## Fort Lewis College

# **Economic Impact Report**

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#### A Product of

Office of Economic Analysis & Business Research
Fort Lewis College
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#### **HIGHLIGHTS**

- In fiscal year 2007-2008 Fort Lewis College accounted for \$70.0 million of personal income in the local economy.
- Fort Lewis College provided 660 direct plus indirect job opportunities.
- Fort Lewis College accounted for approximately 5.69 percent of the personal income and 16.8 percent of the employment in the county.
- La Plata County benefits from improved health, intellectual stimulation and community involvement because it houses Fort Lewis College.

## **Executive Summary**

Four types of benefits can be attributed to Fort Lewis College's presence in the local community:

- Regional economic benefits: employment and income formation.
- Student benefits: higher earnings and a better quality of life realized by exiting students.
- Social benefits: improved health, lower crime, increased community involvement.
- Taxpayer benefits: the return to taxpayers for their Fort Lewis College support.

**Regional Economic Benefits**: Expenditures by the College in the local area accounted for 26.3 percent of the college's total economic impact. Approximately 29.3 percent of the college's total economic impact can be attributed to its students. Fort Lewis College students rent and buy housing, buy gasoline, food, clothing, entertainment, the public utility services, etc. Employee expenditures were 19.2 percent of the college's total local economic impact.

Fort Lewis College acts as a force for long-term stability in the local economy by its continuing presence and gradual increases in expenditures. The economic impact of student expenditures, present from September through April, offsets the seasonal decline in tourism that occurs after the end of the summer tourist season.

As an important part of La Plata County's economic base, Fort Lewis College provides a service, higher education, received by its students. In a sense, Fort Lewis College exports its service and imports income to the county through receipt of tuition and fees and student expenditures for goods and services.

**Student Benefits:** For the student, the benefits of higher education are most obvious: the student sacrifices tuition and current earnings for a lifetime of higher earnings and intellectual awareness. In 2008, B.A. holders on average earned 81 percent more than high school graduates, up from twenty years ago when college graduates earned 61 percent more. In 2008 dollars, this means that, on average, a high school graduate earned \$33,618, while a bachelor's degree holder earned \$60,954. Furthermore, college graduates also benefit in many non-pecuniary ways from their time on campus.

**Social Benefits:** Often overlooked in impact analysis are the indirect benefits a college provides to its community. Having a college in the community makes it possible for more local citizens to obtain a college degree. According to the American Council on Education, Center for Policy Analysis, "a college education is related to many activities and characteristics associated with good health, intellectual stimulation, and active community participation." This not only translates into associated dollar savings (avoided costs) for taxpayers, but also into a better quality of life and a more educated workforce for the community.

**Taxpayer Benefits:** Taxpayers can claim a portion of the benefits of a more educated workforce as well. For example, taxpayers benefit from the additional tax revenues generated by an educated workforce's higher earnings. Similarly, the active, healthy lifestyle influenced by Fort Lewis College's culture provides some healthcare-related taxpayer savings to the state and local government subsidy of the health sector. Reduced incarceration and welfare expenses can be counted as well (to the extent that these are provided at state and local government expense).

## The College

#### Introduction

Fort Lewis College is a state-assisted, liberal arts college. As such, it has direct and varied impacts upon the lives of its students, faculty and staff, and indirectly impacts those persons with whom the college interacts. One important aspect of that interaction is the college's substantial economic impact on Durango, La Plata County, and the State of Colorado.

This study describes and analyzes Fort Lewis College's impact on the area economy and focuses on the important economic variables of employment, income, expenditure, and rental real estate. The college's effect upon state and local government tax revenues and expenditures, as well as on bank deposits and credit creation, is noted but is beyond the scope of this study.

#### **History and Trends**

Fort Lewis College takes its name from a U.S. Army post built southwest of Durango more than one hundred years ago. The army post became a federal Indian school in 1891 and a state-supported high school of agriculture in 1911. Fort Lewis evolved into a junior college by 1933, moved to its Durango campus in 1956, and began offering a four-year liberal arts degree program as a senior college in 1962. Throughout its history Fort Lewis College has been notable for its gradual and sustained growth.

Fort Lewis College is exclusively an undergraduate liberal arts institution with professional programs in business and education. During the Fall trimester, 2008-09, the college enrolled 3,746 students. The college would like to see gradual growth during the next few years until it reaches a maximum enrollment of 5,000 Full-Time-Equivalent (FTE) students. The information in Table 1 and Figure 1 shows that enrollment peaked in 2001–2002 academic year and has fallen off since. Enrollment was about sixteen percent lower in 2008 than in the peak academic year. Figure 1 also shows the annual growth of enrollment. The dip in enrollment can be attributed to an increase in entrance qualifications in 2005. It is hoped that as better-qualified students enter the college, the long-term impact will be higher enrollments due to increased student retention.

