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Colorado Springs Housing Affordability Report

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ABOUT THE AUTHOR

Steven L. Byers, Ph.D. is the senior economist with the Common Sense Institute. Steven's Experience as an economist spans twenty-three years, including work at federal regulatory agencies (SEC, CFTC, PCAOB) and quantitative economic analysis supporting international trade litigation cases brought before the U.S. International Trade Commission.

ABOUT COMMON SENSE INSTITUTE

Common Sense Institute is a non-partisan research organization dedicated to the protection and promotion of Colorado's and Arizona's economies. CSI is at the forefront of important discussions concerning the future of free enterprise in Colorado and Arizona and aims to have an impact on the issues that matter most to Coloradans and Arizonans.

CSI's mission is to examine the fiscal impacts of policies, initiatives, and proposed laws so that Coloradans and Arizonans are educated and informed on issues impacting their lives. CSI employs rigorous research techniques and dynamic modeling to evaluate the potential impact of these measures on the Colorado and Arizona economies and individual opportunity.

Common Sense Institute was founded in 2010 originally as Common Sense Policy Roundtable. CSI's founders were a concerned group of business and community leaders who observed that divisive partisanship was overwhelming policymaking and believed that sound economic analysis could help Coloradans make fact-based and *common sense* decisions.

TEAMS & FELLOWS STATEMENT

CSI is committed to independent, in-depth research that examines the impacts of policies, initiatives, and proposed laws so Coloradans and Arizonans are educated and informed on issues impacting their lives. CSI's commitment to institutional independence is rooted in the individual independence of our researchers, economists, and fellows.

At the core of CSI's mission is belief in the power of the free enterprise system. Our work explores ideas that protect and promote jobs and the economy, and the CSI team and fellows take part in this pursuit with academic freedom. Our team's work is guided by data-driven research and evidence.

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Colorado Springs Housing Affordability Study

Since 2005, an estimated 105,000 new residents have come to the city of Colorado Springs. Over the same period, the average priced home has risen 119% from \$218,707 to \$479,043, as of December 2022. Increased demand and lagging development have created a shortage of housing and a tight housing market. Recent increases in mortgage rates have reduced affordability for those looking to purchase a home. Although higher mortgage rates tend to reduce demand for homes and provide some relief in terms of availability, permitting for new housing units is tapering off and actual home completions are likely to decline as builders respond to a slowing economy. Without an increase in construction of new housing at all price levels, Colorado Springs will continue to have a housing supply shortage.

This report analyzes housing affordability trends and estimates whether there is a deficit or surplus of housing units in Colorado Springs as defined by the area within the city limits. It does not include surrounding cities or towns that are in El Paso County. The study encompasses the period from 2000 through 2022. The data sources used in this report and its most recent availability include: the American Community Survey (2021), the National Association of Homebuilders (2020), U.S. Department of Housing and Urban Development (January 2023), S&P CoreLogic Case-Shiller Home Price Indices (3rd Quarter 2022), Zillow (November 2022), and the Colorado State Demography Office (2022). The housing deficit/surplus in 2022 is estimated using forecasts of population and average household sizes. It is important to note that the housing deficit/surplus estimates may change with each new U.S. Census data release.

KEY FINDINGS

- **The housing deficit in 2022 in Colorado Springs is in the range of 10,614 to 21,150 units. To meet population growth by 2028 and close the housing deficit, between 28,000 and 39,000 housing units will need to be built.**
- **Due to elevated housing prices and rising interest rates, the affordability of purchasing a home in Colorado Springs is at an all-time low.** In just the past 8 years, the cost (purchase price plus mortgage interest) of purchasing a home has increased by 101%. A large part of that increase has occurred over the last three years.
- **Household incomes have not kept pace with rising housing costs.** Between November 2015 and December 2022, the average hourly wage increased by 36% from \$22.63 to \$30.75. However, due to the rapidly increasing cost of housing, the number of hours of work required to cover the monthly mortgage payment on an average priced house increased from 49 hours to 102 hours, a 107% increase, as seen in Table 4.
- **Between 4,730 and 6,485 permits are needed annually through 2028 to close the housing supply deficit in Colorado Springs and meet the demands of future population growth.** Projected permitting for new housing in 2022 started off strong but has tapered off as home builders reassess the demand for housing in a higher interest rate environment. Over the period from 2006 through 2021, the average annual number of permitted units issued was 2,706. This historical average is 42% to 57% of the number of permits necessary to close the deficit and meet new housing demand by 2028.

