

Next Steps: The Housing Availability and Affordability Study for Kootenai County

*An Updated Look at Housing Constraints,
Population and Demographic Changes
and Business Activity*



September
2023

Next Steps: The *Updated* Housing Availability and Affordability Study for Kootenai County

Report and Analysis

Sponsored by Coeur d'Alene Area Economic Development Corporation (CDA EDC or Jobs Plus), Panhandle Affordable Housing Alliance, Avista Foundation, and University of Idaho's College of Business and Economics, Vandal Impact Center.

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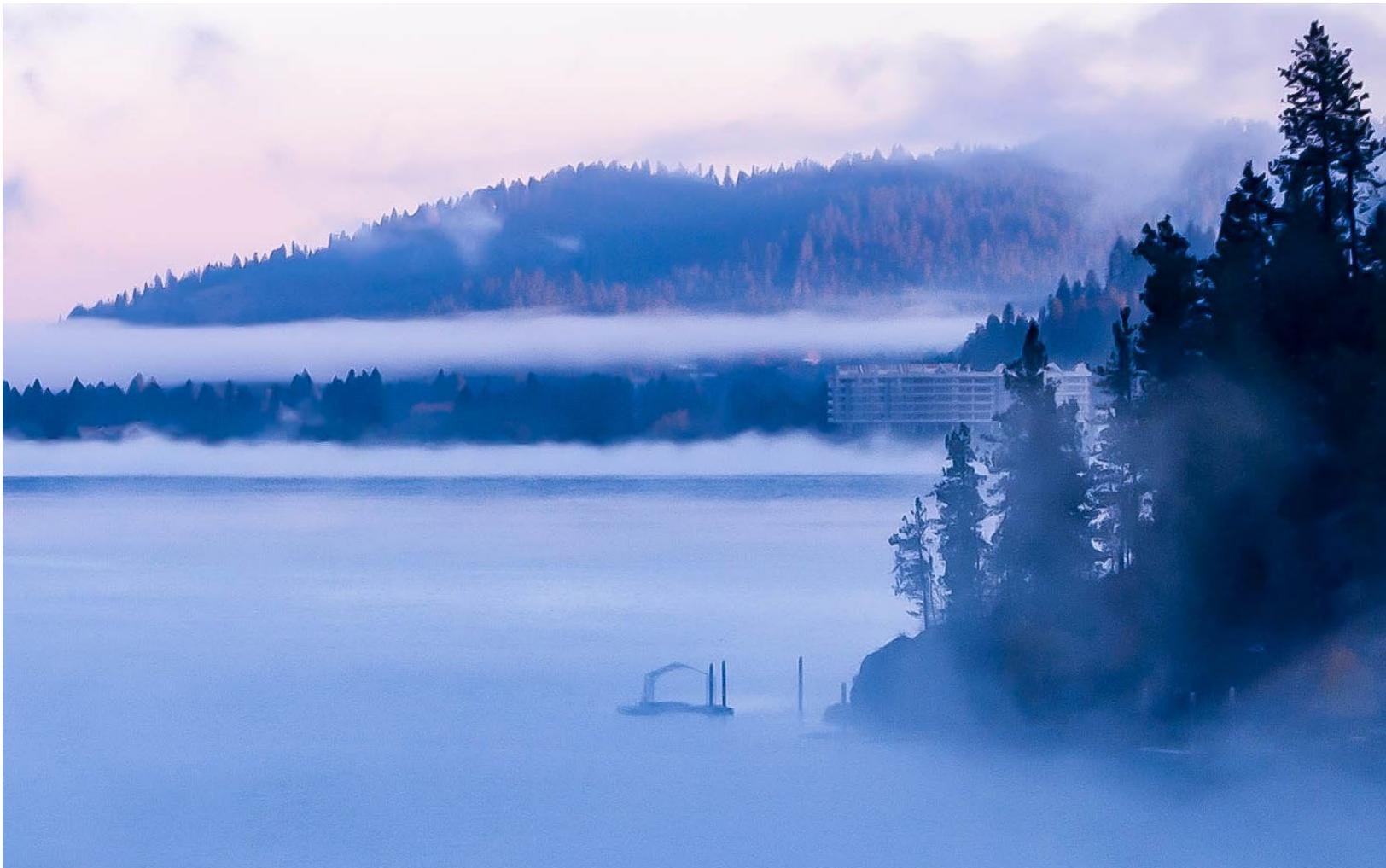
September 2023

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Preface

This is a 2023 update of the 2021 housing market study of Kootenai County including her cities and towns. Its purpose is to provide 2023 analyses and metrics and to offer next steps going forward.

The updated study is driven by data and stakeholder input. Housing needs differ depending upon income levels and overall housing availability. Although this study examines housing needs at all levels of income, its primary focus is on middle-income Kootenai County households. The study is intended to provide an understanding of the needs so that stakeholders in the region can develop policies and housing solutions to meet these needs.

The Housing Study is primarily focused on:

- Regional population and demographic trends.
- The current supply of housing, supply constraints, and a forecast of housing needs in the future across a range of incomes.
- The sharply increasing demand and subsequent housing price and rent increases.
- Key economic drivers and the economic base of the economy.
- Updated regional input from stakeholders' interviews and surveys.
- Consequences of failure to address the housing shortage to the future economy.

Next Steps

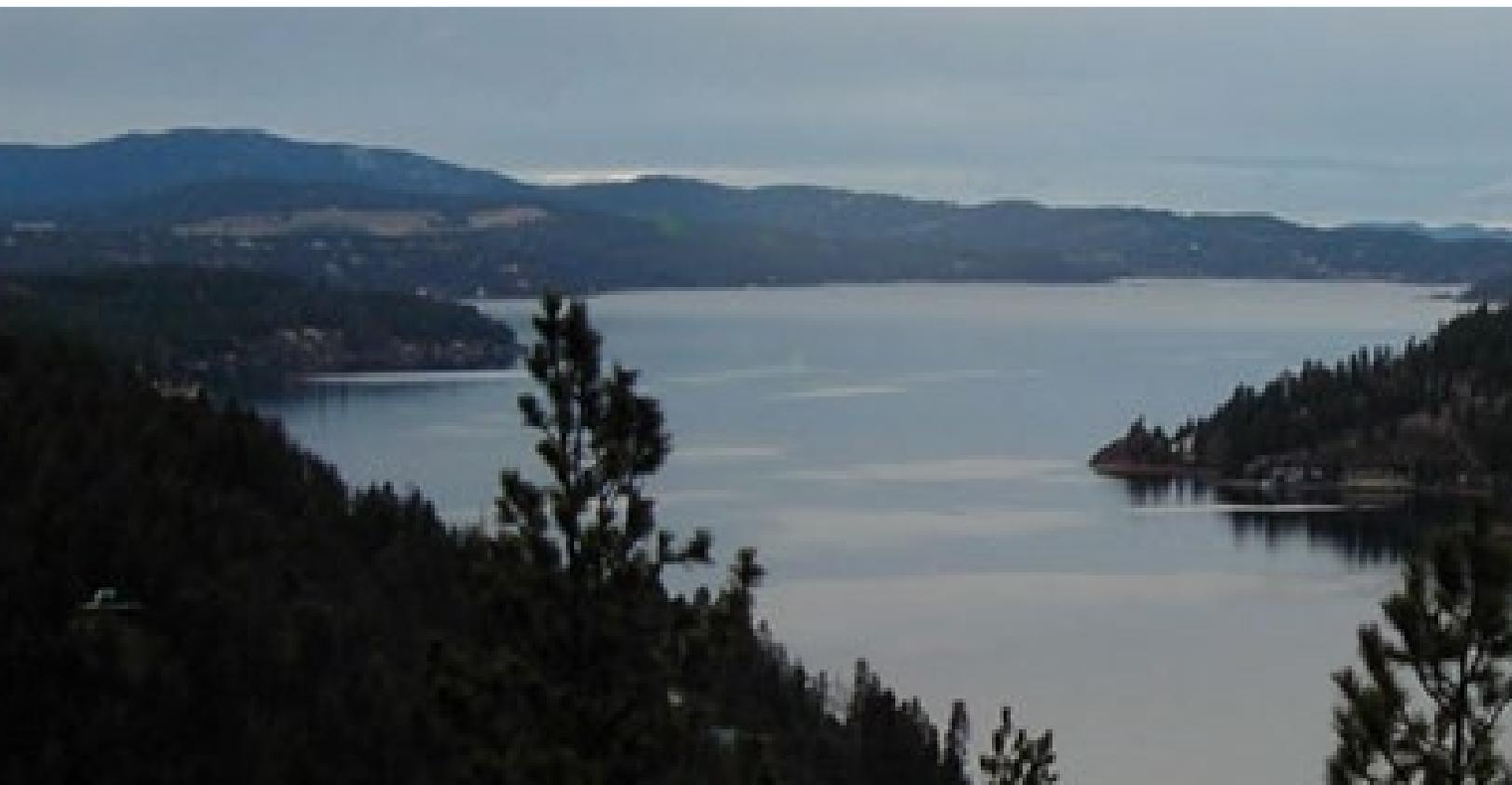
- Profile of Next Steps Forward
- Update of the Original 2021 Kootenai County Housing Study Report
- **There are three sections to the report:**
 - **Key Takeaways-2023 Updates**
 - **Executive Summary-Report Conclusions**
 - **Full Report-2023 Update**
- **Next Steps and updates in the report are highlighted in blue**



Key Takeaways

2023 Update

(Updates highlighted in Blue)



Key Takeaways - 2023 Update

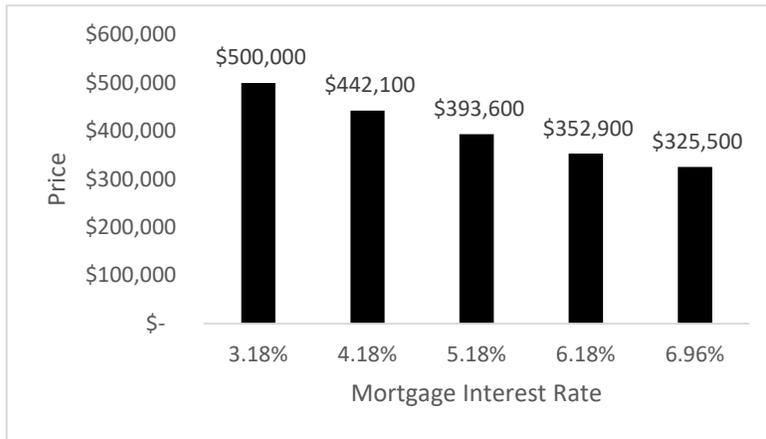
- Idaho’s population continues to lead the nation, ranking only behind Florida in growth from 2021 to 2022. The rate of growth may be slowing.
- Idaho ranked 2nd in the nation in cumulative median housing price increases (2012 to 2022) at 226% only behind Nevada (244%).
- Idaho housing prices continued to rise through about the second quarter of 2022 and then fell in some Idaho counties due to high mortgage rates, but with considerable volatility. In some counties, prices initially fell and then began to recover and stabilize in spring-summer 2023. There is no indication that Idaho housing prices will significantly decline overall once mortgage rates stabilize.
- As of 6/30/2023, Idaho ranked 12th in the nation in terms of the highest-“typical “single-family housing price, (\$443,638). This is significant because Idaho has been known for affordable housing prices.
- The median *Kootenai County housing prices* increased 139% from 2016 to 2023. The average price has increased by 160%
 - Median 2016: \$220,000 Median 2023: \$525,000
 - Average 2016: \$256,000 Average 2023: \$665,000
- Approximately 44% of Kootenai County households cannot afford to pay the July 2023 average market rent of \$1,580, based on a 30% gross monthly income ceiling. These families are paying more than 30% of their income for housing and some are paying more than 50%.
- Mortgage interest rates have been steadily increasing in the last couple of years creating additional financial distress on home affordability. Rates were about 3.18% in November 2021 and have increased to 6.96% in July 2023 and are on track to exceed 7% by August 2023.
- The lack of affordable housing has resulted in 1) a loss of 5,340 jobs in the local economy; 2) a reduction of \$535.6 million in gross regional product; and 3) a loss of \$435.4 million in local payroll, and 4) \$28.0 million in total lost taxes (Chart 1).

Chart 1: Updated 2022 Economic Impacts of Lack of Housing Availability

	Employment	Sales	GRP	Payroll
Economic Impacts	-5,340	-\$833,460,164	-\$535,560,949	-\$435,410,400
	Property	Sales/Excise	Income	Total
Fiscal Impacts (Tax)	-\$5,938,531	-\$9,668,578	-\$12,376,821	-\$27,983,930

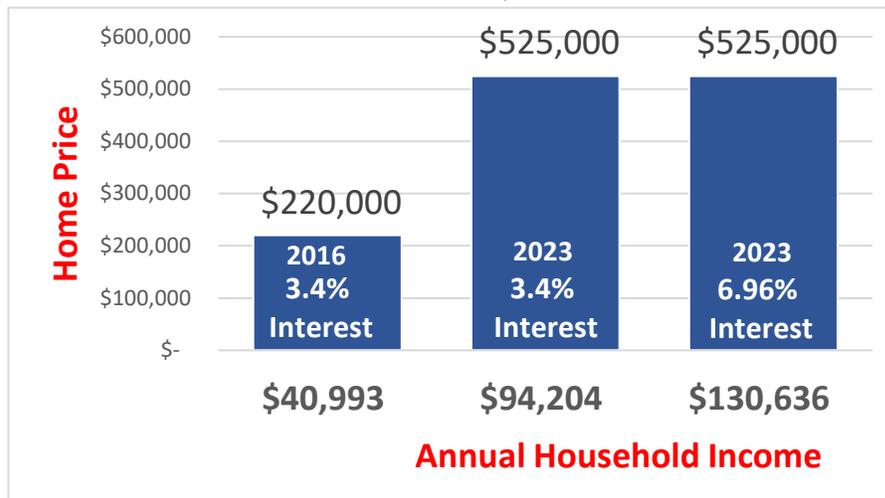
- For every 1% that mortgage rates increase, the capitalized value of a home that a family can afford will drop by about \$50,000 (holding household income and monthly mortgage payments constant) in the long run. A family able to afford a \$500,000 home at 3.18% interest is only able to afford a \$325,500 home at 6.96% interest, holding household income constant at \$87,926 (Chart 2).

