THE ROLE AND IMPACT OF WESTERN STATE COLORADO UNIVERSITY ON THE ECONOMY OF GUNNISON COUNTY

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EXECUTIVE SUMMARY

The Economic Impact of Western State Colorado University on the Economy of the City of Gunnison and Gunnison County, 2015-2016

The economic impact of Western on the economy of Gunnison County arises from two sources: the spending of the University on wages, salaries and local goods and services; and spending by Western students and campus visitors. Each of these sources has both direct and indirect effects on the local economy.

- Western is a substantial asset to the Gunnison County economy. It spends significant sums locally, employs local workers and is less susceptible to downturns in the national economy than tourism and construction, the other main pillars of the local economy.
- For 2015-16, the direct impact of Western on the local economy generated \$40.75 million. The total direct and indirect impact was \$70.52 million, the equivalent of 19 percent of the net earnings by residents of the County.
- Western creates more than 450 jobs directly and an additional 190 jobs indirectly.
- The average wages, salaries and benefits at Western are twice that of the County average. It is a high-paying employer in a county where wages and salaries are well below the average for Colorado.
- Western's students make up a large percentage of the population of Gunnison County in the 18-25 age bracket.
- Western students provide a substantial pool of part-time labor for local Gunnison County businesses.
- The synergistic impact of Western's highly educated employees and students has the potential to be a catalyst for sustainable low-impact growth in Gunnison County.
- Much more needs to be done to integrate Western with the economy of Gunnison County. Both the University and community leaders should address this issue more directly than they have in the past.
- Western is the key to the sustainability of the local economy. Discussions of the economic future of Gunnison County should focus on how Western can be a prime generator of sustainable growth.

1. INTRODUCTION

Western State Colorado University, located in Gunnison, Colo., was founded more than 100 years ago. It is a vital part of the economic life of Gunnison County and the City of Gunnison. It offers a path to County prosperity that does not depend on attracting ever-greater numbers of tourists in the summer and the winter, while leaving the area's accommodations, shops and restaurants empty in the off-seasons. The University is the key to the sustainability of the local economy. Furthermore, it has great potential to promote local economic dynamism and cultural vibrancy. As this study uncovered, Western's importance to the local economy is often overlooked by politicians, residents and officials at all levels of government.

This study details the role Western plays in the local economy. It estimates the economic impact of the University both directly and indirectly. It also documents the number of jobs Western creates as well as some of the indirect effects Western has on the Gunnison Valley. It demonstrates that Western is a lynchpin of the local economy: The University offers the promise of sustainable economic development, which could raise the living standards of the County.

Research on the impact of colleges and universities on their communities demonstrates that they are great assets for regions in which they are located.² Universities spend money on local goods and services, and they also provide employment to local workers. Faculty and other staff also support local businesses through their expenditures. Students spend in the local economy and attract visitors – relatives and friends – who add to the demand for local goods and services, which can extend beyond graduation through homecoming and alumni functions.

Higher education institutions contribute to the stability of local economies because they are less susceptible to downturns in national economic activity. In this regard, Western provides Gunnison County, which is highly dependent on tourism and construction (two of the most procyclical and seasonal sectors of the economy), with an economic anchor to counteract the negative results of downturns.³

Western is also a source of sustainability and smart growth. A prevailing sentiment in the local community has been concern that growth will overwhelm the quality of life in Gunnison County. The recent explosion in summer tourism gives credence to these fears. A university that provides high-paying jobs provides a path to greater sustainable prosperity without overwhelming the infrastructure and social resources of the County. This theme is expanded on in a later section of the analysis.

This impact study includes both quantitative and qualitative analysis. The former estimates the economic benefits Gunnison County and the City of Gunnison accrue due to the presence of Western. The latter utilizes analysis from a number of different studies, both within the United States and from other countries, on how universities benefit local communities by promoting innovation, raising demand for skilled workers and generating highly paid jobs.

Included in the analysis is a summary of views expressed in interviews with nearly 30 local business people, community leaders, and County and City officials regarding their views of Western.

² Examples are: Jaison Are. Abel and Richard Deitz, 2012, How Colleges and Universities Can Help Their Local Economies, Liberty Street Economics, Federal Reserve Bank of New York; Andrew Hahn with Casey Coonerty and Lili Peaslee, 2008, Colleges and Universities as Economic Anchors: Profiles of Promising Practices, Brandeis University, Heller Graduate School of Social Policy and Management, Institute for Sustainable Development.

³ See, Paul Holden, 2009, The Economy of Gunnison County, for a discussion of how the dependence of the local economy on tourism and construction makes it especially vulnerable to downturns in the national economy, although with a lag.

⁴ The analysis uses data from a variety of different sources. Since Western's data is based on the academic year, which runs from August to May, and many other sources are based on calendar years, there may not be an exact correspondence. However, the margin of error arising from these differences is small and changes none of the conclusions.

