

The Economic Impact of Marshall University

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FINAL REPORT



Prepared for:

Marshall University
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Prepared by:

Center for Business and
Economic Research
Marshall University
One John Marshall Drive
Huntington, WV 25755

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MARSHALL'S ECONOMIC IMPACT ON WEST VIRGINIA

INTRODUCTION

Any state would welcome an industry that created 7,735 jobs, increased the State's output by \$547 million and expanded the income earned by its citizens over \$267 million. If this same industry generated an increase in state and local revenues of approximately \$42 million and yielded a return to investors of \$7.93 for each invested dollar, it would be considered a major asset to that State. Further, if that industry was the foundation for attracting and growing high technology firms paying excellent wages while at the same time significantly improving the health and quality of life for those living in the state, its value would be unquestioned. This describes **Marshall University**.

The value of a university is often viewed by the quality of its programs and the graduates it produces. The education received produces a more skilled and productive labor force. Those who attend will, over their lifetimes, earn substantially higher incomes and experience an enhanced standard of living. The economic benefits to the students are substantial. However, that is not the focus of this report, although a high quality labor pool is absolutely essential for a region's economic development. The abilities and qualities that an educated workforce possesses serve as a magnet to create and attract new business.

Viewing **Marshall's** contribution only in those terms is extremely limited. **Marshall** is one of West Virginia's most productive businesses. It generates the output, incomes, jobs and taxes mentioned above; however, even this view is too limited.

Marshall is present across the entire State, not only as a place where students can study at a school rated in the top 100 of the nation's "Best Buys" in higher education, but through a large variety of programs. There is not a county in the State that has not benefited economically from **Marshall's** presence. As the report substantiates, there are significant economic benefits from **Marshall's** statewide thrusts that cannot be measured, but also they cannot be ignored.

- Through the **Joan C. Edwards School of Medicine** and the **Robert C. Byrd Center for Rural Health**, health professionals establish a presence across the State bringing the highest quality of care with them.
- The **Robert C. Byrd Institute for Flexible Manufacturing** has assisted and trained the State's manufacturers, preparing them for international competition.
- The **Nick J. Rahall, II Transportation Institute (RTI)** is one of only a handful of collegiate based centers merging transportation with economic development. **RTI's** programs have impacted nearly every county in the State by recognizing that infrastructure is a key ingredient in economic growth.

These are only a few examples of how **Marshall** reaches beyond the campus to improve the economy of the Mountain State. It is worth asking, what would the economy of West Virginia be like if **Marshall** were not here? The State would lose not only a quality center for higher

education, but a powerful engine for economic development. The report that follows substantiates that fact.

FINDINGS

Output, Income and Employment

The most important component of an economic impact study is output which estimates the total spending that results from the presence of an institution or business in an area. Output includes those salaries or incomes which are the largest contributors to the overall economic impact as they are spent and re-spent throughout the region. Employment translates the income received into numbers of jobs.

Marshall University and its affiliates¹ generate over half a billion dollars of output, almost \$270 million in income, and create over 7,700 jobs in the State. Direct employment of 5,304 from **Marshall's** colleges, centers, institutes and programs generate the economic impacts shown in Table 1. This employment creates \$347 million in output and \$199 million in income. As that output and income is spent, an additional (indirect) \$64 million in output and \$22 million in income is created as well as an additional 737 jobs. These effects are further amplified as the re-spending (induced effects) continues, creating an additional \$136 million in output, \$46 million in income and 1,694 jobs. If it were not for **Marshall University**, this economic activity would not exist.

Table 1: Summary Impacts of Marshall University

	DIRECT	INDIRECT	INDUCED	TOTAL
Output	\$347 million	\$64 million	\$136 million	\$547 million
Income	\$199 million	\$22 million	\$46 million	\$267 million
Jobs	5,304	737	1,694	7,735

Return on State's Investment

One of the most informative ways to measure the economic impact of an organization is to look at the return it provides to the investment that it receives. In the case of **Marshall**, the State invests \$56 million in budget appropriations as well as \$13 million in grants and contracts for a total of \$69 million. This "investment" can be compared to the output, income and employment created by **Marshall**. The estimated output generated by **Marshall** is \$547 million. This provides a return of \$7.93 for every State dollar. If only labor income is considered, the \$267 million generated by **Marshall** related activities provides a return of \$3.87. This return would be considered an outstanding investment in the private sector.

¹ This does not include any Marshall Community and Technical College (CTC) programs or any funds related to faculty, staff, student or operating expenditures of the CTC.

Generation of State Revenue

Another way of determining what the State receives for the dollars it sends to **Marshall** is to look at the taxes that are generated by the economic activity associated with **Marshall**. There are the direct impacts as taxes are paid on the incomes received by faculty and staff, as well as the sales tax from employee expenditures. Indirect taxes are also significant as this spending circulates through the economy causing other tax revenue to increase as well. Table 2 shows the State receiving \$33 million in tax revenue in 2005 for the \$69 million it spent on **Marshall**. For every dollar spent, \$0.48 is returned directly to the State treasury in the year it was received. As the **Marshall** related spending circulates in future years, this figure will grow even larger. Since housing is a major expenditure, **Marshall** also has a positive impact on local real property taxes of \$8.5 million.

