Yuma Housing Market Update

This report provides updates to key metrics included in the 2020 Housing Market Analysis for the City of Yuma with the purpose of expanding the understanding of pandemic induced housing needs—given that at the time the analysis was completed there were limited data available.

Key findings

Salient trends in the housing market include:

- In the city of Yuma, growth in renter income has outpaced growth in owner income. Between 2010 and 2021 median owner income increased by around \$7,000 while median renter income increased by around \$15,000 and this growth was mostly experienced between 2019 and 2021.
- Since 2010, Yuma city added over twice as many renters as it did owners (3,526 renters v. 1,587 owners) while the county added more owners than it did renters (3,850 owners v. 3,381 renters.)
- Before the pandemic, the ownership rate was declining in both the county and the city, while after the pandemic the trend reversed only for the county, which reached an ownership rate of 70% and the city's ownership rate kept declining reaching 59% in 2021.
- Overcrowding increased significantly between 2019 and 2021 among both owners and renters. Among owners:
 - Overcrowding increased from 4.4% to 8.9% in the county. The number of overcrowded owner households increased from 2,147 in 2019 to 4,704 in 2021.
 - In the city, overcrowding increased from 3.9% to 6.4%. The number of overcrowded owner households increased from 819 in 2019 to 1,385 in 2021.

Among renters:

 Overcrowding increased from 15.9% to 24.1% in the county. The number of overcrowded renter households increased from 3,997 in 2019 to 5,410 in 2021.

- o In the city, overcrowding increased from 11.4% to 18.8%. The number of overcrowded owner households increased from 1,578 in 2019 to 2,826 in 2021.
- Among renters, the growth in overcrowding was driven by growth in severe overcrowding in both the county and the city.
- The rate of cost burden among renters did not see the same growth as the rate of overcrowding. Part of this trend is likely driven by the increase in overcrowding explained above, as renters pull resources together to pay for housing costs.
- The rate of cost burden decreased significantly among owner households between 2019 and 2021 going from 25% to 20% in the city and from 22% to 17% in the county. This is due to the opportunity many homeowners had to refinance their mortgages and lower their housing costs during the low interest rate period experienced during the pandemic.
- In the county, the number of vacant units for rent and for sale decreased significantly between 2020 and 2021. The estimated rental vacancy and ownership rates according to 2021 data are 3% and 1% respectively, below the 5% and 2% rates considered healthy for a housing market.
- In 2019 there was a 3,734 rental unit shortage for households earning less than \$20,000. In 2021, this gap decreased to 1,536 units.
 - The decrease in low income renters combined with the increase in overcrowding point to the consolidation of households as the main driver for the reduction in the rental gap.
 - o Between 2019 and 2021 the number of 1-person households in the county decreased by 2,240 and the number of 2-person households decreased by 1,141, while the number of 4-or-more person households increased by 4,536. In the city, the number of 1-person households decreased by 1,184 while the number of 4-or-more person households increased by 1,720.
- The for-sale gaps analysis shows the Yuma market to be affordable for renters earning more than \$35,000 per year in 2019. In 2021, the for-sale gaps analysis now shows the Yuma market to be affordable for renters earning more than \$50,000 per year.
- Ownership affordability among the workforce declined significantly between 2019 and 2021. In 2019 most industries except the Natural Resources and Mining; the Leisure and Hospitality; and Other Services industry had average

wages high enough to afford the median home price of \$166,750. In 2021 only 4 industries— Financial Activities; Professional and Business Services; Education and Health Services; and Public Administration— had average wages high enough to afford the median home price of \$235,000.

 As mortgage interest rates pick up home price growth is expected to decelerate, however, higher interest rates drastically reduce the purchasing power of potential homebuyers who need mortgages.

Population, Income, and Tenure Trends

Population. Yuma County's 2021 population estimate was 206,990. An increase of 29% since 2000. Figure 1 shows population trends for Yuma County, the city of Yuma, and Arizona. Both the county and the city have grown at a lower pace compared to the state.

Figure 1.
Population Trends, 2000-2021

	Total	Population by	2000-2021 0	Change	
	2000	2010	2021	Number	Percent
City of Yuma	77,545	93,064	97,097	19,552	25%
Yuma County	160,026	195,751	206,990	46,964	29%
State of Arizona	5,130,632	6,392,017	7,276,316	2,145,684	42%

Source: 2000, and 2010 Decennial Census, 2021 1-year ACS, and Root Policy Research.

According to ACS 1-year estimates, the number of households in 2021 increased from 74,042 in 2019 to 74,981 in the county and from 34,971 to 36,530 in the city of Yuma.

Household income. Figures 2 and 3 show income trends by tenure for Yuma County and the city of Yuma for 2010, 2019, and 2021. The figures also show the income distribution for each of the years. In the city of Yuma, growth in renter income has outpaced growth in owner income. Between 2010 and 2021 median owner income increased by around \$7,000 while median renter income increased by around \$15,000 and this growth was mostly experienced between 2019 and 2021.

In the county, growth in median owner income was higher, at around \$16,000, while growth in renter income was similar to the growth in the city. Again, most of the income growth for both renters and owners in the county was experienced between 2019 and 2021.

Since 2010, city of Yuma added over twice as many renters as it did owners (3,526 renters v. 1,587 owners) while the county added more owners than it did renters (3,850 owners v. 3,381 renters.)

