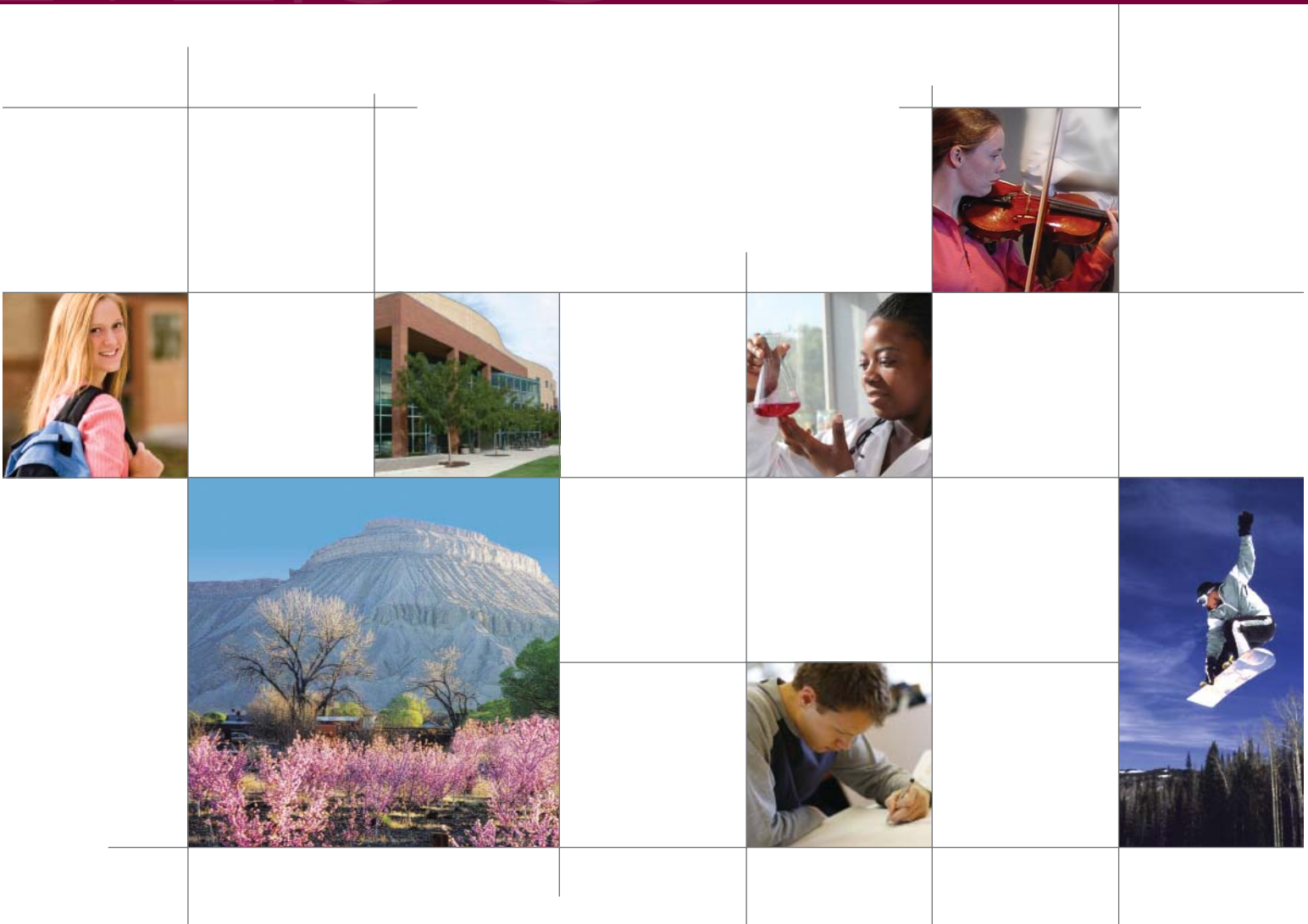


# MESA STATE COLLEGE

GRAND JUNCTION, COLORADO



## Regional Economic Impact

**No Place So Close Can Take You So Far**



No Place So Close Can Take You So Far

# REGIONAL ECONOMIC IMPACT FISCAL YEAR 2005-2006

**January 2007**

This publication is an update of the study *Achieving a Higher Degree of Leadership in Western Colorado*, Mesa State College, Grand Junction, Colorado, (2004), by Carol Futhey and Morgan Bridge.