2. THE ECONOMIC IMPACT OF WESTERN ON GUNNISON COUNTY

Western affects the economy of Gunnison County in many ways: through the direct effect on the economy, as a supplier of labor by its students for tourism and other sectors, and through its long-term effect on the demographics of Gunnison County and the City of Gunnison. It also impacts the housing market through the demand for rental units by faculty, staff and students as well as Western employees' demand for homes to purchase.

In 2010, Western commissioned a study to estimate the economic impact of the (then) College on the economy of Gunnison County. The study concluded the direct annual economic impact of Western was \$36.7 million and the indirect impacts amounted to \$19.4 million. It also accounted for an estimated 422 direct jobs and an indirect creation of an additional 153 jobs.

The analysis contained in this study updates the earlier estimates and places them within the context of the economy of Gunnison County. It demonstrates that Western is a lynchpin of the local economy and a key ingredient in promoting prosperity.

The following discussion will demonstrate that Western is a primary economic institution in the County and that Western could generate synergies with the potential to increase prosperity without many of the negative consequences of growth.

3. THE ROLES THAT WESTERN PLAYS IN THE ECONOMY OF GUNNISON COUNTY

Colleges and universities are assets to regional and local economies. They spend money locally and employ local workers. A frequently overlooked characteristic of higher education institutions is the stability that they contribute to a region, which is illustrated by the fact that the higher education sector expanded spending and employment during and after the Great Recession, which followed the financial crisis of 2008 and '09. In this regard, Western was no exception, with expenditures rising since '08.

The university plays many roles in the local economy. The roles include:

• **Purchaser:** Western spends more than \$5 million annually on the procurement of local goods and services, making it one of the largest single purchasers in the County.

\$5 MILLION | ANNUALLY ON THE PROCUREMENT OF LOCAL GOODS AND SERVICES.

- Employer: While employment at post-secondary institutions accounts for more than 2 percent of total employment in the United States, the ratio is more than double the national average in Gunnison County, where Western employs approximately 4 percent of the workforce. When including student part-time jobs, Western employs about 8 percent of the workforce. Also, the average wage and salary (including benefits) at Western is \$70,800, making it the highest paying large employer in the County. Furthermore, while faculty are often recruited from outside the County, the university also is a notable provider of employment to local workers. It is also a significant employer of students in 2015-16, more than 400 Western students were on the university payroll, adding student-purchasing power to the local economy.
- Real Estate Developer: While universities are not traditionally regarded as real estate developers, Western has substantial land holdings. Over the past seven years, the University has undertaken a major program of building and development, which has included not only upgrading the general facilities, but also providing high quality residences for its students. As part of the building program, Western capital projects have involved the employment of local contractors and workers.

• Business Accelerator: A new business accelerator program was initiated by the University in 2017 in the form of the ICELab, which was partially funded by a grant from the federal Economic Development Administration to promote innovative economic development strategies, particularly in rural areas. The ICELab operates as a nonprofit economic development entity. Its goal is to assist local startup companies expand their businesses, which will generate jobs and investment in Gunnison County. Highlighting the ways in which such programs can tap into networks outside the local region, the ICELab is also a member of the Global Accelerator Network, a worldwide group of accelerators that have the goal of promoting access to human and financial capital for the businesses they assist. While the ICELab is still in an early stage, it has the capacity to integrate with the business community and encourage the formation of dynamic businesses that do not rely on the twin pillars of tourism and construction on which much of the private sector in Gunnison County is based.

WESTERN AS A SUPPLIER OF WORKERS TO LOCAL BUSINESSES

An often-overlooked role that Western plays is providing a pool of part-time and seasonal workers to local businesses. Approximately 40 percent of total private employment in Gunnison County is in industries that include tourism. Because of the seasonality of demand for workers, many of these jobs are part-time and are filled by Western students. Local businesses and Western students have a strong interdependent relationship. Without Western, businesses would be hard put to recruit sufficient workers to fill positions in peak periods in summer and winter. This contribution of student-workers to local businesses is often not fully recognized.

HOW WESTERN AFFECTS THE DEMOGRAPHICS OF GUNNISON COUNTY

In the 2015-16 academic year (which runs from late August to mid-May) – and adding in an adjustment for summer students – 2,122 part-time and full-time students attended Western, the equivalent of nearly 14 percent of the population of the County and 30 percent of the population of the City of Gunnison. The effect on the age structure of the population of the County is striking. Western students, with few exceptions, fall into the 18-25 age group. There are approximately 2,800 people living in the County who fall into this age cohort. This means that Western students make up nearly 70 percent of people in the 18-25 age brackets and play a vital role in keeping the community young and up to date. These students also raise the profile of Gunnison County by attracting friends and families to the area.



WESTERN AS A SOURCE OF SMART GROWTH

Prosperity depends on a concept known as "economic complexity." More prosperous societies or regions have more collective knowledge, which they can use to produce and sell a greater variety of multiple products and services. For example, areas in Colorado that are primarily agricultural are generally far less prosperous than those that produce a wide range of products and services. Epitomizing this are the cities of the Front Range. For smaller communities, like those on the Western Slope, institutions such as Western State Colorado University have a key role to play in providing the knowledge that can lead to a variety of complex products and services.

