Black Hills State University: Serving the Economic Needs of South Dakota’s Beloved Black Hills

FY 2019

ECONOMIC IMPACT REPORT

2021
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BHSU by the Numbers

$135.9 Million
Generated in Economic Impact

1,019 Jobs
Supported and Sustained

$6.2 Million
in State and Local Taxes Generated

$26.6 Billion
Direct Impact Generated by BHSU Alumni throughout the Course of their Careers

3,858
Students

616
Graduates Annually

99%
classes taught by faculty

74.2%
undergraduate students from South Dakota

21%
first-generation college students

56
Undergraduate Programs

7
Graduate Programs

24
Certificate Programs

39
Minors
“Black Hills State University is all about serving the region in every sense of the word. We want to be an economic engine for the Black Hills.”

Laurie Nichols, President

Black Hills State University (BHSU) sits on 125 acres in the Black Hills of South Dakota, famous for its unique landscape and its access to outdoor activities like hiking, biking, and rock climbing. BHSU is centered in the growing and vibrant city of Spearfish and is less than an hour from Rapid City. BHSU serves a critically important regional function — to work closely with regional employers to meet the workforce demands of today and to help its students discover their passion and prepare for the world of tomorrow. Three-quarters of BHSU’s students are South Dakotans, and many choose to settle and make a life in the beautiful Black Hills region after graduating.

The university partners with regional employers to create strong connections between academics and the workplace. With the 2+2 programs in nursing and hospitality, BHSU students are out in the field for hands-on learning that prepares them to enter the workforce upon graduation. The university offers a diverse array of internships with local businesses — many of which turn into full-time jobs. In addition, BHSU is home to an AACSB-accredited business school, only 5% of business programs hold this accreditation worldwide. Along with academics, the Yellow Jackets field 12 NCAA Division II teams across men’s and women’s sports along with competitive men’s and women’s rodeo teams.

The history of the Black Hills feeds the culture on campus. Sustainability is a necessity for the national landmarks surrounding the Black Hills, and BHSU has become a leader in campus sustainability in the area of solar energy, which accounts for 20% of the energy used. BHSU’s campus draws in students and visitors alike with its beautiful views, eco-friendly practices, and strong sense of community.
Black Hills State University Mission

Black Hills State University is a regional, comprehensive, public institution that provides access to a higher education for aspiring students. BHSU offers a generous number of baccalaureate and select master’s degrees, generates new knowledge, promotes excellence in teaching and public engagement, and serves as a regional economic leader. Graduates make significant contributions to the workforce and the betterment of their community.
Case Study:
OFFERING A DISTINGUISHED COLLEGE EDUCATION TO THOSE WHO SERVE OUR COUNTRY WITH DISTINCTION

The U.S. military is one of the backbones of South Dakota’s economy and culture. It is the second-largest employer in South Dakota, powered in large part by historic Ellsworth Air Force Base (EAFB). Established a few miles from Rapid City in 1941, EAFB has served a role in several wars and as home base to critically important air force defense operations and training. EAFB is home to about 8,000 people including military members, their families, and civilian employees, and is one of the largest employers in the region. About 3,800 veterans also call western South Dakota home.

BHSU has a 60-year history of supporting western South Dakota’s military by offering courses at Ellsworth Air Force Base. This fall, the partnership has been elevated to a new level. BHSU competed for and won a contract to operate a local campus on base, delivering distinctive undergraduate and graduate programs to those who serve our country with distinction.

In support of this critically important partnership, the South Dakota Board of Regents approved a reduced tuition rate for active-duty airmen, their spouses and dependents, and U.S. Department of Defense civilians who work on Ellsworth Air Force Base. The arrangement also includes coursework at BHSU’s Rapid City and Spearfish campuses.

“The Air Force is technically driven, and this partnership with Black Hills State University will further develop these airmen’s knowledge. They’re learning the critical thinking skills the Air Force needs in maintaining airplanes and staffing hospitals.”

