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Economic Impacts of the UNM Health Sciences Center on the New Mexico Economy

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-Doleswar Bhandari

EXECUTIVE SUMMARY

The University of New Mexico Bureau of Business and Economic Research (BBER) was commissioned by the University of New Mexico Health Sciences Center (UNM HSC) to estimate its economic impact on the State of New Mexico for the fiscal year 2013. This report describes the impacts, in terms of jobs, income, economic output and taxes, of UNM HSC on the State economy. The main highlights of this study are presented as follows:

✘ In FY13, UNM HSC accounted for nearly \$1 billion in in-state direct expenditures and 13,704 jobs (which included 148 construction jobs). Total salaries and benefits were \$835 million, which included \$7.7 million in construction salaries and benefits. UNM HSC’s total contribution (including indirect and induced effects) to the New Mexico Economy was \$1.7 billion in economic output and 19,495 jobs.

✘ Overall, 55% (or \$701 million) of UNM HSC’s expenditures were supported by out-of-state revenue sources.

✘ The total economic impact of the \$701 million out-of-state dollars UNM HSC brought into New Mexico in FY13 amounts to more than \$768 million in total economic impacts (i.e. sum of direct, indirect and induced impacts), \$492 million in labor income and 8,959 jobs within the state.

✘ The overall employment multiplier and output multiplier are 1.4 and 1.7, respectively.

✘ As a part of UNM HSC, UNM Health System accounted for 80% of the total output and labor income, and 78% of the total employment.

✘ Nineteen start-up companies are using technologies developed by UNM HSC; 15 of them are operating their business in New Mexico.

✘ Our results indicate that in FY13, state and local governments received an estimated \$61.8 million in tax revenues as a result of spending by UNM HSC and its multiplier effect: \$21.2 million in gross receipt tax (GRT), \$20.6 million in personal income tax, and \$20 million in property tax. Additionally, an estimated \$70.9 million in Federal Income Tax Withholding was remitted to the Federal Government.

Impact Type	Impacts
Economic Impact - UNM HSC Academic/Research Programs	
Employment	1,997
Labor Income	\$99,149,122
Output	\$154,760,027
Economic Impact - UNM Health System	
Employment	6,962
Labor Income	\$392,722,042
Output	\$613,529,086
Total Economic Impacts - UNM HSC	
Employment	8,959
Labor Income	\$491,871,164
Output	\$768,289,113
Total Economic Contribution to the State Economy - UNM HSC	
Employment	19,495
Labor Income	\$1,069,093,620
Output	\$1,669,882,354
Sources: UNM Health Science Center, UNM Bureau of Business and Economic Research, and IMPLAN	

1. INTRODUCTION

The University of New Mexico's Health Sciences Center (UNM HSC) commissioned the University of New Mexico Bureau of Business and Economic Research (BBER) to estimate the economic impacts of UNM HSC on New Mexico's economy for the fiscal year 2013 (FY13). This report presents the results of traditional economic impact analysis¹ as well as outlines the data and methods used to arrive at these results.

A total of 13,704 jobs were created for New Mexico in FY13 as a result of the operation of UNM HSC, which is the state's only academic health center that integrates educational, clinical and research missions. For purposes of this report, the UNM HSC is separated into two components: UNM HSC Academic/Research Programs and UNM Health System which consists of UNM Medical Group, HSC Clinical Programs, UNM Hospitals, and Sandoval Regional Medical Center. In FY13, UNM HSC spent \$835 million in wages and salaries (including benefits) and purchased more than \$163 million in goods and services within New Mexico.

In FY13, the UNM HSC Academic/Research Programs employed 3,323 people (including 620 faculty, 1,526 staff, 1,122 researchers, students, and others, and 54 construction workers) and disbursed \$177.7 million in employee compensation which includes more than \$37 million in benefits. In the Fall 2013 semester, UNM HSC had a total of 415 medical students, 577 residents, 643 undergraduate students, 341 PharmD students and 555 graduate students (which included 167 doctoral students).

UNM HSC research in the past has developed many innovations. Nineteen start-up companies in New Mexico and other parts of the United States of America are using these innovations. Fifteen of these companies are operating their businesses in New Mexico and creating jobs and income for New Mexicans. UNM HSC is a source of technology, expert personnel, and business knowledge for these firms, which are partners or affiliates of UNM HSC. A list of the start-up companies is presented in Appendix Table C. 1.

As part of UNM HSC, UNM Health System employed 10,381 people (including 94 construction workers) in FY13. Additionally, the UNM Health System spent \$657 million in wages, salaries, and benefits as well as purchased more than \$127 million in goods and services within New Mexico.

