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# Humboldt State University Impact

August 2019



# Overview

- **Context:** Humboldt State University is a key engine of the region's economy.
  - HSU attracts dynamic new residents to the region and graduates well-prepared students, many of whom go on to stay in the region and contribute significantly to the economy and community.
  - HSU impacts the region in a wide variety of ways: through its direct spending on goods and services; the quality education that it offers students; the innovations that it spawns; and the community services it provides.
- **Purpose:** This study quantifies HSU's economic impact on the region and documents some of the broader ways that the University impacts the region's workforce, innovation system, entrepreneurial capacity, and community assets.
- **Structure:** The Impact Report is organized around the following domains of HSU impact:
  - **Economic Impact:** HSU spending generates regional employment and revenue; HSU education enhances alumni earnings
  - **Education Pathways:** HSU supports the creation of a diverse, stable workforce
  - **Workforce:** HSU meets the labor demands of key regional industries
  - **Research, Innovation and Sustainability:** HSU conducts research, spurs innovation, and provides regional thought-leadership
  - **Entrepreneurship:** HSU imparts entrepreneurship skills and supports small business development
  - **Community Assets & Services:** HSU enriches the region through a range of community assets and services



# Generating Economic Impact

Universities are engines of the regional economy. In addition to the incalculable value of the learning that its students receive, the impact of a university can be measured, in economic terms, through the effects of its own spending, student spending, and the incremental lifetime income earned by its alumni.

# Impact Modeling Methodology

- ICF used the IMPLAN input-output model to measure the inter-industry impacts of HSU on the regional economy.
- Results are presented in terms of:
  - *Direct impacts*, impacts in the primary industries where spending by the University and its students is focused, such as university operations, construction-related expenses, local student housing, bookstores, and restaurant/food purchases.
  - *Indirect impacts*, impacts in the industries that supply or interact with the primary industries, for example when University capital projects require the purchase of construction-related building materials.
  - *Induced impacts*, represents increased spending by workers who earn money due to direct and indirect impacts, such as when faculty and staff use their wages at local restaurants.
- Output metrics include:
  - **Industry Activity**: The total value of economic activity generated by industry spending
  - **Employment**: Represents the annual jobs created by industry
  - **Labor Income**: Includes all forms of employment income
  - **Tax Impact**: Breakdown of taxes collected by the federal, state and local government, including corporate taxes, household income taxes, and other business taxes.



## Overview of the IMPLAN Model

IMPLAN is an Input-Output/Social Accounting Matrix tool, maintained by Minnesota IMPLAN Group (MIG)

Covers 536 sectors based on the North American Industry Classification System (NAICS).

Widely used tool by federal, state, and local governments

# Modeling Inputs

- The total economic impact of HSU is driven by spending in five key categories, grouped by spending type.
- The table below summarizes the inputs from the economic impact study

Category	Input (\$ Millions)
University Operating Expenditure	\$168.5
University Auxiliary Expenditure	\$25.7
Capital Expenditure	\$5.5*
Student Spending	\$101.7
Alumni Impact	\$349.4



Source: HSU Financial Statements

ICF calculated the direct alumni impact based on data provided by HSU

Notes: \*The direct capital expenditure was developed using a 3-year average from 2015/16 – 2017/18. HSU has already spent \$5.5 million in 2018/19 and expects to spend an additional \$33 million on capital projects over the course of this year and next.