Roger Wilson
Chief, Education and Training
Ellsworth Air Force Base
In July 2021, the South Dakota Board of Regents (SDBOR) engaged Parker Philips, Inc. to measure the economic contribution of public higher education overall and of each of South Dakota's six universities. The goal of this analysis is to tell BHSU’s story from a numbers and narrative perspective. To develop this report Parker Philips, Inc. gathered student, financial, and employment data about BHSU, visited and toured the campus, conducted interviews, and researched secondary data and information to inform the writing and key messages.

The primary tool used in the performance of this study is the input-output model and data set developed by IMPLAN Group LLC. Financial data used in this study was obtained from South Dakota and included the following data points: operational expenditures, capital expenditures, and payroll and benefits for employees for FY 19. Secondary data was used to estimate spending by visitors (day and overnight) and students (undergraduate and graduate) exclusive of tuition and fees. Additional information on the methodology and assumptions used to complete this study can be found in Appendix B.

The impact presented in this analysis is broken down into three categories: direct impact, indirect impact, and induced impact. The indirect and induced impacts are commonly referred to as the “multiplier effect.” The graphic below provides an overview of the types of impact detailed in this report.
BHSU contributes to the local and statewide economies through its expenditures on operations, capital projects, wages, the spending of students off campus, and the spending of visitors to campus. The direct, day-to-day expenditures of BHSU, combined with the student and visitor spending, cause a ripple effect throughout the statewide economy.

The total economic impact of BHSU in FY 19 totaled $135.9 million. This contribution to the local and statewide economies is a point-in-time snapshot depicting how the expenditures of BHSU and its faculty, staff, students, and visitors make an impact.

**Operations and Spending Contribution**

BHSU operations and capital spending in FY 19 contributed a total of $92.3 million. BHSU’s operations generated $50.5 million in direct economic impact, $14.7 million in indirect economic impact, and $27.1 million in induced economic impact.

**Student Spending Contribution**

BHSU students contributed a total of $38.5 million to the state’s economy in FY 19 as a result of their spending. They generated $25.9 million in direct economic impact, $6.8 million in indirect economic impact, and $5.8 million in induced economic impact.

**Visitor Spending Contribution**

Visitor spending at BHSU in FY 19 contributed a total of $5.0 million. Visitors to BHSU generated $3.1 million in direct economic impact, $1.1 million in indirect economic impact, and $930,000 in induced economic impact.
BHSU’s Combined Economic Impact (FY 19)

<table>
<thead>
<tr>
<th>Category</th>
<th>Total Spending</th>
<th>Direct Spending</th>
<th>Indirect Spending</th>
<th>Induced Spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Visitor Spending</td>
<td>$5,041,671</td>
<td>$3,058,216</td>
<td>$1,053,445</td>
<td>$930,010</td>
</tr>
<tr>
<td>Total Student Spending</td>
<td>$38,530,064</td>
<td>$25,953,466</td>
<td>$6,773,146</td>
<td>$5,803,452</td>
</tr>
<tr>
<td>Total Operations Spending</td>
<td>$92,281,399</td>
<td>$50,514,087</td>
<td>$14,666,678</td>
<td>$27,100,634</td>
</tr>
<tr>
<td>Total Economic Impact</td>
<td>$135,853,134</td>
<td>$79,525,769</td>
<td>$22,493,269</td>
<td>$33,834,096</td>
</tr>
</tbody>
</table>

Source: Parker Philips using IMPLAN with data from SDBOR and BHSU
BHSU supports a total of **1,019 full- and part-time jobs** throughout the state. Beyond the direct jobs at the university, indirect and induced jobs include construction for campus projects, retail, restaurants, daycare, real estate, and banking – to name a few.

### Jobs Generated by University Operations
BHSU operations supported and sustained a total of 662 jobs: 397 direct jobs, 86 indirect jobs, and 179 induced jobs.

### Jobs Generated by Student Spending
Students from BHSU supported and sustained a total of 310 jobs as a result of their spending: 235 direct jobs, 37 indirect jobs, and 38 induced jobs.

### Jobs Generated by Visitor Spending
Visitors to BHSU supported and sustained a total of 47 jobs as a result of their spending: 34 direct jobs, 7 indirect jobs, and 6 induced jobs.

Based on analysis by industry sectors, other jobs supported by the university’s economy outside of the higher-education and healthcare sectors include jobs in real estate, retail, and services (e.g., restaurants, child-care centers, and entertainment).