Figure 2.
Income Trends by Tenure, Yuma City, 2010, 2019, and 2021

				Change	2010-2021
	2010	2019	2021	Percentage Point Change	Numerical Change
Owner median income	\$58,524	\$62,303	\$65,534		\$7,010
Income distribution					
Less than \$25,000	16%	19%	14%	-2%	-224
\$25,000-\$50,000	22%	22%	20%	-2%	-160
\$50,000-\$75,000	24%	18%	21%	-3%	-262
\$75,000-\$100,000	19%	14%	15%	-5%	-662
\$100,000+	18%	27%	30%	12%	2,895
Total	100%	100%	100%		1,587
Renter median income	\$29,509	\$32,055	\$44,634		\$15,125
Income distribution					
Less than \$25,000	38%	36%	25%	-13%	-654
\$25,000-\$50,000	38%	35%	34%	-3%	803
\$50,000-\$75,000	15%	12%	23%	7%	1,615
\$75,000-\$100,000	5%	12%	7%	1%	379
\$100,000+	3%	5%	12%	8%	1,383
Total	100%	100%	100%		3,526

Source: 2010, and 2019 1-year ACS, Root Policy Research.

Figure 3.
Income Trends by Tenure, Yuma County, 2010, 2019, and 2021

				Change	2010-2021
	2010	2019	2021	Percentage Point Change	Numerical Change
Owner median income	\$51,436	\$53,586	\$67,785		\$16,349
Income distribution					
Less than \$25,000	21%	23%	17%	-5%	-1,563
\$25,000-\$50,000	26%	23%	18%	-8%	-3,148
\$50,000-\$75,000	24%	21%	21%	-2%	-310
\$75,000-\$100,000	14%	15%	16%	2%	1,628
\$100,000+	14%	18%	27%	13%	7,243
Total	100%	100%	100%		3,850
Renter median income	\$27,111	\$32,499	\$42,616		\$15,505
Income distribution					
Less than \$25,000	45%	36%	25%	-21%	-3,101
\$25,000-\$50,000	34%	30%	37%	4%	2,004
\$50,000-\$75,000	13%	15%	21%	7%	2,071
\$75,000-\$100,000	5%	15%	7%	2%	641
\$100,000+	3%	4%	10%	7%	1,766
Total	100%	100%	100%		3,381

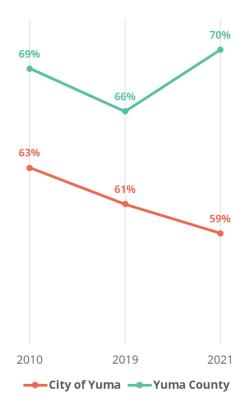
Source: 2010, and 2019 1-year ACS, Root Policy Research.

Tenure. Figure 4 below shows the growth in owners in the county happened during the pandemic. The figure shows ownership rate was declining in both the county and the city, while after the pandemic the trend reversed only for the county, which reached an ownership rate of 70% and the city's ownership rate kept declining reaching 59% in 2021.

Figure 4.
Homeownership Rates, 2010, 2019, and 2021

Source:

2010 Census, 2019 and 2021 1-year ACS, and Root Policy Research.



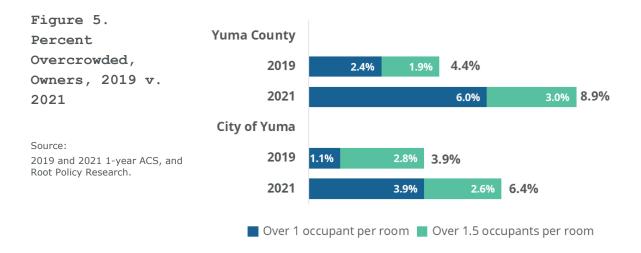
Overcrowding, Cost Burden, and Vacant Units

Overcrowding. Overcrowding in housing can threaten public health, strain public infrastructure, and points to an increasing need of affordable housing. This study uses HUD's definition of having more than one person per room to identify overcrowded units and more than 1.5 persons per room to identify severely overcrowded units.

As shown in Figures 5 and 6 below, overcrowding increased significantly between 2019 and 2021 among both owners and renters. Renters continue to have a higher likelihood than owners of being overcrowded and severely overcrowded in both the county and the city and rate of overcrowding is higher in the county compared to the city.

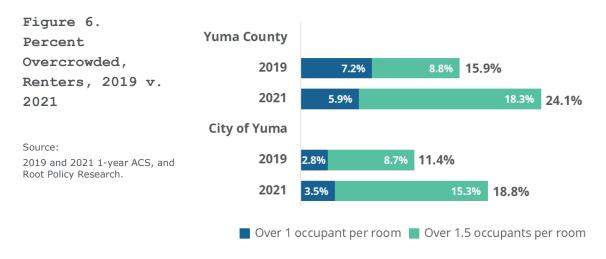
Among owners:

- Overcrowding increased from 4.4% to 8.9% in the county. The number of overcrowded owner households increased from 2,147 in 2019 to 4,704 in 2021.
- In the city, overcrowding increased from 3.9% to 6.4%. The number of overcrowded owner households increased from 819 in 2019 to 1,385 in 2021.



Among renters:

- Overcrowding increased from 15.9% to 24.1% in the county. The number of overcrowded renter households increased from 3,997 in 2019 to 5,410 in 2021.
- In the city, overcrowding increased from 11.4% to 18.8%. The number of overcrowded renter households increased from 1,578 in 2019 to 2,826 in 2021.
- Among renters, the growth in overcrowding was driven by growth in severe overcrowding in both the county and the city.



Cost burden. The rate of cost burden did not see the same growth as the rate of overcrowding. As shown in Figure 7, renter cost burden decreased from 54% in 2019 to 50% in 2021 in the city of Yuma, while it increased from 46% to 51% in the county. Part of this trend might be driven by the increase in overcrowding explained above, as renters pull resources together to pay for housing costs.