⁵ See Enrico Moretti, 2012, The New Geography of Jobs, Houghton, Mifflin, Harcourt, New York

TEXT BOX 1: THE METHODOLOGY USED TO CALCULATE THE EFFECT OF WESTERN ON THE ECONOMY OF GUNNISON COUNTY.

A major contribution to economic activity from Western's spending in the local economy results from so-called multiplier effects, which add to the direct effects of University spending. When Western, its employees, and its students and visitors spend money in local businesses, these businesses in turn spend part of their revenue on hiring employees and purchasing from other local businesses. But the impact does not end there. These businesses also pay wages and salaries to their employees, who buy from local businesses, a process which continues through successive rounds of spending. Thus, a dollar spent by Western, its students and visitors has a cascading effect in generating much more than a dollar contribution to the local economy.

To estimate the economic impact, this study uses the regional input-output table that is produced by the Regional Product Division of the Bureau of Economic Analysis. The table allows the direct and indirect effects on the local economy of spending by Western, its students and visitors to be calculated. Using the input-output table, it is possible to calculate how a dollar of spending related to Western "ripples" through the economy of Gunnison County, leading to increased spending by residents and businesses, and creating additional expenditure and employment.

Tourism and construction are currently the two largest sources of employment in Gunnison County. Approximately 40 percent of private sector jobs in the County are associated with the tourism industry and 12 percent are associated with the construction industry. Combined they account for more than half of all private sector jobs in the County. Productivity improvements in these activities are hard to come by and have not kept pace with many other sectors, with the result that they pay relatively low wages and salaries.

Nationally, the tourism industry tends to employ people with lower skills and tends to use limited technology. This results in low-paying jobs, both nationally and locally. Wages in tourism industry are among the lowest paid by employers in any sector in the County. The average salary in the tourism sector in Gunnison County was \$19,674 in 2015.8

Since productivity is a key determinant of long term prosperity, the concentration of two low productivity activities in the local economy explains the relatively low wages earned by much of the workforce in the County. Many people work more than one job to make ends meet.⁹

Tourism and construction are dependent on the growth of the national economy. When growth is strong, these industries thrive, as they did in 2015 and '16. When the next recession comes along, as it inevitably will, the concentration of local businesses in these activities will affect local spending and employment, as it did so radically in the Great Recession of 2008-10, which saw significant migration of workers out of the County in search of jobs, severely depressed property prices and low demand for local goods and services.

One feature of Gunnison County is the high level of education; a substantial portion of the population has degrees from universities and colleges. The low average wage of the County suggests that this level of human capital is not being utilized in a productive way. Western, with such initiatives as the ICELab, has the potential to improve productivity in industries that already exist and to foster new higher productivity businesses that can draw on the potential synergy between the University and the County.

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⁶The Economic Profile System EPS, 2017, https://headwaterseconomics.org/tools/economic-profile-system/#tourism-report-section

⁷ The Economist magazine, (August 17, 2017). McKinsey, a consulting company, notes that the global value-added per hour in the construction sector has risen by only 1 percent per year over the past 20 years, a quarter of that of manufacturing.

⁸ There is substantial documentation of low wages in the tourism industry. See, for example, R. Geoffrey Lacher and Chi-Ok Oh, Is Tourism a Low-Income Industry? Evidence from Three Coastal Regions, The Journal of Travel Research S (4), pp.464-473. Tourism wage data for Gunnison County, The Economic Profile System, 2016, "A Profile of Industries that Include Travel and Tourism: Gunnison County."

⁹ Many in the local workforce work more than one job. In 2016 there were 12,776 jobs but 8,675 workers in the County (See Bureau of Economic Analysis, CA30 Economic Profile).

4. THE IMPACT OF WESTERN ON THE ECONOMY OF GUNNISON COUNTY

Western has a major positive impact on the economy of Gunnison County. The economic effects can be divided into several components.

- Direct effects arise from the spending of Western and its employees in the local economy.
- Western students live in Gunnison County most of the year and spend money on living expenses, entertainment, recreation and travel.
- The parents and relatives of students at Western most are not Gunnison County residents tend to visit campus, particularly for events such as homecoming and graduation.
- Western attracts potential students and their relatives, who visit the County to decide whether to attend.
- Western hosts major, annual conferences and gatherings on diverse issues such as water rights, writing and music; these draw visitors from all over the country.
- Western's athletics programs attract visiting teams and supporters, who spend money in the County.
- Western's low-residency graduate and seasonal programs bring in substantial numbers of visitors and university attendees, particularly over the summer.
- The multiplier, or indirect effect (explained in Text Box 1), arises because of the direct spending from the aforementioned factors.

The following sections discuss these issues in more detail.

THE DIRECT ECONOMIC IMPACT OF WESTERN ON THE GUNNISON COUNTY ECONOMY

Table 1 contains data on Western's expenditures on salaries and wages, on goods and services, and on capital expenditure in the 2015-16 academic year. This is compared with spending on the same items in the 2008-09 academic year. The third and fourth columns show estimates of the amount of local spending by Western itself. It is this expenditure that will have the greatest impact on the economy of the Gunnison Valley.

