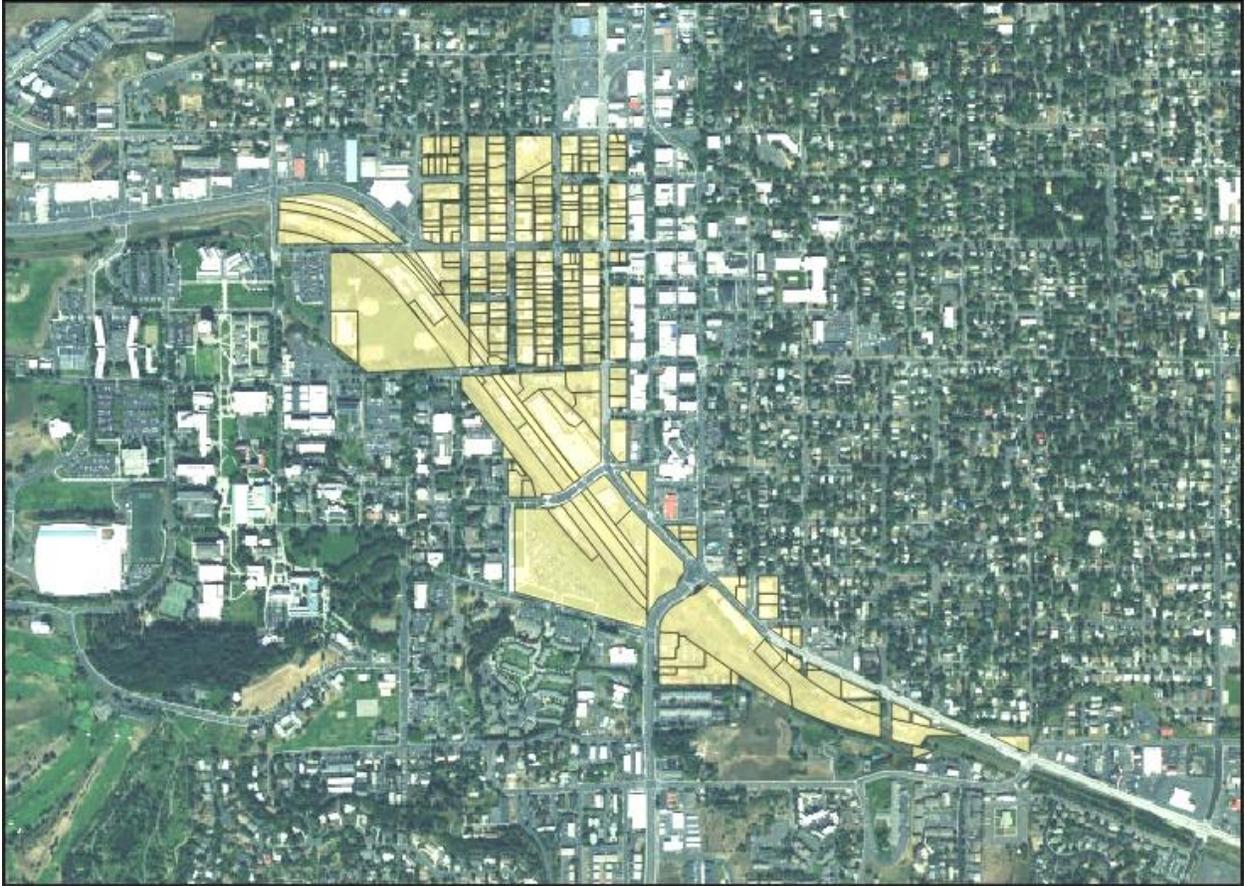




**JOHNSON
ECONOMICS**



**MARKET ANALYSIS FOR
LEGACY CROSSING URBAN RENEWAL DISTRICT,
MOSCOW, IDAHO**

**PREPARED FOR
THE CITY OF MOSCOW,
FEBRUARY 2015**



TABLE OF CONTENTS

I. INTRODUCTION	1
II. ECONOMIC TRENDS AND CONDITIONS.....	2
THE NATIONAL ECONOMY	2
THE LOCAL ECONOMY.....	4
LOCAL DEMOGRAPHIC TRENDS	10
III. RESIDENTIAL MARKET ANALYSIS	16
RENTAL APARTMENTS.....	16
OWNERSHIP HOUSING	25
IV. COMMERCIAL MARKET ANALYSIS	31
RETAIL SPACE	31
OFFICE SPACE.....	38
V. CONCLUSION - MARKET OPPORTUNITIES	43
SEGMENTS WITH DEMAND FOR UPSCALE, URBAN APARTMENTS	43
SITES WITH APARTMENT POTENTIAL	44
MIXED-USE EXAMPLES	45
VI. DEVELOPMENT / REDEVELOPMENT POTENTIAL	47
METHODOLOGY.....	47
FINDINGS	52
A. APPENDIX - PROJECTIONS	56
UNIVERSITY ENROLLMENT AND STUDENT HOUSING DEMAND.....	56
EMPLOYMENT GROWTH.....	57
RESIDENTIAL DEMAND	58
COMMERCIAL DEMAND.....	62
B. APPENDIX – RESIDUAL LAND VALUE CALCULATIONS.....	66

JOHNSON ECONOMICS, LLC

621 SW Alder, Suite 605
Portland, Oregon 97205



I. INTRODUCTION

JOHNSON ECONOMICS was retained by the City of Moscow to evaluate development opportunities within the Legacy Crossing Urban Renewal District across a number of different land use types, including retail, office and residential uses. The main components of this analysis are:

- 1) Inspection and evaluation of the study area with respect to competitive market position for the respective land use types.
- 2) Evaluation of relevant current and projected economic and demographic trends.
- 3) Evaluation of current market conditions and trends for the respective use types.
- 4) Evaluation of current and projected demand for the respective use types in light of market conditions and economic and demographic trends.
- 5) Evaluation of achievable market pricing for the respective use types.
- 6) Assessment of the redevelopment potential within the study area, including an identification of sites, use types and product types with development potential over the near- to mid-term.

This report summarizes the findings and conclusions of our market analysis.



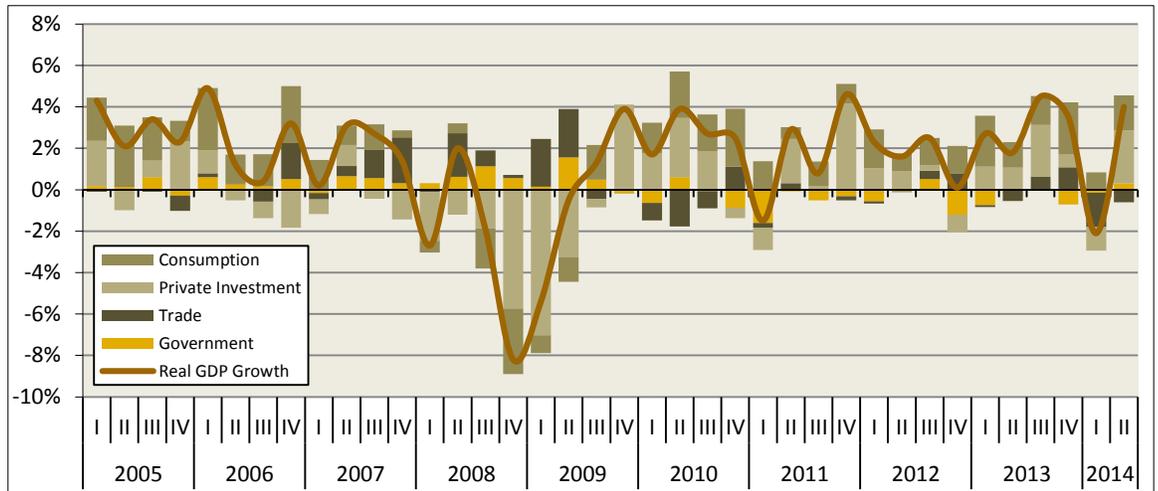
II. ECONOMIC TRENDS AND CONDITIONS

THE NATIONAL ECONOMY

Economic Output

The national economy appears to have recovered from the “Great Recession.” If we ignore the weather-related contraction in the first quarter of 2014, the economy has expanded at healthy rates over the past twelve months. In the second half of 2013 the expansion was 3.4% (annualized), and the growth rate in the second quarter of 2014 was 4.0%, according to preliminary BEA estimates. Private consumption has been the primary driver of growth since the recession, with particularly strong demand for durable goods. Over the last two years, significant contributions have also come from private investment, both in the form of home purchases and corporate investments.

FIGURE 3.1: CONTRIBUTIONS TO CHANGE IN REAL GROSS DOMESTIC PRODUCT, ANNUALIZED (2005 – 2013)



SOURCE: Bureau of Economic Analysis

Though there are signs of strength, the economy faces several headwinds. Domestic demand is still tempered by post-recession caution, both among households and firms, and the government is cutting spending to ensure that it can handle the fiscal challenge represented by aging baby boomers. Further, continued weakness in Europe, Asia and South America translates to low global demand for U.S. goods. All these factors put a drag on employment growth, which in turn restrains consumer spending. This is particularly evident in the service sector, which has expanded by only one percent in each of the last two years.

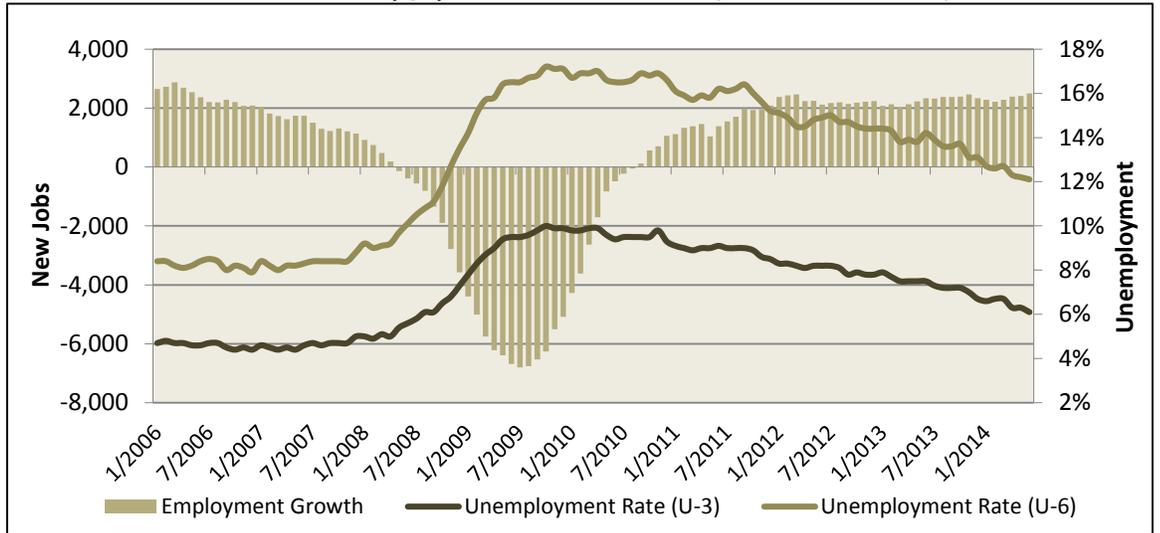
Over the near term, growth is expected to be driven primarily by domestic consumers and firms. U.S. firms have recently shown optimism by boosting their inventory levels and increasing their borrowing. If this optimism persists, hiring and corporate investment might be stronger in the near future. Most predictions for 2014 GDP growth currently hover around 2.5%, while 2015 is expected to see growth around 3%. In the long run, annual economic growth is expected to fluctuate around 2%.

Employment

The “Great Recession” eliminated over 8.7 million jobs in the U.S., pushing up the unemployment rate to 10% at its peak. It has taken nearly five years to recover these jobs and bring the unemployment rate – currently at 6.1% – down below its historical average (6.2%). However, the U-6 unemployment rate, which also takes into account workers who are underemployed or who have left the labor market in discouragement, is still high at 12.1%.



FIGURE 3.2: EMPLOYMENT GROWTH (Y/Y) AND UNEMPLOYMENT RATES, SEASONALLY ADJUSTED, UNITED STATES

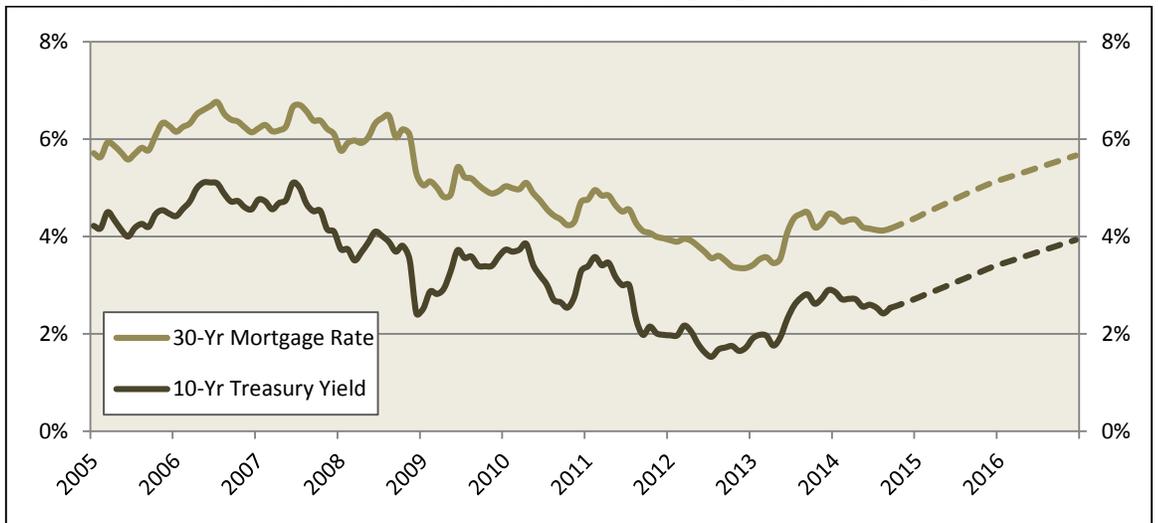


SOURCE: U.S. Bureau of Labor Statistics

Inflation, Monetary Policy, and Interest Rates

Inflation has remained subdued since the recession, reflecting the combination of weak global demand for commodities and tepid domestic wage growth. Though there have been signs of increasing domestic wage growth recently, the global outlook is still quite dim, with weakness in China and a Europe dangerously close to deflation. With the Federal Reserve having unwound its stimulative bond buying program and ready to raise short-term interest rates, it is therefore unlikely that inflation will move significantly above the Fed’s 2% target. At the present, the Fed is expected to begin to raise interest rates cautiously in mid- or late 2015. Most economists expect long-term interest rates to climb by around 35 to 50 basis points in each of the next two years.

FIGURE 3.3: INTEREST RATES ON MORTGAGES AND 10-YEAR TREASURY NOTES



SOURCE: Federal Reserve Bank of Philadelphia, Freddie Mac, Johnson Economics



Risks of a New Recession

Historically, business cycles last about eight years on average, from peak to peak. In terms of GDP growth, the last peak was reached in 2004, and the bottom was hit in 2009. One might therefore think that we should be due for another downturn in the very near future. However, this cycle has been anomalous in many ways, not the least in terms of job recovery. And so far, there are few signs that the economy is getting ahead of itself with over-leveraging and inflated asset prices. There are, however, threats to the U.S. economy from overseas. China, in particular, is a cause of some concern due to its high debt levels and risky investments. With its scale, China could trigger a global recession. However, it has the resources and political will to postpone a crisis for several years. Europe has also been a source of concern recently due to a decline in inflation. If prices across the continent begin to fall, it could have a paralyzing effect on the economy, with ripple effects reaching the United States. With the current momentum in the U.S. economy, these threats are in the near term more likely to cause a deceleration than a recession. If they did cause a recession, it is likely to be shorter and shallower than the previous one.

THE LOCAL ECONOMY

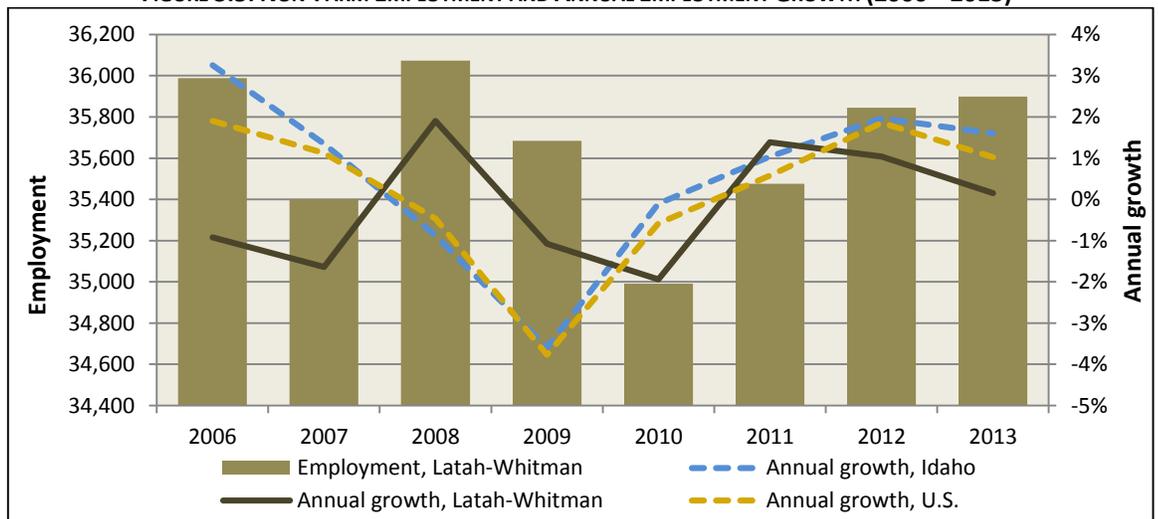
The economic activity of Moscow is intertwined with that of Pullman, Washington. Together, the two cities form the commercial hub for a large agricultural area and a number of smaller cities in the Palouse region. This overview will therefore look at wider trends in Latah and Whitman Counties as well as more specific trends within the City of Moscow. Employment data is only available at the county level.

Both Moscow and Pullman are home to large land-grant universities: University of Idaho in Moscow and Washington State University in Pullman. Students account for more than 40% of the total population of the combined Latah-Whitman region, and the universities employ more than one-fourth of the workforce. Aside from the reliance on the universities, the two counties reflect typical rural economies, with a large agricultural sector and relatively small financial, information, and professional services industries.

Employment

University and agriculture employment helped limit job losses in the Latah-Whitman region in the most recent downturn. However, like many other parts of Idaho and rural America, the region has seen only weak employment growth since, and the region has not yet regained the jobs it lost in the downturn. The region is currently on a weak trend, with flat growth in 2013 and a decline of 1.6% (Y/Y) so far in 2014.

FIGURE 3.5: NON-FARM EMPLOYMENT AND ANNUAL EMPLOYMENT GROWTH (2006 – 2013)

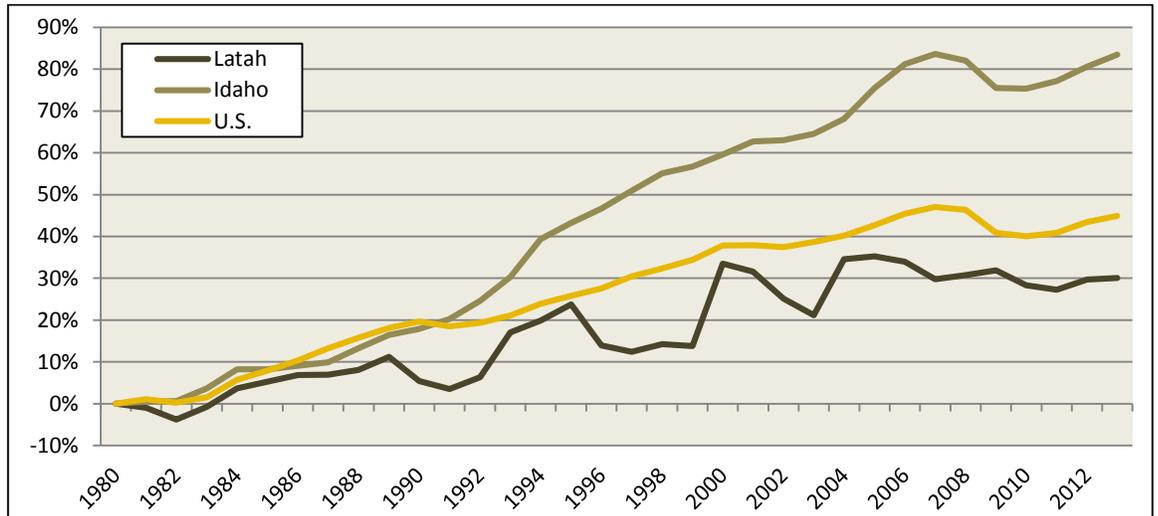


SOURCE: Washington State Employment Security Department (WAESD), Idaho Department of Labor



Despite relatively stable employment in recent years, the Latah-Whitman region has historically been quite volatile. This is not uncommon for small economies with a narrow economic base. The volatility can be seen in the following chart, which compares growth in Latah, Idaho, and the U.S. since 1980. The chart also shows that local employment growth has underperformed these wider geographies. Weak and unpredictable growth can create a difficult environment for real estate investments and development.

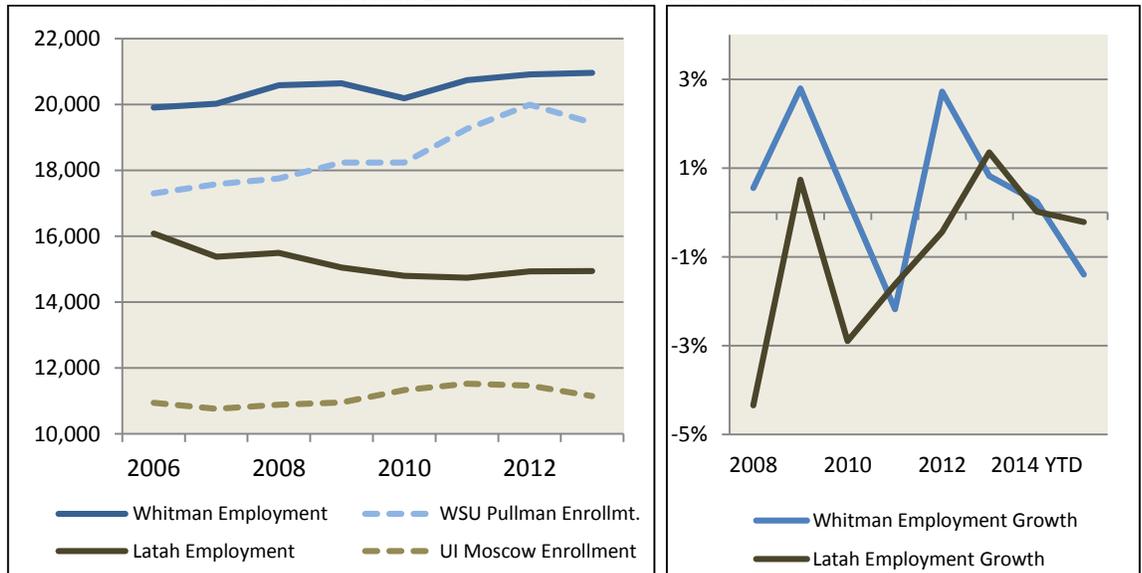
FIGURE 3.6: NON-FARM EMPLOYMENT GROWTH SINCE 1980



SOURCE: Idaho Department of Labor

Whitman County has experienced stronger growth than Latah County in recent years. This is in large part due to stronger university enrollment, reflecting that demand from students for goods and services have ripple effects in the wider economy. The following charts show employment and on-campus university enrollment in the two counties, illustrating the importance of enrollment.

FIGURE 3.7: NON-FARM EMPLOYMENT AND ON-CAMPUS UNIVERSITY ENROLLMENT



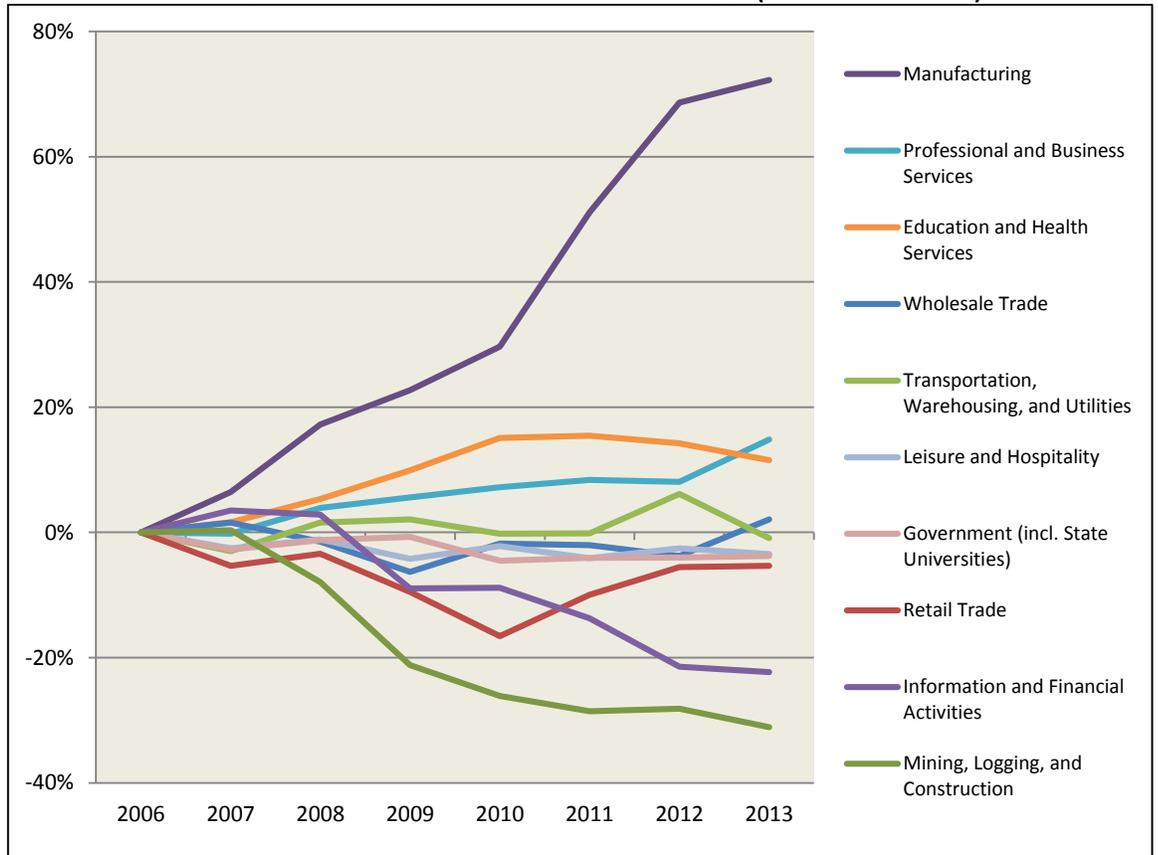
SOURCE: WAESD, Idaho Department of Labor, City of Moscow



Employment by Industry

The manufacturing sector has been the bright spot in recent years, growing from 1,600 to 2,800 jobs between 2006 and 2013. Schweitzer Engineering in Pullman has been the major driver of this growth. Besides manufacturing, the two national growth industries, health and professional services, have also contributed new jobs, though at a slower pace than nationally. Construction has been the laggard. The uptick in construction employment seen elsewhere in the nation over the last two years has been absent in the Latah-Whitman region.

FIGURE 3.7: EMPLOYMENT GROWTH BY INDUSTRY SINCE 2006 (LATAH AND WHITMAN)

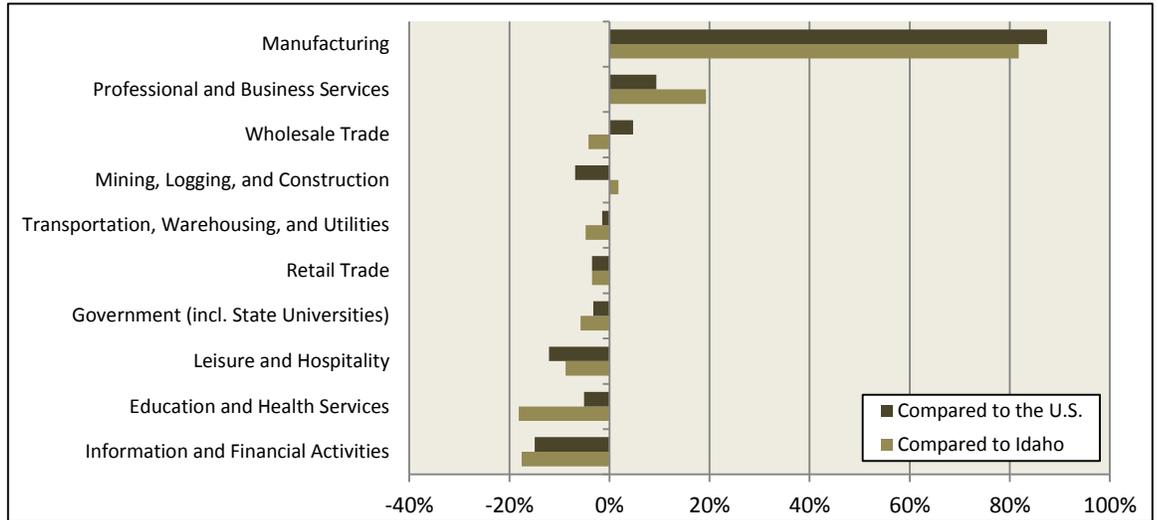


SOURCE: WAESD, Idaho Department of Labor

The following chart displays Latah-Whitman’s industry growth compared to Idaho and the United States. Aside from the strong growth in manufacturing, Latah-Whitman has outperformed state and national trends in the professional services sector. Most of the gain in this industry came in 2013, when Latah County alone added around 70 professional services jobs – most of them related to the expansion of Economic Modeling Specialists after its purchase by CareerBuilder. Information and financial services have been the weakest industries relative to state and national trends. These industries are undergoing consolidation and a shift to digital and online content. So far, the region has not succeeded in capturing the new software jobs created in these two industries. Latah County saw a particularly severe loss in the financial industry in 2013, when it lost 38 jobs (9% of the industry), mostly within the insurance sector.



