



Pacey Nehls
ECONOMIC CONSULTING

Colorado Condominium Development (Supply) Policy Analysis



February 2024

Prepared by: Pacey Nehls | 3005 Center Green Drive, Suite 200, Boulder, Colorado 80301



Executive Summary

- **The societal importance of property ownership cannot be overstated.** Property rights and home ownership play a crucial role in fostering economic, social, and political stability, empowering individuals, and contributing to the overall well-being of societies.
- **While multi-family housing construction is flourishing, there has been a significant decline in the construction of for sale multifamily housing across the nation and in Colorado.**
- **Homebuilders contend that construction defect litigation is the reason why there is a lack of for sale affordable housing in Colorado. Empirical data does not support this contention.**
- **Empirical data shows that states' construction defect laws are not correlated with the availability of affordable for sale housing.** If the lack of for sale affordable housing was a result of construction defect laws, the problem would be more pronounced in states with more homeowner-friendly construction defect laws than Colorado. That is not the case. There has been a significant decline in the construction of for sale multifamily housing across the nation, in Colorado where defect laws are among the most builder-friendly in the country, as well as in states with laws that are far more homeowner-friendly than those in Colorado. Plus, the decline in the construction of for sale condominiums across the country occurred while states' construction defect laws were largely held constant or had minor changes. The root cause of the decline cannot be construction defect laws.
- **From a business economics perspective, placing further restrictions on Colorado's homeowners through changes to construction defect laws would not materially impact the development of for sale condominiums.** Developers, builders, and investors are naturally *profit maximizers* and will choose to build apartments that yield perpetual income rather than condominiums that yield one-time profits from selling units. That is, empirical data shows that it is more profitable for builders to construct for-rent products than for-sale products; **the shortage of for-sale condominiums in Colorado is attributable to builders constructing more profitable for-rent products than less profitable for-sale products.**
- **According to publicly available financial statements, Colorado's construction companies are enjoying record profits and low construction defect costs.** In their own financial statements, these construction companies also concede that construction defect litigation will not have a material effect on their profits, operations, or cashflow.
- **There has been a significant boom in large-scale real estate investing.** This along with low interest rates (until recently) has made it easier for developers and builders to finance their projects but has come at the cost of cutting out the end user of the units from ownership opportunity.
- **The lack of availability of new multifamily for sale structures drives up the price of existing units.** This works to the benefit of builders, developers, and investors of apartment rentals, as individuals are "stuck" renting.



Preface

Economics is the study of human behavior. It measures and analyzes how individuals, businesses, governments, and societies allocate resources and make decisions to maximize their utility (well-being) and profits. Noting such, the Pacey Nehls consulting firm has been asked to present empirical economic data and opinions on the efficacy, if any, of altering construction defect laws in the state of Colorado in the state's efforts to increase the affordability and availability of home ownership via the purchase of condominiums and to study the underlying reasons why builders/developers are choosing to develop apartment rental properties rather than offering for sale condominiums at levels seemingly demanded by Colorado residents.

The societal importance of property ownership cannot be overstated. Property rights and home ownership play a crucial role in fostering economic, social, and political stability, empowering individuals, and contributing to the overall well-being of societies. This is because it provides individuals with economic security and a sense of community, which leads to political and social stability as homeowners invest to improve their homes and neighborhoods, engage in civic activities and local governance, and have lower overall crime rates.

Indeed, macroeconomists find property rights to be one of the most predictive attributes of an economically and otherwise successful society. But what good are property rights without property ownership?

Unfortunately, many Colorado residents are priced out of the single family home market and, while the Colorado economy is strong and residential single- and multi-family home construction is flourishing, there is a dearth of development of for sale condominiums. The affordability of home ownership is exacerbated by required down payments and mortgage rates being higher than those previously enjoyed.

Homebuilders contend construction defect litigation is the reason limiting the construction of condominiums in Colorado. However, this contention is self-serving and not evidenced by empirical data. Further, the financial statements of the largest public Colorado builders belie their contention and show healthy profits and relatively low construction defect costs and concerns.

From an economic perspective, as explained in more detail in this report, further restrictions to Colorado's construction defect laws would not materially increase the development of for sale condominiums and there is no evidence to support the contrary.

