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TO: City Council
FROM: Sam Anselm, City Manager
DATE: September 18, 2015
RE: Weekly Update

Good evening, everyone. Please see below for this week's update.

Key Meetings

- On Monday, our CIP meetings with departments continued from last week, by meeting with both the CVB and police departments to discuss their capital needs over the next five years.
- On Tuesday, during our weekly staff meeting, we finished up our discussion of the state audit report.
- After our staff meeting, I met with Chuck Banks from Deloitte, Planning Director Bolander and Assistant Director Robyn, and City Attorney Edwards, to get an update on various CDBG-DR projects. The senior affordable housing/memory care project is still on track to receive bids on November 24th, and the Infrastructure Team's work on planning the major streets projects is well underway. We also discussed the idea of declaring a majority of our city-owned property as surplus at one time, so that in the future, we can more efficiently dispose of said property. Planning staff will be working on completing the inventory of all city-owned property to present this list to the planning and zoning commission prior to your review and approval. We don't have a timeline on when this will happen, but we are underway.
- Later that morning, AtCM Kelly and I met with staff in the health department to review their CIP requests.
- Prior to the budget work session, AtCM Kelly and I attended the JCVB Advisory Board meeting to review architectural renderings that have been prepared for the visitor's center on Broadway/Route 66. I will be working with Director Tuttle to put the information together for your review.
- At the conclusion of that meeting, I sat in on the joint Historical Preservation Commission/Design Review Standards board meeting.
- On Wednesday, AtCM Kelly coordinated an International City/County Manager's Association-sponsored webinar on "Engaging Employees Effectively." The presentation spurred some good discussion with attendees afterward, and this group will be meeting again next week to discuss ideas that we can implement in our organization.
- On Thursday, PIO Onstot, planning staff, and I sat in on a demonstration of a GIS-based tool being developed by Deloitte that will provide residents with interactive and up-to-date information on the progress of the \$140+ million in CDBG-DR projects that will be

taking place over the next four years, along with other ways we can communicate the progress to our community. We also discussed an upcoming event on October 6th, where officials from HUD will be in town to meet with city staff and other community organizations to talk about various HUD-sponsored programs and initiatives. As details are finalized, I will present that information to you if you would like to attend.

- Later that afternoon, AtCM Kelly and I sat in on a conference call with over 70 other cities that applied for the “Startup in a Day” grant competition sponsored by the US Small Business Administration in partnership with the National League of Cities. While I’m sad to say that our application was not accepted to receive grant funding, the call itself was productive, and we plan to continue discussions with other cities who made the pledge to improve our business permitting/licensing processes.
- Earlier today, Director Allgood and I met to discuss an idea to use temporary agencies to assist us in filling our seasonal positions. I am aware of a few cities that use labor agencies to help fill positions, but it is a practice that is used widely in the public sector. Director Allgood has analyzed the costs it takes from an HR perspective to go through the hiring process to on-board seasonal employees, and it runs around \$600 per employee when you factor in advertising costs, recruiting, interviewing, etc. I have asked Director Allgood to proceed with developing an RFP that we can send out to get some pricing.
- At noon, Mayor Seibert and I were invited to attend MSSU’s Board of Governor’s meeting to hear the results of an economic impact study conducted by the university to measure their impact on our community and region. A copy of that report is attached to this update for your review.
- Finally, this afternoon, AtCM Kelly and I met with Jon Buck and two of his colleagues to discuss the afore-mentioned “Startup in a Day” competition, to learn about their experiences in starting a business in Joplin, and how to improve our processes. Over the next year, we will be reaching out to other small business owners to hear about their experiences and learn ways that we can improve. Our goal is to make Joplin the easiest place in the state to start a business while still doing all the things we do as an organization (issuing permits, licenses, performing various inspections) to ensure the safety of our residents who patronize our businesses. We are in the early stages of this process, so I would invite any feedback or suggestions you may have as well.

Miscellaneous

- We received an update earlier this week on the progress of the construction of the pedestrian bridge connecting MSSU’s campus to the NorthPark Mall area. Our consultant is providing a final review of the submittal paperwork while waiting for clearance from MoDOT/US Fish & Wildlife Service. Once completed, the paperwork will go to FEMA for review for the issuance of a Conditional Letter of Map Revision, which gives us the permission we need to proceed. I will echo what our public works director said, in that we’ve built multi-million dollar projects in less time, but we are just as anxious to get the project underway as I’m sure the university is.
- On Tuesday during our budget meeting, Director Haase indicated that she was scheduled to participate in a meeting of the South Main CID (she serves as ex-officio on the board) on Wednesday, and that she would provide a summary for me to pass along to you. That meeting was cancelled and is being rescheduled, so I will forward the meeting summary after the meeting actually takes place.