Chart 2: Effect of Increases in Mortgage Rates on Housing Affordability for a Household Earning \$87,926.



- As of July 2023, only 20% of Kootenai County households could afford to purchase a median priced house of \$525,000 using this study’s financial model at 6.96% mortgage rate. Approximately 80% of the Kootenai County households are currently priced out of the market.
- Previously, at 2016 housing prices (just seven years ago), about 75% of Kootenai County households would be able to afford a median priced house and only 25% of the households would not be able to afford housing. .
- In Chart 3 (below) an annual income of \$40,993 was all that was necessary to purchase a Kootenai County 2016 medium-priced home of \$220,000 at a mortgage rate of 3.4%. By 2023, a medium home price was \$525,000 and an annual income of \$94,204 was needed at an interest rate of 3.4%. At the current mortgage rate of 6.96% the annual income needed is \$130,636.

Chart 3: Annual Income Required to Purchase a 2016 Medium Priced Home and a 2023 Medium Price Home at 3.4% Interest, and a 2023 Home at 6.96% Mortgage Interest Rate



- There is an estimated 27,338 housing units needed from 2020 to 2030 (see Chart 4). Column 5 presents the maximum affordable home or rent payment by quintile based on a constraint of no more than 30% of your income going towards housing. It ranges from \$456 per month in the first quintile to \$4,878 in the top quintile. Only the top quintile (20% of the households) can afford a

Key Takeaways

medium-priced home in Kootenai County (\$525,000) at 30% income threshold towards monthly housing costs (assuming 6% interest). At the 50% income threshold, it is theoretically possible for the fourth quintile to purchase a median-priced home only if nearly ½ of monthly income is going towards housing.

Chart 4: Forecasts for Kootenai County Housing Supply 2020 to 2030

#1	#2	#3	#4	#5	#6	#7
HH Quintiles 20%	Mean HH Income	# New Rental Units	# New Homes	Max Affordable Monthly Payment 30%	Maximum Affordable House 30% Income Threshold	Maximum Affordable House at 50% Income Threshold
Lowest	\$18,258	5,468	-	\$456	\$56,500	\$ 101,500
Second*	\$42,337	1,914	3,554	\$1,058	\$146,000	\$251,000
Third*	\$65,163	820	4,647	\$1,629	\$231,000	\$ 393,000
Fourth	\$97,566	547	4,921	\$2,439	\$351,000	\$ 594,000
Highest	\$195,117	-	5,468	\$4,878	\$714,000	\$1,199,000
Total		8,748	18,590			

**Creative alternatives such as land trust homes and other housing solutions that lower land prices and construction costs will bring homebuyers in these income quintiles into the housing market.*

- Chart 5 illustrates the point. All the occupations highlighted in blue are priced out of the Kootenai County housing market based on median annual income. When real estate brokers, loan officers, and chief executives cannot afford to purchase a medium-priced home, it is a clear indication of the magnitude of the housing crisis in the community.

Chart 5: 2022 Median Annual Income by Occupation for Kootenai County

Lowest Quintile		\$18,258	Second Quintile		\$42,337
1	Tailors, Dressmakers	\$15,980	1	Sheet Metal Workers	\$43,321
2	Manicurists and Pedicurists	\$18,350	2	Computer Tool Operators	\$42,636
3	Product Promoters	\$19,598	3	Machinists	\$42,758
4	Bartenders	\$20,809	4	Chefs and Head Cooks	\$42,762
5	Childcare Workers	\$21,262	5	Supervisors of Landscaping	\$42,772
6	Cooks, Fast Food	\$21,290	6	Mental Health Social Workers	\$43,133
Third Quintile		\$65,163	Fourth Quintile		\$97,566
1	Respiratory Therapists	\$66,318	1	Sales Managers	\$99,840
2	Loan Officers	\$62,619	2	Credit Analysts	\$93,392
3	Real Estate Brokers	\$62,824	3	Power Plant Operators	\$95,081
4	Healthcare Social Workers	\$65,278	4	Physical Therapists	\$95,773
5	Operations Managers	\$65,255	5	Chief Executives	\$96,593
6	Secondary School Teachers	\$63,467	6	Software Developers	\$96,730
Highest Quintile		\$195,117	Source: Lightcast		
1	Physician Assistants	\$128,908			
2	Pharmacists	\$138,727			
3	Dentists, General	\$152,163			
4	Financial Specialists	\$152,408			
5	Judges	\$179,812			
6	Airline Pilots	\$188,992			

Executive Summary

Report Conclusions

2023 Update



Executive Summary – Report Conclusions

- ❖ The Kootenai County housing market affects all stakeholders, yet many remain unaware of its direct impact on them and the community as a whole. The housing crisis will fundamentally alter the character of the community and the economy of the region if prices and rents continue to increase at their current rates. Many negative impacts are continuing:
 - Regional employers cannot find housing for their employees and many positions are unfilled.
 - New potential firms may not relocate to Coeur d’Alene due to the high cost of housing.
 - Many long-term residents are being squeezed out of the housing market and moving outside the county (i.e., to Spokane County or other surrounding counties).
 - The children of residents will be unable to live in the community because they cannot afford housing.
 - The diversification of the economy may slow or even reverse. Newer high technology companies and manufacturing facilities may be driven out of the market due to high housing costs.
 - The supply curve for housing will become steeper (i.e., more inelastic) leading to greater volatility and periodic price bubbles along with steep price declines during recessions.
 - The high housing and rent costs will lead to a substitution of nonresidents for residents.
 - The effective standard of living for many residents will decline due to high housing costs.
 - High housing costs can actually lead to less open space in the county, greater sprawl, and less environmentally sound outcomes.
- ❖ Increasing housing supply will reduce housing prices but will require regional cooperation and dedication. Paths for increasing supply are relatively straight-forward:
 - A serious, and controllable, impediment to increasing the supply of housing is local zoning and building regulations.
 - When land availability is a constraint to increased supply, mixed-use zoning, mixed-residential, and multi-family dwellings can facilitate that increased supply.ⁱⁱⁱ
 - Allowing the annexation of available land close to the cities is also important.
 - **Cities can control or influence the supply of housing but not the demand for housing.**

Population, Housing and Rent Increases

- ❖ Idaho experienced a 17.3% growth in population over the past decade (2010-2020), making it the 2nd fastest growing state in the nation. Kootenai County’s population grew 23.7% over that time, making it the 3rd fastest growing county in Idaho.
- ❖ From 2021 to 2022, Idaho grew 1.82%, the second fastest growing state. Only Florida (1.91%)^{iv} grew faster. Idaho’s population reached 1.939 million in 2022.
- ❖ From October 2020 to October 2021, Idaho and Arizona had the fastest growing home prices in the U.S. at about 29%. (CoreLogic).
- ❖ As of 6/30/2023, Idaho ranked 12th in the nation in terms of the highest-“typical “single-family housing prices, (\$443,638), dropping two notches from 2021.

- ❖ Median housing prices in Kootenai County now exceed \$525,000 (June 2023) and the average priced home is over \$600,000. Prices have more than doubled in the last seven years (Windermere CDA Realty and Coeur d'Alene MLS).
- ❖ In October 2021, only 24% of Kootenai County households could afford to purchase a median priced house in Coeur d'Alene. At 2016 prices (just five years ago), 75% of all households would have been able to afford a median priced house.
 - Update: As of July 2023, only 20% of Kootenai County households could afford to purchase a median priced house of \$525,000 using this study's financial model at 6.96% mortgage rate. Approximately 80% of the households are currently priced out of the market.
- ❖ From September 2018 to September 2021 the State of Idaho had the 3rd fastest growing rent prices in the U.S. (35%) (Apartment List Blog).
 - Approximately 44% of Kootenai County households cannot afford to pay the July 2023 average market rent of \$1,580, based on a 30% gross monthly income ceiling.
- ❖ Mortgage rates were about 3.18% in November 2021 and have increased to 6.96% by July 2023. The Federal Reserve will likely continue to raise interest rates at least in the near future to fight inflation. That will likely reduce new housing construction.
- ❖ Nationally the cost of new construction has risen dramatically. Prices of newly constructed single-family homes jumped 50.0% from January 2020 to October 2022, while the overall Consumer Price Index (CPI) increased only 20%.
 - There are signs construction costs *may be* slowing and stabilizing.
- ❖ Construction commodities and supply prices increased at a pace between double and four times the inflation rate from about 2018 through 2021. Labor costs increased cumulatively about 18% and some trades increased by over 50% (Producer Price Index).
 - Producer Prices are beginning to stabilize. From April 2022 to June 2023, Producer Prices for metal and metal products decreased 7.8% and wood product and construction wholesaler prices *decreased* 15.5%.
- ❖ Overall inflation increased from 2.2% in January 2018 (monthly annualized) to 8.9% in June 2022 and then fell sharply and stood at 3.3% in July 2023.
- ❖ According to interviews with local builders, the cost of construction has increased from about \$100 per square foot four years ago to over \$200 per square foot today.
- ❖ The cost of land in Kootenai County has risen dramatically. Five years ago, Five-to-ten-acre parcels were priced at about \$5,000 to \$6,000 per acre. Current pricing now ranges between \$20,000 to \$30,000 per acre depending on location and the availability of utilities.
- ❖ Within City boundaries the cost of a small lot is now over \$100,000.
- ❖ The cumulative estimated national housing *deficit* was 8,625,929 units 2008-2022. Using the same methodology:
 - Idaho has a 30,215-housing unit deficit; and
 - Kootenai County has a deficit of 4,938 units and may be as high as 7,000 units.

Zoning, Regulatory, and Supply Side Constraints

- ❖ Gresham's Law of Housing: In the absence of affordable housing, nonresident homebuyers and investors will crowd-out local buyers. **Failure to address the housing shortage will increase the proportion of homes and apartments purchased by nonresidents.**
 - Existing long-time residents will be displaced by nonresidents and new migrants to Kootenai County.
 - Many of Kootenai County's newest generation will be forced to leave due to high housing costs.
 - The lack of affordable housing will add to labor shortages in many industries.
 - Potential employers will choose communities with available labor resources. The lack of affordable housing reduces available labor.
- ❖ City and county regulations have influence in the market only on the supply side. Municipalities have very little ability to regulate or influence the demand for housing.
- ❖ The benefits of zoning are well known. The costs of zoning are less well known, particularly excessive zoning. The benefits of zoning regulations must be weighed against the costs.
- ❖ The National Association of Home Builders estimates that the cumulative regulatory burden per house (at all levels of government) is \$93,870 or about 19% of the total cost of a median priced home in Coeur d'Alene.
- ❖ Increased supply is necessary for reducing prices and making housing more affordable. When land availability is a constraint to increased supply, mixed-use zoning, mixed-residential, and multi-family dwellings can facilitate that increased supply.
- ❖ Update 2023: The lack of affordable housing has *already* caused an estimated loss of 5,340 jobs in the local economy resulting in a reduction of \$535.6 million in gross regional product and a loss of \$435.4 million in local payroll.
- ❖ The construction industry ranks 5th in Kootenai County in terms of total employment with 8,313 workers in 2022. The average annual salary package is \$64,801. Construction job growth in Kootenai County has increased 98% from 2012 to 2022.
- ❖ The number of new housing units in Kootenai County will need to increase by 109% from 1,308 per year from 2010 to 2020 to 2,734 per year from 2021 to 2030. To meet the region's projected population growth during the next 20 years, approximately 2,000 to 3,000 new housing units will be needed annually.

Community and Stakeholder Surveys

- ❖ 2023: The majority of renters (61%) have seen an increase in rent within the last six months with an average increase of about 29%. The average new rent was \$1,704 a month, up from \$1,317 six months ago, according to the survey.
- ❖ According to the Realtors' Surveys approximately 54% of homebuyers come from outside the region. Nonresident purchasers include retirees (25%), second home buyers (15%), and investors for rental properties and resales (14%).
- ❖ 2023: Approximately 71% of the firms had difficulty in finding employees and face a labor shortage. The most important reasons cited were the inability to find affordable housing and salary price points).



Full Report

2023 Update



Full Report 2023 Update

Population and Housing Price Trends: U.S., Idaho, and Kootenai County

This report includes most of the original 2021 results and metrics along with the 2023 updates which are highlighted in blue.

Idaho Rankings

- From 2010 and 2020, Idaho grew by 271,525 people i.e., approximately the size of Boise. During these ten years, Idaho was the 2nd fastest growing state in the U.S. with 1,839,106 people representing a population growth of 17.3%. Only Utah had a faster growth rate at 18.4%.
- From 2020 to 2021, Idaho's population grew 2.9% making it the fastest growing state in the U.S.
- From 2021 to 2022, Idaho grew 1.82%, the second fastest growing state. Only Florida (1.91%)^v grew faster. Idaho's population reached 1.939 million in 2022.

State County Population Growth Rankings (2010 to 2022)

- Kootenai County was the 3rd fastest growing county in Idaho behind Madison and Ada. Kootenai County population grew 23.7% or 32,868 people. This increase is equivalent in size to Idaho's 13th largest city.
- Kootenai County population grew about 10,788 from 2020 to 2022, reaching 183,578 in 2022. The 2021 to 2022 growth rate was 1.91% (above Idaho's but ranked 21st in the state). The annual growth rate was down from 4.3% (2020 to 2021). There is some indication population growth rate of Kootenai County may be slowing.

Kootenai County and City Population Growth Rankings (2010 to 2022)

- From 2010 to 2022 the fastest growing city in Kootenai County was Post Falls with a 39.6% increase in population, followed by population growths of 34.9% for Rathdrum and 23.8% for Coeur d'Alene. There was also a substantial increase in the rural portion of the county of 14.1%. The City of Post Falls gained 10,911 net new residents, which is the size of a standard Idaho city.
- From 2021 to 2022, Rathdrum was the fastest growing city in Kootenai County at 4.1% and stood at 10,651 in 2022, followed by Post Falls at 3.6% (44,194), Spirit Lake at 2.2% (112), Hayden at 1.8% (16,531), and Coeur d'Alene at 1.0% (56,733).

