

UNIVERSITY OF COLORADO

# Economic Contribution on the State and Counties of Operations, FY2022-23

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## ECONOMIC CONTRIBUTION OF THE UNIVERSITY OF COLORADO SUMMARY

The University of Colorado is the nexus of teaching, research, and healthcare that reaches far beyond economic statistics that quantify purchases and payroll in the state of Colorado. In addition, the university’s economic contributions resonate as an economic engine driven by education, clinical, and research expenditures.

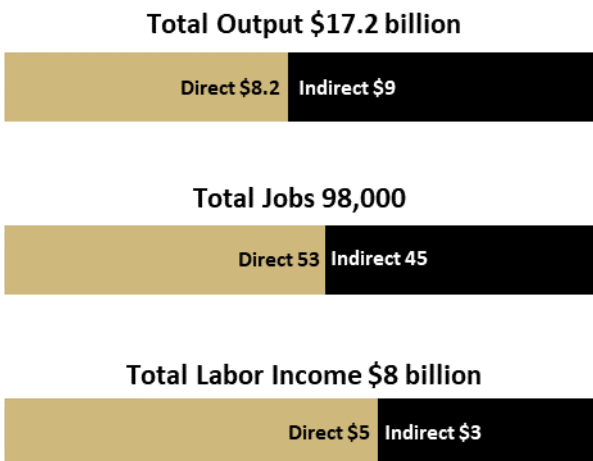
The University of Colorado comprises four campuses—the University of Colorado Boulder (CU Boulder), the University of Colorado Colorado Springs (UCCS), the University of Colorado Denver (CU Denver), and the Anschutz Medical Campus (CU Anschutz), as well as the system administration offices in Denver. This public university serves “Colorado, the nation, and the world through leadership in high-quality education and professional training, public service, advancing research and knowledge, and state-of-the-art health care.”

The University of Colorado is an economic driver in the state of Colorado, employing thousands of workers, buying from local vendors, importing investment, educating the local workforce, and exporting research discoveries. Aside from the direct impact, the university facilitates company growth and job creation through research, tech transfer, and spinoff companies. This study provides a snapshot of the university’s economic contribution to the state. In addition, the economic contribution of the system and the four campuses (CU Boulder, UCCS, CU Denver, and CU Anschutz) to their respective communities is detailed for fiscal year (FY) 2022-23. This study was conducted in cooperation with the University of Colorado System and the individual campuses.

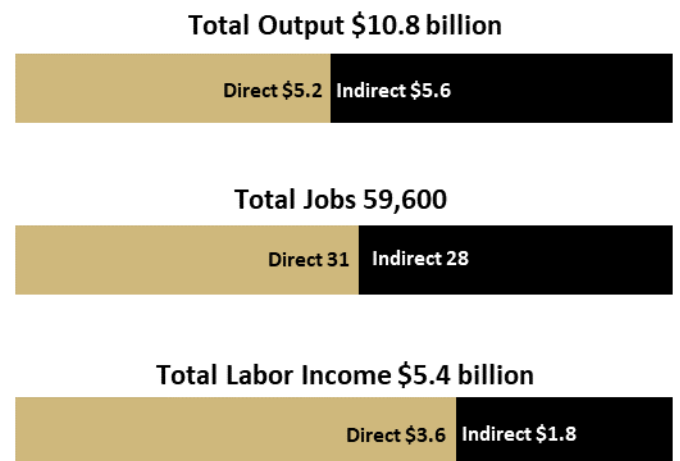
The results of the economic contribution analysis include the University of Colorado and its affiliates at the CU Anschutz Medical Campus for FY2022-23. The results show the following summary for the University of Colorado System:

- Including the impact stemming from healthcare on the Anschutz campus, the economic impact increased to **\$17.2 billion** for the state of Colorado.
- Impacts stemmed from employee earnings, student worker earnings, operating expenditures, construction, research, and visitors.
- Other acknowledged impacts stem from innovation, technology transfer, skills and training, and alumni in the workforce.
- The University alone (excluding hospitals) generated a total economic impact of \$10.8 billion, for the state of Colorado.
- Supported a total of **98,175 jobs**, mostly in the Boulder MSA, Denver MSA, and Colorado Springs MSA.
- Generated labor income of **\$8 billion**.

**Figure 1: University of Colorado System Statewide Economic Impact, FY2022-23**



**Figure 2: University of Colorado System Statewide Economic Impact (excluding affiliates), FY2022-23**



**Table 1: University of Colorado Economic Contribution (Direct, Indirect, and Induced), FY2022-23**

Campus	Employment	Labor Income (In Millions)	Value Added (In Millions)	Output (In Millions)
CU Boulder	24,212	1,853	2,601	4,282
UCCS	3,849	242	345	560
CU Denver	5,123	348	490	684
CU Anschutz System	25,361 1,046	2,819 111	3,412 134	5,009 227
<b>University of Colorado</b>	<b>59,592</b>	<b>5,373</b>	<b>6,982</b>	<b>10,762</b>
Anschutz Campus Hospitals Impact (subtotal)	38,583	2,665	3,393	6,451
<b>Total Impact</b>	<b>98,175</b>	<b>8,037</b>	<b>10,375</b>	<b>17,214</b>

Note: Anschutz Campus hospitals are independent enterprises and not reflected on University of Colorado financial statements.

### Additional Key Findings

- **Education** – With education as a core element of the mission, the University of Colorado enrolled **66,625 students** in the Fall of 2023 and awarded **18,629 degrees** in FY2023.
- **Alumni** – Nearly **308,000 alumni** reside in the state, contributing to Colorado’s economic and social fabric. Evidence of the university’s educational impact can be found in the leadership of private businesses, teachers in classrooms, health care professionals, and policymakers. These alumni are an integral part of the Colorado labor force, particularly in the high-tech workforce, and contribute to the state’s rank as second in the nation for educational attainment.
- **Operations** – The university operated on **\$4.7 billion in noncapital revenues** in FY2021-22. A significant portion of this leveraged funding was related to sponsored programs and other restricted fund activity, primarily associated with research activity.
- **Research Awards** – Sponsored program awards and CU Foundation gifts, totaling **\$1.46 billion in FY2021-22**, were concentrated on the CU Anschutz and the CU Boulder campuses (combined, 98% of the total).
- **Technology Transfer** – Administered by Venture Partners at CU Boulder and CU Innovations, technology transfer is the conduit for technology commercialization. Venture Partners reported **85 license and option agreements**, and had **12 startups** spun out of university technology. CU Innovations annual report quantified **146 invention disclosures, 178 patents files, and 95 deals**.
- **Student and visitor spending** – A survey of students found their spending totaled **\$1.1 billion** in FY2022-23. Spending estimates are based on students who indicated they would not be in Colorado if they were not enrolled at CU. Visitor spending in Colorado related to the campuses was an estimated **\$51 million** FY2022-23.
- **Research** – The University of Colorado collaborates in a research triangle that includes universities, businesses, and federal laboratories. From direct expenditures and spinoff technologies to collaborative research and an educated workforce, the University of Colorado strengthens Colorado’s economy. Research expenditure activities alone had a **\$3.2 billion impact**.

## METHODOLOGY

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### ***Economic Contribution and Impact***

Economic contributions on Colorado were estimated by examining operating expenditures and capital expenditures, including employee salaries and benefits. This approach accounted for the leakage that occurs when research grants lead to a portion of purchases made outside the state.

Furthermore, this study estimated the multiplicative impacts of direct expenditures on other industries in the economy through input-output modeling by using IMPLAN, a widely used economic modeling software. Additional estimates were made for student and visitor expenditures. Benefits such as community service, outreach, and fundraisers are described to illustrate additional community benefits derived from the university's presence but were not directly quantified when determining the overall economic contribution. The study also compared CU to peer institutions through a review of comparable studies. This study did not estimate the economic contributions of alumni working in Colorado, nor did it estimate the economic impacts of spinoff companies or technologies beyond the licensing agreements.

### ***Data***

Data requests were made to the University of Colorado System to obtain information on employment, salaries, expenditures, construction, research, and student spending for all campuses. Additional information was sourced from publicly available data on the University of Colorado website.

Employment and salary data were provided by ZIP code and by campus, allowing for the allocation of employee spending to the counties in which they reside. Employees spend their earnings on a broad range of goods and services, including housing, energy, food, clothes, etc. Employment counts and employee residence data are based on a point in time in fall for the fiscal year.

Expenditure data were provided by vendor ZIP code in order to identify (1) the in-state versus out-of-state spending (i.e., leakage), and (2) the counties/metropolitan statistical areas (MSAs) where spending occurred. The procurement service center (PSC) report contained all expenditures, including construction- and research-related expenditures, but excluded purchasing card transactions made by employees. Purchasing card and travel card transactions were not provided, but card purchases account for a relatively small overall portion of spending. These purchases were assumed to follow the geographic profile of PSC data.

Given the absence of a public education category in the input-output model, operating expenditures were assigned as Private Education in the IMPLAN model, or in the industries representing purchasing vendors.

Construction projects were identified by campus. The construction expenditures were included in the vendor report with accompanying ZIP codes, and the university identified specific projects and quantified the value of current construction by campus. Estimated construction expenditures were assigned as Nonresidential Building in the IMPLAN model.

To the extent possible, research expenditures were identified, and the resulting economic contribution was calculated for each campus and for the overall system. This was accomplished by identifying research expenditures by funding type, and apportioning research faculty and staff salaries to research functions. For full, associate, and assistant professors, 40% of salaries were assigned to research in this study; 100% of other research faculty and staff were assigned to research in this study. Research funding and employment were identified by campus, and expenditures were included in the vendor report with accompanying ZIP codes.

For student expenditures and visitation data, the research team relied on a survey conducted by the university in 2016, with the values adjusted to FY2023 based on inflation and enrollment. This survey captured student spending habits and identified the source of funds (in-state versus out-of-state). Expenditures were calculated for students who would not be in Colorado if they were not enrolled at the university. Similarly, survey data estimated Colorado visitation due to students. This information does not include visitation related to visiting professors and researchers, conventions, athletics, or

collaborative research visits; thus, this a conservative estimate of visitation impacts. These expenditures were assigned by spending activity in the IMPLAN model.

This study provides an estimate of economic contributions using ZIP codes of vendors and employees in procurement and human resource databases. The research team believes this conservatively estimates the economic contribution of the University of Colorado since some vendors are located in the state, but the parent company's accounting office, where the check is mailed, is located in another state. Likewise, some faculty, staff, and students have a home of record in another state, but they are actually living and working in Colorado. Additional research could be conducted to reclassify these expenditures and residences. Furthermore, contract vendor activity was not captured in this study (e.g., football game vendors, basketball game vendors, etc.), nor did this study estimate the economic contributions of alumni living and working in the state of Colorado.

## DEFINITIONS

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**Gross Domestic Product (GDP):** A measure of economic activity, GDP is the total value added by resident producers of final goods and services.

**Gross Output (Output):** The total value of production is gross output. Unlike GDP, gross output includes intermediate goods and services.

**Value Added:** The contribution of an industry or region to total GDP, value added equals gross output, net of intermediate input costs.

**Colorado Springs Metropolitan Statistical Area (MSA):** El Paso County and Teller County.

**Boulder MSA:** Boulder County.

**Denver MSA:** Adams, Arapahoe, Broomfield, Denver, Douglas, Jefferson, Clear Creek, Gilpin, Park, and Elbert counties.

**CU Boulder:** University of Colorado Boulder.

**CU Denver:** University of Colorado Denver.

**UCCS:** University of Colorado Colorado Springs.

**CU Anschutz:** Anschutz Medical Campus.

**University of Colorado System:** President's Office and administration.

**System:** The four university campuses and the President's Office and administration.

**Fiscal Year:** July 1–June 30



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## LITERATURE REVIEW

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By their nature, universities have a profound impact on their respective communities, regions, and states, both in terms of economic contributions and in the area's cultural and social fabric. Economically, direct and indirect spending by the institution, employees, students, and visitors can often total in the billions. This spending spurs on output and revenue for their respective cities/states and can lead to tens of thousands of jobs. A review of recently conducted economic impact studies of peer universities reveals a range of impacts. Although the studies used different methodologies, thus making direct comparisons difficult, the exercise highlights the important role universities play as an economic driver. For a more detailed look at each report, see Appendix 1.

