EXPLORING COLORADO'S HOUSING AFFORDABILITY CHALLENGES IN ALL OF THEIR COMPLEXITY

Conducted by **Shift Research Lab** in partnership with
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Executive Summary

Exploring Colorado's Housing Affordability Challenges in All of Their Complexity

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FACTORS IMPACTING HOUSING AFFORDABILITY

Executive Summary

BACKGROUND

Colorado's housing affordability challenge is first and foremost one of supply. Prior to the Great Recession, there were more housing units in the seven-county Denver metro region than households. But, since the recession, the region has added households at an annual rate that has far outstripped that of housing units, consuming the surplus of housing units. As a result, demand has outstripped supply for nearly a decade and housing prices have risen in excess of wages, causing housing to become increasingly unaffordable for many Coloradans.

We forecast excess demand to persist, even with record levels of building permit activity. Under these circumstances, only significant increases in housing supply will stabilize price; incremental reductions in the cost structure of development will accrue to developer profit and do little to ameliorate price pressure.

And, everyone should care about this affordability challenge. Housing cost-stressed households impact all Coloradans through the negative effects on business, public tax bases, health and education.

Housing Affordability: Why it matters to all Coloradans

According to a recent Colorado Mesa University poll, housing affordability is the biggest issue facing Coloradans. And it is not solely a Denver issue. "Statewide, 14 percent of respondents said housing/real estate was the biggest issue facing their community, while 10 percent said the economy was the most important problem. 9 percent of respondents listed crime/drugs/violence, 7 percent said education, and 6 percent said government was the biggest issue facing their community."[1]

With housing representing, on average, 35 percent of spending for households earning $50,000 or less, housing unaffordability is becoming the most significant threat to family economic security in Colorado. Currently, 50 percent of Colorado renter households are cost burdened, with housing commanding more than 30 percent of total household income. Eighty-five percent of these cost-burdened households have annual household incomes of $50,000 or less.

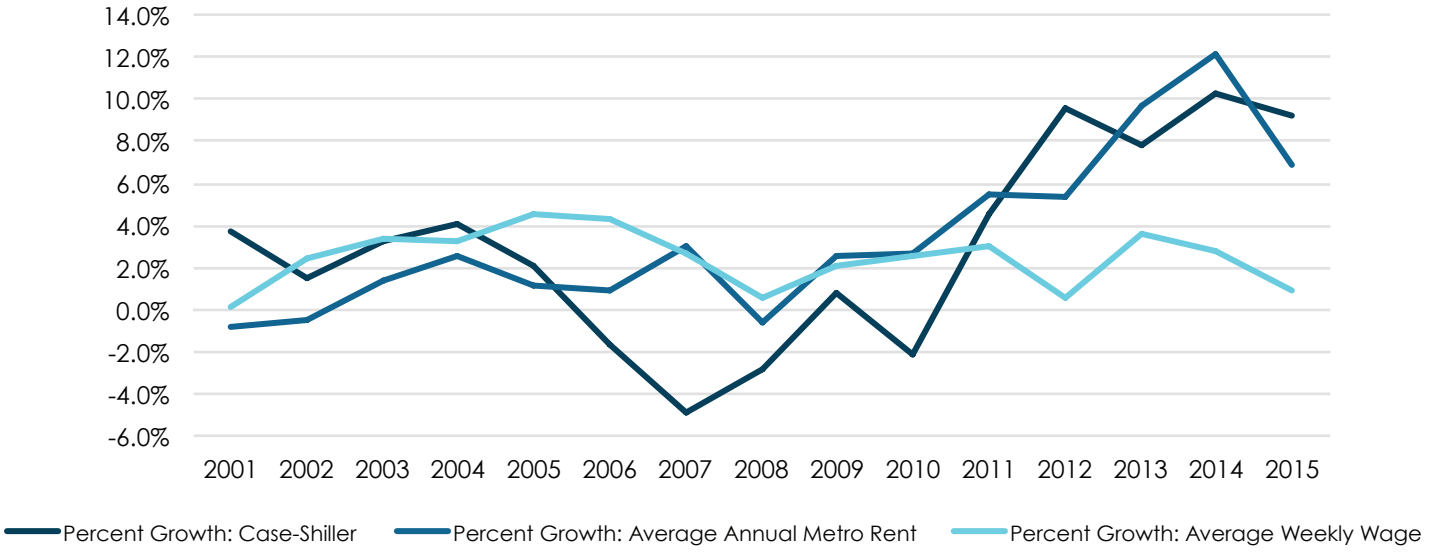
COMPOSITION OF MAJOR HOUSEHOLD EXPENDITURES (HHS EARNING LESS THAN $50,000)