In the Pipeline

- On Monday night, you will be asked to approve the list of surplus items to be placed into our city auction, which will be held on October 10th.

On a final note, I would like to thank you for your participation in the budget meetings this week. I am personally looking forward to the possibility of that being our last review of the end-product of our line-item budget process, because as a reminder, Jon Johnson and Chris Fabian from the Center for Priority Based Budgeting will be in town Monday night to present the priority-based budgeting concept to you and the public. I think you'll find this process to be more engaging for you and for our residents, and I am excited to finally present the agreement to you for consideration.

Please let me know if you have any questions about these items. Otherwise, I'll see you Monday night.

CITY OF JOPLIN, MISSOURI

VISION STATEMENT

Joplin, a regional center at the crossroads of America, where a prosperous and diversified economy joins with hometown values to create a continually enhanced quality of life.

MISSION STATEMENT

The City of Joplin will provide efficient delivery of quality services in the areas of public safety, health and environment, community and economic development, leisure activities, and infrastructure needs for people living, visiting or doing business in Joplin.

It is our goal to design services in response to existing and emerging needs of customers. We are committed to providing clearly superior services to the community, leaving a lasting impression of professionalism and excellence. We pledge, as a team, to build on our rich heritage while creatively planning our future to ensure the expected quality of life in Joplin and the surrounding area.

A REPORT OF THE ECONOMIC IMPACT OF MISSOURI SOUTHERN STATE UNIVERSITY

April 23, 2015

Prepared for:
Missouri Southern State University
3950 E. Newman Road
Joplin, MO 64801



Prepared by:
Impact DataSource, LLC
Austin, TX
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PURPOSE & LIMITATIONS

This report presents the results of an analysis undertaken by the Impact DataSource, an Austin, TX based economic consulting firm.

The analysis relies on operational data from Missouri Southern State University as well as estimates, assumptions, and other information developed by Impact DataSource from its independent research effort.

Our analysis quantified the economic and fiscal impact of the University during fiscal year 2013-14 as described throughout this report.

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Overview

This report presents the detailed results of an economic impact analysis performed by Impact DataSource, an Austin, Texas economic consulting and research firm. The purpose of the analysis was to determine the economic and fiscal impact of Missouri Southern State University (MSSU) in Joplin, Missouri during fiscal year 2013-14.

Missouri Southern State University serves nearly 6,000 students in nearly 200 academic programs. MSSU's outstanding NCAA Division II athletics programs, award-winning Themed Semesters, fun student activities and enriching cultural events in theater, art, music and film create an engaging learning environment for its students and citizens of the region.

Since 1937, Missouri Southern State University has provided educational opportunities for Southwest Missouri and beyond. MSSU has evolved from an outstanding junior college to its role today as a comprehensive four-year state-supported institution offering bachelor and master degrees. The University's academic programs are organized in four schools - School of Arts & Sciences, School of Education, the Robert W. Plaster School of Business and the School of Health Sciences. MSSU also offers a division of Graduate Studies and Distance Learning.

Missouri Southern's state and nationally prepared teachers in nationally acclaimed teacher education programs. For the last 75 years, Missouri Southern has developed outstanding, effective programs accredited by state and national bodies that prepare its students for the competitive and changing global society.

Economic & Fiscal Impacts

This report includes economic impacts resulting from MSSU including such things such things as jobs, earnings, economic output or sales, worker and student spending and taxable property. The State of Missouri, City of Joplin, Jasper County and other local taxing districts benefit from the University through sales, hotel, property and individual income tax collections.

A summary of the economic and fiscal impact of the University is provided below, followed by a detailed discussion and derivation of these impacts.

Total Economic Impact of MSSU During Fiscal Year 2013-14

The total economic impact of MSSU consists of the direct, indirect and induced economic impacts attributable to operations as well as the secondary economic impacts supported by student and visitor spending. In total, the University supported 1,397.0 jobs, \$65.6 million in workers' earnings and \$198.6 million in economic output or sales in the county.