The impact of Pac-12 member universities on their state and local economies was examined through various economic impact studies. The total impact of each university includes both direct and indirect/induced impact. The California institutions in the Pac-12 are extensive schools that had a major effect on surrounding areas. During the 2018–19 fiscal year, the University of California System (ten campuses including UCLA, UC Berkeley, UCH) contributed over \$82 billion in total output, while supporting over 529,000 jobs and \$37.6 billion in salary and benefits. UCLA had a total economic impact of over \$8.4 billion while supporting nearly 56,000 jobs. The University of California, Berkeley (UC Berkeley) generated an estimated \$6.3 billion in economic impact during the 2018-19 fiscal year, of which almost \$4.6 billion was in value added, and supported over 37,000 jobs. The University of Southern California (USC) was responsible for over \$8.1 billion in total output during the 2015–16 fiscal year and directly employed 30,900 people. Stanford had an economic impact of \$2.1 billion in Santa Clara and San Mateo Counties in 2006, with students and visitors spending a combined \$348 million in the surrounding communities.

The four Pac-12 universities located in the Pacific Northwest (Washington, Washington State, Oregon, Oregon State) all had a substantial impact on their respective state and local economies. The University of Washington (UW) generated \$15.7 billion in economic activity during the 2018 fiscal year, including a direct impact of \$7.8 billion. UW's economic impact supported or sustained 1 out of every 37 jobs in Washington and is the fifth largest employer in the state. During FY2014, Washington State University (WSU) generated almost \$19 for every dollar the state invested in the university. WSU generated a total economic impact of \$3.4 billion within the state of Washington in the 2014 fiscal year and employed almost 18,000 workers. The University of Oregon (UO) supported over 26,000 employees in 2019–20, while contributing \$2.6 billion to the state economy. Oregon State University's (OSU) impact to the state economy was over \$2.3 billion in 2017 and around 30,000 jobs. Of OSU's total impact, \$989 million was direct, \$155 million was indirect, and \$1.2 billion was induced.

Universities located in the Mountain/Southwest region (Arizona, Arizona State, and Utah; excluding Colorado) create substantial output. In the 2017 fiscal year, the University of Arizona (UA) accounted for \$11.1 billion in economic impact and \$451.7 million in state and local tax revenue. Arizona State University (ASU) supported 55,712 jobs, approximately 19,652 of which were directly employed by the university in the 2022 fiscal year. ASU's total economic impact in 2022 was estimated at \$4.7 billion in state GDP. The University of Utah had a total economic contribution of \$11 billion in 2019, supporting 83,100 jobs and generating \$4.6 billion in earnings.

Additional CU peer institutions are found within the University of Massachusetts System (UMass) and University of Texas System (UTS). The University of Massachusetts System generated \$7.5 billion in economic activity and supported 49,315 jobs (17,622 direct) in the state in FY2018. UMass-Boston, a selected peer of CU Denver and UCCS, calculated its impact at \$1.2 billion, and UMass-Lowell, a CU Denver peer, calculated its impact at \$1.2 billion. The University of Texas System comprises nine academic and six health-related institutions within the state of Texas, and its 2005 study estimates its annual impact at \$12.8 billion on the Texas economy and supports 215,715 jobs. CU peer institutions at UTS include the University of Texas-El Paso (UCCS), The University of Texas Health Science Center at San Antonio (CU Anschutz), and The University of Texas Health Science Center at Houston (CU Anschutz). Looking within the state of Colorado, the Colorado State University System supported around 22,785 jobs and \$237.7 million in income and sales tax revenue in FY2019-20.

## THE UNIVERSITY OF COLORADO OVERVIEW

The University of Colorado is a research university that educates students, conducts research, commercializes technology, and creates companies. This section provides an overview of the university’s contributions.

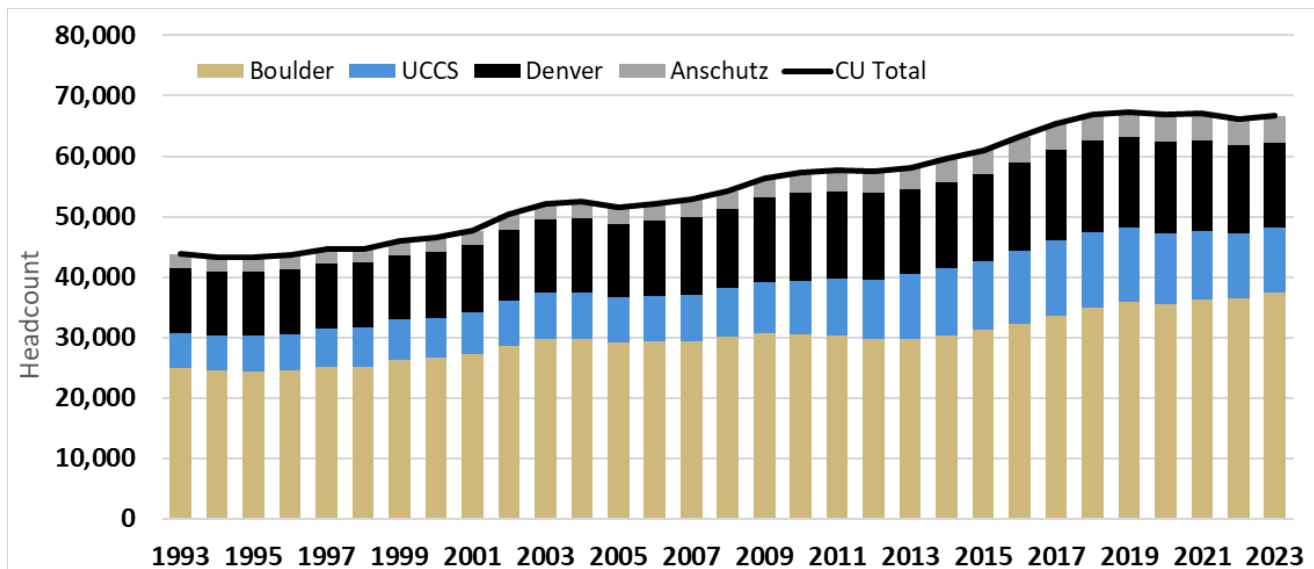
### STUDENTS

The University of Colorado recorded 66,226 students in Fall 2022, decreasing 1.3% year-over-year. Enrollment increased 0.6% in Fall 2023 to 66,625 students. Student headcount was 0.6% lower than five years ago (Fall 2018). On a full-time equivalent (FTE) basis, the university enrollment was 58,747 for FY2022, falling 1% (600 students) year-over-year to 58,148. Enrollment in FY2023 was down 0.3% from FY2018.

The FTE data were published for FY2022-23. Based on the FTE data, CU Boulder recorded the largest enrollment in FY2022-23 (32,132 students, 55% of the total), followed by CU Denver (19%), UCCS (15%), and CU Anschutz (10%). On a full-time basis, 77% of students were undergrads, while 23% were graduate students. Nearly 68% of the student body was Colorado residents. The ratio of nonresident students is limited by Colorado statute.<sup>1</sup>

In FY2021-22, the University of Colorado awarded 18,096 degrees (including double majors) to 17,963 recipients. CU Boulder accounted for over half of awarded degrees, followed by CU Denver, UCCS, and CU Anschutz. Awarded degrees increased 2.9% to 18,629 in FY2022-23 (12,038 bachelor’s degrees, 5,113 master’s and specialist degrees, 133 graduate certificates, and 1,345 doctorate and professional degrees).

**Figure 3: Total Enrollment by Campus, Fall 1993–Fall 2023**



Source: University of Colorado, Budget and Finance Office.

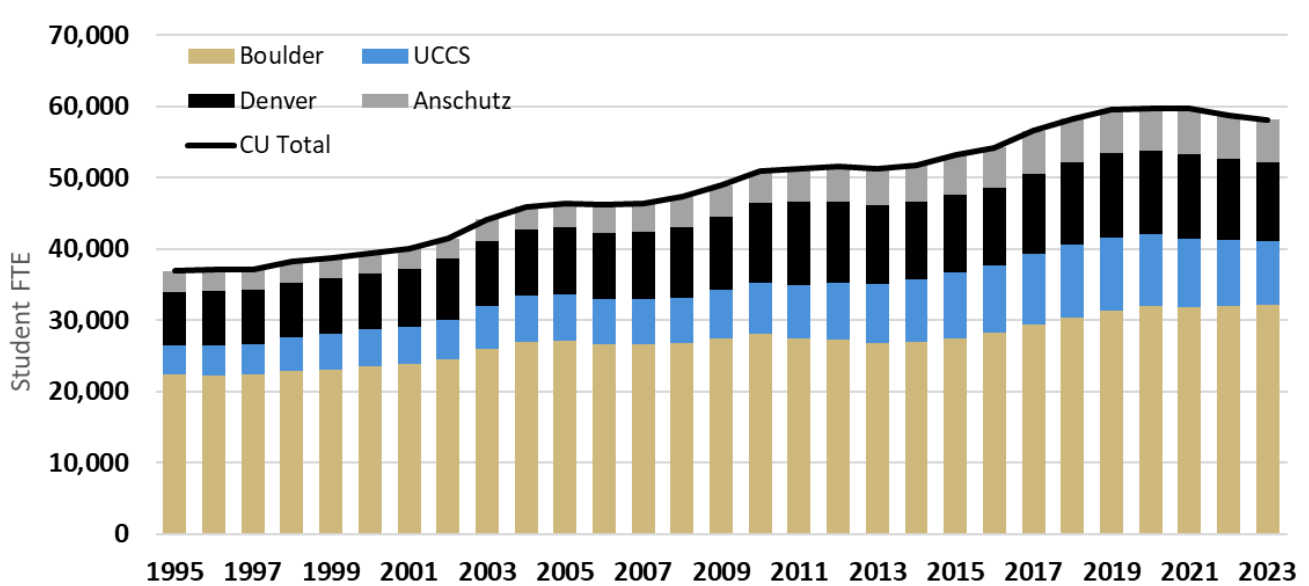
<sup>1</sup>According to statute 23-1-113.5, nonresident students are limited to 45% of total enrollment. “The percentage of students enrolled at each campus of the university of Colorado system, at Colorado state university, at the university of northern Colorado, or at the Colorado school of mines who are in-state students is not less than fifty-five percent of the total student enrollment at each campus of the university of Colorado system, at Colorado state university, at the university of northern Colorado, or at the Colorado school of mines, respectively, including undergraduate and graduate students, calculated on a three-year rolling average and excluding foreign students and students enrolled solely in online courses.” <http://leg.colorado.gov/sites/default/files/images/olls/crs2018-title-23.pdf> (page 44), accessed September 28, 2023.

**Table 2: Enrollment by Campus, Fall 2022 and Fall 2023**

Campus	CU Boulder		UCCS		CU Denver		CU Anschutz		Total	
	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023
Undergraduate - resident	16,834	17,778	7,684	7,540	8,480	8,480	442	446	33,440	34,069
Undergraduate - nonresident	12,983	13,200	1,336	1,327	1,450	1,450	43	61	15,812	15,994
Graduate - resident	3,728	3,658	1,541	1,528	3,496	3,496	3,011	3,004	11,776	11,398
Graduate - nonresident	2,885	2,849	251	283	1,083	1,083	979	983	5,198	5,164
<b>Total</b>	<b>36,430</b>	<b>37,485</b>	<b>10,812</b>	<b>10,678</b>	<b>14,509</b>	<b>13,968</b>	<b>4,475</b>	<b>4,494</b>	<b>66,226</b>	<b>66,625</b>

Source: University of Colorado, Budget and Finance Office, Student Headcount Enrollment.