Idaho and Kootenai County Housing Prices *Were* Among the Fastest Increasing Home Prices in the U.S.

Causes of Real Estate Price Increases (Supply Factors)

- Lack of new residential unit construction during the last decade originating from the 2007-2009 recession.
 - Annual construction has (finally) recovered but can the level of construction of new homes and apartments be maintained in the face of rising mortgage rates?
- World-wide supply chain disruptions effecting lumber, steel, and a wide variety of housing products and goods.
 - Shortages continue to persist into 2023 although some materials and supplies are slowly alleviating.
- Skilled labor shortages.
 - Skilled labor shortages continue to persist into 2023.
- Skyrocketing land values.
 - 2023 land prices fell modestly and then stabilized. We are unlikely to see steep drops in land prices.

Causes of Real Estate Price Increases (Demand Factors)

- Workers telecommuting from home because of COVID-19 and need bigger space for a home office.
 - Most workers have returned to the offices, but a significant portion of workers still telecommute and work remotely. There has likely been a permanent shift in the labor market to a blended workforce.
- Shutdown of recreational activities, travel, and entertainment due to COVID-19, creating greater home-related preferences and activities.
 - Most recreational activities and tourism are strongly recovering from the COVID-19 Pandemic and are not likely a factor in the housing crisis going forward.
- Continued low mortgage interest rates making home price increases more affordable.
 - Mortgage rates have increased from 2.65% (1/21) to 6.96% (7/23), a 163% increase. Mortgage rates are now reducing the demand for housing.
- U.S. government stimulus and relief packages, increasing consumer spending power.
 - COVID-19 related spending is now declining sharply and becoming less of a factor in housing demand.
- Interstate and intrastate migration to Idaho's cities and counties like Kootenai County.
 - Migration may be slowing but will continue to be an important component of the housing market in Kootenai County

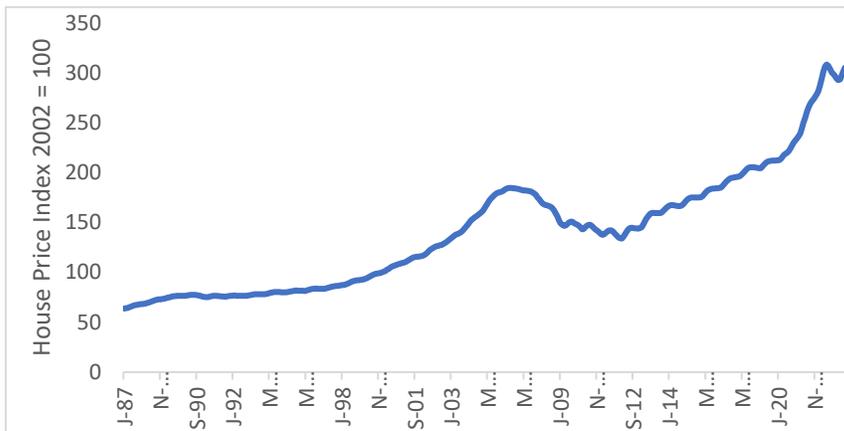
U.S. Housing Price Rankings

- 2023 Update: Housing prices peaked in most U.S. geographies in the second quarter of 2022 and declined through the first quarter of 2023 at varying rates.
- From July 2018 to July 2022 (Peak), U.S. home prices overall increased 49.8% according to the Case-Shiller (C-S) home price index. U.S. housing prices were 64.9% higher than their previous peak in 2006, suggesting a possible bubble.vi The (C-S) has declined slightly since 7/2022 and stood at 302.38 in 5/2023.

- The U.S. median home price reached \$449,300 by 4/2022, increasing 36% from 7/2018 to 4/2022.
- U.S. Median housing prices have declined 7.4% from 4/2022 to 4/2023. Prices are not expected to decline much further overall despite the increase in mortgage rates^{vii}

Generally, housing prices peaked in the second quarter of 2022 in most regions of the U.S. and have declined by various magnitudes through early 2023 depending on the geography. Most prices seem to be stabilizing in mid-2023. However, the FED was still raising interest rates during this time period (Figure 1).

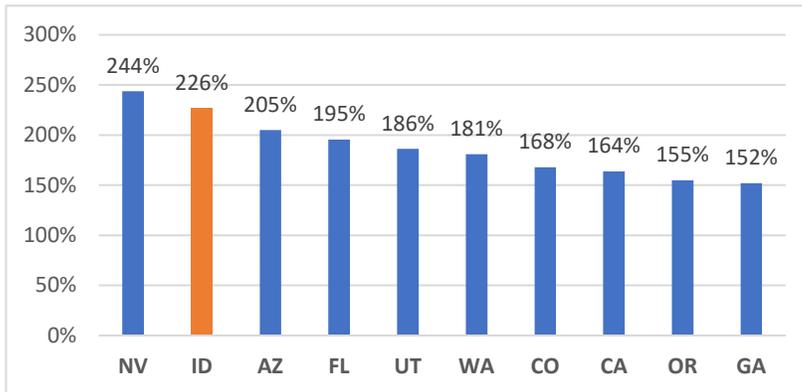
Figure 1: Case-Shiller Home Price Index Jan 1987 to May 2023



Idaho Rankings

- According to Zillow (8/31/21), Idaho ranked 10th in the nation in overall housing prices at an average home price of \$429,145. This is significant because Idaho has been known for affordable housing prices.
 - As of 6/30/2023, Idaho ranked 12th in the nation in terms of the highest-“typical “single-family housing prices, (\$443,638), dropping two notches from 2021,
- From August 2018 to August 2021, Idaho had the fastest growing single-family housing prices in the U.S., increasing 67.3% during these three years. Idaho was followed by the states of Arizona, Utah, Washington, and Maine^{viii}
 - From August 2018 to August 2022 (Peak), Idaho ranked 1st in the nation in housing prices increases (92%), followed by Montana (78%), Arizona (77%), and Georgia (72%)(Zillow).
 - Idaho ranked second in the percentage increase in home purchase prices from 2012 (Q2) to 2022 (Q2)(Peak). Idaho lagged only behind only Nevada (244%)(Figure 2).^{ix}

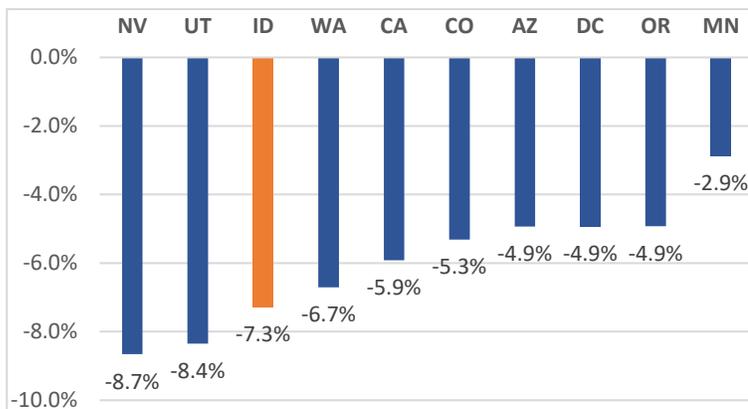
Figure 2: State Rankings in Percentage Increase in Home Purchase Prices 2012 (Q2) to 2022 (Q2) (Peak)



Source: [House Price Index Datasets | Federal Housing Finance Agency \(fhfa.gov\)](https://www.fhfa.gov/data/house-price-index-datasets)

- Home prices declined from Q2 2022 to Q1 2023. Figure 3 ranks the states with the steepest decline. Idaho ranked 3rd sharpest decline in the U.S. at 7.3%. According to Zillow estimates (June 2023) Idaho’s “typical” house price has declined by 8% from a year earlier.

Figure 3: State Rankings in Percentage *Decrease* in Home Purchase Prices from 2022 (Q3) to 2023 (Q1)



Source: [House Price Index Datasets | Federal Housing Finance Agency \(fhfa.gov\)](https://www.fhfa.gov/data/house-price-index-datasets)

- According to Zillow in *August 2021*, from 8/31/18 to 8/31/21, the four fastest growing counties in the nation in terms of single-family home prices were in Idaho: 1) Canyon County (Cities of Caldwell and Nampa) grew 94.7%; 2) Ada County (Boise City) grew 80.6%; 3) Kootenai County (Coeur d’Alene City) grew 68.5%; and 4) Twin Falls (Twin Falls City) grew 65.4%. And according to Zillow, Spokane County was ranked twelfth with a 58.9% growth rate (Zillow).
 - Housing prices continued to rise through about the second quarter of 2022 and then fell in many Idaho counties but with considerable volatility. In some counties, prices fell sharply and then began to recover in spring-summer 2023. From 5/31/22 to 6/30/23, single family housing:
 - Ada County (-8%)

- Canyon County (-6%)
 - Kootenai County (+4%)
- Overall, the sharp increase in housing prices over the last decade is widespread and diffused across virtually all of Idaho’s cities and counties (Intermountain Multiple Listing Service - MLS).^x Virtually no Idaho communities have escaped the housing crisis in Idaho. Real estate prices have stabilized at a very high level in the urban regions and are still increasing in some of the rural regions.

The Doubling of Kootenai County House Prices in Seven Years

Regional Kootenai County House Price Increases

- The median Kootenai County housing prices increased 139% from 2016 to 2023. The average price has increased by 160% (Table 1).

TABLE 1: Kootenai County and City Housing Price Increase 2016-2023

City/Region	2023*		2021		2016	
	Median	Average	Median	Average	Median	Average
Coeur d'Alene	\$535,000	\$622,000	\$ 500,000	\$ 574,000	\$ 220,000	\$ 248,000
Post Falls	\$469,000	\$555,000	\$ 437,000	\$ 489,000	\$ 201,000	\$ 230,000
Hayden	\$594,000	\$756,000	\$ 553,000	\$ 692,000	\$ 253,000	\$ 295,000
Rathdram/Twin Lakes	\$493,000	\$597,000	\$ 440,000	\$ 510,000	\$ 200,000	\$ 230,000
Hauser Lake	\$837,000	\$725,000	\$ 698,000	\$ 667,000	\$ 358,000	\$ 351,000
Athol/Spirit Lake	\$545,000	\$610,000	\$ 485,000	\$ 532,000	\$ 232,000	\$ 236,000
Athol/Bay View	\$775,000	\$806,000	\$ 622,000	\$ 680,000	\$ 278,000	\$ 282,000
Kootenai County Total	\$525,000	\$665,000	\$ 485,000	\$ 624,000	\$ 220,000	\$ 256,000
Silver Valley	\$300,000	\$316,000	\$ 240,000	\$ 254,000	\$ 90,000	\$ 111,000

*January 1 to June 30, 2023

Sources: Authors’ Calculations and Windermere CDA Realty

- The “typical” home in Kootenai County is now priced over \$500,000. The average listing price is nearly \$600,000.^{xi}
- Prices have also increased sharply in every city, and they are presented in the following table including median and average prices (Table 2):^{xii}

The Affordability Gap

Table 2: Percentage Increases in Kootenai County House Prices by City 2016 to 2023

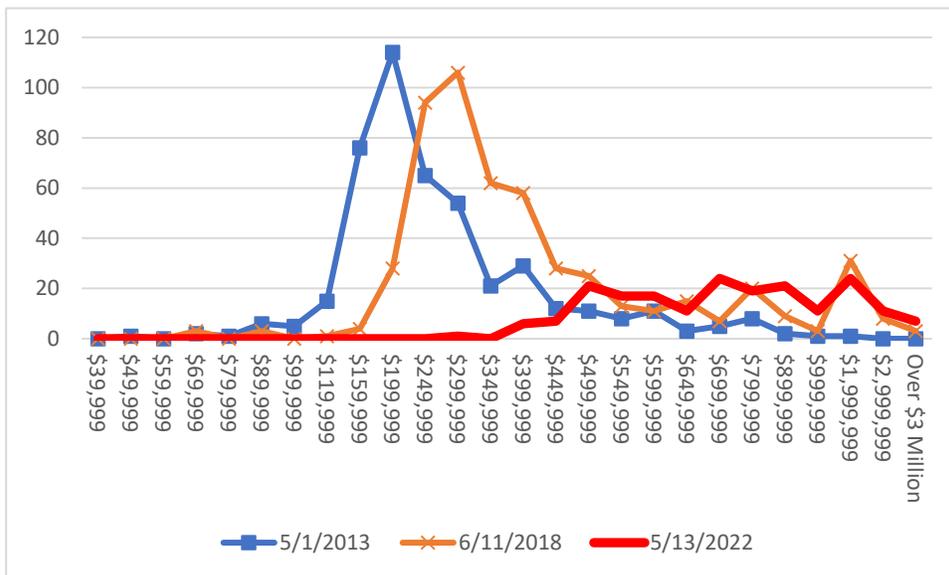
City	Median	Average
Coeur d'Alene	143%	151%
Post Falls	133%	141%
Hayden	135%	156%
Rathdrum/Twin Lakes	147%	160%
Hauser Lake	134%	107%
Athol/Spirit Lake	135%	158%
Athol/Bay View	179%	186%
Kootenai County Total	139%	160%
Silver Valley	233%	185%

Sources: Authors' Calculations and Windermere CDA Realty

Middle-Range Housing Disappearing

- **Sales of homes in Kootenai County, priced from \$160,000 to \$350,000, represented 63% of all existing house sales in 5/2013, 65% in 6/2018, and 4% in 5/2022.** The collapse of workforce housing can be seen in Figure 4 in stark terms, particularly from 2018 to 2022.