Table 2: Marshall's Impact on State & Local Tax Revenue
FY 2005**

Tax	FY 2005 Yield	MU Direct Impact	MU Total Impact
Personal Income Tax	\$ 1,170,087,478	\$ 7,978,074	\$ 11,634,692
Consumer Sales & Use	\$ 1,063,122,835	\$ 7,248,751	\$ 10,571,095
Business Taxes **	\$ 742,206,579	\$ 5,060,630	\$ 7,380,084
Excise Taxes	\$ 349,820,563	\$ 2,385,201	\$ 3,478,419
Property Taxes (State)	\$ 4,282,076	\$ 29,197	\$ 42,579
Misc Fees & Transfers	\$ 15,721,604	\$ 107,196	\$ 156,327
Total State	\$ 3,345,241,135	\$ 22,809,049	\$ 33,263,196
Local Property	-	\$ 5,839,345	\$ 8,515,711
Total State & Local	\$ 3,345,241,135	\$ 28,648,394	\$ 41,778,907

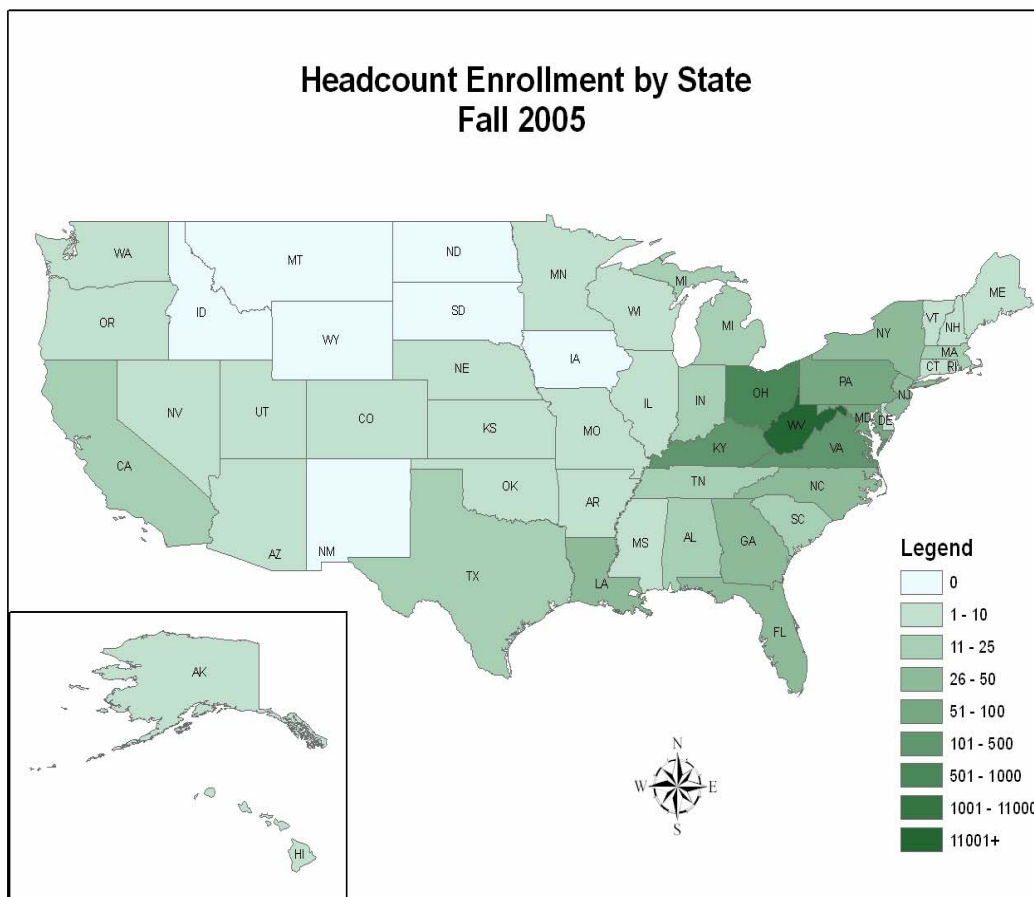
** Severance, Property Transfer, Racing Fees, Estate and Inheritance taxes are omitted.

Extent of Marshall's Presence

Marshall University comprising 3,048 faculty and staff plus 13,996 undergraduate and graduate students, is a major economic force in the region and State. Students can enroll in 2 associate, 45 baccalaureate and 46 graduate programs including doctoral degrees in bio-medical science, education, psychology, and health administration. They come to **Marshall** from all 55 West Virginia counties, 43 states and 40 foreign nations because **Marshall** is ranked as one of the top “100 Best Buys” in collegiate education. **Marshall**’s relatively low tuition makes acquiring a college degree affordable for students with limited financial resources. Some of these students benefit from **Marshall**’s internationally acclaimed **Higher Education for Learning Problems (HELP)** program that assists students with learning disabilities complete their degrees. **Marshall**’s students bring funds not only for tuition and living expenses, but create a rich social and cultural environment that prepares them for the global economy.