### Black Hills State University Employment Contribution (Jobs, FY 19)

<table>
<thead>
<tr>
<th>Contribution Type</th>
<th>Total Contribution (Jobs)</th>
<th>Direct Contribution</th>
<th>Indirect Contribution</th>
<th>Induced Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations</td>
<td>662</td>
<td>397</td>
<td>86</td>
<td>179</td>
</tr>
<tr>
<td>Student</td>
<td>310</td>
<td>235</td>
<td>37</td>
<td>38</td>
</tr>
<tr>
<td>Visitor</td>
<td>47</td>
<td>34</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Total Combined</td>
<td>1,019</td>
<td>666</td>
<td>130</td>
<td>223</td>
</tr>
</tbody>
</table>

Source: Parker Philips using IMPLAN with data from SDBOR and BHSU
BHSU’s employees, suppliers, and related constituencies contribute to the local and statewide tax bases. In FY 19, the university contributed an estimated $6.2 million ($4.0 million direct and $2.2 million indirect and induced) through local spending (operational, capital, students, and visitors) as well as direct and indirect support of jobs. At the state and local levels, BHSU contributes to the tax bases through its purchasing. Specific taxes include employee and employer contributions to state and local social-insurance funds, sales and use taxes, personal property taxes, taxes paid on motor-vehicle licenses, and payments of fines and fees.

### Black Hills State University State and Local Tax Impacts (FY 19)

<table>
<thead>
<tr>
<th></th>
<th>SUB COUNTY GENERAL</th>
<th>SUB COUNTY SPECIAL DISTRICTS</th>
<th>COUNTY</th>
<th>STATE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DIRECT</strong></td>
<td>$771,567</td>
<td>$885,465</td>
<td>$353,898</td>
<td>$1,962,794</td>
<td>$3,973,724</td>
</tr>
<tr>
<td><strong>INDIRECT</strong></td>
<td>$135,402</td>
<td>$155,497</td>
<td>$61,820</td>
<td>$343,547</td>
<td>$696,266</td>
</tr>
<tr>
<td><strong>INDUCED</strong></td>
<td>$300,019</td>
<td>$344,669</td>
<td>$136,664</td>
<td>$751,282</td>
<td>$1,532,634</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$1,206,988</td>
<td>$1,385,631</td>
<td>$552,382</td>
<td>$3,057,623</td>
<td>$6,202,624</td>
</tr>
</tbody>
</table>

Source: Parker Phillips using IMPLAN with data from SDBOR and SDSU
The beautiful Black Hills National Forest, now in its second century, is managed by the USDA Forest Service. Comprised of 1.2 million acres of public lands, it supports a diversity of wildlife and fish, recreation, water production, livestock grazing, and timber harvesting. It is an environmental asset and a major contributor to the quality of life in the Black Hills region. Because it offers a steady stream of job openings, it’s also one of the region’s economic backbones.

But the Forest Service faces a challenge: how to find college graduates with both the right content expertise and a love for the region that will keep them there. The solution? A grow-your-own approach built on a partnership between Black Hills State University and Black Hills National Forest.

Dr. Jerome Krueger, the South Dakota born and bred Deputy Forest Supervisor of Black Hills National Forest, is part of a group of local employers who have worked closely with BHSU faculty to create a Forest & Grassland Ecology track that builds on the university’s already strong natural sciences majors. With specializations in areas such as fire ecology, rangeland management, and forestry, BHSU is striving to provide students with the credentials and experiences they need to pursue natural resources careers in the region they call home.
“When I was coming up, I worked in other parts of the country because it wasn’t possible to build a career in forestry in South Dakota. Now it is — and our partnership with BHSU is going to help South Dakotans who love the Black Hills like I do find a way to stay and thrive.”

Dr. Jerome Krueger
Deputy Forest Supervisor, Black Hills National Forest
BHSU Alumni

In 2019, 623 students graduated from BHSU, and currently there are 10,065 alumni living and working in South Dakota. Thanks to partnerships with local employers, BHSU has built an intentional pipeline to the workforce and a strong demand for talent and graduates at local businesses and employment sectors big and small. Almost 60% of BHSU graduates plant their roots in South Dakota, contributing to the state and making a positive economic impact after graduation. The impact of the total average wage earned by undergraduate and graduate alumni of BHSU on the economy over a 40-year career totals $26.6 billion.