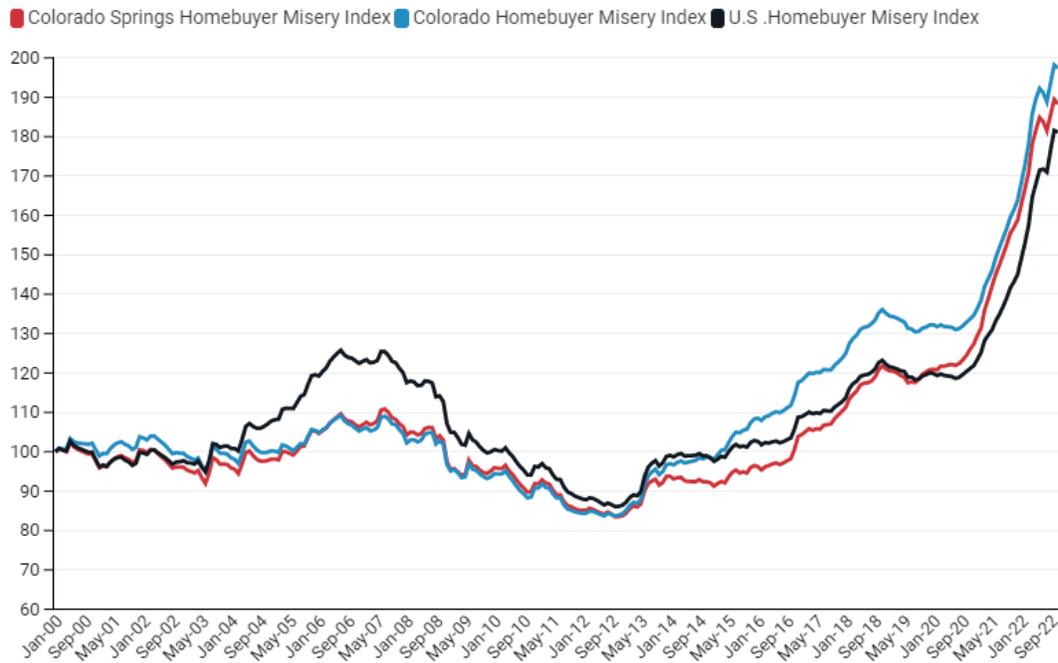
- **Current levels of permitting for new housing may not be enough.** Based on permit data through November 2022, Colorado Springs has issued 5,421 permits through the end of the year. If this annual level is sustained, it is enough to close the deficit plus new housing demand by 2028 under the low estimate of needed permits but is insufficient under the high estimate. Recent reports indicate that the homebuilding market may be contracting. To avoid a collapse of new home building similar to the one that followed the last recession, permitting must remain at elevated levels for the next several years.
- **The passage of HB 22-1362 and mandating electrification of homes and businesses will reduce affordability.** Based on a study of the cost of residential electrification done by Black Hills Energy, the public utility for Rocky Ford, CO, the combined cost of “behind-the-meter” expenses and new electric utility infrastructure needed to fully electrify all residential housing in Colorado Springs would range between \$37,000 and \$44,000 per existing unit, for a total estimated cost to all current Colorado Springs residents in the range of \$5.4 billion to \$6.3 billion.
- **The total cost per existing unit of full of full electrification of Colorado Springs homes would cost between 50% to 58% of median household income (\$75,579).**
- **Homebuilder confidence has declined by 75% since a recent high in November 2020.** The National Association of Home Builders/Wells Fargo Housing Market Index for the Western region has fallen for nine straight months, indicating a possible decrease in the rate of new housing creation going forward.

AFFORDABILITY AS MEASURED BY THE HOMEBUYER MISERY INDEX

The “Colorado Springs Homebuyer Misery Index,” developed by [Common Sense Institute](#)ⁱ, captures the impact of housing prices and mortgage rates on the affordability of purchasing a new home. The Colorado Springs, Colorado, and U.S. Homebuyer Misery Indices are based on 30-year mortgage rates and Zillow home prices.

The Homebuyer Misery Index converts mortgage rates into an indexed value with 2000 as its base year. The mortgage rate index is then added to the Zillow price index and normalized. The following graph shows the Colorado Springs Homebuyer Misery Index, the Colorado Homebuyer Misery Index, and the U.S. Homebuyer Misery Index. The Colorado Springs Index is below the Colorado Index after 2013 and above the U.S. Index after 2019. The substantial increase from 2012 to the end of 2020 was primarily a function of home prices increasing. Beginning in 2021, home prices in Colorado Springs rose dramatically and mortgage rates more than doubled by November 2022; consequently, the cost to purchase an average-price home in Colorado Springs went up by 121% from 2012 to 2022. In the last two months of 2022, the misery indices declined as home prices and mortgage rates fell. The graph of the Homeowner Misery Index is useful for evaluating and comparing trends to the Colorado and U.S. Homebuyer Index, but to determine the degree to which a region became more or less affordable relative to others, the change in the indices must be calculated between two points in time as is shown in in **Table 1**.

Colorado Springs, CO Homebuyer Misery Index



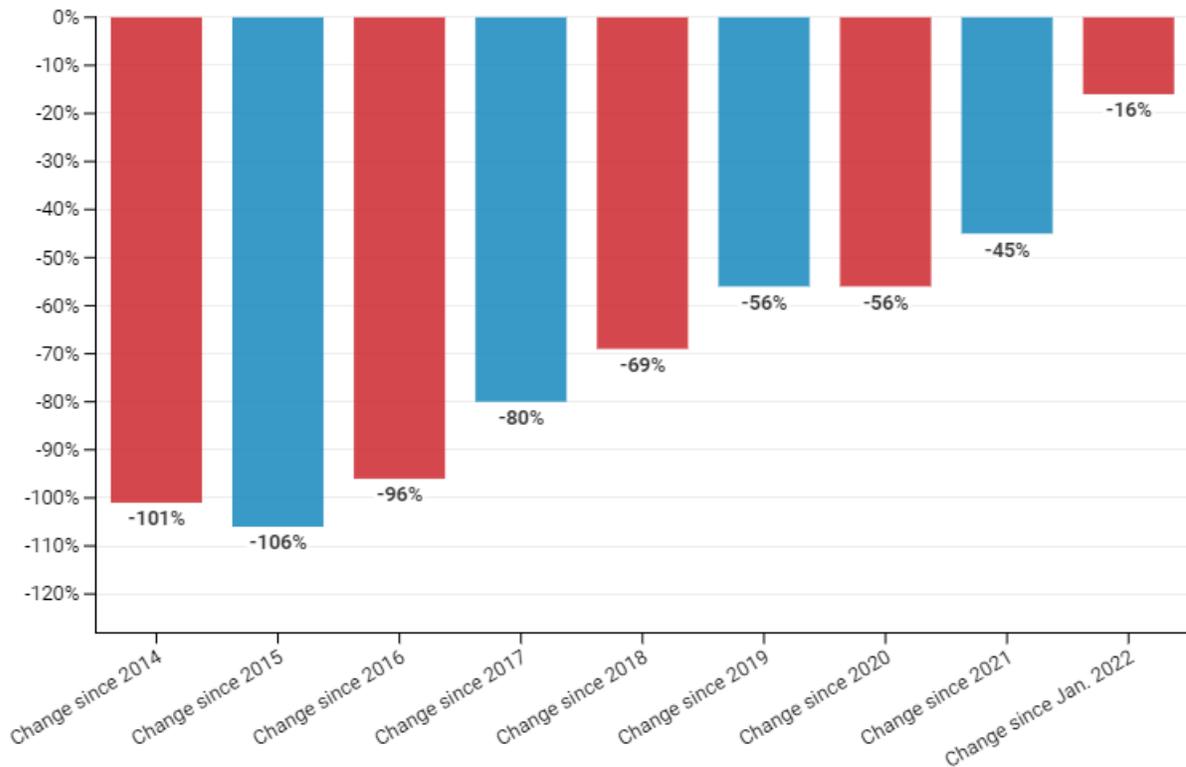
Source: Zillow, and St. Louis Federal Reserve Bank (FRED)