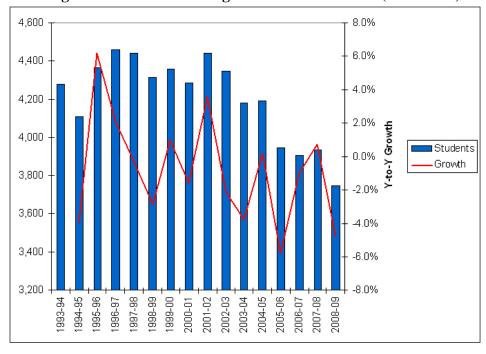
**Table 1 Fort Lewis College Student Enrollment** 

Year	Enrollment
1993-94	4,279
1994-95	4,109
1995-96	4,363
1996-97	4,456
1997-98	4,440
1998-99	4,314
1999-00	4,357
2000-01	4,287
2001-02	4,441
2002-03	4,347
2003-04	4,182
2004-05	4,190
2005-06*	3,946
2006-07	3,907
2007-08	3,935
2008-09	3,746

<sup>\*</sup> The new admission standards were phased in over two years, with full and final implementation in Fall 2008.

Source: Fort Lewis College, Registrar's Office

Figure 1 Fort Lewis College Student Enrollment (1993-2008)

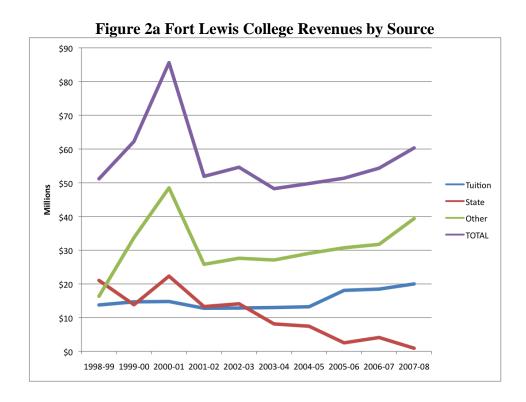


A trend of gradual increase in Fort Lewis College revenues can be seen in Table 2 and in Figures 2a and 2b. As can be seen, while tuition revenues have been rising, state funding has been falling over the past ten years. Overall revenues have been rising as other sources of revenues have risen: grants, funding from the Native American tuition waiver, gifts, etc. State Funding decreased in FY 2002-03, 2004-05 and then rebounded in FY 05-06 – FY 2007-08 and then has fallen since. The annual growth rate of total revenues is shown in Figure 2b.

Table 2 Fort Lewis College Revenues by Source (millions)

	Tuition	State	Other	TOTAL
1998-99	\$13.770	\$21.041	\$16.349	\$51.161
1999-00	\$14.692	\$13.833	\$33.730	\$62.256
2000-01	\$14.797	\$22.319	\$48.486	\$85.602
2001-02	\$12.790	\$13.291	\$25.825	\$51.905
2002-03	\$12.862	\$14.118	\$27.620	\$54.600
2003-04	\$13.008	\$8.146	\$27.096	\$48.250
2004-05	\$13.236	\$7.466	\$29.070	\$49.772
2005-06	\$18.094	\$2.543	\$30.722	\$51.359
2006-07	\$18.475	\$4.121	\$31.737	\$54.333
2007-08	\$20.009	\$0.932	\$39.387	\$60.328

Source: Fort Lewis College, Financial Statements, Fiscal Years 1998-1999 through 2007-2008, Fort Lewis College Budget Office.



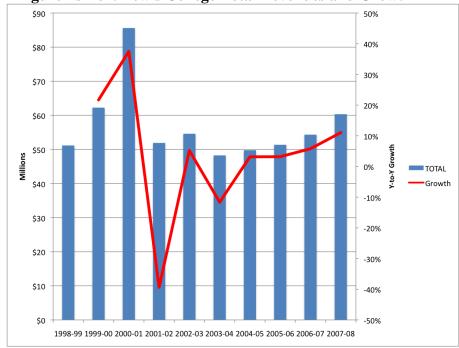


Figure 2b Fort Lewis College Total Revenues and Growth

**Table 3 Fort Lewis College Expenditures** 

Year	Operating	Capital*	Total Expenditures
1998-99	\$40.176	\$5.560	\$45.736
1999-00	\$38.670	\$3.605	\$42.275
2000-01	\$44.750	\$22.527	\$67.277
2001-02	\$47.129	\$15.980	\$63.110
2002-03	\$44.184	\$7.019	\$51.202
2003-04	\$40.705	\$7.268	\$47.973
2004-05	\$46.187	\$5.149	\$51.335
2005-06	\$48.226	\$2.823	\$51.048
2006-07	\$51.581	\$2.714	\$54.294
2007-08	\$56.474	\$1.459	\$57.932

\*Capital expenditures include bond proceeds and state capital construction funds.