Source: US Bureau of Labor Statistics, Consumer Expenditure Survey 2016

[1]http://www.thedenverchannel.com/news/local-news/poll-coloradans-rank-housing-economy-as-biggest-issues-facing-their-communities, accessed 1/22/18

But it was not always this acute. Between 2001 and the onset of the Great Recession, wages in Colorado kept pace with housing costs in both the rental and ownership markets. With the recovery from the Great Recession, housing costs diverged upward from wages. Since 2011, Colorado wages are up 11.4 percent while Denver metro rents are up 46.2 percent and the Denver Case-Shiller index of housing prices is up 48.7 percent.

WAGES VS HOUSING (PRICE & RENT) - ANNUAL GROWTH



Sources: S&P Case-Shiller Colorado (Denver) Home Price Index, US Bureau of Labor Statistics Quarterly Census of Employment and Wages (Colorado), Apartment Association Metro Denver Rent Survey

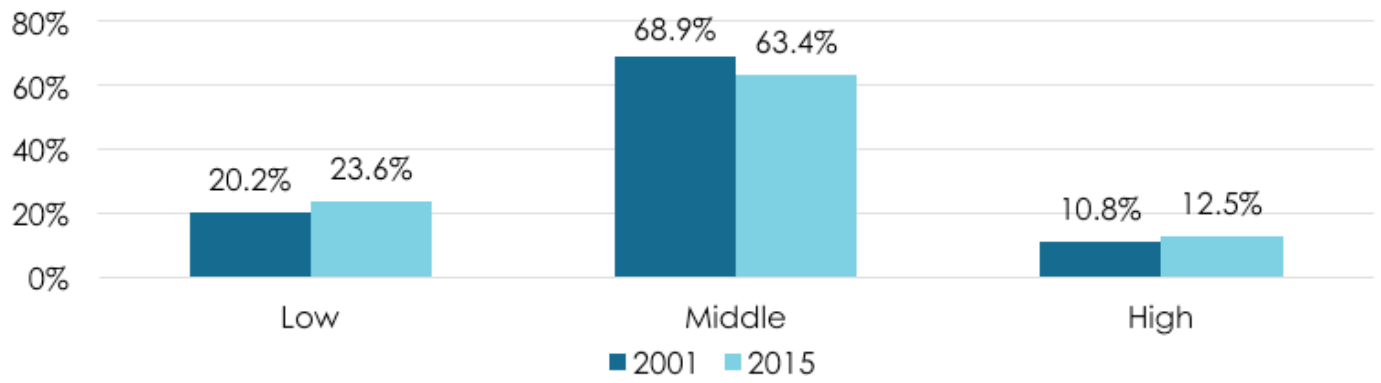
The cost burden of housing is an issue for every Coloradan, even households that are not directly affected. Annually, Colorado's cost-burdened households earning less than $50,000 annually are spending an additional $2 billion over the 30 percent standard to support their housing. That represents $2 billion that is not spent elsewhere on food, clothing, health care, recreation and other household expenditures. These expenditures could support local businesses, and many would be taxable and contributing to the provision of state and local services.

But the impacts are not limited to foregone expenditures. Colorado's service sector will find it increasingly difficult to maintain a workforce in this housing environment, threatening the viability of many of these businesses. Churn of student enrollment in Colorado's public schools, partially due to the community instability that results from high percentages of cost-burdened households, has shown to adversely affect all student performance and development. And, research has associated the overcrowding that often occurs in cost-burdened households with greater risk of injury, higher rates of infection, increased incidences of depression, and other childhood development problems[2], placing additional pressure on health care and social service systems.

