COLORADO MESA.

U N I V E R S I T Y

# REGIONAL IMPACT STUDY 2023







# COLORADO MESA.

## REGIONAL Impact Study

2023

by Nathan Perry, PhD and Johnny Snyder, PhD

Colorado Mesa University, Davis School of Business



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## REGIONAL IMPACT STUDY

### **PURPOSE**

The purpose of this report is to narrate both the tangible and intangible impacts of Colorado Mesa University (CMU) to the region, economy, and to society. The first part of this report explains what the University is about and how it has grown, including CMU's values, student population, faculty, athletics, degrees, technology, and academics. The second half of this report details the economic impact of the University using IMPLAN, an economic impact software. The second section discusses both these tangible as well as the intangible and immeasurable positive impacts of CMU on the region.

### Colorado Mesa University and the Grand Junction Economy

Colorado Mesa University is a cultural, educational, and economic center in the Grand Junction community. CMU is continuously attracting people to the Grand Junction area for educational opportunities, athletic events, theater and music performances, conferences, and other special events. CMU has provided the residents of Western

Colorado access to higher education since 1925 and over the years has expanded the dimension of educational offerings as it has grown and accepted new roles and responsibilities to the people of the region, the nation, and the world.

CMU has held this central location in the Grand Junction community for nearly 100 years and through 11 presidents. The statutory mission of the institution to "serve as a regional education provider" has remained the same over this 100 years for CMU's 14 county service region (figure 1).1

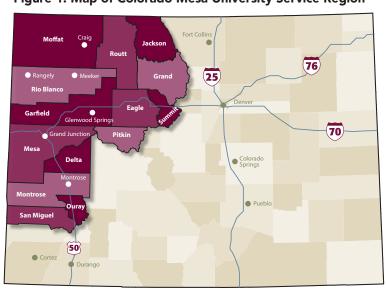


Figure 1: Map of Colorado Mesa University Service Region

### **CMU VALUES**

In 2021 a new administrative team took

the helm of CMU with an updated values system that the University and its employees now aspire to.

The new vision for CMU is summarized as a "Human-Scale University" — a university that serves as a model of the world we want to create — a world where people aspire to love, extend dignity, choose courage, demonstrate humility, develop resiliency, celebrate curiosity, and use power for good. In short, CMU strives to be an example of a model community of the future. As such, new dimensions of what a mid-sized, regional, educational institution needs to be to meet these new visions must be explored.

CMU's current institutional mission is as follows:

As a Human Scale University, our mission is to provide an affordable and accessible education and form meaningful and mutually enriching partnerships that support the well-being and vibrancy of our community.

<sup>1</sup> The service region for CMU includes the following counties: Delta, Eagle, Garfield, Grand, Jackson, Mesa, Moffat, Montrose, Ouray, Pitkin, Rio Blanco, Routt, San Miguel, and Summit. Western Colorado Community College's service region is a subset of that group: Delta, Mesa, Montrose, Ouray, and San Miguel Counties.

Further, CMU has as its core values:

- Love Extending oneself for nurturing the growth of self and others.
- Dignity Respecting the intrinsic value of each person and believing that others act from a foundation of goodwill.
- Courage Taking risks in the pursuit of new possibilities.
- Humility Suspending one's ego and pride to recognize that no idea is perfect and being open to the input of others.
- Resilience Investing in the future by adapting to changes, overcoming challenges, and pursuing opportunity.
- Curiosity Cultivating awe and exploring the unknown.
- Power The strength to act collaboratively with individual agency to achieve our goals.

These added values yield new dimensions for Colorado Mesa University to explore moving forward.

These added values yield new dimensions for Colorado Mesa University to explore moving forward. For example, the partnership between Grand Junction and CMU that houses the Eureka! McConnell Science Museum in Confluence Hall enhances the values of curiosity and power to increase the interest in STEAM (science,

technology, engineering, art, and mathematics) subjects in the Grand Junction community<sup>2</sup>.

### **Staying True to** Our Values with the **CMU Promise**

Learn all about the CMU Promise and watch the announcement made by CMU President John Marshall and local leaders. \*Update: Since

this announcement, the CMU Board of Trustees and President Marshall have expanded the CMU Promise (2024).





CMU's partnership with the local school district, District 51, exhibits the values of resilience and power, enabling high school students to participate in higher education through the ASCENT, Early Scholars, P-TECH, Technical Scholars and other dual-enrollment opportunities and programs offered through District 51, CMU and CMU Tech3. These programs facilitate the transition of local students into the workforce, supporting community goals.

CMU students exhibit courage as many are first generation students who must navigate the university system and learn how to succeed in higher education. CMU faculty and staff exhibit values of love and dignity as they help these first-generation students to grow and succeed.

Humility is an ever-present value at CMU as students and faculty seek to find and present the truth on matters ranging across the spectrum of subjects taught at CMU. Further complicating this endeavor is change brought about by new technologies such as artificial intelligence which must be assessed, explored, and managed in the academic environment.

Finally, power is achieved when a student graduates. Many faculty and staff spend countless hours working with students to be successful in the classroom, successfully managing their school/work/family



The Eureka! McConnell Science Museum in Confluence Hall enhances the values of curiosity and power to increase interest in STEAM subjects.

commitments, and successful in their job search upon graduation. It is truly a community effort to get students ready for the workforce.

### Concurrent Enrollment

Concurrent enrollment allows high school students to earn high school and college credits simultaneously. In May 2023, 78 District 51 (D51) graduates earned a certificate, which enabled them to go directly into the workforce with industry-specific skills. In FY 2022–23, D51 students completed 9,896 credit hours, saving their families over \$3 million in tuition through these CMU D51 partnerships.