FIGURE 3.8: EMPLOYMENT SHARE-SHIFT SINCE 2006



SOURCE: WAESD, Idaho Dept. of Labor, U.S. Bureau of Labor Statistics

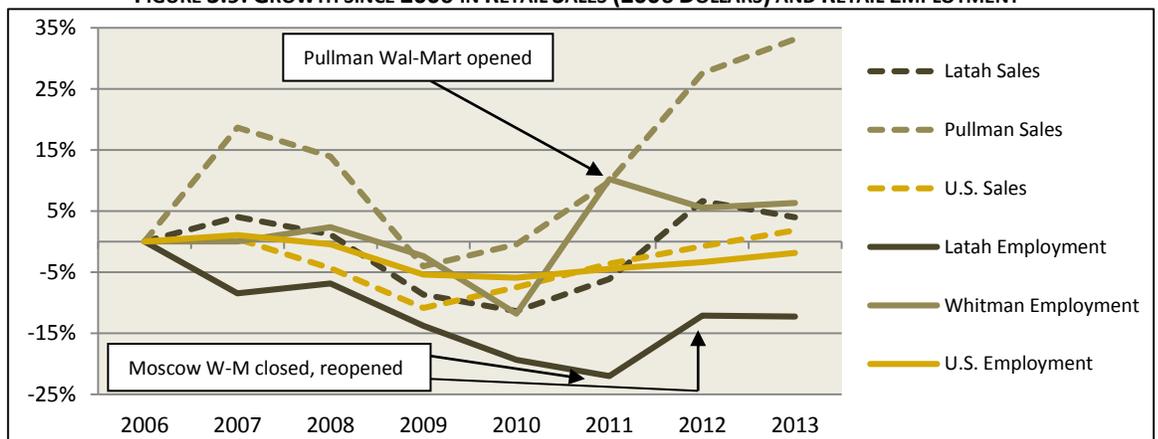
Retail Employment

Retail employment is of particular interest in this study. The retail sector has been weak nationwide after the downturn, reflecting tepid wage growth and cautious use of credit. Brick-and-mortar stores have been the hardest hit, as they continue to cede market share to online competitors. In the nation as whole, gross sales returned to 2007 peak levels in early 2013. However, retail employment has not yet reached pre-recession levels, as self-service scanners and websites increasingly replace in-store sales personnel.

Latah owns a disproportionate share of the Latah-Whitman retail market, as it employs roughly 40% more retail workers than Whitman, despite having a smaller population and workforce. Some retail employment has migrated from Latah to Whitman in recent years, in particular due to Wal-Mart closing its Moscow store and opening a Pullman store in late 2010. It reopened its Moscow store in 2012, causing some employment to flow back into Whitman.

The Pullman Wal-Mart store, combined with strong WSU enrollment, has fueled a strong sales rebound in Whitman, and the county currently employs 6% more retail workers than in 2006. The rebound has been more muted in Latah, which has seen a decline of 12% in retail employment over this period (figure 3.9).

FIGURE 3.9: GROWTH SINCE 2006 IN RETAIL SALES (2006 DOLLARS) AND RETAIL EMPLOYMENT

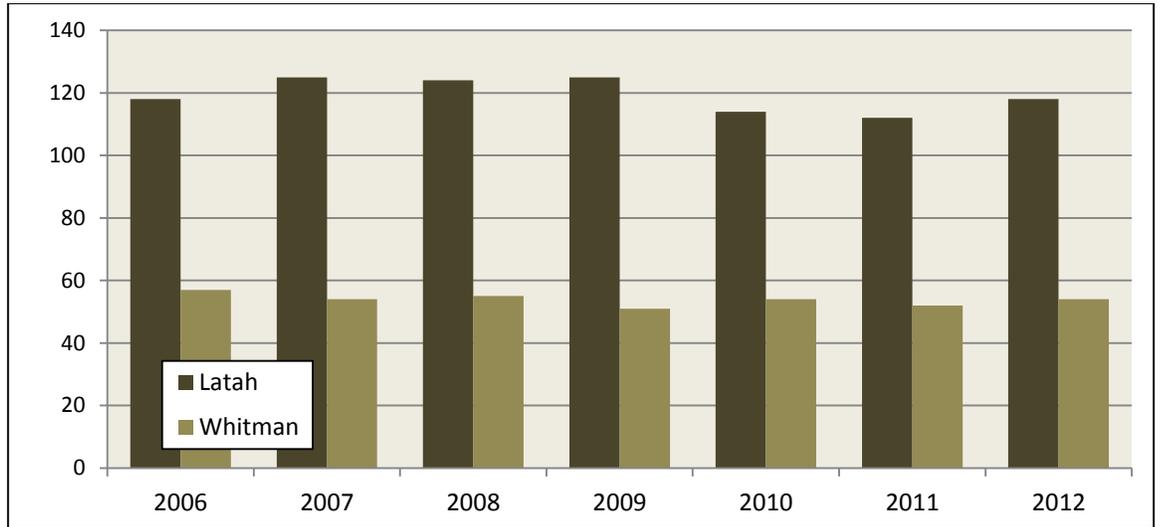


SOURCE: WAESD, Idaho Dept. of Labor, Idaho Tax Commission, WA Dept. of Revenue, U.S. Dept. of Commerce



The smaller retailers in the Latah-Whitman area do not appear to have participated in the local sales rebound to the degree that Wal-Mart has. If we look at the number of retail establishments rather than the number of employees, there has been a decline in Latah since the downturn, while Whitman has remained stable. (Data on establishments is only available through 2012.)

FIGURE 3.10: RETAIL ESTABLISHMENTS (2006 – 2012)

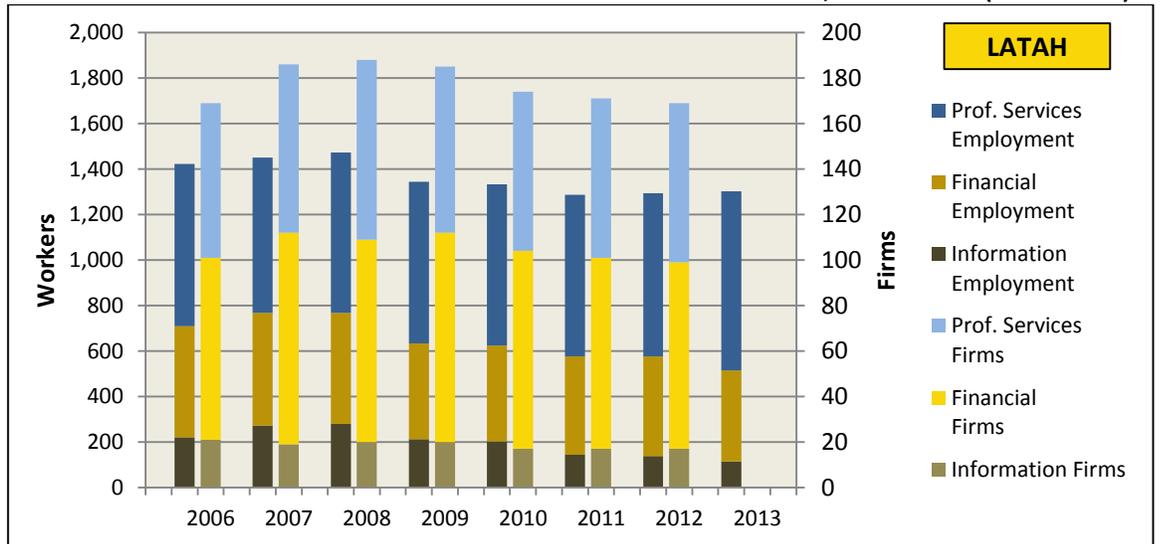


SOURCE: U.S. Census Bureau

Office Employment

Employment in the typical office industries has also been weak. Within Latah County, the combined number of workers in the information, financial, and professional/business services industries has been flat since 2011. Expansion at Economic Modeling Specialists has made up for payroll declines at many other firms. The total number of establishments continued to decline through 2012, with a total loss of 20 firms since 2008.

FIGURE 3.11: EMPLOYMENT AND ESTABLISHMENTS WITHIN MAJOR OFFICE INDUSTRIES, LATAH COUNTY (2006 – 2013)

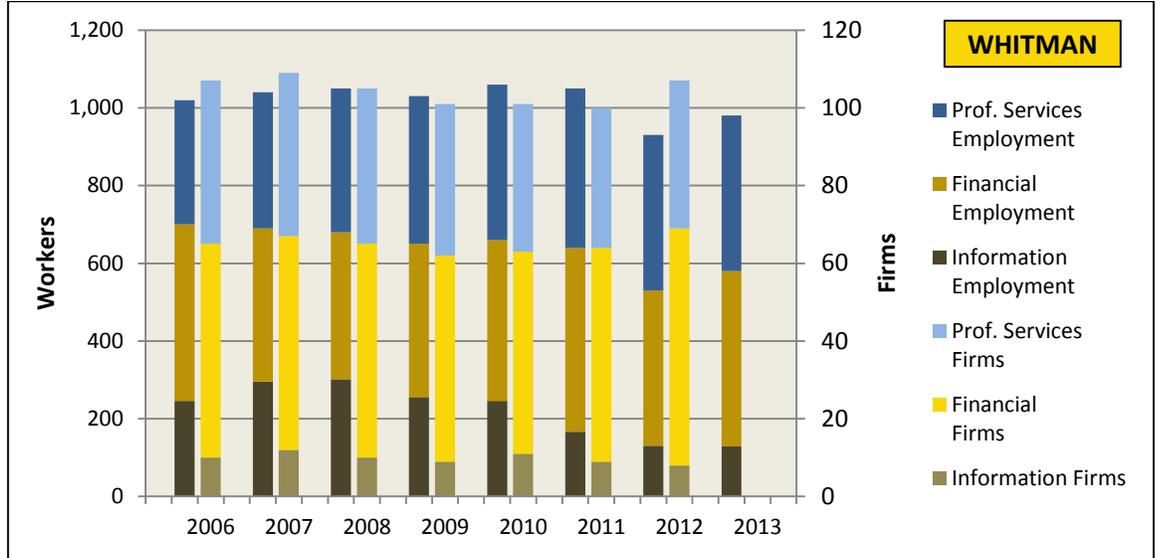


SOURCE: Idaho Department of Labor, U.S. Census Bureau



The enrollment growth experienced at WSU Pullman appears to have had limited impact on the major office industries in Whitman, although it likely staved off some layoffs and shut-downs that otherwise might have taken place. Eight firms closed their doors between 2007 and 2008, but employment was relatively stable until 2012, when major job losses came in the financial sector. The gain in the number of establishments in 2012 came among small financial firms, perhaps because some laid-off workers started on their own.

FIGURE 3.12: EMPLOYMENT AND ESTABLISHMENTS WITHIN MAJOR OFFICE INDUSTRIES, WHITMAN COUNTY (2006-2013)

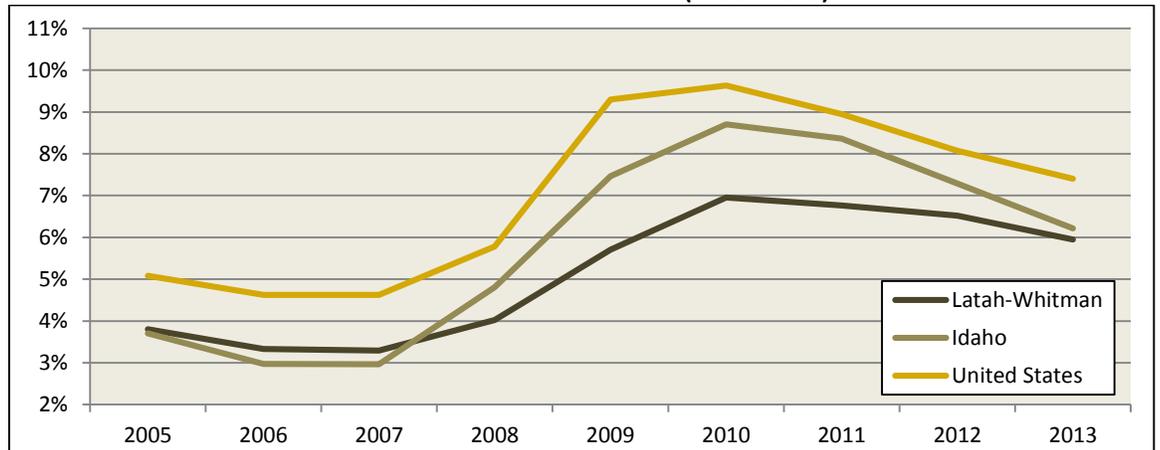


SOURCE: WAESD, U.S. Census Bureau

Unemployment

Latah-Whitman has historically had unemployment well below state and national averages. However, in recent years, the local unemployment rate has hovered near the state average. Due to the recent weak employment growth, the Latah-Whitman unemployment rate has declined at a slower pace than national and state rates following the downturn. Estimates for mid-2014 indicate that Idaho’s unemployment rate (4.7%) currently is half a percentage point below that of Latah-Whitman (5.2%).

FIGURE 3.13: UNEMPLOYMENT RATE (2005 – 2013)



SOURCE: Washington State Employment Security Department, Idaho Department of Labor



Unemployment impacts real estate markets in several ways. When the local unemployment rate is higher than in nearby markets, some workers are likely to move to where firms are offering more jobs and higher wages. This has a direct negative impact on residential and retail markets. Office and industrial markets do not necessarily see a negative impact, as firms that are looking to expand or relocate will often prefer areas with good access to inexpensive labor, providing other resources are also available. However, firms that are dependent on attracting skilled labor from outside the market will often consider the prospects of employment for spouses of their employees, and such firms may find that markets with lower unemployment and higher wages offer better prospects overall.

Wages

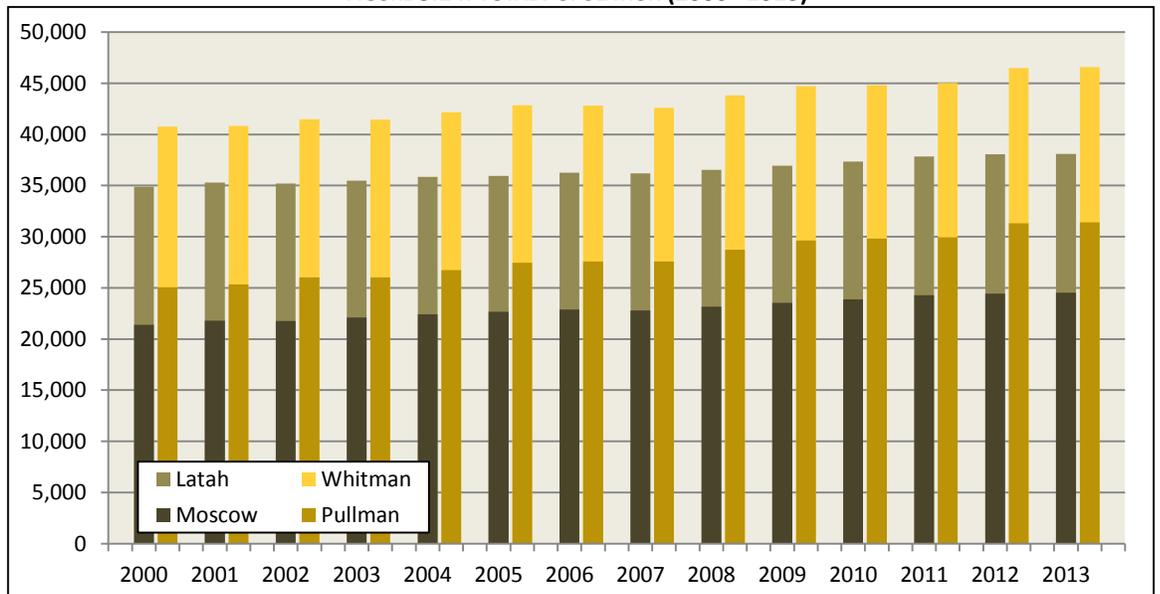
Wages in Latah and Whitman are well below state averages. The 2013 average was \$31,900 in Latah and \$40,800 in Whitman. The state averages, in comparison, were \$36,800 in Idaho and \$53,000 in Washington. The discrepancy between the two counties reflects the higher share of university jobs in Whitman and higher share of retail jobs in Latah.

LOCAL DEMOGRAPHIC TRENDS

Population

The population of university towns can be difficult to estimate with precision, as students surveyed by the Census Bureau do not always report their college residence as their de facto place of residence. According to official estimates, the City of Moscow had 24,500 people in 2013, with Latah County having a total population of 38,000. Moscow’s population increased by 2,500 over the past ten years – an increase that represents an average annual growth rate of 1.1%. This is slightly below the state average of 1.2%, but higher than the national growth rate of 0.7%. Pullman has grown significantly faster, due to the strong enrollment growth at WSU. Pullman added 5,400 people over this period, for an annual growth rate of 1.9%. Pullman’s current population is 31,400, while that of Whitman County is 46,600.

FIGURE 3.14: TOTAL POPULATION (2000 - 2013)

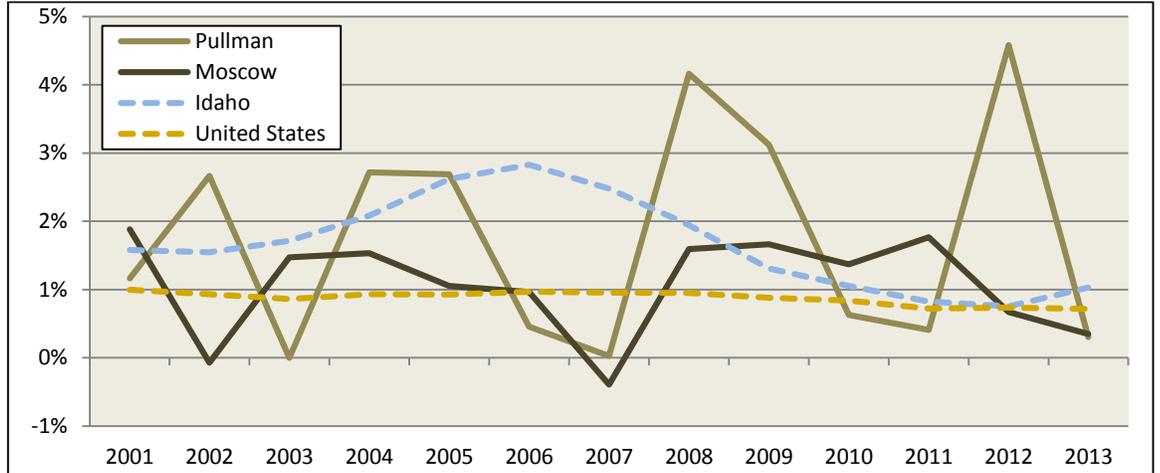


SOURCE: U.S. Census Bureau



The year-to-year population growth in the two cities has been volatile, and largely mirrored enrollment growth at WSU and UI. The post-recession enrollment boost that UI Moscow experienced between 2009 and 2012 pushed annual growth rates above one percent, but the growth rate has since fallen as these students have graduated and the number of new students has declined.

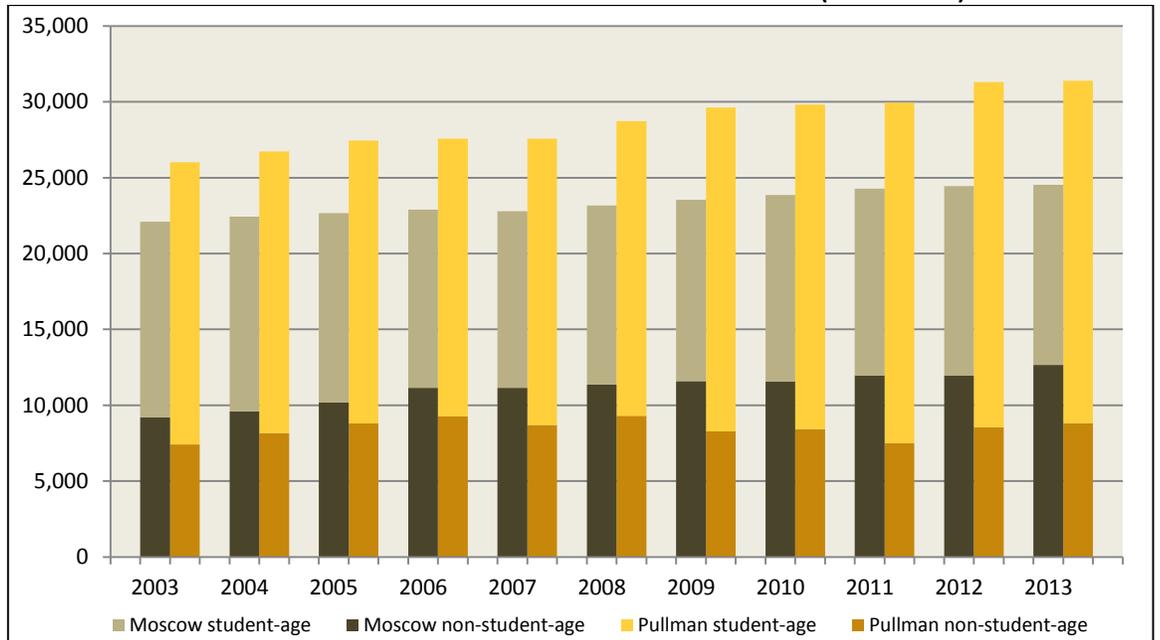
FIGURE 3.15: ANNUAL POPULATION GROWTH (2001 - 2013)



SOURCE: U.S. Census Bureau

There is a significant difference between the population growth of Moscow and Pullman in terms of the segments that have contributed to the growth. Pullman has seen rapid growth among student-age segments (15-29 years old) since the downturn (+16% since 2008), but a decline among other age groups (-5%). Moscow, on the other hand, saw no change in its student-age population over this period, but an 11% increase among non-student-age segments. It may appear that the influx of students to Pullman is driving away some non-students, causing them to settle in Moscow.

FIGURE 3.16: STUDENT-AGE AND NON-STUDENT-AGE POPULATION (2003 – 2013)



SOURCE: U.S. Census Bureau



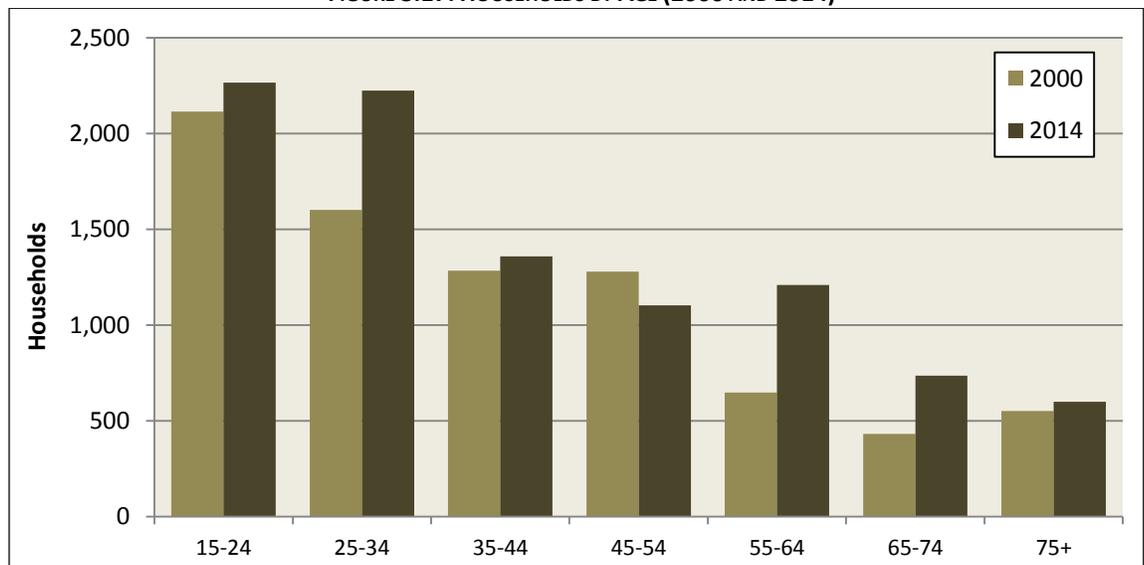
Household Growth

Moscow had 9,600 households in 2012, according to the Census Bureau – an increase of 1,900 units since the 2000 Census. Moscow’s rate of household growth has been higher than its general population growth, due to an increasing share of students living in households rather than group quarters (dormitories). The average annual household growth between 2000 and 2012 was 1.8%, compared to 1.1% population growth.

Estimates for 2014 households, produced by Nielsen Claritas,¹ indicate 9,494 current households in the city. This represents a decline of around 100 households since 2012 and a negative growth rate of -0.5% in each of the last two years. The average annual growth rate for the 2010 – 2014 period was 0.8%, compared to 1.7% in the prior decade.

The following chart displays how the distribution of households across different age groups has changed since the 2000 Census, using estimates for 2014 by Nielsen Claritas. As noted earlier, the estimates likely understate student households. The chart reveals a relatively young population, with particular growth among student-age and empty-nester/retirement households over the period. Growth among the older categories is consistent with wider demographic trends, reflecting the aging of the baby boomer cohort.

FIGURE 3.17: HOUSEHOLDS BY AGE (2000 AND 2014)



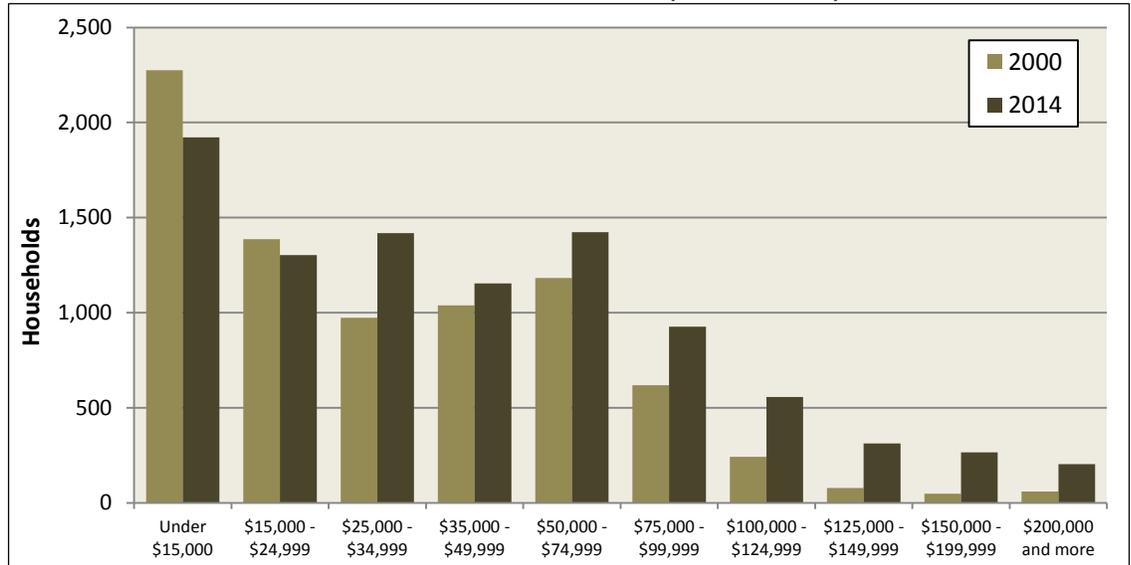
SOURCE: Nielsen Claritas

The following chart displays a profile of Moscow’s households by household income (adjusted to current dollars). The chart reveals strong growth among middle- and upper-income households. This likely reflects employment growth at the two universities, as well as growth among firms like Economic Modeling Specialists. It also likely reflects growth in the empty-nester segment, which tends to earn higher wages than younger segments.

¹ Nielsen Claritas is a third-party provider of demographic data, which uses census data and a number of other public and private data sources to identify trends and make projections for the near and mid-term future.



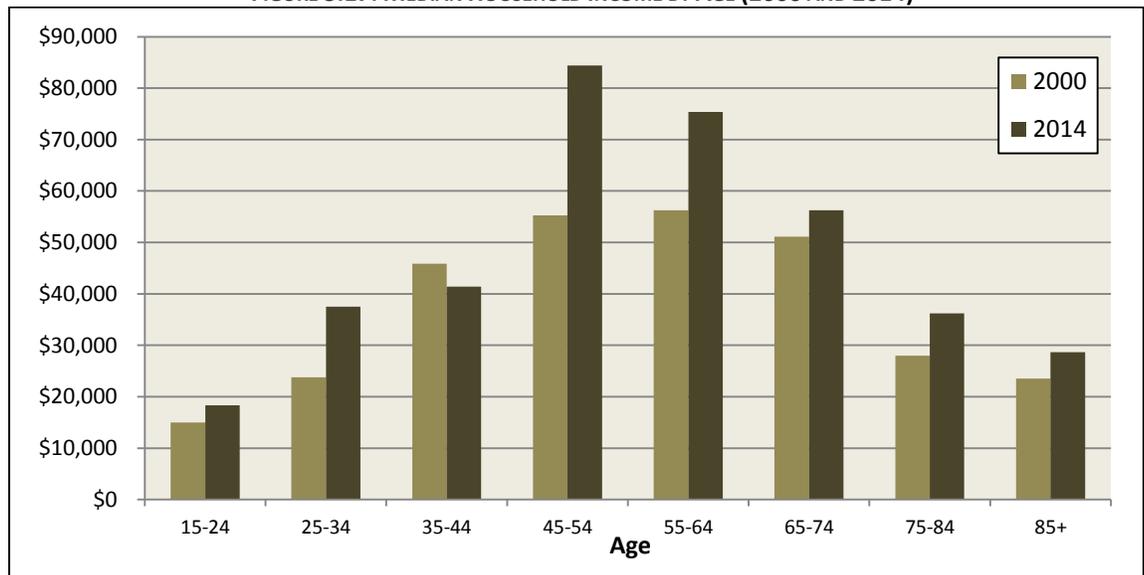
FIGURE 3.17: HOUSEHOLDS BY INCOME (2000 AND 2014)



SOURCE: Nielsen Claritas

The chart below displays median household income by age group in 2000 and 2014 (adjusted for inflation). Moscow has seen income growth among households where the householder is 45 years old and older, particularly in late-family-stage and empty-nester segments. In terms of land use, this typically correlates with an increase in suburban single-family housing and suburban retail centers.

FIGURE 3.17: MEDIAN HOUSEHOLD INCOME BY AGE (2000 AND 2014)



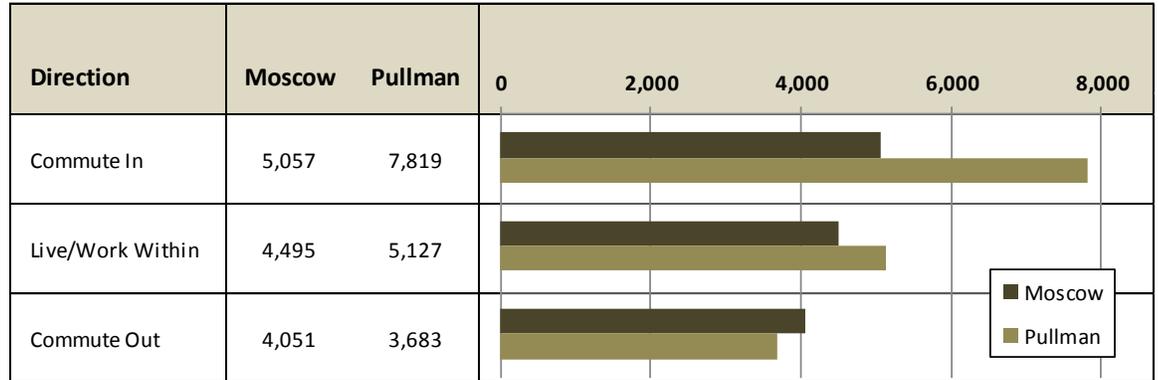
SOURCE: Nielsen Claritas



COMMUTE PATTERNS

The observation that Moscow captures more population growth in non-student segments than Pullman while Pullman achieves higher employment growth is reflected in commute data from the Census Bureau. Commute data is released with a lag and the most recent dataset is from 2011. This dataset shows that Pullman has significantly more workers commuting into the city from the outside than Moscow, while Moscow has more workers commuting out.