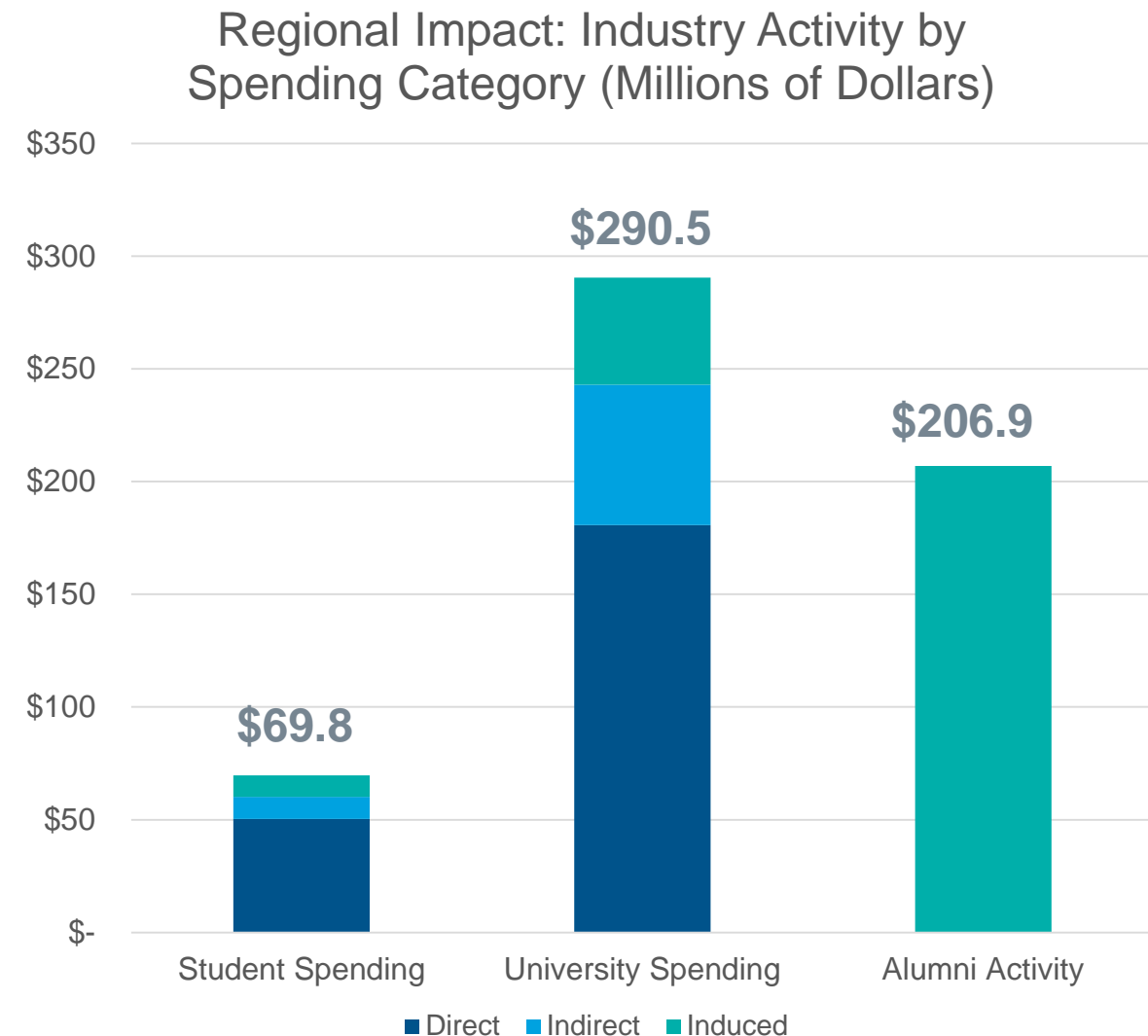
# Summary Results

- Spending associated with Humboldt State University supports over **6,200 jobs** as well as more than **\$180 million** in **labor income**, and more than **\$567 million** in **industry activity**
- Total HSU-related activity generated an additional **\$38.2 million** in **state and local tax revenue** in 2017-2018.
- On average, a degree from HSU adds **\$966,862** in incremental wages over an alumni's lifetime

Including alumni impact, for every dollar invested by the state, **\$6.86 dollars** in regional spending is generated by HSU

# University Spending Drives the Total Impact

- **Direct spending** related to HSU's educational mission totaled \$199.7 million in the 2017-18 academic year. This includes:
  - \$168.5 million in operating expenses
  - \$25.7 million in auxiliary enterprise expenses and;
  - \$5.5 million in annual construction and capital expenditure
- **Total university spending impact** accounted for just under 4,000 jobs, \$96 million in labor income, and \$293 million in industry activity regionally.



# Student Spending

- ***Total student spending*** for the 2017-2018 academic year was approximately \$101.7 million.
- ***Student spending*** supported nearly 670 regional jobs, generated over \$19 million in labor income and drove nearly \$70 million in industry activity across Humboldt County



Image Source: Humboldt State Alumni Facebook Page:  
<https://www.facebook.com/humboldtstatealumni/photos/a.164189515896/10153205879825897/?type=3&theater>

# Alumni Impacts

- In the 2017-18 academic year, HSU alumni living in Humboldt County earned an estimated **\$972.5 million in income** that can be attributed to their HSU degree. Statewide, HSU alumni earned more than \$3 billion.
- The enhanced earning power of HSU alumni supports **1,660 jobs** in the regional economy and **\$65.1 million in labor income** through induced impacts




Image Source: HSU Galleries, HSU Class of 2018:  
<https://www.flickr.com/photos/hsuevents/41168040875/in/album-72157695653998804/>

- An additional **\$16.2 million in state and local tax revenue** can be attributed to incremental alumni earnings in Humboldt County.

# Tax Impact

University expenditures, student spending, and alumni activity create a significant **tax impact** of over **\$38.2 million** in state and local taxes in Humboldt County.



Category	Regional Tax Impact (Million Annually)
University Spending	\$16.7
Student Spending	\$5.5
Alumni Impact	\$16.2
<b>TOTAL</b>	<b>\$38.2</b>

Image Source: Humboldt State Alumni Facebook Page:  
<https://www.facebook.com/humboldtstatealumni/photos/a.10150597963660897/10154325734805897/?type=3&theater>



# Arcata Impacts

Impact Type	Employment	Labor Income (\$Millions)	Industry Activity (\$Millions)	Tax Impact (\$Millions)
University and Student Spending	1,060	\$23.2	\$33.1	\$5.1
Total (Including Alumni Impact)	1,440	\$36.4	\$55.3	\$8.8
Percent of Regional Impact	23%	20%	18%	23%

Source: IMPLAN Analysis. ICF calculations based on data from the 2012 Economic Census of the U.S. All sectors: Geographic Area Series: Economy-Wide Key Statistics: 2012. Output values are in 2018 dollars

- **HSU is a key driver of economic activity in the City of Arcata**
- **Accounting for Alumni Impact, approximately 1,440 jobs, \$55.3 million in industry activity and \$8.8 million in state and local tax revenue is generated in Arcata**

Image Source: Arcata Theater Lounge Facebook Page:  
<https://www.facebook.com/arcatatheatrelounge/>