The change in home affordability, based on the Homebuyer Misery Index, has declined in Colorado Springs by 101% since January 2014, about the same as Colorado overall but above the change for the U.S. Since May of this year, home prices have leveled off or decreased slightly, but affordability has continued to worsen as mortgage rates have increased. **Table 1** shows falling affordability in Colorado Springs, Colorado, and the U.S.

Table 1- Percent Change in Housing Affordability for Colorado Springs, Colorado, and the U.S.			
% Change as of Dec. 2022 Since:	Colorado Springs	Colorado	United States
Jan 2014	-101%	-104%	-83%
Jan 2015	-106%	-101%	-86%
Jan 2016	-96%	-82%	-76%
Jan 2017	-80%	-67%	-66%
Jan 2018	-69%	-58%	-59%
Jan 2019	-56%	-47%	-49%
Jan 2020	-56%	-49%	-51%
Jan 2021	-45%	-45%	-47%
Jan 2022	-16%	-17%	-22%

The following graph shows changes in affordability for the average home in Colorado Springs over time. Half of the total change has occurred since January 2020, and 45% has occurred since the beginning of 2021.

Changes in Housing Affordability in Colorado Springs



Source: Zillow

The Wall Street Journal and Realtor.com began producing their Emerging Housing Markets Index in spring 2021 and have now published six quarterly estimates. The index identifies the top metro areas for home buyers seeking an appreciating housing market, strong local economies, and appealing lifestyle amenities. Three hundred of the most populous core-based statistical areas as measured by the U.S. Census Bureau are evaluated on two criteria: real-estate markets (50%), and economic health (50%). It utilizes 11 key indicators that are weighted and summed to create a single measure: real-estate supply (16.6%), real-estate demand (16.6%), medium home listing price trend (16.6%), unemployment (6.25%), wages (6.25%), regional price parities (6.25%), amenities (6.25%), small businesses (6.25%), and property taxes (6.25%).ⁱⁱ

Table 2 shows the rankings of Colorado Springs’ core-based statistical area relative to all three hundred most populous areas included in the index. The Colorado Springs MSA is in the top 10% (ranked 30 or higher) of all metro areas in terms of future home price appreciation. This index provides perspective that, though housing affordability in the city is near record lows according to latest data, Colorado Springs is generally ranked in the top 10% of MSAs

in the Emerging Housing Market Index and is viewed as relatively attractive given the potential for prices to continue to rise, in addition to other quality of life and economic factors.

Table 2 - Wall Street Journal/Realtor.com Emerging Housing Markets Index, Ranked Relative to 300 Metropolitan Statistical Areas

	Spring 2021	Summer 2021	Fall 2021	Spring 2022	Summer 2022	Fall 2022
Colorado Springs	32	14	11	25	20	14
Boulder	31	46	20	6	14	33
Denver-Aurora-Lakewood	115	88	59	52	66	38
Grand Junction	60	39	90	126	50	43
Fort Collins	96	68	24	8	11	47
Pueblo	86	55	83	102	78	98
Greeley	153	140	93	108	113	168

In this table, Colorado cities are ranked among the three hundred most populous metro areas in the U.S. The index identifies the top metro areas for home buyers seeking an appreciating housing market, a strong local economy and appealing lifestyle amenities.

Table 3 shows the relative rank of other major MSAs in Colorado. Though prices in Colorado Springs are historically high, among the other MSAs in Colorado, the city is considered one of Colorado’s highest-ranking in terms of future home price appreciation.

Table 3 – Wall Street Journal/Realtor.com Emerging Housing Markets Index, Ranked Relative to Colorado Metropolitan Statistical Areas