	Impact
Employment	1,397.0
Workers' Earnings	\$65,594,990
Economic Output or Sales	\$198,607,706

Total Fiscal Impact of MSSU During Fiscal Year 2013-14

The economic impact of MSSU generates sales, hotel, property, and individual income taxes. Sales taxes are collected on taxable spending by workers, students, visitors and sales at the University. Hotel taxes are supported by out-of-town visitors to Joplin staying in the community. Property taxes are collected on residential property owned or occupied by workers supported by the University's economic activity. Income taxes are collected on taxable workers earnings.

Table 2. Fiscal Impact of MSSU in FY 2013-14

	Sales Taxes	Hotel Taxes	Property Taxes	Income Taxes	Total
State of Missouri	\$1,372,492	\$0	\$0	\$2,312,223	\$3,684,716
City of Joplin	\$852,732	\$41,737	\$41,289	\$0	\$935,759
Jasper County	\$316,729	\$0	\$26,438	\$0	\$343,167
Joplin Schools	\$0	\$0	\$353,661	\$0	\$353,661
Joplin Road Dist.	\$0	\$0	\$21,413	\$0	\$21,413
Total	\$2,541,953	\$41,737	\$442,801	\$2,312,223	\$5,338,715

Economic Impact Summary

The economic impact of Missouri Southern State University includes three activities detailed later in this section; the economic impact from University operations, student spending and visitor spending. In total, the University supports 1,397 jobs, \$65.6 million in workers' earnings, and \$198.6 million in economic output or sales.

Table 3. Total Economic Impact of MSSU

	University Operations	Student Spending	Visitor Spending	Total
Employment	902.3	348.8	145.8	1,397.0
Workers' Earnings	\$50,904,506	\$11,516,707	\$3,173,777	\$65,594,990
Economic Output or Sales	\$105,470,898	\$79,921,630	\$13,215,177	\$198,607,706

Each of the above economic impacts are discussed and detailed below along with a summary of taxable spending and taxable property supported by the University.

University Operations

During fiscal year 2013-14, Missouri Southern State University had an annual operating budget of \$29.8 million, 697 faculty and staff and an annual payroll of \$39.3 million. These direct economic impacts support the following indirect and induced economic activity in the county during fiscal year 2013-14:

Table 4. Economic Impact of University Operations

	Direct	Indirect & Induced	Total
Employment	697.0	205.3	902.3
Workers' Earnings	\$39,320,644	\$11,583,862	\$50,904,506
Economic Output or Sales	\$69,115,923	\$36,354,975	\$105,470,898

The University's operations supported 902 jobs, \$50.9 million in workers' earnings and \$105.5 million in economic output during fiscal year 2013-14.

The University employed 697 individuals, the University's spending supported another 205 spin-off jobs in the county. In total, the University supported 902 area jobs.

Similarly, while MSSU employees, staff and faculty earned salaries and benefits of \$39.3 million in fiscal year 2013-14, the University's spending supported another \$11.6 million in earnings for workers in related spin-off jobs in the area. Therefore, total workers' earnings supported by MSSU during the year totaled \$50.9 million.

The direct economic output supported by MSSU during fiscal year 2013-14 was \$69.1 million. This included payments that the University made for employee, faculty and staff salaries, purchases of goods and services and other expenditures. The direct spending generated \$36.4 million in indirect and induced sales or economic output in area businesses and other organizations.

Student Spending

The economic impacts summarized above occur directly from the University's operation and employment. Those impacts result in part by student spending on tuition and books. Additional student spending also contributes to secondary effects resulting from student expenditures for housing, food, transportation and other expenses.

Approximately 44.3% of a typical public four-year college undergraduate student's budget is dedicated to tuition, books and supplies. Approximately 55.7% of a student's spending is dedicated to housing, food, transportation and other expenses.

Table 5. Average Estimated Full-Time Undergraduate Budget: Public Four-Year In-State On-Campus

	Amount	Percent
Tuition and Fees	\$9,139	39.0%
Books and Supplies	\$1,225	5.2%
Room and Board	\$9,804	41.9%
Transportation	\$1,146	4.9%
Other Expenses	\$2,096	9.0%
Total	\$23,410	100.0%

Source: Trends in College Pricing, College Board 2014-15

<http://trends.collegeboard.org/college-pricing/figures-tables/average-estimated-undergraduate-budgets-2014-15>

Approximately 41.3% of MSSU students are from the immediate area, meaning approximately 58.7% of the students are drawn to the Joplin area to attend school at MSSU. The University enables local students to remain in the area to further their education and attracts a number of students from outside of the area. As a result, the University affects spending patterns in the area that result in impacts deriving from student spending on housing, food, transportation and other expenses.