**Figure 4: Total FTE Students by Campus, FY1994-95–FY2022-23**



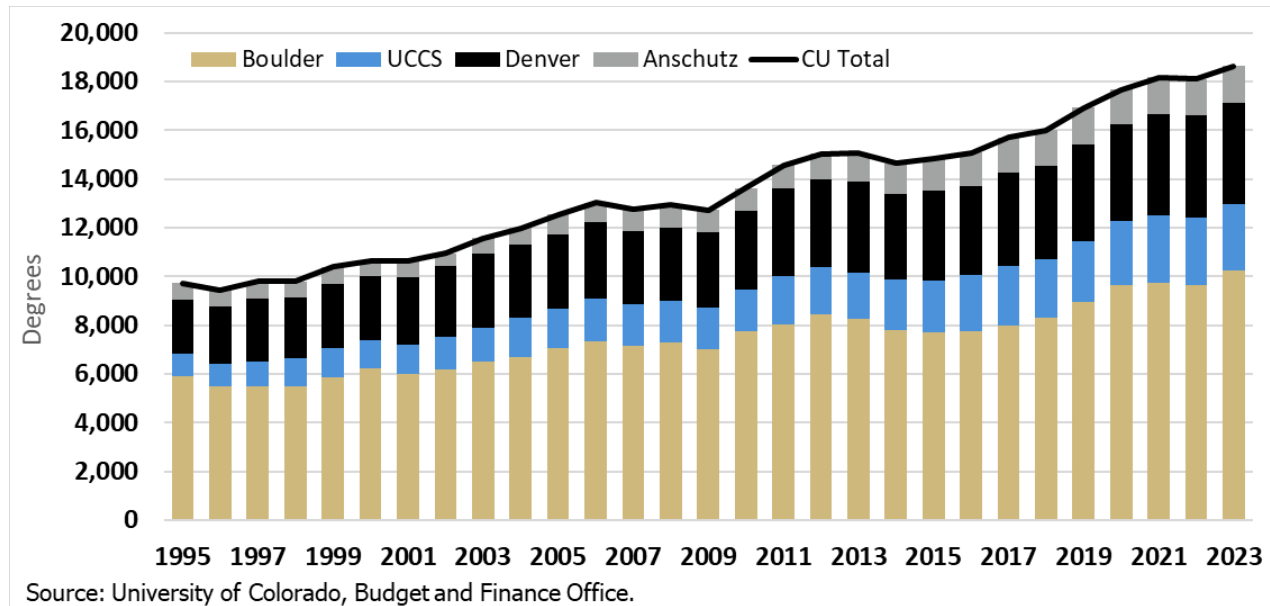
Source: University of Colorado, Budget and Finance Office.

**Table 3: FTE Enrollment by Campus, FY2021-22 and FY2022-23**

Campus	CU Boulder		UCCS		CU Denver		CU Anschutz		Total	
	FY2021-22	FY2022-23	FY2021-22	FY2022-23	FY2021-22	FY2022-23	FY2021-22	FY2022-23	FY2021-22	FY2022-23
Undergraduate - resident	15,544	15,710	6,944	6,680	7,331	7,182	489	496	30,308	30,069
Undergraduate - nonresident	11,982	12,013	1,165	1,125	1,253	1,265	52	63	14,451	14,466
Graduate - resident	2,555	2,464	1,001	985	2,321	2,033	3,849	3,735	9,725	9,218
Graduate - nonresident	1,854	1,945	161	141	554	667	1,695	1,642	4,264	4,396
<b>Total</b>	<b>31,934</b>	<b>32,132</b>	<b>9,270</b>	<b>8,931</b>	<b>11,458</b>	<b>11,148</b>	<b>6,085</b>	<b>5,936</b>	<b>58,747</b>	<b>58,148</b>

Source: University of Colorado, Budget and Finance Office, Student FTE Enrollment. Note: Totals may not sum due to FTE rounding.

**Figure 5: Total Degrees Awarded by Campus, FY1995–FY2023**



**ALUMNI**

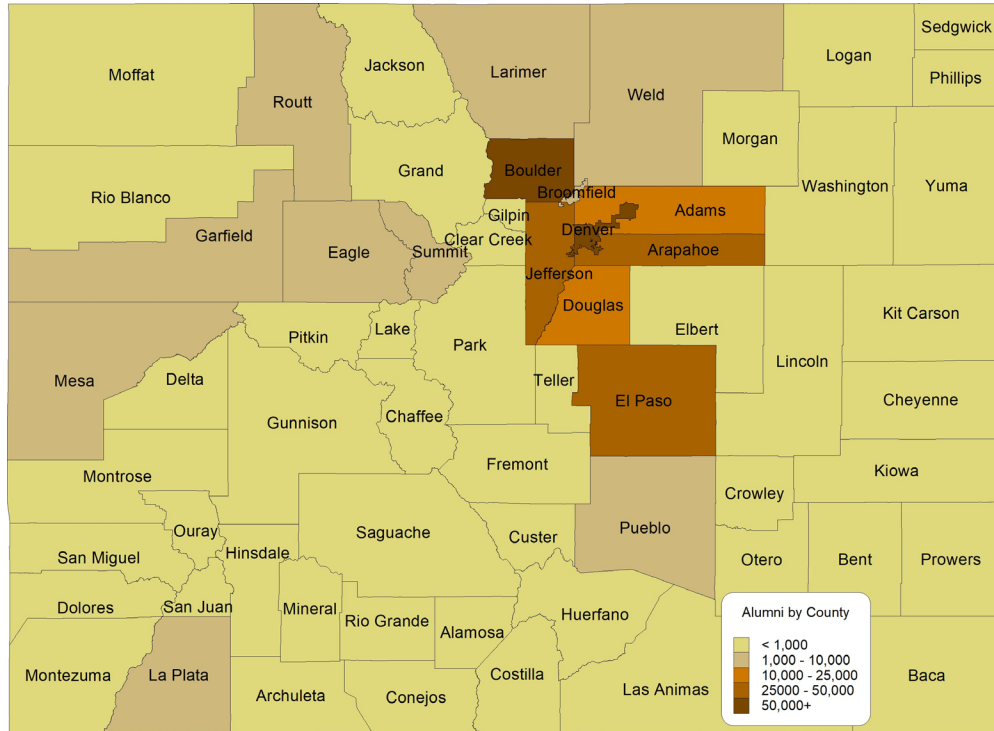
The university has a long history of educating students and preparing them to be actively engaged, contributing members of society. Alumni records indicate that nearly 308,000 graduates reside in the state of Colorado, including business leaders, policymakers, educators, health care workers, engineers, and many others. CU Boulder has the largest number of in-state alumni, totaling more than 154,000, followed by CU Denver (81,000), UCCS (39,000), and CU Anschutz (32,000).

**TABLE 4: ALUMNI BY CAMPUS AND LOCATION, FY2021-22**

Campus	CU Boulder	UCCS	CU Denver	CU Anschutz	Total
Boulder MSA	48,625	505	4,306	1,971	55,575
Denver MSA	78,126	6,692	67,966	24,347	178,057
Colorado Springs MSA	6,064	28,017	2,039	1,350	37,525
Rest of Colorado	21,334	3,727	6,637	4,696	36,562
<b>State Total</b>	<b>154,149</b>	<b>38,941</b>	<b>80,948</b>	<b>32,364</b>	<b>307,720</b>
<b>% of State Total</b>	<b>50%</b>	<b>13%</b>	<b>26%</b>	<b>11%</b>	

Source: University of Colorado, Office of Advancement.  
 Note: Total includes CU System and Foundation alumni; only represents known addresses.

**Figure 6: University of Colorado Alumni by County, FY2022-23**



**NONEDUCATION SPENDING AND VISITATION**

Student spending is similar in nature to offsite employee spending, with expenditures ranging from food and rent to clothing and entertainment. However, student spending habits tend to vary from employee spending as well as sources of funds. The University of Colorado System conducts student spending surveys in order to quantify spending habits. The results are for students who would not be in Colorado if they were not enrolled at the university; thus, this is spending that otherwise would not have occurred in the state nor in the metropolitan areas. Statewide, student spending was estimated at \$1.1 billion in FY2022-23. In FY2022-23, CU Boulder accounted for 68% of the total; CU Denver, 15%; CU Anschutz, 8%; and UCCS, 9%.<sup>2</sup> Nearly 47% of the spending was identified as housing expenditures, followed by groceries (12%) and books (9%).

Visitors bring substantial ancillary benefit to university communities. In a survey of students, the university gained insight into the number of visitors and amount of spending related to students (e.g., parents’ weekend). Visitor spending in Colorado related to the four campuses was an estimated \$51 million in FY2022-23. Most of the visitor spending was related to CU Boulder (72%), followed by CU Denver (13%), UCCS (8%), and CU Anschutz (8%).<sup>3</sup> Other visitor impacts, including those from visiting professors and researchers, have not been quantified in this study, thus, visitor impacts are conservative at best.

<sup>2</sup> Campus student spending does not sum to 100% due to rounding.

<sup>3</sup> Campus visitor spending does not sum to 100% due to rounding.

**Table 5: Visitor Spending and Student Spending (in millions) for students attracted and retained by CU<sup>a</sup>, FY2022-23**

Spending	CU Boulder	UCCS	CU Denver	CU Anschutz	Total
Students <sup>a</sup>					
Housing	\$355.3	\$47.3	\$71.4	\$31.3	\$505.3
Utilities	\$45.5	\$7.8	\$12.2	\$6.2	\$71.7
Groceries	\$88.9	\$9.4	\$18.5	\$12.1	\$128.9
Restaurants	\$55.2	\$6.2	\$10.9	\$6.2	\$78.6
Personal Goods	\$31.8	\$4.5	\$8.1	\$4.5	\$48.9
Personal Services	\$15.4	\$2.4	\$3.9	\$2.5	\$24.1
Transportation	\$22.4	\$5.4	\$6.3	\$4.6	\$38.7
Entertainment & Luxury Items	\$26.6	\$3.4	\$5.1	\$2.8	\$37.9
Medical Expenses	\$13.9	\$2.0	\$3.5	\$2.3	\$21.7
Hotels	\$3.2	\$0.5	\$1.1	\$0.6	\$5.3
Recreation	\$12.0	\$1.2	\$1.7	\$1.5	\$16.3
Books	\$64.0	\$9.5	\$12.6	\$6.4	\$92.6
Childcare	\$6.1	\$2.0	\$2.1	\$3.6	\$13.8
<b>Total Student Expenditures</b>	<b>\$740.3</b>	<b>\$101.6</b>	<b>\$157.5</b>	<b>\$84.5</b>	<b>\$1,084.0</b>
<b>% of Student Expenditures</b>	<b>68%</b>	<b>9%</b>	<b>15%</b>	<b>8%</b>	
Visitors <sup>b</sup>					
Hotels	\$13.0	\$1.5	\$2.2	\$1.4	\$18.1
Recreation	\$11.4	\$1.3	\$2.1	\$1.4	\$16.2
Restaurants	\$12.2	\$1.3	\$2.2	\$1.2	\$16.7
<b>Total Visitor Expenditures</b>	<b>\$36.6</b>	<b>\$4.1</b>	<b>\$6.5</b>	<b>\$3.9</b>	<b>\$51.0</b>
<b>% of Visitor Expenditures</b>	<b>72%</b>	<b>8%</b>	<b>13%</b>	<b>8%</b>	

Note: Conferences, events, and athletics not included. FY2020 values grossed up for inflation and enrollment based on 2016 survey by the University of Colorado System. <sup>a</sup>Includes nonresidents and resident students who indicated that they would have left Colorado had they not attended CU (based on survey responses).