¹ This method can be described as an "export-base" method, because it recognizes only those local expenditures that are supported by out-of-state revenues as having a tangible impact on the state economy. New Mexico in-state dollars would presumably flow to some other activity and yield a similar economic impact if UNM HSC did not exist.

UNM Hospitals operates New Mexico's only Level I Trauma Center, treating nearly 90,000 emergency patients and more than 538,000 outpatients annually. The UNM Hospital system includes Carrie Tingley Hospital, UNM Children's Psychiatric Center and the UNM Psychiatric Center. UNM Hospitals also share missions and resources with UNM's College of Nursing and College of Pharmacy as well as the New Mexico Poison Center. It serves as the primary teaching hospital for the UNM School of Medicine and participates in hundreds of advanced clinical trials annually. The hospital further expands into New Mexico's rural communities through a Telemedicine / Telehealth network, linking patients and physicians throughout the state to the most up-to-date research and medical information available.

Sandoval Regional Medical Center (SRMC) opened in July 2012 with 72 in-patient beds in Rio Rancho, one of the fastest growing communities in New Mexico. SRMC is a community-based academic healthcare facility that is served by both hospital-based UNM Faculty Physicians and community-based independent physicians.

The UNM Cancer Center is the only National Cancer Institute (NCI) - designated cancer center in the state of New Mexico. The UNM Cancer Center also partners with Memorial Medical Center in Las Cruces, New Mexico to deliver medical oncology services.

In 2007, the University of New Mexico Medical Group, Inc. (UNMMG) was created as a nonprofit corporation under the University Research Park and Economic Development Act. UNMMG employs support professionals who perform billing and collections, operate outpatient clinics and provide a variety of management and financial services in connection with operating the UNMMG. The UNM Health System operates 43 off-site clinics.

The following sections of the report provide more detail regarding the methodology used to estimate the economic impacts of UNM HSC on the State of New Mexico, data sources and findings.

2. METHODOLOGY

There are many ways that UNM HSC can produce economic benefits to the state. This study builds on previous studies conducted by BBER and is based on a generally accepted method of measuring economic impact. The method, described as an “export-based” method, recognizes that only expenditures supported by out-of-state revenues can be considered to have a tangible impact on the state’s economy because revenues generated from within the state would presumably flow to some other activity if UNM HSC did not exist. As a result, these revenues do not yield a net economic impact. Consequently, the UNM HSC's contribution to the state economy is derived from both its ability to attract revenues from out-of-state, and to reduce imports of health and educational services by enhancing the self-sufficiency of the state economy through the creation and support of internal businesses.

Economic impact results are heavily dependent on the modeling assumptions. This study is based on counterfactual analysis; a comparison between what actually happened due to UNM HSC and what would have happened in the absence of UNM HSC needs a special mention here. What would have happened to the New Mexico economy if the UNM HSC was not present in the state? This is not an easy question to answer because there is no data present, given that this scenario does not exist. The revenues originating from out-of-state sources would not have come to New Mexico, while the in-state revenue generated would have been spent somewhere else in the economy. For this reason, BBER categorized all the revenues that originated from out-of-state sources such as contracts, grants, Medicare, Medicaid, etc. as an out-of-state source. Fifty-six percent of HSC Academic/Research Programs and 55 percent of UNM Health System revenues are treated as out-of-state sources.

2.1 Data

Revenue and expenditure data used for this analysis were obtained from the Accounting Manager of UNM HSC based on a BBER-designed data collection checklist. BBER then processed the data, reviewed them for reasonableness, and brought them into a usable format to incorporate into the IMPLAN model. Since UNM HSC’s operations are a multifaceted activity, BBER implemented a number of data collection efforts in order to gather information regarding various economic activities associated with UNM HSC. To estimate the first round or direct impacts of the center, BBER collected primary data from various departments. These are broadly classified as follows: 1) UNM HSC Academic/Research Programs 2) UNM Medical Group 3) HSC Clinical Programs 4) UNM Hospitals, and 5) Sandoval Regional Medical Center.

