

TOWARD A MORE COMPETITIVE COLORADO 2024

JANUARY 30, 2024

ABOUT THE REPORT

The 2024 Toward a More Competitive Colorado (TMCC) report outlines how Colorado measures up in 35 key indicators, across seven sections: economic vitality, livability, education, innovation, infrastructure, health, and taxes. The report focuses on data points that outline Colorado's ability to compete today, and what areas must be improved to ensure that the state can compete in the future.

Best attempts have been made to find the most recent data possible. The rankings in this report have the most up-to-date information found.

Each indicator presented will rank Colorado's performance against the other 49 states, with an emphasis on how Colorado compares to ten comparison states: Arizona, California, Florida, Georgia, North Carolina, Oregon, Texas, Utah, Virginia, and Washington.



COLORADO'S 2024 COMPETITOR STATES



Arizona



California



Florida



Georgia



North Carolina



Oregon



Texas



Utah



Virginia



Washington

SUMMARY OF RANKINGS

ECONOMIC VITALITY

	Rank	Previous Rank	Change	Data Year
Labor Force Participation	4	4	0	2022
Employment Growth	13	17	4	2022
Unemployment Rate	17	33	16	2022
Labor Shortage	19	39	20	2022
Personal Income	5	8	3	2022
State GDP per Employee	13	12	-1	2022

LIVABILITY

	Rank	Previous Rank	Change	Data Year
Sharecare Wellbeing Index	8	7	-1	2022
Home Prices	43	43	0	2022
Population Growth	19	17	-2	2022
Net Migration Flows	21	17	-4	2022

EDUCATION

	Rank	Previous Rank	Change	Data Year
Public Expenditure per Student	24	26	2	2022
High School Graduation	44	42	-2	2020
Bachelor's Degrees	2	3	1	2022
Science & Engineering Grad Students	6	6	0	2021
Fall Enrollment per Capita	26	20	-6	2022
Home Grown Talent	46	46	0	2022

INNOVATION

	Rank	Previous Rank	Change	Data Year
High-Tech Employment	4	3	-1	2022
Patents	10	9	-1	2021
Academic R&D	12	14	2	2021
R&D Intensity	22	21	-1	2021
SBIR Grants	5	4	-1	2022
Proprietors	6	6	0	2022
NASA Awards	7	6	-1	2022
Entrepreneurship Index	8	22	14	2021
New Businesses	14	13	-1	2022

INFRASTRUCTURE

	Rank	Previous Rank	Change	Data Year
Wind Generation	6	7	1	2022
Solar Generation	10	13	3	2022
Renewable Energy	14	14	0	2022
Public Transit Usage	14	17	3	2022
State Highway Revenue	21	24	3	2021

HEALTH

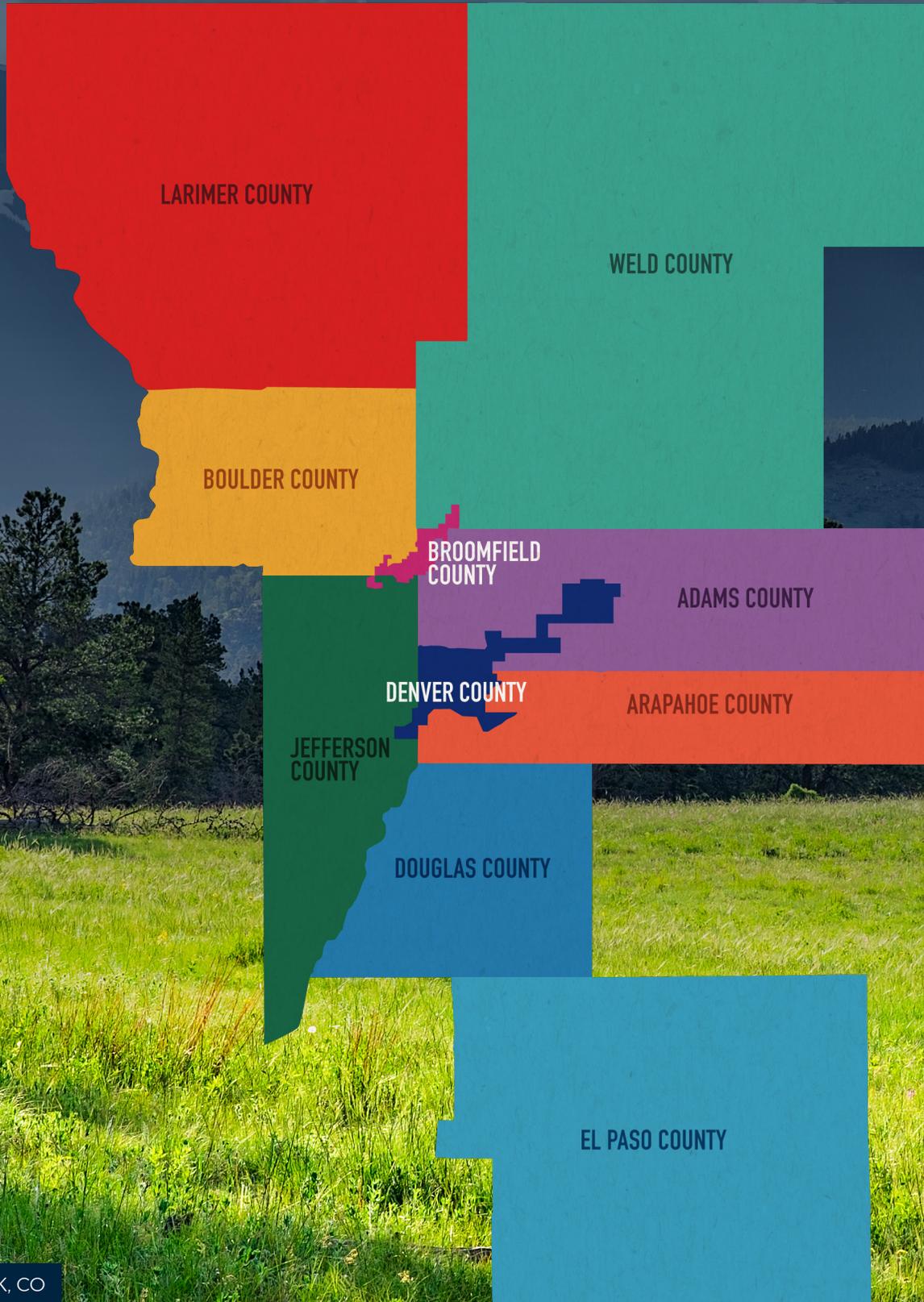
	Rank	Previous Rank	Change	Data Year
Obesity Prevalence	1	2	1	2022
Physical Activity	2	2	0	2022
Hospitalizations	7	6	-1	2022
Insurance	29	29	0	2022

