

U.S. FOREIGN POLICY FOR THE MIDDLE CLASS: PERSPECTIVES FROM COLORADO

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The program would like to thank everyone in Colorado who agreed to be interviewed for the study (see Appendix A for a partial list). Their insights contributed substantially to the study's framing and findings. Colorado's regional and local economic development offices were instrumental in facilitating interviews and focus groups across Colorado. The offices included the Denver South Economic Development Partnership, Grand Junction Chamber of Commerce, Metro Denver Economic Development Corporation, Otero County Economic Development Council, Pueblo Economic Development Corporation, Region 9 Economic Development District of Southwest Colorado, and Upstate Colorado Economic Development.

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Many people helped to inform and prepare this report, but the report's authors alone bear responsibility for its content. The program is grateful to all of them for their flexibility and contributions. As a group effort, the report cannot represent every author's views in all chapters; some authors preferred different language and emphasis in places.

SUMMARY

The American middle class is already taking center stage in the 2020 presidential electoral campaign, even in relation to debates about foreign policy. While the U.S. economy has been growing and unemployment rates have fallen, too many Americans still struggle to sustain a middle-class lifestyle. Meanwhile, major multinational corporations, China, and other foreign competitors reap enormous benefits from a global economy that U.S. leadership and security has helped underwrite. Therefore, candidates on both sides of the aisle have ample cause for debating whether changes to U.S. foreign policy are required to better advance the economic well-being of America's middle class, even if middle-class fortunes largely depend on domestic factors and policies.

This debate will be relevant long after the electoral cycle is over, however, and will influence the trajectory of U.S. global leadership and international affairs for decades to come. National security and foreign policy professionals in government need to be fully involved in this discussion, yet many are understandably consumed by geopolitical and security developments abroad and are, therefore, often distant or disconnected from economic realities at home. They rarely get to hear what Americans beyond Washington, DC, think about how U.S. foreign policy-related efforts may or may not intersect with these realities. Thus, the Carnegie Endowment for International Peace initiated a new line of research on “foreign policy for the middle class” to help address this gap and bridge an important divide.

In 2017, Carnegie convened a bipartisan task force of former senior policy-makers to provide strategic direction to this research and ultimately make concrete recommendations. To inform these recommendations, the task force and a research team—including Carnegie scholars and university researchers—are gathering data on both the perceived and measurable economic effects of U.S. foreign policy on the middle class in three U.S. states in the nation's heartland (Ohio, Colorado, and Nebraska). This report on Colorado, prepared with economists at the University of Colorado Boulder, is the second of the three case studies. The first study on Ohio, undertaken with The Ohio State University, was published in December 2018.¹

While the U.S. economy has been growing and unemployment rates have fallen, too many Americans still struggle to sustain a middle-class lifestyle. Meanwhile, major multinational corporations, China, and other foreign competitors reap enormous benefits from a global economy that U.S. leadership and security has helped underwrite.

Across multiple locales in Colorado, the research team conducted interviews and focus groups with state and local officials, economic developers, small business owners, employees, community leaders, teachers, nurses, tradesmen, and others who comprise, employ, and/or advance the interests of middle-class households. The conversation focused on how those interviewed assessed the economic well-being of Colorado's middle class and whether they believed any significant changes in U.S. foreign policy could yield a better outcome. The interviews and focus groups took place between February and May of 2019, reflecting the events and policies up to that time. Overall, they conveyed the following main points, which often reflected the quantitative data gathered:

- **Even in states with thriving economies, like Colorado's, there are still deep concerns about the viability of the middle-class dream.** All of those interviewed acknowledged the state's sustained economic growth. New jobs have been created across the state faster than they can be filled. But interviewees also made clear that the economic benefits are not being shared evenly. Not nearly enough jobs pay salaries at the level needed to attain or sustain a middle-class lifestyle, largely because of the high costs of health-care, housing, childcare, and education. While income inequality is generally lower in Colorado than most states, disparities in income and wealth persist, including along educational, geographic, racial, and ethnic lines. These issues consume the majority of time and attention of those interviewed.²
- **Coloradans have largely benefited from globalization, and that, in turn, has favorably disposed them toward international trade, as well as foreign aid and immigration.** While Colorado is not a major trading state compared to Ohio or many other states, those interviewed were nonetheless strong advocates of international trade. Perhaps that is because Colorado has suffered relatively few trade-related job losses, especially compared to the industrial Midwest. Meanwhile, its ranchers, farmers, manufacturers, professional business service providers, and tourism industries have benefited from the opening up of new markets through past trade agreements and increased trade with China. In other words, the net positive benefits of international trade for Colorado are clear. As such, those interviewed were concerned about the imposition of new tariffs, movement toward protectionism, jeopardizing of relations with U.S. trading partners, particularly Canada and Mexico, and escalation and prolonging of the trade war with China.

Yet, at the same time, some ranchers, farmers, and business leaders said they were willing to absorb some near-term pain as a result of tariffs if it was necessary to combat China's unfair trading practices and level the playing field for U.S. businesses and workers in the long run. They criticized past administrations for not having done enough on this front. But this does not mean that they favored ceding their market share in China to other foreign

competitors or decoupling the U.S. and Chinese economies. They also were not in favor of cutting foreign aid and humanitarian relief that, when delivered effectively, has helped to grow markets for U.S. products and services and been consistent with U.S. values. Nor were they comfortable with the rhetoric and policies on immigration that portray the United States as unwelcoming of foreigners and that deny access to much-needed labor for jobs that Americans do not want or cannot perform.

- **Colorado benefits from defense spending more than most U.S. states.**

Few interviewed expressed enthusiasm for decades-long military interventions or the start of a new war in the Middle East. Yet, at the same time, many cautioned against making drastic cuts to defense spending that could weaken the U.S. military or adversely affect Colorado, which hosts the U.S. Air Force Academy, the North American Aerospace Command (NORAD), the Air Force Space Command, and the Army's 4th Infantry Division, among several other important commands and units based primarily in and around Colorado Springs. The wider defense sector accounts for a substantial number of middle-class jobs, anchors the economy of El Paso County (the state's second-most populous county and home to Colorado Springs), and helps grow civilian industries in areas such as aerospace and cybersecurity. However, economic developers in El Paso were nonetheless among the most vocal proponents of diversifying their economy, because they had lived through the pain associated with past downturns in defense spending. And a number of those interviewed outside of El Paso, though cautious about the economic ramifications for their state, supported defense cuts that, among other things, would eliminate wasteful spending and make U.S. foreign policy less militarily oriented.

- **Debates about the implications of new approaches to energy and climate change were divisive and heated.**

Colorado is one of the nation's leading oil, gas, and coal-producing states. It is also home to cutting-edge research on renewable energy and preeminent advocates on the environment. Those interviewed in major oil and gas-producing counties, such as Weld, supported the rollback of the previous U.S. administration's approaches to climate change, the relaxation of regulations on fossil fuel extraction, and the promise of increased exports of liquefied natural gas (LNG). They believed these moves had thrown an economic lifeline to Colorado's middle class and diminished U.S. dependence on foreign oil.

Others interviewed outside of these counties, such as in Boulder and Denver, opposed this view. They saw climate change as a significant security threat in terms of the long-term effects on the planet. They also noted the near-term environmental risks of fracking close to their homes and schools. They advocated increased investment in the renewable energy sector, in

which their state is well-positioned to leverage and create good new jobs. They considered the foreign and domestic climate approaches of President Donald Trump's administration to be fundamentally at odds with middle-class interests.

Based on these and other findings from the Colorado and Ohio case studies, recommendations for foreign policy professionals are beginning to take shape:

- Take a much wider view about what it means to make *trade policy* work for the middle class—to include but go well beyond the impact on manufacturing employment.
- Employ a multifaceted strategy for pushing back against unfair trading practices and enhancing U.S. competitiveness with *China*, rather than overrelying on the blunt instrument of tariffs; protect certain technologies and subsectors on national security grounds, but do not pursue widespread decoupling of the U.S. and Chinese economies.
- Recognize how reducing or increasing the *defense budget* can adversely impact the middle class, and consider ways of spending the defense budget differently to simultaneously advance national security interests and the economic well-being of the American middle class.
- Stop proposing cuts to *foreign aid* as a substitute for the domestic policy solutions required to address the economic challenges confronting the middle class.
- Increase investments in the workers and communities likely to suffer most as a result of measures to combat *climate change*, and in the process, explore the desirability and feasibility of a comprehensive approach to economic adjustment assistance for communities most vulnerable to energy-, trade-, and defense-related transitions.

In addition to recounting opinions based on personal experience, this report sheds light on what most interviewees did not or could not comment on. Because of a gap in knowledge, Americans need to be able to trust that foreign policy and national security professionals will prioritize and act on behalf of their interests. Thus, changes in attitudes, processes, and communications will be required to demonstrate that these professionals are aware of and understand those interests.

Carnegie task force members look forward to assessing how the observations and preliminary recommendations they have drawn from the Ohio and Colorado case studies align with the findings of the third and final study on Nebraska. The study is being conducted in partnership with a multidisciplinary team of researchers at the University of Nebraska-Lincoln and is expected to be published in early 2020. The task force will offer detailed recommendations in a final report in mid-2020.

RESEARCH APPROACH AND METHODOLOGY

This report focuses on how Coloradans perceive the economic well-being of the middle class in their state and whether they believe significant changes in U.S. foreign policy could affect that well-being. It contextualizes those perceptions with relevant quantitative data. It has been written with U.S. foreign policy and national security professionals in mind.

Many U.S. foreign policy and national security professionals—who by necessity spend most of their time dealing with geopolitical and security developments abroad—worry that they may be disconnected from the economic realities that Americans confront. They may also be unaware of how current foreign policy debates in Washington, DC, and on the presidential campaign trail—related to issues such as trade policy, foreign aid, defense spending, and international approaches to climate change and energy—stack up with what Americans outside the political establishment actually experience and care about. It is difficult for them to weigh in on these debates, having, so far, largely deferred to domestic policy counterparts and economists to determine how the U.S. role abroad may or may not intersect with the economic well-being of the middle class at home. It is for these reasons, and for the benefit of these foreign policy and national security professionals, that Carnegie initiated research on “foreign policy for the middle class” and convened a bipartisan task force.

The task force members have served in senior policy roles, under Democratic and Republican administrations, at the departments of commerce, defense, state, and treasury; the Office of the U.S. Trade Representative; the National Intelligence Council; and the National Economic Council and the National Security Council at the White House. All the members believe that, at various points in their government service, they did not test their assumptions often enough about how the U.S. role abroad could be affecting the economic well-being of the middle class at home. They have, therefore, come together to provide strategic direction to this research, advise on where data gathered by the research team could be interesting or surprising to officials in the types of positions they once held, and ultimately offer detailed recommendations.

The task force members believe that, at various points in their government service, they did not test their assumptions often enough about how the U.S. role abroad could be affecting the economic well-being of the middle class at home.

Colorado also offers a good counterpoint to Ohio. While Ohio's per capita income relative to the rest of the nation has steadily declined since the mid-1950s, Colorado's has climbed. Similarly, Ohio's population growth has decreased, while Colorado's has accelerated. Ohio trails the nation in residents with college degrees, whereas Colorado ranks near the top.

To inform these recommendations, Carnegie's task force and research team is working with university researchers to gather data in three U.S. states in the nation's heartland—Ohio, Colorado, and Nebraska. The task force deliberately chose to focus on the middle class in these three states, given the prevailing criticism that the nation's top earners and executives in coastal cities have disproportionate access to and influence on those developing foreign policy in Washington, DC. Americans living outside of coastal cities rarely get a chance to interact with foreign policy professionals. This research aims to lift up their voices.

Who Is the Middle Class and How Is Foreign Policy Defined?

In the context of this project, "middle income" refers to households whose incomes range between two-thirds to double the median income, adjusted for household size and local cost of living. This is the widely employed definition from the independent Pew Research Center that allows for comparisons over time and across different metropolitan areas throughout the United States.³ Table 1 shows the middle-income range and median income in Colorado. "Middle class" or a "middle-class lifestyle" are more subjective terms that can refer to, among other things, income, wealth, educational status, potential for upward mobility, or social standing.⁴ Those interviewed in Colorado for this study tended to define a "middle-class lifestyle" as the ability to secure a job with adequate pay and benefits that enables them to meet their monthly expenses, tend to their families' medical needs, buy a car, own a home, help their kids pursue decent

postsecondary school education, take an annual vacation, save for retirement, and not be saddled with crippling debt.

"Foreign policy" serves as shorthand for the spectrum of foreign, defense, development, international economic, trade, and other internationally oriented policies perceived by those interviewed as most impactful to their economic well-being. Interviewees associated foreign policy with some issues that typically fall under the purview of domestic policy, such as foreign direct investment, immigration, and energy and climate change. Further information on the definition of terms, the rationale for the project, and relevant historical context can be found in the introductory chapter of the first report on Ohio.⁵

Why Colorado?

Like Ohio, Colorado's political and economic diversity make it an excellent proxy for national debates. It has some of the most liberal counties in the country, such as Boulder and Denver, but also some of the most conservative, such

as El Paso (where Colorado Springs is located) and Mesa (where Grand Junction is located). Other counties, especially in the suburban areas, proudly espouse centrist tendencies and are often political “toss-ups” in local-, state-, and national-level elections. Peace activists and environmental leaders in Colorado coexist alongside entire communities dependent on defense spending and extractive industries.

Colorado also offers a good counterpoint to Ohio. While Ohio’s per capita income relative to the rest of the nation has steadily declined since the mid-1950s, Colorado’s has climbed. Similarly, Ohio’s population growth has decreased, while Colorado’s has accelerated. Ohio trails the nation in residents with college degrees, whereas Colorado ranks near the top. Ohio is heavily dependent on goods manufacturing and international trade, while Colorado relies far more on professional services and domestic markets. See Table 1 for additional key state-level comparisons.

Therefore, Colorado—a state with similar political and economic debates to Ohio but with a different economic outlook and base—helps shed new light on the perceived and measurable economic effects of U.S. foreign policy on the middle class.

TABLE 1

Key Statistics on Colorado, Ohio, and the United States⁶

| | Colorado | Ohio | U.S. |
|---|-----------------------------------|---|-------------------------------------|
| <i>3-Person Household, 2016:</i> | | | |
| Middle-Income Range | \$46,551-139,653 | \$40,359-121,078 | \$45,195-135,585 |
| Median Income | \$69,827 | \$60,539 | \$67,793 |
| Population, 2018 | 5,695,564 | 11,689,442 | 327,167,434 |
| Population Growth, 2010-2018 | 13% | 1% | 6% |
| Population With a Bachelor’s Degree or Higher (ages 25+), 2017 | 41% | 28% | 32% |
| Gross Domestic Product (GDP), 2018 (billions) | \$369 | \$676 | \$20,494 |
| Median Value of Owner-Occupied Housing, 2017 | \$348,900 | \$144,200 | \$217,600 |
| Poverty Rate, 2017 | 10% | 14% | 12% |
| Unemployment, 2018 | 3% | 5% | 4% |
| Top Nongovernment Employers | Walmart Kroger Co. UCHealth | Walmart Cleveland Clinic Foundation Kroger Co. | Walmart Kroger Co. Home Depot |
| Manufacturing Employment, 2018 | 6% | 13% | 9% |
| Defense Spending, 2017 (% of GDP) | 2.4% | 1.1% | 2.3% |
| Goods Imports, 2018 (% of GDP) | 4% | 10% | 12% |
| Goods Exports, 2018 (% of GDP) | 2% | 8% | 8% |
| Service Exports, 2017 (% of GDP) | 4% | 3% | 4% |
| State Governor | Democrat | Republican | 23 Dem, 27 Rep |
| Senators | 1 Dem, 1 Rep | 1 Dem, 1 Rep | 45 Dem, 53 Rep |
| Representatives | 4 Dem, 3 Rep | 4 Dem, 12 Rep | 235 Dem, 199 Rep |
| State Voted in Presidential Elections, 1980-2016 | R, R, R, D, R, R, R, D, D, D | R, R, R, D, D, R, R, D, D, R | R, R, R, D, D, R, R, D, D, R |

Methodology

It is not possible to credibly quantify or model the economic impact of the sum total of all U.S. foreign policy activity on a specific income group within a single state. There are far too many variables involved, including the wars the U.S. wages or prevents, the stability for the global economy it provides, the commerce it enables, the trade in goods and services it conducts, the foreign investment it makes or receives, the aid it delivers, and the friendly relations it forges. Therefore, this report focuses on perceptions of the economic impact of foreign policy on the middle class and the ways in which those perceptions stack up against hard data. To gauge such perceptions, Carnegie's research team largely conducted focus groups and one-on-one interviews, where it was possible to engage in conversation and seek clarification on complicated issues.

The research team, including Salman Ahmed and Allison Gelman at the Carnegie Endowment for International Peace and Richard Wobbekind and Brian Lewandowski at the Leeds School of Business at the University of Colorado Boulder (CU Boulder), engaged more than 125 individuals between March and June 2019. The research took place in ten of Colorado's sixty-four counties, including in each of its three main regions—the Front Range, the Western Slope, and the Eastern Plains—to capture its socioeconomic and political diversity.

Front Range

- **Boulder** (city and county): A liberal, affluent university town (CU Boulder) that is home to several federal labs and prospering tech, engineering, and defense sectors.
- **Denver** (city and county): A liberal city with a thriving economy anchored by state government, universities, information technology (IT) services, financial services, tourism, and the Denver International Airport.
- **Arapahoe and Douglas**: Two affluent, highly educated, and politically moderate suburban counties in the Denver area that used to reliably vote Republican but are now considered "swing areas"; they host the headquarters of several Fortune 500 companies, such as Arrow Electronics, Dish Network, and Liberty Interactive.
- **El Paso** (Colorado Springs): The state's most populous county after Denver, with an economy heavily oriented around several military installations, including the U.S. Air Force Academy, and the defense industry; El Paso is well-known for its conservatism and active evangelical community.

- **Pueblo** (city and county): An ethnically and politically diverse manufacturing town on the southern end of the Front Range that arguably bears as much resemblance to the industrial Midwest as it does to other parts of Colorado; Pueblo voted for Barack Obama (Democrat) in the 2008 and 2012 presidential elections and for Donald Trump (Republican) in 2016.
- **Weld** (Greeley): A conservative-leaning county on the northeastern edge of the Front Range that is one of the nation's leading oil and gas producers and that has a strong farming community.

Western Slope

- **La Plata** (Durango): A traditionally conservative ranching county that is home to the fast-growing, liberal city of Durango, which relies heavily on tourism and outdoor recreation.
- **Mesa** (Grand Junction): A conservative county whose fortunes have been heavily tied to mining and oil and gas extraction but is now diversifying its economy and leveraging the presence of Colorado Mesa University and its position as a major commercial and transportation regional hub.

Eastern Plains

- **Otero** (La Junta, Rocky Ford, and Fowler): A conservative-leaning, but politically mixed, rural county with a large Hispanic population; it relies heavily on agriculture and related manufacturing and has among the state's lowest levels of growth and per capita income.

More places on the Front Range were studied because the region accounts for the vast majority of the state's population and economic activity.

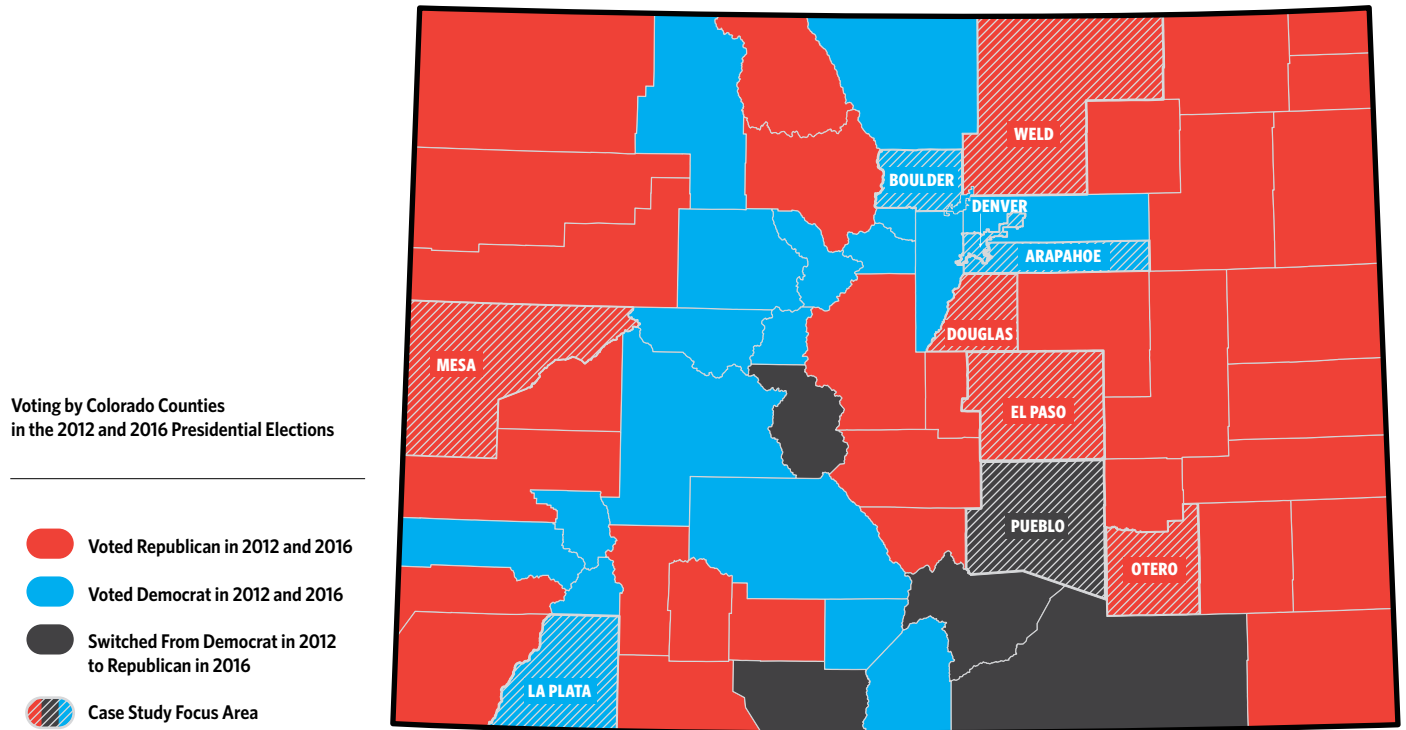
In all of the case study areas, CU Boulder leveraged its own contacts and worked with local economic development organizations and community leaders to identify focus group participants who could speak authoritatively on the local economy and middle-class fortunes. Many participants characterized themselves as middle income. The groups as a whole included state and local government officials, economic developers, teachers, first responders, healthcare professionals, small business and farm owners, and middle managers in large firms. Participants in the upper-income bracket spoke as employers of, and policy-setters for, middle-income workers.

