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MSU DENVER BY THE NUMBERS

18,917

96.5%

Undergraduate

Students from

Colorado

FROM COLORADO -

877

Undergraduates

Graduate **Students**

Graduate Students from Colorado

98.7%

18,031

Resident Undergraduate Students, the Most of Any University in the State

100+Majors

Graduate Programs

34 Certificate Programs

99% Classes Taught by Faculty, Not Teaching Assistants

95,000

Alumni Nationally

80%

Alumni Living in Colorado and Contributing to the Economy



#5 Most Innovative University in the West Region



25

Average Age of Undergraduates



Nearly 80%

Students Working While Pursuing Their Education

70%

of registered MSU Denver students voted in the 2018 midterm elections.

The national average for college students is 55%

2017

Roadrunners earned national honors for the highest undergraduate voting rate -Highest Overall Rate for Large Campus from the

ALL IN Campus Democracy Challenge.







ABOUT THE STUDY

In November 2019, Metropolitan State University of Denver engaged Parker Philips Inc. to measure the economic contribution of its operations, including its campuses, across the state of Colorado and the Denver Metropolitan Statistical Area (MSA).

The goal of this analysis is to provide a complete assessment of the total economic, employment and state and local tax impact of MSU Denver across the state of Colorado.

The primary tool used in the performance of this study is the Input-Output model and data set developed by IMPLAN Group LLC. Financial data used in this study was obtained from MSU Denver and included the following data points: operational expenditures, capital expenditures (three-year average) and payroll and benefits for employees for FY 19. Secondary data was used to estimate spending by visitors (day and overnight) and students (undergraduate and graduate) exclusive of tuition and fees. Additional information on the methodology and assumptions used to complete this study can be found in Appendix B.

MSU DENVER STUDY PROFILE

Data Source MSU Denver

Study Type **Economic Contribution Analysis**

Geography Colorado and Denver MSA

Study Year Fiscal Year 2019 (FY 19)

Methodology IMPLAN

The impact presented in this analysis is broken down into three categories: direct impact, indirect impact and induced impact. The indirect and induced impacts are commonly referred to as the "multiplier effect." The graphic below provides an overview of the types of impact detailed in this report.







DIRECT

Impacts generated as a result of spending on operations, capital expenditures, pay and benefits, student spending and visitor spending.

INDIRECT

The increase in demand for goods and services in industry sectors that supply or support MSU Denver, its students, its faculty and staff and visitors. Often referred to as the supply chain.

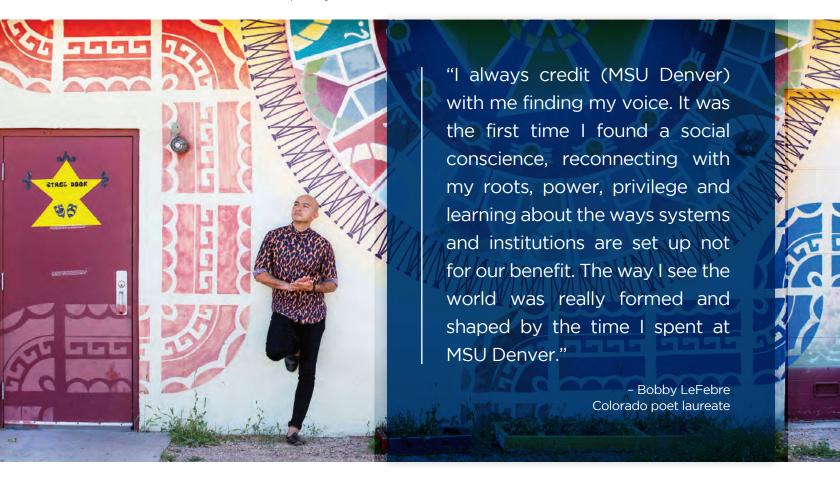
INDUCED

The third wave of impact created as a result of household spending by MSU Denver employees, employees of suppliers and students. Induced impacts estimate the effect of increased household income including housing, household goods, entertainment, food, clothing, transportation and other categories of personal spending.

ABOUT **MSU DENVER**

Ask someone in Denver about MSU Denver, and either they will tell you that they know someone who attended, who works there or who loves it, or they will let you know that they still call it Metro State. A thread that weaves through the city is that everybody knows somebody who has been impacted by MSU Denver.

MSU Denver is a comprehensive, public "four-year" institution granting bachelor's degrees through its three colleges (Business, Professional Studies, and Letters, Arts and Sciences) as well as the School of Education and School of Hospitality.



It offers 100+ majors, more than 70 minors and 34 certificate programs, as well as an Individualized Degree Program. MSU Denver also offers eight master's programs.

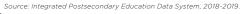
When Metro State became MSU Denver, the overwhelming reason for the change was to increase the value of an MSU Denver degree while eliminating the misperception that the institution was a community college. Despite national rankings for excellence and a well-implemented rebrand, the unintentional practice of devaluing of the University persists. News reports at the time of this report covering a state pledge to help keep tuition rates flat repeatedly referred to MSU Denver as "Metro State."

¹The expectation to graduate with 120 credit hours in four years is out of reach for the majority of American students who are not privileged enough to go to college without working to pay for school. Department of Education data show the four-year graduation rate at "four-year" institutions is close to 40%, while the six-year graduation rate is close to 60%. Source: https://nces.ed.gov/programs/digest/d18/tables/dt18_326.10.asp

For the past 55 years, MSU Denver has provided a high-quality, accessible, relevant education in service to the ever-evolving workforce needs of Colorado and, above all, its students. It is difficult to lump those students into any one bucket - they transfer, they are fresh out of high school, or they are attending the University while holding down a job or jobs. Regardless of their stories, MSU Denver meets them where they are and prepares them for postgraduate success.

Profoundly committed to inclusion, MSU Denver serves a complex and diverse set of students. It powers the state economy through its 95,000 graduates, 97% of whom are Colorado residents and more than 80% of whom stay in Colorado after graduation. (The total number of students who began their studies at MSU Denver grows to nearly 300,000.) Not every student graduates in four years, but MSU Denver is transformational for its students and invaluable to Colorado.

Institution Name	Colorado Undergraduate Enrollment	
Metropolitan State University of Denver	97%	
University of Colorado, Denver/Anschutz Medical Campus	90%	
Colorado Mesa University	84%	
University of Colorado, Colorado Springs	84%	
University of Northern Colorado	83%	
Colorado State University, Pueblo	78%	
Western Colorado University	75%	
Colorado State University, Fort Collins	71%	
Adams State University	60%	
University of Colorado, Boulder	51%	
Colorado School of Mines	49%	
Fort Lewis College	43%	





"There is no better way to catalyze social and economic mobility, fill the Colorado talent pipeline and ensure that our state thrives and competes nationally and globally than to invest in public higher education. Every day, I am even more amazed by the transformational experience we are able to provide for so many hardworking Colorado students."

– Janine Davidson, Ph.D. president MSU Denver

THE ROADRUNNER DIFFERENCE

In the early days of the University, students dubbed themselves "Roadrunners" because they sprinted across downtown Denver's busy streets to get to classes.