The earnings of the over 10,000 BHSU alumni living and working in 306 South Dakota cities and towns over the course of their 40-year careers will total $26.6 billion, support and sustain a cumulative total of 177,242 jobs, and generate $1.2 billion in fiscal impacts at the local and state level.
West of the Missouri River is a unique place in South Dakota. Black Hills State University and South Dakota Mines are located only about an hour apart and work together to serve the people of western South Dakota. But when it comes to football, collaboration gives way to competition in this historic rivalry. BHSU and Mines meet every year in the Black Hills Brawl — the longest-running rivalry in Division II football. Winner takes the Homestake Trophy, based on a prospector’s pan, in a nod to the history of the Black Hills. BHSU won the first game in 1895, setting the tone for future meetings between the two. BHSU won the rivalry game again in 2019, South Dakota Mines won it in 2020 and 2021.
BHSU Gives Back

The community around BHSU benefits from BHSU faculty, staff, and students. Based upon assumptions derived from the U.S. Census Bureau and the Points of Light Foundation regarding donation amounts and volunteerism rates by age, income level, and employment status, it is estimated that staff, faculty, and students give $347,615 annually in charitable donations and volunteer for nearly 60,000 hours, valued at over $1.27 million. In FY 19, the combined impact of charitable giving and volunteerism totaled nearly $1.75 million. These benefits were in addition to the $135.9 million annual economic impact.

- The Donald E. Young Sports and Fitness Center is available for public use with a fitness center for training, an indoor track, and tennis, volleyball, and basketball courts. Community members can also use an aquatic center with a lap pool and a therapeutic pool. The center is also available for community members to rent?It’s rented for a lot more than birthdays.

- The community can also attend the Madeline A. Young Distinguished Speaker Series, which brings in world-class speakers such as Michael Chabon, United Nations Ambassador Jeane Kirkpatrick, actor Danny Glover, and writer and Pulitzer Prize winner Doris Kearns Goodwin.

- Black Hills State University is serving the Black Hills community by creating a cross-disciplinary approach to recording the history of veterans buried in local cemeteries. The National Cemetery Administration has partnered with the university to use public history to create biographies while education majors create lesson plans that bring these veterans to life.

### Charitable Giving and Volunteer Impact of BHSU

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Staff and Faculty Charitable Giving</strong></td>
<td>$203,904</td>
</tr>
<tr>
<td><strong>Student Charitable Giving</strong></td>
<td>$121,733</td>
</tr>
<tr>
<td><strong>Total Charitable Giving</strong></td>
<td><strong>$347,615</strong></td>
</tr>
<tr>
<td><strong>Staff and Faculty Volunteerism Hours</strong></td>
<td>5,504</td>
</tr>
<tr>
<td><strong>Student Volunteerism Hours</strong></td>
<td>53,935</td>
</tr>
<tr>
<td><strong>Total Volunteerism Hours</strong></td>
<td><strong>59,439</strong></td>
</tr>
<tr>
<td><strong>Value of Staff and Faculty Volunteerism Hours</strong></td>
<td>$129,668</td>
</tr>
<tr>
<td><strong>Value of Student Volunteerism Hours</strong></td>
<td>$1,270,705</td>
</tr>
<tr>
<td><strong>Total Value Volunteerism Hours</strong></td>
<td><strong>$1,400,372</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>$1,747,987</strong></td>
</tr>
</tbody>
</table>
Conclusion

Black Hills State University’s commitment to serve its students and the community make it an integral part of the Black Hills. BHSU generated $135 million in impact in 2019, and the impact goes beyond jobs and dollars. Through their creation of new programs and adapting core offerings to meet the changing needs of the South Dakota economy, BHSU is an integral part of the economic development ecosystem of the region. Black Hills State University works to develop the workforce and educate students of western South Dakota while continuing its tradition of service.
## Appendix A: Terms & Definitions