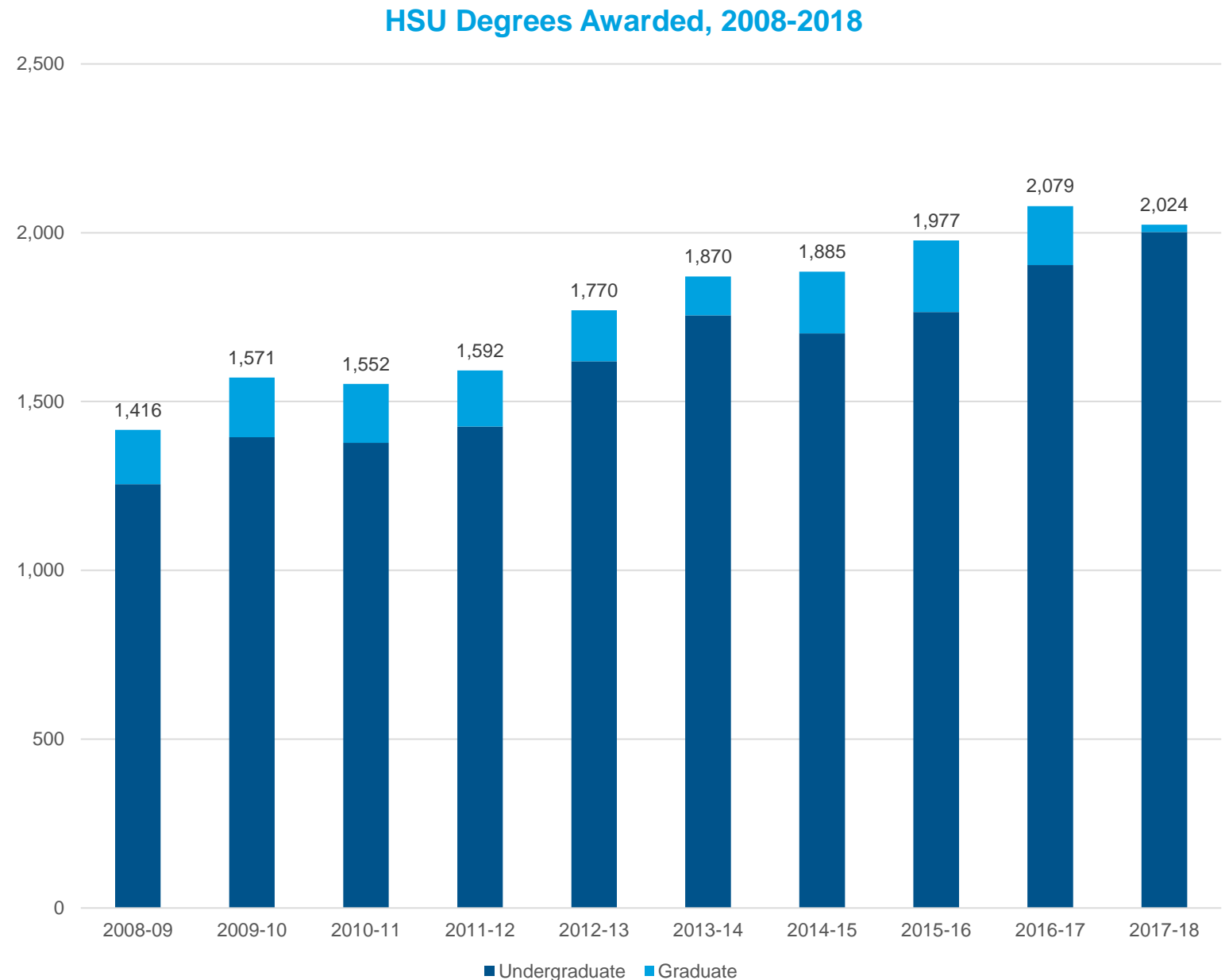


# Supporting the Education Pathway

HSU attracts diverse students to the region in growing numbers, and provides educational opportunity to locals of all ages.