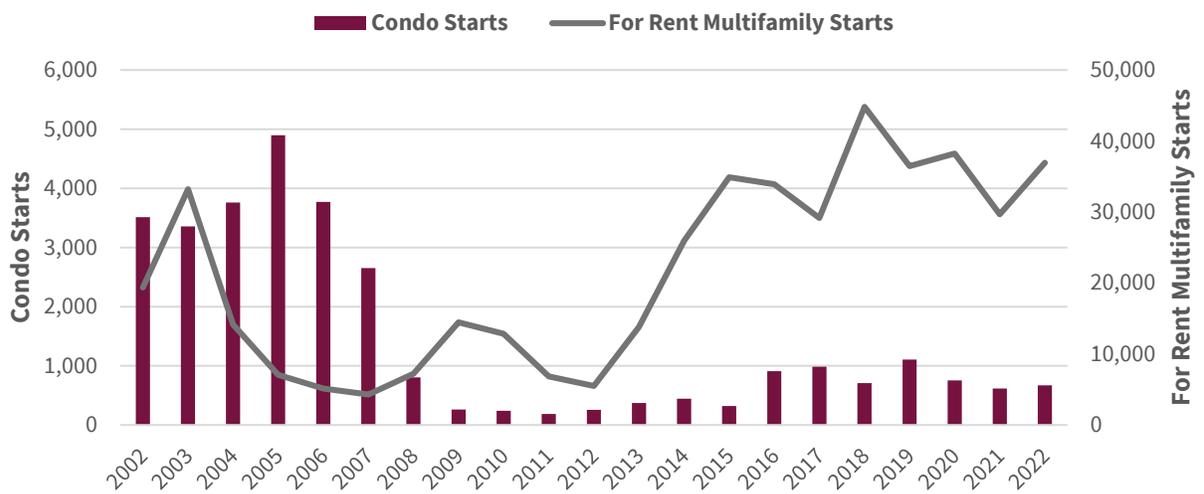




The Availability of New For Sale and For Rent Multifamily Housing

The construction of for sale condominiums in Colorado’s Front Range plummeted during the Great Recession and has never recovered. As demonstrated in Figure 1 below, pre-Great Recession there were well over 3,000 condominium construction starts per year whereas post-Great Recession there have largely been less than 1,000 starts each year. The lack of new for sale condominium supply has driven up the price of existing units and has forced many Colorado residents to rent.

Figure 1 – Condominium Construction Starts in Colorado’s Front Range by Year



Source: Zonda via Common Sense Institute

Builders’ Costs Associated with Construction Defects and Construction Defect Insurance, and Builder Profits

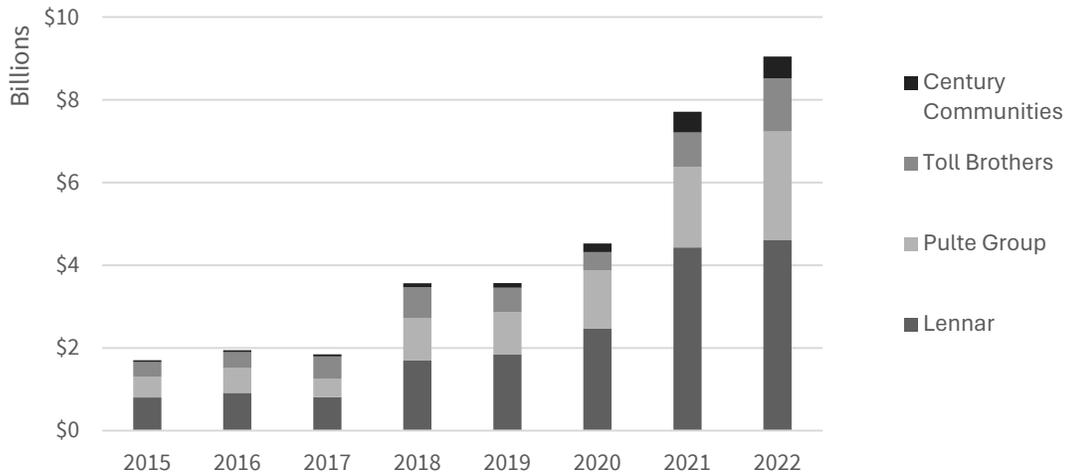
While builders argue they do not build for sale condominiums because of the cost of insurance/risk of litigation, this assertion is not supported by any facts or data. That is, while builders obviously would prefer even more builder-friendly laws, there is no evidence or even reason to believe that it would change their choice to build rental apartment units rather than for sale condominiums.

In today’s data driven world (the information age), policy makers and the general public expect claims made by individuals and groups to be supported by objective empirical data. These data exist but are only available from insurance companies and the developers/builders who claim the current construction defect laws make building condominiums exorbitantly expensive. However, both insurance companies and builders have highly guarded this information from policy makers and the general public and the limited information that has been spread throughout local news outlets in recent months is not empirical data and was sourced by special interest groups.