Source: Fort Lewis College, Financial Statements, Fiscal Years 1998-1999 through 2007-2008,

Fort Lewis College Budget Office

Figure 3a Fort Lewis College Expenditures

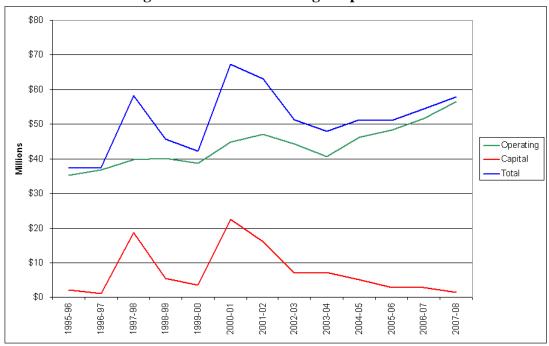
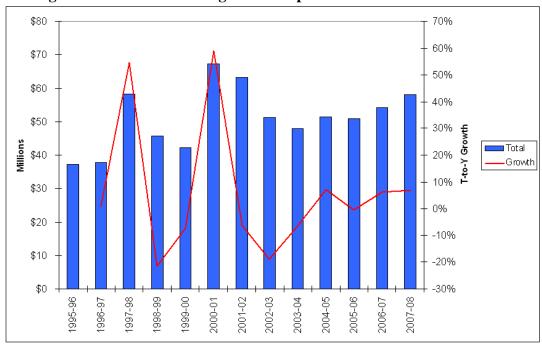


Figure 3b Fort Lewis College Total Expenditures and Annual Growth



#### **Economic Environment of the College**

Fort Lewis College performs its mission within a multi-dimensional economic environment. International and national events, national economic trends and policies, and fluctuations within the state and local economy have significant effects on the college. During the past two decades, major increases in energy prices and other necessary costs have had dramatic effects on the college's budget. Also, changing economic conditions in other regions of the United States have caused major population shifts. The State of Colorado and La Plata County, as well as Fort Lewis College, have felt the de-stabilizing effects of these events. Most recently, the economic recession has negatively impacted the local economy. Unemployment rates are higher than usual and employment growth has slowed. Tourism, a major contributor to the local economy, has declined, as have construction and real estate activity.

#### **Employment and Unemployment**

Employment and unemployment patterns help illustrate the similarities and differences among the national, state, and local economies. Unemployment rates for the United States, Colorado and La Plata County are shown in Table 4. On average, in 2008 La Plata County had a lower unemployment rate than both the United States and the State of Colorado. In 2009, the unemployment rates have gone up in all three areas. The most recent rates reported by the Bureau of Labor Statistics (annual average through November 2009) are U.S. – 9.2 percent, Colorado – 7.3 percent, and La Plata County – 5.3 percent. Figure 4 shows how the unemployment rate in La Plata County has changed over the last few years.

**Table 4** Unemployment Rates, Comparisons

Area	2008 Annual Average	2009 Annual Average
<b>United States</b>	5.8%	9.2%
Colorado	4.9%	7.3%
La Plata County	3.6%	5.3%

Sources: U.S. Department of Labor, Bureau of Labor Statistics

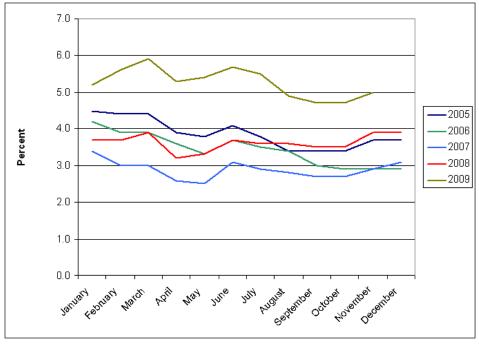


Figure 4 – La Plata County Unemployment Rate: 2005 – 2009

Source: Department of Labor, Bureau of Labor Statistics

The La Plata County labor force averaged 31,588 persons during 2008, with average total employment of 30,444. iii Interestingly, employment patterns within La Plata County are somewhat different from those found in the state. Employment by major industry for Colorado and La Plata County is shown in Table 5.

Table 5 Percent of Non-Agricultural Employment, by Major Industry, Colorado and La Plata County, 2008 Average

	Colorado - Average	•	La Plata - Average	
Industry	Employment	Percent	Employment	Percent
Agriculture, Forestry, Fishing & Hunting	1,389	0.78%	27	1.02%
Mining	1,509	0.84%	42	1.59%
Utilities	612	0.34%	11	0.42%
Construction	21,906	12.26%	463	17.50%
Manufacturing	5,850	3.27%	70	2.65%
Wholesale Trade	12,926	7.23%	93	3.52%
Retail Trade	18,581	10.40%	308	11.64%
Transportation and Warehousing	4,309	2.41%	62	2.34%
Information	3,406	1.91%	47	1.78%
Finance and Insurance	11,274	6.31%	105	3.97%
Real Estate and Rental and Leasing	10,433	5.84%	172	6.50%
Professional and Technical Services	28,661	16.04%	364	13.76%
Management of Companies and Enterprises	1,636	0.92%	13	0.49%
Administrative and Waste Services	10,428	5.83%	154	5.82%
Educational Services	2,640	1.48%	29	1.10%
Health Care and Social Assistance	13,112	7.34%	213	8.05%
Arts, Entertainment, and Recreation	2,628	1.47%	56	2.12%
Accommodation and Food Services	12,141	6.79%	199	7.52%
Other Services, Ex. Public Admin	12,841	7.18%	166	6.28%
Public Administration	1,811	1.01%	51	1.93%
Unclassified	640	0.36%	0	0.00%
Totals	178,733	100.00%	2,645	100.00%

