Gorge freeway. The city and WCVEDG manage a housing rehabilitation grant program that provides funding for home buyers interested in renovating distressed single-family homes. Home buyers and contractors can apply for the grant to get up to 20% (max \$20,000) of their renovations paid for by the WCVEDG. Though the fund has been used routinely by locals to renovate homes, the community feels they are reaping benefits by turning over blighted real estate and increasing property tax collections. Such programming could be particularly well suited to cities in the Palouse Region with a large stock of outdated housing that the market is slow to turn over, such as Colfax or Potlatch.



### **Clarity in Development Standards**

Seasoned real estate developers and builders gain knowledge of the development process through experience. But, for an average citizen, figuring out what terms to use and where to look for information about development requirements can be an onerous process. TPMA's interviews with community members indicate that though city and county officials are typically very helpful on these matters, the barrier of having to visit or call city offices to obtain information is enough to deter many from ever seeking out this information. This situation is all the more important for landowners in younger generations who expect to be able to quickly and efficiently find information online rather than through personal interaction. If the region's communities wish to see more housing development, it is not enough to simply list all the pertinent information within city code documents, which can be difficult to find, worded in a bureaucratic terminology, and hidden in a series of multiple documents.

At the least, both of the Palouse Region's primary cities should embrace the responsibility for making this information clear on their city websites, including use of charts or infographics. To go a step further, Pullman and Moscow should consider hosting educational sessions and webinars so citizens can learn how to develop more housing using the policies and tools available in each city. To provide simplicity and clarity on these issues, it is recommended a website with GIS maps, simple explanations of various zoning districts, and a simple table demonstrating the following pieces of information for each residential zoning districts:

- Minimum lot area,
- Floor area ratio,
- Maximum building heights,
- Maximum number of dwelling units per acre,
- Restrictions on number of non-related occupants,
- Minimum lot widths,
- Required setbacks for each side of the yard,
- Required on-site parking,
- Density bonuses available;
- Infrastructure improvement requirements;
- And conditions which would warrant further conversations with city officials.

In Moscow, the Moscow Fair and Affordable Housing Commission (MFAHC) embraces this role, to an extent but mostly focuses on affordable housing rather than the breadth of housing issues that need to be discussed regionally. With the addition of some other partners, the MFAHC could be part of this solution. At the time of this writing TPMA is not aware of any similar group in Pullman.



### Best Practices: Clarity in Development Standards

A recent approach by cities to simplify these processes is a **Unified Development Ordinance (UDO)**, which combines all information about zoning, guidelines, subdivision processes, and floodplain and stormwater management into a single comprehensive document. Notably, UDOs also frequently employ illustrations to explain industry-specific terminology, and tables to explain complex information. Additionally, some UDOs have a built in "what has changed recently" feature to the city websites, so residents can quickly see a summary of what codes and regulations have recently changed. The UDO process has been used to great effect in communities such as Bloomington, Indiana; Gastonia, North Carolina; and Buffalo, New York, to name a few cities.

	N-1D	N-10	N-1S	N-2C	N-2E	N-2R	N-30	N-3E	N-3B	N-4-30	N-4-50	Definitions/Standards
Attached House		•	•		•	•		•	•			Section 3.2.2
Carriage House		•		•	•	•	•	•	•			Section 3.2.3
Civic Building	•	•	•	•	•	•	•	•	•	•	•	Section 3.2.4
Commercial Block	•	•		•	•		•	•				Section 3.2.5
Detached House					•	•		•	•	•	•	Section 3.2.6
Flex Building			•									Section 3.2.7
Loft Building			•									Section 3.2.8
Shopfront							<b>●</b> ¹	<b>●</b> ¹				Section 3.2.9
Shopfront House				•	•		•	•				Section 3.2.10
Stacked Units	•	•			•	•		•	•			Section 3.2.11
Tower	•											Section 3.2.12
												<ul><li>Permitted</li></ul>

Example: Buffalo, New York "Green Code," Unified Development Ordinance



#### Increased Use of the Land Trust Model

A risk with any new form of attainable housing development that is visually appealing and trendy is that popularity among consumers will quickly escalate prices to the same rate as other forms of single-family housing already on the market. Likewise, even if developers initially sell homes at an affordable price, they may be "flipped" within a matter of years for a higher price.

One option used in certain states and regions is placing price ceilings on developers of high-density neighborhoods. However, this option often has the unintended consequence of developers avoiding this form of development entirely or cutting corners to save on cost. Another option exists in the **use of land-trust models**, by which homeowners only own the improvements (i.e., the home) but not the ground that the home is built upon. If the landowner is a for-profit entity this would do little to nothing to decrease cost, as the price of land would be passed on through maintenance or HOA fees. However, if the landowner is a not-for-profit, this could significantly decrease the cost of the homeownership. Additionally, this model helps preserve the affordability of homes over time, as the cost of land is excluded from the cost of the home when it is resold. The Palouse currently hosts just one housing land trust organization, namely, the Moscow Affordable Housing Trust (MAHT). It is recommended that stakeholders consider providing greater funding and support of this organization as well as creation of a similar organization in Pullman. A few examples of communities that have excelled in use of land trust models are listed in the following best practices section.

#### **Best Practices: Land Trusts**

**Evergreen Land Trust** – Founded in 1974, the Evergreen Land Trust (ELT) Association is the oldest community land trust in the Pacific Northwest. The organization began as a grassroots effort to promote affordable housing, cooperatives, recycling, and other progressive initiatives related to land reform. ELT holds both urban and rural properties in the Puget Sound Region, including cooperative houses and farms.<sup>14</sup>

**Northern California Land Trust** – The Northern California Land Trust (NCLT) is the oldest Community Land Trust in California and has served as a leader in the CLT movement on the West Coast. Throughout its history, the NCLT has been involved in dozens of community development projects, developed more than 165 units of housing, and has more than 35 new units in construction. <sup>15</sup>

**Durham Community Land Trustees –** Catalyzed in 1987 by residents concerned with rising home prices, absentee landlords, and housing disrepair, Durham Community Land Trustees (DCLT) builds, manages, and advocates for permanently affordable housing. The land trust now owns and manages 282 units, which provides rental and homeownership opportunities to 325 low-income people. <sup>16</sup>



### **Development of Skilled Labor**

As noted in numerous interviews and focus groups conducted throughout this analysis, the limited availability and high cost of construction labor are among the greatest challenges for home builders in the Palouse Region. Unfortunately, any strategies focused on enhancement of skilled labor are prone to be long-term efforts rather than quick fixes. These approaches should still be considered as part of the overarching strategy for alleviating housing issues in the Palouse Region over the next 20 to 50 years.

One innovative option for alleviating labor shortages in the construction industry would be in developing educational programming that offers financial incentive and upward career pathway growth. A model that has gained strength in recent years, at both non-profit academies and higher education institutions, are Income-Share Agreements (ISA's). ISA's are an alternative to a traditional college loan. Freed from the constraints of lending institutions, ISA's allow managing institutions to set specific rules about how much the borrower pays back and when. Typically, ISA's have varied pay-back plans based on the level of income of the borrower once training is completed and the worker is employed.

Higher educations across the United States are pioneering ISA programs in an array of fields including, most recently the University of Utah, which allows for ISA funding in 18 different educational categories, and the University of California, San Diego, which is focusing first on digital careers but has plans to roll the program out for an array of career and technical positions.<sup>17</sup> By and large, ISA's have served as a popular tool for injecting the technology industry with skilled workers in a short period of time. Though they have yet to be piloted on construction and skilled trades, in theory the model could work perfectly. Any such arrangement would require participation from regional higher education institutions, potentially those that serve career and technical needs, such as North Idaho College and Lewis-Clark State College.

#### Best Practices: Skilled Labor

The construction industry, much like manufacturing, suffers from certain pre-conceptions and stigmas in the eyes of many young people. To combat that image, a model that has sprung up in the Pacific Northwest is the **Construction Combine**, which are two-day events usually held in partnership between a university or college, The Home Depot, and various local stakeholders in the construction industry. These events are designed to provide quick training to young people interested in construction, in a fun and competitive atmosphere, which typically translates into people entering the construction workforce. During Construction Combines participants learn or enhance skills in concrete, drywall, siding, roofing, framing, carpeting, tile, hardwood restoration, plumbing, electrical, rebar, and other areas. During the two day process the participants are interacting with local contractors and construction groups which evaluate them for joining their workforce in varying capacities. Combines have been hosted across Idaho in places such as Lewiston and Pocatello, to great effect and should be considered in the Palouse Region.



### **Recommended Housing Types**

In alignment with suggested strategies listed above, this section summarizes how the Palouse Region could facilitate and enable development of a variety of housing options that respond to critical gaps in the regional housing market. Wherever possible, best practices are provided referencing other regions of the country, both inside and outside the Inland Northwest, that have seen similar successful developments. In some cases, options listed related to increasing density for communities in the Palouse Region.

Within this section are mentioned the various neighborhoods that compose the two primary cities in the Palouse Region. The seven neighborhoods analyzed for Moscow were taken directly from the City of Moscow's Citizen Survey Sectors from the 2018 Citizen Survey. No analogous neighborhood breakdown exists in Pullman. Though the "Four Hills" is one common way of subdividing the town, in TPMA's approximation these groupings were too large and non-homogeneous to be helpful. To satisfy this need, TPMA used the four hills as a starting point but developed six custom neighborhoods to break-up the city into semi-homogeneous units. Maps of these neighborhoods are contained in Figures 1 and 2. In Chapter 4: Qualitative Housing Assessment, TPMA also outlines the strengths and weaknesses of each of these neighborhoods.

This section also relates to several other sections of the report with similar but different purposes. In particular, in chapter 6, TPMA quantitatively discusses projected needs for housing. However, based on the structure of existing datasets, forecasts do not specify the precise number of units required for the following types of housing. Lastly, density is an important part of the recommended housing types. Hence, Appendix B contains a chart of each major community's listed density standards.

For the Palouse Region, the most appropriate housing strategies commended for consideration include the following:

- Attainable, dense single-family housing;
- Multi-family student housing;
- Senior housing;
- In-fill development;
- Premium large footprint single-family housing;
- Rural living zones



Figure 1: Neighborhood Map of Pullman

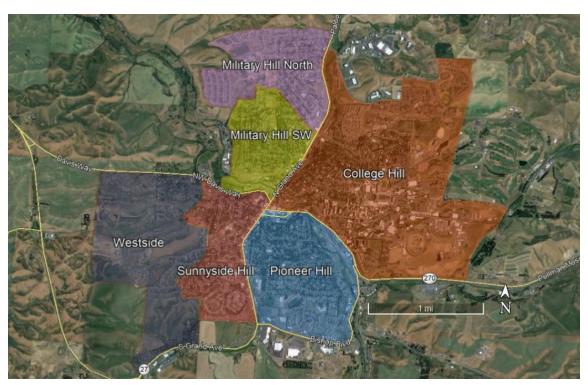
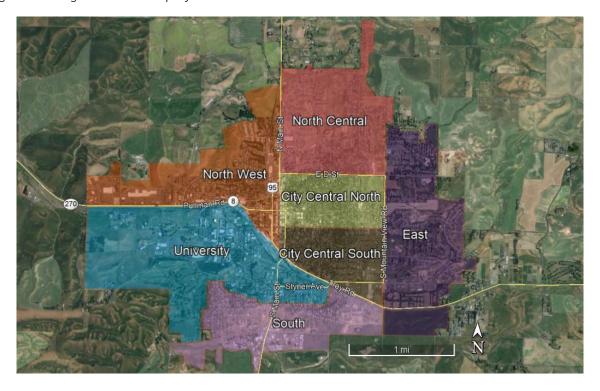


Figure 2: Neighborhood Map of Moscow





### **Small Single-Family Homes**

### **Summary of Opportunity**

Small single-family homes (SSFH) go by many names in many different settings including pocket neighborhoods, micro homes, high-density detached, and cluster housing, among others. Such developments are identified by small home sizes (generally less than 1,800 square feet (SF)), smaller lot sizes (generally 8 to 20 homes per net developed acre)<sup>19</sup>, limited parking and storage space, rear or exterior access roads, and existence of shared community spaces rather than single-family spaces.



Example of Small Single-Family Home

Though SSFH's are smaller in square footage and in tighter quarters with other homes, when designed well, interior space can be made to feel larger, and exterior views and entrances can be positioned to provide privacy to homeowners. In addition, the smaller interior square footage of SSFH's is made up for by other advantages including lower cost, nicer finishes, and access to shared indoor and/or outdoor spaces (e.g., courtyards, playgrounds, community centers, and pocket parks). SSFH designs often orient homes toward shared spaces in order to facilitate community engagement. Though price is often one of the motivators for buyers of SSFH's, for many the lifestyle facilitated by the homes can also be a benefit. Lifestyle features include decreased home maintenance, walk/bike-ability, and connection to neighbors and community.

### Benefits of Housing Type

SSFH's allow for higher-density and more affordable development, while maintaining or improving communities' existing built environment standards. SSFH's are typically built in the cottage or bungalow style with some stylistic variation, rather than traditional mass-produced tract homes. In both focus groups and stakeholder interviews, concepts such as pocket neighborhoods and similar concepts received high degrees of attention and approval from audiences; in contrast to some other forms of high-density single-family housing about which community members were more uncertain (e.g., mobile home parks, tiny home developments, etc.).

### Mitigation of Risks and Challenges

The tight density of SSFH's are part of the appeal to homebuyers but with this model comes the risk that homeowners will not have adequate internal space for their belongings, or adequate parking space for their vehicles. The first issue can be resolved through home-owner's association (HOA) contracts and neighborhood covenants, which could manage multiple issues, such as limiting use of outdoor storage, household tidiness, etc. Parking issues could be resolved in several ways, either mandating less vehicle ownership through HOA's or by requiring the housing developer to provide a large centralized parking location. This is often done in a similar manner to apartment complexes that provide a single dedicated parking spot, while additional vehicles are required to park in a less convenient and more generic parking lot.



An additional community concern in connection to higher density single-family dwellings is that they may become havens for short-term student rentals, and therefore might harm community aesthetics. To counter this possibility, the city planning and zoning commissions could determine which neighborhoods and districts where such developments would be permitted. To a degree, this could also be managed through an HOA or neighborhood covenants and restrictions. Generally speaking, traditional student populations tend to live closer to campuses and as such, developments permitted further away from campus would be less likely to transform into student dominant neighborhoods.

#### Ideal Locations in the Palouse Region

SSFH's are best utilized in areas nearer to work and commerce locations to reduce the need for automotive transit. However, this can be mitigated by locating SSFH sites near public transit, or by providing larger centralized on-site parking. However, the greatest potential would be for the cities of Moscow and Pullman to allow for pocket neighborhoods in the truest sense, that is permitting a "pocket" with smaller lot sizes within R1 through R4 districts. All factors considered, the best options would be in Moscow, in the Northwest, University, City Central South or City Central North neighborhoods, as well as Pullman in the Military Hill Central, Pioneer Hill Central, and Sunnyside Hill Central neighborhoods.

#### Parallels with Other Models

Modular Built Homes, Tiny Home Neighborhoods, and Senior Housing.

### Successful Case Studies

**NeighborWorks Boise** is in the process of developing five pocket neighborhoods in Boise and Garden City. These compact single-family neighborhoods provide opportunities for lower cost but amenityrich living in more compact developments. So far, the homes that have become available have sold out quickly.

Ross Chapin Architects has been involved in the development of over 20 pocket neighborhoods, most of which are in the states of Oregon and Washington; with additional neighborhoods in Montana, Arizona, Indiana, and Massachusetts.<sup>20</sup> Their first project was in the high growth area of Langley, Washington. The city adopted an innovative zoning code provision that allowed the project to move forward while preserving housing diversity,



Rosh Chapin Spring Valley Pocket Neighborhood

affordability and character, and discouraging urban sprawl. The project was extremely successful as all homes sold out quickly and then received media coverage on a regional and national scale. Cottages within the original group that have been resold have seen as much of a 250% increase over their original price. For future projects the firm often has partnered with the Cottage Company for Oregon based projects and has been a catalyst for development under new housing codes in the cities of Redmond and Shoreline.



Riverside Crossing Active Adult Cottage Cooperative is currently being built in Western Montana. The community will be for those 55 and older and will feature over 50 cottages grouped into numerous pocket neighborhoods. The smaller footprint of the homes is attractive to seniors looking to downsize, and the pocket neighborhood structure offers a community aspect. The cooperative layout also allows for a reduction in maintenance and housework as a monthly service fee is paid to take care of things such as appliances, roofs, lawn care, painting, and more. The cooperative owns the cottages, and the members own a share in the development which they can later sell, yet the value of the cottages can only increase at 1% per year to keep them affordable for future members.

### Recommended Changes to Zoning Codes

Over the past decade, the City of Moscow has made incremental steps toward allowing for greater density developments. Both the City of Moscow and the City of Pullman have procedures for allowing developers to build with higher density than permitted within given zoning districts. Moscow utilizes the Planned Unit Development (PUD) processes and Pullman utilizes the Planned Residential Development (PRD) process. Numerous successful developments have occurred in Moscow using this process (e.g., Green Acres, Tiempo Commons, Camden Court), as well as in Pullman (along Center Street and Lost Trail Drive). All told, these processes have allowed for eight higher density developments in the Palouse over the past ten years.

In addition to the above listed modifications, it is worth noting that the City of Moscow's planning and zoning commission is currently reviewing options for both cluster developments and traditional developments, which would permit for lower minimum lot sizes. In the case of cluster developments, developers would need to provide a greater proportion of open or green spaces. In the case of traditional neighborhoods, developers could build within traditional grid systems but with smaller lots and narrower alleys.

Though effective to some degree, the primary issue with the PUD/PRD processes is that they are not "byright" development processes, which means that developers need to go through an extensive process of requesting permission from planning and zoning, sometimes pay higher costs for additional design and building requirements, and risk that their plans are denied in the process. To provide greater ease of higher density development, TPMA recommends that the primary cities in the Palouse work to allow for higher densities, by-right, across all residential districts.

#### Recommended First Steps

Any significant alterations to housing densities must first be considered by planning and zoning commissions for the predominate cities and counties of the Palouse. As a first step, the cities of Moscow and Pullman (and to a lesser extent the region's outlying communities) should review minimum lot requirements with a lens on the challenges of affordability for single-family housing. At the same time, these commissions should consider what communities such as those listed above have done to both allow and incentivize denser housing development. If the commissions agree there is an unmet need, they should move forward recommending changes to codes and give the community opportunity to provide feedback on those changes.



### **Agrihoods**

### **Summary of Opportunity**

Over the past century, homes have been increasingly set apart from agricultural areas. An agrihood seeks to turn back the clock by re-merging agriculture and residential land uses by surrounding a farm, garden, or orchard with a residential neighborhood. In recent years agrihoods have sprung up in various places across the United States in suburban and rural areas in response to communities' needs to provide more single-family housing without significantly altering those communities' agricultural feel and heritage.



Example of an Agrihood

### Benefits of Housing Type

In addition to retaining communities' agricultural look and feel, agrihoods can potentially respond to homeowners' demands in numerous other ways including connection with sustainable food production, experiential learning for young people, access to green space, and environmental sustainability (e.g., reuse of rainwater, community gardens, etc.). One common theme drawn from TPMA's focus groups and interviews was a concern that new home production in the Palouse over the past decade has mostly been low density tract homes without significant character and no elevation of the existing aesthetics of the region's built environment. Less commonly, but still mentioned by certain developers and landowners, is a concern that farmland is slowly being swallowed up by residential neighborhoods. Hence, agrihoods offer an alternative that can simultaneously connect residential with agricultural uses.

#### Mitigation of Risks and Challenges

It is important to note in connection with this housing style that the concept is new and evolving, and, in fact, has been employed to describe a wide variety of housing options. One of the key differences is whether the agriculture at the center of the neighborhood is utilized for commercial farming or for small scale community organic farming. Both models are viable in the Palouse, but the latter would require a developer/landowner with the right cultural fit who would be willing to work near residences, which may alter their use of traditional farming practices (e.g., crop dusting, early morning/evening use of machinery, herbicides and pesticides, etc.). A smaller scale community farm would likely be easier to accommodate, as the landowner or a council of homeowners could set and enforce policies related to use of the farm. There is also a potential middle-ground option where the agricultural land is dedicated to less intrusive forms of growing and harvesting, such as a fruit orchard.

One thing that agrihoods would provide little assistance with is affordability of housing. Homes in agrihoods are typically on the upper-middle to upper level price ranges.

#### Ideal Location(s) in the Palouse Region

The most likely areas where agrihood development would occur would either be within city limits of Moscow, Pullman, Colfax or Palouse or just outside of the city limits in the areas of impact for those cities.

#### Parallels with Other Models

Large Single-Family Homes and Small Single-Family Homes.



### Successful Case Studies

Successful agrihoods can be found across the country in both rural and urban settings. Most come from family farms that adapt and provide solutions to a sprawling population. One example of this is **Agritopia in Gilbert, Arizona**. The neighborhood sprung up in the late 1990s from the suburban growth of Gilbert getting close to a family farm. After some rezoning and development across the years, the neighborhood stands at 450 homes, many of which share a lot and feature a diverse array of sizes and architectural styles. The neighborhood also contains other features including an 11-acre organic farm, full-service restaurant, coffee house, makers space, mobile healthcare, spa, fitness and wellness center, and a school across the street.

An additional example is the **suburban Atlanta agrihood of Serenbe.**<sup>22</sup> The 1,200-acre area has 70% of land set aside for conservation and trails. The other acreage includes over 700 sustainability focused homes, a 25-acre organic farm, restaurants, shops, art facilities, a swim club, and an inn.

Serenbe has been highly successful as it has gotten national attention from developers studying its model.



Arial view of Serenbe

A final example that adds a small twist to this model is the newly opened **Red Barn in Bentonville**, **Arkansas**. It sits on 55-acres, of which the neighborhood only occupies about 15 acres. Included in this is a 2-acre for-profit organic farm. It is designed for people to become members and investors in the farm and share in the vegetable production. People can buy different shares of crop production and pick it up each week once it is harvesting season and the excess is sold to local restaurants and at farmers markets.

#### Recommended Changes to Zoning Codes

Districts with Agriculture/Forestry, Rural/Suburban and or R-1 are all good candidates for an agrihood development. Rather than modifying code, developers and government officials would be better served adapting to an agrihood using a Conditional Use Permit (CUP) and/or Variance. These procedures would allow for flexibility in density and land-use while also not having the unintended consequence of losing control of development in all districts with similar zoning. In addition to bulk and land use, there would be further considerations related to use of water, sewer, road access, and stormwater management that would require the careful consideration of planners and planning and zoning committees in both the cities and the counties.

### Recommended First Steps

The Palouse Housing Leadership team will need to vet this issue with local stakeholders to further test the viability of the agrihood concept. The most important audience is landowners on the outskirts of the major cities, most of whom will be multi-generational farming families. In most cases, this will be a new concept and will require considerable education and explanations of best practices. Through these conversations, potential partners for agrihood development will likely arise.