<sup>b</sup>Includes only students' visitors.

## EMPLOYMENT

In 2022, the University of Colorado was the third-largest employer in the state of Colorado,<sup>4</sup> and is among the largest employers in each county of operations. Differentiating between employee work location and residence is important for assigning employee spending to home MSAs.

Together, the faculty and staff of the University of Colorado form a collaborative community that supports CU's pillars of excellence and impact—learning and teaching, discovery and innovation, community and culture, and health and wellness. A wide range of employees with a variety of skills is needed to support these pillars, including faculty researchers, scientists, and instructors; administrators; and support staff. Inherent in this range is an array of educational attainment. Most tenured/tenure-track faculty hold a doctorate or other terminal degree.

Based on a comprehensive snapshot of employment, there were 31,157 faculty and staff in FY2022-23 and 12,098 student workers, with salaries and wages nearing \$2.8 billion (excluding benefits), increasing 5.4% over the prior year. *This is a count of individuals (not full-time equivalent jobs)*. Excluding student workers, average earnings were \$85,724 in FY2022-23. Including student workers, the simple average wage was \$64,145. CU Anschutz and CU Boulder recorded the largest number of employees and the highest total (excluding student workers). Fringe benefits are an additional cost of labor above the salaries paid.<sup>5</sup> Fringe benefit rates depend on the employee type (e.g., 29.4% for full-time regular faculty, 37.9% for full staff and research faculty on the Boulder campus in FY2023)<sup>6</sup>.

<sup>4</sup>Excludes student and temporary workers.

<sup>5</sup>Fringe benefits include dental insurance, disability insurance, FICA contribution, health insurance, life insurance, Medicare, other retirement plans, PERA, EcoPass, annuities insurance, unemployment compensation claims, workers' compensation insurance, and termination annual and sick leave.

<sup>6</sup> <https://www.colorado.edu/controller/resources/fringe-benefit-rates-history>

**Table 6: Total Employment, FY2022-23**

Campus	Faculty and Staff	Student Workers	Total Employment
CU Boulder	11,626	7,562	19,189
UCCS	1,976	1,504	3,481
CU Denver	3,069	1,608	4,677
CU Anschutz	13,893	1,407	15,300
System	592	16	609
<b>Total</b>	<b>31,157</b>	<b>12,098</b>	<b>43,255</b>

Source: Based on a September HCM snapshot. Note: Includes student workers, temporary workers, officer/exempt professional, classified staff, student other, research faculty, clinical faculty, other faculty, and regular faculty.

**Table 7: University of Colorado Faculty and Staff, Fall 2022**

Occupation	Full-Time	Part-Time	Total
<b>Faculty</b>			
Instructional	7,297	2,177	9,474
Non-Tenure Track	2,873	2,107	4,980
Instructor/Sr Instructor	2,571	34	2,605
Other	302	2,073	2,375
Tenured/Tenure Track	4,424	70	4,494
Assistant Professor	1,674	35	1,709
Associate Professor	1,433	17	1,450
Full Professor	1,317	18	1,335
<u>Research/Public Service</u>	<u>2,016</u>	<u>255</u>	<u>2,271</u>
<b>Total Faculty</b>	<b>9,313</b>	<b>2,432</b>	<b>11,745</b>
<b>Staff</b>			
Officers	152	152	152
<u>Management/Other Professionals/Support Staff</u>	<u>13,276</u>	<u>13,276</u>	<u>13,276</u>
<b>Total Staff</b>	<b>13,428</b>	<b>854</b>	<b>14,282</b>
<b>Total Faculty and Staff</b>	<b>22,741</b>	<b>3,286</b>	<b>26,027</b>

Note: Excludes temporary workers and student employees.

Source: University of Colorado, Budget and Finance Office, Faculty and Staff Headcount, Fall 2022 (IPEDS HR survey).

## RESIDENT COMMUNITIES

Employees have incredible economic impacts on their local communities. Aside from where they reside—own their home or pay rents—they spend a great deal of their disposable income close to their place of residence. These purchases range from regular spending on fuel and groceries to less frequent spending on clothing, at restaurants, and on vehicles. Their activity supports local business, employment, and wages. It also funds public activities ranging from police and fire protection to schools and infrastructure through the payment of property taxes, sales taxes, income taxes, and fees.

Additionally, employees make important community contributions through volunteerism and charitable giving. They are generally economic and societal stewards who positively impact the communities in which they reside and in which they work. The university’s employees are dispersed across the state but concentrated in the metropolitan areas where they work. The CU System provided employee counts by ZIP code in Colorado in order to assign off-site economic benefits to their respective metropolitan areas. Excluding student workers, 57% of CU employees live in the Denver Metro region, 23% reside in the Boulder MSA, and 7% live in the Colorado Springs MSA.

Most University of Colorado employees (excluding students) lived in the same metropolitan area in which they work (72%) in FY2022-23; however, given the proximity and integration of communities and economies within the state, 27% live and work in two different places. Of the Colorado-based employees, most University of Colorado employees live in the Denver MSA and the Boulder MSA. Salaries, like employment, were concentrated in the metropolitan areas where the university has a presence. Of the \$2.8 billion in faculty, staff, and student salaries, an estimated \$1.8 billion in salaries were paid to

employees living in the Denver MSA, \$567 million to workers residing in the Boulder MSA, and \$146 million to employees in the Colorado Springs MSA.

**Table 8: Residence of Employees (incl. students), FY2022-23**

Campus	Boulder MSA	Colorado Springs MSA	Denver MSA	All Other	Total
CU Boulder	10,495	179	4,824	3,691	19,189
UCCS	12	2,682	339	448	3,481
CU Denver	286	88	3,620	682	4,677
CU Anschutz	500	333	13,026	1,441	15,300
System	69	20	385	134	609
<b>Total</b>	<b>11,362</b>	<b>3,303</b>	<b>22,194</b>	<b>6,396</b>	<b>43,255</b>

Notes: Number of employees based on based on a September HCM snapshot. Some "All Other" home of record addresses, notably for students, refer to an out-of-state residence.

**Table 9: Total Salaries by MSA, FY2022-23 (In Millions)**

Campus	Boulder MSA	Colorado Springs MSA	Denver MSA	All Other	Total
CU Boulder	\$496.1	\$2.1	\$213.9	\$142.0	\$854.1
UCCS	\$0.0	\$92.8	\$8.4	\$8.6	\$109.8
CU Denver	\$10.8	\$1.9	\$139.7	\$18.7	\$171.1
CU Anschutz	\$51.5	\$46.9	\$1,369.8	\$109.6	\$1,577.9
System	\$7.6	\$2.5	\$39.2	\$12.4	\$61.7
<b>Total</b>	<b>\$566.1</b>	<b>\$146.1</b>	<b>\$1,771.1</b>	<b>\$291.3</b>	<b>\$2,774.6</b>

Note: Includes faculty, staff, and students. Excludes benefits.

## CONSTRUCTION

As of June 30, 2023, the University of Colorado continued progress on construction projects valued at \$302 million. Just over 44% of this activity was related to CU Boulder and 32% was for projects at the CU Denver and CU Anschutz campuses. The largest project systemwide included the Hellems and Rippon renovation at CU Boulder. Capital outlays (performed by in-state and out-of-state companies) were estimated at \$51 million in FY2022-23. Capital spending is nested in the vendor procurement data.

**Table 10: Current Construction Projects as of June 30, 2022 (in Thousands)**

Campus/Project Description	Financing Sources	Value <sup>a</sup>
<b>University of Colorado Boulder</b>		
Sustainability, Electrical, Environmental Labs (SEEL), Room 356A	Campus cash resources	\$8,500
1135 Broadway renovation	Campus cash resources	6,000
Hellems & Rippon renovation	Campus cash resources, Federal, and State funding	105,157
Fleming Tower renovation and system upgrades	Campus cash resources and debt	13,719
<b>University of Colorado Denver and the Anschutz Medical Campus</b>		
Fitzsimmons Building Central Services renovation	Campus cash resources	16,479
Engineering Building	Campus cash resources	80,912
<b>University of Colorado Colorado Springs</b>		
Engineering Annex	Campus cash resources	23,765
Engineering remodel	Campus cash resources	47,100

Sources: University of Colorado 2022 Annual Financial Report (page 22) and the CU System Office of the Vice President for Budget and Finance.

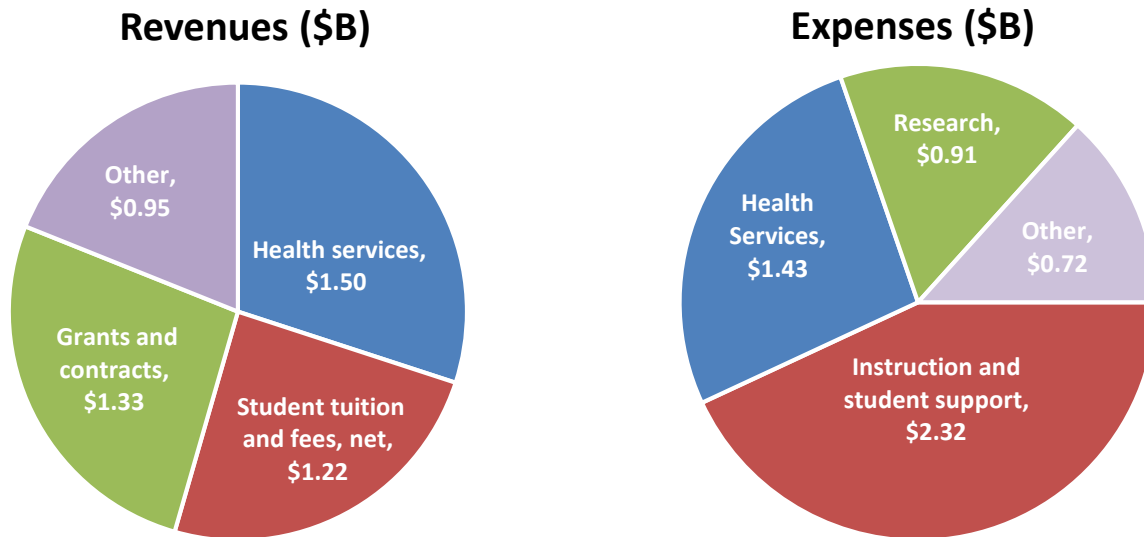
<sup>a</sup>Value represents budgeted costs for project in thousands.



**OPERATIONS**

The University of Colorado recorded operating revenue totaling \$5 billion in FY2022-23. Nearly 81% of these noncapital revenues are generated from health services (30%), grants and contracts (26.6%), and tuition and fees (24.4%). Appropriated state funding totaled \$281.8 million in FY2022-23.<sup>7</sup> The university recorded \$5.4 billion in operating expenditures in FY2022-23, though some of this included noncash activity (e.g., depreciation and amortization) or activities related to health care enterprises.

**Figure 7: Operating Revenues and Expenses by Type, FY2022-23**



**Table 11: Operating and Nonoperating Revenues (Excluding Capital), FY2022-23 (in Thousands)**

Revenues (in thousands)	FY2023
<b>Operating Revenues</b>	
Student tuition and fees, net	\$1,224,562
Fee-for-service contracts	193,930
Grants and contracts	1,334,081
Sales and services of educational departments	285,454
Auxiliary enterprises, net	317,627
Health services	1,504,889
Other operating	151,734
<b>Total Operating Revenues</b>	<b>5,012,277</b>
<b>Nonoperating Revenues</b>	
Federal Pell Grant	56,390
State appropriations	18,831
State support for PERA pension	19,751
COVID Aid	5,601
Gifts	241,894
Investment income, net	288,579
Other nonoperating, net	30,204
<b>Total Nonoperating Revenues</b>	<b>661,250</b>
<b>Total Noncapital Revenues</b>	<b>\$5,673,527</b>

Source: University of Colorado Annual Financial Report, June 30, 2023 and 2022 (page 15).