FIGURE 3.17: COMMUTING WORKERS*, MOSCOW AND PULLMAN

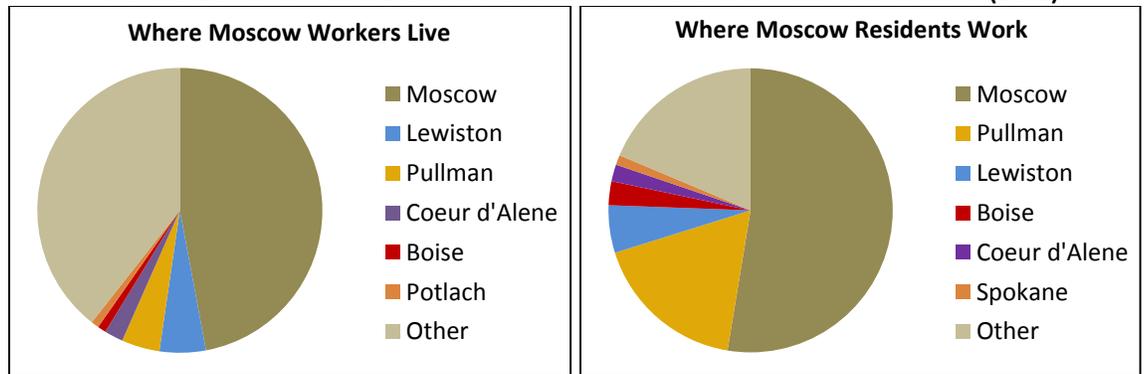


* Primary Jobs only.

SOURCE: U.S. Census Bureau

As the following pie charts reveal, only a small share (4.3%) of Moscow’s workforce commute in from Pullman (panel 1). However, a relatively large share (17.6%) of Moscow’s employed residents work in Pullman (panel 2). This indicates that employment is more abundant in Pullman, and/or that Moscow is a more attractive place of residence. The geographies combined in “Other” all represent less than one percent each.

FIGURE 3.18: PLACE OF RESIDENCE AND WORKPLACE FOR MOSCOW WORKERS AND RESIDENTS (2011)



SOURCE: U.S. Census Bureau

Over the past decade, Moscow residents have increasingly found work in other cities, including in Pullman. Roughly 5,400 Moscow residents (63% of all employed residents) had their primary jobs in Moscow in 2002; by 2011 the number had decreased to 4,500 (53% of all employed residents). Over this period, positions within Moscow were increasingly filled by workers commuting in from other nearby cities, though Pullman’s contribution to Moscow’s workforce remained nearly constant (figure 3.19 and 3.20).



FIGURE 3.19: WHERE MOSCOW WORKERS LIVE (2002 - 2011)

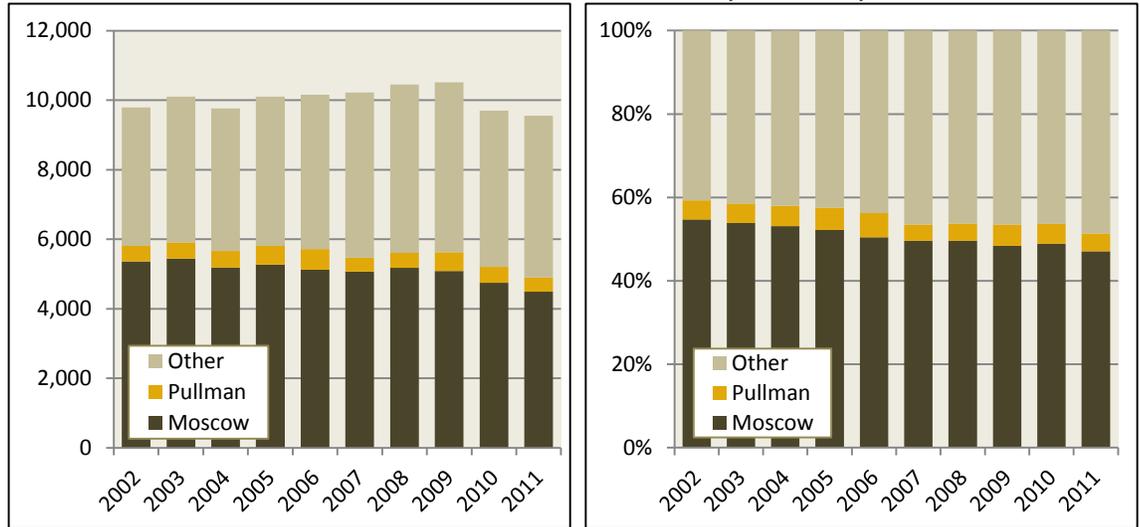
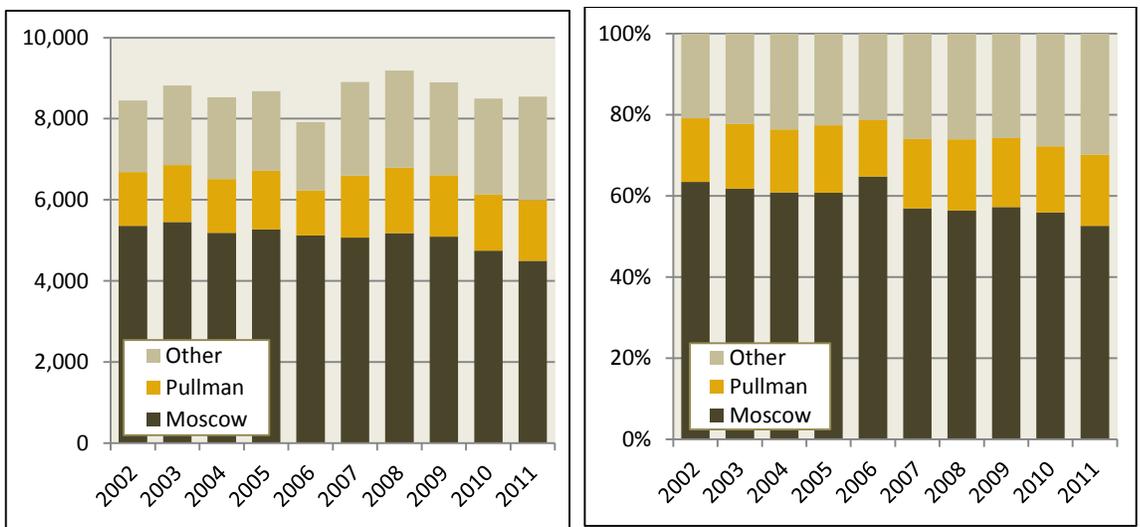


FIGURE 3.20: WHERE MOSCOW RESIDENTS WORK (2002 - 2011)



SOURCE: U.S. Census Bureau

A possible explanation for this trend is that the shift in the employment mix between 2002 and 2011 led to unemployment among many existing Moscow residents while attracting skilled labor from the outside. Over this period, the retail industry lost 460 jobs in Latah County, accounting for 89% of all job losses. The industries that generated the most new jobs over this period were education and health services, gaining 320 jobs. Low-paying positions that do not require higher education tend to be filled by people who live near the jobs, while higher-paying jobs requiring specific skill sets are more difficult to match with local labor and also tend to attract workers who already own homes in other areas and who can afford to commute. The latter may have been exacerbated by the collapse of the real estate market, which prevented many homeowners from selling their homes. Since 2011, the retail industry has gained more than 200 jobs while education and health have remained flat, indicating that this trend by now has reversed or at least subsided.

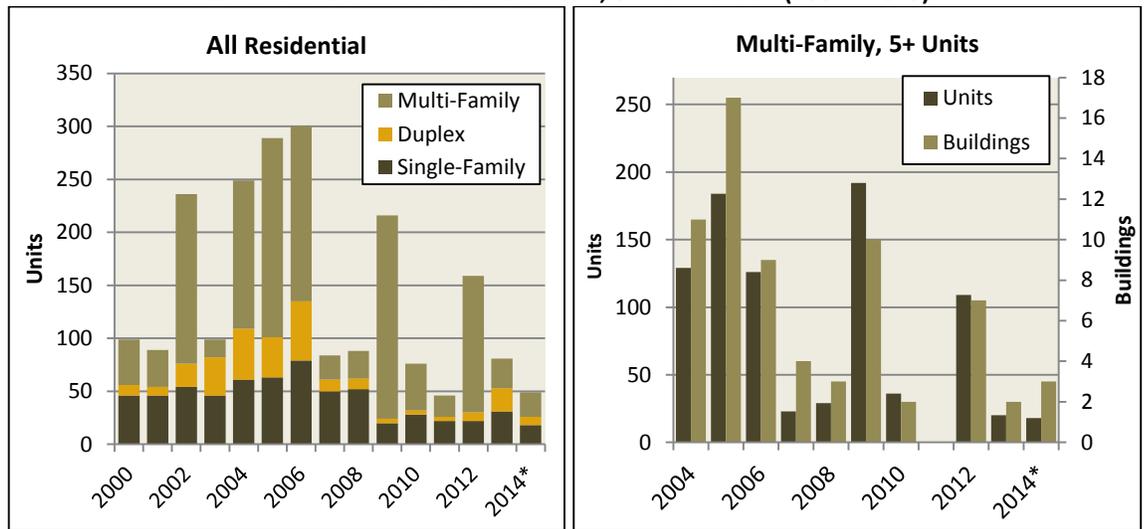


III. RESIDENTIAL MARKET ANALYSIS

In this section, we analyze the market for residential products at the subject site. The analysis is organized in two parts: one for the rental market and one for the ownership market. Consistent with proposed zoning within the Legacy Crossing Urban Renewal District, only multi-family product types have been considered. However, trends in the single-family market have also been studied in order to gauge wider currents in the residential markets.

Moscow’s residential markets remained relatively stable through the nationwide real estate crisis that began in 2007. Sales volumes dropped significantly, but the ownership market experienced only modest price declines. Between 2006 and 2009, there was a steep drop in residential building activity within the city – across all product types – with the total number of permitted units dropping from around 300 to 30 (figure 4.1). The lack of new supply helped support occupancy rates, rents, and sales prices. In the most recent years, the ownership market has continued to recover while the multi-family market has experienced some weakness due to weak enrollment numbers at UI.

FIGURE 4.1: RESIDENTIAL BUILDING PERMITS, CITY OF MOSCOW (2004 – 2013)



* 2014 YTD
 SOURCE: City of Moscow

The charts displayed above show the dramatic decline in residential building over the past ten years. For multi-family buildings, the construction volume has generally been in the range of 20 to 30 units per year since 2006, with the exception of the Grove project in 2009 and a Baker Street project in 2012.

RENTAL APARTMENTS

General Overview

The apartment market in Moscow is dominated by student-oriented projects. Most of these are located near the UI campus and are built to a basic standard. A number of new off-campus student projects were constructed in the first half of the 2000s, when UI enrollment grew quite rapidly. In 2009, a national developer built the Grove – a 190-unit project with a more upscale profile. This project is located further from campus, on the south side of the city, and caters primarily to older students. Most of the student-focused projects that have been completed after the Grove have been located north of campus on Baker



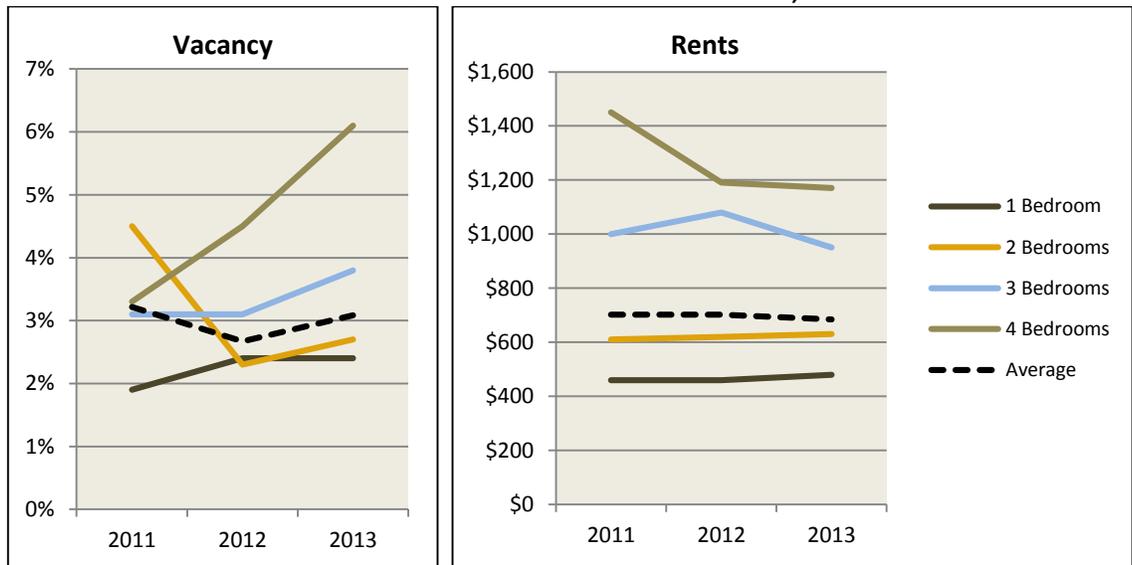
Street. In addition to the student-oriented projects, Moscow also has some affordable (tax credit) projects of relatively recent vintage, located on the south and southeast side of Moscow.

Recent Trends

The apartment market in Moscow has shown some weakness recently, reflecting enrollment declines at UI. Rents fell 2.4% in the fall of 2013 compared to the previous year, while the vacancy rate increased 0.4 percentage points. In most apartment markets, a 5% vacancy rate is regarded as a balanced market, as this is usually the inflection point at which managers begin to either raise or lower rents. However, in markets dominated by student housing, a lower vacancy rate is expected during the school year, reflecting that managers usually aim for full occupancy during this period.

The smallest units have fared best in the most recent years. One-bedroom units were the only unit type with rent increases and a drop in vacancy in 2013. These units rely to a lesser extent on the student segment than the larger units that can accommodate roommates. The market for four-bedroom units has been particularly weak. The oversupply of this unit type may to some extent reflect the requirement that freshman students live in on-campus housing, which was introduced in 2010.

FIGURE 4.2: AVERAGE FALL APARTMENT VACANCY AND RENT, MOSCOW



SOURCE: Palouse Commercial Real Estate

Pipeline Supply

Two apartment projects are currently in the pipeline in Moscow: one with 18 units in 3 buildings; the other with 120 units in 15 buildings. Both are market-rate projects located on White Avenue southeast of Downtown. According to plans, they will be more upscale than most student projects, and are intended to appeal to a broader tenant base.

FIGURE 4.3: PROFILE OF SURVEYED APARTMENT PROJECTS

Project Name	Location	Status	Est. Delivery	Buildings	Units
Merrell Apartments	2000 E White Ave	Under Construction	2014 - 2015	3	18
Kestrel Project	2300 E White Ave	Proposed	2015 - 2016	15	120
Total Units					138

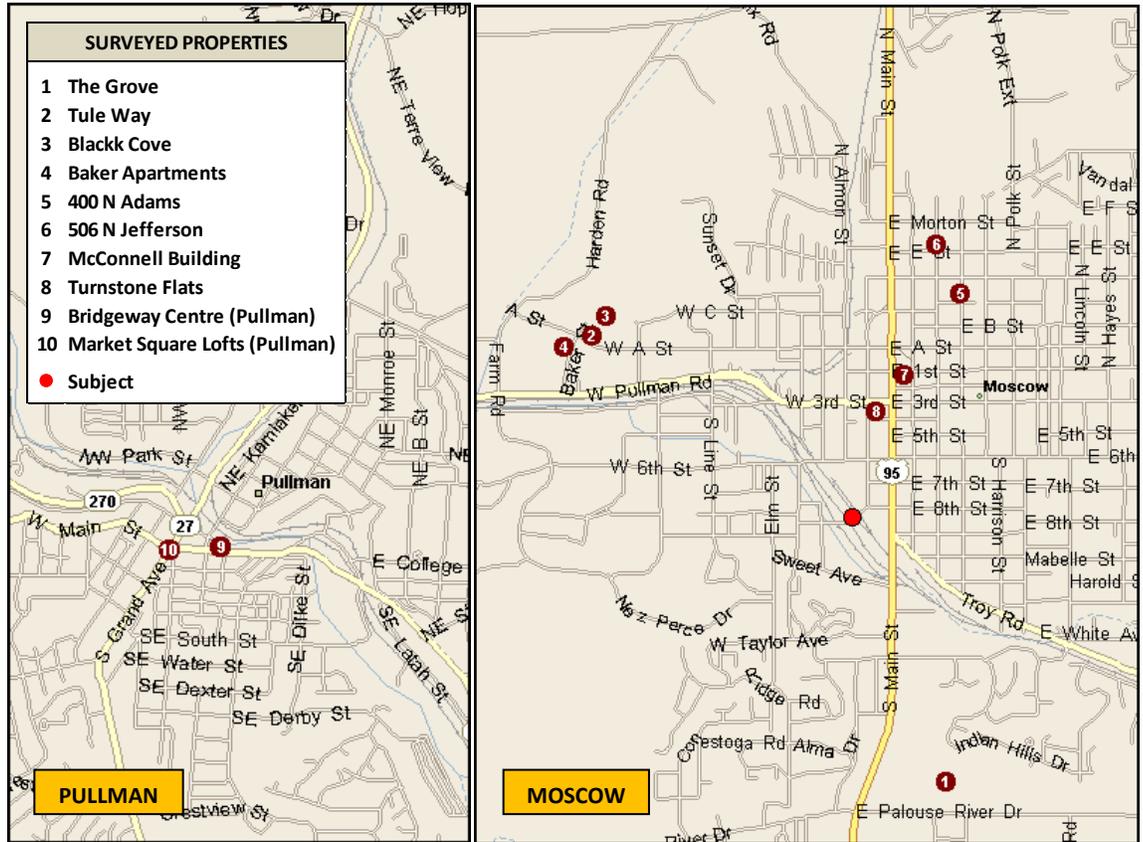
SOURCE: City of Moscow



Apartment Market Survey

JOHNSON ECONOMICS surveyed a sample of ten relatively recent apartment projects in order to assess the market for new apartments in Moscow. With the exception of the McConnell Building, all the projects were completed within the last ten years. Seven of the properties are located in Moscow and two are located Downtown Pullman. The McConnell Building, Turnstone Flats, and the two Pullman properties can be considered urban-style buildings, while the remaining properties are garden-style projects. Below, we present a map of these projects. The map is followed by an individual profile of each property and a summary of the most pertinent observations.

FIGURE 4.4: MAP OF SURVEYED APARTMENT PROJECTS



SOURCE: MapPoint, JOHNSON ECONOMICS



FIGURE 4.5: PROFILE OF SURVEYED APARTMENT PROJECTS

1) THE GROVE

209 Southview Ave, Moscow, Idaho

Year Built: 2009

Occupancy: [Not discl.]



Type	Units	Unit Mix	Vacant	Size (SF)	Rent Low	Rent High	Rent/SF
2B/2b	128	67%		807	\$950	\$1,050	\$1.25
3B/3b	64	33%		1,200	\$1,287	\$1,530	\$1.17
Total/Avg:	192	100%		938	\$950	\$1,530	\$1.23

Community Amenities: Fitness center, outdoor pool, club house (w/coffee bar, game room, pool table, library), volleyball court, basketball court, barbeque area, fire pit, secured access.

Unit Amenities: Carpet/laminate wood flooring, black appliances, washer/dryer.

Notes: Student-oriented. Furnished. Individual lease. Rent includes: w/s/g + \$25 el., internet, cable. Pets allowed for a fee. No covered parking. Concessions and occupancy not disclosed.

2) TULE WAY

250-258 Baker St, Moscow, Idaho

Year Built: 2004

Occupancy: 96%



Type	Units	Unit Mix	Vacant	Size (SF)	Rent Low	Rent High	Rent/SF
1B/1b	4	14%		520	\$475	\$550	\$0.99
2B/1b	24	86%	1	730	\$670	\$720	\$0.95
Total/Avg:	28	100%	1	700	\$475	\$720	\$0.96

Community Amenities: Laundry room.

Unit Amenities: Vinyl/carpet flooring, laminate countertops, oak cabinets, washer/dryer.

Notes: Students. In-unit washers/dryers available only in 2B. W/s/g included in rent. No pets.

3) BLACKK COVE

286-310 Baker St, Moscow, Idaho

Year Built: 2011-13

Occupancy: 98%



Type	Units	Unit Mix	Vacant	Size (SF)	Rent Low	Rent High	Rent/SF
1B/1b	52	100%	1	528	\$575	\$575	\$1.09
Total/Avg:	52	100%	1	528	\$575	\$575	\$1.09

Community Amenities:

Unit Amenities: Vinyl/carpet flooring, laminate countertops, oak cabinets, washer/dryer.

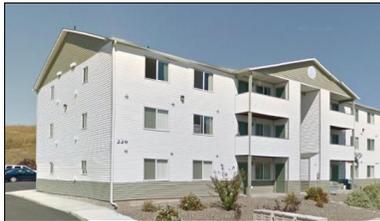
Notes: Mostly students. W/s/g included in rent. No pets. Surface parking.

4) BAKER STREET APARTMENTS

225-249 Baker St, Moscow, Idaho

Year Built: 2010-13

Occupancy: 100%



Type	Units	Unit Mix	Vacant	Size (SF)	Rent Low	Rent High	Rent/SF
2B/2b	72	100%		1,050	\$726	\$726	\$0.69
Total/Avg:	72	100%	0	1,050	\$726	\$930	\$0.69

Community Amenities:

Unit Amenities: Vinyl floors, oak cabinets, lam. countertops, black/white appl., washer/dryer.

Notes: 3 buildings. No pets. Surface parking.

5) 400 N ADAMS APARTMENTS

400 N Adams St, Moscow, Idaho

Year Built: 2006

Occupancy: 88%



Type	Units	Unit Mix	Vacant	Size (SF)	Rent Low	Rent High	Rent/SF
1B/1b	4	50%		600	\$575	\$575	\$0.96
2B/2b	4	50%	1	1,100	\$800	\$800	\$0.73
Total/Avg:	8	100%	1	850	\$575	\$1,140	\$0.84

Community Amenities: Laundry room, surface parking.

Unit Amenities: Vinyl and carpet flooring, laminate countertops, white appliances, oak cabinets.

Notes: Includes w/s/g, internet. Surface parking.



6) 506 N JEFFERSON APARTMENTS

506 N Jefferson St, Moscow, Idaho

Year Built: 2005

Occupancy: 100%



Type	Units	Unit Mix	Vacant	Size (SF)	Rent Low	Rent High	Rent/SF
1B/1b	8	100%	0	620	\$650	\$650	\$1.05
Total/Avg:	8	100%	0	620	\$650	\$1,050	\$1.05

Community Amenities: Storage units. Balcony/patio available.

Unit Amenities: Tile/carpet/vinyl floors, bath tub, washer/dryer, gas fireplace, bay windows.

Notes: Includes w/s/g and internet. Surface parking. No pets.

7) MCCONNELL BUILDING

104 S Main St, Moscow, Idaho

Year Built: 1891

Occupancy: 100%



Type	Units	Unit Mix	Vacant	Size (SF)	Rent Low	Rent High	Rent/SF
Studio	27	77%		250	\$400	\$450	\$1.70
1B/1b	8	23%		350	\$475	\$620	\$1.56
Total/Avg:	35	100%	0	273	\$400	\$620	\$1.67

Community Amenities: Laundry room, elevator, secured entry, storage units.

Unit Amenities: Vinyl/carpet flooring.

Notes: Tenants are mostly grad students, professionals and some elderly. Rents include w/s/g.

8) TURNSTONE FLATS

129 W Third St, Moscow, Idaho

Year Built: 1936 (2012)

Occupancy: 100%



Type	Units	Unit Mix	Vacant	Size (SF)	Rent Low	Rent High	Rent/SF
1B/1b	4	50%		564	\$680	\$895	\$1.43
2B/1b	4	50%		668	\$930	\$1,100	\$1.45
Total/Avg:	8	100%	0	616	\$880	\$1,100	\$1.44

Community Amenities: Laundry room, elevator, secured entry, storage units.

Unit Amenities: Vinyl/carpet flooring.

Notes: Tenants are mostly young professionals. Note: the property did not participate in our survey, and some unit rents were estimated based on rent levels posted online.

9) BRIDGEWAY CENTRE

350 E Main St, Pullman, Washington

Year Built: 2004

Occupancy: 100%



Type	Units	Unit Mix	Vacant	Size (SF)	Rent Low	Rent High	Rent/SF
1B/1b	5	83%	0	932	\$1,000	\$1,147	\$1.15
2B/2b	1	17%	0	1,218	\$1,234	\$1,234	\$1.01
Total/Avg:	6	100%	0	980	\$1,000	\$1,355	\$1.13

Community Amenities: Covered parking available, secured access.

Unit Amenities: Balconies, granite countertops, oak cabinets, stainless steel appliances, gas heat, gas fireplace, washer/dryer, air conditioning.

Notes: W/s/g included. 2nd floor of retail building.

10) MARKET SQUARE LOFT APARTMENTS

105 W Main St, Pullman, Washington

Year Built: 1927 (2006)

Occupancy: 100%



Type	Units	Unit Mix	Vacant	Size (SF)	Rent Low	Rent High	Rent/SF
1B/1b	2	22%	0	684			
2B/2b	1	11%	0	1,289	\$1,600	\$1,600	\$1.24
3B/2b	6	67%	0	1,400	\$1,700	\$1,700	\$1.21
Total/Avg:	9	100%	0	1,229	\$1,600	\$1,700	\$1.23

Community Amenities: Private parking

Unit Amenities: Exposed brick/rafters/ducts, steel staircase, concrete/tile floors, concrete counter, stainless steel appl., cherry cabinets, walk-in closet, utility room, washer/dryer, a/c.

Notes: Above ground-floor retail. Current rents were not disclosed, and rents displayed above are estimates based on past rents: 2B was \$1,450 in 2012; 3B was \$1,550 in 2011.

SOURCE: Surveyed properties, online listings, JOHNSON ECONOMICS



Orientation and Profile

Moscow's apartment market is dominated by student-oriented projects located near the UI campus. Most of these are of a very basic standard and virtually without community amenities, reflecting the price sensitivity of students and the fact that many amenities are offered on campus. Among the Moscow properties, only the Grove is of a higher standard, with more appointed units and a wide range of community amenities. The latter serves to offset the project's relative lack of proximity to campus.

The two surveyed non-student projects in Moscow, the Turnstone Flats and the McConnell Building, are both located Downtown, but represent two different markets. The Turnstone Flats is a recent redevelopment with modern units catering to young, creative professionals. The McDonald Building is a nineteenth century historic building occupied predominantly by graduate students, professionals and elderly. The building is an expired tax credit project that was renovated in the 1980s.

The two Pullman projects are similar to Turnstone Flats in that they offer recently built apartments at Downtown locations. They are also similar in terms of scale and lack of community amenities.

Pricing

Rents at the more basic student projects generally range between \$300 and \$400 per bed in two- and three-bedroom units, and between \$450 and \$650 for studios and one-bedrooms. On a per-square-foot (PSF) basis, these units achieve rents between \$0.70 and \$1.10 per square foot, with the smaller units capturing the highest PSF rates. In general, these rates represent a premium to on-campus options. The low rates at Baker Street Apartments reflect discounting to fill units that were vacant at semester start.

The Grove is at a higher price point, at about \$500 per bed, and a \$1.23 PSF rate. At Turnstone Flats the rents are in the \$680-\$1,100 range, or around \$1.45 per square foot. The McConnell Building charges \$400 to \$600 per unit, translating into a high project PSF rate of \$1.67 due its micro-size units.

The two Pullman properties are at a higher rent level, between \$1,000 and \$1,700 per unit. Even with their large units, this translates to relatively high blended PSF rates of \$1.13 and \$1.23.

Occupancy

Excluding the Grove, which did not disclose occupancy rates, only three units were vacant across the sample. This translates to an overall occupancy rate of 99%, which is quite typical in student markets during the school year. It should be noted that the Grove offered concessions several weeks into the fall semester this year, indicating at least some vacancies at this project. Rents were reduced at properties on Baker Street prior to the semester start in order to fill vacant units.

Competitive Position and Achievable Pricing

Achievable pricing for an apartment project within the Renewal District will vary depending on the specific site within this area and the level of product execution. We regard sites located along Jackson Street between Third and Sixth Streets to be best positioned, and our following estimates of achievable rents will reflect our expectations for these, with a discount indicated for other parts of the district.

Competitive Position

Our estimates of achievable pricing are based on our assessment of the competitive position of sites within the Renewal District relative to the surveyed properties. The competitive position, in turn, is primarily a function of locational attributes (access, visibility, views, surrounding land use, nearby amenities), but we also consider the newer vintage and our expectations for project quality and on-site amenities. With respect to the latter, only larger sites will have the scale required to offer on-site amenities with measurable rent impact.



In terms of location, we regard the strongest sites within the Renewal District to be positioned considerably above the less centrally located properties on Baker Street and South Main Street, on par with Turnstone Flats, and below the McConnell Building and the Pullman properties.

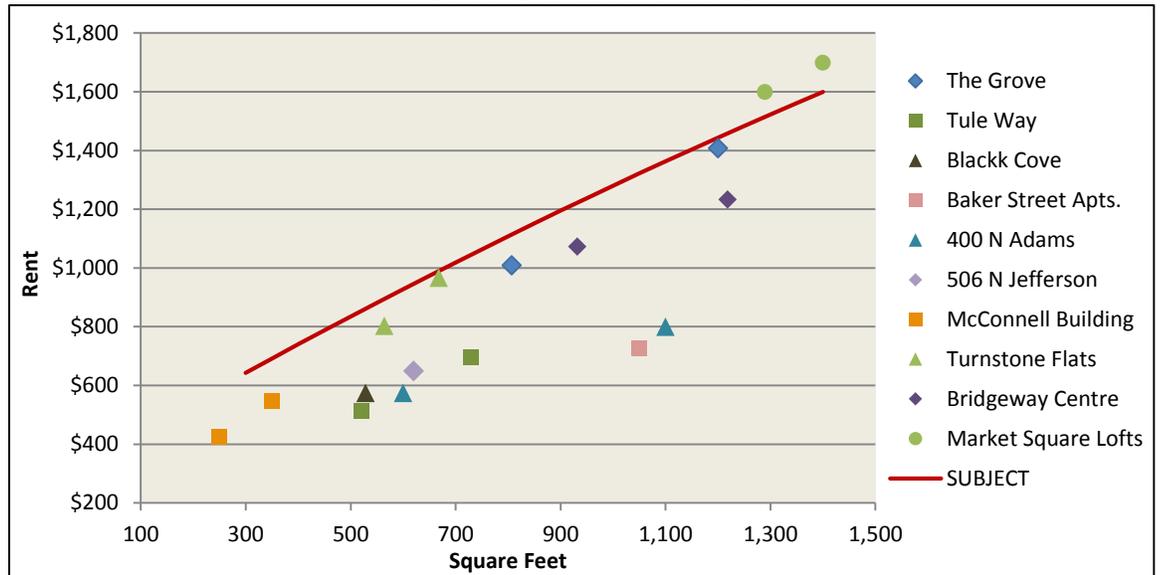
In terms of amenities, a new development in the Renewal District has the potential to offer a broader range than what is currently offered at any of surveyed projects with the exception of the Grove, which has a larger site and greater economies of scale. At the larger sites within the district, we would expect a community lounge and possibly a fitness room, both of which would justify somewhat higher rents.