<sup>2</sup> https://eurekasciencemuseum.org/

<sup>3</sup> https://www.coloradomesa.edu/tech/concurrent/technical-scholars/index.html

Recent reports have 64% of the employment in Grand Junction listed as white-collar jobs, or jobs that generally require some type of education beyond high school.<sup>4</sup> CMU, with CMU Tech and CMU Montrose, provide educational opportunities for all levels of postsecondary education in the Grand Junction area. By providing educational opportunities that are in-step with regional business demands, CMU assists the Grand Junction community in attracting and retaining business entities to the Western Slope of Colorado.

The major dimensions of CMU that impact the local community include the students who comprise approximately 13.4% of the population of Grand Junction, the faculty and staff of CMU (another 1–2% of the Grand Junction population), the athletic and academic dimensions



CMU President John Marshall and D51 Superintendent Dr. Brian Hill discuss how CMU Tech concurrent programs are making a difference in the lives of high school students

of CMU, and the campus infrastructure and technology dimensions. Each of these contributes to the mission of CMU and to the growth and strength of Grand Junction's community and economic well-being. CMU and Grand Junction are inextricably linked to each other and the mutual synergy between these two entities will enable strong economic growth and economic stability on the Western Slope of Colorado.

### **STUDENTS**

CMU continues its mission as a regional, state serving institution by attracting students from throughout Colorado (84.9 percent of students according to the Fall 2022 census). CMU students are actively engaged in scholarship, athletics, student clubs, and other activities while on campus. While off campus, students participate in community activities such as the Mesa County Fair, internships in local businesses, and bringing national level collegiate bicycle racing to Grand Junction.

The academic experience is central to the mission of CMU, and some of the more popular disciplines students choose to pursue at the baccalaureate level are: <sup>5,6</sup>

- Business
- Biological Sciences
- Exercise Science
- Psychology
- Nursing









Western Colorado Community College was re-branded to CMU Tech to promote the technical education careers available at CMU.

Many of the majors in these disciplines are listed as having "faster than average" or "much faster than average" growth rates by the Bureau of Labor Statistics.<sup>7</sup> This indicates that both CMU and the students are listening and responding to community needs in the labor market.

In addition to CMU and bachelor's degrees, to meet the workforce needs of in-demand career and technical education careers. CMU Tech also provides customized industry and business services for employers. In fact, what was known as Western Colorado Community College was re-branded to CMU Tech in part to show the commitment to programs and resources that promote filling these workforce needs.

- 4 https://www.gjep.org/move-here/demographics/
- 5 CMU Office of Institutional Research, CDS 21-22
- 6 CMU Office of Institutional Research, <a href="https://www.coloradomesa.edu/institutional-research/student-profiles/job-placement-and-professional-exams.html">https://www.coloradomesa.edu/institutional-research/student-profiles/job-placement-and-professional-exams.html</a>
- 7 Bureau of Labor Statistics, <a href="https://www.bls.gov/">https://www.bls.gov/</a>

The student results in Table 1 show how effective the programs are in preparing students for the workforce. CMU graduates work throughout the Grand Junction community in positions ranging from accountant to nurse to transportation worker. Table 1 also highlights the Physician Assistant program which had its first program graduates in 2021, illustrating CMU's commitment and flexibility to staffing high need jobs in the Grand Junction community.

Table 1: Pass Rates for Program Assessment<sup>8</sup>

Program	2022 Licensure/Certification Pass Rate
Nursing - BSN	88.8%
Nursing - AAS	79%
Certified Nurse Aid, State Exam	98.2%
Culinary ServSafe Certification – National Restaurant Association	80%
Medical Laboratory Technician	100%
Peace Officer Standards and Training – State Exam	100%
Radiologic Technology	95%
Physician Assistant – National Certifying Exam	90%

CMU students interact with the community by being a source of labor for local businesses, by spending their paychecks in the local economy, and continuing to professional employment in the region upon graduation. An educated workforce has been shown to increase economic activity and produce higher paying jobs in the local community. Companies desire a talented labor pool from which to draw, and CMU provides this labor pool in many different professions as shown in Table 2. The community contributions of the students at CMU enhance the local economy in multiple dimensions. These include measurable dimensions such as jobs, wages, and number of businesses attracted to Grand Junction due to the presence of a talented labor pool. Students also contribute intangible dimensions to the Grand Junction community such as internships in local businesses, volunteer activities, student projects involving local businesses, and student-centered activities in the community such as homecoming parades and music performances around the community.

Table 2: Professions Where CMU Graduates are Employed in the Grand Junction Community

Accounting	Education	Communication	Computer Sciences
Information Systems	Biologist	Music	Graphic Arts
Cybersecurity	Data Sciences	Outdoor Recreation	Nursing

In addition to the scholarships, grants, and other sources of funding students have for pursuing higher education, CMU has recently partnered with local governments and made a pledge to provide a higher education (up to a first baccalaureate) for Western Slope families earning less than \$65,000 per year. <sup>10</sup> Furthering this initiative, termed "The CMU Promise", CMU announced a similar plan to assist families in Colorado who earn less than \$70,000 per year to send their children to CMU, with CMU covering the cost of their tuition<sup>11</sup>. These initiatives, partnered with the Learn for Less initiative which provides up to a 40% reduction in tuition at CMU Tech, makes a higher education affordable for families not only on the Western Slope of Colorado, but in the entire state of Colorado. These local initiatives illustrate CMU's continuing commitment to the communities and people residing in the state of Colorado.