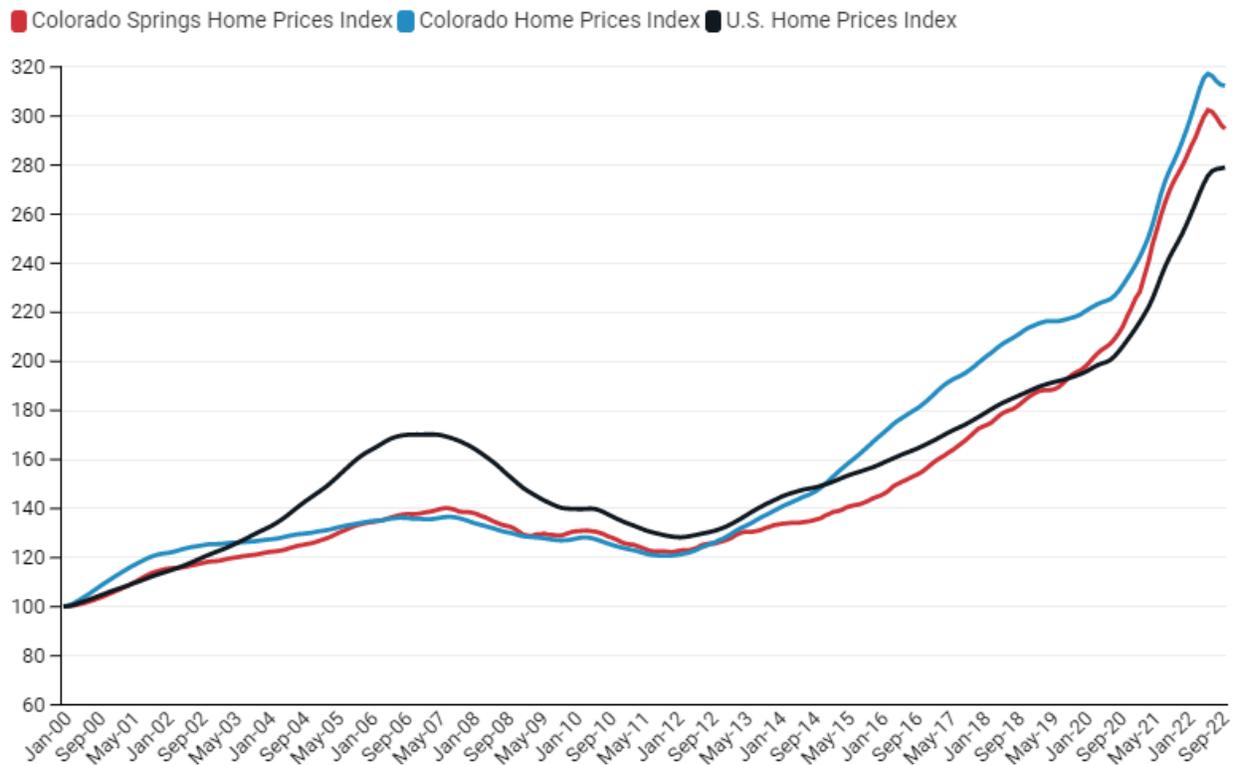
	Spring 2021	Summer 2021	Fall 2021	Spring 2022	Summer 2022	Fall 2022
Colorado Springs	2	1	1	3	3	1
Boulder	1	3	2	1	2	2
Denver-Aurora-Lakewood	6	6	4	4	5	3
Grand Junction	3	2	6	7	4	4
Fort Collins	5	5	3	2	1	5
Pueblo	4	4	5	5	6	6
Greeley	7	7	7	6	7	7

This table ranks seven of the most populous metro areas in Colorado. The index identifies the top metro areas for home buyers seeking an appreciating housing market, a strong local economy, and appealing lifestyle amenities.

HOME PRICES

The following graph shows home price indices for Colorado Springs, Colorado, and the United States. Home prices in Colorado Springs have increased by 140% since 2012 and 49% from the beginning of the COVID-19 pandemic through June 2022. Since then, home prices in Colorado Springs have begun to taper off, falling 3% since June. Nationally, home prices increased by 44% from the beginning of the COVID-19 pandemic through October 2022 and have declined by 0.3% since May 2022.

Colorado Springs Home Price Index



Source: Zillow

HOURS OF WORK NEEDED TO AFFORD A HOME MORTGAGE

To measure the impact on the average homeowner in Colorado Springs, Common Sense Institute calculated the number of hours that one would have to work while earning the average hourly wage in Colorado Springs in November of each year from 2013 to 2022 to cover the monthly mortgage payments shown in **Table 4**. Over just the last 12 months, driven primarily by the increase in mortgage rates, an additional 37 hours of work has become necessary to cover the monthly mortgage payment on a newly purchased average-price home.

Table 4 – Colorado Springs Home Prices, Mortgage Rates, Monthly Payment, Wage Rates, and Hours Required to Cover Monthly Mortgage Payment

Date	Average Home Price	30-year Mortgage Rate	Mortgage Payment	Average Wage Rate	Hours of Work at the Average Wage Rate Required to Cover Mortgage Payment	% Annual Change in Hours of Work Required
11/2013	\$216,227	4.26%	\$1,064	\$21.55	49	N/A
11/2014	\$221,898	4.00%	\$1,059	\$22.25	48	-3.6%
11/2015	\$234,809	3.94%	\$1,113	\$22.63	49	3.4%
11/2016	\$253,210	3.77%	\$1,176	\$22.74	52	5.1%
11/2017	\$278,800	3.92%	\$1,319	\$23.58	56	8.2%
11/2018	\$300,599	4.87%	\$1,589	\$24.64	64	15.4%
11/2019	\$318,894	3.70%	\$1,467	\$25.39	58	-10.4%
11/2020	\$356,033	2.77%	\$1,456	\$28.18	52	-10.6%
11/2021	\$451,122	3.07%	\$1,918	\$29.38	65	26.4%
11/2022	\$479,043	6.81%	\$3,125	\$30.75	102	55.6%

Freddie Mac, 30-Year Fixed Rate Mortgage Average in the United States [MORTGAGE30US], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/MORTGAGE30US>, Colorado - May 2021 OEWS State Occupational Employment and Wage Estimates (bls.gov).

