HOUSING DEMAND, SUPPLY AND AFFORDABILITY IN PIERCE COUNTY

WASHINGTON REALTORS® REPORT

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HOUSING DEMAND, SUPPLY AND AFFORDABILITY IN PIERCE COUNTY

Pierce County has been growing rapidly, in terms of both population and employment. This part of the region has, for many years, been an affordable alternative to high prices in King County, with reasonable commutes to the large job centers of South King County. The combination of employment growth within Pierce County and inadequate housing in King County, has put pressure on the Pierce County housing market, and, consequently, driven prices up.

In September of 2022, the median sales price of a single family home in Pierce County was $538,000, down from a peak of $582,000 in May 2022, but up from $370,000 in 2019. This 45 percent increase mirrors, to some extent, national patterns of home price increases, but is also in line with longer term trends in home prices in the Puget Sound region.

To put this home price in some context, with normal assumptions about financing, a household wanting to buy that median home would need an annual income somewhere in the neighborhood of $120,000. The median annual wage paid to a full-time worker in Pierce County is about $57,000, so two full time median income earners with a large down payment would barely be able to qualify for this home.

The housing situation in Pierce County is complicated by the severe shortage of single family homes in King County, to the north, where wages are higher than in Pierce County. People who work in King County, but cannot afford homes there, bring their higher incomes to Pierce County and bid up prices beyond what Pierce County wages can support. This pattern has been in place for a long time and really began to be seen prominently in the early 2000s. As the data in this report will indicate, it shows no sign of stopping.

This paper will review the housing situation in Pierce County as it has unfolded over the past 20 years. Plans developed under the Washington State Growth Management Act took effect in the early 1990s, and by 2000, even the more generous allocations of land for homebuilding had started to pinch in Pierce County. Because of the special circumstances of the pandemic, we will stop most of the analysis in 2019 or early 2020, before the unprecedented economic and demographic shifts of the pandemic began to occur. The combination of work-from-home trends, rapidly rising interest rates and falling asset values has introduced a great deal of volatility and uncertainty into housing markets since 2020 and that is still playing out in 2023.

MEASURING AFFORDABILITY

Data and discussions concerning housing affordability usually suffer from a basic methodological problem: they compare housing costs in an area to the incomes of people living in the area. This ends up being circular, since people living in an area, by definition, can afford that area. Over time, a more expensive area will become populated primarily by higher income households, especially in single family ownership housing. When these high incomes are applied to a standard affordability calculation, they can give a false impression of affordability that does not reflect the housing cost situation faced by people working in that area.

A far more helpful comparison is between housing costs in an area and the earnings of people working in that area. It should be a goal of public policy that people should have an opportunity to live within a reasonable commute of where they work. And, even more helpful, is to concentrate on the earnings of those taking new jobs being created in an area, since they are the ones that will be looking for housing in the current cost environment.

In this report we use wages to assess affordability to the extent possible. We also discuss the growth in jobs in Pierce County and the wages associated with those jobs, to see if housing affordability is improving or deteriorating at the margins. Our main concern is middle income jobs—paying between, say, 80 and 120 percent of the median wage. As we will see, these wage levels are the ones that fall off the affordability ladder first.

We will begin by looking at the demand for housing generated by economic and job growth in Pierce County, focusing on the wages and incomes paid in the county. We will then shift to the supply of housing that has been brought to market during that period, always making a clear distinction between the single family and multi-family markets. We then put supply and demand together, and examine trends in housing prices and affordability, and the trends in commutes that result from buyers having to "drive to qualify."

To help understand how demographic and housing supply trends fit with the current housing market, focus groups of active Realtors were convened in King, Kitsap, Pierce and Snohomish Counties in the summer and fall of 2022. Findings from these focus groups have informed the analysis of this paper, and highlights are found in Appendix A. Appendix B describes the relationship between land prices and housing prices.

The reader will note that the data used in this report will often cover inconsistent timelines. That is because the data used is often not available for all years, or because a particular data series began or ended in an awkward timeframe. Data that helps us understand trends in housing has generally been improving, but quality data is not always available as far back as we would like to go.

1. CHANGES IN HOUSING DEMAND IN PIERCE COUNTY

"A home is where a job goes at night." To understand housing demand, we need to understand employment growth. The Puget Sound region[1] is not an above-average retirement or vacation destination, so regional housing demand should be roughly proportional to employment growth at the regional level. Within the region, it should be a policy goal that everyone should have the opportunity to live and work within the same subarea of the region.

Pierce County is one of the subareas, so we need to determine if sufficient housing is being developed to meet the needs of those working there. And we cannot just look at averages and current employment. We need to look at what economists call the margins: the area of change. In other words, new housing must meet the needs of the most recent job growth, not the historic or average employment pattern.

1 For purposes of this report the Puget Sound Region refers to the four counties included in the Puget Sound Regional Council: King, Kitsap, Pierce, Snohomish. There is clearly "leakage" in both job and housing markets to adjacent counties—especially Thurston, Skagit, Island—but this leakage does not affect the fundamental trends in movement of people and jobs in the four counties.

Fig 1 Pierce County Total Employment

	2001	2019	Growth
Private wage and salary employment	200,740	276,787	38%
Self employment	57,823	86,974	50%
Federal civilian	9,407	12,104	29%
Military	23,636	32,380	37%
State and local	42,430	48,692	15%
Total employment	334,036	456,937	37%

Source: Bureau of Economic Analysis

Figure 1 shows the growth in major categories of employment in Pierce County from 2001 to 2019.

The county saw substantial growth in all major categories except for state and local government. During this time employment in the four-county region grew by 32 percent, with Pierce County growing only slightly slower than Snohomish County, and higher than King County's employment growth rate of 30 percent.

GROWTH IN COVERED EMPLOYMENT

Figure 2 shows changes in covered employment (jobs covered by unemployment insurance, which does not include the self-employed and those in the military. Covered employment data is far more detailed than the total employment data seen in Figure 1) in Pierce County by major industry sectors between 2000 and 2019 (pre-pandemic).

Fig 2 Pierce County Covered Employment

	2019 Employment	Job growth 2000-2019		County avg annual wage 2019
Constuction/natural resources	24,297	8,165	51%	$64,577
Wholesale/transp/utilities	30,278	13,542	81%	$62,056
Manufacturing	17,239	-4,916	-22%	$65,602
Retail stores	34,957	6,942	25%	$36,389
Information	2,730	-844	-24%	$68,313
Finance/insurance/real estate	13,640	631	5%	$70,747
Professional services	10,514	3,782	56%	$69,684
Management of firms	945	-412	-30%	$90,418
Administration and waste mgmt	13,305	6,101	85%	$46,983
Private education	4,897	1,178	32%	$42,616
Healthcare and social serv.	53,053	21,725	69%	$56,937
Arts/entertainment	4,438	-161	-4%	$24,262
Accommodations and food service	30,867	11,074	56%	$22,853
Other services	12,053	203	2%	$36,626
Government	59,297	10,891	22%	$67,956
Total	312,510	77,901	33%	$54,267

Sources: Puget Sound Regional Council, Washington State Department of Employment Security

Over 20 years, covered employment in Pierce County grew by nearly 78,000 jobs, or 33 percent. But within that growth there is substantial variation. The manufacturing sector, which has been a mainstay of the Pierce County economy, fell by 22 percent, while healthcare grew by nearly 22,000 jobs, or 69 percent. The high-paying construction and wholesale/transportation/utilities sectors grew well, but so did the lower paying retail and accommodations/food service sectors.

Figure 3 shows job growth at the city level for the larger cities in Pierce County as well as for unincorporated areas. (Some employment categories are collapsed due to data suppression requirements.)

Fig 3 Covered Employment Growth 2000 to 2019

	Const./Resources	FIRE*	Manufacturing	Retail	Services	WTU**	Government	Education	Total
Bonney Lake	262	103	9	1,100	1,546	118	65	372	3,575
Fife	595	-41	-1,417	850	1,207	3,752	608	116	5,672
Gig Harbor	169	339	291	847	4,051	-68	29	28	5,686
Lakewood	651	-219	364	286	1,704	550	1,231	43	4,612
Puyallup	1,516	222	-147	-217	5,939	1,970	-21	392	9,651
Sumner	2,011	195	2,298	619	1,154	5,139	29	42	11,488
Tacoma	588	-734	-5,096	527	13,348	451	2,131	-157	11,058
University Place	82	-122	-34	297	621	-3	123	57	1,021
Other cities	1,328	752	-1,659	129	3,072	1,304	235	446	5,607
Uninc. Pierce	971	136	476	2,504	10,003	318	3,103	2,019	19,531
Total	8,173	631	-4,915	6,942	42,645	13,531	7,533	3,358	77,901

* Finance, insurance, real estate
** Wholesale, transportation, utilities

Source: Puget Sound Regional Council

Again, we see the largest growth in the broad services category that includes healthcare, accommodations and food services.

Fig 4 Pierce Co Health Professions Employment

	2019 Employment estimate	2019 Average Wage	Monthly housing payment
Aides and assistants	5,667	$47,564	$1,308
Administrators	2,597	$73,780	$2,029
Therapists	2,351	$74,623	$2,052
Nurses, physicians asst.	7,991	$84,415	$2,321
Physicians	2,187	$212,511	$5,844
Technicians	5,691	$66,210	$1,821
Total	26,484	$81,281	$2,235

Sources: Washington State Department of Employment Security, Puget Sound Regional Council

GROWTH IN HEALTHCARE EMPLOYMENT

During the 2000-2019 period, the largest job growth took place in healthcare, with 28 percent of job growth in that sector. Healthcare is an important sector to watch, since it is growing rapidly, and healthcare providers do not have much geographic flexibility. The average wage in healthcare is slightly above the overall average wage for the county. But within the sector, wages vary widely.

Figure 4 shows employment and average wages by occupations that are specific to healthcare (the total is less than the total employment for the sector seen in Figure 2 because many people who work in the sector are not in health-specific occupations). It also shows the monthly housing payment that would be supported by the average wage for that occupation.

As healthcare institutions look to lower costs, they are employing more aides and assistants, who will be paid below the average wage in the county. And as we will see below, aides, assistants and technicians will struggle to pay rapidly increasing rents.