Table 1: The Direct Impact of Western on the Economy of Gunnison County				
	Total Spending		Impact on Gunnison County	
Direct Economic Impact	2008-2009	2015-2016	2008-2009	2015-2016
Supplies	\$2,531,000	\$2,308,000	\$467,000	\$556,000
Services	\$5,984,000	\$8,345,000	\$2,577,000	\$3,340,000
Travel	\$883,000	\$1,432,000	\$142,000	\$166,000
Utilities	\$1,329,000	\$1,180,000	\$986,000	\$927,000
Capital Spending	\$1,211,000	\$913,000	\$137,000	\$16,000
Miscellaneous	\$816,000	\$663,000	\$18,000	\$25,000
Payroll	\$16,306,000	\$19,765,000	\$16,157,000	\$19,556,000
Benefits	\$3,633,000	\$5,493,000	\$0	\$0
Total Direct Impact	\$32,693,000	\$40,099,000	\$20,484,000	\$24,586,000

Source: Data supplied by Western State Colorado University

From 2008-09 to 2015-16, total direct spending by Western rose to slightly more than \$40 million per year, which represented a 23 percent increase. By far the most significant portion of Western spending is in the form of salaries, wages and benefits to its employees, which amounted to more than \$25 million in 2015-16. Western employs the equivalent of 333 full-time staff and an additional 416 students. The balance of spending, which totaled nearly \$15 million, was on supplies, services, utilities, travel, capital spending and other miscellaneous items.

WESTERN'S SPENDING ROSE TO SLIGHTLY MORE THAN \$40 MILLION PER YEAR IN 2015-16, WHICH REPRESENTED A 23 PERCENT INCREASE SINCE 2008-09.

WESTERN EMPLOYS THE EQUIVALENT OF 333 FULL-TIME STAFF AND AN ADDITIONAL 416 STUDENTS.

Payroll spending by Western (excluding benefits) has the single largest impact on the economy of Gunnison County, especially since the large majority (close to 100 percent) of the University's employees are situated in the County. While some of the other expenditure items have only a minor impact on the economy (travel, for example), many other items have major local components. This includes utility purchases, amounts spent on food services and other spending.

Thus, the total direct contribution of spending by Western into the local economy in 2015-16 was \$24.59 million. This, of course, is annual expenditure that will continue going forward and will rise over time as it has done over the previous seven years.

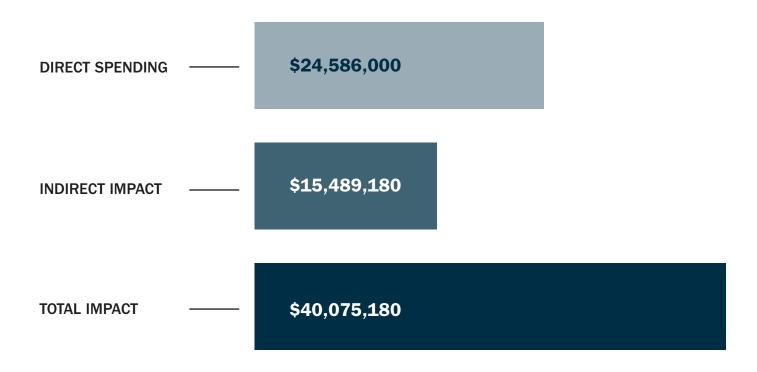
THE INDIRECT ECONOMIC IMPACT OF WESTERN ON THE GUNNISON COUNTY ECONOMY

Because a significant portion of Western's spending occurs within Gunnison County, there are "knock on" effects of this expenditure. As described above, if employees of Western spend locally, they have a positive effect on local businesses; the same goes for student spending. If Western buys supplies and services locally, it increases the demand for local goods and services. Not only does this increase sales for local businesses, but it also generates jobs. This is known as the "multiplier effect."

To estimate the impact of spending associated with Western, multipliers based on 2015 data were used to calculate the indirect effects of Western on the local economy. This is shown in Table 2. While direct spending in Gunnison County by Western amounted to \$24.59 million, when these indirect effects are taken into account the total impact is slightly more than \$40 million. Furthermore, the spending created approximately 150 additional jobs within the county.

Table 2: Direct and Indirect Impact on the Economy of Gunnison County by Western State Colorado University's Spending in 2015-2016							
	Direct Spending Multiplier Indirect Impact Total Impact						
Total Spending	\$24,586,000	1.63	\$15,489,180	\$40,075,180			
Salaries and Wages	\$19,765,000	1.37	\$7,313,050	\$27,078,050			
Employment	333	1.45	150	483			

Sources: Author's estimates based on: Data supplied by Western State Colorado University; Multipliers – RIMS II, 2017, Total Multipliers for Output, Earnings, Employment and Value Added by Detailed Industry, Gunnison County (Type II)



THE IMPACT OF STUDENT SPENDING

While the above calculations demonstrate the economic impact of the University, it does not take into account the effects of the spending by Western students. The total of 2,122 students that attended Western during the 2015-16 academic year and the summer sessions¹⁰ was used to estimate the economic impact of student spending.