The trends are not favorable. Our previous work on family economic security shows the state losing jobs paying middle-class wages, with the hollowing of that middle more to low-wage than high-wage jobs. Between 2001 and 2015, the share of middle-wage jobs in Colorado fell from 68.9 percent to 63.4 percent. As a result, the state experienced an increase in the share of high-wage jobs of 1.7 percentage points but also an increase in the share of low-wage jobs of 3.4 percentage points. To the extent Colorado is losing middle-wage jobs, it is losing them disproportionally and at twice the rate to low-paying jobs. Yet the new housing being built is disproportionally targeted to the high-income jobs highlighted in economic development announcements without recognizing that each of the additional high-paying jobs creates lower-paying service jobs at a greater than one-to-one ratio. If these trends continue with no changes, even more families will become housing cost burdened. It is in this context that we decided to look more deeply at the multiple, interconnected factors contributing to housing unaffordability in Colorado.

[2]Maciag, Mike. No Room in the City. Governing. November 2015.

SHARE OF HIGH, MIDDLE, AND LOW INCOME JOBS BY HOURLY WAGE - 2001 & 2015

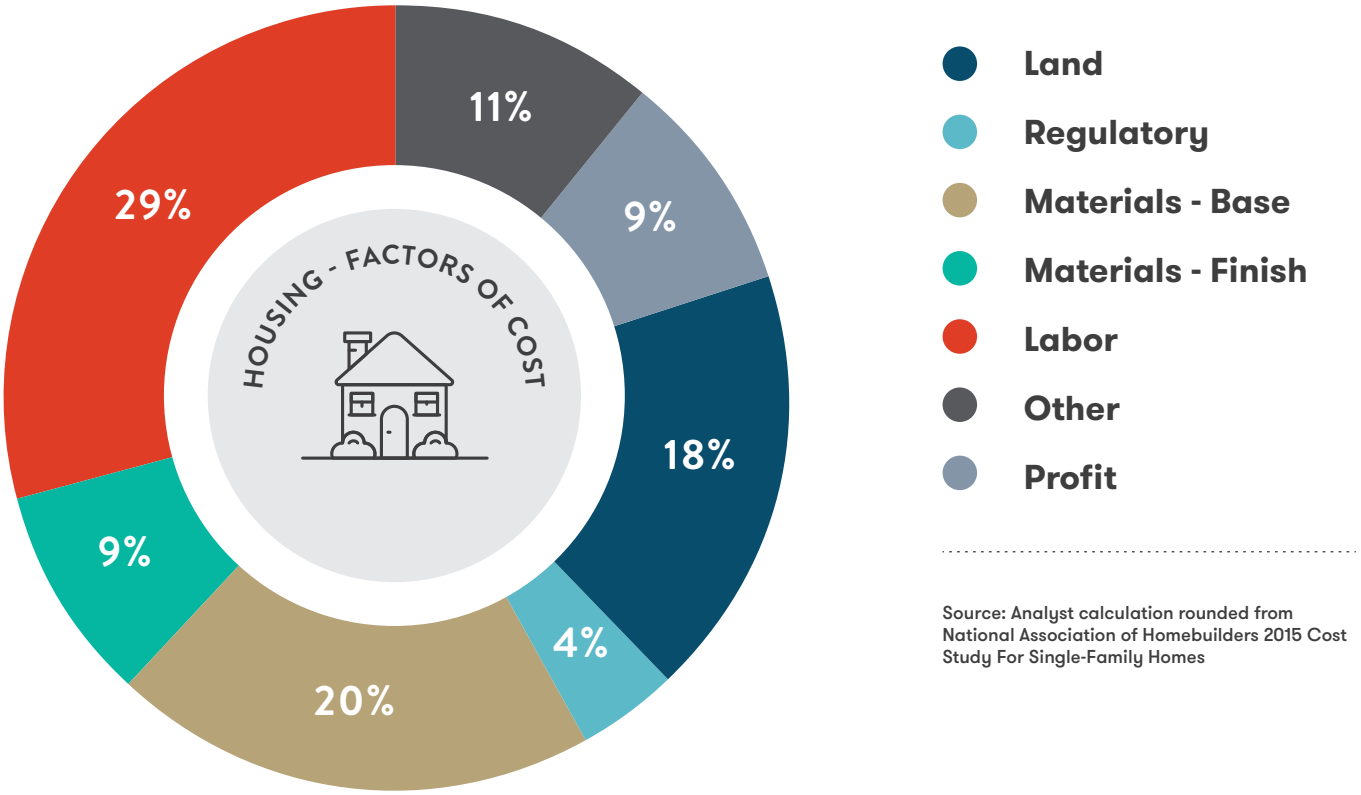


Source: Analyst calculation from Bureau of Labor Statistics data

HOUSING AFFORDABILITY - FACTORS OF COST

This study was designed to identify, analyze and synthesize the multiple and interrelated contributing factors to Colorado's housing challenge. While it is tempting to identify a single factor, for example construction defect legislation, or labor, the factors work in concert and interact with the market environment—and each of them matters. A simple fix to a singular contributor is unlikely to reverse the trend.

A recent study from the National Association of Homebuilders categorized the relative share of costs associated with building an average single-family home in the United States. While the shares may differ slightly for Colorado, the presentation is representative of the composition of the factors driving price.



Source: Analyst calculation rounded from National Association of Homebuilders 2015 Cost Study For Single-Family Homes