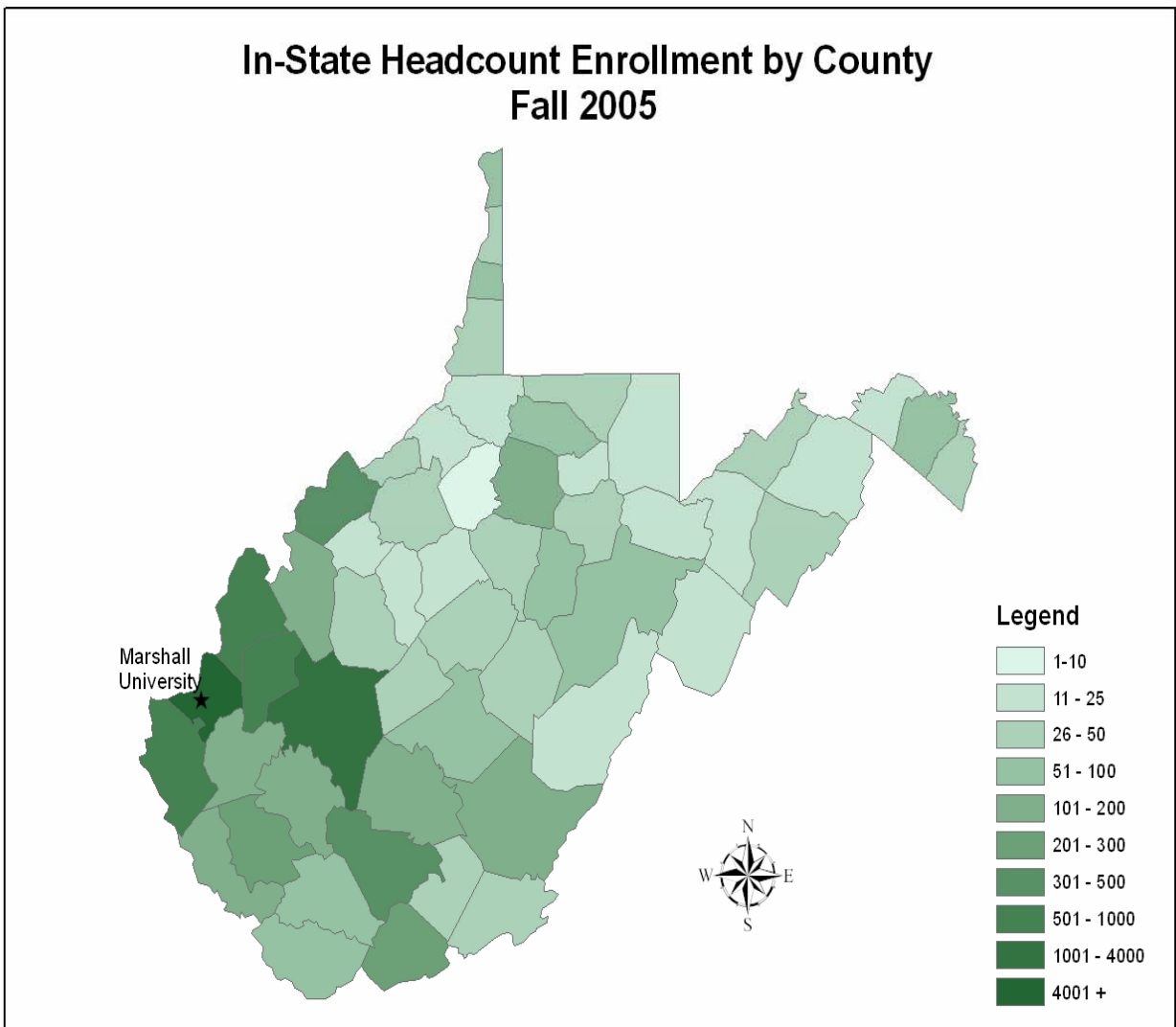
The distribution of **Marshall**’s students by state of residence includes 43 of the 50 states and the District of Columbia. A map of the distribution is shown in Figure 1.

Figure 1: Headcount Enrollment by State



Marshall’s student body also represents all 55 counties within West Virginia. A map showing the distribution of students by West Virginia counties is shown in Figure 2.

Figure 2: West Virginia Enrollment by County



It would not be proper to view **Marshall** as a regional university since its economic impact is felt across the State. Figures 3 through 7 provide a glimpse of the extent of **Marshall's** presence in West Virginia.

Figure 3: Marshall University Statewide Impact

Marshall University Statewide Impact



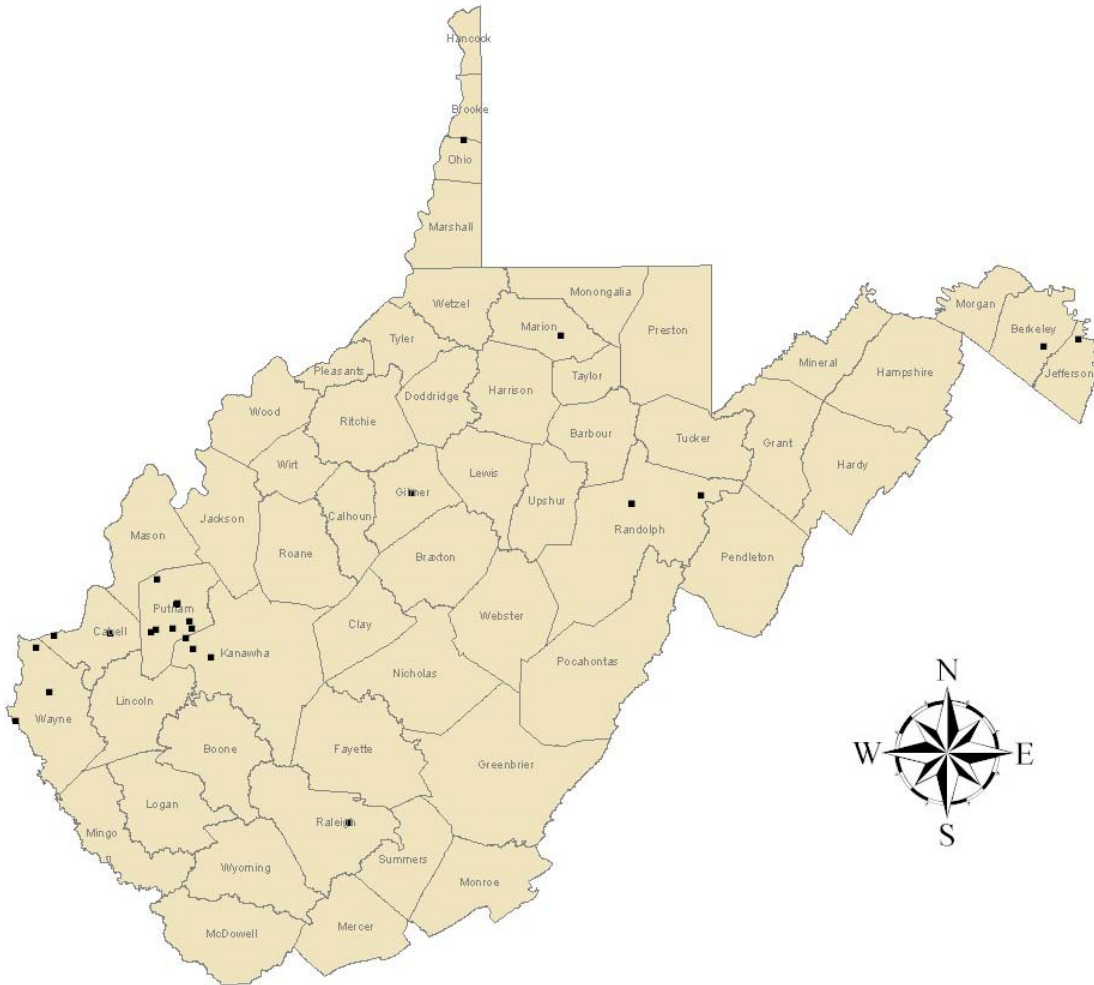
Legend

- ★ MU - Main Campus
- ★ MU- Graduate Campus
- ★ MU Extension Campuses

*Some symbols may represent more than one campus.

