BUREAU OF BUSINESS AND ECONOMIC RESEARCH
UNIVERSITY OF MONTANA

THE ECONOMIC IMPACT OF RESEARCH IN THE MONTANA UNIVERSITY SYSTEM

BRANDON BRIDGE
JANUARY 2019

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INTRODUCTION

Universities have long been perceived as a source of various benefits to society. Many of these benefits are intangible, such as the heightened level of culture and diversity, or the spirit of open inquiry and mind development felt at institutions of higher learning, along with the increased quality of life in the communities surrounding them. Though they are often clearly observed, these benefits are rather subjective and experiential.

Other benefits brought to society by universities are much more tangible and measurable. These include the beneficial economic impacts resulting from university activities taking place in the local or regional economy. And again, many of the university functions that result in economic activity are immediately obvious and clearly observed. Examples of these types of activities include collegiate sporting events, faculty and staff employment opportunities, and the local commercial activities providing goods and services in support of an increased concentration of student populations.

Other activities taking place on university campuses, such as research, that provide positive economic impacts are less visible, though still tangible and measurable. One of these activities is university research. University research is currently being carried out throughout the entire Montana University System, and the majority of this research activity takes place on the campuses of Montana State University - Bozeman, the University of Montana - Missoula, Montana Technological University, Montana State University - Billings, Montana State University - Northern, and the University of Montana - Western.

The primary purpose of this report is to quantify the ways in which research performed in the Montana University System impacts the state economy. This assessment is necessarily incomplete, as some dimensions of research activities are difficult to objectively and accurately quantify, as detailed below. But even restricting the analysis to those aspects of its economic footprint which are more amenable to quantification, we find that the impacts of MUS research activity are sizable.

Table 1: MUS Research Impact Summary

The Economic Impact of MUS Research Impacts Summary		
Category	**Units**	**Total**
Total Employment	Jobs	3,532
Personal Income	$ Millions	$234.9
Disposable Pers. Income	$ Millions	$201.5
Output	$ Millions	$565.8
Population	People	4,524

Comparing how the economy in the state of Montana might have evolved if MUS research did not exist as it exists today gives a measure of the economic contribution of MUS research. By any measure this contribution is significant. Specifically, we find that MUS research ultimately supports:

- 3,532 permanent, high-paying, year-round jobs in the Montana economy
- $234.9 million in income received by Montana households each year, which includes $201.5 million in disposable (after tax) personal income;
- $565.8 million in annual sales to Montana businesses and other organizations;
- a population statewide that is larger by 4,524 people, including 1,027 school-aged children.

The Montana economy is more prosperous and more populous today because of MUS research. This is even more so due to the nature of research jobs, which pay significantly more than the overall average. The average earnings of all jobs that are ultimately supported by MUS research (including both research jobs as well as jobs throughout the economy supported by research spending) is $66,506.

How University Research Affects the Economy

There are a multitude of connections between MUS research and economic activity. Some are more amenable to objective measurement than others. A useful way to conceptualize these linkages is to imagine a world where MUS research did not exist.

- MUS research is a focal point for spending in the state economy by the federal government and other out-of-state sources in support of projects. Without MUS research these monies would not come into the state.
- MUS research attracts talented faculty and students to Montana. Without research at MUS these individuals would go elsewhere, taking their careers and earning power to other places.
- Research produces knowledge, which translates into economic value. Research supports the development of new products and services that make consumers better off and businesses viable and more productive.
- Research within MUS attracts visitors who attend conferences and other research-focused activities. Without research, the spending of these visitors would be lost to the economy.
- MUS research has been an incubator of spin-off companies, either founded by MUS research personnel or in close connection with research activities. Without research these companies would not be formed and their jobs would not exist.

- The fact that MUS is an important university research system makes Montana a more attractive place for technology-related companies to start or relocate to, even if there are no formal connections, to better attract skilled workers and to make use of research facilities and resources.
- Without research, the entire MUS system would be a different kind of institution. Without the knowledge and abilities of research-trained personnel in the classroom, the caliber (and pay) of its faculty would be much lower than it is today.

Assessing Economic Impacts

A standard approach to assessing the economic impact of any activity is to use an economic model – a mathematical representation of the trade flows in the economy of the region – to portray how the economy would have evolved if the activity did not take place. That is the approach of this study as well. A comparison of this "no MUS research" economy to the actual economy gives a full accounting of economic activity that is the result of MUS research. This economic impact can be thought of as the sum of three pieces:

Direct impact. This is the impact that the research taking place in the Montana University System itself has on the economy. The items in this list are incredibly varied. MUS research pays employees and vendors, attracts research dollars from governments and industry, and increases the earning power of its students when they graduate. MUS research activity attracts out-of-state scholars and students. It receives tax support from the state of Montana. All of these mechanisms directly impact the economy of the state.

Indirect impacts. These are the economic activities that occur in the state of Montana because of MUS research, but are not part of the Montana University System itself. Companies that locate in Montana because of the existence of Montana University System research, visitors and tourists, technology companies and other spin-off companies with informal links to the MUS research, and even highly educated workers who come to Montana because their spouses are employed in MUS research are examples of these.