Colorado has experienced some degree of cost pressure in each of these factors since the end of the Great Recession. The degree to which the cost pressures impact final housing price vary with the relative importance of each factor to the cost of construction and the extent to which cost pressures have mounted for the particular factor. But, more importantly, the factors interact with each other in unexpected ways. As examples, the shortage in labor available to subdivide properties may be holding down the demand for land, thus dampening what would otherwise be additional pressures on land cost. A migration of labor back into the state, which ironically may not be happening due to the high cost of housing, could, in the short run, exacerbate housing costs by placing even more demand pressure on the limited stock of housing available. Even productivity improvements, often explored as a potential solution, require large up-front investments and the specter of such improvements may discourage workers to enter the construction trades and in the short-term exacerbate any existing labor shortage.

Further complicating the issue is the fundamental structure of the Colorado housing market, which is experiencing, and is projected to continue to experience, excess demand, record low vacancy rates, and quite possibly deficits of housing units. Under circumstances of such demand pressure, only increases in supply bring down price; incremental cost efficiencies more likely will flow to developer profit. The point is, housing is a system and must be understood, analyzed and addressed as such. Above all, this project is intended to highlight the networked nature of the housing supply challenge facing Colorado, and, unfortunately, to dispel the myth that there is a simple, unidimensional driver, and therefore a single solution.

The Research: Setting the Stage for a Discussion About Affordability

Our approach to this research was inductive; we entered the project with no formal model of unaffordability and instead set out to understand the issue through a series of interviews with professionals involved in various aspects of housing development. This qualitative approach provided a list of potential factors contributing to housing affordability that were synthesized into the following categories, and explored more deeply in the factsheets that comprise this report:

The Market	**Regulatory**	**Productivity**	**Materials**
Labor	**Land**	**Consumer Preference**	**Other**