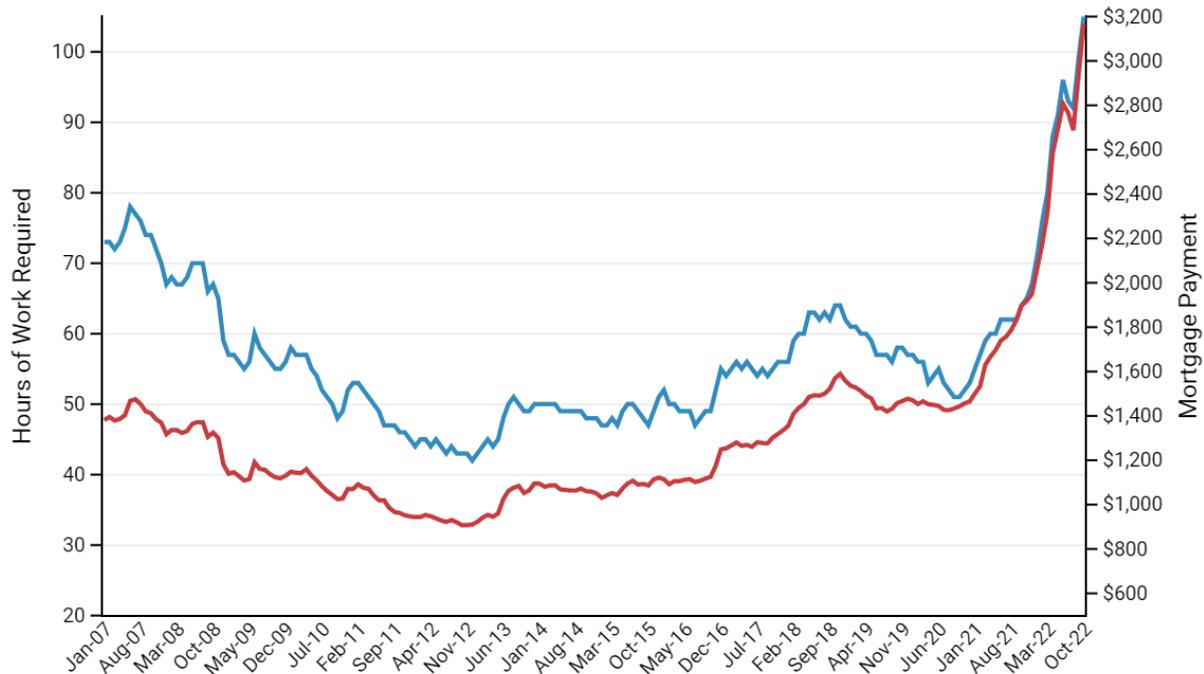
The graph below shows the evolution of monthly mortgage payments on an average-price home in Colorado Springs and the required hours of work necessary to cover each payment. Required hours fluctuated around forty from January 2007 until the summer of 2020, after which it increased dramatically as home prices rose. Beginning in the spring of 2022, mortgage rates increased as the Federal Reserve began raise interest rates to address inflation.

Since the start of the pandemic, the hours of work required to afford a monthly mortgage payment on an average-price home increased by 76% from 58 hours to 102.

Mortgage Affordability in Colorado Springs

Hours of work require to afford an average thirty-year mortgage

■ Typical Mortgage Payment ■ Hours of work required to afford a typical 30-year mortgage payment



Source: St. Louis Federal Reserve Bank Source: St. Louis Federal Reserve Bank

COLORADO SPRINGS HOUSING SUPPLY SHORTAGE

Colorado Springs has failed to build enough housing to keep pace with demand. Standard housing market reports like those developed by the National Association of REALTORS® track inventory based on homes listed for sale. What those reports do not capture is the total stock of homes needed to maintain a healthy housing market.

CSI estimated the number of homes needed in Colorado Springs to achieve a healthy housing market under two scenarios. Each scenario is intended to measure the difference between the actual number of homes in the city relative to the number of homes needed to maintain a stable market for the local population. The first scenario models a housing deficit or surplus based on a low estimate of homes held off the market for purchase by the local population. The second scenario models the values of a housing deficit or surplus based on a high estimate of homes held off the market for purchase by the local population.

Housing units and households – Each scenario uses estimations of housing units and households from the U.S. Census Bureau’s American Community Survey (ACS) and the Colorado State Demography Office. The number of housing units is adjusted by removing those that are considered uninhabitable by virtue of having no kitchen or no plumbing.

Homes held off the market – Homes held off the market are existing housing units not available for purchase. The estimate of the total number of such homes includes a range of second homes at the county level released by the National Association of Homebuildersⁱⁱⁱ along with an estimate of uninhabitable homes from ACS. Colorado Springs has between 0% and 4.99% of the housing stock allocated to second homes.

Desired ratio of total units to local population – To estimate the target number of housing units, the value of 1.1 housing units per household was used to represent a healthy market. This value is derived from the historic average vacancy rates in the U.S. which was used in a housing supply report done for the state of Oregon.^{iv} **Table 5** shows the forecasted change in population and the projected numbers of households in 2028 and 2033.

Table 5 - Change in Population and Households in Colorado Springs, in 2028 and 2033				
Region	Population		Households	
	2028	2033	2028	2033
Colorado Springs	43,518	80,622	17,763	32,908

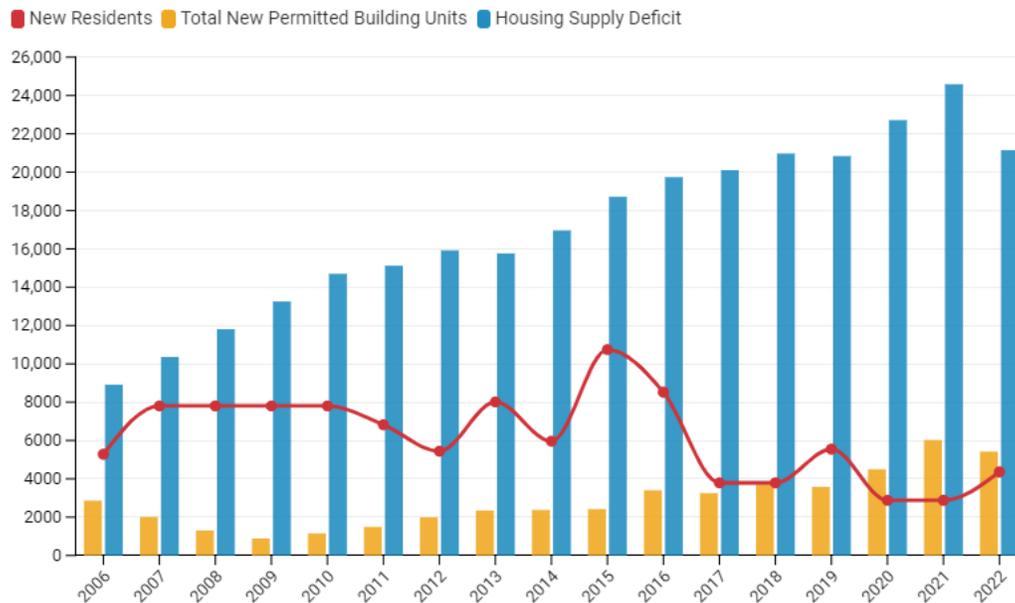
Using the scenarios discussed above, the housing unit deficit in 2022 is estimated to have been between 10,614 and 21,150 units. These deficits represent 5.03% and 10.02% of the existing housing stock in Colorado Springs. **Table 6** presents summary results for Colorado Springs housing supply deficit. CSI will continue to monitor new data as it becomes available and will amend the estimates and methodology as required.