Induced impacts. An economic stimulus such as Montana University System research produces changes in the economy that go beyond its direct and indirect impacts. When businesses and employees are economically enriched through the University System's research activities, they further stimulate the economy through the increases in their spending that result. Every form of local business – from restaurants to real estate agencies – can benefit from this "second-round" spending, which can in turn create additional rounds of spending as a portion of the money these diverse businesses receive is spent again in the state economy. In a dynamic, mobile economy where households and investment dollars travel to places where employment and profit opportunities exist, the presence of MUS research in the Montana economy can be expected to induce inflows of people and capital to our state. This third mechanism grows the population and grows the businesses and governments that serve them. This impact is

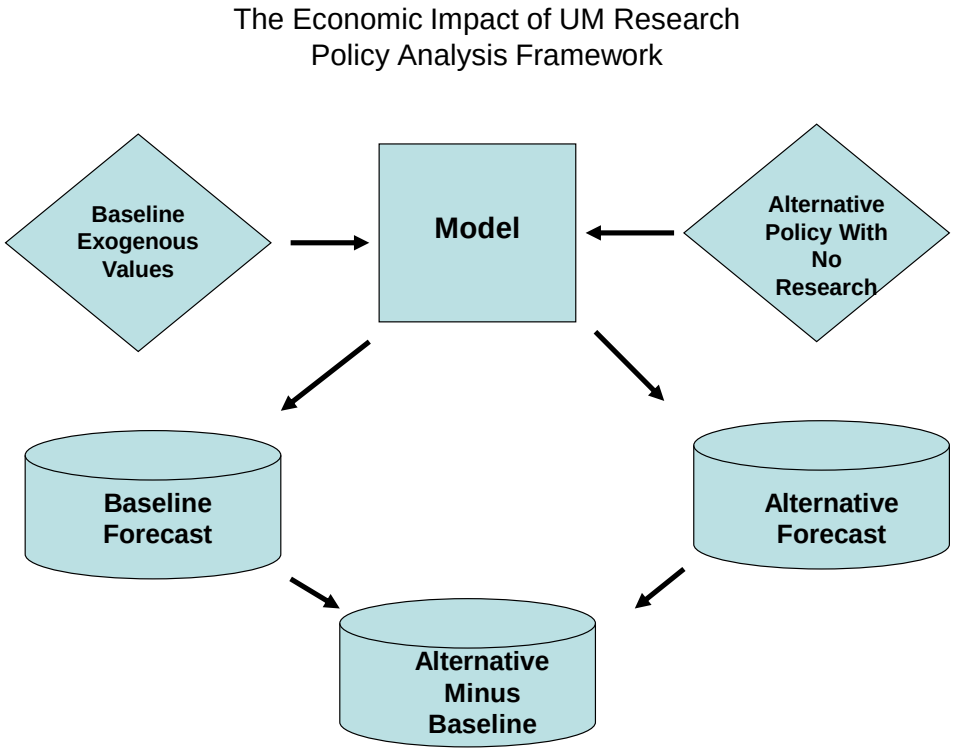
significant and can be estimated with the use of an economic model that captures the linkages between spending and production for the Montana economy.

The economic contribution – in terms of jobs supported and income received– of MUS research is more substantial than one might assume due to these three forms of impacts. Much economic activity takes place because of MUS research that is not accounted for in research budgets.

The REMI Model

As mentioned above, a critical link in the analysis involves the translation of Research's direct and indirect impacts into overall state economic activity. This is accomplished by means of an economic model.

Figure 1: REMI Model



The analysis is depicted graphically above. The model is used to make two kinds of economic projections. The first is the baseline, or status quo – a projection of the Montana economy as it stands today. The second projection removes the direct and indirect contributions of Research. These changes bring about further economic impacts – the induced impacts described above.

The model is a critical tool in understanding how those first round impacts alter investments and decisions that ultimately determine the size of the resulting economy. The difference between these economic projections is the total impact of Research at the MUS Institutions.

We utilize a top tier economic impact model, provided by REMI, Inc. of Amherst, Massachusetts, for this purpose. The REMI model has been in existence since the early 1980's, and has been thoroughly evaluated in previous studies, as well as in refereed academic research. It is capable of examining impacts in fine detail, which we believe makes the report much more effective. It also has a peerless reputation.

Inputs to the REMI Economic Model

The inputs to the REMI model can be broken down into five broad categories. The first and primary model input is the amount of research and development expenditures by the various MUS institutions themselves. This figure (for each respective institution) is the amount reported in the National Science Foundation's annual research and development survey of higher education institutions (HERD Survey). These research and development expenditures are reported in Table 2 below.

Table 2: Reported MUS R&D Expenditures

MUS Research and Development Expenditures	
Institution	**Total**
Montana State University - Bozeman	$129,073,000
University of Montana – Missoula	$85,044,000
Montana Technological University	$13,059,000
Montana State University - Billings	$3,299,000
Montana State University – Northern	$2,127,012
University of Montana - Western	$934,471

The second model input is the amount of money spent on research-related construction by the various MUS institutions, as reported by the institutions themselves. These figures are reported in Table 3 below.

Table 3: Research-related Construction Expenditures

MUS Research Construction Expenditures	
Institution	**Total**
University of Montana – Missoula	$505,542
Montana Technological University	$400,000
Montana State University - Bozeman	$268,000

The third model input is revenue received by the MUS institutions due to intellectual property payments. Both Montana State University – Bozeman, and the University of Montana – Missoula reported IP revenue, which is found in Table 4.

Table 4: Intellectual Property Revenue

MUS Research Intellectual Property Revenue	
Institution	**Total**
Montana State University - Bozeman	$555,101
University of Montana - Missoula	$157,229

The fourth model input is visitor spending in the areas where the MUS institutions are located due to research related activities, such as conferences. These amounts are shown in Table 5.