GROWTH IN MILITARY PERSONNEL

Pierce County is home to a major military installation that employs tens of thousands of uniformed personnel and civilians. The population connected to Joint Base Lewis McChord (JBLM) varies over time as the base's mission shifts, but the base has been growing. The data from U.S. Bureau of Economic Analysis shows that the number of uniformed personnel has grown by 37 percent over a 20 year period.

JBLM reports that it currently has 4,874 occupied housing units on the base. While some of these units may have married couples who are both in uniform, it is clear that the great majority of uniformed personnel assigned to JBLM will be living off-base, adding pressure to the Pierce County housing market. Military personnel living off base are given a Basic Allowance for Housing (BAH), which is tied to the pay grade of the individual and local area housing costs. Figure 5 shows the BAH levels for JBLM for 2022.

Because the BAH is tied to local housing market, a soldier or airman can afford to pay more rent than their pay grade might suggest. Looked at another way, if we assume rent should be about 33 percent of gross income, the BAH for a Private would be 33 percent of an annual income of $57,000, which is far above the $41,000 that an E-1 would receive in pay and BAH combined. Many military personnel have resources for housing that are far above what a civilian in a similar place in their life would have.

Figure 5 Basic Allowance for Housing
Joint Base Lewis McChord 2022

	Army rank	Without Dependents	With Dependents
E1	Private	$1,578	$2,034
E2	Private 2nd Class	$1,578	$2,034
E3	Private First Class	$1,578	$2,034
E4	Corporal/Specialist	$1,578	$2,034
E5	Sergeant	$1,764	$2,205
E6	Staff Sergeant	$1,914	$2,553
E7	Sergeant First Class	$2,040	$2,586
E8	Master Sergeant	$2,280	$2,622
E9	Sergeant Major	$2,379	$2,682
W1	Warrant Officer 01	$1,986	$2,568
W2	Warrant Officer 02	$2,277	$2,601
W3	Warrant Officer 03	$2,388	$2,646
W4	Warrant Officer 04	$2,556	$2,697
W5	Warrant Officer 05	$2,592	$2,757
O1	Second Lieutenant	$1,863	$2,250
O2	First Lieutenant	$2,151	$2,550
O3	Captain	$2,424	$2,643
O4	Major	$2,580	$2,775
O5	Lieutenant Colonel	$2,598	$2,868
O6	Colonel	$2,631	$2,889

Source: U.S. Army

When housing markets are tight, the BAH can act as a floor for rents in the area that is well above what a low-wage civilian could afford. When apartments are scarce, owners can charge the BAH even if it is well above what the civilian market would otherwise indicate. And the Defense Department raises the BAH to conform to local conditions, so rent increases become sort of self-fulfilling. The BAH is an essential recruiting and retention tool for the military, but it can strain local housing markets when rental supply is tight.

According to data from the Internal Revenue Service, of military households that moved in 2019 to Pierce County from APO and FPO (Army Post Office, Fleet Post Office) addresses, and from counties with major military bases, the average household size was 2.4 people. The average of all households moving to Pierce County that year was 1.9 people, indicating that Military households are more likely to have children and, therefore, need family-appropriate housing.

SPILLOVER DEMAND FROM KING COUNTY

A key source of demand for housing in Pierce County comes from job growth in King County. According to the U.S. Census Bureau, around 137,000 people commuted from Pierce County to King County each day in 2019. Figure 6A shows the origins of commuters heading from Pierce to King County in the morning, and Figure 6B show the destinations of Pierce County commuters heading to King County.

Fig 6A Daily commuters to King County 2019

Commuting from:	
Tacoma	33,907
South Hill	9,623
Puyallup	8,327
Lakewood	6,187
Parkland	5,439
Bonney Lake	5,224
Spanaway	4,256
Graham	3,971
Prairie Ridge	3,454
Lake Tapps	3,440
University Place	3,385
Frederickson	3,201
Fife	2,744
Edgewood	2,566
Sumner	2,403
Elk Plain	2,211
Milton	2,118
Artondale	1,853
Summit	1,349
Other Pierce County	31,338

Source: U.S. Census Bureau

Fig 6B Daily commuters from Pierce County 2019

Commuting to:	
Seattle	37,835
Kent	17,457
Auburn	17,004
Federal Way	10,305
Renton	9,020
Bellevue	9,009
Tukwila	7,523
SeaTac	6,349
Redmond	2,874
Kirkland	2,716
Issaquah	2,177
Enumclaw	1,705
Burien	1,618
Pacific	1,517
Bothell	1,052
Des Moines	947
Covington	817
Maple Valley	741
Shoreline	657
Other King County	5,673

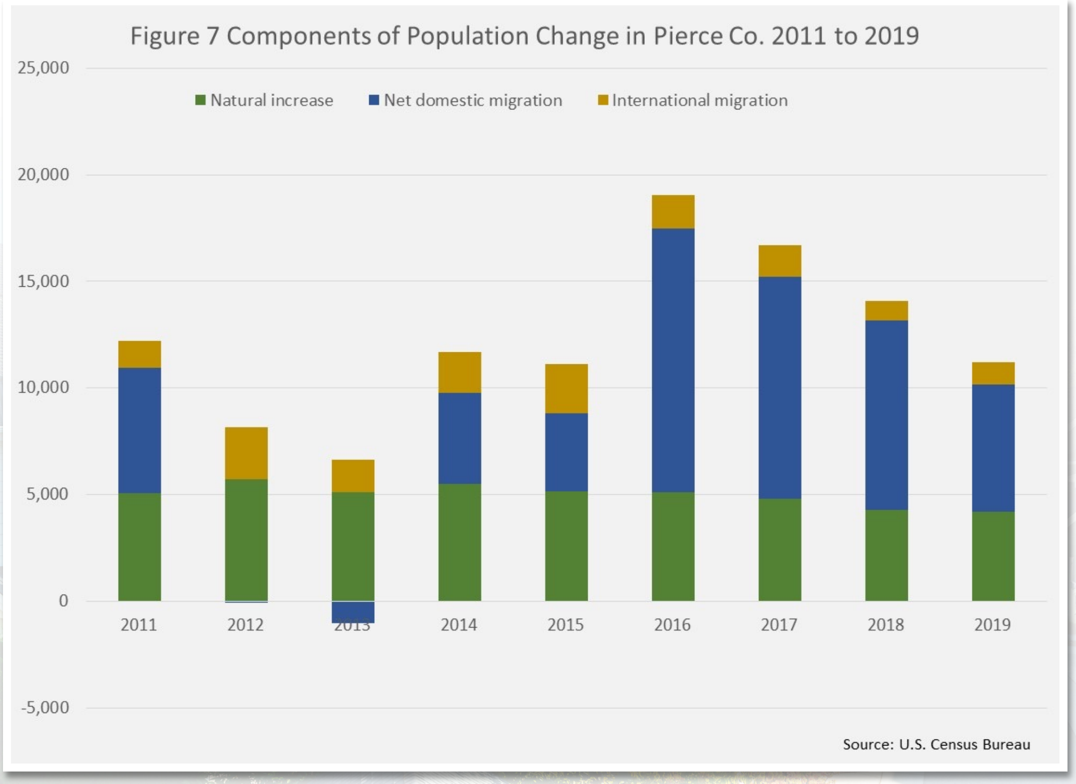
Source: U.S. Census Bureau

While a good number of Pierce County commuters are headed to jobs in South King County, over one quarter are headed to Seattle and 13 percent to East King County.

Migration data from the Internal Revenue Service shows the movement of people from King County to Pierce County, by tracking address changes on tax returns. In the five years from 2014 to 2019, the IRS counted 49,000 households moving from King County to Pierce County, and 32,000 households moving from Pierce to King County, for a net flow of about 17,000 households moving from King to Pierce. There was a net flow to Pierce County of over 37,000 people in these households. The households moving from King to Pierce were, on average, larger than the households moving from Pierce to King, suggesting that movers to Pierce were more likely to be families.

STRONG IN-MIGRATION

Population growth comes from two sources: natural growth (births minus deaths) and net in-migration (in-migrants minus out-migrants). Natural growth drives housing demand, but with some lags (parents of newborns likely already have a house), but in-migration certainly does, as each new household needs a place to move into. Figure 7 shows the two components of growth for Pierce county from 2011, as the region emerged from the Great Recession, to 2019, the eve of the pandemic.



Between 2011 and 2019, net in-migration accounted for 59 percent of Pierce County's growth. While natural growth is fairly steady, migration varies widely over time. This can strain housing supply. Bringing on new supply takes quite a long time, and as seen in Figure 7, in-migration can surge unexpectedly.

It is also important to see where in-migrants are coming from. This will give some indication of the purchasing power they bring with them. Figure 8 shows the totals for domestic in-migration for 2019, as well as the top 20 counties of origin of in-migrants.

Fig 8 Origins of Migrants to Pierce County

Based on federal tax returns filed in 2019

	Households	Individuals	Hd size
From all U.S.	28,226	53,735	1.9
From within Washington	15,139	27,648	1.8
From another state	13,087	26,087	2.0
From APO/FPO addresses	638	1,514	2.4
King	9,624	17,870	1.9
Thurston	1,705	3,045	1.8
Kitsap	989	1,795	1.8
Snohomish	782	1,420	1.8
Los Angeles	448	823	1.8
Honolulu	402	962	2.4
Maricopa	324	613	1.9
San Diego	317	583	1.8
Spokane	267	444	1.7
Clark, Nevada	243	506	2.1
Mason	206	365	1.8
Clark, Washington	205	393	1.9
El Paso, Colorado	195	474	2.4
Orange	183	330	1.8
San Bernardino	167	336	2.0
Lewis	163	280	1.7
Multnomah	161	252	1.6
El Paso, Texas	154	418	2.7
Anchorage	153	359	2.3
Riverside	149	291	2.0
Other Washington	1,112	1,871	1.7
Other California*	1,037	1,946	1.9
Other Oregon*	410	699	1.7
Other West*	2,033	3,868	1.9
Balance of US**	6,159	12,278	2.0

*Includes only counties with 20 or more households moving to Snohomish County
**Includes Western counties with fewer than 20 households moving to Snohomish County