TAXES

	Rank	Previous Rank	Change	Data Year
Corporate Tax Index	7	7	0	2023
Overall Tax Climate	27	21	-6	2023
Commercial-Homestead Classification Ratio	51	51	0	2022

ABOUT THE METRO DENVER EDC

Often called a “center of influence,” the Metro Denver EDC was the nation’s first regional economic development organization. From Castle Rock to Fort Collins and Golden to Greeley, we represent the ten counties that contribute to our robust economy and incredible culture. As the economic development function of the broader Denver Metro Chamber of Commerce, the EDC serves the ten-county territory that represents two-thirds of the state’s population and three-quarters of the GDP.



EXECUTIVE SUMMARY

One of Colorado's most valuable assets is the highly educated workforce that resides here. The state rates second for the percent of adults with a college degree with 45.9 percent of adults holding a 4-year degree or more. Colorado is home to many emerging industries, quantum computing for one, and has the talent to attract fast-growing companies to the region.

Colorado's renewable energy and highway infrastructure investments, which began early in the 2000s, are starting to pay dividends. Although the state has no access to hydro-electric power generation, Colorado ranks highly in the percentage of power generated by renewable sources, at 36 percent of total energy generated in 2022. This makes us one of only three states, alongside California and Texas, to rank in the top ten in both wind and solar net power generation. In recent years, the state has placed a renewed emphasis on rebuilding the state's roads and providing access to public transportation. Colorado's long-run competitiveness relies on our ability to match workers to companies, and to ensure high quality transportation options for those workers.

While the state has an educated workforce, those workers are typically not from Colorado. Of the adults with a college degree in the state, only 23.4 percent of degree holders were born here. This is, at least in part, due to challenges facing the K-12 education system. Colorado's four-year on-time graduation rate is below the national average of 87 percent. In order to satisfy the long-run needs of the labor force, Colorado will have to upskill and reskill workers who do not have the necessary training to meet the demands of a changing economy.

The state is also in the preliminary stages of an affordability crunch that, if left unaddressed, will hinder Colorado's ability to attract and retain talent. Home prices have shot up throughout the state, with single family home prices in the Denver MSA more than doubling between 2014 and 2022. Colorado now scores consistently higher for overall cost of living, making it one of the most expensive states in the country.

Over the past two decades, Colorado has relied on in-migration to bolster population and economic growth, but the flow of people into the state is slowing. Due to a variety of factors, that growth has slowed considerably since the onset of the COVID-19 pandemic. In two years, we saw Colorado drop in terms of the overall population growth, and the net number of people moving to the state. If the trend continues, the Colorado community will have to address cost of living concerns broadly, but specifically with regard to housing and energy costs.

Colorado is a hub of technological innovation made possible by a workforce with high-tech skillsets. Adults throughout the state are more likely to hold a college degree, and public and private dollars have flocked to the state in response. That is not to say that Colorado is not facing challenges in this unique economic environment. Slowing in-migration, rising housing costs, and a K-12 education system that lags its peers nationally are all areas where Colorado can make improvements to guarantee the state remains competitive nationally and internationally.



ECONOMIC VITALITY

Access to talent drives economic growth. To ensure Colorado remains a top choice for both companies and workers, it is essential that we sustain a robust and diverse labor market that provides the skills and experience businesses need to thrive in Colorado. However, the availability of workers has been constrained, with over two open jobs per unemployed worker in 2022. Of the six indicators in this section, Colorado improved its rank in four, dropped a spot in one, and was unchanged in one.

EMPLOYMENT ¹

#4 LABOR FORCE PARTICIPATION

The percentage of adults aged 16 and up who are employed or looking for a job.

- Colorado's ranking did not change over the year, and the state has remained in the top 10 each of the last six years.

#13 EMPLOYMENT GROWTH

The rate of increase in the number of jobs in the state's economy from 2021 to 2022.

- Employment grew by a strong 4.3 percent during 2022 after suffering from pandemic-induced declines in 2020 and 2021. Colorado employment has grown faster than the U.S. in each of the last 12 years.

#17 UNEMPLOYMENT RATE

The percentage of the labor force that is looking for a job but does not have one.