Table 5: Visitor Spending

MUS Research Visitor Expenditures	
Institution	**Total**
University of Montana – Missoula	$102,879
Montana State University - Bozeman	$93,150
Montana Technological University	$78,660

The fifth and last input into the regional economic impact model is employment in spin-off companies due to research transpiring at the MUS research institutions. While the majority of this employment activity takes place in companies that fall within the Technical Services

industrial classification, MUS research spin-off companies also employ individuals in the manufacturing, wholesale trade, educational, and health care industrial classifications. The institutions reporting spin-off employment are Montana State University – Bozeman, and the University of Montana – Missoula. The names of the companies reporting spin-off employment, as well as the total number employed resulting from research at the respective institutions, are reported in Tables 6 & 7 below.

Table 6: MSU-Bozeman Spin-off Employment

Montana State University – Bozeman Spin-off Employers (150 jobs)	
Montana Gluten Free Processors, LLC	Grey Matter Research
Zdye	Integrated Engineering Software, Inc
Sustainable Bioproducts LLC	Managen Inc
BioSurface Technologies Corporation	Montana Bioagricultural Inc
S2 Corporation	Montana Molecular LLC
Safflower Technology Intl.	MPA Technologies, Inc
Takeda Pharmaceuticals	NWB SENSORS INC.
Advanced Microcavity Sensors, LLC	Resonon Inc
AdvR Inc.	Revibro Optics LLC
Beartooth Biotech Inc.	Sensopath Technologies Inc.
Bio Robotics LLC	Western Feedstock Technology
Bridger Photonics	Project WET

Table 7: UM-Missoula Spin-off Employment

University of Montana - Missoula Spin-off Employers (83 jobs)	
Inimmune, Inc.	ATERIS Technologies, LLC
Meadowlark Science and Education, LLC	Transynaptic Technologies, LLC
Immersive Learning for Children, LLC	Big Sky Biotechnology, LLC
DermaXon, LLC	Bee Alert Technology, Inc.
PhysioZing, LLC	Applied Ecological Services, Inc.
Agile Legal Technology, LLC	Sunburst Sensors, LLC
The Legal Atlas, LLC	
Good Nutrition Ideas, LLC	
Applied Coastal and River Science, Inc	
Terradynamics, Inc.	
GT Neuropharma, Inc	

Model Results

The Economic Contribution of MUS Research: Employment

Because of these ways in which research activity within the MUS system propagates throughout the state economy, the types of jobs supported by MUS research activity are quite varied. While the majority of jobs in the Montana economy that owe their existence to MUS research are found in Professional and Technical Services industries – where MUS research itself is classified – there are significant numbers of jobs in Construction, Health Care, Retail Trade and in Government, which are in Montana because of MUS research.