The original publication, and the update focusing on Mesa State College's regional economic impact, are available online at [www.mesastate.edu/president/impactstudy](http://www.mesastate.edu/president/impactstudy).

## **CREDITS**

Special thanks to the following who provided data and reviews of the study: Andy Anderson, Paul Arnhold, Sonia Brandon, Elizabeth Brodak, Don Carpenter, Jessica Cowden, Tim Hatten, Jeanne Herring, Deb Hoefler, Claudia Kellar, Mike Mansheim, Curt Martin, Dana Nunn, Jerry Moorman, Deb Parman, Bryan Rooks, Erin Rooks, Jane Sandoval, Whitney Sutton, and Christy VanDahm.



## OVERVIEW

As a regional public institution of higher education, the primary goal of Mesa State College (MSC) is to raise the educational attainment of Coloradans, with a focus on 14 counties on the Western Slope (Figure 1). The 14-county region spans 28% of the state and is a diverse mix of geography, economic activities, socio-economic levels, and education. Its 375,000 residents are scattered across an area of 28,535 square miles, and with the exceptions of Mesa, Montrose, Delta and Garfield counties, is a region with low population densities. Based on the 2000 census, half of the 14 counties served by Mesa State exceed the state's average of 32.7% of adults with a baccalaureate degree or higher; five counties have an above average proportion of associate degree completers.

A secondary benefit that Mesa State adds to the region is its economic contributions. Beyond its educational mission, the College is a significant economic engine in its own right that ranks it as the third largest employer in the local community. **In FY 2005/06, Mesa State College added more than \$106 million directly to the regional economy, and when indirect spending is taken into account, the total exceeds \$190.9 million. Additionally, this study estimates that 471 jobs were supported due to the \$106 million in direct spending.**

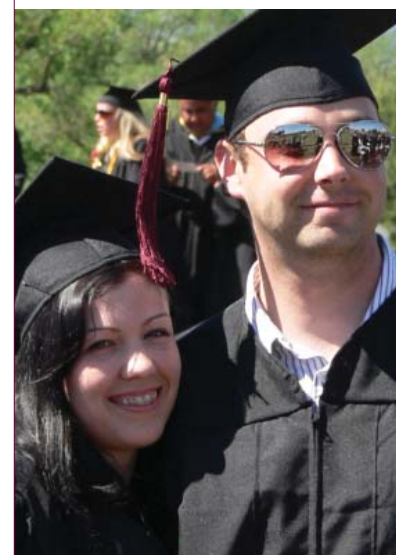
### Mesa State College's Role in the Region

Mesa State serves as a significant access point to baccalaureate higher education for the entire Western Slope. In fall 2006, the College's enrollment was more than 6,100 students, 72% of whom were from the 14 western Colorado counties of Delta, Eagle, Garfield, Grand, Jackson, Mesa, Montrose, Moffat, Ouray, Pitkin, Rio Blanco, Routt, San Miguel, and Summit (Figure 1). Total enrollment has grown 11.5% between fall semesters 2002 and 2006, while the number of students from underrepresented groups has increased by 19%.

The breadth of MSC degree offerings is unusual among Colorado's public four-year colleges and universities. Since 1997, the College has offered graduate programming, beginning with the Master's of Business Administration, and more recently, the Master of Arts in Education. Baccalaureate degrees prepare students for careers in professional positions as well as further study in graduate programs. The College also offers technical certificates and the associate of applied science degree to prepare students whose immediate plans are to enter the workforce in a technical field. Finally, at the two-year level, associate of arts and science degrees also are available for students who ultimately plan to transfer to another institution.

Equally important to the region, however, is the fact that Mesa State College is the third largest employer in Mesa County, and as such, serves the dual purposes of educational institution and economic catalyst. The College is a major economic player on several levels. Most of this report focuses on Mesa State as a regional employer and how its spending ripples through the economy.

Mesa State College plays a vital role in the economy of Western Colorado. In addition to being the third largest employer in Mesa County, the College prepares graduates for careers in business, psychology, health professions, the arts, environmental sciences, culinary arts, and manufacturing technology, just to name a few. In total, the College offers more than 45 programs of study and awarded nearly 900 degrees and certificates in 2005/06 that ranged from one-year technical certificates to master's degrees.