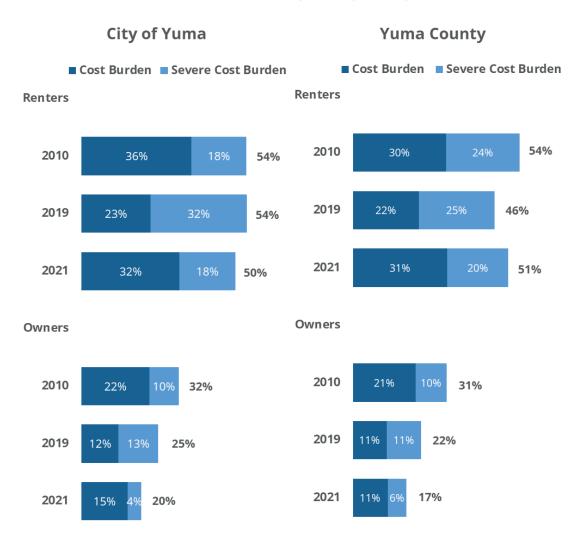
■ In 2021 an estimated 10,562 renter households were cost burdened, of these, 4,146 were severely cost burdened in the county. In the city, an estimated 7,216 renters were cost burdened and 2,604 of these were severely cost burdened.

Owners face lower rates of cost burden, and this rate decreased significantly between 2019 and 2021. This is due to the opportunity many homeowners had to refinance their mortgages and lower their housing costs during the low interest rate period experienced during the pandemic.

■ In 2021 an estimated 8,984 renter households are cost burdened, of these, 3,117 are severely cost burdened in the county. In the city, an estimated 4,078 renters are cost burdened and 906 of these are severely cost burdened.

Figure 7.

Cost Burdened Owners and Renters, 2010, 2019, and 2021



Source: 2010, 2019, and 2021 1-year ACS.

Vacancies. Figure 8 below shows the number of vacant units for the county and the city. Data for 2021 for the city were not available and vacancy data for the city are only available in 5-year estimates. In the city the number of vacancies among different categories appears relatively stable in 2020 compared to 2019. In the county however, the number of vacant units for rent and for sale decreased significantly between 2020 and 2021. The estimated rental vacancy and ownership rates according to 2021 data are 3% and 1% respectively, below the 5% and 2% rates considered healthy for a housing market.

Figure 8.
Vacant Units by Reason

	Y	uma Count	ty	City of Yuma		
	2019	2020	2021	2019	2020	2021
Total:	20,606	18,988	18,816	6,802	6,370	N/A
For rent	1,343	1,616	688	1,079	1,052	N/A
Rented, not occupied	10	187	556	77	49	N/A
For sale only	272	818	455	344	343	N/A
Sold, not occupied	276	401	541	110	121	N/A
For seasonal, recreational, or occasional use	15,184	12,881	13,575	3,946	3,563	N/A
For migrant workers	358	473	568	286	221	N/A
Other vacant	3,163	2,612	2,433	960	1,021	N/A

Source: 1-year and 5-year ACS, and Root Policy Research.

Rental Market Trends and Affordability

Figure 9 shows the median contract and gross (including utilities) rents in the city of Yuma and Yuma County.

The city of Yuma has experienced slower growth in median gross rents than the county between 2010 and 2021, while slightly higher growth in median contract rent.

Figure 9.
Median Rent,
2010, 2019,
and 2021

Source:

2010, 2019, and 2021 1-year ACS, and Root Policy Research.

	2010	2019	2021	Compound Annual Growth Rate 2010-2021
Median gross rent				
City of Yuma	\$872	\$924	\$966	0.9%
Yuma County	\$781	\$829	\$906	1.4%
Median contract re	ent			
City of Yuma	\$671	\$712	\$831	2.0%
Yuma County	\$630	\$665	\$770	1.8%

Figure 10 shows the median income by tenure for 2010, 2019 and 2021. Median growth in renter income since 2010 has outpaced growth in median gross rent in both the city and the county but most of the income growth occurred between 2019 and 2021.

Figure 10.
Median Income
by Tenure,
2010, 2019,
and 2021

Source:

2010, 2019, and 2021 1-year ACS, and Root Policy Research.

	2010	2019	2021	Compound Annual Growth Rate 2010-2021
Owner Median I	ncome			
City of Yuma	\$58,524	\$62,303	\$65,534	1.0%
Yuma County	\$51,436	\$53,586	\$67,785	2.5%
Renter Median I	ncome			
City of Yuma	\$29,509	\$32,055	\$44,634	3.8%
Yuma County	\$27,111	\$32,499	\$42,616	4.2%
Overall Median I	ncome			
City of Yuma	\$45,789	\$47,249	\$54,260	1.6%
Yuma County	\$42,240	\$46,419	\$57,304	2.8%

Figure 11 shows how Yuma County's rental price distribution has changed since 2010—data for the city of Yuma were available for 2021. In 2010 the distribution of rentals was skewed toward rentals priced below \$650, which represented 40

percent of rentals in 2010—in 2021, this share is down to 23 percent— while the share of rental units priced above \$1,250 increased from 12% to 19%.

Figure 11.
Rent Distribution, Yuma County, 2010, 2019, and 2021



Source: 2021, 2019, and 2010 1-year ACS, and Root Policy Research.

Renter affordability. Figure 12 shows the median gross rent in the county and the city by number of bedrooms and the minimum income required to avoid being cost burdened in 2019 and 2021.