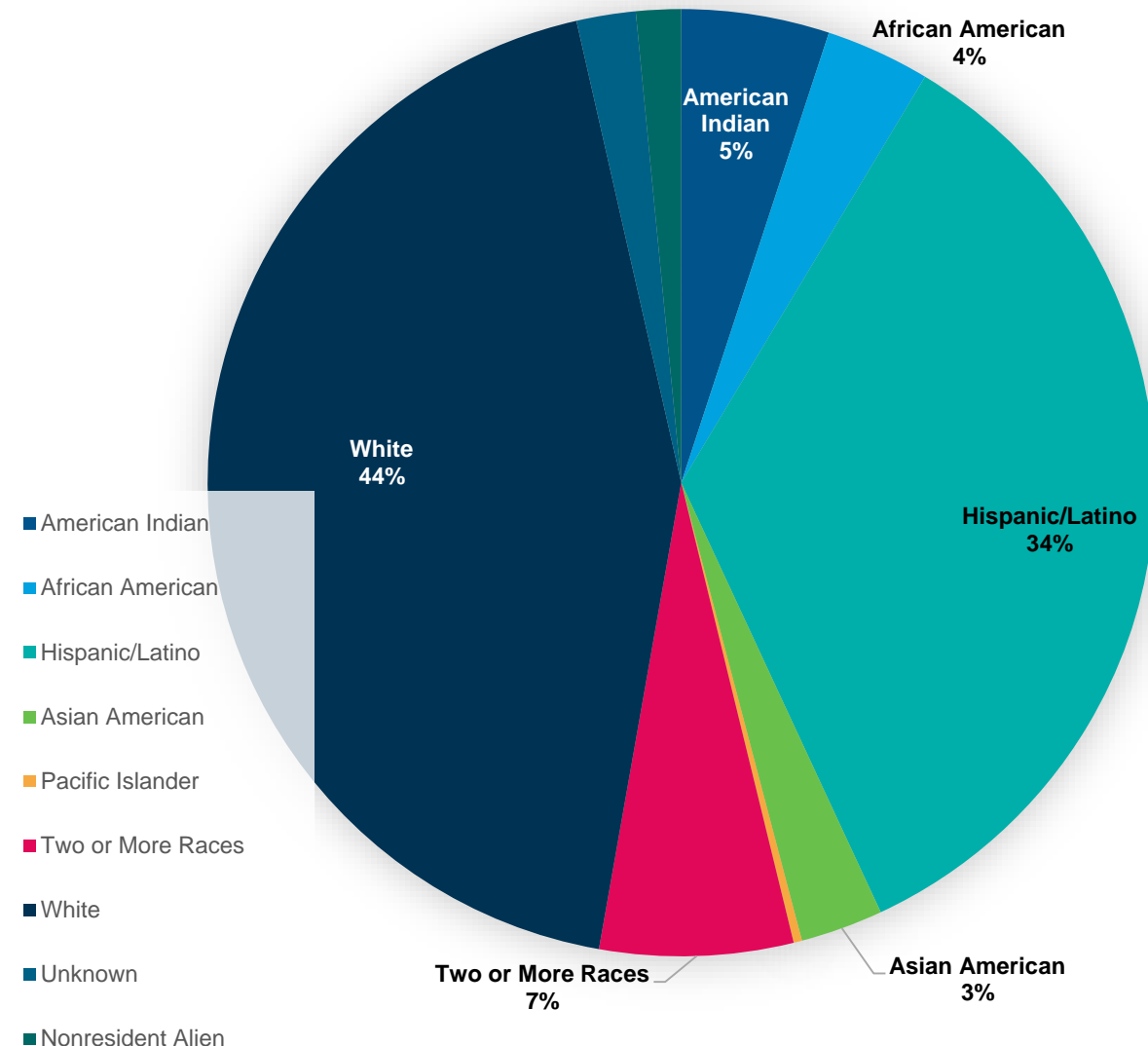
# Attracting and Educating Future Residents

- Each year HSU attracts a student body of seven to eight thousand students
- The number of degrees awarded has remained relatively consistent, increasing by an average of 5% each year between 2008 and 2017, and decreasing 3% in 2018.



# HSU Student Diversity

- Over half of the HSU student population are students of color, 55% are first-generation students, and 54% are low-income.
  - Student Support Services and Educational Opportunity Program support low income and first-generation students
- 5% of HSU's students are Native American (based on self-selection)<sup>1</sup>
  - Indian Tribal and Educational Personnel Programs provides support the HSU Native American students



Source: HSU. Enrolled Student Demographics Report Options. <https://pine.humboldt.edu/~anstud/humis/demo-AAFHEV.html>  
1: Due to federal reporting guidelines, small sample sizes of certain ethnicities, such as American Indian/Native American can be underreported. When examining all ethnicities students may self-select, HSU's American Indian/Native American enrollment is about 5%. (Source: [https://ie.humboldt.edu/sites/default/files/oie\\_enviro\\_scan\\_01\\_26\\_2018.pdf](https://ie.humboldt.edu/sites/default/files/oie_enviro_scan_01_26_2018.pdf))

# Serving the Local K-12 Population

- **Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP):** HSU works with local partners to provide services to low-income, disadvantaged students and their families. Currently GEAR UP is serving the Class of 2020 and Class of 2021 at Del Norte High School, Hoopa Valley High School, and Eureka High School.
- **Upward Bound:** Helps local high school students enroll and succeed in higher education. As of August 2017, the program served 60 students from 6 local high schools.
- **Youth Mentoring Program (YMP):** Since 1969, YMP student volunteers establish one-on-one mentor relationships with local elementary and middle school students.