In terms of building quality, wear, and up-to-date design and layouts, we expect a positioning somewhat above the Pullman projects, Turnstone, and the Grove, and significantly above the remaining projects in the sample.

Achievable Pricing

The considerations regarding competitive position justify the rent levels indicated by the red curve in the following chart.

FIGURE 4.6: PEER GROUP PRICING ANALYSIS



SOURCE: Surveyed properties, online listings, JOHNSON ECONOMICS

The rent curve shown above indicates achievable rents ranging from \$835 per month for a 500-square-foot studio unit to around \$1,450 for a large three-bedroom unit. With the unit mix assumed below, this translates to overall project rents of around \$1.45 per square foot. Achievable rents are expected to move with the wider market prior to delivery. The rents assume adequate market depth.

FIGURE 4.7: ACHIEVABLE PRICING – RENTAL APARTMENTS

Unit Type	Units	Unit Mix	Average Size	Avg. Rent	Avg. PSF Rent
Studio	15	30%	500	\$835	\$1.67
1B/1b	18	36%	600	\$928	\$1.55
2B/1b	5	10%	850	\$1,152	\$1.36
2B/2b	10	20%	1,000	\$1,280	\$1.28
3B/2b	2	4%	1,200	\$1,444	\$1.20
Sum/Average	50	100%	699	\$1,014	\$1.45

SOURCE: JOHNSON ECONOMICS



It is important to note that the existing supply, even the higher end Grove project, reflects a product type and execution well below what would be expected for new market-rate construction in most markets. As a result, there is a significant opportunity to deliver a top-of-market property that can establish new price points for Moscow.

Market Depth

Because students and non-students have somewhat different preferences in terms of location and housing product, we will distinguish between the two segments in our projections for rental apartment demand. Estimates of apartment demand from students are deduced from enrollment projections that JOHNSON ECONOMICS has developed for UI Moscow. Estimates of demand from non-students are developed using a housing demand model developed by JOHNSON ECONOMICS. This model utilizes household growth projections developed by Nielsen Claritas, adjusted to reflect our expectations for local enrollment and employment growth. A more detailed presentation of our demand projections is included in the appendix.

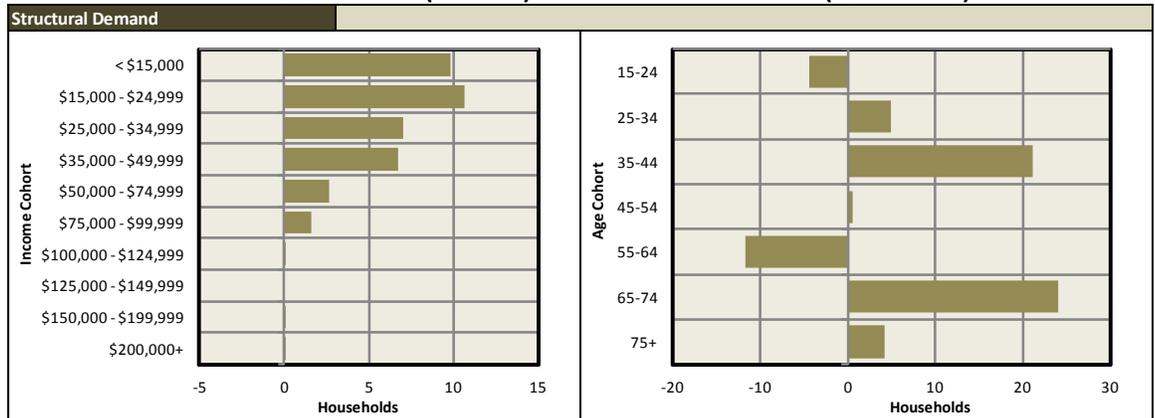
Students

Our enrollment projections for UI Moscow (on-campus students only) indicate a decline of around 240 students over the coming five years under the baseline scenario. We assume that roughly one-fifth of Moscow students live in households headed by non-students. This indicates a decline in student housing demand of roughly 200 beds. Under the high-growth scenario, our model indicates a net increase of roughly 200 students, translating into demand for around 150 student housing beds.

Non-students

According to our baseline scenario, which assumes flat enrollment growth (combined UI and WSU) and annual employment growth of 0.5% (Latah-Whitman), the model indicates structural (net new) demand from non-students for around 40 rental apartments over the coming five years (110 under the high-growth scenario). The growth is expected to be concentrated in the lower income brackets, with the strongest growth represented by retirees and young adults. Note that pent-up demand, which is difficult to estimate quantitatively in small geographies,² is not included in these estimates.

FIGURE 4.8: STRUCTURAL (NET NEW) RENTAL APARTMENT DEMAND (2014 – 2019)



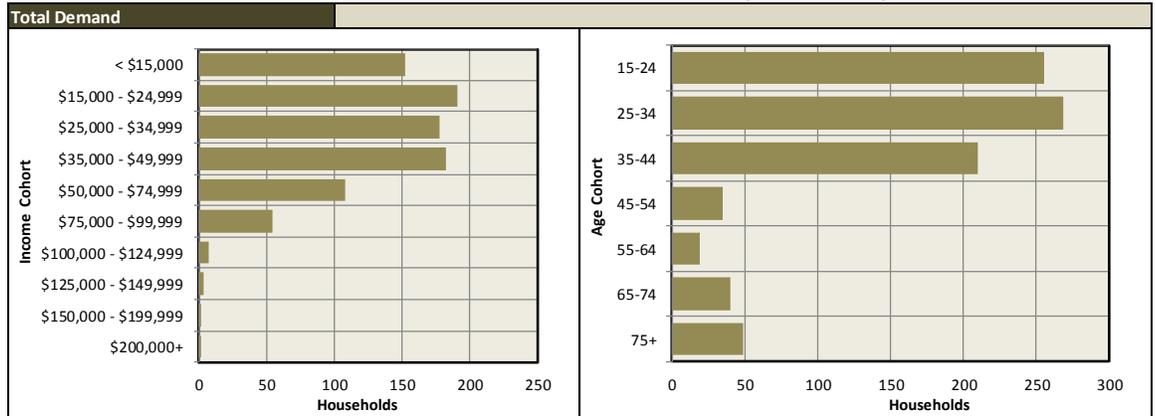
SOURCE: JOHNSON ECONOMICS

² Pent-up demand is reflected in unusually large household size averages, which are reported by the Census Bureau’s American Community Survey. However, these estimates are highly uncertain for small geographies.



When demand from renters in turnover is included, the total demand profile represents around 175 lease transactions annually. As is indicated by the following chart, the market is dominated by younger households with modest incomes. However, roughly one-fifth are households with incomes above 50,000, and these represent around 35 lease transactions per year.

FIGURE 4.9: TOTAL RENTAL APARTMENT DEMAND (2014 – 2019)



SOURCE: JOHNSON ECONOMICS

Market Opportunities

In light of current enrollment trends and recent declines in market rents, the potential for additional apartment supply in Moscow is somewhat limited. There already appears to be some oversupply in the lower end of the market, as reflected in the deep rent discounts at projects like Baker Street Apartments, measured relative to the higher-quality Grove and Turnstone projects. The promotions offered this fall at the Grove may also indicate limited market depth for more upscale, garden-style apartments focused specifically on students.

Our survey might indicate some support for an apartment project oriented toward graduate students and non-students. Both Turnstone Flats and the McConnell Building achieve relatively high rent levels (and a lack of vacancy), without offering luxury units. This suggests some unmet demand for Downtown apartments and/or apartment communities without a student profile. The two projects currently in the pipeline on White Avenue represent many years of projected new non-student demand (not counting pent-up demand), but these will not cater to segments with a preference for Downtown living. They are likely also located too far from campus to appeal to graduate students.

Among the sites within the Renewal District, we believe those located near Downtown and at some distance to campus are best positioned to capture demand from graduate students and non-students. The site located directly east of University Pointe (Sixth and Jackson) is likely the strongest candidate in this respect. Sites that are more detached from the vibrant part of Downtown are more likely to be perceived as student projects.

It is difficult to estimate the market depth for upscale, urban apartments due to the uncertainty related to pent-up demand (see note 2, preceding page). However, taking into account current enrollment and household growth trends and projected market depth in middle- and upper-income households, we reckon that only a project of limited scale (30 to 70 units) is likely to find adequate market depth at the indicated levels of achievable pricing.



OWNERSHIP HOUSING

Recent Trends

Across the United States, the market for condominiums was disproportionately hard hit in during the downturn, due to its high share of young homeowners. Younger segments were more likely to become unemployed or underemployed during the crisis due to their lack of workplace seniority, and their lack of savings caused many of them to lose their homes in foreclosure. The inordinately high foreclosure rates for condominiums caused a glut of discounted supply on the market, at the same time as demand was choked off by lenders who became hesitant to finance these homes due to their elevated risk.

Moscow was spared for the kind of turmoil that the rest of the nation experienced in the wider ownership market, and its small condominium market was to a large degree buoyed by demand from students (or their parents) and investors renting out to students. According to broker Gary Tribble, the condominium market has tracked the wider ownership market over the past years. The ownership market has been relatively stable in recent years, but with a decline in sales volume and pricing in 2013, and some improvement so far in 2014.

The feasibility of condominium development within the Legacy Crossing Urban Renewal District has been significantly reduced over the past years since the Federal Housing Administration required that a majority of the units be pre-sold and intended for owner-occupancy before it will approve the development for individual home loans. As a consequence, lenders have set similar or even tougher conditions before they will finance the construction of these projects.

The current credit requirements create a particular hurdle for a development near a university campus. Students generally do not qualify for home loans, and non-students who intend to purchase condo units as owner-occupants will likely be wary of buying into projects near campus, where they might expect to have a large number of student renters as neighbors. Satisfying the 50% pre-sale/owner-occupant requirement does therefore not appear feasible under current standards. However, these requirements have already been eased once since the downturn, and may be eased again, potentially allowing for condominium development within the Renewal District in the future.

Pipeline Supply

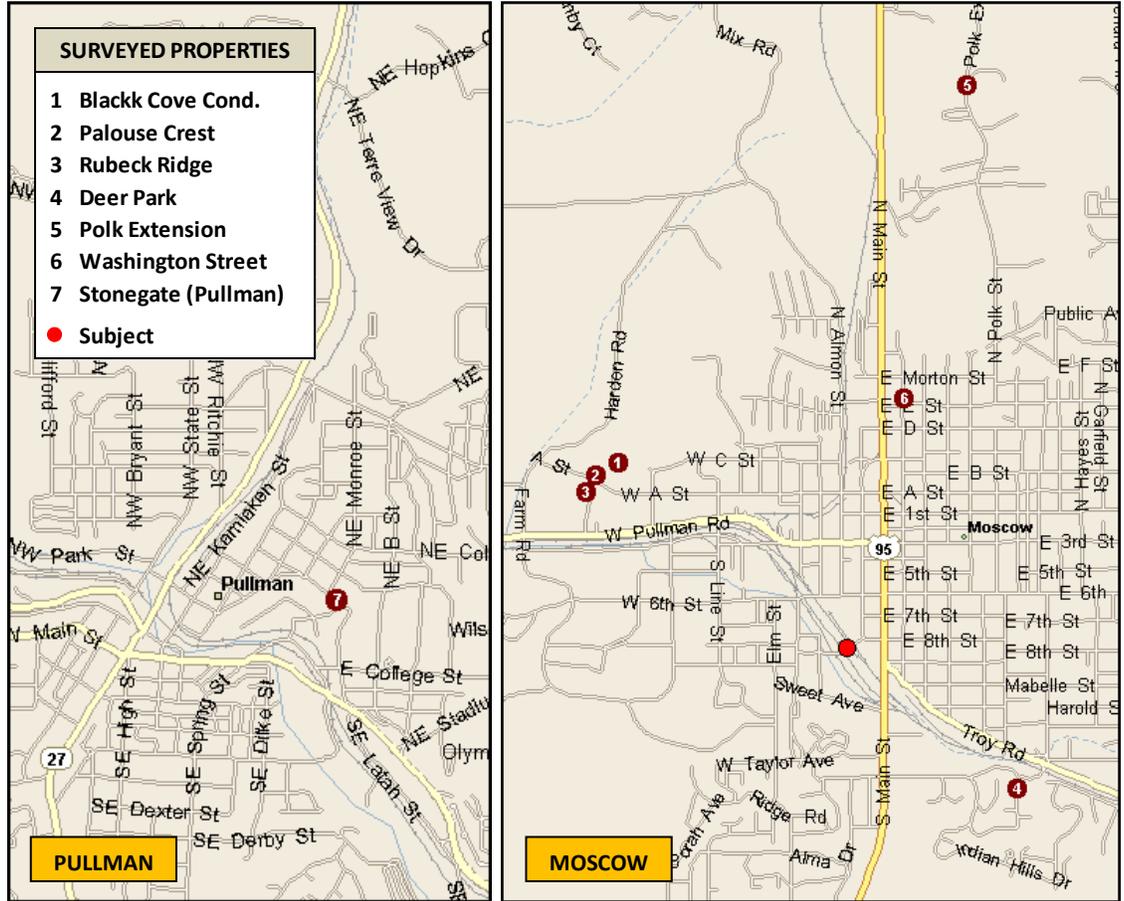
There is no known supply of multi-family condominium projects in the pipeline within Moscow.

Ownership Market Survey

In order to assess the current market for urban condominiums within Moscow, JOHNSON ECONOMICS surveyed a sample of seven multi-family condominium projects. Six of these are located in Moscow, and one is located near the WSU campus in Pullman. The majority of the projects have student residents, and many units are owned by investors. The locations of the properties are shown on the following map, and an individual profile of each project is included on the following pages.



FIGURE 4.8: MAP OF SURVEYED CONDOMINIUM PROJECTS



SOURCE: MapPoint, JOHNSON ECONOMICS



FIGURE 4.9: PROFILE OF SURVEYED CONDOMINIUM PROJECTS

1) BLACK COVE CONDOMINIUM



Address: 182 Baker St, Moscow, Idaho
Year Built: 2007
Total units: 12

Community Amenities:

Unit Amenities: Carpet/vinyl flooring, laminate countertops, extra storage.

Unit	Type	Status	Size (SF)	Price	Price/SF
#202	3B/1b	Sold Jun-2014	1,460	\$147,400	\$101
#301	3B/1b	Off Market	1,460	\$149,000	\$102

2) PALOUSE CREST



Address: 1311 W A St, Moscow, Idaho
Year Built: 1996
Total units: 16

Community Amenities:

Unit Amenities: Carpet/vinyl flooring, oak cabinets, laminate countertops.

Unit	Type	Status	Size (SF)	Price	Price/SF
#101	3B/2b	For Sale	1,050	\$99,500	\$95
#103	3B/2b	For Sale	1,050	\$100,100	\$95
#202	3B/2b	Off Market	1,050	\$112,000	\$107

3) RUBECK RIDGE



Address: 135 Baker St, Moscow, Idaho
Year Built: 1995
Total units: 16

Community Amenities:

Unit Amenities: Carpet, tile, vinyl flooring, laminate countertops, vaulted ceilings (2nd floor), balconies.

Unit	Type	Status	Size (SF)	Price	Price/SF
#204	3B/2b	For Sale	1,050	\$107,499	\$102
#103	3B/2b	For Sale	1,050	\$100,100	\$95

4) DEER PARK



Address: 1487 Northwood Dr, Moscow, Idaho
Year Built: 1993
Total units: 40

Community Amenities:

Unit Amenities: Carpet/wood laminate flooring, laminate countertops, walk-in closet, vaulted ceilings.

Unit	Type	Status	Size (SF)	Price	Price/SF
#203	3B/2b	For Sale	1,050	\$112,900	\$108
#102	3B/2b	Off Market	1,051	\$106,500	\$101

5) POLK EXTENSION CONDOMINIUMS



Address: 1529 N Polk Ext., Moscow, Idaho
Year Built: 1999
Total units: 4

Community Amenities:

Unit Amenities: Vinyl and carpet flooring, laminate countertops, white appliances, oak cabinets.

Unit	Type	Status	Size (SF)	Price	Price/SF
#1	3B/2b	For Sale	868	\$74,900	\$86
#2	3B/2b	Off Market	1,010	\$105,500	\$104



6) WASHINGTON STREET



Address: 529 N Washington St, Moscow, Idaho
Year Built: 1995
Total units: 4

Community Amenities: Storage units, balconies, two reserved gravel parking spaces per unit.
Unit Amenities: Carpet/vinyl/tile floors, laminate countertops, oak or white cabinets.

Unit	Type	Status	Size (SF)	Price	Price/SF
#A	2B/1	For Sale	839	\$109,500	\$131
#B	2B/1	For Sale	839	\$107,000	\$128

7) STONEGATE CONDOMINIUMS



Address: 715 NE Oak St, Pullman, Washington
Year Built: 2007
Total units: 10

Community Amenities: Two-car garages with direct unit access, views, adjacent to WSU.
Unit Amenities: 9' ceilings, stainless steel appl., granite counters, hardwood/tile floors, gas fireplace.

Unit	Type	Status	Size (SF)	Price	Price/SF
#E	4B/4b	Sold Mar-2013	1,929	\$300,000	\$156
#D	4B/4b	Off Market	1,892	\$315,500	\$167

SOURCE: Latah County MLS, online listings, JOHNSON ECONOMICS

Summary of Survey Observations

The majority of the surveyed condominium projects are small-scale, low-rise projects built in the late nineties, and without community amenities. Only one of the projects in Moscow was completed within the past ten years (Blackk Cove, 2007). The Moscow projects hold a basic standard, consistent with their primary use as student housing. The Pullman project, Stonegate, which is a lower density townhouse development, was included for what it might reveal about demand and pricing for a more upscale product. It is located near downtown, adjacent to the WSU campus.

The surveyed projects have only two sales transactions within the last two years, of which one was in Pullman. Eight units are currently for sale in Moscow, and another four units have been taken off the market within this period without being sold. This indicates low demand.

Pricing is typically around \$100 per square foot. The one unit that sold in Moscow, a 1,460-square-foot unit at Blackk Cove, sold for \$147,000, or \$101 per square foot. Most of the units for sale are around 1,000 square feet and have asking prices around \$100,000. The Washington Street project stands out with somewhat higher asking prices, roughly \$110,000 for 800-square-foot units, translating into a PSF price of \$130. The higher prices likely reflect that this is a four-plex located away from the UI campus on the north side of Downtown.

The Stonegate project has achieved significantly higher pricing than the Moscow projects, at \$300,000 for a 1,900 square foot unit, or \$156 per square foot. Most likely, this does not only reflect the higher standard of the units, but also the stronger enrollment growth in Pullman (and thus higher expectations for future prices), Pullman’s larger student pool (and thus more market depth), that the units are townhouses with downstairs garages, and the quad-type configuration (4B/4b). The latter makes the units suitable for renting to four students, which gives these units more utility per square foot than a similarly large unit intended for one household.

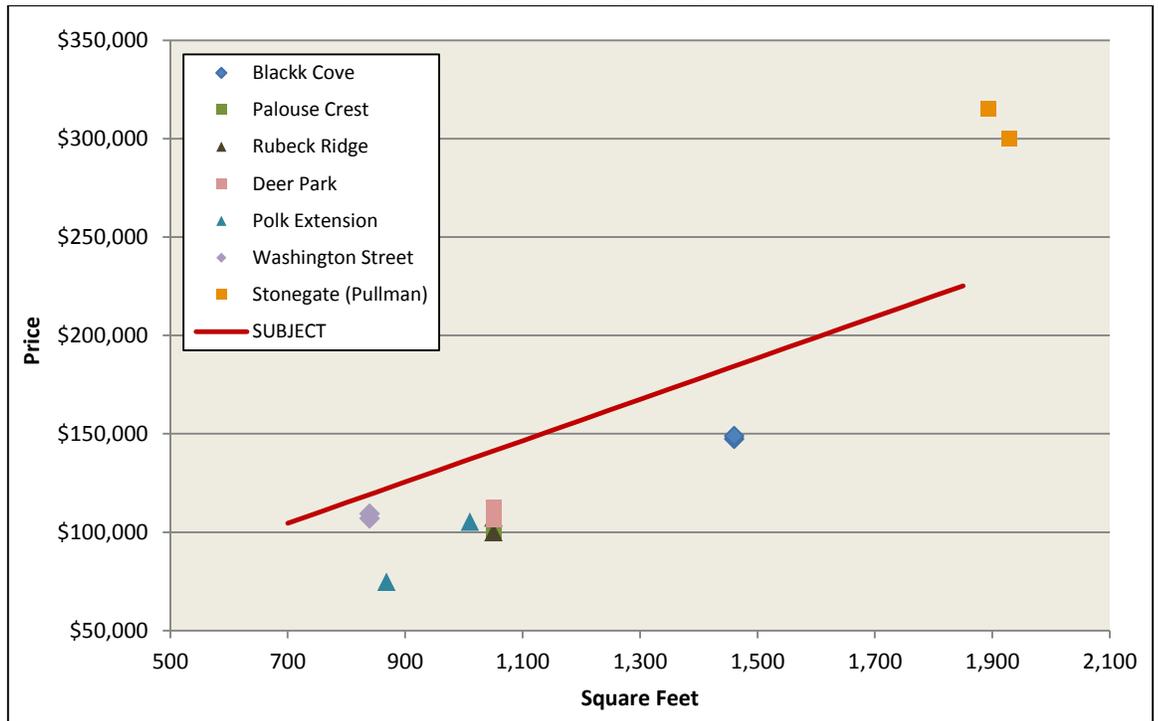


Competitive Position and Achievable Pricing

We would expect a condominium development within the Renewal District to be positioned above all of the Moscow projects in terms of location, building quality, amenities, and vintage. We expect a positioning roughly on par with the Stonegate project, when adjusting for the difference in product type. We regard the Renewal District as offering a comparable location to Stonegate, and we assume a similar unit standard, but with the additional benefit of community amenities.

For the purpose of estimating achievable pricing, we considered location premiums for central locations in Moscow, as reflected in single-family and townhouse sales. We further made adjustments to the observed prices for the expected higher standard, newer vintage, moderate community amenities, and for the factors mentioned with respect to Stonegate. The following chart and table illustrate our estimates for achievable pricing. It should be noted that the margin of error is high when there is a lack of good comparables in the current market. Further, the estimates do not take into account market depth and the possible need for discounts in order to achieve acceptable absorption rates.

FIGURE 4.10: PEER GROUP PRICING ANALYSIS



SOURCE: Latah County MLS, online listings, JOHNSON ECONOMICS

FIGURE 4.11: ACHIEVABLE PRICING – CONDOMINIUM FLATS

Unit Type	Units	Unit Mix	Average Size	Avg. Price	Avg. Price/SF
Studio	5	10%	600	\$93,000	\$155
1B/1b	23	46%	700	\$103,500	\$148
2B/1b	2	4%	850	\$119,250	\$140
2B/2b	15	30%	1,100	\$145,500	\$132
3B/2b	5	10%	1,300	\$166,500	\$128
Sum/Avg.	50	100%	876	\$121,980	\$139

SOURCE: JOHNSON ECONOMICS

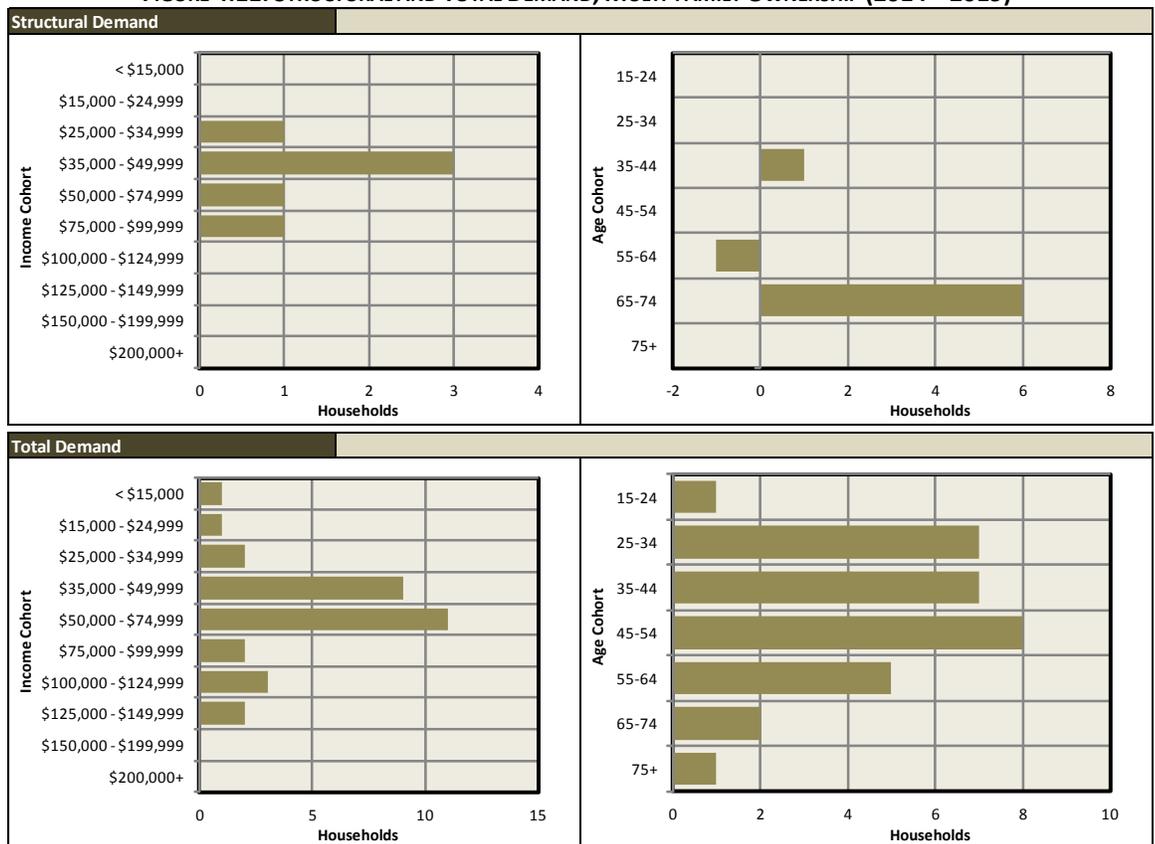


Market Depth

Due to the current lending requirements, an urban condominium development will only be feasible within Moscow if there is sufficient demand from potential owner-occupants. Because students typically are not owner-occupants, we will exclude student household from the following demand analysis. The analysis utilizes the same housing model with the same assumptions as for rental apartments, but with focus on households with a preference for multi-family ownership housing.

Our demand model indicates a very shallow market for urban condominiums. Under the baseline scenario, a net increase of six households with a preference for multi-family ownership housing is anticipated over the coming five years. With turnover included, roughly 30 transactions are expected within this market segment over the coming five years, or 6 transactions per year.

FIGURE 4.11: STRUCTURAL AND TOTAL DEMAND, MULTI-FAMILY OWNERSHIP (2014 – 2019)



SOURCE: JOHNSON ECONOMICS

Market Opportunities

We do not currently regard an urban condominium development to be feasible within the Renewal District. The owner-occupant pre-sale requirement will be difficult to meet, particularly on sites near the UI campus, as potential owner-occupant buyers will likely expect the project to be dominated by students. In addition, current achievable pricing is likely too low to support a well-appointed development with positive impacts on its surroundings. Finally, without the student segment, Moscow does not appear to have adequate demand for this use type.



IV. COMMERCIAL MARKET ANALYSIS

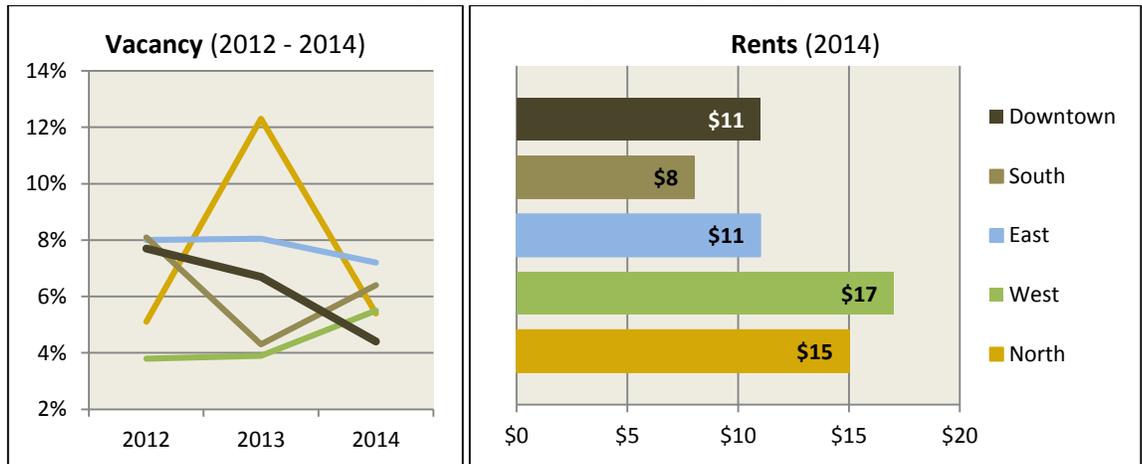
RETAIL SPACE

Recent Trends

The market for retail space in Moscow has seen modest improvement over the past years. Though rents have not changed much, the overall vacancy rate has declined and currently sits at a low 5.9%, according to Palouse Commercial Real Estate. The Downtown vacancy rate is even lower, at 4.4% - the lowest in the Moscow market. The Downtown market is also the submarket that has seen the greatest declines in vacancy over the past three years, indicating relatively strong demand in this submarket. Overall vacancy rates in Pullman are comparable to Moscow's, though Downtown Pullman currently has 10.6% vacancy.

Rents in Moscow are highest west of Downtown, along Pullman Road, at an average of \$17 per square foot. Rents in Downtown average \$11 per square foot, reflecting the lower traffic volume and smaller and more dated spaces.

FIGURE 5.1: MOSCOW RETAIL MARKET TRENDS



SOURCE: Palouse Commercial Real Estate

Pipeline Supply

According to city planners, there are three retail projects currently under construction within Moscow. A 3,200-square-foot restaurant building is going up at the intersection of 6th Street and Jackson Street, with 1,900 square feet pre-leased to Jimmy Johns and the remaining space currently available for pre-lease. Further north on Jackson Street, Hunga Dunga Brewing is remodeling an existing building for a new brew-pub. North of Downtown, at the intersection of Main Street and Rodeo Drive, Meineke Muffler is constructing a service shop. Together, we estimate that the three buildings supply roughly 7,000 square feet of retail space, all to be delivered in 2015.