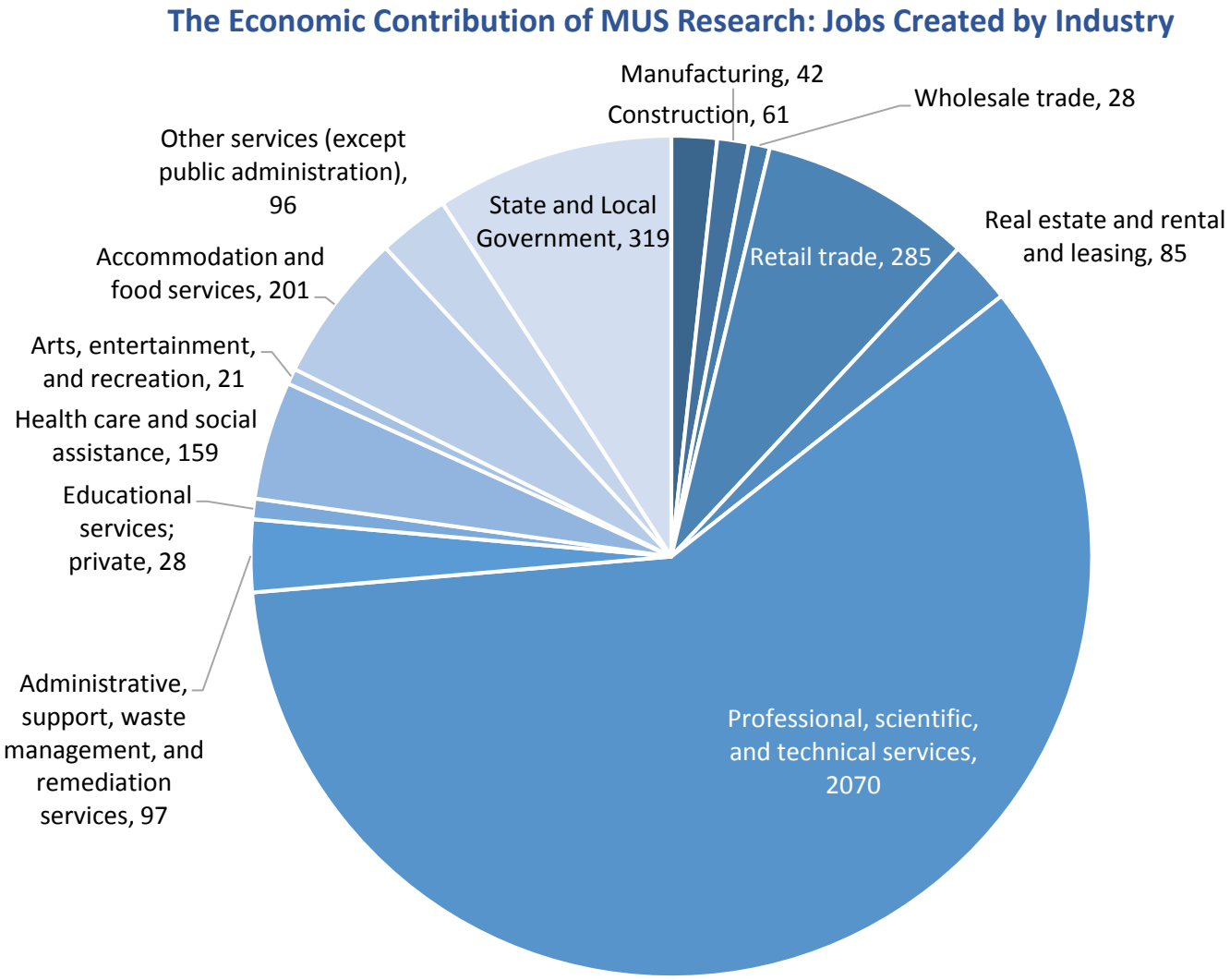


Figure 2: MUS Research Jobs Impact

The Economic Contribution of MUS Research: Economic Output

The presence of MUS research in the state economy is responsible for increased sales by Montana businesses and other organizations. This is not surprising, since the ongoing operations of MUS research activity make the economy larger. But what may be surprising is the magnitude and the breadth of these impacts.

Table 8: Output Impacts by Industry

The Economic Contribution of MUS Research: Sales at Montana Businesses ($ Million)	
Category	**Impact**
Utilities	0.6
Construction	15.4
Manufacturing	10.2
Wholesale trade	11.1
Retail trade	40.7
Transportation and warehousing	0.9
Information	5.7
Finance and insurance	5.6
Real estate and rental and leasing	25.4
Professional, scientific, and technical services	343.1
Management of companies and enterprises	1.7
Administrative and waste management services	11.2
Educational services; private	1.5
Health care and social assistance	25.6
Arts, entertainment, and recreation	1.0
Accommodation and food services	14.3
Other private	5.6
State and Local Government	46.2
TOTAL	565.8

In total, Montana businesses realize about $566 million in gross sales annually due to the presence of MUS research in the state economy. As the table makes clear, the footprint of this impact is broad, with sizable revenues accruing to businesses in construction, manufacturing, retail trade, health care, as well as state and local government. These various industry sales come about both directly – MUS research spending on vendors – as well as indirectly. In the latter category would be the spending of employees of MUS research, as well as the second-round spending of those businesses that realize these sales as income and spend a portion again in the local economy.

The Economic Contribution of MUS Research: Worker Earnings

The presence of MUS research in the state economy increases the size of the economic pie, and that certainly includes wages, benefits and other compensation paid to workers. Those compensation increases are amplified by the fact that jobs associated with MUS research pay significantly more than the average across the entire economy.

Table 9: MUS Research, Compensation Impacts

The Economic Contribution of MUS Research: Compensation Impacts		
Category	**Units**	**Impact**
Wages and Salaries	$ Millions	146.0
Compensation	$ Millions	183.8
Earnings	$ Millions	205.1

In a Montana economy with MUS research there is $146.0 million more paid annually to wage and salary workers in paychecks than would be the case if MUS research did not exist. Compensation, which includes benefits paid to payroll employees, brings this impact to just over $183.8 million. When the earnings of the self-employed, business owner income and payments made to non-employee contractors are added, the total impact is $205.1 million.

The Economic Contribution of MUS Research: Fiscal Impacts

The research activity taking place in the MUS system, with its associated direct, indirect, and induced impacts also has an effect on the fiscal situation of the state. Table 10 summarizes these effects.

Table 10: MUS Research, Fiscal Impacts

The Economic Contribution of MUS Research: Fiscal Impacts		
Category	**Units**	**Impact**
Total Revenues	$ Millions	42.9
Total Expenditures	$ Millions	23.5
Net Fiscal Impact	$ Millions	19.4

The Economic Contribution of MUS Research: Summary

MUS research has been, and continues to be, an important driver to the Montana economy. It employs talented, high-wage people and engages in activities that bring money and jobs into the state that otherwise would not exist. But its economic footprint is larger than the operations on the MUS system campuses themselves. The synergies and spin-off businesses that have occurred because of the discoveries and advances of MUS research represent another boost to economic activity that would not have occurred in its absence. Even without capturing the all of the dimensions of its relationship with the economy in this analysis, we find:

- 3,532 permanent, year-round jobs, earning an average of $66,506 per year,
- $234.9 million in annual income received by Montana households, $201.5 million of which represents after-tax income
- $565.8 million in annual gross sales by Montana businesses and other organizations.
- A net fiscal impact of $19.4 million per year.

These impacts are supported by the ongoing activities of MUS research represent an important and desirable achievement for the state economy.

Appendix I: The Economic Contribution of Montana State University-Bozeman Research

MSU-Bozeman Research: Impacts Summary

If we isolate the impacts from research activity taking place at Montana State University - Bozeman, we get the followings results.