Figure 4: Disappearing Middle... Collapse of Workforce Housing Options 2013,2018,2022

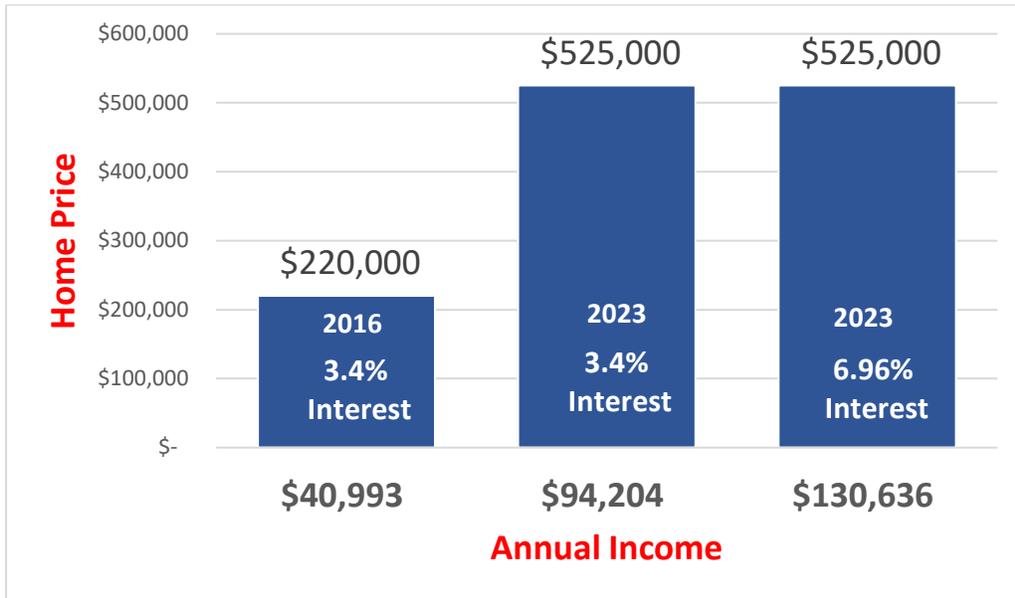


Source: Coeur d'Alene Association of REALTORS; Rick Vernon and *The Real Estate Report*

- Increasing housing prices and rents threatens the sustainability of median income households. Kootenai County housing prices are presented below for 2016 and 2023.
 - The first bar in Figure 5 (below) is the annual income (\$40,993) necessary to purchase a medium-priced home (\$220,000) in Kootenai County in 2016 at a mortgage interest rate of 3.4%.
 - The 2016 medium income was \$50,924, creating a positive income surplus of \$9,931.
 - The second bar is the 2023 medium home price (\$525,000) and the annual income needed to purchase a home at an interest rate of 3.4% (\$94,204) and at the current

mortgage rate of 6.96% (\$130,636). The estimated 2023 median household income is \$71,002^{xiii} creating a negative income gap of (\$23,202) and (\$59,634), respectively.

Figure 5: Annual Income Required to Purchase a 2016 Medium Priced Home and a 2023 Medium Price Home at 3.4% Interest, and a 2023 Home at 6.96% Mortgage Interest Rate



Sources: Authors' Calculations and Windermere CDA Realty

Wall Street Journal: Hottest Housing Market in the Country

- The Wall Street Journal recently ranked Coeur d’Alene as the hottest real estate market in the U.S. (“Lakeside Idaho City Is America’s Hottest Housing Market in New WSJ/Realtor.com Index”, April 27, 2021). The city beat out its rivals in Austin, Texas, Springfield, Ohio, Billings, Montana, and Spokane, Washington.

Idaho and Kootenai County Rental Price Increases (Among the Fastest Growing in the U.S.)

State and County Rankings

- From September 2018 to September 2021 the State of Idaho had the 3rd fastest growing rent prices in the U.S. (35%). Only Arizona (41%) and Nevada (36%) had higher rent increases.

Kootenai County and Broader Regional Economy: Fastest Increasing Rents in the U.S.

- Spokane Valley had the *fastest growing* rents in the U.S. with a 60% increase (September 2018 to September 2021).
 - Rents have largely stabilized/or declined in most larger Idaho cities.
 - Kootenai County average rents stood at \$1580/month in July 2023.
 - Spokane County average rents were \$1284/month.
 - Ada County average rents were \$1,369/month.
- Regional county rent comparisons are listed in the table below (as of July 2023) (Table 3).^{xiv}

Table 3: Average Regional Rents Per Apartment Size - July 2023

Size	Kootenai County	Spokane County	Ada County
Overall	\$1,580	\$1,284	\$1,369
1br	\$1,138	\$967	\$1,095
2br	\$1,400	\$1,275	\$1,284

Source: [Apartment List Blog - Research](#)

Kootenai County Rents are Unaffordable (i.e., Greater than 30% of Gross Household Income)

- Approximately 44% of Kootenai County households cannot afford to pay the July 2023 average market rent of \$1,580, based on a 30% gross monthly income ceiling. These families are paying more than 30% of their income for housing and some are paying more than 50%. The minimum annual income to rent in Kootenai County based on size of apartment is presented in Table 4.

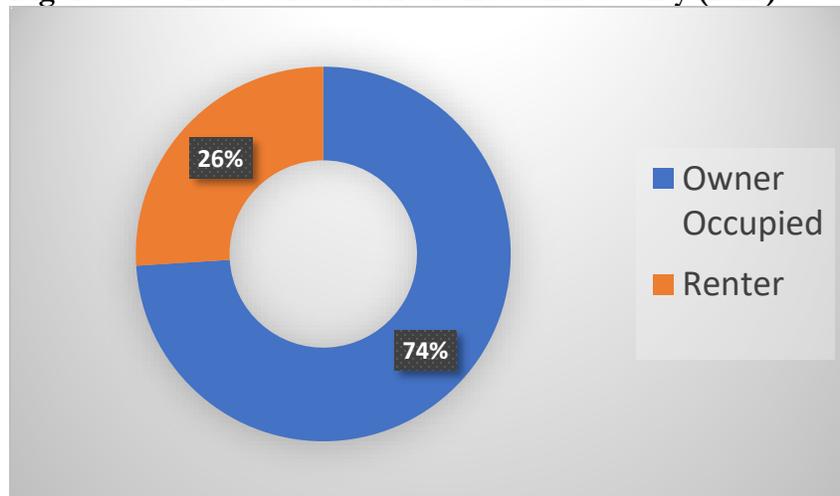
Table 4: Maximum Affordable Kootenai County Rent Per Apartment Size

Size	Minimum Annual Income	Hourly
Overall Average	\$63,200	\$30
1 bedroom	\$45,520	\$22
2 bedrooms	\$56,000	\$27
3 bedrooms	\$69,800	\$34
4 bedrooms	\$83,680	\$40

Sources: Apartment List Blog and Authors' Calculations

- Kootenai County homeowners versus renters: There are approximately 49,929 (74%) households that own their own homes and 17,842 households (26%) that rent (Figure 6).

Figure 6: Owners Versus Renters Kootenai County (2021)



Sources: <https://censusreporter.org/profiles/05000US16055-kootenai-county-id/>

Housing Construction Costs and Supply Chain Constraints

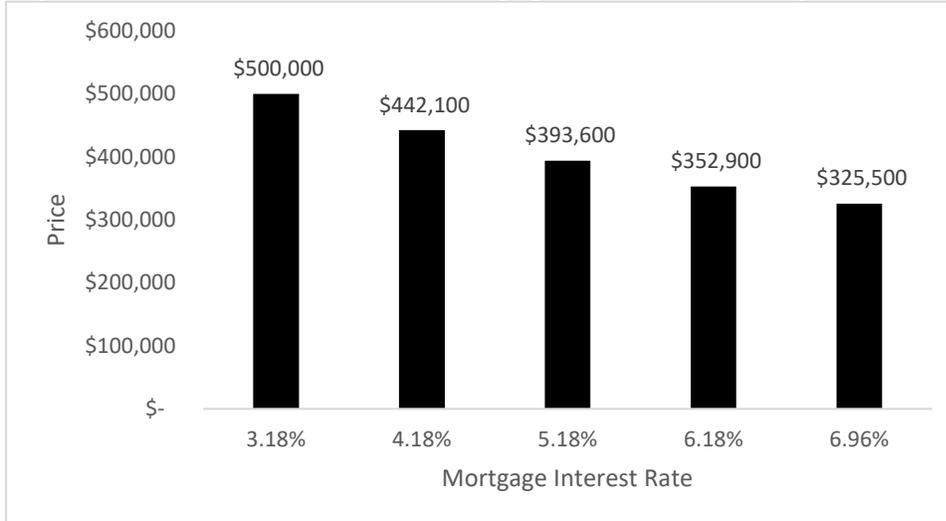
- Nationally the cost of new construction has risen dramatically. Prices of newly constructed single-family homes jumped 50.0% from January 2020 to October 2022, while the overall Consumer Price Index (CPI) increased only 20%.^{xv} There are signs construction costs *may be* slowing and stabilizing.
- From November 2022 to June 2023, construction costs for new homes *declined* by 2.8% while the CPI increased by 2.5%.
- According to interviews with local builders, the cost of construction has increased from about \$100 per square foot four years ago to well over \$200 per square foot.
- The cost of land in Kootenai County has risen even faster. Five-to-ten-acre parcels which five years ago were going for about \$5,000 to \$6,000 per acre, can now range between \$20,000 to \$30,000 per acre depending on location and the availability of utilities.
- The cost of a small lot is now over \$100,000 in most cities in Kootenai County.
- Producer prices for lumber increased dramatically over the last several years in a near exponential fashion and then leveled off over the last year. From January 2018 to March 2022 (Peak), prices for metal and metal products increased 56.6% and wood product and construction wholesaler prices increased 57%.
- From April 2022 to June 2023, Producer Prices for metal and metal products decreased 7.8% and wood product and construction wholesaler prices *decreased* 15.5%.
- Inflation increased from 2.2% in January 2018 (monthly annualized) to 8.9% in June 2022 and stood at 3.3% in July 2023.^{xvi}
- The minimum cost to build a house in Kootenai County is between \$400,000 and \$500,000 including land and can easily reach \$600,000 for an entry-level home.^{xvii}
 - Price increases are slowing and may have stabilized at a very high-cost level.

Interest Rates and Mortgage Costs

- Mortgage interest rates have been steadily decreasing since their historic high of 18.16% in September 1981. Rates were about 3.18% in November 2021 and have increased to 6.96% by July 2023.^{xviii} The Federal Reserve will likely continue to raise interest rates at least in the near future to fight inflation. That will likely reduce new housing construction.
- The previously low mortgage interest rates became dangerously capitalized into housing prices contributing to home price increases.
- Recent mortgage rate increases have exacerbated housing affordability in the short run but put downward pressure on housing prices in the long run.
- A *financial model* was created to run scenarios on home purchase affordability. The model assumes a 30-year fixed-rate mortgage. It also assumes the **maximum affordable home could not exceed 36% of gross monthly income including principle, interest, mortgage insurance, property taxes, and homeowner's insurance.**
- For every 1% that mortgage rates increase, the capitalized value of a home that a family can afford will drop by about \$50,000 (holding household income and monthly mortgage payments constant) in the long run. The graph below illustrates the effect on the affordability of home prices with mortgage interest rate increases of 1%. (Figure 7).

Mortgage rates stood at 6.96% in July of 2023. A family able to afford a \$500,000 home at 3.18% interest is only able to afford a \$325,500 home at 6.96% interest, holding household income constant at \$87,926.

Figure 7: Effect of Increases in Mortgage Rates on Housing Affordability



Housing Affordability in Kootenai County

Nearly 80% of Households Cannot Afford a Home in the Current Market

- As of July 2023, only 20% of Kootenai County households could afford to purchase a median priced house of \$525,000 using this study’s financial model at 6.96% mortgage rate. Approximately 80% of the households are currently priced out of the market.^{xix}
- Previously, at 2016 housing prices (just seven years ago), about 75% of Kootenai County households **would be able** to afford a median priced house and only 25% of the households would not be able to afford housing.^{xx}
- The CRE Spokane Study results were even starker: Nearly 85% of *Spokane’s* households *could not* afford the median priced \$450,000 home. The CRE Spokane Study employed a narrower set of assumptions than the analysis in this study:

In 2016, or just 5 years ago, 70% of local employees could afford a \$250,000 median-priced home; by 2021, only about 15% of employees could afford what is now a more than \$450,000 median-priced home (p.19).^{xxi}
- Housing affordability has changed dramatically over the past decade at a rapid speed. In 2010, the median (sale) priced home in Kootenai County was \$165,000, climbing to \$205,000 by 2015 and \$220,000 in 2016. By June of 2023, it was \$525,000 (Windermere CDA Realty). In Spokane County in 2016, approximately 52% of the listings sold for under \$200,000 versus 5% in 2021 (CRE Spokane Study).
- Both housing and rent prices have increased dramatically within the last five years i.e., housing price increases resemble a hockey stick (i.e., exponential growth), although the growth rates in 2023 are moderating or falling slightly.