Sources: U.S. Department of Labor, Bureau of Labor Statistics, and Colorado Department of Labor and Employment

Employment in La Plata County is less concentrated in manufacturing than is the case for both the U.S. and Colorado. Construction and mining are somewhat more significant in the

county, while transportation and public utilities, wholesale trade, and finance, insurance, and real estate are somewhat less significant. Services, retail trade, and government are relatively more important providers of employment in La Plata County than in Colorado or the U.S. However, in the last few years, retail trade has declined in its importance as an employer in La Plata County. In 2000, retail trade employed over 15% of the workers in the county; in 2008 that number was down to 11.6%. Over recent years and not considering this most recent recession in 2009, construction has seen some growth, as has government and financial service employment.

A closer examination of La Plata County employment shows that the major industries providing the bulk of employment in 2008 were construction, professional and technical services, retail trade, health care and social assistance and accommodation and food services. Together these five sectors counted for 58.5% of non-agricultural employment in the county during 2008. Figure 5 illustrates the relative importance of the different major industries to employment in La Plata County.

Construction Professional and Technical Services Retail Trade Health Care and Social Assistance Accommodation and Food Services Real Estate and Rental and Leasing Other Services, Ex. Public Admin. Administrative and Waste Services Finance and Insurance Wholesale Trade M anufacturing Transportation and Warehousing Arts, Entertainment, and Recreation Public Administration Information Mining Educational Services Agriculture, Forestry, Fishing & Hunting Management of Companies and Enterprises Utilities Unclassified 2% 6% 8% 10% 12% 14% 16% 18% 20%

Figure 5 Percent of Non-Agricultural Employment by Major Industry, La Plata County, 2008

Sources: U.S. Department of Labor, Bureau of Labor Statistics, and Colorado Department of Labor and Employment

#### **Population**

The population of La Plata County has been increasing, growing significantly from 1980 until the middle of that decade and then stabilizing for a few years. Beginning in the late 1980's, the local economy began to expand. Economic expansion has been accompanied by major population growth during the past several years. Table 6 shows population and population estimates for La Plata County. If recent trends continue, the Colorado Division of Local Government estimates that the La Plata County population may increase to close to 59,000 persons by the year 2015.

**Table 6 La Plata County Population** 

Date	Population
1980 Census	27,195
1990 Census	32,284
2000 Census	43,941
2005 estimate	47,802
2010 estimate	51,517
2015 estimate	58,707

Source: Colorado Division of Local Government, State Demographer's Office

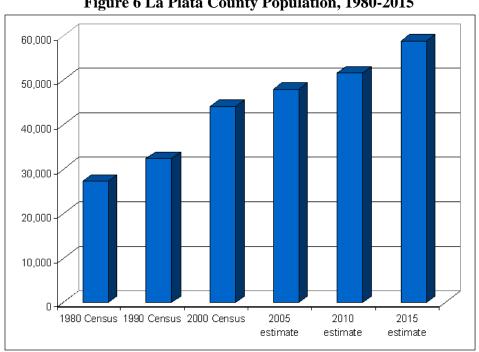


Figure 6 La Plata County Population, 1980-2015

#### **Housing**

The housing supply in La Plata County is estimated to have increased significantly during the past decade 15 years. In 1980, total housing units were estimated to number 12,036. <sup>iv</sup> By 1990, the total is estimated to have increased to 15,412. <sup>v</sup> Since 1990, there has been very substantial new construction of housing units in Durango and La Plata County. In 2000, the estimate of total housing units in the county was 20,765; a 34.7% increase over the estimate from 1990. <sup>vi</sup> By 2008 there were an estimated 26,821 total housing units, a 29% increase over 2000. <sup>vii</sup> College students are an important part of the total demand for residential rental units in Durango and La Plata County. Given that about two-thirds of the students enrolled at Fort Lewis live off campus, it can be estimated that around 2,600 students rented in La Plata County in the years 2007-2008, with an average rent per student of about \$425-\$450 per month. <sup>viii</sup>

#### **Income**

An important indicator of economic activity is Total Wages. This is the total "pay of workers covered by state and federal unemployment insurance (UI) legislation and provided by State Workforce Agencies (SWAs)". The levels and trends of Total Wages in La Plata County are shown in Table 7 and the associated Figure. The trend has definitely been upward during the time period 1990-2007. Total Wages data have not been adjusted for inflation.

**Table 7 Personal Income, La Plata County** 

	Wages	Annual
Year	(millions)	Growth
2001	\$565.478	
2002	\$597.527	5.7%
2003	\$633.404	6.0%
2004	\$695.224	9.8%
2005	\$757.576	9.0%
2006	\$844.798	11.5%
2007	\$941.076	11.4%
2008	\$981.768	4.3%
Average	_	8.2%

Source: U.S. Department of Labor, Bureau of Labor Statistics.