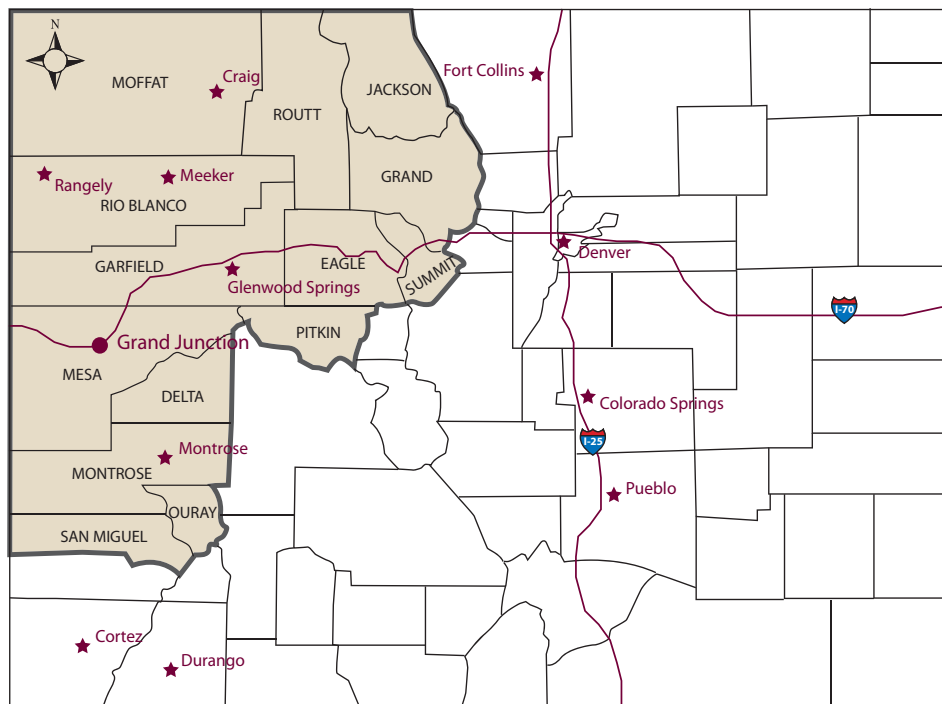


From a second vantage point, the College has initiated a number of academic and technical programs over the past few years that support the region's economic development. These include:

- ❖ Development of a formal community college division—Western Colorado Community College—that offers technical training for the workforce (e.g., manufacturing technology, computer-aided design, welding, construction technology, transportation services, and technology integration).
- ❖ Creation of degree completion programs, such as the Bachelor of Applied Science degrees in business, public administration/public safety, and computer information systems (approval anticipated in spring 2007). These programs enable individuals with a technical associate's degree to pursue a bachelor's degree in order to advance in management or administration.
- ❖ Delivery of high demand programs to communities across the region via interactive and online formats (e.g., nursing, teacher education). By using distance technologies, employees can advance their education without leaving the workplace and employers who can ill-afford for staff to be gone to attend school.
- ❖ Design of programs using a career ladder model. Students can complete a program of study, exit for employment, and return later to move upward to the next degree, with credit hours fully transferable across all program levels.

Mesa State College continues a long tradition of partnering with regional employers and agencies to support and advance the region's economic development. The College continues to develop programs of study and enter into joint ventures that leverage the resources of the College and its partners.

**Figure 1. COUNTIES DESIGNATED TO BE SERVED BY MESA STATE COLLEGE**



- ❖ Collaboration with local employers to develop programs that leverage the resources of both the College and businesses, such as:
  - Peace Officer Standards and Training (POST) with the Grand Junction Police and the Mesa County Sheriff’s Departments;
  - Construction technology with the local chapter of the Associated Builders and Contractors;
  - Associate of Applied Science/Registered Nurse and Licensed Practical Nurse degrees with Mesa County Workforce Center;
  - Emergency Medical Technician with a variety of first responder agencies across the region;
  - Business degree concentrations in entrepreneurship and energy management, as well as a process technology degree with oil and gas companies (approval anticipated in spring 2007); and
  - Master of Arts in Education in response to the needs of K-12 school districts on the Western Slope.