In 2021 the median gross rent (including utilities) for a two bedroom apartment in the city of Yuma is \$1,000; it is \$970 in the county. To afford this rent without being cost burdened, households need to earn between \$38,800 and \$40,320 per year. Around 40% of renter households in the county and 37% in the city have incomes below \$35,000.

Figure 12.

Median Rent
(including
utilities) and
Income to Afford,
Yuma County and
City of Yuma,
2019 and 2021

Source: 2021 and 2019 1-year ACS, and Root Policy Research

	Media	n Rent	Income F	Required
	2019	2021	2019	2021
Yuma County	\$829	\$906	\$33,160	\$36,240
Studio	\$571	\$840	\$22,840	\$33,600
1 bedroom	\$661	\$731	\$26,440	\$29,240
2 bedrooms	\$819	\$970	\$32,760	\$38,800
3 bedrooms	\$1,039	\$1,145	\$41,560	\$45,800
4 bedrooms	\$1,336	\$1,222	\$53,440	\$48,880
City of Yuma	\$924	\$966	\$36,960	\$38,640
Studio	\$701	\$906	\$28,040	\$36,240
1 bedroom	\$675	\$730	\$27,000	\$29,200
2 bedrooms	\$913	\$1,008	\$36,520	\$40,320
3 bedrooms	\$1,124	\$1,192	\$44,960	\$47,680
4 bedrooms	\$1,389	\$1,521	\$55,560	\$60,840

Gaps in the rental market. To examine how well the Yuma County's¹ current housing market meets the needs of its residents Root Policy Research conducted a modeling effort called a "gaps analysis." The analysis compares the supply of housing at various price points to the number of households who can afford such housing. If there are more housing units than households, the market is "oversupplying" housing at that price range. Conversely, if there are too few units, the market is "undersupplying" housing. The gaps analysis conducted for renters in Yuma County addresses both rental affordability and ownership opportunities for renters who want to buy.

Figure 13 compares the number of renter households in Yuma County in 2021, their income levels, the maximum monthly rent they could afford without being cost burdened, and the number of units in the market that were affordable to them. The "Gap" column shows the difference between the number of renter households and the number of affordable rental units. Negative numbers indicate a shortage of units at the specific income level; positive units indicate an excess of units.

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¹ Data for the distribution of units by price were not available for they city for 2021.

Figure 13.
Mismatch in Rental Market, Yuma County, 2021

	Maximum Affordable	Rental D (Current		Rental : (Current		
Renter Incomes	Gross Rent	Number	Percent	Number	Percent	Gap
Less than \$5,000	\$125	1,096	5%	6	0%	(1,090)
\$5,000 to \$9,999	\$250	1,203	5%	200	1%	(1,003)
\$10,000 to \$14,999	\$375	660	3%	660	3%	(0)
\$15,000 to \$19,999	\$500	985	4%	1,542	7%	557
\$20,000 to \$24,999	\$625	1,589	7%	2,193	9%	604
\$25,000 to \$34,999	\$875	3,522	16%	5,917	26%	2,395
\$35,000 to \$49,999	\$1,250	4,873	22%	7,572	33%	2,699
\$50,000 to \$74,999	\$1,875	4,606	21%	3,789	16%	(817)
\$75,000 to \$99,999	\$2,500	1,589	7%	606	3%	(983)
\$100,000 to \$149,999	\$3,750	1,695	8%	102	0%	(1,593)
\$150,000 +	\$3750+	594	3%	514	2%	(80)
Total/Low Income Ga	o	22,412	100%	23,100	100%	(1,536)

Note: Low Income Gap refers to the total gap for households with income below \$20,000.

Source: 2019 1-year ACS, and Root Policy Research.

The gaps analysis in Figure 13 shows that:

- About 2,959 households living in Yuma County earn less than \$15,000 per year and need rental units of \$375/month and less. Just 4 percent of rental units (866 units) in the county rent for less than \$375/month. This leaves a "gap," or shortage, of 2,093 units for these low income households.
- Most rental units in Yuma County rent for between \$875 and \$1,250 per month—68% of rental units fall within this range. There are approximately 8,395 renter households who can afford rents in this range and over 13,400 units priced appropriately for them, leaving a surplus of 5,000 units.

The "shortage" shown for higher income renters (earning more than \$50,000 per year) suggests those renters are spending less than 30 percent of their income on housing.

It is important to note that renters in the income brackets where gaps exist are not homeless. Those renters who cannot find affordably priced rentals are living in units that cost more than they can afford. These households are "cost burdened." Who

are the renters who struggle to pay their rent? Some of these renters are students.² These households are also working residents earning low wages, residents who are unemployed and residents who are disabled and cannot work.

Change in the rental gaps. Figure 14 shows rental gaps for Yuma County in both 2019 and 2021 to evaluate changes in market trends and needs. Rental gaps have significantly changed during this time period. In 2019 there was a 3,734 unit shortage for households earning less than \$20,000. In 2021, this gap decreased to 1,536 units.

This decrease was driven by a sharp decrease the number of renters with income below \$20,000 which outpaced the rate at which units priced below \$500 are sliding into higher price brackets.

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² Data limitations make it difficult to separate out renters who are students and may receive assistance paying rent from parents, student loans and/or other non-income sources.

Figure 14.