Table 6 - Housing Deficit/Surplus in Colorado Springs in 2022					
Region	Housing Stock 2022	Housing Deficit/Surplus in 2022		Deficit/Surplus as a Percent of 2022 Existing Stock of Housing Units	
		Scenario One	Scenario Two	Scenario One	Scenario Two
Colorado Springs	211,127	-10,614	-21,150	5.03%	10.02%
Scenario One uses the NAHB low estimate of the share of homes held off the market Scenario Two uses the NAHB high estimate of the share of homes held off the market					

BUILDING PERMITS AND THE HOUSING SUPPLY DEFICIT

As shown in the following graph, new residents continued to arrive in Colorado Springs and the housing supply deficit grew from 2006 through 2021, before falling slightly in 2022. Annual permitting steadily rose after 2009, but not enough to reduce the supply deficit.

Colorado Springs - Population Growth, New Unit Permits, and the Housing Supply Deficit



Sources: National Association of Homebuilders, Colorado State Demography Office, U.S. Census Bureau ACS

To erase the estimated deficit in Colorado Springs and meet new population-driven demand for housing by 2028, an additional 28,377 to 38,913 permitted units are required in total, equating to 4,730 to 6,485 per year (see **Table 7**). CSI tracks building unit permits by county on a quarterly basis to evaluate whether the level of issuance is sufficient to close the existing housing deficit and meet new demand for housing.

Table 7 - Permits Required to Close the 2022 Deficit and Meet New Housing Demand in Colorado Springs in 2028

Region	Number of Permits Required to Close the Deficit Plus New Demand for Housing in Colorado Springs by 2028		Permits Issued per Year in Colorado Springs in 2022	Deficit/Surplus in Permitted Units Issued in Colorado Springs in 2022	
	Scenario One	Scenario Two	Through November	Scenario One	Scenario Two
Colorado Springs, CO	28,377	38,913	5,421	691	(1,065)

Scenario One uses the NAHB low estimate of the share of homes held off the market
Scenario Two uses the NAHB high estimate of the share of homes held off the market

To erase the estimated deficit in Colorado Springs and meet new demand for housing by 2033, an additional 43,522 to 54,057 permitted units are required in total, equating to 3,957 to 4,914 per year (see **Table 8**). Closing the deficit and meeting new housing demand by

2033 requires fewer permits per year than does closing the deficit by 2028, because filling the 2022 housing deficit is spread out over an additional five years.

Table 8 - Permits Required to Close the 2022 Deficit and New Housing Demand in Colorado Springs in 2033

Region	Number of Permits Required to Close the Deficit Plus New Demand for Housing in Colorado Springs by 2033		Permits Issued per Year in Colorado Springs in 2022	Deficit/Surplus in Permitted Units Issued in Colorado Springs in 2022	
	Scenario One	Scenario Two	Through November	Scenario One	Scenario Two
Colorado Springs	43,522	54,057	5,421	1,464	506
Scenario One uses the NAHB low estimate of the share of homes held off the market Scenario Two uses the NAHB high estimate of the share of homes held off the market					

The following graph shows the number of monthly housing unit permits needed to close the deficit by 2028 for two scenarios and the number of permits issued monthly through November 2022. The red line shows the average monthly required permits to close the 2022 deficit and meet new housing demand by 2028 under scenario one. The blue line is for scenario two. Under scenario one, enough permits have been issued in eight months over the first eleven months of 2022 to cover the housing deficit and meet new demand for housing by 2028. Under scenario two, enough permits have been issued in eight months out of eleven to cover the housing deficit and new housing demand by 2028. At the moment, permitting is trending down as high interest rates are dampening demand for housing and builders are applying for fewer permits.

Colorado Springs - Monthly Housing Unit Permits Needed vs. Issued

■ Permits Needed in Colorado Springs -Scenario 1
 ■ Permits Needed in Colorado Springs -Scenario 2
 ■ Permits Issued in Colorado Springs



Source: U.S. Department of Housing and Urban Development and CSI Calculations

TYPES OF PERMITS ISSUED

Table 9 shows the number of housing unit permits issued in total and the percentage of each type issued from 2012 through November 2022. Annual permitted units issued have increased from 1,991 in 2012 by 172% to 5,421 in 2022. The share of permitted units issued has gone from 80% single-family in 2012 to 41% in 2022. The share of permits for multi-family structures has increased from 20% in 2012 to 59% in 2022. The majority of permits for multi-family structures contain 5 or more units.

Table 9– Colorado Springs Permits by Percentage of Type Issued

Year	Total Units	Units in Single-Family Structures	Units in All Multi-Family Structures	Units in 2-unit Multi-Family Structures	Units in 3- and 4-unit Multi-Family Structures	Units in 5+ Unit Multi-Family Structures
2012	1991	80%	20%	0%	0%	20%
2013	2345	81%	19%	1%	0%	18%
2014	2374	73%	27%	1%	0%	26%
2015	2423	82%	18%	0%	0%	18%
2016	3402	70%	30%	0%	0%	30%
2017	3256	77%	23%	0%	0%	23%
2018	3698	73%	27%	0%	0%	26%
2019	3577	73%	27%	2%	1%	24%
2020	4499	72%	28%	4%	0%	23%
2021	6025	54%	46%	3%	0%	43%
2022	5421	41%	59%	0%	0%	58%