# Extending Educational Opportunities for Lifelong Learning



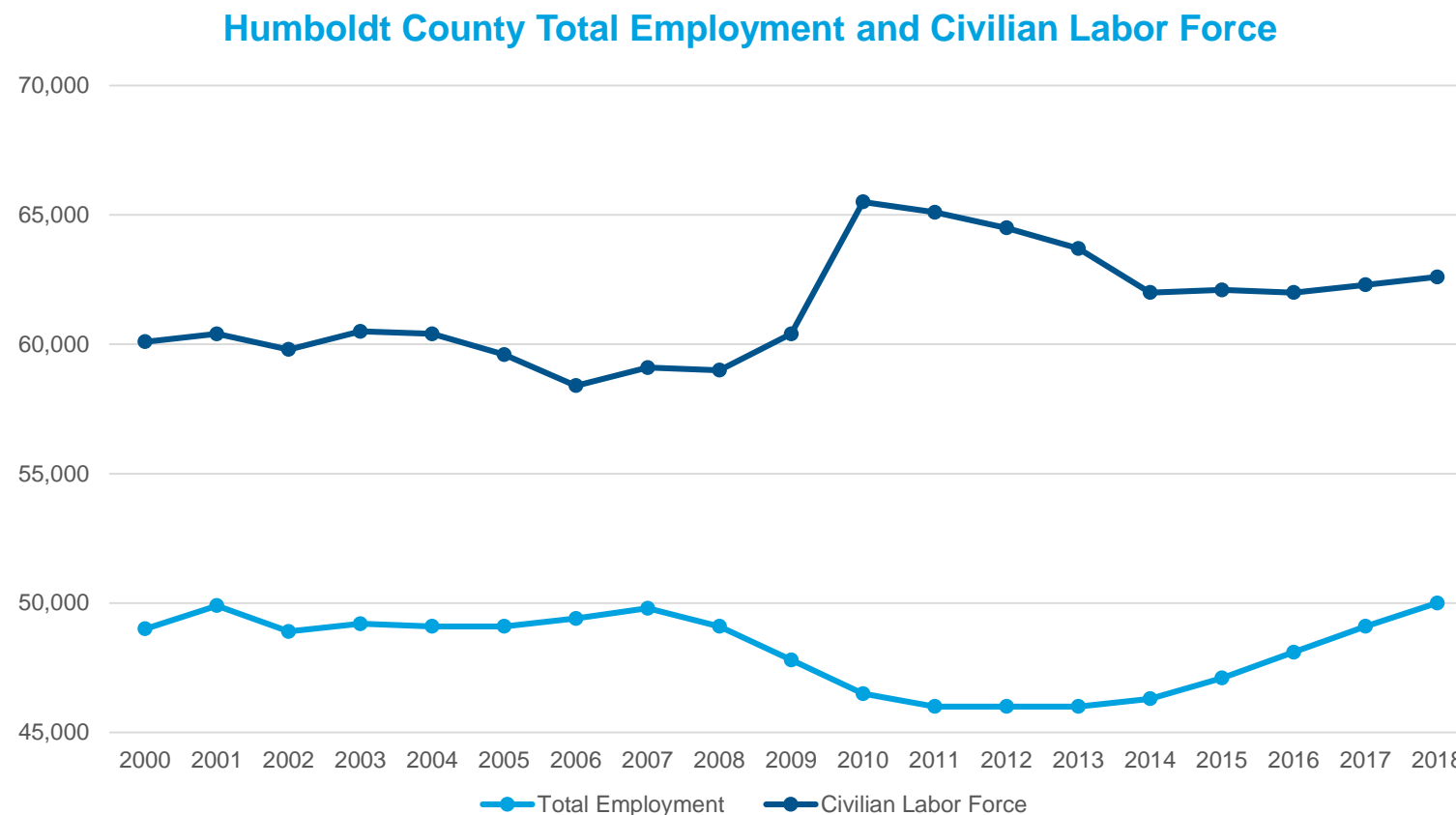
- **College of Extended Education:** In 2018 over 3,000 people took an extended education course and 60 degrees and certificates were awarded.
- **Education Credential Program:** Total enrollment in elementary, secondary, and special education credential programs in 2017 was 98 students, a 4% increase from 2016.
- **Osher Lifelong Learning Institute:** Opportunity for 50+ community for academic engagement. Courses range from culturally-focused, to sustainability, to iPhone basics, to recreational activities like kayaking.



# Meeting the Workforce Needs of Regional Industries

HSU graduates support the growth of key regional industries from education and social work, to forestry, fishing and energy.

# Regional Context



- Humboldt County has a labor force of 64,400, and an unemployment rate of 3.3%.
- While the number of jobs available has been slowly increasing, there have been growing concerns over a decreasing labor force, a void which HSU students and graduates can help to fill.
- HSU is the most northern and rural CSU campus, and it is a key educational resource for several northwestern CA counties.
- HSU works to serve the needs of the six Native American Tribes in Humboldt County, along with many others in neighboring counties.

# Meeting the Region's Workforce Needs

## Education

- 9% of the county currently employed in education field
- 110 HSU undergraduates and graduates earned degrees in education in 2018
- HSU offers credential courses in teaching

## Healthcare

- Humboldt County has had long term issues with health care provider shortages
- The number of healthcare providers increased 14% between 2009 and 2018, but still does not keep up with demand
- HSU discontinued its BSN program in 2011, but just announced its RN-to-BSN program beginning in Fall 2020.

## Social Work

- In the Arcata area there is approximately one psychiatrist for every 4,600 residents
- The number of social workers increased 77% between 2009 and 2018, but still does not keep up with demand
- In 2018 HSU graduated over 750 undergrads in social work/psychology, and 119 graduate students.

## Farming, Fishing, Forestry

- Over 5% more people are employed in the industry in 2018 than in 2009.
- In 2018 over 490 undergraduates received degrees from the College of Natural Resources & Sciences, and 40 graduates.
- The number of CNRS graduates has increased 97% between 2008 and 2018

# Supporting the Region's Forest Industry

## Community Need:

- Humboldt's timber industry has been in decline since the early 1990's, leading to preservation of the Redwoods, but loss of mill jobs. New jobs in forest conservation have replaced lost ones.
- Employment in forestry-related positions has increased 123% between 2009 and 2018.



## HSU Contribution:

- From 2010 to 2014 the HSU Forestry and Wildlife department has averaged an intake of 50 freshmen and transfers each year.
- Fire research is conducted at the HSU wild fire lab, one of only 3 of its kind in the country.
- Student interns in Redwood Rising help to restore the Redwoods.
- Many grads now work in the industry, such as the 30 currently working at Green Diamond Resource Company.

# Supporting the Region's Fishing Industry

## Community Need:

- In 1970, over half of the fish produced and consumed in California were landed in Humboldt Bay.
- In 2016 the local economic impact of the bivalve industry was \$20 million in direct and indirect impacts, and supported 100-full time jobs.