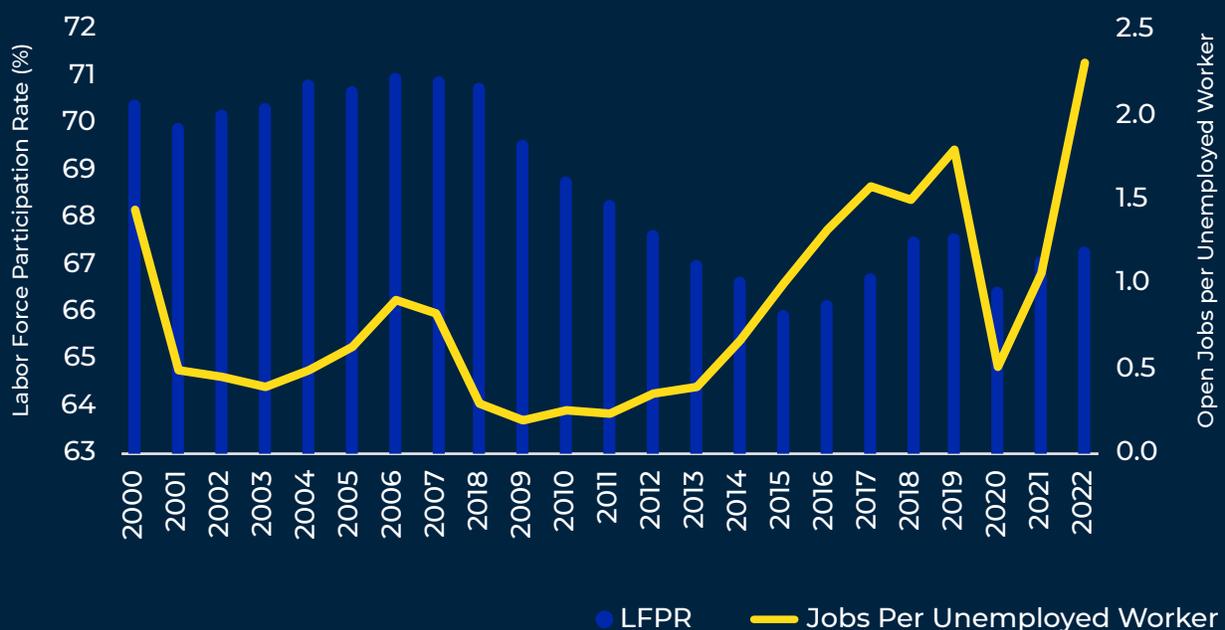
- Despite a 3.0 percent unemployment rate during 2022, Colorado only ranked in the top third of states due to historically low unemployment rates across the country.
- The low unemployment and high labor force participation rates means there are few people looking for jobs, and it becomes more difficult to draw people into the workforce.

#19 LABOR SHORTAGE

Measures the ratio of open jobs to unemployed workers.

- There were more than two open jobs for each unemployed worker in 2022, more than double the 2021 rate, pushing the state up from 39th in 2021.

COLORADO LABOR PARTICIPATION & SHORTAGE ¹



PRODUCTION & COMPENSATION

#5 PERSONAL INCOME

The amount of total compensation earned per person in Colorado.²

- Per-capita income in Colorado was \$75,720 in 2022, 5.3 percent higher than in 2021. Colorado workers earned 15.0 percent more than the average worker nationally in 2022, equating to more than \$10,000 more in personal income per year.

#13 STATE GDP PER EMPLOYEE

The economic value that the average Colorado worker creates.²

- Colorado fell one spot from 2021 to 2022, the most recent year for which data is available. Total output in the state grew by 10 percent over the year, but 14 states grew at a faster rate during that time.



¹ Source: U.S. Bureau of Labor Statistics, 2022

² Source: U.S. Bureau of Economic Analysis, 2022

LIVABILITY

A key driver of Colorado's economy over the past 20 years has been the enticing quality of life the state offers. Ensuring all members of our community can access the benefits the state has to offer is imperative to keeping Colorado competitive. The increased cost of living has put additional financial pressures on many families and reduced the attractiveness of relocating or putting roots down here. Of the four indicators in this section, Colorado fell in three, and was unchanged in one.

WELLBEING

#8 SHARECARE WELLBEING INDEX

The index compares states on over 600 health risk factors including: access to food and medical care, social systems, financial support, and economic security.¹

- Since the publication started in 2009, Colorado has not ranked outside the top 10, indicating the state has a high overall quality of life.

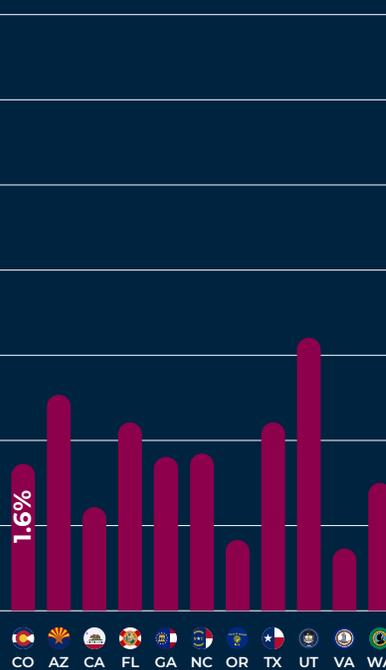
COLORADO POPULATION GROWTH & HOME PRICES⁵



EMPLOYMENT GROWTH 2022⁴



5-YR ANNUAL GROWTH RATE⁴



10-YR ANNUAL GROWTH RATE⁴



COST OF LIVING

#43 HOME PRICES

Measured by the median price of a single-family detached home.¹

- According to the National Association of Realtors, the median price of a single-family home has more than doubled from 2014 to 2022, increasing from \$310,200 to \$670,100 over the period.
- According to the Colorado Housing Finance Authority, Colorado has a housing unit shortage of over 225,000 units for current residents.

POPULATION

#19 POPULATION GROWTH

The overall change in statewide population from year to year.²

- Colorado's natural population increase, calculated as births minus deaths, has now decreased in seven consecutive years, falling from 31,710 in 2014 to 12,570 in 2022. This ranking also includes net migration numbers.

#21 NET MIGRATION FLOWS

The number of people who move into Colorado each year minus the people who move out.³

- Of the top-10 states with the highest levels of net migration, four have a higher cost of living than Colorado:
 - Higher: California, Maryland, New Jersey, and New York
 - Lower: Arizona, Florida, Georgia, Illinois, North Carolina, and Texas

¹ Source: National Association of Realtors, 2022

² Source: U.S. Census Bureau, pulled from the U.S. Bureau of Economic Analysis, 2022 National Association of Realtors, 2022

³ Source: U.S. Census Bureau, 2022

⁴ Source: Bureau of Labor Statistics, 2022

⁵ Source: U.S. Bureau of Economic Analysis, 2022

EDUCATION

As the economy evolves, it is critical that Colorado educates and trains the next generation of workers across all fields. The state boasts a highly educated workforce, with many science and engineering students already in the pipeline. However, Colorado graduates a relatively low percentage of high school students on time and has room to improve access to skills-based training programs. Of the six indicators discussed below, Colorado improved its rank in three, fell in two, and held steady in one.