Table 11: MSU-Bozeman Research Impacts Summary

The Economic Impact of MSU-Bozeman Research Impacts Summary		
Category	**Units**	**Total**
Total Employment	Jobs	1,865
Personal Income	$ Millions	$132.1
Disposable Pers. Income	$ Millions	$114.0
Output	$ Millions	$314.0
Population	People	2,592

We find that MSU-Bozeman research ultimately supports:

- 1,865 permanent, high-paying, year-round jobs in the Montana economy
- $132.1 million in income received by Montana households each year, which includes $114.0 million in disposable (after tax) personal income;
- $314.0 million in annual sales to Montana businesses and other organizations; a population statewide that is larger by 2,592 people

MSU-Bozeman Research: Worker Earnings Impact

In a Montana economy with MSU-Bozeman research there is $81.1 million more paid annually to wage and salary workers in paychecks than would be the case if MSU-Bozeman research did not exist. Compensation, which includes benefits paid to payroll employees, brings this impact to $102.1 million. When the earnings of the self-employed, business owner income and payments made to non-employee contractors are added, the total impact is $112.6 million.

Table 12: MSU-Bozeman Research, Compensation Impacts

The Economic Contribution of MSU-Bozeman Research: Compensation Impacts		
Category	**Units**	**Impact**
Wages and Salaries	$ Millions	81.1
Compensation	$ Millions	102.1
Earnings	$ Millions	112.6

MSU-Bozeman Research: Employment Impacts

The employment impacts of MSU-Bozeman research are shown in the following chart. As with the trend of the state as a whole, the majority of jobs (1,382) resulting from research taking place at MSU-Bozeman accrue to the services industry classifications. Due to the high amount of MSU-Bozeman research activity, the employment impacts are felt broadly throughout the various industries.

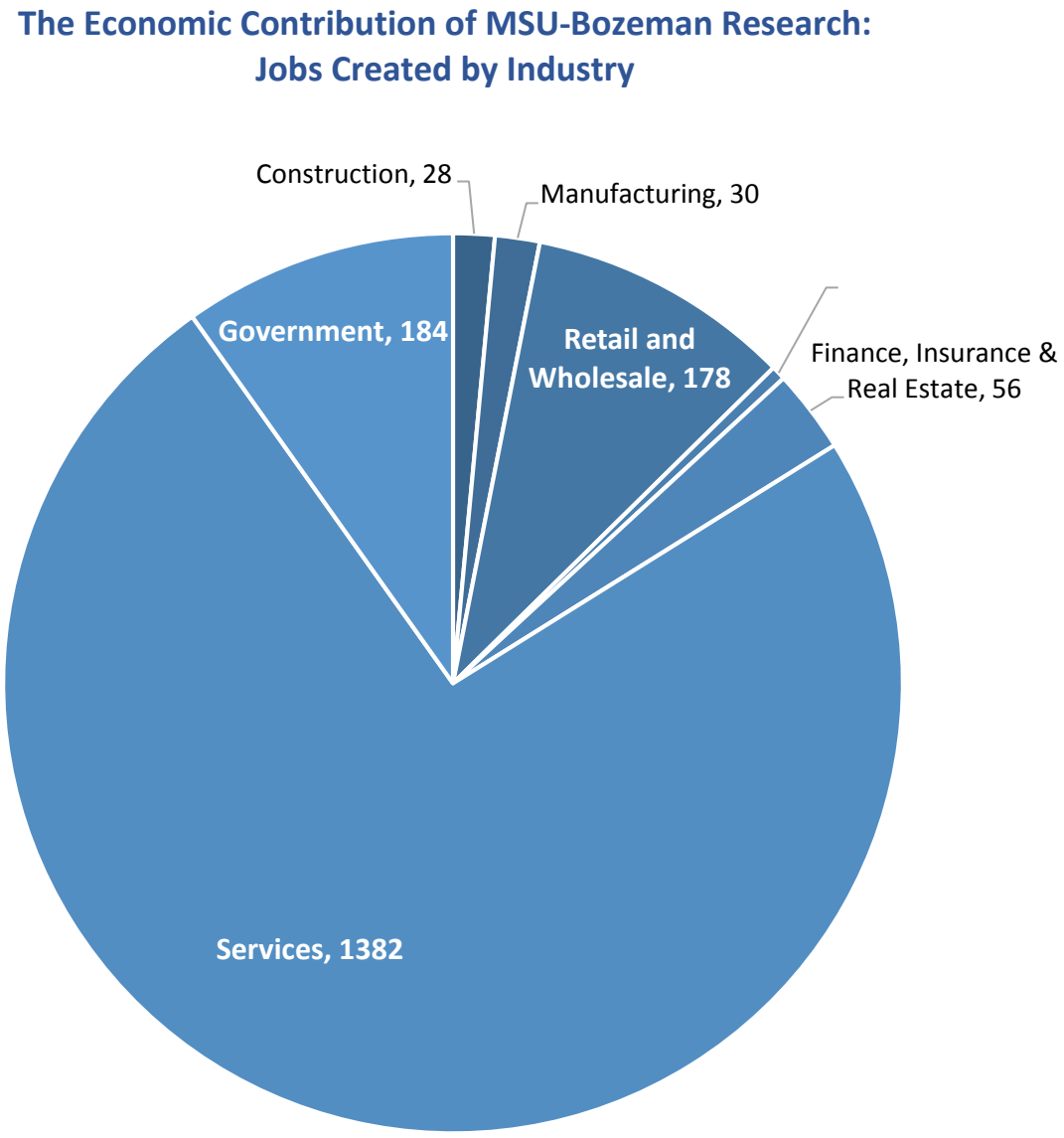


Figure 3: MSU-Bozeman Research, Jobs Impact

Appendix II: The Economic Contribution of University of Montana-Missoula Research

UM-Missoula Research: Impacts Summary

If we isolate the impacts from research activity taking place at the University of Montana-Missoula, we get the followings results.