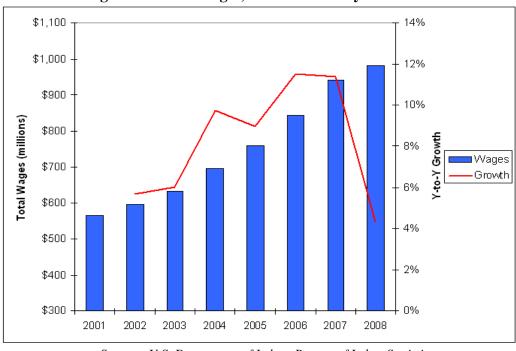


Figure 7 Total Wages, La Plata County: 2001 – 2008

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Total wages in La Plata County have been rising in La Plata County. Total wages in La Plata County in 2008 were \$981.7 million. Moreover, wages from 2001–2008 have been a growing relatively high eight percent, see Figure 7. However, there are differences in per capita personal income (personal income per person) when the U.S., Colorado, and La Plata County are compared. In 2008 per capita personal income in La Plata County was 81.7% of the per capita personal income in the state of Colorado and 83.6% of the per capita personal income in the United States. The good news is that La Plata County's per capita personal income is growing relative to the per capita personal income in the United States. In 2001, La Plata County's per capita personal income was 69.5% and 72.8% of the per capita personal income in Colorado and the United States respectively.

Table 8 Average Per Capita Annual Pay – U.S., Colorado, and La Plata County, 2008

Area	Average Annual Pay	La Plata County Income as Percentage of
La Plata County	38,070	_
Colorado	46,614	81.7%
U.S.	45,563	83.6%

Source: U.S. Department of Labor, Bureau of Labor Statistics

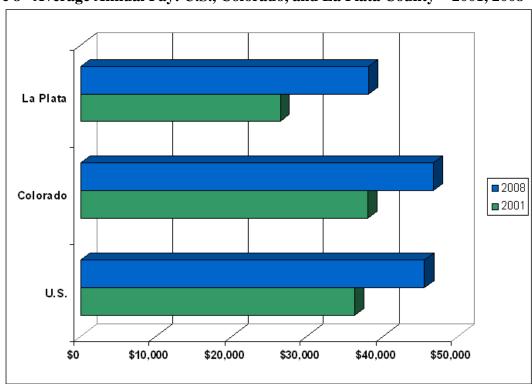


Figure 8 Average Annual Pay: U.S., Colorado, and La Plata County – 2001, 2008

## The Economic Impact of Fort Lewis College

The economic base of a local economy is employment in industries that are engaged in producing goods and services sold outside of the area, or to consumers who are from outside of the area. Tourism is an important part of the economic base of La Plata County. Fort Lewis College is also an important part of the economic base of the local economy. The college produces a service, higher education, which is received by students, many of whom are from outside of the immediate area. In a sense, Fort Lewis College exports its product, which is then paid for with money that was earned in other parts of the state and nation. "New," or "outside," money circulates in the local economy, providing increased income and employment locally because Fort Lewis College is located in Durango and La Plata County.

The information presented in this study makes it clear that the local economy in which Fort Lewis College exists is heavily oriented toward services, retail trade, and government. Manufacturing is a relatively small part of the La Plata County economy. The unemployment rate in La Plata County is currently lower than the national rate, and also lower than the state rate. Per capita income is somewhat relatively low compared to both the state and the nation. Tourism is quite important locally, but is vulnerable to changes in energy markets and other external, and even local, changes, as has been clear in the last three years. Economic activity in La Plata County is highly seasonal, with the greatest amount of activity during the summer months.

Given the described local conditions and the stability and growth of the college, it is apparent that Fort Lewis College is a force for economic stability in the community. College expenditures provide income and employment for faculty and staff as well as sales revenues for many local businesses. Students spend large sums of money for housing and other consumer goods and services. State and local government derive revenues from the income and expenditures of those associated with the college. Bank deposits and the supply of credit are increased because of the college.

It is important to recognize that Fort Lewis College provides both long-term stability and short-term, or seasonal, stability, to the local economy. The growth of student enrollment and college expenditures over the years provides long-term stability. Seasonal stability occurs because most the students of the college are attending classes and present in La Plata County from September through April, when tourist activity is relatively low. The presence of the students and their expenditures moderates the seasonal decline in the local economy.

#### Methodology

The more precise estimate of the economic impact of Fort Lewis College may be obtained by focusing on the most recently completed fiscal year of the college (Fiscal Year 2007-2008). Data may be used to estimate the impacts of the College upon income and employment in both La Plata County and Colorado. An "economic impact" basically means an

increase in income and/or a job created for someone. Economic impacts typically are divided into three categories: direct, indirect and induced.

#### **Direct Impacts**

Direct economic impacts consist of the jobs and income created by Fort Lewis College. The College generates income and creates jobs for its employees by producing a product whereby the value of the output generated is greater than the value of the resources used in the production process.<sup>xi</sup> This increase in value allows Fort Lewis to pay its employees, thereby generating jobs and income.