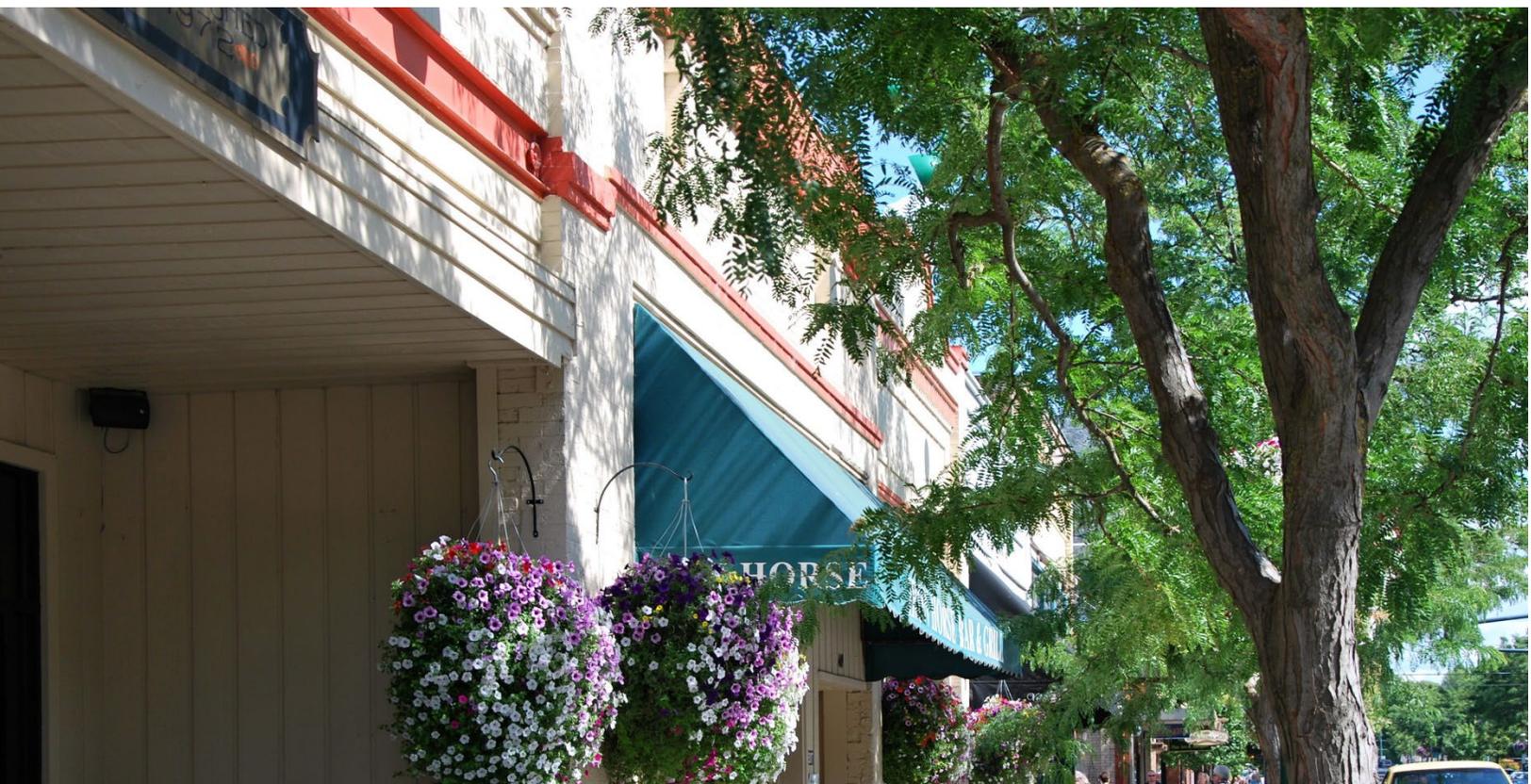
Poverty

- This study is primarily focused on the housing challenges of low-to-middle-income families. The challenges for those in acute poverty are even greater. The Federal Poverty Level is officially defined by the U.S. Department of Health and Human Services^{xxii} and is a persistent problem in any region or time. The issues can be particularly acute during housing affordability crises which increase the financial stress on poor families.
- For Kootenai County in 2021 about 16,927 people are estimated to be in poverty or approximately 9.5% of the overall population which is a lower rate than the U.S. average. Approximately 10.7% of children under the age of 17 are in poverty and 9.7% of children ages 5 to 17 are in poverty. The overall poverty rate for Shoshone county was 17.9%^{xxiii}
- Asset Limited, Income Constrained, Employed (ALICE) are households that are above the federal poverty line and working, but cannot not afford basic household necessities. While appearing “low to middle class,” ALICE is by definition the “working poor.” Approximately 30% or 20,722 households in Kootenai County are ALICE compared to approximately 9.5% living at the federal poverty threshold (depending on the year). Approximately 60% of the Kootenai County population is above the ALICE threshold. For the State of Idaho, the ALICE threshold is 32%, the poverty threshold is 10.8%, and 57% are above the ALICE threshold.^{xxiv}

Building Permits

Housing Deficit Created by the Great Recession

- The Great Recession caused a crater-like effect on *new housing construction* that lasted over a decade and the industry has still not fully recovered. This suggests that the current housing price spike is not simply a bubble, but also represents pent-up demand and a lagging supply. A housing bubble is possible, but it is not the only factor in the price increases.



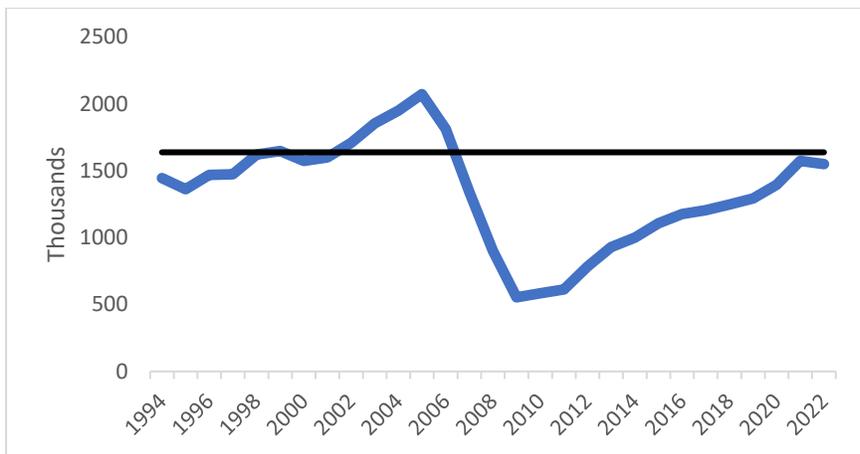
- U.S. housing starts were measured against a benchmark historic average (1994-2007) to measure a deficit or surplus of U.S. housing.^{xxv} The cumulative national housing deficit was 8,625,929 units from 2008-2022, as compared to the benchmark period. Other studies suggest a deficit between 2.3 million and 6.5 million homes using alternative benchmark averages for 2022 (Table 5 and Figure 8). Complicating factors make an exact estimate difficult to estimate.^{xxvi}

Table 5: U.S. Housing Starts 1994-2022 and Estimated Deficit

Year	Actual	Average (1994-2007)	Deficit
2008	900,000	1,638,095	(738,095)
2009	554,000	1,638,095	(1,084,095)
2010	585,500	1,638,095	(1,052,595)
2011	611,917	1,638,095	(1,026,179)
2012	783,750	1,638,095	(854,345)
2013	928,167	1,638,095	(709,929)
2014	1,000,250	1,638,095	(637,845)
2015	1,106,750	1,638,095	(531,345)
2016	1,177,083	1,638,095	(461,012)
2017	1,205,000	1,638,095	(433,095)
2018	1,247,333	1,638,095	(390,762)
2019	1,292,167	1,638,095	(345,929)
2020	1,396,583	1,638,095	(241,512)
2021	1,606,000	1,638,095	(32,095)
2022	1,551,000	1,638,095	(87,095)
Totals	15,945,500	24,571,429	(8,625,929)

U.S. Census / FRED and Authors' Calculations

Figure 8: U.S. Housing Starts 1994-2022 and Estimated Deficit



- The same methodology (and benchmark years) was applied to Idaho for estimating its housing deficits. The result identifies a cumulative deficit of 30,215 units by 2022, or about a two-year supply as a very conservative estimate.

Construction Lags and Housing Challenges

- The estimated Idaho housing unit deficit of 30,215 (by 2022) does not fully account for the rapid population growth and the extensive lags in housing construction and development. The actual shortage is likely even larger. Construction and planning lags between the start of planning to house completion can be three years or longer. From the time a building permit is issued for single family housing, it may take several months for construction to even begin. On average, once construction begins, it takes six months to complete a single-family dwelling and ten months for multi-family units.
- There can often be more than a year in Kootenai County from start to finish for housing construction. For developments requiring land annexation and zoning changes, the permitting and construction process can sometimes take multiple years to complete.

Kootenai County Housing Deficit

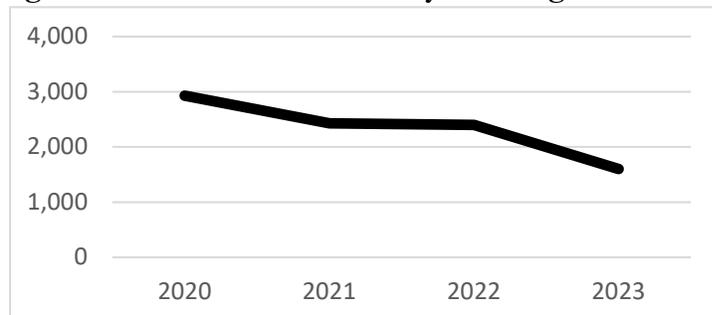
- There is an estimated (minimum) 4,938 housing unit deficit (2022) in Kootenai County which represents about a 2-year supply of needed housing in the county. This is calculated by employing the same methodology used for measuring the U.S. and Idaho deficits but with a 15% annual adjustment for second nonresident homes, a complicating factor in this assessment.
- As of 2022, (the most recent year) Kootenai County housing permits in 2020 were 2,929 units, 2,426 (2021), and 2,039 in 2022. It appears that 2023 is on track to be lower than the number of building permits issued in 2022 (Table 6 and Figure 9).^{xxvii}

Table 6: Updated Total Building Permits 2020-2022

City/Region*	2020	2021	2022
Hayden	228	204	78
Coeur d’Alene	495	582	537
Post Falls	1,364	835	568
Rathdrum	352	211	440
Other Cities & Rural	490	594	416
Total Kootenai	2,929	2,426	2,039

Census Bureau's Building Permits Survey. [Building Permits Survey \(census.gov\)](https://www.census.gov/building-permits).

Figure 9: Total Kootenai County Building Permits 2020-2023 (Projected)



- Table 7 reports housing permits from 2012 to 2022 for each major city in Kootenai County and for the rural county regions. Approximately 34% of all permits were issued by Post Falls, 27% by Coeur d’Alene, 20% in the rural regions, 10% in Rathdrum, 7% in Hayden, and 2% in other cities.

Table 7: Updated Building Permits by City – Kootenai County 2012 to 2022

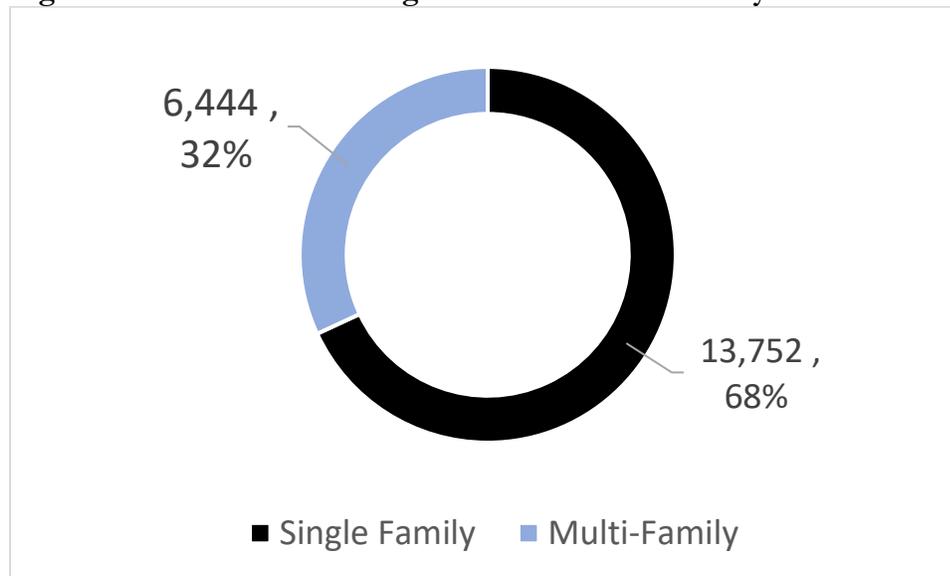
City	Single Family	Multi-Family	Total	%
Coeur d’Alene	2,905	2,486	5,391	27%
Post Falls	3,747	3,189	6,936	34%
Hayden	1,098	335	1,433	7%
Rural County	3,963	70	4,033	20%
Rathdrum	1,556	364	1,920	10%
Other Cities	483	-	483	2%
Total	13,752	6,444	20,196	100%

Census Bureau's Building Permits Survey. [Building Permits Survey \(census.gov\)](https://www.census.gov/building-permits).

Post Falls is the Primary Location of New Construction

- Figure 9 presents the cumulative building permits by year from 2012 to 2022 for Kootenai County reported by single family housing and multi-family housing. Single family units constituted about 68% of the total housing permits and multi-family were about 32%. Typically, the number of multi-family units under construction is more volatile and less predictable than single family units. Housing permits are shifting over time from Coeur d’Alene to Post Falls and Rathdrum.

Figure 9: Cumulative Building Permits Kootenai County 2012-2022



SOCDS Building Permits Database Census (Bureau's Building Permits Survey), and Authors' Calculations

Vacancy Rates

Regionally vacancy rates are low. The overall Kootenai County (3/15/2022) vacancy rate is 0.6%, broken down as follows in Table 8:^{xxviii}

Table 8: Vacancy Rate Kootenai County 2022

Overall Vacancy Rate	0.600%
Total Number of Apartment Units	3528
Vacancy Rate by Number of Bedrooms:	
Studio	0%
One-bedroom	0.8%
Two-bedroom	2%
Three or more	0.6%
Vacancy Rate by Geographic Area:	
Coeur d’Alene	0.20%
Post Falls	1.8%
\$ Rent/SQ Foot	\$1.56

Source: [Spokane Kootenai Real Estate Research Committee - The Real Estate Report \(skrerc.com\)](http://skrerc.com).

Term Rentals (i.e., Air B&B)

- The conversion of residences to short-term rentals (STRs) effectively reduces housing inventory. There are 228 legal permits for STRs in Coeur d’Alene and more than half are held by out-of-state owners. The number of vacation rental units advertised is estimated to be about 645, though only about 35% have permits.^{xxix} Extrapolating across the county, the total number of STRs could exceed 1,000 units.^{xxx} STRs can be controversial. They facilitate the tourism industry but reduce the housing stock available to residents. There are clear tradeoffs.
 - The city passed a Resolution approving an agreement with Granicus/Host Compliance, a company that provides monitoring services, and they currently note 765 short term rentals are being advertised within the City limits. The City currently has 652 licensed short-term rentals.^{xxxi}

Housing Supply Estimations and Forecasts

- The housing forecast for this study was conducted *adapting* some of the forecast data employed by KMPO.^{xxxii}
- Assuming the decade 2020-2030 has the KMPO growth rates, a total of 27,043 units will be needed in Kootenai County before 2030 (per weighted average of Kootenai County cities and rural county regions). This assumes the persons per dwelling will remain constant from the 2020 U.S. Census. Of those units, an estimated 23,043 new housing units will be needed in cities and another 4,295 will be needed for the rural regions of the county (Table 9).