Table 13: UM-Missoula Research, Impacts Summary

The Economic Impact of UM-Missoula Research Impacts Summary		
Category	**Units**	**Total**
Total Employment	Jobs	1,429
Personal Income	$ Millions	$85.6
Disposable Pers. Income	$ Millions	$72.7
Output	$ Millions	$212.8
Population	People	1,596

We find that UM-Missoula research ultimately supports:

- 1,429 permanent, high-paying, year-round jobs in the Montana economy
- $85.6 million in income received by Montana households each year, which includes $72.7 million in disposable (after tax) personal income;
- $212.8 million in annual sales to Montana businesses and other organizations;
- a population statewide that is larger by 1,596 people

UM Research: Worker Earnings Impact

In a Montana economy with UM research there is $54.3million more paid annually to wage and salary workers in paychecks than would be the case if UM research did not exist. Compensation, which includes benefits paid to payroll employees, brings this impact to $68.4million. When the earnings of the self-employed, business owner income and payments made to non-employee contractors are added, the total impact is $77.8 million.

Table 14: UM-Missoula Research, Compensation Impacts

The Economic Contribution of UM-Missoula Research: Compensation Impacts		
Category	**Units**	**Impact**
Wages and Salaries	$ Millions	54.3
Compensation	$ Millions	68.4
Earnings	$ Millions	77.8

UM-Missoula Research: Employment Impacts

The employment impacts of UM research are shown in the following chart. As with the trend of the state as a whole, the majority of jobs (1,119) resulting from research taking place at UM accrue to the services industrial classifications. Other notable industries in the state that experience employment impacts from UM research are retail/wholesale trade and state and local government.

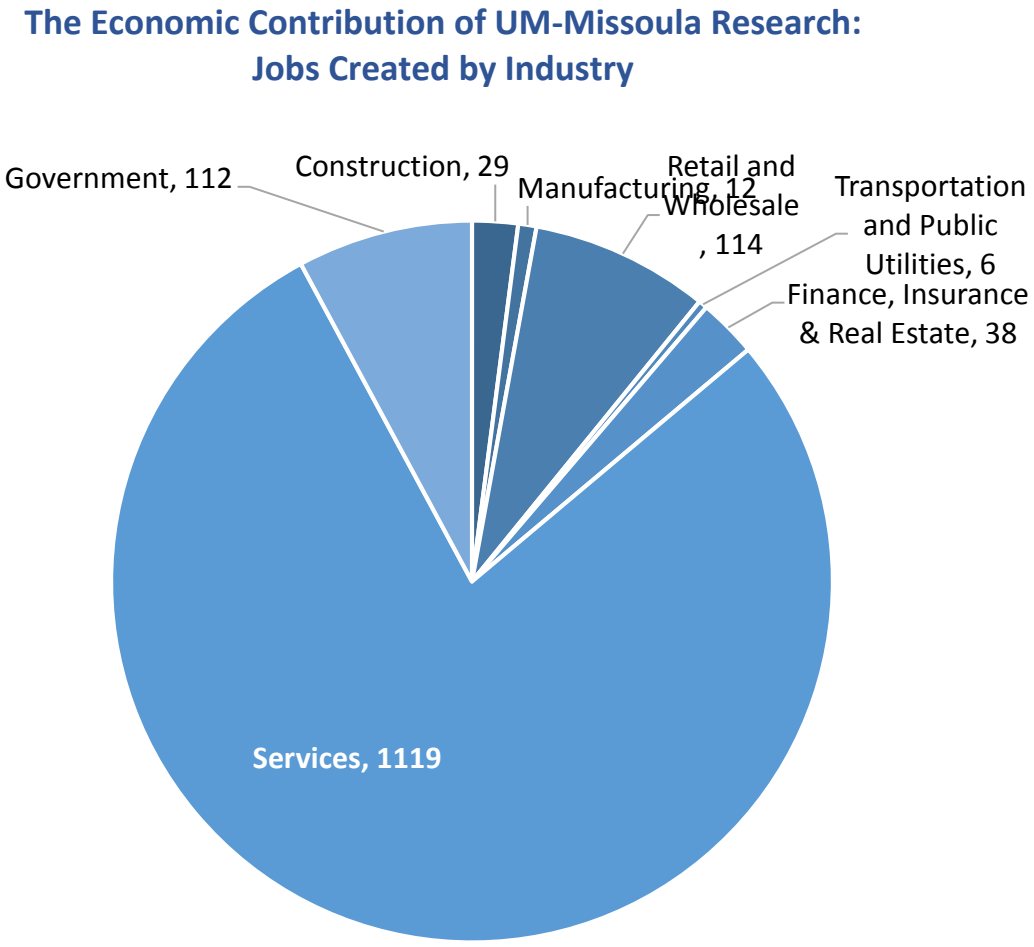


Figure 4: UM-Missoula Research, Jobs Impact

Appendix III: The Economic Contribution of Montana Technological University Research

Montana Tech Research: Impacts Summary

If we isolate the impacts from research activity taking place at Montana Tech, we get the followings results.

