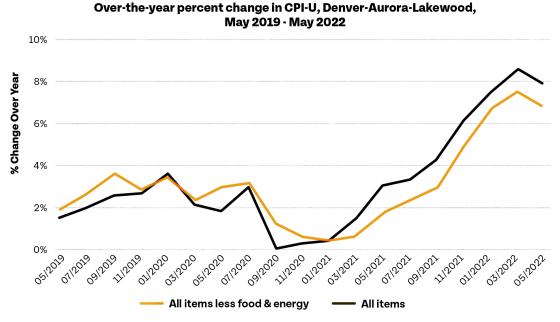


What's Really Driving Inflation

& How Should We Talk About It?

A word not heard often in recent decades, inflation is back in our vocabulary. In May, inflation cracked 8.3 percent in the Denver metro area—it was just 1.9 prior the pandemic. Nationally, inflation hit a 40-year record this month, increasing 9.1 percent year-over-year. This increase is largely rooted in spiking gas prices, rent & home prices, and food costs. Inflation, it appears, is here to stay. On June 21, the state Legislative Council Staff updated its inflation forecasts for the Denver-Aurora-Lakewood area. The estimates rose across the following three years, hitting an expected 7.9 percent in 2022, 4.6 percent in 2023, and 3.1 percent in 2024. The primary underlying drivers of inflation are Russia's invasion of Ukraine, the Covid-19 pandemic, and the affordable housing crisis. As of June, rent increases comprise a larger share of the uptick in inflation, a trend that is predicted to continue growing throughout 2022.

As the <u>Bell reported earlier this year</u>, inflation varies across categories and geographies. In essence, an extremely regressive tax, inflation whittles away pre-tax income by reducing purchasing power. For low-to middle-income Coloradans, the impact of inflation can be devastating. Retirees and those on fixed incomes likewise struggle to keep up with costs that rise sharply. Notably, while wages have increased over the past two years, they have largely been <u>outpaced by inflation</u>.



Source: U.S. Bureau of Labor Statistics

State lawmakers have limited options to address the root causes of inflation. However, policymakers do have the ability to provide targeted relief to those most impacted by this phenomenon. By doing so, we can support Coloradans in need of assistance until globally high rates of inflation subside. Before doing so, it's imperative to sort through the noise and determine what is and isn't driving inflation.

What's driving inflation?

The driving forces of inflation are complicated and varied. Mark Zandi, an economist at Moody's Analytics, a branch of the credit-rating agency, broke down May's year-over-year inflation figures. In this analysis, Russia's invasion of Ukraine as well as the supply chain disruptions and excess demand from the Covid-19 pandemic account for the bulk of the U.S.' headline inflation. The underlying inflation captured by the 'Other' category is in line with the Fed's floating inflation target of 2 percent.

Approximately 41 percent of May's year-over-year inflation can be attributed to the Russian invasion of Ukraine. That is, the impacts of higher energy and input prices as the global markets for oil/gas, agricultural grains, and metals have skyrocketed due to reduced Ukrainian output of grains and sanctions on Russian oil and gas. Energy and food prices remain high with the potential for further increases. Across Colorado, gas costs on average \$4.92 per gallon, a 50 percent increase compared to this time last year. The Biden administration has attempted to quell high gasoline prices by releasing part of the nation's strategic oil reserves.

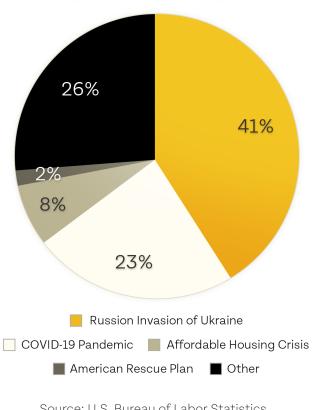
To save lives, during the initial months of the pandemic, many who were able to stay home did so. As a result, our consumption patterns shifted more to goods over services and were fueled by expansionary fiscal and monetary policy. As this shift was happening, global supply chains were stymied, creating a mismatch between supply and demand, resulting in roughly 2.3 percent inflation year-over-year: a figure fitting within the Federal Reserve's floating target of 2 percent annual inflation.