Figure 4: MU Cooperative Programs

Marshall University Statewide Impact



Legend

- Cooperative Programs

*Some symbols may represent more than one program.

Figure 5: MU Nick J. Rahall II Transportation Institute

Marshall University Statewide Impact



Legend

- ▲ Rahall Transportation Institute (RTI) Headquarters
- ▲ RTI Partners
- ▲ RTI Programs

*Some symbols may represent more than one facility.

Figure 6: Robert C. Byrd Institute for Advanced Flexible Manufacturing

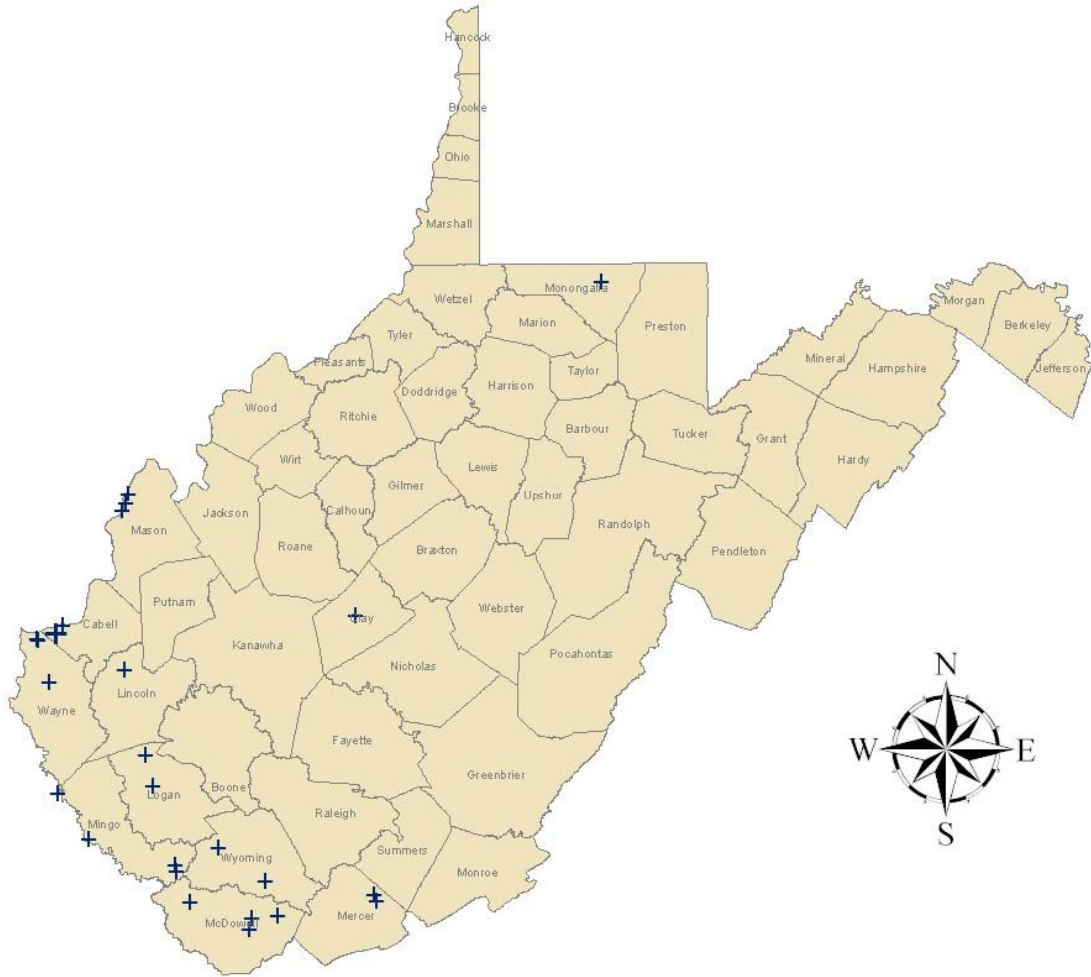
Marshall University Statewide Impact



*Some symbols may represent more than one facility.

Figure 7: Joan C. Edwards School of Medicine & Robert C. Byrd Center for Rural Health

Marshall University Statewide Impact



Legend

- + School of Medicine
- + Rural Health Care Programs

*Some symbols may represent more than one facility.

Scope of Study

Included in this study are the activities of:

- Marshall University's academic colleges (Business, Education and Human Services, Extended Education, Graduate, Health Professions, Information Technology and Engineering, Journalism and Mass Communications, Fine Arts, Liberal Arts, and Science)
- Joan C. Edwards School of Medicine
- Robert C. Byrd Center for Rural Health
- Forensic Science Center
- Marshall University Research Corporation
- Athletics and Sports
- Robert C. Byrd Institute for Advanced Flexible Manufacturing
- University Physicians & Surgeons
- Marshall University Foundation
- Big Green Foundation
- Marshall University Graduate College Foundation
- Marshall University Alumni Association
- Nick J. Rahall II Appalachian Transportation Institute
- Marshall University Early Education Center
- The Child Development Academy
- Center for Business and Economic Research
- Harless Center for Rural Research and Development
- Robert C. Byrd Biomedical and Biotechnical Research and Development Center
- Marshall University Autism Center
- Mid-Ohio Valley, Teays Valley and Southern Mountain Centers
- MU Learning Resources Center and the Larry Joe Harless Center
- The John Deaver Drinko Academy
- Higher Education for Learning Problems