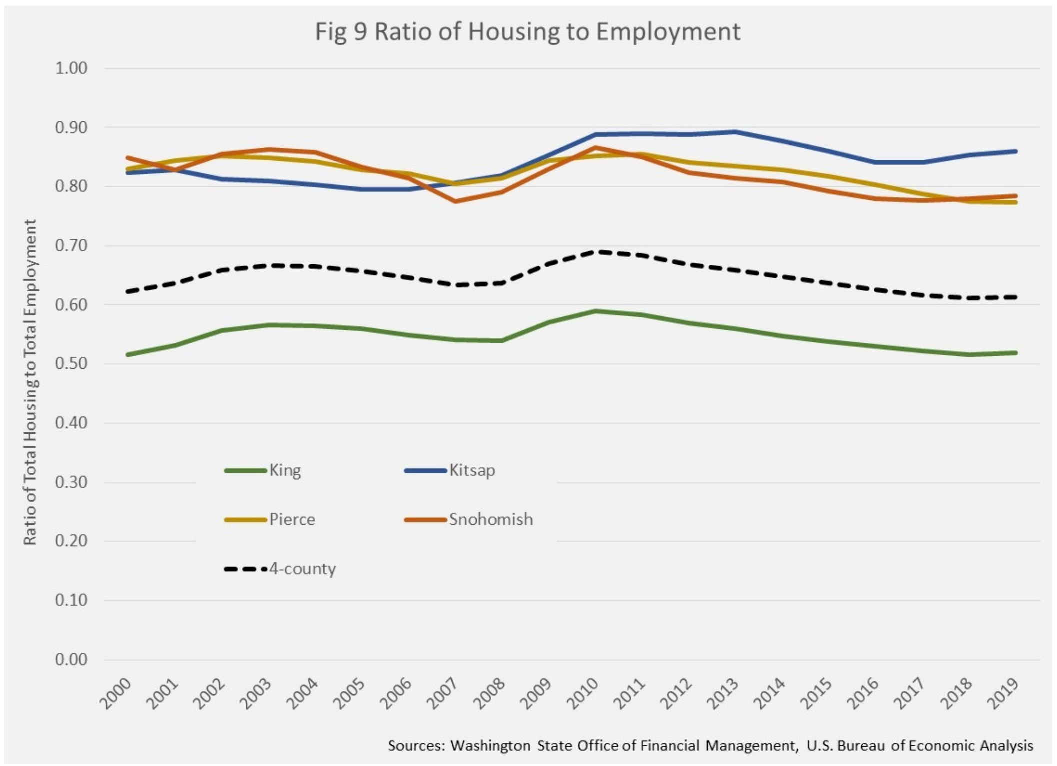
Source: U.S. Internal Revenue Service

Over one third of the households moving to Pierce County that year had lived in King County the prior year. And note that the average household size of those moving from King County is higher than the typical household size of people moving to Pierce County from other areas of Washington. About 2,300 households, or 8 percent, came from California. Figure 8

also shows the origins of households moving from areas with a strong military presence, both overseas and elsewhere in the U.S.

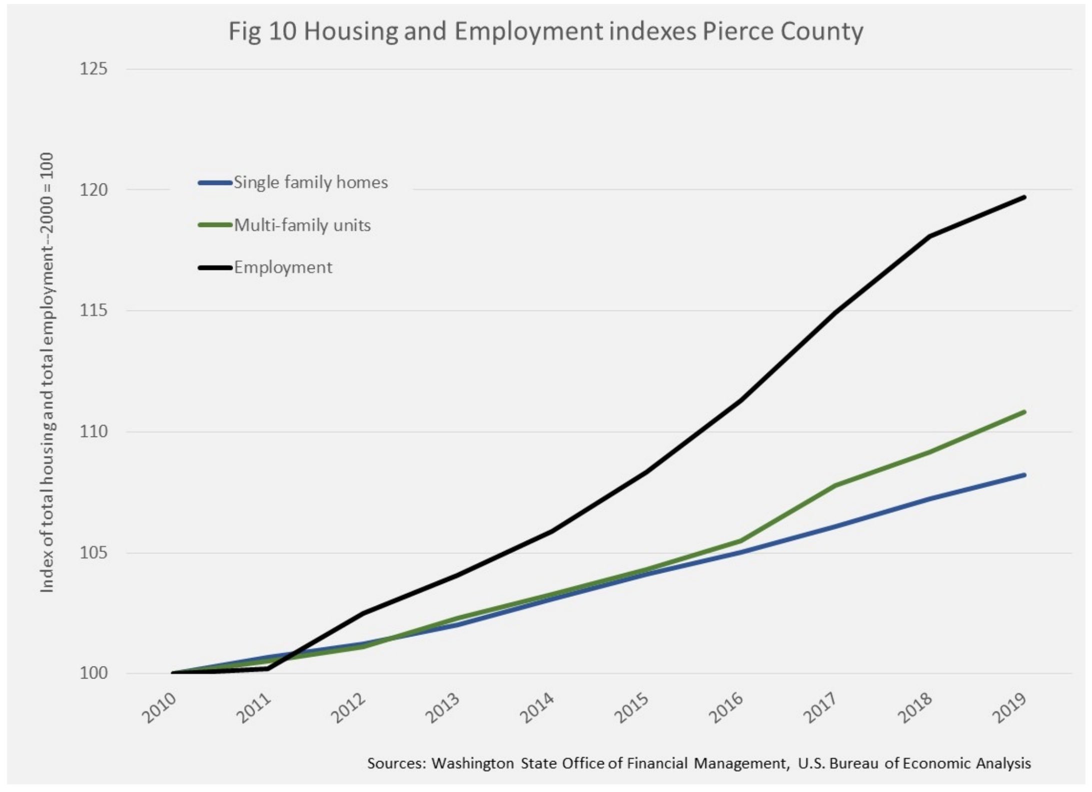
2. TRENDS IN HOUSING SUPPLY IN PIERCE COUNTY

As the preceding discussion makes clear, two large needs drive housing demand in Pierce County. First, most people working in Pierce County would find it convenient to live there. Second, Pierce County is a destination for people working in King County but unable to afford homes there. Figure 9 shows the ratio of housing units to jobs for the four counties of Central Puget Sound.



The relationships here are remarkably steady. King County consistently has a lower ratio of housing to jobs than the region as a whole, and Pierce, Kitsap and Snohomish Counties have a higher ratio. Kitsap, Pierce and Snohomish counties are providing housing to people working in King County, and the degree to which they are doing that is not changing much at all. The good news is that the share of King County's housing needs being met by adjacent counties is not growing. But the bad news is that with strong job growth in King County, the number of new homes and apartments that must be provided in adjacent counties is quite large.

For now, then, we will concentrate on the degree to which the housing supply of Pierce County is keeping pace with demand generated by employment growth within the county. Figure 10 shows an index of employment growth and growth in the total stock of single family and multi-family housing units. The index shows, for each year, the number of housing units and jobs for every 100 that existed in 2010. For example, there were about 120 jobs in Pierce County in 2019 for every 100 that existed in 2010, or a 20 percent increase.



Coming out of the Great Recession, Pierce County had some overhang of housing supply. After a slow start, employment growth accelerated and outpaced housing growth through 2019: the black line has a much steeper slope than the blue and green lines. Some of the imbalance of the 2010s was taken up with slack in the housing market and vacancies that occurred after the Great Recession. But those vacancies were soaked up and housing construction is not keeping pace with job growth.

Figure 10 is based on estimates of total housing units made by the Office of Financial Management. We now turn to actual construction of new housing. Building permit data is not always consistent or timely, but we can get a reasonable assessment of construction using data collected by the Census Bureau and presented locally by the Puget Sound Regional Council. The permitting data becomes much less reliable in recent years, so we cut off the analysis at 2017.

Figure 11 shows permits issued within Pierce County, by cities and the county, for single family and multi-family homes. To smooth out the normal variation in permitting, the figure for each year is the average of that year plus the two previous years.

Fig 11 Permits issued in Pierce County
Trailing 3-year average. Net after demolitions

	Single family	Multi-family				Mobile home
		Total	2 to 19	20 to 49	50 and over	
2002*	4,316	655	661	44	-50	235
2003*	4,086	713	673	40	0	295
2004	4,203	1,156	973	233	-50	293
2005	4,592	1,460	1,152	256	53	356
2006	4,654	1,670	1,245	314	111	237
2007	4,183	1,407	917	204	286	117
2008	2,810	1,103	689	197	217	-2
2009	1,725	888	486	168	234	38
2010	1,316	508	325	73	111	44
2011	1,324	777	341	149	287	23
2012	1,575	775	310	114	351	4
2013	1,788	861	367	121	373	-4
2014	2,009	760	375	97	288	-23
2015	2,060	762	474	139	148	-16
2016	2,014	1,059	572	280	206	3
2017	2,203	1,188	494	368	326	59
2002-2017	44,858	15,743	10,054	2,797	2,892	1,659

*Data for one year only. Not averaged

Source: Puget Sound Regional Council

The drop in permitting since the Great Recession, especially in single family, is quite striking. The easy financing and questionable lending practices that led to the housing crash were certainly in evidence in Pierce County. But even with some degree of overbuilding, we have not returned to even half of the rate of single family building that the county saw in the early 2000s. Multi-family construction seems to be returning to pre-crash levels.

How short of demand is housing construction in Pierce County? Figure 12 estimates the number of single family homes and multi-family units that would be required to meet the needs of Pierce County job growth between 2002 and 2017 and compares that estimate to the actual homes and units permitted. The calculations assume that the rate of spillover demand from King County job growth remains constant.

Fig 12 Estimate of Required and Permitted Housing Pierce County 2002-2017

Employment growth 2002-2017*	100,765
Single family homes per job in 2002	0.57
Multifamily units per job in 2002	0.36
Single family homes required for job growth	57,574
Multi-family units required for job growth	36,711
Single family homes permitted 2002-2017	43,129
Multi-family units permitted 2002-2017	17,995
Single family home deficit 2002-2017	14,445
Multi-family unit deficit 2002-2017	18,716
Percent of required single family homes permitted	75%
Percent of required multi-family units permitted	49%

*includes self employed and uniformed military

Sources: Puget Sound Regional Council, U.S. Bureau of Economic Analysis, author's calculation

During this 15 year period Pierce County added about 75 percent of the single family housing that would have been required for Pierce County job growth and King County spillover, but only about half of the multi-family housing that would have been required. As recently as 2012, the single family housing deficit in Pierce County was quite small, but as we might expect, given the trajectories seen in Figure 10, the deficit shot up rapidly after 2012.