### **Tiny Home Neighborhoods**

### **Summary of Opportunity**

Generally speaking, tiny homes describe a type of housing that meets all necessary building and design codes and provides single-family living space with a very small geographic footprint. Typically, tiny homes are 500 square feet or smaller, and regions that have modified zoning or allowed special use of tiny homes typically allow the homes on lots of roughly 3,000 square feet or smaller. In some cases, tiny homes are on a chassis and wheels, allowing residents to essentially treat the home as an RV. Increasingly, however, tiny homes are placed on foundations as traditional homes. Tiny homes have achieved notoriety in the United States in recent years



Example of a Tiny Home Neighborhoods

primarily for two audiences. Firstly, individuals or families who want an affordable home but do not value the large square footage of a traditional single-family home. Secondly, as an affordable housing option for homeless or formerly homeless individuals.

### Benefits of Housing Type

The primary benefit of tiny homes is allowing users to experience the benefits of a single-family detached home but at a lower cost than traditional single-family housing. In addition, tiny homes, by their nature, are more environmentally friendly than traditional housing due to less materials used in construction, and lower energy use. In addition, many tiny homes are built with other eco-friendly features including utilization of natural light, use of recycled materials, solar panels, etc.

Tiny homes are often custom built for landowners looking for such benefits, but numerous cities are embracing the tiny home model to address community issues such as homelessness and lack of affordable housing. For many, the tiny home neighborhoods are the equivalent to the traditional mobile home park. Tiny homes have been used to respond to homelessness in urban areas across the United States, such as in Seattle, Washington; Austin, Texas; and Syracuse, New York.

Where tiny homes have been used by cities and non-profits to respond to social issues, operators organize as a non-profit and acquire grant funding and federal funding to support their programs. In some cases, cities provide funding or discounted utilities to support these organizations. As yet, few communities the size of Moscow or Pullman have pioneered tiny home neighborhoods as a response to homelessness. However, private developers are increasingly looking to develop tiny home neighborhoods in small to mid-sized towns, especially in cases where outdated and poorly managed mobile home parks could be converted to new more productive uses.

#### Mitigation of Risks and Challenges

One of the biggest challenges for communities in regulating tiny homes is differentiating transportable vs. permanently stationed homes. To provide any definitive rules for use, the cities and counties in the Palouse Region must first differentiate their standards based on whether the housing unit is portable.



Currently, as long as housing units meet International Building Code (IBC) requirements, tiny homes are permitted to park in RV parks in the region, but for limited durations of time (no greater than six months within a 12-month period in Latah County on private land, but can be longer depending on the permit for at RV parks; and 180 consecutive days in Whitman County).<sup>23</sup>

For homes on permanent foundations, Moscow is the only municipality in the Palouse Region that has provided specific rules on the construction of tiny homes. In a city council vote in the summer of 2019, Moscow facilitated greater adoption of tiny homes as long as they meet certain building requirements and abide by existing zoning rules. Absocow is taking steps on this matter more quickly than the rest of the state of Idaho, and of eastern Washington. As such, many communities throughout the Palouse and beyond will be watching to see how tiny homes are used and regulated in Moscow. Issues that Moscow will need to consider (as well as other cities that move in the same direction) are: managing the placement of high-density housing, maintaining existing community aesthetics, and whether developers will need to use planned-unit development processes or will be allowed to develop such housing by-right in the appropriate locations.

### Ideal Location(s) in the Palouse Region

Areas of Moscow and Pullman that are currently zoned R3 or R4 would provide the most natural transition to tiny home developments. In addition, cities and the Counties should consider both allowing and encouraging manufactured/mobile home parks to place tiny homes in replacement of unusable mobile homes.

#### Parallels with Other Models

Small Single-Family Homes and Modular Built Homes.

#### Successful Case Studies

Quixote Communities is a collection of three different tiny house villages across the state of Washington in Olympia, Orting, and Shelton.<sup>25</sup> The "Quixote Village" in Olympia is the only community currently open, while the other two are still in the planning and building phases. The Quixote Village consists of 30 homes and was constructed on the site of an old tent city, and now helps to provide economical housing to those who were previously homeless. They help to serve the primary need of shelter and do so in a way that is half the cost to build a typical apartment unit. The next two villages are targeted at providing affordable housing to veterans and their families, but tiny homes communities can be applied to serve any population.

**Escalante Village** located in Durango, Colorado is a tiny home community focused on the outdoors. <sup>26</sup> The village came from an extreme shortage in affordable housing in the area. The village is situated right along the Animas river, with access to multiple trail heads and a 15-minute bike ride to the downtown making it an attractive and affordable community to be in.



Delta Bay Waterfront Resort contains the only legal tiny house community in Northern California.<sup>27</sup> The resort is home to houseboats, floating homes, and a RV and mobile home park with a tiny home community integrated within. Due to local laws and regulations, the tiny homes have to be on wheels, as that makes them classified as an RV. This is a more innovative approach and shows the successful reuse of parts of a mobile home park. The resort setting is an attractive place for someone with a tiny home to call home as it provides amenities such as water access, walking trails, a clubhouse, and weekend activities during the summer. Overall the tiny house segment of the resort has been very successful and has received multiple mentions in both local and national media.

### Recommended Changes to Zoning Codes

None, see below.

#### Recommended First Steps

Before altering zoning, cities should move to accept their state's given state building code recommendations related to tiny homes. Following this, city councils and planning and zoning committees should workshop ideal locations within their cities. Most cities would prefer novel developments such as tiny homes first go through PUD/PRD processes to maintain control and learn through the process prior to altering zoning rules.



### **Accessory Dwelling Units**

### Summary of Opportunity

Accessory dwelling units (ADU's) are a type of housing that shares a parcel with an existing housing unit, and typically provides 'in-fill' for urban and high-density single-family areas. Though ADU's are often not limited to a certain maximum square footage, they are generally smaller than 1,000 square feet simply due to space limitations when developed in the back yards of existing neighborhoods. ADU's can either be attached or detached from existing housing.



Example of an Accessory Dwelling Unit

### Benefits of Housing Type

In short, greater allowance of ADU's is potentially one of least impactful and most affordable ways to introduce more housing structures to the region. ADU's can help achieve greater density in areas near urban cores without transitioning existing single-family housing into duplex, triplex, or rental homes, which often significantly alters the community and aesthetics of traditional neighborhoods. Much of the cost of new housing units comes not just in the building construction but also in site costs (e.g., grading, preparing, city required improvements, etc.). In some settings, ADU's introduce the possibility of avoiding many of these costs and thereby providing a housing solution that is more affordable. Homeowners are drawn to ADU's for a variety of reasons including housing for elderly relatives, housing for visiting family members, additional income through rental housing, or home-rental services. In fact, in many cases, homeowners are drawn to ADU's simply for the flexibility it allows them in utilizing multiple of these options, depending on current life circumstances.

#### Mitigation of Risks and Challenges

ADU's pose some risk in the cities of Moscow and Pullman in terms of over-densification of non-dense zoning areas, parking availability, and alteration of traditional neighborhood culture and feel. This concern could be allayed, in part, by the establishment of student housing districts and/or overlay zoning as previously mentioned. To further mitigate these challenges, planning and zoning committees in both Pullman and Moscow should study recent case studies of how ADU's have been adopted in other areas of the United States to cope with such challenges. Ultimately, to prevent uncontrolled development of ADU's, regulatory agencies could place minimum limits on lot sizes for ADU additions, provision of offstreet parking for new ADUs, and limitations on the number of ADU's per lot.

#### Ideal Location(s) in the Palouse Region

ADU's are most helpful to communities' areas that are close to urban cores and which have some level of density above R1. By developing near urban centers and amenities, the need for automobile traffic is also decreased as new residents can travel by bike, foot, or city transit. By these standards the best locations in the City of Moscow include: City Central North, City Central South, North Central, Northwest, and the University areas. In Pullman the best locations include: College Hill, Sunnyside Hill Central, Military Hill Central, and Pioneer Hill.



#### Parallels with Other Models

Modular Built Homes and Senior Housing.

### Successful Case Studies

**Santa Cruz, California** is an expensive and high-growth city near Silicon Valley. The city adopted a new ADU ordinance in 2003, which explained the permit process, zoning incentives, and development standards. The passing of the ordinance also increased knowledge and awareness of ADU's, which increased the number of permits issued by 250% in the years following. Local government agencies have attributed the growth to allowing for easier and more creative development.<sup>28</sup>

**Portland, Oregon** made ADU's more popular by altering regulations in 1998. These changes helped to promote ADU's as they eliminated some previous requirements and made the development of ADU's simpler and more attractive. The city has seen an increase and notes the ADU's are more efficient and cheaper than other housing types, and the city has seen no significant negatives from increased use.

In 2009, **Vancouver, British Columbia** changed housing policy to make ADU housing legal city wide with very few requirements and a simple approval process. Since then, the city with near zero vacant land now has more than an additional 2,000 ADU's. These AUD's have helped provide lower priced housing for a magnitude of populations including seniors, renters, young adults, low income families, and more.

### Recommended Changes to Zoning Codes

The City of Moscow has policies in place for ADU's including limitation of dwelling unit space (less than 600 SF or 40% of the gross floor area of the principal dwelling), and limitation of two persons per ADU, and at least one off-street parking space per ADU. The primary owner of the property must also live onsite, either in the ADU or the primary dwelling. Pullman is more restrictive on ADU's. Two areas of the city code address ADU's, firstly relating to the number of non-related persons that are permitted to share a dwelling (no more than three in R1 zoning, and no more than four in R2 zoning). In relation to ADU's for rental purposes, Pullman's City Code states a maximum of three bedrooms can be offered to rent for commercial purposes. However, use is not permitted in R1 or RT areas, and a conditional use permit is required in R2 districts. The issue rose to the surface in Pullman, in the Spring of 2019, when an operator was asked to cancel all rental reservations for non-compliance with existing rules.<sup>29</sup>

Though it is necessary for the common good to place controls on use of ADU's, it is advisable that the Cities revise the square footage and CUP requirements in place, which currently limit homeowners from making greater use of ADU's as a housing option. It could be further argued, that in both cities resident's use of housing is in various states of compliance with stated rules, and policies are typically only enforced when complaints arise, which does not seem to be a common occurrence.

#### Recommended First Steps

The ADU issue is one worth careful consideration in both cities, as some residents of low-density neighborhoods may express concern about greater use. However, good and properly aligned policy will allow the type of housing to develop that the city wishes to see. In addition, coaching residents through the process and providing visuals from other areas where ADU's have been more implemented will likely allay many community concerns.



#### **Modular Built Homes**

### **Summary of Opportunity**

Modular building has existed as a housing solution for rural and hard-to-build areas for many years. Traditionally, modular homes have provided sound architectural structure but little aesthetic appeal. Over the past several decades, however, the industry has provided a diverse array of styles to appeal to low, middle, and high-end buyers.

### Benefits of Housing Type

In many cases, manufactured housing can be constructed more affordably than stick built homes. In some cases that means they can be brought to market at a lower cost, but much of this depends upon proximity from the ultimate installation site, as



Example of a Modular Built Home

well as other local issues. In the worst-case scenario, the final cost of a modular built home is nearly equivalent to stick built homes due to issues such as transportation to the home site, soft costs, permitting, site prep, etc. One encouraging factor which may keep the costs of modular built homes down in the Palouse Region is the close proximity to numerous modular builders in operation throughout the Pacific and Inland Northwest including regions such as Portland, Boise, and the Tri-Cities.

Overall, one of the greatest appeals of modular housing in the Palouse Region is the potential to create housing without the constraint of available construction labor. According to many of the home builders and contractors interviewed for this analysis, production is both inhibited and made more costly by the shortage of skilled construction laborers in the region. Modular housing, alternatively, can be built within a factory outside of the Palouse where such labor exists. As an added bonus, laborers in the manufactured housing industry operate more as production workers than manufacturing workers, many of whom complete semi-routine tasks that require less skill. In addition, workers can remain in-doors for the duration of the year and avoid the deterrent of working outdoors in inclement weather. Lastly, as indicated, modular is not necessarily cheaper than stick-built homes, but one factor that could help decrease cost would be efficiencies of scale (e.g., 20 homes being installed simultaneously rather than one at a time).

#### Mitigation of Risks and Challenges

Modular built homes have long been designed to meet building code and zoning code standards and to fit into the existing fabric of communities. Likely the biggest challenge with promoting further use of this building style is that the homes will not be designed with architectural distinction, thereby dragging down rather than elevating housing aesthetics of the Palouse Region. Some community members expressed concern and distaste for "cheap" and "boring" housing styles that were introduced during prior building booms during the 1980s or early 2000s. On one hand, communities in the Palouse need to be aware that there are trade-offs for finer finishes and more architectural diversity, namely cost. To a degree, home buyers should be permitted the primary choice for the type of housing that is suitable for their given budgets. At the same time, housing leaders in Moscow and Pullman may be able to shape the future by proactively recruiting modular housing developers who are able to build up to the architectural standards that the community, at large, wishes to see.



#### Ideal Location(s) in the Palouse Region

Modular housing could fit in most any location in the Palouse, whether new development or in-fill development. For larger scale modular developments, the ideal locations would be on the fringe of Moscow (either the East or Northwest regions), or Pullman (the Sunnyside Hill West region).

#### Parallels with Other Models

Small Single-Family Homes, Accessory Dwelling Units, Senior Housing, and Large Single-Family Homes.

### Successful Case Studies

The largest modular home development in the area is currently underway in **King County, Washington**. King County is home to Seattle and has a lack of affordable housing and problems with homelessness. In an attempt to address both of these issues, the county, along with several partners, signed contracts for the different types of modular housing that will serve around 190 people. Part of this project includes smaller modular, "micro-dwellings" that are stackable.<sup>30</sup> They plan on stacking and combining them to form a campus-like homeless shelter, yet these dwellings could be used singularly. The estimated final cost for each unit is estimated at \$150,000 compared to the typical \$350,000 unit in King County. The county feels this is the first step to more affordable housing and will expand using modular housing if this project is successful.

There is also a large presence of modular building designers, manufacturers, and installers in the northwest.<sup>31</sup> This is important as the closer the companies are, the lower the transportation cost for the project. From a desktop scan it appears the local companies do only single homes, and not full, large scale, developments. However, these singular homes are often highly customizable and offer unique architecture and design aspects all while being more affordable and quicker to construct than stick-built housing. The local companies also offer a large range of variety including single-family, multifamily, multi-generational, tiny homes, accessory dwelling units, and ADA compliant.

#### Recommended Changes to Zoning Codes

Little to no changes to zoning would be required to accommodate modular homes unless this concept were combined with other best practices listed herein.

#### Recommended First Steps

To start, the Palouse Housing Leadership team should assemble a short-list of modular building companies that fit the cost requirements and aesthetics of the Palouse. These companies should be approached for conversations and to understand the development model. Once the requirements are understood, the person or committee can provide regional landowners and real estate developers with the information on the development process and seek to facilitate housing production.



### **Large Single-Family Homes**

### **Summary of Opportunity**

Though much of the recommendations of this report are focused on emergent forms of housing development, the opportunity to create more single-family housing in the traditional large square footage model, should not be neglected. Large single-family homes are those that fit perfectly within the design standards of R1 and R2 zoning districts and are typically characterized by more than 2,000 square footage of interior space, as well as front and rear yards and a one or two car garage. Homes built in the Palouse Region



Example of Single-Family Development

between the 1970s until recently are typically built in this model. Large single-family homes can be differentiated by architectural style, finishes, and environmentally friendly products and designs.

Although not common in the Palouse Region, many large single-family homes can also be developed as semi-master planned communities, which include recreational areas, walking paths, water features, and community buildings.

### Benefits of Housing Type

The Palouse Region is home to a wide variety of people, with various lifestyles, family sizes, tastes, and preferences. For many nuclear families as well as retirees and single individuals, the large single-family home still represents the "American Dream" in terms of home ownership. In discussions with major employers and real estate professionals, TPMA noted that the regional labor pool is somewhat constrained by the lack of supply and variety within the large single-family home market. Those in the prime of their working careers will often be dual-income families with several children, for whom the large single-family model is the ideal option. Yet, in a sense, the lack of housing in this segment imposes a constraint on the growth of the labor pool, and therefore the economy. One community member even noted that potential new hires to the Universities and companies are very interested in the community until they start looking for a home, at which point they decline in favor of other opportunities.

Another benefit of this housing option is that it allows communities in the Palouse to cut "with the grain" in that builders, government agencies, and consumers are most comfortable with the large single-family building style.

Lastly, throughout the late 20th century throughout Washington and Idaho, and up until recent years in the Palouse, builders of large single-family neighborhoods are often capable of and most interested in building a neighborhood "at-scale," in other words 20 to 100 homes in a single neighborhood to be built-out in multiple phases. Introducing housing at this rate would allow the region to most quickly ameliorate the existing housing shortage.



#### Mitigation of Risks and Challenges

A common concern among builders and those in the real estate world is that the large single-family home developers who were building in the Palouse Region over the past 20 years have largely withdrawn. Therefore, the biggest risk with this strategy is simply that the housing developers who focus on this type of building have already moved on to other pursuits. Many of these companies have a regional presence with either a headquarters or a regional office in the Spokane/Coeur d'Alene region. Though the issue is clearly nuanced and the reasons different for each company, research indicates that these companies stopped developing in the Palouse primarily for two reasons. Firstly, the cost of building in the Palouse was more expensive relative to other locations in the region (due to topography, soil, and drainage issues, etc.). Secondly, some builders felt that they had a harder time cooperating with regional government agencies in receiving permits, meeting standards, etc., relative to other locations in the Inland Northwest.

Another potential risk presents itself with the possibility that the region successfully addresses the housing shortage but the homes are largely focused on providing housing for the \$300,000 plus market. This would be a partial solution as it would introduce some movement within the housing market for more affordable houses, but it would not directly address the attainable housing gap that most stakeholders are primarily concerned about. Without some substantive donations or grant funding, it is unlikely that the large single-family home model will address both the attainable and affordable housing shortages, which is why it is recommended to pursue multiple of these strategies simultaneously.

#### Ideal Location(s) in the Palouse Region

Existing locations in the Palouse with large tracts of developable land in city limits or within areas of impact, for example: the east or northwest areas of Moscow, and Military Hill north and west of Sunnyside Park in Pullman.

#### Parallels with Other Models

Small Single-Family Homes, Modular Built Homes, and Agrihoods.

#### Successful Case Studies

An interesting case study involving the development of single-family homes involves building them not for purchase, but for rentals. The housing bubble of 2008 showed people that ownership is not risk free and because of this and along with tighter lending standards, rentals, including those of large single-family homes, have increased in demand. The company **BB Living** has applied this in Arizona by building full communities, with all large single-family rental homes.<sup>32</sup> The communities offer attractive amenities such as pools, parks, trails, and locations near restaurants and night life. They have been very successful and have three of their four original communities fully leased and two more communities being developed.



Closer to the Palouse area, some local builders have been able to successfully make single-family home communities with options under \$250,000. Hubble Homes has options in communities west of Boise, Idaho near Nampa; as well as southeast of Boise in the Mountain Home area. An additional developer, Viking Homes, has options under \$250,000 in areas in Idaho and Washington including Post Falls, Airway Heights, and Cheney. These developers show that it is possible to develop large single-family homes in the area and they have them still in the mid-level price point.



Example of a Hubble Home for under \$250,000

#### Recommended Changes to Zoning Codes

Few zoning changes would be required, though communities should remain open to proposals from developers who may want to build mixed-use/mixed-income master planned communities, which feature various housing types interspersed within the same community (e.g., large single-family, small single-family, duplexes, townhouses, etc.)

#### Recommended First Steps

The Palouse Housing Leadership team should make an ambassador's visit to the Spokane/Coeur d'Alene area to meet with housing developers, both those familiar with the area and those who are not. Whether past concerns about the Palouse Region are warranted or not, there is a reputation that needs to be overcome for such developers to consider working in the region. TPMA recommends that these missions be done with the intent of hearing out builder's concerns and an attitude of solving them by bringing those lessons back to the region for consideration with regional landowners and government agencies. Though it may seem a novel concept for regions to "recruit" home builders, recruitment of businesses is a long-standing norm in the world of economic development. And, as previously noted, the lack of housing in the Palouse is one of the region's foremost economic development challenges.

Once doors are opened with these housing developers, housing leaders should remain open to the needs and concerns of these developers, with the awareness that they are often facing high risk and thin margins. Any accommodations, incentives, or infrastructure cost sharing that can be brought to bear could make the difference between more housing being developed, or not.



#### **Senior Housing**

#### **Summary of Opportunity**

Senior housing summarizes an array of housing options that are more suitable for those over the age of 55 due to the increased emphasis of safety, accessibility, adaptability, and longevity. There are multiple versions of senior housing based on the needs of those living there including fully independent, assisted living, and nursing homes. These different types can be incorporated into a mixed-use community allowing for all needs to be served while providing a community atmosphere to the residents. A mixed-use community is also beneficial for couples, family, and/or friends as they can continue living together even as seniors require different amounts of care.



Example of Independent Senior Housing

#### Benefits of Housing Type

Senior housing is growing nationally for the precise reason that it fills a need for the currently or recently retiring Baby Boomer generation. As indicated by recent demographic data, there are more than 10,000 individuals on the Palouse over the age of 65, a group which increased by 36% over the prior ten years.<sup>33</sup> As such, one of the greatest benefits to the Palouse Region of Senior housing is that it addressed unmet demand for one of the region's highest growth population cohorts.

Benefits of having adequate senior housing are wide ranging, including retention of valued community members, retention of household spending, and the potential to re-introduce existing homes into the housing market. As the population ages, the seniors will decide to either stay in their current homes, move into senior housing, or move away entirely. If the Palouse Region can provide senior housing, there is a larger ability to retain their senior population. Developing this senior housing also positively impacts the traditional housing market through a process known as "filtering". Filtering explains the process of buying and selling that occurs once an injection of new housing stock enters a regional housing market. Although the selected housing type may be focused on a particular market segment, benefits are generated for all residents because as seniors sell and vacate their homes, they introduce a new form of housing supply for other residents.

There is also the possible benefit of gaining seniors from surrounding areas that do not have adequate senior housing. Lastly, there is a slight expansion of job opportunities with certain types of senior housing. Assisted living and partial assisted living communities require a staff of employees including, but not limited to administrators, nurses, medical directors, activity coordinators, maintenance, housekeeping, and dining staff. If seniors are drawn to the region or remain in the region when they otherwise would not, there will be an impact on jobs in terms of doctor's offices and outpatient care facilities.