2.2 UNM HSC Revenue and Expenditure Data

UNM HSC FY13 revenues totaled nearly \$1.3 billion, of which more than 55% come from out-of-state sources (Table 2.1). Revenue collected from patient services accounted for the largest share (65%) followed by the Bernalillo and Sandoval County mill levies (9%), federal grants and contracts (9%), and state appropriations (7%). Since more than \$569 million of the UNM HSC revenue came from within the State of New Mexico, UNM HSC made a net contribution of more than \$700 million to the state economy. In other words, the UNM HSC generated approximately \$2.23 in total revenue for every \$1.00 in revenue received from within-state sources. Revenue breakdowns for the UNM HSC Academic/Research Programs and the UNM Health System are presented in Appendix A. Please note that this study is based on counterfactual analysis: a comparison between what actually happened due to UNM HSC and what would have happened in the absence of UNM HSC. If UNM HSC was not present, most of the UNM HSC students would go out of state to get a higher degree in the medical field. As a result, their tuition money would leave the state. Therefore, BBER assumed that 75% of tuition money goes out of state in the absence of UNM HSC.

UNM HSC spent nearly \$1.2 billion in FY13. The largest expenditure category was employee compensation, accounting for nearly \$827 million. This represented 70% of all expenditures (Table 2.2). The second largest expenditure category was the purchases of goods and services, which accounted for 27% (or \$314 million) of all expenditures. UNM HSC spent more than \$37 million in capital improvement projects, which is 3% of the total expenditures. UNM HSC operations create direct demand for supplies and services in the state. Eighty-five percent of all expenditures were spent in the State of New Mexico. Table 2.2 presents expenditures on employee compensation, goods and services, and capital improvement projects. Please note that some expenditure categories do not produce economic impacts (although they are part of the income statement); therefore, BBER excluded those expenditures from Table 2.2. These excluded expenditure items are depreciation, bad debt expense, cost of goods sold, Banner tax, Foundation surcharge, and internal UNM sales/services. Expenditure breakdowns for UNM HSC Academic/Research Programs and UNM Health System are presented in Appendix B.

Capital Improvement Projects: The design, construction/remodeling, and maintenance of UNM HSC facilities and infrastructure are activities that may happen every year. The main construction activities undertaken in FY13 were the acquisition and renovation of 1650 University, remodeling of the CTSC building, building of Lands West Infrastructure, UNMH 2nd floor pathology remodeling, and other miscellaneous capital improvement projects. These activities not only provide employment opportunities to New Mexicans as construction workers, architecture designers, engineers, and consultants, but also

further stimulate the economy by spending monies locally to purchase related goods and services.

Table 2.1 UNM HSC Revenue Sources by Region in FY13

Revenue Sources	Total Revenue	Out-of-state revenue	Percent out-of-state revenue	Percentage of total revenue
Federal grants & contracts	\$111,980,397	\$111,980,397	100%	9%
State and local grants & contracts	\$16,330,231	-	0%	1%
Tuition & fees	\$13,177,207	\$9,877,741	75%	1%
Sales & services of enterprises	\$6,637,936	-	0%	1%
Nongovernmental grants and contracts	\$21,687,443	\$14,995,853	69%	2%
Other operating revenue	\$10,886,180	\$4,064,989	37%	1%
Net patient service	\$823,799,885	\$533,352,081	65%	65%
Other clinical revenue	\$21,906,156	\$8,768,977	40%	2%
Other nonoperating revenues	\$778,940	\$732,598	94%	0%
Gifts and endowments	\$7,283,884	\$485,688	7%	1%
Investment income	\$17,952,757	\$16,510,803	92%	1%
Capital appropriation	\$577,000	-	0%	0%
Mill Levies	\$112,061,664	-	0%	9%
State appropriations	\$91,916,402	-	0%	7%
Transfers from UNM Main Campus	\$12,850,381	-	0%	1%
Total Revenues	\$1,269,826,463	\$700,769,127	55%	100%

Source: Accounting Manager, UNM HSC

Table 2.2 UNM HSC Expenditures by Region in FY13

Expenditure Types	New Mexico	Out-of-State	Total
Employee compensation	\$826,871,114	-	\$826,871,114
Purchases of goods and services	\$147,001,700	\$167,332,915	\$314,334,615
Expenditure on capital improvement	\$24,123,831	\$13,317,532	\$37,441,362
Total Expenditures	\$997,996,644	\$180,650,447	\$1,178,647,091

Source: Accounting Manager, UNM HSC

2.3 Economic Impact Estimation Method

The combined effects of the UNM HSC on the state economy are greater than the sum of the UNM HSC's total spending on employee compensation, goods and services, and capital improvement projects. This is because money spent by UNM HSC is spent again by their employees and vendors. The following calculations were implemented to estimate the direct economic impact from UNM HSC-derived revenues on the state economy.

$$\text{Direct Impact} = (\% \text{ Out-of-State Revenues}) \times (\% \text{ In-State Expenditures}) \times (\text{Total Expenditures})$$

The above equation indicates that direct impacts are created by the externally funded and locally spent dollars. The input-output multipliers model called IMPLAN was used to estimate the indirect and induced impacts on the economy of the State of New Mexico. IMPLAN uses a variety of data sources to estimate the total economic impacts of economic activity, where the total economic impact is comprised of the sum of direct, indirect and induced impacts (Figure 2.1).