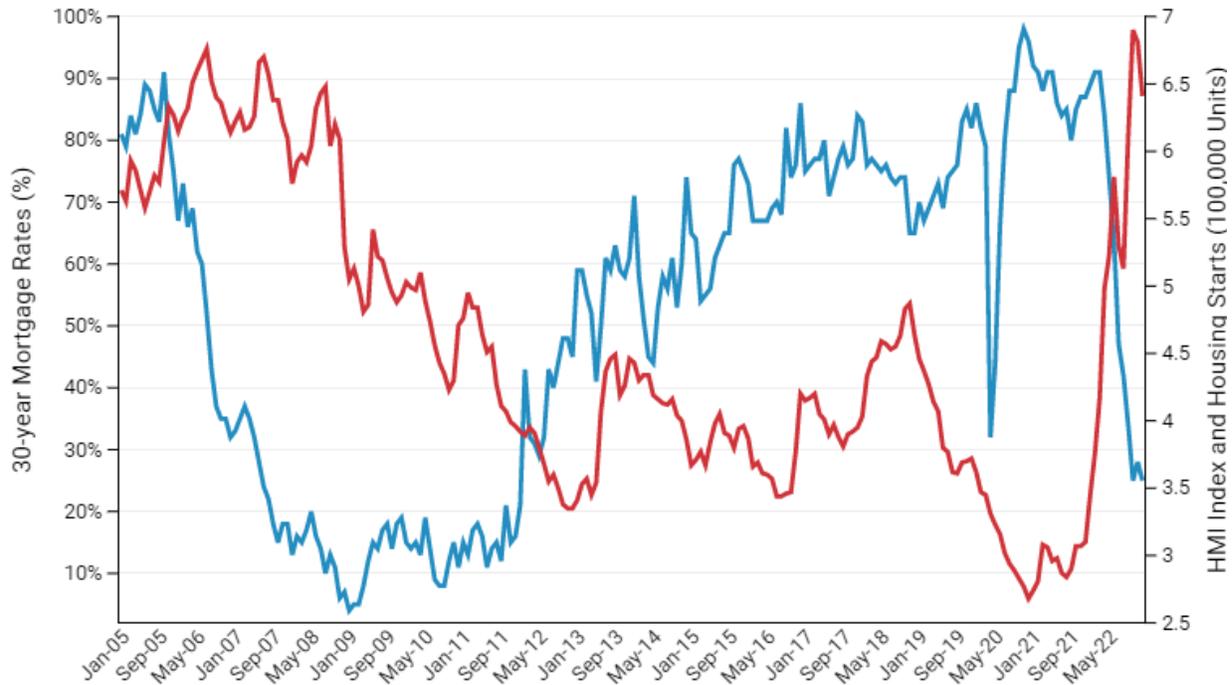
HIGHER MORTGAGE RATES AND HOMEBUILDER CONFIDENCE

As shown in the following graph, as mortgage rates (red line) have increased since March 2022, demand for housing has begun to taper off and, in response, many home builders are re-evaluating their plans for new housing. The December Housing Market Index (HMI) (blue line) released by the National Association of Homebuilders, which reflects builder confidence in the market for newly built single-family homes, fell for the 10th straight month to the lowest point since April 2020.^v

If builders in Colorado Springs reduce new construction, which looks increasingly likely based on the HMI, the housing unit deficit will not decrease. If population growth continues as forecasted, absent sufficient new housing units, the deficit in Colorado Springs will grow. Developers might consider changes to the mixture of housing they build such as a transition to building higher-density and less-expensive housing so that the deficit can be reduced even in a high-interest rate environment.

NAHB/Wells Fargo Housing Market Index (HMI), New Single-Family Starts and Mortgage Rates

■ 30-Year Mortgage Rate ■ NAHB/Wells Fargo HMI - West



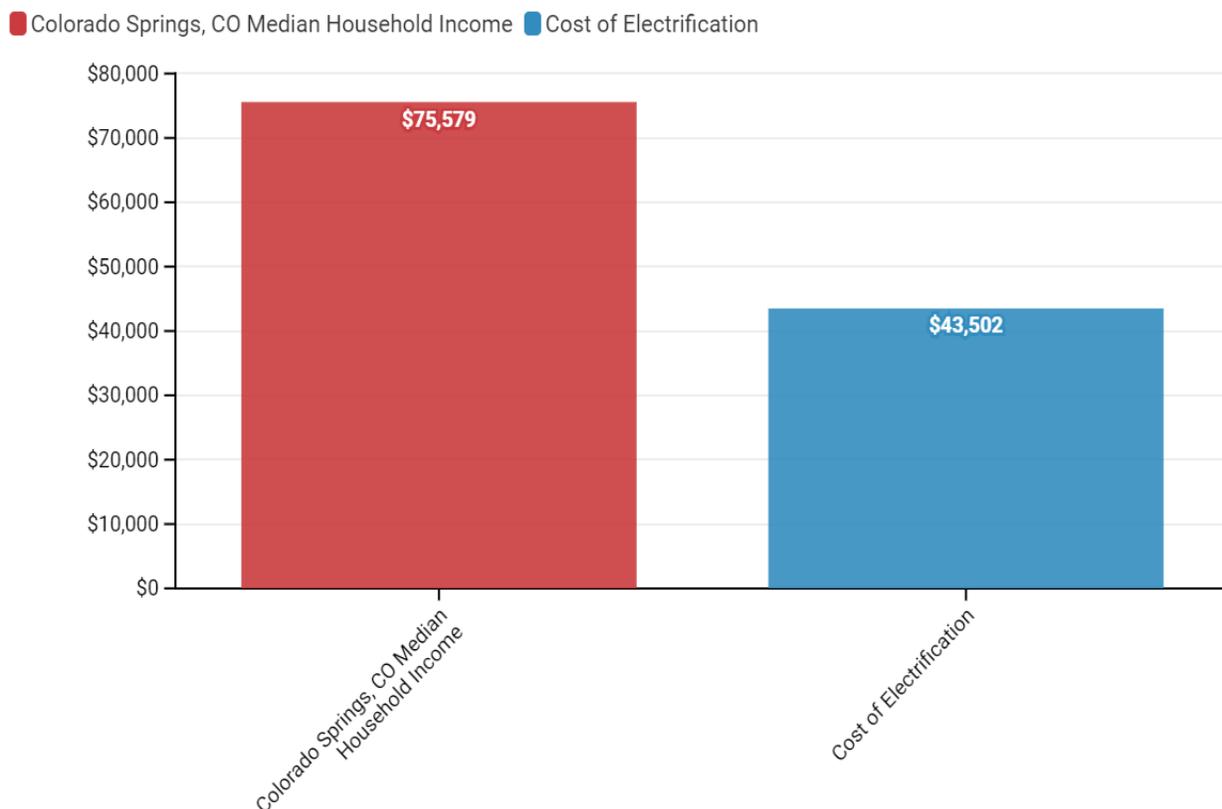
Source: NAHB/Wells Fargo Housing Market Index (MNI) and the St. Louis Federal Reserve Bank (FRED)