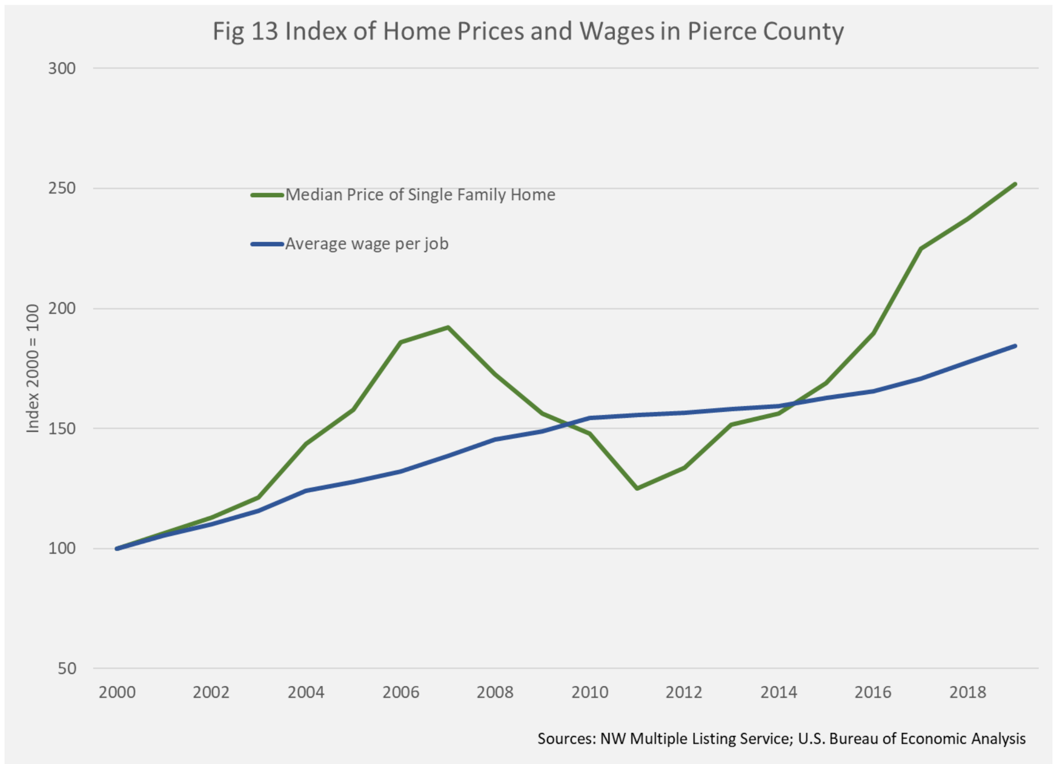
The deficit in multi-family housing is large and concerning, given the growth in relatively low paying jobs seen above, and the growth in military personnel, many of whom will be young, childless and appropriately housed off-base in apartments.

(Appendix A provides findings of focus groups of active Realtors in Pierce, King, Kitsap and Snohomish counties exploring the evolution of housing demand and the continued strong demand for single family detached housing)

3. TRENDS IN HOUSING PRICES AND AFFORDABILITY IN PIERCE COUNTY

Pierce County has long been a relatively affordable area in which to buy a home. The geography of much of the county is conducive to homebuilding, and the county and local planning and regulatory environment has tended to encourage affordable homebuilding. Indeed, during the homebuilding rush of the early 2000s, Pierce County was the location of a great deal of building that was aimed at the lower cost end of the market.

Over the past ten years, the overbuilding has been absorbed as Pierce County employment has steadily grown, and prices have begun to outpace wages. Figure 13 shows the relationship between average wages and median home prices since 2000. The index shows the wage or price in a given year for every $100 of wage or price in 2000.



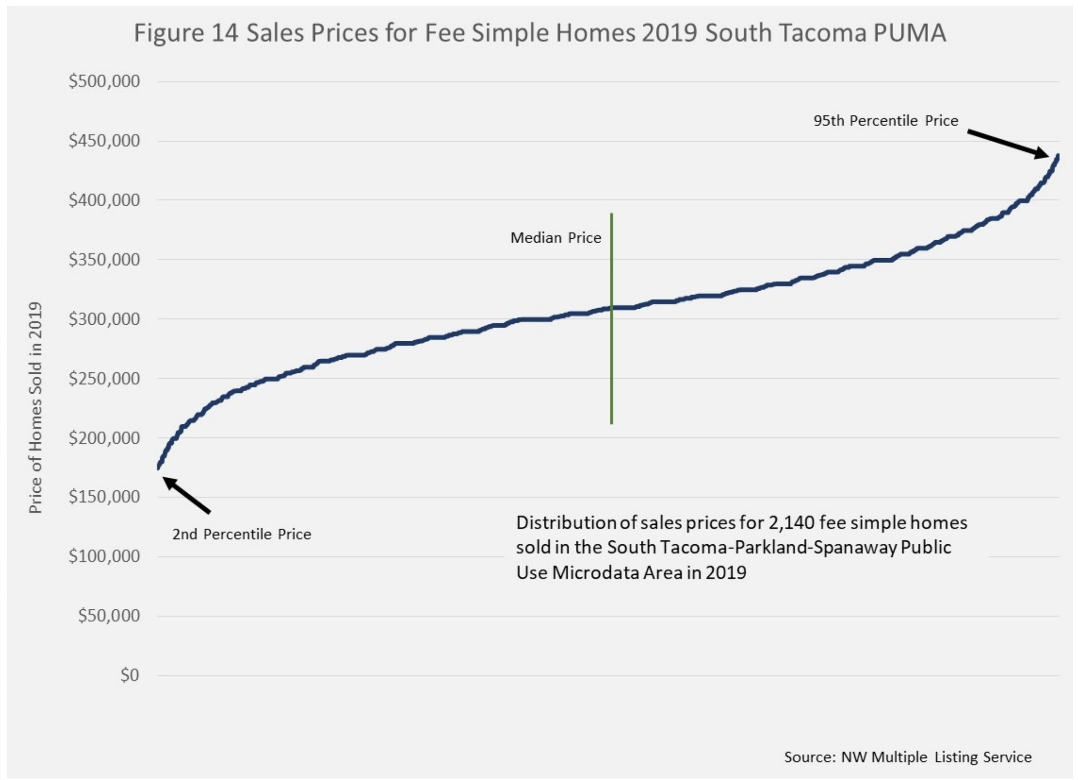
The green line shows the boom and bust of the years 2000 to 2011. From 2011 through 2019, pre-pandemic, median prices climbed an average of 9 percent per year, doubling in that time. Wages, meanwhile, increased an average of only 2.3 percent per year. The historic affordability of Pierce County, combined with the deep price drops of housing crash provided some cushion for affordability.

But that cushion is largely gone now. The Washington Center for Real Estate Research publishes its Housing Affordability Index (HAI) that indicates whether a household with the median income can afford the median priced house. An HAI reading of 100 means that the median income is just able to afford the median priced home, given prevailing interest rates. The HAI for Pierce County dropped below 100 in 2007, during the height of the housing bubble, but rose well above 100 after the bubble burst. Pre-pandemic the HAI was down to 108 and has now dropped below 100 as the distortions of the pandemic have led to dramatic price increases.

We do need to be careful about just focusing on median prices, as the HAI does. We need to look at the distribution of prices across the range of the market. As the HAI indicates, the median income in Pierce County has, until recently, been enough to afford the median priced home. But what happens below the median? Do prices fall at the same rate that incomes do as we move below medians?

The answer to that question is no. The curve of home prices, from least to most expensive, is far flatter than the curve of incomes. To illustrate this, we will look at the area of Pierce County from roughly South Tacoma through Spanaway, from JBLM on the west, to Canyon Road on the east. This is designated by the Census Bureau as the Pierce County South Central Public Use Microdata Area (PUMA). It has just about 50,000 households and corresponds roughly to the NWMLS areas 53, 60 through 69, and 99.

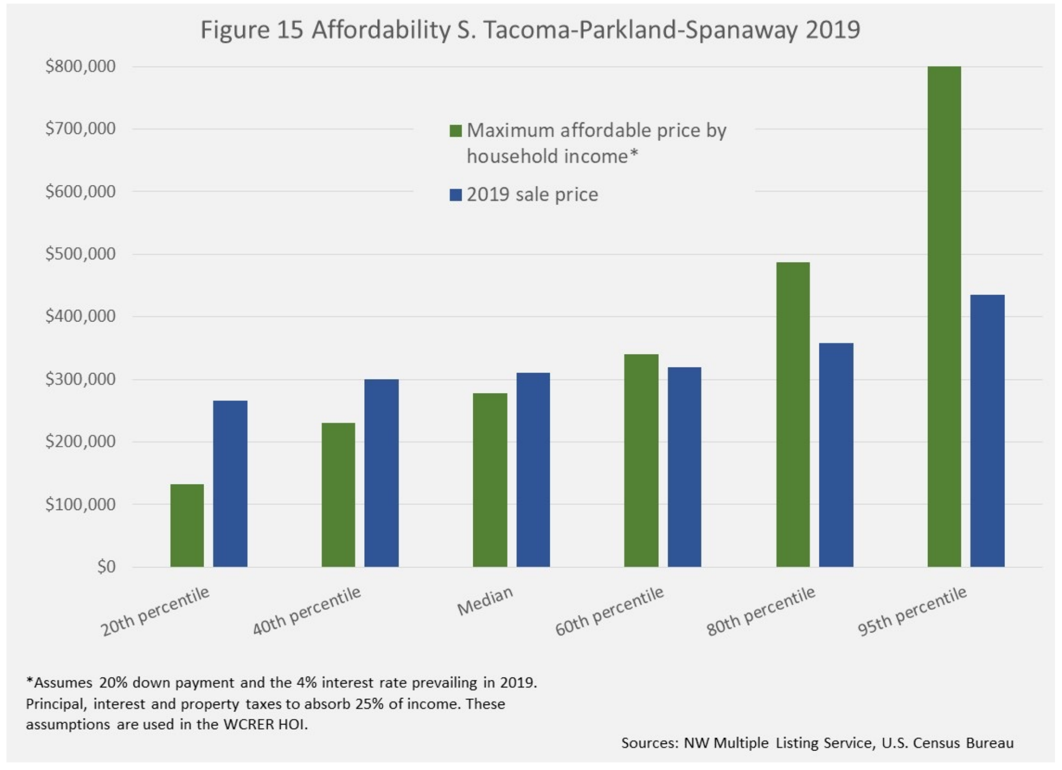
Figure 14 shows the curve of sales prices for fee-simple homes in this area sold in 2019 (pre-pandemic). We eliminate the outliers at the bottom 2 percent and the top 5 percent.