With a main campus in Huntington, the **Marshall University Graduate College** in South Charleston, the **Mid-Ohio Valley Center** in Point Pleasant, and **centers at Gilbert, Logan, Teays Valley and Beckley** as well as cooperative degree programs at Shepherd and Glenville Universities and Southern West Virginia Community and Technical College, **Marshall** enhances the ability of West Virginia residents to receive an education no matter where they reside. **Marshall's** distance learning programs providing to college students as well as elementary and secondary schools in more remote regions has significantly upgraded the quality of the State's labor force, making it more attractive for industry to locate here. No attempt was made to quantify these types of benefits or to ascertain the economic benefits that accrue to the students whose earning capacity is enhanced by having these courses available. According to the US Census Bureau, over an adult's working life, high school graduates earn an average of \$1.2 million; associates degree holders earn about \$1.6 million; bachelor's degree holders earn about \$2.1 million, master's degree holders earn about \$2.5, doctoral degree holders earn about \$3.4

and professional degree holders earn approximately \$4.4.² This analysis, therefore, underestimates the overall impact of **Marshall** to the area.

UNMEASURED ECONOMIC IMPACTS

The above quantified impacts are conservative estimates representing a limited view of **Marshall's** contribution to the economy of West Virginia. While these statistics summarize the measurable economic contribution of **Marshall**, the true total impact is much greater. A review of several of **Marshall's** initiatives which go beyond traditional academic programs illustrates the point.

Robert C. Byrd Institute for Advanced Flexible Manufacturing

The Robert C. Byrd Institute for Advanced Flexible Manufacturing (RCBI) is the only statewide manufacturing technology production and teaching resource in West Virginia. The RCBI has facilities in Huntington, Charleston, Bridgeport and Rocket Center providing manufacturers with access to advanced computerized equipment, workforce development and technical training. Through its relationships with NASA, the U.S. Department of Defense (USDOD) and commercial businesses, RCBI serves as a catalyst for allowing West Virginia businesses to compete with the world's best. The Composites and Technology Training partnership with NASA provides analysis, design and development of the next generation of composite materials.

While this study does not calculate the increased income that clients of RCBI earn due to the support received, that sum is considerable. RCBI has served small and medium manufacturing firms in 43 West Virginia counties through its "21st Century Manufacturing Network," providing improved use of technology and expert assistance for USDOD and commercial contracting opportunities. Over the past decade more than 600 firms and 5,000 individuals have benefited from access to RCBI facilities and training.

Nick J. Rahall II Appalachian Transportation Institute

The Nick J. Rahall II Appalachian Transportation Institute (RTI) is only one of 30 university-based programs in the United States established by the U.S. Department of Transportation (USDOT) with the focus of creating jobs and economic development through transportation. RTI has been designated as one of seven National Maritime Enhancement Institutes by the USDOT to provide research and leadership in addressing navigation and development issues in the Ohio River Basin and Great Lakes Region. In addition to its Huntington location, RTI works through a four school consortium including Bluefield State University, Mountain State University (Beckley), West Virginia University Institute of Technology (Montgomery), and Southern West Virginia Community and Technical College (Logan).

Recently, RTI has become the focus for the Statewide "21st Century Science, Technology, Engineering and Mathematics (STEM)" program. In addition, RTI will spread "Project Lead the

² Washington, DC: Commerce Dept., Economics and Statistics Administration, Census Bureau. Available: <http://www.census.gov/prod/2002pubs/p23-210.pdf>

Way” across the State, forming partnerships among public schools, higher education and business to increase the quality and quantity of engineers and technologists. In this way, the quality of the labor force is increased forming a foundation for future growth.

Joan C. Edwards School of Medicine and the Robert C. Byrd Center for Rural Health

The Joan C. Edwards School of Medicine and the Robert C. Byrd Center for Rural Health at **Marshall** have become national centers for the graduation of health care practitioners and the delivery of health programs in rural areas. The School of Medicine ranks fifth in the nation in the production of primary care physicians and an estimated 300 graduates are now practicing in the state. The new Clinical Education and Outreach Center houses facilities for teaching and clinical education allowing **Marshall** to increase the number of doctors practicing in the State. The many outreach programs of the Center for Rural Health reduce the isolation of those living in Appalachia by increasing the availability of health care services. Certainly the lives and livelihoods of those served are greatly enhanced by this increased availability, yet it is not possible to put dollars and cents on the value of the lives that have been saved or enhanced by the work of these two entities.

The Joan C. Edwards Comprehensive Cancer Center resides in a new facility bringing the most up-to date cancer diagnostic and treatment services. The Cancer Center will allow the region’s residents to remain in the area for all forms of advanced cancer care. The new Robert C. Byrd Biomedical and Biotechnical Research and Development Center, a joint project of the School of Medicine and the College of Science, will be pivotal in providing research with strong commercial potential. The Forensic Science Center provides the highest quality forensic analysis for the prevention of crime throughout the nation and is only one of a handful of accredited DNA laboratories in the United States.

Marshall University Research Corporation (MURC)

Marshall’s Research Corporation provides support for researchers to obtain federal grants and contracts as well as other outside funding. As the fiscal agent for sponsored research, MURC has expanded since its inception in 1987 to capture over \$400 million in external support. In addition these grants have generated over 600 jobs which make MURC by itself among the top ten employers in the region.

These are high powered dollars. They come primarily from outside the State. It is outside spending which produces the highest multipliers for the generation of income and jobs. In addition, outside support from the National Institute of Health, National Science Foundation, NASA, Environmental Protection Agency and the United States Department of Transportation has propelled **Marshall** toward fulfilling its mission as a major research university.