Public financial statements reveal that many of Colorado’s largest builders have had record profits and are not concerned about construction defect claims and costs. First, as it relates to builder profits, four of the largest home building corporations in Colorado (Lennar, Century Communities, Toll Brothers, and Pulte Group) recorded revenues ranging from 1.5 to 33.7 billion dollars in 2022 and net incomes ranging from 525 million dollars to 4.6 billion dollars. Figure 2 demonstrates the profits of these four companies from 2015 through 2022.

Figure 2 – Builder Profits



In regard to builders’ perspective about construction defect claims and costs, four quotes are provided below demonstrating their lack of concern.

- Lennar:* “We do not believe that the ultimate resolution of these claims or lawsuits will have a material adverse effect on our business or financial position.”¹
- Century Communities:* “We do not believe that the ultimate resolution of any claims and lawsuits will have a material adverse effect upon our consolidated financial position, results of operations, or cash flows.”²
- Toll Brothers:* “We believe that adequate provision for resolution of all current claims and pending litigation has been made and that the disposition of these matters will not have a material adverse effect on our results of operations and liquidity or on our financial condition.”³
- Pulte Group:* “While the outcome of such [lawsuits] cannot be predicted with certainty, we do not believe that the resolution of such matters will have a material adverse impact on our results of operations, financial position, or cash flows.”⁴



Further evidence of the financial health of Colorado's builders is that the average permitted value (approximately the hard costs to build) of Denver Metro apartments was just \$66,300 per unit.⁵ This means the hard costs can be recouped in just several years of rental income.

Finally, based on the limited data available, a comparison of Colorado's Construction defect insurance rates to Texas and Utah, where the construction defect laws are significantly more homeowner-friendly,⁶ finds a similar range of insurance costs.⁷

Colorado Construction Defect Laws

Statute of Repose

A statute of repose cuts off the legal rights of a party if they notice or see a potential problem but fail to make a claim within a deadline specified in the statute, where the timeline commences upon "substantial completion" of the housing product. Colorado has a statute of repose of six years with a two-year extension if the cause of action arises during the 5th or 6th year after "substantial completion."

Statute of Limitations

The Colorado statute of limitations is a time limit that requires homeowners to file a suit within two years of discovering any sign of a problem, even if scope, cause, or responsibility is unknown.

Damages

In Colorado, a party claiming damages related to construction and/or design defects may not recover more than "actual damages" unless there is a violation of the Colorado Consumer Protection Act. "Actual damages" is defined as "the lesser of the: (1) fair market value of the real property without the alleged construction defect; (2) replacement cost of the real property; or (3) reasonable cost to repair the alleged construction defect, together with 'relocation costs.'" CDARA also requires that the party claiming construction defects file an initial list of alleged defects in any arbitration or litigation.⁸

Certificate of Merit Requirement

Under *Colorado Revised Statute sections 13-20-602(3)(a)(I) and (II)*, it is understood if a licensed professional is a defendant in a legal proceeding, then a certificate of merit is required. It must be executed by the plaintiff's attorney and state, in pertinent part, that the lawyer has consulted a third-party expert "in the area of the alleged negligent conduct" and that the expert has concluded, based on their review of the relevant facts and documents, that the plaintiff's claim "does not lack substantial justification."



Notice and Cure Procedure

Colorado Revised Statute section 13-20-803.5 has the following requirements: (1) before a construction defect action may proceed, the claimant must serve a written notice of claim to the construction professional he or she intends to sue, (2) after the notice of claim is sent, the claimant must provide access to the affected property so that the alleged defect can be inspected by the target of the claim, (3) the inspection must be completed within 30 days of service of the notice of claim, and (4) within 30 days after the inspection (45 days if the property is commercial), the target of the claim may send an offer to settle the claim to the claimant, either by payment or by agreeing to fix the defect. Claimant may accept or reject the offer in writing, but if no offer is made or the offer is rejected, a legal claim may move forward.