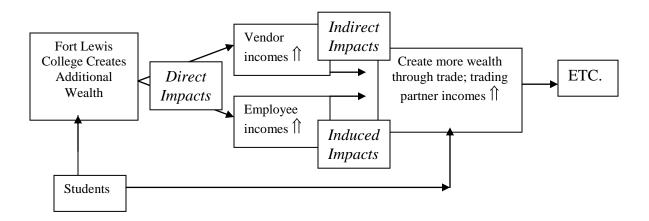
#### **Indirect Impacts**

Indirect impacts consist of the additional jobs and income created when Fort Lewis College purchases goods and services from the many diverse businesses that provide support to the college (excluding salaries, wages, and taxes). The indirect impacts include both an increase in income and/or jobs for these businesses and the additional income and jobs created when employees and owners of the support businesses spend their additional income throughout the local economy.

#### **Induced Impacts**

Induced impacts consist of additional income and jobs created throughout the economy when the employees of Fort Lewis College spend their personal incomes on consumer goods, other property, services and taxes. Because Fort Lewis also brings students to the area, we can also include in induced impacts the additional income and jobs created when the students of Fort Lewis College spend their personal incomes in the community.

#### **Economic Impacts From Fort Lewis College**



#### **Economic Multipliers**

Economists typically estimate indirect and induced impacts by using a "multiplier." Multipliers are used to represent the "ripple effects" of money in the economy as it is traded and traded again, generating wealth and income. For example, a multiplier of 1.5 would mean that for every dollar of payroll that an industry pays to its own employees, an estimated \$0.50 in

additional economic value or income is generated in other industries. It is important to remember that multipliers are estimates of the ripple effect. Economists do not always agree on what the multiplier for a specific industry or type of business should be.

The Bureau of Economic Analysis (BEA), by using a Regional Input-Output Modeling System (RIMS), has determined industry multipliers for specific regions in the country. Each industry is assigned a different multiplier based on several factors, including the residency of the workforce, the average wages paid, and the "maturity" of the economic sector. For example, a mature support sector (typical of large cities) will stimulate more spending locally and less "leakage" of dollars outside the region. Conversely, an underdeveloped (immature) support sector (typical of smaller communities) will hold dollars locally for a shorter period as residents look outside the immediate community to make many of their purchases.

#### The Economic Impact of Fort Lewis College – Fiscal Year 2007-08

Table 10 displays the county-wide results of the economic impact of Fort Lewis College during Fiscal Year 2007-2008. Economic impacts of the college occurring outside of La Plata County are not represented in the table. The data and assumptions on which the table is based are shown in Appendixes A, B, and C.

Table 10 County-wide Results of Economic Impact Study, Fort Lewis College

College budgetary expenditures (excluding salaries, non-cash items, and scholarships)  Employee expenditures (non-housing, rental by full/part-time, in-county by employees living out-of-county)  Student expenditures (living allowances, excluding tuition, fees, books, and room and board for on-campus residents)  Direct Economic Impact  \$28,336,506  (26.3%†)  \$20,740,889  (19.2%)  \$31,646,855  (29.3%)  \$63,293,710  (58.7%)	
Employee expenditures (non-housing, rental by full/part-time, in-county by employees living out-of-county)  Student expenditures (living allowances, excluding tuition, fees, books, and room and board for on-campus residents)  Direct Economic Impact  (20.374)  \$20,740,889  (19.2%)  \$31,646,855  (29.3%)  \$63,293,710	_
in-county by employees living out-of-county)  Student expenditures (living allowances, excluding tuition, fees, books, and room and board for on-campus residents)  Direct Economic Impact  (19.2%)  \$31,646,855  (29.3%)  \$63,293,710	
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fees, books, and room and board for on-campus residents) (29.3%) Direct Economic Impact \$63,293,710	
Direct Economic Impact \$63,293,710	
(58.7%)	
(30.770)	
Multiplier 1.336735	
Total Estimated Economic Impact \$107,906,930	
Employment Impact	_
Total existing FTE* positions 525	_
Multiplier 1.258534	
Total Job Opportunities 660	_

<sup>\*</sup>Full-Time Equivalent, † percentage of overall economic impact in parenthesis.

The numbers presented in Table 10 suggest a very substantial economic impact of the college during Fiscal Year 2007-08. The direct economic impact, which is the sum of college, employee, and student expenditures, was \$63,293,710. It should be noted that 29.3% of the direct economic impact of the college was the result of student expenditures. College budgetary expenditures were 26.3% of the direct economic impact, and employee expenditures were 19.2%. Including the multiplier effect, the total estimated economic impact of the college was \$107,906,930. Some perspective may be gained by recognizing that this figure is equal to about 11.0 percent of the 2008 Personal Income of La Plata County. Also, it is important to recognize

that the bulk of student expenditures occur during the period from September through April. This is the same time period when local tourists expenditures tend to be lower. Therefore, student expenditures tend to offset seasonal declines in the local economy. The seasonality in tourism is then offset by the opposite seasonality of college enrollment.