<sup>7</sup> Joint Budget Committee. *Appropriations Report, Fiscal Year 2022-23*. <https://leg.colorado.gov/publications/appropriations-report-fiscal-year-2022-23> (page 65), accessed October 3, 2023.

**Table 12: Expense Program Categories, FY2022-23 (in Thousands)**

	FY2023
<b>Operating Expenses</b>	
Instruction	\$1,339,864
Research	\$912,111
Public service	\$180,195
Academic, institutional, and plant support	\$776,134
Student aid and other services	\$201,005
<b>Total Education and General Expenses</b>	<b>\$3,409,309</b>
Depreciation and amortization	\$275,307
Auxiliary enterprises	\$260,914
Health services	\$1,433,583
<b>Total Operating Expenses</b>	<b>\$5,379,113</b>

Source: University of Colorado Annual Financial Report, June 30, 2023 and 2022 (page 19).

The university’s nonlabor expenditures occur primarily through vendor purchases and through university travel and procurement cards. Combined, nonlabor PSC expenditures totaled \$1.1 billion in FY2022-23, plus an additional \$425 million in non-PSC expenditures, for a total of \$1.5 billion used in this analysis. Nearly a third of expenditures were in-state purchases in FY2022-23. While this leakage includes the purchase of some supplies and equipment out-of-state, it also includes payments to partnering research institutions that contribute unique capabilities to research projects—collaboration that runs both directions in research. Without these collaborations, many of the grants would otherwise not be awarded to the University of Colorado.

CU Boulder accounted for 45% of nonlabor expenditures in FY2023-23, totaling \$699.7 million. CU Anschutz vendor spending accounted for 44%, followed by UCCS, CU Denver, and the CU System.

**Table 13: Total Nonpayroll Expenditures, FY2022-23 (In Millions)**

Campus	Boulder MSA	Colorado Springs MSA	Denver MSA	All Other	CO Total	Total
CU Boulder	\$59.0	\$3.4	\$150.1	\$12.7	\$225.2	\$699.7
UCCS	\$1.8	\$16.1	\$21.1	\$0.8	\$39.8	\$73.4
CU Denver	\$0.8	\$0.2	\$10.0	\$0.8	\$11.8	\$44.8
CU Anschutz	\$3.4	\$1.4	\$182.5	\$20.3	\$207.6	\$674.4
System	\$0.6	\$0.1	\$14.7	\$0.5	\$16.0	\$54.0
<b>Total</b>	<b>\$65.6</b>	<b>\$21.2</b>	<b>\$378.4</b>	<b>\$35.1</b>	<b>\$500.4</b>	<b>\$1,546.3</b>

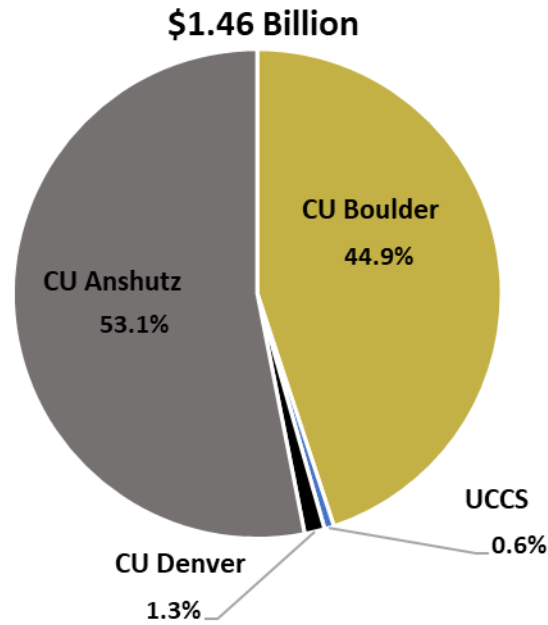
Note: Includes Procurement Card, Travel Card, Voucher Card, and non-PSC expenditures.

## SPONSORED PROGRAMS

Each campus has an office that reviews, negotiates, and administers externally funded sponsored research for its respective campus. Responsibilities also include ensuring campus, university, and sponsor policies are being followed; providing award management assistance; preparing subcontracts; and managing government property. These services are provided by the Office of Contracts and Grants for CU Boulder, by the Office of Grants and Contracts for CU Denver and CU Anschutz, and by the Office of Sponsored Programs for UCCS.

In FY2021-22, of the \$1.46 billion in sponsored research, 98% of sponsored research was conducted on two University of Colorado campuses: CU Anschutz and CU Boulder. Excluding the CU Foundation research funding, sponsored research increased 1.4% across the System in FY2020-21, and 42% over the past five years (FY2017-FY2022).

**Figure 8: Sponsored Research, by Campus, FY2021-22**



Source: University of Colorado, <http://www.cu.edu/sponsored-research>.

**Table 14: University of Colorado Sponsored Research, By Campus, in Millions, 2000-2022**

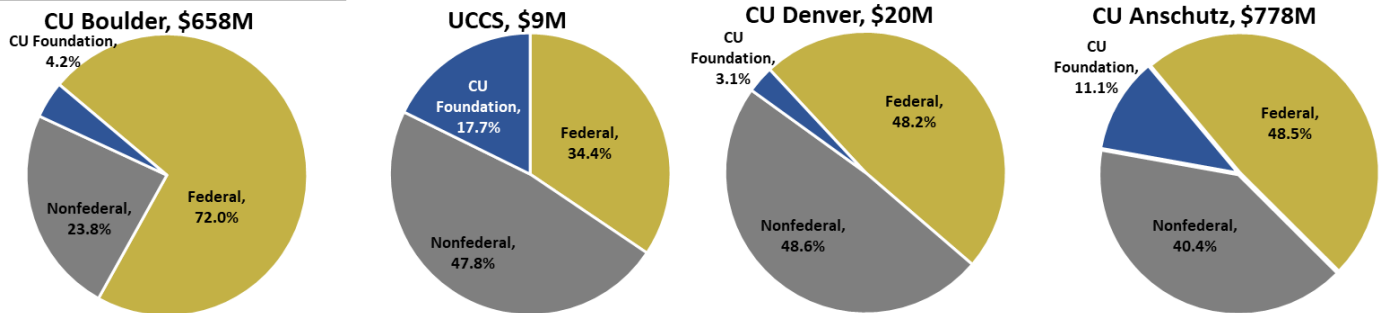
Fiscal Year	CU Boulder	UCCS	CU Denver	CU Anschutz	Total
2000	\$214.2	\$3.0	\$18.7	\$224.0	\$459.9
2001	\$219.0	\$2.8	\$16.7	\$260.1	\$498.6
2002	\$229.0	\$1.9	\$20.3	\$294.6	\$545.9
2003	\$250.4	\$5.2	\$19.1	\$286.1	\$560.9
2004	\$259.7	\$6.3	\$22.9	\$299.8	\$588.7
2005	\$257.6	\$8.7	\$18.6	\$332.2	\$617.0
2006	\$256.5	\$10.3	\$23.5	\$349.8	\$640.0
2007	\$266.1	\$7.9	\$19.8	\$343.6	\$637.4
2008	\$280.0	\$9.2	\$17.9	\$353.6	\$660.7
2009	\$339.7	\$8.7	\$22.8	\$342.4	\$713.5
2010	\$454.4	\$8.3	\$22.2	\$399.2	\$884.1
2011	\$359.1	\$12.4	\$21.8	\$400.1	\$793.5
2012	\$380.7	\$5.0	\$22.4	\$411.7	\$819.8
2013	\$351.9	\$7.8	\$20.1	\$390.8	\$770.5
2014	\$412.1	\$9.4	\$18.5	\$423.3	\$863.3
2015	\$425.6	\$10.3	\$22.2	\$420.3	\$878.3
2016	\$436.8	\$8.0	\$25.0	\$454.1	\$923.9
2017	\$507.9	\$10.2	\$25.9	\$490.3	\$1,034.3
2018	\$511.1	\$6.9	\$18.8	\$516.2	\$1,053.1
2019 <sup>a</sup>	\$630.9	\$8.0	\$23.4	\$805.7	\$1,468.1
2020 <sup>a</sup>	\$613.9	\$18.3	\$18.0	\$762.2	\$1,412.5
2021 <sup>a</sup>	\$634.4	\$15.9	\$24.9	\$769.8	\$1,445.0
2022 <sup>a</sup>	\$658.0	\$9.3	\$19.5	\$777.8	\$1,464.6

Source: University of Colorado, <http://www.cu.edu/sponsored-research> and the Office of the Vice President for Budget and Finance.

Note: Values are in nominal dollars and are not adjusted for inflation.

<sup>a</sup>2019-2021 figures include foundation funding at CU Boulder and CU Anschutz. Anschutz foundation research, while included here, is not included in other published sponsored research totals. Beginning in FY2019, CU Foundation gifts supporting research were added to this summary. Gifts supporting research prior to FY2019 are not included.

**Figure 9: Sponsored Research, By Source and Campus, FY2022**



Source: University of Colorado, <http://www.cu.edu/sponsored-research> and the Office of the Vice President for Budget and Finance.

## TECHNOLOGY TRANSFER

Technology transfer works to assist with the commercialization of university technology. University of Colorado commercialization activity is decentralized between Venture Partners, the commercialization arm of CU Boulder and UCCS, and CU Innovations, an intellectual property management service at the Anschutz Medical Campus.<sup>8</sup>

The services provided on campus from Venture Partners and CU Innovations include:

- Advises faculty on intellectual property issues
- Supports intellectual property management and commercialization planning for major federal grant proposals
- Advises campus researchers about the technology transfer process through a variety of means including seminars, newsletters, and special events
- Solicits and analyzes invention disclosures from faculty, students, and staff
- Engages students and commercialization partners in market assessment
- Prepares and manages the transfer of “tangible research property” such as biological materials
- Licenses patents and copyrights for commercial use and manages those licenses

To illustrate impact, according to Venture Partners at CU Boulder, in FY2021-22, Venture Partners recorded 85 license and option agreements, and had 12 startups spun out of university technology.<sup>9</sup> In 2022, CU Innovations reported 146 invention disclosures, 178 patents files, and 95 deals.<sup>10</sup>

## CU FOUNDATION

Created in 1967 by volunteers and community leaders, the University of Colorado Foundation raises, manages, and invests private support for the benefit of the university. Fundraising efforts supplement state funding, tuition, and other revenue sources by funding student scholarships, faculty support, academic programs, and building improvements. In FY2021-22, the University of Colorado Foundation recorded \$377.2 million in gifts from 44,489 donors: \$65 million for scholarships and fellowships; \$137 million for research and discovery; \$43 million for faculty recruitment and retention; and \$180 million for health care and lifesaving treatment.<sup>11</sup> The impact of these gifts touches all four campuses in the areas of learning and teaching, discovery and innovation, community and culture, and health and wellness. As of June 30, 2022, the Foundation managed more than \$2.8 billion in assets.<sup>12</sup> The CU Foundation transferred \$234 million in FY2021-22 to support people, places, and programs on CU campuses.

<sup>8</sup> Venture Partners at CU Boulder represents commercialization from the Boulder, Colorado Springs, and Denver campuses. CU innovations represents commercialization from the Anschutz Medical Campus.

<sup>9</sup> <https://www.colorado.edu/venturepartners/about-us/2022-venture-partners-annual-report>, retrieved October 3, 2023.

<sup>10</sup> <https://www.cuanschutz.edu/cu-innovations/cu-innovations/in-the-news/annual-report/2022>, retrieved October 3, 2023.

<sup>11</sup> <https://advancement.cu.edu/financials>, retrieved October 3, 2023.