Table 15: Montana Tech Research, Impacts Summary

The Economic Impact of Montana Tech Research Impacts Summary		
Category	**Units**	**Total**
Total Employment	Jobs	165
Personal Income	$ Millions	$11.6
Disposable Pers. Income	$ Millions	$10.0
Output	$ Millions	$27.3
Population	People	229

We find that Montana Tech research ultimately supports:

- 165 permanent, high-paying, year-round jobs in the Montana economy
- $11.6 million in income received by Montana households each year, which includes $10 million in disposable (after tax) personal income;
- $27.3 million in annual sales to Montana businesses and other organizations;
- a population statewide that is larger by 229 people.
-

Montana Tech Research: Worker Earnings Impact

In a Montana economy with Montana Tech research there is $7.1 million more paid annually to wage and salary workers in paychecks than would be the case if Montana Tech research did not exist. Compensation, which includes benefits paid to payroll employees, brings this impact to $8.9 million. When the earnings of the self-employed, business owner income and payments made to non-employee contractors are added, the total impact is $9.9 million.

Table 16: Montana Tech Research, Compensation Impacts

The Economic Contribution of Montana Tech Research: Compensation Impacts		
Category	**Units**	**Impact**
Wages and Salaries	$ Millions	7.1
Compensation	$ Millions	8.9
Earnings	$ Millions	9.9

Montana Tech Research: Employment Impacts

The employment impacts of Montana Tech research are shown in the following chart. As with the trend of the state as a whole, the majority of jobs resulting from research taking place at Montana Tech accrue to professional, scientific, and technical services. We also see a similar proportional distribution throughout the other industries.

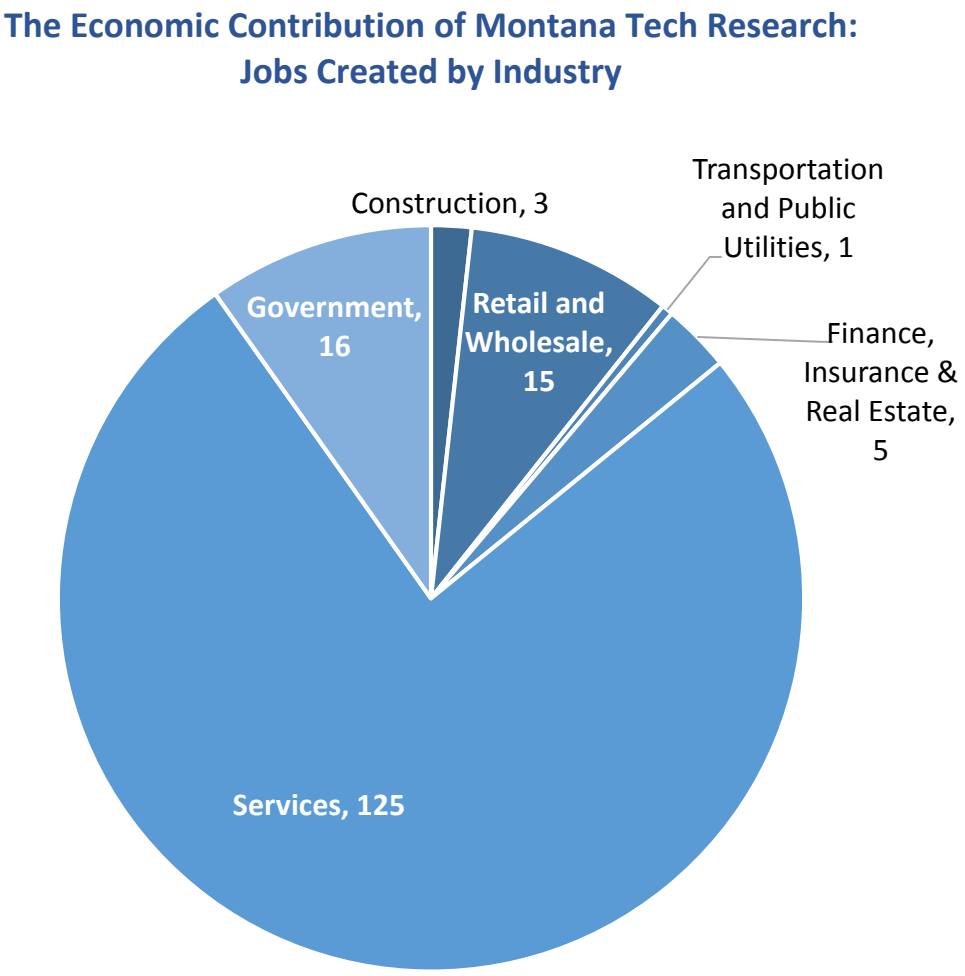


Figure 5: Montana Tech Research, Jobs Impact

Appendix IV: The Economic Contribution of Montana State University-Billings Research

MSU-Billings Research: Impacts Summary

If we isolate the impacts from research activity taking place at MSU-Billings, we get the followings results.

Table 17: MSU-Billings Research, Impacts Summary

The Economic Impact of MSU-Billings Research Impacts Summary		
Category	**Units**	**Total**
Total Employment	Jobs	34
Personal Income	$ Millions	$2.6
Disposable Pers. Income	$ Millions	$2.3
Output	$ Millions	$5.2
Population	People	48

We find that MSU-Billings research ultimately supports:

- 34 permanent, high-paying, year-round jobs in the Montana economy
- $2.6 million in income received by Montana households each year, which includes $2.3 million in disposable (after tax) personal income;
- $5.2 million in annual sales to Montana businesses and other organizations;
- a population statewide that is larger by 48 people.