The **direct impacts** of the UNM HSC on the state economy reflect the jobs, payroll, and sales directly related to UNM HSC operations and capital projects. Direct impact occurs as a result of UNM HSC spending on employee compensation, goods and services, and capital projects.

Indirect impacts are the jobs, payroll, and output created by businesses which provide goods and services essential to UNM HSC. These impacts are created as a result of expenditures by businesses and organizations that support UNM HSC activities. These expenditures create demand for the goods and services of other companies, who must then purchase goods and services and hire employees to produce their products. They are also referred to as supplier impacts. These UNM HSC vendor businesses range from real estate businesses, pharmaceutical industries, medical lab and ambulatory care services, insurance companies, and utility services to manufacturers, wholesalers, and shippers whose revenue partly or wholly depends on UNM HSC operations.

Induced Impacts are the result of wage and salary spending by the direct and indirect employees on items such as food, housing, transportation, health care services, entertainment, etc. The spending by these employees creates further demand for goods and services for which firms must again purchase supplies and hire employees to produce. The sum of these iterations constitutes the induced impacts.

Dividing the total economic impact by the original direct activity yields an estimate of the **multipliers**, which are a numeric way of describing the secondary impacts stemming from the direct impacts. These provide a measure of economic activity generated per dollar or per employee. The impact results are presented in three main categories: employment, labor income, and output. **Employment** is based on the total number of full-time jobs plus part-time jobs. In this analysis, part-time positions are the equivalent of full-time positions. **Labor income** represents the annual wages and salaries together with benefits paid to all workers. The **output** represents the value of industry production. Output measurement for manufacturing and service businesses differs from that of retail and wholesalers. For manufacturing and service businesses, output would be equal to sales, whereas for retail and wholesale business, output equals gross margin and not gross sales. The economic impacts presented here are discussed in these terms.