#### Mitigation of Risks and Challenges

When developed to meet or exceed existing community standards, senior housing can form a valuable component of a region's existing housing stock. With a finite supply of developable land in the Palouse that is currently accessible to city services, there is a slight risk that a senior housing center or development could use valuable space that could be otherwise used for other purposes. This risk is deemed to be relatively minor, as senior housing facilities tend to be higher density and would more likely be entering areas zoned R3 or R4, which may crowd out further multi-family development but have little effect on existing single-family zoned areas.

A secondary risk is that some operators in the assisted living and continuing care industries have struggled to be viable in rural areas. This issue is due to a myriad of issues including the cost of services, sporadic access to private health-insurance, limitations in Medicare funding, and proximity to other healthcare establishments. Though this issue is primarily a risk to the developer/operator of such a community, if the development fails and is not well suited for other purposes, it could create a real estate liability for the city it is located in. Lastly, again in relation to the cost of senior living facilities, in many cases senior living centers are not viable for low- to moderate-income seniors. Hence, there is some risk that a senior living facility would serve some of the region's seniors but leave a gap for low-income seniors in the Palouse.

#### Ideal Location(s) in the Palouse Region

Senior housing is one of the few development concepts that could work either in the urban centers (Moscow and Pullman) or in the mid- to small-sized cities in the Palouse Region. Existing demographics already point to cities such as Colfax, Palouse, and Genesee being good options, as the proportion of 55+ citizens is much higher than in larger cities. For example, although the secondary cities of the Palouse are home to just 11% of the region's citizens, 28% of the region's population 65+ live in these cities. An One local example, which provides evidence of success in rural areas is the Palouse Cove senior living development in Palouse, Washington. Palouse Cove provides 11 one-bedroom units for people 62 years and over with income less than 50% of the area median and was funded via the Housing and Urban Development (HUD) Section 202, Supportive Housing for the Elderly Program

However, it should be noted that independent living facilities present a better model for rural towns, whereas Moscow and Pullman could likely sustain either independent living or more intensive forms of senior housing, such as assisted living or continuing care, as these models typically require easier access to regional amenities and healthcare professionals to be successful.

#### Parallels with Other Models

Modular-Built Housing and Accessory Dwelling Units.



#### Successful Case Studies

McMinnville, Oregon; Oregon City, Oregon; and Walla Walla, Washington are all similar in size to the cities of Pullman, Washington and Moscow, Idaho. They all have multiple successful senior living options that cater to different levels of needed care. The most prevalent are assisted living and retirement communities. Most are set up in apartment/condo style housing with community amenities such as a community center, weekly social planned activities, onsite healthcare, walking trails, and group exercise classes.

#### Recommended Changes to Zoning Codes

None required unless greater density is pursued.

#### Recommended First Steps

The Palouse Housing Leadership team should undertake a small-scale feasibility study of the senior housing concept by researching demand and occupancy at existing regional facilities and interviews with seniors on their preferences and taste for the variety of Senior Housing options. If the opportunity seems viable, the council should conduct a local and web-based search of real estate developers and operators who may be interested in developing such a facility. The region's economic development organizations would need to support these conversations by providing data on demographics and workforce availability.



# 2. ANALYSIS OF HOUSING SUPPLY

### **Overview & Summary**

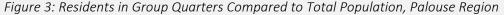
Trends in housing supply reveal insights about housing development such as where development has been occurring, types of housing units that are currently available, and price ranges for owned or rented housing.

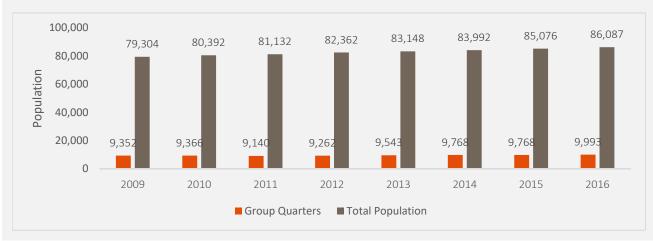
For the purpose of this study, the Palouse Region is defined as including two counties, Latah County, Idaho and Whitman County, Washington. In addition, the cities of Pullman, in Whitman County, and Moscow, in Latah County, are analyzed separately from the remainder of their counties for many points of analysis. This allows for analysis of differences in trends between urban and rural areas in each county.

The summary of supply draws primarily upon data from the U.S. Census Bureau's American Community Survey. It utilizes annual estimates from 2006 to 2016 whenever available and estimates single year values based on three-year estimates or five-year in select cases where single year estimates are unavailable. These instances are noted in footnotes throughout. In addition, the analysis draws upon other sources of reputable public data, such as direct reports from Pullman and Moscow, the U.S. Census Buildings Survey, and the Department of Housing and Urban Development.

#### **Definition of Housing Units**

The U.S. Census Bureau, and therefore, this report, describes housing supply on the basis of housing units. The Census definition of "housing unit" includes all individual houses, apartments, or rooms intended for occupancy as "separate living quarters," whether occupied or not. It does not, however, include "group quarters", such as college dormitories, barracks, or skilled nursing facilities. The chart below shows that over 10% of the Palouse Region's population is in group quarters such as these—a stat heavily influenced by the presence of two universities. Thus, these residents are not considered in the majority of this analysis.







### Trends in Supply

Throughout the Palouse Region, housing supply has grown from 33,711 units in 2006 to 37,076 units in 2016. The majority of this growth has occurred in the cities of Moscow and Pullman; each of the cities has added approximately 1,500 housing units over the past ten years. Growth in housing units in the Palouse Region is shown in Figure 4.<sup>35</sup>

Figure 4: Total Housing Units in the Palouse Region

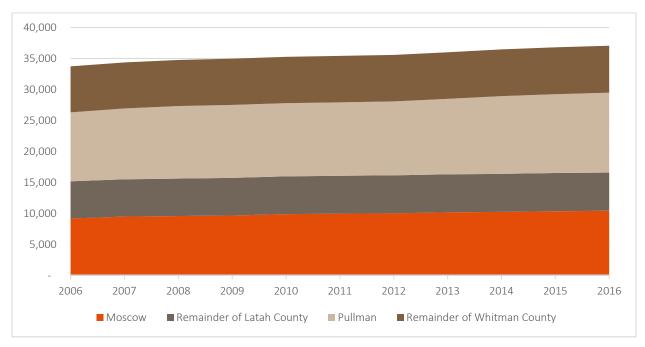


Figure 5 and Table 1 separate these four groups in order to demonstrate cumulative growth rates of housing units over time. Though these figures are just estimates, they indicate that Moscow experienced the most significant growth between 2006 and 2011, but Pullman has had the most housing growth in the past five years. During the same period, housing supply in the remainder of Whitman and Latah counties has risen gradually, but steadily.



Figure 5: Cumulative Housing Unit Growth, 2006-2016, Broken Out by Location

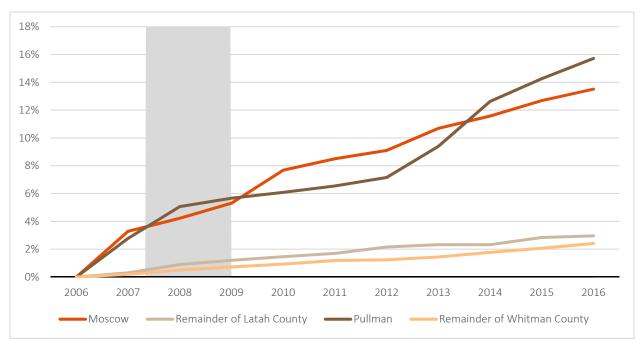


Table 1: Housing Unit Growth in the Palouse Region

	2016 Housing Units	Change Since 2006	% Change Since 2006
Moscow	10,414	1,240	13.5%
Remainder of Latah County	6,175	177	3.0%
Pullman	12,884	1,750	15.7%
Remainder of Whitman County	7,587	178	2.4%
Grand Total	37,060	3,345	9.0%



### **Housing Density**

By location, by far the greatest housing densities in the region occur within the cities of Moscow and Pullman. While these two cities both have several census block groups with housing densities greater than 1,000 units per square mile, the highest density block group in the rest of the region is in Potlatch, where there are just 33.0 housing units per square mile. Figure 6 displays housing unit density by block group in Moscow, demonstrating that the highest-density area is just south of the University of Idaho's campus, along Taylor Ave.

Figure 6: Housing Density in Moscow, by Census Block Group.

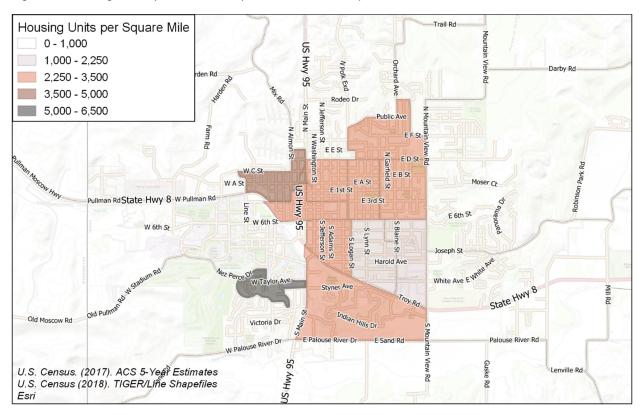
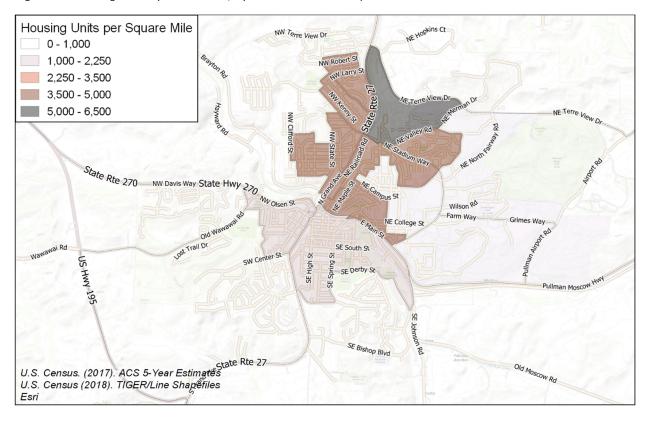




Figure 7 displays housing density by census block group in Pullman, using the same scale. It demonstrates that, in contrast to Moscow, Pullman has several more neighborhoods with greater than 3,500 housing units per square mile. The areas of greatest density are located on the north side of town, where there are a significant number of apartments and residential neighborhoods north and west of WSU's campus.

Figure 7: Housing Density in Pullman, by Census Block Group.





#### **Residential Building Trends**

While looking at total housing units does not reveal dramatic trends within the Palouse Region, residential building permit data can be more revealing. Figure 8 demonstrates the total quantity of residential building permits in each geographic region since 2006.<sup>36</sup> As this chart demonstrates, housing production declined dramatically during and a few years after the Great Recession (marked with the light grey background), in both Moscow and Pullman. Production recovered within a few years in Pullman, indicated by the high years of productivity from 2012 through 2017. Yet, production was slower to rebound in Moscow, just recently jumping to above 200 units in 2017.

Some data are available for 2018 but at the publishing of this report, not enough to warrant inclusion in Figure 8. Examining what is known of 2018, Moscow experienced an average year considering past tenyear trends. And, although Pullman was strong in commercial building, it was at a near all-time low for single-family permits at 16.

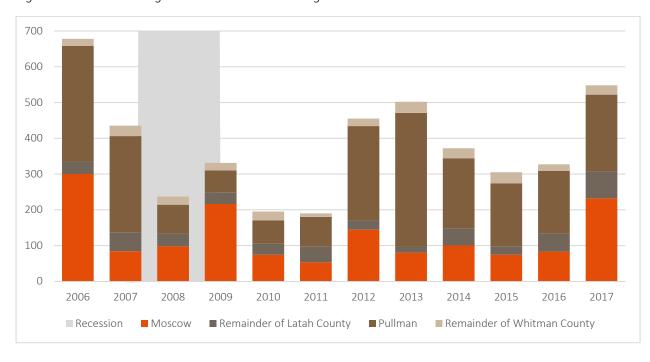


Figure 8: Annual Building Permits in the Palouse Region

Figures 9 and 10 show the same data in two different ways: residential building permits broken out by type of building and by county. This demonstrates that while single-family housing construction has remained relatively constant over time, multi-family building permits have fluctuated drastically. There are punctuated bursts in building in both Latah and Whitman County at various points, for example 2006, 2007, 2012, and 2013 in Whitman County and 2006, 2009, and 2017 in Latah County. Since 2012, multi-family housing production in Whitman County (primarily in Pullman), has been the predominant form of housing construction in the Palouse Region, representing 43.4% of all housing units permitted. However, 2017 data indicate that this may be changing, with considerable increases in Latah County.



Figure 9: Annual Building Permits, by Year, Type and County

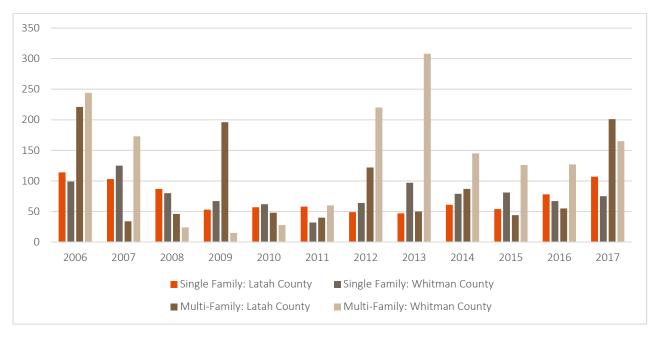
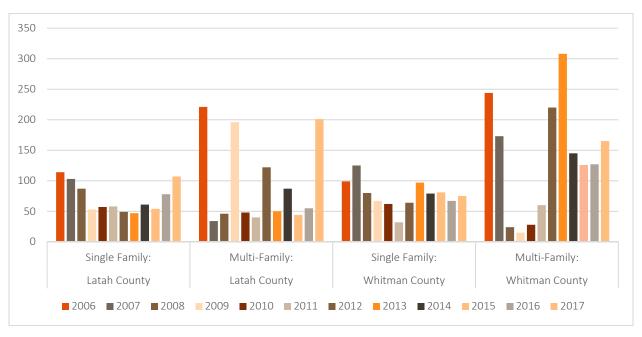


Figure 10: Annual Building Permits Over Time, by Type and County





#### **Supply by Housing Type**

Since 2006, the quantity of housing in each occupancy category (vacant, renter, and owner-occupied) has risen. However, the portion of vacant housing has increased in recent years, while renter-occupied housing has surpassed owner-occupied housing as the most common tenant type. In 2006, owner-occupied housing represented 45.5% of total Palouse housing stock, compared to 43.4% that was renter-occupied. By 2016, owner-occupied housing was just 43.1% of all units, while renter-occupied units had risen to 43.9%. However, a significant number of multi-family rental units were built in the region in the last ten years; consequently, rented units surpassed owned units in 2011 as the most common housing type in the Palouse Region.<sup>37</sup>

It is impossible to guess precisely what residents would choose if presented with multi-family units, and more attainably priced single-family housing. A large part of this conversation traces to the behavior of millennials, who are the largest component of the American workforce and the predominant population group in the Palouse Region. However, it is reasonable to conclude that many if not most residents would prefer the advantages of single-family housing, if it were available. This conclusion is bolstered by research by multiple organizations that indicate that millennials display the same preferences as older generations, but they are inhibited by housing cost and their own debt obligations. For example, as many millennials as Generation Xer's consider homeownership to be "the American dream," and indicate that they plan on buying a house in the future.<sup>38</sup>

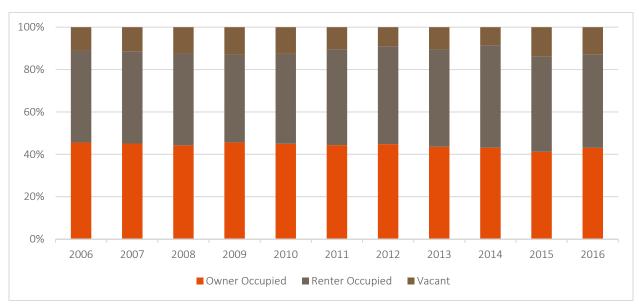


Figure 11: Units by Occupancy Type, Palouse Region

In addition, region-wide vacancy rates rose from 11.0% in 2006 to 13.0% in 2016. These figures are calculated based on ACS estimates, which define units as vacant if no one is living in them at the time an ACS interview is attempted.<sup>39</sup> However, these estimates have a relatively high margin of error. Based on select surveys by Palouse Commercial Real Estate of housing units in Moscow and Pullman, 2016 vacancy rates in these places for multi-family units are considerably lower, ranging from 2.2% for two-bedroom units to 4.4% for four-bedroom units in Moscow, and from 2.8% for one-bedroom units to 9.2% for three-bedroom units in Pullman.<sup>40</sup> They also indicate that vacancy rates had declined in Pullman by 2018.<sup>41</sup>



Unfortunately, the ACS does not compile vacancy estimates specifically for multi-family units in these locations, so direct comparisons of these two data sources are not possible.

The Census Bureau does provide a breakdown of the vacancy status for each of the housing units it has deemed vacant, which provides greater detail on why there is such a drastic difference between national and local metrics. This breakdown is presented in Figure 12. It indicates that the most common category of vacancy in the Palouse Region is "other vacant," which includes houses that are being held for an estate, repairs, or personal reasons; these represent 3.6% of all housing units in the Palouse Region. This is followed by housing units that are "rented, but not occupied"—the vast majority of which are located within Pullman; these represent 2.7% of all Palouse units. The third-most common vacancy type, representing 2.4% of all Palouse Region units, is units that are currently for rent—the majority of which are also in Pullman. Given the purpose of the Palouse Commercial Survey, it is likely that vacancy is focused mostly on the "for rent" category, as classified in the Census dataset, which brings the two metrics much closer together than initially indicated.

In summary, the implication of these data is that vacancy rates on the Palouse are below average for similar metrics in the multi-family market nationwide. The rental market appears to be slightly tighter in Moscow than in Pullman. And, furthermore, demand outpaces supply in both communities for smaller bedroom multi-family units. All of these statistics also indicates that despite the recent infusion of new multi-family housing, demand has not been fully satiated.

Figure 12: Units by Occupancy Type, Palouse Region

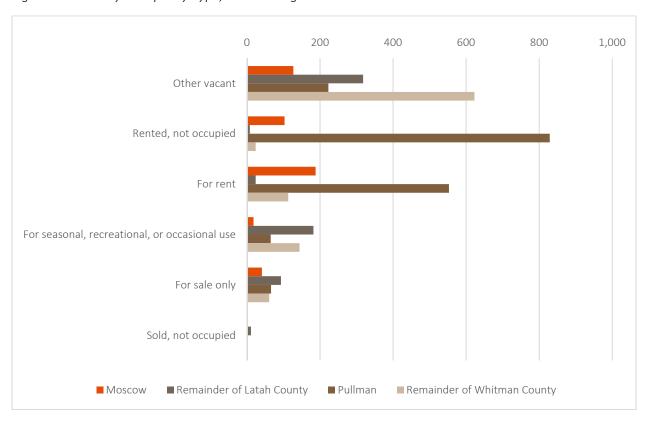
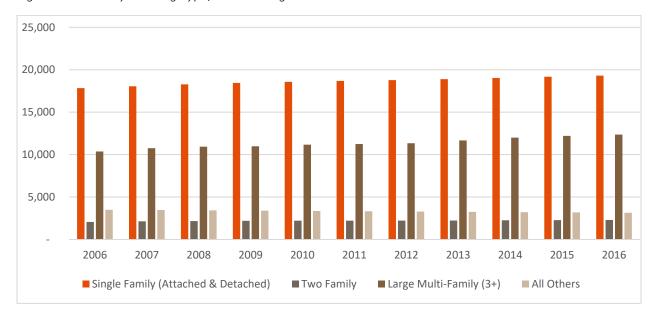


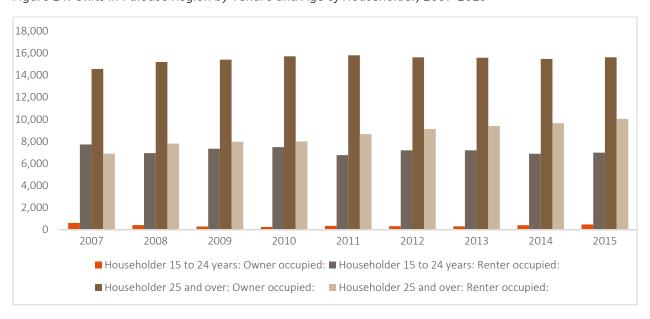


Figure 13: Units by Housing Type, Palouse Region



The types of housing units within the region can be modeled using building permit figures. As Figure 13 indicates, single-family housing makes up a smaller portion of housing within the Palouse Region than it did in 2006. This is primarily due to growth in the large multi-family housing category—that is, buildings with 3 or more housing units. Approximately 59.7% of all buildings of this type within the Palouse Region are in Pullman alone. Since 2006, single-family units in the region have increased by 8.2%, two-family units have increased by 11.6%, large multi-family units have increased by 19.3%, and all other housing units have decreased by 9.5% (a Census category which includes mobile homes, RVs, vans, cars, and house-boats). In contrast, the number of households in the region increased by 8.8% in this time.

Figure 14: Units in Palouse Region by Tenure and Age of Householder, 2007-2015





According to ACS estimates, <sup>43</sup> the vast majority (96.4%) of multi-family units are renter occupied, and the majority (65.1%) of renter occupied units are multi-family. Thus, the trends of increasing multi-family units and increasing renter occupied single-family units are correlated. Overall growth among college student populations at least partially account for the increased demand for large multi-family units. Accounting for growth at Washington State University and decline at the University of Idaho, there are 2,600 more students in the region than twelve years prior. <sup>44</sup> However, these trends do not appear to be exclusively driven by student populations in the Palouse Region. For example, Figure 14 presents the trends in housing units in the region over time, by tenant type and age of householder. The key statistics to compare in Figure 14 are Owner occupied vs. Renter occupied householders who are 25 years and over, as this cohort generally represents the non-college student audience. <sup>45</sup>

Figure 15 breaks down this group of renter-occupied housing units headed by adults 25 and older based on geographic region. It demonstrates that the majority of growth has occurred in Pullman, followed by Moscow, Whitman County, and Latah County.

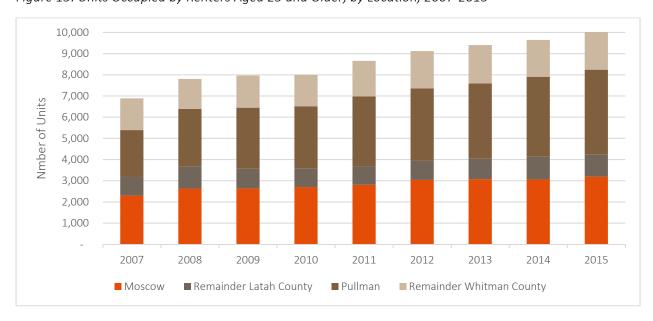


Figure 15: Units Occupied by Renters Aged 25 and Older, by Location, 2007-2015

Among units in both single-family and multi-family buildings, housing units in the Palouse have tended to get larger and larger over time. <sup>46</sup> As indicated in Figure 16, in 2006, housing units with at least 4 bedrooms made up 19.1% of all Palouse Region units and by 2016, they represented 20.9% of all units in the region.