It is the first perspective, however, that is the focus of this study – the College’s economic relationship to the region it serves – and the balance of this report focuses on Mesa State’s economic impact in Western Colorado.

## THE ECONOMIC IMPACT OF MESA STATE COLLEGE

### Methodology

The economic impact of Mesa State College on its 14-county region was estimated by using the short-run approach, which examines the impact on local economic activity that results from the presence of an institution. Beck and Elliot (1995) define economic impact as, “... the difference between existing economic activity in a region given the presence of the institution and the level that would have been present if the institution did not exist.” This study considers both the economic impact of Mesa State College in fiscal year (FY) 2005/06 as well as increases in economic activity over the last five years (FY 2001/02 – 2005/06). The methodology relied heavily on the American Council on Education model developed by Caffrey and Isaacs (1971). The model examines five categories of expenditures associated with the College, listed below, and then applies a multiplier to calculate the estimated total economic impact of the College:

- ❖ College expenditures, such as utilities, printing, janitorial supplies, and paper.
- ❖ Employee salary/wage expenditures, including all items purchased by employees of Mesa State College such as rent/mortgage payment, clothing, food, and transportation.
- ❖ Student expenditures, that range from purchases such as food and board to personal expenses and entertainment as determined by the MSC Financial Aid Office.
- ❖ Visitor expenditures, including primarily food and shelter purchases, stated as a per diem amount, made by visitors attending various student and campus activities.
- ❖ Capital expenditures, which vary year-to-year depending upon the amount of construction funding available for the fiscal year.

In partnership with local businesses and agencies, the College recently developed programs to train peace officers and emergency services personnel, and is currently developing programs to serve the energy industry.



Mesa State College's two-year division—Western Colorado Community College—is integral to the technical training of the region's workforce. Programs include manufacturing technology, transportation services, and construction technology.

The following section details each of the expenditure categories, their direct economic impact on the surrounding community, and their total impact due to the multiplier effect. The multiplier effect represents a dollar spent by one individual that becomes the income of another person. The initial dollar, since it is being “respent,” has a greater impact on the economy than just the original dollar, and hence, dollars “grow” as they circulate through the economy. The economic impact of Mesa State College is significant. **In FY 2005/06, the College added over \$106 million directly to the regional economy, and by applying a multiplier of 1.8, the total addition to the economy was estimated to be \$190.9 million due to the presence of the Mesa State College.**

### Expenditure Categories

#### College Expenditures

Mesa State College purchases a variety of goods, services, and materials from the surrounding area, ranging from paper to janitorial supplies to utilities. In order to measure the economic impact of MSC's purchases from the local community, the budgets for all departments and auxiliary accounts were evaluated. Out-of-state purchases were excluded from the total. After reviewing College vendor lists, it was determined that approximately 50% of the funds were spent in the 14-county region of Western Colorado. Total expenditures amounted to \$10.8 million for FY 2005/06, and assuming 50% of that total was spent regionally, the College added \$5.4 million to the local economy. A five-year summary of College expenditures is found in Table 1.

**Table 1. MESA STATE COLLEGE EXPENDITURES  
FY 2001/02 - 2005/06**

Fiscal Year	Expenditure Amount	% Spent Locally	Adjusted Total Dollars Added
2001/02	\$ 8,953,972	50%	\$4,476,986
2002/03	\$ 9,762,700	50%	\$4,881,350
2003/04	\$10,965,243	50%	\$5,482,622
2004/05	\$ 9,283,813	50%	\$4,641,907
2005/06	\$10,861,187	50%	\$5,430,594
<b>5 Yr Total</b>	<b>\$49,826,915</b>		<b>\$24,913,458</b>
<b>Annual Avg</b>	<b>\$9,965,383</b>		<b>\$4,982,692</b>



### Employee Salary/Wage Expenditures

The employee salary/wage expenditure category includes items purchased by MSC employees, from housing payments to entertainment to education and transportation. To calculate employee salary/wage expenditure dollar amounts, all monies budgeted for salaries and wages for all College departments and auxiliary accounts were reviewed. Benefits, which include retirement, medical insurance, life insurance, etc. were excluded. Taxes, estimated at a rate of 15%, also were subtracted from the salary dollars.