## HSU Contribution:

- HSU's undergraduate fisheries program is one of the largest and best in the U.S., and the only fisheries management program in California.
- HSU grad students conduct research to support and restore fish and their ecosystems at the California Cooperation Fish and Wildlife Research Unit.
- Students protect marine life by checking regional beaches for stranded marine life as part of the Stranding Network.

Source: HSU Now. Study: Humboldt Bay Bivalve Businesses Has a Big Local Impact. 2019. <http://now.humboldt.edu/news/study-humboldt-bay-bivalve-business-has-a-big-local-impact/>

HSU. Fisheries Biology. <https://www.humboldt.edu/programs/fisheries-biology>

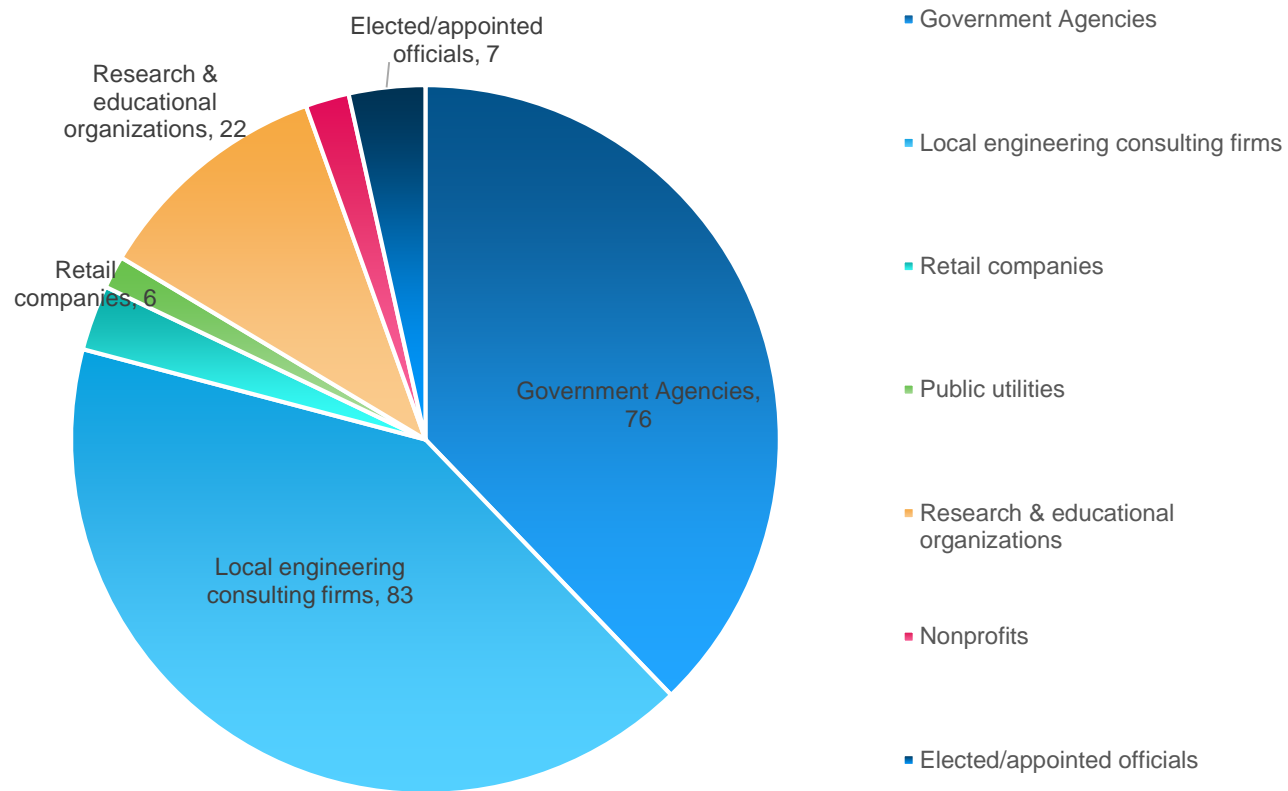
HSU, California Cooperative Fish & Wildlife Research Unit, <https://cuca.humboldt.edu/>

Cooperative Research Units. Klamath REMS, Fisheries. <https://www.coopunits.org/California/Research/Completed/2.7130482688E10/>

HSU Stranding Network. <https://sites.google.com/site/hsummerp/stranding-network>

# Supporting the Region's Environmental Engineering & Energy Industries

HSU ERE Graduates Current Employment



- Engineering occupations are expected to increase over 1% annually until 2024 in the North Coast Region
- HSU graduates 5-10% of the nation's graduates from accredited environmental engineering programs (ABET)<sup>1</sup>
- HSU graduates are now leading many important regional entities, such as the Redwood Coast Energy Authority (RCEA)

# Preparing Regional Leaders

- **HSU alumni serve the public:**

- 4 of the 5 current Arcata City Council members are HSU Graduates
- 4 of the 5 most recent Mayors are HSU Graduates

- **Spotlight: Sofia Pereira**

## Arcata City Council Member 2014-2019

- Graduated from HSU in 2009, major in communications and minor in social advocacy
- Elected as Mayor in December 2017
- Pereira stated that the environmental stewardship and sustainability focused culture at HSU influences her still, saying “[My time on campus] inspired me to further work on issues surrounding climate change, including energy usage, water conservation and waste diversion.”