Gaps in Rental Market, Yuma County, 2019 and 2021

				20 19					2021				
	Maximum Affordable	Rental D (Current		Rental (Curren				Demand Renters)	Rental (Curren	Supply t Units)		2019-202	1 Change
Renter Incomes	Gross Rent	Number	Percent	Number	Percent	Gap	Number	Percent	Number	Percent	Gap	Renters	Units
Less than \$5,000	\$125	2,182	9%	0	0%	(2,182)	1,096	5%	6	0%	(1,090)	(1,086)	6
\$5,000 to \$9,999	\$250	1,860	7%	974	4%	(886)	1,203	5%	200	1%	(1,003)	(657)	(774)
\$10,000 to \$14,999	\$375	2,122	9%	1,362	5%	(760)	660	3%	660	3%	(0)	(1,462)	(702)
\$15,000 to \$19,999	\$500	1,576	6%	1,671	6%	95	985	4%	1,542	7%	557	(591)	(128)
\$20,000 to \$24,999	\$625	1,329	5%	2,720	10%	1,391	1,589	7%	2,193	9%	604	260	(527)
\$25,000 to \$34,999	\$875	4,040	16%	7,631	29%	3,591	3,522	16%	5,917	26%	2,395	(518)	(1,715)
\$35,000 to \$49,999	\$1,250	3,442	14%	8,520	32%	5,078	4,873	22%	7,572	33%	2,699	1,431	(948)
\$50,000 to \$74,999	\$1,875	3,658	15%	2,886	11%	(772)	4,606	21%	3,789	16%	(817)	948	903
\$75,000 to \$99,999	\$2,500	3,672	15%	523	2%	(3,149)	1,589	7%	606	3%	(983)	(2,083)	83
\$100,000 to \$149,999	\$3,750	1,027	4%	0	0%	(1,027)	1,695	8%	102	0%	(1,593)	668	102
\$150,000 +	\$3750+	35	0%	0	0%	(35)	594	3%	514	2%	(80)	559	514
Total/Low Income G	ap	24,943	100%	26,286	100%	(3,734)	22,412	100%	23,100	100%	(1,536)	(3,796)	(1,598)

Note: Low Income Gap refers to the total gap for households with income below \$20,000.

Source: 2019 and 2021 1-year ACS, and Root Policy Research.

The decrease in low income renters combined with the increase in overcrowding point to the consolidation of households as the main driver for the reduction in the rental gap:

Between 2019 and 2021 the number of 1-person households in the county decreased by 2,240 and the number of 2-person households decreased by 1,141, while the number of 4-or-more person households increased by 4,536. In the city, the number of 1-person households decreased by 1,184 while the number of 4-or-more person households increased by 1,720.

Ownership Market Trends and Affordability

Median home values. Figure 15 shows the median home values for the city of Yuma and Yuma County for 2010, 2019, and 2021. Between 2010 and 2021 Census data indicates home value increased at a compound annual growth rate of 2.3% in the city of Yuma and 2.4% in the county. The acceleration in home values happened between 2019 and 2021.

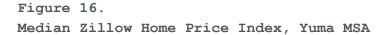
Figure 15.
Median Home Value, 2010, 2019, and 2021

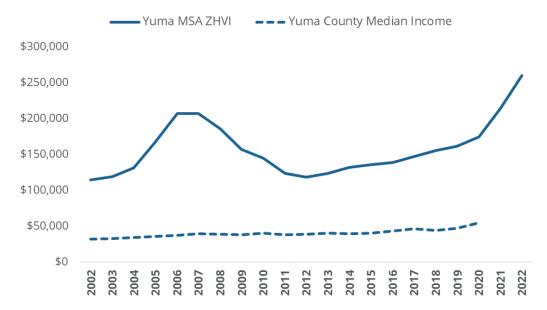
	2010	2019	2021	Compound Annual Growth Rate
City of Yuma	\$146,900	\$163,900	\$189,000	2.3%
Yuma County	\$131,800	\$139,100	\$170,400	2.4%

Source: 2010, 2019, and 2021 1-year ACS, and Root Policy Research.

Price trends. Figure 16 shows the Yuma MSA home value trends according to Zillow from 2002 to 2022 year-to-date. Trends in Yuma County's median income are also presented in the graphic to compare home price shifts to income shifts.

As shown in the figure, starting in 2020 price growth accelerated at an extremely rapid pace. Between 2010 and 2019 the home value index increased by 12% and between 2019 and 2022 it increased by 61%. Although the decrease in interest rates helped affordability despite the rapid growth in prices, the larger downpayment commanded by higher prices presents a barrier for many households.





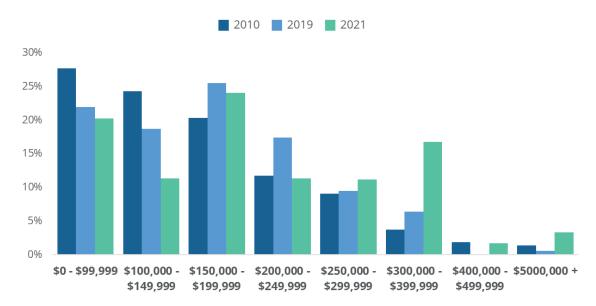
Note: Data for 2022 include January through September.

Source: Zillow Home Value Index, U.S. Census Bureau Estimate of Median Household Income retrieved from FRED, and Root Policy Research.

Price distribution. Figures 17 and 18 show the price distribution of home values according to Census data in 2010, 2019, and 2021 for the city of Yuma and Yuma County.