<table>
<thead>
<tr>
<th>Study Year</th>
<th>FY 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dollar Year</td>
<td>Presented in 2019 dollars</td>
</tr>
<tr>
<td>Total Economic Output/Economic Impact</td>
<td>Includes organizational spending on operations, capital expenditures, labor income expenditures, and value added to the economy as a result of expenditures made by an organization. It is the combined impact of direct, indirect, and induced impacts.</td>
</tr>
<tr>
<td>Direct Economic Impact</td>
<td>All direct expenditures made by an organization due to its operating expenditures. These include operating expenditures, capital expenditures, and pay and benefits expenditures.</td>
</tr>
<tr>
<td>Indirect Economic Impact</td>
<td>The indirect impact includes the impact of local industries buying goods and services from other local industries. The cycle of spending works its way backward through the supply chain until all money is spent outside of the local economy, either through imports or by payments to value added (multiplier effect).</td>
</tr>
<tr>
<td>Induced Economic Impact</td>
<td>The response by an economy to an initial change (direct effect) that occurs through re-spending of income received by a component of value added. IMPLAN’s default multiplier recognizes that labor income (employee compensation and proprietor income components of value added) is not lost to the regional economy. This money is recirculated through household spending patterns causing further local economic activity (multiplier effect).</td>
</tr>
<tr>
<td>Multiplier Effect</td>
<td>The multiplier effect is the additional economic impact created as a result of the organization’s direct economic impact. Local companies that provide goods and services to an organization increase their purchasing by creating a multiplier (indirect/supply-chain impacts). Household spending generated by employees of the organization and the organization’s suppliers create a third wave of multiplier impact (induced/household-spending impacts).</td>
</tr>
<tr>
<td>Government Revenue/State and Local Tax Impact</td>
<td>Government revenue or tax revenue that is collected by governmental units at the state and local levels in addition to those paid directly by an organization. This impact includes taxes paid directly by the organization itself, employees of the organization, and vendors who sell products to the organization and at the household level.</td>
</tr>
<tr>
<td>Direct Employment</td>
<td>Total number of employees, both full-time and part-time, at the organization based on total jobs, not FTEs.</td>
</tr>
<tr>
<td>Indirect Employment</td>
<td>Additional jobs created as a result of an organization’s economic impact. Local companies or vendors that provide goods and services to an organization increase their number of employees as purchasing increases, thus creating an employment multiplier.</td>
</tr>
<tr>
<td>Induced Employment</td>
<td>Additional jobs created as a result of household spending by employees of an organization and the employees of vendors. This is another wave of the employment multiplier.</td>
</tr>
</tbody>
</table>
Appendix B: Data & Methods

Data used to complete the contribution analysis was provided by the South Dakota Board of Regents and the university. Data supplied included operating expenditures, capital spending, pay and benefits, and total employees. Primary and secondary data was used to complete the input-output models in IMPLAN. The study approach and economic-impact findings are a conservative estimate of impact and are based on actual financial information. The study is a snapshot of the economic impact of the university.

Overview and the IMPLAN Model

The most common and widely accepted methodology for measuring the economic impacts of economic sectors is input-output (I-O) analysis. At its core, an I-O analysis is a table that records the flow of resources to and from companies/organizations and individuals within a region at a given time. For a specified region such as a state of the nation, the input-output table accounts for all dollar flows among different sectors of the economy in a given period. With this information, a model can then follow how a dollar added into one sector is spent and re-spent in other sectors of the economy, generating outgoing ripples of subsequent economic activity. This chain of economic activity generated by one event is called the “economic multiplier” effect.

The primary tool used in the performance of this study is the I-O model and dataset developed and maintained by IMPLAN Group LLC (formerly Minnesota IMPLAN Group Inc.). IMPLAN is a widely accepted and used software model first developed by the U.S. Forest Service in 1972. Data used in the baseline IMPLAN model and data set come largely from federal-government databases. The input-output tables themselves come from the Bureau of Economic Analysis. Much of the annual data on labor, wages, final demand, and other market data comes from the Bureau of Labor Statistics, the U.S. Census Bureau, and other government sources.