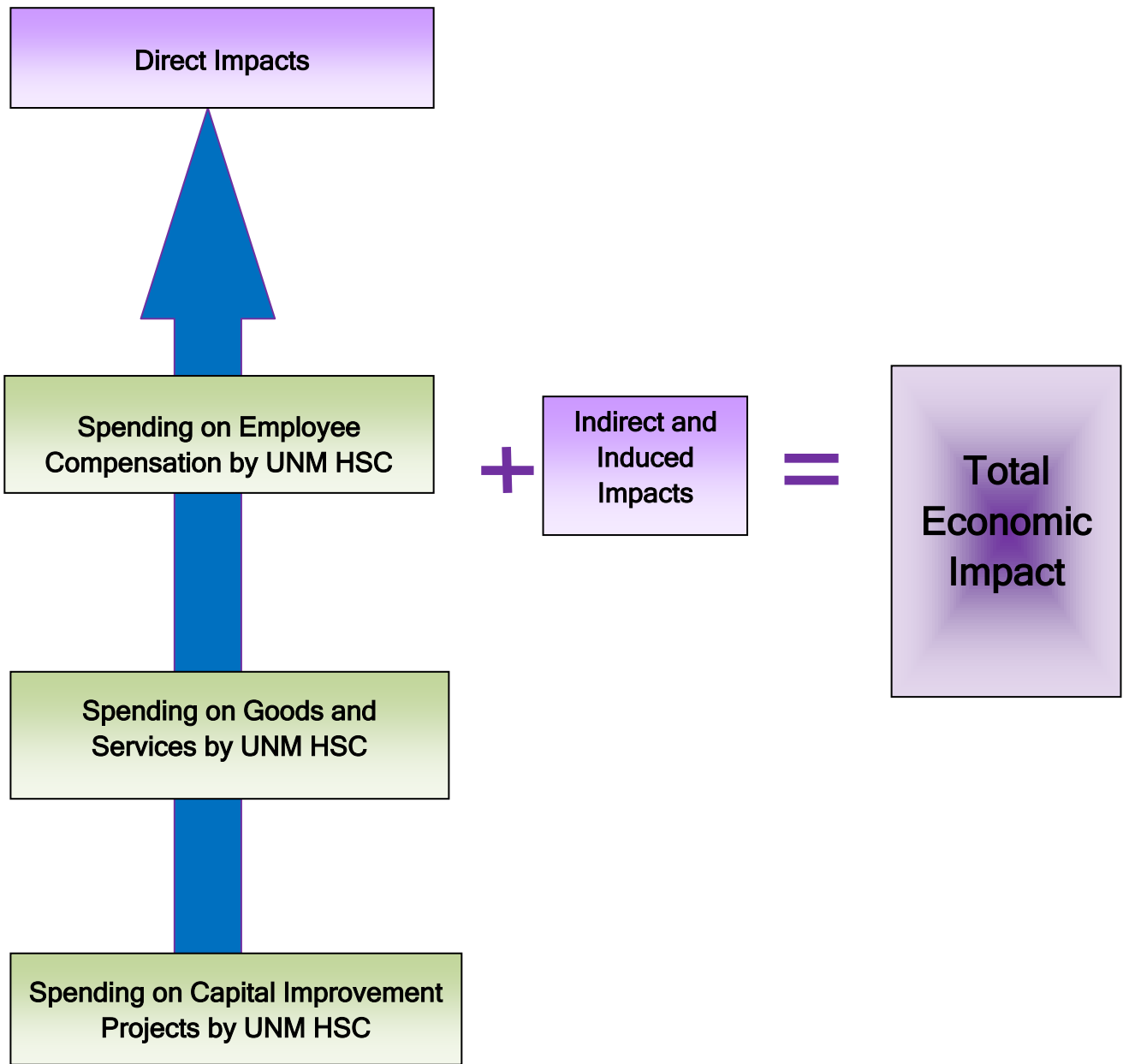


Figure 2.1 Economic Impact Components

3. ECONOMIC IMPACTS OF THE UNM HEALTH SCIENCES CENTER ON THE NEW MEXICO ECONOMY

The economic impacts of UNM HSC were estimated for New Mexico’s economy for FY13. These impacts are the result of the direct economic activities generated by the UNM HSC. These activities include jobs created, purchases made, wages and salaries paid by UNM HSC as well as spending on capital improvement projects. The results of the analysis include UNM HSC’s direct impacts, indirect impacts, induced impact, and total impacts measured in terms of employment, labor income and output. The tax components of the total economic impact on New Mexico’s economy are also presented. All dollar amounts are reported for FY13.

Total economic contribution of UNM HSC, UNM HSC Academic/Research Programs, and UNM Health System are presented in Appendix Table D. 1, Table D. 2, and Table D.3, respectively. Please note that economic contribution is different from economic impact. Economic contribution is an estimate of the impact of expenditures supported by both in-state and out-of-state revenue sources; whereas economic impact is an impact of expenditures supported by only out-of-state sources.

3.1 Impacts of the UNM Health Sciences Center

As presented in Table 2.1 and Table 2.2 above, in FY13 UNM HSC accounted for nearly \$1.2 billion in expenditures, created 13,704 jobs and generated nearly \$835 million in salaries and benefits in New Mexico. Overall, 55% of UNM HSC’s expenditures were supported by out-of-state revenues. Table 3.1 presents the direct, indirect, induced, and total economic impacts of UNM HSC on the New Mexico economy that are **supported by out-of-state dollars**. It includes impacts associated with expenditures on operations of UNM HSC and its capital projects.

Table 3.1 Total Economic Impacts of the UNM HSC on the State of New Mexico, FY13

Impact Type	Employment ¹	Labor Income ²	Output ³
Direct	6,295	\$384,024,003	\$459,066,621
Indirect	654	\$32,199,810	\$80,202,377
Induced	2,010	\$75,647,351	\$229,020,115
Total	8,959	\$491,871,164	\$768,289,113
Multiplier	1.4	1.3	1.7

¹Employment = Full-time and part-time jobs directly and indirectly supported by UNM HSC

²Labor income = Total employee compensation including benefits

³Output = The value of expenditure directly and indirectly supported by UNM HSC

Source: UNM HSC, UNM Bureau of Business and Economic Research, and IMPLAN Bureau of Business & Economic Research, University of New Mexico, 2014

The total economic impact to the state is the creation of 8,959 jobs, \$492 million in labor income, and \$768 million in economic output. Capital improvement programs accounted for 1% of both jobs and labor income, and 2% of economic output. The breakdown of HSC Academic/Research Programs and UNM Health System impacts are presented in the next section.