FIGURE 5.2: SUPPLY PIPELINE, RETAIL SPACE

Project	Location	Status	Delivery	Square Footage
Jimmy Johns	525 S Jackson St	Under Construction	2015	3,200
Hunga Dunga Brewing*	333 N Jackson St	Under Construction	2015	1,000
Meineke Muffler*	970 N Main St	Under Construction	2015	3,000
Total Square Feet				7,200

* Square footage is estimated

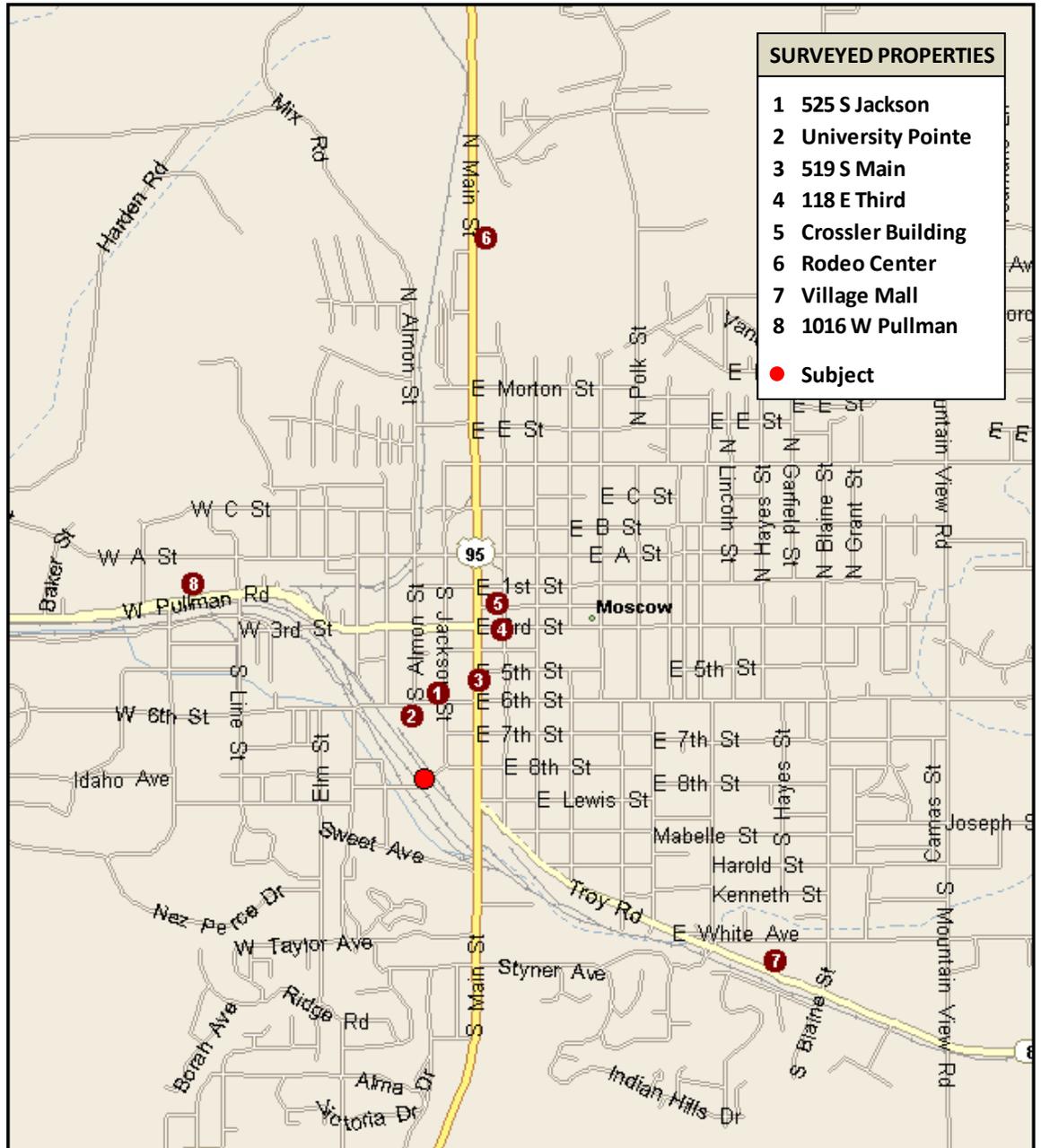
SOURCE: City of Moscow, JOHNSON ECONOMICS



Retail Market Survey

JOHNSON ECONOMICS surveyed a sample of eight retail projects, existing and under construction, with recent lease transactions or space available for lease. Five of the projects are located Downtown, and three are located outside Downtown.

FIGURE 5.3: MAP OF SURVEYED RETAIL PROPERTIES



SOURCE: MapPoint, JOHNSON ECONOMICS

Profiles of the surveyed properties are included on the following pages.



FIGURE 5.4: PROFILE OF SURVEYED RETAIL PROPERTIES

1) 525 S JACKSON STREET



Address: 525 S Jackson St, Moscow, Idaho
Year Built: 2014 (U.C.)
Total square feet: 3,200
Leased (%): 59% (pre-lease)
Lease Type: NNN
Asking Rate (\$/Yr/SF): **\$19.00**

Notes: Freestanding building on 10,000 SF. lot at NWC. Designed primarily for restaurant use. 1,900 SF pre-leased to Jimmy John's; 1,300 SF warm shell offered for \$19/SF.

2) UNIVERSITY POINTE



Address: 317 W 6th, Moscow, Idaho
Year Built: 2003
Total square feet: 25,712
Occupancy (%): 100%
Lease Type: NNN
Asking Rate (\$/Yr/SF): **\$13.00**

Notes: Retail on ground floor with office above. No space currently available. NNNs estimated to \$3-4 PSF.

3) 519 S MAIN STREET



Address: 519 S Main St, Moscow, Idaho
Year Built: 1950
Total square feet: 3,000
Occupancy (%): 50%
Lease Type: NNN
Asking Rate (\$/Yr/SF): **\$12.00**

Notes: One-story retail/office building with two 1,500 SF. spaces. One currently available.

4) 118 E THIRD STREET



Address: 118-120 E 3rd St, Moscow, Idaho
Year Built: 1900
Total square feet: 3,883
Occupancy (%): 100%
Lease Type: Modified Gross
Asking Rate (\$/Yr/SF): **\$5.88**

Notes: Two-story historic building with retail on ground floor and office above. Two spaces (1,942 SF. each) leased in September for January 2015 occupancy.



5) CROSSLER BUILDING



Address: 111 E 2nd St, Moscow, Idaho
Year Built: 1885
Total square feet: 4,000
Occupancy (%) 86%
Lease Type Full Service
Asking Rate (\$/Yr/SF) **\$19.64**

Notes: Two-story historic building with retail on ground floor and office above (10,000 sf. total). One retail space of 550 SF. currently available.

6) RODEO CENTER



Address: 212 E Rodeo Dr, Moscow, Idaho
Year Built: 2005
Total square feet: 12,500
Occupancy (%) 63%
Lease Type NNN
Asking Rate (\$/Yr/SF) **\$15.00**

Notes: Strip mall with two spaces available: 1,650 SF. available since 2008; 3,000 SF. available since 2012. Existing tenants are medical service providers. Center for sale for \$1.8M, or \$144/SF.

7) VILLAGE MALL



Address: 866 Troy Rd, Moscow, Idaho
Year Built: 2005
Total square feet: 19,642
Occupancy (%) 63%
Lease Type Modified Gross
Asking Rate (\$/Yr/SF) **\$15.00**

Notes: Strip mall with recent leases of spaces between 1,194 and 3,000 SF. Center for sale for \$2,85M, or \$145/SF.

8) 1016 W PULLMAN ROAD



Address: 1016 W Pullman Rd, Moscow, Idaho
Year Built: Unknown
Total square feet: 2,871
Occupancy (%)
Lease Type NNN
Asking Rate (\$/Yr/SF) **\$6.96**

Notes: Older but recently remodeled building on 8,000 SF. Lot between Wendy's and AutoZone on Pullman Road. Leased to Stiches & Petals.

SOURCE: Loopnet, online listings, Palouse Commercial Real Estate, JOHNSON ECONOMICS



Summary of Survey Observations

The surveyed properties represent a mix of building formats and vintages. With the exception of University Pointe and the new Jimmy John's building, the Downtown buildings are all more than sixty years old, and mostly occupied by smaller boutiques and secondhand stores. Among the projects located outside of Downtown, two are strip malls that were built within the past ten years, and one is an older freestanding building situated adjacent to the recent University Crossing development on Pullman Road.

Rents vary significantly within the sample. The older buildings along Main Street in Downtown range from around \$6 per square foot on a modified gross basis to \$20 full service. The only triple net lease among these properties has an asking rate of \$12 PSF. The building currently under construction at 525 S Jackson Street, which enjoys stronger exposure, has an asking rate of \$19, triple net. The smaller spaces in the University Pointe building have leased for around \$13, triple net. Due to their vintage and locations, these two properties are important reference points for achievable pricing at other sites in the Renewal District.

The two strip-malls in the sample have asking rates of \$15 PSF, triple net. However, these have high vacancy rates, and negotiated rates are likely to be lower. The older building on Pullman Road has a low asking rate of \$7 PSF, triple net, reflecting its vintage and lack of modern storefront. Its newer strip mall neighbors were offered through pre-lease at \$20-25, triple net, in 2011.

Competitive Position & Achievable Pricing

Among the sites with near-term redevelopment potential within the Renewal District, we regard the corner sites on 3rd/Jackson and 6th/Jackson to be best positioned. These sites have the potential for similar lease rates as 525 S Jackson (Jimmy Johns building). Assuming that the actual transaction rate for the available space at the Jimmy Johns site will be discounted 10% (\$2) from the current asking price, we estimate achievable rents at these sites to be \$17 per square foot, triple net. The Idaho Inn site, which has lower near-term redevelopment potential, is arguably an even stronger retail site, due to more traffic exposure. Assuming a rate premium of 15% for this site, we estimate its achievable rents to be \$19-20.

Achievable pricing at the other sites within the Renewal District will represent a discount to the mentioned sites. Sites with frontage along SR-8 (Jackson St, 3rd St, Troy Rd) are expected to achieve rates in the \$12 - \$15 range, with the highest rates on Jackson between 3rd and 6th Streets, and the lowest rates south of College Street.

Retail Spending Leakage and Demand Growth

In this section, we analyze potential opportunities for retail development in Moscow based on the current spending leakage to surrounding areas and anticipated new demand as a result of household growth over the five-year forecast horizon. For the purpose of these analyses, we define the primary trade area for a retail development in Downtown Moscow as Moscow proper plus the surrounding areas located within a five-mile radius of Downtown. Residents within this trade area are expected to contribute roughly three-fourths of the demand. A ten-mile radius defines the secondary trade area, which includes Pullman.

Spending Leakage

A comparison of current household retail spending to current retail sales within the defined trade areas reveals patterns of spending leakage – losses of retail sales to other geographic regions. The leakage represents potential unmet demand (identified as “opportunity gap” in the following table) that may be filled by new retailers within the trade area. Smaller towns typically exhibit considerable leakage, as they do not have the household counts required to sustain retail businesses dependent on considerable scale.



FIGURE 5.5: RETAIL SPENDING LEAKAGE, PRIMARY TRADE AREA

MOSCOW (5-Mile Radius)	2014 Demand	2014 Supply	Opportunity	Opportunity
Retail Category (NAICS)	(Consumer Spending)	(Retail Sales)	Gap (Surplus)	Gap (%)
Motor Vehicle and Parts Dealers-441	100,511,291	50,985,919	49,525,372	49%
Furniture and Home Furnishings Stores-442	8,759,614	5,608,153	3,151,461	36%
Electronics and Appliance Stores-443	11,028,324	7,359,116	3,669,208	33%
Building Material, Garden Equip Stores -444	46,336,323	46,411,953	(75,630)	0%
Food and Beverage Stores-445	60,987,574	59,927,375	1,060,199	2%
Health and Personal Care Stores-446	19,006,783	26,144,520	(7,137,737)	-38%
Gasoline Stations-447	50,602,485	25,324,514	25,277,971	50%
Clothing and Clothing Accessories Stores-448	23,410,813	11,289,285	12,121,528	52%
Sporting Goods, Hobby, Book, Music Stores-451	12,421,396	1,488,801	10,932,595	88%
General Merchandise Stores-452	56,722,193	17,739,608	38,982,585	69%
Miscellaneous Store Retailers-453	14,705,092	18,776,594	(4,071,502)	-28%
Non-Store Retailers-454	44,104,658	3,844,075	40,260,583	91%
Foodservice and Drinking Places-722	54,821,355	81,098,905	(26,277,550)	-48%
Total/Average	\$503,417,901	\$355,998,818	\$147,419,083	29%

SOURCE: Nielsen Claritas, JOHNSON ECONOMICS

The preceding table indicates annual leakage of nearly \$150 million within the primary trade area, representing nearly one-third of total retail spending. The retail categories that show the greatest leakage and thus the greatest opportunity are mostly dominated by large-format stores, oriented toward auto traffic in suburban settings (e.g., auto dealers, furniture, sporting goods, general merchandise/department stores). The primary category for boutique stores in a pedestrian, downtown environment is the “Miscellaneous Store Retailers” category, which shows a current oversupply (retailers capture spending from out-of-area households). The category for restaurants and bars also shows oversupply. In other words, the pattern of current spending leakage indicates few immediate opportunities for retail development in Downtown Moscow.

The secondary market area shows a greater spending leakage in the categories suitable for Downtown locations (figure 5.6). This explains how Moscow can sustain the “oversupply” indicated for the primary trade area for miscellaneous stores and restaurants/bars. It also indicates that the Moscow-Pullman region might have an opportunity for more retail within these categories. However, the leakage is relatively modest (37% and 20%, respectively), suggesting only limited opportunities in these categories.

FIGURE 5.6: RETAIL SPENDING LEAKAGE, SECONDARY TRADE AREA

MOSCOW-PULLMAN (10-Mile Radius)	2014 Demand	2014 Supply	Opportunity	Opportunity
Retail Category (NAICS)	(Consumer Spending)	(Retail Sales)	Gap (Surplus)	Gap (%)
Motor Vehicle and Parts Dealers-441	\$249,647,393	\$170,342,945	\$79,304,448	32%
Furniture and Home Furnishings Stores-442	\$21,106,550	\$13,972,085	\$7,134,465	34%
Electronics and Appliance Stores-443	\$28,453,584	\$11,644,331	\$16,809,253	59%
Building Material, Garden Equip Stores -444	\$110,528,364	\$58,737,209	\$51,791,155	47%
Food and Beverage Stores-445	\$148,371,149	\$204,302,837	(\$55,931,688)	-38%
Health and Personal Care Stores-446	\$43,802,769	\$53,475,963	(\$9,673,194)	-22%
Gasoline Stations-447	\$122,671,022	\$80,532,935	\$42,138,087	34%
Clothing and Clothing Accessories Stores-448	\$59,805,112	\$13,825,885	\$45,979,227	77%
Sporting Goods, Hobby, Book, Music Stores-451	\$32,278,313	\$5,475,843	\$26,802,470	83%
General Merchandise Stores-452	\$138,706,899	\$20,995,026	\$117,711,873	85%
Miscellaneous Store Retailers-453	\$36,863,065	\$23,385,109	\$13,477,956	37%
Non-Store Retailers-454	\$112,835,182	\$3,991,901	\$108,843,281	96%
Foodservice and Drinking Places-722	\$139,919,229	\$112,137,448	\$27,781,781	20%
	\$1,244,988,631	\$772,819,517	\$472,169,114	38%

SOURCE: Nielsen Claritas, JOHNSON ECONOMICS



Retail Demand from Household Growth

Applying projected household growth rates for Moscow to the primary market area indicates an increase of around 270 households under the baseline scenario. Based on current average household spending, this should lead to a spending increase of approximately \$7 million in the primary market. Assuming typical sales-per-square-foot ratios, this translates into demand for an additional 28,000 square feet of retail space. Roughly 20% of this demand is anticipated to be for retail space located in a downtown context, primarily belonging to the categories of miscellaneous stores (boutiques) and restaurants/bars. Household growth is thus projected to support nearly 6,000 square feet of new retail space in Downtown over the coming five years, or 1,200 square feet per year.

FIGURE 5.7: PROJECTED DOWNTOWN RETAIL SPACE DEMAND, PRIMARY TRADE AREA (2014 – 2019)

MOSCOW (5-Mile Radius)		Sales Support	Spending Supported Retail Demand (SF)				Downtown Demand (SF)
NAICS	Category	Factor ¹	2014	2019	'14-'19 Δ	Downtown	
441	Motor Vehicle and Parts Dealers	\$422	238,165	243,815	5,650	0%	0
442	Furniture and Home Furnishings Stores	\$228	38,434	39,345	912	0%	0
443	Electronics and Appliance Stores	\$329	33,487	34,281	794	0%	0
444	Building Materials and Garden Equipment	\$424	109,231	111,822	2,591	0%	0
445	Food and Beverage Stores	\$469	130,061	133,146	3,085	0%	0
446	Health and Personal Care Stores	\$304	62,471	63,953	1,482	20%	296
448	Clothing and Clothing Accessories Stores	\$170	137,615	140,880	3,264	20%	653
451	Sporting Goods, Hobby, Book and Music	\$217	57,239	58,597	1,358	20%	272
452	General Merchandise Stores	\$179	317,164	324,687	7,524	0%	0
453	Miscellaneous Store Retailers	\$138	106,179	108,698	2,519	50%	1,259
722	Foodservices and Drinking Places	\$291	188,284	192,750	4,466	75%	3,350
Totals/Weighted Averages			1,180,164	1,208,160	27,996	21%	5,830

SOURCE: Nielsen Claritas, JOHNSON ECONOMICS

The secondary trade area is projected to represent additional demand for downtown retail space in the order of 9,000 square feet over the forecast period. Pullman is likely to capture the majority of this demand, but Moscow has the potential to capture some of this demand if it can gain competitive advantage in terms of creating an attractive downtown retail environment. (See appendix for details.)

Retail Market Opportunities

The preceding market analysis reveals a mixed picture in terms of opportunities for a new retail development within the Renewal District. The high vacancy rates at the malls surrounding the Renewal District indicate general weakness in the Moscow market. Further, spending patterns do not indicate much unmet demand for pedestrian-oriented retail within greater Moscow, and household growth over the forecast horizon is only expected to have a marginal impact. However, the Downtown submarket has seen relatively strong absorption of retail space in recent years, and currently enjoys a very low vacancy rate (4.4% vs. 10% considered normal). With roughly 4,000 square feet of space currently under construction to house a new sandwich restaurant and a brew pub, some of the unmet demand for Downtown retail space is about to be met. However, we expect that the market will have some capacity to absorb additional space over the coming five years.

A likely obstacle to new development is the relatively low rent levels in Downtown, which currently average \$11 per square foot, according to Palouse Commercial Real Estate. Low lease rates have likely contributed to the current low vacancy rate in this submarket. This means that the unmet demand for retail space in Downtown may be at a rate that cannot support new development. Much of the current demand for retail space comes from antique stores and small boutiques with relatively low rates of sales per square foot. Such retailers are unable to support new construction.



In light of these considerations, we regard purely speculative retail developments to be unlikely over the forecast period. Developments anchored by pre-leased tenants, such as the new Jimmy Johns building, are more realistic, but our analyses indicate only limited demand for retail space from such retailers over the forecast horizon. At sites with strong exposure, we regard some absorption of smaller spaces at adequate rent levels to be likely over the forecast horizon.

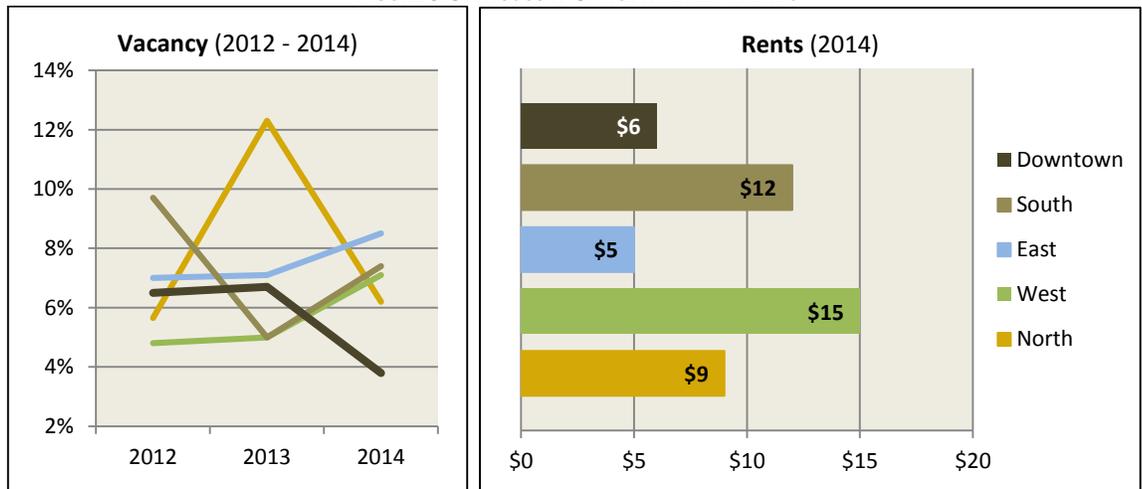
OFFICE SPACE

Recent Trends

Moscow's office market has largely followed the same trajectory as the retail market in recent years, though with somewhat weaker improvements in occupancy. The closing of two auto dealerships in 2013 contributed to increasing vacancy in certain submarkets, but the Downtown submarket saw a decline in the vacancy rate to a low of 3.8%. The overall vacancy rate for office space is 6.8% in and 8.4% in Pullman.

Rents have remained flat recently in recent years. The highest rents are found west of Downtown, at an average of \$15 PSF, and the lowest are east of Downtown, at around \$5. The Downtown submarket currently has an average of \$6, reflecting a mix of triple net and gross leases.

FIGURE 5.8: MOSCOW OFFICE MARKET TRENDS



SOURCE: Palouse Commercial Real Estate

Supply Pipeline

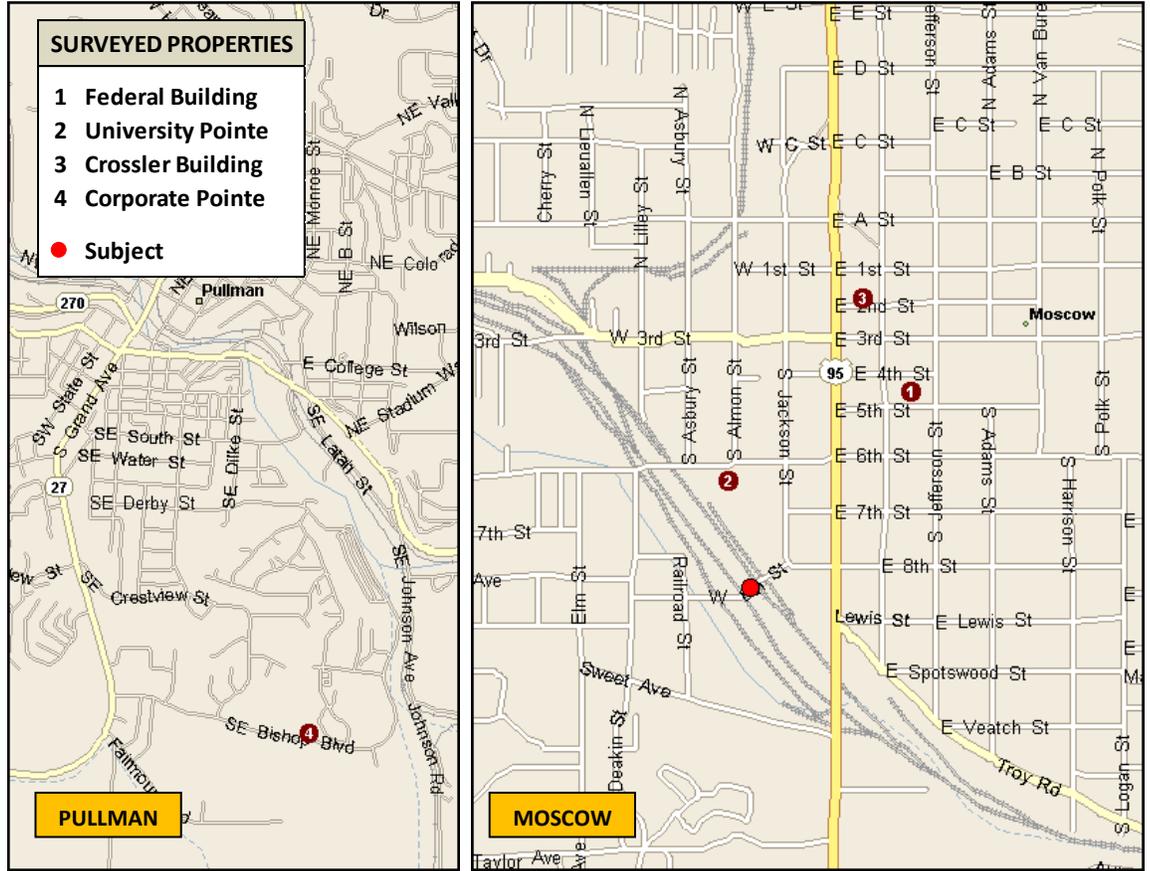
There is no office development currently in the pipeline in Moscow, according to city planners.

Office Market Survey

JOHNSON ECONOMICS surveyed a sample of four office projects with recent lease transactions or available space for lease. Three of the projects are located in Downtown Moscow, and one is located in Pullman. Profiles of the properties are included on the following pages.



FIGURE 5.9: MAP OF SURVEYED OFFICE PROPERTIES



SOURCE: MapPoint, JOHNSON ECONOMICS



FIGURE 5.10: PROFILE OF SURVEYED OFFICE PROPERTIES

1) FEDERAL BUILDING



Address: 220 E 5th St, Moscow, Idaho
 Year Built: 1973
 Total square feet: 43,049
 Leased (%): 100%
 Lease Type: Unknown
 Negotiated Rate (\$/Yr/SF) **\$16.16**

Notes: Sold for \$2.38M or \$55/SF in 2012, with an estimated \$3M in needed renovations. Quoted lease rate based on public GSA lease-back contract for 25k SF. Parking for 108 vehicles.

2) UNIVERSITY POINTE



Address: 317 W 6th, Moscow, Idaho
 Year Built: 2003
 Total square feet: 25,712
 Occupancy (%): 100%
 Lease Type: NNN
 Asking Rate (\$/Yr/SF) **\$13.00**

Notes: Retail on ground floor with office above. No space currently available. NNNs estimated to \$3-4 PSF.

3) CROSSLER BUILDING



Address: 111 E 2nd St, Moscow, Idaho
 Year Built: 1885
 Total square feet: 4,000
 Occupancy (%): 77%
 Lease Type: Full Service
 Asking Rate (\$/Yr/SF) **\$10.49**

Notes: Two-story historic building with retail on ground floor and office above (10,000 sf. total). One office space of 915 SF. currently available.

4) CORPORATE POINTE



Address: 840 SE Bishop Blvd., Pullman, WA
 Year Built: Unknown
 Total square feet: 17,321
 Occupancy (%): 100%
 Lease Type: NNN
 Asking Rate (\$/Yr/SF) **\$16.00**

Notes: Two-story building adjacent to Pullman Regional Hospital. Existing tenants are medical/dental, title company, etc. Two suites (1,668 and 2,004 SF) available from Jan 2015.

SOURCE: Loopnet, online listings, Palouse Commercial Real Estate, JOHNSON ECONOMICS



Summary of Survey Observations

The four surveyed properties represent different office formats. The Federal Building is a civic office building, which will likely have specific requirements set by its governmental tenant that might warrant above-market rents. University Pointe and the Crossler Building are both mixed use buildings with ground floor retail and office and the second floor. These buildings are oriented more toward office tenants within industries like information, finance, and professional services. However, the two buildings are of very different vintage, being built almost 120 years apart. University Pointe is the best reference point for achievable pricing within the Renewal District, given its location as well as its vintage. Corporate Pointe is the only suburban project in the sample. It is similar to the Federal Building in that it is a pure office building oriented toward larger tenants. However, its tenants are mostly from medical sectors, reflecting its location near Pullman Regional Hospital.

The highest rents in the sample are captured by the projects oriented toward government and medical sectors. This likely reflects a combination of the specific requirements set by these types of tenants as well as the general stability of their industries. As discussed in the section on local economic trends, other typical office industries have generally seen declines in firm and employee counts recently (with EMSI as a notable exception). The lack of demand from these industries has likely prevented rent increases for smaller downtown office spaces. According to Shelley Bennett at Palouse Commercial Real Estate, up-to-date office space typically leases for around \$12 per square foot, triple net, and there is little demand for space at higher rent levels.

Competitive Position & Achievable Pricing

Among the sites within the Renewal District, we regard sites located near Gritman Medical Center to be best positioned, as these can capitalize on the desire among medical services providers to be located near a major hospital. With access to and visibility from major arterials (SR-8, Highway 95), such sites might capture triple-net lease rates around \$15 to \$16 per square foot. Sites with similar access and exposure but located further from the Hospital are likely to be positioned similarly to University Pointe, and might capture rates around \$13 to \$14, although special build-to-suit arrangements could warrant higher rates. Sites that have neither of these attributes are not likely to lease for more than \$10-\$12. The quoted rates assume adequate market depth.

Market Depth

Demand for office space is a direct result of employment in office-space-utilizing industries. JOHNSON ECONOMICS has developed a model that converts expected employment growth by industry into office space demand by applying typical rates for office space utilization within each industry and rates for typical space per employee. Employment growth projections are based on industry-specific forecasts produced by the State of Idaho, adjusted to reflect the impacts of anticipated enrollment growth at UI Moscow and WSU Pullman. A more detailed presentation of the methodological steps involved in the modeling is included in the appendix.

Reflecting our relatively low growth expectations for the Latah-Whitman economy over the next five years, our demand model indicates a modest increase in office space demand over this period. Under the baseline scenario, the net increase within Latah County is estimated to 21,000 square feet of space over the period, or approximately 4,000 square feet per year. This estimate reflects overall employment growth of 0.5%. Our high-growth scenario, which reflects employment growth of 1.0%, indicates demand for 45,000 square feet over the period, or around 9,000 per year. Downtown office space is assumed to capture nearly half of this demand, or roughly 10,000 square feet over the forecast period.



FIGURE 5.11: PROJECTED OFFICE SPACE DEMAND (2014 – 2019)

Office Space-Utilizing Demand Employment Sector	Total Office Empl.		Avg. Space	Total Office Space Need (SF)		'14-'19	Downtown	Downtown
	2014	2019	Per Job ¹	2014	2019	Change (SF)	Capture	Demand
Construction	7	7	285	2,015	2,137	123	0%	0
Manufacturing	19	19	285	5,372	5,547	175	0%	0
Wholesale Trade	15	15	285	4,227	4,398	170	0%	0
Retail Trade	94	98	285	26,774	27,851	1,078	0%	0
T.W.U.	26	27	285	7,314	7,553	239	0%	0
Information	104	106	285	29,629	30,295	666	50%	333
Financial Activities	362	375	285	103,311	106,943	3,631	75%	2,724
Professional & Business	713	738	285	203,265	210,410	7,145	50%	3,572
Education	37	38	285	10,475	10,736	262	0%	0
Health Services	385	403	285	109,677	114,935	5,258	50%	2,629
Leisure & Hospitality	88	92	285	24,961	26,222	1,261	0%	0
Other Services	149	154	285	42,480	43,865	1,385	50%	693
Government	1,930	1,930	285	550,128	550,128	0	20%	0
Total	3,929	4,004		1,119,630	1,141,022	21,393	47%	9,951

¹ Average office employment density by industry sector based on Urban Land Institute guidelines.