Colorado's Defect Laws Compared to Other States

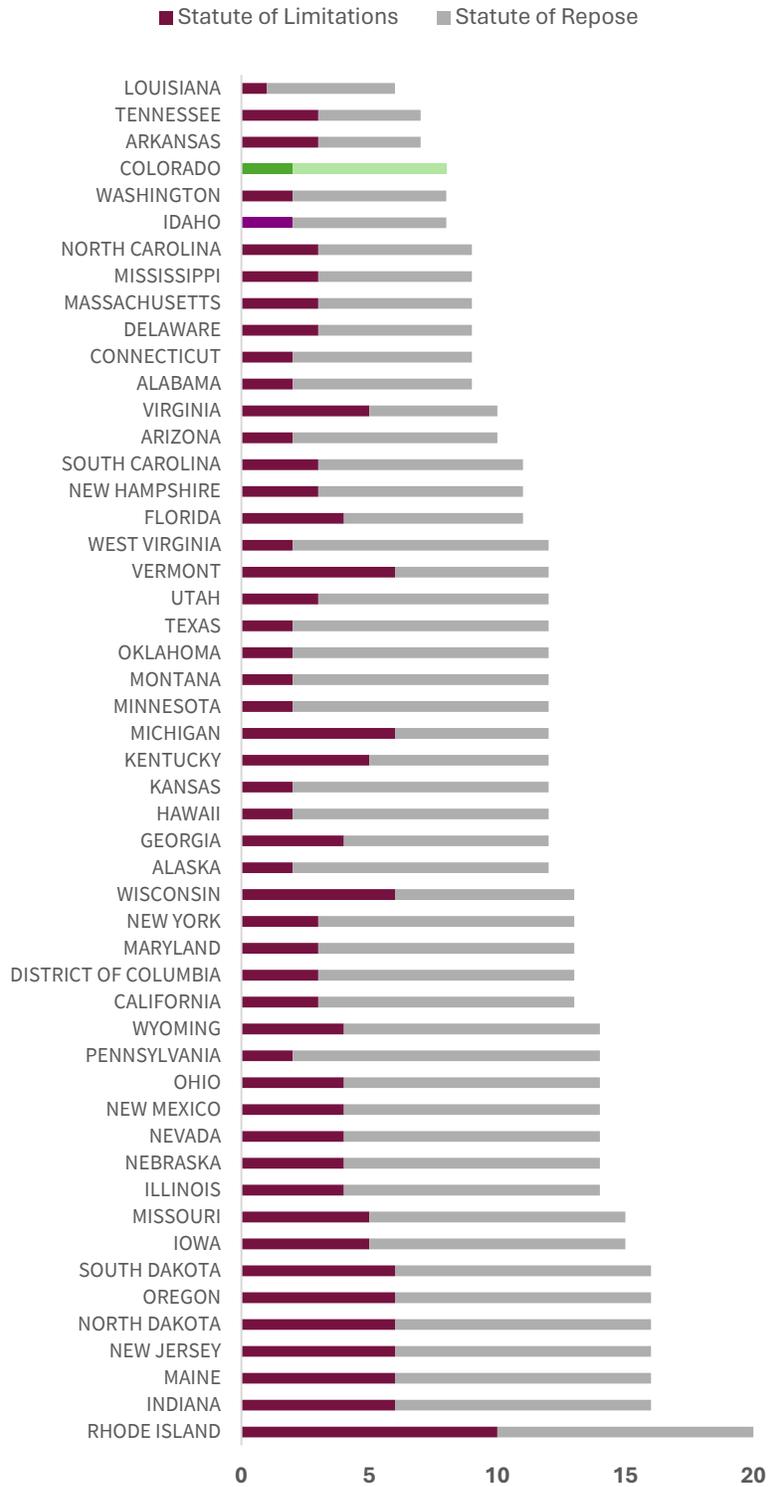
- When looking at all 50 states plus the District of Columbia, only Louisiana has a statute of limitations shorter than Colorado's Statute of limitations.
- There are only four states with a shorter statute of repose than Colorado.
- Consistent with its statute of limitations and statute of repose, Colorado's policies on damages, certificate of merit, and notice and cure requirements are among the most-builder friendly in the country.

Figure 3 on the following page demonstrates the statute of limitations and statute of repose of all 50 states and the District of Columbia.

[Intentional Blank Space]