The overall multipliers of employment, labor income, and output are 1.4, 1.3, and 1.7, respectively (Table 3.1). The output multiplier of 1.7 indicates that a total of \$1.70 was generated in the state economy for every \$1.00 spent in the state that was supported by out-of-state revenues. Similarly, the employment multiplier of 1.4 indicates that 1.4 jobs were generated in the state economy for every job UNM HSC generated in the state that was supported by out-of-state revenues.

3.2 UNM HSC Academic/Research Programs Impacts

The direct, indirect, induced and total impacts of UNM HSC Academic/Research Programs on the New Mexico economy are presented in Table 3.2. It is estimated that 1,468 direct jobs and more than \$78 million in labor income produced an additional 530 indirect and induced jobs and \$20.6 million in indirect and induced labor income, resulting in a total impact of nearly 2000 jobs and \$99 million in labor income. A total direct spending of \$94 million within the state supported \$60 million in additional output in FY13. Capital improvement programs accounted for 2% of both jobs and labor income, and 3% of economic output.

Table 3.2 Total Economic Impacts of the UNM HSC Academic/Research Programs on the State of New Mexico, FY13

Impact Type	Employment ¹	Labor Income ²	Output ³
Direct	1,468	\$78,502,601	\$94,346,029
Indirect	124	\$5,363,361	\$14,094,997
Induced	406	\$15,283,159	\$46,319,001
Total	1,997	\$99,149,122	\$154,760,027
Multiplier	1.4	1.3	1.6

¹Employment = Full-time and part-time jobs directly and indirectly supported by UNM HSC academic programs

²Labor income = Total employee compensation including benefits

³Output = The value of expenditure directly and indirectly supported by UNM HSC Academic/Research Programs

Source: UNM HSC Academic/Research Programs, UNM Bureau of Business and Economic Research, and IMPLAN

Bureau of Business & Economic Research, University of New Mexico, 2014

3.3 UNM Health System Impacts

Table 3.3 presents the direct, indirect, induced and total economic impact of UNM Health System to the State. It includes impacts associated with expenditures on operations and construction that occurred in New Mexico. Please note that these impacts are created by funding derived from out-of-state sources. The total economic impact of the UNM Health System to the state is 6,962 in employment, \$393 million in labor income and \$614 million in economic output. Capital improvement programs accounted for 1% of both jobs and labor income, and 2% of economic output.

Table 3.3 Total Economic Impacts of the UNM Health System on the State of New Mexico, FY13

Impact Type	Employment ¹	Labor Income ²	Output ³
Direct	4,827	\$305,521,402	\$364,720,592
Indirect	531	\$26,836,448	\$66,107,380
Induced	1,604	\$60,364,192	\$182,701,113
Total	6,962	\$392,722,042	\$613,529,086
Multiplier	1.4	1.3	1.7

¹Employment = Full-time and part-time jobs directly and indirectly supported by UNM Health System

²Labor income = Total employee compensation including benefits

³Output = The value of expenditure directly and indirectly supported by UNM Health System

Source: UNM Health System, UNM Bureau of Business and Economic Research, and IMPLAN Bureau of Business & Economic Research, University of New Mexico, 2014

3.4 Tax Revenue Impacts on State and Local Governments

BBER estimated state and local government gross receipts, property, and income tax revenues stemming from UNM HSC operations. Results indicate that in FY13, state and local governments received an estimated \$61.8 million in tax revenues as a result of spending by UNM HSC and its multiplier impacts: \$21.2 million in gross receipts tax (GRT), \$20.6 million in personal income tax, and \$20 million in property tax. Additionally, an estimated \$70.9 million in Federal Income Tax Withholding was remitted to the Federal Government.

4. CONCLUSION

As this study has demonstrated, the UNM Health Sciences Center is a vital and significant contributor to the New Mexico economy in addition to its contribution in education, research, training of health care professionals, treating people, and providing care. It fuels economic activity at the local, regional, and state levels via their direct, indirect, and induced impacts. The UNM HSC's direct economic effects are comprised of employment, payroll, and spending by UNM HSC Academic/Research Programs, UNM Hospitals, UNM Medical Group, Sandoval Regional Medical Center and HSC Clinical Programs; these impacts total \$768 million, alone. These first-round direct impacts are only a small portion of the total economic income generation.