<sup>8</sup> CMU Office of Institutional Research, <a href="https://www.coloradomesa.edu/institutional-research/student-profiles/job-placement-and-professional-exams.html">https://www.coloradomesa.edu/institutional-research/student-profiles/job-placement-and-professional-exams.html</a>

<sup>9</sup> https://www.epi.org/publication/states-education-productivity-growth-foundations/

<sup>10</sup> CMU Now, https://www.coloradomesa.edu/now/2023/september/cmu-promise-covers-100-of-tuition-for-families-of-modest-income.html

 $<sup>11\ \</sup> https://www.coloradomesa.edu/now/2024/09/cmu-promise-expands-statewide-increasing-access-and-affordability-for-all-colorado-students. html$ 

<sup>12</sup> https://www.coloradomesa.edu/now/2022/05/learn-for-less.html

CMU students also participate in a range of athletic activities, theatrical and musical productions, and conferences, bringing entertainment and information to the Grand Junction community. These activities fill the football stadium on Saturday, pack the theater on the weekend, and bring scholars to the University Center to discuss issues germane to the Western Slope. These activities bring residents and visitors out into the community, stimulating economic activity and showcasing the attributes of the Grand Junction community.

### FACULTY AND STAFF

The number of faculty and staff continues to rise as CMU adds academic programs, infrastructure, and partnership relationships with the Grand Junction community.

The faculty and administration at CMU are aware of trends in the employment marketplace and have





The Davis School of Business, St. Mary's SLC Health Medical Education Center and the Jac Kephart Fine Arts Building are examples of how CMU partners with the Grand Junction community to add new dimensions to CMU programs.

responded appropriately, adding programs in response to community needs. Most recently, this would include an MS in Occupational Therapy, an MSW (master's in social work), an MA in Criminal Justice Leadership and Policy, and a BS in Outdoor Recreation Industry Studies, a growth area for Mesa County as illustrated in The Economic Impact of Outdoor Recreation in Mesa County report which indicates "The total direct economic impact of outdoor recreation, including outdoor recreation businesses and outdoor recreation tourism is \$321,625,137, or 4.8% of GDP." 13 Programs such as these illustrate CMU's commitment to supporting and growing the local economy.

Partnering with the Grand Junction community is a win-win situation for CMU and Grand Junction. As CMU grows and adds new dimensions to its programs and coursework, the Grand Junction community can expand along these dimensions as well. Some recent examples of collaborative growing include the St. Mary's SLC Health Medical Education Center, Chamberlin Cycling Center, Jac Kephart Fine Arts Building, and the Davis School of Business.

Faculty participate in events, competitions, consulting activities, and exhibitions geared toward improving the world in which we live. Some of these activities are listed in Table 3.

Table 3: Faculty Activities that Enhance our World

Activity and Description	Results
<b>XPRIZE Rainforest<sup>14</sup> –</b> a five-year competition designed to enhance the world's understanding of the rainforest ecosystem in order to protect it	CMU faculty and students are on a team which has been named one of six finalists for the culmination of the competition in 2024
<b>GoCodeColorado¹⁵</b> – A public data competition geared toward moving businesses forward in Colorado	CMU students and faculty have participated for five years, bringing seven awards home to CMU
<b>Colorado National Monument Historical Video</b> <sup>16</sup> – A video played in the monument's visitor center	CMU faculty and students collaborated with park service employees to produce a new video detailing the monument's history
Patent for Graffiti Removal Awarded <sup>17</sup>	CMU students and faculty created a process by which graffiti can be removed from affected surfaces

<sup>13</sup> https://www.coloradomesa.edu/natural-resource-center/nrc-reports/mesa-county-outdoor-recreation-economic-impact-report---final.pdf

<sup>14</sup> https://www.xprize.org/prizes/rainforest

<sup>15</sup> https://www.coloradomesa.edu/now/2022/06/cmu-and-western-colorado-win-big-at-go-code-colorado-2022-awards.htm

<sup>16</sup> Maverick Magazine Spring 2023 https://www.supportingcmu.org/maverick

<sup>17</sup> Maverick Magazine Spring 2023https://www.supportingcmu.org/maverick

CMU Tech offers courses by community members for community members. These continuing education courses are an excellent example of how CMU and the Grand Junction community partner to shape our community. The ever-evolving course list for CMU Tech's community education program includes sewing classes, language classes, photography classes, astronomy classes, and the list goes on. There are even plans to incorporate a ski lift maintenance class put on by a local ski lift manufacturer. These classes stimulate the community and serve an often overlooked, but growing, segment of the Grand Junction community, the retired community members. Many retirees enjoy having a local community education program to select classes from to expand their horizons and stay mentally active. By offering continuing education by and for community members in addition to CMU's Golden Scholars Program (an opportunity for community members aged 60 and over to take CMU classes for no grade and significantly reduced tuition rates) retirees are finding the Grand Valley a nice place to retire, further enhancing the local economy.

Figure 2 illustrates the continuing stability of CMU in the community as an educator of students and an employer in the community. Over the time-period illustrated, 2006-2023, CMU has been adding, on average, seven new faculty members per year, 200 students per year, and 17 staff members per year. These stable growth patterns impact the local community positively in tangible and intangible ways.

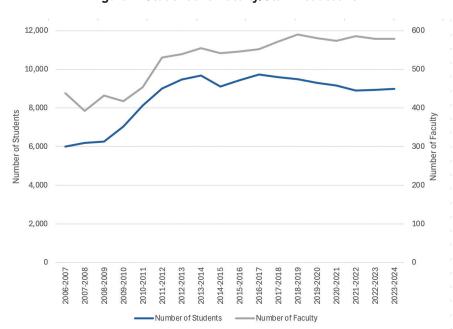


Figure 2: Student and Faculty/Staff Headcount<sup>18</sup>

### **ACADEMICS**

The faculty at CMU manage the curriculum processes via Faculty Senate standing committees and departmental curriculum processes. Faculty take part in program inception, program modification, and program assessment through departmental approvals, curriculum committee approval, and faculty senate approval.