Student spending on off-campus housing becomes direct income for property owners. The recent analysis of affordable housing in Gunnison County provides a means of crosschecking the accuracy of the data. Based on a combination of survey data and the affordable housing analysis, Western students paid an average of \$500 per month for off-campus housing. Since students now must live on campus for two years, this translates to about 1,060 students living off campus during the fall and spring semesters (for 9-10 months of the year) and 260 students during the summer. In addition, about 100 graduate students visit Western during the summer session, as do attendees of Western conferences and workshops.

Therefore, the direct impact of spending on off-campus housing by Western students amounted to \$6.7 million during the 2015-16 academic year and \$360,000 during the summer for an estimated total of \$7.01 million for the whole year. To this must be added the cost of utilities paid by the students, which totaled an estimated \$1.15 million for the year. The total direct impact of student housing on the local economy was therefore \$8.21 million. Taking into account the indirect effects described above, student housing including utilities had a total impact of \$12.58 million.

\$8.21 MILLION | TOTAL DIRECT IMPACT OF STUDENT HOUSING ON THE LOCAL ECONOMY.

\$12.85 MILLION | TOTAL STUDENT HOUSING IMPACT INCLUDING UTILITIES.

Precision in estimating retail spending by Western students is more difficult because survey data on spending patterns is less likely to be accurate. The previous analysis of Western student spending on food, recreation and other items was based on a survey conducted during the 2004 spring semester. The study estimated that spending by Western students in the local economy amounted to \$7.5 million during that year. If we apply a small adjustment to account for rising prices, an estimate of \$8 million is realistic. Approximately 80 percent of this amount would have stayed in the County, amounting to \$6.4 million. Combining expenditure on housing with spending on goods and services, the total direct economic impact of student spending within Gunnison County amounted to \$16.47 million. Adding the indirect impact of \$6.96 million to this, the total economic impact from students amounted to \$20.73 million in the 2015-16 academic year. In addition, student spending directly added \$1.9 million in payroll and 83 jobs to the local economy – and \$786,200 in payroll and 31 jobs indirectly.

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¹⁰ Since recent surveys of students' spending patterns were not available, the parameters established for the 2010 estimate of the economic impact of Western were used.

Table 3: Total Impact of Student Spending in Gunnison County						
	Direct Spending	Multiplier	Indirect Spending	Total Impact		
Student Spending on Housing Employm	Student Spending on Housing Employment by Landlords (number of jobs) **					
Student spending on housing	\$7,006,000	1.39	\$2,732,340	\$9,738,340		
Landlord spending on salaries and wages *	\$440,000	1.43	\$189,200	\$629,200		
Employment by landlords (number of jobs) **	17	1.37	6	23		
Student Spending on Utilities						
Student spending on utilities	\$1,150,000	1.6	\$690,000	\$1,840,000		
Utilities spending on salaries and wages *	\$230,000	1.6	\$138,000	\$368,000		
Employment by utilities (number of jobs) **	3	2.83	5	8		
Student Spending on Retail ***						
Student spending on retail purchases, including food and recreation	\$6,400,000	1.43	\$2,752,000	\$9,152,000		
Retail spending on salaries and wages *	\$1,242000	1.37	\$459,000	\$1,701,000		
Employment by retail establishments (number of jobs) **	63	1.31	20	83		
Total Student Spending on Housing, Utilities and Retail						
Spending	\$14,556,000		\$6,174,340	\$20,730,340		
Spending on salaries and wages *	\$1,912,000		\$786,740	\$2,698,740		
Employment by landlords, utilities and retail establishments (number of jobs)**	83		31	114		

^{*}This is additional spending on wages and salaries by landlords, utilities and retail because of demand by Western students.

Sources: Author's estimates based on: data supplied by Western State Colorado University; multipliers – RIMS II,2017, Total Multipliers for Output, Earnings, Employment and Value Added by Detailed Industry, Gunnison County (Type II)

^{**}This is additional number of people employed by landlords, utilities and retail because of demand by Western students.

^{***}Note, student spending on retail purchases must be reduced by the spending of retail establishments on their purchases of inventory to sell to students. About 47 cents in every dollar of retail sales goes outside the county for purchasing inventory. The multiplier is an average of retail establishments, recreation establishments and food establishments.

THE IMPACT OF VISITOR SPENDING

Western attracts a wide variety of visitors:

- Parents and other relatives visiting students, particularly for special events such as Homecoming and Graduation.
- Prospective students and their families visiting the campus.
- Visitors to athletic events.
- Visiting athletic teams, coaches and supporters.
- Conferences and events attendees, particularly during the summer.

These visitors purchase food, accommodations, and goods and services from local businesses. Just as with other expenditures, these have both direct and indirect effects on the local economy. Table 4 shows estimates of the total number of visitors to the campus. Table 5 shows their expenditures.