Table 9: Updated (Predictive) *Minimum* Housing Units Needed by 2030

City/County	Population 2030	Total 2030 Units Needed	Actual 2020 Units	Net Over 2020 Needed
Cities	170,955	72,974	49,931	23,043
Rural Kootenai County	52,753	21,642	17,347	4,295
Total County	223,708	94,616	67,278	27,338

*Census data, KMPO Assumptions, and Authors' Calculations

- These calculations suggest that 2,045 new housing units per year (at a minimum) must become available to accommodate anticipated growth in Kootenai County from 2021 to 2030. Projecting population growth beyond 2030 to 2040, the annual number of new housing units that will be needed rises considerably. From 2020 to 2035, an estimated 2,833 new housing units per year will be needed, and from 2020 to 2040, an estimated 3,015 new housing units per year will be needed (Table 11).
- Table 10 presents the population and actual housing units as estimated by the U.S. Census for the years 1990, 2000, 2010 and 2020. The years 2030, 2035, and 2040 are population and housing projections from KMPO, and including an additional 7,000 units needed between 2020 and 2023 to help alleviate the current housing shortfall.
- The housing projections for the years 2030, 2035, and 2040 are compared against the base year 2020. From 2020 to 2030, the housing projection is for 10 years. From 2020 to 2035, the projection is 15 years, and from 2020 to 2040 is 20 years. The average units per year (Column 5) is calculated by dividing the net additional units in Column 4 by the respective number of years in each interval (10 years for the 2030 projection, 15 years for the 2035 projection, and 20 years for the 2040 projection).

Table 10: Updated Forecasts for Kootenai County Housing Supply

Year	Population	Units	Net New Units	Avg New Units/Year	Type
-1990	69,795	31,964	-	-	Actual
2000	108,685	46,607	14,643	1,464	Actual
2010	138,494	54,200	7,593	759	Actual
2020	171,362	67,278	13,078	1,308	Actual
2030	223,708	94,616	27,338	2,734	Predicted
2035	252,180	101,663	7,047	2,292	Predicted
2040	282,618	113,457	11,794	2,309	Predicted

Source: KMPO Population Forecasts and Authors' Calculations

- The number of new housing units that were added to Kootenai County housing stock fell from 14,643 units during 1990-2000 to 7,593 units added 2000 to 2010 (Column 4). This reduction contributed to the current housing deficit in Kootenai County caused by the subprime mortgage crisis and 2007-2009 recession. Approximately 13,078 units were added from 2010 to 2020 as the housing market slowly recovered^{.xxxiii}

- **Given the analysis above, new housing units will need to increase by 109% from 1,308 per year from 2010 to 2020 to 2,734 per year from 2021 to 2030.** To meet the region's projected population growth during the next 20 years, approximately 2,000 and 3,000 new housing units will be needed annually. Only since 2018-2022 (in the last decade) has Kootenai County met or exceeded 2,000 annual building permits. These are conservative estimates of new housing units needed and do not include other factors such as second home purchases by nonresidents, term rentals, or other changing demographics. The total number of building permits in Kootenai County was 2039 in 2022, down from 2,929 in 2020. If Kootenai County housing starts to exceed 2,000 units annually through 2040, the housing crisis might resolve itself or at least stabilize (depending on a variety of factors).

Housing Units Needed by Average Household Income Per Quintile

Table 11 presents the number of needed housing units in Kootenai County from 2020 to 2030. The mortgage model employed in this study was utilized to measure the maximum affordable house at *6% interest*, which is the likely mortgage rate for the foreseeable future. The current mortgage rate (6.96%) is expected to increase to over 7% by late summer /early fall 2023 and then decline to around 6% in late winter.

- Column One: Quintiles (i.e., 20% population groupings)
- Column Two: Mean household income by quintiles (i.e., 20% population groupings)
- Column Three: A total of 27,338 units are needed by 2030. We assume that the needed units are proportional, and 5,468 units are needed for each quintile (20%) of the population assuming household size is constant across the population.
- Column Four: Proportion of renters for each quintile (%)
- Column Five: Number of renters for each quintile.
- Column Six: Proportion of homeowners per quintile (%)
- Column Seven: Number of homeowners per quintile.
- Column Eight: Maximum affordable monthly payment (rent or own) at 30% of mean household income per quintile
- Column Nine: Maximum affordable home price per quintile at 30% mean income per quintile
- Column Ten: Maximum affordable home price per quintile at 50% mean in

Table 11: Forecasts for Kootenai County Housing Supply 2020 to 2030

#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
HH Quintiles 20%	Mean HH Income	Forecast Needed Units	Rent %	# New Rental Units	% Own	# New Homes	Max Affordable Monthly Payment 30%	Maximum Affordable House 30% Income Threshold	Maximum Affordable House at 50% Income Threshold
Lowest	\$18,258	5,468	100%	5,468	0%	-	\$456	\$56,500	\$ 101,500
Second*	\$42,337	5,468	35%	1,914	65%	3,554	\$1,058	\$146,000	\$ 251,000
Third*	\$65,163	5,468	15%	820	85%	4,647	\$1,629	\$231,000	\$ 393,000
Fourth	\$97,566	5,468	10%	547	90%	4,921	\$2,439	\$351,000	\$ 594,000
Highest	\$195,117	5,468	0%	-	100%	5,468	\$4,878	\$714,000	\$ 1,199,000
Total		27,338		8,748		18,590			

* *Creative alternatives such as land trust homes and other housing solutions that lower land prices and construction costs will bring homebuyers in these income quintiles into the housing market.*

There is an estimated 27,338 housing units needed from 2020 to 2030 from Table 11. The core of this estimate builds off the KMPO housing forecast with an additional 7,000 units added to help alleviate the current housing shortfall. Of these needed new units, about 32% (8,748) are estimated to be apartments and 68% (18,590) will be homes.^{xxxvii} The lowest quintile (i.e., 20% of the population) is estimated to be 100% renters. The proportion of renters (apartments) decreases as mean income increases by quintiles (i.e., 100%, 35%, 20%, 10%, 0%). Alternatively, home ownership increases as mean income increases.

The number of new homes needed by quintile between 2020 and 2023 is reported in Column 7, ranging from 1,094 for the lowest quintile and 5,194 for the highest quintile. Column 8 presents the maximum affordable home or rent payment by quintile based on a constraint of no more than 30% of your income going towards housing. It ranges from \$456 per month in the first quintile to \$4,878 in the top quintile.

Today, only the top quintile (20% of the households) can afford a medium-priced home in Kootenai County (\$525,000) at 30% income threshold towards monthly housing costs. At the 50% income threshold, it is theoretically possible for households in the fourth (i.e., second highest) quintile to purchase if nearly ½ of the monthly income is going towards housing.

Table 12 illustrates the point. All the occupations highlighted in blue are priced out of the Kootenai County housing market based on median annual income. When real estate brokers, loan officers, and chief executives cannot afford to purchase a medium-priced home, it is a clear indication of the magnitude of the housing crisis in the community.

Table 12: 2022 Median Annual Income by Occupation for Kootenai County

Lowest Quintile		\$18,258	Second Quintile		\$42,337
1	Tailors, Dressmakers	\$15,980	1	Sheet Metal Workers	\$43,321
2	Manicurists and Pedicurists	\$18,350	2	Computer Tool Operators	\$42,636
3	Product Promoters	\$19,598	3	Machinists	\$42,758
4	Bartenders	\$20,809	4	Chefs and Head Cooks	\$42,762
5	Childcare Workers	\$21,262	5	Supervisors of Landscaping	\$42,772
6	Cooks, Fast Food	\$21,290	6	Mental Health Social Workers	\$43,133
Third Quintile		\$65,163	Fourth Quintile		\$97,566
1	Respiratory Therapists	\$66,318	1	Sales Managers	\$99,840
2	Loan Officers	\$62,619	2	Credit Analysts	\$93,392
3	Real Estate Brokers	\$62,824	3	Power Plant Operators	\$95,081
4	Healthcare Social Workers	\$65,278	4	Physical Therapists	\$95,773
5	Operations Managers	\$65,255	5	Chief Executives	\$96,593
6	Secondary School Teachers	\$63,467	6	Software Developers	\$96,730
Highest Quintile		\$195,117	Source: Lightcast		
1	Physician Assistants	\$128,908			
2	Pharmacists	\$138,727			
3	Dentists, General	\$152,163			
4	Financial Specialists	\$152,408			
5	Judges	\$179,812			
6	Airline Pilots	\$188,992			

Demand Factors - Market Driven - Almost Entirely by Independent Market Forces

- Cities and counties have little control over the migration of people relocating to their communities.
- Municipalities have very little ability to regulate or influence the demand for housing or any other community services.
- For Coeur d’Alene, nonresident home buyers will likely have the resources to outbid residents if housing supply is constrained.
- Wealthy individuals are more likely to move than their less affluent counterparts.

Supply Factors - Heavily Influenced by Local Governments and Regulations

- City and county regulations have influence in the market only on the supply side.
- The U.S. has a robust and vibrant competitive construction and real estate industry (including Kootenai County). In the absence of impediments, the industry will provide adequate and affordable housing for the majority of households.
- Supply side constraints take the form of rent controls, green zones, building codes, minimum acreage requirements for subdividing rural land, zoning restrictions and general policies to prevent urban sprawl.

Housing Demand Increase + Housing Supply Decrease = Sharp Price Increases

- In Kootenai County, housing demand has dramatically increased and driven-up price. On the supply side, *quantity supplied* increased in response to the increase in prices and builders constructed many more housing units. However, the *supply curve* of Kootenai County housing has actually decreased due to increased construction and regulatory constraints. Both the increase in demand without a commensurate increase in supply have sharply increased housing prices.^{xxxv}

R1 Residential Zoning Reduces Housing Density and Increases Land Consumption

- Across the country, R1-Residential zoning has become a focus among community leaders. It is only legal to build single unit detached housing on 75% of the residential land in the U.S. This restriction is higher for some cities (Table 13). This is consistent with Idaho and its cities. The historic R1 zoning policies have resulted in a low-density housing pattern that increased both urban land use and housing prices.^{xxxvi}

Table 13: Percentage of Housing in R1 Residential Zoning

Percent R1	City
94%	San Jose, California
81%	Seattle
79%	Chicago
77%	Portland, Oregon
75%	Los Angeles, California

Source: New York Times (6/18/19)

Zoning and Building Regulations: A Trade-off of Benefits Versus Costs

- The well-known benefits of zoning include building codes to promote safety, provide adequate utility and transportation infrastructure, segment industrial and large commercial enterprises from residential neighborhoods, and other benefits.
- The costs of zoning are less well known, particularly excessive zoning.^{xxxvii} The literature suggests that the greater the zoning-related land use restrictions, the higher the housing prices and greater the volatility of prices both upward during economic expansions and downward during recessions.
- The trade-offs in development: Sprawl (i.e., building on more land) versus density. The absence of either escalates housing prices. There is no “magic bullet.” If you do not provide adequate housing, house prices will increase sharply altering the character of your community.
- The direct regulatory burden of building a house in terms of permitting fees is 2.4% of direct costs in Coeur d’Alene and it ranges in the various Kootenai County communities from the approximately \$11,491 in Coeur d’Alene to about \$19,191 in Rathdrum. The National

Association of Home Builders estimates that the cumulative regulatory burden per house (at all levels of government) in Kootenai County is \$93,870 or about 19% of the total cost of a median priced home. This includes construction delays, zoning regulations, and all other impediments and restrictions^{xxxix}

Houston Texas Versus San Jose California: A Tale of Two Cities' Zoning Regulations

- A tale of two cities: Houston and San Jose. The population for the Houston MSA grew by 50% (4.8 million to 7.3 million people) over the past two decades. During that same time the population in the San Jose MSA only grew 13% (1.7 million to 2 million people). From 2001 to 2021 the price of a home in the Houston MSA rose only \$52,011 in real terms (30% price growth). In the San Jose MSA the real price of a home increased \$453,774 (59% price growth). Even though Houston's population was growing nearly four times faster than San Jose's, San Jose's typical home prices were growing twice as fast as Houston's.
- One key difference between the two cities is the degree of zoning regulations. Houston^{xl} has very low levels of housing regulations where San Jose^{xli} has a relatively high level of zoning and building restrictions.
- According to Zillow the typical house price in Houston was \$261,794 (August 2023)^{xlii} and the typical price of a home in San Jose was \$1,298,233 (August 2023).^{xliii}

Community Alternatives: Mixed Residential: Increasing Housing Density

- Reducing housing constraints does not necessarily change the fundamental character of the region. One solution is changing zoning laws to allow for higher density residential housing and relaxing R1 zoning restrictions in some neighborhoods. There are many advantages for creative strategies to increasing density.^{xliv} They include:
 - Esthetically elegant and beautiful neighborhoods (contrary to some public perception)
 - Reducing traffic congestion
 - Reducing overall housing costs
 - Increasing employment opportunities for the local population by making housing affordable
 - Reducing inequality
 - Promoting environmental sustainability
 - Preserving open spaces and farmland
 - Promotion of community cohesiveness
 - Other benefits

Housing Constraints Impact on the Regional Economy

Adverse Community Impacts

- Housing constraints may *appear* to boost the economy through higher house equities for existing homeowners. They can, however, transform the economy and local culture in ways not anticipated. These are several possible adverse consequences:
 - Local firms may curtail expansion plans because they cannot find workers who can afford housing, reducing employment opportunities for residents.