A persistent housing shortage, combined with changing housing preferences during the pandemic, has led to skyrocketing housing and rent prices. Despite rising mortgage rates, inflation and cost increases in housing could rise further. Since the CPI shelter inflation lags behind Zillow's Observed Rent Index, it is likely that rent inflation will increase even more in the coming months. Researchers at the San Francisco Fed predict rent inflation to increase by 7 percent in 2022 and 2023, boosting overall inflation by 1.1 percent over its historic average. Unfortunately, national inflation numbers in June reflect this forecast as rent prices rose 5.6 percent increase (y/y) driving overall inflation even higher.

Inflation Drivers by Percentage of Total Inflation

Total	8.5%
Russian invasion of Ukraine	3.5%
Direct impact of higher commodity prices	2.8%
indirect impact of higher commodity prices	0.7%
COVID-19 pandemic	2.0%
Stressed supply chains	1.5%
Reopening effect	0.4%
Labor shortages	0.1%
Affordable Housing Crisis	0.6%
American Rescue Plan	0.1%
Energy Regulation	0.0%
Money Supply	0.0%
Corporate Price Gouging	0.0%
Other	2.3%

Decomposing Consumer Price Inflation, May 2022 (Year-over-year)



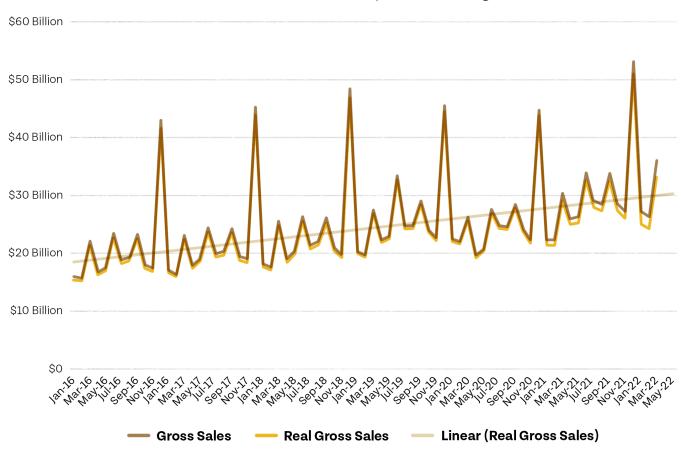
Source: U.S. Bureau of Labor Statistics, Moody's Analytics

What's not driving inflation?

With inflation high, headline-grabbing arguments are all over the place. One prominent claim is that due to the labor shortage, workers' wages are skyrocketing and thus driving up inflation. However, as the price of goods and services rises, real wages (or wages that account for inflation) actually decline. Wage gains, while high in aggregate, have not been evenly shared. And this increase in wages has not kept pace with rising prices. While average hourly earnings are up 9.2 percent in Colorado (year-over-year), real average hourly earnings (factoring in reduced purchasing power from inflation) are up a mere 0.8 percent. Headline wage increases may appear shocking, however, the inflationary effect nearly nullifies these gains to workers. Wage-driven inflation generally factors into medium-term inflation. Given the fall in real wages below pre-pandemic levels, wage-driven inflation does not appear to be a medium-term factor. Further, it is not a current driver of inflation nor the above-target inflation of the last year.

Other arguments claim that the American Rescue Plan (ARP) funding is the primary driver of inflation and further that upcoming TABOR rebates will only worsen inflation. As Zandi's econometric analysis plainly demonstrates, fiscal stimulus during the beginning of the pandemic had a nominal effect on inflation. Further, Colorado directed these funds toward long-term investments, such as the housing crisis and workforce development, therefore increasing productive capacity rather than accelerating excessive demand. Although fiscal stimulus was large during the pandemic, consumption spending levels followed the rolling average nationally and in Colorado as many low- to middleincome households initially saved stimulus and unemployment benefits; today, remaining savings from fiscal stimulus are being quickly depleted as inflation persists.

Colorado Sales Tax Revenue: Jan 2016-May 2022



In shifting to present relief, some claim the \$3.65 billion in TABOR rebates are dangerously inflationary. If the \$1.9 trillion ARP contributed a mere 0.1 percent of inflation, it's difficult to understand how a rebate worth .001 percent of ARP could be excessive. As the average Colorado household loses \$500 per month (or \$6,000 per year) to inflation, a one-time payment of \$750 isn't enough to break even, let alone accelerate inflation in Colorado. And thanks to a change in the TABOR sales tax rebate mechanism, these rebates will be more targeted than in previous years.