CMU embraces its core values of applied, hands-on learning in a residential campus setting. This model enhances the community impact of CMU students as well as the economic impact of students on the Grand Junction economy. While most of CMU's coursework is face-to-face (F2F), CMU recognizes the need for maintaining distance learning coursework to service students in Western Colorado, the US, and the world when work or other life events take students away from the Western Slope classrooms. The option of having F2F or online coursework, at CMU's tuition

## Classroom Experience

89%

of classes have less than 40 students

54%

of classes have less than 20 students

Clas Exp

<sup>18</sup> https://www.coloradomesa.edu/institutional-research/reports.html; https://www.coloradomesa.edu/human-resources/index.html

level (one of the lowest tuition rates in the state of Colorado) helps to keep higher education accessible and affordable for the residents of Colorado.

CMU makes a strong commitment to being on the forefront of education programs that create employability for our students. The Bureau of Labor Statistics publishes the employment outlook for the United States, and in the highest category (much faster than average) of job growth are key CMU programs. Table 4 illustrates some of these programs, at multiple degree levels, many of which are newly created. By keeping abreast of the trends in the labor market, CMU faculty and administration keep the curriculum moving in a positive direction both for students and the economy of the Western Slope of Colorado. By continuously monitoring employment trends, CMU faculty and administration update existing curriculum and add or modify programs as necessary to address employment needs of existing and potential businesses in the Grand Junction community.

## ACADEMIC CREDENTIALS OFFERED AT CMU

**Technical Certificates: 27** 

**Professional Certificates: 13** 

**Associate degrees:** 48

**Baccalaureate degrees:** 48

Master's degrees: 18

**Doctoral degrees: 2** 

Table 4: Degrees with the Highest Job Growth Potential<sup>19</sup>

Type of Degree	Position with Much Faster Than Average Job Growth Rate		
Associate	Veterinary Technologists and Technicians		
	Computer and Information Systems Managers		
Bachelor's	Data Scientists		
	Mechanical Engineers		
	Physician Assistants		
Master's	Occupational Therapists		
	Athletic Trainers		

The Grand Junction Economic Partnership's 2022 Annual Report<sup>20</sup> lists the top industries for inquiries about company relocation to Grand Junction as:

- Outdoor Recreation
- Manufacturing
- Technology
- Agribusiness

This indicates that the academic changes CMU has undertaken recently are in-line with the local economy's growth trajectory. These new employment opportunities have average salaries in the \$50,000 range and also generate capital expenditures in the local economy as employers relocate their businesses to Grand Junction.<sup>21</sup>

CMU Tech also supports curriculum modifications to address the local economy. Recent programs that have been added include viticulture and enology to support the local wine industry, unmanned aircraft systems to support the varied and growing usage of drones in the world, gerontology to support the aging population of America, and the fire science program to keep the infrastructure in Grand Junction safe. These are in addition to the



A student in the Master of Physician Assistant Studies Program, one of several degrees on the forefront of education offered at CMU with higher job growth potential.

<sup>19</sup> https://www.bls.gov/

<sup>20</sup> https://www.gjep.org/annual-report-2022/

<sup>21</sup> https://www.gjep.org/annual-report-2022/

programs CMU Tech offers such as the police academy, information and communication technology, and nurse aid – all relevant to keeping a community safe, connected, and healthy.<sup>22</sup> At CMU's Montrose campus, new programs have been added which support the community. These include the POST (Peace Officers Standards Training) Academy and the PN (Practical Nursing) program now offered in Montrose, supplying qualified candidates to the local job market.<sup>23</sup>

### **ATHLETICS**

Collegiate athletics brings students to CMU and visitors to the Grand Junction community. With 15 women's sports, 14 men's sports, and six club sports CMU educates approximately 1,000 student athletes who are also active participants in the Grand Junction community.<sup>24</sup> Student athletes actively participate in recruiting activities in the local public schools and represent the Grand Junction community while competing in events outside of the Grand Junction area.

One of the community activities CMU athletes assist with include the Challenger Baseball Program, a baseball, team-building, and athletic adaptive baseball event in the spring for individuals with physical and intellectual disabilities.<sup>25</sup> The Challenger Baseball Program is an example of why CMU athletes are finalists for the NCAA's Award of Excellence.<sup>26</sup> This national level award recognizes the contributions of CMU athletes in conducting events and serving as leaders on their campus and in their community.





The Peace Officers Standards Training Academy and the Practical Nursing programs at CMU's Montrose campus supply indemand qualified candidates to the local job market.

Another example of student athletes giving back to the Grand Junction community is their participation in the "Where We Become Mavericks" initiative, which pairs athletes with public schools to promote the pursuit of higher education.

Other areas where CMU's athletic program and facilities meets the Grand Junction community include the shareduse athletic spaces (Stoker Stadium, Track and Field Facility) and summer sports camps put on by CMU and CMU athletes which attract local and not-so-local students to these on-campus sports-focused camps.

### CAMPUS Infrastructure

Colorado Mesa University has been expanding and remodeling the campus for two decades. This activity has generated numerous jobs for local construction companies and led to a renewed campus presence for the Grand Junction community to enjoy. On any given day, one can see students and community members walking, biking, and enjoying the beautifully landscaped and centrally located main campus.

Some of the highly visible campus infrastructure projects that have taken place recently include the Bergman



A Little League Baseball tournament at Bergman Sports Complex is one of the many community activities CMU athletes and staff assist with.