<sup>12</sup> <https://giving.cu.edu/sites/default/files/pdfs/cuf-audited-financial-statements-fy-2022.pdf>, retried October 3, 2023.

## ECONOMIC CONTRIBUTION

The University of Colorado’s direct expenditures led to \$10.8 billion in economic activity in the state of Colorado in FY2022-23, resulting from the work of 31,156 regular faculty and staff. These faculty and staff participate in activities ranging from teaching and research to administrative and support, operating one of the largest institutions in the state of Colorado. The majority of economic activity is, in fact, driven by employee compensation (salaries and benefits).

Sliced by function, sponsored programs expenditures (i.e., research) accounted for more than \$3.2 billion in total economic activity in Colorado, excluding the long-term benefits of scientific discoveries and technology commercialization via licenses, patents, and spinoff companies.

**Table 15: University of Colorado Economic Contribution, FY2022-23**

Impact	Employment	Labor Income \$B	Value Added \$B	Output \$B
Direct	31,156	\$3.6	\$3.6	\$5.2
Indirect/Induced	28,436	\$1.8	\$3.4	\$5.6
<b>Total</b>	<b>59,592</b>	<b>\$5.4</b>	<b>\$7.0</b>	<b>\$10.8</b>

**Table 16: Summary of Research Expenditure Contributions, FY2022-23**

Impact	Employment	Labor Income \$B	Value Added \$B	Output \$B
Direct	8,956	\$1.1	\$1.1	\$1.7
Indirect/Induced	7,277	\$0.5	\$0.8	\$1.5
<b>Total</b>	<b>16,232</b>	<b>\$1.6</b>	<b>\$1.9</b>	<b>\$3.2</b>

**Table 17: University of Colorado Economic Contribution by MSA, FY2022-23**

Location	Employment	Labor Income \$B	Value Added \$B	Output \$B
Boulder MSA	20,644	\$1.6	\$2.2	\$3.5
Colorado Springs MSA	3,873	\$0.2	\$0.3	\$0.5
Denver MSA	33,942	\$3.5	\$4.4	\$6.5
All Other CO MSAs	1,134	\$0.1	\$0.1	\$0.2
<b>Total</b>	<b>59,592</b>	<b>\$5.4</b>	<b>\$7.0</b>	<b>\$10.8</b>

## CONCLUSION

The University of Colorado remains an economic engine in the state of Colorado through educational, research, operational, and ancillary activities. Students enroll at the university to earn an education, many of whom will enter the Colorado workforce. This labor force not only fills local employment and entrepreneurial needs, but also becomes a draw for businesses looking to locate in Colorado. Likewise, while research is driven off the interests and expertise of faculty, it also provides competitive economic attributes that differentiate Colorado from other states—as seen in such industry concentrations as the Professional, Scientific, and Technical Services Sector; the Information Sector; and in aerospace, cleantech, and biotechnology clusters. This research activity exists in a collaborative triangle of universities, businesses, and federal research facilities in the state, occasionally resulting in the creation of companies and the licensing of technologies from the university.

The economic impacts of the university are ultimately driven by the education and research missions of the university, which result in both operating and capital expenditures in the state of Colorado. The \$5.2 billion in direct spending related

to the university operations and capital projects, in addition to student spending, resulted in economic activity of \$10.8 billion. Comparatively, state funding for the university topped \$281.8 million in FY2022-23, lending to the substantial economic activity generated by the university. This is not to say that additional dollars invested by the state will result in similar returns on investment. While state funding is often a match for federal dollars, the amount of additional federal funding is limited, and may even decline in coming years.

This operating and capital spending occurs primarily with private companies in the state, ranging from utilities to food suppliers. Direct and indirect employment supported by university operations, excluding the count of student workers, totaled 59,600.

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## BIBLIOGRAPHY

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- Beacon Economics (2016). University of Southern California *Economic & Social Impact Analysis*. [https://about.usc.edu/files/2017/03/USC\\_EIR\\_FINAL.pdf](https://about.usc.edu/files/2017/03/USC_EIR_FINAL.pdf). Retrieved July 24, 2023.
- Beacon Economics (2021). *Systemwide Economic, Fiscal, and Social Impact Analysis 2021*. <https://universityofcalifornia.edu/sites/default/files/economic-impact-report-2021.pdf>. Retrieved July 24, 2023.
- Bureau of Economic Analysis, Regional Economic Accounts. Retrieved October 3, 2023.
- Bureau of Labor Statistics, Current Employment Statistics. Retrieved October 3, 2023.
- Bureau of Labor Statistics, Local Area Unemployment Statistics. Retrieved October 3, 2023.
- Bureau of Labor Statistics, Quarterly Census of Employment and Wages. Retrieved October 3, 2023.
- CAI Community Attributes (2015). *Washington State University: Economic Reach and Impact*. <https://presidentialexsearch.wsu.edu/economic-impact/#:~:text=An%20independent%20economic%20impact%20study,nearly%20%243.4%20billion%20in%202013>. Retrieved July 24, 2023.
- Center for Competitiveness and Prosperity Research (2022). *Economic Impact of Arizona State University, Fiscal Year 2022*. <https://economist.asu.edu/sites/default/files/2022-12/ASU%20Impact%20FY22.pdf>. Retrieved July 24, 2023.
- Duy, Tim. (2020). *University of Oregon Impact, 2019-2020 Update*. [https://gcr.uoregon.edu/sites/gcr2.uoregon.edu/files/2019-2020impact\\_tim\\_duy.docx](https://gcr.uoregon.edu/sites/gcr2.uoregon.edu/files/2019-2020impact_tim_duy.docx). Accessed July 24, 2023.
- Economic and Fiscal Impact Study: Colorado State University System. (2021). <https://csusystem.edu/wp-content/uploads/sites/7/2021/02/econ-impact-2021-report-final-21.pdf>. Retrieved July 24, 2023.
- Elliot D. Pollack & Company and The Maguire Company (2019). *Economic and Fiscal Impact of the Arizona Public University Enterprise*. <https://www.azregents.edu/sites/default/files/reports/Economic-Impact-Report-FY17.pdf>. Retrieved July 24, 2023.
- Joint Budget Committee. Appropriations Report, Fiscal Year 2022-23. <https://leg.colorado.gov/publications/appropriations-report-fiscal-year-2022-23> (page 65), accessed October 3, 2023.
- Kem C. Gardner Policy Institute. (2020). Economic Contribution of the University of Utah. <https://gardner.utah.edu/wp-content/uploads/EconCont-UProper.pdf?x71849#:~:text=The%20University%20of%20Utah%20directly,largest%20employer%20in%20the%20state>. Retrieved October 3, 2023.
- Institute for Economic Development, The University of Texas at San Antonio. *A Study of the Economic Impact of The University of Texas System*. <https://tbed.org/wp-content/uploads/UTEcolImpact-FullReport030905.pdf>. Retrieved October 3, 2023.
- Oregon State University Leadership (2018). [https://leadership.oregonstate.edu/sites/leadership.oregonstate.edu/files/president-documents/2018\\_impact\\_report.pdf](https://leadership.oregonstate.edu/sites/leadership.oregonstate.edu/files/president-documents/2018_impact_report.pdf), *Oregon State University: Impact 2018*.

Parker Philips and University of Washington (2019). *The Economic Contribution of the University of Washington to the Statewide and Local Communities*. <https://s3-us-west-2.amazonaws.com/uw-s3-cdn/wp-content/uploads/sites/18/2019/12/13223227/UWFINALEIR2019-compressed.pdf>. Retrieved July 24, 2023.

The Pacific Partners Consulting Group, Inc. (2008). *Stanford University Economic Impact Study 2008*. <https://oga.stanford.edu/sites/g/files/sbiybj21581/files/media/file/economic-impact-study.pdf>. Retrieved July 24, 2023.

UMass Donahue Institute Economic and Public Policy Research (2020). *FY18 University of Massachusetts Economic Contribution Analysis*. [https://donahue.umass.edu/documents/FY18\\_Economic\\_Contribution\\_Analysis\\_of\\_the\\_UMass\\_System.pdf](https://donahue.umass.edu/documents/FY18_Economic_Contribution_Analysis_of_the_UMass_System.pdf)  
[C:\Users\jadu5995\Downloads\FY18 Economic Contribution Analysis of the UMass System\[1\].pdf](C:\Users\jadu5995\Downloads\FY18 Economic Contribution Analysis of the UMass System[1].pdf). Retrieved July 24, 2023.

University of Colorado Anschutz Medical Campus, CU Innovations Annual Report 2022, <https://www.cuanschutz.edu/cu-innovations/cu-innovations/in-the-news/annual-report/2022>, retrieved October 3, 2023.

University of Colorado Foundation, Consolidated Financial Report, June 30, 2022, <https://giving.cu.edu/sites/default/files/pdfs/cuf-audited-financial-statements-fy-2022.pdf>, retrieved October 3, 2023.

University of Colorado, Budget and Finance Office. Degrees Awarded Data. <https://www.cu.edu/budgetpolicy/degrees-awarded-data>, retrieved October 2, 2023.

University of Colorado, Budget and Finance Office. Student FTE. <https://www.cu.edu/student-fte>, retrieved October 3, 2023.

University of Colorado, Budget and Finance Office, CU Data Made Simple. Student Headcount Enrollment. <https://www.cu.edu/student-headcount-enrollment>, retrieved October 3, 2023.

University of Colorado, Budget and Finance Office, CU Data Made Simple. Faculty and Staff Headcount. <https://www.cu.edu/budgetpolicy/cu-data>, retrieved October 3, 2023.

University of Colorado, Annual Financial Report June 30, 2023 and 2022. <https://www.cu.edu/doc/cu-afr-finalpdf>. Retrieved October 5, 2023.

University of Colorado Advancement | CU Foundation. <https://advancement.cu.edu/financials>, retrieved October 3, 2023.

University of Colorado. Sponsored Research. <https://www.cu.edu/sponsored-research>. Retrieved October 3, 2023.

Venture Partners at CU Boulder, 2022 Venture Partners Annual Report. <https://www.colorado.edu/venturepartners/about-us/2022-venture-partners-annual-report>, retrieved October 3, 2023.



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## APPENDIX 1: LITERATURE REVIEW OF UNIVERSITY ECONOMIC IMPACT STUDIES

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### **Arizona State University** (*Center for Competitiveness and Prosperity Research 2022*)

Arizona State University (ASU) directly employed 19,652 faculty, students, and staff in FY2022 and accounted for a total of 55,712 Arizona jobs. This includes an approximately 11,357 jobs created in and around the campus due to spending by faculty, students, and visitors. The university also generated \$3.2 billion in labor income. ASU accounted for nearly \$4.7 billion in state GDP, with \$1.8 billion attributed to university payroll and employment and \$1.2 billion attributed to student spending.

### **Oregon State University** (*Oregon State Leadership 2018*)

Oregon State University (OSU) economic impact in the state of Oregon in 2017 was over \$2.3 billion and 30,452 jobs. Gross output within the university accounted for \$1.46 billion in Oregon, with about \$726 million in payroll. Nearly 19,000 of those jobs were directly hired by Oregon State consisting of students and faculty. OSU directly accounted for \$989 million to the Oregon economy as well as \$155 million in indirect and \$1.2 billion in induced impacts. OSU student spending averaged around \$12,540 per student and led to \$485 million in gross output. The economic impact for Benton and Linn counties was \$1.6 billion and the total impact for labor was 20,691 jobs. Within Portland, the university also accounted for \$281.8 million and 3,884 jobs.

### **Stanford** (*The Pacific Partners Consulting Group, Inc. 2008*)

Stanford University, which consists of seven schools, employed 1,807 faculty and over 20,000 total employees in 2006, making it the largest employer in the region. The university also brought in revenue of \$4.5 billion and spent more than \$1.6 billion the local area in 2006 according to the economic impact study conducted in 2008. The study estimated that Stanford employees spent \$1.2 billion in the surrounding communities. Stanford University contributed \$2.1 billion in direct expenditures to Santa Clara and San Mateo counties, \$609 million of which was from Stanford hospitals. Students and visitors spent a combined \$348 million in the surrounding communities as well.