In conclusion, the UNM HSC contributes to the state economy not only by providing education and health care to New Mexicans but it also brings in out-of-state dollars, which created economic impacts of more than \$768 million in total economic output, \$492 million in labor income, and 8,959 jobs within the state in FY13. Additionally, in FY13, state and local governments received an estimated \$61.8 million in tax revenues as a result of spending by UNM HSC and associated indirect and induced impacts. Aside from these impacts, 19 companies are using technologies developed by UNM HSC. Fifteen of these companies are operating in New Mexico and creating jobs and income for New Mexicans. These figures clearly depict that the presence of the UNM HSC plays a robust role in the State's economy.



Appendix A. UNM HSC Academic/Research Programs and UNM health System Revenue Sources by Region in FY13

Appendix Table A. 1 UNM HSC Academic/Research Programs Revenue Source by Region in FY13

Revenue Sources	Total Revenue	Out-of-state revenue	Percent out-of-state revenue	Percentage of total revenue
Federal grants & contracts	\$93,118,316	93,118,316	100%	46%
State and local grants & contracts	\$1,307,397	-	0%	1%
Tuition & fees ¹	\$13,170,321	9,877,741	75%	6%
Sales & services of enterprises	\$2,146,276	-	0%	1%
Nongovernmental grants and contracts	\$13,619,969	11,382,088	84%	7%
Other clinical revenue	\$342,796	-	0%	0%
Gifts and endowments	\$3,874,669	416,779	11%	2%
Investment income	\$867	-	0%	0%
State appropriations	\$67,985,702	-	0%	33%
Transfer from UNM Main Campus	\$9,052,249	-	0%	4%
Total Revenues	\$204,618,562	\$114,794,924	56%	100%

Source: Accounting Manager, UNM HSC

¹ Assumed 75% out-of-state because if UNM HSC does not exist many students may go to out of state to pursue their degree

Appendix Table A. 2 UNM Health System Revenues by Region in FY13

Revenue Source	Total Revenue	Out-of-state revenue	Percent out-of-state revenue	Percentage of total revenue
Federal grants & contracts	\$18,862,081	\$18,862,081	100%	2%
State and local grants & contracts	\$15,022,834	\$0	0%	1%
Tuition & fees	\$6,885	\$0	0%	0%
Sales & services of enterprises	\$4,491,660	\$0	0%	0%
Nongovernmental grants and contracts	\$8,067,474	\$3,613,765	45%	1%
Other operating revenue	\$10,886,180	\$4,064,989	37%	1%
Net patient service	\$823,799,885	\$533,352,081	65%	77%
Other clinical revenue	\$21,563,361	\$8,768,977	41%	2%
Other nonoperating revenues	\$778,940	\$732,598	94%	0%
Gifts and endowments	\$3,409,215	\$68,910	2%	0%
Investment income	\$17,951,890	\$16,510,803	92%	2%
Capital appropriation	\$577,000	\$0	0%	0%
Mill Levies	\$112,061,664	\$0	0%	11%
State appropriations	\$23,930,700	\$0	0%	2%
Transfers from UNM Main Campus	\$3,798,132	\$0	0%	0%
Total Revenues	\$1,065,207,901	\$585,974,204	55%	100%

Source: Accounting Manager, UNM HSC

Appendix B. UNM HSC Academic/Research Programs and UNM Health System Expenditures by Region in FY13

Appendix Table B. 1 UNM HSC Academic/Research Programs Expenditures by Region in FY13

Expenditure Types	New Mexico	Out-of-State	Total
Employee compensation	\$174,746,491	-	\$174,746,491
Purchases of goods and services	\$29,187,707	\$30,570,778	\$59,758,485
Expenditure on capital improvement	\$9,641,335	\$3,756,222	\$13,397,557
Total Expenditures	\$213,575,533	\$34,327,000	\$247,902,533

Source: Accounting Manager, UNM HSC

Appendix Table B. 2 UNM Health System Expenditures by Region in FY13

Expenditure Types	New Mexico	Out-of-State	Total
Employee compensation	\$652,124,623	-	\$652,124,623
Purchases of goods and services	\$117,813,993	\$136,762,137	\$254,576,130
Expenditure on capital improvement	\$14,482,496	\$9,561,310	\$24,043,805
Total Expenditures	\$784,421,111	\$146,323,447	\$930,744,558