Figure 3 – Statutes of Limitations and Repose by State





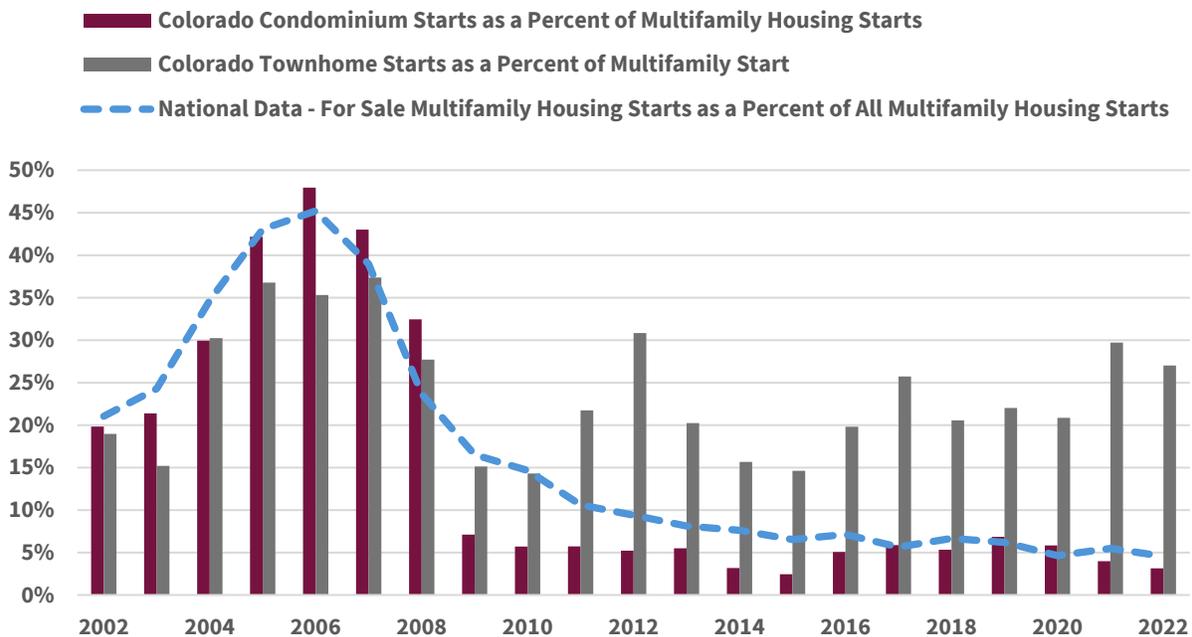
Economic Analysis

Economic/econometric studies that relate to public policy issues typically rely on variations in policies across geographies or time periods to determine/measure the impact of various governmental policies.

Colorado Compared to the Nation as a Whole

The first insight emerging from an economic analysis is that the decline in the construction of for sale multifamily housing is a national phenomenon. This confirms Colorado's construction defect laws, which are among the most builder-friendly in the country and have only become more builder-friendly in the last decade, are not to blame. Figure 4 below provides data regarding the construction of for sale multi-family housing in the Denver area as a percent of all multifamily housing starts as well as data⁹ from *Federal Reserve Economic Data (FRED)* regarding national multifamily for sale housing as a percent of all of multifamily housing by year.

Figure 4 – Denver Area and National Multifamily For Sale Units as a Percent of All Multifamily Units



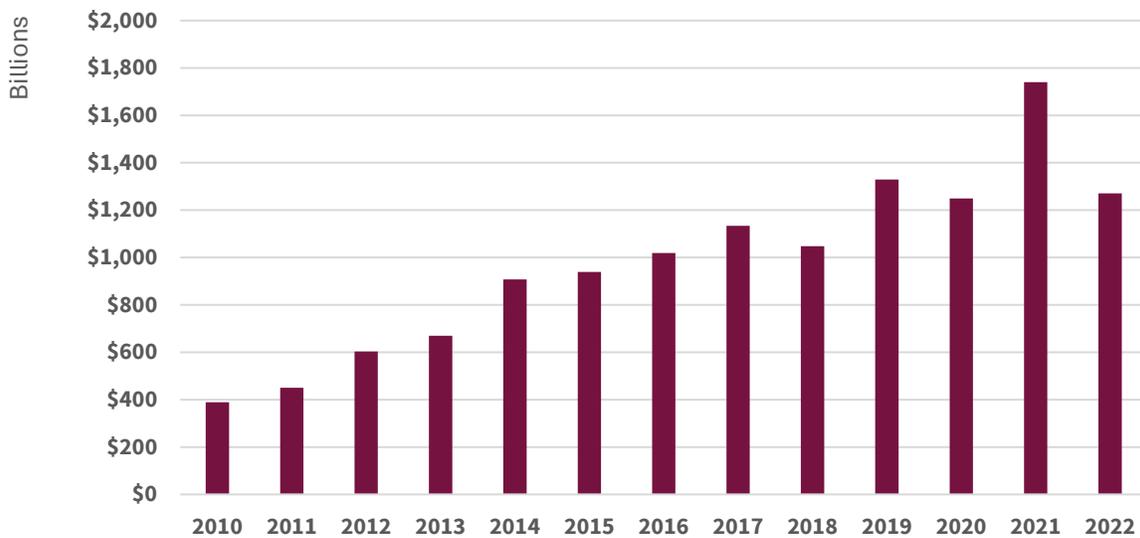
Source: Colorado data: Zonda; National data: Federal Reserve Economic Data



Large-Scale Real Estate Investing and Low Interest Rates

During the past 15 years there has been a significant boom in institutional and private equity investing in real estate. These investors and low interest rates (until recently) have made it easier for builders and developers to finance their projects, but this has come at the cost of cutting out the end user from ownership opportunity. Investors can own the apartment properties for the long-term, siphoning income from Colorado’s renters, even long after the project is paid off. In an April 2022 article¹⁰, Builder Magazine found that “*Today’s home builders are front and center of the industry’s largest shift in generations. As build-to-rent continues its surge, we now have a good understanding of the asset class, opportunity, and players... Private equity is using its deep pockets to acquire newly built homes, and competition is fierce. In fact, the latest tally has these groups committing \$50 billion toward this endeavor. The opportunities and value proposition being offered to builders is unprecedented.*” Note that this article and similar articles do not mention construction defect laws; this is because they are not the cause of the “shift.” Figure 5 shows the market capitalization of real estate investment trusts (REITs) by year.