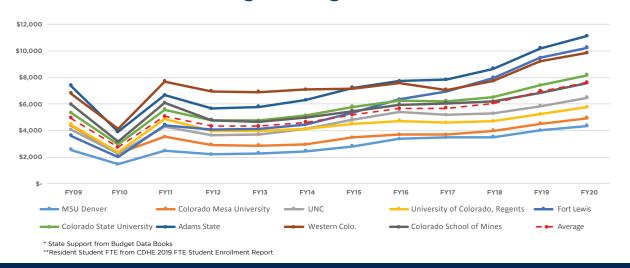
In 1974, students voted to make the Roadrunner the University's official mascot. Over the years, the MSU Denver Roadrunner has come to signify more, including these five characteristics shared by every graduate of the University.

DIVERSE	TENACIOUS	PRIMED	PURPOSEFUL	ENTREPRENEURIAL
They come from every background imaginable and learn to be broad-minded by grappling with a variety of experiences and viewpoints.	They are determined to succeed and achieve. If they get knocked down, they get back up.	They have career-ready skills and a deep knowledge of the issues and dynamics that shape the workforce.	They want to use their education to make change. Every degree earned has a ripple effect, spreading benefits across metro Denver and beyond.	They don't settle for walking on well-worn trails. They reimagine what is possible for themselves and their communities.

MAKING IT COUNT

Since its inception in 1965, MSU Denver has educated Coloradans to meet the workforce needs of area businesses. For much of that time, the University was funded through a state budget line for the State Colleges in Colorado Board of Trustees, which governed Colorado Mesa, Adams State and Western Colorado. While the board was dissolved in 2002, the funding line remains. Funding per student for Colorado's state-supported colleges and universities ranks 48th in the nation. Of that threadbare resource, MSU Denver receives less per-student funding than any other public institution in the state, supporting only 25% of its budget. The formula used to determine funding for universities does not align with the state's higher-education goals: increasing credential completion, erasing equity gaps, improving student success and investing in affordability and innovation.

MSU Denver receives the lowest funding per student in a state that ranks 48th in the nation in college funding



Historically, MSU Denver has been dramatically underfunded. The average state funding in Colorado per full-time-equivalent student is \$7,623. MSU Denver receives \$4,370 per FTE, the lowest in the state.



"A racialized stigma exists as we serve a significant diverse population. That stigma is tied to 'low-quality or easy,' or 'not prestigious or rigorous enough.' I'd like to break or rupture that stigma. We know that companies prefer the MSU Denver grad because our students arrive to work with more preparedness, focus and work-ready maturity."

- Michael Benitez Jr., Ph.D. vice president for the Office of Diversity and Inclusion

This low base funding from the state has made MSU Denver tuition-dependent.

- MSU Denver receives 50% of the funding in tuition and fees as schools similarly situated and sized.
- MSU Denver is funded to serve about 10,000 students, when enrollment is more than 19,000.
- MSU Denver's staff-to-student ratio is 1 for every 26 students, leaving it short-staffed to support its current student population. Similar schools in Colorado have more than double MSU Denver's staffing on average.
- If MSU Denver were "right-sized" and funded similarly to other peer universities, its economic impact would be \$913.4 million, 9,765 jobs and \$43.5 million in state and local tax revenue.²

² This projection is based upon 60% increase in operational expenditures, capital expenditures, pay and benefities and staff numbers.

FROM COLORADO

MSU DENVER COMPARED WITH AVERAGE PER FTE FUNDING FOR ALL COLORADO 4-YEAR COLLEGES

\$3,253 \$4,370



MSU Denver

Average

Persistent underfunding has led MSU Denver to find creative, efficient and moreeconomic solutions: The Auraria Campus shares academic space with the University of Colorado Denver and the Community College of Denver. The state-of-the-art Hotel and Hospitality Learning Center housing the SpringHill Suites - Denver Downtown® by Marriott is one of only a few such facilities nationwide, providing collegiate hospitalitylearning laboratories with a fully functioning hotel.

"In Colorado, we spend the most money on the students who need it the least. This is the moment in time to right that wrong and provide our students the education they deserve."

> - Barb Grogan chair MSU Denver Board of Trustees



MICHAEL ATKINS

The principal's office is a long way from where Atkins started his career: cleaning up buildings as a Denver Public Schools janitor. But it was working for Denver Public Schools that sparked Atkins' interest in education – and led him to MSU Denver, where he enrolled as a young father, working during the day and attending classes at night. Michael started at the Community College of Denver in spring 2000 and took classes on and off, and he transferred to MSU Denver in spring 2008. He graduated in 2011 with a Bachelor of Arts in Behavioral Science and a minor in K-5 Education after 10.5 years.

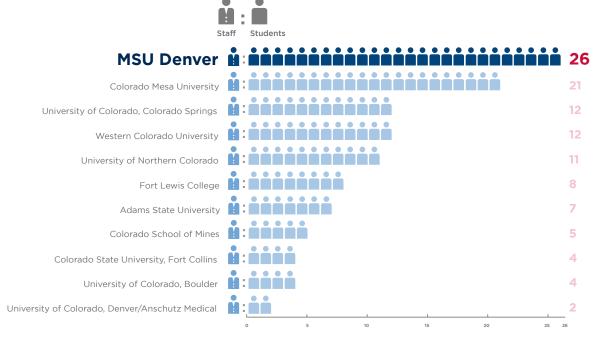
"The thing I truly loved about (MSU Denver) was its diversity. I didn't feel like an 'old' student going to night class, per se. I fit into the cultural norms of the University, so I felt very comfortable within that space."

- Michael Atkins principal Stedman Elementary School in Denver

Colorado ranks 48th in the country in per-student funding for higher education, while Denver has earned a reputation as one of the United States' most attractive places to live. As companies and professionals flock to the Mile High City, the local talent pool is undereducated as it relates to current workforce needs, a problem that locals call the "Colorado paradox" – this is where MSU Denver stands tall among its competitors. As the state struggles to educate Coloradans so that they can tap into the economic opportunities around them, MSU Denver is partnering with businesses to provide unparalleled access to internships and professional networks.

Similar institutions to MSU Denver in Colorado average a staff-to-student ratio of 1:12 (with some as low as 1:4 or 1:2). MSU Denver averages a staff-to-student ratio of 1:26.

Ratio of Noninstructional Staff Members to Undergraduate Students



Source: https://nces.ed.gov/ipeds/use-the-data, Number of full- and part-time staff by primary occupational category, Fall 2017 and Undergraduate unduplicated 12 month Headcount (full- and part-time student) 17-18.

CREATING A WORKFORCE PIPELINE

Students in the Lockheed Martin Co-op Program work 20 to 25 hours each week for two full semesters in areas such as 3D printing, electronics and even spacecraft testing. More intensive than a traditional internship, the program gives students more responsibility and treats them as members of the team. The outcome: the majority of students who participate get hired full time when they graduate.

With 29 former co-op students landing jobs at Lockheed Martin in the past five years and the creation of a cutting-edge Advanced Manufacturing Sciences degree program, MSU Denver graduates are well-positioned to be at the forefront of the workforce that will propel the aerospace industry in the 21st century.

Emilie Vaughn, an Advanced Manufacturing Sciences major, worked on a team building spacecraft parts such as the so-called "black box" that distributes power throughout a satellite. She helped solve several critical problems during her co-op, including one that improved the efficiency with which satellites are manufactured.