K-12 EDUCATION

#24 PUBLIC EXPENDITURE PER STUDENT

Per student spending in public K-12 schools.¹

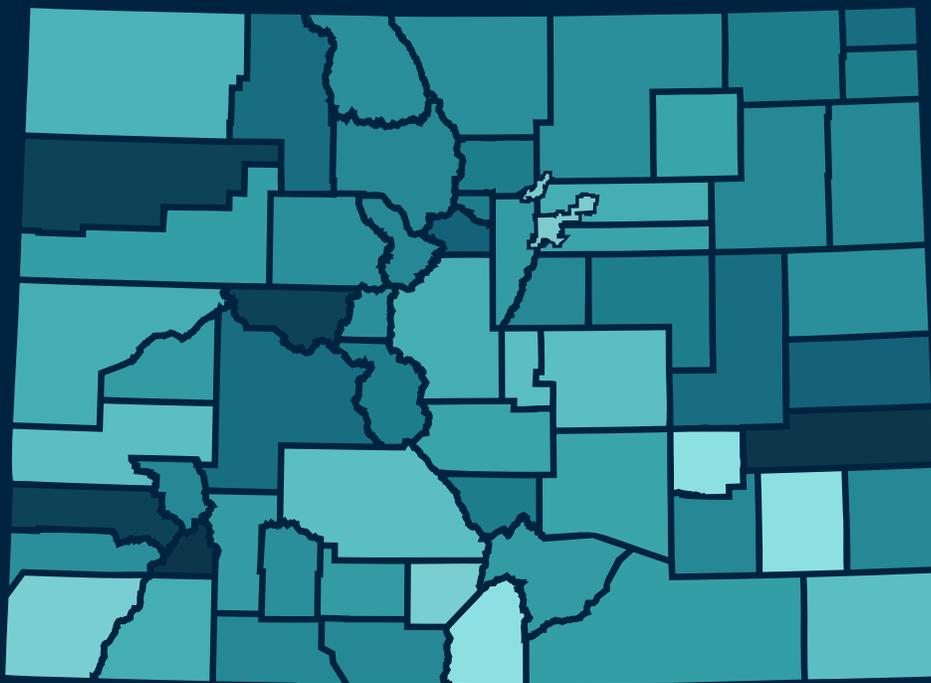
- Statewide, Colorado invests a below-average amount per K-12 student. The national average is \$16,510, while Colorado spent \$15,322 per pupil in 2022. Even with the amount spent per student increasing in each of the last seven years, Colorado lags key competitor states such as Washington, Oregon, and California.

#44 HIGH SCHOOL GRADUATION

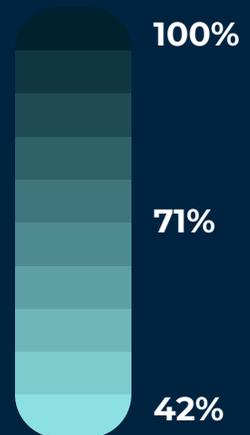
The public high school four-year, on-time, graduation rate.¹

- Colorado public schools graduate 81.9 percent of their students, while the national average is 86.5 percent.
- The state government recently launched a universal pre-k program to increase access to education for all Colorado children. Studies show that pre-k program enrollment is linked to higher graduation rates, test scores, and college attendance.

HIGH SCHOOL GRADUATION RATE BY COUNTY⁵



GRADUATION RATE



HIGHER EDUCATION

#2 BACHELOR'S DEGREES

Percent of the population aged 25 and higher with at least a bachelor's degree.²

- 45.9 percent of Colorado adults have a bachelor's degree or higher. Colorado has ranked in the top five for 22 consecutive years.

#6 SCIENCE & ENGINEERING GRADUATE STUDENTS

Science and engineering graduate students as a percentage of the state's population.³

- Colorado has the second-highest ranking of our 10 comparison states, trailing only Virginia (#3) and has ranked sixth in four of the last six years.
- Colorado has top 10 programs in Aerospace Engineering (CU Boulder), Petroleum Engineering (Colorado School of Mines), and Environmental Engineering (CU Boulder).

#26 FALL SEMESTER HIGHER EDUCATION ENROLLMENT PER CAPITA

Fall enrollment in post-secondary institutions per person.⁴

- Colorado fell six spots from last year, the largest drop of any indicator in the report. Higher education enrollment typically declines during periods of economic expansion; however, this indicates Colorado has declined faster relative to other states.

#46 HOME GROWN TALENT

The percent of degree holders, bachelor's or higher, in a state that were born in that state.⁵

- Just 23.4 percent of people with a bachelor's degree or higher were from Colorado. This ranking is driven by over 1.2 million Colorado residents with a bachelor's degree or higher who moved into the state. When analyzing the population in Colorado that was born here and still live here, 35.9 percent have a bachelor's degree or higher. The state ranks fifth for the home-born population with a college degree, as a percentage.

1 Source: National Education Association, 2022

2 National Center for Education Statistics, 2020

3 Source: National Science Foundation, 2021

4 Source: National Student Clearinghouse Research Center, 2022

5 U.S. Census Bureau, 2022

INNOVATION

Developing the next generation of leaders in Colorado requires collaboration between the public and private sectors. Their ongoing partnerships make Colorado an ideal place to start or grow a business. Colorado already has a solid foundation in high growth industries and attracts investments from all over the country to fund revolutionary technology. That enthusiasm nationally makes Colorado a highly rated place to build a business but has yet to see that translate to elite levels of business formation. In this category, Colorado fell in five indicators, rose in three, and did not change in one.