Combining the numbers for each of these activities, Western attracted a total of more than 18,000 visitors during the 2015-16 academic year. The estimated number of nights of lodging for visitors was 12,000. The average price per night at local hotels rose from \$91 in 2008-09 to \$107 in 2015-16. Lodging expenditure is therefore estimated at \$1.28 million. Non-lodging expenditure varies by type of visitor. Conference attendees are estimated to have spent an average of \$80 per person per night; Western-related visitors an average of \$55 per person per day; and athletic teams an average of \$20 per person per day. The total direct economic impact of Western visitors to Gunnison County, allowing for the fact that some non-lodging expenditure will "leak" out of the County, was therefore \$4.43 million in 2015-16 compared with \$2.9 million in 2008-09.

As with other types of expenditures, as visitors spend money on lodging, food and retail purchases, the businesses that make sales in turn must hire employees and purchase goods and services to supply the spending. Table 6 shows the total impact of visitors spending in Gunnison County for 2015-16. Adding the direct economic impact to the indirect impact and including the additional payroll generated by workers from the visitors, the total economic impact of visitors to Western was \$9.02 million.

\$9.02 MILLION | TOTAL ECONOMIC IMPACT OF VISITORS TO WESTERN.

Visitor spending created 44 jobs and \$1.3 million in payroll, taking into account both the direct and the indirect impact of spending.

Table 4: Numbers of Visitors to Western					
Year	2008-2009	2015-2016			
Student related visitors	7,500	7,500			
Conference related visitors	4,780	4,641			
Western event related visitors	4,300	4,300			
Visiting athletes and coaches	1,613	1,900			
Total visitors	18,193	18,341			
Average days in Gunnison County by:					
Student related visitors	2	2			
Athletic teams and coaches	3	3			
Conference attendees	5	5			

Source: Data supplied by Western State Colorado University and Author's estimates

Table 5: Lodging and Non-Lodging Expenditure by Visitors				
	2008-2009	2015-2016		
Total Lodging Expenditure	\$978,000	\$1,284,000		
Total Non-Lodging Expenditure	\$2,938,000	\$3,363,400		
Total Spending – Direct Economic Impact	\$3,916,000	\$4,434,000		

Source: Data supplied by Western State Colorado University and Author's estimates

Table 6: Total Economic Impact on the Economy of Gunnison County due to Visitors to Western					
	Direct Spending	Multiplier	Indirect Spending	Total Impact	
Retail and Food					
Visitor spending on retail purchases, including food and recreation	\$3,643,400	1.43	\$1,566,662	\$5,210,062	
Retail spending on salaries and wages *	\$576,000	1.37	\$213,120	\$789,120	
Employment by retail establishments (number of jobs) *	24	1.31	7	31	
Lodging					
Visitor spending on lodging	1,284,000	1.18	\$231,120	\$1,515,120	
Lodging spending on salaries and wages	\$231,120	.32	\$73,958	\$305,078	
Employment by lodging establishments (number of jobs)	10	1.15	3	13	
Total					
Total visitor spending	\$4,927,400		\$1,797,782	\$6,725,182	
Spending on salaries and wages due to visitors	\$807,120		\$287,078	\$1,094,108	
Total impact	\$5,743,520		\$2,084,860	\$7,819,380	
Number of jobs created due to visitors to Western	34		10	44	

 $[*]The\ retail\ impact\ calculations\ on\ salaries\ and\ wages,\ direct\ employment\ and\ the\ indirect\ impact\ are\ based\ on\ value\ added,\ which\ is\ 53\%\ of\ retail\ sales.$

Sources: Author's estimates based on: data on supplied by Western State Colorado University; multipliers: RIMS II, 2017, Total Multipliers for Output, Earnings, Employment and Value Added by Detailed Industry, Gunnison County (Type II)

THE IMPACT OF WESTERN'S CONSTRUCTION PROGRAM

Western has had an extensive construction program as it has undertaken extensive upgrading and renovation of its facilities. Unlike the spending analyzed in the prior estimations, however, construction programs (apart from ongoing capital and maintenance expenditure) are periodic "one-off" projects that are not part of the continuing contribution of Western to the economy of the County. Furthermore, much of the spending leaks out of the county. For example, of the \$17.5 million capital expenditure program in 2015-16, local spending amounted to \$1.2 million. Because of its periodic nature, the impact of construction is not included in this analysis.

Table 7: Annual Economic Contribution of Western to the Economy of Gunnison County: 2015-2016					
	Direct Spending Indirect Spending Total Impact				
Spending by Western*	\$24,586,000	\$15,489,180	\$40,075,180		
Student Spending**	\$16,468,000	\$6,961,080	\$23,429,080		
Visitor Spending***	\$4,927,400	\$2,084,860	\$7,012,260		
Total	\$45,981,400	\$24,535,120	\$70,516,520		

^{*}From Table 2; **From Table 3; ***From Table 6

Table 8: The Contribution of Western to Job Creation in Gunnison County: 2015-2016					
	Direct Jobs Indirect Jobs Total Jobs				
Western Jobs*	333	150	483		
Jobs Created by Student Spending	83	31	114		
Jobs Created by Visitor Spending	34	11	45		
Total Jobs in Gunnison County from Western	450	192	642		

Consolidating the impact from direct spending by Western and the multiplier effects, the effects of student spending and the effects of visitors connected with Western, Tables 7 through 10 demonstrate the total impact of Western on the Gunnison County economy on businesses, employment and earnings. It is substantial. Western added more than \$70 million to the Gunnison County economy in 2015-16, and directly and indirectly created 642 jobs.