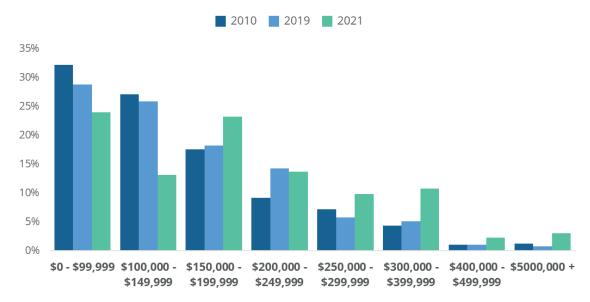
In 2019, 41% of homes were valued below \$150,000 in the city of Yuma, this share decreased to 32% in 2021. In the county, 55% of homes were valued below \$150,000 and this share decreased to 37% in 2021.

Figure 17.
Home Value Distribution, City of Yuma, 2010, 2015, and 2019



Source: 2010, 2019, and 2021 1-year ACS, and Root Policy Research.

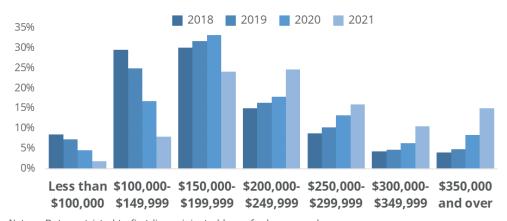
Figure 18.
Home Value Distribution, Yuma County, 2010, 2015, and 2019



Source: 2010, 2019, and 2021 1-year ACS, and Root Policy Research.

Figure 19 uses Home Mortgage Disclosure Act Data³ (HMDA) to show how the distribution of the value of homes that were purchased with a mortgage has shifted since 2018. In the county, in 2018 68% of homes purchased with a mortgage were priced below \$200,000, this share decreased to 34% in 2021.

Figure 19.
Yuma County Property Value Distribution of Mortgage Loan
Originations, 2018-2021



Note: Data restricted to first lien originated loans for home purchase.

Source: Home Mortgage Disclosure Act (HMDA), and Root Policy Research.

Trends in second home and investment properties. HMDA data indicate which home mortgages were for second homes or investment properties and can be analyzed to better understand the shift in purchases of second or investment homes. However, HMDA data only include home purchases which made use of a mortgage—home purchases made in cash, without a mortgage, are not included in the data. Therefore, the following estimates are an undercount of how many homes were purchased as second homes and investment properties.

Figure 20 shows the number of originated mortgages by occupancy type in Yuma County. Although the percent change in mortgages for second homes and investment properties between 2018 and 2021 was significantly larger than for principal residences, the number of mortgages for second homes and investment properties remains low as a share of total mortgages originated.

³ HMDA data are collected by the Federal Financial Institutions Examination Council (FFIEC) and contain loan application records with information on income, loan terms, loan purpose, and outcomes of loan applications. HMDA data are reported by lending institutions and are one of the best readily available sources of mortgage applications and purchase transactions.

Figure 20.
Yuma County Mortgage Loan Originations, by Occupancy Type

	2018	2019	2020	2021	2018-2019 % Change
Principal residence	2,653	2,719	3,085	3,559	34%
Second residence	174	162	181	250	44%
Investment property	99	96	117	187	89%
All occupancy types	2,926	2,977	3,383	3,996	37%

Note: Data restricted to first lien originated loans for home purchase.

Source: Home Mortgage Disclosure Act (HMDA), and Root Policy Research.

Figure 21 shows the median property value of mortgage originations by occupancy type. Both second homes and investment properties have a lower median price compared to homes purchased as principal residence.

Figure 21.

Yuma County Median Property Value of Mortgage Loan Originations,
by Occupancy Type

	2018	2019	2020	2021	2018-2019 % Change
Principal residence	\$165,000	\$175,000	\$195,000	\$235,000	42%
Second residence	\$155,000	\$165,000	\$185,000	\$225,000	45%
Investment property	\$145,000	\$155,000	\$165,000	\$205,000	41%
All occupancy types	\$165,000	\$175,000	\$195,000	\$235,000	42%

Note: Data restricted to first lien originated loans for home purchase.

Source: Home Mortgage Disclosure Act (HMDA), and Root Policy Research.

Gaps in the For-Sale Market. The gap between interest in buying and available product is demonstrated by the for-sale gaps analysis shown in Figure 22, this is the analysis that was conducted for the previous housing market analysis. The for-sale gaps analysis was conducted to evaluate the market options affordable to renters who may wish to purchase a home in Yuma County. Similar to the rental gaps analysis, the model compares renters, renter income levels, the maximum monthly housing payment they could afford, and the proportion of units in the market that were affordable to them.

The maximum affordable home prices shown in Figure 22 assume a 30-year mortgage with a 10 percent down payment and an interest rate of 3.11%⁴. The

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⁴ This rate is the Freddie Mac average for 2020 and it is a close representation of the prevailing rate when the model was completed.

estimates also incorporate property taxes, insurance, HOA payments and utilities (assumed to collectively account for 25% of the monthly payment).

The "Renter Purchase Gap" column shows the difference between the proportion of renter households and the proportion of homes listed or sold in 2019/20 that were affordable to them. Negative numbers indicate a shortage of units at the specific income level; positive units indicate an excess of units. It is important to note that the gaps column accounts only for units that fall precisely within the affordability range of the household.

The "cumulative gap"—which is a better measure of need—allows buyers to purchase homes that are priced at less than their affordability range.

The for-sale gaps analysis shows the Yuma market to be affordable for renters earning more than \$35,000 per year. At that level, the proportion of homes for sale exceeds the proportion of renters who may be in the market to purchase.

Figure 22.