Source: Accounting Manager, UNM HSC



Appendix Table C. 1 Start-up Companies Using UNM HSC Technologies

Start-ups	State of operation	Fiscal Year
Alpine Biosciences LLC (Acquired by Oncothyreon)	New Mexico	2013
GHP Development	Colorado	2015
TerraSOL	New Mexico	2015
Exovita Biosciences	New Mexico	2015
Accelera Diagnostics, LLC	New Mexico	2014
SolaranRx, Inc.	New Mexico	2014
Biophagy	New Mexico	2013
Ecopesticides International, Inc.	New Mexico	2013
Zocere, Inc. (formerly Tyrosine Pharmaceuticals, Inc.)	New Mexico	2013
NeoVita Biosystems, Inc. (Azco Biotech spin-off)	California	2013
algorithmRX	Virginia	2012
Avisa Pharma, Inc.	New Mexico	2011
AgilVax	New Mexico	2011
Respira Therapeutics, Inc.	New Mexico	2010
Quatros	New Mexico	2009
NuView Radipharmaeuticals	Utah	2008
Azano Health	New Mexico	2007
NanoMR	New Mexico	2007
Intellicyt	New Mexico	2006

Appendix Table D. 1 Total Economic Contribution of the UNM HSC on the State of New Mexico Economy, FY13

Impact Type	Employment ¹	Labor Income ²	Output ³
Direct	13,704	\$834,808,752	\$997,996,644
Indirect	1,421	\$69,859,659	\$174,087,646
Induced	4,370	\$164,425,209	\$497,798,064
Total	19,495	\$1,069,093,620	\$1,669,882,354

¹Employment = Full-time and part-time jobs directly and indirectly supported by UNM Health System

²Labor income = Total employee compensation including benefits

³Output = The value of expenditure directly and indirectly supported by UNM Health System

Source: UNM HSC, UNM Bureau of Business and Economic Research, and IMPLAN Bureau of Business & Economic Research, University of New Mexico, 2014

Appendix Table D. 2 Total Economic Contribution of the UNM HSC Academic/Research Programs on the State of New Mexico Economy, FY13

Impact Type	Employment¹	Labor Income²	Output³
Direct	3,323	\$177,710,023	\$213,575,533
Indirect	280	\$12,141,293	\$31,907,506
Induced	919	\$34,597,205	\$104,854,497
Total	4,522	\$224,448,521	\$350,337,536

¹Employment = Full-time and part-time jobs directly and indirectly supported by UNM HSC academic programs

²Labor income = Total employee compensation including benefits

³Output = The value of expenditure directly and indirectly supported by UNM HSC Academic/Research Programs

Source: UNM HSC Academic/Research Programs, UNM Bureau of Business and Economic Research, and IMPLAN

Bureau of Business & Economic Research, University of New Mexico, 2014

Appendix Table D. 3 Total Economic Contribution of the UNM Health System on the State of New Mexico Economy, FY13

Impact Type	Employment¹	Labor Income²	Output³
Direct	10,381	\$657,098,729	\$784,421,111
Indirect	1,141	\$57,718,366	\$142,180,140
Induced	3,451	\$129,828,004	\$392,943,567
Total	14,973	\$844,645,099	\$1,319,544,818

¹Employment = Full-time and part-time jobs directly and indirectly supported by UNM Health System

²Labor income = Total employee compensation including benefits

³Output = The value of expenditure directly and indirectly supported by UNM Health System

Source: UNM Health System, UNM Bureau of Business and Economic Research, and IMPLAN

Bureau of Business & Economic Research, University of New Mexico, 2014



Definitions

- **Employee Compensation:** the sum of wage and salary income, benefits (including health and life insurance), pension payments and other non-cash compensation
- **Employment:** the estimated number of jobs created as a result of UNM HSC activities
- **Direct Impacts:** the initial, immediate economic impacts generated by UNM HSC initial expenditures.
- **Indirect Impacts:** the economic impact resulting from spending by New Mexico companies (contractors) from which UNM HSC buys goods and services. This spending creates a demand for the goods and services of local companies, which must then subsequently purchase their own goods and services to produce their product. The sum total of these iterative purchases is termed indirect impacts.
- **Induced Impacts:** the economic impact resulting from UNM HSC employees spending a portion of their salary on goods and services for personal consumption, e.g. housing, food, clothing, or childcare. This spending *induces* additional employment in many sectors of the economy, such as jobs at the local grocery store.
- **Impact Analysis:** an estimate of the impact of dollars from outside the region on the region's economy
- **Labor Income:** the employee compensation (wage and salary income including benefits) plus proprietors' income (self-employed income)
- **Multipliers:** An economic multiplier measures the total change in the number of jobs/income/output resulting from an initial change in job/income/output of an industry/company being studied.
- **Output:** the total market value of goods and services that go to final and intermediate consumption. In this case, it is the total economic activity resulting from UNM HSC operation and construction activities in the State. It is also a measure of the state's domestic product created as a result of UNM HSC activities.