- New firms who would have located in Kootenai County may choose to move to other locations, further reducing employment opportunities for the local population.
- Long-term, nonresidents may crowd out the working resident populations. Nonresidents typically have the resources to outbid residents for available housing. Housing constraints ultimately hurt longtime residents more than nonresidents or new arrivals. We need opportunities that can expand generations of residents to become deeply rooted and involved in our communities.
- The character of the community will be changed from a community that represents all walks of life to a community where only the wealthy can afford to live.
- Over time, the community will be transformed in ways unimagined to the previous generations who enacted housing restrictions.
- While these factors translate to significant losses to the economy, it should also be noted this is both a national and a local problem. Some factors such as zoning laws and regulations are under the auspices of local jurisdictions. Other factors are beyond the control of local policymakers including supply chain challenges, increasing costs of construction, the lack of construction workers, and pandemic demographic shifts.

Economic Impacts: The Housing Constraint is Reducing Employment and Output in Kootenai County

- As part of this study, we conducted a workforce analysis using labor market data provided by Lightcast (formerly Emsi).^{xlv} The lost productivity by firms unable to find employees due to the housing constraints in Kootenai County were measured. Specifically, we focused on the long-term vacant positions created by the lack of affordable housing.
- The workforce analysis confirmed both individual feedback from businesses and from the employer surveys that were conducted as part of this study. Approximately 44% of executives/managers responded that they had difficulty in filling positions due to the housing market and the resulting salary price point needed to hire the position.
 - While it's been difficult, some employers have found success in recruiting short-term by increasing wages and/or benefits including childcare subsidy benefits.
- The workforce analysis found an updated 2022 direct job loss of 3,020 employees. This is a conservative metric as we attributed only 25% of the persistent unfilled positions in the county to the housing market (and as such is a lower-bound estimate). The economic impacts were calculated with an IMPLAN input-output model of the economy. The results are reported in Table 14. The lack of affordable housing has resulted in: 1) a loss of 5,340 jobs in the local economy; 2) a reduction of \$535.6 million in gross regional product; and 3) a loss of \$435.4 million in local payroll.
- In addition to the decline of economic activity, the housing constraint is reducing tax revenues including a loss of \$5.9 million in property taxes, \$9.7 million reduction in state sales and excise taxes, and \$12.4 million in state income taxes. Total lost taxes are \$28.0 million including the multiplier effects which could have been supporting critical infrastructure, improving transportation, expanding education and/or reducing the levy rate.

Table 14: Updated 2022 Economic Impacts of Lack of Housing Availability

	Employment	Sales	GRP	Payroll
Economic Impacts	-5,340	-\$833,460,164	-\$535,560,949	-\$435,410,400
	Property	Sales/Excise	Income	Total
Fiscal Impacts (Taxes)	-\$5,938,531	-\$9,668,578	-\$12,376,821	-\$27,983,930

Source: IMPLAN and Author's Calculations

Housing Constraints and the Construction Industry

- The construction industry ranks 5th in Kootenai County in employment with 8,313 workers in 2022 and an average annual salary package of \$64,801. Industry job growth has increased 98% from 2012 to 2022. Total gross payroll, benefits, and income were \$538.7 million in 2022. Housing constraints could cripple this industry and reduce an important local source of jobs and income.

Surveys of Kootenai County Stakeholders

- The CDA EDC sponsored a series of surveys and interviews to collect primary data on the challenges facing residents, employers, and other stakeholders in acquiring and maintaining affordable housing. *Two survey samples were collected: 1) July 2021 through September 2021, and 2) April – May 2023.*
 - Focus groups and individual meetings: Over 50 regional stakeholders were interviewed.
 - Three different surveys were sent to respective stakeholders and organizations within Kootenai County: employers, employees, and realtors. The Employee Survey was sent out to the employees of several regional businesses through their respective human resource departments. The Employer Survey was sent out to the managers of a sampling of prominent employers in Kootenai County. The Realtor Survey (only 2021) was sent out to all active realtors in Kootenai County.
- 2021: In total, the CDA EDC received 2,697 responses from all the surveys.
- 2023: In total, the CDA EDC received 2,260 responses from all the surveys.

Survey Summary Findings

Employee Survey

- 2021: Approximately 71% of respondents owned their own home while 28% rented. This is similar to the overall population of Kootenai where 69% own their own homes and 31% rent.
- 2023: 71% own their own homes and 29% rent. Similar proportions across surveys.
- 2021: Approximately 60% have lived in Kootenai for over 10 years, 16% for 5-10 years, 14% for 2-4 years, and 10% for a year or less. Interestingly, of those who have lived in Kootenai County for 10+ years, only 47% own homes. About 40% of the sample have lived in Kootenai County for less than 10 years.
- 2023: Approximately 61% have lived in Kootenai for over 10 years, 16% for 5-10 years, 14% for 2-4 years, and 9% for a year or less. About 39% of the sample have lived in Kootenai County less than 10 years.

- 2021: The majority of renters (68%) have seen an increase in rent within the last six months with an average increase of about 29%. The average new rent was \$1,443 a month, up from \$1,122 six months ago, according to the survey.
- 2023: The majority of renters (61%) have seen an increase in rent within the last six months with an average increase of about 29%. The average new rent was \$1,704 a month, up from \$1,317 six months ago, according to the survey.
- *Leading Indicator for overall housing affordability*
 - 2021: Approximately 54% of renters spend 30%-50% of gross monthly household income to pay their rent while 21% pay more than 50% of their income for housing. Only 24% of the renters spend 30% or less of their income on housing.
 - 2023: Approximately 43% of homeowners or renters spend 30%-50% of gross monthly household income to pay their rent/mortgage payment while 11% pay more than 50% of their income for housing. Only 46% of the homeowners/renters spend 30% or less of their income on housing.
- Over time, the number of financially stressed homeowners will increase as normal housing turnover forces more homeowners into higher priced homes.

Realtors Survey (2021 - 105 responses)

- Approximately 46% of homebuyers are local. The realtors (on average) believe that only 22% of all home sales are coming from residents wanting to change homes. Another 12% are new residents wanting to purchase a home. Finally, telecommuters compose about 12% of the homebuyers.
- Approximately 54% of homebuyers are nonlocal: Nonresident purchases include retirees from outside the region (25%), second home buyers (15%), and investors (14%) for rental properties and resales.
- Multi-family sales: About 70% of multifamily housing sales are to nonlocal investors.

Employer Surveys

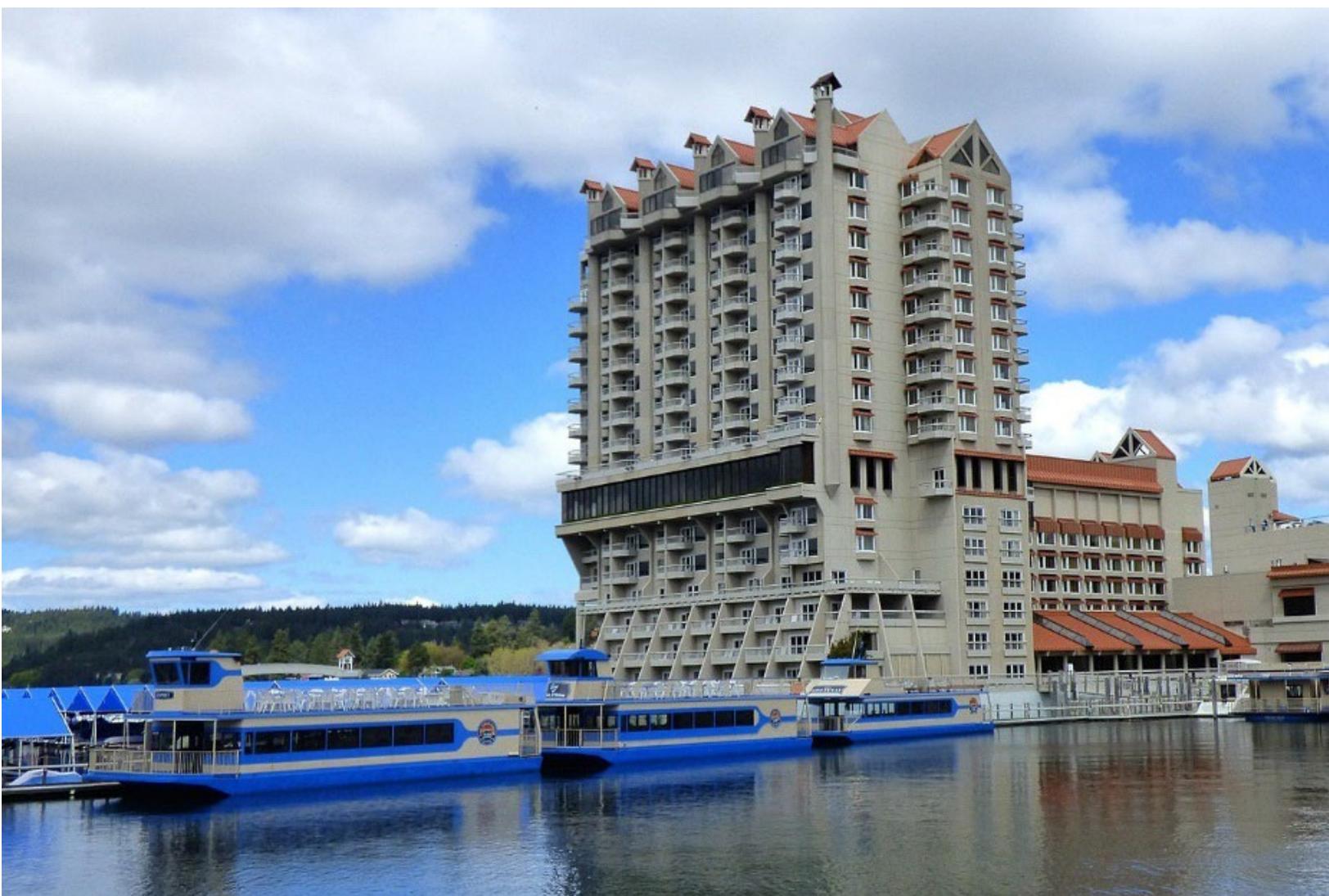
- 2021 (57 Respondents): Approximately 75% of the firms had difficulty in finding employees and face a labor shortage. The most important reasons cited were the inability to find affordable housing and salary price points (Table 14).
- 2023: (14 Respondents): Approximately 71% of the firms had difficulty in finding employees and face a labor shortage. The most important reasons cited were the inability to find affordable housing and salary price points (Table 14).

Table 14: Reasons of Hiring Difficulty (2021)

Reason	%
Inability to find affordable housing and salary	44%
Lack of specific skill/technical expertise	32%
Lack of interest/applications	12%
Career changes	4%
Unemployment benefits	3%
COVID related	3%
Daycare	1%
Total Responses Given	100%

Conclusions

Kootenai County is one of the fastest growing counties in Idaho and Idaho is at the top of the list for fastest growing states in the U.S. Not coincidentally, Kootenai County is ranked nationally as having the fastest increase in housing prices and rents within the last four years. The county is at a crossroads with regards to long-run character of the community. Failure to provide adequate and affordable housing will fundamentally reshape the community in ways unintended by community leaders and community stakeholders.



Sources

- Ashworth, Robert. *Coeur d' Alene, Idaho*, Wikipedia, 6 Mar. 2003, [https://en.wikipedia.org/wiki/Coeur_d%27Alene,_Idaho#/media/File:Couer_d'_Alene_\(10490631594\).jpg](https://en.wikipedia.org/wiki/Coeur_d%27Alene,_Idaho#/media/File:Couer_d'_Alene_(10490631594).jpg).
- “Mixed-Use Development.” *Planning for Complete Communities in Delaware*, University of Delaware, <https://www.completeccommunitiesde.org/planning/landuse/mixed-use-development/>.
- Buhn, Jacqueline, et al. “Action Steps to Increase Spokane's Housing Supply.” *Spokane Realtor*, The Counselors of Real Estate, Dec. 2021, <https://www.spokanerealtor.com/wp-content/uploads/2021/12/CRE-Consulting-Corps-Spokane-Housing-Recommendations.pdf>.
- Manley, Jon. *Coeur d'Alene Condo Riverstone Village*. Accessed 16 Nov. 2021.
- “New Vintage 2021 Population Estimates Available for the Nation, States and Puerto Rico.” *Census.gov*, United States Census Bureau, 21 Dec. 2021, <https://www.census.gov/newsroom/press-releases/2021/2021-population-estimates.html>.
- “Federal Reserve Economic Data.” *Economic Research Federal Reserve Bank of St. Louis*, Federal Reserve Bank of St. Louis, <https://fred.stlouisfed.org/>.
- Hryniw , Natalia. “Zillow Home Value Index Methodology, 2019 Revision: Getting under the Hood.” *Zillow Research*, 18 Dec. 2019, <https://www.zillow.com/research/zhvi-methodology-2019-deep-26226/>.
- “Intermountain Multiple Listing Service, Inc.” *Intermountain MLS Static Reports*, 2021, <http://publicstats.intermountainmls.com/static/staticreports.aspx>.
- “Income Limits.” *HUD USER*, Office of Policy Development and Research, 2021, <https://www.huduser.gov/portal/datasets/il.html#2021>.
- “Data & Rent Estimates.” *Apartment List Blog - Data & Rent Estimates*, <https://www.apartmentlist.com/research/category/data-rent-estimates>.
- “Fair Market Rents (40th Percentile Rents).” *HUD USER*, Office of Policy Development, 2021, <https://www.huduser.gov/portal/datasets/fmr.html#history>.
- “Construction Price Indexes.” *Census.gov*, US Census Bureau , 16 Sept. 2010, <https://www.census.gov/construction/cpi/>.
- “Consumer Prices up 6.8 Percent for Year Ended November 2021.” *TED: The Economics Daily*, U.S. Bureau of Labor Statistics, 15 Dec. 2021, <https://www.bls.gov/opub/ted/2021/consumer-prices-up-6-8-percent-for-year-ended-november-2021.htm>.