See Appendix A for a list of the individuals engaged, and Figure 1 for more statistics on each selected county and for the voting patterns by county.

FIGURE 1

Focus Group and Interview Counties ⁷

The research team conducted interviews and focus groups in ten counties across Colorado. The counties covered a range of political leanings and economic realities.



POPULATION

5,695,564 TOTAL POPULATION (2018)

| | | |
|-------------------------------------|--------------------------------|---------------------------------|
| Population Growth (%, 2010–2018) | Foreign Born (%, 2013–2017) | Hispanic or Latino (%, 2017) |
| +13% | 10% | 22% |

| County | Population (2018) | Population Growth (%) | Foreign Born (%) | Hispanic or Latino (%) |
|----------|-------------------|-----------------------|------------------|------------------------|
| BOULDER | 326,078 | +11% | 11% | 14% |
| DENVER | 716,492 | +20% | 16% | 30% |
| ARAPAHOE | 651,215 | +14% | 15% | 19% |
| DOUGLAS | 342,776 | +20% | 7% | 9% |
| WELD | 314,305 | +24% | 9% | 29% |
| EL PASO | 713,856 | +15% | 7% | 17% |
| PUEBLO | 167,529 | +5% | 4% | 43% |
| OTERO | 18,432 | -2% | 6% | 42% |
| LA PLATA | 56,310 | +10% | 4% | 13% |
| MESA | 153,207 | +4% | 4% | 15% |

INCOME & HOUSING

Less than state median
 Greater than state median

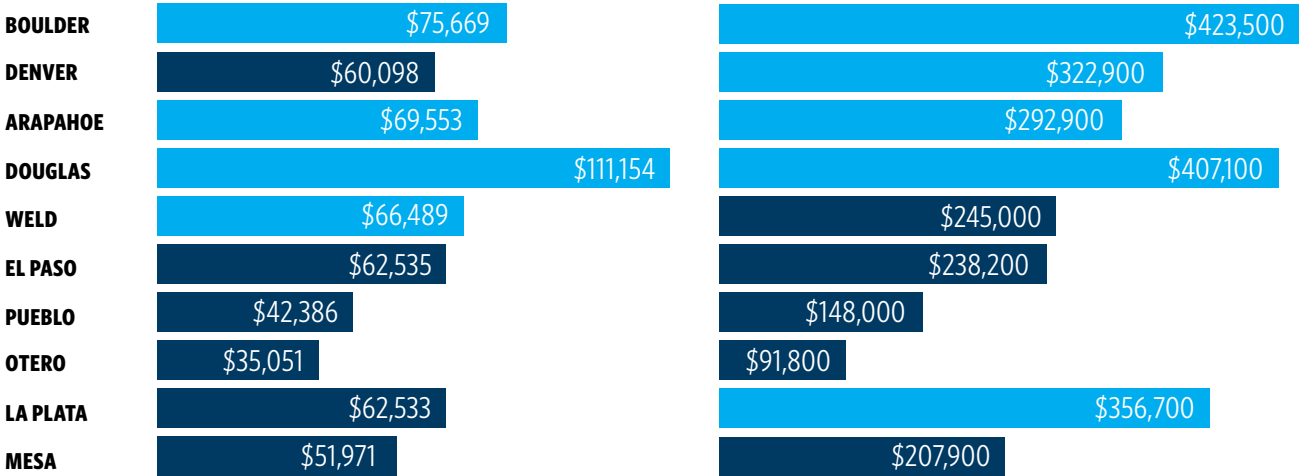
Median Household Income
(2013-2017)

Owner-Occupied Housing Median Value
(2013-2017)

COLORADO

\$65,458

\$286,100



EMPLOYMENT

EDUCATION

| | Natural Resources and Mining (% Workforce, 2018) | Manufacturing (% Workforce, 2018) | Professional and Business Services (% Workforce, 2018) | Defense Sector-Related Employment 2016 (Direct and Indirect)* | Unemployment Rate (2017) | Bachelor's Degree or Higher (Age 25+, 2013-2017) |
|-----------------|---|--------------------------------------|---|--|--------------------------|--|
| COLORADO | 1% | 6% | 16% | 8% | 2.7% | 39% |
| BOULDER | 0% | 10% | 20% | 3% | 2% | 60% |
| DENVER | 2% | 4% | 20% | 3% | 3% | 47% |
| ARAPAHOE | 0% | 2% | 21% | 11% | 3% | 42% |
| DOUGLAS | 0% | 2% | 18% | 3% | 2% | 58% |
| WELD | 12% | 12% | 10% | 2% | 3% | 27% |
| EL PASO | 0% | 4% | 16% | 30% | 3% | 37% |
| PUEBLO | 1% | 7% | 10% | 9% | 4% | 22% |
| OTERO | 4% | 9% | 2% | 4% | 4% | 18% |
| LA PLATA | 2% | 3% | 8% | 1% | 3% | 43% |
| MESA | 4% | 5% | 8% | 5% | 4% | 27% |

*Defense-related employment refers to direct, indirect, and induced employment in 2016. See the endnote for more detail.

Research Bias

The majority of interviewees and focus group participants held positions of responsibility and/or served as leaders within their respective communities. There was insufficient representation from those in the lower-middle class, minority groups, and millennials, because they do not occupy as many public leadership positions relative to their overall numbers. The research team attempted to correct for this bias by supplementing the interviews with data drawn from other studies on Colorado's middle class, such as from the Bell Policy Center, which gives attention to underrepresented groups. Additionally, to stay focused on lifting up local voices not heard in Washington, DC, formal interviews were not conducted with some national leaders who may be best placed to connect the dots between the U.S. role abroad and its economic impact at home (for example, top executives in multinational corporations, representatives of national-level business and trade associations, and members of Congress).

To help deal with political biases, the research team deliberately conducted interviews and focus groups in areas that voted heavily for Trump or Hillary Clinton in the last presidential election, as well as in places more evenly split. The authors indicate where there appeared to be a correlation between the views being expressed and the politics of the interview locations. And they note where some individuals voluntarily self-identified themselves as conservative or liberal. Notwithstanding, because focus group participants were not required to indicate their political affiliations, no definitive judgments were made in this study about the link between political preferences and opinions on foreign policy. And the research team generally steered the conversations back toward what people could comment on based on their actual experiences, rather than simply echoing what they had heard from national-level political figures and media personalities.

The questions posed during the interviews and focus groups, as well as the supplemental research, were consciously biased toward the economic effects of foreign policy. Some foreign policy concerns, such as the threat of terrorism, would probably have been expressed more frequently had the discussions focused on noneconomic factors. Likewise, the views expressed on issues like immigration may have differed if the conversations focused on cultural issues rather than economic considerations. Nevertheless, some noneconomic factors, such as values, identity, and political affiliation did come up occasionally and, as recent research suggests, likely played a role in the views expressed by those interviewed.⁸

Finally, although the Colorado study is significantly informed by the participants' views, the qualitative research was just a starting point. Based on emerging themes, the team conducted additional research and collected quantitative data. The analysis and thoughts in the concluding chapter also draw on the personal experiences of the task force members.

TOP MIDDLE-CLASS CONCERNS

One goal of U.S. foreign policy is to advance Americans' economic well-being. While high growth rates and low unemployment rates are important indicators, those interviewed made clear that these statistics are insufficient to gauge how the middle class is faring. Even in a comparatively healthy economy like Colorado, the middle class faces pressing economic challenges. The data collected reveal the need for foreign policy professionals and their domestic counterparts to reexamine the analytical framework they use to define and advance national economic interests. This reexamination should consider the extent to which economic growth is inclusive and whether earnings are keeping pace with household costs.

Colorado's economy has been growing and diversifying for the last century and has taken quantum leaps forward since the 1970s. Today, the state's economy is thriving. Jobs exist everywhere. But not everyone is benefiting equally. Disparities across educational, geographic, ethnic, and generational lines persist. And even as jobs become available, a middle-class lifestyle remains difficult to obtain or sustain because incomes are not growing as fast as the costs of healthcare, housing, childcare, education, and other monthly expenditures. As a result, anxiety persists about the future of the middle class—not only in struggling rural counties in the Eastern Plains and the Western Slope but also among the highly educated populations in the urban areas of the Front Range.

Colorado's Economy Is Thriving, but Not Everyone Is Benefiting

In the late 1800s, risk-takers and adventurers flocked to Colorado in search of gold. Farming and ranching, coal mining, and rail lines quickly sprung up to support them.⁹ The state still bears the imprint of these early industries, even as the past century has been marked by diversification and reinvention. Indeed, beef and other meat products are still among Colorado's top goods exports, and coal powers more than half of the state's electricity.¹⁰

In the last few decades, Colorado's workforce has evolved considerably, contributing to the diversification of the economy. Colorado's population has more than doubled since 1970 and has become increasingly educated. In 1970, less

Even in a comparatively healthy economy like Colorado, the middle class faces pressing economic challenges.

than 15 percent of Coloradans possessed a college degree; today, over 40 percent do.¹¹ Colorado's colleges and universities have been steadily turning out more graduates, while the state concurrently attracts a massive inflow of educated talent from across the nation and globe.¹² The state's diversified economy, physical beauty, abundant outdoor recreation, and innovation culture have primed it for growth.

Leveraging a highly educated workforce and extensive research and development (R&D) through its network of universities and federal laboratories, Colorado now boasts several thriving industry clusters. These include aerospace, aviation, beverage production, bioscience, broadcasting and telecommunications, energy, financial services, food and agriculture, healthcare and wellness, information technology software, outdoor recreation, and tourism. Average wages in these industry clusters in the metro Denver area range from \$60,000 to over \$170,000 per year.¹³ Postrecession, Colorado ranks among the top ten states in employment, population, and income growth.¹⁴ The growth has created a tight labor market in the last few years, and employers are alarmed about the increasing difficulty of finding workers to fill vacancies.¹⁵

Colorado's economy is clearly doing well, but the middle-class experience within it varies considerably depending on levels of education and skill, geographic location, race, and ethnicity.

A Different Economic Reality for Low-Skilled, Low-Paid Employees

Even with one of the nation's most highly educated workforces, approximately 60 percent of working-age Coloradans do not possess a college degree.¹⁶ For these workers, many of the top occupations available to them involve low-skilled, low-paying service sector jobs that do not put them in the Colorado's middle income range (\$46,551-\$139,653 for a three-person household in 2016) (see Table 2).

The occupations that pay more than \$70,000 per year—a figure often cited in interviews as the minimum required to sustain a modest middle-class lifestyle—generally require higher levels of education, whereas those available for those without a college degree fall below the threshold for a middle income. Thus, to achieve a middle-income status through low-paying service sector jobs, households usually require two incomes. Both parents now work full time in 81 percent of Colorado's middle-class families.¹⁷

A Concentration of Well-Paying Jobs

Well-paying jobs for those with a college or advanced degree do not exist everywhere across the state. They tend to be concentrated in Colorado's Front Range, which includes the Denver metropolis, the defense hub of Colorado Springs, and other major cities such as Fort Collins and Pueblo. Sixteen counties in the

TABLE 2

Most of Colorado's Top Occupations Pay Below Middle-Income Wages

| Top Ten Occupations | Employment | Median Annual Wage |
|---|----------------|--------------------|
| Retail Salespersons | 86,610 | \$25,120 |
| Combined Food Preparation and Serving Workers, Including Fast Food | 65,670 | \$23,220 |
| Cashiers | 56,710 | \$23,840 |
| Registered Nurses | 51,760 | \$72,870 |
| Waiters and Waitresses | 50,390 | \$21,230 |
| Customer Service Representatives | 48,120 | \$34,260 |
| Business Operations Specialists, All Other | 43,800 | \$74,910 |
| Office Clerks, General | 41,290 | \$38,310 |
| General and Operations Managers | 39,200 | \$107,140 |
| Secretaries and Administrative Assistants, Except Legal, Medical, and Executive | 38,610 | \$37,360 |
| Total | 522,160 | |

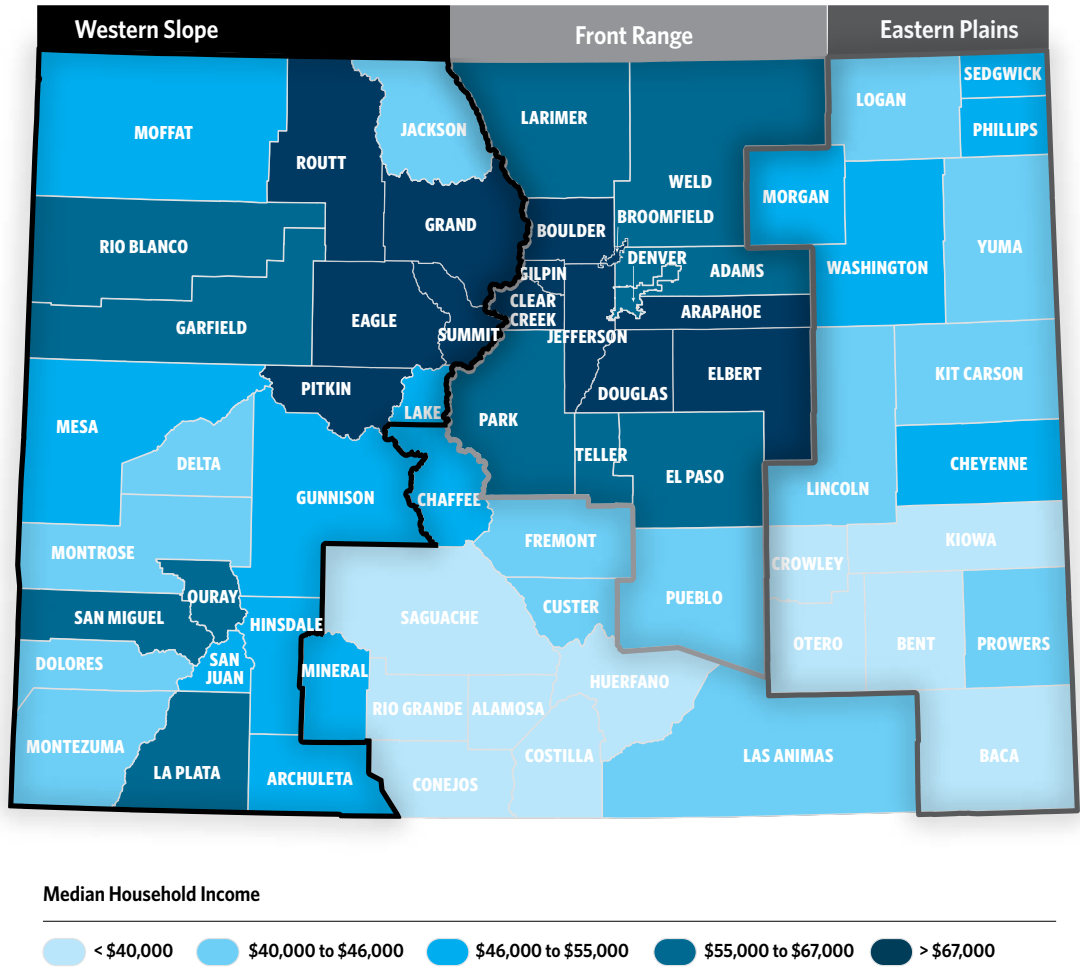
SOURCE: Bureau of Labor Statistics, "Occupational Employment Statistics: May 2018 State Occupational Employment and Wage Estimates: Colorado," https://www.bls.gov/oes/2018/may/oes_co.htm.

Front Range (of the sixty-four total counties in Colorado) account for over 80 percent of the state's population and economic activity.¹⁸ Figure 2 illustrates the particularly stark disparity in household income between the Front Range and the Eastern Plains.

Economic Disparities Along Ethnic and Racial Lines

Similar to national trends, Hispanic, Native American, and African American households in Colorado generally experience lower incomes, higher poverty rates, higher unemployment rates, lower homeownership rates, and lower educational attainment levels than most of the non-Hispanic, white population. In 2016, the median household income in Colorado for white households was \$71,406 compared to \$49,201 for Hispanic or Latino households.¹⁹ And while unemployment rates for Hispanics or Latinos in Colorado are lower than in most of the rest of the country (at 3.4 percent in 2018), they are still trailing the white population within their own state.²⁰ Note, however, that Colorado's ethnic and racial minorities are by no means monolithic communities. Real differences exist within them, depending on geography and education. There are differences, for example, between newly arrived Hispanic families and those who settled in places like Pueblo a few generations ago.²¹

FIGURE 2
Colorado Counties by Household Income



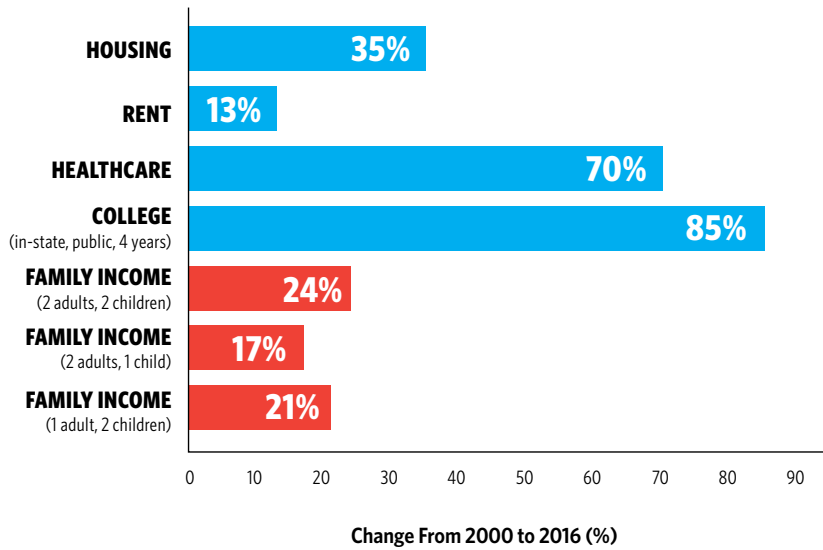
SOURCE: Colorado Department of Local Affairs, "Median Household Income," January 22, 2019, <https://storage.googleapis.com/maps-static/MedianHouseholdIncome.pdf>.

Rising Household Costs

Notwithstanding Coloradans' different economic experiences, focus group participants across the state made clear that whatever their household incomes, they were not going up fast or high enough to keep pace with the rising costs of healthcare, childcare, education, and housing, among other monthly expenses (see Figure 3). The inability to cope with increasing costs was repeatedly pointed out as the main threat to attaining a middle-class lifestyle.

FIGURE 3

Costs Are Rising Faster Than Income in Colorado, 2000–2016



SOURCE: Todd Ely and Geoffrey Propheter, *Colorado’s Middle Class Families: Characteristics and Cost Pressures* (Denver: Bell Policy Center, 2018), <http://www.bellpolicy.org/wp-content/uploads/2018/07/Colorados-Middle-Class-Families.pdf>.

Healthcare

Focus group participants in conservative, liberal, urban, and rural areas all repeatedly pointed to the rising costs of healthcare as their chief concern. That is not surprising, given the approximately 70 percent increase in healthcare costs for middle-class households from 2000 to 2016.²² The Consumer Price Index shows that medical care prices increased 21 percent in Colorado over the past five years compared to 14 percent nationally.²³

These rising costs are especially troubling for an aging population entering the later stages of life and for whom healthcare comprises a substantially larger proportion of their household budget.²⁴ The economic struggles of the elderly can also affect their children. One focus group participant in Grand Junction summed up the sentiment: “I think all of us are worried about losing our home by having some medical event. If you have family members like older parents that you’re caring for, you’re seeing your inheritance disappear because of their costs. There are just so many things related to healthcare that are costing us more than they did twenty years ago.”²⁵

Childcare

The rising costs of childcare have become an increasing preoccupation for Coloradans. In 2017, it cost \$12,095 per year, on average, to place one four-year-old in a childcare center for the workday (the costs were far higher for toddlers,

Middle-class families are struggling with the rising costs of childcare, and childcare workers are struggling even more to break into the middle class.

infants, or multiple children in childcare). Coloradans pay more for childcare than the national average by upwards of \$3,000 annually.²⁶

At the same time, childcare workers are paid less than middle-income wages in Colorado. The average annual income of childcare workers in Colorado in 2018 was \$28,770. It is higher than the national average by approximately \$4,000, but they face higher costs of living on average.²⁷ Thus, their salary generally is not enough to attain a middle-class lifestyle, especially if they have kids of their own and lack a second income.