Government agencies, companies, and researchers use IMPLAN to estimate the economic activities associated with spending in a particular industry or on a particular project. The IMPLAN model extends conventional I-O modeling to include the economic relationships among government, industry, and household sectors, allowing IMPLAN to model transfer payments such as taxes. Producers of goods and services must secure labor, raw materials, and other services to produce their product.

The resources transferred to the owners of that labor or those raw materials and services are then spent to secure additional goods and services or inputs to the products they sell. For example, an organization in a region may develop a company that produces tractors with a value of $1 million. However, to produce that product, they may be required to spend $500,000 in wages and benefits, $200,000 to suppliers of tractor parts, $100,000 for electricity, $50,000 for transportation of goods and raw materials to and from the plant, and $50,000 in various professional services associated with operating a business (e.g., attorneys and accountants). The suppliers will, in turn, spend those resources on labor and raw materials necessary to produce tractors. Workers and the owners of the company will buy goods and services from other firms in the area (e.g., restaurants and gas stations) and pay taxes. The suppliers, employees, and owners of this second tier will, in turn, spend those resources on other goods and services whether within the study region or elsewhere. The cycle continues until all of the money leaves the region.
IMPLAN METHODOLOGY

The model uses national production functions for over 536 industries to determine how an industry spends its operating receipts to produce its commodities. These production functions are derived from U.S. Census Bureau data. IMPLAN couples the national production functions with a variety of county-level economic data to determine the impacts at a state and congressional-district level. IMPLAN collects data from a variety of economic data sources to generate average output, employment, and productivity for each industry in a given county. IMPLAN combines this data to generate a series of economic multipliers for the study area. The multiplier measures the amount of total economic activity generated by a specific industry’s spending an additional dollar in the study area. Based on these multipliers, IMPLAN generates a series of tables to show the economic event’s direct, indirect, and induced impacts to gross receipts, or output, within each of the model’s more than 536 industries.

The model calculates three types of effects: direct, indirect, and induced. The economic impact of BHSU is the sum of these three effects.

CONSIDERATIONS CONCERNING IMPLAN

There are three important points about the use of IMPLAN (or any other input-output model):

It is a fixed-price model. The model assumes that changes in consumption are not limited by capacity and do not affect prices. This assumption does not cause a problem for the analysis presented here because we are taking a snapshot of South Dakota in a specific year.

As in many studies using this type of model, the direct impacts are not calculated by the model; they are a reflection of actual spending levels and patterns created by South Dakota. Changing the level of direct spending allows us to calculate the magnitude of the indirect and induced effects associated with the initial level of spending.

Because the model continues to calculate additional spending until all of the money leaves the region (i.e., “leakage”), the larger and more economically diverse the region, the longer it will take for spending to leave the region and the larger the impact is likely to be. For example, employees of South Dakota may spend some amount of their income on buying a car. If there are no car manufacturers in their state or county, this spending will leave the region and the multiplier effect will stop. At the national level, some portion of that same spending by that same individual may go to a national auto producer. That spending would lead to more spending at the national level than would be captured by a more regional model. The national impact will be larger than the sum in the individual states, and the individual state impact will be larger than the sum of the impacts in its congressional districts.
WHAT IS AN ECONOMIC-CONTRIBUTION ANALYSIS?

Technically, this study is a contribution analysis. The study quantifies the economic contribution of the university in terms of economic impact, jobs, and local and state tax revenue. The study calculates how spending by employees, visitors, and students contributes to the economy of South Dakota and beyond. It examines how expenditures create additional impact in the economy directly and through the multiplier.

For the purposes of this study, an economic contribution is defined as the gross changes in South Dakota’s existing economy that can be attributed to the universities. Contribution analysis is a descriptive analysis that tracks gross economic activity: how spending by the university and its constituencies cycles dollars through the economy. The university’s economic-contribution analysis does not consider how spending at this university may crowd out spending at another college or university within the state. This type of analysis is one of the most common that is performed and is often mislabeled as an economic-impact study. Please note that while the terms used to express the contribution of South Dakota to the statewide economy are referred to as economic impact, this is a contribution analysis.