Market Options for Renters Wanting to Buy, Yuma County, 2019/2020

	Max Affordable	Potential Demand among 1st Time Buyers (Current Renters) Number Percent		For-Sale Supply (Homes Sold 2019-2020)		Renter Purchase	Cumulative
Income Range	Home Price			Number	Percent	Gap	Gap
Less than \$5,000	\$24,119	2,182	9%	6	0%	-9%	-9%
\$5,000 to \$9,999	\$48,234	1,860	7%	111	3%	-4%	-13%
\$10,000 to \$14,999	\$72,353	2,122	9%	227	7%	-2%	-14%
\$15,000 to \$19,999	\$96,473	1,576	6%	282	9%	2%	-12%
\$20,000 to \$24,999	\$120,592	1,329	5%	287	9%	3%	-9%
\$25,000 to \$34,999	\$168,831	4,040	16%	762	23%	7%	-2%
\$35,000 to \$49,999	\$241,190	3,442	14%	889	27%	13%	11%
\$50,000 to \$74,999	\$361,787	3,658	15%	634	19%	5%	16%
\$75,000 to \$99,999	\$482,384	3,672	15%	87	3%	-12%	4%
\$100,000 to \$149,999	\$723,578	1,027	4%	14	0%	-4%	0%
\$150,000 or more	\$723,578+	35	0%	3	0%	0%	0%

Note: Maximum affordable home price is based on a 30 year mortgage with a 10 percent down payment and an interest rate of 3.11%. Property taxes, insurance, HOA and utilities are assumed to collectively account for 25% of the monthly payment. Data for 2020 home sales cover January through July.

Source: 2019 1-year ACS, MLS data, and Root Policy Research.

Figure 23 shows the for sale gaps model updated with the 2021 renter distribution and using HMDA data to measure the supply of homes in 2021. The estimates assume a 30-year mortgage with a 10 percent down payment and an interest rate of 2.96% (the average rate in 2021).

The for-sale gaps analysis now shows the Yuma market to be affordable for renters earning more than \$50,000 per year.

Figure 23.
Market Options for Renters Wanting to Buy, Yuma County, 2021

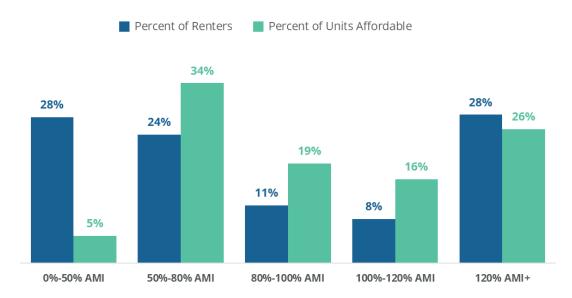
Max Afforda		Potential Demand among 1st Time Buyers (Current Renters)		For-Sale Supply (Originated Mortgages in 2021)		Renter Purchase	Cumulative	
Income Range	Home Price	Number	Percent	Number	Percent	Gap	Gap	
Less than \$5,000	\$24,119	1,096	5%	0	0%	-5%	-5%	
\$5,000 to \$9,999	\$48,234	1,203	5%	7	0%	-5%	-10%	
\$10,000 to \$14,999	\$72,353	660	3%	13	0%	-3%	-13%	
\$15,000 to \$19,999	\$96,473	985	4%	55	1%	-3%	-16%	
\$20,000 to \$24,999	\$120,592	1,589	7%	83	2%	-5%	-21%	
\$25,000 to \$34,999	\$168,831	3,522	16%	561	14%	-2%	-22%	
\$35,000 to \$49,999	\$241,190	4,873	22%	1,615	40%	19%	-4%	
\$50,000 to \$74,999	\$361,787	4,606	21%	1,183	30%	9%	5%	
\$75,000 to \$99,999	\$482,384	1,589	7%	344	9%	2%	7%	
\$100,000 to \$149,999	\$723,578	1,695	8%	104	3%	-5%	2%	
\$150,000 or more	\$723,578+	594	3%	26	1%	-2%	0%	

Note: Maximum affordable home price is based on a 30 year mortgage with a 10 percent down payment and an interest rate of 2.96%. Property taxes, insurance, HOA and utilities are assumed to collectively account for 25% of the monthly payment. Data for 2020 home sales cover January through July.

Source: 2021 1-year ACS, HMDA data, and Root Policy Research.

Figure 24 shows the share of homes sold by AMI affordability level in 2021 compared to the renter distribution in Yuma County. The odds that renter households with income below 50% AMI find an affordable home is extremely low. Even for renter households at 80% AMI the odds are low, the share of renters below 80% AMI is 52% compared to 39% of homes affordable at that income level.

Figure 24.
Renter and Affordability Distribution by AMI, 2021



Note: Maximum affordable home price is based on a 30 year mortgage with a 10 percent down payment and an interest rate of 2.96%. Property taxes, insurance, HOA and utilities are assumed to collectively account for 25% of the monthly payment. Data for 2020 home sales cover January through July. HUD's AMI in 2021 is \$51,400.

Source: 2021 1-year ACS, HMDA data, HUD AMI income brackets, and Root Policy Research.

Workforce Affordability

Figures 25 and 26 display affordable rental and ownership options for workers earning the average wage by industry in Yuma County in 2019 and 2021.

In 2019, most industries had average wages high enough to afford the median rent of \$829 per month in Yuma County. However, workers employed in the Natural Resources and Mining; and Leisure and Hospitality could afford the median rent based on average wages. In 2021, all industries except the Leisure and Hospitality had average wages high enough to afford the median rent of \$906 in the County.

Ownership affordability however, declined significantly between 2019 and 2021. In 2019 most industries except the Natural Resources and Mining; the Leisure and Hospitality; and Other Services industry had average wages high enough to afford the median home price of \$166,750. In 2021 only 4 industries— Financial Activities; Professional and Business Services; Education and Health Services; and Public Administration— had average wages high enough to afford the median home price of \$235,000.