When she began her co-op in early 2018, technicians assembling a satellite protected exposed wiring by covering metal frames with tape manually cut into precise lengths and shapes. Vaughn helped acquire and program a new tape-cutting system that slashed the time it takes to complete the task by 40%.



"MSU Denver works to feed the advanced-manufacturing pipeline. Over the past five years, we've had 48 MSU Denver students as part of the co-op program, 29 of which have become full-time employees."

- Mark Yoss production principal Lockheed Martin

MSU Denver is well-positioned to support the Colorado Commission on Higher Education master plan, Colorado Rises: Advancing Education and Talent Development. The plan recognizes the need to anchor credential production to high-demand areas and commits to investing in affordability and innovation.

The Classroom to Career Hub is the latest innovative venture from MSU Denver, connecting students and employers, facilitating real-world learning experiences and upskilling homegrown talent for Colorado's workforce pipeline.

STRATEGIC GOAL #2

ERASE EQUITY GAPS:

The second strategic goal addresses the fact that Colorado's largest and fastest-growing ethnic group, Hispanic/Latino, has the lowest average educational attainment and the lowest college-enrollment rate of any ethnic group in the state. Success in meeting the statewide goal of increasing the credential-attainment rate to 66% hinges on improving all students' completion in colleges and universities in the state. That means erasing the state's current equity gaps.

COLORADO RISES: ADVANCING EDUCATION & TALENT DEVELOPMENT

STRATEGIC GOAL #2 **STRATEGIC STRATEGIC STRATEGIC** Success in GOAL #1 GOAL #4 GOAL #3 meeting the statewide goal Increase Credential *Improve* Invest in Completion of increasing the **Affordability** Student and Innovation Success credential-Significantly increase attainment rate the number of Increase public Promote to 66% hinges credentials that investment and students' timely encourage models students earn over an completion on improving eight-year period and that reduce costs through new all students' and time-toincrease credential approaches and completion in completion for degree. practices. colleges and high-demand areas of STEM- educated universities in workers and a growing the state. shortage of educators. ource: Colorado Commission on Higher Education

DEDICATED TO DIVERSITY

"The gaps in education outcomes for different groups of Coloradans are morally unacceptable. White Coloradans are around twice as likely as nonwhites to have some sort of postsecondary credential and therefore a good shot at working their way into the middle class. When we make college inaccessible to working and lower-income learners, we replicate inequality and inequity in our system."

- Daniel Baer diplomatic fellow at the University of Denver's Josef Korbel School former United States ambassador to the Organization for Security and Co-operation in Europe former executive director of the Colorado Department of Higher Education under Gov. John Hickenlooper

In 2019, MSU Denver received the federal designation of Hispanic-Serving Institution. The University serves more Latinx students (5,663) than any other higher-education institution in Colorado. HSI designation brings with it many benefits for all students, faculty and the state of Colorado by making the school eligible for U.S. Department of Education grants in the areas of student-support services, academic materials and increased scholarships as well as the renovation and creation of campus facilities.

With one in every five Coloradans and one in every three Denver residents being Latinx, higher-education attainment for this population is imperative for the state to remain economically vibrant. But beyond the economic impact, what is more difficult to measure is the generational impact as more than half of MSU Denver students are are among the first generation in their family to attend college and about half of the students are eligible for federal Pell Grants, meaning their families cannot afford to pay for higher education.

for colorado — For colorado

JASMINE VILLALOBOS-VALLES

Jasmine's story embodies the spirit of MSU Denver and the Denver Scholarship Foundation. As a spring 2019 graduate of MSU Denver with a bachelor's degree focused in Business Management, she now works for the program that helped her graduate debt-free with the desire to help other students achieve their goals.

She is the daughter of immigrants from Chihuahua, Mexico, and was a first-generation student at MSU Denver. Educated in Colorado's public schools, she was raised and encouraged by a family that stressed education as a conduit to success. Jasmine had the determination to navigate the unfamiliar waters of higher education at a four-year institution and to go the distance. As a first-generation student, she faced challenges, but through her mentors at MSU Denver and a personal commitment to excellence she got the degree.

Jasmine realized her dream and made her family proud – a college graduate in the family. Jasmine now advocates and works for the very program that helped her attend MSU Denver as coordinator of Scholarship, Leadership and Community Partner Programs at the University.

"MSU Denver met me where I was in my life, and the Denver Scholarship Fund provided the financial and necessary resources to help me along the way."

- Jasmine Villalobos-Valles

IMMIGRANT SERVICES AT MSU DENVER

IMMIGRANT IDENTITY SERVING

MSU Denver is the epitome of an anchor institution, bringing to life the idea that a community can blend into the institution and vice versa. The success of the Immigrant Services Program, which celebrated its 30th anniversary in 2020, is a good example of how that can happen. Many students may want to identify as part of the immigrant community but not as a specific background. By creating a broad immigrant-support program, not limited to just international students or those from a geographic region, MSU Denver boasts an inviting program that allows for programming around refugees, asylees, permanent residents and Deferred Action for Childhood Arrivals students as well as non-DACA students.

SHOWING UP

The trust required to authentically engage immigrant families doesn't get built; it's shaped and cultivated individual by individual, and it takes a long time. MSU Denver's reputation in this community has been nurtured for decades. Hiring staff members who reflect the students and who speak their language and intentionally improving hiring practices are cooked into the MSU Denver culture and reflected in the programming.

"The difference is how open and welcome the people at MSU Denver are. On every college campus, you don't feel that. MSU Denver goes that extra step, and out of the gate everyone knew our staff, learned about our dedicated student-service resources and partnered in supporting our students."

- Lori Rabinowitz CEO Denver Scholarship Foundation 18

"Immigrant Services at MSU Denver has been a valued resource to the community for more than 30 years and is the glue that holds the puzzle together for immigrants, refugees, international and foreign-exchange students. Our collaboration with them on DACA-related issues has changed outcomes for students, graduates, their families and the overall immigrant community."

- Kevin Omaña Mendoza legal services coordinator Colorado Immigrant Rights Coalition

IMMIGRANT SERVICES

The MSU Denver Immigrant Services Program is at work in the community long before a student decides which university is right for them.

MSU Denver makes connections and forms relationships at area high schools by talking to students about how college can be a part of their future through financial-aid and college-readiness conversations. These are not recruiting visits for the Immigrant Services team; they serve as a college-access resource, regardless of where the student lands. The team builds a rapport with these potential first-generation college students and strives to be a trusted and safe resource to answer questions.

DENVER IS ONE OF NINE EMERGING IMMIGRANT DESTINATIONS

16% (97,000) of Denver's population (604,000) is foreign born

2.95 average GPA compared with2.88 in the general student population.