Note that prices rise quickly at the very lowest end (mostly homes with little value in the structure, or small fee simple townhouses) and again at the upper end. But the middle is quite flat. The difference in price between the home at the 40th percentile level and the home at the 60th percentile level is just $20,000.

(Appendix B provides a more detailed explanation of the relationship between land prices and home prices that helps explain why the home at the 2nd percentile level in Figure 14 is priced at $175,000.)

Incomes, however, are not this flat. Income data is far less granular, but we can see what happens when we compare incomes in that PUMA (wage data is not available) with home prices. Figure 15 shows, for 2019, what would be affordable to a family at each income quintile for residents of the PUMA alongside the actual prices of homes sold in the Public Use Microdata Area at those quintiles.



At the 20th percentile level homes are more than twice as expensive as the income would support, but we probably would not expect a lot of home ownership at that income level. But at the 40 percent level, where we should expect ownership, the home at that level is unaffordable. Income at the 40 percent level is not even enough to purchase the home at the 20 percent level. Under these assumptions, the median income is not enough to purchase the median home. Things then improve, as incomes rise and home prices rise much less. At the 80th and 95th percentile level, homes are very affordable.

This illustration does not represent actual market dynamics (most people will not live and work in the same PUMA) but it does show that just paying attention to the median ignores the plight of those whose incomes are falling below median, but not seeing house prices falling at the same rate.

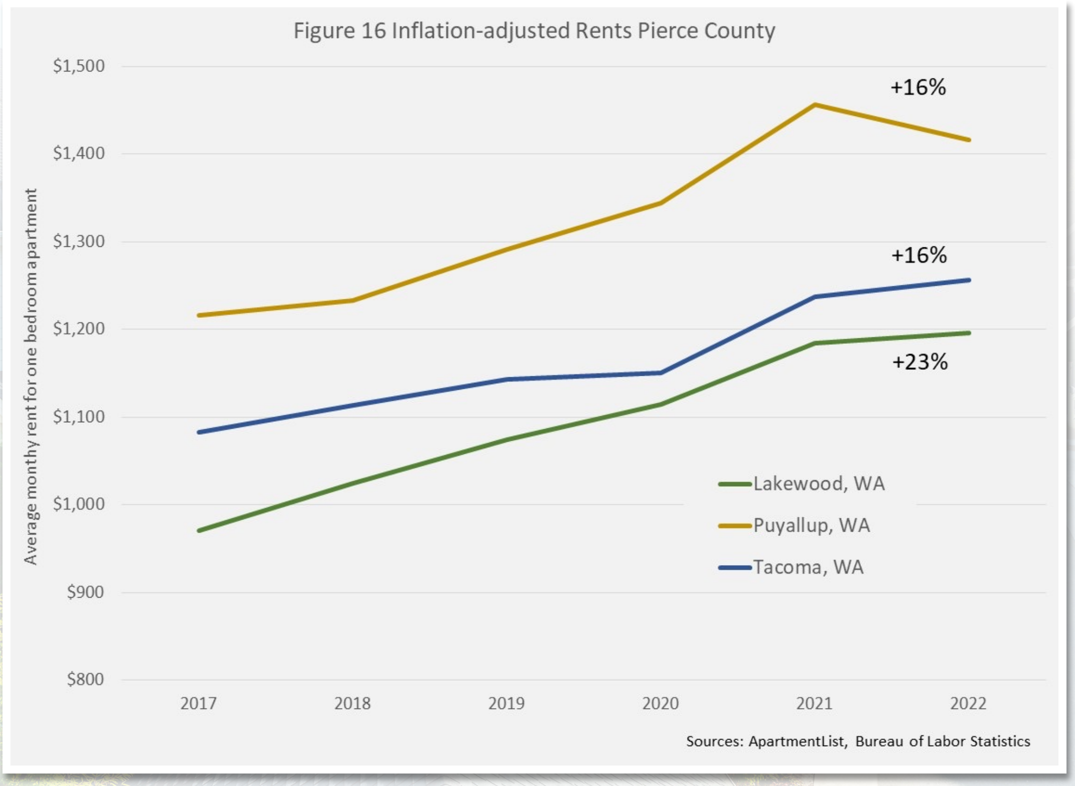
The starting point for understanding this (at least for detached homes) is the value of the lot underneath the house, which will be consistent across a given market area, but vary between market areas. Appendix B explains this in more detail.

Pierce County is no longer the affordable place it has historically been. Its economy continues to grow, as seen in Figures 1 and 2, but homebuilding has not kept up, as seen in Figure 12. With the excess housing production of the 2000s now fully absorbed, and inadequate production in the pipeline, the upward trajectory of the green line in Figure 13 is likely to continue. Add to this the spillover demand for housing from people employed in King County but unable to afford homes there, and we can see no end to price pressures. The drop in prices in late 2022 reflects artificially high interest rates, and once rates come down again, prices will likely rise.

Those seeking affordability in Pierce County will not get much relief in the rental market. Rents across Pierce County have been increasing above inflation. In 2000, the median one-bedroom apartment in Pierce County rented for $749 in 2019 dollars. By 2019, pre-pandemic, that median apartment was renting for $1,415.

Over the past 20 years, rent on a one-bedroom apartment has increased 94 percent, after adjusting for inflation, while inflation-adjusted average wages increased just 22 percent. In 2000, the median rent for a one-bedroom apartment was about 16 percent of the average monthly wage in the county, and by 2019, median one-bedroom rent was 26 percent of the average wage.

The sudden shifts of work arrangements during the pandemic caused rents to shift around the region. Generally, rents farther away from the Seattle-Redmond axis increased more than rents closer in, as work-from home allowed many people to shift to lower priced housing. But the upward trend in rents in Pierce County predates the pandemic. Figure 16 shows inflation-adjusted annual average median one-bedroom rents for the past five years for three Pierce County markets.



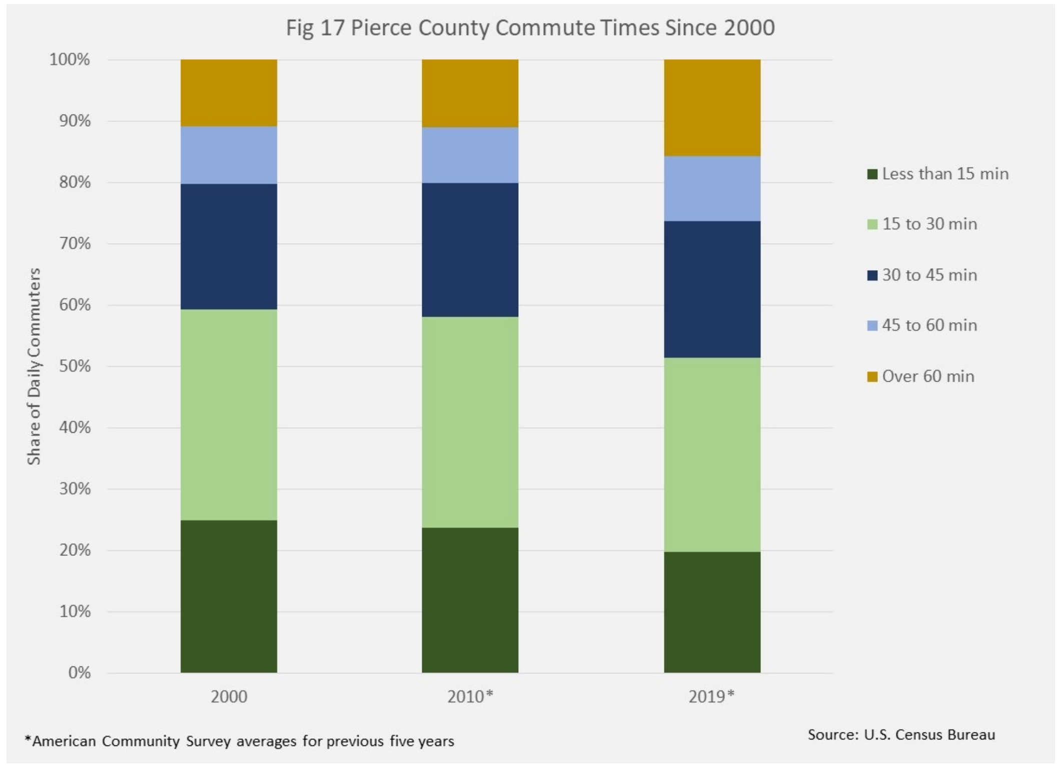
We can see rents increasing in all three markets prior to the time the pandemic hit the rental market in mid-2020. This would be consistent with the under-production of apartments in Pierce County, seen in Figure 12. The jump in rents in 2020 is consistent with the idea that people who can work from home were choosing to live in what had been more affordable areas.

TRENDS IN COMMUTING IN PIERCE COUNTY

When homebuyers cannot afford a home in their preferred area, typically close to where they work, they will "drive to qualify." Unless that homebuyer changes jobs, they will face a longer commute than before they bought their new home. Longer commutes are the natural outcome of housing shortages and high prices: those who can afford high prices get the shorter commutes and those who cannot afford high prices get longer commutes.