Impact DataSource estimates student spending in the community based on the number of students enrolled at MSSU and the national average spending on (1) Room and Board, (2) Transportation, and (3) Other Expenses. Impact DataSource adjusts the Room and Board spending to reflect that fact that a small portion of students, eight percent, live on campus.

Table 6. Student Spending Supported by MSSU

	Amount Per Student	Students	Total
Room and Board	\$9,804	5,997	\$58,790,274
Transportation	\$1,146	6,518	\$7,469,628
Other Expenses	\$2,096	6,518	\$13,661,728
Total Student Spending in the Region			\$79,921,630

The estimated student spending of \$79.9 million or \$12,262 per student described above supported 348.8 additional jobs in the county and \$11.5 million in additional workers' earnings and a total of \$79.9 million in total economic output or sales.

Table 7. Economic Impact of Student Spending

	Impact
Employment	348.8
Workers' Earnings	\$11,516,707
Economic Output or Sales	\$79,921,630

Visitor Spending

In addition to the impacts supported by the University's operations and its student's spending, the University supports additional economic impacts in the community as a result of visitor spending. MSSU provided visitor information for sports spectators as well as non-spectator visitors. A summary of the 23,400 non-spectator visitors during fiscal year 2013-14 is provided next.

Table 8. MSSU Non-Spectator Visitor Summary

	Visitors
Music Events	2,500
Alumni	650
Business Department	400
Foreign Language Field Day	400
Admissions	1,961
Commencements	4,000
Miscellaneous Events*	13,500
Total	23,411

* HS commencements, Conferences, Other rentals

While in town visiting the University, the visitors likely spent money in the community at retail establishments and restaurants. Additionally, it is assumed that 47.0% of the visitors stayed overnight in Joplin. The table below estimates the spending supported by out-of-town non-spectator visitors to MSSU.

Table 9. Non-Spectator Visitor Spending Estimate in FY 2013-14

	Visitors
Annual visitors	23,411
Average length of visit in days	1.0
Average spending per day, excluding lodging	\$50.00
<u>Non-Spectator Visitor spending, excl. lodging</u>	<u>\$1,170,572</u>
Percent of visitors requiring a hotel stay	47.0%
Average hotel room occupancy	2.0
Estimated hotel nights	5,502
Average hotel rate in the area	\$89.00
<u>Non-Spectator Visitor spending on lodging</u>	<u>\$489,678</u>
<u>Total</u>	<u>\$1,660,250</u>

Spectators to athletics events at MSSU are expected to have had slightly different spending profile and therefore are broken out below. The spectator spending shown below is in addition to the other non-spectator visitor spending shown on the previous page. In total, the Athletics department estimated attracting 132,380 spectators during fiscal year 2013-14. Forty-four percent of these spectators are assumed to be students or local residents and did not have a spending impact. The spending impact relating to the remainder is estimated below.

Table 10. Spectator Visitor Spending Estimate in FY 2013-14

	Visitors	Spending Per Visitor	Total Spending
From Jasper County area	47,657	\$75	\$3,574,260
From outside of the area	26,476	\$125	\$3,309,500
<u>Spectator Visitor spending, excl. lodging</u>			<u>\$6,883,760</u>
Percent of outside of the area requiring a hotel stay			47.0%
Average hotel room occupancy			2.0
Estimated hotel nights			6,222
Average hotel rate in the area			\$89.00
<u>Spectator Visitor spending on lodging</u>			<u>\$553,758</u>
<u>Total</u>			<u>\$7,437,518</u>

The above non-spectator and spectator visitor spending supports the following total economic impacts in the region.

Table 11. Economic Impact of Visitor Spending

	Impact
Employment	145.8
Workers' Earnings	\$3,173,777
Economic Output or Sales	\$13,215,177

Summary of Taxable Spending

The University's employees and workers in spin-off jobs will generate significant taxable spending in the area. An estimate of total direct and spin-off worker spending is provided below. The estimate assumes workers spend 16.0% of wages on taxable goods and services and 70% of this spending will occur in the region, consistent with spending patterns of families earning approximately \$50,000 per year.