This situation presents a twofold problem. Middle-class families are struggling with the rising costs of childcare, and childcare workers are struggling even more to break into the middle class. The same dynamic applies for middle-class families dealing with the rising costs of elderly care and for elderly care providers dealing with low wages.

Education

Focus group participants frequently cited education as another key concern for the middle class, especially in how it relates to economic potential and childcare. School funding shortfalls are forcing many school districts, particularly in rural areas, to drop to a four-day school week, which many fear will reduce the quality of education and put added childcare burdens on families.²⁸ In 2017–2018, Colorado ranked thirty-third in public school expenditures per student, and it currently leads the nation in the number of school districts with four-day weeks: 111 out of 178 districts, most of which are rural.²⁹ Focus group participants across the state were aware that Colorado is falling behind the rest of the country. For example, a participant from a local business in Grand Junction remarked, “If you start in this district in kindergarten and graduate from high school, your butt would have been in a high school an entire year less than your counterparts around the country.”³⁰

The shortfalls in resources are also affecting school teachers, who are already struggling with low pay. A 2017 report found that over 95 percent of teachers in rural school districts in Colorado were paid salaries below the cost of living.³¹

Naturally, state and local officials would love to be able to address all the education needs, but they face significant resource constraints. Unlike the federal government, states cannot deficit spend. In Colorado’s case, the situation is even more challenging. Those fearful of an expanding state government pushed through legislation in the 1980s (the Gallagher Amendment) and early 1990s (the Taxpayer’s Bill of Rights, known as TABOR) that had the net effect of making it harder to raise local taxes to address shortfalls in school financing.

Focus group participants also expressed concerns about postsecondary education. While a bachelor’s or advanced degree has been seen as an important pathway to the middle class, questions are being raised about whether the

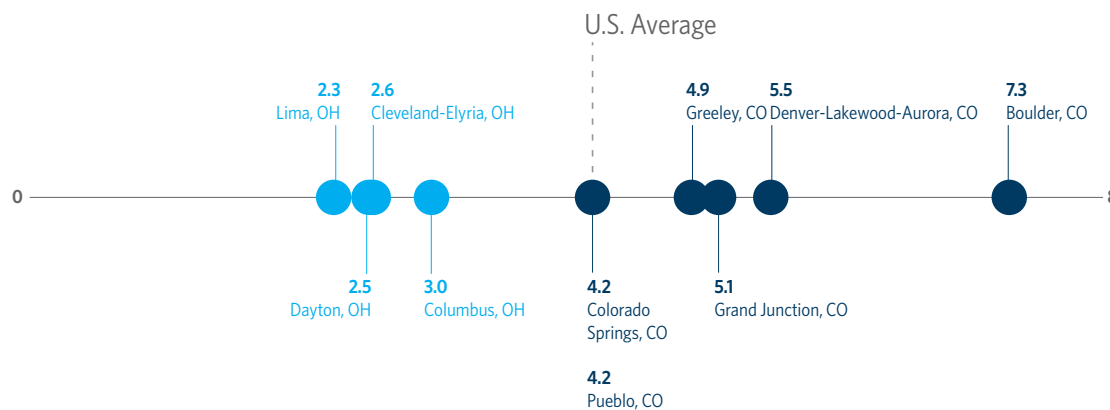
mounting costs of college and student debt are worth it. In Durango, a local ice cream store owner believed that “a college degree gets far less in today’s economy. I have two employees and they can’t get jobs in the field they studied and make more than they make at the ice cream shop—they make pretty good tips. A college degree alone doesn’t mean much, plus you have all that debt—it is no longer the ticket to economic stability. It’s the minimum bar to entry, but it is not a guarantee.”³²

Largely in response to college debt, in almost every focus group, participants urged consideration of a societal shift back to vocational schools, two-year degrees, apprenticeships, and trades. They saw these as potentially more cost-effective routes to the middle class. In Greeley, a local resident stressed that “they’ve been told in order to be successful, in order to achieve middle class, you’ve got to go get a four-year degree, spend \$100,000, and go into debt. We’ve got to get back to basics in saying it’s okay to be a plumber, it’s okay to be a carpenter, it’s okay to be a mason. I have a cousin in Chicago who is a skilled electrician and makes \$80 an hour. He has two houses and a motorcycle.”³³

Housing

Whereas healthcare costs and college debt are universal concerns across the country, the costs of housing are especially acute in Colorado, which has become a victim of its own success. The sheer pace of in-migration has increased the pressure on limited housing stock, driving up prices. An increasing share of Coloradans’ income is going to housing, especially in Boulder and Denver (see Figure 4).³⁴ Colorado ranks seventh in the nation in terms of the ratio of median home value to median income value.³⁵

FIGURE 4
Home-Price-to-Income Ratios in the United States, Colorado, and Ohio



SOURCE: Alexander Hermann, “Price-to-Income Ratios Are Nearing Historic Highs,” Joint Center for Housing Studies of Harvard University, September 13, 2018, <https://www.jchs.harvard.edu/blog/price-to-income-ratios-are-nearing-historic-highs/>.

In Boulder, a longtime resident and head of the local realtor's association indicated that, in 1990, he and his wife purchased a modest, typical single-family "middle-class home" for \$200,000. That same house would now sell for around \$1.2 million, which "no middle-class family can afford."

In the northern Front Range, it seems that although well-paying jobs exist and incomes are going up, housing prices are going up even faster. An executive at Colorado's Department of Labor pointed out how a middle-class household in

Denver might now consist of three to four young professionals carrying heavy student debt and sharing a home to save on escalating rent in the booming metropolis.³⁶ Similarly, in Boulder, a longtime resident and head of the local realtor's association indicated that, in 1990, he and his wife purchased a modest, typical single-family "middle-class home" for \$200,000. That same house would now sell for around \$1.2 million, which "no middle-class family can afford."³⁷ Retirees are not selling, because they do not want to leave Boulder and could no longer afford to buy there. Rising housing costs have put more pressure on the budgets of all generations. Meanwhile, new housing development is restricted in Boulder, which purchased much of the land in decades past to create a greenbelt to prevent urban sprawl. That has forced an increasing number of

working families in Boulder to seek accommodations in towns farther out, such as Longmont, where housing is more affordable, at least for now.

Some interviewed in the metro Denver area considered Greeley, approximately 65 miles northwest of Boulder in the more rural county of Weld, to be a potential, cheaper option. Focus group participants in Greeley would urge them to think again, however. One conjectured that the average house price in Greeley was as low as \$130,000 in 2008–2009 and has risen to \$340,000 in 2019.³⁸

Rising housing costs are not merely a Front Range concern. On the Western Slope, for example, one hears similar complaints from those in the fast-growing tourist town of Durango and even the regional transportation hub of Grand Junction. Those fortunate to have bought homes a decade or two ago in these areas have seen their wealth appreciate. Yet they likewise cite increasing home prices as an obstacle to attracting more middle-class families to growing communities.

Other Concerns

Healthcare, childcare, education, and housing are direct, large, and growing parts of a middle-income budget. But participants also mentioned other significant domestic concerns that restrict families' ability to attain a middle-class lifestyle:

- *Transportation:* The ability of workers to be able to commute from more affordable areas depends heavily on investments in highways and public transport.

- *Broadband*: An increasing number of towns are also looking to attract tele-commuters but struggle with limited and costly broadband service. For example, in Grand Junction, one focus group participant complained that the absence of competition among internet service providers meant they could charge businesses exorbitant rates for service. The previous and current governors have taken steps to expand broadband access across the state, but many in rural areas near Grand Junction suffered from no connectivity at all and pushed for greater priority attention on “the last mile.”³⁹
- *Water*: Building affordable housing in new communities or attracting new industries often comes down to the availability and cost of water. Because eastern Colorado is situated in the High Plains, water issues feature in many public policy debates in the state.

This is just a partial list of the broad range of issues that cause anxiety for the middle class in Colorado, and this is a state that is doing better economically than most other states.

Concluding Thoughts: Why These Domestic Policy Concerns Matter for Foreign Policy Professionals

Foreign policy professionals, members of Carnegie’s task force included, often gloss over the aforementioned issues because they see them as being the responsibility of their domestic policy counterparts. That needs to change.

By not paying close enough attention to these domestic concerns, foreign policy professionals risk becoming out of touch with the economic realities that America’s middle class face. They might not fully understand why the defense of certain foreign policies simply on the grounds that they are “good for growth” can ring hollow for many middle-class households. They can underappreciate the extent to which even those in thriving, affluent areas, such as in the metropolitan Denver area, question the viability of the middle-class dream, just as those struggling in Ohio’s smaller manufacturing towns do.

Ultimately, when defining the national economic interests intended to be advanced through the U.S. role abroad, foreign policy professionals need to take these economic realities into account. They need to work more closely with domestic counterparts to discern where certain problems predominantly require domestic policy solutions, whereas others may also be affected by foreign policy. And they need to be familiar with the domestic investments required to address these challenges, so they can properly assess the potential trade-offs and opportunity costs associated with increasing expenditures abroad.

TRADE, AID, AND IMMIGRATION

Those interviewed across Colorado, in conservative and progressive areas, saw the world in positive-sum terms. They rejected the zero-sum thinking that suggests other countries' gains come at the expense of the United States. Colorado's exporters welcomed trade agreements that allowed them to tap into foreign markets. They supported foreign aid that helped grow new markets and head off crises that could spill across borders. They coveted access to foreign workers for jobs that would go unfilled if reliant on indigenous labor alone. Overall, they believed that globalization and increasing global prosperity has been good for Colorado and its middle class.

Most people interviewed did not believe that middle-class economic interests would be advanced by the widespread use of tariffs, significant cuts to foreign aid, or major impediments to legal immigration. However, some said they were prepared to take a hit to their economic interests in the near term if it would help to combat China's unfair trading practices and level the playing field in the long term. That said, views on the escalating trade tensions with China were by no means uniform. Furthermore, the interviews were conducted in early 2019, when hopes were higher for a breakthrough in U.S.-China trade negotiations and the additional U.S. tariffs and retaliation by China (between July and September 2019) had not yet gone into effect. Colorado manufacturers that source inputs from China, among others, have since expressed heightened levels of anxiety.⁴⁰

The nature of Colorado's industries, workforce, and exports may explain why those interviewed generally did not advocate drastic changes to long-standing approaches to trade, aid, and legal immigration. Industries that play a big role in Colorado's economy and export activity—for example, professional and business services, IT, advanced manufacturing, agriculture, and tourism—tend to be strong advocates of globalization. They produce services and goods that are uniquely competitive in the global market. They have more to gain from growing and accessing overseas markets than to fear from foreign competition. They also depend on accessing foreign labor to fill critical gaps in highly educated professionals and low-skilled, low-paid workers.

Compared to other states, Colorado has had far fewer blue-collar manufacturing workers who have lost their jobs due to import competition and offshoring.

Industries that play a big role in Colorado's economy and export activity—for example, professional and business services, IT, advanced manufacturing, agriculture, and tourism—tend to be strong advocates of globalization.

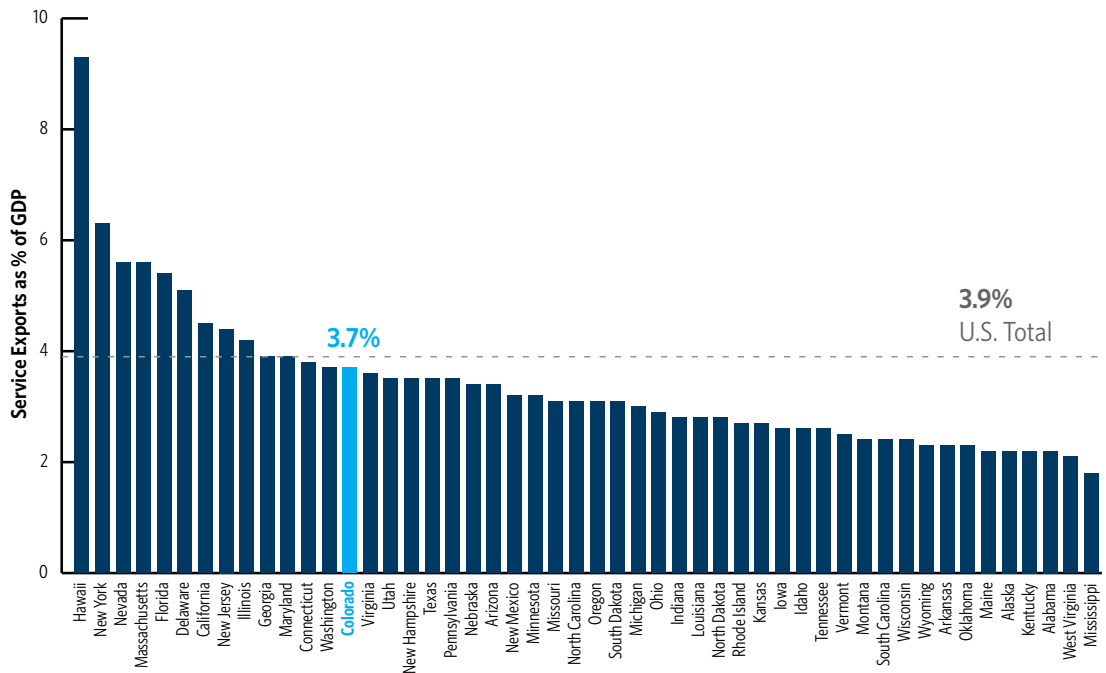
Thus, drastic policy changes geared toward bringing back blue-collar manufacturing jobs and protecting older U.S. industries, such as steel, are of no interest to the majority of Coloradans. In fact, tariffs on imported steel are not even uniformly popular in Pueblo, Colorado’s traditional steel town.

Coloradans are split on many issues, especially on energy and climate change. However, when it comes to trade, aid, and immigration, there appears to be a convergence of views across the state’s different industries and regions.

Services and Service Exports Play an Important Role in Colorado

One primary reason why Coloradans see more to gain than lose from further reducing trade barriers between nations is that financial activities, professional and business services, and IT services dominate the state’s trading activity and economy. By one estimate, service exports accounted for 3.7 percent of Colorado’s GDP in 2017 (the most recent reliable data available). Thus, while Colorado’s service exports as a percentage of GDP seem to approximate the national figure (see Figure 5), Colorado’s goods exports continue to fall well below (see Figure 6).

FIGURE 5
Colorado Service Exports Mirror National Trends

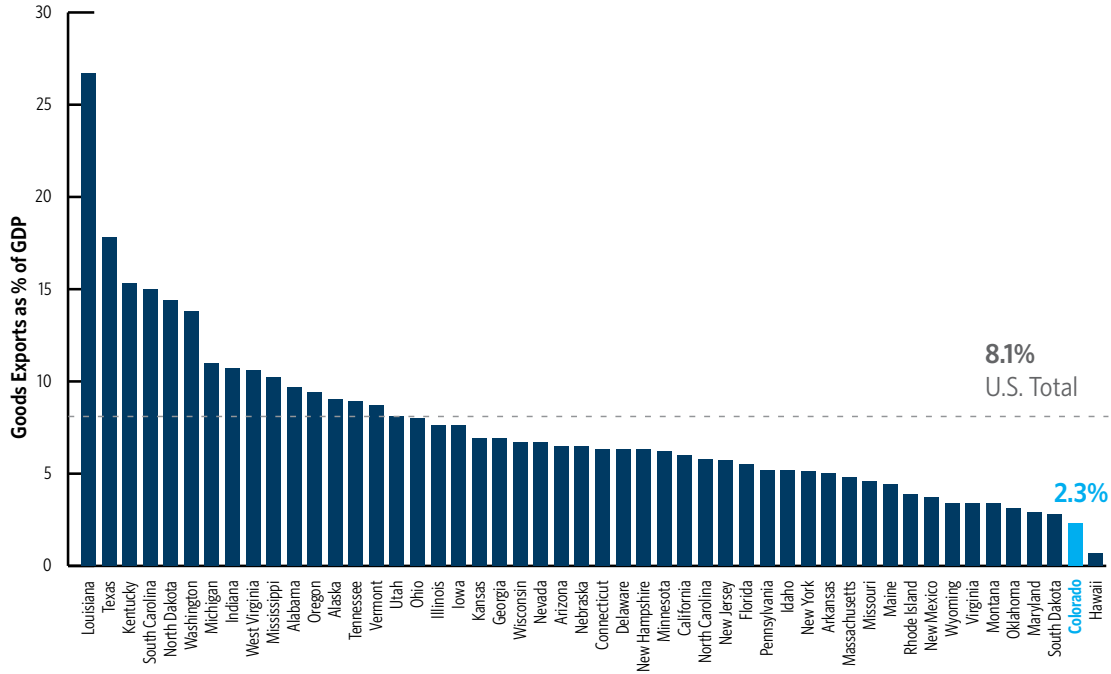


SOURCE: Nick Marchio and Joseph Parilla, “Export Monitor 2018,” Brookings Institution, April 30, 2018, <https://www.brookings.edu/research/export-monitor-2018/>.

NOTE: State exports are largely estimated by allocating total U.S. exports for a given industry to counties (based on the share of national production), aggregated at the state level. Service exports are taken as a share of nominal 2017 GDP.

FIGURE 6

Colorado Has the Second-Lowest Goods Exports in the Country



SOURCES: U.S. Census Bureau, USA Trade Online, data extracted May 10, 2019, <https://usatrade.census.gov/>; and Bureau of Economic Analysis, "Regional Data: GDP by State, Current Dollars," 2018, data extracted May 16, 2019, <https://apps.bea.gov/iTable/iTable.cfm?isuri=1&reqid=70&step=1#isuri=1&reqid=70&step=1>.

NOTE: Total state goods exports are measured by origin of movement and then taken as a share of nominal 2018 GDP.

By one measure, services—IT, tourism, finance, insurance, engineering, and general business services—accounted for about half of Colorado’s exports in 2017. The services share of exports at the national level was lower. Meanwhile, by the same measure, not only does Colorado have comparatively few goods exports in total, but manufacturing accounts for a smaller share of Colorado’s total exports than it does nationally and far less than in states such as Ohio.⁴¹

The relative importance of Colorado’s service industries are reflected in its workforce composition as well. For example, most recent estimates maintain that professional and business services account for 16 percent of the state’s workforce, in comparison to just 5 percent for manufacturing (see Table 3). Wages within the service industry workforce span the income range, according to data from the Bureau of Labor Statistics.⁴² They range from around \$20,000 per year for those in retail trade, transportation, and food services in the lower-income bracket to almost \$200,000 for chief executive officers in the upper-income bracket. While middle- to upper-level managers earn annual median wages above \$150,000, the far more numerous rank-and-file employees in business, finance, and IT-related occupations earn median annual wages between \$79,000 and \$109,000 per year, putting them solidly in the middle-income range.

TABLE 3

Service Industry Jobs Dominate in Colorado's Workforce

| Industry | Number of Employees in Colorado (Thousands, July 2019) | Share of Total Colorado Nonfarm Jobs (%) | Share of Total U.S. Nonfarm Jobs (%) | Share of Total Ohio Nonfarm Jobs (%) |
|--------------------------------------|--|--|--------------------------------------|--------------------------------------|
| Trade, Transportation, and Utilities | 473 | 17% | 18% | 18% |
| Government | 455 | 16% | 15% | 14% |
| Professional and Business Services | 454 | 16% | 14% | 13% |
| Education and Health | 350 | 13% | 16% | 17% |
| Leisure and Hospitality | 349 | 12% | 11% | 10% |
| Construction | 174 | 6% | 5% | 4% |
| Financial Activities | 169 | 6% | 6% | 6% |
| Manufacturing | 149 | 5% | 8% | 13% |
| Other Services | 114 | 4% | 4% | 4% |
| Information | 75 | 3% | 2% | 1% |
| Mining and Logging | 29 | 1% | 0% | 0% |
| Total Nonfarm Employment | 2,791 | | | |

SOURCES: Bureau of Labor Statistics, "Colorado Economy at a Glance," July 2019 data seasonally adjusted, <https://www.bls.gov/eag/eag.co.htm>, data extracted September 24, 2019; Bureau of Labor Statistics, "Economic News Release: Table B-1 Employees on Nonfarm Payrolls by Industry Sector and Selected Industry Detail," July 2019 data seasonally adjusted, September 6, 2019, <https://www.bls.gov/news.release/empsit.t17.htm>, data extracted September 24, 2019; Bureau of Labor Statistics, "Ohio Economy at a Glance," July 2019 data seasonally adjusted, <https://www.bls.gov/eag/eag.oh.htm>, data extracted September 24, 2019.