Figure 16: Units by Size, Palouse Region



Table 2 displays the estimated types of housing present in the Palouse Region in more detail. Though these figures may not precisely match those modeled in Table 1 previously, they do provide a snapshot of the types of housing situations currently present in the Palouse Region. Highlighting the prevalence of multi-family dwellings in Pullman, there are more units in large apartment complexes (ten or more apartments) than there are owner-occupied single-family homes (2,894 compared to 2,695). The same is not the case in Moscow, where owner -occupied single-family homes are still the norm. Another interesting insight revealed by this table is that the vast majority of owned housing units in structures with 3 or more units (such as condos, small complexes or townhomes) are in the cities of Moscow and Pullman. On the other hand, the prevalence of single unit, detached housing structures are by far the norm in rural areas outside of Pullman and Moscow.

Table 2: Buildings by Size, Palouse Region, 2017 ACS 5-Year

	Mos	scow	Remaind Cou		Pullr	man	Rema Whitmar	inder n County
Units in Structure	Owned	Rented	Owned	Rented	Owned	Rented	Owned	Rented
1, detached	3,288	498	3,333	725	2,527	745	4,158	1,191
1, attached	302	282	68	13	168	396	22	10
2 apartments	27	645	1	45	88	938	13	58
3 or 4 apartments	14	818	0	55	27	1,029	1	148
5 to 9 apartments	78	1,216	0	139	67	1,679	0	92
10 or more apartments	45	2,203	0	82	40	2,854	4	180
All other types of housing	315	171	759	326	251	166	490	315



These ACS estimates also provide information about the age of housing in the Palouse. Though these figures underestimate recent development, they can be used to compare parts of the Palouse Region on relative terms. While in Pullman only 13.7% of housing units were built prior to 1960, 53.7% of housing units in the rest of Whitman County were built before 1960.<sup>47</sup>

Built 1939 or earlier Built 1940 to 1959 Built 1960 to 1979 Built 1980 to 1999 Built 2000 to 2009 Built 2010 or later 500 1,500 4,000 1,000 2,000 2,500 3,000 3,500 ■ Remainder of Whitman County ■ Remainder of Latah County ■ Pullman Moscow

Figure 17: Housing Units, by Age and Region, 2016

These age discrepancies are further revealed when analyzing the median age of housing in Moscow and Pullman compared to other cities and towns in the Palouse Region. Figure 18 shows that all other towns in the county have housing approximately ten or more years older than houses in the two largest cities. The most extreme case is the city of Potlach, where the median house was built in 1939.<sup>48</sup>

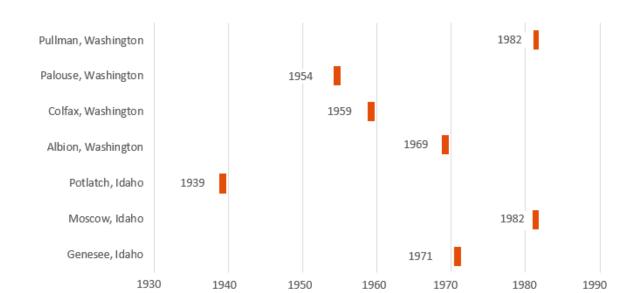


Figure 18: Median Year Built for All Housing Units, by City/Town



### **Affordability & Access**

#### **Home Values**

Throughout the Palouse Region, home values have increased since 2006. According to U.S. Census estimates, only 2,621 homes in the two-county region are worth less than \$100,000. Conversely, 3,180 are worth \$300,000 or more. <sup>49</sup> In 2016, there were 29.6% fewer houses available for less than \$100,000 than in 2006. Meanwhile, there were 79.4% more houses priced at \$300,000 or above.

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% 2006 2008 2012 2016 2007 2009 2010 2011 2013 2014 2015 ■ Less than \$50,000 ■\$50,000 to \$99,999 ■\$100,000 to \$149,999 ■\$150,000 to \$199,999 ■\$200,000 to \$299,999 ■\$300,000 to \$499,999 ■\$500,000 or more

Figure 19: Home Value Trends, Palouse Region

Figure 20: Home Value Distribution by County, 2016





As shown in Figure 20, the majority of these highly valuable homes are in Whitman County. However, housing prices across the board are actually higher in Latah County. According to ACS 5-Year Estimates from 2017, the median home value in Latah County is \$207,200, which ranks 7th among all 44 Idaho counties. The median home value of Whitman County is lower at \$199,400, good for 20th out of 39 counties in Washington. These values grew significantly over the past eight years, since ACS 5-year estimates first became available. Latah County's growth rate of 19.5% over that time ranked 11th among Idaho counties, and Whitman's growth rate of 18.3% ranked 10th among all Washington counties. Both significantly outpaced U.S. median housing value growth, of 4.4%. In fact, using the Federal Housing Finance Authority's housing price index, both counties rank in the top 25 percent of all counties for housing price growth since 2000.<sup>50</sup>

#### **Monthly Costs**

For residents of the Palouse Region, monthly housing costs vary greatly depending on location and whether the resident owns their own home. These differences are shown in Figure 21. This chart demonstrates not only that most housing units outside of the cities of Pullman and Moscow are owner-occupied, but also that homeownership can have higher monthly costs than renting. <sup>51</sup> Of course, this graphic does not account for equity that homeowners are building; nevertheless, it demonstrates that the majority of Palouse residents who are paying less than \$1,000 a month in housing costs are in rental units in Pullman or Moscow. On the other hand, there are many more homeowners paying less than \$500 a month for housing than there are renters (likely owners who have paid off mortgages and only pay for utilities, taxes, and insurance).

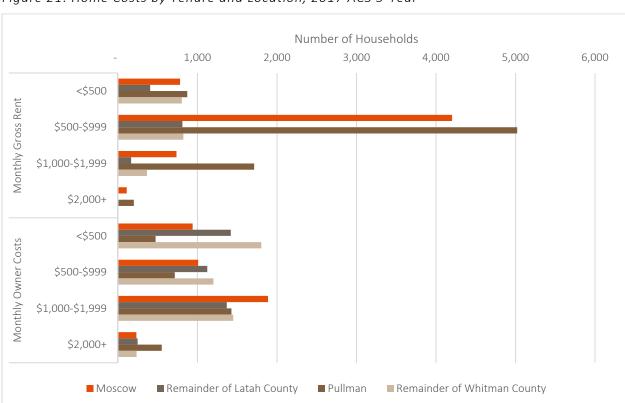


Figure 21: Home Costs by Tenure and Location, 2017 ACS 5-Year



#### **Affordability and Subsidies**

Beyond housing costs, income constraints in the Palouse Region make housing unaffordable for many people. According to federal definitions, anyone who pays more than 30% of their monthly income in housing costs is considered cost burdened—that is, they may have difficulty affording other necessities due to their housing costs. <sup>52</sup>

In the Palouse Region, 91.7% of the 7,668 households who make less than \$20,000 per year are cost burdened. In addition, 47.3% of households who make between \$20,000 and \$35,000 per year are cost burdened. This is shown in Figure 22, which also demonstrates that renting is more prevalent among lower-income households, while homeownership is more prevalent among higher-income households. However, it should be noted that 52.4% of households earning less than \$20,000 per year are headed by people under 25; it is likely that a high percentage of these households are students.

Despite this caveat, there are still a large number of households at all income levels throughout the region who experience housing cost burden. For example, 32.7% of homeowners who make between \$35,000 and \$49,999 are cost burdened, and 16.1% of homeowners who make between \$50,000 and \$74,999 are cost burdened as well.

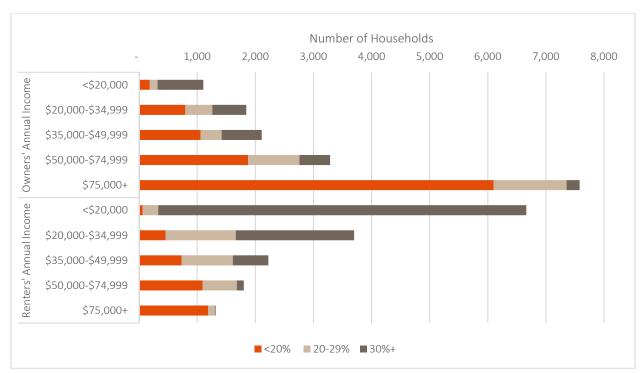


Figure 22: Portion of Annual Income Paid to Housing, by Tenure, 2013-2017 ACS 5-Year

Within the Palouse Region, housing cost burden is much more common in the cities of Moscow and Pullman than elsewhere. This is shown by Figure 23, which demonstrates that many Moscow and Pullman households are cost burdened—and that housing cost burden is particularly acute in Pullman. There, 5,268 households, or 50.3% of all Pullman households, pay more than 30% of their annual income in housing expenses.<sup>54</sup>



Figure 23: Level of Cost Burden for Palouse Households by Region, 2013-2017 ACS 5-Year

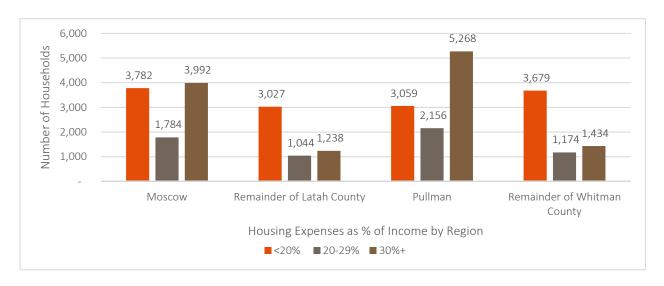


Figure 24: Income Level of Palouse Households by Region, 2013-2017 ACS 5-Year

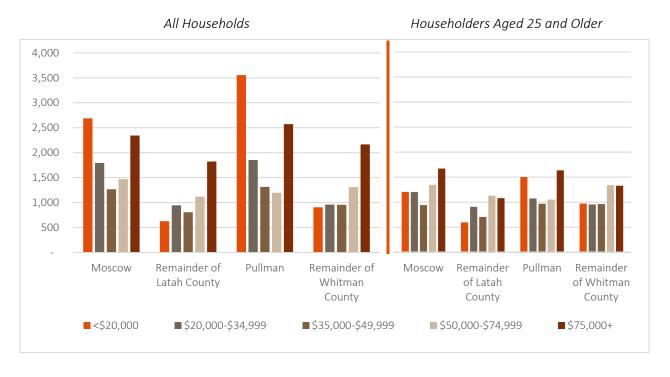
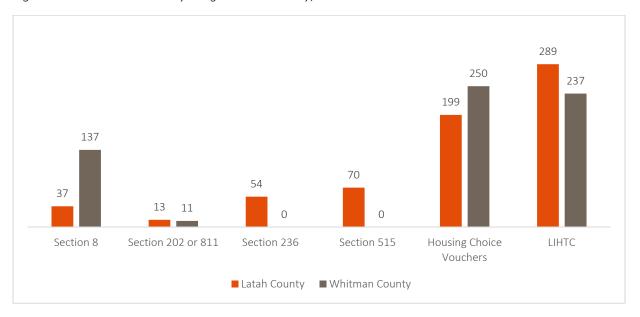




Figure 24 at least partially explains the reason for these cost burdens. In Pullman and Moscow—cities with large student populations—the most common household income is less than \$20,000 per year. The opposite is true in the remainder of the Palouse Region, where the most common income category is households above \$75,000 annually.<sup>55</sup> On the other hand, the right side of the figure displays income levels by location with Under-25 households excluded; this demonstrates that young adult populations contribute significantly to the counts of low income households; however, there are still significant portions of households of all ages in Moscow and Pullman making less than \$20,000 annually.

In order to offset some of these housing affordability needs, there are several housing assistance programs in operation within Latah and Whitman counties. These include Housing Choice Vouchers, Section 8 Housing, Section 236 Below Market Rate Housing, housing assistance for persons with disabilities (Section 811), supportive housing for the elderly (Section 202), rural rental housing assistance (Section 515), and Low-Income Housing Tax Credits (LIHTC). Depending upon the program, these subsidies may come in the form of loans, capital advances, or tax credits to developers for building rent-controlled housing, credits to households to offset costs of market-rate housing, or direct mortgage loans to disadvantaged households. The number of total housing units in each region participating in all of these programs is shown in Figure 25. While there are 1,297 housing units in the region (around 3.5% of all units) that are subsidized in some way, there are a total of 11,932 households that experience housing cost burdens of more than 30%. 57

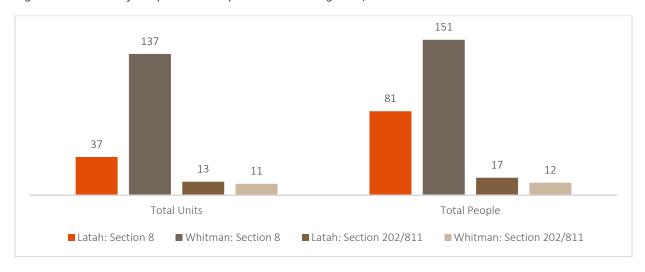
Figure 25: Subsidized Units by Program and County, 2019





For two specific HUD programs, details are available on the number of total people occupying subsidized housing units. These include Section 8, Section 202, and Section 811. Overall, approximately 98 people in Latah County and 163 people in Whitman County are served by these programs-as shown in Figure 26. In many places, local housing agencies administer HUD's subsidy programs. Though Latah County is not served by a specific housing agency, Whitman County is included under the Spokane Housing Authority, and served locally by the Whitman County Community Action Center (CAC). According to the CAC, the waiting list for Section 8 Housing within Whitman County is currently open, but the average wait time is approximately one to one and a half years.<sup>58</sup>

Figure 26: Total # of People Served by Select HUD Programs, 2019





#### Homelessness

These levels of housing costs in the Palouse Region may contribute to homelessness in the area. One indication of the level of homelessness in the region is HUD's annual Point-in-Time Count, conducted in January each year by every local region's homelessness Continuum of Care (CoC). This survey is meant to provide a snapshot of all sheltered and unsheltered individuals experiencing homelessness at a single point in the year but relies upon local surveyors to identify and locate all individuals living outside of the shelter system at that time. Thus, it may under-count the total number of homeless individuals in a region.

Nevertheless, the 2017 Point-in-Time Count reported a total of 40 sheltered individuals experiencing homelessness in Whitman County (a significant increase from 2016), and 92 total individuals (including sheltered and unsheltered) experiencing homelessness in Latah, Clearwater, Nez Perce, Lewis, and Idaho Counties. <sup>59</sup> It is unclear how many of these individuals were within Latah County itself.



Figure 27: Point-in-Time Count of Sheltered and Unsheltered Homeless, by Region & Year



#### **Planned Developments**

Beyond the units permitted and under development there are many lots, properties, and housing developments that are in early stages of development. As with most aspects of this analysis, the majority of activity is occurring in the cities of Pullman and Moscow. All developments noted below are based on information from June 2019 and refer to projects permitted in 2018, 2019, or potentially to be permitted in the near future.

In Moscow, during the course of 2019, 34 new housing units have been permitted. Of those units, 20 are single-family, two are two-family, and 12 are multifamily.<sup>60</sup> Home building is trending low in 2019, in comparison to Moscow's 20-year average annual housing production of 137 units. To highlight a few specific projects, the Barley Flats District on A and Asbury Streets is under construction, which will add 36 residential condos across three buildings. A \$6.5 million, 48-unit apartment complex was recently completed on Farm Road, which will be open for leasing by fall 2019. An additional 24 apartment complex is under construction on Indian Hills drive. Also, the Moscow Affordable Housing Trust (MAHT) has several projects under development including a tri-plex building on Southview Avenue, and a potential 17-unit development on the corner of Nursery Street and East Palouse River Drive. The MAHT has already made some initial improvements to support the potential 17 affordable single-family units, which could be maintained at affordable levels in perpetuity due to use of a community land trust model.

In Pullman, 2018 saw unusually low production of single-family housing, adding just 16 new homes, lower than the city's 20-year annual average of 58.<sup>61</sup> The most notable recent housing development in Pullman is The Hills on Grand project which, when open in fall 2019, will introduce 102 rental duplex units that are only accessible to students at WSU. So far in 2019, single-family housing permits have again been lower than historic averages, while apartment permitting has picked up slightly since 2018. An additional development that is planned to start construction in late 2019, is the Riverview Apartments. The apartments are a low-income housing tax credit project and there will be 56 units. Units will be split between households with the lowest income (less than 30% of the median) and households with very low income (less than 50% of the median) but priority will be given towards helping homeless with children, people with disabilities, veterans, and large families.



# 3. ANALYSIS OF HOUSING DEMAND

### **Quantifying Demand**

In order to estimate the demand for new housing, the following analysis examines existing population and demographic trends that could highlight the need for different types and price points for new housing development. This analysis focuses on population, age, income, family size, educational attainment, employment, and commuting patterns. Where possible, historic and projected growth trends are included to gather additional insights into potential demographic and socioeconomic changes that could occur in the future and influence the region's housing needs. This section also includes a regional industry analysis that dives deeper into the employment patterns, including growth trends by industry, the largest businesses, and clusters.

### **Regional Demographic Profile**

The following demographic profile provides data on the existing residents within the Palouse Region and examines future trends that could impact the need for additional housing.

#### **Population**

The population in the Palouse Region has grown 16.1% between 2001 and 2017 from 76,077 to 88,346. As shown in Figure 28, Whitman County is slightly larger at 49,024 residents compared to Latah County at 39,321 residents. The region saw consistent population growth over this period, with only a slight population loss between 2006 and 2007. The overall growth over this time period is similar to that of the United States at 14.2%. Over the next ten years, the region is expected to see moderate population growth, increasing 4.9% compared to 4.4% growth in the United States.

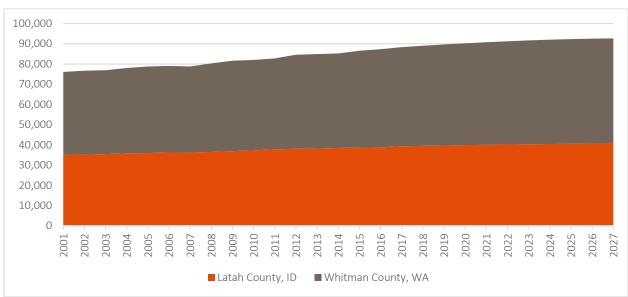


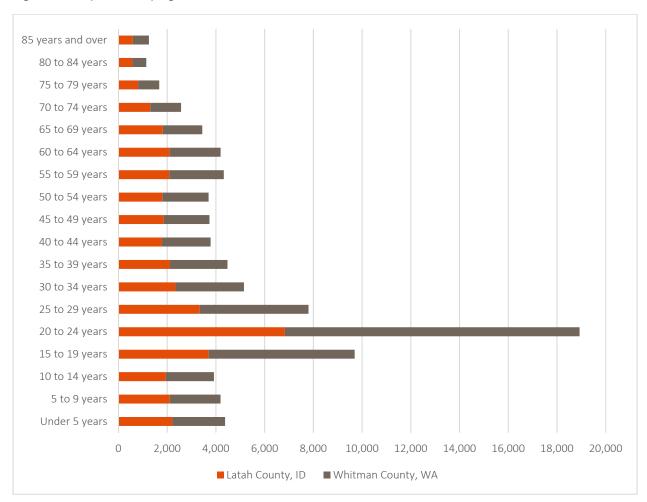
Figure 28: Population Growth by County



#### Population by Age

The Palouse Region's population is young due to the large university enrollment within the region. Figure 29 shows the population by age and county in the region. The population between the ages of 20 and 24 makes up 21.4% of the total population of the region. However, this cohort represents only 6.8% of the total United States population. This large student population has a large impact on the housing needs of the region. Student housing, including dormitories and low-cost rental units, are likely in high demand in the region.

Figure 19: Population by Age



The population projections shown in Table 3 indicate that over the next ten years there will be a significant increase in the population 65 and older.<sup>63</sup> This will likely influence the need for senior housing. There will also be an increase in the population between 35 and 50, indicating a need for housing for working-aged families.



Table 3: Regional Population Growth by Age

Age Cohort	2017	2027	Growth	Percent Growth
Under 5 years	4,375	4,533	158	3.6%
5 to 9 years	4,189	4,179	-10	-0.2%
10 to 14 years	3,921	4,109	188	4.8%
15 to 19 years	9,697	10,582	885	9.1%
20 to 24 years	18,928	19,391	463	2.4%
25 to 29 years	7,801	6,891	-910	-11.7%
30 to 34 years	5,152	5,103	-49	-1.0%
35 to 39 years	4,475	5,338	863	19.3%
40 to 44 years	3,783	4,405	622	16.4%
45 to 49 years	3,735	4,218	483	12.9%
50 to 54 years	3,701	3,605	-96	-2.6%
55 to 59 years	4,324	3,543	-781	-18.1%
60 to 64 years	4,192	3,476	-716	-17.1%
65 to 69 years	3,441	3,953	512	14.9%
70 to 74 years	2,570	3,548	978	38.1%
75 to 79 years	1,673	2,654	981	58.6%
80 to 84 years	1,141	1,770	629	55.1%
85 years and over	1,249	1,372	123	9.8%
Total	88,345	92,668	4,323	4.9%

The population of the region is highly dependent on college students at the University of Idaho and Washington State University, and both universities envision continued enrollment growth in the future with focus on increasing student retention and the number of graduates. Ten-year enrollment trends are shown in Table 4.64 Overall, University of Idaho enrollment has decreased by 9.4% while Washington State University has grown by 13.6%. WSU is the largest institution in the region by two-thirds.



Table 4: Total Enrollment at University of Idaho and Washington State University

Year	University of Idaho (Moscow Campus)	Washington State University (Pullman Campus)
2007	10,289	17,853
2008	10,275	17,753
2009	10,455	18,234
2010	10,752	18,232
2011	10,791	19,255
2012	10,469	19,989
2013	10,103	19,446
2014	9,751	19,756
2015	9,509	20,043
2016	9,349	20,193
2017	9,319	20,286

#### Income

Across the region, median household income varied between \$29,577 and \$41,738 for different geographies as shown in Table 5.<sup>65</sup> Pullman, WA had the lowest median household income, while Latah County, ID had the highest. Over the last ten years, there has not been a consistent trend, either growth or decline, of the median household income (as measured in 2016 dollars). The median declined 7.3% in Latah County, but increased by 15.4% in Pullman. This trend is particularly interesting considering that student populations have increased significantly in Pullman and remained largely the same in Moscow over the given period of time. Since full- and part-time students tend to earn lower-than-average income, these household income trends are running counter to expectations. The implication of this trend, therefore, is that in general, employers in Pullman are increasing employee wages whereas employers in Moscow are not. This change is due, at least in part, to the minimum wage increase in Washington from \$7.93 in 2007 to \$9.47 in 2016 and ultimately to \$12 in 2019.<sup>66</sup> Additionally, the higher household incomes in the counties indicates that wealthier households are living outside of the city limits.