MSU-Billings Research: Worker Earnings Impact

In a Montana economy with MSU-Billings research there is $1.7 million more paid annually to wage and salary workers in paychecks than would be the case if MSU-Billings research did not exist. Compensation, which includes benefits paid to payroll employees, brings this impact to $2.1 million. When the earnings of the self-employed, business owner income and payments made to non-employee contractors are added, the total impact is $2.4 million.

Table 18: MSU-Billings Research, Compensation Impacts

The Economic Contribution of MSU-Billings Research: Compensation Impacts		
Category	**Units**	**Impact**
Wages and Salaries	$ Millions	1.7
Compensation	$ Millions	2.1
Earnings	$ Millions	2.4

Appendix IV: The Economic Contribution of Montana State University-Northern Research

MSU-Northern Research: Impacts Summary

If we isolate the impacts from research activity taking place at MSU-Northern, we get the followings results.

Table 19: MSU-Northern Research, Impacts Summary

The Economic Impact of MSU-Northern Research Impacts Summary		
Category	**Units**	**Total**
Total Employment	Jobs	27
Personal Income	$ Millions	$2.1
Disposable Pers. Income	$ Millions	$1.8
Output	$ Millions	$4.6
Population	People	40

We find that MSU-Northern research ultimately supports:

- 27 permanent, high-paying, year-round jobs in the Montana economy
- $2.1 million in income received by Montana households each year, which includes $1.8 million in disposable (after tax) personal income;
- $4.6 million in annual sales to Montana businesses and other organizations;
- a population statewide that is larger by 40 people.

MSU-Northern Research: Worker Earnings Impact

In a Montana economy with MSU-Northern research there is $1.2 million more paid annually to wage and salary workers in paychecks than would be the case if MSU-Northern research did not exist. Compensation, which includes benefits paid to payroll employees, brings this impact to $1.5 million. When the earnings of the self-employed, business owner income and payments made to non-employee contractors are added, the total impact is $1.7 million.

Table 20: MSU-Northern Research, Compensation Impacts

The Economic Contribution of MSU-Northern Research: Compensation Impacts		
Category	**Units**	**Impact**
Wages and Salaries	$ Millions	1.2
Compensation	$ Millions	1.5
Earnings	$ Millions	1.7

Appendix IV: The Economic Contribution of University of Montana-Western Research

UM-Western Research: Impacts Summary

If we isolate the impacts from research activity taking place at UM-Western, we get the followings results.

Table 21: UM-Western Research, Impacts Summary

The Economic Impact of UM-Western Research Impacts Summary		
Category	**Units**	**Total**
Total Employment	Jobs	12
Personal Income	$ Millions	$0.8
Disposable Pers. Income	$ Millions	$0.7
Output	$ Millions	$1.9
Population	People	16

We find that UM-Western research ultimately supports:

- 12 permanent, high-paying, year-round jobs in the Montana economy
- $800 thousand in income received by Montana households each year, which includes $700 thousand in disposable (after tax) personal income;
- $1.9 million in annual sales to Montana businesses and other organizations;
- a population statewide that is larger by 16 people.

UM-Western Research: Worker Earnings Impact

In a Montana economy with UM-Western research there is $498 thousand more paid annually to wage and salary workers in paychecks than would be the case if UM-Western research did not exist. Compensation, which includes benefits paid to payroll employees, brings this impact to $1.5 million. When the earnings of the self-employed, business owner income and payments made to non-employee contractors are added, the total impact is $1.7 million.

Table 22: UM-Western Research, Compensation Impacts

The Economic Contribution of UM-Western Research: Compensation Impacts		
Category	**Units**	**Impact**
Wages and Salaries	$ Thousands	498.0
Compensation	$ Thousands	624.0
Earnings	$ Thousands	691.0

About This Report

The Bureau of Business and Economic Research at the University of Montana, the state's premier business research center, was contracted by the Office of the Commissioner for Higher Education in the Montana University System (MUS) to perform an analysis of the impacts of MUS research activity on the economy of the state of Montana. The data for this study were obtained from Montana State University, the University of Montana, and Montana Tech, as well as from other public sources. The analysis was conducted with the use of a model leased from Regional Economic Models, Inc. (REMI) that was constructed and designed for this purpose. The REMI model has been used in hundreds of published studies and peer-reviewed articles. Full details on the assumptions and inputs to the analysis can be found in the full research report.

About the Bureau of Business and Economic Research

For more than 60 years, the Bureau of Business and Economic Research at the University of Montana (BBER) has been working to help Montanans understand the economy around them and make informed decisions in their personal and professional lives. The Bureau—a research department within the University of Montana-Missoula's School of Business Administration—was founded in 1948 to monitor the State's economic and business conditions. The Bureau has expanded from a staff of four to a research department of 18 full-time employees and more than a dozen part-time workers.

Economists at the Bureau research and collect a wide variety of economic and industry data which assist businesses, government agencies, and individuals across Montana. Several research programs within the Bureau study the statewide industries of forest products, health care, manufacturing, and oil and gas. These programs provide a wealth of information not available elsewhere, and Bureau staff field approximately 6,000 requests each year from people seeking information about topics ranging from inflation rates to county demographics to business startup tips.