HIGH-TECH INDUSTRIES

#4 HIGH-TECH EMPLOYMENT

High-tech employment per 1,000 private sector workers per CompTIA.¹

- Colorado has ranked in the top five in every year of the publication since CompTIA began producing the report in 2017.

#10 PATENTS

Number of patents granted per one million residents.²

- Colorado entrepreneurs are driving growth in high-tech spaces, such as aerospace and quantum computing. As a result, Colorado received a designation as a technology hub for quantum computing. The grant focuses on furthering the technology with an emphasis on commercial applications.

#12 ACADEMIC R&D

Total science and engineering research and development spending at academic institutions per capita.³

- Colorado rose two spots in the most recent data year, 2021, passing competitor state Utah.

#22 R&D INTENSITY

Total research and development expenditures as a percentage of state GDP.³

- Colorado's research and development expenditures grew by 4.9 percent between 2020 and 2021, but state GDP grew by 12.4 percent, causing Colorado to drop in the rankings. The state has now fallen in the rankings in four consecutive years.

1 Source: CompTIA, Cyberstates, 2022

2 Source: U.S. Patent and Trademark Office, 2020

3 Source: National Science Foundation, 2021

4 Source: U.S. Department of Commerce, 2022

5 Source: U.S. Bureau of Economic Analysis, 2022

6 Source: National Aeronautics and Space Administration, 2022

7 Source: Ewing Marion Kauffman Foundation, 2021

8 Source: U.S. Bureau of Labor Statistics, 2022

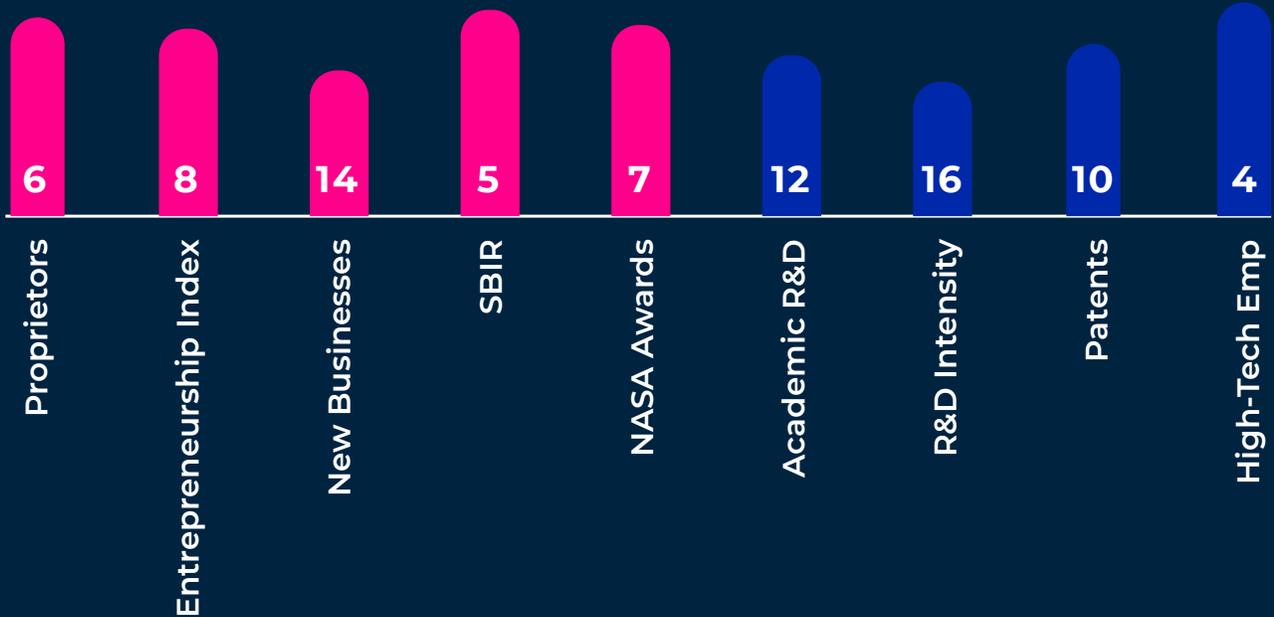
9 Source: Various, for more detail consult individual data point



COLORADO INNOVATION RANKINGS⁹

INVESTMENT & GROWTH

HIGH-TECH INDUSTRIES



INVESTMENT & GROWTH

#5 SMALL BUSINESS INNOVATION RESEARCH (SBIR) GRANTS

U.S. Department of Commerce SBIR grant awards per worker.⁴

- Awarded over \$185 million in 2022, Colorado has ranked sixth or better every year from 2000 to 2022. These funds are used on experimental technologies and help entrepreneurs commercialize their inventions.

#6 PROPRIETORS

Proprietors as a percentage of total employment.⁵

- Colorado has now ranked 6th in three consecutive years and has ranked in the top 10 since 2000.
- The number of proprietors in Colorado fell by about 30,500 in 2019. Since then, the state has seen a boom in proprietors throughout the state, growing by at least 60,000 in each of the past three years. The state only reached that level of growth once before in 2007.

#7 NASA AWARDS

NASA prime contract awards.⁶

- Colorado's ranking has fallen two years in a row, after ranking in the top five each year from 2008-2020. While NASA awards have fallen, Colorado Springs remains the Space Command headquarters, due in large part to the aerospace ecosystem in the state.

#8 KAUFFMAN EARLY-STAGE ENTREPRENEURSHIP INDEX

Ranks states on the rate of new entrepreneurs, opportunity share of new entrepreneurs, startup job creation, and startup survival rate.⁷

- This was one of the state's biggest increases, rising 14 spots from last year's ranking (#22).