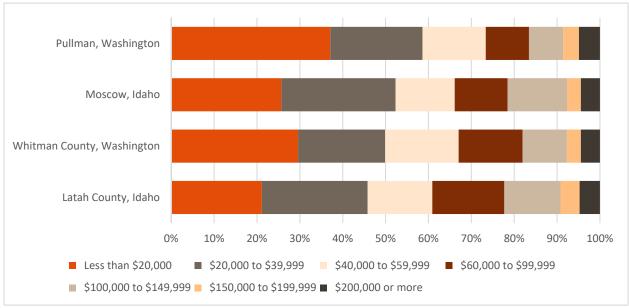
Table 5: Household Income Growth by Region

Household Income	2007	2016	Change	Percent Change
Latah County, ID	\$45,032	\$41,738	-\$3,294	-7.3%
Whitman County, WA	\$37,223	\$39,276	\$2,053	5.5%
Moscow, ID	\$39,317	\$34,551	-\$4,766	-12.1%
Pullman, WA	\$25,626	\$29,577	\$3,951	15.4%



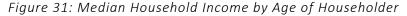
Looking at the percentage of households in each income bracket as shown in Figure 30, 38.7% of households in Pullman make less than \$20,000 a year.<sup>67</sup> However, this same threshold represents just 22.8% of the households in Latah County. Both the City of Moscow and Latah County have a higher percentage of households making between \$20,000 and \$40,000 than Pullman and the surrounding county of Whitman. Interestingly, Moscow has the lowest percentage of households making between \$60,000 and \$100,000. All of the geographies have few households making over \$150,000 a year.

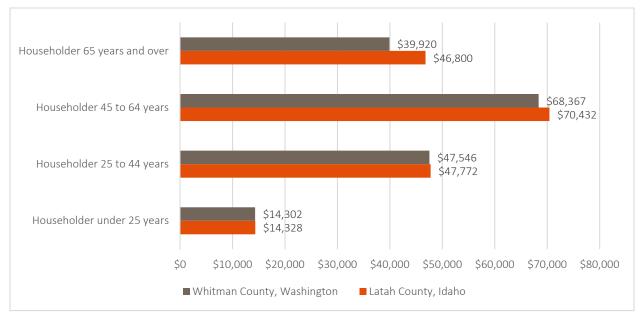
Figure 30: Percent of Households by Income, 2016



The high number of low-income households in the region is due primarily to the large student population, as shown by Figure 31, which shows that households where the householder is under 25 years old have a median household income of less than \$15,000.<sup>68</sup> A recent study of communities with a large number of off-campus college students shows an interesting counter-point to the low-income college student phenomenon. Of all US counties with between 20,000 and 65,000 residents, Whitman County's poverty rate had the largest change when excluding those students, decreasing 16.5%.<sup>69</sup> In other words, when college students are netted out of the population, Whitman County has become increasingly prosperous over time.







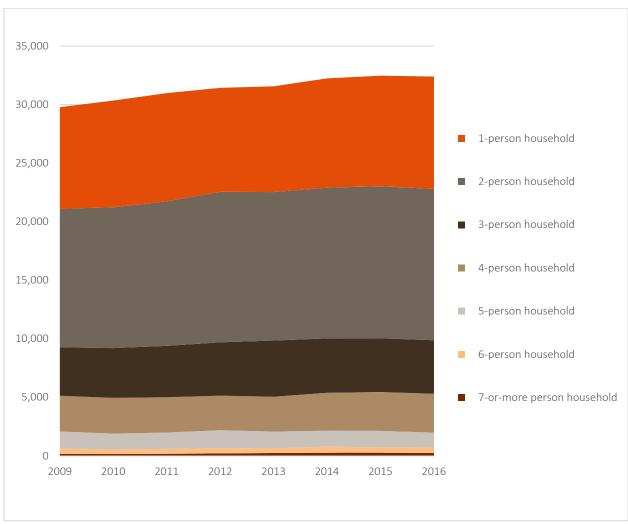
Much insight can be drawn from this series of charts. Though college students explain much of the low-income population cohorts of the region, there are plenty more low- to moderate-income families in the Palouse Region. The \$60,000 to \$99,000, and \$100,000 to \$149,000 household income brackets typically include households who are prime candidates for home ownership, but compared to the national average, there are proportionally much fewer such households in both Moscow and Pullman. Simultaneously, there is a clear pattern of higher income households choosing to live elsewhere in these counties, outside of Pullman and Moscow. If the Palouse Region wishes to satisfy the housing needs of all of its residents and many who wish to move to the region, it must provide attainable housing, especially in the cities, and higher end single-family housing, especially outside of the cities.



#### Household Size

In reference to data on household sizes, it is germane to note that the Census Bureau's estimate of households does not include group quarters, such as dormitories, group homes, or nursing care facilities. Therefore, Greek houses and dormitories are excluded, however, privately operated student-oriented complexes such as The Grove (in Moscow) and Evolve (in Pullman) are included. Within the region, one and two-person households are the most common, making up 29.6% and 39.9% of total households, respectively, as shown in Figure 32.<sup>70</sup> Additionally, the number of one-person households grew by 10.8% between 2009 and 2016, and the number of two-person households grew by 9.2%, representing an additional 2,027 households. The fastest growing household size over this time period was seven-or-more person household which saw 45.7% growth. This growth clearly coincides with increased growth of 5+ unit multi-family housing complexes in the Palouse Region over the past ten years. However, this represented only 74 households due to the low number of households of this type. The only household size to decrease was five-person households, which decreased by 13.5% or 198 households.

Figure 32: Number of Households by Size in Palouse Region





Comparing the size of households across the region as shown in Figure 33, Moscow has the highest percentage of its units that are one-and two-person households, while Pullman has the lowest percentage.<sup>71</sup> Overall the size of households tends to skew smaller in Moscow and the surrounding Latah County than in Pullman and Whitman County. None of the geographies have greater than 2.8% of the households having 6 or more people. While all have between 83.0% and 85.1% of households having either one, two, or three people.

Overall, these data indicate that the region generally requires smaller houses to accommodate the small households that live in the region, even when factoring in that a large number of the small households represent college students. With the majority of households having three or fewer people, it is likely that most homes will need less than four bedrooms.

United States Pullman, Washington Moscow, Idaho Whitman County, Washington Latah County, Idaho 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% 1-person household 2-person household 3-person household 5-person household 6-person household 4-person household 7-or-more person household

Figure 33: Percent of Households by Size and Geography, 2016



#### **Educational Attainment**

Over half of the population in the region over 25 years of age has a bachelor's degree or higher as shown in Figure 34.<sup>72</sup> Within the region, Latah County has the highest percentage of population with a high school diploma or less. Pullman has the highest percentage of population with a bachelor's degree or higher, with a significant percentage of the population having a graduate degree. This is likely due to the presence of the university and the presence of highly educated residents that remain in the area following graduation.

The impact of a highly educated workforce on overall housing needs may be difficult to assess. While people with a higher degree may earn a higher income, that may not always be the case when it comes to employment within the higher education system. Indeed, while Pullman has a high proportion of the population with a graduate degree or higher, the median household income in the city is the lowest in the region. Because the educational attainment data only includes the population over 25 years of age, it does not reflect much of the student population. Another potential consideration is the preference for housing density amongst individuals with higher educational attainment. Studies have indicated that individuals with a bachelor's degree are more likely to choose higher density and that increasing levels of education is correlated with moving to neighborhoods with increased density.<sup>73</sup>

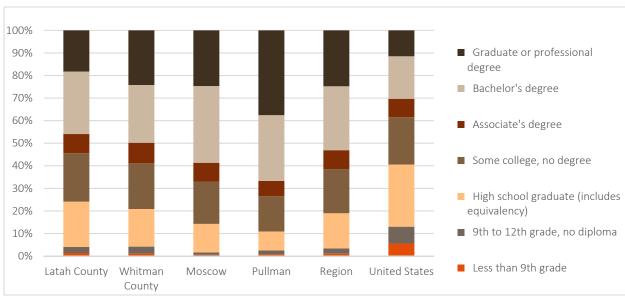


Figure 34: Educational Attainment, 2016



#### Labor Force and Employment

Pullman also has the highest percentage of the population over 16 being unemployed or not in the labor force as shown in Figure 35.<sup>74</sup> This is also likely a result of the high student population. Latah County has the highest percentage of the population that is employed, indicating a higher non-student population and likely driving the higher median household income compared to Whitman County.

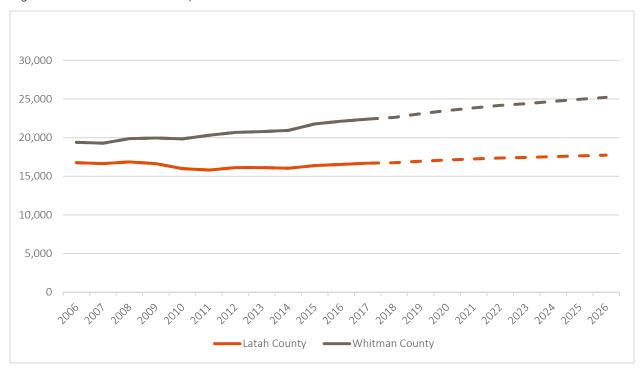
Pullman, Washington Moscow, Idaho Whitman County, Washington Latah County, Idaho 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% Employed Unemployed ■ Not in Labor Force

Figure 35: Employment Status for Population Over 16

Total employment within the region grew between 2006 and 2017 by 8.1%.<sup>75</sup> However, the distribution of jobs within the region varied as shown in Figure 36. While the number of jobs in Whitman County increased by 15.5%, jobs within Latah County decreased slightly by 0.4%. This trend is projected to continue over the next ten years, with a higher growth rate in Whitman County. Jobs are forecasted to grow by 9.9% in the region, 12.6% in Whitman County, and 6.2% in Latah County.



Figure 36: Total Job Growth, 2006-2026



Job growth by industry has varied significantly across the region over the last five years as shown in Table 6. The Educational Services industry had the highest employment growth over the time period at 30.8%. Other growing industries include Real Estate, Rental, and Leasing; Utilities; and Professional, Scientific, and Technical Services. The industry with the largest percentage decrease in jobs over this time period was Management of Companies and Enterprises. However, with only 18 total jobs, the impact of the 58.8% decrease is small. Job losses in Wholesale Trade, Information, and Finance and Insurance have been more significant.

Basic industries are those that export products outside of a region, thus bringing in additional income into an economy. Generally, basic industries include Agriculture, Manufacturing, Professional Services, Educational Services, Transportation and Warehousing, and Tourism. These industries can be contrasted with businesses aimed at serving the local population, including Retail Trade; Arts, Entertainment, and Recreation; and Accommodation and Food Services.

The Palouse Region has low location quotients in many industries, due to the high concentration in Agriculture, Forestry, Fishing, and Hunting; and Government (which includes State Universities). Apart from the few aforementioned industries, the region lacks many of the basic industries that would help support continued economic growth. Though the contributions of agriculture, manufacturing, and government should be appreciated and retained, the region clearly needs more diversity in its industrial base.

Industry forecasts over the next five years project mostly growth. Only two industries show projected job losses: Finance and Insurance; and Management of Companies and Enterprises. Industries showing significant job growth include Utilities; Transportation and Warehousing; Professional, Scientific, and Technical Services, and Educational Services.



Table 6: Employment by Industry

Industry	Palouse Region	Latah County	Whitman County	Palouse Region Five-Year Percent Growth	Palouse Region Five-Year Projected Growth	Palouse Region Location Quotient
Agriculture, Forestry, Fishing and Hunting	1,027	444	583	-4.1%	0.8%	2.18
Mining, Quarrying, and Oil and Gas Extraction	13	12	1	-11.3%	1.2%	0.08
Utilities	100	7	94	-1.0%	19.9%	0.74
Construction	1,090	583	507	9.5%	4.2%	0.50
Manufacturing	3,239	424	2,816	14.4%	11.9%	1.05
Wholesale Trade	775	346	429	-15.3%	-1.2%	0.53
Retail Trade	3,464	1,927	1,537	3.1%	5.4%	0.86
Transportation and Warehousing	423	73	350	24.3%	19.9%	0.30
Information	260	137	123	-8.2%	0.4%	0.36
Finance and Insurance	415	252	163	-10.0%	-6.8%	0.26
Real Estate and Rental and Leasing	636	248	388	29.1%	13.3%	0.96
Professional, Scientific, and Technical Services	1,336	799	536	18.8%	18.5%	0.52
Management of Companies and Enterprises	18	6	13	-58.8%	-18.1%	0.03
Administrative and Support and Waste Management and Remediation Services	609	389	220	10.4%	9.1%	0.25
Educational Services	493	373	121	30.8%	14.6%	0.48
Health Care and Social Assistance	3,247	1,715	1,532	-0.4%	8.7%	0.65
Arts, Entertainment, and Recreation	360	165	195	14.9%	13.2%	0.53
Accommodation and Food Services	3,658	1,899	1,759	16.1%	7.4%	1.08
Other Services (except Public Administration)	1,350	650	700	3.2%	7.0%	0.71
Government	16,858	6,305	10,553	5.9%	3.7%	2.83
Total	39,372	16,753	22,620	6.7%	6.3%	



#### Migration

Table 7 below shows the annual migration estimates for residents of Latah and Whitman Counties for 2016.<sup>76</sup> A total of 6,005 people moved to Latah County, including 379 from Whitman County, while 10,793 moved to Whitman County, including 493 moving from Latah County. These numbers are higher than the number moving out of the counties, indicating a positive overall net migration.

Interestingly, a large number of people (7,106) moved from other counties in Washington to Whitman County, making up more of the total in migration than those moving from outside of the state. This is opposite of the trend in Latah County, where slightly more people moved from outside of the state than from inside of the state.

Table 7: Palouse Region Migration Summary

	Latah County	Whitman County
Total Residents	38,292	47,091
Nonmovers	27,325	27,955
Moved within County	4,962	8,343
Net Migration	1,140	5,798
Moved to County	6,005	10,793
From Another County in Region	379	493
From in State (Outside County)	2,492	7,106
From Outside State (not Latah or Whitman)	2,680	2,350
From Abroad	454	844
Moved Out of County	4,865	4,995
To Another County in Region	493	379
To Another County in State	1,727	2,952
To Another State (not Latah or Whitman)	2,645	1,664

Tables 8 and 9 below show the top counties where people are migrating to or from for Latah County. The top county where residents are moving from is Kootenai County, ID. With the exception of San Bernardino County, CA, all of the top counties are in Idaho or Washington. The top counties where people are migrating to when leaving Latah County are all in Idaho or Washington. The top county is Ada County, ID, followed by Kootenai County, ID, which is also the top county for in-migration. This movement could be due to the in- and out-migration of students to the University of Idaho in Moscow from the major cities of Boise, ID, and Seattle, WA.



Table 8: Where Latah County Residents are Moving From

Origin County	Number of People
Kootenai County, ID	626
Ada County, ID	548
Whitman County, WA	379
Nez Perce County, ID	312
San Bernardino County, CA	305

Table 9: Where Latah County Residents are Moving To

Destination County	Number of People
Ada County, ID	593
Kootenai County, ID	493
Whitman County, WA	493
King County, WA	408
Asotin County, WA	284

Tables 10 and 11 below show what counties Whitman County residents are moving to and from. Overwhelmingly, residents are moving to Whitman County from King County in Washington; although, this is also the top county for out migration. The overall flow for King County is positive, with 1,087 more residents moving to Whitman County from King County than the opposite. The other top counties for migration also mirror each other all within Washington or Idaho.

Table 10: Where Whitman County Residents are Moving From

Origin County	Number of People
King County, WA	1,868
Spokane County, WA	875
Pierce County, WA	705
Latah County, ID	493
Snohomish County, WA	485



Table 11: Where Whitman County Residents are Moving To

Destination County	Number of People
King County, WA	781
Spokane County, WA	644
Pierce County, WA	379
Latah County, ID	195
Snohomish County, WA	178

#### **Commuting Patterns**

The vast majority of people that work within the Palouse Region also live within the region as shown in Table 12.<sup>77</sup> Of the 29,051 working residents living in the region, 21,730 or 74.8%, work within the region. A total of 7,735 workers commute into the region from outside, only 26.2% of the 29,465 people that have jobs within the region. Within the region, Latah County has a higher number of residents that commute out of the County for work and an overall net outflow. Whitman has a large number of workers commuting into the County for work.

Table 12: Home and Work Location of Workers in Palouse Region

Type of Worker	Number
Workers Residing in the Region	29,051
Workers Working in the Region	29,465
Workers Commuting into the Region	7,735
Workers Commuting Out of the Region	7,321
Net Job Inflow	414

Table 13: Home and Work Location of Workers in Latah County

Type of Worker	Number
Workers Residing in Latah County	14,354
Workers Working in the Latah County	11,918
Workers Commuting into Latah County	4,219
Workers Commuting Out of Latah County	6,655
Net Job Inflow	-2,436



Table 14: Home and Work Location of Workers in Whitman County

Type of Worker	Number
Workers Residing in Whitman County	14,697
Workers Working in Whitman County	17,457
Workers Commuting into Whitman County	7,262
Workers Commuting Out of Whitman County	4,412
Net Job Inflow	2,850

Table 15 shows the distance to work for residents in the Palouse Region. Among working population living within the region, 57.8% commute to jobs that are less than ten miles away. Only 24.4% commute 25 miles or more. This would indicate that most workers are currently able to find housing within close proximity to job centers within the region. Furthermore, over the past three years of data, the proportion of workers who are living and working in the same place has consolidated, indicating that there is not an increasing trend of people moving to outlying areas while retaining jobs in Pullman and Moscow.

Table 15: Distance to Work for Residents in Palouse Region

Distance Traveled	Count	Share
Total Primary Jobs	29,051	100.0%
Less than 10 miles	16,801	57.8%
10 to 24 miles	5,167	17.8%
25 to 50 miles	1,659	5.7%
Greater than 50 miles	5,424	18.7%

Tables 16 and 17 show where workers in Moscow and Pullman live. Between the two major cities, Pullman has the largest number of jobs. Of the 14,203 people who work in Pullman, 44.0% also live there. Although Moscow has fewer jobs, 49.0% of the people who work in Moscow also live there. Additionally, over three times as many people commute from Moscow to Pullman than commute from Pullman to Moscow.

Other major cities in the region where people live include Lewiston, ID; Colfax, WA; Boise, ID; Spokane, WA; and Coeur d'Alene, ID. However, in total, 55.7% of all the people that work in one of the two main cities also live within one of them. Data related to some of the smaller towns are telling. The fact that nearly 500 people choose to live in Lewiston and work in the Palouse Region, despite a 30-minute plus drive, is perhaps an indication that attainable housing is more ample in the Lewis-Clark Valley. Likewise, the same can be said of the more than 300 people who live in Colfax and commute to Pullman. The growth in the number of people who work from home may skew this data as highlighted by the 216 workers who live in Boise, Idaho but work in Moscow, a five-and-a-half-hour commute. Many of these workers likely work from home most of the time.



Table 16: Where Workers in Moscow Live

Place	Number	Percent
Moscow, ID	4,851	49.0%
Pullman, WA	488	4.9%
Lewiston, ID	465	4.7%
Boise, ID	216	2.2%
Coeur d'Alene, ID	203	2.1%
Post Falls, ID	94	1.0%
Troy, ID	93	0.9%
Nampa, ID	88	0.9%
Potlatch, ID	74	0.7%
Meridian, ID	65	0.7%
All Other Locations	3,255	32.9%
Total Jobs	9,892	

Table 17: Where Workers in Pullman Live

Place	Number	Percent
Pullman, WA	6,253	44.0%
Moscow, ID	1,821	12.8%
Colfax, WA	360	2.5%
Spokane, WA	344	2.4%
Lewiston, ID	309	2.2%
Albion, WA	221	1.6%
Spokane Valley, WA	149	1.0%
Palouse, WA	127	0.9%
Clarkston, WA	102	0.7%
West Clarkston-Highland, WA	86	0.6%
All Other Locations	4,431	31.2%
Total Jobs	14,203	



#### **Community Profiles**

In addition to the main cities of Pullman, Washington and Moscow, Idaho, there are a few other cities and towns within the Palouse Region that have their own demographic composition, including Genesee, Idaho; Potlatch, Idaho; Albion, Washington; Colfax, Washington; and Palouse, Washington. Figures 37, 38, and 39 below highlight some key demographic differences between these communities.<sup>78</sup>

The largest of these communities is Colfax with 2,851 residents. Colfax also has an older population with a median age of 43.1, second only to Palouse, the second largest of the communities. Palouse also has the highest median household income. The higher income level in Palouse is likely connected both with the older average median age (44.3 years), and as indicated from stakeholder interviews, the above average number of WSU employees who reside there. Albion, the smallest community, is also the youngest with a median age of only 29.4. Albion's median household income is \$45,000. Potlatch has the lowest household median income at \$37,788. Genesee has a population of 951 and the second highest median household income at \$53,250.

The combination of total population, average age, earnings, as well as the home age data presented in Figure 17, start to present the unique circumstances and opportunities within each of these outlying communities. In general, there are a few outlying cities with relatively higher average earnings combined with a relatively older housing stock, namely Genesee and Palouse. These markets face a strong opportunity for both housing renovations and new home construction for larger single-family homes. Alternatively, communities such as Colfax, Albion, and Potlatch, are currently serving largely as low-income commuter cities. These cities may benefit from considering developing low-income housing, and/or senior housing. It is possible that greater investment of attainable and affordable housing within Moscow and Pullman will draw some of these residents into the larger towns. If such relocations materialize, these outlying cities could be left with communities that are both smaller and stronger, presenting the opportunity for revitalization.



Figure 37: Total Population in Cities and Towns

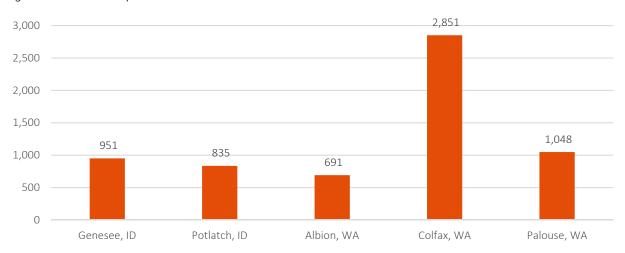


Figure 38: Median Age in Cities and Towns

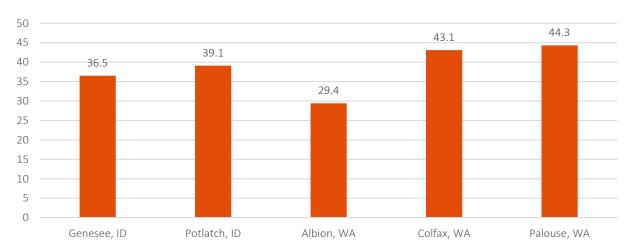


Figure 39: Median Household Income in Cities and Towns





#### **Regional Industry Analysis**

The following regional industry analysis provides a background of the largest detailed industries and businesses within the region.<sup>79</sup> This analysis will be used to provide an assessment of the existing workforce and any trends that could affect future housing needs.