NOTES: The share of nonfarm employment reflects seasonally adjusted data from July 2019. In using more recent data from a sample-based survey, the percentages may vary slightly from the 2018 annual averages reported in Table 1 and Figure 1. "Other Services" includes noncategorized, private service-providing employment such as repair and maintenance, personal and laundry services, and membership associations and organizations.

Thus, to understand how trade policy impacts Colorado and its middle class, it is not enough to evaluate how it impacts manufacturing employment. One also needs to look at it from the perspective of the service sector, including the tech and engineering firms. For example, one focus group participant in the Denver suburbs stressed that because Colorado is strong in IT software development and data analytics, "intellectual property theft [is] a big consideration. . . . Whether this [trade war] is the right way to [protect] it or not is a question. But I think there is recognition that intellectual property theft is an issue in the technology space . . . particularly with China."⁴³

The tech firms based in Colorado span the gamut—from small start-ups and relatively newer players like SurveyGizmo to well-established multinational corporations like Arrow Electronics, IBM, and Oracle. These firms collectively export both services and goods. They employ both upper-income management and middle-income workers, whose salaries continue to rise in a tight labor market amid

fierce competition for top talent. For some firms and their employees, the trade policies that now attract the most attention relate to requirements on where companies store data, how they protect their data and intellectual property, and where consultants providing international services are required to reside. Some representatives of the tech industry interviewed for this study believed that the provisions on these issues included in the newly negotiated U.S.-Mexico-Canada Agreement represent steps in the right direction.⁴⁴ Conversely, those in the tech industry who are particularly dependent on exports to China, such as wholesalers of electronics products, believed that the escalating trade war with China was heading in the wrong direction.⁴⁵

The metro Denver area boasts one of the highest concentrations of engineers in the country, many of whose firms provide services to overseas clients.⁴⁶ Like the tech firms, though perhaps not to the same extent, interviewees at engineering firms expressed interest in how the protection of intellectual property is addressed in current and future trade negotiations. However, they are as or more concerned about other issues that will affect their international activities. For example, since many of them are involved in structural engineering, their businesses are sensitive to global trends in government spending on major infrastructure projects. They are also impacted by their relationships with local communities where they do business and with local workers, who they rely on for site engineering, geotechnical services, and field inspections.

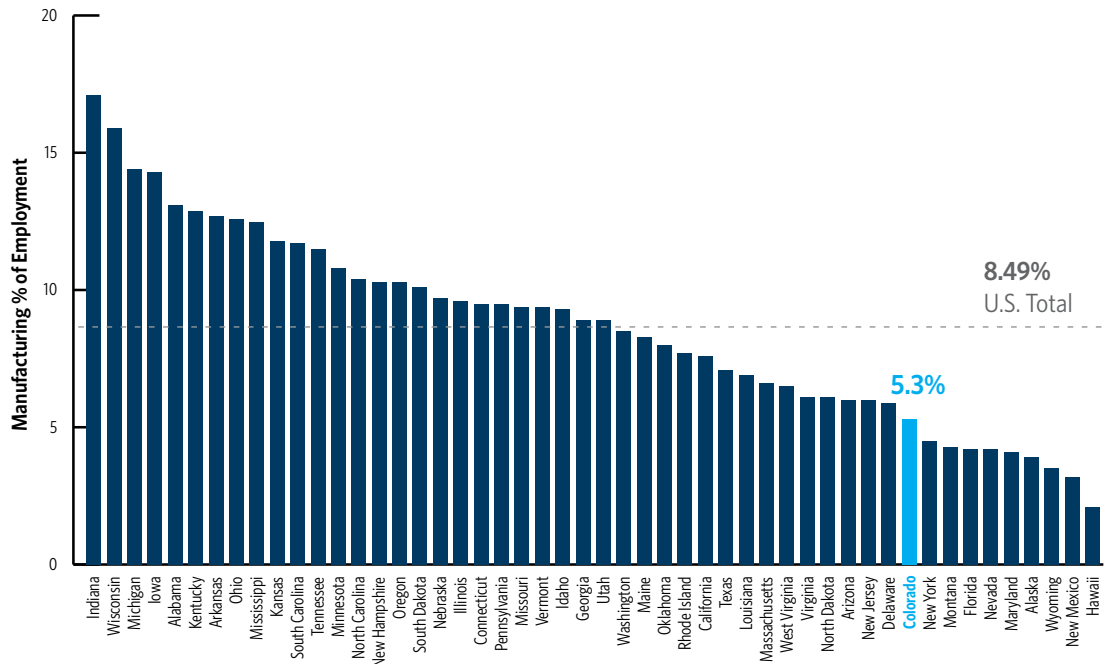
In sum, trade policy that works for Colorado's middle class needs to prioritize issues around intellectual property, the free flow of data, and relations with labor abroad, among other issues related to the future of services and digital trade—in addition to those around import competition and the offshoring of manufacturing employment.

Colorado Is Less Vulnerable to Manufacturing Trade-Related Job Losses

Due to manufacturing becoming more technologically advanced and less labor intensive, it now employs much less of the nation's workforce. That is especially the case in Colorado, where manufacturing activity takes place, but—with notable exceptions, such as in the food and beverage industries—tends to occur in less labor-intensive niche areas, such as in the outdoor gear industry or at the high end of the value chain. The advanced manufacturing industry in Colorado relies on the state's well-educated, high-skilled labor and research institutions and universities to produce and export semiconductors, medical equipment, and telescopes for the U.S. National Aeronautics and Space Administration (NASA), among other highly specialized goods.⁴⁷ For that reason, Colorado can rightfully claim that it undertakes important manufacturing activity, including for the U.S.

The metro Denver area boasts one of the highest concentrations of engineers in the country, many of whose firms provide services to overseas clients.

FIGURE 7

Colorado Has One of the Lowest Manufacturing Employment Levels

SOURCE: Bureau of Labor Statistics, Current Employment Statistics, “Employees on Nonfarm Payrolls by State and Selected Industry Sector, Seasonally Adjusted,” data extracted September 24, 2019, <https://www.bls.gov/sae/tables/state-news-release/home.htm>; Bureau of Labor Statistics, “Economic News Release: Table B-1 Employees on Nonfarm Payrolls by Industry Sector and Selected Industry Detail,” July 2019 data seasonally adjusted, September 6, 2019, <https://www.bls.gov/news.release/empsit.t17.htm>, data extracted September 24, 2019.

Department of Defense (DOD), even though manufacturing accounts for less of the workforce than in most U.S. states (see Figure 7).

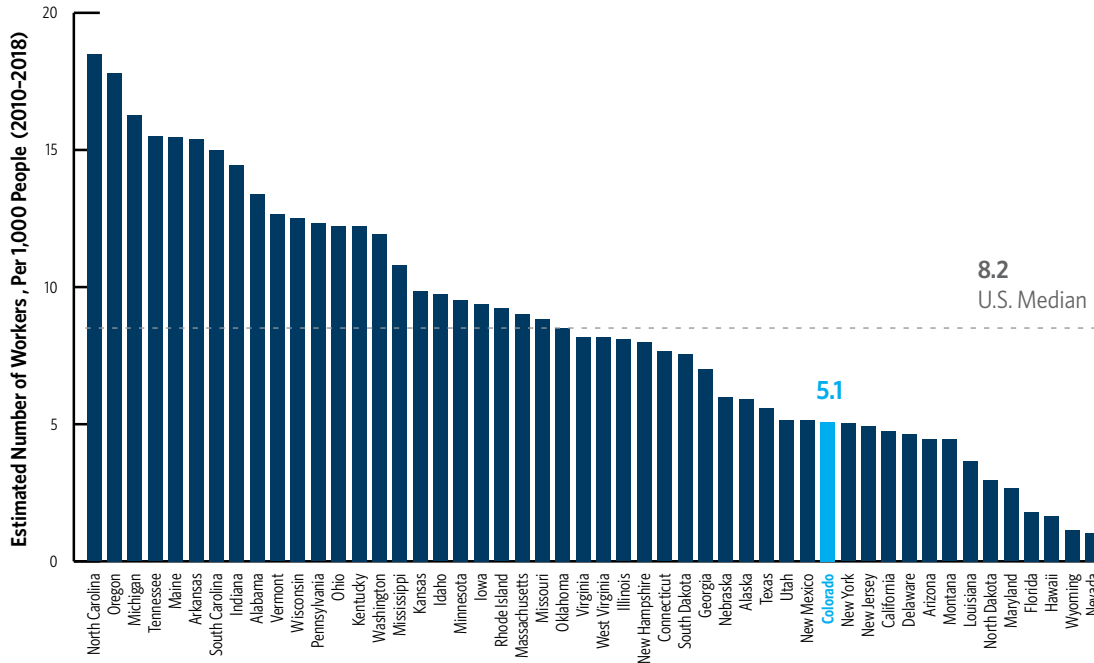
Colorado’s relatively limited reliance on labor-intensive manufacturing has meant that it has not had as many workers exposed to trade-related job losses as a result of the North American Free Trade Agreement or increased trade with China, compared to other U.S. states. The Department of Labor keeps statistics on the number of workers certified as eligible for trade adjustment assistance (TAA) because they lost jobs due to foreign import competition or the relocation of production overseas. This statistic by no means captures all workers adversely affected by trade—some who lost their jobs did not seek assistance and others may have been unable to make their case effectively. It is nonetheless a decent indicator of how trade displacement has affected U.S. states differently (see Figure 8). Unlike Ohio, a state with much higher manufacturing employment, Colorado suffered comparatively fewer trade-related job losses.

Mixed Results of Steel Tariffs in Pueblo

Pueblo is the one place in Colorado where traditional, labor-intensive manufacturing and blue-collar workers still dominate the local economy. But there, too,

FIGURE 8

Comparatively Few Workers in Colorado Are Certified for TAA Benefits



SOURCE: United States Department of Labor, Data on TAA Petitions and Determinations, April 30, 2019, data extracted May 30, 2019, <https://www.doleta.gov/tradeact/taa-data/petitions-determinations-data/>; U.S. Census, "State Intercensal Tables: 2000-2010" and "Annual Estimates of the Resident Population April 1, 2010 to July, 2018," data extracted June 3, 2019, https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=PEP_2018_PEPANNRES&src=pt, <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>.

NOTE: Per capita number of workers estimated using the average annual state population, 2000-2018. Population data extracted June 3, 2019, from U.S. Census, "State Intercensal Tables: 2000-2010" and "Annual Estimates of the Resident Population April 1, 2010 to July, 2018."

globalization has had a significant and largely positive effect, and few of those interviewed favored the widespread use of tariffs.

Pueblo was Colorado’s largest city in the late 1800s, as its strategic location and growing rail lines and steel mills rapidly attracted workers and entrepreneurs. In 1903, the Rockefeller family and Jay Gould purchased the Colorado Fuel and Iron Company (CF&I), Pueblo’s largest steel mill. Italian and southern European immigrants streamed into the area to work at the mill. This was just the first wave of immigrants that continued to come to Pueblo, contributing to its rich, ethnic diversity. Though experiencing ups and downs over the next several decades, Pueblo and its steel industry continued to thrive. But fortunes took a precipitous turn for the worse following the steel crash and recession in 1982. Since then, Pueblo has dramatically diversified its economy, but steel remains associated with the city’s heritage and provides a prominent source of income.⁴⁸

Steel’s economic, cultural, and symbolic value in Pueblo explains a level of sympathy for the imposition of steel tariffs intended to aid the industry. Moreover,

CF&I still lives on in Pueblo, under the new name and ownership of EVRAZ Rocky Mountain Steel. It is one of the top private sector employers in the region. It employs over 1,000 people—of whom the majority are blue-collar workers without a college degree, who can earn salaries over \$60,000, plus generous health-care plans, defined pension benefits, and paid apprenticeship options that pave a pathway to higher-earning jobs in the company. It remains fully unionized, which is not a common occurrence within Colorado's private sector, especially relative to the industrial Midwest. Thus, residents in Pueblo see EVRAZ's success as highly relevant to the middle class in the area, even though EVRAZ is no longer an all-American company. EVRAZ is traded on the London Stock Exchange, with its main headquarters, investors, and management based in Russia (a fact that others interviewed in Pueblo and across Colorado were surprised to learn).⁴⁹

Yet it turns out that the steel tariffs have had mixed implications even for EVRAZ, which has facilities in both the United States and Canada and therefore supported the recent lifting of tariffs on Canadian steel.⁵⁰ Meanwhile, the steel tariffs inflict serious pain on other top manufacturing employers in Pueblo that rely on steel to make their products, such as Vestas.

Vestas, a Danish company, is one of the world's leading manufacturers of wind turbines. At its facility in Pueblo, it fabricates, welds, and assembles up to 240-ton steel towers for wind turbines, some in excess of 90 meters. While many do not know EVRAZ is foreign-owned, Pueblo residents acknowledged the benefits of foreign investment gained through Vestas. The Pueblo facility produces more of these towers than any other facility in the world. It opened the facility in 2010, attracted to the area by the tax breaks, affordable land and water, and most importantly, the history of Pueblo as a steel city that could supply the kind of workforce it needed.⁵¹ Vestas is also one of the top private sector employers in the area. Like EVRAZ, it provides the types of salaries, benefits, and training for blue-collar workers that enable a secure middle-class lifestyle. Yet the tariffs helping steel companies like EVRAZ are imposing serious pain and cost on steel-using companies like Vestas.⁵² Vestas reported a sharp decline in profits in the second quarter of 2019; their prices had remained stable but tariff, raw material, and transport costs had increased.⁵³

The bottom line is that steel tariffs are not a clear win for the middle class in Pueblo. And if that is not the case in Pueblo, then it is far less likely to be elsewhere in Colorado, where the state's service exports and agricultural products are exposed to retaliatory tariffs.

Meat Products Are Colorado's Top Goods Exports

Colorado is a particularly interesting state insofar as it exports sophisticated financial instruments, professional and business services, IT software, and aerospace equipment, but cattle, beef, and other meat products still top the list of the state's goods exports.⁵⁴ And when it comes to trade, aid, and immigration,

the economic interests of Colorado's bankers, engineers, IT software developers, ranchers, and farmers appear to coincide.

Colorado's ranchers are sensitive to, and aware of, how various trade agreements and trade actions might affect them. They point to the U.S.-Korea Free Trade Agreement as a prime example of how international trade benefits them. Since the pact went into effect in 2012 and Seoul reduced its tariffs, Colorado beef exports to South Korea increased by 73 percent through 2018.⁵⁵ South Korea is now Colorado's top importer for beef.⁵⁶ Colorado ranchers and farmers see Asia, more generally, as a main area for growth. For that reason, they were worried after the United States withdrew from the (at the time) twelve-nation Trans-Pacific Partnership (TPP) and escalated trade tensions with China. Japan is the second-highest importer of Colorado beef and the highest importer of U.S. beef.⁵⁷ Since the United States exited from the TPP, Japan has negotiated more favorable terms with other beef-producing countries, including Australia, one of U.S. ranchers' top competitors. Colorado ranchers will benefit from the mini U.S. trade deal with Japan, which, as of the writing of this report, appeared on track to be announced this fall. China was poised to be another area of growth, when market access for U.S. beef resumed in 2017. But in retaliation for the U.S. imposition of tariffs on its imports, China upped the tariffs on U.S. beef to 37 percent and imposed tariffs on hides and skins.⁵⁸ Hides and skins, the largest U.S. exports to China, are down 39 percent as of September 2018. And in August 2019, the United States imposed additional tariffs on Chinese imports, prompting Beijing to promise retaliation against additional U.S. goods, including pork.⁵⁹

Cattle and beef account for the majority of Colorado's meat products, but the state is also a leader in lamb meat and wool. It is the third-biggest sheep-producing state in the United States, after Texas and California.⁶⁰ The owner of a sheep ranch participated in one of the focus groups. He made clear that, in addition to harnessing the benefits of international trade, he saw foreign aid and immigration as critical to his economic interests in the agriculture industry. "Let me just talk about red meat for a minute—beef, lamb, and pork. The better the economy is in any other country, they crave protein, high protein. And they're used to just eating rice. If you can elevate their economic level just a little bit, it would be huge for us to export red meat to those countries. But they just can't afford it . . . anything we can do to elevate, to bring people of third world countries out of extreme poverty, worldwide, it will help."⁶¹ Similar thoughts were expressed by some focus group participants in the agriculture industry in Ohio.

He added that "we use the sheep herder program. And you can't find an American. Through the H-2A [visa] program, we get a lot of Peruvians in here. They send a lot of money back there, and they know a lot about sheep."⁶² The

Colorado ranchers and farmers see Asia, more generally, as a main area for growth. For that reason, they were worried after the United States withdrew from the TPP and escalated trade tensions with China.

issue of seasonal workers came up in other focus groups as well. In Grand Junction, for example, one participant stressed that “with the big . . . visa program going away effectively [due to restrictive policy changes], all of a sudden you can’t get the crops picked at an affordable rate. So the cost of a tomato from Northbrook Valley that was 50 cents two years ago is now \$3 or \$4.”⁶³

At the same time, this sheep rancher and others representing the agricultural industry cautioned against evaluating policy through the lens of narrow, short-term economic interests alone. He was willing to absorb the near-term pain from retaliatory tariffs on beef, hides, and skins if it led to long-term gain in getting other countries, especially China, to play by the rules. The sheep rancher also noted that foreign aid and immigration were not just about expanding markets and getting seasonal workers. They were part of a larger project, championed by former president Ronald Reagan, that sought to promote free markets and democratic societies globally and elevate the United States as a beacon of hope.⁶⁴

Tourism Is Colorado’s Top Service Export

Colorado’s ranchers and farmers tend to reside in more rural, conservative areas, whereas those working in the tourist industry are more heavily concentrated in urban or semi-urban liberal cities and towns. The conservative ranchers and liberal tourist industry representatives might disagree on taxes, regulations, and approaches to climate change, among other issues, but they appear to have the same views on trade, aid, and immigration. They all benefit from globalization, increased global prosperity, and the ability to draw on foreign labor.

Tourism is a \$19.7 billion industry in Colorado that supports 165,000 jobs and contributes \$1.2 billion in local and state tax revenues.⁶⁵ It is also the largest sub-sector of Colorado’s service exports (see Table 4). Colorado’s old mining towns,

ski resorts, mountain biking trails, rock climbs, canoe trips, craft breweries, and growing culinary scene all contribute to making it an attractive tourist destination. State officials responsible for tourism indicated that U.S. citizens accounted for the bulk of the tourists, but foreign tourism (counted as a service export) is seen as an important area of growth.

International visits to Colorado increased 5.4 percent in 2016–2017, compared to 1.8 percent nationally. They have

increased by 23 percent overall since 2011.⁶⁶ State officials and tourist industry representatives attributed much of this growth to the rapid increase in nonstop, direct international flights to/from the Denver International Airport, now the fifth-busiest airport in the United States.⁶⁷ Canadians and Mexicans still top the list of foreign visitors to Colorado, but Australians, Britons, and Germans are also traveling to the state in large numbers. This is good news for the tourism industry, because they and other overseas visitors spent \$2,424 on average per trip

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TABLE 4

Travel and Tourism Is the Top Subsector of Colorado Service Exports

| Service Industry and Subsectors | Total Service Exports (%), 2017 |
|----------------------------------|---------------------------------|
| Travel and Tourism | 22 |
| Royalties | 15 |
| Tech Sector | 14 |
| Financial Services | 14 |
| Freight and Heavy Industry | 9 |
| Management and Legal Services | 8 |
| Engineering Services | 7 |
| Educational and Medical Services | 5 |
| Support Services | 3 |
| Insurance Services | 2 |

SOURCE: Nick Marchio and Joseph Parilla, "Export Monitor 2018," Brookings Institution, April 30, 2018, <https://www.brookings.edu/research/export-monitor-2018/>.

in 2017, approximately triple of what Canadians and Mexicans spent the same year.⁶⁸ Chinese visitors spent the most of all foreign visitors at \$3,223 on average per trip. While Chinese visitors constitute about only 3 percent of international visitors, their number grew the fastest between 2012 and 2017 (it is presumed that statistics for 2018–2019, when available, may show a decline in Chinese visitors).