45% of Denver households utilizing the public school system speak a non-English language at home

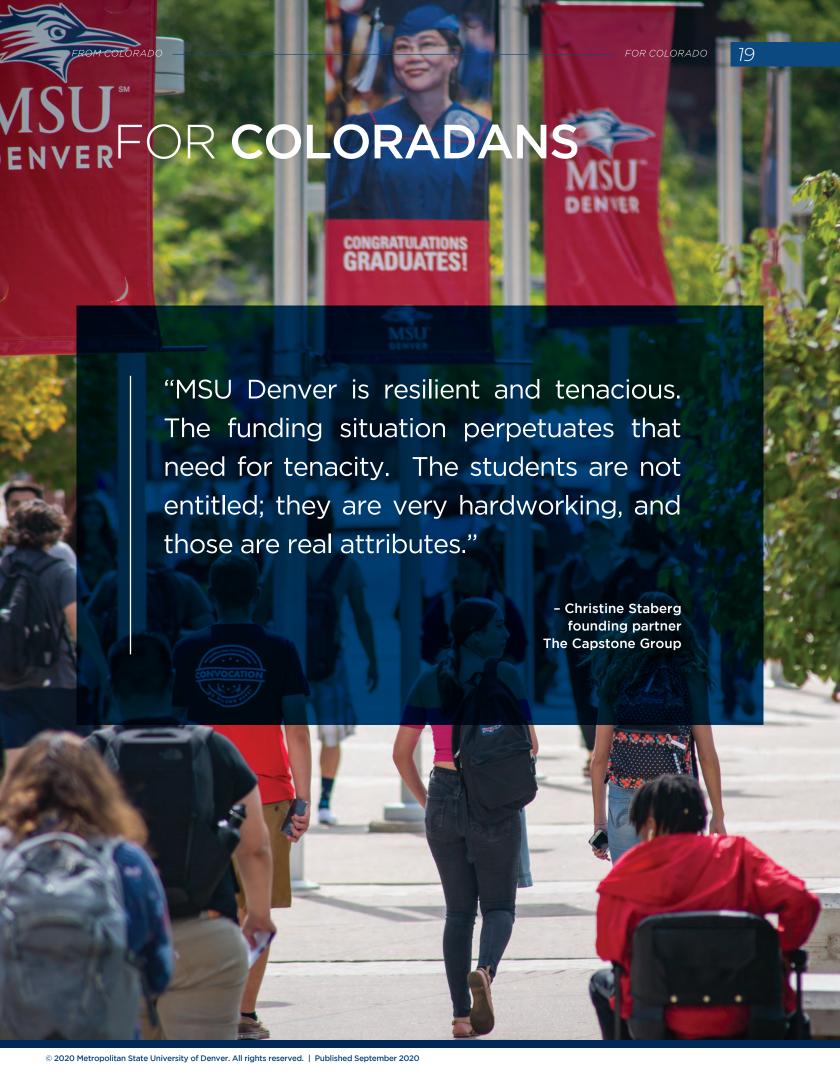
421 students accessing Immigrant Services.

Common majors among DACA students

- 1 Criminal Justice
- 2 Biology
- 3 Accounting
- 4 Psychology
- 5 Undeclared Nursing

Services offered to immigrant students

- Academic + ESL tutoring
- Communication with departments/faculty on students' behalf
- Personalized goals for every semester
- Peer mentorship
- Walk-in tutoring in all subjects, individual and one-on-one
- Learning-style assessments
- Note-taking workshops
- Writing Center



MSU DENVER CONTRIBUTES TO THE STATE & LOCAL ECONOMIES

MSU Denver contributes to the local and statewide economies through its expenditures on operations, capital projects, wages, the spending of students off-campus and the spending of visitors to campus.

The direct, day-to-day expenditures of MSU Denver, combined with the student and visitor spending, cause a ripple effect throughout the statewide economy.

The economic impact of MSU Denver in FY 19 totaled **\$703.4 million**. This contribution to the local and statewide economies is a point-intime snapshot depicting how the expenditures of MSU Denver and its faculty, staff, students and visitors make an impact.

OPERATIONS CONTRIBUTION

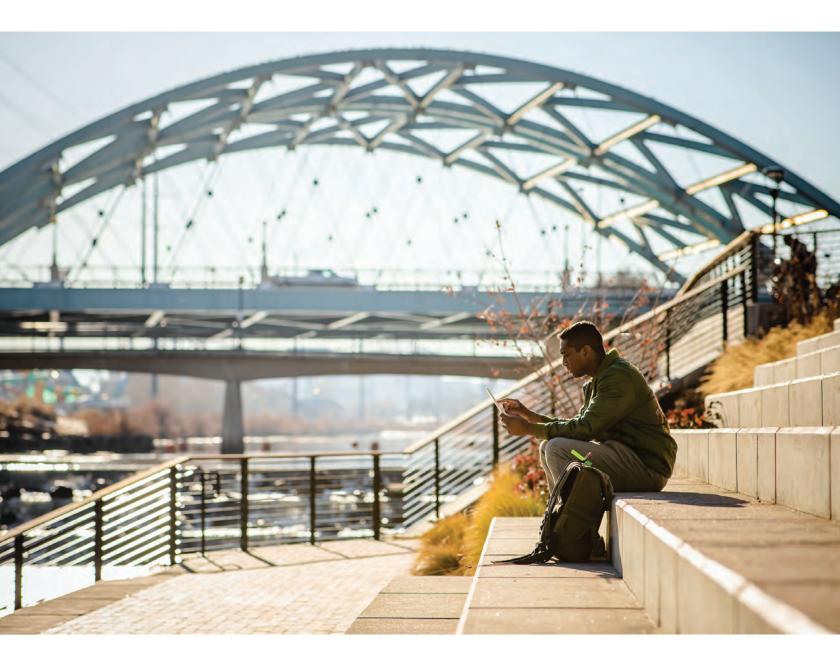
MSU Denver operations and capital spending in FY 19 contributed a total of \$362.1 million as a result of operational spending. MSU Denver's operations generated \$170.5 million in direct economic impact, \$64.7 million in indirect economic impact and \$126.9 million in induced economic impact.

STUDENT SPENDING CONTRIBUTION

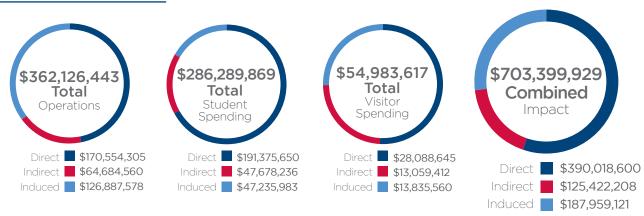
MSU Denver students contributed a total of **\$286.3 million** in FY 19 as a result of their spending. They generated \$191.4 million in direct economic impact, \$47.7 million in indirect economic impact and \$47.2 million in induced economic impact.

VISITOR SPENDING CONTRIBUTION

MSU Denver visitor spending in FY 19 contributed a total of **\$55.0 million**. Visitors to MSU Denver generated \$28.1 million in direct economic impact, \$13.1 million in indirect economic impact and \$13.8 million in induced economic impact.



MSU DENVER **COMBINED ECONOMIC IMPACT** (FY 19)



CREATING & SUSTAINING JOBS THROUGHOUT COLORADO

MSU Denver supports a total of 7,250 full- and part-time jobs throughout the state.

Based on analysis by industry sectors, other jobs supported in the Colorado economy outside of the higher-education and health-care sectors include jobs in real estate, retail and services (e.g., restaurants, child-care centers and entertainment).

OPERATIONS

MSU Denver operations supported and sustained a total of 4,315 jobs: 3,179 direct jobs, 348 indirect jobs and 788 induced jobs.