#### **Economic Base Analysis**

The largest detailed industry in the region is Colleges, Universities, and Professional Schools (State Government) as shown in Table 18.<sup>80</sup> With Washington State University and the University of Idaho within the region, there are over 12,000 jobs in the industry. This represents 30.5% of the total jobs in the region.

The second largest detailed industry is Relay and Industrial Control Manufacturing, which has 2,248 jobs. This industry has grown significantly over the last five years, doubling in size, and is projected to continue to grow. This industry is also the region's most unique specialized industry as measured by its Location Quotient. An industry's Location Quotient (LQ) is a measure of concentration within a given geographic boundary in comparison to the rest of the US. A LQ of one signifies that a particular industry is equally as concentrated in the area as the rest of the US. A LQ higher than one (1) would indicate that an industry is more concentrated in a particular area than would be expected at the national level, thus representing a strength of the region. A LQ less than one would indicate that an industry is less concentrated than the national level, representing a weakness within the region.



Table 18: Largest Detailed Industries in the Palouse Region

Description	2018 Jobs	2018 Location Quotient	2008-2018 Percent Growth	2018-2028 Projected Growth
Colleges, Universities, and Professional Schools (State Government)	12,005	18.54	3.6%	6.6%
Relay and Industrial Control Manufacturing	2,248	207.32	101.1%	20.0%
Elementary and Secondary Schools (Local Government)	1,826	1.04	4.0%	8.5%
Local Government, Excluding Education and Hospitals	1,534	1.11	4.1%	14.5%
Limited-Service Restaurants	1,219	1.14	14.4%	13.8%
Full-Service Restaurants	1,149	0.87	33.8%	11.4%
Supermarkets and Other Grocery (except Convenience) Stores	721	1.16	2.5%	6.7%
General Medical and Surgical Hospitals	632	0.55	11.6%	14.4%
Crop Production	514	2.55	15.7%	12.4%
State Government, Excluding Education and Hospitals	478	0.86	-10.9%	-1.7%

Detailed industries with the highest LQ and 150 or more employees in the region are shown in Table 19. Relay and Industrial Control Manufacturing; Colleges Universities, and Professional Schools (State Government); and Crop Production are the only detailed industries that are both within the top ten industries for employment and location quotient. Other industries that are strengths within the region are Analytical Laboratory Instrument Manufacturing, Logging, and Farm Supplies Merchant Wholesalers. Some of these industries could represent potential growth opportunities in the future due to their unique concentration within the region. However, two of the top five industries, Logging and Farm Supplies Merchant Wholesalers are forecasted to lose employment over the next ten years.



Table 19: Industries with the Highest Location Quotient

Description	2018 Jobs	2018 Location Quotient	2008-2018 % Growth	2018-2028 % Growth
Relay and Industrial Control Manufacturing	2,248	207.32	101.1%	20.0%
Analytical Laboratory Instrument Manufacturing	168	19.21	180.0%	29.0%
Colleges, Universities, and Professional Schools (State Government)	12,005	18.54	3.6%	6.6%
Logging	256	14.64	-11.0%	-19.0%
Farm Supplies Merchant Wholesalers	261	9.11	-9.0%	-17.0%
Other Scientific and Technical Consulting Services	209	3.53	281.0%	56.0%
Crop Production	514	2.55	15.7%	12.4%
Drinking Places (Alcoholic Beverages)	244	2.52	7.0%	-2.0%
Hospitals (Local Government)	350	2.15	38.0%	-2.0%
Lessors of Residential Buildings and Dwellings	231	2.05	16.0%	12.0%

Overall, the Palouse Region is not incredibly economically diverse. Emsi produces an Industry Diversity Index which ranks counties across the United States for the level of balance in their employment, as compared to a typical U.S. county. By this metric, Whitman County ranks 2,347th, and Latah County fares slightly better at 1,734th out of 3,142 Counties.<sup>81</sup> Thus, both counties have a below average level of economic diversity, as higher education employment dominates in both cities.

Though having strong pillars within a regional economy is important, having a diversified employment base is also important. Diversity in industry is important for the same reasons that one should strive for a diversified industry portfolio, it protects regional economies from overexposure to a risk that is unique to a particular set of industries. Diversification of the industrial base should be a key concern of any local economic development group and, although not the key factor for this housing assessment, it does have direct impacts on the number and type of residents that will live within the region, as well as the risk assessment of real estate developers who may consider developing within the Palouse Region.



#### Supply Chain Gaps

An indicator of the lack of diversity in the Palouse Region is the large number of imports from outside of the region. Table 20 below shows the high-level industry groups in which Palouse imports most, if not all, of the local demand. There are seven industry groups for which all of the local demand comes from imports. These industries, in which the region solely imports the production of many primary resource materials used in other goods, particularly includes Primary Metal Manufacturing, Paper Manufacturing, Textile Product Mills, and Leather and Allied Product Manufacturing. Across all industries, the Palouse Region imports 68.2% of the local demand. This high number of imports means that money and income is leaving the region rather than supporting local businesses and jobs.

Table 20: Industries with the Highest Percentage of Demand Met by Imports (\$ Millions)

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Demand for	Demand Met by Imports	% Demand Met by Imports	Total Demand
Primary Metal Manufacturing	\$11.07	100.0%	\$11.07
Paper Manufacturing	\$13.00	100.0%	\$13.00
Water Transportation	\$6.33	100.0%	\$6.33
Textile Product Mills	\$3.55	100.0%	\$3.55
Pipeline Transportation	\$3.92	100.0%	\$3.92
Leather and Allied Product Manufacturing	\$1.28	100.0%	\$1.28
Monetary Authorities-Central Bank	\$1.22	100.0%	\$1.22
Funds, Trusts, and Other Financial Vehicles	\$36.58	99.8%	\$36.66
Plastics and Rubber Products Manufacturing	\$19.14	99.6%	\$19.23
Federal Government	\$785.31	99.2%	\$791.74
Support Activities for Mining	\$19.42	98.7%	\$19.68
Machinery Manufacturing	\$57.03	98.3%	\$58.01
Chemical Manufacturing	\$87.13	98.1%	\$88.79
Management of Companies and Enterprises	\$56.22	98.1%	\$57.33
Petroleum and Coal Products Manufacturing	\$65.47	97.9%	\$66.85
Food Manufacturing	\$105.78	97.4%	\$108.59
Fabricated Metal Product Manufacturing	\$40.09	96.8%	\$41.42
Printing and Related Support Activities	\$7.24	96.5%	\$7.50
Miscellaneous Manufacturing	\$30.77	96.4%	\$31.92
Computer and Electronic Product Manufacturing	\$46.69	95.4%	\$48.95



#### Largest Businesses

The largest businesses in the Palouse Region, as shown in Table 21, are mostly related to education and healthcare. 82 With around 5,000 employees, Washington State University if by far the largest employer. University of Idaho and Pullman School District are the other top educational employers. Pullman Regional Hospital and Gritman Medical Center have over 800 employees between the two medical institutions. Schweitzer Engineering Laboratories is the other major employer in the region, and the key player in the Relay and Industrial Control Manufacturing sector.

Table 21: Top Employers in Palouse Region

Business Name	Industry	Approximate Employment
Washington State University	Colleges and Universities	5,194
Schweitzer Engineering Laboratories	Relay and Industrial Control Manufacturing	2,000
University of Idaho	Colleges and Universities	1,997
Pullman Regional Hospital	Hospitals	420
Gritman Medical Center	Hospitals	380
Pullman School District	Schools	301
Walmart	Department Store	250
Bennett Lumber	Sawmills	220
City of Moscow	Government	200
City of Pullman	Government	200



#### The Palouse Region & Recessions

Economies tend to cycle through both growth and recessionary periods. Due to the significant role that housing plays in household wealth spending and wealth formation, there is an obvious correlation between the housing market and the economy. As of July 2019, the United States is experiencing the longest economic growth period on record, with 121 consecutive months of economic expansion. This fact, in combination with a few other concerning macro-economic signs, have some economists predicting a mild to moderate recession sometime between 2020 and 2021. Naturally, this calls to question how the Palouse Region fares during recessionary periods.

During the Great Recession (2007 to 2009), employment in the United States decreased by 7.1%, equivalent to a 0.3% decrease on a rolling four quarter basis. Meanwhile, over the same period of time, the Palouse Region actually increased in employment by 2.1%, equivalent to a 0.4% rolling four-quarter increase. Whitman County fared better than Latah County, however, which decreased by an average of 0.2% per quarter during the recession. Interestingly, the Palouse Region experienced a minorly delayed recession for two years following the Great Recession, during which time employment decreased by 0.3% on a rolling four-quarter basis.<sup>85</sup> Home values in Whitman and Latah Counties followed suit with employment changes, generally remaining stable but decreasing by as much as 4.0% annually during and just after the recession.<sup>86</sup>

In summary, the Palouse Region is affected by the same economic forces that influence the rest of the nation. But due to an industry mix that is largely fueled by state government and higher education, historically the region has been fairly insulated from economic declines, which preserves both jobs and home values. The fairly insulated nature of the Palouse Region's economy works both for and against the region's housing market. On the one hand, the stability of home prices could make the Palouse market relatively more attractive to real estate developers than other nearby high-growth markets when the next recession hits. In addition, this stability prevents drastic changes in home values which could encourage gentrification and displacement of historic residents. From a less positive lens, the stable home values prevent the influx of capital from outside of the region, which could add more housing options and more community amenities. In addition, during these periods, dynamic economic regions like Spokane/Coeur d'Alene and Boise will receive more attention from real estate developers than will the Palouse Region.



# 4. QUALITATIVE HOUSING INVENTORY

Much of this analysis focuses on quantifiable measurements of housing supply and demand. However, TPMA recognizes that the community's need for housing extends just beyond a need for shelter but also touches upon issues of aesthetics, proximity to services, infrastructure conditions, etc. To address these issues, TPMA conducted qualitative drive throughs of each of Moscow and Pullman's predominate neighborhoods (see Figures 1 and 2). TPMA also drove through numerous neighborhoods in secondary cities across the Palouse Region. Generally speaking, the housing, infrastructure, and zoning issues were common across each of these cities. The report's recommendations address these findings, but no specific data are listed on the qualitative conditions of each individual city.

A qualitative housing rubric was utilized to grade neighborhoods on a one to five scale on qualitative factors, along with notes on predominate types of housing. The results are provided in Tables 22 and 23, and the scoring rubric is provided in Table 24.

Table 22: Qualitative Review of Pullman Neighborhoods

Category	Military Hill Central	Military Hill North	College Hill	Sunnyside Hill	Westside	Pioneer Hill
Housing Conditions	3.0	4.0	3.0	3.0	4.0	3.5
Level of Residential Density	3.0	2.0	5.0	4.0	2.0	3.0
Infill Opportunities	2.0	2.0	1.5	2.0	4.0	2.0
Proximity to Amenities	3.0	2.0	5.0	3.0	2.0	3.0
Natural/Built Environment Conditions	3.0	2.0	4.0	3.0	2.0	3.0
Infrastructure Conditions	3.0	5.0	4.0	3.0	5.0	4.0
Pedestrian Infrastructure	4.0	5.0	5.0	4.0	5.0	4.0
	Housin	g Mix (2 to 3 ı	nost commo	on types)		
Single-Family Detached	✓	✓	✓	✓	✓	✓
Multifamily	✓	✓			✓	
Duplexes or Townhomes				✓	✓	✓
Mixed-Use (Commercial & Residential)	✓	✓	✓			
Small Single-Family or Mobile Homes			✓	✓		



Table 23: Qualitative Review of Moscow Neighborhoods

Category	North West	University	South	East	City Central South	City Central North	North Central
Housing Conditions	3.0	4.0	4.0	3.0	4.0	4.5	2.0
Level of Residential Density	4.0	5.0	2.0	2.0	3.5	2.0	3.0
Infill Opportunities	3.0	2.5	2.0	2.0	4.0	3.5	3.5
Proximity to Amenities	5.0	5.0	1.0	2.0	3.5	3.5	2.5
Natural/Built Environment Conditions	3.0	4.0	3.0	4.0	4.0	5.0	3.0
Infrastructure Conditions	3.0	4.0	4.0	4.5	4.0	4.5	3.0
Pedestrian Infrastructure	3.5	4.0	3.5	3.0	5.0	5.0	3.0
		Housing Mix (	2 to 3 mos	t common ty	/pes)		
Single-Family Detached	✓	✓	✓	✓	✓	✓	
Multifamily	✓	✓			✓		✓
Duplexes or Townhomes				✓	✓	✓	✓
Mixed-Use (Commercial & Residential)	✓	✓	✓				
Small Single- Family or Mobile Homes			✓				✓



Table 24. Scoring Rubric for Qualitative Housing Review

Category	5	4	3	2	1
Housing Conditions	Excellent	Good	Average	Poor	Deteriorated
Level of Residential Density	High	Moderate	Dense Suburban/ Low Urban	Low Density/ Suburban	Rural
Infill Opportunities	Developable Rural	Non- developable Rural	High Potential Urban/ Suburban	Moderate Potential Urban/ Suburban	Saturated Urban
Proximity to Amenities	Walkable Neighborhood	Somewhat Walkable, Close Proximity	Few Amenities, Relatively Close	Few Amenities, Not Close	No nearby amenities
Natural & Built Environment Conditions	Excellent	Good	Average	Poor	Deteriorated or Non- Existent
Infrastructure Conditions	Excellent	Good	Average	Poor	Deteriorated or Non- Existent
Pedestrian Infrastructure	Excellent	Minor Improvements Needed	Major Improvements Needed	Poor Conditions	No Sidewalks, crosswalks, or signals



#### 5. SUMMARY OF STAKEHOLDER ENGAGEMENT

## **Summary of Process**

Over the course of several months in early 2019 TPMA conducted 19 individual interviews and three focus groups with stakeholders in the Palouse Region. Stakeholders engaged with included developers, city officials, major employers, community leaders, bank lenders, and those involved with aspects of real estate. The focus groups took place in Pullman, Washington; Colfax, Washington; and Moscow, Idaho. These focus groups where advertised through social media and radio in the weeks leading up to ensure proper attendance and representation from stakeholder groups. Overall, the focus groups helped to inform of broad issues of concern surrounding housing and the different communities in the Palouse Region, while the interviews with key stakeholders shined light on the specific perceptions and detailed statuses of housing needs and various issues surrounding development. All feedback and narrative that is proceeding is non-attributable to specific individuals.

## Summary of Key Themes

To present the findings of the engagements, notes taken during all the interviews and focus groups where carefully reviewed for trends and themes that appeared repeatedly throughout. Below are the most frequent topics that also had strong conciseness from the stakeholders.

- Low Income Housing
  - Low inventory
  - o Mobile home parks
- Attainable and High-End Housing
  - o Connection to economic development
- Need for Senior Housing
- Cost of Building
  - Land challenges
  - Opportunity Zones and incentives
- Diversity of Housing
  - o Zoning
  - o Prefab tract housing

## **Low-Income Housing**

The largest and most consistent trend in the interviews and focus groups was the perception that there is a lack of housing options for low- to moderate-income individuals. Stakeholders voiced that there are little to no habitable homes in the \$100,000 to \$200,000 range. This has the result of young professionals moving to neighboring areas and commuting, living in substandard housing, or moving away entirely. This lack of low-income housing is in multiple ways directly connected with the high population of college students. Some stakeholders identified the college student populations as a factor in perpetuating the issue. For example, there have been cases of parents buying homes for their children for the duration of their education and then turning these homes into rentals, effectively removing them from the single-family home market. Students are also adversely impacted by the lack of low-income housing, as the market gets tighter, college students struggle to find affordable living accommodations.



The competitive nature of the low-income housing market is reflective of the market as a whole due to the low inventory of available homes. One stakeholder spoke on this specifically saying that the lack of available homes has always been an issue, and when they moved to Moscow (more than ten years ago) only three homes where for sale, and that is typically how many they have seen on the market at a time. This issue of low-income housing also embodies a national issue of a stagnant, middle-class wage growth and the Palouse Region is not exempt from this. Many stakeholders also raised the issue that current wages being paid by employers (especially on the Idaho side of the border) do not provide enough income for workers to find housing that they can afford.

The topic of mobile home parks was raised numerous times in connection with low-income housing. Some stakeholders saw the region's mobile home parks as a valuable asset that should be expanded to help the supply of low-income housing, while other stakeholders would prefer not to see this as a solution due to the untidy appearance of many parks, as well as several major infrastructure issues that have arisen at mobile home parks in Latah County over the past several years. Stakeholders familiar with the industry report at there is a rising "bubble" in the mobile home park industry that tracks with increasing real estate values. The value of used mobile homes varies based on size and quality but are generally in the \$10,000 to \$75,000 range. Added to this cost in most settings are lot rent fees, which vary drastically from community to community, from as low as \$150 per month to \$600 per month. These lot fees often reflect the quality of the area and the services and amenities being provided.

#### The Missing Middle and High End Housing

While low income housing was a hot topic, stakeholders often brought up their concerns surrounding housing at the middle and high price points. Overwhelmingly stakeholders were concerned that it is very difficult to find a middle-income type home for under \$300,000 that matches expectations. People often voiced that it is not that such homes do not exist, but the market is so competitive that such homes are almost never for sale or are listed far above their worth.

Over the past ten years, numerous employers have started courting experienced talent from outside of the region. When considering high-end housing for such professionals, there is often a similar lack of supply, as well as a lack of community amenities in comparison to other housing markets. Several stakeholders voiced how the current high-end housing market harms economic growth by hindering such talented professionals from committing to the region. It was noted on multiple occasions that when these employers would bring top talent into the area for interviews and tours, some expressed that even if these workers liked the job offer, they could not find housing to secure, or the housing they could find was not comparable to other areas.

## **Senior Housing**

The demand for senior housing was also raised by many stakeholders, both in correlation with low-income and moderate-income housing discussions. Many seniors look to downsize and live in smaller accommodations with little to no maintenance. Yet, when it comes to meeting these requirements, many stakeholders noted that there are very few such options in the Palouse Region. Most new and existing housing options are traditionally large plot single-family homes. This is especially an issue as the aging of baby boomers raise the demand in the senior housing market. This is reinforced from the interviews and focus groups as there was demand for additional senior living through a senior community and/or assisted



living for the aging population that want to stay in the Palouse Region. Interviewers also noted the role that non-profits and grant funding can have on this issue. Many said that non-profits cannot do it all by themselves, but they can help make an impact in the right direction if they have the correct resources.

#### **Cost of Development**

In an unconstrained free market, the natural response of producers to a shortage is to increase supply (i.e., in this case, increased supply of housing for the various sub-sectors noted). This outcome has not been occurring over the past several years, however. Stakeholders noted that the Palouse Region faces a compound problem of national housing issues and local issues which make building even more costly. National issues that make development costly include the high cost of building materials, shortage of skilled labor, and tight lending standards. These issues are difficult to overcome in a lower population area especially, as noted by stakeholders, because they cannot achieve economies of scale to reduce cost burdens. If they produced enough demand to support large-scale housing developments, the size of the orders and requests would help drive prices down on a per unit base. Also, since the Palouse Region is not a major economic region with large growth, it often does not attract the attention of developers or investors to push such developments forward.

The main localized issues that were brought up regarding cost included the cost of the land, regional landscape, and water. For starters, the cost for undeveloped land itself in the Palouse Region is often much more expensive than other similarly situated communities in the Pacific and Inland Northwest. Agricultural land is surrounding the main cities in the area, and even with no infrastructure, farmers demand a premium price for the land due to the opportunity cost they give up when selling. The region's landscape introduces extra costs, as the hills of the Palouse often need to be flattened, requiring developers to move large amounts of clay and basalt. Even following such excavation work, many parcels remain undevelopable, or even become more costly due to drainage issues at the basins of the rolling hills. Another aspect adversely effecting real estate is water infrastructure and water management. Some concerns were raised that certain geographic areas do not have a water main large enough to support dense housing development. In addition, other water concerns were raised related to agricultural lands, such as water mitigation, aquifer depletion, agricultural contaminants, and stormwater channeling.

The preponderance of costs is, according to many stakeholders, why housing production in the Palouse Region is routinely focused on highly priced custom homes. When developers consistently face high costs, high risk, and moderate levels of absorption from the community building homes at the request of affluent homebuyers is the most reliable way to ensure costs are covered. Most stakeholders, including builders and real estate developers, are aware of the glaring need to provide attainable and low-income housing, and many in fact are very interested in addressing this market, but are puzzled about how to do so profitably. A solution recommended by numerous stakeholders was a desire to provide incentivization through federal, state, or local programming, though stakeholders had little guidance about how such programs could or should work.

## **Diversity of Housing**

In addition to concerns listed above, numerous stakeholders lamented the lack of diversity in existing housing stock in terms of price, sizes, styles, finishes, and building types. Many people mentioned that when looking for a home, homebuyers are considering mobile homes for under \$100,000, or the next



step-up, which is typically a single-family home priced at \$300,000 or above, leaving vacant a large pocket of demand that could be filled by many innovative housing types. Stakeholders point mainly to issues of building cost, and developers' requirements to meet or exceed a set profit level.

Some people pointed out the lack of small lot sizes which would make building smaller, more affordable homes more achievable. Others brought up the lack of high-density housing such as multilevel condo complexes, duplexes, townhomes, pocket neighborhoods, and so forth. An issue influencing diversity of housing, especially noted by those in the real estate development industry, were concerns about over-involvement from local regulatory agencies. These concerns mainly came in three types: firstly, restrictive zoning and density regulations; secondly: overly stringent improvement standards (e.g., streets, sidewalks, streetscaping, etc.); and thirdly, inconsistent application of policy by city staff and regulatory agencies. Overall, TPMA's conclusion is that stakeholders, regardless of profession and background, want to see more flexibility in regulation to allow for more creative solutions and a more diverse housing stock.

Lastly, a popular and reoccurring comment relates to prefab tract housing. This solution involves having a tract of land divided into smaller sized lots and placing cookie-cutter houses on each lot. Either modular or prefabricated development of major sections of each house helps to significantly reduce cost and lead times for construction in comparison to houses built on site to unique specifications. Stakeholders also voiced that these homes are just as high in quality as spec homes, but at a more affordable price point. High density and multi-family homes could also be built into this trac housing solution to compound the impacts even further. It must be mentioned, in correlation with these comments however, that some community members are strongly opposed to further development of plain, homogenous single-family housing. Some community members even cited the recent advent of the derogatory nickname for Pullman, "Taupe Town" as a reason to not encourage further such development.