In addition to airport access, tourist industry representatives pointed to several other factors that could affect the growth of international tourism. The global economy needs to stay healthy, so more foreigners can afford to travel. The costs of air travel, accommodations, and currency exchange rates need to be comparatively low, so people will choose to travel to the United States over another country. Visitors need to feel safe, making perceptions and statistics about violent crime important factors. Much will also depend on the "U.S. brand" and whether it portrays a country that is welcoming of foreigners and acts as a good global citizen on the world stage. Tourist industry representatives believe that the U.S. brand will take a hit if the United States continues to escalate trade tensions, employ hostile rhetoric toward other nations, cut foreign aid, and clamp down on legal immigration.⁶⁹

Beyond affecting the U.S. brand, certain major policy changes, especially related to immigration, could also affect the ability of tourist industry suppliers to operate. Ski resorts, hotels, and restaurants depend heavily on seasonal workers

A Denver-based business owner that supplies seafood for resorts, hotels, and restaurants . . . believed deeply in the value of the U.S. investing in global health systems. He recalled how he ended up having to pay considerably higher prices for salmon a few years ago, following the outbreak of infectious Salmon Anemia in Chile, a top source of the salmon he imports.

from south of the U.S. border. In a particularly tight labor market, they cannot find enough workers locally to operate the ski lifts, clean the rooms, wash the dishes, and take on other lower-paying jobs. Colorado's tourist industry is, therefore, very sensitive to any changes in the H-2B visa program.⁷⁰

A Denver-based business owner that supplies seafood for resorts, hotels, and restaurants offered a particularly holistic explanation of how trade, aid, and immigration affect his business and workers. He explained that he relies on mainly legal, immigrant labor to receive and cut seafood, because it is difficult to find native Coloradans who are interested in taking on such jobs, despite the relatively high wages and benefits he pays for those without a postsecondary education. While he himself is not in the middle class, many of his employees and contractors are, such as the unionized labor that trucks and warehouses his seafood. His ability to pay generous salaries and benefits would take a hit if he had to pay more for the seafood

that he imports from overseas. He was worried about any movement away from free trade and toward increased tariffs. But immigration and trade were not his only concerns. He also believed deeply in the value of the U.S. investing in global health systems. He recalled how he ended up having to pay considerably higher prices for salmon a few years ago, following the outbreak of infectious Salmon Anemia in Chile, a top source of the salmon he imports. He saw long-term benefits from the foreign aid the United States dispenses to protect the health of the oceans.⁷¹

Those in the tourist industry had a clear idea about the type of foreign policy that benefited them. Some, like the owner of the seafood company, made the case in concrete economic terms. Others focused more on policy that espouses the values that contribute to the U.S. brand, such as delivering humanitarian relief to those in need, because, as one local contractor in Durango put it, it was "the right thing to do" and that mattered to Americans.⁷²

Concluding Thoughts: Industrial Mixes Significantly Influence Opinions on Trade, Aid, and Immigration Within and Across States

The legacy and future of international trade is not nearly as divisive in Colorado as it is in Ohio. It is important to understand why.

Everything the Carnegie research team heard in Colorado about the benefits of globalization, international trade, foreign aid, and the legal flow of foreign labor was also heard in various parts of Ohio. But unlike Colorado, Ohio has suffered

large numbers of manufacturing job losses due to foreign import competition and offshoring. That largely explains why trade policy has been such a divisive issue in Ohio but far less so in Colorado.

The divisiveness in Ohio is compounded by the political-economy of trade in the state. The large metropolitan areas of Cleveland, Columbus, and Cincinnati have been the biggest beneficiaries of globalization, whereas smaller cities and towns in rural counties have borne the heaviest brunt of trade-related job losses. In the case of Colorado, because there have not been nearly as many people and places that have suffered as a result of globalization, support for international trade is actually a unifying thread across political and geographic lines. Colorado's top exporters of cattle, beef, and other meat products tend to be ranchers and farmers in conservative, rural areas. The state's top exporters of services tend to be those with college and advanced degrees in urban areas on the Front Range. All groups are joined in a common cause to promote international trade.

Finally, many state officials and economic developers—across Ohio's large metropolitan areas and smaller cities and towns alike—stressed that retaining and attracting more foreign direct investment (FDI) was vital to the state's economic strategy. Yet FDI did not come up nearly as often in Colorado. The different role that manufacturing plays in the two states likely explains that. A high percentage of FDI in the United States tends to be concentrated in manufacturing industries, as international companies locate production closer to the consumers they are trying to reach in North America. For that reason, the Midwest, in particular, attracts considerable foreign investment, with Ohio ranking fourth in the nation for FDI-supported manufacturing employees in 2016 (Colorado ranked twenty-sixth).⁷³ Further, in Ohio, the “foreign” nature of the investment is also unmistakable. The Japanese automaker Honda is now Ohio's top manufacturing employer. Japanese FDI supports over 72,000 employees in Ohio alone.⁷⁴ There is no equivalent in Colorado. FDI does play an important role, but it is less concentrated and obvious where ownership lies, as was starkly illustrated by the case of Russian involvement with the steel company in Pueblo.

Regardless, the case studies in Ohio and Colorado demonstrate that, while culture, identity, and political biases all can play a role, Americans' views on international trade, investment, aid, and immigration are significantly informed by economic considerations. And those economic considerations flow from the industrial mix in their respective states and communities.

CHAPTER 4

DEFENSE

Some politicians and policymakers contend that drastically reducing U.S. defense spending could make a big difference for the middle class. This could free up badly needed resources to address the broad range of domestic challenges Americans face. But in Colorado, the defense industry has substantial support and provides economic resources for many of its middle-class citizens.

Focus group participants and others interviewed pointed out that Colorado receives more defense dollars for personnel and contracts than most other U.S. states, in part because it has steadily become a leader in military aerospace and space over the last several decades. Its leadership role in those sectors has helped it grow its civilian aerospace industry and attract veterans and military retirees looking to start new careers. The defense sector now accounts for a sizable number of middle-class jobs, and it anchors the economy and community in El Paso (Colorado Springs), Colorado's second-most populous county. In other words, defense spending is seen to have a positive economic impact for the middle class in key segments of Colorado's economy and society. It is not self-evident, therefore, how Colorado's middle class would come out ahead by drastically cutting it.

However, some of those interviewed were worried that the United States spends far too much on defense. Some described defense spending as excessive and wasteful. Others stated that it has led to an overly militarized foreign policy and diverted resources away from vital, unfunded investments at home. Yet even some of these critics stopped short of calling for drastic cuts in defense spending because they feared a weakening of the U.S. military in a dangerous world or an economic blow to their own state.⁷⁵ In other words, they believed the United States could not afford to spend as much as it did on defense, yet were also unsure if it could afford to be spending far less.

Colorado Is a Leading Defense State, Especially in Military Aerospace and Space

Many people in Colorado might find it difficult to advocate cutting defense spending because the state has spent the last several decades building up its

Defense spending is seen to have a positive economic impact for the middle class in key segments of Colorado's economy and society. It is not self-evident, therefore, how Colorado's middle class would come out ahead by drastically cutting it.

leadership role in the military aerospace and space industries. That investment continues to yield economic dividends, including an increased number of defense personnel and contracts, which often generate middle-class jobs.

In 1951, the Chamber of Commerce in Colorado Springs formed a Military Affairs Council to petition the U.S. government to locate the newly created U.S. Air Force Academy in its region.⁷⁶ Colorado Springs was already home to the Camp Carson Army Base (later renamed Fort Carson) and the Peterson Air Force Base, but the area was suffering from a recession. It needed a catalyst to lift the local economy and create jobs. Like so many other U.S. states, Colorado sought to increase its military role for economic purposes.

Colorado worked hard to win the bid to host the Air Force Academy over formidable competition from around the country. That was just the start of Colorado's leadership role in defense. Other notable military aerospace and space sites soon followed and grew:

- At the height of the Cold War, the U.S. Air Force constructed a new military facility in the Cheyenne Mountains just outside of Colorado Springs. The Cheyenne Mountain Air Force Station (CMAFS) initially hosted the Combat Operations Center of North American Air Defense Command (NORAD). The center's mission was to watch for ballistic and air attacks against North America.⁷⁷ Since then, the Cheyenne Mountain CMAFS has continued to house additional elements of several other combatant commands, and NORAD is now defined as the North American Aerospace Defense Command.⁷⁸
- Peterson Air Force Base (AFB) in Colorado Springs hosts the headquarters of NORAD, the U.S. Northern Command, the Air Force Space Command, the U.S. Army Space and Missile Defense Command/Army Forces Strategic Command, and the 21st Space Wing.⁷⁹
- Schriever AFB in Colorado Springs hosts the 50th Space Wing, which is responsible for the operations and support of 185 DOD satellites.⁸⁰
- Buckley AFB in Aurora (near Denver) hosts, among other critical units, the 460th Space Wing that delivers "global infrared surveillance, tracking and missile warning for theater and homeland defense and provides combatant commanders with expeditionary warrior Airmen."⁸¹

In addition to these important aerospace and space capabilities, Colorado hosts the U.S. Army's 4th Infantry Division at Fort Carson in Colorado Springs, where soldiers are prepared and trained for the battlefield.⁸² The personnel at this base alone account for almost half of all military personnel in Colorado.⁸³ And Colorado has been largely spared by successive rounds of base realignments and closures (though two important facilities in the Denver area, Lowry

TABLE 5

Defense Spending, Fiscal Year 2017

| | Colorado | Ohio | U.S. |
|---|----------|-------|---------|
| Total Spending on Defense Personnel and Contracts (billions) | \$8.4 | \$7.0 | \$407.0 |
| <i>Personnel</i> | \$3.4 | \$3.1 | \$135.3 |
| <i>Contracts</i> | \$5.0 | \$3.9 | \$271.7 |
| Total Spending as % of GDP | 2.4% | 1.1% | 2.3% |
| Total Spending per Resident | \$1,498 | \$603 | \$1,466 |

SOURCE: U.S. Department of Defense, Office of Economic Adjustment, "Defense Spending by State: Fiscal Year 2017," Revised Version, March 2019, http://www.oea.gov/sites/default/files/fy2017-r2/FY2017_Defense_Spending_by_State_Report_Web_Version_20190315.pdf.

Air Force Base and Fitzsimons Medical Army Center, closed in 1994 and 1999, respectively).⁸⁴

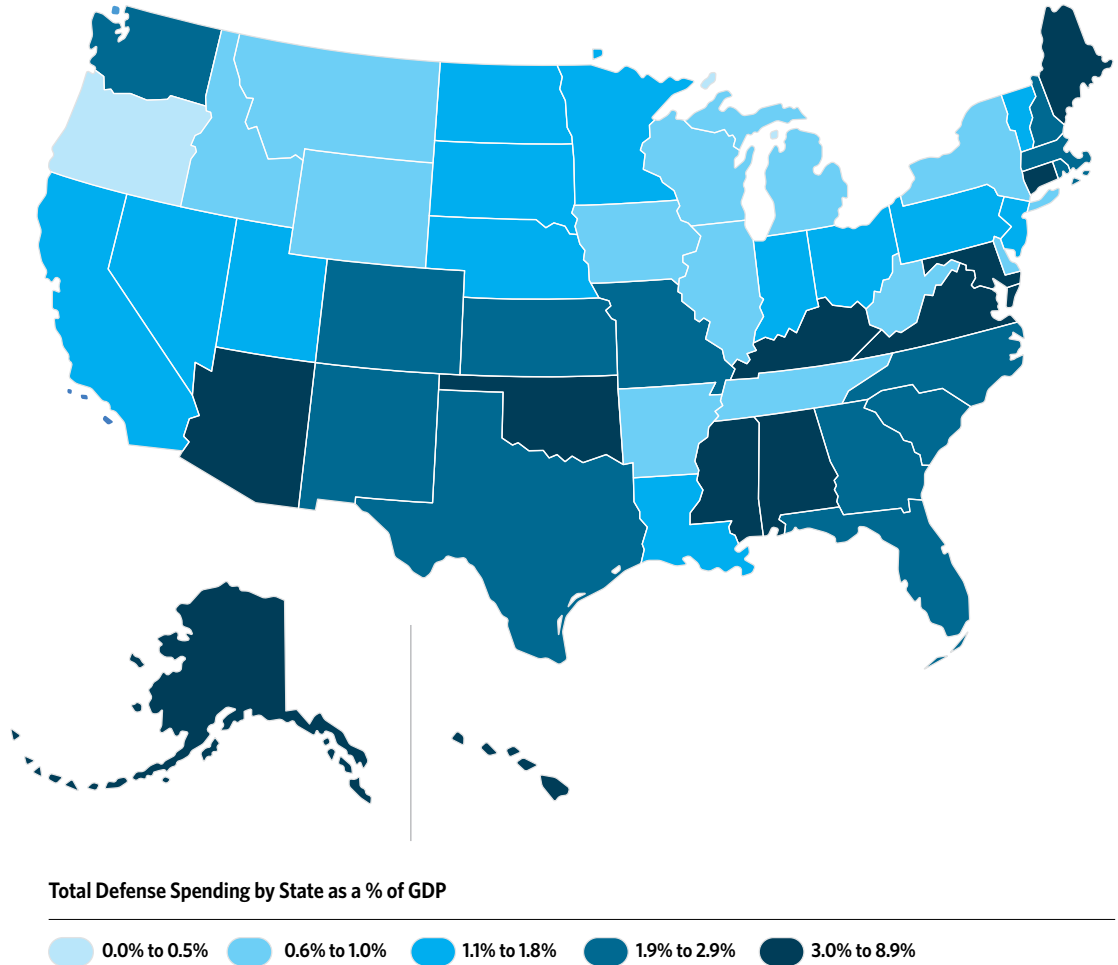
In total, there are eight major military installations and two smaller ones in Colorado and approximately 60,161 DOD personnel (of which 58 percent are active duty, 22 percent national guard and reserve, and 19 percent civilian). The federal government spent \$3.5 billion on these personnel in FY 2017 and an additional \$5 billion on defense contracts.⁸⁵ To put things in perspective, it is useful to compare these amounts to those in Ohio, a state with almost double the population of Colorado (see Table 5).

Many people interviewed in Ohio pointed to defense spending as one of the aspects of foreign policy that most affects the state's economy. It is not surprising that a greater number of those interviewed in Colorado did so, in even more strenuous terms. Overall, Colorado ranks tenth in the nation for defense spending on military personnel based in the state, thirteenth in the actual number of defense personnel, fourteenth in total defense spending per resident, and seventeenth for defense contract spending.⁸⁶ And while it is not in the top tier in terms of defense spending as a percentage of GDP, it is nonetheless still ahead of most other U.S. states, as indicated in Figure 9.

As one of the planners with the Army Corps of Engineers indicated during an interview, the Corps alone was spending roughly \$300 million per year on infrastructure and security at the Buckley, Peterson, and Schriever AFBs; Fort Carson; and other areas in Colorado. It was building water systems, roadways, bridges, and electrical grids and investing in cybersecurity.⁸⁷

There are eight major military installations and two smaller ones in Colorado and approximately 60,161 DOD personnel.

FIGURE 9
Total Defense Spending as a Percent of State GDP



SOURCE: U.S. Department of Defense, Office of Economic Adjustment, "Defense Spending by State: Fiscal Year 2017," Revised Version, March 2019, http://www.oea.gov/sites/default/files/fy2017-r2/FY2017_Defense_Spending_by_State_Report_Web_Version_20190315.pdf.

Colorado will likely move further up the list of U.S. states benefiting from defense spending if it becomes the permanent home of the unified Space Command (USSPACECOM). The DOD formally established USSPACECOM on August 29, 2019, at Trump's direction, and it is temporarily headquartered at Colorado's Peterson AFB, with additional personnel and functions at Schriever AFB, Colorado; Offutt AFB, Nebraska; and Vandenberg AFB, California.⁸⁸ Further consolidation of Colorado's leadership role in military aerospace and space could complement its brand as a leader in the aerospace industry, in general. Colorado is perennially among the top states securing NASA contracts (totaling \$1.8 billion in 2017, or 13 percent of the nation's total). The Air Force Academy and CU Boulder offer two of the nation's top aerospace engineering degree programs.

Eight of the United States' biggest "prime" aerospace contractors are based in Colorado. As of 2016, Colorado hosts the second-largest number of aerospace industry jobs of all U.S. states. And Denver's metropolitan statistical area has over 21,000 aerospace industry employees, surpassing any other big metropolitan area in the country.⁸⁹

Colorado hosts the second-largest number of aerospace industry jobs of all U.S. states.

Thus, to speak about defense spending in generic terms, as if it were just about spending "x percent" any given year, fails to take into account the bigger picture. Some states like Colorado successfully establish comparative advantages in their military capabilities and leverage those advantages to complement or support wider economic development strategies. In the case of Colorado, the state's leadership in aerospace and space has helped it capture highly skilled jobs within the defense sector and bolster its R&D sector.

Colorado's Defense Sector Generates Middle-Class Jobs

In addition to the over 60,000 military and civilian personnel employed by the DOD, the defense sector also encompasses contractor personnel, veterans, military retirees, and employees with the Department of Veterans Affairs, as well as workers in other industries spurred by defense activity. By one study's account, in 2016, the defense sector directly and indirectly accounted for up to 247,000 jobs in Colorado and about 7.5 percent of the total state wage and salary employment.⁹⁰ In many, but not all, instances, defense sector jobs support middle-class households.

Active military personnel generally fall within the middle-income band, though officers at the highest ranks break into the upper-income bracket. According to representatives of the military community interviewed for this study, once enlisted personnel get to the rank of E-5 (for example, a sergeant in the Army), they can start earning enough to sustain a modest middle-class lifestyle. Personnel also gain skills, such as in combat medics and signals, that can later help them break into related middle-income jobs in the private sector.⁹¹

Veterans make up almost 10 percent of Colorado's adult population (in comparison to 6.6 percent nationwide), and their income can vary considerably.⁹² Many have opportunities to earn wages that afford them a middle-class lifestyle. Some veterans earn upper-income salaries with defense contractors, as their clearances and skills are particularly desired. Focus group participants in Colorado Springs noted that there are also many veteran-owned businesses that serve as key subcontractors for companies such as United Launch Alliance, Northrop Grumman, Raytheon, and Lockheed Martin.⁹³ Other veterans (notably at retirement age) may just be living off their Pentagon pensions. The sheer number of veterans also creates employment opportunities for other Coloradans, including at the Department of Veterans Affairs and its new hospital in Denver.

At the top end, former senior military engineers can go on to work in the aerospace industry, where salaries top \$130,000 on average per year. Many others might not reach six figures but nonetheless can earn solid middle-income salaries, including in construction-related jobs.

The variety of jobs spawned from defense spending illustrates why people might associate the defense budget with the middle class. At the top end, former senior military engineers can go on to work in the aerospace industry, where salaries top \$130,000 on average per year.⁹⁴ Many others might not reach six figures but nonetheless can earn solid middle-income salaries, including in construction-related jobs.⁹⁵

But it should also be noted that not all military personnel are guaranteed a middle income. According to focus group participants in Colorado Springs, not all enlisted personnel reach the E-5 rank before completing their military service or perform functions that could earn them a middle-class job after their service. This is especially true in the U.S. Army and Marine Corps, where there are many combat troops and turnover is high. Base pay for enlisted personnel starts around \$20,000, which does not meet the middle-income threshold (though they receive healthcare, housing, food, and other allowances).⁹⁶ Therefore, enlisted personnel who leave the service before rising up the ranks enter the civilian workforce without savings, the demanded skills, or a college degree that could help them land a better-paying job with defense contractors or private sector companies. In response, the U.S. military has invested in transition support services for departing military personnel. But as this is not always enough, veterans have also been dependent on the goodwill of local businesses and the support of nonprofit organizations—both of which are abundant in Colorado Springs.⁹⁷

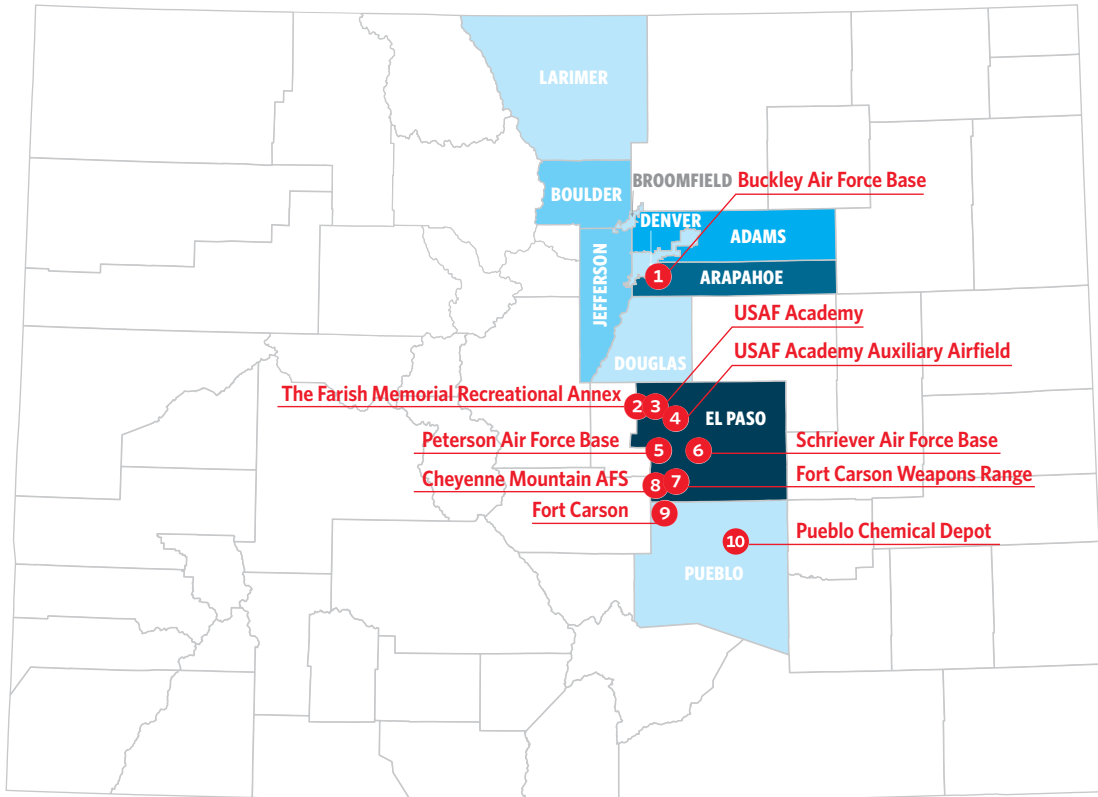
The Defense Sector in El Paso Creates Prosperity and Challenges

While those interviewed noted the importance of defense spending for the state as a whole, 90 percent of DOD personnel are concentrated in just two counties—El Paso and Arapahoe—with El Paso having the lion's share between them. El Paso is the second-most populous county with over 700,000 residents, and the majority live in Colorado Springs.⁹⁸ As shown in Figure 10, the county hosts eight of the ten military presences in Colorado and accounted for \$2.1 of the \$5 billion in defense contracts awarded in the state in FY 2017.⁹⁹ The defense sector impacts all parts of the economy and society in El Paso.