#14 NEW BUSINESSES

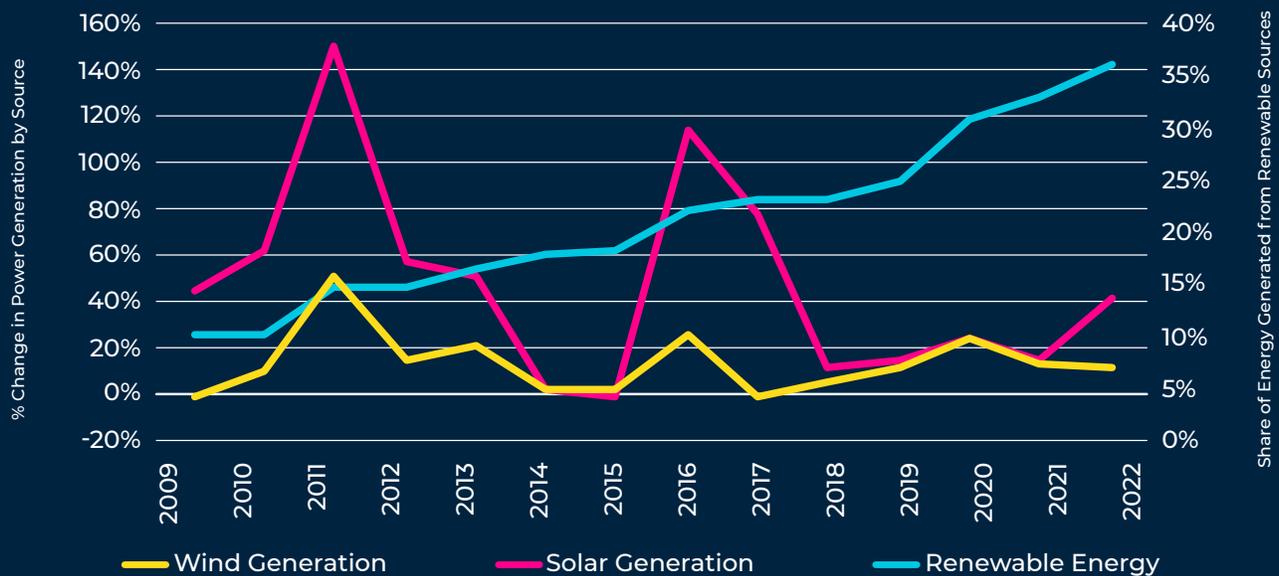
Number of new businesses per 1,000 employees.⁸

- Colorado fell one spot from last year and has now fallen in five of the past six years.

INFRASTRUCTURE

Access to reliable, renewable sources of energy and sustainable infrastructure are critical as the economy grapples with the increasing costs associated with climate change. Colorado is uniquely positioned to build on previous investments in wind and solar power generation to reduce both energy costs and the state's carbon footprint. In addition, new spending on highway and energy infrastructure propelled Colorado up the rankings in four of the five rankings in the sector.

% CHANGE IN WIND & SOLAR GENERATION & SHARE OF ENERGY FROM RENEWABLE SOURCES¹



RENEWABLE ENERGY

#6 WIND GENERATION

Total wind energy net generation.¹

- Colorado's ranking has increased in each of the past three years, rising one spot from last year.

#10 SOLAR GENERATION

Total solar energy net generation.¹

- Between 2021 and 2022 the amount of solar power generated throughout the state grew by 41.3 percent. Colorado has a competitive advantage in sunshine production compared to our competitor states.

#14 RENEWABLE ENERGY

Percent of electricity generated through renewable sources.¹

- 36 percent of the state's power is generated using renewable sources. Colorado is one of only three states to rank in the top 10 in both solar and wind power generation in 2022.

TRANSPORTATION

#14 PUBLIC TRANSIT USAGE

Percentage of workers who use public transit as their main mode of traveling to work.²

- 1.6 percent of Colorado workers commute using public transit, double the national median of 0.8 percent. Annual public transit use increased by 23.6 percent in Colorado from 2021 to 2022.

#21 STATE HIGHWAY REVENUE

Revenues used for state highways per person.³

- The state's ranking climbed three places from last year to this year and has jumped 14 places from two years ago, due in large part to Senate Bill 21-260, which overhauled transportation finance at the state level.

1 Source: Energy Information Administration, 2022

2 Source: Bureau of Transportation Statistics, 2022

3 Source: Federal Highway Administration, 2021

HEALTH

Providing care for the wellbeing of all Coloradans is essential for workforce development and retention. The active lifestyle ingrained in Colorado's culture has led to a population that is exceptionally healthy compared to national standards. Colorado ranked in the top five in three of the four health indicators in this report.

PHYSICAL ACTIVITY

#1 OBESITY

Lowest obesity prevalence in adults per the Robert Wood Johnson Foundation.¹

- Approximately 25 percent of Coloradans qualify as obese, 8 percentage points lower than the national average of 33.2 percent.
- Colorado has now ranked first in 19 of the past 20 years, retaking the top spot this year from Hawaii.

#2 PHYSICAL ACTIVITY

Percent of adults who participated in physical activity in the past month.²

- Over 83 percent of Colorado adults reported engaging in physical activity over the past month, 6 percentage points higher than the national average of 77 percent.
- Colorado has over 23-million acres of publicly available land and four national parks, not to mention almost 44,000 acres of accessible ski areas. All of these opportunities encourage Coloradans of all ages to get out and exercise.

MEDICAL CARE

#7 HOSPITALIZATIONS

The fewest number of hospitalizations per 1,000 Medicare and Medicaid beneficiaries.³