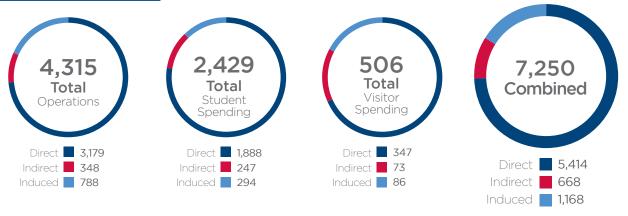
STUDENT SPENDING

MSU Denver students supported and sustained a total of 2,429 jobs as a result of student spending: 1,888 direct jobs, 247 indirect jobs and 294 induced jobs.

VISITOR SPENDING

Visitors to MSU Denver supported and sustained a total of 506 jobs as a result of their spending: 347 direct jobs, 73 indirect jobs and 86 induced jobs.

MSU DENVER **EMPLOYMENT CONTRIBUTION** (Jobs FY 19)





"We've enjoyed this talent-attraction run, where generally young educated people have been moving to Denver in big ways. The challenge for any community is that you can't rely on talent-attracting. The cake is the local talent base, and the attraction is the frosting."

- Randy Thelan vice president of Economic Development Downtown Denver Partnership

GENERATING LOCAL & STATE TAX REVENUES

With 80% of its graduates choosing to live in Colorado and 80% of its student population working while attending the University, MSU Denver makes a unique mark on the local and state tax coffers.

MSU Denver and its employees, suppliers and related constituencies contribute to the local and statewide tax bases. In FY 19, MSU Denver contributed an estimated \$35.5 million (\$20.6 million direct and \$14.9 indirect and induced) through local spending (operational, capital, students and visitors) as well as direct and indirect support of jobs.

At the state and local levels, MSU Denver contributes to the tax bases through its purchasing. Specific taxes include employee and employer contributions to state and local social-insurance funds, sales taxes, personal property taxes, taxes paid on motor-vehicle licenses and payments of fines and fees.







MSU DENVER **STATE & LOCAL TAX CONTRIBUTION** (FY 19)



MSU DENVER ALUMNI

Last year, over 3,400 students graduated from MSU Denver.

MSU Denver alumni are ubiquitous across the region, with 65,000 graduates living within 25 miles of the University. Many were born and raised in Denver, and Roadrunner alumni – even students who attended MSU Denver but graduated elsewhere – are part of the landscape of Denver, presenting a tremendous advantage to the metro area's employers.

"The beauty of a place like MSU Denver is that we have the workforce right here in our back yard. Most of the graduates are Colorado-based, want to stay in Colorado, and the diversity offered closely mirrors the Colorado population."

- Ron Tilton
president of FirstBank
chair of the MSU Denver Foundation Board

Thanks to partnerships with local employers, building an intentional pipeline to the jobs that exist and a strong demand for talent and graduates at local businesses big and small, 80% of graduates plant their roots in Colorado, contributing to the state and making a positive economic impact after graduation.

The direct impact of the total average wage earned by undergraduate and graduate alumni of MSU Denver on the economy over a 35-year career totals **\$134.9 billion**. Based upon the additional income earned by undergraduate and graduate alumni of MSU Denver, the direct addition to the Colorado economy over a 35-year career totals \$53.4 billion. This impact is calculated based on the incremental increase in wages over the previous degree earned – only the wage differential is calculated as part of the impact over the previous degree, not the average annual salary.

MSU DENVER ALUMNI IMPACT	Incremental Increase over Previous Degree (direct labor income)	Average Annual Salary (direct labor income)
Impact of all undergraduate alumni living in Colorado over 35 years	\$52.8 billion	\$132.2 billion
Impact of all graduate alumni living in Colorado over 35 years	\$613.9 million	\$2.7 billion
Direct labor income impact of MSU Denver undergraduate and graduates	\$53.4 billion	\$134.9 billion
One class undergraduate impact (one year)	\$67.2 million	\$168.5 million
One class graduate school impact (one year)	\$5.0 million	\$22.0 million
One class combined	\$72.2 million	\$190.5 million
One undergrad class (over 35 years)	\$2.3 billion	\$5.9 billion
One graduate class (over 35 years)	\$174.3 million	\$771.2 million
Total one class (undergraduate and graduate) over 35 years	\$2.5 billion	\$6.7 billion



"MSU Denver has such a high rate of success with the students who come here. Whether it's becoming a pilot, working in maintenance or airport management, people who come here typically land in the aviation field."

> - Gary Moore Captain, United Airlines 1983 graduate in Aerospace Sciences

DR. SEAN KNESS

Dr. Sean Kness' story is like that of many people who attend MSU Denver in that it is uniquely his. After serving in the military for eight years, he was ready to go to college. He was 26 years old, and time was of the essence.

"It was really nice in that if you were over 25 years old, you were automatically accepted," Kness said. "I was still in the Army, thinking about going to college and being regularly deployed to Africa and Haiti, but there was no way I would have been able to go through any kind of interview process. All I had to do was apply at MSU Denver, and it was done."

Beginning his career in the Army, with one year in a medic program, he was prepared to launch right into classes. When he finished his military service in Africa and Haiti, Kness was ready upon discharge to start the next phase of his career. MSU Denver allowed him to enroll in December and begin classes in January – no other Colorado institution could do that. And the MSU Denver classroom experience prepared him well.

Kness thrived in the small classrooms at MSU Denver. A fond walk down memory lane includes tales of a beloved histology professor walking through the classroom offering direct feedback on sketches drawn from beneath the microscope, and Kness' amazement at the immediate feedback. "After every class, he would grade each of those sketches, painstakingly, down to the smallest detail," Kness said. "To this day, I think it was the best science-related classes I've ever had." Kness reached for those sketches in medical school and says he could have passed the medical-school histology final on what he remembered from that class alone.

He pushed hard to finish his degree in 3½ years, and in 1999, Kness earned a degree in biology and chemistry. He then went on to the University of Colorado School of Medicine, graduating in 2003. He completed his residency training in Loma Linda, California, and returned home to Colorado to practice emergency medicine at UCHealth in Colorado Springs.

"His path was very successful. He was 26 years old, needed to work, and had he waited six months to a year to get into another institution, his path may have ended very differently," said Kness' wife, Laura English, chief financial officer and vice president of Finance for Kaiser Permanente Colorado.

"MSU Denver made my transition from the Army easy," Kness said. "It gave me the education I needed to get into medical school and to become a physician. No other university could have helped me achieve my goal so quickly."



TRACIE KEESEE

Tracie Keesee was the first female police captain in Denver, the first African American woman to rise to the rank of division chief in Denver and the first deputy commissioner of equity and inclusion for the New York City Police Department. She is a 25-year veteran of the Denver Police Department who now serves as the senior vice president of justice initiatives for the nonprofit Center for Policing Equity.



"What was different about the professors (at MSU Denver) was real-life experience. They had been on the ground, in the trenches, and were telling us what you need to look out for or what you need to be brave enough to do. That was always what grounded me and what set my direction for the rest of my education."

- Tracie Keesee senior vice president of justice initiatives for the nonprofit Center for Policing Equity

MSU DENVER ATHLETICS

Since 1977, when MSU Denver introduced club sports to its student body, the community spirit that runs across Denver has come to life on the Auraria Campus and beyond.

After launching collegiate athletics in the early 1980s, MSU Denver hit a watershed moment when in March 2000 the Men's Basketball team brought home the NCAA Division II national championship.