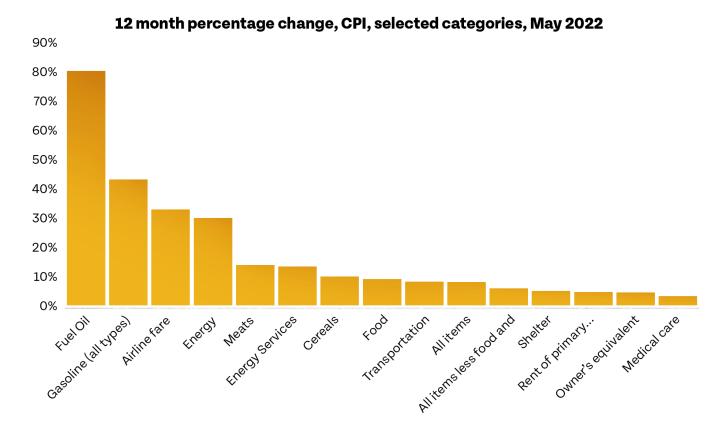
This analysis also puts to rest the 'greenflation' theory. The claim that regulation of fossil fuels has restricted oil/gas supply, and is thus artificially driving up prices, is not borne out by the evidence. U.S. oil refineries are operating at near full capacity, continuing at roughly 15-year levels. Furthermore, oil and gas prices are set on a global market, plainly demonstrated in globally high energy prices.

These arguments are political stunts intended to distract the public from the corrosive effects of inflation. As the electoral season heats up, Coloradans should be wary of what they hear and what drivers are borne out by economic analysis.

Exacerbating existing inequalities in Colorado

Predictably, the costs are not shared equally. The basket of goods measured by the CPI is the same for all Coloradans. However, people with the lowest income spend the greatest percentage of their incomes on those goods. The lowest quintile spends 30 percent of its income on food,

while the highest quintile of Americans spends 6 percent. Under persistent inflation above 8 percent, lower- and middle-income households (those in the bottom 60 percent of the income spectrum) will lose roughly 33-50 percent of their excess savings within a year.



In quelling this regressive tax, national monetary authorities (such as the Federal Reserve) are responsible for reducing inflation. The Federal Reserve is making important moves to lower inflation, recently raising interest rates by three-quarters of a percentage point—the bank's highest rate hike since 1994. Interest rate hikes are expected to continue at the Fed's upcoming meeting in September, likely reaching 3 percent by year's end.

The bottom line is that the causes of our current inflationary period are vast, the solutions are difficult, and not much can be done to get to the root of the problem at the state level.

Neverthreless, state policymakers did good work to try and address rising costs during this past legislative session.

Only the Fed can reduce prices, however, the state government can focus on the targeted reduction of costs for Colorado families and small businesses through tax rebates, credits, or direct payments. In this case, targeting matters more than ever. Some tools Colorado can wield to fight inflation include the child tax credit and the earned income tax credit. As they are targeted at lower-income people, they offer relief to those who most need it without flooding the economy with loose funds. Additionally, these tools have knock-on impacts, lowering poverty rates and boosting economic output over five to ten years. Electric vehicle tax credits and rebates can also assist both the state's transition to clean energy as well as reduce price pressure on industries requiring oil and gas. For more examples of targeted relief implemented in the last legislative session, see our recent blog. In drafting policy, we must consider inflationary impacts and provide targeted relief to Coloradans most in need of assistance

Key Takeaways:

With the rapid run-up of inflation across the globe, we're hearing a lot of heated takes about the drivers and impacts of inflation on Colorado. The Bell wanted to sort through the evidence and separate myth from fact. To remain informed in this political season, our key takeaways are:

- 1. In May, inflation hit 8.3 percent (year-over-year) in the Denver metro area.
- 2. Current inflation is primarily driven by Russia's invasion of Ukraine and the Covid-19 pandemic.
- 3. Current inflation is not driven by the American Rescue Plan, and TABOR rebates won't worsen it.
- Colorado lawmakers can't slow inflation but can target relief and assistance to lower- and middle-income Coloradans.