Table 12. Taxable Spending by Workers

	Amount
Total Workers' Earnings	\$65,594,990
<i>Wages as a % of Earnings</i>	75.0%
<i>Taxable Spending as % of Wages</i>	16.0%
<i>% of taxable spending that is local</i>	70.0%
<u>Taxable Spending by Workers</u>	<u>\$5,509,979</u>

Students attending the University will make taxable purchases well. The taxable student spending is estimated to be 20% of student spending, consistent with spending patterns of individuals earning less than \$20,000 per year.

Table 13. Taxable Spending by Students

	Amount
Local Student Spending	\$79,921,630
Taxable Spending %	20.0%
<u>Taxable Spending by Students</u>	<u>\$15,984,326</u>

In addition, the visitor's spending is assumed to be 100% taxable and MSSU reports annual taxable sales of \$1.9 million at its bookstore, dining facility, and at sporting events.

Table 14. Total Taxable Spending

	Amount
Taxable Spending by Workers	\$5,509,979
Taxable Spending by Students	\$15,984,326
Taxable Spending by Visitors, incl. Lodging	\$9,097,768
Taxable Spending at the University	\$1,892,950
Total	\$32,485,023

Residential Property on Local Tax Rolls

Although the University's property is not on local tax rolls, employees, staff, faculty at the University, and workers in spin-off jobs in the community own or occupy residential property on which they directly or indirectly pay property taxes, as shown below.

Table 15. Total Residential Property Supported

	Amount
Number of direct and spin-off workers supported by MSSU	1,397.0
Percent of workers who live in Jasper County*	53.6%
Average market value of residential property in the area**	\$67,978
<u>Total residential market value supported</u>	<u>\$50,857,208</u>

* Estimate based on data from the U.S. Census OnTheMap Program, Commuting Patterns for the region.

** Estimate based on the number of housing units reported by the U.S. Census in Joplin and Joplin CAFR presenting the total value of residential property in the city.

The economic impacts described above will result in tax revenues for local taxing districts. The fiscal impact of the University is detailed below.

Fiscal Impact Summary

The economic impacts supported by MSSU result in tax revenues for the state and local taxing jurisdictions. The fiscal impact analysis in this study focuses on the major revenue sources for local jurisdictions in which the University is located. Other nearby cities and counties benefit from the University as well however, this analysis focuses on the City of Joplin, Jasper County, and the State of Missouri. The table below summarizes the tax revenues supported by MSSU in fiscal year 2013-14.

Table 16. Total Fiscal Impact of MSSU

	Sales Taxes	Hotel Taxes	Property Taxes	Income Taxes	Total
State of Missouri	\$1,372,492	\$0	\$0	\$2,312,223	\$3,684,716
City of Joplin	\$852,732	\$41,737	\$41,289	\$0	\$935,759
Jasper County	\$316,729	\$0	\$26,438	\$0	\$343,167
Joplin Schools	\$0	\$0	\$353,661	\$0	\$353,661
Joplin Road Dist.	\$0	\$0	\$21,413	\$0	\$21,413
Total	\$2,541,953	\$41,737	\$442,801	\$2,312,223	\$5,338,715

Sales Taxes

The taxable spending supported by the University results in sales tax revenue for Joplin, Jasper County and the State of Missouri. The estimated annual sales taxes supported by the University are shown below.

Table 17. Sales Tax Collections

	Sales Amount	Tax Amount
Total Taxable Spending	\$32,485,023	
State of Missouri	<i>Sales Tax Rate: 4.225%</i>	\$1,372,492
City of Joplin	<i>Sales Tax Rate: 2.625%</i>	\$852,732
Jasper County	<i>Sales Tax Rate: 0.975%</i>	\$316,729
Total Sales Tax Collections		\$2,541,953

Hotel/Motel Taxes

The lodging spending supported by the University results in hotel/motel tax revenue for Joplin in addition to the sales taxes shown above. The table below shows the hotel/motel taxes for Joplin based on the estimated lodging spending by out-of-town visitors to MSSU.