We Are . . . Marshall Movie

The filming of *We Are . . . Marshall* in Huntington in April 2006 will also provide a one-time direct economic stimulus to the area. The movie is expected to be filmed in three weeks,

although the 140-member film crew could be in the area for up to nine weeks. The crew will require lodging, food, transportation and entertainment that will translate into local spending. The actual filming will require that expenditures be made to a number of local businesses for equipment rental, business services and parking fees. It is also possible that some “below the line” workers will be hired as extras and to assist with sets. Brent O’Connor, Executive Producer of the *We Are . . . Marshall* movie, estimates that nearly \$3 million will be spent directly during the movie’s production. As much as an additional \$250,000 will be spent by cast and crew for food and entertainment.³ The direct spending of \$3.2 million by Warner Brothers will also create additional economic benefits to Huntington and the surrounding area resulting in total spending in excess of \$4.6 million.

Perhaps the greatest impact of the film will be the immeasurable long-term impacts that it will provide. **Marshall** will receive increased attention and prominence as a result of the national and international viewing, which will almost certainly lead to tourism and perhaps an increase in the numbers of out-of-state students that wish to attend **Marshall**.

Science and Technology

Marshall’s ability to attract professors on the cutting edge of their disciplines lays the foundation for economic development in the age of technology. According to many studies, the presence of a major university is the most important influence in starting and attracting high technology business to a region. Such attraction is already witnessed by the emergence of new biotech firms that had their incubation on the **Marshall** campus. As **Marshall’s** emphasis on science and technology expands, so will the number of new entrepreneurship which will serve as the nucleus for high quality jobs.

Athletics

The athletic and sports programs provide national visibility and are a symbol of the overall quality of the University. **Marshall** is a full member of Conference USA, participating in all sports. This membership gives **Marshall** wide visibility in the south and southwest. Attendees of **Marshall** athletic events pour over \$10 million into the regional economy.

Other Impacts

Most of **Marshall’s** schools and colleges have earned international reputations. This insures a ready job market for their graduates. The presence of arts in the area, such as the **Marshall Artist Series**, provides cultural opportunities within the state and region, but they are difficult to economically assess and are not measured in this study.

Summary of Unmeasured Economic Impacts

³ Fossel, E. (2006, April 16). Movie Having Big Economic Impact, *Herald Dispatch*. Retrieved April 17, 2006, from <http://hdonline.com/apps/pbcs.dll/article?AID=/200604/NEWS01/604160344/100>.

To summarize, the economic benefits stemming from **Marshall** that cannot be measured in monetary terms include:

- Improved rural health and living conditions
- Increased quantity and quality of the labor force
- Greater cultural opportunities
- Expanded manufacturing and exporting
- Better educational opportunities

If the economic impact of these could have been quantified, the result would be an impact many times that which the study measured. While the economic benefit cannot be fully expressed in dollars, those activities contribute significantly to the economic well being and quality of life in the region. It cannot be denied that **Marshall's** economic impact far exceeds even the impressive dollar figures in this study. Without **Marshall**, the State and region would have fewer jobs, lower incomes and a weaker economy. When one considers the future, this is just the beginning of **Marshall's** economic contribution to the State.

METHODOLOGY

This study is a snapshot of **Marshall's** economic impact in a given year. The year 2005 was selected because it provided the most recent year with complete data. Capital expenditures on new buildings were averaged over the last three years to provide a more accurate estimation. Future capital expenditures were not included although those will be extensive as **Marshall** continues to build the facilities needed to complete its mission.

These results were estimated using carefully collected data on University expenditures. The Center for Business and Economic Research communicated with **Marshall** entities to acquire the appropriate data, including historical data where needed. Results were modeled using the IMPLAN⁴ regional input-output simulation software to assess the multiplier effects of direct **Marshall** spending by its students, employees, and affiliates. This software simulates the secondary (indirect) and tertiary (induced) spending that occurs due to initial spending in an assigned industry. The secondary impacts occur when local businesses respond the dollars spent by **Marshall** necessary to provide it with goods and services. The tertiary impacts result from the spending by individuals who receive their incomes either directly from **Marshall** or from those firms who do business with **Marshall**.

Stated another way, initial direct spending stimulates additional indirect spending by businesses as they supply goods and services to **Marshall** and induced spending by households who are employed by those businesses. This report measures all of these impacts which are summarized in Table 1. The total impact is the net effect of spending and includes some leakage of spending to domestic and international trade. These funds do not remain in the local economy and do not contribute to indirect or induced spending.

⁴ IMPLAN Professional Version 2.0 (1999) Minnesota IMPLAN Group, Stillwater MN.