SOURCE: JOHNSON ECONOMICS

Office Market Opportunities

Moscow’s office market is relatively tight at the present, and our projections indicate some support for new office development over the coming five years. The two industries that have produced most of the gains in office employment in the recent past are health services and professional and business services. Based on our market depth projections, these industries will also contribute the majority of the new demand over the coming five years. In this context, there might be an opportunity for a medical office development on sites near Gritman Medical Center. A development intended to capitalize on demand within the professional/business services industry would likely have to involve EMSI, which is the main driver of growth in this industry. Apart from EMSI and health services, the demand is anticipated to be limited and to come at rent levels that for the most part will be inadequate to justify new development.



V. CONCLUSION - MARKET OPPORTUNITIES

The use types that are likely to exhibit the strongest market support in Central Moscow over the near- to mid-term are upscale, urban apartments and medical office space. We regard these as feasible development forms even in a generally weak market environment. In the case of apartments, there are indications of pent-up demand for upscale options; in the case of medical office space, the demographic composition of the local population indicates a steady increase in demand. Slight declines in employment, enrollment, or household formation are not likely to materially impact the market support for these use types.

The analysis also indicates some support for additional commercial space within the study area, though not at a scale that will justify larger developments. Smaller retail spaces could potentially work as part of a mixed-use development with apartments, something that in turn would enhance the marketability of the apartments. However, we expect absorption of new retail space (priced at rent levels that can support new construction) to be slow in the near future, and pre-leases will likely have to be in place in order to make a larger retail component viable. A relocation of the University bookstore is a possible solution that makes a mixed-use project immediately viable without causing a dilution of the Downtown retail market.

In the following, we will focus on urban apartments, due to the immediate potential for this development form within the Renewal District and the benefits such a development might offer for Downtown Moscow and the University of Idaho.

SEGMENTS WITH DEMAND FOR UPSCALE, URBAN APARTMENTS

Non-Students

An upscale apartment project in the Renewal District is likely to draw support from a broad range of segments. We expect young professionals, empty-nesters, and retirees to dominate. Demand from these segments is indicated by the current tenant profile at Turnstone Flats and the McConnell Building, as well as our demand projections for Moscow. The latter indicate that retirees will be the single largest segment in terms of net new apartment demand over the coming five years. However, most of the pent-up demand is likely to be among younger cohorts, which dominate the current renter base. Our projections indicate that roughly 35 lease transactions annually will involve apartment households with incomes above \$50,000, a segment that has few apartment options in the current market.

Students

We also expect students to contribute to some of the demand for upscale apartments. Students are sometimes underestimated in the context of high-end spending, including spending on apartment rent, due to the fact that student loans and transfers from parents are not commonly taken into account. An analysis performed by JOHNSON ECONOMICS in the Portland Metro Area indicated that older students in particular are willing to stretch their budgets and take on debt to pay for apartment rent. The analysis revealed that apartment renters in the 25-to-34-year cohort with annual incomes below \$15,000 (students and non-students) spent an average of 127% of their income on rent, while 15-to-24-year-olds in the same income bracket spent 97% on average.³ In other words, income is a poor indicator of typical spending among students. This is true for retail spending as well as for rent.

Across the nation, student housing developers have recognized that today's students have a stronger preference for well-amenitized apartment projects than previous generations. Consequently, numerous

³ Based on an analysis of Microdata Samples from the American Community Survey (U.S. Census Bureau), collected across the Portland Metro Area between 2007 and 2011, representing 5% of the population.



luxury student projects have been built in recent years. The two Grove projects in Moscow and Pullman are modest reflections of this trend. Many developers have also perceived increasing demand for more urban locations among students. Examples of this can be found in Eugene, Oregon, where several recent student projects have been built in or near Downtown. A project named 13th & Olive is an example of a student-oriented project that is both upscale and urban. Among a number of other amenities, this project includes a pool, which is unusual for urban projects.

FIGURE 6.1: 13TH & OLIVE (EUGENE, OREGON)



SOURCE: Capstone Collegiate Communities

The trend toward stronger high-end demand from students is often ascribed to the higher expectations set by today's students, reflecting the increasing comfort of middle-income American homes. However, in many cases, it is the parents rather than the students who decide on (and pay for) the more upscale apartment options, which promise a safer, cleaner, and generally better environment for their young. We expect the same dynamics to be in place in Moscow, and we suspect that the availability of such housing could increase the marketability of UI Moscow.

SITES WITH APARTMENT POTENTIAL

There are several sites within the Renewal District that have potential for urban apartments. We have highlighted four sites in the image to the right. The potential of the site in the north end of the Renewal District (First and Almond St.) is primarily as a mid-market option, given the character of its surroundings. The site located south of Crites Seed has potential for a large-scale student project, which is unlikely to be realized in the current environment. Its potential for a mixed-use or pedestrian-oriented development is limited given its detachment from the more vital, pedestrian parts of Downtown. In the following, we will focus on the two smaller sites on Sixth Avenue, due to their more immediate development potential and greater benefits to the City and the University.



Sixth & Jackson

The vacant lot located at the southwest corner of W Sixth Street and W Jackson Street is likely the strongest candidate for an upscale, urban apartment development. Located only one block from Main Street, this site is directly linked to the pedestrian Downtown area. A study earlier conducted by JOHNSON ECONOMICS indicates a strong price impact associated with pedestrian access to urban amenities like restaurants, bars, and movie theaters.⁴ The site's marketability is further enhanced by its arterial access

⁴ JOHNSON GARDNER, "An Assessment of the Marginal Impact of Urban Amenities on Residential Pricing," 2007.



and visibility, which makes for convenient living and allows it to be easily sighted by passersby. The site's connection to Downtown makes it a good candidate for a non-student-focused apartment project, though its proximity to campus makes it an attractive option for students as well.

The Sixth and Jackson site is also has retail potential, and thus is suitable for a mixed-use development. In addition to its exposure to auto-traffic along two arterial streets, the site benefits from foot traffic between the UI campus and Downtown. It is also likely to benefit from Downtown pedestrian retail traffic, and might serve to extend the Downtown pedestrian environment to the existing University Pointe building. As mentioned, the current market for retail space is quite weak, and a lease by the University bookstore is one possible way to secure occupancy until there is firmer demand from other retailers. Given the site's qualities, however, it has commercial potential that goes beyond student-oriented services.



At a size of roughly 35,000 square feet, we estimate that this site should be able to accommodate at least 50 apartment units over three stories (13,000 sf. footprint), leaving adequate space for tenant and retail parking on a surface lot behind the building.

Sixth & Asbury

On the other side of University Pointe there is a group of parcels that together make up another potential apartment site. These parcels are currently occupied by Taco Time, the HR department of UI, and a small Wells Fargo ATM building. Redevelopment through assemblage of these sites would likely require a substantial level of effort and time.



This site is more detached from Downtown and located closer to the UI campus. Consequently, its residential potential is primarily as a student housing site. Given the scale of the site, it can house a large number of student units. In the current environment, a large-scale student housing project is not realistic unless the university decides to close and repurpose some of its existing student housing buildings.

The retail potential of the site is somewhat lower than the previous site, reflecting its lack of exposure to traffic along Jackson Street and longer distance to Downtown. However, the pedestrian link to Downtown will be strengthened if the development is preceded by a project on the Sixth and Jackson site. However, in the current market, a pedestrian-oriented, mixed-use project would likely have to include student-oriented services on the ground floor. A student-focused project on this site would likely function similarly to 13th & Olive in Eugene, catering primarily to older students who prefer to live off campus and close to Downtown.

MIXED-USE EXAMPLES

There are multiple examples in the Northwest of urban-style, mixed-use projects located in suburban or small-town settings where prevailing rent levels do not justify structured parking or steel/concrete structures. The following are three examples of concepts that we regard to be feasible on the two mentioned sites.



Orenco Station (Hillsboro, Oregon)

Orenco Station is a suburban town center that was built around a new light-rail station. The Nexus apartment project is a three-story, wood-frame complex, with retail and tenant parking on surface lots behind the buildings. The parking lots are accessed via alleyways, as shown in the picture below. Rents range from \$880 for studios to \$1,700 for three-bedroom units. Because the units are relatively large, these rents translate into a relatively low per-square-foot range (\$1.20 to \$1.40).



Bell Tower at Old Town Square (Wilsonville, Oregon)

Another example is the Bell Tower in Wilsonville – a city of about 14,000 residents. The four-story wood-frame building features 52 apartment units above 5,000 square feet of retail and an at-grade parking garage. Rents range from around \$800 for the smallest studios to around \$1,800 for the largest two-bedroom units (\$1.50 to \$1.65 per square foot). The Bell Tower site is comparable in size to the Sixth and Jackson site.



The 951 (Boise, Idaho)

The 951 is a mixed-use project currently under construction along Parkcenter Boulevard, southeast of Downtown. The building is a four-story structure with 68 apartment units and 4,000 square feet of retail space on the ground floor. The project will offer covered parking behind the building. The site is about twice the size of the Sixth and Asbury site. The project is scheduled to open in January 2015.

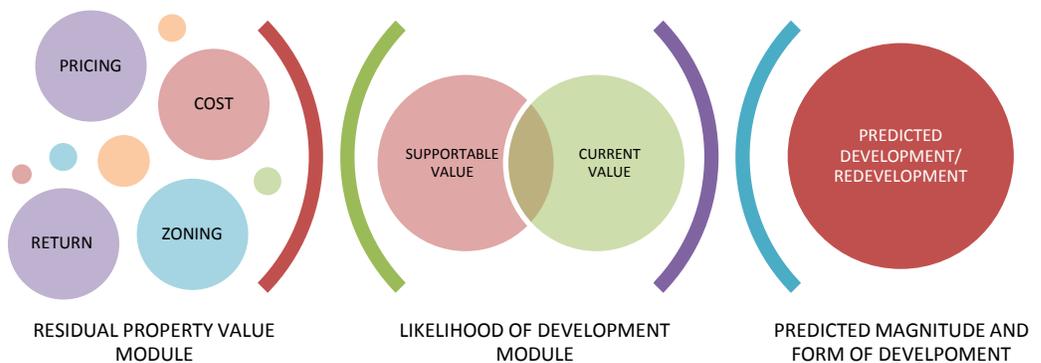


VI. DEVELOPMENT / REDEVELOPMENT POTENTIAL

This component of our analysis utilizes a predictive model which projects the potential new development activity within a study area. The model is designed to forecast new real estate development, redevelopment and rehabilitation in the study area.

METHODOLOGY

The Model is Excel-based, and translates user inputs on existing and expected conditions in a study area into an estimate of the magnitude of new development activity that can be expected over a planning period. The model is designed from a “production” perspective, and delivers a predicted development pattern in a specific study area under a specific set of assumptions with respect to the development environment.



The following steps describe an application of the Model:

1. The user **inputs a range of indicators** on existing conditions in the area.
2. The model **generates a “baseline scenario”** based on existing conditions.
3. The Model **produces projections of the anticipated amount of development** in the corridor under the scenario.



A key component of this approach is the utilization of a “production” model, which is intended to mimic a developer’s decision tree. As such, the Model solves for the “highest and best use” development form on the basis of predicted financial return.

To do this, the Model uses a pro forma based predictive model to generate predominant development profiles for the study area. This model evaluates highest and best use development forms under a range of assumptions, based on the implied residual property value⁵ under each use. This allows a calculation of the likely predominant development form within the study area, based on market dynamics and zoning entitlements. It also establishes a residual property value for the area, which enables an evaluation of the extent to which existing properties can be expected to redevelop.

The development/redevelopment module is intended to simulate the development decision tree, factoring in the impact of the key inputs on decisions to undertake development activity. The model is based on a series of simplified pro formas for 27 theoretical development programs that characterize the relationship between key variables, predicted development form and associated residual property values. The module generates a generalized determination of the “highest and best economic use” based on the theoretical development programs, as well as an associated residual property value associated with each program under the scenario. This information is reconciled with information on the existing inventory information and zoning, resulting in a predicted pattern of investment.

**COMPONENTS OF THE DEVELOPMENT/
REDEVELOPMENT MODEL**

DEVELOPMENT/REDEVELOPMENT MODULE
Highest and Best Use Determination
<i>Residual Property Values</i>
Existing Inventory
<i>Vacant</i>
<i>Redevelopable</i>
<i>Improvements</i>
Predicted Investment
<i>Development</i>
<i>Redevelopment</i>
<i>Investment in Existing</i>

“Highest and Best Use”

The development/redevelopment module initially solves for a development solution that represents the highest and best use of the property under the assumptions used, as well as outputting an associated residual property value. The highest and best *economic* use of the site is defined as the allowable land use program that yields the greatest return to the existing property, and the residual property value reflects the maximum acquisition value supported by that program under the assumptions used. There may be additional considerations in determining the *overall* highest and best use of land from a community and planning perspective, but this Model focuses on the economic component which tends to be most relevant to private developers.

The highest and best use determination is based on the allowable use that has the highest indicated residual property value. The model currently incorporates a total of 27 theoretical development programs, but the number and nature of program options can be varied. An entitlement screen is necessary, since use types identified as having the greatest residual values may not be allowed under existing zoning. In the model, this is done using a matrix that evaluates whether or not the theoretical

⁵ “Residual Property Value” reflects the maximum supportable acquisition value of the property under an assumed development program (i.e. what the developer is willing to pay given the planned and permitted uses of the site). The permitted use that yields the highest Residual Property Value is considered the most attractive use in terms of financial return to the developer.

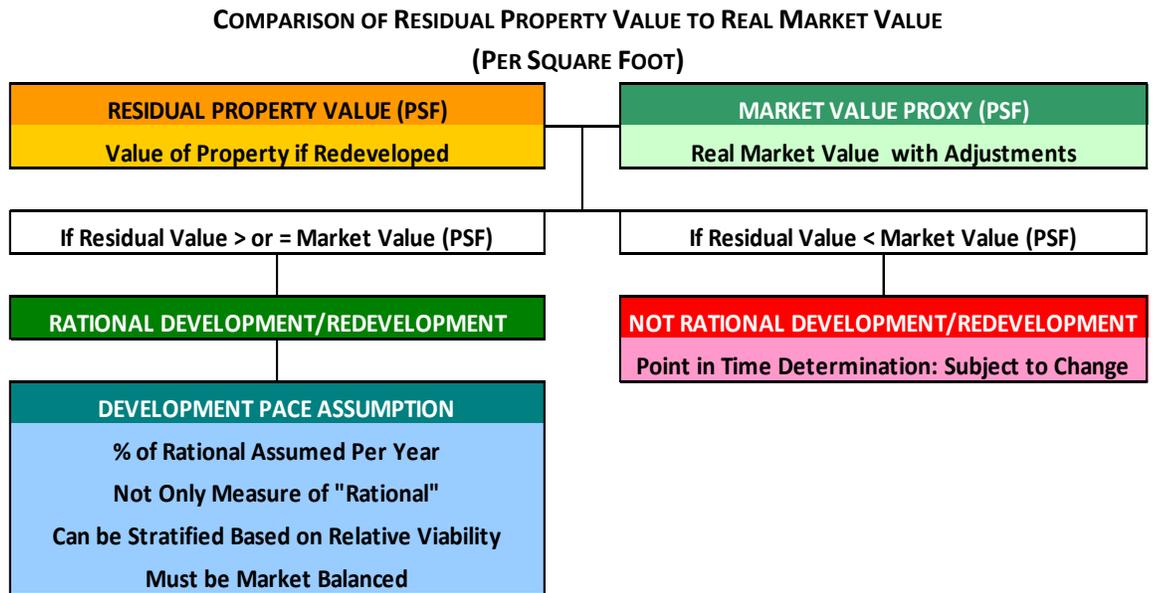


programs are allowable under the range of zoning codes in the study area. If the use is not allowed, the highest and best *allowed* use is determined.

Threshold for Development

Development and redevelopment activity is predicted by the model when the residual property value exceeds the property value under the existing use. If the residual value is greater than or equal to the market value of the property, it is assumed to represent a “rational” development or redevelopment opportunity – i.e. a developer can purchase the property at current market value for anew intended purpose that places a greater value on the site.

While development and/or redevelopment is considered viable in these instances, it does not necessarily mean that it will occur within the study time frame. There are a number of additional factors that impact redevelopment, and the Model assumes that only a portion of opportunities identified as viable will be realized within the study horizon.



Output Measures

Predicted development/redevelopment is broken down into multiple categories: 1) predicted levels of new development, 2) predicted levels of redevelopment, and 3) investment in existing structures. The units of measure include:

- The dollar value of construction and investment activity in physical improvements.
- Projected net change in real market value in the study area associated with new construction
- Net change in square footage of commercial space, as well as residential units in the study area.

The model does not address the direct, indirect or induced impact of the construction activity funded.

Limitations and Assumptions

As with any model, this Model has limitations resulting from gaps in knowledge and data.



- First and foremost, it is impossible to precisely predict future development activity in a large study area given the multitude of property owners, individual investment decisions, real estate market cycles, general economic conditions and unforeseeable events. For this reason, **it is recommended that this Model be used to consider the *potential magnitude and character of development*, rather than the precise numerical results generated.**
- The Model uses specific parcel-level data to generate quantified measures of predicted development activity, but it is important to remember that this Model is actually generating a broad study-area-wide estimate of development activity. In no cases should this Model be used to reach definitive conclusions about what will happen on any given parcel. Any Model outputs that identify parcels, whether in map or database form, should specify that *it is making no firm predictions or guarantees on the eventual development or lack of development on specific properties. The actual output is a probability estimate of development/redevelopment, and is intended to be utilized in aggregate as opposed to at the site level.*
- Key variables in the model, such as capitalization rates, lending terms and construction costs, are highly variable. The model incorporates only a single set of assumptions for these variables.



Assumptions

The following is a list of key assumptions used in the model scenario:

CURRENT MARKET PRICING (MARGINAL, ASSUMING NEW PRODUCT)			
10	Rental Residential	\$1.35	Per Square Foot Per Month
11	Ownership Residential	\$139	Per Square Foot
12	Office Space	\$16.00	NNN (Triple Net Lease)
13	Retail Space	\$18.00	NNN (Triple Net Lease)
14	Parking - Rental Residential	\$50.00	Per Covered Secured Space per Month
15	Parking Price - Ownership	\$0	Per Covered Secured Space
16	Parking - Office Space	\$50.00	Per Covered Secured Space per Month
17	Average Annual Pricing Growth Trend (Residential-Rental)	0.0%	AAGR/Inflation Adjusted
18	Average Annual Pricing Growth Trend (Residential-Owner)	0.0%	AAGR/Inflation Adjusted
19	Average Annual Pricing Growth Trend (Office)	0.0%	AAGR/Inflation Adjusted
20	Average Annual Pricing Growth Trend (Retail)	0.0%	AAGR/Inflation Adjusted
OPERATING CHARACTERISTICS			
Structural Vacancy			
24	Rental Residential	5.0%	
25	Office	10.0%	
26	Retail	10.0%	
Operating Expenses			
27	Rental Residential	33.0%	
28	Office	5.0%	
29	Retail	5.0%	
FINANCIAL CHARACTERISTICS			
30	Rental Residential Cap Rate	5.75%	
31	Office Cap Rate	7.00%	
32	Retail Cap Rate	7.00%	
33	Ownership Residential, Return on Cost	15.00%	

The assumptions used were based on our market analysis, as well as professional experience. Specific terms are likely to vary substantively on a site specific level.



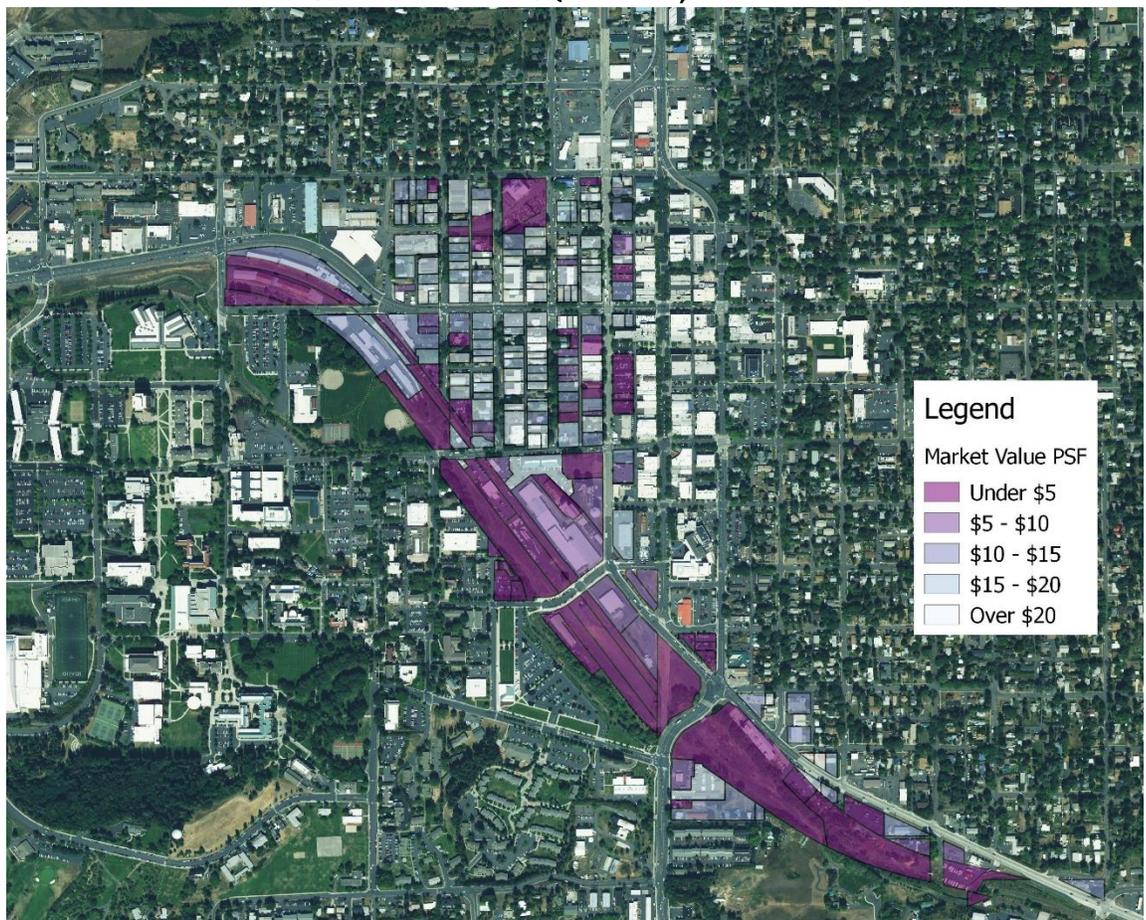
FINDINGS

This section presents the results of applying the predictive model to the Legacy Crossing Urban Renewal District (URA).

Current Property Values

Current properties in the URA were classified based on their indicated overall value per square foot. This information was derived from assessor records. The total value of the property (land and improvements) was divided by the square footage of the parcel to calculate an estimated value per square foot. The following map summarizes the results of this analysis:

ESTIMATED CURRENT VALUE PER SQUARE FOOT, LAND AND IMPROVEMENTS



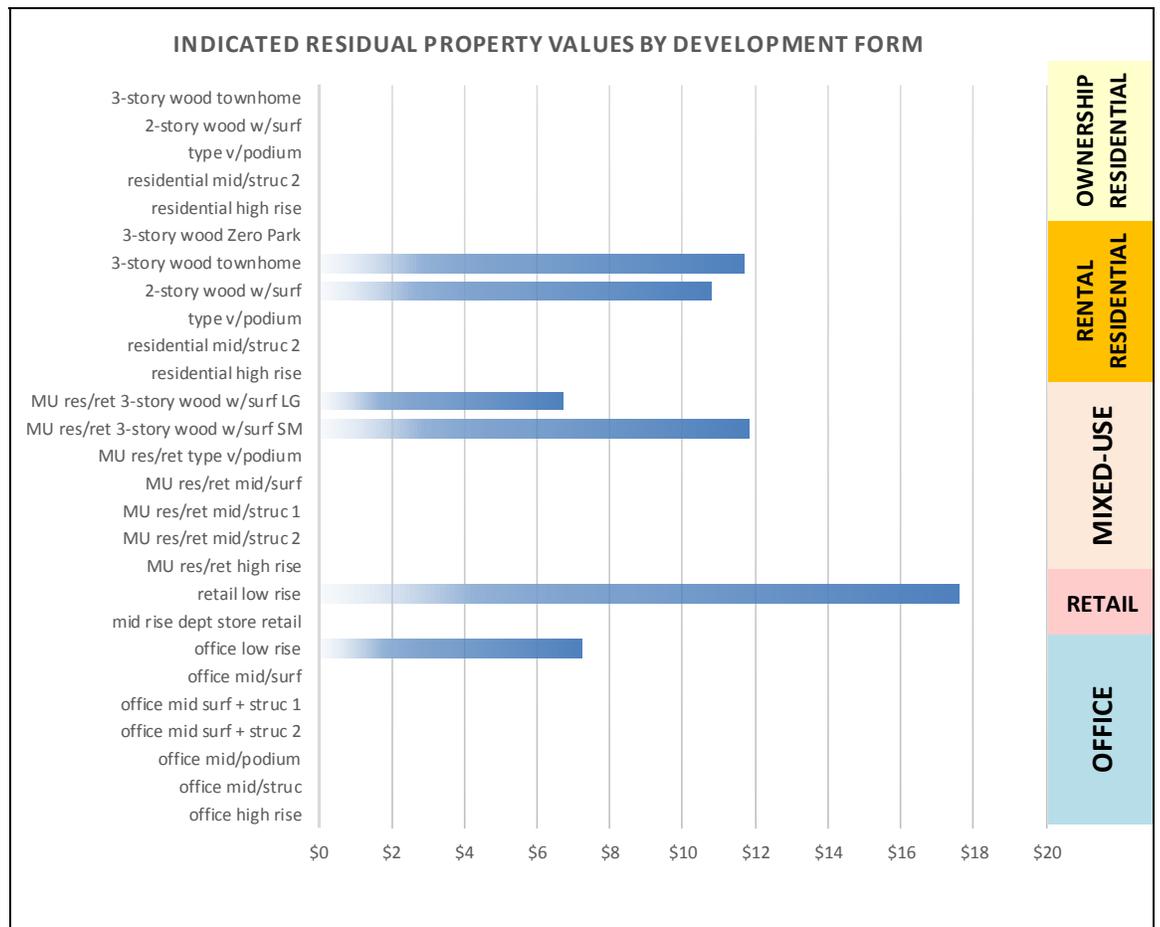
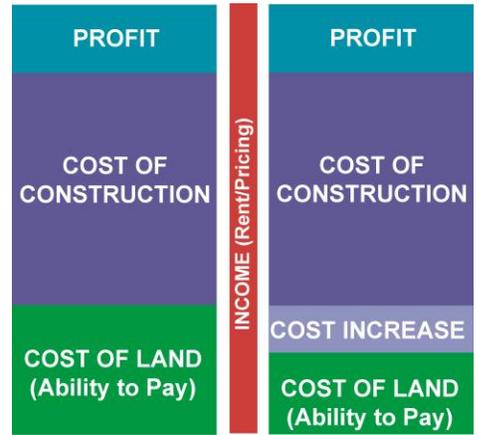
Properties with relatively low land values per square foot are assumed to be easier redevelopment opportunities, as there is a greater likelihood that the residual land value under a new development program would exceed the cost of acquisition.



Residual Land Values

The residual land value reflects the maximum site acquisition cost a development program can support under a set of assumptions. From a developer perspective, variables such as achievable pricing, construction costs and necessary profit are largely fixed, and the variable that is adjusted is the acquisition cost of land. Changes in achievable pricing, costs or perceived risks impact residual land values.

As summarized in the following graphic, the residual land values for the range of development forms are highest for wood-frame rental residential development, mixed-use projects and low rise retail. Market conditions in the Moscow area do not support a number of prospective development forms in the model under the assumptions used, which are shown to have no residual land value.⁶



⁶ The detailed assumptions and schematic pro formas are included in Appendix B of this report.



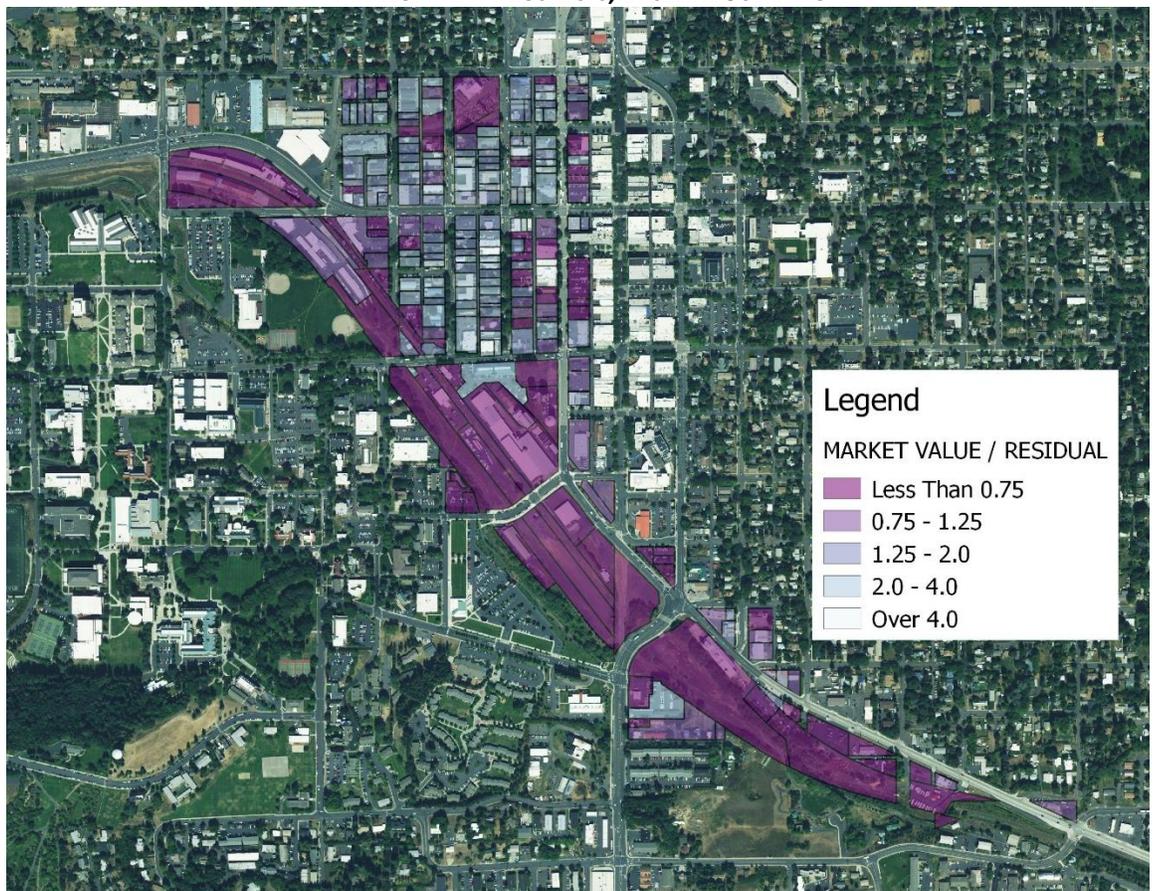
Residual values vary from market values in that they reflect what someone can pay while still meeting their return requirements, not what they will pay. The actual market value of property will typically be lower unless the market is unusually competitive.