Full Report

- “30-Year Fixed Rate Mortgage Average in the United States.” *FRED Economic Data*, 23 Dec. 2021, <https://fred.stlouisfed.org/series/MORTGAGE30US#0>.
- Explore Census Data*, United States Census Bureau, <https://data.census.gov/cedsci/>.
- “Poverty Guidelines.” *ASPE*, Office of the Assistant Secretary for Planning and Evaluation, <https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines>.
- “Download Data.” *Economic Research Service*, U.S. Department of Agriculture, <https://www.ers.usda.gov/data-products/county-level-data-sets/download-data/>.
- “Research Center Idaho.” *United for Alice*, ALICE, <https://www.unitedforalice.org/idaho>.
- “New Privately-Owned Housing Units Started: Total Units.” *FRED Economic Data*, FRED, 16 Dec. 2021, <https://fred.stlouisfed.org/series/HOUST>.
- “Housing Supply: A Growing Deficit .” *Freddie Mac*, Freddie Mac, May 2021, http://www.freddiemac.com/fmac-resources/research/pdf/202105-Note-Housing_Supply-08.pdf.
- “Building Permits Survey.” *Census.gov*, United States Census, 23 Aug. 2011, <https://www.census.gov/construction/bps/>.
- Hardy, Madison. “Vrbo a Four-Letter Word to Neighbors.” *CDA Press*, Coeur D'Alene Press, 27 June 2021, <https://cdapress.com/news/2021/jun/27/nightmare-neighbors/>.
- “Kootenai MPO.” *KMPO*, Kootenai Metropolitan Planning Organization, <https://www.kmpo.net/about-us/>.
- Badger, Emily, and Quoctrung Bui. “Cities Start to Question an American Ideal: A House with a Yard on Every Lot.” *The New York Times*, The New York Times, 18 June 2019, <https://www.nytimes.com/interactive/2019/06/18/upshot/cities-across-america-question-single-family-zoning.html?mtrref=undefined&gwh=91A293CD2999A7F57513AC67969E3DEB&gwt=pay&assetType=PAYWALL>.
- Gyourko, Joseph, and Raven Molloy. “Regulation and Housing Supply.” *NBER*, National Bureau of Economic Research, 6 Oct. 2014, <https://www.nber.org/papers/w20536>.
- Schuetz, Jenny. “Is Zoning a Useful Tool or a Regulatory Barrier?” *Brookings*, Brookings, 31 Oct. 2019, <https://www.brookings.edu/research/is-zoning-a-useful-tool-or-a-regulatory-barrier/>.
- “Development Regulations.” *Planning & Development*, City of Houston Texas, <https://www.houstontx.gov/planning/DevelopRegs/>.

Angst, Maggie. "Debate over Fate of San Jose's Single-Family Zoning Rules Heats Up." *The Mercury News*, The Mercury News, 5 Aug. 2021, <https://www.mercurynews.com/2021/08/04/debate-over-preserving-san-joses-single-family-zoning-rules-heats-up/>.

"Houston TX Home Prices & Home Values." *Zillow*, Zillow, <https://www.zillow.com/houston-tx/home-values/>.

"San Jose CA Home Prices & Home Values." *Zillow*, Zillow, <https://www.zillow.com/san-jose-ca/home-values/>.

Adams, Tyler. *Mixed-Use Zoning*. Edited by Jonathan Rosenbloom and Christopher Duerksen, Sustainable Development Code, <https://sustainablecitycode.org/brief/mixed-use-zoning/>.

Emsi, Emsi, 7 July 2021, <https://www.economicmodeling.com/>.

Goebel, Greg. *Coeur D'Alene Resort and Marina*. Wikipedia, 11 May 2014, [https://en.wikipedia.org/wiki/Coeur_d%27Alene,_Idaho#/media/File:Yicda_1b_\(20669118961\).jpg](https://en.wikipedia.org/wiki/Coeur_d%27Alene,_Idaho#/media/File:Yicda_1b_(20669118961).jpg).

Notes

- ⁱ The results and opinions in the study are those of the authors alone and do not reflect on any associated institutions. The author's bear no liability in application or use of the study in any financial or policy decision making.
- ⁱⁱ LibertyLikeAnne, *Mist on the Lake Coeur D'Alene in Idaho*. Flickr, [https:// Mist on Lake Coeur d'Alene, ID. | Mist on Lake Coeur d'Alene... | Flickr](https://www.flickr.com/photos/libertylikeanne/1491111111/).
- ⁱⁱⁱ "Mixed-Use Development." *Planning for Complete Communities in Delaware*, University of Delaware, <https://www.completecommunitiesde.org/planning/landuse/mixed-use-development/>.
- ^{iv} "New Vintage 2022 Population Estimates Available for the Nation, States and Puerto Rico." *Census.gov*, United States Census Bureau, 22 August 2023, <https://www.census.gov/newsroom/press-releases/2021/2021-population-estimates.html>.
- ^v "New Vintage 2022 Population Estimates Available for the Nation, States and Puerto Rico." *Census.gov*, United States Census Bureau, 22 August 2023, <https://www.census.gov/newsroom/press-releases/2021/2021-population-estimates.html>.
- ^{vi} S&P/Case-Shiller U.S. National Home Price Index, Index Jan 2000=100, Monthly, Not Seasonally Adjusted.
- "Federal Reserve Economic Data." *Economic Research Federal Reserve Bank of St. Louis*, Federal Reserve Bank of St. Louis <https://fred.stlouisfed.org/>.
- ^{vii} Median Sales Price of Houses Sold for the United States, Dollars, Quarterly, Not Seasonally Adjusted.
- "Federal Reserve Economic Data." *Economic Research Federal Reserve Bank of St. Louis*, Federal Reserve Bank of St. Louis, <https://fred.stlouisfed.org/>.
- ^{viii} Zillow has an algorithm that measures a "typical" home price instead of an average or median price. For simplicity we will refer to these prices as an "average".
- Hryniw, Natalia. "Zillow Home Value Index Methodology, 2019 Revision: Getting under the Hood." *Zillow Research*, 18 Dec. 2019, <https://www.zillow.com/research/zhvi-methodology-2019-deep-26226/>.
- ^{ix} [House Price Index Datasets | Federal Housing Finance Agency \(fhfa.gov\)](https://www.fhfa.gov/house-price-index/datasets)
- "Intermountain Multiple Listing Service, Inc." *Intermountain MLS Static Reports*, 2023, <http://publicstats.intermountainmls.com/static/staticreports.aspx>. Coeur d'Alene/Kootenai County MLS. Ali Taylor Ali@cdarealtors.com.
- ^x These medians and averages are measured from January-September 2016 to January -September 2021.
- ^{xi} Kootenai County Realtors. [Kootenai County, ID | realtor.com®](https://www.kootenai.com/)
- ^{xii} Windermere CDA Realty.
- ^{xiii} This estimate is extrapolated from the U.S. Census, but there is variation depending on the source and metric. The U.S. Census Bureau (1 Year ACS) for 2022 is \$67,593. For the 2021 5-year ACS estimate is \$68,403.
- ^{xiv} Apartment List Blog. [Apartment List Blog - Data & Rent Estimates](https://www.apartmentlist.com/blog/data-rent-estimates). Also see: HUD Fair Market Rents. (PD&R *Fair Market Rents (40th Percentile Rents)*).
- ^{xv} U.S. Census. Price Indexes of New Single-Family Houses Sold Including Lot Value. [Construction Price Indexes \(census.gov\)](https://www.census.gov/hhes/housing/price-indexes/). Accessed 8/23.
- ^{xvi} Consumer Price Index (CPI). Bureau of Labor Statistics. Accessed through FRED. [Consumer Price Index for All Urban Consumers: All Items in U.S. City Average \(CPIAUCSL\) | FRED | St. Louis Fed \(stlouisfed.org\)](https://fred.stlouisfed.org/series/CPIAUCSL).
- ^{xvii} Data obtained Interviews from local builders and realtors.

- ^{xviii} “30-Year Fixed Rate Mortgage Average in the United States.” *FRED Economic Data*, 23 August 2023, <https://fred.stlouisfed.org/series/MORTGAGE30US#0>. .
- ^{xix} Household Distribution. Authors estimates and 2021 ACS 1-Year Estimates Subject Tables. 2021 ACS 1-Year Estimates Subject Tables. *Explore Census Data*, United States Census Bureau, <https://data.census.gov/cedsci/>. Accessed 01 Aug. 2023.
- ^{xx} Holding household income constant at \$64,764 for both time periods.
- ^{xxi} Buhn, Jacqueline, et al. “Action Steps to Increase Spokane's Housing Supply.” *Spokane Realtor*, The Counselors of Real Estate, Dec. 2021, <https://www.spokanerealtor.com/wp-content/uploads/2021/12/CRE-Consulting-Corps-Spokane-Housing-Recommendations.pdf>.
- ^{xxii} “Poverty Guidelines.” *ASPE*, Office of the Assistant Secretary for Planning and Evaluation, <https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines>.
- ^{xxiii} “Download Data.” *Economic Research Service*, U.S. Department of Agriculture, <https://www.ers.usda.gov/data-products/county-level-data-sets/download-data/>. Accessed 01 Aug. 2023.
- ^{xxiv} “Research Center Idaho.” *Unitedforalice*, ALICE, <https://www.unitedforalice.org/idaho>. Note: the poverty rates used in ALICE differed slightly from the U.S. Census estimates reported in the ESA above.
- ^{xxv} “New Privately-Owned Housing Units Started: Total Units.” *FRED Economic Data*, FRED, 16 July 2023, <https://fred.stlouisfed.org/series/HOUST>.
- ^{xxvi} “The US housing market is short 6.5 million homes.” [The US housing market is short 6.5 million homes | CNN Business](https://www.cnn.com/2023/03/17/economy/housing-shortage/index.html). 17 March 2023.
See also: “Housing Supply: A Growing Deficit .” *Freddie Mac*, Freddie Mac, May 2021, http://www.freddiemac.com/fmac-resources/research/pdf/202105-Note-Housing_Supply-08.pdf. Middle range: Market Update July 2023, Windermere CDA Realty.
- ^{xxvii} “Building Permits Survey.” *Census.gov*, United States Census, 23 July. 2023, <https://www.census.gov/construction/bps/>.
- ^{xxviii} Spokane-Kootenai County Real Estate Report Fall 2022. [Spokane Kootenai Real Estate Research Committee - The Real Estate Report \(skrerc.com\)](https://www.skrerc.com/reports/spokane-kootenai-county-real-estate-report-fall-2022).
- ^{xxix} Communications with the City of Coeur d’Alene. Renata McLeod, Municipal Services Director.
- ^{xxx} Hardy, Madison. “Vrbo a Four-Letter Word to Neighbors.” *CDA Press*, Coeur D’Alene Press, 27 June 2021, <https://cdapress.com/news/2021/jun/27/nightmare-neighbors/>. .
- ^{xxxi} KREM2, Coeur d’Alene cracks down on illegal short-term rentals, [Coeur d’Alene cracks down on illegal short-term rentals | Boomtown | krem.com](https://www.krem.com/news/coeur-d-alene-cracks-down-on-illegal-short-term-rentals/). 18 Nov. 2022
- ^{xxxii} “Kootenai MPO.” *KMPO*, Kootenai Metropolitan Planning Organization, <https://www.kmpo.net/about-us/>. Accessed 01 Aug. 2023.
- ^{xxxiii} These are net additions to the housing stock as measured by the U.S. Census (not building permits). The number of actual units added to the housing stock (measured by the U.S. Census) and building permits issued are different metrics that must be evaluated carefully. The biggest difference between the two is the lag effect between the issuing of a building permit and the date the unit is added to the housing stock, which can be lengthy. Other differences include errors in measurement by the U.S. Census on both metrics, and some issued housing permits may not actually get built.
- ^{xxxiv} The apartment component in the forecast is slightly higher than the current mix reported in the census of 74% homes and 26% renters. The proportion of renters is likely to increase in the future.

- ^{xxxv} An increase in quantity supplied by builders is a result of price increases. The decrease in supply (i.e., supply shifting left) is a result of increased input costs from delays and supply chain disruptions. This is a familiar topic in economics courses.
- ^{xxxvi} Badger, Emily, and Quoc Trung Bui. “Cities Start to Question an American Ideal: A House with a Yard on Every Lot.” *The New York Times*, The New York Times, 18 June 2019, <https://www.nytimes.com/interactive/2019/06/18/upshot/cities-across-america-question-single-family-zoning.html?mtrref=undefined&gwh=91A293CD2999A7F57513AC67969E3DEB&gwt=pay&assetType=PAYWALL>.
- ^{xxxvii} Gyourko, Joseph, and Raven Molloy. “Regulation and Housing Supply.” *NBER*, National Bureau of Economic Research, 6 Oct. 2014, <https://www.nber.org/papers/w20536>.
- ^{xxxviii} Schuetz, Jenny. “Is Zoning a Useful Tool or a Regulatory Barrier?” *Brookings*, Brookings, 31 Oct. 2019, <https://www.brookings.edu/research/is-zoning-a-useful-tool-or-a-regulatory-barrier/>.
- ^{xxxix} Logan, David., Economic Impact of Homebuilding, National Association of Home Builders, 2021.
- ^{xl} “Development Regulations.” *Planning & Development*, City of Houston Texas, <https://www.houstontx.gov/planning/DevelopRegs/>.
- ^{xli} Angst, Maggie. “Debate over Fate of San Jose's Single-Family Zoning Rules Heats Up.” *The Mercury News*, The Mercury News, 5 Aug. 2021, <https://www.mercurynews.com/2021/08/04/debate-over-preserving-san-joses-single-family-zoning-rules-heats-up/>.
- ^{xlii} “Houston TX Home Prices & Home Values.” *Zillow*, Zillow, <https://www.zillow.com/houston-tx/home-values/>.
- ^{xliii} “San Jose CA Home Prices & Home Values.” *Zillow*, Zillow, <https://www.zillow.com/san-jose-ca/home-values/>.
- ^{xliv} Adams, Tyler. *Mixed-Use Zoning*. Edited by Jonathan Rosenbloom and Christopher Duerksen, Sustainable Development Code, <https://sustainablecitycode.org/brief/mixed-use-zoning/>.
- ^{xlv} *Lightcast (Formerly Emsi)*, 7 July 2023, [Lightcast - A global leader in labor market analytics](#).