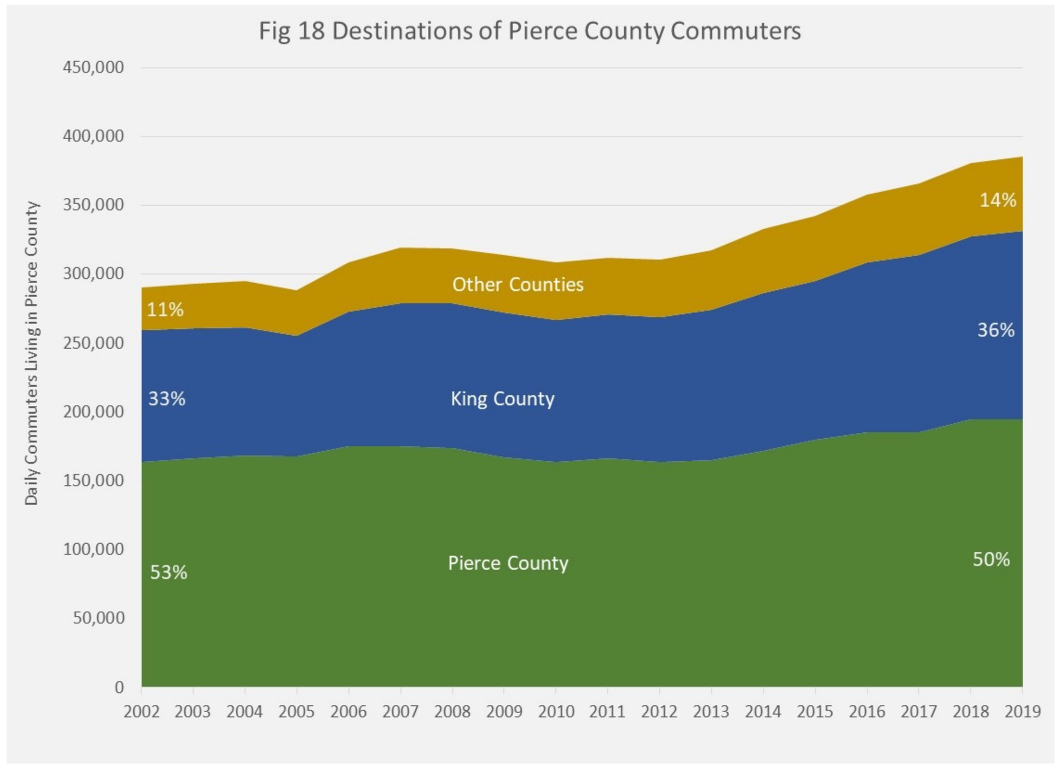
The new patterns of work-from-home have changed this dynamic in ways that are not fully understood. Nevertheless, a large segment of the workforce does not have the option of working from home and will always need to commute.

Figure 17 shows changes in commute times for just the past 10 years.



The bars on the left show commute times for those living in Pierce County. In 2010, 9 percent of those living in Pierce County spent more than an hour getting to work, and by 2020, this had risen to 16 percent. While it is possible to have an hour-long commute and stay within Pierce County, the great majority of these road warriors are commuting to King County. The bars on the right show commutes for those working in King County. The number of hour-long commutes for those working in King County increased from 10 percent to 16 percent, mirroring the increase in Pierce County's long distance commuting.

Pierce County's role as a home for people working in King County has been growing, as would be expected from the growth in longer commutes. Figure 18 shows the destinations for commuters living in Pierce County from 2002 to 2019.



During this 17-year period, Pierce County added about 31,000 commuters who stay in the county but added over 41,000 commuters heading to King County each morning. And, as Figure 6B shows, these commuters are not just crossing the county line to work in Kent or Auburn, many are commuting to Seattle and the Eastside.

CONCLUSION

Pierce County has long been a source of affordable living for both those who work in the county and those who have been priced out of more expensive markets of King County. The county has had large areas with modest sized homes that have retained their value, and has, in more recent years, been the site of very large scale development of moderate priced homes. During the housing boom of the early 2000s, Pierce County was the location for a great deal of homebuilding aimed at what became known as the subprime market.

Since the housing bust that began in 2008 and lasted until 2011, Pierce County has seen a steady increase in home prices and decline in affordability for those working in the county. Pierce County has added a great deal of employment but not nearly enough homes, both single family and rental apartments. King County has done the same, resulting in a continued flow of "drive to qualify" buyers who bring their higher King County incomes to the lower priced markets of Pierce County. This has supported steep price increases and led to a situation where Pierce County incomes are not able to support Pierce County prices at the lower levels of the market.

Concerns about housing supply in Pierce County involve not just the single family market, but also apartments. Rents have been climbing steadily, and unlike single family homes, apartment renters have fewer options to "drive to qualify."

Going forward, Pierce County leaders should "lean in" to Pierce County's historic role as a series of communities that are accessible to those looking for affordable, quality single family neighborhoods. The county will continue to attract middle income industries that are priced out of King County and needs to have the housing for workers in those industries that have families. At the same time Pierce County needs to make its land use and development policies friendly to development of lower cost apartments, and not get swept up in the trend of building only mid-rise stacked flat buildings that are expensive and not affordable to the many moderate wage workers and military personnel in the county.

APPENDIX A

FOCUS GROUP FINDINGS

Focus groups of real estate professionals were conducted in King, Kitsap, Pierce and Snohomish counties in the summer and fall of 2022. The objective of these group interviews was to gain a sense of market preferences among homebuyers, and the ways in which those preferences have been shifting. Shifts are noted that have taken place over the past 20 to 30 years, as well as during the recent pandemic years.

Shifts in market preferences can be the result of changes in social trends, public policy, environmental conditions, demographics, economic conditions or exogenous forces such as the pandemic. As will be noted, however, some preferences resist change even in the face of these larger contextual changes.

It is important to remember that focus groups and other qualitative research methods are intended to gather a range of issues and ideas that should be further explored. For most of this summary there is no attempt to quantify the scope or intensity of any of the issues and ideas. But these matters do come into play in planning processes and deserve consideration and further research. There are a small number of "dead ends," or instances where there was broad consensus among the real estate professionals that certain ideas are non-starters.

The focus group discussions centered around a short paper exercise that asked the participants to name factors that go into decisions by people seeking new homes, and to rank those factors in importance for three demographic groups. This summary is organized around those factors and the ways in which each factor:

Has changed. How have preferences of those seeking homes shifted in the middle-term and short term?

Has not changed. What are the constants in preferences that persist in the face of other changes in the region?

Presents opportunities. Are there ways to further the provision of housing opportunities at various levels and for various groups?

Presents challenges. What persistent challenges lead to barriers to housing for various groups?

Suggests dead ends. What concepts have a very low likelihood of success?

PIERCE

4 COUNTY FINDINGS

4 COUNTY FINDINGS

1. HOME SIZE AND LOT SIZE

WHAT HAS CHANGED.

Home office space. New work-from-home opportunities have led to the need for home office spaces that are separate from other living spaces. These can be extra bedrooms, or spaces carved out of flex-spaces like bonus rooms.

Multi-generational needs. Many families, especially immigrant families, will anticipate the need to house parents or adult children, and will want spaces that afford privacy, functional features and appropriate access.

Acceptance of smaller lot sizes. As single family lot sizes in subdivisions have shrunk over the past 30 years, the market has come to accept these smaller parcels as a reasonable tradeoff for new construction.

WHAT HAS NOT CHANGED

Space for families. Families with children still want ample bedrooms, bathrooms, recreation rooms and other spaces that give everyone enough room.

Single level homes for older residents. Homeowners who want to age in place will seek out single level homes or homes with ground floor bedrooms, laundry etc.

Guest space. Homeowners without children at home still want guest bedrooms and spaces for visiting family and friends. Many anticipate housing their adult children.

Privacy and light. Even in higher density environments, people still value privacy (no one looking in the windows) and natural light (windows and more than one side).

Willingness to commute to afford larger lots. For those who want larger lot sizes, many buyers are willing to commute long distances.

Expectation of large lots in outlying areas. Buyers moving to outlying areas, especially in Kitsap County and parts of Pierce County, expect large lots. That is the reason they moved there.

OPPORTUNITIES

Townhouses and duplexes. In certain markets, buyers can get the spaces and privacy they need in townhouse or duplex developments.

Cottage cluster. The concept of small, detached homes clustered around common open spaces has proved successful, especially for older single people who still want a detached home but without the size or maintenance requirements of traditional single family homes.

CHALLENGES

Missing middle economics. The economics of duplex, townhouse, cottage and other "missing middle" forms of housing are not simple. Zoning must be crafted so these building forms are viable uses of land that might otherwise be used for single family homes.

DEAD ENDS

Families with children in multi-family buildings. While it is common in in the Mid-Atlantic area, and in many parts of the world, there is little enthusiasm for raising children in large walk-ups or stacked flat buildings. When economically feasible, families with children will almost always opt for detached homes, even if it means a long commute for parents. Resistance to raising children in multi-family settings has not changed in recent decades and there is no sign that it will change in the future.

2. LOCATION

WHAT HAS CHANGED

Commute times less important. For those who can work from home all or part of the time, commute times have become a much less important factor in location decisions.

Walkability. Both younger and older buyer groups are placing increased emphasis on walkability and the ability to access retail and other services on foot.

WHAT HAS NOT CHANGED

Schools are important. The importance of school quality varies by buyer group, but many groups still place great value on the quality of local public schools.

Safety is very important. Crime and safety, in both perception and reality, are very important to all groups.

Access to medical services. Older buyers want to have good access to healthcare services.

Access to retail. Easy access to retail and basic services is important, but not highly important.

OPPORTUNITIES

Fee simple townhouses, duplexes, cottages. Some buyers who are willing to accept smaller lots will consider semi-attached homes at densities in the range of 10 to 30 units/acre.

CHALLENGES

Commutes for those that cannot work from home. A large share of the working population cannot work from home. These people often hold middle and lower income jobs and face new affordability issues in outlying areas.

DEAD ENDS

Trading high density for short commutes for families. None of the real estate professionals can detect any willingness among families to compromise their preferences on density in order to get shorter commutes. The idea that families might want to live in urban centers with very short commutes seems to be a non-starter.

3. FEATURES AND CONDITION OF HOME

WHAT HAS CHANGED

Less interest in renovation. Younger buyers are less interested in buying homes on which they will need to do substantial work. They lack the skills to do the work themselves and lack the financial resources to pay for the work.

Emphasis on new construction. Many buyers, especially some immigrant groups, place a high emphasis on new construction or newer homes. This is because of concern about both layouts and condition.

Smaller exterior spaces. Many buyers are willing to accept relatively small yards and outdoor spaces.

Low maintenance exteriors. Many buyers are looking for exterior spaces that do not require much maintenance.

WHAT HAS NOT CHANGED

Desire for private open space. Although they will be flexible on the size, homebuyers still want to have some private open space. This might be a deck, hardscaped area or low maintenance landscaping, but it must allow for private space for small children and pets.