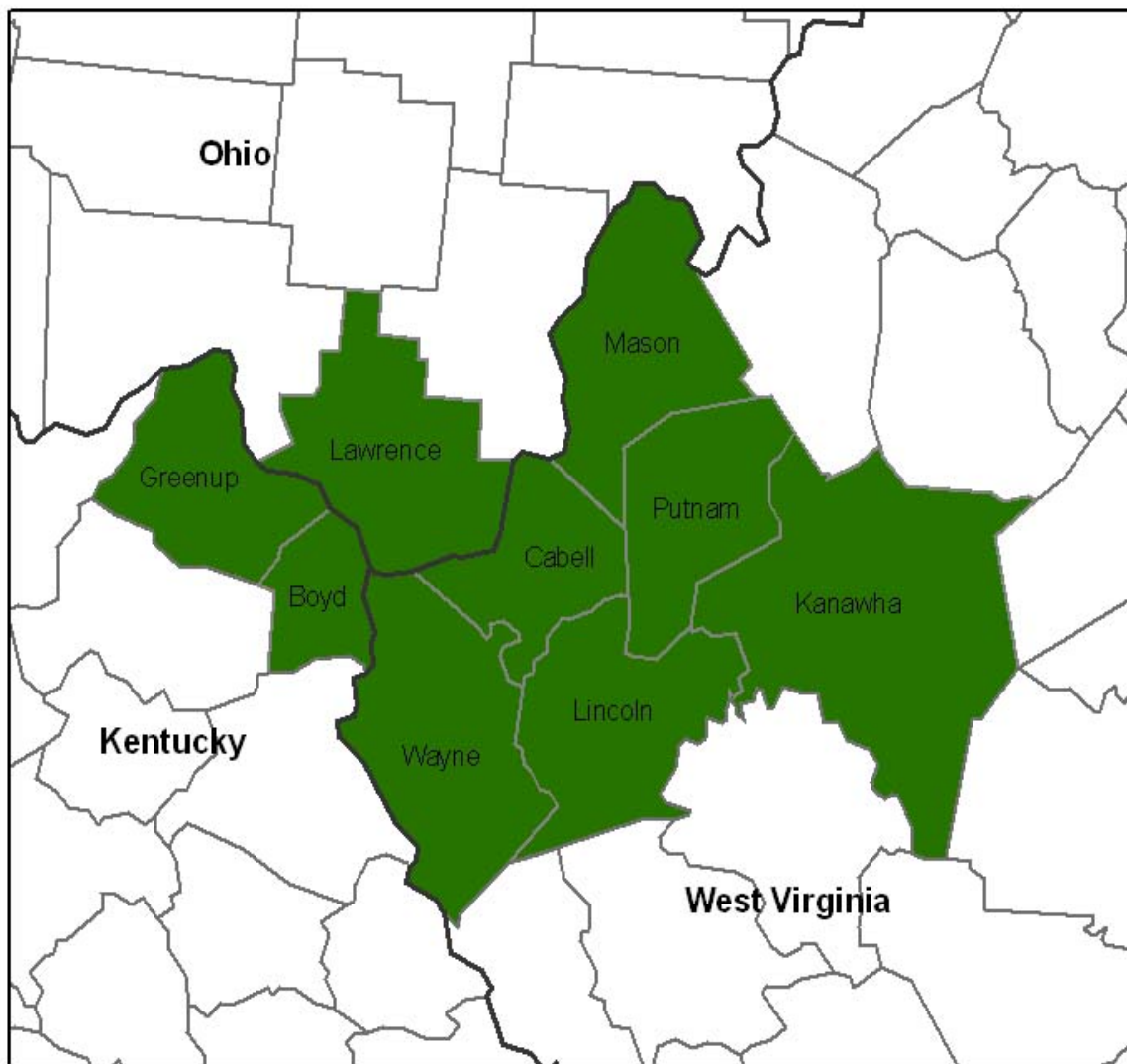
Study Area

The immediate study area, as shown in Figure 8, includes neighboring counties in the Tri-State region. By state, these counties are:

- Cabell, Lincoln, Wayne, Putnam, Mason and Kanawha counties in West Virginia
- Lawrence County in Ohio
- Greenup and Boyd counties in Kentucky

Marshall has academic campuses in Cabell, Kanawha and Mason counties. Inclusion of additional surrounding counties is attributable to common spill-over in the exchange of labor and services. Including additional nearby counties does not increase the impact since the diversity of available businesses would not change significantly.

Figure 8: Study Area Counties



While **Marshall's** immediate impact is strongly felt in the study region, the scope of **Marshall** programs, and thus the University's total impact, spreads well beyond the region and encompasses the entire state.

Categories of Impact

The six categories of impacts shown in Table 3 comprise the total direct impact of **Marshall**. Each category was modeled separately to reflect the unique buying patterns of the industries or households represented. For example, **Marshall's** operation & maintenance were modeled based on national patterns for university expenditures but was adjusted to include data provided by the **Marshall University Office of Finance and Administration**.

Table 3: Summary Detailed Direct Impacts Table

CATEGORY	DIRECT SPENDING
Salaries - MU & Affiliates	\$162,000,000
Student Expenditures	\$77,000,000
O&M - MU & Affiliates	\$59,000,000
Construction	\$18,000,000
Retirees	\$20,000,000
Sports Events & Other Visitors	\$11,000,000
TOTAL	\$347,000,000

Marshall Salaries

This category is by far the single largest component of impact that **Marshall** provides. The 3,048 employees of **Marshall University** and its affiliates receive salaries and benefits amounting to \$162 million.⁵ This income translates into direct household spending on local goods and services as well as indirect spending and induced additional household spending. As shown in Table 1, direct jobs exceed the number of **Marshall** employees due to jobs created as a result of direct spending by students and by **Marshall-related** activities, e.g. construction and **University Physicians and Surgeons**.

Student Expenditures

Student expenditures in the study area are a major component of the economic stimulus **Marshall** provides. **Marshall's** 13,996 students⁶ spend about \$77 million locally per year that would otherwise not be spent in the area if **Marshall** were not present. This spending translates into an additional \$40 to \$45 million in local spending and associated jobs. This figure is

⁵ Average labor income is \$53,100. If the School of Medicine is excluded, the figure is \$47,000. This compares to the statewide average of \$30,470 demonstrating that Marshall creates the type of high paying jobs which best drive an economy.

⁶ Standard Answers to Survey Questions Fall 2005, Bluebook of Planning and Analytic Data Fall 2005 and Common Data Sheet for Marshall University for academic year 2005/2006. MU Office of Institutional Research and Planning.

somewhat conservative in that only full-time students were counted as having a full impact. The assumption was made that all full-time students are in the area because of the University and could attend schools elsewhere. The expenditures of the 4,259 part-time students,⁷ which account for about one-third of the student body, were only counted if directly related to school. Thus, no housing related expenses were included for them. For part-time students, only expenditures made on books, supplies and transportation, which was counted at one-third the rate of full-time students, were included.

Annual student expenditures data was obtained from the **Marshall University Common Data Sheet (CDS)**. The CDS divides expected expenses into five main categories: 1) room, 2) board, 3) books and supplies, 4) transportation and, 5) other expenses. Using a survey conducted by Virginia Tech in estimation of the economic impact of the university and its affiliates, approximate percentages for individual expenditure categories were assigned to the aggregated “other” expenses category from the CSD data.⁸ This provides estimated per student expenditures in seven categories:

- 1) Housing/Utilities
- 2) Food
- 3) Entertainment
- 4) Services
- 5) Health Care
- 6) Transportation
- 7) Retail Goods (includes books and supplies)⁹

The expenditure estimates were applied to the full and part-time student population. Data on numbers of on-campus and off-campus students was also used to compensate for reduced levels of spending for on-campus students. The categories of Housing/Utilities and Food expenses were not applied to on-campus students as these expenditures should be captured by reported University expenditures. It is also assumed for the purposes of this report that no part-time students were campus residents.