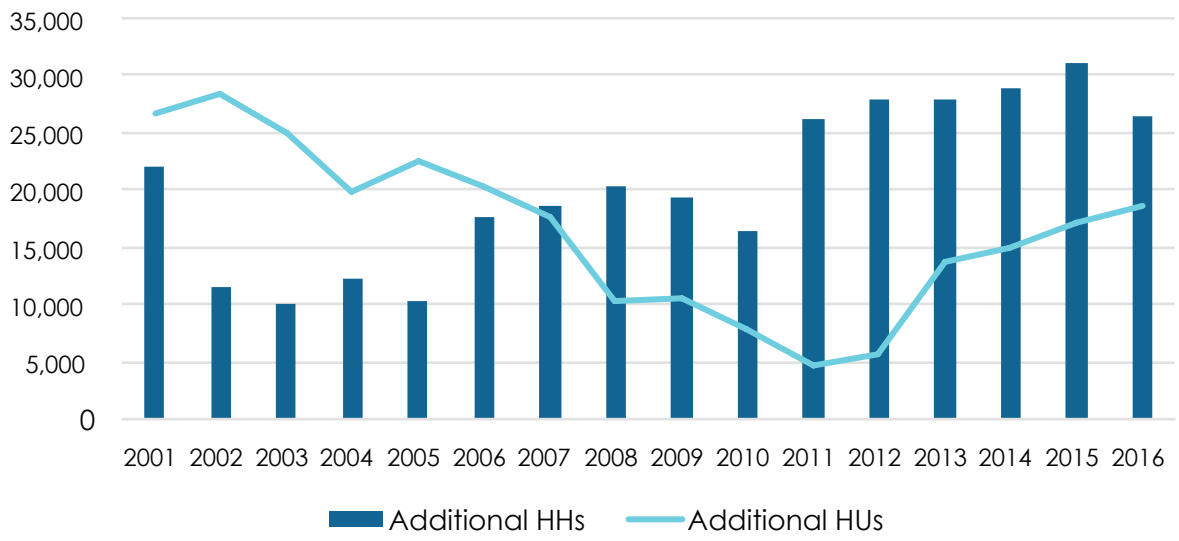
The second stage of this research was a quantitative assessment of each of the above factors and the extent to which each is contributing to unaffordability. The results, as summarized in the accompanying factsheets, are more nuanced than the conventional wisdom. Labor shortages exist, but to differing extents for general contracting/homebuilding and trade labor, with stronger evidence of shortages in the trades. Employment in the subfield of land subdivision is down more than 60 percent from its level in 2001, but employment in other subtrades has increased. The resulting impact on wages is similarly mixed with most subcategories of trade labor commanding larger increases in real wages than the overall private sector labor market. Yet real wages in home building and general contracting remain below both 2001 and 2006 levels. Notably, real wages for single-family general contractors have been largely flat since 2001; they are up only a half of a percent. And even though the wage pressure in the construction trades suggests a labor shortage, Colorado is using more trade labor per housing unit built today than it was in either 2001 or 2007.

Material costs displayed mixed results as well. Over the past ten years, most basic building material costs have demonstrated little inflation. Instead, the increase in material costs is more related to changes in consumer preferences and the industry's response. Preferences for larger homes and premium finishes, or perhaps perception of such on the part of developers, have contributed more to the cost of construction than the general level of inflation in basic building materials.

Land costs are up, but perhaps not as steeply as they would have been had the labor market for those engaged in subdividing activities not declined. Perhaps due to a shortage of that labor, the pressure to entitle land for development has slowed, likely holding down the cost pressures on vacant, currently unentitled land. Yet, land already zoned for residential development is becoming scarcer. Our analysis shows that the seven-county Denver metro region has about five years' worth of supply of land in a currently developable state, and once that supply is consumed, converting additional land to a developable form will add cost. This is on top of other regulatory cost pressures such as development and tap fees, a local issue in Colorado. These have displayed differing levels of cost pressure depending on the location.

While the individual factors certainly contribute to housing cost inflation, their impacts are more uneven, interrelated and nuanced than is initially obvious. The market circumstances, however, are unambiguous. Since the early 2000s, the seven-county Denver metro region housing market transitioned from producing annual surpluses (relative to households) to one of potential deficit of units to those seeking housing. This is due to both the unexpected growth in "housing seekers" coupled with the anemic growth in housing units during and just after the Great Recession and a demographic shift toward a larger number of smaller, single adult family units. Currently, many family units are doubling up, either by choice or due to necessity, resulting in multiple per housing unit. A reversal of the preference for doubling up will significantly exacerbate the regional housing shortage.