4. OWNERSHIP

WHAT HAS CHANGED

Expansion of ownership options. New options present buyers with expanded ownership and income options, such as including attached and detached ADUs and short term rentals.

WHAT HAS NOT CHANGED

Desire for investment value. The rate at which individuals and families want to own their own home has not changed. Home ownership is still seen as a solid investment, especially for some immigrant groups.

OPPORTUNITIES

Flexible ownership structures. Flexible ownership methods, such as condominiumizing duplexes and including ADU income, can expand opportunities for both owners and renters.

CHALLENGES

Avoiding condominium ownership. Many buyers fear the complications and expenses of condominium ownership.

Avoiding HOAs. While homeowner's associations (HOAs) can provide order and predictability to communities, especially high density ones, many buyers are leery of the rules and processes that HOAs require.

DEAD ENDS

Convincing buyers to be renters. Buyers and renters have different objectives and expectations, and they tend not to move from one category to the other. While the case can be made that other investment strategies can generate long terms returns comparable to home ownership, few prospective owners will opt to remain renters and pursue those alternative strategies.

PIERCE COUNTY HIGHLIGHTS

The Pierce County focus group of active Realtors was convened in September 2022. Some key points coming out of the Pierce County discussion:

- Commute times and distances have become less important as large numbers of householders can work from home much of the time.
- Crime and safety have become larger issues, not just in Tacoma, but countywide. The expectation is that Pierce County should be a place to escape the rising crime in larger cities.
- The size of back yards is less important. Just enough space for pets and small children.
- Multi-family living is not considered an alternative to single family living.
- Single family detached homes are part of the expectation of those moving to Pierce County. Separation distances are less important, but there must be separation.
- Duplexes and townhouses are a tougher sell in Pierce County.
- Condominium ownership is not favored.
- Many people consider condo associations and many HOAs to be intimidating and something to avoid.
- The economics of “missing middle” housing are not favorable. Incentives are needed for these forms to become viable.

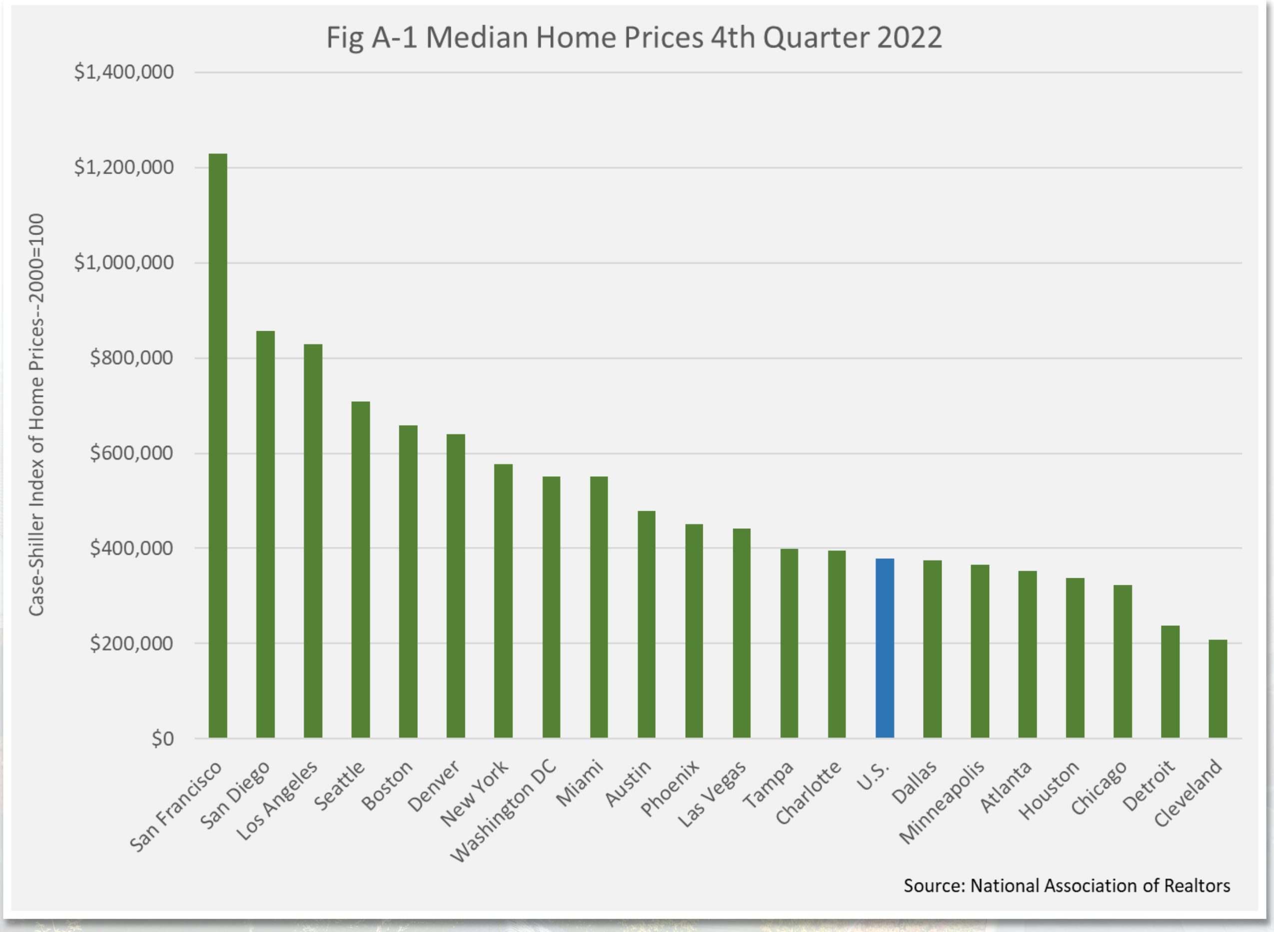
A separate report is available that includes a compilation of findings from REALTOR® focus groups held in King, Kitsap, Pierce and Snohomish counties in mid-2022.

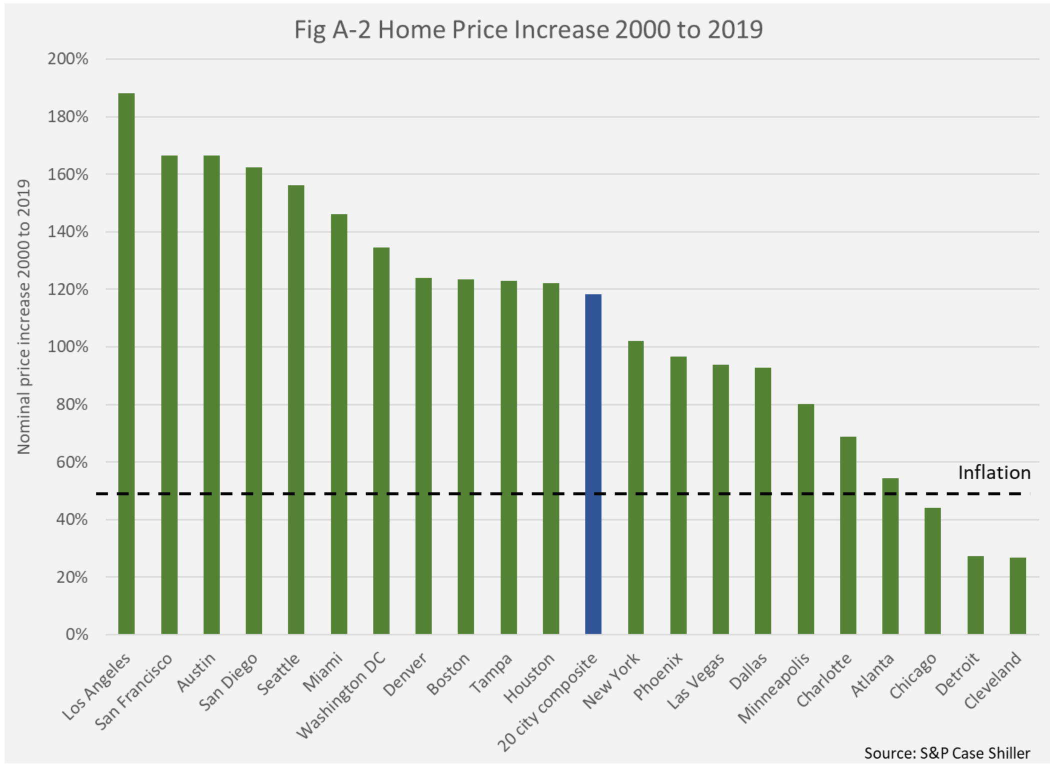
APPENDIX B

WHY SINGLE FAMILY HOMES ARE SO EXPENSIVE

Single family home prices in the Seattle area have consistently increased faster than the rate of wage and income growth, making it harder for families to afford to live in areas convenient to their workplace. As homebuyers shift from expensive areas to moderately priced areas, they push up prices in those areas, forcing families that otherwise might have lived there to, themselves, move on to the next most affordable area. "Drive to qualify" has become the norm.

It does not have to be this way. Home prices, and their rate of increase, vary widely around the country and are not tied to relative levels of economic success in a region. Figure A-1 shows median home prices for major metro areas around the country in the fourth quarter of 2022. Figure A-2 shows the rate of increase in prices in those cities based on the widely observed Case-Shiller home price index, which tracks repeat sales of existing homes.





How can we account for this wide variation, especially when considering the lower prices and lower price growth rates in economically successful places like Atlanta, Charlotte and Dallas? Why should the median price in Seattle be twice as high as the median price in a booming place like Houston?

To understanding the difference in single family home prices around the country and why prices are so high in the Puget Sound area, it is helpful to consider a home as having two distinct components:

Entitled land. This is defined as a parcel that is legally described and, according to existing zoning, is allowed to have one single family home built on it (plus any accessory structures allowed by local zoning). We will refer to this as an "entitled lot."

Improvements. This includes all the improvements to the land (roads, utilities) and the home itself.

CONSTRUCTION COSTS ARE NOT THE ISSUE

We can begin by emphasizing that construction costs—materials and labor—are not the source of variation in home prices around the country. Single family home construction costs do vary across metro areas, but not nearly as much as home prices.