<sup>22</sup> https://www.coloradomesa.edu/tech/programs/index.html

<sup>23</sup> https://www.supportingcmu.org/maverick.html

<sup>24</sup> https://cmumavericks.com/

<sup>25</sup> https://challengerbaseball.net/

<sup>26</sup> https://cmumavericks.com/news/2024/1/5/general-colorado-mesa-named-finalist-for-ncaa-award-of-excellence.aspx

Sports Complex along Orchard Ave., the Wingate Apartments, and the new Asteria Theatre along the western boundary of campus. These projects increase the visibility of CMU's athletic programs which also enhance the recruiting of student athletes to CMU; increase the housing capacity of CMU for incoming freshmen; and enhance the academic programs of theater and music which provide entertainment for the community. There were also numerous other capital improvement projects ongoing throughout the year totaling 32.9 million dollars in 2022-2023.

CMU also seeks to have an impact on future expenditures by developing sustainable buildings on campus. This is achieved through initiatives such as the geo-exchange program which heats and cools many of the buildings on campus and is currently undergoing a major expansion to include other buildings. The associated savings (both in cost and energy) set an example for others to follow.

Other capital expenditures that impact the community include the installation of EV charging stations, Little Mavericks Learning Center (where both campus and community children learn), HVAC updates, and multiple projects at CMU Tech and the Montrose campus.

Infrastructure decisions which support faculty efforts include the new Asteria Theatre on campus and the Cybersecurity Center in the Maverick Innovation Center. Not only do these spaces serve faculty, but they also serve as gathering places for community members interested in the performing arts, or in expanding on an idea for a business in the local community.

### TECHNOLOGY

CMU's information technology (IT) group continues to support the mission of CMU while servicing a diverse group of users. These users include faculty, students, staff, and the community via a "guest access" account on CMU's wireless network. The IT group keeps CMU connected to the rest of the world enabling the faculty and students to interact with colleagues across the globe.

While interaction is important, the ability to thrive in a connected world by using current technologies prepares CMU's students for the modern workplace. IT supports cloud technologies such as collaboration tools (Microsoft Teams, Zoom, cloud storage) and productivity tools (Office 365, Handshake) that give CMU students exposure to these tools of the modern Construction workers at the new Asteria enterprise. Another initiative that IT is exploring is the "student laptop project" where each CMU student has a laptop, enabling the student to study, communicate, or work from anywhere at any time. Initiatives such as these keep the CMU students up-to-date with trends in the modern workplace which position the students for employment in a globally connected world.

Other initiatives from IT include the modernization of Montrose classrooms, virtual reality tools in the physician assistant program (exposure to tele-medicine and experiential learning), and upgrades to Wi-Fi 6, the latest standard for wireless networks. CMU's IT department keeps the campus connected, updated, and secured. CMU's IT department is continuously evolving the IT landscape at CMU through the IT master plan and by being receptive to change driven by internal as well as external forces. CMU's implementation of a modern IT infrastructure in which the students

operate allows CMU's students to exit the university with the knowledge to succeed in the connected enterprise.

### The Future of **Energy Innovation**

In 2023, CMU received \$6 million from State of Colorado to expand CMU's underground infrastructure. CMU invested \$3 million towards

that same project. As of before summer 2024, that construction is underway.









Theater's topping out ceremony on November 9, 2023.

# THE ECONOMIC IMPACT OF COLORADO MESA UNIVERSITY ON THE WESTERN SLOPE

The following section investigates the economic impact of Colorado Mesa University on the 14-county service region in Colorado. Different departments at CMU provided data regarding expenditures. These expenditures are adjusted for out of region spending and coded into an economic impact software called IMPLAN. There are five categories of spending that are modeled, including university expenditures, employee wages, capital expenditures, student expenditures, and visitor expenditures.

### **University Expenditures**

Operational expenditures refer to the regular and ongoing costs associated with the day to to day functioning of the University. CMU operational expenditures include facilities and maintenance, utilities, office supplies, travel expenses, insurance, student services, teaching and research resources, and other administrative costs. Budgeting and managing operational expenditures is important for universities to ensure the sustainability of operations and the delivery of quality education and services to students and the broader community. Wages and benefits are not included in this calculation of operational expenditures, and are instead calculated separately below. The data shows that total operating expenditures were \$48,960,226. Based on previous estimates of regional spending from these operating expenditures, a percentage of operating expenditures spent in the region of 79.07% was used.<sup>27</sup> Using this percentage provides a regional operating expenditure of \$38,712,850. This regional expenditure was input into IMPLAN by expenditure category.

**Table 5: Operational Expenditures** 

Operating Expenditures	Amount	Percent
Total Expenditures	\$48,960,226	100%
Total Expenditures Outside the 14 County area	\$10,247,376	20.93%
Total Expenditures Inside the 14 County Area	\$38,712,850	79.07%

### **Employee Wages and Jobs**

CMU's expenditures on wages and benefits have a profound and positive economic impact at the local and regional level. Salaries paid to faculty, staff, and administrators serve as a source of stable income for the employees of CMU and for the region as a whole. CMU gross wages have increased from \$48,675,910 in FY 2019-20 to \$60,895,921 in FY 2022-23, an almost 25% increase. Figure 3 illustrates CMU wages and salaries over time.

Between full time faculty, part time faculty, adjunct faculty, staff, and student employees, CMU employs 3,001 people. Human resources was asked to produce a full time equivalent (FTE) estimate for the number of employees which equates to 1,392.79, and can be seen in table 6. The FTE employment number is the number input into IMPLAN.



Faculty at the 2024 May Commencement ceremony.

<sup>27</sup> The last four estimates from this series of economic reports were as used to calculate an average of operational spending inside of the 14 county region: 2015: 81.8%, 2017: 80.5%, 2019: 76.1%, 2021: 77.9%.