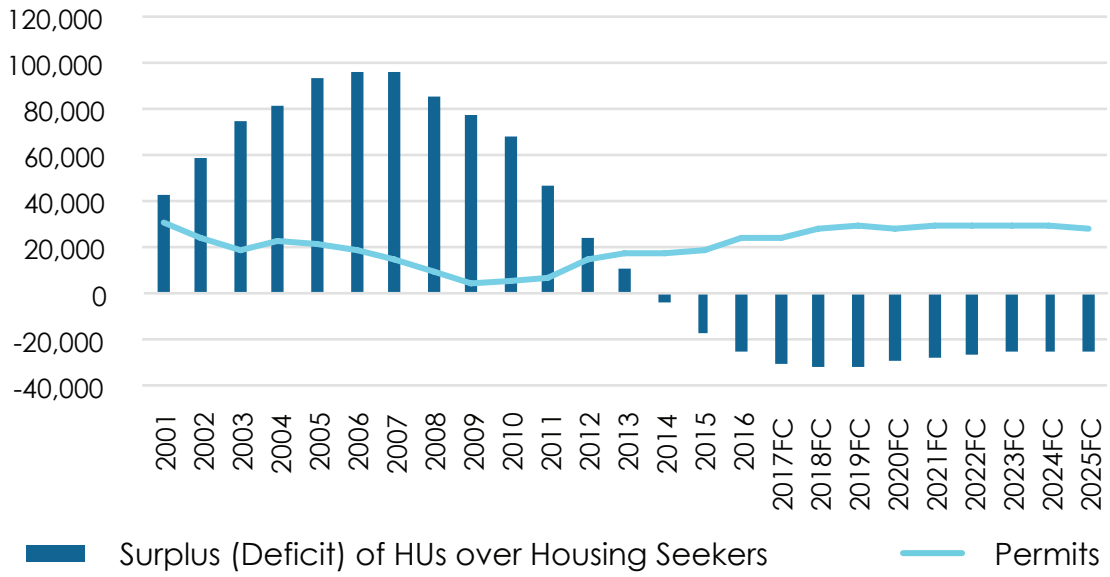
CHANGE IN HOUSEHOLDS AND HOUSING UNITS - ANNUAL GROWTH



Source: Colorado State Demography Office

And, our forecast is for a market that will not correct. Even record levels of projected permit activity fail to create a year-over-year surplus through the 2025 forecast horizon. Alternative forecasts of household formation, which reverse the trend toward one adult family units, also fail to return the region to healthy vacancy rates. Our alternative forecast projects vacancy rates in the vicinity of 1.5 percent regionally through 2025, far below the 5 percent generally considered healthy for a housing market.

BUILDING PERMITS AND ANNUAL SURPLUS RATE - DENVER METRO REGION



Source: Colorado State Demography Office

First and foremost, as argued and demonstrated earlier, Colorado's housing affordability challenge is a market problem; demand is outstripping supply. Why, then, with such demand pressure, has the market not corrected and further increased supply?

The story of limited supply likely has its genesis in the Great Recession, one largely fueled by real estate excesses. In the wake of the recession, Colorado appears to be left with the "perfect storm" on the supply side: a market dealing with the aftermath of bankruptcies and consolidations, uneven labor shortages particularly in the areas of land development and key trades, and increased levels of risk aversion among the remaining players. In the halo of the recession, rational business practice is to avoid the level of overextension that jeopardized the viability of many firms prior to the recession.

Compounding this, with a limited supply of developable land and a shortage of professionals available to shepherd land through the development process, there is neither the capacity nor perhaps the incentive to bring more housing to the market. With limited capacity to build and excess demand, the firms that remained turned to high-return projects: single-family housing out of the reach of those with modest incomes and rental units in high demand due to demographic shifts and the hangover of the foreclosure crisis. Finally, and to a lesser extent, investors entered the market, buying up single-family homes and deploying them as rental properties and the market for existing properties shrank, perhaps partly due to the requirement in Colorado's senior homestead exemption for ten years of continuous occupancy for eligibility. These multiple phenomena converged to limit supply, creating a vicious cycle in the resale market as potential sellers balked due to the inability to find replacement homes to buy. All the time, demand continued to mount.

Much has been written lately about the need to lower the cost of development. As demonstrated by this research, all aspects of housing development have experienced some cost pressure, albeit more unevenly and in some cases less acutely than the prevailing wisdom. Lowering or limiting these costs of development is necessary. However, it will not be sufficient to reduce the price of housing. Given the strong demand pressure, reductions in cost structure that fail to generate enough additional supply to alleviate the excess demand will flow mostly to developer profit and not to price reductions for the consumer. Instead, to be effective, changes in the cost structure MUST be accompanied with sufficient increased supply to alleviate the demand pressure, particularly supply tailored to households currently priced out of the market. This will require solutions that transcend the traditional market and instead focus on innovative approaches, such as those allowing for significant increases in the productivity of housing construction, expanding the supply of developable land, exploring the role of social capital in all phases of housing, and deploying strategic investments in infrastructure to increase the economic viability of less populated areas of Colorado.