According to Estimation QS, residential construction costs in Washington State are just about the national average. The least expensive state for construction, Idaho, is just 9 percent below the national average, and the most expensive state (other than Alaska and Hawaii), Massachusetts, is just 12 percent above the national average.

Most materials are traded on national markets, so prices of lumber, fixtures, paint, etc., will be similar around the country. Labor costs will vary, but labor is somewhat mobile and will shift in response to employment opportunities. Average wages for construction workers are just about the same in Texas as in Washington, while home prices are quite different.

LAND IS THE ISSUE

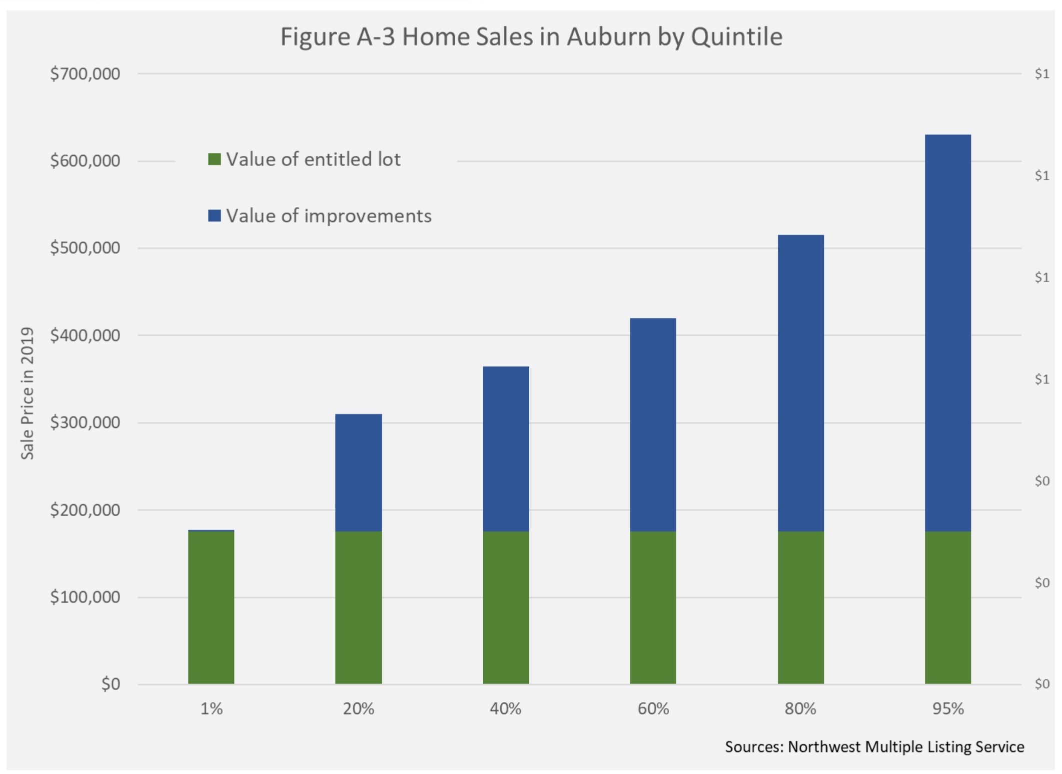
The general price level of new and existing homes is driven in a fundamental way by the land component of the package: the value of the entitled lot. The size of the parcel is not that important, as long as the allowable building envelope (heights and setbacks) in the zoning code allows for the size of home that meets market demand. We are seeing very expensive homes built on very small lots.

In other words, we can explain nearly all of the variation in Figure A-1 through differences in the value of entitled land. And, crucially, those land value differences apply across all homes, not just new construction.

In a given market area, a building lot that does not feature notable amenities (waterfront, views, golf course) or disamenities (on an arterial, next to a rail yard, under a flight path) is a commodity. That is, one lot is just about the same as another. Basic economics says that the value of any building lot will be equal to the cost of developing a similarly situated new lot.

In a given market area, the value of a newly developed vacant lot, a lot under a tear-down, a lot under a quality used home and a lot under a brand new home will be similar.

The value of entitled lots provides the "floor" for home prices, with the price of a barely habitable home roughly equal to the prevailing lot price in the market area (the structure having near zero value). The difference in home prices in a market area is then determined by the structures themselves, starting from the floor of lot values. Figure A-3 illustrates the relationship between lot values and home prices, using actual sales data from 2019 for the Auburn market area (MLS area 310).



In this area in 2019, 1,034 fee simple homes were sold, ranging in price from $135,000 to $2.15 million. The lowest priced detached home sold for $177,000. This home was old and in extremely poor condition, so we can assign no real value to the structure. The lot under this house could easily be redeveloped, so we will assign a value to the lot of $175,000 (we will ignore demolition costs and assume that the lot value includes roads, utilities, etc.).

We then look at the sales prices of homes sold in that area in 2019 at the 20th percentile level, 40th percentile, 60th percentile, 80th percentile and 95th percentile, assigning a lot value of $175,000 to each of them. (The top 5 percent of homes typically have high amenity values and are not illustrative of general market conditions.)

For the homes at each price level, the green bar represents the value of the entitled lot, and the blue bar represents the value of all the improvements. The total height of the bars is the sales price of the home at that percentile level in that market area in 2019. We see a fairly straight line upward for prices.

Figure A-4 shows details on the six properties in Figure A-3.

Fig A-4 Home Sales Auburn 2019

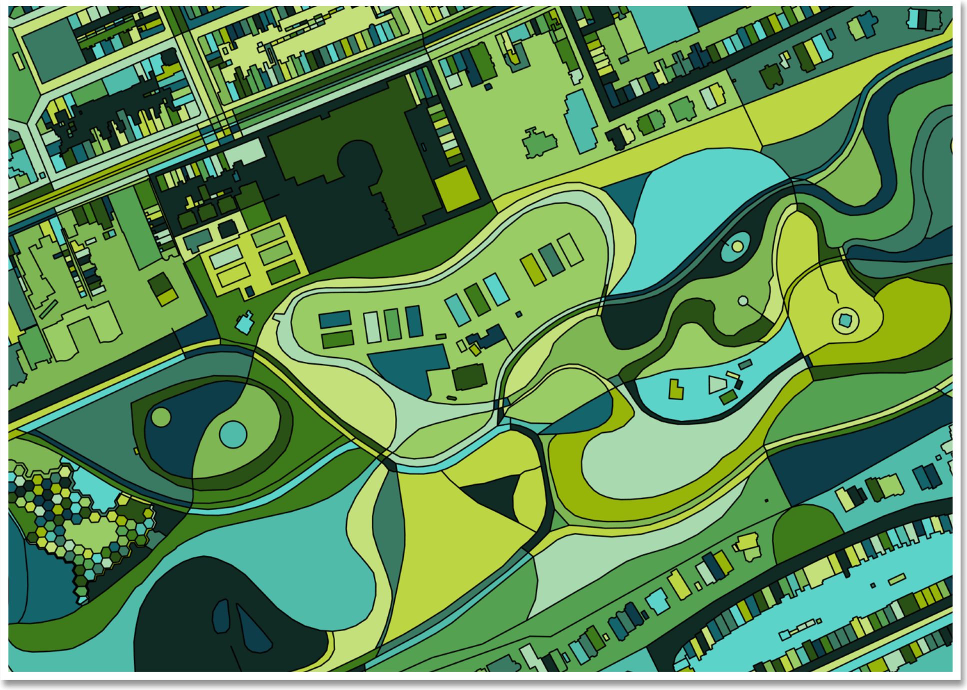
	Percentile level of ranked single family sales in 2019 in MLS area 310					
	1 percent	20 percent	40 percent	60 percent	80 percent	95 percent
Sale price	$177,000	$310,000	$364,950	$420,000	$514,950	$630,000
Home square feet	1,183	1,320	1,460	2,042	2,855	3,225
Lot square feet	11,325	10,000	10,000	5,250	3,904	6,435
Year built	1959	1992	1988	1998	2019	2017
Structure cost per square foot	$0	$102	$130	$120	$119	$141

Source: NW Multiple Listing Service

If we look at the size of the homes at each price level, and calculate the cost paid for the structure on a per-square-foot basis (dividing the value of the blue bar by the size of the home), we get remarkably consistent figures. The value of the improvements, per square foot, for the homes at the 40, 60 and 80 percentile level are quite similar, between $119 and $130.

This is a fairly homogenous market area, and the values of the structures are being determined primarily by size. As the homes get newer, they are getting larger and, therefore, more expensive. This is due to the familiar dynamic in homebuilding: the mandatory ratio of home price to lot value. In new construction, homes will generally be priced at least three times the lot value. Note that the home at the 80th percentile level was sold as new construction for $514,950, which is 2.94 times our assumed lot price of $175,000.

In a dynamic economy like that in the Puget Sound region, we can expect volatility in home prices—the rapid increase in prices in the 2020-2021 time frame are now being offset by price drops in 2022-2023. But over the longer term, stable or lower values for entitled lots will lead to generally lower prices for new and resale homes.



IMPLICATIONS

The value of entitled land acts as the floor under home prices, so that the price of a home will never be lower than that floor, even for the least habitable house. That floor sits at different levels depending on the demand to live in an area, but in even the lowest cost areas of the Central Puget Sound region, that floor sits above $200,000 in 2023.

A small parcel of undeveloped land on the periphery of a metro area has no real economic value other than as a home site. So, if that parcel is priced at $200,000, we can assume that is the minimum value of an entitled lot. The Washington State Growth Management Act, and the comprehensive plans and zoning codes developed under it, have severely restricted the amount of land that can be used for homebuilding. This scarcity, combined with strong demand, leads to these high prices for entitled lots.

The key to lowering the price of single family homes, at all price levels, will be to lower the value of entitled lots. In other words, make the green bars in Figure A-3 smaller, so that the price of homes more closely reflects the value of just the improvements. The only way to do that, absent some large secular shift in demand (i.e., an economic crash) is to increase the supply of entitled lots. That increase can be done in two ways.

First, vacant and redevelopable residential land within urban growth areas can be zoned for smaller parcel sizes so that more entitled lots can be created. Second, more land can be brought into urban growth areas. In either case, the addition of more entitled lots into the marketplace will lower the value of all entitled lots, lowering the floor under home prices and making all homes more affordable.