MSU Denver Athletics sponsors teams in 16 programs; the Roadrunners compete in the Rocky Mountain Athletic Conference. With 200 student-athletes participating in various sports, MSU Denver is committed to excellence in the classroom and on the field and court. MSU Denver has made 105 NCAA championship appearances all-time among its current Athletics programs.

Beyond the thrill of winning championships, like most programs at MSU Denver, Athletics is viewed as an opportunity for community engagement and expanding access to Coloradans. Building the Regency Athletic Complex with no new taxpayer revenue in 2013 is a great example. The state-of-the-art complex has drawn visitors and neighbors alike to downtown Denver.

The NCAA Spring Sports Festival hosted by MSU Denver and the Denver Sports Commission, the NCAA Division II National Volleyball Championships and countless summertime events have created an excellent marketing opportunity. The Regency Athletic Complex is now attracting new possibilities for club camps and clinics. boosting the local economy. Last summer alone, MSU Denver hosted 120 baseball games, attracting new traffic through the campus.

In FY 19, MSU Denver Athletics generated an estimated economic impact of \$23.3 million and supported and sustained 199 jobs as a result of operations and game-day spending by visitors. MSU Denver Athletics generated \$1.3 million in state and local tax revenue.

An estimated **\$9.3 million** is generated from game-related spending by fans attending sporting events.



MSU DENVER **GIVES BACK**

Communities throughout Colorado benefit from services provided by MSU Denver faculty, staff and students.

Based upon assumptions derived from the U.S. Census Bureau and the Points of Light Foundation³ regarding donation amounts and volunteerism rates by age, income level and employment status, it is estimated that staff, faculty and students give nearly **\$2.4 million** annually in charitable donations and volunteer for nearly **372,000 hours**, valued at **\$4.1 million**. In FY 19, the combined impact of charitable giving and volunteerism totaled \$6.5 million. These benefits were in addition to the **\$703.4 million** annual economic impact.

Service and community engagement are at the heart of the MSU Denver academic experience. The University's service-learning program, where interdepartmental faculty lead students in community projects for academic credit at various community partner sites, has grown by 1,310% from Assessment Year (AY) 2012-13 (138 tracked students) to AY 2018-19 (1,946).

The One World One Water Center is a collaboration between MSU Denver and the Denver Botanic Gardens that offers academic and internship programs, joint research projects (several international) and a wide range of applied stewardship opportunity throughout the Front Range.

Long-standing initiatives such as the Richard T. Castro Distinguished Visiting Professorship and Rachel B. Noel Distinguished Visiting Professorship as well as Bridge Speakers bring internationally renowned academics to campus to engage the community on Latinx, Black and gender issues of justice and equity. The annual Dr. Martin Luther King Jr. Peace Breakfast is another event that has brought together the campus and community since 1992, incorporating the University's Illuminate service project, food drives and participation in the city's yearly Marade march.

3 For the purposes of this study, it is assumed that 24.9% of staff and faculty donate an average of \$2,064 annually and 14.9% of students donate an average of \$250 each year. Volunteer impacts are based upon assumptions found in the U.S. Census survey of charitable giving, and the value of a volunteer hour (estimated at \$23.56 per hour) was obtained from the Points of Light Foundation. For the purposes of this breakout analysis, it was assumed that 27.2% of staff and faculty volunteer for an average of 51 hours and 23.3% of students volunteer for an average of 60 hours annually.

MSU DENVER **CHARITABLE GIVING & VOLUNTEER IMPACT**

Staff and Faculty Charitable Giving		\$1,633,803
Student Charitable Giving		\$748,092
	TOTAL	\$2,381,895
Staff and Faculty Volunteerism Hours		44,099
Student Volunteerism Hours		327,554
	TOTAL	371,653
Staff and Faculty Volunteerism Hours		\$1,038,975
Student Volunteerism Hours		\$3,086,866
	TOTAL	\$ 4,125,841

GRAND TOTAL

\$6,507,736



The University's Health Institute is an initiative of 10 departments dedicated to addressing issues of health equity within communities by expanding the health workforce pipeline and focusing on whole-person care. A \$3.1 million Health Resources and Services Administration grant helped establish the institute's Health Careers Opportunity Program that provides students from disadvantaged backgrounds the mentorship and field placements needed for entry into the field at partner locations such as Denver Health. Similarly established cohort scholar programs include DUHOP (for DACA/undocumented students) and others in conjunction with Centura Health and the Anschutz Foundation.

Since its opening in 2015, the Regency Athletic Complex has hosted more than 1,780 events, including six NCAA Division II national championships (with two future tourneys currently scheduled). The 13-acre athletic complex was also designed to serve as a public greenspace for the surrounding La Alma, Lincoln Park, Sun Valley and Val Verde neighborhoods. The RAC received a 2016 Downtown Denver Award for its service to the local community through events, camps and clinics.

The nearby Colfax viaduct also serves as a staging area for creation of meal sacks through Food For Thought; the hunger relief organization partners with MSU Denver's School of Hospitality and often the engaged Roadrunner Athletics volunteer base to deliver food to 53 area schools, ensuring that more than 10,000 students annually have enough to eat. Recent COVID-19 relief efforts have volunteers packing more than 4,000 bags weekly to combat food insecurity.

The MSU Denver Alumni Association has raised more than \$350,000 thanks to its exclusive partnership with the Colorado Rockies. Funds generated from 50/50 raffle sales go directly back to a University department of volunteers' choosing, benefiting over 120 departments over the past two seasons.

Roadrunners Give Back Day (RGBD) is a campuswide day of community outreach that supplements the four hours of volunteer time employees can take advantage of each month. The 2018 RGBD event fielded approximately 250 volunteers across 16 community locations, while the weather-rescheduled 2019 version placed participants at sites including Florence Crittenton Services, the Food Bank of the Rockies, Denver Health and Servicios De La Raza.

Civic engagement is also a cornerstone of MSU Denver. According to a nationwide survey conducted by Tufts University, Roadrunner students who were registered voted in the 2018 election at a rate of 70% versus the national average for registered college students of 55%.

The University is a long-standing member of AASC&U's American Democracy Project, dedicated to developing civically informed and engaged citizens, recently using the \$457,000 awarded from the bipartisan HB19-1239 to hire 22 students as Census 2020 outreach employees for direct community engagement.



DENVER PROJECT FOR HUMANISTIC INQUIRY

Launched in 2015, the ambitious effort of the Denver Project for Humanistic Inquiry has notched more than 80 events, with total attendance topping 10,000. With high-profile partners spanning from the Denver Center for the Performing Arts and Denver Film Society to local spots such as Ratio Beerworks, D-phi invites members to see the urban world as their classroom.

That's done through the practice of humanistic scholarship, fusing critical thought and group discussion to evaluate disparate opinions and explore the various possible solutions to a problem.

"We're filling a gap in the Denver cultural scene," said Adam Graves, associate professor of philosophy at MSU Denver and director of the organization. "The city has become a great place for creatives in fields like music, art and beer; within this, we saw an opportunity to bring humanities to the broader public as well."

These are but a small number of the wide-ranging programs and partnerships that also include the School of Education's substantial presence in Front Range classrooms, long-standing support of the city's annual Cinco de Mayo festival and the Family Literacy Program's outreach to help immigrant, low-income and refugee communities break the cycle of intergenerational poverty. And as 65% of alumni live within a 25-mile radius of campus, MSU Denver continues to live its mission as a self-sustaining pipeline and engaged, informed and integral heart of the Front Range economy.