Supportable land values in the study area are relatively modest, reflecting current achievable pricing in the district. Under current conditions, we would expect new development to be primarily wood frame construction, with single story retail space and three story rental apartments. Mixed-use development is also a likely outcome, with supportable values similar to those of rental apartments in locations that can support ground floor retail tenants.

Market Value Relative to Residual Land Value

The following map presents the results of the Baseline scenarios for the URA. Areas shown in dark purple are those with the greatest redevelopment potential due to current property values which are low relative to the potential value of new development. Areas displayed in lighter purple are somewhat likely to develop, and those in blue or white have a low likelihood to redevelop because the current uses still retain enough value to make the parcels prohibitively expensive for redevelopment.

DEVELOPMENT PROSPECTS, BASELINE SCENARIO



Note that the Model results are not an assurance that any specific property is likely or unlikely to redevelop. Each property has unique issues which make sale or redevelopment more or less likely, including the rights of current users, the property owner’s plans and preferences, or unknown constraints.



Development Forecast

The model categorizes the study area property inventory based on the ratio between market value and residual land value. The level of predicted development/redevelopment is then calculated using development probability factors. These have been derived from our work in other jurisdictions, which has allowed us to calibrate the estimates through a back casting exercise base on observed development patterns for properties with similar relationships.

The study area was estimated to include over 6.8 million square feet of area (roughly 157 acres), of which approximately 8% was estimated to develop or redevelop over the next ten years.

	SQUARE FEET OF LAND (Scale Adjusted)					
	RMV/Residual Category					Total
	<.75	.75-1.25	1.25-2.0	2.0-4.0	>4.0	
TOTAL	1,587,417	585,368	382,905	536,487	3,744,867	6,837,045
Dev Probability	17%	9%	7%	5%	4%	8%
DEVELOPED	266,686	53,854	25,655	24,678	149,795	520,668

The following figure presents the results for the scenario run by product type. The predominant predicted development form is predicted along with construction investment, projected housing units, commercial space and net change to real market value.

**DEVELOPMENT/REDEVELOPMENT FORECAST, BASELINE SCENARIO
URA / TEN YEAR PERIOD**

Predicted Predominant Development Form	Predicted Development Yield			RMV/ Dev. or Redev.	Current RMV	Net Change in RMV
	Construction Investment	Residential Units	Commercial Space			
MU res/ret 3-story wood w/surf SM	\$15,144,719	114	21635	\$20,215,435	\$2,001,805	\$18,213,630
retail low rise	\$16,064,802	0	114749	\$24,431,614	\$1,941,044	\$22,490,570
TOTAL	\$31,209,522	114	136384	\$44,647,049	\$3,942,849	\$40,704,199
TOTAL/REHAB/RENOVATION						\$8,082,283
OVERALL TOTAL						\$48,786,482

Source: Johnson Economics LLC

Zoning restrictions do not seem to be limiting development significantly in the near term, as the building types currently providing the best economic return do not challenge the height or limits.

The development forecast are intended to model a series of site specific decisions, and the overall model does not factor in the depth of demand. In a market with limited depth such as Moscow, the overall depth of product demand may be a limiting function in addition to the economics of specific projects.



A. APPENDIX - PROJECTIONS

Demand for the types of real estate analyzed in this study is modeled on the basis of expectations for local university enrollment, employment growth, and demographic shifts. Our modeling begins with enrollment, due to its impact on employment and demographics. Because the States of Idaho and Washington do not produce enrollment projections for their public universities, JOHNSON ECONOMICS developed projections for WSU Pullman and UI Moscow informed by projections from the Oregon University System. Employment projections – which are used as inputs in our models of demand for commercial space – are largely based on projections from the State of Idaho, adjusted to reflect the expected impact of university enrollment. The demographic modeling – which informs our housing demand models – is based on projections produced by Nielsen Claritas, adjusted to reflect projected enrollment and employment growth.

UNIVERSITY ENROLLMENT AND STUDENT HOUSING DEMAND

The Oregon University System (OUS) develops enrollment projections for all its state-funded colleges and universities. These projections take into account high school class sizes and trends in high school graduation and college enrollment, which are wider trends that can be assumed to take place in Idaho and Washington as well as Oregon. Growth rates projected by the OUS can therefore be assumed to provide a good starting point for projections specific to Moscow and Pullman.

Based on recent trends, the OUS expects larger universities located in larger urban areas to enjoy stronger growth than smaller universities with more rural locations. Because UI Moscow and WSU Pullman exhibit characteristics of both these types of universities, we have weighted the projected growth rates for these two university types equally. We further adjust the growth rates by assuming that these schools will exhibit a growth differential to the Oregon schools that reflects the growth differential of the past five years, but at half the magnitude. This yields the following projections for on-campus enrollment at the UI Idaho and WSU Pullman:



FIGURE A.1: HISTORICAL AND PROJECTED ENROLLMENT (2005 – 2022)

Baseline Scenario		OUS			WSU Pullman			UI Moscow			Pullman/Moscow	
		Fall	Small	Large	W.Avg.	Enr.mt.	Growth	OUS Diff.	Enr.mt.	Growth	OUS Diff.	Enr.mt.
Historical	2005	-2.1%	0.7%	-0.7%	17679	0.8%	1.5%	11528	-1.5%	-0.8%	29207	-0.1%
	2006	-2.3%	-0.1%	-1.2%	17300	-2.1%	-1.0%	10938	-5.1%	-3.9%	28238	-3.3%
	2007	2.2%	0.5%	1.3%	17583	1.6%	0.3%	10756	-1.7%	-3.0%	28339	0.4%
	2008	4.5%	5.9%	5.2%	17753	1.0%	-4.2%	10882	1.2%	-4.0%	28635	1.0%
	2009	7.1%	6.4%	6.8%	18234	2.7%	-4.1%	10950	0.6%	-6.2%	29184	1.9%
	2010	5.2%	4.9%	5.0%	18232	0.0%	-5.0%	11327	3.4%	-1.6%	29559	1.3%
	2011	2.3%	2.4%	2.4%	19255	5.6%	3.2%	11520	1.7%	-0.7%	30775	4.1%
	2012	-1.0%	0.5%	-0.3%	19989	3.8%	4.1%	11464	-0.5%	-0.2%	31453	2.2%
	2013	0.4%	1.3%	0.8%	19446	-2.7%	-3.6%	11143	-2.8%	-3.6%	30589	-2.7%
	'08-'13 Avg.			3.0%		1.8%	-1.2%		0.5%	-2.5%		
Projected	'14-'22						-0.6%			-1.3%		
	2014	0.2%	1.0%	0.6%	19446	0.0%	-0.6%	11067	-0.7%	-1.3%	30513	-0.2%
	2015	0.8%	0.9%	0.8%	19492	0.2%	-0.6%	11018	-0.4%	-1.3%	30510	0.0%
	2016	1.4%	1.3%	1.4%	19641	0.8%	-0.6%	11027	0.1%	-1.3%	30667	0.5%
	2017	0.8%	0.9%	0.8%	19684	0.2%	-0.6%	10976	-0.5%	-1.3%	30660	0.0%
	2018	0.6%	0.8%	0.7%	19701	0.1%	-0.6%	10911	-0.6%	-1.3%	30612	-0.2%
	2019	0.4%	0.6%	0.5%	19681	-0.1%	-0.6%	10825	-0.8%	-1.3%	30506	-0.3%
	2020	-0.2%	0.0%	-0.1%	19545	-0.7%	-0.6%	10676	-1.4%	-1.3%	30221	-0.9%
	2021	0.5%	0.5%	0.5%	19529	-0.1%	-0.6%	10595	-0.8%	-1.3%	30124	-0.3%
	2022	0.8%	0.7%	0.7%	19556	0.1%	-0.6%	10538	-0.5%	-1.3%	30094	-0.1%

SOURCE: Oregon University System, City of Moscow, JOHNSON ECONOMICS

The projections indicate a decline of nearly 250 students over the coming five years under the baseline scenario, reflecting an annual growth rate of -0.4%. We assume that roughly one-fifth of Moscow’s students live in households headed by non-students. This indicates a decline in demand for student housing of around 200 beds. Under the high growth scenario, an increase of around 200 students is indicated, translating into demand for around 160 additional student housing beds.

The combined enrollment projections for UI Moscow and WSU Pullman indicates virtually flat enrollment over the coming five years under the baseline scenario. Under the high scenario, an increase of around 1,250 students is indicated, for an average annual growth rate of 0.8%. These projections are used as inputs in the projection of employment growth in the Latah-Whitman region, which in turn informs projections of residential and commercial real estate demand in Moscow.

EMPLOYMENT GROWTH

Employment growth is modeled at the county level, using industry-specific growth projections on the state level as a starting point. Applying the industry-specific growth rates projected by the State of Idaho to Latah County’s employment mix indicates an overall annual employment growth rate of 1.4%. Given the reliance of the Latah economy on regional university enrollment, this growth rate should be adjusted to reflect the projected flat combined enrollment growth for UI Idaho and WSU Pullman. For the purpose of projecting employment growth for Latah County, we weighted state employment projections and our enrollment projections equally. Only public administration, which is dominated by university employment, was weighted 100% by the enrollment projections. This indicates overall annual employment growth of roughly 0.5%.



FIGURE A.2: PROJECTED EMPLOYMENT GROWTH RATES, LATAH COUNTY

Baseline Scenario	2013	State-projected	Projected university	Projected Latah
Employment Sector	Employment	annual growth	enrollment	annual growth
Construction	349	2.4%	0%	1.2%
Manufacturing	375	1.3%	0%	0.6%
Wholesale Trade	294	1.6%	0%	0.8%
Retail Trade	1,864	1.6%	0%	0.8%
T.W.U.	85	1.3%	0%	0.6%
Information	115	0.9%	0%	0.4%
Financial Activities	400	1.4%	0%	0.7%
Professional & Business	787	1.4%	0%	0.7%
Education	731	1.0%	0%	0.5%
Health Services	953	1.9%	0%	0.9%
Leisure & Hospitality	1,735	2.0%	0%	1.0%
Other Services	549	1.3%	0%	0.6%
Public Administration	6,434	1.2%	0%	0.0%
Total	14,671	1.44%	0%	0.5%

SOURCE: State of Idaho, JOHNSON ECONOMICS

RESIDENTIAL DEMAND

(Non-student Households)

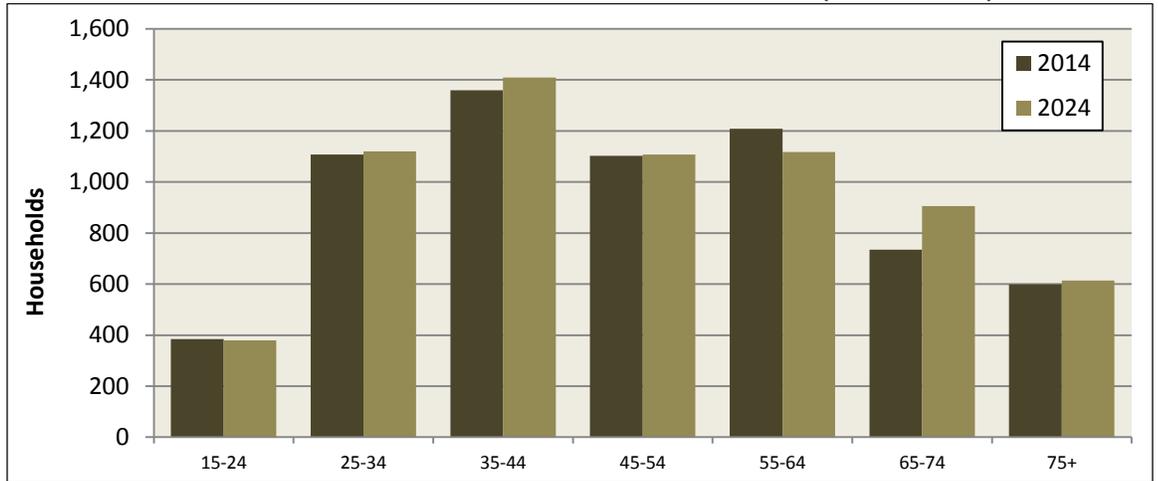
JOHNSON ECONOMICS has developed a demographically driven housing demand model to forecast near-term residential market depth. The demand forecast begins with estimates produced by Nielsen Claritas of market area household growth stratified by age and income cohort, which are the best predictors of tenure split. The projections from Nielsen Claritas are adjusted to reflect our observations with respect to employment and market trends. Local census data (the American Community Survey) is used to derive assumptions of propensities to own or rent as well as preferences for single- and multifamily housing. Projections are developed for a high-, low-, and baseline growth scenario.

Over the coming five years, we expect a net increase in demand for new housing (ownership *and* rentals) in the PMA of roughly 150 units under the baseline scenario, representing annual growth of 0.5%. These estimates represent our estimates of underlying demand, and not of realized household growth, which may be constrained by supply.

The following chart displays how we anticipate housing demand to be distributed across age segments. The chart indicates particular growth concentrations in housing demand among family-age and retirement-age segments, and only weak growth in the other segments.



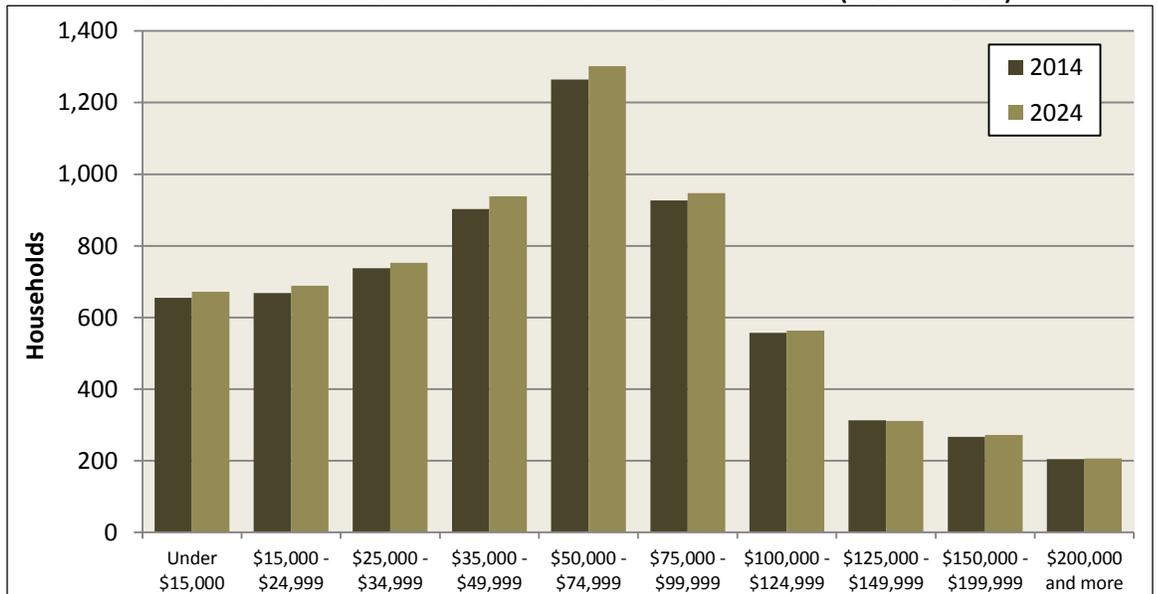
FIGURE A.3: PROJECTED DISTRIBUTION OF PMA HOUSEHOLDS BY AGE (2014 AND 2019)



SOURCE: Nielsen Claritas, JOHNSON ECONOMICS

With respect to income, the demand growth is anticipated to be mostly among low- and middle-income households (figure 8.5).

FIGURE A.4: PROJECTED DISTRIBUTION OF PMA HOUSEHOLDS BY INCOME (2014 AND 2019)



SOURCE: Nielsen Claritas, JOHNSON ECONOMICS

Based on existing segment-specific tenure splits among Moscow’s households, we anticipate one-third of the new household growth to represent demand for rental housing and two-thirds for ownership housing.

Rental Apartment Demand

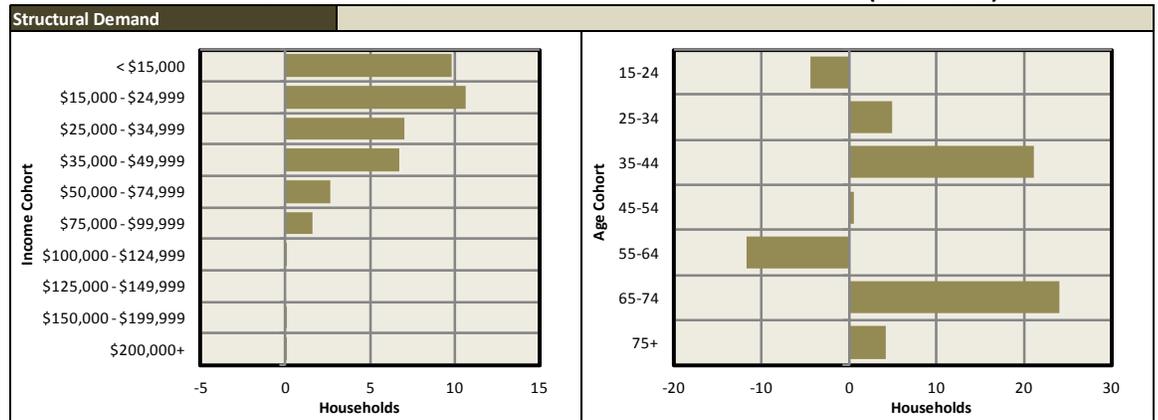
Most of the net new demand for rental housing is expected to be for rental apartments. The following charts display estimated market depth for rental apartments by age and income cohort, both from structural demand (net-new household growth) and total demand (net-new demand and turnover demand).



Structural Demand

Based on the existing propensity among Moscow households to rent single-family and multi-family housing respectively, we have a baseline demand forecast for roughly 40 new rental apartments over the five-year forecast period, or almost ten units annually. The growth is expected to be concentrated in low- and middle-income households made up mostly of family-age households and retirees.

FIGURE A.5: PROJECTED STRUCTURAL RENTAL APARTMENT MARKET DEPTH (2014-2019)



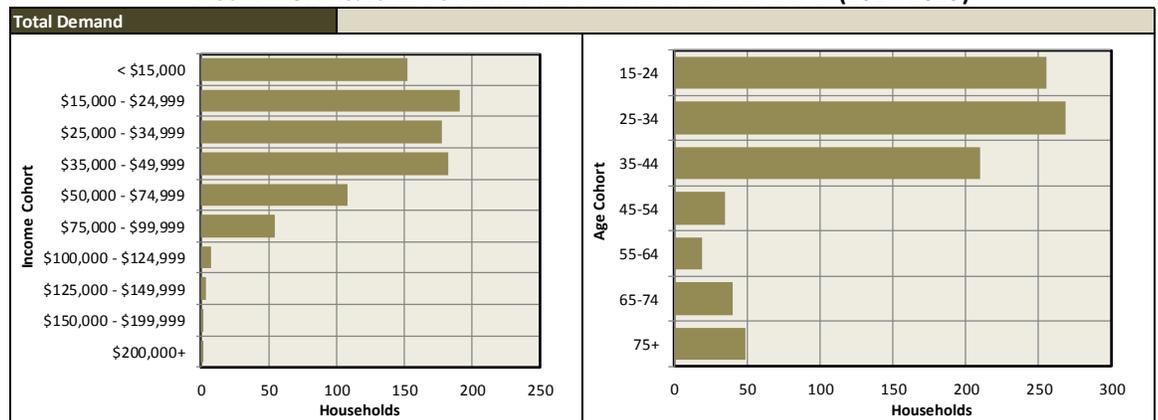
SOURCE: Nielsen Claritas and JOHNSON ECONOMICS

Total Demand Profile

Demand for rental apartments in the market area will come from existing renter households in turnover as well as from new households. In order to estimate turnover within the market area, we use local, segment-specific turnover rates calculated from census data, which in turn are applied to the distribution of existing renters. Turnover households, by definition, vacate existing units which become vacant supply. Therefore, structural demand is a better measure of new units needed annually, while total supply better reflects the profile of the leasing demand that will drive new-unit absorption. Turnover demand tends to benefit new projects disproportionately, as these are able to offer up-to-date units and amenities. New projects also tend to benefit from additional publicity and marketing efforts.

The market area has a total demand profile of approximately 850 lease transactions over the five-year forecast horizon, or nearly 175 units annually. Young adults are expected to dominate this market. In terms of income, the demand is anticipated to be concentrated among low- and middle-income households.

FIGURE A.6: PROJECTED TOTAL RENTAL APARTMENT MARKET DEPTH (2014-2019)



SOURCE: Nielsen Claritas and JOHNSON ECONOMICS



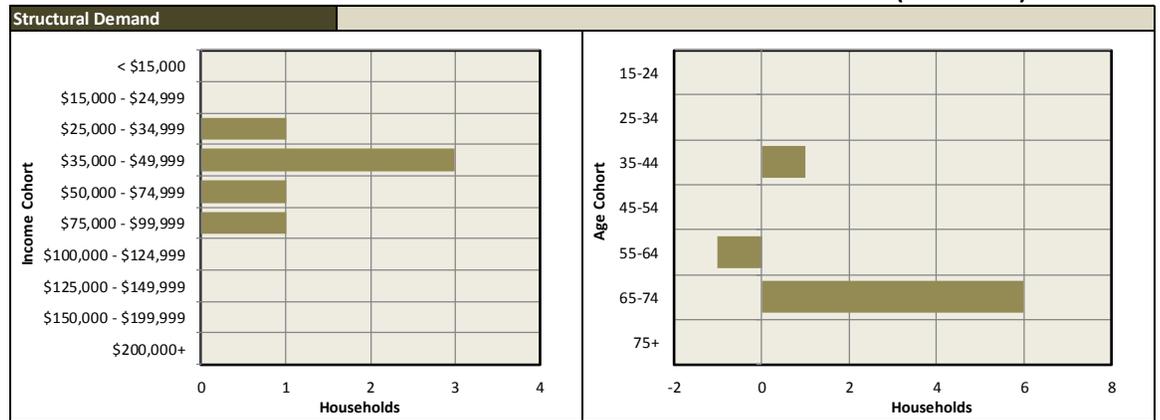
Demand for Multifamily Ownership Housing

For ownership housing, we follow the same approach as for rental housing, making projections for net new demand as well as for total demand.

Structural Demand

Our demand model indicates very small increase in the demand for multifamily ownership housing over the forecast horizon. The baseline estimate indicates a net increase of six households with a preference for this housing type, or roughly one additional household per year. The growth is expected primarily among middle-income retirees.

FIGURE A.7: PROJECTED STRUCTURAL MULTIFAMILY OWNERSHIP MARKET DEPTH (2014-2019)

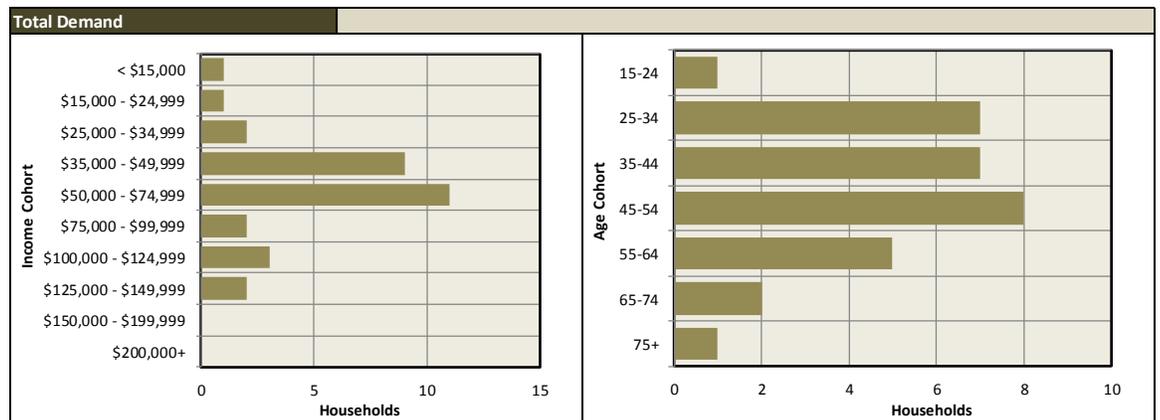


SOURCE: Nielsen Claritas and JOHNSON ECONOMICS

Total Demand

With turnover included, only 30 sales transactions are expected within this market segment over the coming five years, or 6 transactions per year. Young and middle-aged households in middle-income segments are anticipated to dominate the market:

FIGURE A.8: PROJECTED TOTAL MULTIFAMILY OWNERSHIP MARKET DEPTH (2014-2019)



SOURCE: Nielsen Claritas and JOHNSON ECONOMICS



COMMERCIAL DEMAND

Retail Space Demand

In order to assess the nature and depth of demand and the likely pace of absorption of retail space in Moscow, JOHNSON ECONOMICS modeled future demand for retail space based on anticipated household growth. In this analysis, local average per-household retail expenditures are applied to our household growth estimates for the Planning Area. The total expenditures are in turn converted to retail space demand utilizing typical per-square-foot sales figures. For this analysis we defined the primary trade area as the city of Moscow and ancillary developed areas within a 5-mile radius of the city's geographic centroid. A secondary trade area was defined within a 10-mile radius, including Pullman.

The following tables display estimated average household retail spending within the two trade areas, based on estimates from Nielsen Claritas:

FIGURE A.9: AVERAGE HOUSEHOLD RETAIL SPENDING (2014)

PRIMARY MARKET AREA			Per Household Expenditures ¹	SECONDARY MARKET AREA			Per Household Expenditures ¹
NAICS	Category			NAICS	Category		
Estimated Households in 2014: 11,286				Estimated Households in 2014: 25,789			
	441 Motor Vehicle and Parts Dealers		\$8,906		441 Motor Vehicle and Parts Dealers		\$9,680
	442 Furniture and Home Furnishings Stores		\$776		442 Furniture and Home Furnishings Stores		\$818
	443 Electronics and Appliance Stores		\$977		443 Electronics and Appliance Stores		\$1,103
	444 Building Materials and Garden Equipment		\$4,106		444 Building Materials and Garden Equipment		\$4,286
	445 Food and Beverage Stores		\$5,404		445 Food and Beverage Stores		\$5,753
	446 Health and Personal Care Stores		\$1,684		446 Health and Personal Care Stores		\$1,699
	448 Clothing and Clothing Accessories Stores		\$2,074		448 Clothing and Clothing Accessories Stores		\$2,319
	451 Sporting Goods, Hobby, Book and Music St		\$1,101		451 Sporting Goods, Hobby, Book and Music St		\$1,252
	452 General Merchandise Stores		\$5,026		452 General Merchandise Stores		\$5,379
	453 Miscellaneous Store Retailers		\$1,303		453 Miscellaneous Store Retailers		\$1,429
	722 Foodservices and Drinking Places		\$4,857		722 Foodservices and Drinking Places		\$5,426
Totals/Weighted Averages			\$36,214	Totals/Weighted Averages			\$39,144

¹ 2014 dollars

SOURCE: Nielsen Claritas and JOHNSON ECONOMICS

In order to estimate household growth over the coming five years, we have applied the projected growth rate for Moscow (see previous):

FIGURE A.10: PROJECTED TRADE AREA HOUSEHOLD GROWTH (2014 – 2019)

HOUSEHOLD GROWTH Scenario	HOUSEHOLD FORECAST		'16-'26 Δ Households
	2014	2019	
MOSCOW (5-Mile Radius)	11,286	11,554	268
MOSCOW-PULLMAN (10-Mile Radius)	25,789	26,401	612

SOURCE: Nielsen Claritas and JOHNSON ECONOMICS

Applying current average household retail spending to our household growth estimates indicates an increase in retail spending of \$7.3 million within the primary trade area and \$18 million within the secondary trade area:



FIGURE A.11: PROJECTED TRADE RETAIL SPENDING (2014 – 2019)

MOSCOW (5-Mile Radius)		Per Household Expenditures	Household Retail Spending (In Millions)		
NAICS	Category		2014	2019	'14-'19 Δ
441	Motor Vehicle and Parts Dealers	\$8,906	\$100.5	\$102.9	\$2.4
442	Furniture and Home Furnishings Stores	\$776	\$8.8	\$9.0	\$0.2
443	Electronics and Appliance Stores	\$977	\$11.0	\$11.3	\$0.3
444	Building Materials and Garden Equipment	\$4,106	\$46.3	\$47.4	\$1.1
445	Food and Beverage Stores	\$5,404	\$61.0	\$62.4	\$1.4
446	Health and Personal Care Stores	\$1,684	\$19.0	\$19.5	\$0.5
448	Clothing and Clothing Accessories Stores	\$2,074	\$23.4	\$24.0	\$0.6
451	Sporting Goods, Hobby, Book and Music Stores	\$1,101	\$12.4	\$12.7	\$0.3
452	General Merchandise Stores	\$5,026	\$56.7	\$58.1	\$1.3
453	Miscellaneous Store Retailers	\$1,303	\$14.7	\$15.1	\$0.3
722	Foodservices and Drinking Places	\$4,857	\$54.8	\$56.1	\$1.3
Totals/Weighted Averages		\$36,214	\$308.2	\$315.5	\$7.3

MOSCOW-PULLMAN (10-Mile Radius)		Per Household Expenditures	Household Retail Spending (In Millions)		
NAICS	Category		2014	2019	'14-'19 Δ
441	Motor Vehicle and Parts Dealers	\$9,680	\$249.6	\$255.6	\$5.9
442	Furniture and Home Furnishings Stores	\$818	\$21.1	\$21.6	\$0.5
443	Electronics and Appliance Stores	\$1,103	\$28.5	\$29.1	\$0.7
444	Building Materials and Garden Equipment	\$4,286	\$110.5	\$113.2	\$2.6
445	Food and Beverage Stores	\$5,753	\$148.4	\$151.9	\$3.5
446	Health and Personal Care Stores	\$1,699	\$43.8	\$44.8	\$1.0
448	Clothing and Clothing Accessories Stores	\$2,319	\$59.8	\$61.2	\$1.4
451	Sporting Goods, Hobby, Book and Music Stores	\$1,252	\$32.3	\$33.0	\$0.8
452	General Merchandise Stores	\$5,379	\$138.7	\$142.0	\$3.3
453	Miscellaneous Store Retailers	\$1,429	\$36.9	\$37.7	\$0.9
722	Foodservices and Drinking Places	\$5,426	\$139.9	\$143.2	\$3.3
Totals/Weighted Averages		\$39,144	\$759.8	\$777.9	\$18.0

SOURCE: Nielsen Claritas and JOHNSON ECONOMICS

The next step is to apply typical sales-per-square-foot ratios for the different types of retail to estimated retail spending. This produces estimates of additional square footage demanded within the trade areas. Finally, we apply capture rates for downtown retail space for the different types of retail. Most of these retail forms will lead to demand at auto-oriented shopping centers rather than at pedestrian-oriented downtown locations. We assume the greatest capture rates for restaurants/bars (75%) and miscellaneous stores (50%).