### **University of Arizona** (*Elliot D. Pollack & Company and The Maguire Company 2019*)

The University of Arizona (UA) accounted for a total economic output of \$11.1 billion through its employees, students, and visitors according to a study based on FY2017. The university employed 36,725 people, and it is estimated that the university created an additional 47,630 jobs in the Arizona economy. A total of \$4.6 billion in labor income and \$6.0 billion in value added was generated by the university. It is also estimated that the Arizona Public University Enterprise provides \$180.8 million in primary fiscal impacts and \$270.8 million in secondary fiscal impacts. This amounts to a total of \$451.7 million in state, county, city, and other local taxes from these primary and secondary sources.

### **University of California System** (*Beacon Economics 2021*)

The University of California System had a total impact of \$82 billion on the California economy during the 2018-2019 fiscal year according to a study conducted in 2021 by Beacon Economics. UC's output is composed of \$41.7 billion in direct effects and \$40.3 billion in indirect and induced effects. 529,119 full-time jobs are supported throughout California, and \$82.1 billion in output as a result of UC spending, and over 310,000 people are employed directly by the university system. As of 2020, UC was the third largest employer in Los Angeles County. The UC System had the largest absolute impacts on the Bay Area, Los Angeles, and the San Diego-Imperial region.

### **University of Massachusetts** (*UMass Donahue Institute Economic and Public Policy Research 2020*)

The University of Massachusetts System generated \$7.5 billion in economic activity and supported 49,315 jobs (17,622 direct) as the second largest employer in the state in FY2018. UMass-Boston, a selected peer of CU Denver and UCCS, calculated its impact at \$1.2 billion, and UMass-Lowell, a CU Denver peer, calculated its impact at \$1.2 billion. The UMass system consists of UMass Amherst, UMass Boston, UMass Dartmouth, UMass Lowell, and UMass Medical School. UMass System revenues are 72% operating revenues and 28% state revenues.

**University of Oregon** (*Duy 2020*)

The University of Oregon (UO) contributed \$2.6 billion to Oregon's economy in 2019–20 according to a study conducted by UO economics professor, Tim Duy. A total of \$1.2 billion of this amount was new economic activity that would not have happened without the university. In 2021, UO directly employed approximately 9,300 employees, and the university's direct and indirect spending supported nearly 26,000 jobs in Oregon. The total amount of spending associated with the university grew by 16.9% since FY2019. In 2014, household earnings generated from the UO's payroll and spending generated \$42.7 million in tax revenue.

**University of Southern California** (*Beacon Economies 2016*)

The University of Southern California (USC) was responsible for about \$8.1 billion in total output in California in the 2015-2016 fiscal year. Direct effects amounted to \$4.2 billion, \$1.9 billion were indirect effects, and \$2.0 billion were induced effects. USC also generated \$455 million in tax revenues for local and state governments according to the economic impact study conducted in 2016 by Beacon Economies. The university employed 30,907 people directly, equating to \$2.9 billion in payroll. It also had indirect and induced effects of 10,171 and 12,347 jobs respectively. A total of 53,425 jobs are supported through USC. Within California the vast majority of those jobs, 42,315, are located in Los Angeles County, and all of the jobs are located within California. Direct spending in the state of California provided by USC totaled over \$3.7 billion in the 2015-2016 fiscal year.

**University of Texas** (*Institute for Economic Development 2005*)

The University of Texas System (UTS) comprises nine academic and six health-related institutions within the state of Texas. In the 2004 fiscal year, UTS had a total economic impact of \$12.8 billion, consisting of \$8.7 billion in direct spending and \$4.1 billion in indirect spending. UTS accounts for total student enrollment of 177,676, and more than 88,035 faculty and staff. Through its total economic activity, UTS supports 215,715 total jobs, 103,544 in academic-related institutions, and for every on-campus job, and additional 1.5 jobs are added. The students enrolled at the UT System spent over a combined \$1.9 billion in their local economies. The Houston-Galveston area gains the biggest impact from the UT System with an added \$5.57 billion in Output and 79,587 in supported employment.

**University of Utah** (*Kem C. Gardner Policy Institute 2020*)

The University of Utah directly and indirectly supported \$11 billion in Output, \$6.3 billion in state GDP, supported 83,100 jobs, and generated \$4.6 billion in earnings in 2019. The University is the state's largest employer, with 39,300 employees and accounting for 0.9% of state employment – the most among public PAC-12 Universities. In terms of total economic impact, Operations accounted for \$10.3 billion in output, 79,000 jobs, and \$4.4 billion in earnings; construction accounted for \$607 million in output, 3,500 jobs, and \$189 million in earnings; and nonresident student spending accounted for \$79 million in output, 600 jobs, and \$22 million in earnings.

**University of Washington** (*Parker Philips and University of Washington 2019*)

The University of Washington (UW) generated \$15.7 billion in FY2018 throughout its three campuses according to an economic impact study conducted by Parker Philips. The direct impact of UW in the state of Washington was \$7.8 billion while the indirect/induced impact was \$7.9 billion. Spending from students and visitors to the campus total 1.9 billion and added over 126 million in state and local taxes. The university directly employed 43,536 people, making UW the fifth-largest employer in the state. Overall, UW was responsible for supporting 100,520 jobs across the state, or roughly 2.7% of total jobs in Washington, which equates to 1 of every 37 jobs in the state. UW accounted for \$249.4 million in direct tax revenue and \$503.3 million in indirect/induced tax revenue to state and local governments.

**Washington State University** (*CAI Community Attributes 2015*)

In FY2014, Washington State University (WSU) employed 17,970 workers, with an average annual employment of 11,900 direct jobs. There are economic impacts through all major sectors of Washington's economy. Producer and transport services received the largest labor income impact, and consumer services was impacted mainly through employment. In FY2014, WSU employee compensation totaled \$598 million, including both wage and salary, and employer contributions to benefits. Through indirect impacts, the university supported an additional 8,700 jobs and \$101 million in labor income. Another \$311 million was generated in induced effects. WSU generated almost \$19 for every \$1 the state invested in the university. WSU generated a total economic impact of \$3.4 billion within the state of Washington in FY2014.

**Colorado State University** (*Economic and Fiscal Impact Study: Colorado State University System 2021*)

The Colorado State University System which consists of three main campuses supported nearly 23,000 jobs and more than \$237.7 million in state income and sales tax revenue in FY2019-20. The combined campuses directly employ 8,989 workers with a payroll of almost \$752 million. The Fort Collins area receives more than \$36 million in local sales and use tax revenues from CSU related operations, 1.2 billion in total expenditures and more than 17,300 jobs are supported in the city a year. The Pueblo area receives around \$2.4 million in local sales and revenue, 90 million in total expenditures, and impacts almost 1,500 jobs.

## APPENDIX 2: UNIVERSITY OF COLORADO BOULDER IMPACT

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The Boulder Metropolitan Statistical Area (MSA) recorded 206,600 employees in August 2023 (7.1% of Colorado’s total) and \$30.2 billion in total nominal GDP in 2021 (7.7% of Colorado’s total). Funding for university operations and capital spending is by and large nonlocal, resulting in an infusion of investment into the local economy.

### ***Enrollment***

In Fall 2023, CU Boulder enrolled 37,485 students (headcount). On a full-time equivalent (FTE) basis, CU Boulder enrolled 32,132 students in FY2022-23.

### ***Alumni***

CU Boulder accounts for at least 154,100 alumni living in the state of Colorado, including business leaders, policymakers, educators, health care workers, engineers, and others. Nearly 55,600 alumni from University of Colorado campuses live in the Boulder MSA.

### ***Employment and Wages***

CU Boulder employed 19,189 faculty, staff, and students in FY2022-23. Based on employment records, nearly 90% of these employees live in Colorado, with some of the nonresident employment attributable to student workers citing their parents’ out-of-state home address. CU Boulder employees living and working in the Boulder MSA totaled 10,495 in FY2022-23, with an additional 867 individuals living in the Boulder MSA but working on other campuses. Excluding the number of student workers (e.g., work-study recipients), CU Boulder was estimated to employ 11,626 individuals in FY2022-23. Gross wages and benefits paid to faculty, staff, and students totaled \$1.1 billion in FY2022-23.

### ***Total Operating and Capital Spending***

Direct spending by the University of Colorado Boulder totaled an estimated \$700 million in FY2022-23. Budgeted costs for construction projects as of the end of FY2023 for CU Boulder were estimated at \$133 million—these projects may span several years.

### ***Student Spending and Visitors***

Based on a survey of students, CU Boulder recorded \$777 million in FY2022-23 in nonlocal student and visitor spending in Colorado. This includes nonresident and resident students who indicated that they would have left Colorado had they not attended CU, as well as students’ visitors. Spending included rents, groceries, transportation, childcare, recreation, health care, and other.

### ***Research***

Research draws federal, state, and private funding. University research leads to immeasurable scientific discoveries and societal benefits that range from medicine and energy to space and weather. To understand just a slice of the benefits, one could look to licensed technologies in the Venture Partners portfolio, or to the spinoff companies that dot the Colorado landscape. However, by the nature of the work, research begets research, and is thus a perpetual building block of knowledge that propels the next scientific discovery. CU Boulder research expenditures (including equipment, construction, operations, and labor) were estimated at \$643 million in FY2022-23. The economic contribution of these research activities totaled \$1.2 billion on the Colorado economy in FY2022-23.

### ***Economic Contribution***

CU Boulder had the largest economic contribution on the Boulder MSA, but businesses in the metropolitan area also supply goods and services to the other University of Colorado campuses. Additionally, some employees live in the Boulder MSA but work on another campus, which creates an economic boost from their household spending. The economic contribution of CU Boulder on the state of Colorado totaled \$4.3 billion in FY2022-23.

**Table 18: CU Boulder, Impact on Colorado, FY2022-23**

<b>Impact</b>	<b>Employment</b>	<b>Labor Income \$B</b>	<b>Value Added \$B</b>	<b>Output \$B</b>
Direct	11,626	\$1.1	\$1.1	\$1.8
Indirect/Induced	12,586	\$0.7	\$1.5	\$2.5
<b>Total</b>	<b>24,212</b>	<b>\$1.9</b>	<b>\$2.6</b>	<b>\$4.3</b>

**Table 19: CU Boulder Research, Impact on Colorado, FY2022-23**

<b>Impact</b>	<b>Employment</b>	<b>Labor Income \$B</b>	<b>Value Added \$B</b>	<b>Output \$B</b>
Direct	4,218	\$0.4	\$0.4	\$0.6
Indirect/Induced	2,704	\$0.2	\$0.3	\$0.5
<b>Total</b>	<b>6,922</b>	<b>\$0.6</b>	<b>\$0.7</b>	<b>\$1.2</b>

### APPENDIX 3: UNIVERSITY OF COLORADO COLORADO SPRINGS IMPACT

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The Colorado Springs Metropolitan Statistical Area (MSA) recorded 321,500 employees in August 2023 (11% of Colorado's total) and \$40.3 billion in total nominal GDP in 2021 (10.2% of Colorado's total). Funding for university operations and capital spending is by and large nonlocal, resulting in an infusion of investment into the local economy.

#### ***Enrollment***

In Fall 2023, UCCS enrolled 10,678 students (headcount). On a full-time equivalent (FTE) basis, UCCS enrolled 8,931 students in FY2022-23.

#### ***Alumni***

UCCS accounts for at least 38,900 alumni living in the state of Colorado, including business leaders, policymakers, educators, health care workers, engineers, and others. Approximately 37,500 alumni from University of Colorado campuses live in the Colorado Springs MSA.