According to one study, the defense sector directly and indirectly accounted for about 41 percent of El Paso County's total labor income in 2016.¹⁰⁰ A sizable portion of that income stemmed from military retirees and veterans. El Paso hosts the largest percentage of veterans in the state, though a sizable number also live in and commute from neighboring counties, where housing costs are lower.¹⁰¹ Focus group participants in neighboring Pueblo County, for example,

FIGURE 10

Defense Contracts and Bases Are Concentrated in El Paso



Defense Spending by County, Top Ten Counties in Colorado



SOURCE: U.S. Department of Defense, Office of Economic Adjustment, "Defense Spending by State: Fiscal Year 2017," Revised Version, March 2019, http://www.oea.gov/sites/default/files/fy2017-r2/FY2017_Defense_Spending_by_State_Report_Web_Version_20190315.pdf.

stressed that many members of their community also depend on defense spending in El Paso for their livelihoods, as a significant number of them commute to the Colorado Springs bases.¹⁰²

Focus group participants explained that a tight-knit community has developed in the region, comprising military personnel and their families, veterans and military retirees, local businesses, and nonprofit and faith-based organizations. And this community looks after its own. For example, one participant conjectured that her daughter, who was one of those leaving the military at a junior rank, "probably [still] had a higher likelihood of getting a job straight out of the military than she would straight out of college."¹⁰³ That confidence appeared to stem

from the benefits of living in Colorado Springs, where local businesses went out of their way to hire veterans. Other focus group participants recalled local businesses in Colorado Springs offering temporary jobs and discounts to furloughed defense personnel during government shutdowns.¹⁰⁴

El Paso's economic fortunes have risen and fallen with major fluctuations in the defense budget. Focus group participants in Colorado Springs stressed that the local economy took a clear hit when defense spending cuts associated with "sequestration" kicked in between 2011 and 2015.¹⁰⁵ While defense personnel, small businesses, and local communities have shown the ability to work together to weather temporary downturns, the region's economy would be devastated by drastic cuts in defense spending over a sustained period of time. Community and business leaders recognize this danger and stressed the importance of advancing economic diversification in military towns. In the case of Colorado Springs, this means growing other industries, such as cybersecurity, that leverage the presence of former military personnel with security clearances.¹⁰⁶ One focus group participant described the conundrum: "We don't want the balance we have right now where it's so high in the military. We'd rather this other sector grow so we can absorb the hits. But also the DOD allows us to absorb the blows when other industries in town take a hit because the legs are so long and relatively solid."¹⁰⁷

Concluding Thoughts: Moving Beyond a Binary Choice on Defense Spending

Those who work in and around the defense sector tend to think of it as an important source of good middle-class jobs. Therefore, they see Colorado's middle class as having benefited considerably due to the military role the state has cultivated and built upon over the last several decades. That is why they might push

back against those who argue that cuts to defense spending are required to help the middle class.

Yet there were Coloradans who cautiously supported defense cuts that, among other reasons, would eliminate wasteful spending and make U.S. foreign policy less oriented around the military. However, those expressing such views tended not to be in one of the four counties in Colorado where defense spending is concentrated, particularly El Paso.

Economic developers in El Paso were nonetheless among the most vocal proponents of diversifying their economy, because they have lived through the pain associated with downturns in defense spending. They clearly have compelling reasons to continue developing other industries. And it seems to be in the interests of those on all sides of the spending debate that they do so.

Yet there were Coloradans who cautiously supported defense cuts that, among other reasons, would eliminate wasteful spending and make U.S. foreign policy less oriented around the military.

Decisions on defense spending levels in the years ahead should ideally flow from assessments about the evolving threats the United States faces and the military capabilities and capacity it requires to meet them. In Colorado's case, that could mean sustaining or investing even more in the units it hosts, because military aerospace and space capabilities could become even more important in an era of rapid technological advances and increasing competition among major powers. Yet places like El Paso cannot afford to assume that will be the case. The economic costs of being wrong could be dire. And defense priorities and the politics around defense spending could shift decisively and unexpectedly.

Regardless of which side of the argument politicians and policymakers may fall, they should find common ground in advancing ideas on how to help communities heavily dependent on defense spending to more rapidly diversify their economies. In some cases, the goal might be to help communities better prepare for, and weather, temporary fluctuations in defense spending. In other cases, it might be to give Pentagon leaders' greater flexibility to shift resources in relation to evolving threats, or it might be to enable significant reductions in defense spending over the longer term.

ENERGY AND CLIMATE

Coloradans pointed to international leadership in energy production and climate change as a key aspect of U.S. foreign policy that causes conflict within the state and impacts the economic well-being of the middle class. For some Coloradans, leadership in energy means protecting the revenue and good-paying jobs that flow from the state's thriving fossil fuel industries and exporting more liquefied natural gas (LNG). For many others, it means protecting the environment and the outdoor recreation industries on which the state's economy depends and creating more jobs in renewable energy sectors. The heated debate on energy and climate change taking place across the nation is playing out in a major way within Colorado, often pitting conservative rural counties against more liberal urban areas.

Colorado's Fossil Fuel Industries Support Middle-Class Jobs and Communities

Colorado is a major energy-producing state, where its thriving fossil fuel industries create high-paying jobs for those without a college degree. Several parts of the state are heavily reliant on the revenues and economic activity that the extractive industries generate. For those reasons, a number of people interviewed stressed the importance of increasing exports of LNG and attracting more foreign direct investment to grow Colorado's extractive industries.

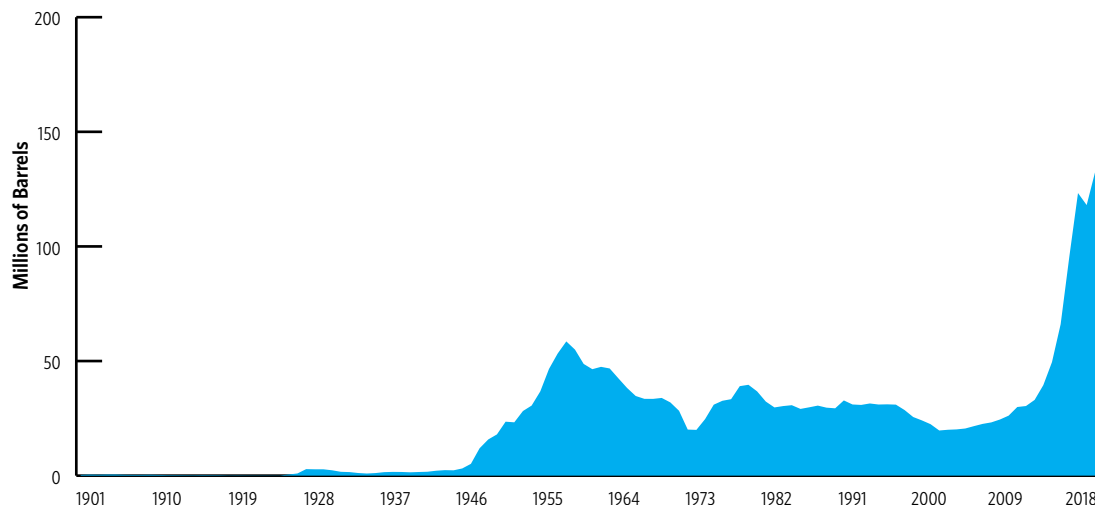
Colorado Is a Major Energy-Producing State

In 2017 (the most recent year for reported rankings consistent across sectors), Colorado ranked sixth in the nation in natural gas production, seventh in crude oil, and tenth in coal.¹⁰⁸ Due to technological innovation, Colorado's oil production has grown exponentially over the past decade, far surpassing the previous peak level in 1956 (see Figure 11).

Though not nearly at the same pace, natural gas production in Colorado has also grown significantly—over 100 percent from 2000 to 2018.¹⁰⁹ Coal production has fallen by more than 60 percent since 2005, though it still accounts for approximately half of electricity generation in the state.¹¹⁰

In 2017, Colorado ranked sixth in the nation in natural gas production, seventh in crude oil, and tenth in coal.

FIGURE 11

Oil Production in Colorado Is Increasing Exponentially

SOURCE: Colorado Oil and Gas Conservation Commission, “Colorado Oil and Gas Information (COGIS)—Production Data Inquiry,” data extracted May 2, 2019, <https://cogcc.state.co.us/data.html#/cogis>; and Business Research Division, Colorado Business Outlook 2019.

While only five counties recorded coal production in 2018 (Gunnison, Moffat, La Plata, Rio Blanco, and Routt), dozens of counties across Colorado have oil and gas wells and basins (see Figure 12).¹¹¹

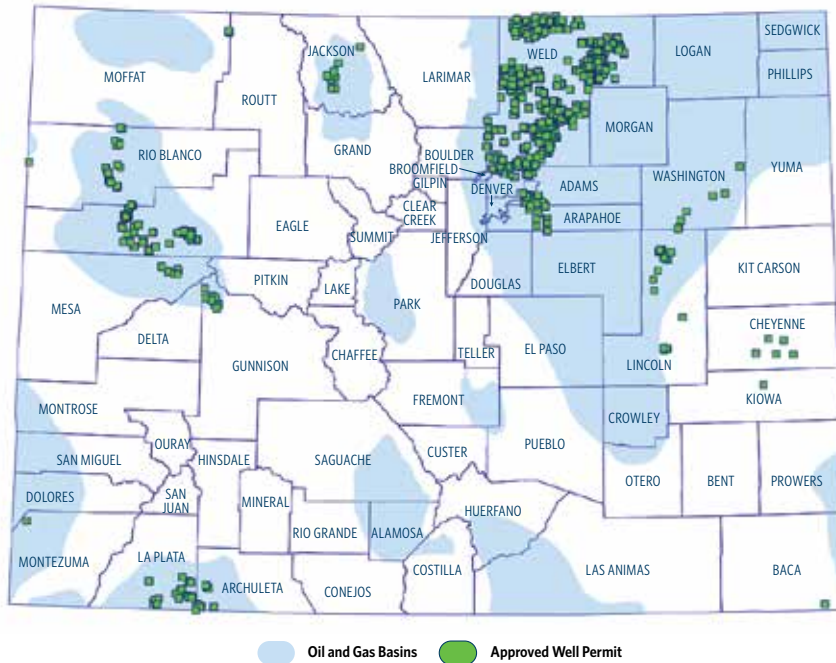
Fossil Fuel Industries Generate Middle-Class Jobs for High School Graduates

Many top oil-producing companies are Colorado-based and create well-paying employment opportunities.¹¹² Coloradans without a college degree can earn around \$65,000 a year in the oil, gas, and coal industries. Many go on to earn considerably more; the average value of salary and benefits for coal workers topped six figures in 2018.¹¹³ Few, if any, other industries offer that kind of compensation and opportunity for recent high school graduates.¹¹⁴ In fact, some focus group participants stated that young workers in the industry constitute the wealthier group in certain regions. A longtime resident of Greeley (Weld County) recalled, “I was picking up some parts and there was a beautiful Toyota-type pickup [truck]. I asked the price of the vehicle. \$60,000. I said who buys that? The young single guys in the oil field. The average person would be crazy to spend that kind of money.”¹¹⁵

A longtime resident and journalist in the fossil fuel rich region of Grand Junction saw the high-paying jobs in these industries as a mixed blessing for his region. “The rate at which we send our graduates to any form of higher education—Toyota degree or 4-year degree—is 20 percent below the national average

FIGURE 12

Oil and Gas Locations by County



SOURCE: Colorado Oil and Gas Conservation Commission, “COGCC Interactive Map,” accessed June 24, 2019, https://cogccmap.state.co.us/cogcc_gis_online/.

and it’s gotten lower. One explanation is that during boom time, you could come out as an eighteen-year-old and make \$80,000 in an extraction industry. And if the mindset in the household is ‘my dad made \$80,000 in the oil patch—why do I need to go to college; I will do the same,’ that works until there is a bust and that kid doesn’t have any real prospects.”¹¹⁶

The total number of fossil fuel industry employees is relatively small. In 2017, there were approximately 30,000 directly employed in the oil and natural gas industries and 1,200 in the coal industry. But these workers represent only a fraction of the people dependent on the industries to sustain a middle-class lifestyle.¹¹⁷ Focus group participants in the Weld and Mesa counties explained that many businesses in their region are associated with, and dependent on, extractive industries, including truckers who move the products and local firms that supply parts for the machinery. “We have a lot of manufacturers here in town. But a lot of that is based on the oil and gas production. . . . Grand Junction in our environment here can’t survive on tourism alone. It genuinely can’t—all of the hospitals, all of the medical, are paid for by the manufacturing, by oil and gas.”¹¹⁸

Focus group participants also explained that various counties depend heavily on severance taxes from extractive industries to deliver local services and pay municipal workers, county clerks, police officers, and local firefighters—all of whom are considered the backbone of the middle class. One participant said,

“We’re looking at tax increases because we don’t have that tax revenue from oil and gas. If we can get that gas exported, the price will come up and that would help La Plata County.”¹¹⁹ Oil and gas development on public land also generates income for the state.¹²⁰ And oil and gas companies appear to be aware of their importance to communities and their members’ livelihoods. One former state official believed oil and gas companies were even thinking “tax me so you can be addicted to our business.”¹²¹

Nowhere is the importance of extractive industries to the middle class more evident than in Weld County, one of the leading oil producers in the country, where extraction takes place on state-owned land (unlike on the Western Slope, where extraction occurs on federal land). In 2018, 89 percent of the oil and 43 percent of the coalbed and natural gas produced in Colorado came from Weld.¹²² More than half of all property taxes in the county are collected from extractive industries.¹²³ That revenue pays for workers and services across the county. And many farm owners rely on the royalties paid by the oil companies that extract oil and gas from their land.¹²⁴

Communities Dependent on Extractive Industries Favor Increasing Exports

Middle-class jobs and communities dependent on oil, gas, and coal are highly sensitive to industry booms and busts. For example, when oil is in high demand, there are more oil patch jobs and tax revenue. But when there is a bust, there are layoffs and the community suffers. Therefore, these communities are also sensitive to foreign policy decisions that directly impact extractive industry demand and pricing.

Some in Greeley mentioned the importance of maintaining good relations with Canada, where many of the oil and gas companies that operate in Weld County are headquartered.¹²⁵ Others said that a decision on national security grounds to supply more LNG to Eastern Europe, thereby diminishing North Atlantic Treaty Organization (NATO) allies’ energy dependence on Russia, could translate to economic gains for Colorado’s natural gas industry.¹²⁶ Some business leaders in Grand Junction said that the foreign policy decision that would matter most to their middle-class residents is exporting more LNG to Asia.¹²⁷ They believed such a move could potentially help to revive the natural gas industry on the Western

Slope, which has experienced a 15 percent decrease in oil production and a 10 percent decrease in gas production since 2008.¹²⁸

Whether the Western Slope is able to export natural gas is not simply a matter of foreign policy alone, however. Much will depend on the completion of the Jordan Cove pipeline project, which is required to transport natural gas from Colorado to the export terminal on the coast in

Some business leaders in Grand Junction said that the foreign policy decision that would matter most to their middle-class residents is exporting more LNG to Asia.

Oregon, from where it would be shipped. That will require permits to be approved and legal challenges to be overcome in Oregon and other states through which the pipeline traverses.¹²⁹ Many state legislatures, including in Colorado, are shifting toward the tighter regulation of fossil fuel industries and the promotion of higher environmental standards.¹³⁰ Thus, even if the federal government takes a more favorable approach to the extraction and export of crude oil and LNG, as is the case under the Trump administration, states like Colorado may be moving in the opposite direction.

Climate Change Also Has Major Economic Impacts for Colorado's Middle Class

While Colorado is a powerhouse in the production of oil, gas, and coal, it is also home to fierce advocates for increased U.S. international leadership on climate change. In 2018, the state elected Jared Polis as governor, who vowed to get Colorado to 100 percent renewable energy by 2040. Since taking office in January 2019, he has already signed into law seven bills intended to limit the state's contribution to global warming.¹³¹ In April 2019, the Democratic majority in the state legislature passed Colorado Senate Bill 181 (Protect Public Welfare Oil and Gas Operations), which shifts the focus of the regulatory Colorado Oil and Gas Conservation Commission from fostering industry growth to protecting community well-being (for example, public safety, health, welfare, and the environment).¹³² These latest developments are all indicative of the growing constituency across the state favoring tighter regulation of fossil fuel extraction. Those interviewed mentioned a variety of reasons why many Coloradans are now taking a firmer stance, noting the global and local risks of climate change and the economic benefits of transitioning from extractive to renewable industries.

Coloradans Favor Climate Change Leadership to Protect the Planet, Communities, and Industries

For some people interviewed, especially the younger ones, climate change was among the foreign policy issues they cared about most. In Durango, a local contractor within the tourism industry stated that climate change poses the most significant security threat to the country and the world. If the point of foreign policy is to keep Americans safe, she could not understand how climate change leadership would not be the top priority.¹³³

In the Denver suburbs, a focus group participant expressed exasperation with the failure of the United States to do far more on climate change: "I don't want my grandkids to have to breathe through a mask. You look at the climate science, we . . . clearly have to start working with other countries to start planning as a species to move forward to take care of the earth. We don't think that way now."¹³⁴ Other participants reiterated similar worries and implied that they disagreed

“I don’t want my grandkids to have to breathe through a mask. You look at the climate science, we . . . clearly have to start working with other countries to start planning as a species to move forward to take care of the earth. We don’t think that way now.”

Focus group participant, Denver

with the United States’ withdrawal from the Paris Climate Accords, though few explicitly mentioned it.

For many participants, their concern was less about the long-term impact of climate change on the planet and more about the health and safety implications of hydraulic fracturing, or fracking, in their own backyards. The Denver-Julesburg Basin in northeast Colorado accounts for the majority of the state’s oil and gas boom. That is also where the state has experienced explosive population growth, from Denver and Boulder to Fort Collins and Greeley. Even residents who benefit from oil and gas revenues worry about fracking taking place near their homes, schools, and parks.¹³⁵

The safety concerns have become so acute for some Coloradans that, in November 2018, the state voted on

Proposition 112 that would have required a buffer of 2,500 feet between any new oil and gas development and “any structure intended for human occupancy.”¹³⁶ This would have entailed a fivefold increase in the existing setback requirements and become the largest buffer in the country. However, Proposition 112 did not pass. Fifty-one of sixty-four counties voted it down, with almost 75 percent of the population coming out against it in the extractive industry-dependent Weld County. Protect Colorado, an organization associated with the oil and gas industry, spent \$36 million on its campaign to oppose the measure, lambasting it for going too far and threatening Colorado’s economy and jobs. Even still, fourteen counties voted in favor of the measure, including by over 70 percent in Boulder, Pitkin, and San Miguel. This proposition and the vote results illustrate how divisive the debate over the safety concerns and economic success of the extractive industry has become across Colorado.¹³⁷

In contrast to the positive implications for the oil and gas industry, some worried that the failure to take decisive action on climate change could negatively impact other important Colorado industries. Many pointed to the susceptibility of Colorado’s outdoor recreation and tourism industries to the environmental challenges created by climate change. Durango’s economy, in particular, depends on tourists that come for skiing, hiking, and water sports, among other activities. A contractor in the tourism industry stated that climate change has been causing more extreme weather events, affecting the city and state’s tourism industry. She noted that in a nearby town in Silverton, businesses had to close following the wildfires in Southwest Colorado, halting their outdoor tourism industry. In addition to outdoor recreation in Colorado, agriculture is another industry susceptible to environmental changes. A focus group participant in Durango added that more frequent droughts caused by climate change would hurt the agriculture industry as a whole.¹³⁸

Colorado Could Benefit From Transitioning More Quickly to Renewable Energy

In addition to pointing out what Colorado and the world could lose by failing to act on climate change, some also talked about what could be gained by diminishing dependence on fossil fuels and transitioning to renewable energy.

Some people interviewed made the case that, regardless of one's stance on climate change, some communities should reduce their dependence on fossil fuels for their own economic survival. They cannot afford to remain so vulnerable to industry boom and bust cycles.

One focus group participant in Greeley warned that "if you're not fracking new wells to replace the bell curve that bottoms out in two years, you have no production, you have no severance tax, no jobs. This creates that downward spiral that I experienced in my lifetime. I remember Black Sunday, May 2, 1982. I was living in Western Colorado. It set off a depression that took Colorado a decade to recover from. These things have enormous consequences, and to repair it [the damage] takes longer. From that perspective, I've seen people lose their homes, I've seen what we created up here, and I'm really worried about the future."¹³⁹

Another longtime resident in Greeley also advocated taking the long view. "Colorado had gold; it had silver, and it goes away. This industry [oil and gas] is going to top out at some point; it's not a renewing resource. . . . We always look at what's happening today and want to keep it there, but we need to keep looking down the road. We need to always keep looking at what else is out there, what other industries, what else can keep people employed."¹⁴⁰ He was essentially highlighting two challenges that the state now faces. One is to become a leader in the renewable energy sector in the way it has in the extractive industries. The other is to determine whether the renewable energy sector, or any other sector, could help replace the middle-class jobs and revenue now generated by fossil fuels in various counties across Colorado.