The impact of Fort Lewis College on employment in the county that is suggested by Table 10 is also quite impressive. While Full-Time Equivalent (FTE) positions at the college numbered 525, total jobs attributable to the college and its expenditures numbered 660. This latter number is qualified by the following: approximately one-half of average college-related expenditures by students goes to rental housing, and the manufacturing sector in La Plata County is not large. Consequently, it would be prudent to regard the 660 jobs shown in Table 10 as a reasonable "upper limit" estimate of the total job opportunities in La Plata County attributable to Fort Lewis College. These 660 jobs represented approximately 2.6% of the total employment in La Plata County in 2008.

#### Comparison of Fiscal Year 2007-2008 Study with Past Economic Impact Studies

This study updates four earlier studies that determined the economic impact of Fort Lewis College on the local economy. Since the same basic methodology was used in all of the studies, it is interesting to see how the impact of the College has changed over the last 18 years. The income generated impact is all in constant 1990 dollars so that meaningful changes in economic impact can be compared across time. With respect to the impact on job market, previous studies used a final demand multiplier whereas we have used a total direct impact rather than the total demand multiplier. Because of the change in the *type* of multiplier used, our calculations differ from those in previous studies.

It is clear from the table that Fort Lewis has increased its economic impact in the local economy over the last 14 years.

Table 11 Comparison of Economic Impact Studies of Fort Lewis College

	1990	1994	1998	2004	2008
A. Total Direct	\$23.941	\$31.837	\$42.956	\$49.659	\$38.423
Economic Impact		(32.9%)	(34.9%)	(15.6%)	(-22.6%)
B. Total Economic	\$35.912	\$47.757	\$64.433	\$74.489	\$65.505
Impact		(32.9%)	(34.9%)	(15.6%)	(-12.1%)
C. Percent of Total	4.62% of 1990	7.21% of 1994	7.94% of 1998	7.13% of 2004	10.9% of 2008†
Income in La Plata	Personal	Personal	Personal	Personal	Personal
County	Income	Income	Income	Income	Income
D. FTE and Total	387,	422,	450,	503,	525,
Direct	600	655	698	698	660
Employment					
Impact		1			
E. Percent of Total	22.6%	22.6%	22.4%	19.0%	16.8%
Employment in La					
Plata County					

Notes: Panel A. Total Direct Impact of Fort Lewis College in millions of 1990 dollars, numbers in parentheses are the percentage change from the previous study. Panel B. Total Impact of Fort Lewis College in millions of 1990 dollars, numbers in parentheses are the percentage change from the previous study. Panel C. Total Impact as Percentage of Total Income in La Plata County. Panel D. Fort Lewis Full Time Employee Equivalents and Total Employment, the first number is the FTE and the second is the employment impact. Panel E. Percent of Total Employment which can be attributed to Fort Lewis College. † In current dollars.

Sources: Income data – Bureau of Economic Analysis;

CPI and county employment data - Bureau of Labor Statistics

### **Summary & Conclusions**

Fort Lewis College has exerted its influence on La Plata County for many years. The local economy is reliant upon services, retail trade, and government for its income and employment. Because of its orientation toward tourism, the local economy has some vulnerability to uncertainties in energy markets and other changes in the external economic environment. Approximately 2,600 college students rent residences in La Plata County. Per capita personal income is lower in La Plata County than in Colorado or the U.S., while the unemployment rate in the county is lower than both the state's and the U.S.'s rate.

This study of the economic impact of Fort Lewis College on La Plata County during Fiscal Year 2007-08 shows that the college does indeed have a very substantial impact in terms of both income and employment. When income and employment multiplier effects are considered, approximately 11 percent of Personal Income and approximately 2.6 percent of employment in the county may be attributed to Fort Lewis College.

In conclusion, the economic impact of Fort Lewis College is impressive, and has various dimensions. The college is stable in its economic activities. The absolute levels of revenues, expenditures, and student enrollments are large. A large number of residential housing units within the county are rented to college students each year. The seasonal pattern of student expenditures tends to offset seasonal decreases in tourism. The college is an important part of the economic base of La Plata County. In relative terms, an important proportion of income and employment within La Plata County may be attributed to the college. All of these impacts are expected to continue into the foreseeable future.

# Appendix A

## **Survey Form**

1. Number of college employees	
a. full-time	481
b. part-time	107
c. TOTAL NUMBER	588
d. FTE for above	525
2. College employees who live	
in La Plata County—	
a. full-time	459
b. part-time	99
c. TOTAL NUMBER	558
d. FTE for above	500
In State	
a. full-time	477
b. part-time	104
c. TOTAL NUMBER	581
d. FTE for above	504
3. Total disposable income available to	\$28,523,020
employees	
4. Number of students	
a. full-time	3620
b. part-time	315
c. TOTAL	3935
5. Average annual college-related	
expenditures by full-time students (living	
allowances, weighted thirty-three percent	
resident on-campus, sixty-seven percent	
resident off-campus <sup>xii</sup> )	\$8,290
6. Average annual college-related	
expenditures by part-time students	\$5,197

# Appendix B

# **Preliminary Data for Detail Worksheet** (This Appendix should be read with Appendix C)

Census data: Percentage who rent in county (2008) Median monthly rent in county (2008)	48% \$861
For Part J: Multiplier	1.336735
For Part M: Multiplier for jobs related to college <sup>xiii</sup>	1.258534