## Stakeholder Engagement Participants

Development, Real Estate, & Property Management

- Shelly Bennet—Co-owner, Palouse Commercial Real Estate
- Angela Carpenter—Realtor, Latah Realty
- Nethaniel Ealy—Real Estate Developer, Ealy Construction
- Jeannette Gordon—Summit Realty
- Tim Kirkland—Mortgage Lender, Zion's Bank
- Curtis McNeilly—Broker, Kincaid Real Estate
- Rusty Olps—Real Estate Developer/Owner, Acadia Property Management
- Bob Olson—R.B. Olson Construction
- Justin Rasmussen—Co-owner, Palouse Commercial Real Estate
- Michael Salisbury—Real Estate Developer, Erban Design
- Debbie Spurgeon—Owner and Broker, Team Idaho Real Estate
- Mark Wintz—Real Estate Developer, Wintz Company

#### **Community Organizations**

- Nancy Backes—Pullman Council on Aging
- Francis Benjamin—Department of Psychology, Washington State University



- Cathy Blood—Chair of Habitat for Humanity of the Palouse
- Steve Bonnar—Director, Sojourners Alliance
- Mary Collins—Whitman County League of Women Voters
- Bob Krikac—Associate Professor of Interior Design, Washington State University
- Nils Peterson—Executive Director, Moscow Affordable Housing Trust
- Jennifer Wallace—Habitat for Humanity of the Palouse

#### Major Employers

- Gerard Billington—Real Estate Officer, University of Idaho
- Andrew Crapuchettes & Rob Sentz—CIO and CEO, Economic Modeling Specialists
- Kelly Fukai—Government Affairs, Schweitzer Engineering Laboratories (SEL)
- Gary Lester—President, EcoAnalysts

#### Local Government

- Bill Belknap—Community Development Director, URA Executive Director, City of Moscow
- Pete Dickinson—Planning Director, City of Pullman
- Jenny Hemly—Business Expansion and Retention Specialist, Idaho Department of Commerce
- Glenn Johnson—Mayor, City of Pullman
- Kathie LaFortune—Latah County Commissioner
- Bill Lambert—Mayor, City of Moscow
- Sarah McKnight—Director, Director of Southeast Washington Economic Development Association
- Victoria Seever—City of Moscow Planning and Zoning Commission

#### **Community Members**

- John Chapman
- Anita Hornbook
- Jenise James
- Kristie Kirkpatrick
- Josephine Mark
- Bonnie Sampson
- Bill Spence



#### 6. REGIONAL HOUSING GAP ANALYSIS

Using information from Chapter 2: Analysis of Supply, Chapter 3: Analysis of Housing Demand, and the miscellaneous forms of qualitative input discussed in the remaining chapters, this section describes the results and methodological process of TPMA's housing gap analysis. At the outset, it must be noted that this analysis looks at Whitman County and Latah County as a single region, without breakouts or differentiation. Since the two economies function as one, and so many residents commute between the two cities, there simply is not enough strong empirical data to indicate that there are separate trends or demands between the two regions. In addition, forecasting the data in this way will actually help residents and stakeholders to break down the unnecessary walls that separate the two communities and start working collaboratively toward solutions.

Based upon characteristics of housing supply and demand within the Palouse Region in 2017, there was a housing surplus of 0.8%, or approximately 305 units—totaled across Latah and Whitman Counties. However, this does not mean that the market is perfectly suited to residents' current needs. Based upon the current supply of housing, and distribution of population within the region, there was still a gap in supply for single-family housing. An estimated 342 additional single-family units were needed, while there was a surplus of 99 two-family units and 608 large multi-family (3+) units.

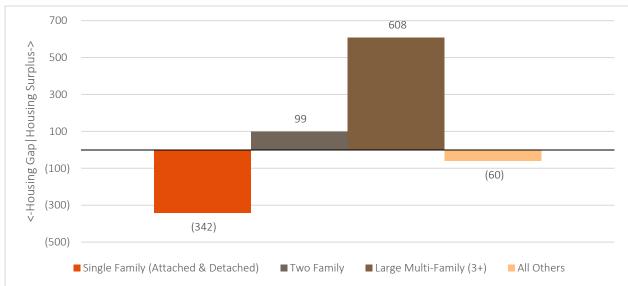


Figure 40: Housing Gap or Surplus in 2017, by Type of Housing



#### Methodology

These gap estimates are based upon a combination of underlying factors, including the total number of housing units of each type, the number of Palouse residents in each adult age group, and job and commuting characteristics. The total number of required housing units for each unit type was calculated in five steps:

- 1. Identify Current Population by Age
- 2. Estimate Number of Units of Each Type Required per Person in Each Age Group
- 3. Estimate Total Number of Units of Each Type Required for Current Residents
- 4. Estimate Optimal Vacancy Rates
- 5. Add Units for Current Commuters & Available Jobs

First, estimates of total Palouse Region population by age group were utilized to begin understanding the distribution of housing needs throughout the region. These estimates are shown in Table 25.87

Table 25: 2017 Population by Age Group, Palouse Region

	15 to 24	25 to 34	35 to 44	45 to 74	75+
2017 Population	28,625	12,953	8,258	21,962	4,063

Next, American Community Survey data on age of householder by type of housing unit were utilized to estimate the number and type of housing units required by people of various ages. This approach allowed for estimating not only what type of housing was utilized by people in each age group, but what proportion of those people are heads of household. For example, for every 100 15-24 year-olds in the population as a whole, there were 26 households in the region headed by 15-24 year-olds; for every 100 seniors, there were 62 housing units headed by seniors. The remainder of people in the age group are not the householders of the households in which they live—meaning that they are not the person in whose name the housing unit is owned or rented. For example, for every 100 15-24 year-olds, there are 74 who are not the primary person listed on the title or lease of their housing unit.

Table 26: Number of Households of Each Type Headed by Householders in Age Group for Every 100 Palouse Residents in Age Group

Unit Type	15 to 24	25 to 34	35 to 44	45 to 74	75+
SF	4	20	38	46	41
2F	3	4	3	1	2
3+	18	24	9	5	13
All Other	<1	5	8	6	6
Total	26	53	58	59	62



Directly following from this estimate, therefore, is a calculation of the number of housing units of each type that are needed by current residents. This is shown in Table 27.

Table 27: Number of Housing Units Required in Palouse Based on Current Residents in Age Group

Unit Type	15 to 24	25 to 34	35 to 44	45 to 74	75+	Total
SF	1,063	2,557	3,154	10,195	1,660	18,629
2F	830	568	218	280	88	1,984
3+	5,283	3,072	736	1,149	513	10,754
All Others	129	645	649	1,274	241	2,938

However, having the exact number of housing units required to satisfy current residents is not sufficient for a well-functioning housing market. Vacancy is needed to provide residents with choice, moderate landlords' leverage, and enable investors or developers to rehabilitate homes while they are not occupied. A 2018 study by Allan Mallach and the Lincoln Institute of Land Policy defines a healthy vacancy rate as between 7.0 and 8.0% for renter-oriented properties, and between 1.3 and 2.0% for owner-oriented housing units. O Using current distributions of owned vs. rented properties of each type within the Palouse Region, as well as the suggested vacancy rates for rented vs. owned, optimal vacancy rates were estimated for each type of property.

Table 28: Owner-Occupied Units and Optimal Vacancy Rates

	SF	2F	3+	All Other
% Owner-Occupied	79%	3.0%	3.0%	66%
Optimal Vacancy Rate	2.9%	7.3%	7.3%	3.6%

In addition, the Palouse Region currently has 414 more in-commuters than out-commuters, meaning that there are many workers in the region for whom additional housing options might reduce commute times or provide more efficient housing choices. Lastly, employers within the region are currently advertising many more job offerings than there are unemployed individuals. Over the last three years, active job postings have outweighed unemployment numbers in the Palouse Region by an average of 1,680 per month. Based upon the distribution of employees by age in Palouse, and the ratios shown in Table 29, these 2,094 potential residents were distributed by housing unit to estimate the real supply levels needed—a total of 1,027 additional units.<sup>91</sup>

Table 29: Additional Units Needed to Meet Additional Employment Requirements, by Age

Unit Type	15 to 24	25 to 34	35 to 44	45 to 74	75+	Total
SF	19	93	135	344	5	596
2F	15	21	9	9	0	55
3+	95	111	31	39	2	279
All Others	2	23	28	43	1	97



#### **Full Results**

Adding each of these components together—current resident needs, vacancy rate, and employment needs—results in a total of 37,005 units needed in 2017, which can be compared to the estimated 37,351 units available during that time. However, there is a mismatch between the types of units available and the units needed.

Table 30: Total Housing Units Needed by Type in 2017, Compared to Supply

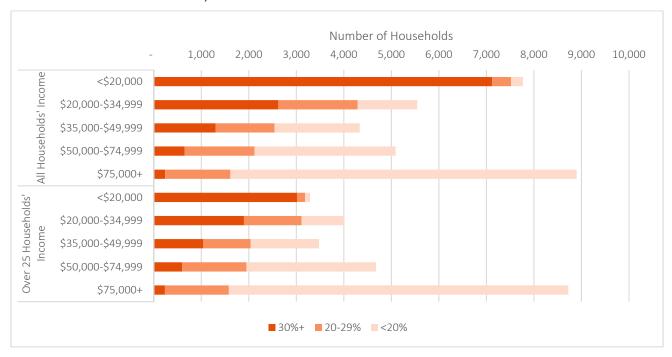
Unit Type	Current Residents	Employment Needs	Optimal Vacancy	Total Need	Total Supply	Gap
SF	18,629	554	565	19,749	19,450	-299
2F	1,984	55	161	2,200	2,298	+ 99
3+	10,754	287	873	11,915	12,513	+599
All Others	2,938	90	114	3,142	3,090	-52
Total	34,304	987	1,713	37,005	37,351	346

## **Affordability Gap**

In addition, there are also gaps in affordability, as discussed in the analysis of supply. Approximately 11,932 households throughout the Palouse Region are considered cost-burdened, meaning that they spend more than 30% of their monthly income on housing costs. In the general population, this represents 37.7% of all households. However, given the significant numbers of students within the Palouse Region, many of these 11,932 households are likely student households that receive housing support through non-income means. The proportion of cost-burdened households in the general population can be estimated by removing from calculations all households headed by persons under the age of 25. Figure 41 shows the change this makes in overall estimates of cost-burdened households. With these households removed, the number of households that are cost-burdened drops to 6,789, or 28.1% of all over-25 households.



Figure 41: Number of Households Paying 30%+ of Monthly Income on Housing, with and without Households Headed by Persons Under 25



In practical terms, this means that additional housing units are needed at various price levels to allow households to affordably meet housing needs. Figure 42 shows the number of over-25 households that are currently cost-burdened (corresponding to the 30%+ households in the bottom of Figure 41), alongside the monthly housing cost range that they would need in order to reduce their burden below 30% of income.

Figure 42: Number of Households Currently Cost-Burdened, by Needed Monthly Housing Cost





## **Projections of Future Need**

In addition, based on current housing supply gaps and surpluses, as well as demographic projections from 2017 through 2027, demand for various types of housing can be roughly projected for the next ten years. Based on forecasts of demographic change—particularly with the Baby Boomer and Millennial generations aging, the number of households headed by 15 to 34-year-olds in the Palouse Region is projected to be lower in 2027 than it was in 2017. Since these are the age groups currently most associated with multi-family housing—and there is currently a surplus of multi-family housing in the region—it is projected that construction of single-family housing will be much more needed than other types of housing in the next ten years.

These projected needs are shown in Figure 43. However, forecasts of the number of additional units needed for each year are just rough estimates, and unanticipated changes to consumer preferences or demographic trends could significantly impact these estimates. In Table 31, these projected needs are compared to the amount of production that has recently occurred. This demonstrates large mismatches between what is projected to be needed and the types of housing that have been built since 2007.

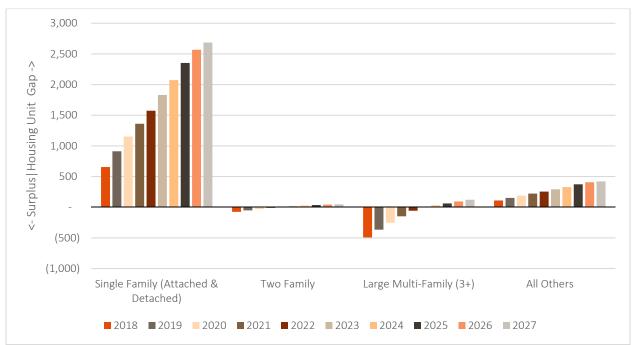


Figure 43: Cumulative Number of Housing Units Needed, by Type, 2018-2027

Table 31: Total Housing Units Needed by Type in 2027, Compared to Previous Production

	Single-Family (Attached & Detached)	Two-Family	Large Multi- Family (3+)	All Others	Total
Needed in Next 10 Years	2,684	47	121	420	3,273
Added in Prior 10 Years	1,401	177	1,771	(355)	2,994



# APPENDIX A: REGIONAL & NATIONAL LITERATURE REVIEW

#### Literature Review

#### **Key National Themes**

Nearly ten years since the beginning of the Great Recession — which was caused in large part by issues with home loan lending — housing is once again dominating government and economic development conversations across the country. Across the U.S., home prices are the least affordable that they have been since Q3 of 2008<sup>92</sup> — with median-priced homes pricing 5% less affordable than the historic average. In addition, there is a shortage of affordable housing in nearly every urban area, and 11 million households in the U.S. spend more than 50% of their income on rent. <sup>93</sup> This is, in part, due to significant decreases in housing production in the later years of the Great Recession, 2008 and 2009. Though housing construction was likely above sustainable levels prior to the recession, the severe cutbacks in construction during the recession have not yet been overcome. Overall, the total number of housing units completed in the United States decreased by 70.4% between 2006 and 2011. Though housing production has increased steadily since 2011, it has not returned to levels of production seen in the early 2000s. <sup>94</sup> One example of the under-production of housing is Denver, where for-sale housing inventory has lagged behind population growth since 2007. <sup>95</sup>

At the same time, federal funding to support affordable housing is decreasing. <sup>96</sup> This is a significant concern, given the prominence of federal funding and programming in rural housing support, through programs such as Section 514 and 515 rentals, the multi-family housing preservation and revitalization program, Low Income Housing Tax Credits, and housing counseling programs. <sup>97</sup> In addition, much of the home construction that is occurring is marketed towards high-income households. <sup>98</sup> This process can alleviate housing price pressures through the process of "filtering," whereby the addition of high-priced new housing units frees up older units which become more affordable as they age. But, there is some evidence that this process is not occurring rapidly enough to lower housing costs across the country. <sup>99</sup> In addition, the opportunity for higher returns in dense urban areas may make building moderately-priced homes in rural areas less economically appealing to real estate investors. <sup>100</sup> Lastly, the presence of major universities to any region adds additional concerns for housing affordability. While universities are often able to provide safe, well-maintained housing, their costs are often higher than market rate. In the face of increasing tuition prices, this presents an additional affordability concern for many college-attending households. <sup>101</sup>



#### **Key Local Themes**

The housing market in the Palouse Region is directly tied to the regional economy; as such, a review of population and economic trends in recent years is the appropriate starting point for analysis of the housing market.

#### **Demographic Issues**

Most reports reviewed promote the concept that the greater Palouse economy is largely dependent on college enrollment rates at Washington State University (WSU) and University of Idaho (U of I). 102 103 104 105 Though there is certainly an observable correlation between these indicators and economic growth, some more nuanced themes lay a bit below the surface. As pointed out by Johnson Economics, enrollment at WSU has a clear relationship with growth in employment in Whitman County. The relationship is not as linear in Latah County, however. Although the U of I's enrollment has not increased substantially in the past twenty years, over that same period of time Moscow's population has increased steadily at over 1% per year and employment has neither increased nor decreased substantially. Furthermore, as pointed out by Peterson, in 2015 the flow of commuters from Whitman to Latah County was more than quadrupled by the flow of commuters from Latah to Whitman County. Their analysis indicates that residents in the Palouse reveal a preference for the "character" of Moscow over Pullman as a place to live including both the style of its neighborhoods and the community amenities, such as restaurants and drinking places. 106 This dynamic is clearly pointed out when "student-aged" populations is plotted along with "non-student aged" populations for Moscow and Pullman. Between 2007 and 2013, Pullman saw about 16% growth in student-aged populations but a decline in non-student aged populations. Meanwhile, the opposite was true of Moscow, where student-aged population was virtually unchanged and non-student population increased approximately 11%. <sup>107</sup> Based on these findings, it may be more accurate to say that university enrollment is an indicator that effects the Palouse positively, but has uneven effects on the economies of Moscow and Pullman.

Both WSU and U of I are actively working to increase enrollment which, if successful, will have a positive effect on the regional economy. In a document published in 2016, U of I administrators were aiming for over 17,000 students by 2020.<sup>108</sup> WSU does not list a specific number but does identify increasing international student enrollment, graduate student enrollment, and underrepresented groups within its sub goals.<sup>109</sup> As of Fall 2018, enrollment is up at both U of I and WSU (12,072 and 21,022). Related to both universities, it must be noted that their strategic planning documents tout their status as land-grant universities. As such, they recognize their responsibility to engage and serve local communities. At the same time, details on the priorities and processes of the universities for community service and engagement are relatively light.

Despite recent industry diversification and population growth, the Palouse remains, by and large, a very rural area. For the more rural areas, accessing tools of the modern economy can be a challenge to economic growth, most notably broadband access. Providing broadband to rural areas is one of the highest priorities for some of the region's economic development organizations. Regions with poor internet access tend to age more quickly, and with it so do housing values. For that reason, broadband has a direct connection to both the region's economy and housing market.



#### **Economic Issues**

Outside of higher education, the reports reviewed focused on several other industry sectors that have particularly significant impacts in the Palouse's economy, in particular, restaurants and drinking places, retail trade, healthcare, manufacturing, high-tech, and agriculture.

The preponderance of eating and drinking places that emphasize fresh and locally grown goods has led not only to a local reputation but captured national attention recently through a Wall Street Journal article which labeled the Palouse as the "Tuscany of America". This trend is particularly interesting in light of the conclusion of Johnson Economics in 2014 that restaurants and bars were at roughly an equilibrium point of supply and demand between Moscow and Pullman, with Moscow appearing significantly oversupplied and Pullman undersupplied. Yet, since that time, the proliferation of restaurants and drinking places has continued. Complementing this sector is the Moscow Farmer's Market, which attracts over 176,000 visitors annually. These metrics highlight that the food and beverage tourism industry is a significant regional economic driver.

Perhaps the most volatile industry in the Palouse in the past decade has been retail trade. Retail sales and employment in Whitman and Latah Counties took deep dives during the recession and didn't begin rebounding until 2010. Between 2011 and 2012 Walmart made a unique decision to temporarily shut down its Moscow store while it focused on opening up a Super Walmart in Pullman, before reopening the Moscow store once the Pullman store was completed. Historically, Moscow has dominated the retail trade market in the Palouse. As late as 2012, there were twice as many retail trade businesses in Latah as in Whitman. Recent statistics have yet to be pulled on this sector but due to recent retail closures in Moscow and openings in Pullman, the balance may have shifted in recent years. Despite the relatively low wages in the retail trade sector, it remains a hot topic for both cities, which are thirsty for revenue generating enterprises to help compensate for the large stretches of city land that is tax exempt due to WSU and U of I.

The economic development entities covering Whitman and Latah are all focused on seeing growth in growing technology-based employment. Moscow's Urban Renewal Agency has seen several successful business expansions due in part to its focus on the Alturas Technology Park and the Legacy Crossing District. Meanwhile, the Port of Whitman has seen strong growth in manufacturing and ag technology at the Pullman Industrial Park. These emphases have paid off through noteworthy hiring expansions by firms such as SEL and Emsi.

Though not highlighted in many of the industry analyses reviewed, the agriculture sector warrants particular attention in this housing assessment. Firstly, because industries such as farming and logging have historically anchored the local economy. And secondly, outside of Moscow and Pullman, agriculture remains the predominant producer of jobs and wages for the region, including cities such as Colfax, Potlatch, Deary, and Palouse. For these reasons the Forestry and Timber Products cluster remains one of the region's drivers, <sup>119</sup> and farmers in both Latah and Whitman Counties continue to bring in significant dollars to the regional economy from exports across the globe. <sup>120</sup> Yet, the decline of employment in these industries over time has created challenging housing situations for many individuals in smaller towns, many of whom are now commuting to Moscow, Pullman or ever further flung destinations for work. Though this is a legitimate solution for many, it does create challenges for transportation infrastructure and for some residents in rural communities who want these towns to retain their rural community character. <sup>121</sup> <sup>122</sup> <sup>123</sup> <sup>124</sup> <sup>125</sup>



#### **Housing Issues**

Multiple sources discuss the issue of housing in the Palouse, focusing on issues such as age and character of housing stock, single-family vs. multi-family building trends, and changes in housing since the end of the Great Recession. Strategic and comprehensive plans also regularly touch on the topic of housing, emphasizing communities' interest in providing a variety of housing options and maintaining the historic character and layout of existing communities.

More written research on housing trends has been conducted on Moscow than on Pullman or any other regional municipality. Johnson Economics' 2014 report found that in the City of Moscow the value of single-family housing has remained relatively stable over time, including the period from 2006 to 2009 during the Great Recession. During the post-recession period, however, there has been a steep drop off of both multi-family and single-family building activity. The drop-off of building permits is verified in the research of Steve Peterson, which indicates that in Moscow and Pullman combined, the number of annual building permits decreased by nearly 60% post-recession (2010- 2016) from the pre-recession period (2000-2006). TPMA will take a deeper look at more recent trends during our Analysis of Supply, but signals indicate that counts of multi-family building permits in Latah and Whitman County hit near all-time highs in 2017 due to the conglomeration of the Identity and Evolve projects, and a number of other smaller developments. On the other hand, single-family building activity recovered decently following the recession and has declined in recent years. The provided that the conglomeration of the Identity and Evolve projects.

It is clear from the various comprehensive plans, strategic plans, and planning and zoning documents reviewed on both sides of the border that local government officials have put a tremendous amount of time and effort into housing issues. Challenges grappled with by local officials include working within the geographic and infrastructure constraints of the cities, respecting privately-owned property rights, retaining community character in both rural and urban areas, and providing flexibility for real estate developers to meet the needs of citizens. All of these priorities must be managed within a context of cities where greater than half of the city footprint is owned by Universities and is therefore neither annexable nor taxable. Historically, the county and cities on both sides of the border have maintained zoning and subdivision polices that restrict residential sprawl from entering surrounding agricultural areas. This has had the positive effects of maintaining community character, as well as keeping public-borne infrastructure costs low. <sup>130</sup> <sup>131</sup> <sup>132</sup> It is possible, however, that these policies have prevented the cities of Moscow and Pullman from growing organically outward and allowing real estate developers from producing attainable and affordable housing options on the periphery of these cities.