According to the Bureau of Labor Statistics Consumer Expenditure Survey, housing and transportation are the two largest areas of consumer expenditures. It was assumed that there was little dollar leakage out of the region, particularly in the major areas of housing, food, and transportation, since the majority of those dollars are spent by Mesa State employees in their home community. Vacations and entertainment, however, are examples of dollars that are more likely to leave the local economy. For this study, it is assumed that 10% adequately accounts for leakage out of the 14-county area. Consequently, in FY 2005/06, employee salaries and wages totaled \$16.7 million after taxes. Adjusting for a 10% leakage, this study estimates that employee salary/wage expenditures added \$14.9 million to the local economy.

Mesa State College currently employs 1,177 faculty, staff, and students, either full- or part-time, and according to the Grand Junction Chamber of Commerce, MSC is the third largest employer in Mesa County, exceeded only by Mesa County School District #51 and St. Mary's Hospital. The College thus has a significant impact on employment levels and economic activity in the surrounding community.

**Table 2. MESA STATE COLLEGE  
EMPLOYEE SALARY/WAGE EXPENDITURES, FY 2001/02 - 2005/06**

Year	Salaries	Less 10%	Adjusted Total Dollars Added
2001/02	\$15,359,316	\$1,535,932	\$13,823,384
2002/03	\$15,552,807	\$1,555,281	\$13,997,526
2003/04	\$15,425,848	\$1,542,585	\$13,883,263
2004/05	\$15,287,269	\$1,528,727	\$13,758,542
2005/06	\$16,666,127	\$1,666,613	\$14,999,514

Table 3 illustrates how MSC employees, as consumers, generally spend salary dollars in the local economy. The total excludes benefits, and subcategories were adjusted for after-tax dollars and the 10% deduction for leakage out of the local economy. The average household income for the area, according to the Grand Junction Chamber of Commerce, was \$50,600. For this study, Table 3 is based on an average income range of \$50,000-\$69,999 for the Midwest Region for the FY 2003/04, the most recent data available from the Bureau of Labor Statistics.

According to the Grand Junction Chamber of Commerce, Mesa State College is the third largest employer in Mesa County, exceeded only by Mesa County School District #51 and St. Mary's Hospital. The College's salary/wage expenditures added an estimated \$14.9 million to the local economy.

**Table 3. MESA STATE COLLEGE  
CONSUMER EXPENDITURES BY CATEGORY, FY 2005/06**

Consumer Expenditure Category	Percent of Total Income	Estimated Total Dollars Spent
Food		
Food at home	7.54%	\$1,130,963
Food away from home	5.97%	\$895,471
<b>Total Food</b>	<b>13.50%</b>	<b>\$2,024,934</b>
Housing		
Shelter	16.63%	\$2,494,419
Utilities, fuels, and public services	6.83%	\$1,024,467
Household operations	1.40%	\$209,993
Housekeeping supplies	1.54%	\$230,993
Household furnishings and equipment	3.92%	\$587,981
<b>Total Housing</b>	<b>30.36%</b>	<b>\$4,553,852</b>
Apparel and Services		
Men and boys	1.00%	\$149,995
Women and girls	1.49%	\$223,493
Children under 2	0.20%	\$29,999
Footwear	0.68%	\$101,997
Other apparel products and services	0.40%	\$59,998
<b>Total Apparel and Services</b>	<b>3.76%</b>	<b>\$563,982</b>
Transportation	19.32%	\$2,897,906
Health Care	6.72%	\$1,007,967
Entertainment	4.98%	\$746,976
Personal Care Products and Services	1.22%	\$182,994
Reading and Education	1.68%	\$251,992
Miscellaneous	3.77%	\$565,482
Cash Contributions	3.22%	\$482,984
Personal Insurance and Pensions	11.47%	\$1,720,444
<b>Total</b>	<b>100%*</b>	<b>\$14,999,514*</b>

\*Differences due to rounding



### Student Expenditures

Students attending Mesa State College add significant dollars to the economy, and a major share of their spending stays in the Western Colorado economy. Student expenditure estimates were based on a formula used by MSC's Financial Aid Office, and the same amounts were used for both on-campus and off-campus students. Non-tuition expenditures were divided into five groups: books and supplies, room, board, personal expenses, and transportation. As with employee spending, the study assumed that 90% of these dollars remained in the local economy as shown in Table 4.