The next section will put this into perspective relative to the economy of the County.

Table 9: Salaries and Wages in Gunnison County Because of Western: 2015-2016				
	Direct Salaries and Wages	Indirect Salaries and Wages	Total Salaries and Wages	
Western Salaries/ Wages	\$19,765,000	\$7,313,050	\$27,078,050	
Salaries and Wages Created by Student Spending	\$1,912,000	\$786,740	\$2,698,740	
Salaries and Wages Created by Visitors to Western	\$807,120	\$287,078	\$1,094,198	
Total	\$22,484,120	\$8,386,868	\$30,870,988	
Average Salaries/ Wages paid by Western, including benefits.	\$70,799			

5. PUTTING WESTERN'S ECONOMIC IMPACT INTO PERSPECTIVE

This section analyzes the impact that Western has on the economy of Gunnison County. Table 10 shows the relative importance of Western in some of the key economic areas of the economy.

Table 10: The Role of Western in the Gunnison Valley Economy: 2015-2016			
Population: Gunnison County/City of Gunnison	16067/6261		
Percent of Western Students and Employees in Population of the County/City	13%/34%		
Percent of Direct and Indirect Jobs from Western in County Workforce	7%		
Western Wages and Salaries as a Percent of Wages Paid in the County/City *	12%/31%		
Average Earnings per Job, including Benefits, at Western Compared with County (%)	201%		

Demographics: Western's employees and students constitute 13 percent and 34 percent of the population of Gunnison County and the City of Gunnison, respectively.

As a Key Economic Driver: Western is a key driver of the local economy. Either directly or indirectly, it accounts for 7 percent of the workforce of the County, yet generates 10 percent of the County's wages and salaries and nearly 30 percent of that of the City of Gunnison. Furthermore, in a county where the average salary is low, Western is a source of high-paying jobs, with the average salary constituting 201 percent of the average salary of the county. It is not an exaggeration to say that Western is an economic colossus in the County economy, and it is even more important to the City of Gunnison.

HOW WOULD THE EXPANSION OF WESTERN BENEFIT GUNNISON COUNTY?

To determine how Western would benefit Gunnison County by expanding, we estimate the effect of increasing enrollment by approximately 25 percent, which would bring in an additional \$5 million in tuition revenue. Since the additional students would not reduce enrollment in any other local educational institution, the full amount of the tuition would accrue to the local economy.

Using multipliers ¹¹ for Gunnison County, the fees from the additional students would increase output in the local economy by \$8.15 million. The direct effect of the increase in fees would amount to \$3 million. The additional students would create 95 additional jobs. Assuming the University hired an additional 40 workers and faculty to deal with the larger number of students, the direct and indirect effects from the increase in enrollment would result in the creation of a total of 135 full- and part-time jobs in the County. Thus, expanding Western has the potential to create significant increases in local employment and output.

TEXT BOX 2: SOME QUOTES FROM INTERVIEWS WITH BUSINESS PEOPLE AND LEADERS IN GUNNISON COUNTY WHO WERE INTERVIEWED AS PART OF THIS PROJECT.

- Western is the key to sustainability in the County.
- We do not need more tourists filling up our streets. We need the sustainable growth that Western provides.
- *Gunnison should be a university town with tourists, not the other way around.*
- Western is one of the key assets that makes Gunnison County sustainable.
- Tourists do not generate high-paying jobs Western could.
- Western seems separated from the community of the Gunnison Valley. I never know what is going on there.
- The communities in the Gunnison Valley take Western for granted.
- There is not much connection between Western and the community.
- Western never figures in discussions about the future of Gunnison County.
- All we focus on is tourism. I am fed up with the number of visitors in the summer. Where is Western in discussions of the future of the County?
- City and County leaders should consider ways in which Western could be supported to ensure the sustainability of the entire community.
- Western affords a way of assuring prosperity to the County in a low impact manner.
- Why are we spending so much money on attracting tourists? It is time to consider alternatives and Western is part of this.
- In the discussions of the future of Gunnison County, why is more attention not being given to attracting students? All the focus is on bringing tourists here. Why are we not ensuring that policies serve the University?

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¹¹ The output multiplier is 1.63; the jobs multiplier is 18.9 jobs per million in revenue to the University; the earnings multiplier is 1.38.

6. VIEWS OF THE LOCAL COMMUNITY REGARDING WESTERN

As part of this analysis, more than 20 people from the business community, the faculty, the trustees and local government were interviewed regarding how they perceive Western and its relationship to the City and the County. This was not a random sample, so the views expressed do not necessarily reflect those of the community at large. Nevertheless, the responses provide some insights into the opinions of local thought leaders. Some of the views expressed appear in Text Box 2.