Some interviewees stated that Colorado is well-positioned to grow its renewable energy sector. As a start, it hosted the National Renewable Energy Laboratory (NREL) just outside Denver. A federally funded, premier research institution in the field, NREL works with many of the state's universities that boast established programs in renewable energy. Colorado also hosts more than thirty other federally funded scientific research laboratories and institutes, many of which focus on climate change, renewable energy, atmospheric research, and the environment.¹⁴¹

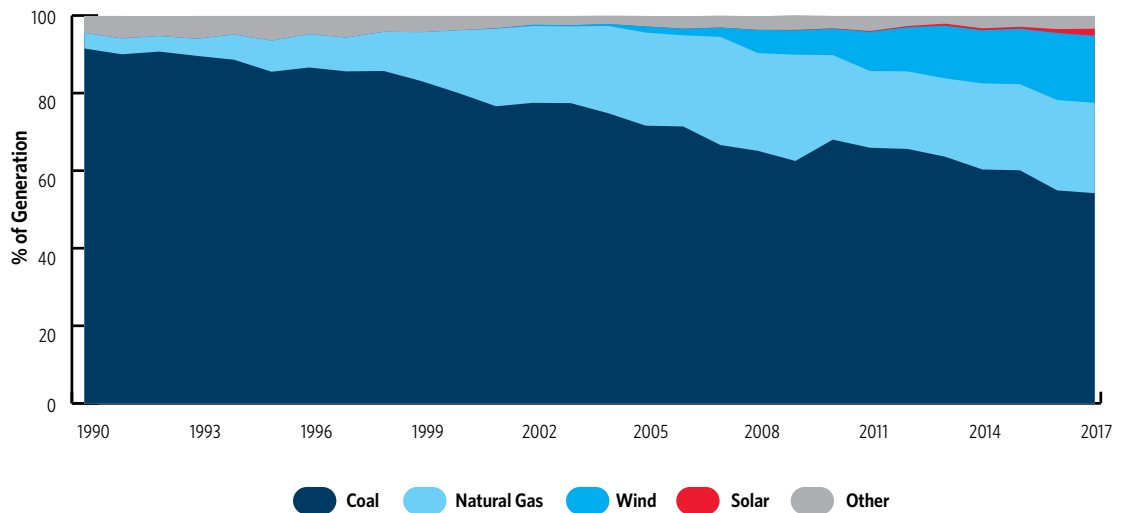
By the numbers, Colorado is not yet a national leader in renewable energy, but it is gaining ground. The state ranks twelfth in solar energy installed capacity, with 463 companies working in the industry (49 manufacturers, 231 installers/developers, and 183 others). And it ranks ninth for projected growth over the next five years.¹⁴² It has seventeen wind-manufacturing facilities and over 7,000

wind energy jobs.¹⁴³ In 2017, Colorado's electric power industry ranked eighth for wind energy generation (9,314,667 megawatt hours) and eleventh for solar thermal and photovoltaic generation (954,498 megawatt hours).¹⁴⁴ While about half of Colorado's electricity generation still comes from coal, it has declined from 91.6 percent in 1990 to 54.3 percent in 2017 (see Figure 13).

Colorado's renewable energy sector has attracted major investments from big players like British Petroleum (BP) and is poised for growth, but it remains unclear how many middle-class jobs it will spawn. Those interviewed surmised that in wind and solar, some of the best-paying middle-class jobs, especially for those without a college degree, would be in construction for the initial installation. Thereafter, however, the better-paying jobs (for example, in facility operations) would require more specialized skills. One economic developer in Colorado Springs assumed that demand for wind turbine technicians and solar panel installers, who could potentially earn middle-income wages, would go up considerably in the future. However, she urged that more needed to be done to seize on that opportunity, asking rhetorically "how many training programs do we have for those?"¹⁴⁵

FIGURE 13

Colorado's Electricity Has Become Less Dependent on Coal



SOURCE: Energy Information Administration, "State-Level Generation and Field Consumption Data: Net Generation 1990-2017 Final," September 2018, data extracted June 25, 2019, https://www.eia.gov/electricity/data/state/annual_generation_state.xls.

Concluding Thoughts: Advancing Economic Diversification

As Colorado progresses toward the governor's goal of 100 percent renewable energy by 2040, economic anxiety will intensify in the areas currently reliant on fossil fuels to generate local tax revenue. This may exacerbate already contentious geographic and political divides. Over three-quarters of the oil-, gas-, and coal-producing counties in Colorado are considered rural (in other words, counties not in a metropolitan statistical area).¹⁴⁶ And many of them traditionally vote Republican.¹⁴⁷ Thus, when counties in the greater Denver metropolitan area, who vote heavily for Democrats, lead the charge toward more stringent regulation of the fossil fuel industries, places like Greeley and Grand Junction might view this as a case of liberal urbanites disregarding their economic concerns and livelihoods. Those in urban areas may retort that the majority of the population is being held hostage and being endangered by the narrow economic concerns of a far smaller number of rural workers and towns. After all, many climate scientists warn that it will take drastic, historically unprecedented transformations in the global energy infrastructure within the next decade or so to limit global warming to moderate levels, after which it may be too late.¹⁴⁸ Experts in the field argue that this drastic action must include leapfrogging from coal straight to renewable energy sources for electricity generation, as simply transitioning to natural gas is no longer adequate.¹⁴⁹

These are seemingly incompatible views, but there is one point all sides of the debate agree on: areas now dependent on fossil fuels require more investment to accelerate the diversification of their local economies. Those people living in such areas clearly want to insulate themselves from the industry's boom and bust cycles and recognize how demographic changes are affecting the state's politics on climate change. Those people favoring more drastic action on climate change recognize that the political support will not be there unless communities and workers left behind in the move toward renewable energy are helped to make the transition.

The ability of different places in Colorado to diversify their economies will vary considerably. For example, BP has made a multibillion dollar investment in wind farms in Weld County, where community leaders have been thinking seriously about diminishing their dependence on oil and gas industries. In Mesa County, business leaders have been pushing hard to establish a free trade zone, where they could attract manufacturers of outdoor recreation equipment and foreign investors. In coal-producing areas like Delta, however, the challenge is formidable. While appealing in theory, it may not be practical to replace coal jobs with those in the renewable energy sector. The prime locations for solar and wind installations—for example, San Luis Valley and

There is one point all sides of the debate agree on: areas now dependent on fossil fuels require more investment to accelerate the diversification of their local economies.

the Eastern Plains, respectively—are far from Colorado’s coal resources (in the Western Slope).

In many ways, the need to invest more in economic diversification is a theme that runs through the discussions on trade, defense spending, and climate change. In each instance, there may be policy decisions that would benefit the majority of Americans, but come at the expense of a minority of communities and workers who represent the essence of the middle class. The need, therefore, is to make the investments required so that this is not a zero-sum proposition, where the benefits to some must come at the expense of others. The United States has thus far had a mixed track record in rising to this challenge.

IMPLICATIONS FOR U.S. FOREIGN POLICYMAKERS

Based on the data collected thus far, there appears to be some disconnect between the political debates taking place on the national stage and those playing out in communities across Colorado and Ohio. At the national level, key political figures on both sides of the aisle have pursued or proposed significant changes in U.S. foreign policy in the name of helping America's middle class. These include:

- overhauling past trade policies to “bring back” manufacturing jobs;
- decoupling the U.S. and Chinese economies;
- significantly reducing or increasing defense spending;
- cutting foreign aid; and
- taking dramatic steps on climate change and energy, ranging from drastically curtailing fossil fuel extraction on the one hand to reviving the coal industry on the other.

However, these moves go well beyond or run counter to the thinking of Coloradans and Ohioans, who viewed these issues in less categorical terms and expressed concerns about the trade-offs involved. As such, members of Carnegie's task force believe that U.S. foreign policy could work better for the middle class if its elements were more balanced, along the following lines:

- Take a much wider view about what it means to make *trade policy* work for the middle class—to include but go well beyond the impact on manufacturing employment.
- Employ a multifaceted strategy for pushing back against unfair trading practices and enhancing U.S. competitiveness with *China*, rather than overrelying on the blunt instrument of tariffs; protect certain technologies and subsectors on national security grounds, but do not pursue widespread decoupling of the U.S. and Chinese economies.
- Recognize how reducing or increasing the *defense budget* can adversely impact the middle class, and consider ways of spending the defense budget differently to simultaneously advance national security interests and the economic well-being of the American middle class.

- Stop proposing cuts to *foreign aid* as a substitute for the domestic policy solutions required to address the economic challenges confronting the middle class.
- Increase investments in the workers and communities likely to suffer most as a result of measures to combat *climate change*, and, in the process, explore the desirability and feasibility of a comprehensive approach to economic adjustment assistance for communities most vulnerable to energy-, trade-, and defense-related transitions.

These ideas, and others put forward in the Ohio report, will be revisited and developed further in a final report to be issued in mid-2020, after the final state-level case study on Nebraska is completed in early 2020.

Trade Policy

Few interviewees argued for overhauling past trade policies to bring back manufacturing jobs. They were more interested in looking at how current trade policies intersect with Colorado's middle class now working in a wide range of jobs (in goods and service sectors and tradeable- and nontradeable sectors). They were also far more preoccupied with increasing exports than they were worried about losing jobs due to import competition and offshoring. And from that perspective, those familiar with the agreements (only a minority) largely viewed the North American Free Trade Agreement, TPP, and the United States-Mexico-Canada Agreement positively.

This could be because of the small portion of Colorado's middle class employed in manufacturing—which, by most recent estimates, accounts for only 5 percent of the workforce—and the positive effects globalization has had for Colorado over the last several decades. The state has productive and competitive agriculture, advanced manufacturing, high tech, professional business service, and tourism industries, among others, that rely on the export of goods and services to grow their business and create well-paying jobs. In comparison to Ohio, Colorado has lost far fewer jobs as a result of import competition or offshoring. Thus, while Colorado is not an export-powerhouse like Ohio and many other U.S. states, those interviewed almost uniformly saw trade as a net plus. They wanted to build and expand on trade policies and relationships forged to date, especially with Canada, Mexico, and several Asian countries with rapidly growing economies, rather than throw them into question by escalating the use of tariffs and threatening to or actually withdrawing from trade agreements.

Even in Pueblo, the state's historic steel town and home to the largest concentration of blue-collar manufacturing workers, community members recognized the limits and trade-offs associated with trying to bring back certain manufacturing jobs through the imposition of steel tariffs. For example, a few metal production facilities in the state, such as the EVRAZ facility in Pueblo, have seen only

a marginal near-term benefit from steel tariffs, while metal-consuming facilities have borne increased costs from the tariffs, including Vestas, the wind turbine production facility that employs almost as many workers as EVRAZ. Additionally, Colorado's exporters of precision medical instruments and agricultural products are all exposed to retaliatory tariffs that could cut into their profits or cost them market share. If the subsequent volatility and uncertainty over trade policy continues, it could undermine the efforts of communities across Colorado to attract foreign investment. Virtually all of the Coloradans interviewed for this report—in urban and rural counties and progressive and conservative areas—expressed some or all of these fears.

Similar views were expressed in Ohio, with far greater vehemence and frequency, given that Ohio has a considerably greater percentage of export-dependent jobs than Colorado. Therefore, our partners at The Ohio State University went a step further in preparing a dedicated report on the economic impact in Ohio of the Trump administration's recent trade actions.¹⁵⁰ While the authors recognized that there are not enough data and too much uncertainty to make a definitive judgment, they saw ample reason to conclude that these actions would have net negative effects.

To be clear, steel and other manufacturing industries are vitally important for the U.S. economy and national security, they still provide a pathway to the middle class, and they ensure the economic survival of many smaller cities and towns across the industrial Midwest. Manufacturing now accounts for approximately 13 percent of Ohio's workforce and 9 percent nationally.¹⁵¹ There has been a slight uptick in manufacturing employment levels across the country over the last nine years as the economy recovered from the recession and continues to grow.¹⁵² That is a welcome development. Past administrations underappreciated the importance of manufacturing employment in various communities, the havoc that certain trade policies would wreak on them, and the inadequacy of trade adjustment assistance programs to offset the blow. The previous report on Ohio stressed these points.

However, there are serious limits and significant trade-offs associated with using trade policy to bring back certain manufacturing jobs. Manufacturing's share of the labor market has flattened. The longer-term trends suggest an eventual and steady decline in manufacturing employment levels, as capital investments in labor-reducing technologies accelerate.¹⁵³ Manufacturing no longer serves as the proxy for the middle class that it once did, especially not in states like Colorado, Arizona, Florida, Nevada, and New Mexico, where it represents a relatively small percentage of the workforce.

To put things in perspective, according to the Bureau of Labor Statistics, there are now approximately 90,000 steelworkers in the country with annual median incomes of approximately \$54,000. The numbers of steelworkers could

There are serious limits and significant trade-offs associated with using trade policy to bring back certain manufacturing jobs.

potentially grow by an additional 11,000 by 2026.¹⁵⁴ In comparison, there are now 2.9 million nurses, with registered nurses commanding an annual median wage of roughly \$72,000. Their numbers are anticipated to grow by over 400,000 by 2026.¹⁵⁵ And contrary to perceptions otherwise, many of these nursing jobs will require an associate's degree, not a bachelor's.¹⁵⁶

Thus, policymakers looking to make trade policy work better for the middle class cannot simply focus on redressing the past negative effects of trade policy on manufacturing employment. They must also consider how trade policy impacts a rapidly evolving middle-class workforce in the service sectors and how it intersects with top middle-class concerns, such as the costs of healthcare and housing.

For example, in the health sector, rapid evolutions in telemedicine could potentially create a new avenue of service export growth. And provisions on intellectual property protection in trade agreements directly relate to the production of generic drugs globally and the cost of prescriptions drugs. While the Trump administration has weighed in on this issue through developing a plan to enable more Americans to import certain prescription drugs, more can and should be done to advance the interests of patients in future trade negotiations.¹⁵⁷ But these are just a few examples of how trade policy and health intersect. A detailed study is required to identify all the ways trade policy could be leveraged to generate higher-paying middle-class jobs in the health sector and help lower healthcare costs.

Although not a major driver of housing and infrastructure costs, the impact of trade policy on the housing sector should also at least be contemplated whenever taking actions to help the middle class. Those interviewed cited rising housing costs and inadequate infrastructure investment as major middle-class concerns, after healthcare costs. City planners in Columbus and Denver expressed fears that the steel tariffs, among several other factors, were contributing to rising construction costs in their cities. Increased tariffs on imported lumber would likewise make it more expensive for builders to construct new, affordable single-family homes—the cost of which would be passed on to home buyers.

America's middle class will also be impacted by evolutions in international trade and investment over the coming decades due to quantum leaps forward in e-commerce, the Internet of Things, 3-D printing, artificial intelligence (AI), blockchain, and other digital technologies. According to a World Trade Organization (WTO) report, advances in digital technologies will be a significant contributing factor in services accounting for 25 percent of all global trade by 2030 and will ultimately blur the line between goods and services.¹⁵⁸ This will have important implications for middle-class jobs and where they are concentrated. For example, technological advances will continue to eliminate blue-collar jobs in the manufacturing sector, but they could also usher in a new wave of reshoring. Multinational corporations may relocate key production activities

back in the United States, where they can find qualified engineers and technicians to manage increasingly complex tasks requiring higher levels of education and training.¹⁵⁹

Finally, an explosive growth in service exports could be a boon for places like the metro Denver area, given that its growing tech and professional business sectors are major employers of Colorado's middle class. However, without appropriate transitional policies and measures in place, a windfall gain for well-educated, urban professionals could coincide with major disruptions for lower-skilled workers and exacerbate urban-rural divides. And a quantum leap forward in digital trade could raise a new host of issues related to privacy and data security, which will affect middle-class households.

In sum, while the impact of trade policy on manufacturing employment is important, many other aspects of trade and international economic policy deserve attention in connection with the economic well-being of America's middle class. This includes areas generally not mentioned by those interviewed, such as international standards and regulations related to data flows, data analytics and AI, international currency and exchange rates, international tax policy, and international coordination on the regulatory environment for banking and finance. Carnegie's task force will further examine some of these issues in its final report.

China

When it comes to trade and investment policy, those interviewed in Colorado and Ohio put China in a category of its own. On the one hand, they saw China as an important trading partner and vital market for their exports. In the case of Ohio, they had been actively courting Chinese investment for manufacturing activities. Virtually no one in Ohio or Colorado favored decoupling the U.S. and Chinese economies. To the contrary, they saw various opportunities for the United States to benefit even more from China's economic success. Therefore, they worried about the opportunities and markets they would lose to foreign competitors if the U.S. trade war with China did not end in the near future. On the other hand, some did express sympathy for playing hardball with Beijing to stop its theft of intellectual property, curtail its state subsidies to industries, and ultimately make it easier for American businesses and workers to compete with Chinese enterprises. They criticized past administrations for not doing enough on this front. Thus, it is too early to say how they will feel about the tariffs in the long term, without seeing how their imposition ultimately alters China's behavior.

Carnegie's task force members fully support pushing back against unfair trading practices and leveling the playing field for American businesses and workers to compete more effectively, especially in light of Beijing's commitment

Virtually no one in Ohio or Colorado favored decoupling the U.S. and Chinese economies.

to protecting and dominating certain industries in the twenty-first century. However, serious questions remain about whether the Trump administration's current approach will meaningfully alter China's long-term behavior, even if it can reach a deal with Beijing that addresses some of the immediate concerns. It is also unclear whether any results will justify the toll the escalating trade war and mounting uncertainty will have taken on American businesses, workers, farmers, and consumers in the near and long term.

There is a need, therefore, to distinguish between the objectives of pushing back against unfair trading practices and leveling the playing field and the strategic approach employed to pursue those objectives. Carnegie's task force members intend to lay out key elements of an alternative approach in the project's final report. It will include a role for unilateral actions and bilateral negotiations, but put more emphasis on working with U.S. allies and partners. It will additionally emphasize enhancing national competitiveness, including through increased government investment in research and development. It will also address the need to protect certain technologies and subsectors, on national security grounds, as opposed to pursuing widespread decoupling of the U.S. and Chinese economies on economic grounds. In developing the proposals, task force members intend to offer ideas for reframing the debate around industrial policy in ways that might enjoy greater bipartisan support.

Defense Budget

After trade and economic competition with China, those interviewed generally pointed to defense spending as the next U.S. foreign policy element that most affects the economic well-being of Colorado's middle class. As in Ohio, more people viewed defense spending positively than negatively. Carnegie's task force members see the potential to reframe at least part of the debate by focusing on *how* the defense budget is spent—to simultaneously advance national security interests and the economic well-being of the middle class.

The Case for Sustaining or Increasing Defense Spending

Many people interviewed in Colorado believe that sustaining or increasing defense spending is crucial. Military service provides a pathway to the middle class for those without a college degree and can help subsidize the costs of acquiring one. Defense spending creates well-paying middle-class jobs in the private sector (in areas such as manufacturing—for military aircraft, ships, tanks, and weapons systems—and the delivery of logistics and other services). Military bases and related installations create tremendous economic demand for local goods and services and help anchor the economies of smaller cities and towns. And the defense (and veterans' affairs) budget supports military retirees and their families, especially through pensions and healthcare.

All of these positive economic impacts were discussed in Colorado, especially in El Paso County (Colorado Springs).¹⁶⁰ And there are certainly more, including the indirect economic benefits that result from deterring war among major powers, preventing attacks on the homeland, keeping the key arteries of commerce open, and maintaining the flow of energy critical for the growth of the U.S. and global economies.

Those who recognize these economic benefits think that cutting defense spending would be counterproductive. They fear that instead of returning the money to taxpayers or reinvesting it in their communities to offset the loss of defense-related economic activity, it could end up subsidizing programs less beneficial to them elsewhere in the country.

They also point out the national security risks, arguing that it makes little sense to weaken the nation's defenses when China (which has increased its military spending by over 83 percent in the last decade), Russia, North Korea, and Iran are posing more significant geopolitical and security challenges.¹⁶¹ Therefore, they are favorably disposed toward the United States increasing investments in new, high-end capabilities, especially in the air and space industries, where Colorado is strong.

At the national level, some military leaders and national security professionals have long questioned why defense spending is even in the crosshairs, given that entitlements constitute a far greater share of the federal budget and entitlement reform could free up more resources for needed domestic investments.