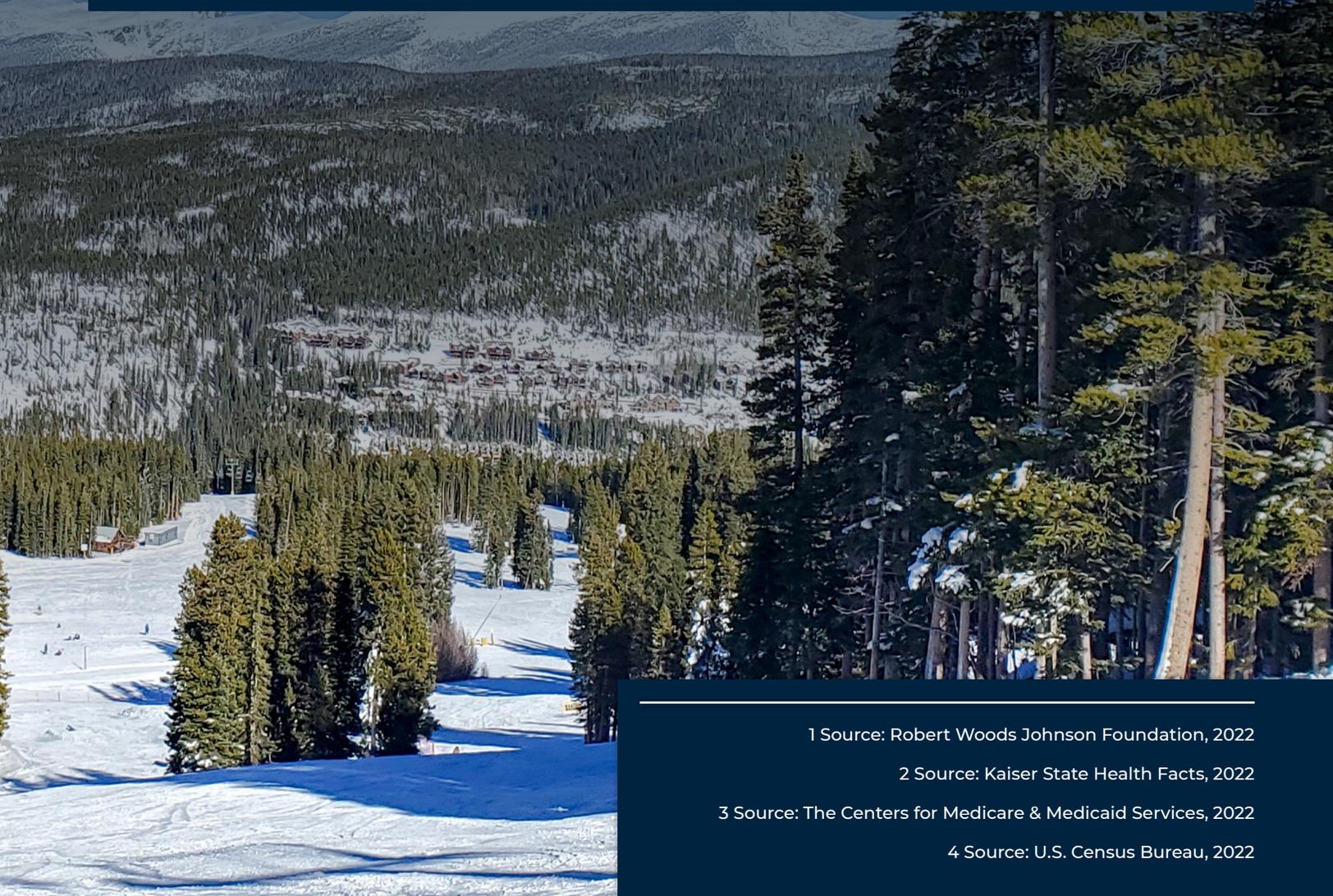
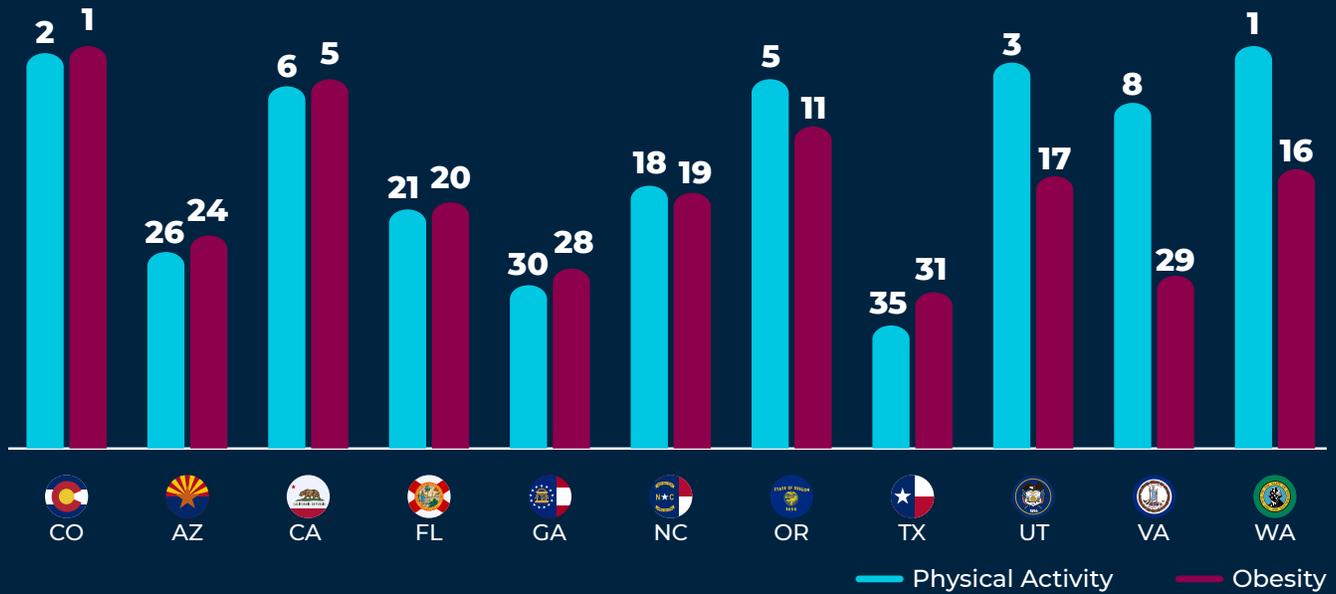
- Colorado reported 166 hospitalizations per 1,000, approximately 20 percent lower than the national average level of 208.