Conclusion

Not all economic activity is equal. MSU Denver offers social and economic mobility to communities in Denver and across Colorado that don't have access to economic mobility. There is a cross-generational impact when first-generation students earn a college degree – that's special, and MSU Denver offers access to higher education to many Colorado families.

The evolution of MSU Denver is limited in some part by lack of public resources to support modernization efforts and the wrap-around services required to successfully educate its diverse student population. MSU Denver is a nexus of the Colorado public-education and economic ecosystem, from high school through graduate school, and is a prolific pipeline to the workforce.

The impact of the University reaches far beyond the economic energy it generates and sustains. With 97% of its students hailing from Colorado and 80% remaining in Colorado following graduation, the human impact is palpable. While many companies rely on MSU Denver graduates as a workforce asset, students are able to help them make a connection to their respective communities, bridging societal gaps.

MSU Denver cultivates Colorado's homegrown talent and partners effectively to prepare its graduates to support the workforce needs of Denver and the state. The University is educating a population of talented and intelligent people for whom higher education might not otherwise be a path forward because of the cost or time or life circumstances that make it impossible to take a traditional route.

APPENDIX A: TERMS & DEFINITIONS

STUDY YEAR

FY 2019

DOLLAR YEAR

Presented in 2019 dollars.

TOTAL ECONOMIC OUTPUT/ ECONOMIC IMPACT Includes organizational spending on operations, capital expenditures, labor income expenditures and value added to the economy as a result of expenditures made by an organization. It is the combined impact of direct, indirect and induced impacts.

DIRECT ECONOMIC IMPACT

All direct expenditures made by an organization due to its operating expenditures. These include operating expenditures, capital expenditures and pay and benefits expenditures.

INDIRECT ECONOMIC IMPACT

The indirect impact includes the impact of local industries buying goods and services from other local industries. The cycle of spending works its way backward through the supply chain until all money is spent outside of the local economy, either through imports or by payments to value added (multiplier effect).

INDUCED ECONOMIC IMPACT

The response by an economy to an initial change (direct effect) that occurs through respending of income received by a component of value added. IMPLAN's default multiplier recognizes that labor income (employee compensation and proprietor income components of value added) is not lost to the regional economy. This money is recirculated through household spending patterns causing further local economic activity (multiplier effect).

MULTIPLIER EFFECT

The multiplier effect is the additional economic impact created as a result of the organization's direct economic impact. Local companies that provide goods and services to an organization increase their purchasing by creating a multiplier (indirect/supply chain impacts). Household spending generated by employees of the organization and the organization's suppliers creates a third wave of multiplier impact (induced/household spending impacts).

GOVERNMENT REVENUE/ STATE AND LOCAL TAX IMPACT Government revenue or tax revenue that is collected by governmental units at the state and local level in addition to those paid directly by an organization. This impact includes taxes paid directly by the organization itself, employees of the organization and vendors who sell products to the organization and at the household level.

DIRECT EMPLOYMENT

Total number of employees, both full-time and part-time, at the organization based on total jobs, not FTEs.

INDIRECT EMPLOYMENT

Additional jobs created as a result of an organization's economic impact. Local companies or vendors that provide goods and services to an organization increase their number of employees as purchasing increases, thus creating an employment multiplier.

INDUCED EMPLOYMENT

Additional jobs created as a result of household spending by employees of an organization and the employees of vendors. This is another wave of the employment multiplier.

APPENDIX B: DATA & METHODS

Data used to complete the contribution analysis was provided by MSU Denver. Data supplied included operating expenditures, three-year capital-spending average, pay and benefits, total employees and direct taxes paid. Primary and secondary data was used to complete the input-output models in IMPLAN. The study approach and economic-impact findings are a conservative estimate of impact and are based on actual financial information. The study is a snapshot of the economic impact of MSU Denver.

Overview And The Implan Model

The most common and widely accepted methodology for measuring the economic impacts of economic sectors is input-output (I-O) analysis. At its core, an I-O analysis is a table that records the flow of resources to and from companies/organizations and individuals within a region at a given time. For a specified region such as a state of the nation, the input-output table accounts for all dollar flows among different sectors of the economy in a given period. With this information, a model can then follow how a dollar added into one sector is spent and respent in other sectors of the economy, generating outgoing ripples of subsequent economic activity. This chain of economic activity generated by one event is called the "economic multiplier" effect.

The primary tool used in the performance of this study is the I-O model and dataset developed and maintained by IMPLAN Group LLC (formerly Minnesota IMPLAN Group Inc.). IMPLAN is a widely accepted and used software model first developed by the U.S. Forest Service in 1972. Data used in the baseline IMPLAN model and data set come largely from federal-government databases. The input-output tables themselves come from the Bureau of Economic Analysis. Much of the annual data on labor, wages, final demand and other market data comes from the Bureau of Labor Statistics, the U.S. Census Bureau and other government sources.

Government agencies, companies and researchers use IMPLAN to estimate the economic activities associated with spending in a particular industry or on a particular project. The IMPLAN model extends conventional I-O modeling to include the economic relationships among government, industry and household sectors, allowing IMPLAN to model transfer payments such as taxes. Producers of goods and services must secure labor, raw materials and other services to produce their product.

The resources transferred to the owners of that labor or those raw materials and services are then spent to secure additional goods and services or inputs to the products they sell. For example, an organization in a region may develop a company that produces trains with a value of \$1 million. However, to produce that product, they may be required to spend \$500,000 in wages and benefits, \$200,000 to suppliers of parts, \$100,000 for electricity, \$50,000 for transportation of goods and raw materials to and from the plant and \$50,000 in various professional services associated with operating a business (e.g., attorneys and accountants). The suppliers will, in turn, spend those resources on labor and raw materials necessary to produce trains. Workers and the owners of the company will buy goods and services from other firms in the area (e.g., restaurants and gas stations) and pay taxes. The suppliers, employees and owners of this second tier will, in turn, spend those resources on other goods and services whether within the study region or elsewhere. The cycle continues until all of the money leaves the region.

Implan Methodology

The model uses national production functions for over 536 industries to determine how an industry spends its operating receipts to produce its commodities. These production functions are derived from U.S. Census Bureau data. IMPLAN couples the national production functions with a variety of county-level economic data to determine the impacts at a state and congressional-district level. IMPLAN collects data from a variety of economic data sources to generate average output, employment and productivity for each industry in a given county. IMPLAN combines this data to generate a series of economic multipliers for the study area. The multiplier measures the amount of total economic activity generated by a specific industry's spending an additional dollar in the study area. Based on these multipliers, IMPLAN generates a series of tables to show the economic event's direct, indirect and induced impacts to gross receipts, or output, within each of the model's more than 536 industries.

The model calculates three types of effects: direct, indirect and induced. The economic impact of MSU Denver is the sum of these three effects.

Considerations Concerning Implan

There are three important points about the use of IMPLAN (or any other input-output model):

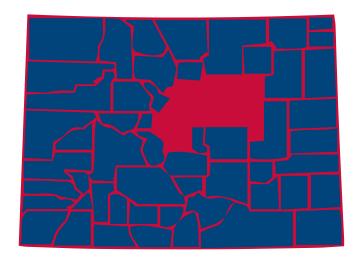
It is a fixed-price model. The model assumes that changes in consumption are not limited by capacity and do not affect prices. This assumption does not cause a problem for the analysis presented here because we are taking a snapshot of MSU Denver in a specific year.