The increase in dollars spent annually is indicative of the growing student population (Figure 2). In academic year 2005/06, the unduplicated student headcount (excluding concurrently enrolled high school students) was 6,823, who spent an average of \$1,225 a month for nine months while attending college during the 2005/06 academic year. At that rate, students infused approximately \$68.2 million into the local economy.

**Table 4. MESA STATE COLLEGE  
STUDENT EXPENDITURES, FY 2001/02 - 2005/06**

Fiscal Year	Student Expenditures	Less 10%	Adjusted Total Dollars Added
2001/02	\$55,714,406	\$5,571,441	\$50,142,965
2002/03	\$59,147,280	\$5,914,728	\$53,232,552
2003/04	\$61,120,100	\$6,112,010	\$55,008,090
2004/05	\$73,658,025	\$7,365,803	\$66,292,223
2005/06	\$75,774,825	\$7,577,483	\$68,197,343

**Figure 2. MESA STATE COLLEGE ANNUAL STUDENT EXPENDITURES,  
FY 2001/02 - 2005/06**

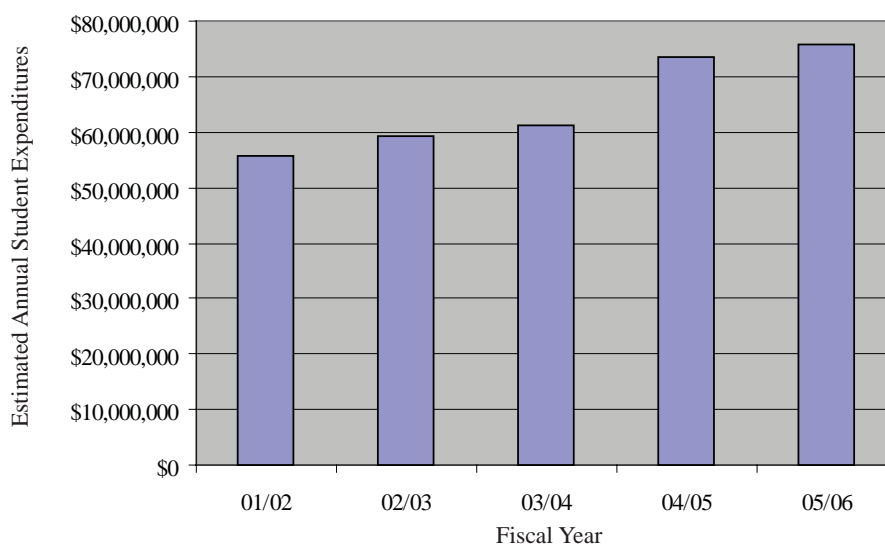


Figure 2 (left) represents the growth in dollars spent by Mesa State College students. The increase in expenditures is indicative of the College's growing student population.



**Visitor Expenditures**

Visitor expenditures include those items purchased by individuals who attend Mesa State College activities and events. As visitors, they purchase lodging, food, entertainment, and fuel. Also, since these items are purchased with out-of-area dollars, they are “new” to the community and increase overall economic activity. The number of visitors to Mesa State was based on estimates from academic, student, and athletic departments for FY 2005/06, and Table 5 summarizes the information provided by the various departments.

**Table 5. MESA STATE COLLEGE  
NUMBER OF VISITORS BY ACTIVITY, FY 2005-2006**

Activity	Estimated Visitors
Tomlinson Library	7,585
Performing Arts	19,000
College Center	95,364
Athletics	53,679
Graduation	8,000
<b>Total</b>	<b>183,628</b>

Visitors who attend Mesa State College activities and events, such as athletic events and performing arts productions, add an estimated \$5.4 million to the local economy.

Of the estimated 183,628 visitors last year, it is assumed that 25%, or 45,907 individuals, were from outside the region and added new dollars to Western Colorado’s economy. Using \$118 as the per diem, obtained from the U.S. General Services Administration for Glenwood Springs/Grand Junction, Colorado, and counting each person as a one-day stay, a total in excess of \$5.4 million results.