Spending by students, staff, and faculty who are explicitly participating in activities associated with South Dakota's output represents a “stemming-from effect” and could also be considered a direct effect of the higher-education industry. For example, a student who attends classes and spends $10 on lunch at a local restaurant is a stemming-from effect of the university. This contribution analysis then follows the direct economic activity and associated stemming-from effects through the economy, with the output of each sector broken down and attributed to expenditures on intermediate inputs or to value-added components such as labor, taxes, and returns to capital. Output multipliers, which are sector- and region-specific, are derived from the appropriate model and relate an industry’s economic activity (or changes in the industry’s economic activity) to gross sales in the other sectors of the regional economy.

The contribution analysis does not account for the fact that if a student attending class were a local resident, then the $10 they spent on lunch potentially represents $10 they are not spending at another restaurant elsewhere in town. The direct effect in a contribution analysis includes purchases by students from in and out of state and is neither a measure of changes to the state’s economic base nor a measure of the value added to the region above what was paid to input suppliers.

WHAT SHOULD YOU REMEMBER ABOUT THE STUDY WHEN YOU READ IT?

- It is a point-in-time calculation of impact for FY 19.
- It quantifies the amount of impact that the universities produce each year.
- The economic numbers can fluctuate from year to year based on operational spending, capital spending, pay and benefits, number of employees, number of students, and state appropriation.
- This is an economic-contribution analysis that casts a broader net to calculate impact than an economic-impact study.
- These are conservative numbers and adhere to industry-respected protocols.
WHAT METHODOLOGY WAS USED TO COMPLETE THIS STUDY?

IMPLAN data and software were used to conduct this economic-contribution analysis. The IMPLAN database is built using county, state, ZIP code, and federal economic statistics that are specialized by region, not estimated from national averages, to measure the contribution or impact of an organization’s economic activity.

WHAT WERE THE MULTIPLIERS FOR THIS STUDY?

The multipliers used in this study range from 1.8 to 2.1. The multipliers are derived through the input-output models created using the IMPLAN software based upon industries selected during the modeling process.

WHAT DATA DOES THIS STUDY USE TO CALCULATE THE ECONOMIC IMPACT?

Primary data used in this analysis is for FY 19 and was obtained from the South Dakota Board of Regents and the university.

Data addresses the following subjects:
- Operating expenditures.
- Capital expenditures.
- Pay and benefits by employee type.
- Number and types of students (all in-state and out-of-state students included).
- Athletics.
- Volunteerism.
- Charitable giving.
- Alumni data.

Secondary data was used to estimate the following:
- Student spending habits based on the universities’ budgets for spending (full- and part-time undergraduate and graduate students, excluding tuition and fees).
- Visitor numbers and visitor spending habits (day and overnight visitors).

WHAT ARE THE COMMUNITY-BENEFIT IMPACTS BASED UPON?

Charitable-giving impacts are based upon assumptions found in the U.S. Census donor data. These models do not assume a 100% participation rate for staff, faculty, and students and are not based on averages. Some colleges and universities had primary data available on volunteerism, and in those cases actual hours were used in the calculation. For the purposes of this study, it is assumed that 24.9% of staff and faculty donate an average of $2,064 annually and 14.9% of students donate an average of $250 each year.

Volunteer impacts are based upon assumptions found in the U.S. Census, and the value of a volunteer hour was obtained from the Points of Light Foundation and is estimated at $23.56 per hour.
WHY DID THE SDBOR COMMISSION A STUDY?

The SDBOR commissioned the analysis to quantify the impact of all six public higher education institutions in its system. SDBOR and the university have a number of helpful tools to explain the value proposition for supporting higher education; this independent study is one way to help explain its worth. In trying to explain the value of South Dakota public higher education to internal and external constituents, it is important to quantify the workforce and economic gains realized throughout the state. There are many ways to view the impact and value of a university and university system — economic impact is one.

WHY DOES THIS STUDY LOOK DIFFERENT FROM OTHERS WE HAVE SEEN PUBLISHED?

The veracity of the data and methodology are consistent with industry-standard protocols for conducting an effective economic-impact study that is conservative. The data is an independent assessment of the university’s contribution to the overall economy — the numbers drive the message, not the other way around. The report is designed to make the data analysis accessible to all readers.