Figure 3: CMU Wages/Salaries Over Time

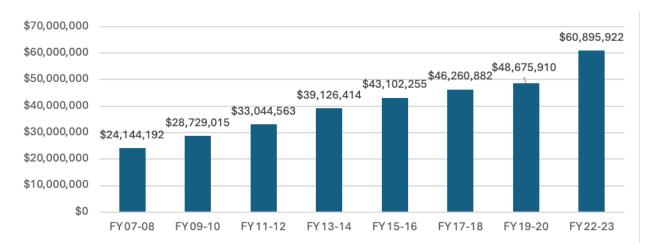


Table 6: Employees

Employee	Total	FTE Equivalent
Total	3,001	1,392.79

### **Capital Expenditures**

Colorado Mesa University spends millions on capital expenditures yearly. Capital expenditures include student housing, technology investments, building and infrastructure upgrades, and other necessary expenditures to keep the infrastructure of the University strong. Capital expenditures for FY 22-23 amounted to \$32,920,413, and included capital equipment purchases as well as construction and renovation of structures and buildings. Examples include new dorms (Wingate apartments), the Foster Field House, St. Mary's Medical Education Center, and the new theater construction. CMU had significant capital expenditures over the last 15 years, as seen in Table 7.

Table 7: Historical Capital Expenditures<sup>28</sup>

Fiscal Year	Capital Expenditures
07–08	\$27,600,000
09–10	\$71,600,000
11–12	\$23,700,000
13–14	\$37,400,000
15–16	\$41,800,000
17–18	\$24,800,000
19–20	\$40,800,000
22–23 <sup>29</sup>	\$32,920,413

<sup>28</sup> Capital expenditures are taken from previous CMU economic impact reports written by Carol Futhey.

<sup>29</sup> CMU economic impact reports for 20/21 and 21/22 were not conducted.

### **Student Expenditures**

Approximately 48% of CMU's 8,905 students come from outside of the 14-county service region, and 15.1% from outside of Colorado. Each of these students spends money on housing, food, entertainment and other life expenses. Both out-of-region student expenditures as well as local student expenditures are counted in this study. In standard economic impact reporting, it is common to only count new spending, or out-of-region students. However, in the case that there is no other local higher education option, and students who did not attend CMU would have to leave the region to attain the same education, the counting of local students in the impact is the correct approach.

Student spending estimates were retrieved from CMU financial aid and are broken down by in-state vs. out-of-state, and spending category. Most of the spending occurs between fall and spring semester, because many students return to their hometown for the summer. Many students do take summer courses, however, many of the summer courses are online and students may move home for the summer while taking a summer course.

To account for this, the estimate used data on students who attended classes in-person because they were guaranteed to have an impact on the local economy during the summer session. The total student expenditures

## Mavs Take Over the Mountain



Every year CMU's Student
Life hosts Mavs Take Over the
Mountain. This event invites
alumni and current students to
Powderhorn Mountain Resort
not only to engage the CMU
community but to support the
local mountain and expose
potentially new customers to
the resort.

are \$128,411,760. These expenditures are weighted by spending category and input into IMPLAN. Spending weight estimates were provided by CMU financial aid. Spending categories include food, personal expenses, transportation, and housing. Housing expenditures were adjusted for the percentage of students who live on campus vs. off campus. Financial aid provided different spending profiles for in-state vs. out-of-state students. Total spending was weighted for the in-state and out-of-state difference and are illustrated in tables 8 and 9.

Table 8: Estimated Student Expenditures In State vs. Out of State by semester

Residency	Semester Average Expenditures	Monthly Average Expenditures	% of students
In-state	\$6,706	\$1,490	84.9%
Out of state	\$7,696	\$1,710	15.1%
Average weighted expenditure	\$6,946	\$1,543	

**Table 9: Estimated Student Expenditures by Category** 

Residency	In State	Out of State
Per Semester		
Average housing cost	\$2,873	\$3,059
Average food	\$2,327	\$2,413
Personal expenses	\$765	\$796
Transportation	\$833	\$1,513
Per Month		
Housing per month	\$638	\$680
Food per month	\$517	\$536
Personal expenses per month	\$170	\$177
Transportation per month	\$185	\$336

### **Visitor Expenditures**

University events and event spaces attract visitors from across the state. Performing arts and athletics provide spectator events, the University Center provides spaces for meetings and large conferences, the library serves as a hub for reading and research resources for the regional community, and admissions and graduation bring families and friends of students to both explore the potential to attend CMU and attend the graduation of their loved ones. University departments provided the estimates in table 10, with visitors totaling 668,903. After taking into account the estimated number of these visitors that are from outside the 14-county region, the number of visitors from outside of the region was estimated at 324,526.

There are two assumptions necessary to calculate visitor

### Hotel Maverick Investing proceeds into scholarships



Guests who visit Hotel Maverick, Devil's Kitchen and Betty's Gourmet Coffee are making big impacts financially for Mesa County students. As visitors enjoy their stays and meals, those profits go directly into scholarships for local students. Hotel Maverick also provides an excellent teaching opportunity for students in the hospitality and culinary arts programs, offering hands-on experience in a real-world setting to prepare them for their future



careers, many of whom contribute to Colorado's thriving tourism industry. Watch this CMUnow video about the Hotel Maverick Match Program.

spending, and each of these assumptions are used in Khalaf, Jolley, and Clouse (2022). The first is that the estimated length of stay for overnight visitors is assumed to be two days.<sup>30</sup> The second is that 50% of all non-local visitors stay overnight. Both performing arts and admissions had exact data on the number of people from outside of the region that visited for events (40.5% and 79.1% respectively). In both cases, that exact number is used in the calculation. For the library, University Center, Athletics, and Graduation, the percentage of students from outside of the 14- county region (48%) is used.<sup>31</sup> The visitor spending profile is from the U.S. General Services Administration, specific to the Grand Junction area, and shows a minimum spending of \$98.00 for lodging and \$44.25 for food. Using these inputs, the total visitor spending equates to \$46,163,860.