The main message from the interviews was that Western is viewed as being set apart from the community with not a great deal of communication and interaction. Given that it is such a large part of the demographic of Gunnison and Gunnison County, this is surprising and indicates that substantial opportunities for leveraging Western's strengths are being wasted.

A second thread was a recognition of the potential of Western to orientate the local economy away from its extensive reliance on tourism and construction. At the same time, some frustration was expressed that the University was not more proactive in bringing this about. Some knew of the ICELab, and this is welcomed and seen as embodying significant possibilities.

A key conclusion from these interviews is that when either the University, the City, the County or the business community is formulating strategic plans, the role of the University in the local economy should be a major consideration. A second conclusion is that Western needs to do more within the local community to apprise it of its importance, its role in the local community and its attempts to bind itself to the local community more strongly.

TEXT BOX 3: AN EXAMPLE OF UNIVERSITY COMMUNITY COOPERATION

The Grand Junction Chamber of Commerce and Colorado Mesa University have created the CMU 20000 Project. Its goal is to increase CMU enrollment to 15,000 students from the current enrollment of 10,000 and to enlist 5,000 supporters of CMU from the City of Grand Junction. The city has a population of 62,000, so the goal is to have approximately a quarter of the population comprised of students.

The depth of support for CMU is shown in this excerpt from The (Grand Junction) Daily Sentinel story "Colorado Mesa University Welcomes Freshman Class."

While college officials and students were welcoming the incoming freshmen to the campus, Grand Junction Mayor Rick Taggart welcomed them to town.

(CMU President) Foster told the students that Taggart and the rest of the Grand Junction City Council voted only last week to rename North Avenue to University Boulevard. That change is to occur over time starting next spring. The city also is considering a proposal to rename 12th Street, which also abuts the campus, to Maverick Way (CMU athletic teams play under the team name "Mavericks").

"On behalf of the city of Grand Junction, welcome to this wonderful campus," Taggart told the new students. "Grand Junction is western Colorado's university town. Kicking off an academic year is a big deal to the city of Grand Junction because we recognize the critical role that CMU plays in educating our future workforce, enhancing our civic life and adding dramatically to our region's economic base."

An article in the Business Times, a twice-monthly business journal published in Grand Junction, also shows the importance that CMU attaches to community support. The article discusses just how critical this support is to meet CMU's goal of expanding to 15,000 students within the next five years.

7. CONCLUSION

A key finding of this analysis is that the economic effect of a university such as Western in a small community is profound. Both the University and the community stand to reap large benefits if the University is thriving. While the calculations in this study demonstrate that Western already has a large impact on the demographics and economy of Gunnison County, there is much room for more cooperation and integration. This should leverage the key features of the institution, the County and its surroundings. The relationship between Western and the local community (made up of the City of Gunnison and Gunnison County) is so important that it should be at the forefront of ongoing policy discussions, which need to be translated into concrete actions in the community and at the University. The partnership between Colorado Mesa University and the City of Grand Junction illustrates the potential for cooperation.

Interviews with people in the community revealed two distinct themes. First, the University needs to do far more to connect with the County. A strong thread in the discussions is that people interviewed believed that it was hard to connect with the University and what goes on there. At the same time, the University community believes that little more needs to be done in this regard.

Second, most people interviewed, both within the community and at the University, acknowledged the importance of Western to Gunnison County but stopped there. The overall impression was one of benign neglect on the part of all parties interviewed. Many Western personnel and prominent citizens of the County saw much need to go beyond where things stand currently. Many smaller colleges and universities in the United States are facing a crisis. Key demographics for these institutions are negative as the size of college-age cohorts decline. Much more needs to be done to attract students, which should also be part of the discussion of the future of the Gunnison County economy.

There is an ongoing discussion of many issues related to the County's future, and there are signs that the need to make Western's role central to the vision for a sustainable future are emerging. Western provides the key to a more prosperous local economy. This is a key topic for discussions regarding the economic future of the Gunnison Valley. The sooner these conversations begin, the more assured the preservation of Gunnison Country in a recognizable form and the greater the prosperity of its citizens.

TEXT BOX 4: THE CONTRIBUTIONS OF WESTERN TO THE COMMUNITY IN GUNNISON COUNTY

Western also benefits the local community in non-financial ways.

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Faculty and staff serve on Gunnison boards and participate extensively in local projects, including the Airport Planning process, the Tourism Association, the Gunnison Valley Hospital and the Chamber of Commerce.

Students are also actively involved in the community. Examples include:

- Western Mountain Rescue Team provides backcountry and wilderness rescue;
- The Master in Environmental Management program offers 35 600-hour projects per year to community organizations, totally 50,000 hours to date;
- Exercise & Sport Science students provide supervised exercise intervention to 100 community members three times a week through the Wellness Elevated program;
- The Gunnison Sockeyes Club has completed more than 600 hours of community service.

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