# Research, Innovation, and Sustainability

HSU research activities—particularly related to the natural sciences, clean energy and sustainability—are key drivers of innovation, provide thought leadership, and have a significant impacts on critical regional issues.

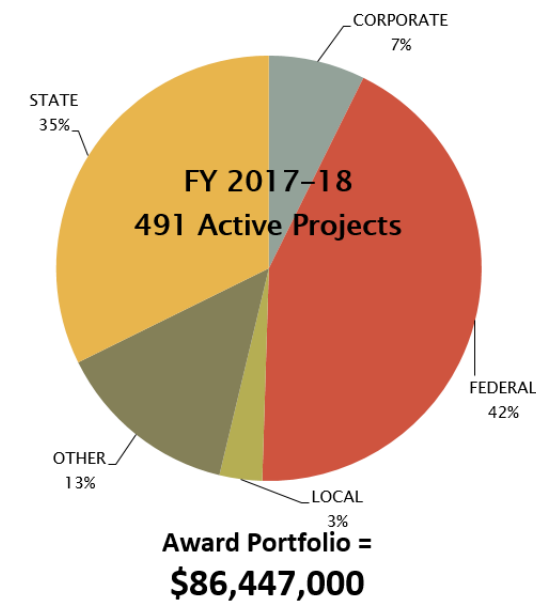
# Conducting Sponsored Research

- **HSU conducts a significant amount of externally-funded research**

- \$28 million in FY17/18; more research per capita than most other CSUs
- SPF currently managing 491 active sponsored research grants, totaling \$86 million
- This research attracts funding to the region and generates over 1,000 local jobs annually
  - FY17/18: 111 full-time auxiliary staff, 611 part-time staff and faculty, and 342 students

- **HSU research largely focuses on education, natural resources management, energy, and sustainability issues; and the resulting innovations often directly benefit the region**

- \$2.7 million grant from U.S. Dep. of Education to establish pathways into teacher education programs for Latinx students, helping to meet the critical need for qualified teachers in the region.
- \$5 million grant from California Energy Commission to build renewable energy microgrid at Redwood Coast Airport, helping to reduce GHG emissions and strengthening energy resilience for critical regional facilities.
- U.S. BLM innovation award to study forest density thinning and fuel treatments to reduce wildfire risks and create resilient forests in the face of climate change.



# Creating Learning Communities

HSU's place-based and experiential research opportunities for students create "learning communities" that both enrich students and positively impact the region.

- **Klamath Connection:** HSU students from a range of scientific and natural resources disciplines conduct experiments alongside scientists working on water quality, habitat restoration, and fish and wildlife conservation that are helping to improve the health and resiliency of the region's critical Klamath River.
- **Global Humboldt:** A "globally" themed learning community that offers students an interdisciplinary introduction to the world. This learning community is designed for students who hope to make a difference, but first want to learn more about the world and what it needs from them.
- **Rising Tides:** Students majoring in marine biology and oceanography conduct hands-on research (sometimes aboard HSU's marine research vessel the *R.V. Coral Sea*) to better understand and protect the region's wild and vibrant coastline.



# Providing Leadership on Clean Energy

For thirty years, the Schatz Energy Research Center has been working to promote the use of clean energy technologies, both within the HSU region and around the world.



- **Research, Policy and Planning Work:**

- **Energy Planning:** Worked with RCEA to analyze Humboldt County's energy needs and develop the RePower Humboldt strategic plan.
  - **Community Power:** Ongoing collaboration with RCEA to establish Community Choice Aggregation (CCA) program.
  - **Offshore Wind:** Working to develop region's offshore wind resource; potential major impacts on regional economy.
- **Microgrid Project Development:** The Schatz Center has paved the way for greener, more resilient energy systems across the region, through its innovative development of several community-scale, low-carbon microgrids:
    - **Blue Lakes Rancheria:** Enables renewable energy generation for the Rancheria and provides emergency power to a designated Red Cross shelter case in case of local disaster and prolonged electricity outages.
    - **Solar+ Project:** Innovative microgrid designed as a demonstration project for a lower-cost "out of the box" microgrid package for gas stations, convenience stores, and similar applications.
    - **Redwood Coast Airport Microgrid:** Developing a cutting-edge microgrid to provide energy resilience for critical regional infrastructure (i.e., airport and Coast Guard Air Station).





# Entrepreneurship & Small Business Development

HSU business education strengthens entrepreneurial skills and activity in and around Humboldt County, and the HSU-sponsored Small Business Development Center (SBDC) is a critical hub for small business development support services across the multi-county Northern California region.