Figure 5 - Market Capitalization of REIT’s in the U.S.



Source: Statista

Profit Maximization Analysis

Regardless of construction defect policies, *profit maximizing* builders, developers, and investors, given the choice, will choose to develop for rent apartments that yield perpetual incomes rather than one-time profits from the sale of each unit. An exception to this is when high-end multifamily housing units (townhomes or luxury condominiums) are built, as consumers of those units are not typically willing to rent.

Selling units individually requires developers to employ (and pay) realtors and deal with logistical hurdles on each and every unit they build – no amount of legislative reform will change this reality.



Conversely, when selling the entire complex to an investment group, there is one transaction, and the investment group typically takes over managing and renting the units.

By way of example, American Community Survey data finds the typical rent of a new two-bedroom multifamily home in the Denver metro area is approximately \$2,000 per month (\$24,000 per year) and those units are worth approximately \$420,000, on average. Builders' financial statements reveal that their profit margins are approximately 10-15%. Hence, the expected profit on a \$420,000 unit would be some \$52,500. Thus, in just over two years, the rental income will equal the profits that could have been garnered from selling the unit, and the builder/investor still holds that value plus appreciation. An analogy can be made here to the farming sector, why would a farmer sell a cow that is producing milk and calves rather than owning the cow until later in its life cycle?

Time Period Analysis

As noted previously, the construction of for sale condominiums in Colorado's Front Range plummeted during the Great Recession and has never recovered. Other analysts researching the issues of for sale condominiums concluded that there was an uptick in building corresponding with construction defect legislation in 2017 (HB17-1279). However, a cursory look at the data¹¹ finds that the slight uptick occurred well-before the law was enacted and there was a slight uptick at the national level. To be sure, there is no evidence to support that HB17-1279 incentivized the construction of for sale condominiums in Colorado.

The decline in the construction of for sale condominiums across the country occurred while states' construction defect laws were largely held constant or had minor changes. The root cause of the decline cannot be construction defect laws.

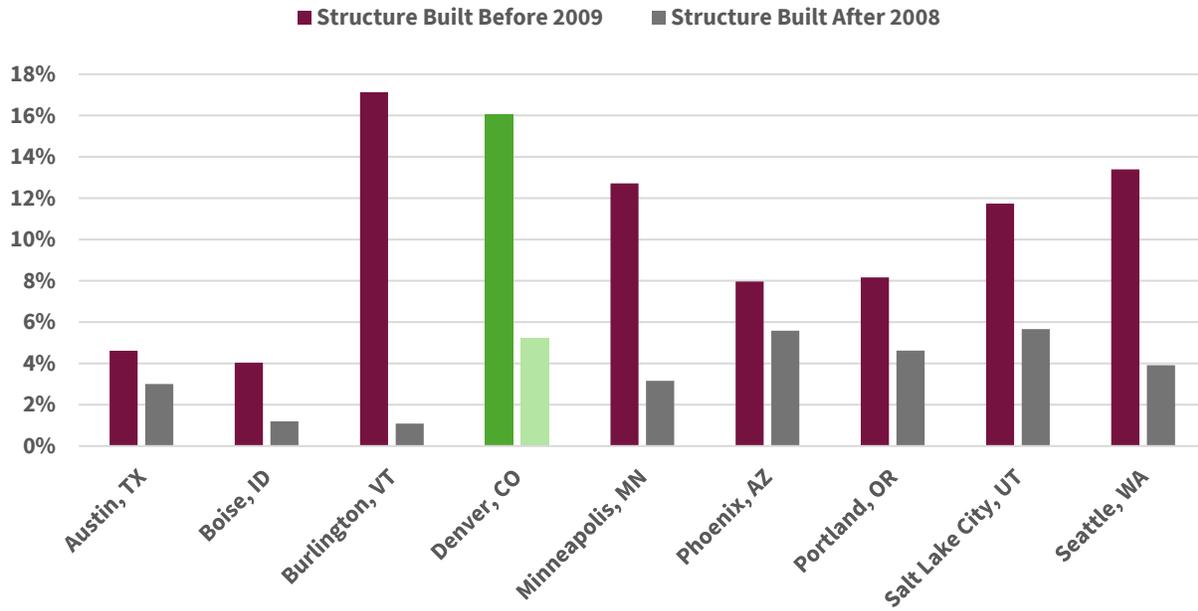
Cohort Analysis

Colorado's Front Range has one of the strongest economies in the country. The Denver area ranks 19th in the country in GDP per capita while Boulder ranks 9th. Our strong economy attracts developers, builders, and investors. Pacey Nehls performed a "cohort" analysis, examining the experiences of eight cities that are similarly situated to Denver in terms of socioeconomic standing and/or cultural values.