Table 18. Hotel Tax Collections

	Sales Amount	Tax Amount
Total Lodging Spending	\$1,043,436	
City of Joplin	<i>Hotel Tax Rate: 4.000%</i>	\$41,737
Total Hotel Tax Collections		\$41,737

Property Taxes

The University's property is not on local tax rolls but employees, staff, faculty at the University, and workers in spin-off jobs in the community own or occupy residential property on which they directly or indirectly pay property taxes as summarized below.

Table 19. Property Tax Collections

	Sales Amount	Tax Amount
Total residential market value supported	\$50,857,208	
Total assessed value of property <i>Assessment Rate: 19.0%</i>	\$9,662,870	
City of Joplin <i>Property Tax Rate per \$100 of assessed value: 0.4273</i>		\$41,289
Jasper County <i>Property Tax Rate per \$100 of assessed value: 0.2736</i>		\$26,438
Joplin Schools <i>Property Tax Rate per \$100 of assessed value: 3.6600</i>		\$353,661
Joplin Road District <i>Property Tax Rate per \$100 of assessed value: 0.2216</i>		\$21,413
<u>Total Property Tax Collections</u>		<u>\$442,801</u>

Income Taxes

The workers' earnings supported by the University results in individual income tax revenue for the State of Missouri. Missouri's individual income tax system consists of ten brackets and a top rate of 6%. Impact DataSource applies an effective income tax rate of 4.7% to workers' earnings less benefits to estimate the income tax supported for the state of Missouri. This rate was determined by comparing Missouri individual income tax collections to personal income.

Table 20. Individual Income Tax Collections

	Sales Amount	Tax Amount
Total workers' earnings less benefits	\$49,196,242	
State of Missouri <i>Effective individual income tax rate: 4.70%</i>		\$2,312,223
<u>Total Individual Income Tax Collections</u>		<u>\$2,312,223</u>

Overview of Methodology

This report presents the results of an analysis undertaken by the Impact DataSource, an Austin, TX based economic consulting firm.

Economic impacts can be categorized into two main types of impacts. First, the direct economic impacts are the jobs and payroll directly created by the University. Second, this economic impact analysis calculates the indirect and induced impacts that result from the University. Indirect jobs and salaries are created in new or existing area firms, such as maintenance companies and service firms, that may supply goods and services for the University. In addition, induced jobs and salaries are created in new or existing local businesses, such as retail stores, gas stations, banks, restaurants, and service companies that may supply goods and services to new workers and their families. The impacts supported by students and visitors are categorized as indirect and induced impacts.

Regional Input-Output Modeling System (RIMS II)

The economic impact estimates in this report are based on the Regional Input-Output Modeling System (RIMS II), a widely used regional input-output model developed by the U. S. Department of Commerce, Bureau of Economic Analysis. The RIMS II model is a standard tool used to estimate regional economic impacts. The economic impacts estimated using the RIMS II model are generally recognized as reasonable and plausible assuming the data input into the model is accurate or based on reasonable assumptions. The RIMS II model is described in basic detail below.

Generally speaking, input-output modeling attempts to estimate the changes that occur in all industries based on a change in the demand for the output of an industry. An input-output model allows an analyst to identify the subsequent changes occurring in various industries within a regional economy in order to estimate the total impact on the economy. Total economic impact is the sum of three components: (1) direct, (2) indirect, and (3) induced impacts.

If the demand for the output of an industry, measured by industry sales or revenue, increases by \$1.0 million, total regional output increases by \$1.0 million. This initial change in output is called the change in direct economic output and also referred to as the direct expenditure effect. The change in total economic output in the region resulting from the initial change does not stop with the change in direct economic output. Businesses in a variety of industries within the region will be called upon to increase their production to meet the needs of the industry where the initial increase in demand occurs. Further, other suppliers must also increase production to meet the needs of the group of initial supplier firms to the industry. This increase in expenditures by regional suppliers is considered the indirect economic impact of the initial \$1.0 million in sales, and is classified as indirect expenditures of the total economic impact or the change in indirect economic output.

The total economic impact of the \$1.0 million in sales includes one more component, the induced impact. All economic activity, whether direct or indirect, that results from the initial increase in demand of \$1.0 million, requires workers, and these workers must be paid for their labor. This means that part of the direct and indirect expenditures is actually in the form of wages and salaries paid to workers in the various affected industries. These wages and salaries will in turn be spent in part on goods and services produced locally in the region. This spending is another part of the regional economic impacts referred to as induced impacts and is classified as induced expenditures or the change in induced economic output.