Marshall Operating Expenditures

Marshall University spends its income in numerous ways and many different businesses benefit from its direct spending. The major industries that benefit are real estate, utilities, telecommunications, building maintenance, business support services and wholesale trade. **Marshall** and its affiliates spend approximately \$58 million per year to operate and maintain their organizations.

⁷ Residence Services Study: 2005 – A Comparative Analysis of Student Attitudes Toward Residence Hall Services (2003-2005). By the Center for Business and Economic Research for the Marshall University Department of Residence Services.

⁸ Virginia Polytechnic University, 2000. “A Summary of the University’s Economic Effects.”

⁹ Impacts exclude revenue from University Bookstore that would already be counted in University expenditures.

Marshall Related Construction

As **Marshall** expands its student body and faculty base, it must also expand its property holdings and update its buildings. Construction has the single largest impact per dollar of spending relative to other categories of activity. This above-average impact is caused by more construction money being re-spent locally. Relative to other industries, more goods and services demanded by the construction industry can be acquired locally.

For the purposes of this analysis, construction contracts that were awarded to companies in the study area are considered an impact. Purchases of major equipment, e.g. boilers, chillers, etc. were excluded. Contracts awarded to out-of-area firms also have large local impacts in purchase of labor and materials.

Over the last three years, **Marshall** related construction has contributed an average of \$31 million per year to the local economy, \$18 million of which is direct local spending on construction projects. This figure is net of expenditures made to out-of-area contractors and for equipment that is not manufactured in the region. Major **Marshall** construction projects of the last three years include:

- Buskirk and Holderby Hall renovations
- Marshall Commons (Gibson, Wellman, Haymaker and Willis Halls)
- Buck Harless Dining Hall
- Marshall University Parking Garage
- Upgrading of parking lots
- Robert C. Byrd Biomedical and Biotechnology Science Center
- Forensic Science Center
- Morrow Library renovation
- James C. Edwards Field upgrade
- Athletic Facilities Building
- Clinical Education and Outreach Center

MU Retirees

This study assumes that about 670 MU retirees still live in the Huntington area and make expenditures that contribute to the economy of the area. These retirees are assumed to have an annual income of \$20 million, or \$30,000 per retiree per year. Data for these assumptions was taken from an impact study of a state university in Texas in a county with similar per capita income.¹⁰

Visitors to Marshall Events

Marshall athletic events are decidedly unique events in the study area. There are no collegiate level substitutes for these events. Because football games draw larger crowds and have

¹⁰ Jafri, S. H., Dudley, J. and Buland, D (1999). "Economic Impact of Tarleton State University."

associated tailgating events, the impact of these games exceeds the impact of other sporting events.

Marshall football and basketball games are directly responsible for over \$10 million in annual direct spending in the study area.¹¹ Game attendees spend money on a variety of goods and services in the area. Goods demanded are primarily food and beverages, but impacts are also seen in clothing, miscellaneous retail, transportation-related purchases and lodging. Season and per game attendance for basketball and football games are shown in Table 4. Data for minor sports was not available, but they do bring teams to campus along with their fans which contributes to the overall economy. These effects are likely to cancel each other because **Marshall** teams and fans also travel to away games.

Table 4: MU Football and Basketball Game Attendance, 2005-2006¹²

	SEASON ATTENDANCE	PER GAME ATTENDANCE	DIVISION I AVERAGE ('98-'05)
Football	159,000	26,500	44,066
Men's Basketball	56,843	3,790	5,155
Women's Basketball	8,715	726	na

Recent attendance figures show a slight decline in attendance at men's basketball games, but an increase in attendance at women's games. Football attendance for the 2005 season was only slightly below the average for the last seven years.

The impact of attendance is not limited to athletics. Plays, concerts, art exhibits, symposiums and workshops all bring visitors to the various **Marshall** venues. Families and friends of students come to visit as well.

Medical Care

Patient visits to **University Physicians & Surgeons** also provide an impact to the region. Patients who reside outside the study area yet receive medical care at **Marshall University** clinics make expenditures in the area. Because most patients to the **Marshall** clinics are local residents, this impact is relatively small but worthy of mention. This impact was calculated by reviewing the distribution of patients to **Marshall** clinics, reducing the number of patients by the number of **Marshall** students (to avoid double-counting) and subtracting those that reside in the study-area counties. This impact is estimated at almost \$1 million in direct spending annually by these patients.

¹¹ The Economic Impact of Marshall University Football. (1994). By the Center for Business and Economic Research.

¹² Basketball: Herd Zone website for Marshall University athletics. Average attendance for the 2005/06 season was calculated based upon the 15 home games. The two 'away tournament' games, the Conference USA game and the West Virginia University game in Charleston were treated as neutral site events. Data for the seven seasons prior to 2005/06 was obtained from the NCAA website.

CONCLUSION

This report conveys the significant impact that **Marshall** provides to the economy of West Virginia. It creates thousands of jobs and millions of dollars of output, income and taxes for the state. But its influence extends well beyond the coverage of these impressive statistics.

All parts of the State have prospered from **Marshall** activities. **Marshall** fulfills its goal of being an active partner and a dynamic engine for economic development. The lives that are lived longer and healthier, the manufacturers who compete in world markets, the entrepreneurs who start and grow their businesses, the high technology that is being introduced, the skilled workers and the educated workforce, all bear testimony to why **Marshall** is much more than a high quality place of learning. As **Marshall** expands its commitment to biotechnology, engineering, health care, transportation, education, business and the arts, its economic impact will only grow and the State will be even better because **Marshall University** is here.