Among these peer cities, Denver ranked near the middle in terms of household income and had among the most builder-friendly construction defect laws. Meanwhile, Salt Lake City, Utah, which has longer statutes of limitations and repose, and NO right to cure, has higher ownership rates of new builds than Denver. If the lack of for sale affordable housing was a result of construction defect laws, the problem would be more pronounced in states with more homeowner-friendly construction defect laws than Colorado. That is not the case. The analysis finds that there is no correlation of ownership rates and construction defect laws. It is anticipated that the differences seen in the ownership between cities is due to other factors including local ordinances requiring builders to commit a percentage of their project to for sale housing and whether or not the multi-family housing units are high-end/luxury units. Figure 6 below provides the data.



Figure 6 - Cohort Analysis
Percentage of Multifamily Housing that is Owner Occupied



Source: American Community Survey

[Intentional Blank Space]



Conclusion

Home ownership plays an important role in creating economic, social, and political stability, empowers individuals, and contributes to the overall well-being of societies. Since the Great Recession, there has been a nationwide reduction in the availability of new for sale condominiums, largely due to ease of financing and ability to sell entire apartment properties (more investors and lower interest rates). Unfortunately, many Colorado residents are priced out of the single family home market and, while the Colorado economy is strong and residential single- and multi-family home construction is flourishing, there is a lack of for sale condominium units. Compounding the problem is that the lack of new for sale condominiums drives up the price of existing units, which works to the benefit of apartment developers, as individuals have no choice but to rent. The problem is even further exacerbated by high mortgage interest rates, high required down payments, and Coloradans' incomes not keeping pace with the inflation on housing.¹² The problem impacts Coloradans across a wide range of demographics, from young couples trying to afford their first home to retirees hoping to stay in Colorado, rather than moving to a more affordable state.

The fact that the shortage of for sale multi-family housing is occurring all across the country, despite significant variations in each state's construction defect laws (Colorado's are among the most builder-friendly), provides strong evidence that construction defect laws are not to blame and that changing them will not fix the problem. Plus, the decline in the construction of for sale condominiums across the country occurred while states' construction defect laws were largely held constant or had minor changes. The root cause of the decline cannot be construction defect laws.

Builders' publicly available financial statements show they have enjoyed record profits in recent years and their financial statements include specific information indicating low construction defect costs and concerns. Indeed, the builders, developers, and investors that bring homes to our cities are naturally *profit maximizers* and will choose to build apartment rentals that yield perpetual incomes rather than the one time profits from condominium sales. While making the laws even more builder-friendly would not materially increase the availability of for sale multi-family housing, it would come at the cost of jeopardizing the assets of and shifting costs to low and middle income consumers. Our laws ought to be written to protect these individuals, not corporations earning billions of dollars in profits each year.

Rather than further reducing consumer protections in the hopes of incentivizing new construction of for sale multi-family housing, local ordinances and housing authorities can directly address the problem. That is, recognizing the shortage of for sale multi-family housing, some municipalities have required builders and developers to commit a portion of their projects to for sale multifamily housing or pay cash in lieu. For example, the City of Boulder requires builders to commit 25% of each project to for sale affordable units.¹³ When developers choose to pay cash in lieu, the funds are used, in-part, to purchase and convert apartments to for sale condominiums. City of Denver has a similar program/policy;¹⁴ although, the percentage is lower, and the City of Denver has options for builders to provide low income rental units. Other options to make housing more affordable and available include changing policies surrounding subsidies, taxes, and zoning¹⁵ and/or exploring insurance regulation (e.g., addressing insurers' ability to price discriminate based on whether structures are going to be built for rent or sale).



About the Authors

Pacey Nehls – Economic Consulting

Pacey Economics, Inc. (DBA Pacey Nehls Economic Consulting), located in Boulder, Colorado, has over 35 years of experience providing consulting services and analyses on an array of economic, public policy, and business issues. We are a small boutique firm, focused on providing economic analyses for state agencies and private or publicly held companies. In addition, we offer economic reports or opinions and expert witness testimony in legal matters. Over the past decades, the firm has been awarded many government contracts through a number of different agencies to forecast, analyze, and evaluate programs and legislative changes. These agencies include the Colorado Department of Education (DOE), the Colorado Public Employee Retirement Association (PERA), and the Corporation of Public Broadcasting (CPB).