# Appendix C

## **County-Wide Data for Fort Lewis College**

A. Total salaries paid to employees	\$28,523,020
B. Average salary per employee (FTE,	\$54,330
full time equivalent – see Appendix A)	
C. Expenditures of in-county employees	
(FTE) spent in-county on non-housing	
items (assuming 33% spent on housing =	\$18,092,000
\$54,330 x 66.6% x FTE)	
D. Expenditures of out-of-county	
employees (FTE) spent in-county on non-	
housing items (assuming 5%). \$54,330 x	\$45,225
66.6% x 5% x FTE)	
E. Rental expenditures by full-time	
college employees living in county (FTE	\$2,603,664
x % who rent x median rent)	
F. Total employee expenditures (C + D	\$20,740,889
+ <b>E</b> )	
G. Total expenditures by full-time	
students	\$30,009,800
H. Total expenditures by part-time	
students	\$1,637,055
I. Total expenditures by students	\$31,646,855
J. Total Direct economic impact of the	_
college on the county	\$52,387,744
K. Multiplier	1.336735
L. Total estimated economic impact	\$70,028,531
M. FTE employees	525
N. Multiplier	1.258534
O. Total full-time employment related to	
college	660.7

#### References

American Council on Education, Center for Policy Analysis, www.acenet.edu/resources/higheredfacts/fact\_sheets/returns.pdf.

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- U.S. Department of Labor, Bureau of Labor Statistics, www.bls.gov/cps/home.htm.
- U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics, www.bls.gov/lau/.
- U.S. Department of Labor, Bureau of Labor Statistics, Quarterly Census of Employment and Wages, www.bls.gov/cew/.

#### **End Notes**

<sup>&</sup>lt;sup>i</sup> CPS 2009 Annual Social and Economic Supplement, US Census Bureau, Table PINC-03, 2009.

ii American Council on Education, Center for Policy Analysis, http://www.acenet.edu/resources/higheredfacts/fact\_sheets/returns.pdf.

iii Colorado Department of Labor and Employment, Labor Market Information, http://lmigateway.coworkforce.com/lmigateway/gsipub/index.asp?docid=363.

<sup>&</sup>lt;sup>iv</sup> U.S. Department of Commerce, Bureau of the Census, 1980 Census of Population and Housing, Population and Housing Unit Counts, Colorado, p. 15.

<sup>&</sup>lt;sup>v</sup> Ibid, 1990, p. 2.

vi Ibid, 2000, http://dola.colorado.gov/demog/Housing/Occupancy.xls.

 $<sup>^{\</sup>rm vii}$  Colorado Demographer's Office, Population and Household Estimates for Colorado Counties and Municipalities, 2008.

viii Based on an average rent of \$844.72 in Durango, CO, third quarter of 2007, two bedroom, two bath apartment (assuming most students have roommates). *Statewide Multifamily Housing Vacancy and Rent Survey*, Gordon E. Von Stroh, Ph.D., The Daniels College of Business at the University of Denver. By the third quarter of 2008, the average rent for a two bedroom, two bath apartment in Durango, CO had decreased to \$819.14.

ix "County Employment and Wages in Colorado: Fourth Quarter 2008", *Quarterly Census of Employment and Wages*, Bureau of Labor Statistics, <a href="http://www.bls.gov/ro7/qcewco.htm">http://www.bls.gov/ro7/qcewco.htm</a>, accessed 1/15/2010.

<sup>&</sup>lt;sup>x</sup> The estimate of the economic impact of Fort Lewis College during Fiscal Year 2007-08 is patterned after an approach used in earlier economic impact studies of Fort Lewis College by Vernon E. Lynch, Jr., School of Business Administration, Fort Lewis College (with some adjustments to the analysis).

xi This is true in the private sector or firms would not survive. In the case of Fort Lewis College, a public institution, this study will assume that the value created by the College is greater than the cost of the inputs. Of course, there really is no way of knowing this without market forces directing resources, instead of state legislatures.

xii Fort Lewis College, Resident Life and Housing, <a href="http://www.fortlewis.edu/prospective\_students/housing/default.asp">http://www.fortlewis.edu/prospective\_students/housing/default.asp</a>. Number determined as follows: Expenses (minus tuition, books and fees plus personal/misc. expenses and transportation) for off campus student is \$14,063.50 - \$5,142-\$1,000-\$1,543.50=\$6,378+\$2,508+\$1,508=\$10,394. For on campus student it is equal to the personal/misc. expenses plus transportation = \$4,016. Assuming 67% live off campus: \$10,394 x 2426 students = \$25,215,844 plus 33% who live off campus: \$4,016 x 1194 students = \$4,795,104. Therefore, total expenses = \$30,010,948/3620 full time students = \$8,290 per year. We assume part time students all live off campus and would spend half of what the full time student would spend = \$10,394/2 = \$5,197.

xiii Regional Multipliers provided by the Bureau of Economic Analysis.