### Capital Expenditures

Capital expenditures were separated from all other expenditures of the College due to the significant variation that can occur from year to year. During the time frame of this study, the College continued or completed major capital projects, listed in Table 6. In FY 2005/06, more than \$1.8 million were spent on a variety of projects that ranged from technology upgrades for classrooms and labs to completion of temporary parking lots, the Elm Avenue pedestrian mall, and the Nesbitt Center on the Bishop Campus. Additionally, the College remodeled and/or expanded several buildings that involved painting, carpet replacement, landscaping, roof repair, and railings. During this time, the College’s newest residence hall—adding 288 beds—also was completed at a cost of \$12 million.

In total, then, Mesa State College spent \$14.5 million on capital projects over the two most recent fiscal years. Of that amount, it is estimated that 100% of the projects’ total—except for residence halls—was spent in the surrounding community, while approximately 79% of the expenditures for the residence hall construction were spent locally. Total dollars spent in the local economy from capital projects in FY 2005/06 equaled \$11.5 million. As shown in Table 6, these funds vary dramatically from one year to the next since these types of projects are funded on a case-by-case basis.

**Table 6. MESA STATE COLLEGE  
CAPITAL EXPENDITURES, FY 2004/05 - 2005/06**

Fiscal Year	Project	Expenditure Amount	% Spent Locally	Adjusted Total Dollars Added
2004/05	HVAC/ Saunders/ Dining Remodel	\$39,000	100%	\$39,000
	Landscape/ Sidewalks/ Carpet	\$106,500	100%	\$106,500
	Pinon/ Rait Elevator	\$46,000	100%	\$46,000
2005/06	Elm Avenue	\$702,265	100%	\$702,265
	Remodel/ Expansion	\$210,718	100%	\$210,718
	Rail/ Roof/ Carpet/ Misc.	\$351,988	100%	\$351,988
	Demolition/ Temporary Parking	\$224,250	100%	\$224,250
	Technology Labs/ Classrooms	\$389,093	100%	\$389,093
	Nesbitt Center	\$450,000	100%	\$450,000
	Residence Hall	\$12,057,940	79%	\$9,525,773
<b>2 Yr Total</b>		<b>\$14,577,754</b>		<b>\$12,045,587</b>



High demand programs—including nursing and teacher education—are delivered to communities across the region via interactive and online formats. By using distance technologies, Mesa State College allows Western Coloradans to advance their education without leaving employers who can ill-afford for staff to be gone to attend school.

### Economic Multiplier

The multiplier effect is an important factor when determining the total economic impact of Mesa State College on the region. Through the multiplier, the impact of each dollar spent by the College increases as it travels through the economy and becomes another person’s income. Thus, the economic impact is not just the original dollar but also the “growth” of the dollar due to the multiplier.

When reviewing similar economic impact studies, the range of multipliers used to calculate the multiplier effect, or indirect effect of dollars spent in the surrounding community, varies rather widely as shown in Table 7.

**Table 7. Multipliers Used in Selected Economic Impact Studies**

College, University, Organization	Multiplier
Colorado State University	4.0
Northern Arizona University	3.49
Montana State University	2.50
University of Colorado Health Sciences	2.06-2.5
University of Colorado-Boulder	1.93-2.06
Mesa State College RIMS Multipliers (1999 study)	1.595-1.87
University of Idaho	1.50
Grand Junction Visitor & Convention Bureau RIMS Multipliers	1.477-2.649

For this study, the multipliers in Table 7 were averaged separately for the high and low ranges, producing an average range from 2.32 to 2.57. A multiplier of 1.8 was chosen, a conservative one compared to those shown above. The impact of applying this multiplier to each expenditure category is summarized in Table 8, resulting in Mesa State’s \$106 million from direct expenditures growing to a total regional economic impact of \$190.9 million.



**Table 8. ECONOMIC IMPACT OF MESA STATE COLLEGE  
BY EXPENDITURE CATEGORY, FY 2005/06\***

Expenditure Category	Direct Impact	Multiplier (Indirect Impact)	Total Impact	% of Total
College	\$5,430,594	1.8	\$9,775,068	5.1%
Employee	\$14,999,514	1.8	\$26,999,126	14.1%
Student	\$68,197,343	1.8	\$122,755,217	64.3%
Visitor	\$5,417,026	1.8	\$9,750,647	5.1%
Capital	\$12,045,587	1.8	\$21,682,056	11.4%
<b>Total</b>	<b>\$106,090,063</b>	<b>1.8</b>	<b>\$190,962,113</b>	<b>100.0%</b>

\* To avoid distortion from differing multipliers and inflation, total impact was calculated only for FY 2005/06.