Patricia L. Pacey, Ph.D.

Dr. Pacey is the President of Pacey Nehls. In addition to her diverse experience testifying as an expert witness, Dr. Pacey has conducted several education funding studies, cost-of-living and economic impact analyses, and for nearly two decades assisted Boulder Municipal Employee's Association in their wage and benefit contract negotiations, an ongoing relationship her colleague now leads on her behalf. She received her Ph.D. in economics and a Bachelor of Arts in mathematics from the University of Florida, both with honors. She held academic positions with the University of Colorado before forming her own firm, Pacey Economics, Inc., in the early 1980s. Prior to moving to Colorado in the late 1970s, she was an associate for the Congressional Budget Office.



Jeffrey E. Nehls, M.A.

Mr. Nehls has been with Pacey Nehls since 2009 and was the key contributor to this analysis. In addition to his expert witness testimony experience, Mr. Nehls develops databases, designs studies and reports, and conducts quantitative and qualitative research for public policy projects. Mr. Nehls obtained a bachelor's degree in 2007 from University of Puget Sound, Tacoma, with a major in economics and minor in mathematics and a master's degree in economics from University of Colorado Denver in May 2015. Mr. Nehls is a member of several local and national professional organizations and has taught as an adjunct economics professor at Front Range Community College.





Hannah J. Suarez, M.S.

Ms. Suarez started working at Pacey Nehls as an analyst/research assistant in 2018 shortly after graduating from University of Colorado Boulder with a bachelor's degree in quantitative economics. She has since obtained a Master of Science in data analytics and developed extensive skills in data collection, data analysis and visualization, machine learning, and professional writing. In addition to her work with Pacey Nehls, Ms. Suarez served as a board member with the Denver Association for Business Economists (a chapter of the National Association for Business Economics) from 2022-2023. She is instrumental in the research and quantitative analyses for the firm's public policy projects.



Jake M. Zieba, B.A.

Mr. Zieba joined Pacey Nehls in the summer of 2022. He is fresh out of college with a bachelor's degree in economics from the University of California Santa Barbara. While in school, Jake acquired solid training and skills in R and Excel and has already demonstrated his ability to manage data, data analyses, and most importantly, critical thinking skills in addressing the tasks assigned to him. In addition to his research assistance, Mr. Zieba provides supplemental analysis and case support to the expert witnesses at Pacey Nehls.





Endnotes:

-
- ¹ https://otp.tools.investis.com/clients/us/lennar_corporation2/SEC/sec-show.aspx?Type=html&FilingId=16960989&Cik=0000920760 page 48
 - ² <https://d18rn0p25nwr6d.cloudfront.net/CIK-0001576940/90972704-6ff0-4e12-bd23-553ed4df1228.pdf> page 17
 - ³ https://otp.tools.investis.com/clients/us/toll_brothers_inc/SEC/sec-show.aspx?Type=html&FilingId=16904524&Cik=0000794170 page 20
 - ⁴ <https://d18rn0p25nwr6d.cloudfront.net/CIK-0000822416/38a68495-13bc-40b5-869f-b607a2a2ce2b.pdf> page 20
 - ⁵ Construction Monitor; www.constructionmonitor.com
 - ⁶ <https://www.findlaw.com/realestate/construction-defects/construction-defect-laws-by-state.html>
 - ⁷ <https://eastinsurancegroup.com/texas/builders-risk-insurance/>
 - ⁸ <https://www.primerus.com/article/short-summary-colorado-construction-defect-action-reform-act>
 - ⁹ <https://fred.stlouisfed.org/series/HOUSTPFR2UMQ> and <https://fred.stlouisfed.org/series/HOUSTPFST2UMQ>
 - ¹⁰ https://www.builderonline.com/money/opportunities-within-build-to-rent-to-sell-fee-build-or-hold_o
 - ¹¹ See Figure 8 of The Decline of Condominium Construction in Colorado from Common Sense Institute dated September 2023 and Figure 3 of this report.
 - ¹² <https://fred.stlouisfed.org/graph/?g=1fJ3R>
 - ¹³ <https://bouldercolorado.gov/services/inclusionary-housing>
 - ¹⁴ <https://www.denvergov.org/Government/Agencies-Departments-Offices/Agencies-Departments-Offices-Directory/Community-Planning-and-Development/Denver-Zoning-Code/Text-Amendments/Affordable-Housing>
 - ¹⁵ Schuetz, J. (2020). To improve housing affordability, we need better alignment of zoning, taxes, and subsidies. *Washington, DC: Brookings Institution.*