The Case for Reducing Defense Spending

However, some in Colorado, particularly in more liberal parts of the state than the staunchly conservative Colorado Springs area, have a diametrically opposing view. For example, a number of people interviewed in Boulder, Denver, and Durango said upfront that they want the United States to have a strong military to protect the nation. But they believe that the amounts spent on defense far exceed what is required. At \$649 billion, the United States remains, by far, the largest spender in the world, accounting for 36 percent of global military spending in 2018.¹⁶² By one measure, the United States spent almost as much on its military in 2018 as the next eight highest spenders—China, Saudi Arabia, India, France, Russia, United Kingdom, Germany, and Japan—combined.¹⁶³

To its critics, defense spending appears to be excessive and wasteful and has a massive opportunity cost for the U.S. economy and the middle class. Remaining dependent on defense spending will continue to prevent the type of economic diversification smaller cities and towns across America desperately require. The critics therefore argue that it would be far more productive for the United States to reduce defense spending by \$100–\$200 billion per year and instead invest in badly needed infrastructure, including broadband connectivity, and in cutting-edge research at American universities and federal laboratories. Given

that Colorado is home to more federal laboratories than any other state outside of the Washington, DC, metro area, it would likely benefit from this redirection of money. Economists frequently contend that, in comparison to defense spending, such investments would make the United States more competitive in the global economy, as well as have a greater impact on long-term, broad-based productivity that, in turn, pushes up wages for the middle class.

Some Coloradans, similar to critics of defense spending elsewhere around the country, further argue that spending too much on the military is a moral hazard. They say it contributes to an overly militarized foreign policy, especially given that many threats in the world cannot be solved by military might. They add that the astronomical amounts of money spent make it harder to resist the temptation not to use it, including in places where military intervention may actually do more harm than good.

Thus, for all these reasons, people looking to free up more resources for domestic investment have their eyes on defense spending. They consider cutting entitlements instead to be antithetical to middle-class interests. Notably, presidential candidates on both sides of the aisle have already firmly committed to protecting social security and Medicare, so this debate may be moot for now.

Changing the Conversation on Defense Spending

Carnegie's task force members see valid arguments in both views. And clearly many politicians on both sides of the aisle do, too. After all, former U.S. senator Gary Hart (Democrat, Colorado) was one of the most eloquent critics of what he considered to be Reagan's excessive defense spending. But he was also one of the fiercest champions for sustaining or increasing spending on Colorado-based defense activities and bases.¹⁶⁴ Likewise, Ohio senators Robert Portman (Republican) and Sherrod Brown (Democrat) advocate different foreign and domestic policies at the national level, yet they continue to join forces in Congress to preserve or increase defense spending that supports the Wright-Patterson Air Force Base in Dayton and the tank production facility in Lima.¹⁶⁵

The positions of these senators are understandable—many other politicians have taken the same view when a military base closure could spell economic disaster for their constituents. They are fighting for their communities, and it is unfair to expect them to do otherwise. Yet it is also unfair to continue putting military leaders—many of whom are aware of and sensitive to the different arguments—in the position of having to continually ask for big increases in the defense budget. They currently lack the flexibility to spend less on some things and more on others as the nature of national threats evolve.

Carnegie's task force will aim to offer recommendations in its final report. It may be possible for politicians and policymakers on both sides of the aisle to think beyond binary choices on defense spending and arrive at a more constructive place. Perhaps defense spending levels could be kept constant for the next

decade, but major shifts could be made within the top-line numbers. For example, a far greater percentage of the defense budget could be allocated to supporting state and local community efforts to diversify their economies. The DOD's Office of Economic Adjustment already manages various important programs and grants, but they may benefit from more resources and/or modifications to yield even greater dividends and faster results.

Another idea would be to expand the definition of a substantive defense requirement to include supporting the education and training of the civilian national security workforce in critical areas. For example, in his executive order dated May 2, 2019, Trump referred to America's cybersecurity workforce as a "strategic asset that protects the American people, the homeland and the American way of life," and that "whether they are employed in the public or private sectors, they are guardians of our national and economic security."¹⁶⁶ Yet there are almost 300,000 cybersecurity positions in the U.S. public and private sectors that remain vacant and difficult to fill, and that number is expected to climb as high as 1 million.¹⁶⁷ Perhaps more of the defense budget could be used to address that critical national security vulnerability and, in the process, prepare Americans for well-paying middle-class jobs in the cybersecurity field.

More of the defense budget could also be applied toward activities aiming to enhance economic competition with China, especially those that involve dual civilian and military applications. Relevant areas might include robotics and automated machinery, aircraft and maritime vessels, and electrical generation and transmission equipment.

More exploration is required to determine whether these are the best ideas. The point in mentioning them now is simply to illustrate that a change in defense spending does not have to involve a binary choice. A more fiscally responsible and sustainable approach is possible—one that will advance both national security interests and the economic well-being of the middle class.

Foreign Aid

Carnegie's task force members agree that it is important to regularly review the levels, priorities, and methods of delivering foreign aid to ensure that taxpayers' money is being used efficiently and effectively. However, based on what was said or not said in Colorado and Ohio, there does not appear to be widespread popular demand for cutting foreign aid for the purposes of helping America's middle class. To the contrary, only a minority of those interviewed volunteered any view at all about foreign aid, and when they did, it was often to highlight the ways it has advanced U.S. economic interests, values, and/or global standing.

In comparison to defense spending, the amount the United States spends annually on foreign aid (less than 1 percent of the federal budget) is simply not

A change in defense spending does not have to involve a binary choice. A more fiscally responsible and sustainable approach is possible.

large enough to have a significant, visible impact on the American middle class—either in terms of the jobs it creates or the resources it diverts away from domestic efforts. The Trump administration’s proposed budget for FY 2020 would have widened the gap between defense spending and foreign aid even further, given its request of \$718 billion for the DOD and only \$40 billion for the Department of State and U.S. Agency for International Development combined.¹⁶⁸

Several focus group participants were aware that foreign aid accounts for less than 1 percent of the federal budget. And a recent national poll by the Pew Research Center found that 35 percent of the American public want to increase foreign assistance (up 14 points since 2013), 33 percent want to keep it the same, and 28 percent want to decrease it (down 20 points since 2013).¹⁶⁹ Members of Congress (Democrats and Republicans alike) appear to be acting consistent with those attitudes, having appropriated \$15.4 billion more for foreign aid in FY 2018 than the Trump administration had requested.¹⁷⁰

Foreign aid did not appear to be a partisan issue in Colorado; for some people, their defense of foreign aid was based on self-interest. One rancher (who identified himself as conservative) strongly supported any aid that helped lift people around the world out of poverty and, in turn, increased demand for the meats and meat-related products that Colorado exports. The owner of a business that supplies seafood to the tourist industry saw benefits to the U.S. contributing to global health and health security. He recalled how the price of salmon imports went up considerably following the outbreak of infectious salmon anemia in Chile, one of the top three sources of salmon for Colorado. Others whose livelihood depended on Colorado tourism believed that a positive U.S. brand abroad could only help to increase the number of foreign visitors to the state and that U.S. foreign aid contributed to that end. Even some interviewees whose business interests were not affected by foreign aid nonetheless saw its connection to their own self-interest. For instance, those concerned about the flow of illegal immigrants into the United States saw the value of providing aid to Central America to diminish the likelihood of people fleeing.

The views expressed in Ohio were similar. For example, Honda is now Ohio’s top manufacturing employer. Its supply chain was disrupted following the 2014 tsunami, which affected Ohio workers. It was in the company’s best interest that the United States help Japan recover quickly. Even a local labor representative in Ohio defended foreign aid, as he sees the benefit of helping other countries’

workers climb into the middle class: it would make it easier for American workers to compete with them on a fairer footing.

That said, only a few people were able to illustrate how foreign aid directly benefits their industries. Most were not able to make such connections and instead noted less quantifiable reasons for supporting foreign aid, such as “it is the right thing to do” and it is emblematic of the kind of global leader they want the United States to be.¹⁷¹ They want the

Foreign aid did not appear to be a partisan issue in Colorado.

nation's foreign policy to be consistent with American values and to project a positive global image (for example, when the United States takes the lead in responding to a catastrophic natural disaster overseas).

However, the defense of foreign aid for any reason should not be taken as unconditional or equated to giving a blank check. Several of those interviewed would favor cutting foreign aid if it were not achieving the desired objectives or falling into corrupt hands. They certainly had questions about the results of aid dispensed over the last few decades during "nation-building" efforts in Afghanistan, as distinct from other forms of aid. Others had a clear preference for private sector solutions or charitable giving through nongovernmental channels, primarily because they were wary of government bureaucracy. Most also expect other nations to be doing their fair share. They do not want the United States to be shouldering the burden alone.

Carnegie task force members see room for a more informed public debate about the benefits and challenges related to foreign aid. This would be far more constructive than perpetuating misperceptions about current foreign aid spending and implying that drastic cuts would obviate the need to make tough domestic policy decisions related to advancing America's middle class. It will be interesting to see if the Nebraska case study confirms or contradicts this judgment.

Climate Change and Energy

One key theme arising from the Colorado and Ohio studies is the expectation that policymakers will sufficiently weigh the economic trade-offs associated with foreign policy changes—not just for the nation as whole but also for specific categories of workers and entire communities. Generally, policymakers have long been examining the trade-offs related to trade and defense spending, but only very recently those associated with combating climate change. These trade-offs may be as or more challenging to manage, if this Colorado case study is any indication.

Colorado is among the nation's leading producers of crude oil, natural gas, and coal, with areas in the Front Range and Western Slope particularly dependent on energy production. In Weld, the oil and gas industries account for more than half of the county's property taxes.¹⁷² In Grand Junction, business leaders believed that a foreign policy decision to export more LNG to Asia could be a real game-changer for the area.¹⁷³ Communities dependent on the energy sector stand to be left behind if their base industries are restricted or abandoned.

Meanwhile, in many other parts of the state, people, especially millennials, said that climate change was the foreign policy issue they cared about most, because it poses a grave security threat to the United States and world at large. They want the United States to be a global leader on climate change, including by leading by example at home and leveraging cutting-edge research and high tech industries across the state to create new "green jobs."

Two diametrically opposed arguments are now unfolding in Colorado on energy and climate change, as is much the case across the United States. The one thing those on both sides of the debate might agree on is the need to front-load significant investments in the workers and places that could suffer most as a result of measures to combat climate change. There is clear need and scope for prioritizing attention to this issue. In doing so, policymakers should learn lessons from where past trade- and defense-related economic impact assessments and adjustment assistance programs have fallen short. This includes where they relied on overoptimistic assumptions about how easily or quickly affected communities could reinvent their economic bases or affected workers could be retrained for new, equally well-paying jobs. A case could also be made for radically rethinking and scaling up, in a comprehensive and holistic manner, the current patchwork of relatively small “economic adjustment assistance” programs applicable to defense-, trade-, and energy-related dislocations, and now technology-related displacements as well, as some Washington, DC-based scholars have proposed.¹⁷⁴

Concluding Thoughts: The Importance of Rebuilding Trust

Those interviewed commented on just a small fraction of U.S. foreign policy. By their own admission, they were unfamiliar with much of what U.S. diplomats, soldiers, aid workers, international economic experts, trade negotiators, and other foreign policy professionals do in Washington, DC, and around the world. Nor could they imagine how all that activity affected their economic well-being. With their primary focus being their families and local communities, they need to trust foreign policy professionals to make the right decisions about the U.S. role abroad and to consider the welfare of the American middle class as they do so.

The problem, however, is that trust in the foreign policy establishment and elite institutions, in general, has steadily eroded over time. The reasons are subject to debate in academic circles. But one reason might be that international trade agreements and the opening of trade with China ended up causing significant hardship for certain categories of blue-collar workers and entire communities. Meanwhile, the nation’s top earners that seem to have disproportionate influence on international trade and economic policy continue to benefit disproportionately from globalization and growth. It has not helped that those on Wall Street considered to be responsible for the 2008 financial crisis are seen as closely associated with, if not a part of, the foreign policy establishment. On top of that, while confidence in the U.S. military remains high, civilian leaders and foreign policy experts are blamed for starting and keeping the nation engaged in costly, long-running wars that lack a clear path to victory. And increasing political polarization has led to intensified scrutiny, criticism, and mistrust of the foreign policies pursued by the administration of an opposing party.

Against this backdrop, it is unrealistic to think that the handful of policy changes flagged in this report alone will reassure the American public that the foreign policies developed in Washington, DC, will truly work for the middle class. Thus, alongside policy changes, there must also be significant changes in attitudes, processes, and external communications.

Ultimately, foreign policy professionals should continue to seek to advance national economic interests through the policies they develop, but they must be, and be seen as, advocates for defining those economic interests in ways that better reflect the concerns and aspirations of the middle class. That means better familiarizing themselves with the economic realities American families and communities confront, and to that end, engaging far more frequently with governors, mayors, and other key stakeholders outside of Washington. It requires being more sensitive to the suspicions that can arise when foreign policy professionals work closely with senior executives in major multinational corporations but hardly engage with small business owners and labor leaders. It is worth exploring how to ensure that those people in domestic agencies and departments most attuned to the concerns of working families and households can weigh in more often on foreign policy. Regardless of the approach, foreign policy professionals will need to be able to answer questions more clearly and candidly about the potential impact of major foreign policy changes on the broad range of middle-class jobs and concerns across the country.

If foreign policy professionals can demonstrate that they are aware of, and are prioritizing, the economic interests of the middle class, they will be in a better position to explain how foreign policy does and does not affect those interests. There is clearly room and a need to think through adjustments in trade policy, defense spending, foreign aid, and climate change and energy leadership, in order to better advance the economic well-being of America's middle class. Yet such adjustments on their own cannot substitute for the domestic policy solutions that ultimately lie at the heart of the challenge.

Carnegie's task force members look forward to revisiting and elaborating on the above themes and, following the Nebraska study, will ultimately offer detailed recommendations. They hope the recommendations will be useful to foreign policy professionals seeking to promote the well-being of the middle-class and better integrate foreign and domestic policy.

Foreign policy professionals should continue to seek to advance national economic interests through the policies they develop, but they must be, and be seen as, advocates for defining those economic interests in ways that better reflect the concerns and aspirations of the middle class.

APPENDIX A: LIST OF INDIVIDUALS ENGAGED, MARCH-JUNE 2019

State Level (mainly Denver)

Dan Baer, former executive director, Colorado Department of Higher Education
Joe Barela, executive director, Colorado Department of Labor and Employment
Andrea Blankenship, director of international tourism, Tourism Office, Colorado Office of Economic Development and International Trade
Shannon Block, executive director and chief operating officer, Skillful Colorado, a Markle Initiative
Drew Ceccato, manager, Skillful Colorado, a Markle Initiative
Ralph W. Christie, Jr., former chief executive officer and current chairman emeritus, Merrick & Company
Stan Dempsey, Jr., president, Colorado Mining Association
Alison Felix, vice president, Denver Branch, Federal Reserve Bank of Kansas City
Karen Gerwitz, president and chief executive officer, World Trade Center Denver
John Harpole, founder and owner, Mercator Energy
Stephanie Harrison, client account manager and senior project manager, Jacobs
Gary Hart, former U.S. senator
Jenny Heeter, senior energy analyst, National Renewable Energy Laboratory
James Iacino, president and chief executive officer, Seattle Fish Company
Molly Kocialski, regional director, U.S. Patent and Trademark Office, Rocky Mountain
Jeff Kraft, division director, Business Funding & Incentives, Colorado Office of Economic Development and International Trade
Julie Levy Duvall, state director, U.S. Senator Michael Bennet
Eve Lieberman, chief policy adviser, Governor Jared Polis
Alexandra Peterson, senior manager, Skillful Colorado, a Markle Initiative
Betsy Markey, executive director, Colorado Office of Economic Development and International Trade
Frannie Matthews, president and chief executive officer, Colorado Technology Association

Andy Merritt, state director, U.S. Senator Cory Gardner
 Cathy Ritter, director, Tourism Office, Colorado Office of Economic
 Development and International Trade
 Daniel Salvetti, manager, Strategy and Analytics, Global Business Development,
 Colorado Office of Economic Development and International Trade
 Richard W. Scharf, president and chief executive officer, Visit Denver
 Greg Sobetski, senior economist, Colorado Legislative Council
 Martin Vieiro, program manager, Global Business Services,
 World Trade Center Denver
 Scott Wasserman, president, Bell Policy Center, and former deputy chief of
 staff for former governor John Hickenlooper
 Kate Watkins, chief economist, Colorado Legislative Council

Arapahoe and Douglas (Denver South)

Patty Boyd, Tri-County Health Department
 Tom Brook, Denver South Economic Development Partnership
 Alicia Cartwright, Arapahoe Library District
 Alex Cowsky, Denver South Economic Development Partnership
 Jackie Devine, Alpine Bank
 Colbe Galston, Douglas County Libraries
 Mike Hanbery, Webolutions
 Patrick J. Holwell, Arapahoe Douglas Workforce Development Board
 Katy Hoxworth, Kaiser Permanente
 JD Key, BluePrint Strategies
 Lauren Masias, Denver South Economic Development Partnership
 Greg Mills, Kaiser Permanente
 Lynn Myers, Denver South Economic Development Partnership
 Polly Page, self-employed, formerly Colorado Public Utilities Commission
 Matt Saiedfar, Koala Kare
 Anthony Valdez, South Metro Fire Rescue

Boulder (city and county)

Matt Appelbaum, Boulder mayor (former)
 Chris Barge, Community Foundation Boulder County
 Clif Harald, Boulder Economic Council
 Jeff Hirota, Community Foundation Boulder County
 Ken Hotard, Boulder Area Realtor Association
 John Tayer, Boulder Chamber

Denver (city and county)

Andrew Halpern, master of public administration student, University of Colorado Denver

J.J. Ament, Metro Denver Economic Development Corporation

Greg Boushelle, BBVA USA

Kelly Brough, Denver Metro Chamber of Commerce

Samantha Economos, University of Colorado Anschutz Medical

Mike Ferrufino, Hispanic Chamber of Commerce of Metro Denver

Nicole Frank, Hyder Construction

Stephanie Garnica, City and County of Denver

Laura L. Jackson, Denver International Airport

Jeff Romine, City and County of Denver

Joe Suardi, RK

Laurie Tabachnick, City and County of Denver Parks and Recreation Department

Rich Werner, Upstate Colorado Economic Development

El Paso (Colorado Springs)

Tatiana Bailey, University of Colorado, Colorado Springs

Jeff Bohn, 21st Space Wing

Rich Burchfield, Catalyst Campus

Brian Dziekonski, Army Corps of Engineers

Lynne Jones, Installation Management Command

Dee McNutt, U.S. Army

Paul Rochette, Summit Economics

La Plata (Durango)

Theresa Blake Graven, Treehouse Communications

J. Paul Brown, rancher and former state representative

Katie Burford, Cream Bean Berry

Ed Cash, Durango High School

Sierra Di Marco, Durango Adult Education Center

Dale Garland, Durango High School

Jodi Hayden, First Southwest Bank

Becky Hutchinson, La Plata County Fairgrounds

Kirk Komick, Rochester Hotel

Laura Marchino, Region 9 Economic Development District

Melanie Mazur, *Durango Herald*
Brian Rose, Region 9 Economic Development District
Mark Simon, Community Banks of Colorado
Carol Thompson, CSA Bookkeeping
Loretta Velasquez, Southern Ute Indian Tribe
Julie Westendorff, La Plata Board of County Commissioners
Melissa Yousef, City of Durango
Roger Zalneraitis, Southern Ute Indian Tribe

Mesa (Grand Junction)

Bonnie Aman, Western Colorado Community College
Kurt Anderson, Copeland Supply
James Arrieta, Sooper Credit Union
Seth Cahalan, EIS Solutions
Greg Caton, City of Grand Junction
Tim Foster, Colorado Mesa University
Glen Gallegos, University of Colorado
Shannon Gannon, Express Employment Professionals
Sonja Hruby, NuQuest
Celina Kirnberger, Mesa County Workforce Center
Jon Maraschin, Business Incubator Center
C.J. Rhyne, Grand Junction Area Chamber of Commerce
Diane Schwenke, Grand Junction Area Chamber of Commerce
Jay Seaton, *Grand Junction Daily Sentinel*
Jessica Smith, Reynolds Polymer Technology
Bo Tobin, Mesa County Valley School District 51
Tanya Travis, Mesa County Valley School District 51
Darcy Weir, Grand Junction Area Chamber of Commerce

Otero (La Junta)

Danelle Berg, Otero County Economic Development
Ethan Berg, La Junta Municipal Airport
Audrey Dehdouh-Berg, DeBourgh Manufacturing
Kevin Karney, Otero Board of County Commissioners (retired)
Rick Klein, City of La Junta
Jeannie Larsen, Southeast Health Group
Sarah Petramala, Otero Junior College

Pueblo (city and county)

Lance DeHerrera, GOAL Academy

Crystal Faricy, U.S. Bank

Margaret Gaillard, Pueblo Economic Development Corporation

Ben Lutze, EVRAZ

Mark Magnone, Legacy Bank

Joe O'Brien, Pueblo Economic Development Corporation

Brad Olson, Vestas

Jeff Shaw, Pueblo Economic Development Corporation

Chris Wiseman, Pueblo County Government

Weld (Greeley)

Pam Bricker, formerly at the Downtown Development Authority

Sean Conway, Weld County Commissioners

Audrey Herbison, Upstate Colorado Economic Development

Bill Jerke, FUEL

Steve Moreno, Weld County Commissioners

Jim Neufeld, RE/MAX Eagle Rock-Commercial Division

ABOUT THE AUTHORS

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Tom Wyler is the senior vice president for global strategy at PSP Capital. He formerly served as counselor and senior adviser for international economics under former secretary of commerce Penny Pritzker and was responsible for managing the Department of Commerce's global economics team.

NOTES

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