FIGURE A.12: PROJECTED TRADE RETAIL SPACE DEMAND (2014 – 2019)

MOSCOW (5-Mile Radius)		Sales Support	Spending Supported Retail Demand (SF)				Downtown Demand (SF)
NAICS	Category	Factor ¹	2014	2019	'14-'19 Δ	Downtown	
441	Motor Vehicle and Parts Dealers	\$422	238,165	243,815	5,650	0%	0
442	Furniture and Home Furnishings Stores	\$228	38,434	39,345	912	0%	0
443	Electronics and Appliance Stores	\$329	33,487	34,281	794	0%	0
444	Building Materials and Garden Equipment	\$424	109,231	111,822	2,591	0%	0
445	Food and Beverage Stores	\$469	130,061	133,146	3,085	0%	0
446	Health and Personal Care Stores	\$304	62,471	63,953	1,482	20%	296
448	Clothing and Clothing Accessories Stores	\$170	137,615	140,880	3,264	20%	653
451	Sporting Goods, Hobby, Book and Music	\$217	57,239	58,597	1,358	20%	272
452	General Merchandise Stores	\$179	317,164	324,687	7,524	0%	0
453	Miscellaneous Store Retailers	\$138	106,179	108,698	2,519	50%	1,259
722	Foodservices and Drinking Places	\$291	188,284	192,750	4,466	75%	3,350
Totals/Weighted Averages			1,180,164	1,208,160	27,996	21%	5,830

MOSCOW-PULLMAN (10-Mile Radius)		Sales Support	Spending Supported Retail Demand (SF)				Downtown Demand (SF)
NAICS	Category	Factor ¹	2014	2019	'14-'19 Δ	Downtown	
441	Motor Vehicle and Parts Dealers	\$422	591,549	605,581	14,033	0%	0
442	Furniture and Home Furnishings Stores	\$228	92,607	94,804	2,197	0%	0
443	Electronics and Appliance Stores	\$329	86,398	88,448	2,050	0%	0
444	Building Materials and Garden Equipment	\$424	260,554	266,735	6,181	0%	0
445	Food and Beverage Stores	\$469	316,414	323,920	7,506	0%	0
446	Health and Personal Care Stores	\$304	143,970	147,385	3,415	20%	683
448	Clothing and Clothing Accessories Stores	\$170	351,551	359,890	8,339	20%	1,668
451	Sporting Goods, Hobby, Book and Music	\$217	148,741	152,270	3,528	20%	706
452	General Merchandise Stores	\$179	775,583	793,982	18,398	0%	0
453	Miscellaneous Store Retailers	\$138	266,172	272,486	6,314	50%	3,157
722	Foodservices and Drinking Places	\$291	480,552	491,952	11,400	75%	8,550
Totals/Weighted Averages			2,922,543	2,991,872	69,328	21%	14,763

¹ Based on national averages derived from "Dollars & Cents of Shopping Centers," Urban Land Institute, 2008. Median sales for neighborhood scale centers were used. 2014 dollars.

SOURCE: Nielsen Claritas and JOHNSON ECONOMICS

The estimates displayed above indicate a five-year increase in downtown retail space within Moscow of nearly 6,000 square feet, or roughly 1,000 square feet per year. The secondary trade area indicates demand for downtown retail space of around 15,000 square feet over the forecast period. Demand generated outside the primary trade area but within the secondary trade area is thus estimated to be nearly 9,000 square feet. Pullman is likely to capture the majority of this demand, but Moscow has the potential to capture part of this demand if it can gain competitive advantage in terms of creating an attractive downtown retail environment.

Office Space Demand

Our projections for office space demand are directly deduced from employment growth projections, based on typical rates of office space utilization within each industry and typical rates of office space per office worker.

Based on industry-specific rates of typical office space utilization, we have a baseline projection of 60 additional office space workers within Latah County over the coming five years:



FIGURE A.13: PROJECTED GROWTH IN OFFICE EMPLOYMENT, LATAH COUNTY (2014 – 2019)

Office Space-Utilizing Demand Employment Sector	Base Year	Annual	Total Empl. Growth		Office	Office Space-Utilizing Empl.			'14-'19
	2013	Growth	2014	2019	Share ¹	2013	2014	2019	Change
Construction	349	1.2%	353	375	2%	7	7	7	0
Manufacturing	375	0.6%	377	389	5%	19	19	19	0
Wholesale Trade	294	0.8%	297	309	5%	15	15	15	0
Retail Trade	1,864	0.8%	1,879	1,954	5%	94	95	98	3
T.W.U.	85	0.6%	86	88	30%	26	26	27	1
Information	115	0.4%	116	118	90%	104	104	106	2
Financial Activities	400	0.7%	403	417	90%	362	365	375	10
Professional & Business	787	0.7%	792	820	90%	713	718	738	20
Education	731	0.5%	735	753	5%	37	37	38	1
Health Services	953	0.9%	962	1,008	40%	385	388	403	15
Leisure & Hospitality	1,735	1.0%	1,752	1,840	5%	88	88	92	4
Other Services	549	0.6%	552	570	27%	149	150	154	4
Public Administration	6,434	0.0%	6,434	6,434	30%	1,930	1,930	1,930	0
Total	14,671	0.5%	14,737	15,077		3,929	3,943	4,004	60

¹ Share of office space-utilizing employment provided by the Urban Land Institute, converted to NAICS by Johnson Economics
 SOURCE: Idaho Department of Labor and JOHNSON ECONOMICS

Assuming average office space of 285 square feet per worker, the net growth in office employment is expected to generate demand for roughly 20,000 square feet of new office space. Much of this demand is likely to be for office space in suburban or even rural locations. Applying assumed capture rates for Downtown Moscow indicates net new demand in the order of 10,000 square feet over the coming five years, or roughly 2,000 square feet per year. One-third of this demand is anticipated within professional and business services, predominantly due to growth at EMSI. Financial services and medical/health services are each expected to account for roughly one-fourth of the demand.

FIGURE A.13: PROJECTED GROWTH IN OFFICE EMPLOYMENT, LATAH COUNTY (2014 – 2019)

Office Space-Utilizing Demand Employment Sector	Total Office Empl.		Avg. Space	Total Office Space Need (SF)		'14-'19	Downtown	Downtown
	2014	2019	Per Job ¹	2014	2019	Change (SF)	Capture	Demand
Construction	7	7	285	2,015	2,137	123	0%	0
Manufacturing	19	19	285	5,372	5,547	175	0%	0
Wholesale Trade	15	15	285	4,227	4,398	170	0%	0
Retail Trade	94	98	285	26,774	27,851	1,078	0%	0
T.W.U.	26	27	285	7,314	7,553	239	0%	0
Information	104	106	285	29,629	30,295	666	50%	333
Financial Activities	362	375	285	103,311	106,943	3,631	75%	2,724
Professional & Business	713	738	285	203,265	210,410	7,145	50%	3,572
Education	37	38	285	10,475	10,736	262	0%	0
Health Services	385	403	285	109,677	114,935	5,258	50%	2,629
Leisure & Hospitality	88	92	285	24,961	26,222	1,261	0%	0
Other Services	149	154	285	42,480	43,865	1,385	50%	693
Government	1,930	1,930	285	550,128	550,128	0	20%	0
Total	3,929	4,004		1,119,630	1,141,022	21,393	47%	9,951

¹ Average office employment density by industry sector based on Urban Land Institute guidelines.
 SOURCE: Idaho Department of Labor and JOHNSON ECONOMICS



B. APPENDIX – RESIDUAL LAND VALUE CALCULATIONS



PROTOTYPE OFFICE PROGRAMS								
		several floors of structured parking	one basement parking level	parking under podium	struc pkg outside bldg footprint	struc pkg outside bldg footprint	all surface parking	all surface parking
		office high rise	office mid/struc	office mid/podium	office mid surf + struc 2	office mid surf + struc 1	office mid/surf	office low rise
PROGRAM	Property Assumptions							
	Site Size (SF)	20,000	13,000	10,000	25,000	20,000	20,000	10,000
	Bldg Footprint	19,000	12,000	9,500	8,500	7,500	3,500	4,000
	Stories	8	5	2	4	3	3	1
	FAR	10.45	6.46	2.85	2.04	1.50	0.53	0.40
	Building Square Feet	152,000	60,000	19,000	34,000	22,500	10,500	4,000
	Efficiency	85%	85%	85%	85%	85%	85%	90%
	Leasable Area	129,200	51,000	16,150	28,900	19,125	8,925	3,600
	Parking Ratio/000 SF	1.0	1.0	2.0	2.0	3.0	3.0	3.0
	Parking Spaces	129	51	32	57	57	26	10
	Parking SF/Space - Surface	350	350	350	350	350	350	350
	Parking SF/Space - Structure	425	425	375	425	375	425	425
	Parking Spaces - Surface	-	-	-	14	29	26	10
	Parking Spaces - Structure	129	51	32	43	29	-	-
	Structured Parking %	100%	100%	100%	75%	50%	0%	0%
	Structured Parking Stories	3	2	1	2	1	0	0
	% of Struc Pkg in Bldg FP	100%	100%	100%	0%	0%	0%	0%
	Cost Assumptions							
	Base Construction Cost/SF	\$205	\$185	\$160	\$160	\$160	\$140	\$130
	Adjustment Factor	0%	0%	0%	0%	0%	0%	0%
	Construction Cost/SF	\$205	\$185	\$160	\$160	\$160	\$140	\$130
	Base Parking Costs/Space	\$35,000	\$30,000	\$25,000	\$35,000	\$30,000	\$0	\$0
	Adjustment Factor	0%	0%	0%	0%	0%	0%	0%
	Structured Parking Cost/Space	\$35,000	\$30,000	\$25,000	\$35,000	\$30,000	\$0	\$0
	OPERATING ASSUMPTIONS	Income Assumptions						
Base Income/Sf/Yr.		\$16.00	\$16.00	\$16.00	\$16.00	\$16.00	\$16.00	\$16.00
Adjustment Factor		0%	0%	0%	0%	0%	0%	0%
Achievable Pricing		\$16.00	\$16.00	\$16.00	\$16.00	\$16.00	\$16.00	\$16.00
Parking Charges/Space/Mo		\$50	\$50	\$50	\$50	\$50	\$50	\$50
Expense Assumptions								
Vacancy/Collection Loss		10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Base Operating Expenses		5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Adjustment Factor		0%	0%	0%	0%	0%	0%	0%
Operating Expenses		5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Reserve & Replacement		3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Valuation Assumptions								
Base Capitalization Rate		7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%
Adjustment Factor	0%	0%	0%	0%	0%	0%	0%	
Capitalization Rate	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	
SUPPORTABLE PROPERTY VALUE	Cost							
	Cost/Construct w/o prkg.	\$31,160,000	\$11,100,000	\$3,040,000	\$5,440,000	\$3,600,000	\$1,470,000	\$520,000
	Total Parking Costs	\$4,515,000	\$1,530,000	\$800,000	\$1,496,250	\$855,000	\$0	\$0
	Estimated Project Cost	\$35,675,000	\$12,630,000	\$3,840,000	\$6,936,250	\$4,455,000	\$1,470,000	\$520,000
	Income							
	Annual Base Income	\$2,067,200	\$816,000	\$258,400	\$462,400	\$306,000	\$142,800	\$57,600
	Annual Parking	\$77,400	\$30,600	\$19,200	\$25,650	\$17,100	\$0	\$0
	Gross Annual Income	\$2,144,600	\$846,600	\$277,600	\$488,050	\$323,100	\$142,800	\$57,600
	Less: Vacancy & CL	\$214,460	\$84,660	\$27,760	\$48,805	\$32,310	\$14,280	\$5,760
	Effective Gross Income	\$1,930,140	\$761,940	\$249,840	\$439,245	\$290,790	\$128,520	\$51,840
	Less Expenses:							
	Operating Expenses	\$96,507	\$38,097	\$12,492	\$21,962	\$14,540	\$6,426	\$2,592
	Reserve & Replacement	\$57,904	\$22,858	\$7,495	\$13,177	\$8,724	\$3,856	\$1,555
	Annual NOI	\$1,775,729	\$700,985	\$229,853	\$404,105	\$267,527	\$118,238	\$47,693
	Property Valuation							
	Return on Cost	4.98%	5.55%	5.99%	5.83%	6.01%	8.04%	9.17%
	Threshold Return on Cost	8.05%	8.05%	8.05%	8.05%	8.05%	8.05%	8.05%
Residual Property Value	(\$13,616,257)	(\$3,922,114)	(\$984,686)	(\$1,916,307)	(\$1,131,686)	(\$1,200)	\$72,457	
RPV/SF	(\$680.81)	(\$301.70)	(\$98.47)	(\$76.65)	(\$56.58)	(\$0.06)	\$7.25	



PROTOTYPE RETAIL PROGRAMS			
		struc pkg outside bldg footprint	all surface parking
		mid rise dept store retail	retail low rise
PROGRAM	Property Assumptions		
	Site Size (SF)	40,000	10,000
	Bldg Footprint	18,500	3,900
	Stories	2	1
	FAR	2.31	0.39
	Building Square Feet	37,000	3,900
	Efficiency	90%	100%
	Leasable Area	33,300	3,900
	Parking Ratio/000 SF	3.0	4.0
	Parking Spaces	99	15
	Parking SF/Space - Surface	350	350
	Parking SF/Space - Structure	425	425
	Parking Spaces - Surface	25	15
	Parking Spaces - Structure	74	-
	Structured Parking %	75%	0%
	Structured Parking Stories	3	0
	% of Struc Pkg in Bldg FP	0%	0%
	% Site Requirements	5%	10%
	Site Coverage Check	97%	95%
	Cost Assumptions		
	Base Construction Cost/SF	\$170	\$140
	Adjustment Factor	0%	0%
	Construction Cost/SF	\$170	\$140
	Base Parking Costs/Space	\$30,000	\$0
	Adjustment Factor	-2%	-2%
Parking Cost/Space	\$29,500	\$0	
PROPERTY OPERATIONS	Income Assumptions		
	Base Income/Sf/Yr.	\$16.20	\$18.00
	Adjustment Factor	0%	0%
	Achievable Pricing	\$16.20	\$18.00
	Parking Charges/Space/Mo	\$0	\$0
	Expense Assumptions		
	Vacancy/Collection Loss	10.0%	10.0%
	Base Operating Expenses	5.0%	5.0%
	Adjustment Factor	0%	0%
	Operating Expenses	5.00%	5.00%
	Reserve & Replacement	3.0%	3.0%
	Valuation Assumptions		
	Capitalization Rate	7.00%	7.00%
Adjustment Factor	0%	0%	
Capitalization Rate	7.00%	7.00%	
SUPPORTABLE PROPERTY VALUE	Cost		
	Cost/Construct w/o prkg.	\$6,290,000	\$546,000
	Total Parking Costs	\$2,190,375	\$0
	Estimated Project Cost	\$8,480,375	\$546,000
	Income		
	Annual Base Income	\$539,460	\$70,200
	Annual Parking	\$0	\$0
	Gross Annual Income	\$539,460	\$70,200
	Less: Vacancy & CL	\$53,946	\$7,020
	Effective Gross Income	\$485,514	\$63,180
	Less Expenses:		
	Operating Expenses	\$24,276	\$3,159
	Reserve & Replacement	\$14,565	\$1,895
	Annual NOI	\$446,673	\$58,126
	Property Valuation		
	Return on Cost	5.27%	10.65%
	Threshold Return on Cost	8.05%	8.05%
	Residual Property Value	(\$2,931,644)	\$176,057
	RPV/SF	(\$73.29)	\$17.61



PROTOTYPE MU RETAIL/RESIDENTIAL PROGRAMS								
	integrated pkg struc	integrated pkg struc	separate pkg struc	surface parking	some under-podium parking	surface parking	surface parking	
	MU res/ret high rise	MU res/ret mid/struc 2	MU res/ret mid/struc 1	MU res/ret mid/surf	MU res/ret type v/podium	MU res/ret 3-story wood w/surf SM	MU res/ret 3-story wood w/surf LG	
PROGRAM	Property Assumptions							
	Site Size (SF)	11,500	11,500	20,000	10,000	10,000	10,000	60,000
	Density	180	140	95	60	60	35	35
	Unit Count	47	36	43	13	13	8	48
	Ave Unit Size	750	750	750	750	750	750	750
	Apt. Building Square Feet	35,250	27,000	32,250	9,750	9,750	6,000	36,000
	Bldg Footprint	4,406	5,400	6,450	2,438	3,250	3,000	18,000
	Apt. Stories	8	5	5	4	3	2	2
	Retail Stories	1	1	1	1	1	1	1
	TOTAL STORIES	9	6	6	5	4	3	3
	Percent of Retail	50%	50%	30%	50%	50%	50%	25%
	Retail Square Footage	2,203	2,700	1,935	1,218	1,625	1,500	4,500
	Ground Floor Non-Retail (parking)	2,203	2,700	4,515	-	1,625	-	-
	Parking Ratio/1000sf.	4.0	4.0	4.0	4.0	4.0	4.0	4.0
	FAR	5.36	3.76	2.26	0.98	1.30	0.60	0.60
	Parking Ratio/Unit	1.0	1.0	1.0	1.0	1.5	1.5	1.5
	Total Parking Spaces	56	47	51	18	26	18	90
	Parking SF/Space - Surface	350	350	350	350	350	350	350
	Parking SF/Space - Structure	425	425	425	425	425	425	425
	Parking Spaces - Surface	-	-	-	18	-	18	90
	Parking Spaces - Structure	56	47	51	-	26	-	-
	Structured Parking %	100%	100%	100%	0%	100%	0%	0%
	Structured Parking Stories	6	3	2	0	1	0	0
	% of Struc Pkg in Bldg FP	50%	50%	0%	0%	50%	0%	0%
	% Site Requirements	20%	20%	20%	20%	20%	20%	20%
	Site Coverage Check	65%	80%	71%	92%	55%	99%	89%
	Cost Assumptions							
	Apt Base Construction Cost/SF	\$210	\$195	\$195	\$165	\$165	\$140	\$140
	Adjustment Factor	0%	0%	0%	0%	0%	0%	0%
	Construction Cost/SF	\$210	\$195	\$195	\$165	\$165	\$140	\$140
	Retail Base Construction Cost/SF	\$150	\$150	\$150	\$150	\$150	\$140	\$140
	Adjustment Factor	0%	0%	0%	0%	0%	0%	0%
	Construction Cost/SF	\$150	\$150	\$150	\$150	\$150	\$140	\$140
	Base Parking Costs/Space	\$40,000	\$35,000	\$30,000	\$35,000	\$15,000	\$0	\$0
	Adjustment Factor	0%	0%	0%	0%	0%	0%	0%
Parking Cost/SF	\$40,000	\$35,000	\$30,000	\$35,000	\$15,000	\$0	\$0	
Income Assumptions								
Apt. Base Income/SF/Mo.	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	
Adjustment Factor	0%	0%	0%	0%	0%	0%	0%	
Achievable Pricing	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	
Retail Base Income/SF/Yr.	\$18.00	\$18.00	\$18.00	\$18.00	\$18.00	\$18.00	\$18.00	
Adjustment Factor	0%	0%	0%	0%	0%	0%	0%	
Achievable Pricing	\$18.00	\$18.00	\$18.00	\$18.00	\$18.00	\$18.00	\$18.00	
Parking Charges/Space/Mo	\$50	\$50	\$50	\$50	\$50	\$50	\$50	
Expenses								
Apt. Vacancy/Collection Loss	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	
Retail Vacancy/Collection Loss	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	
Operating Expenses	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%	
Adjustment Factor	0%	0%	0%	0%	0%	0%	0%	
Apt. Operating Expenses	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%	
Retail Operating Expenses	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	
Reserve & Replacement	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	
Valuation								
Capitalization Rate	5.75%	5.75%	5.75%	5.75%	5.75%	5.75%	5.75%	
Adjustment Factor	0%	0%	0%	0%	0%	0%	0%	
Capitalization Rate	5.75%	5.75%	5.75%	5.75%	5.75%	5.75%	5.75%	
SUPPORTABLE PROPERTY VALUE								
Cost								
Cost/Construct w/o pkg.	\$7,732,950	\$5,670,000	\$6,579,000	\$1,791,450	\$1,852,500	\$1,050,000	\$5,670,000	
Total Parking Costs	\$2,240,000	\$1,645,000	\$1,530,000	\$0	\$390,000	\$0	\$0	
Estimated Project Cost	\$9,972,950	\$7,315,000	\$8,109,000	\$1,791,450	\$2,242,500	\$1,050,000	\$5,670,000	
Income								
Apt. Annual Base Income	\$485,393	\$371,790	\$444,083	\$134,258	\$134,258	\$97,200	\$583,200	
Retail Annual Base Income	\$39,654	\$48,600	\$34,830	\$21,924	\$29,250	\$27,000	\$81,000	
Annual Parking	\$33,600	\$28,200	\$30,600	\$0	\$15,600	\$0	\$0	
Gross Annual Income	\$558,647	\$448,590	\$509,513	\$156,182	\$179,108	\$124,200	\$664,200	
Less: Apt. Vacancy & CL	\$24,270	\$22,430	\$25,476	\$7,809	\$8,955	\$6,210	\$33,210	
Less: Retail Vacancy & CL	\$3,965	\$4,860	\$3,483	\$2,192	\$2,925	\$2,700	\$8,100	
Effective Gross Income	\$530,411	\$421,301	\$480,554	\$146,180	\$167,227	\$115,290	\$622,890	
Less Expenses:								
Apt. Operating Expenses	\$152,171	\$115,289	\$138,140	\$41,728	\$41,350	\$30,027	\$181,497	
Retail Operating Expenses	\$1,784	\$2,187	\$1,567	\$987	\$1,316	\$1,215	\$3,645	
Reserve & Replacement	\$15,912	\$12,639	\$14,417	\$4,385	\$5,017	\$3,459	\$18,687	
Annual NOI	\$360,544	\$291,186	\$326,430	\$99,080	\$119,544	\$80,590	\$419,062	
Property Valuation								
Return on Cost	3.62%	3.98%	4.03%	5.53%	5.33%	7.68%	7.39%	
Threshold Return on Cost	6.90%	6.90%	6.90%	6.90%	6.90%	6.90%	6.90%	
Residual Property Value	(\$4,747,672)	(\$3,094,920)	(\$3,378,136)	(\$355,507)	(\$509,973)	\$117,965	\$403,357	
RPV/SF	(\$412.84)	(\$269.12)	(\$168.91)	(\$35.55)	(\$51.00)	\$11.80	\$6.72	



PROTOTYPE RENTAL RESIDENTIAL PROGRAMS							
	integrated pkg struc	integrated pkg struc	podium parking	Surface Parking	surface parking	No Parking	
	residential high rise	residential mid/struc 2	type v/podium	2-story wood w/surf	3-story wood townhome	3-story wood Zero Park	
PROGRAM	Property Assumptions						
	Site Size (SF)	10,000	10,000	10,000	10,000	10,000	10,000
	Density	200	150	56	28	28	130
	Unit Count	45	34	12	6	6	29
	Ave Unit Size	750	750	750	750	1,000	600
	Efficiency Ratio	85%	85%	90%	100%	100%	85%
	Building Square Feet	39,706	30,000	10,000	4,500	6,000	20,471
	Stories	8	5	3	2	3	3
	Bldg Footprint	4,963	6,000	3,333	2,250	2,000	6,824
	FAR	5.96	4.20	1.33	0.45	0.80	2.05
	Parking Ratio/Unit	1.0	1.0	1.5	1.5	1.5	-
	Total Parking Spaces	45	34	18	9	9	-
	Parking SF/Space - Surface	350	350	350	350	350	350
	Parking SF/Space - Structure	425	425	350	425	425	425
	Parking Spaces - Surface	-	-	-	9	6	-
	Parking Spaces - Structure	45	34	18	-	6	-
	Structured Parking %	100%	100%	100%	0%	50%	0%
	Structured Parking Stories	4	2	1	0	1	0
	% of Struc Pkg in Bldg FP	50%	50%	50%	0%	0%	0%
	% Site Requirements	20%	20%	20%	20%	20%	20%
	Site Coverage Check	84%	102%	57%	59%	65%	82%
	Cost Assumptions						
	Base Construction Cost/SF	\$210	\$195	\$165	\$125	\$135	\$145
	Adjustment Factor	0%	0%	0%	0%	0%	0%
	Construction Cost/SF	\$210	\$195	\$165	\$125	\$135	\$145
	Base Parking Costs/Space	\$40,000	\$40,000	\$20,000	\$0	\$0	\$0
	Adjustment Factor	0%	0%	0%	0%	0%	0%
	Parking Cost/Space	\$40,000	\$40,000	\$20,000	\$0	\$0	\$0
	PROPERTY VALUATION	Income Assumptions					
		Base Income/Sf/Mo.	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35
Adjustment Factor		0%	0%	0%	0%	0%	0%
Achievable Pricing		\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35
Parking Charges/Space/Mo		\$50	\$50	\$50	\$50	\$50	\$50
Expenses							
Vacancy/Collection Loss		5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Operating Expenses		33.0%	33.0%	33.0%	33.0%	33.0%	33.0%
Adjustment Factor		0%	0%	0%	0%	0%	0%
Operating Expenses		33%	33%	33%	33%	33%	33%
Reserve & Replacement		3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Valuation							
Capitalization Rate		5.75%	5.75%	5.75%	5.75%	5.75%	6.25%
Adjustment Factor	0%	0%	0%	0%	0%	0%	
Capitalization Rate	5.75%	5.75%	5.75%	5.75%	5.75%	6.25%	
SUPPORTABLE PROPERTY VALUE	Cost						
	Cost/Construct w/o prkg.	\$8,338,235	\$5,850,000	\$1,650,000	\$562,500	\$810,000	\$2,968,235
	Total Parking Costs	\$1,800,000	\$1,360,000	\$360,000	\$0	\$0	\$0
	Estimated Project Cost	\$10,138,235	\$7,210,000	\$2,010,000	\$562,500	\$810,000	\$2,968,235
	Income						
	Annual Base Income	\$546,750	\$413,100	\$145,800	\$72,900	\$97,200	\$281,880
	Annual Parking	\$27,000	\$20,400	\$10,800	\$0	\$3,600	\$0
	Gross Annual Income	\$573,750	\$433,500	\$156,600	\$72,900	\$100,800	\$281,880
	Less: Vacancy & CL	\$28,688	\$21,675	\$7,830	\$3,645	\$5,040	\$14,094
	Effective Gross Income	\$545,063	\$411,825	\$148,770	\$69,255	\$95,760	\$267,786
	Less Expenses:						
	Operating Expenses	\$179,871	\$135,902	\$49,094	\$22,854	\$31,601	\$88,369
	Reserve & Replacement	\$16,352	\$12,355	\$4,463	\$2,078	\$2,873	\$8,034
	Annual NOI	\$348,840	\$263,568	\$95,213	\$44,323	\$61,286	\$171,383
	Property Valuation						
Return on Cost	3.44%	3.66%	4.74%	7.88%	7.57%	5.77%	
Threshold Return on Cost	6.61%	6.61%	6.61%	6.61%	6.61%	7.19%	
Residual Property Value	(\$4,862,772)	(\$3,224,095)	(\$570,109)	\$107,794	\$116,826	(\$583,776)	
RPV/SF	(\$486.28)	(\$322.41)	(\$57.01)	\$10.78	\$11.68	(\$58.38)	



PROTOTYPE OWNERSHIP RESIDENTIAL PROGRAMS							
		integrated pkg struc	integrated pkg struc	podium parking	Surface Parking	surface parking	
		residential high rise	residential mid/struc 2	type v/podium	2-story wood w/surf	3-story wood townhome	
PROGRAM	Property Assumptions						
	Site Size (SF)	10,000	10,000	10,000	10,000	10,000	
	Density	200	150	56	28	28	
	Unit Count	45	34	12	6	6	
	Ave Unit Size	800	800	800	800	1,100	
	Building Square Feet	36,000	27,200	9,600	4,800	8,250	
	Stories	8	5	3	2	3	
	Bldg Footprint	4,500	5,440	3,200	2,400	2,750	
	FAR	6.75	4.35	1.28	0.48	1.10	
	Parking Ratio/Unit	1.5	1.5	1.5	2.0	2.0	
	Total Parking Spaces	68	51	18	12	12	
	Parking SF/Space - Surface	350	350	350	350	350	
	Parking SF/Space - Structure	425	425	350	425	425	
	Parking Spaces - Surface	-	-	-	12	6	
	Parking Spaces - Structure	68	51	18	-	6	
	Structured Parking %	100%	100%	100%	0%	50%	
	Structured Parking Stories	7	3	1	0	1	
	% of Struc Pkg in Bldg FP	50%	50%	50%	0%	0%	
	% Site Requirements	20%	20%	20%	20%	20%	
	Site Coverage Check	77%	92%	54%	71%	82%	
	PROGRAM	Cost Assumptions					
		Base Construction Cost/SF	\$231	\$215	\$182	\$138	\$149
		Adjustment Factor	0%	0%	0%	0%	0%
		Construction Cost/SF	\$231	\$215	\$182	\$138	\$149
		Base Parking Costs/Space	\$44,000	\$44,000	\$22,000	\$0	\$0
		Adjustment Factor	0%	0%	0%	0%	0%
Parking Cost/Space		\$44,000	\$44,000	\$22,000	\$0	\$0	
INCOME	Income Assumptions						
	Sales Price/SF	\$139	\$139	\$139	\$139	\$139	
	Adjustment Factor	0%	0%	0%	0%	0%	
	Achievable Pricing	\$139	\$139	\$139	\$139	\$139	
	Parking Charges/Space	\$0	\$0	\$0	\$0	\$0	
INCOME	Expenses						
	Sales Commission	6.0%	6.0%	6.0%	6.0%	6.0%	
SUPPORTABLE PROPERTY VALUE	Cost						
	Cost/Construct w/o prkg.	\$8,316,000	\$5,834,400	\$1,742,400	\$660,000	\$1,225,125	
	Total Parking Costs	\$2,992,000	\$2,244,000	\$396,000	\$0	\$0	
	Estimated Project Cost	\$11,308,000	\$8,078,400	\$2,138,400	\$660,000	\$1,225,125	
	Income						
	Gross Income - Units	\$4,503,600	\$3,402,720	\$1,200,960	\$600,480	\$1,032,075	
	Gross Income - Parking	\$0	\$0	\$0	\$0	\$0	
	Gross Sales Income	\$4,503,600	\$3,402,720	\$1,200,960	\$600,480	\$1,032,075	
	Less: Commission	(\$270,216)	(\$204,163)	(\$72,058)	(\$36,029)	(\$61,925)	
	Effective Gross Income	\$4,233,384	\$3,198,557	\$1,128,902	\$564,451	\$970,151	
	Property Valuation						
	Return on Sales	-62.56%	-60.41%	-47.21%	-14.48%	-20.81%	
	Threshold Return on Cost	15.00%	15.00%	15.00%	15.00%	15.00%	
Residual Property Value	(\$7,626,797)	(\$5,297,046)	(\$1,156,746)	(\$169,173)	(\$381,516)		
RPV/SF	(\$762.68)	(\$529.70)	(\$115.67)	(\$16.92)	(\$38.15)		