#### ***Employment and Wages***

UCCS employed 3,481 faculty, staff, and students in FY2022-23. Based on employment records, 92% of these employees live in Colorado, with some of the nonresident employment attributable to student workers citing their parents' out-of-state home address. UCCS employees living and working in the Colorado Springs MSA totaled 2,682 in FY2022-23; an additional 621 individuals lived in the Colorado Springs MSA, but worked on other campuses. Excluding the number of student workers (e.g., work-study recipients), UCCS was estimated to employ 1,976 individuals in FY2022-23. Gross wages and benefits paid to faculty, staff, and students totaled \$142.8 million in FY2022-23.

#### ***Nonlabor Operating and Capital Spending***

Direct spending by the University of Colorado Colorado Springs totaled an estimated \$73 million in FY2021-22. Budgeted costs for construction projects as of the end of FY2023 for UCCS were estimated at \$71 million—these projects may span several years.

#### ***Student Spending and Visitors***

Based on a survey of students, UCCS recorded \$106 million in FY2022-23 in nonlocal student and visitor spending in Colorado. This includes nonresident and resident students who indicated that they would have left Colorado had they not attended CU, as well as students' visitors. Spending included rents, groceries, transportation, childcare, recreation, health care, and other.

#### ***Research***

Research draws federal, state, and private funding. University research leads to immeasurable scientific discoveries and societal benefits that range from medicine and energy to space and weather. To understand just a slice of the benefits, one could look to licensed technologies in the Venture Partners portfolio, or to the spinoff companies that dot the Colorado landscape. However, by the nature of the work, research begets research, and is thus a perpetual building block of knowledge that propels the next scientific discovery. Research expenditures (including equipment, construction, operations, and labor) at UCCS were estimated at \$47.1 million in FY2022-23. The economic contribution of these research activities totaled \$123.1 million on the Colorado economy in FY2022-23.

#### ***Economic Contribution***

UCCS had the largest economic contribution on the Colorado Springs MSA, but businesses in the metropolitan area also supply goods and services to the other University of Colorado campuses. Additionally, some employees live in the Colorado Springs MSA but work on another campus, which creates an economic boost from their household spending. The economic contribution of UCCS on the state of Colorado totaled \$559 million in FY2022-23.

**Table 20: UCCS, Impact on Colorado, FY2022-23**

Total	Employment	Labor Income \$M	Value Added \$M	Output \$M
Direct	1,976	\$142.8	\$142.8	\$216.2
Indirect/Induced	1,873	\$99.5	\$202.5	\$343.6
<b>Total</b>	<b>3,849</b>	<b>\$242.3</b>	<b>\$345.3</b>	<b>\$559.8</b>

**Table 21: UCCS Research, Impact on Colorado, FY2022-23**

Total	Employment	Labor Income \$M	Value Added \$M	Output \$M
Direct	646	\$26.8	\$26.8	\$47.1
Indirect/Induced	394	\$25.3	\$41.4	\$76.0
<b>Total</b>	<b>1,040</b>	<b>\$52.2</b>	<b>\$68.2</b>	<b>\$123.1</b>

## APPENDIX 4: UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS IMPACT

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The Denver Metropolitan Statistical Area (MSA) recorded 1.6 million employees in August 2023 (54.8% of Colorado's total) and \$228.1 billion in total nominal GDP in 2021 (57.8% of Colorado's total). Funding for university operations and capital spending is by and large nonlocal, resulting in an infusion of investment into the local economy.

### ***Enrollment***

In Fall 2023, CU Anschutz enrolled 4,494 students (headcount). On an FTE basis, CU Anschutz enrolled 5,936 students.

### ***Alumni***

CU Anschutz at least 32,400 alumni living in the state of Colorado, including business leaders, policymakers, educators, health care workers, engineers, and others. Nearly 178,100 alumni from University of Colorado campuses live in the Denver MSA.

### ***Employment and Wages***

CU Anschutz employed 15,300 faculty, staff, and students in FY2022-23. Based on employment records, 94% of these employees live in Colorado, with some of the nonresident employment attributable to student workers citing their parents' out-of-state home address. CU Anschutz employees living and working in the Denver MSA totaled 13,026 in FY2022-23, with an additional 9,168 individuals living in the Denver MSA, but working on other campuses. Excluding the number of student workers (e.g., work-study recipients), CU Anschutz employed 13,893 individuals in FY2022-23. Gross wages and benefits paid to faculty, staff, and students totaled \$2.05 billion in FY2022-23.

### ***Nonlabor Operating and Capital Spending***

Direct spending (including construction but excluding research) by CU Anschutz totaled \$353 million in FY2022-23. Budgeted costs for construction projects as of the end of FY2023 for the Anschutz campus were estimated at \$16 million—these projects may span several years. The Denver MSA benefits from regional construction spending by the other campuses.

### ***Student Spending and Visitors***

Based on a survey of students, CU Anschutz recorded \$164 million in nonlocal student and visitor spending in Colorado in FY2022-23. This includes nonresident and resident students who indicated that they would have left Colorado had they not attended CU, as well as students' visitors. Spending included rents, groceries, transportation, childcare, recreation, health care, and other.

### ***Research***

Research draws federal, state, and private funding. University research leads to immeasurable scientific discoveries and societal benefits that range from medicine and energy to space and weather. To understand just a slice of the benefits, one could look to licensed technologies in the CU Innovations portfolio, or to the spinoff companies that dot the Colorado landscape. Research expenditures, including labor, by CU Anschutz, totaled an estimated \$1 billion in FY2022-23. The economic contribution of these activities on the Colorado economy totaled \$1.7 billion.

### ***Economic Contribution***

The Anschutz Medical Campus had the largest economic contribution on the Denver MSA, but businesses in the metropolitan area also supply goods and services to the other University of Colorado campuses. Additionally, some employees live in the Denver MSA but work on another campus, which creates an economic boost from their household spending. Through research, teaching, operations, construction, student spending, and visitation, the economic contribution of the Anschutz Medical Campus was \$5 billion.



**Table 22: CU Anschutz, Impact on Colorado, FY2022-23**

Total	Employment	Labor Income \$B	Value Added \$B	Output \$B
Direct	13,893	\$2.1	\$2.1	\$2.7
Indirect/Induced	11,469	\$0.8	\$1.4	\$2.3
<b>Total</b>	<b>25,361</b>	<b>\$2.8</b>	<b>\$3.4</b>	<b>\$5.0</b>

**Table 23: CU Anschutz Research, Impact on Colorado, FY2022-23**

Total	Employment	Labor Income \$B	Value Added \$B	Output \$B
Direct	3,420	\$0.6	\$0.6	\$1.0
Indirect/Induced	3,918	\$0.3	\$0.5	\$0.8
<b>Total</b>	<b>7,337</b>	<b>\$0.9</b>	<b>\$1.1</b>	<b>\$1.7</b>

***Additional Economic Impacts from the Anschutz Medical Campus***

University of Colorado Medicine (CU Medicine) provides administrative and business operations support for clinical healthcare provides at the University of Colorado School of Medicine. The Anschutz Medical Campus is also the location of University of Colorado Hospital (UCH) and Children’s Hospital Colorado (CHCO) with CU Anschutz faculty providing patient care at these facilities. While operations are concentrated on the Anschutz Medical Campus, the economic contribution extends well beyond the Denver MSA and across Colorado. These hospitals on the CU Anschutz Campus collectively reported \$3 billion in direct economic activity in the state, nearly 22,000 employees, and \$1.4 billion in salaries. The economic contribution of these entities is estimated at \$6.5 billion to the Colorado economy in FY2022-23.

**Table 24: UCH AND CHCO Impact on Colorado (Direct, Indirect, and Induced), FY2022-23**

Impact	Employment (Direct and Supported)	Labor Income \$B	Value Added \$B	Output \$B
Anschutz Campus Hospitals Impact	38,583	\$2.7	\$3.4	\$6.5

## APPENDIX 5: UNIVERSITY OF COLORADO DENVER IMPACT

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The Denver Metropolitan Statistical Area (MSA) recorded 1.6 million employees in August 2023 (54.8% of Colorado's total) and \$228.1 billion in total nominal GDP in 2021 (57.8% of Colorado's total). Funding for university operations and capital spending is by and large nonlocal, resulting in an infusion of investment into the local economy.

### ***Enrollment***

In Fall 2023, CU Denver enrolled 13,968 students (headcount). On a full-time equivalent (FTE) basis, CU Denver enrolled 11,148 students. CU Anschutz enrolled 4,494 students (headcount). On an FTE basis, CU Anschutz enrolled 5,936 students.

### ***Alumni***

CU Denver accounted for 81,000 alumni living in the state of Colorado, including business leaders, policymakers, educators, health care workers, engineers, and others. Nearly 178,100 alumni from University of Colorado campuses live in the Denver MSA.

### ***Employment and Wages***

CU Denver employed 4,677 faculty, staff, and students in FY2022-23. Based on employment records, 91% of these employees live in Colorado, with some of the nonresident employment attributable to student workers citing their parents' out-of-state home address. CU Denver, CU Anschutz, and System employees living and working in the Denver MSA totaled 3,620 in FY2022-23, with an additional 18,574 individuals living in the Denver MSA, but working on other campuses. Excluding the number of student workers (e.g., work-study recipients), CU Denver employment totaled 3,069 individuals in FY2022-23. Gross wages and benefits paid to faculty, staff, and students totaled \$222.4 million in FY2022-23.

### ***Nonlabor Operating and Capital Spending***

Direct spending (including construction but excluding research) by CU Denver totaled \$38.7 million in FY2022-23. Budgeted costs for construction projects as of the end of FY2023 for the Denver campus were estimated at \$81 million—these projects may span several years. The Denver MSA benefits from regional construction spending by the other campuses.

### ***Student Spending and Visitors***

Based on a survey of students, CU Denver recorded \$164 million in nonlocal student and visitor spending in Colorado in FY2022-23. This includes nonresident and resident students who indicated that they would have left Colorado had they not attended CU, as well as students' visitors. Spending included rents, groceries, transportation, childcare, recreation, health care, and other.

### ***Research***

Research draws federal, state, and private funding. University research leads to immeasurable scientific discoveries and societal benefits that range from medicine and energy to space and weather. To understand just a slice of the benefits, one could look to licensed technologies in the CU Innovations and Venture Partners portfolios, or to the spinoff companies that dot the Colorado landscape. Research expenditures, including labor, by CU Denver, totaled an estimated \$54 million in FY2022-23. The economic contribution of these activities on the Colorado economy totaled \$100.7 million.

### ***Economic Contribution***

CU Denver had the largest economic contribution on the Denver MSA, but businesses in the metropolitan area also supply goods and services to the other University of Colorado campuses. Additionally, some employees live in the Denver MSA but work on another campus, which creates an economic boost from their household spending. Through research, teaching, operations, construction, student spending, and visitation, the economic contribution of CU Denver on the state of Colorado totaled \$683.7 billion in FY2022-23.

**Table 25: CU Denver, Impact on Colorado, FY2022-23**

Total	Employment	Labor Income \$M	Value Added \$M	Output \$M
Direct	3,069	\$222.4	\$222.4	\$267.2
Indirect/Induced	2,055	\$125.2	\$267.6	\$416.5
<b>Total</b>	<b>5,123</b>	<b>\$347.6</b>	<b>\$490.0</b>	<b>\$683.7</b>

**Table 26: CU Denver Research, Impact on Colorado, FY2022-23**

Total	Employment	Labor Income \$M	Value Added \$M	Output \$M
Direct	672	\$46.8	\$46.8	\$53.0
Indirect/Induced	243	\$16.1	\$28.4	\$47.7
<b>Total</b>	<b>915</b>	<b>\$63.0</b>	<b>\$75.2</b>	<b>\$100.7</b>