COST OF PROPOSED ELECTRIFICATION OF HOMES AND BUSINESSES

During the 2022 legislative session, the General Assembly passed HB22-1362 and the Governor signed it into law on June 2, 2022. It requires the adoption of model code language that would achieve energy performance “equivalent [to] or better” than the 2021 International Energy Conservation Code (IECC). It also requires the development of an electric and solar ready code and a model green code by a newly established Energy Code Board convened by the Colorado Energy Office (CEO) and the Department of Local Affairs (DOLA). The legislation goes further than earlier legislation passed in 2019 (HB19-1260) which required local jurisdictions to adopt one of the three most recent versions of the IECC at a minimum upon updating any other building codes. Thus, the passage of HB 22-1362, represents a larger energy efficiency hurdle for new buildings in the state. Upon the passage of HB22-1362, the state departed from local home rule governance policies that characterize housing development in the state of Colorado. By doing so, they have declared that energy conservation in the built environment supersedes local preferences and standards. In contrast to a uniform statewide building code which focuses on the safety and integrity of structures, the state has dedicated its policy priorities to energy conservation and stretch codes that emphasize energy efficiency, will pave the way for full electrification of buildings.

In September 2020, Black Hills Energy provided an estimate of the costs of electrification for customers within Rocky Ford, CO. Their analysis is for the total cost of electrification for residential units, which includes the cost of the infrastructure to provide the electricity to all housing units, new appliance costs, and behind-the-meter-costs (cost of wiring, breakers, outlets, etc. inside the house), which are costs to be covered by the customer individually. The analysis found that the total cost to electrify all 1,543 housing units in Rocky Ford would be \$53.8 billion—\$37,131 per housing unit. CSI extended the results of the Rocky Ford study to all 197,542 housing units in Colorado Springs that do not use electricity for heating and cooking under the assumption that the 52,631 housing units that currently use electricity for heating and cooking would not have to be retrofitted. The cost of electrification per housing unit in Colorado Springs is estimated to be \$43,502. This is equivalent to 58% of the median household income of \$75,579. The estimated per unit cost is higher for Colorado Springs due to the much larger amount of infrastructure required to generate and deliver the electricity to residents.

The Cost of Electrifying an Average Housing Unit is 58% of Colorado Springs Median Household Income



The total cost to electrify all 144,179 housing units that are not currently using electricity for heating and cooking ranges between \$5.4 billion and \$6.3 billion (see **Table 10**).

**Table 10 - Cost of Residential Electrification
(Rocky Ford and Colorado Springs)**

	Rocky Ford	Colorado Springs
Number of Residential Units Switching to Full Electrification	1,450	144,179
Total Utility Infrastructure Costs – Low	\$19.1K	\$24.5K
Total Utility Infrastructure Costs – Mid	\$19.1K	\$24.6K
Total Utility Infrastructure Costs – High	\$22.2K	\$28.5K
Total Behind the Meter Costs – Low	\$13.0K	\$13.0K
Total Behind the Meter Costs – Mid	\$14.0K	\$14.0K
Total Behind the Meter Costs – High	\$15.0K	\$15.0K
Total Electrification Cost – Low	\$32.1K	\$37.6K
Total Electrification Cost – Mid	\$33.2K	\$38.6K
Total Electrification Cost – High	\$37.1K	\$43.5K
Total Cost Community – Low	\$46.6M	\$5.42B
Total Cost Community – Mid	\$48.1M	\$5.56B
Total Cost Community – High	\$53.8M	\$6.27B

Source: Alternative Fuel Analysis – Preliminary Study of Electrification of Customers within Rocky Ford, Colorado. Sept 2020, Black Hills Energy, and CSI Calculations

GOING FORWARD

Colorado Springs is an attractive city to live in, and the population has increased by 27% since 2005. At the same time, the supply of new housing has not kept pace and there exists a housing supply deficit ranging between 10,614 and 21,150 units. To close the existing deficit by 2028 and meet new demand for housing, 4,730 to 6,485 housing unit permits need to be issued per year.

Addressing affordability requires issuing an adequate number of housing units permits to close the deficit and meet future housing demand, changes to zoning, increasing the mix of housing types permitted so that more housing can be offered at affordable price points, and setting realistic and cost-conscious goals for transition to clean and renewable energy so that they do not overburden homeowners.

ⁱ <https://commonsenseinstitute.org/>

ⁱⁱ https://www.wsj.com/articles/see-the-full-rankings-for-wsj-realtor-coms-summer-emerging-housing-markets-index-11658779946?mod=article_relatedinline

ⁱⁱⁱ The Nation’s Stock of Second Homes, Zhao, Na., May 2013, National Association of Home Builders

^{iv} Implementing a Regional Housing Needs Methodology in Oregon: Approach, Results, and Initial Recommendations. August 2020. ECONorthwest.

^v <https://www.nahb.org/news-and-economics/press-releases/2022/07/builder-confidence-plunges-as-affordability-woes-mount>