As in many studies using this type of model, the direct impacts are not calculated by the model; they are a reflection of actual spending levels and patterns created by MSU Denver. Changing the level of direct spending allows us to calculate the magnitude of the indirect and induced effects associated with the initial level of spending.

Because the model continues to calculate additional spending until all of the money leaves the region (i.e., "leakage"), the larger and more economically diverse the region, the longer it will take for spending to leave the region and the larger the impact is likely to be. For example, employees of MSU Denver may spend some amount of their income on buying a car. If there are no car manufacturers in their state or county, this spending will leave the region and the multiplier effect will stop. At the national level, some portion of that same spending by that same individual may go to a national auto producer. That spending would lead to more spending at the national level than would be captured by a more regional model. The national impact will be larger than the sum in the individual states, and the individual state impact will be larger than the sum of the impacts in its congressional districts.

APPENDIX C: IMPACT ON DENVER MSA

MSU Denver's impact on the Denver - Aurora - Lakewood Colorado Metropolitan Statistical Area is significant. MSU Denver generates \$562.7 million in economic impact and supports and sustains 5,800 jobs.



City and County of Denver

Arapahoe County

Jefferson County

Adams County

Douglas County

City and County of Broomfield

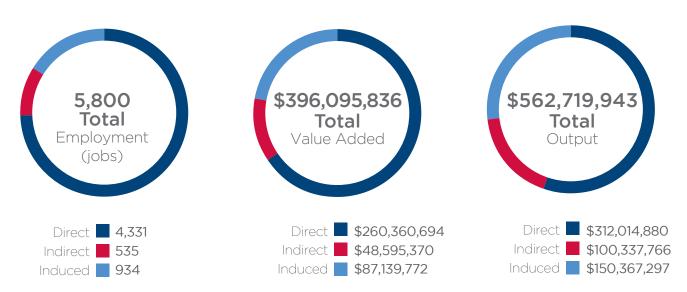
Elbert County

Park County

Clear Creek County

Gilpin County

MSU DENVER **COMBINED ECONOMIC IMPACT** (FY 19)



APPENDIX D: FAQS

What Is An Economic Contribution Analysis?

Technically, this study is a contribution analysis. The study quantifies the economic contribution of MSU Denver in terms of economic impact, jobs and local and state tax revenue. The study calculates how spending by MSU Denver employees, visitors and students contributes to the economy of Colorado and beyond. It examines how expenditures create additional impact in the economy directly and through the multiplier.

An economic-contribution analysis quantifies the broader and more general case of how the economic activity cycles through an existing economy. For the purposes of this study, an economic contribution is defined as the gross changes in Colorado's existing economy that can be attributed to MSU Denver. Contribution analysis is a descriptive analysis that tracks gross economic activity: how spending by MSU Denver and its constituencies cycle dollars through the economy. The MSU Denver economic-contribution analysis does not consider how spending at this university may crowd out spending at another college or university within the state. This type of analysis is one of the most common that is performed and is often mislabeled as an economic-impact study. Please note that while the terms used to express the contribution of MSU Denver to the statewide economy are referred to as economic impact, this is a contribution analysis.

Spending by students, staff and faculty who are explicitly participating in activities associated with MSU Denver's output represents a "stemming-from effect" and could also be considered a direct effect of the higher-education industry. For example, MSU Denver students who attend classes and spend \$10 on lunch at a local restaurant are a stemming-from effect of MSU Denver. This contribution analysis then follows the direct economic activity and associated stemming-from effects through the economy, with the output of each sector broken down and attributed to expenditures on intermediate inputs or to value-added components such as labor, taxes and returns to capital. Output multipliers, which are sector-and region-specific, are derived from the appropriate model and relate an industry's economic activity (or changes in the industry's economic activity) to gross sales in the other sectors of the regional economy.

The contribution analysis does not account for the fact that if a student attending class at MSU Denver were a local resident, then the \$10 they spent on lunch potentially represents \$10 they are not spending at another restaurant elsewhere in town. The direct effect in a contribution analysis includes purchases by students from in and out of state and is neither a measure of changes to the state's economic base nor a measure of the value added to the region above what was paid to input suppliers.

What Should You Remember About The Study When You Read It?

- It is a point-in-time calculation of impact for FY 19.
- It quantifies the amount of impact that MSU Denver produces each year.
- The economic numbers can fluctuate year to year based on operational spending, capital spending, pay and benefits, number of employees, number of students and state appropriation.
- This is an economic contribution analysis that casts a broader net to calculate impact than an economic impact study.
- These are conservative numbers and adhere to industry respected protocols.

What Methodology Was Used To Complete This Study?

IMPLAN data and software were used to conduct this economic contribution analysis. The IMPLAN database is built using county, state, ZIP code and federal economic statistics that are specialized by region, not estimated from national averages, to measure the contribution or impact of an organization's economic activity.

What Were The Multipliers For This Study?

The multipliers used in this study range from 1.8 to 2.1. The multipliers are derived through the input-output models created using the IMPLAN software based upon industries selected during the modeling process.

What Data Does This Study Use To Calculate The Economic Impact?

Primary data used in this analysis is for FY 19 and was obtained from MSU Denver. Data addresses the following subjects:

- Operating expenditures
- Capital expenditures (three-year average)
- Pay and benefits by employee type
- · Number and types of students (all in-state and out-of-state students included)
- MSU Denver Athletics
- Volunteerism
- Charitable giving
- Visitor numbers
- Alumni data

Secondary data was used to estimate the following:

• Student spending habits based on MSU Denver budgets for spending (full- and part-time undergraduate and graduate students, excluding tuition and fees)

Visitor spending habits (day and overnight visitors)

What Are The Community Benefits Impacts Based Upon?

Charitable giving impacts are based upon assumptions found in the U.S Census donor data. These models do not assume a 100% participation rate for staff, faculty and students and are not based on averages. Some colleges and universities had primary data available on volunteerism, and in those cases actual hours were used in the calculation. For the purposes of this study, it is assumed that 24.9% of staff and faculty donate an average of \$2,064 annually and 14.9% of students donate an average of \$250 each year.

Volunteer impacts are based upon assumptions found in the U.S. Census, and the value of a volunteer hour was obtained from the Points of Light Foundation and is estimated at \$23.56 per hour. For the purposes of this breakout analysis, it was assumed that 27.2% of staff and faculty volunteer and 23.3% of students volunteer.

Why Did MSU Denver Commission A Study?

MSU Denver commissioned the analysis to quantify its impact on Colorado and the Denver MSA. MSU Denver has a number of tools helpful in explaining the value proposition for supporting higher education; this independent study is one way to help explain its worth. In trying to explain the value of a MSU Denver education to both internal and external constituents, it is important to quantify the financial and societal gains realized throughout the state. There are many ways to view the impact and value of a university – economic impact is one.

Why Does This Study Look Different From Others We Have Seen Published?

The veracity of the data and methodology is consistent with industry standard protocols for conducting an effective economic impact study that is conservative. The data is an independent assessment of MSU Denver's contribution to the overall economy – the numbers drive the message, not the other way around. The report is designed to make the data analysis accessible to all readers.