Figure 25.
Worker Affordability, Yuma County, 2019

Industry	Average Annual Wage	Max Affordable Rent	Can Afford Median Rent?	Max Affordable Home Price	Can Afford Median Home Price?	Can Afford Median Home Price with 1.5 Earners per Household?
Goods Producing	\$35,672	\$892	yes	\$172,078	yes	yes
Natural Resources and Mining	\$32,968	\$824	no	\$159,034	no	yes
Construction	\$39,936	\$998	yes	\$192,647	yes	yes
Manufacturing	\$43,888	\$1,097	yes	\$211,711	yes	yes
Service Producing	\$35,902	\$898	yes	\$173,185	yes	yes
Trade, Transportation, and Utilities	\$36,154	\$904	yes	\$174,405	yes	yes
Information	\$40,040	\$1,001	yes	\$193,148	yes	yes
Financial Activities	\$43,769	\$1,094	yes	\$211,135	yes	yes
Professional and Business Services	\$44,588	\$1,115	yes	\$215,090	yes	yes
Education and Health Services	\$47,565	\$1,189	yes	\$229,446	yes	yes
Leisure and Hospitality	\$20,967	\$524	no	\$101,141	no	no
Public Administration	\$70,736	\$1,768	yes	\$341,223	yes	yes
Other Services	\$33,904	\$848	yes	\$163,549	no	yes
Total Employment	\$41,376	\$1,034	yes	\$199,591	yes	yes

Note: Maximum affordable home price is based on a 30-year mortgage with a 10 percent down payment and an interest rate of 3.11%. Property taxes, insurance, HOA and utilities are assumed to collectively account for 25% of the monthly payment.

Source: Bureau of Labor Statistics, 2019 1-year ACS, MLS data, and Root Policy Research.

Figure 26.
Worker Affordability, Yuma County, 2021

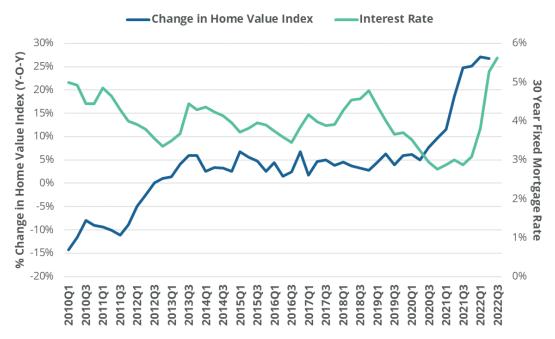
Industry	Average Annual Wage	Max Affordable Rent	Can Afford Median Rent?	Max Affordable Home Price	Can Afford Median Home Price?	Can Afford Median Home Price with 1.5 Earners per Household?
Goods Producing	\$41,756	\$1,044	yes	\$205,321	no	yes
Natural Resources and Mining	\$39,624	\$991	yes	\$194,837	no	yes
Construction	\$39,624	\$991	yes	\$194,837	no	yes
Manufacturing	\$47,424	\$1,186	yes	\$233,191	no	yes
Service Producing	\$46,072	\$1,152	yes	\$226,543	no	yes
Trade, Transportation, and Utilities	\$45,240	\$1,131	yes	\$222,452	no	yes
Information	\$45,448	\$1,136	yes	\$223,475	no	yes
Financial Activities	\$60,216	\$1,505	yes	\$296,091	yes	yes
Professional and Business Services	\$51,064	\$1,277	yes	\$251,090	yes	yes
Education and Health Services	\$57,408	\$1,435	yes	\$282,284	yes	yes
Leisure and Hospitality	\$23,504	\$588	no	\$115,573	no	no
Public Administration	\$74,589	\$1,865	yes	\$366,765	yes	yes
Other Services	\$39,416	\$985	yes	\$193,815	no	yes
Total Employment	\$44,772	\$1,119	yes	\$220,151	no	yes

Note: Maximum affordable home price is based on a 30-year mortgage with a 10 percent down payment and an interest rate of 2.96.11%. Property taxes, insurance, HOA and utilities are assumed to collectively account for 25% of the monthly payment.

Source: Bureau of Labor Statistics, 2021 1-year ACS, HMDA data, and Root Policy Research.

Interest rates and affordability. As shown in Figure 27, historically low interest rates were a key driver of home price increases during the pandemic. As mortgage interest rates pick up home price growth is expected to decelerate.

Figure 27.
Mortgage Interest Rates and Change in Home Prices, Yuma MSA



Source: U.S. Federal Housing Finance Agency, Freddie Mac, and Root Policy Research.

However, as shown in Figure 28—which compares the maximum affordable home price by average wage in each industry using the average interest rate in 2021 compared to the average rate in September 2022—despite tempering the price of housing, higher interest rates drastically reduce the purchasing power of potential homebuyers who need mortgages. At the average wage for all industries of 44,700 the maximum affordable price drops by around \$100,000 from around \$330,000 at an interest rate of 2.96% to around \$228,000 at an interest rate of 6.11%.

Figure 28.

Changes in Affordability by Industry, 2021 v. 2022 Interest Rates



Note: Maximum affordable home price is based on a 30-year mortgage with a 10 percent down payment. Property taxes, insurance, HOA and utilities are assumed to collectively account for 25% of the monthly payment. Estimates assume 1.5 workers per household at the same wage level.

Source: Bureau of Labor Statistics, Freddie Mac, and Root Policy Research.