### Labor Multiplier

A labor multiplier can be used to calculate the number of jobs created by the influx of the \$106 million into the surrounding community, servicing the original jobs. Again, when other impact studies were reviewed, differing labor multipliers were found, and Table 9 presents the labor multipliers found in those studies.

**Table 9. Labor Multipliers Used in Selected Economic Impact Studies**

College, University, Organization	Multiplier
University of Nevada-Las Vegas	3.08
Grand Junction Economic Partnership	3.0-7.0
University of Colorado	1.8
Montana State University	1.67
Colorado State University	1.5
University of Idaho	1.41
Mesa State (1999 study)	1.4
Grand Junction Visitor & Convention Bureau	1.2-2.445

Deriving an adjusted average from the referenced studies, a conservative labor multiplier of 1.4 was used to estimate the additional number of jobs supported by the expenditures made by Mesa State College employees. Using the current 1,177 employees at Mesa State, and the labor multiplier of 1.4, an additional 471 jobs—full- and part-time— were added due to the presence of Mesa State College.



Mesa State College added over \$106 million directly to the regional economy, and by applying a multiplier of 1.8 to estimate indirect spending, the total addition to the economy was estimated to be \$190.9 million.

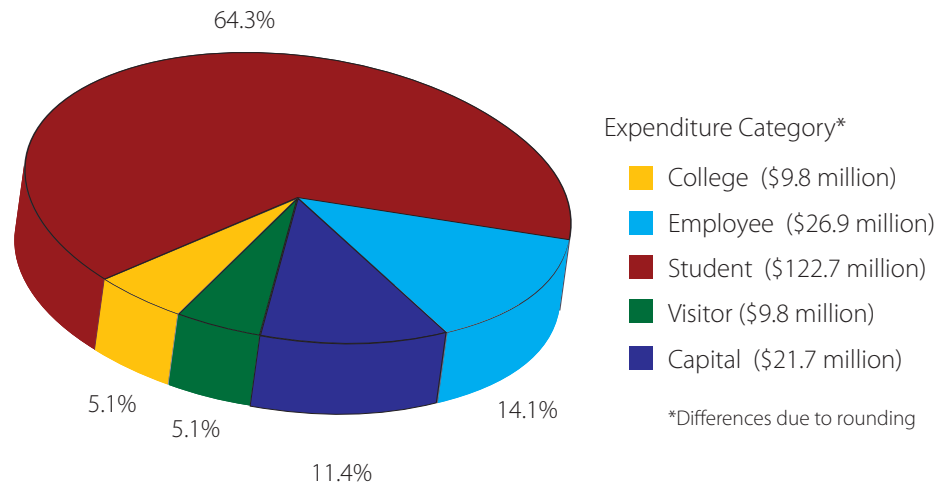


## CONCLUDING COMMENTS

In FY 2005/06, Mesa State College added more than \$106 million directly to the regional economy, and when indirect spending is taken into account, the total exceeds \$190.9 million (Figure 3). Additionally, this study estimates that 471 jobs were supported due to the \$106 million in direct spending.

One of the major criticisms of economic impact studies that are conducted in-house is the temptation to inflate numbers, use larger multipliers and thus overstate the impact of the institution on the surrounding community (Beck and Elliot, 1995). This study has used a very conservative approach in its calculations and multipliers to estimate the total economic impact of the College. Consequently, it is highly likely that the economic impact of Mesa State College is actually greater than the \$190.9 million estimated in this study.

**Figure 3. ECONOMIC IMPACT OF MESA STATE COLLEGE BY EXPENDITURE CATEGORY, FY 2005/06**



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**CAMPUS MASTER PLAN**

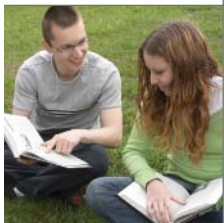
January 11, 2007



Mesa State's main campus, located in the heart of Grand Junction, will see continued expansion over the next two years. Current construction plans include a \$14.8 million classroom building to house primarily business and teacher education programs, among other disciplines. Also slated is construction of new parking facilities and the addition of a soccer stadium. Under discussion is the renovation and expansion of Saunder's Fieldhouse.

- Existing building
- Current construction
- Potential expansion

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