**Table 10: Visitors by Activity** 

Visitor Activity	Estimated Visitors	% from Outside 14 County Region	Visitors from Outside the Region
Tomlinson Library	17,252	48%	8,281
Performing Arts	9,193	40.5%	3,723
University Center	509,032	48%	244,335
Athletics	108,011	48%	51,845
Admissions	13,315	79.11%	10,533
Graduation	12,100 <sup>32</sup>	48%	5,808
Total	668,903		324,526

<sup>30</sup> Khalaf, C., Jolley, G., Clouse, C. 2022. The economic impact of small colleges on local economies: A guide to attainable data and best practices. Economic Development Quarterly. Vol. 36(1), 17-32.

<sup>31</sup> Using the percentage of students from outside of the study region as a proxy for the percentage of visitors to University events in the absence of exact data is suggested in Khalaf, Jolley, and Clouse (2022).

<sup>32</sup> Current graduation attendee estimates were unavailable, so the average of the last 3 estimates from this series of University economic impact reports was used.

### **Economic Impact Modeling<sup>33</sup>**

This report uses a data and software program called IMPLAN to conduct the economic impact analysis.<sup>34</sup> IMPLAN is an Input-Output model that accounts for all flows of economic activity between different sectors in an economy, including government and households. The model uses a Social Accounting Matrix (SAM) which accounts for the relationships between different industries, households, and government, as well as other elements like savings, commuting, and trade.

The direct effect from jobs, wages, and expenditures is the starting point for the economic impact story. After the direct industry contribution is calculated, these numbers need to be adjusted for leakages from the economy, supply chain effects, and multiplier effects, all of which IMPLAN estimates.

Leakages are important to consider because not every dollar spent in the county stays in the region. Leakages include taxes, commuting (a leakage of employee compensation), savings, and imports from other areas (as imported goods do not drive further local effects). IMPLAN also calculates supply chain effects for each spending category and industry. Supply chain effects, or indirect effects, are the effects of local spending on suppliers. IMPLAN estimates what percentage of this supply chain effect is spent locally vs. non-locally.

Induced effects are also calculated by IMPLAN. Every dollar spent by CMU employees and CMU students, as well as in the supply chains in the area becomes income to someone else, such as a local business, hotel employee, gas station attendee, or waiter/waitress. Each of these businesses and their employees spend this new income, creating income for someone else. The cumulative impact of these rounds of spending is known as the multiplier effect. The multiplier effect is the total economic effect divided by the direct effect.

#### **Model and Results**

Table 11 illustrates the economic impact of CMU on the regional economy. The direct effect is the initial value that the industry contributes to the study region. Indirect effects are supply chain effects, and induced effects represent the employee spending from those working in the direct and indirect industries. The three combined are the total economic impact. The direct employment for CMU is 3,001, adjusting for FTE that number is 1,392.79. Note that the FTE number is the number input into IMPLAN. Adding the direct effects from capital expenditures, student expenditures, and travel expenditures, the total direct impact of jobs is 2,857. After indirect and induced effects, the total contribution to regional employment is 4,137.

Note that approximately 97.5% of the in-region spending takes place in Mesa County. Because of this the results will be compared to Mesa County data for scale. Direct impacts represent all the categories above, including operational expenditures, wages, capital expenditures, student spending, and visitor spending. The direct jobs number of 2,857 are the direct jobs created by these spending categories. This direct employment number equates to 3.1% of Mesa County jobs. When adding indirect and induced effects, the total employment resulting from CMU is 4,137, or 4.56% of total jobs.

Table 11 shows that CMU creates a direct contribution of \$149,263,140 to regional GDP. When adding indirect and induced effects, the total economic impact of CMU is \$256,256,848. This equates to 3.07% of Mesa County GDP.

	Employment	Labor Income	GDP	Output
Direct	2,857	\$115,686,324	\$149,263,140	\$281,301,492
Indirect	669	\$29,405,670	\$49,861,202	\$122,920,425
Induced	609	\$29,720,987	\$57,135,505	\$101,272,115
Total	4,137	\$174,812,982	\$256,259,848	\$505,494,034

<sup>33</sup> Some wording and phrasing explaining economic impact concepts are taken from previous economic impact studies conducted by Nathan Perry, Ph.D.

<sup>34</sup> IMPLAN Group LLC. IMPLAN 2023. Huntersville, NC. IMPLAN.com.

<sup>35</sup> Employment, wages, proprietor income, and intermediate inputs were modeled through the use of IMPLAN's industry impact analysis function. Capital expenditures were modeled as a commodity outputs.

The direct total output value of \$505,494,034 represents the gross total value of all sales and production due to CMU. This is a broader measure than the standard gross domestic product (GDP). Output is the value of an industry's production. It counts the county GDP and the intermediate inputs that are associated with it. This total output measure is the gross measure of local economic activity and is more in line with how a business would account for the sales transaction from one firm to another. GDP, is a subset of "output," and is the standard measure of growth in an economy.<sup>36</sup>

CMU wages and the wages created by student, travel, and capital expenditures totaled \$115,686,324. Adding indirect and induced effects, this wage number increases to \$174,812,982.<sup>37</sup> This equates to 3.5% of Mesa County wages.

Table 12: Percentage of Mesa County

	% total for direct expenditures	% total for total expenditures	
Employment	3.15%	4.56%	
Wages	2.34%	3.53%	
GDP	1.79%	3.07%	

Table 13 illustrates the employment impact by industry. University is the obvious top employer, with other real estate, full service restaurants, construction, and hotel employment all being impacted.