A CALL TO ACTION

The factors contributing to housing unaffordability are complex and interrelated. Maintaining affordability for all segments of the market will require multiple approaches, some of which are yet to be identified, or perhaps even invented. But, to be successful in the current market environment, the actions taken must be structured around the goal of increasing the supply of housing.

While programs and policies that reduce cost and expand access to existing housing are necessary, particularly for the neediest Coloradans, they will not be sufficient in reducing price pressure; in the face of the current market conditions, only increased supply will be sufficient. Bringing that additional supply to the market undoubtedly will require the innovative thinking and actions of many; there is no simple solution. Thus, this call to action is designed to encourage all Coloradans to embrace a new way of thinking about Colorado's housing challenge while recognizing the need to maintain and expand the important programs, policies, and efforts currently underway. It should be interpreted as a set of potential actions that may be taken to augment, not replace, existing policy around housing affordability (e.g. LIHTC, State tax credits, vouchers, density bonuses, etc.). To commence the conversation, we offer the following action areas for consideration:

LABOR

To the extent the labor shortage is affecting supply of housing:
- Identify areas of labor shortage and expand training apprenticeship programs.
- Advocate for immigration policy that is consistent with the need for skilled trades.
- Explore programs to bring alternative sources of labor to the market, such as employing crews from the correctional system in a manner similar to Colorado Correctional Industries' SWIFT program.

Explore ways to expand labor productivity and bring more supply to the market by using methods such as factory-built modular housing. Currently both regulation and perception are barriers to these sorts of innovations in building. The legislature should form a committee to study and address these and other barriers to factory-built housing or other productivity-enhancing innovations in building. This inquiry should be inclusive of solutions for primary residences, as well as accessory dwelling units.

Communicate the true impact of major economic development announcements by accounting for the secondary jobs created by the new primary jobs. This will raise awareness and call attention to the number of additional workers, generally in lower paying occupations, who will demand housing as a result of the newly created economic activity.

ENHANCEMENTS OF CAPITAL RESOURCES

- **Identify and promote opportunities** for social impact capital investments that will enhance the ability to bring more supply to the market.
- **Expand investible opportunities** in private and/or public-private partnership cost abatement vehicles, such as community land trusts and pilot projects.

INNOVATIONS IN INFRASTRUCTURE PROVISION

- **Expand Colorado's housing options** through strategic infrastructure investments statewide, such as broadband, that make other regions of the state economically viable and thus more attractive for housing.
- **In the urban settings,** explore innovations in shared parking as a means of reducing the burden that parking regulations place on new development. This option is particularly viable as the Denver region continues development along newly established transit corridors.

POLICY

- **Monitor trade policy** for actions that would increase the price of building materials. Coordinate with relevant state agencies, and if appropriate advocate for, trade policies that will not increase the price of those materials.
- **Consider a restructure** of the Colorado Senior Property Tax Exemption to eliminate the requirement for ten years of ownership. This should reduce the incentive for seniors to remain in homes they would rather sell but for the loss of the exemption and as a result bring additional inventory and a more healthy "churn" to the resale market. Means testing the exemption could offset the additional cost of eliminating the residency requirement.
- **Continue to monitor** the impact of the changes to Colorado's construction defect laws to evaluate whether those changes have been successful at increasing the inventory of condominium property at more affordable price points.
- **Evaluate the impact** of the current federal tax reform on housing in Colorado and recommend state-level policy changes if appropriate.
- **Reach out to other areas,** particularly the San Francisco/Bay Area for lessons learned. Explore ways to incorporate those lessons into Colorado's housing policy.

Finally, we recognize that this call to action is a beginning, not an end. It is undoubtedly incomplete, both in coverage and in detail. It will take a persistent, on-going effort to address affordability in Colorado. To facilitate that effort, we recommend establishing a Housing Affordability Roundtable to explore these options and others, including the ongoing monitoring of the entire housing ecosystem.

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