Based on the initial direct impact, the RIMS II model can be used to estimate the direct, indirect and induced impacts on economic output, value added, earnings and employment in a given region. Economic output is gross output and is the sum of the intermediate inputs and final use. This is a duplicative total in that goods and services will be counted multiple times if they are used in the production of other goods and services. Value added is defined as the value of gross output less intermediate inputs. Workers' earnings or earnings consist of wages and salaries, employer provided benefits and proprietors' income. Employment consists of a count of jobs that include both full-time and part-time workers.

The RIMS II model is based on regional multipliers, which are summary measures of economic impacts generated from changes in direct expenditures, earnings, or employment. Multipliers show the overall impact to a regional economy resulting from a change in demand in a particular industry. Multipliers can vary widely by region. Multipliers are higher for regions with a diverse industry mix. Industries that buy most of their materials from outside the state or region tend to have lower multipliers. Multipliers tend to be higher for industries located in larger areas because more of the spending by the industry stays within the area.

The RIMS II model generates six types of multipliers for more than 400 industrial sectors for any region in the United States. The multipliers include four “final-demand” multipliers and two “direct-effect” multipliers. Final demand multipliers indicate the impact of changes in final demand for the output of a particular regional industry on total regional output, earnings, employment and value added. Direct-effect multipliers indicate the impact of changes in regional earnings or employment within a particular industry on total employment or earnings within a region.

Final-demand output multipliers indicate the total regional output (direct, indirect and induced expenditures) that results from an increase in direct expenditures for a good produced by a particular regional industry. For example, if an industry in a particular region is said to have a final demand output multiplier of 2, this tells us that a \$1 increase in final demand for the good produced by that industry results in a \$2 increase in total output or expenditures within the regional economy. Final-demand earnings multipliers indicate the impact of an increase in final demand for the good of a particular regional industry on the total earned income of households within the region. Final-demand employment multipliers indicate the increase in total regional employment that results from a \$1.0 million increase in final demand for the good produced by a particular regional industry. Final-demand value-added multipliers indicate the increase in total regional value added that results from a \$1.0 million increase in final demand for the good produced by a particular regional industry. Direct-effect earnings multipliers indicate the impact of a \$1 change in earnings within a particular regional industry on total earnings in all industries within a region. Direct-effect employment multipliers indicate the impact of a change in employment in a particular regional industry on total employment in all industries within a region.

Theoretically, changes in final demand drive the total change in economic output, earnings, and employment. However, these multiplier relationships can be used to estimate impacts in other ways if only limited information is known about a project. For example, the multiplier relationships can be used to estimate the increase in direct economic output based on a given level of employment in a specific industry.

Additional Notes on RIMS II

RIMS II multipliers are based on the average relationships between the inputs and outputs produced in a local economy. The multipliers are a useful tool for studying the potential impacts of changes in economic activity. However, the relative simplicity of input-output multipliers comes at the cost of several limiting assumptions.

- Firms have no supply constraints—Input-output based multipliers assume that industries can increase their demand for inputs and labor as needed to meet additional demand.
- Firms have fixed patterns of purchases—Input-output based multipliers assume that an industry must double its inputs to double its output.
- Firms use local inputs when they are available—The method used by RIMS II to develop regional multipliers assumes that firms will purchase inputs from firms in the region before using imports.

RIMS II, like all input-output models, is a “static equilibrium” model. This means that there is no specific time dimension associated with the results using the model. For the RIMS II model, it is customary to assume that the impacts occur in one year because the model is based on annual data.

The fiscal impacts calculated in this report are described in the text of the report.

About Impact DataSource

Impact DataSource is an Austin economic consulting, research, and analysis firm founded in 1993. The firm has conducted over 2,500 economic impact analyses of firms, projects, and activities in most industry groups in Texas and more than 30 other states.

In addition, Impact DataSource has prepared and customized more than 50 economic impact models for its clients to perform their own analyses of economic development projects. These clients include the New Mexico Economic Development Department and the Metro Orlando (Florida) Economic Development Commission.

The New Mexico Department of Economic Development uses Impact DataSource's computer model to project the economic impact of new or expanding firms in the state, including costs and benefits for the State of New Mexico, as well as each local taxing district. The model also analyzes the amount of eligible state and local incentives and calculates a rate of return and payback period for these incentives.