Table 13: Employment Impact by Industry Top 10

Industry	Total Employment
481 - Junior colleges, colleges, universities, and professional schools	1,393
447 - Other real estate	466
509 - Full-service restaurants	363
53 - Construction of new educational and vocational structures	283
507 - Hotels and motels, including casino hotels	251
511 - All other food and drinking places	223
510 - Limited-service restaurants	190
409 - Retail - Clothing and clothing accessories stores	40
490 - Hospitals	36
476 - Services to buildings	34

Table 14 illustrates the tax impacts at the federal, state, county, sub-county special district, and sub-county general level. The tax impacts are broken down by direct, indirect, and induced effects. CMU and it's associated spending, including indirect and induced effects, contributes a total of \$3,377,698 to sub-county general taxes, \$4,895,679 to sub-county special districts, and \$2,939,375 to county. The overall tax contribution to the state is \$13,411,352 and to the Federal government is \$42,870,812.

<sup>36</sup> A good example illustrating the relationship between total output and GDP is car production: GDP only counts the final value of the car, but total output adds the intermediate goods of steel, rubber, and other parts, plus the total value of the car. This is known as double counting in GDP calculations.

<sup>37</sup> Note that labor income is the sum of employee compensation (wages and benefits) and proprietor income.

Table 14: Tax Impact

	Sub-county General	Sub-county Special Districts	County	State	Federal	Total
Direct	\$1,828,847	\$2,595,491	\$1,578,357	\$7,738,719	\$27,781,727	\$41,523,142
Indirect	\$542,794	\$861,758	\$485,540	\$2,217,419	\$7,223,656	\$11,331,167
Induced	\$1,006,058	\$1,438,399	\$875,478	\$3,455,213	\$7,865,428	\$14,640,577
Total	\$3,377,698	\$4,895,649	\$2,939,375	\$13,411,352	\$42,870,812	\$67,494,886

### **Comparison to Previous CMU Economic Impact Reports**

Previous CMU economic impact reports used a similar methodology for the data collection, but did not input the spending categories into IMPLAN, and instead used general multipliers to attain indirect and induced effects. This is a very common approach in University economic impact reports. The FY 19-20 CMU economic impact report showed \$538,982,142 in economic impact. This is very close to the total output number of \$505,494,034 in this report, and more closely compares to total output because leakages and the double counting issues are not taken into account.

### **Intangible Economic impacts**

This report focuses on University spending, but much of the important impact from a University comes in the form of the intangible impact to the region and society as a whole. This intangible impact can be seen in the form of an educated and productive workforce, higher wages, innovation and entrepreneurship, and business attraction. Universities are positively associated with higher future GDP growth per capita, and they are also associated with

positive spillover effects into geographically close regions.<sup>38</sup> This growth is not just because of University expenditures, but because of the increase in human capital and increased innovation. In economics, human capital refers to education, training, or other human improvements that increase productivity. CMU has the task of administering CMU Tech, CMU Montrose, and CMU, and between these three is responsible for much of the human capital creation on the Western Slope of Colorado.

Increasing one's education does not just lead to higher growth for the region, it is also a clear direct benefit to those who invest in their education. The Bureau of Labor Statistics data shows that median weekly earnings for a bachelor's degree holder were \$1,352 in 2023, compared to high school graduates weekly wage of \$782. The weekly wage of a master's degree is \$1,973 and doctoral degree \$2,320.



**Entrepreneurship Day** 

E-Day Keynote Speaker 2023 -Corey Ciocchetti



CMU facilitates an entrepreneurial culture, as shown through events such as "Entrepreneurship Day," and facilities like the Maverick Innovation Center. These are part of fostering an entrepreneurial ecosystem that Universities, government and businesses/entrepreneurs participate in to spur entrepreneurship and economic growth.

Entrepreneurs and business owners are much more likely to want to set up businesses in a region that has a higher level of education and talent pool to pull from. Higher education increases specialized labor supply for existing, new, and relocating businesses. This is especially true for CMU, who is willing to adapt programs to workforce needs. Ultimately, one of the goals of CMU is to have its graduates become the entrepreneurs and business owners on the Western Slope of Colorado, leading the region to greater economic activity.

### CONCLUSION

The synergy between Colorado Mesa University and the Grand Junction community has been ongoing for decades. Colorado Mesa University touts Grand Junction as a great place to live for its community and outdoor recreation opportunities while Grand Junction touts Colorado Mesa University as a great opportunity for learning and personal growth in our community. Both entities embrace the synergies that have propelled Grand Junction to becoming a top tourist destination as well as a great place to live and work (or retire) and Colorado Mesa University as a top selection for students seeking a certificate, an associate degree, a bachelor's degree, or a graduate program. Together, CMU and Grand Junction are putting the Western Slope of Colorado on the map as a place to live, work, study, play, and enjoy all that the area has to offer.

Colorado Mesa University has a large economic impact in Western Colorado. Total economic impacts, which include direct, indirect, and induced effects show a GDP impact of \$256,259,848 and a wage impact of \$174,812,982. In addition, CMU's impact creates 4,137 jobs in the region. These numbers account for leakages from the economy, and only counts money spent inside of the region. The total economic output in the region created by CMU is \$505,494,034. In addition to measurable dollar economic impacts, the University contributes in intangible ways, including creating a productive workforce, increasing wages for educated employees, the facilitation of entrepreneurship and business creation, and business retention and attraction due to a skilled workforce. •



### \$256 million

in gross domestic product (direct, indirect and induced spending in the regional economy by CMU)

#### \$175 million

in wages created by CMU

**4,137** additional jobs created

**\$505 million** economic output by CMU