#### **Alternative Models**

In response to these issues, several new approaches are being trialed across the country. In Eastern lowa, the median household income is \$130,000 and the median year built of housing is 1969. In order to provide new affordable rural housing while also providing amenities, one development organization is trialing "pocket neighborhoods," which create rural density and connectivity while preserving open space and sustainability. They are utilizing simpler building templates, keeping lots close together, and providing a larger common greenspace shared by all neighbors. Compellingly for the Palouse Region's housing context, they are also drawing upon local college student expertise to creatively design infrastructure and foundation engineering elements. Lastly, this property is being built in close proximity to employment centers, as well



as a grocery store and a daycare center—a strategy advised by Development Concepts (2015) as a key consideration for easing transportation costs and improving land use efficiency.

In addition to the pocket neighborhoods concept, there are a wide variety of housing examples that might be applicable to the Palouse housing context. For example, in Woodland, California, USDA rural development subsidies were utilized to make apartments and townhomes in an energy-efficient development complex more affordable for agricultural workers. In addition, because the development uses the mutual-housing model, residents participate in property management decisions and have access to on-site services, such as financial education, ESL classes, and legal clinics. <sup>134</sup> Other potential options for promoting affordable rural housing include community land trusts, converting industrial and public properties into affordable housing complexes, and using stick-building to improve affordability while maintaining quality of life. <sup>135</sup> In addition, one community in Cleveland has taken an innovative approach, opening up its retirement home to college students to provide affordable and supportive multigenerational living. <sup>136</sup>

In some cases, these solutions require changes to current policy or creative financing approaches to be executed effectively. For example, the pocket neighborhood development in Eastern Iowa drew upon a diverse set of funding sources, including a TIF district, a donation of county-owned land, a housing trust fund, and state and federal grants. In other areas, city governments are disrupting and modifying current zoning regulations to reduce parking requirements, provide more affordable business rental spaces, and allow for more diverse housing structures. Other approaches promoted as affordable housing solutions include leveraging publicly-owned property in development, creating housing trust funds, using ballot measures to subsidize affordable housing, attaching linkage fees to market rate developments, and providing inclusionary zoning incentives to encourage development of new affordable housing units. 138



# APPENDIX B: DENSITY ALLOWANCES IN THE PALOUSE REGION

#### **Density Allowances**

Many of the recommended solutions relate to adjusting density allowances, as such a general reference to the density allowances for the region's key cities is a helpful starting point. The minimum lot densities for single-family detached dwellings allowed per each of the major cities in the Palouse Region are listed in Table 32.<sup>139</sup> Generally speaking, the region's zoning identities are similar for rural/suburban and R1 through R4, which are as follows.<sup>140</sup> Note, however, that in many cases the municipality or city makes no specific mention of a given residential district, typically because such districts do not exist in that area:

- Rural/Suburban: single-family residential with very low density
- R-1: Single-family residential
- R-2: Low density multi-family or moderate density single-family residential
- R-3: Medium-density multi-family, or medium density residential
- R-4: High-density multi-family, or multiple family residential

Table 32: Minimum Lot Sizes for Regions of the Palouse

Region	Rural/ Suburban	R-1	R-2	R-3	R-4
Moscow <sup>141</sup>	43,560 SF	9,600 SF	7,000 SF	6,000 SF	5,000 SF
Pullman <sup>142</sup>	N/A	6,000 SF	6,000 SF	5,000 SF	5,000 SF
Colfax <sup>143</sup>	87,120 SF <sup>144</sup>	N/A <sup>145</sup>	1,500 SF	N/A	N/A
Latah County <sup>146</sup>	9,600 SF <sup>147</sup>	N/A	N/A	N/A	N/A
Whitman County Cluster Districts	21,780 SF <sup>148</sup>	N/A	N/A	N/A	N/A



# APPENDIX C: LEGAL CONSTRAINTS ASSOCIATED WITH RECOMMENDATIONS

TPMA's Palouse Regional Housing Assessment contains a host of potential strategies and recommendations for the consideration of regional municipal governing agencies, as well as non-profit, and for-profit partners. The identified strategies and best practices are solutions that have abetted the creation of housing units in other places in the United States with similar context to the Palouse Region. That said, as with any strategic recommendations, solutions must be fine-tuned to fit the local context of each community and regulatory environment. TPMA is aware that each state, county and city operate under different constitutional, statutory, and practical constraints such that not all recommendations may be feasible or legally permissible in every place in the region.

To provide further context and aid in the implementation process, the following table provides commentary on each of TPMA's core recommendations, specifically noting geographic areas where a particular recommendation is either not permitted by existing state or local laws, or it may not be permissible. Recommendations that are understood to be legally impermissible are marked with an "X"; those that have some limitations are marked with "~". In many cases, circumstances making the action achievable may require intermediary or partner organizations (typically non-profits) who can legally execute recommended actions where city and local government cannot.

Lastly, it is important to note that TPMA's objective with this table is to outline geographic locations with legal constraints to feasibility. Unmarked boxes are those understood to be legal, but their practicality and feasibility would still need to be determined through further research.

<sup>&</sup>lt;sup>1</sup> Thomas P. Miller & Associates (TPMA) is not a law firm. In no way should these insights be construed as legal advice. To determine legal constraints in each region, community leaders should contact their own legal counsel for final determination.

<sup>&</sup>lt;sup>2</sup> Research related to this appendix is based on TPMAs review of the following documents: Idaho State Constitution, 2013 Edition; Constitution of the State of Washington, Revised 01-12-11 and, to a lesser extent the Zoning and Comprehensive Plan documents for Whitman County and Latah County, respectively.



Table 33: Noted Legal Constraints for Regional Municipal Government Agencies

Recommended Action	City of Pullman	City of Moscow	Whitman County	Latah County
Priority Land Set Asides <sup>3</sup>	~	~	~	~
Cost Reduction Program <sup>4</sup>	~	~	~	~
Construction Loan Guarantee Program <sup>5</sup>	~	~	~	~
Land Cost Reduction <sup>6</sup>	~	~	~	~
Priority Incentives <sup>7</sup>				
Attainable Housing Builders' Toolkit				
Student Housing Districting <sup>8</sup>				
Rural Housing Transition Zones				
Grants, Sponsorships & Incentive Programs				
Clarity in Development Standards				
Increased Use of the Land Trust Model				
Development of Skilled Labor				

<sup>3</sup> Technically possible for each multiplicity but requires ability to purchase land at market value or acquire through the property auction process.

<sup>&</sup>lt;sup>4</sup> In both Washington and Idaho, fee reduction is legal but reduction of tax burden is less clear.

<sup>&</sup>lt;sup>5</sup> In both Washington and Idaho, state entities cannot take on debt from private parties, however, this program could be achieved through partnership with an intermediary, such as a credit union, foundation or other such entity.

<sup>&</sup>lt;sup>6</sup> In both Washington and Idaho, city and local government has limited ability to provided preferred cost sales to private sellers; however, they are permitted to provide a decrease in cost via a tax credit if land is purchased for the purpose of housing.

<sup>&</sup>lt;sup>7</sup> There are many forms of incentives that are at the discretion of the Departments of Commerce, and local County Commissioners.

<sup>&</sup>lt;sup>8</sup> Local government cannot and should not discriminate against renters or homeowners based on status as college students. This recommendation can be achieved through overlay zoning that incentivizes college students to live in a given area.



## **APPENDIX D: ENDNOTES**

- <sup>1</sup> Community Needs Assessment Survey, sponsored by Innovia Foundation, Whitman County Health Network, Lewis Clark Valley Healthcare Foundation and additional funders. For more information, and survey results, see: <a href="https://inlandnorthwestinsights.org/community-survey/">https://inlandnorthwestinsights.org/community-survey/</a>"
- <sup>2</sup> United Way Research Center, State and County Reports: https://www.unitedforalice.org/all-reports
- <sup>3</sup> Sperling's Best Places, Cost of Living Comparison Tool, https://www.bestplaces.net/cost-of-living/.
- <sup>4</sup> U.S. Census Bureau, Characteristics of New Housing, 2018.
- <sup>5</sup> Federal Housing Finance Association (FHA), House Price Index,

https://www.fhfa.gov/PolicyProgramsResearch/Research/Pages/wp1601.aspx.

- <sup>6</sup> As defined by the Department of Housing and Urban Development cost-burdened households are those that pay 30% or greater of household income toward housing, either rental-occupied or owner-occupied.
- <sup>7</sup> Headwaters Economics 2018, "A Profile of Public Land Amenities" Latah County and Whitman County,
- <sup>8</sup> Lisa Sturtevant PhD, "A Guidebook for Increasing Housing Affordability in the Greater Washington Region," 2017. http://docs.wixstatic.com/ugd/06af46 0268b7d74a0a40ec88b5a7cfaa11333f.pdf
- <sup>9</sup> Harris, Jonathan. "County Planning, Land Use and Zoning Strategies for Affordable Housing." *National Association of Counties*, 24 Sep. 2018, naco.org/resources/featured/planning-ahead-county-planning-land-use-zoning-strategies-affordable-housing#go. Accessed 13 Aug. 2019.

  <sup>10</sup> Ibid.
- <sup>11</sup> "Director's Report Appendix C: Rezone Analysis." *Seattle Office of Planning & Community Development*, 25 May 2016, <a href="http://www.seattle.gov/dpd/cs/groups/pan/@pan/documents/web">http://www.seattle.gov/dpd/cs/groups/pan/@pan/documents/web</a> informational/p2439410.pdf
- <sup>12</sup> National Association of Counties, Harris.
- <sup>13</sup> Cabeza, Garrett. "Whitman County commissioners aim to expand affordable housing options without raising taxes." Moscow-Pullman Daily News, <a href="https://dnews.com/local/whitman-county-affordable-housing-discussed/article">https://dnews.com/local/whitman-county-affordable-housing-discussed/article</a> 8d48173a-be1a-5dee-8fef-a600af5dc751.html. Accessed 12 August 2019.
- <sup>14</sup> Evergreen Land Trust (2019). Retrieved from: http://www.evergreenlandtrust.org/.
- <sup>15</sup> Northern California Land Trust (2019). Retrieved from: https://nclt.org/.
- <sup>16</sup> Durham Community Land Trusts (2019). Retrieved from: https://www.dclt.org/.
- <sup>17</sup> University of Utah, Income Share Agreements, <a href="https://isa.utah.edu/">https://isa.utah.edu/</a>. And, Abigail Hess, "San Diego's new incomeshare program wants to help students go back to school now, pay later", CNBC Make It,

https://www.cnbc.com/2019/05/17/san-diego-launches-isa-program-with-the-help-of-donors-like-google.html.

- <sup>18</sup> City of Moscow, Idaho, 2018 Citizen Survey, https://www.ci.moscow.id.us/ArchiveCenter/ViewFile/Item/334.
- <sup>19</sup> Sizes according to the following report: Ducker, Adam, Kelly Mangold, and Lorry Lynn. *Attainable Housing: Challenges, Perceptions, and Solutions*. Washington, DC: Urban Land Institute, 2019.
- <sup>20</sup> Ross Chapin projects: <a href="https://rosschapin.com/projects/pocket-neighborhoods/">https://rosschapin.com/projects/pocket-neighborhoods/</a>
- <sup>21</sup> Agritopia: <a href="http://agritopia.com/">http://agritopia.com/</a>
- <sup>22</sup> Serenbe: <a href="https://serenbe.com/">https://serenbe.com/</a>
- <sup>23</sup> Latah County Land Use Ordinance #269,

https://api.latah.id.us/web/DownloadFile?filename=PlanningBuilding\Ordinances\Land%20Use%20Ordinance.pdf . Whitman County Zoning, Title 19, http://www.whitmancounty.org/Commis%5Clndex Pages/PDF Files/County%20Code 2009/T19%20-%20Title%2019%20%20ZONING.pdf.

- <sup>24</sup> William Spence, June 4, 2019, "Moscow council OKs 'tiny homes'" <a href="https://lmtribune.com/northwest/moscow-council-oks-tiny-homes/article">https://lmtribune.com/northwest/moscow-council-oks-tiny-homes/article</a> 00d8c092-72a6-51ea-91cf-491d6f22c1a3.html
- <sup>25</sup> Quixote Communities: <a href="http://www.quixotecommunities.org/">http://www.quixotecommunities.org/</a>
- <sup>26</sup> Escalante Village: <a href="https://www.escalantevillage.com/">https://www.escalantevillage.com/</a>
- <sup>27</sup> Delta Bay Waterfront Resort: <a href="http://deltabay.org/">http://deltabay.org/</a>
- <sup>28</sup> U.S. Department of Housing and Urban Development, June, 2008, "Accessory Dwelling Units: Case Study" <a href="https://www.huduser.gov/portal/publications/adu.pdf">https://www.huduser.gov/portal/publications/adu.pdf</a>



- <sup>29</sup> Amy Edelen, "Pullman Airbnb operator claims city short-term rental codes or lack thereof forced her to cancel \$35K in reservations", Spokesman Review: <a href="http://www.spokesman.com/stories/2019/mar/02/pullman-airbnb-operator-claims-city-short-term-ren/">http://www.spokesman.com/stories/2019/mar/02/pullman-airbnb-operator-claims-city-short-term-ren/</a>.
- <sup>30</sup> Fryer, Alex. *King County Press Office*. 21 Aug. 2018, https://kingcounty.gov/elected/executive/constantine/news/release/2018/August/21-modular-homeless.aspx
- <sup>31</sup> Some modular companies that supply the area include Indie Dwell, Stout Homes, True Built Home, Method Homes, and Design Space Modular Buildings.
- <sup>32</sup> BRB Homes: <a href="https://bblivingresidential.com/">https://bblivingresidential.com/</a>
- <sup>33</sup> Emsi, Demographics, 2019.3.
- <sup>34</sup>U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates, Table S0101: Age & Sex. Secondary cities analyzed include Colfax, Genesee, Palouse, Troy, Potlatch, Garfield, and Uniontown.
- <sup>35</sup> Annual estimates were modeled using data from the 2000 Decennial Census, the 2010 Decennial Census, the American Community Survey, and building permit data from Pullman, Moscow, and the U.S. Census Building Permit Survey. Estimated year over year changes, with the exception of mobile home units, are consistent with building permit data. Estimates from 2010 may differ slightly from 2010 census figures based on harmonizing building permit, 2000 Census, and ACS 5-Year estimates.
- <sup>36</sup> Building Permit data from U.S. Census Bureau Building Permits Survey: 2006-2017.
- <sup>37</sup> Annual estimates for each region were modeled using data from the U.S. Census Bureau's American Community Survey. For 2006-2012, 3-Year Estimates were utilized. For 2014-2016, 1-Year Estimates were utilized. 2013 estimates were interpolated based on neighboring years' data.
- <sup>38</sup> Chung Hong Fu, PhD, "Do Millennials Want to Buy Single Family Homes?" Timberland Investment Resources, January 2016. <a href="https://lnzy1a2az6m43b6rbr2f9hib-wpengine.netdna-ssl.com/wp-content/uploads/2012/11/Are-Millennials-Creating-a-Structural-Shift-in-the-Housing-Market-2016-01-19.pdf">https://lnzy1a2az6m43b6rbr2f9hib-wpengine.netdna-ssl.com/wp-content/uploads/2012/11/Are-Millennials-Creating-a-Structural-Shift-in-the-Housing-Market-2016-01-19.pdf</a>
- <sup>39</sup> U.S. Census. Housing Definitions and Explanations. https://www.census.gov/housing/hvs/definitions.pdf
- <sup>40</sup> Palouse Commercial Real Estate. (2017). Market Review 2016.
- <sup>41</sup> Palouse Commercial Real Estate. (2019). 2018 Market Review.
- 42 Ibid.
- <sup>43</sup> Sections of this report that rely upon ACS estimates may differ slightly from overall housing unit projections. Contrary to TPMA's model of total housing units, ACS estimates may demonstrate more year to year variability. However, they are included here because they provide details that cannot be estimated from other sources.
- <sup>44</sup> Washington State University, Fall Enrollment Statistics, Institutional Research Office. And University of Idaho, Enrollments, Institutional Effectiveness and Accreditation.
- <sup>45</sup> U.S. Census Bureau (2017). Based on mid-points of ACS 5-Year, from 2009 through 2017.
- <sup>46</sup> Annual estimates for each region were modeled using data from the U.S. Census Bureau's American Community Survey. For 2006-2012, 3-Year Estimates were utilized. For 2013-2016, 5-Year Estimates were utilized. 2016 estimates were extrapolated based on prior years' data.
- <sup>47</sup> Annual estimates for each region were modeled using data from the U.S. Census Bureau's American Community Survey. For 2006-2012, 3-Year Estimates were utilized. For 2014-2016, 1-Year Estimates were utilized. 2013 estimates were interpolated based on neighboring years' data.
- <sup>48</sup> U.S. Census Bureau. (2017). ACS 5-Year Estimates
- 49 Ibid.
- <sup>50</sup> Latah County is in the top 15% and Whitman County is in the top 21%. Calculated based upon the FHFA's Housing Price Index Database, with 2000 as the base year. <a href="https://www.fhfa.gov/">https://www.fhfa.gov/</a>
- <sup>51</sup> U.S. Census Bureau (2017). 2013-2017 ACS 5-Year Estimates. Gross rent is contract rent expenses plus the average monthly cost of utilities (electric, gas, water, and sewer) and fuels (oil, coal, kerosene, wood, etc.)
- https://www.census.gov/quickfacts/fact/note/US/HSG860217. Monthly owner costs include payment for mortgages, real estate taxes, insurance, utilities, fuels, mobile home costs, and condominium fees.

https://www.census.gov/quickfacts/fact/note/US/HSG651217

<sup>52</sup> HUD. (2018). Affordable Housing. Accessed at:

https://www.hud.gov/program offices/comm planning/affordablehousing/



- <sup>53</sup> U.S. Census Bureau (2017). 2013-2017 ACS 5-Year Estimates.
- 54 Ibid.
- 55 Ibid.
- <sup>56</sup> Department of Housing and Urban Development. (2019). Office of Policy Development & Research. & USDA Rural Development Program (2018). Rural Development Datasets.
- <sup>57</sup> This 11,932 total likely includes some students. However, there are only 7,452 households in the region that are headed by persons under 25, and 12.8% of those make more than \$45,000 a year—meaning they are unlikely to be cost-burdened.
- <sup>58</sup> CAC Whitman. (2019). Section 8 Housing. <u>www.cacwhitman.org/section-8-housing</u>
- <sup>59</sup> Department of Housing and Urban Development. (2017). Point in Time Count Data.
- <sup>60</sup> Bill Belknap, 2019 City of Moscow Community Development Department Report, June 14, 2019.
- <sup>61</sup> Pete Dickinson, Pullman Development Update, June 14, 2019.
- <sup>62</sup> Population by age data is from Economic Modeling Specialists International 2018.4.
- 63 Population projections by age is from Economic Modeling Specialists International 2018.4
- <sup>64</sup> https://www.uidaho.edu/provost/iea/institutional-data/enrollments; https://ir.wsu.edu/documents/2018/01/pullman-enrollment-statistics-fall-2012-fall-2017.xls/.
- <sup>65</sup> Median household income data is from U.S. Census Bureau, American Community Survey. Data for 2014-2016 is from 1-year estimates, while data for 2007-2013 is from 3-year estimates. Estimates were converted to 2016 dollars using the Consumer Price Index (CPI-U-RS) from the Bureau of Labor Statistics.
- <sup>66</sup> Washington State Department of Labor and Industries, "History of the Washington Minimum Wage." <a href="https://www.lni.wa.gov/WorkplaceRights/Wages/Minimum/History/default.asp">https://www.lni.wa.gov/WorkplaceRights/Wages/Minimum/History/default.asp</a>.
- <sup>67</sup> Data for the percentage of households by income is from is from the U.S. Census Bureau, American Community Survey, 2016, 1-year estimates.
- <sup>68</sup> U.S. Census Bureau. American Community Survey, 2016, 5-year estimates.
- <sup>69</sup> Bishaw, Alemayehu. "Examining the Effect of Off-Campus College Students on Poverty Rates." U.S. Census Bureau, Social, Economic & Housing Statistics Division, Poverty Statistics Branch, 2013.
- <sup>70</sup> Data on household size is from U.S. Census Bureau, American Community Survey, 5-year estimates.
- <sup>71</sup> Data on percent of households by size and geography is from U.S. Census Bureau, American Community Survey, 5-year estimates.
- <sup>72</sup> Data for educational attainment is from U.S. Census Bureau, American Community Survey, 5-year estimates.
- <sup>73</sup> Jun, Hee-Jung & A. Morrow-Jones, Hazel. (2011). Residential Density and Location Decisions: The Factors Affecting Homeowners' Choice of Denser Neighborhoods. Housing and Society: Journal of the Housing Education and Research Association. 38. 10.1080/08882746.2011.11430593.
- <sup>74</sup> Data on labor force participation is from U.S. Census Bureau, American Community Survey, 1-year estimates.
- <sup>75</sup> Employment data is from Economic Modeling Specialists International 2018.4.
- <sup>76</sup> U.S. Census Bureau, American Community Survey, County-to-County Migration Flows, 2012-2016.
- <sup>77</sup> Data on commuting patterns if from U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics, 2015.
- <sup>78</sup> Demographic data is from U.S. Census Bureau, American Community Survey, 2012-2016 Estimates.
- <sup>79</sup> Whereas prior analysis focused on 2-digit North American Industrial Classification (NAICS) codes, this section focuses on the more detailed 6-digit NAICS codes.
- 80 Emsi, 2018.4
- 81 Ibid.
- <sup>82</sup> Ibid. Data for businesses with multiple locations is aggregated into one business where possible. In some cases, employer names do not allow for easy identification of multiple locations of a single business and can lead to a lower approximate employment than expected. Updated employment estimates for some employers are from the Moscow Comprehensive Plan: <a href="https://www.ci.moscow.id.us/DocumentCenter/View/609/Chapter-6---Economic-Development-PDF">https://www.ci.moscow.id.us/DocumentCenter/View/609/Chapter-6---Economic-Development-PDF</a> and the Pullman Chamber of Commerce: <a href="https://pullmanchamber.com/live-in-pullman/10-reasons-to-live-in-pullman/business-environment/">https://pullmanchamber.com/live-in-pullman/10-reasons-to-live-in-pullman/business-environment/</a>



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- $^{145}$  Code only mentions gross floor area with no reference to square footage of lots.
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- <sup>148</sup> Lots may be as small as one-half acre as long as the short plat ratio of at least five acres per residence is maintained, or the long plat ratio of at least ten acres per residence is maintained.