#29 INSURANCE

The share of the population covered by health insurance.⁴

- Within Colorado, the group aged 65+ was the most insured at 99.3 percent, and the 19- to 25-year-old group is the least likely to be insured at 88.9 percent.

PHYSICAL ACTIVITY & OBESITY PREVALENCE RANKINGS¹



1 Source: Robert Woods Johnson Foundation, 2022
 2 Source: Kaiser State Health Facts, 2022
 3 Source: The Centers for Medicare & Medicaid Services, 2022
 4 Source: U.S. Census Bureau, 2022

TAXES

Colorado's low corporate tax environment sets the foundation for our ability to both attract new businesses and retain home grown ventures. Colorado remained steady in the corporate tax environment but fell six spots overall.

#7 CORPORATE TAX INDEX

Measures the income tax structure and rates within a state according to the Tax Foundation. ¹

- Colorado's place was unchanged from the previous rankings, remaining in the top 10 for the sixth consecutive year. The state corporate income tax rate is one of the lowest, after voters lowered the tax rate to 4.40 from 4.55 in 2022, and from 4.63 to 4.55 in 2020.

#27 STATE BUSINESS TAX CLIMATE INDEX

Tax index built by the Tax Foundation includes income, property, and sales tax rates as well as unemployment insurance costs. A lower tax rate and simpler tax code are associated with better ranking outcomes. ¹

- Colorado ranked 13th in individual income tax, 38th in the property tax section, 40th in sales tax, and 44th in unemployment insurance. Colorado's sales tax structure is one of the most complicated nationally, and the continually changing tax landscape increases the cost of compliance for businesses, dropping Colorado in the rankings.

STATE BUSINESS TAX RANKINGS BY COMPONENT¹

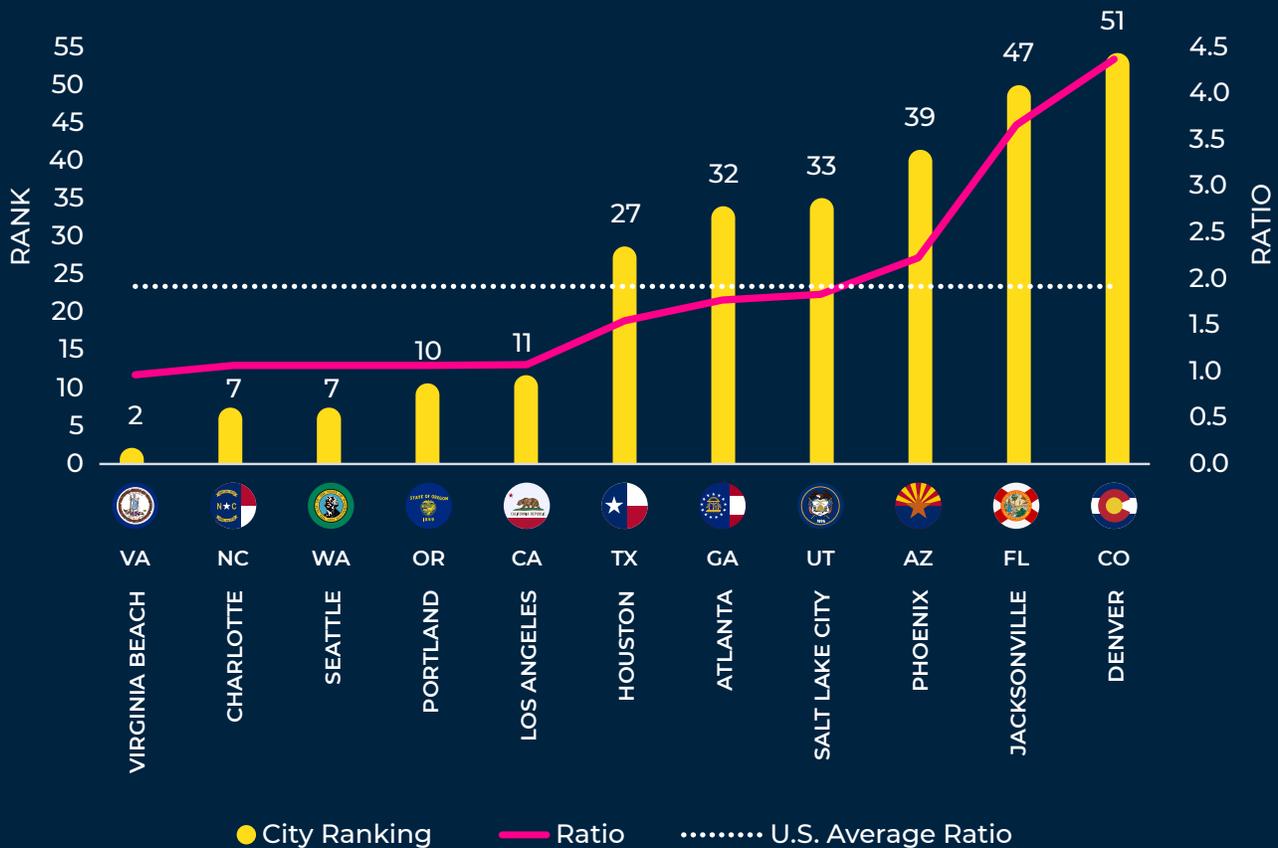


#51 COMMERCIAL HOMESTEAD CLASSIFICATION RATIO

Measures the effective tax rate on a \$1 million commercial property to the effective tax rate on a median-value homestead property.²

- Out of 53 cities representing all 50 states and Washington, D.C., Colorado has the third highest ratio at 4.11, meaning that the effective tax rate on commercial property is over 400 percent that of residential property. Colorado has the worst ranking out of our competitor states, and is well above the U.S. average of about 180 percent.

COMMERCIAL- HOMESTEAD CLASSIFICATION RATIO FOR LARGEST CITY IN EACH STATE (2022)²



¹ Source: The Tax Foundation, 2023

² Source: Lincoln Land Institute, 2022



Denver Metro
Chamber of
Commerce



Metro Denver EDC