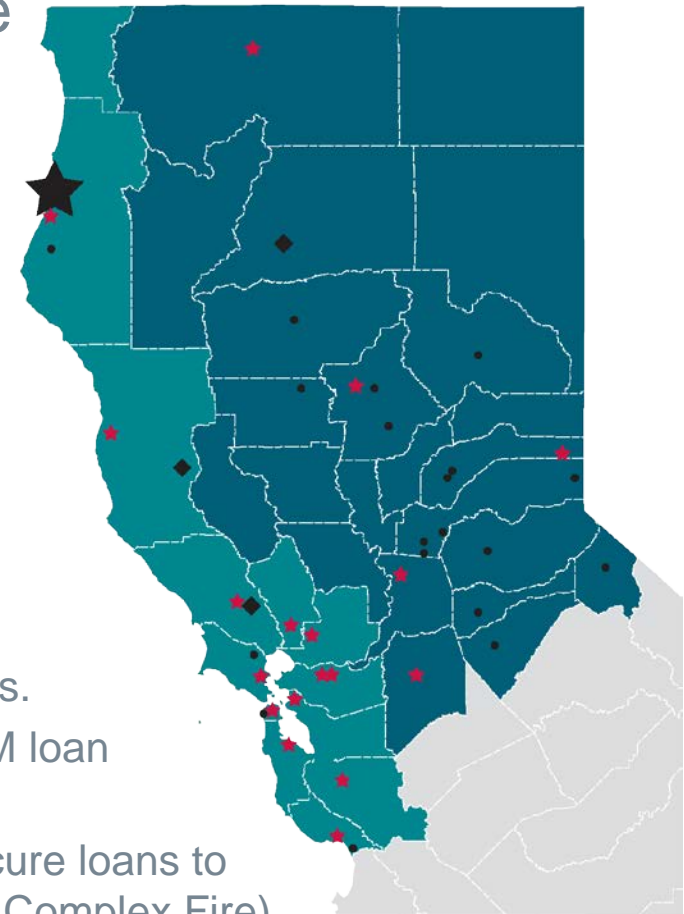
# Entrepreneurship Education

- **Institute for Entrepreneurship Education (IEE)** promotes entrepreneurship education on campus and collaborates with local businesses.
  - Hosts small business speaker series, provides consulting education, and develops entrepreneurship curriculum
- **HSU Entrepreneurs Club** is an on-campus resource for linking students, faculty, and community members who are passionate about entrepreneurship.
  - Hosts events and discussions, and helps link students to regional business networks.
- **Internship Programs:**
  - The School of Business academic internship program, which began in 2012, enables HSU business administration students to work directly with local businesses and support them on activities ranging from business planning to social media assistance to accounting and finance.
  - The HSU *Unternship* program is a hands-on learning opportunity for graduating seniors. Each Untern spends 30-45 hours working on a concrete project to support a local business.
  - **Impact:** Over 100 local businesses and organizations have been served by HSU internship programs:
    - Redwood Region Economic Development Commission, Humboldt Bay Harbor District, Humboldt Redwood Company, Green Diamond Resource, Humboldt Distillery, US Forest Service, Coast Central Credit Union, Humboldt Blood Bank, Southern Humboldt Community Healthcare District, Fortuna Chamber, Six Rivers Solar, and [many more](#).

# Supporting Small Business Development

The HSU-based NorCal Small Business Development Center (SBDC) Lead Center oversees the SBDC program for 36 Northern California counties along the coast from the Oregon border to Santa Cruz.

- **HSU Support:** HSU provides physical space, financing and administrative support for this key hub of regional economic development.
- **Services:** SBDC offers a range of business support services, including one-on-one advising on financing, technology, and public procurement.
- **Results:** Across its full service region, the NorCal SBDC has counseled nearly 36,000 small businesses, assisted in launching more than 2,500 new businesses, and helped create more than 18,000 jobs.
- **Significant Local Impacts:**
  - Within the immediate 5-county region, SBDC has helped to start 448 businesses and created over 2,400 jobs.
  - Recently assisted the Hoopa Valley Tribe with strategic planning and loan preparation to help secure a \$4.2M loan to successfully open a [tribally-owned grocery store](#) in what was formerly a food desert.
  - SBDC plays an important role on the regional disaster response teams that help impacted businesses to secure loans to rebuild and recover from the recent devastating wildfires (e.g., Camp Fire; Tubbs Fire; Carr Fire; Mendocino Complex Fire)





# Community Services and Assets

HSU actively serves the surrounding community, through the community-driven research conducted at its California Center for Rural Policy (CCRP) and through thousands of hours of student and faculty volunteering. Additionally, the University provides vital cultural amenities to the region—including lectures, performances, and public radio station KHSU—that make it a better place to live, work, learn, and play.



# Addressing Rural Community Needs

The California Center for Rural Policy (CCRP) is a community-driven research center, promoting evidence-based policy and planning that address the critical needs of the region's rural communities.

## ■ Rural Broadband Access

- 19 million rural-dwelling Americans do not have access to reliable broadband connection
- CCRP helped Humboldt and Del Norte Counties achieve route diversity and reliable broadband connections

## ■ Community Health and Wellness

- In 2010 CCRP developed a common set of community health indicators for regional use.
- Del Norte County and surrounding tribal regions then utilized these key indicators to guide the allocation of funding under a Building Healthy Communities grant.
- Through regular assessments using this common set of indicators, the communities can determine if policy and systems changes are making a difference and inform the targeting of interventions.

## ■ Food Security

- **Food Access:** In 2005, 2011, and 2017, CCRP and partners conducted the Humboldt Food Access and Pantry Survey to identify critical food insecurity issues.
- **Food Policy:** CCRP funds the Humboldt Food Policy Council, which brings together diverse food system stakeholders to develop and pursue solutions for strengthening food security in the region.

# Enriching the Humboldt Region with Community Service

- Youth Education Services (YES):
  - Each semester, 300-400 student volunteers engage in 12-16 community service programs
  - Annually YES students contribute 20,000 service hours to the community, a value of \$495,000 to the community<sup>1</sup>.
- Service Learning and Academic Internships also create community serving opportunities for students.
  - Annually nearly 1,140 students in SL and AI courses serve an estimated 78,000 hours, a value near \$1.9 million to the community<sup>2</sup>





Source: HSU Now. Zero Waste Conference Coming to Humboldt State. 2018.  
<http://now.humboldt.edu/news/zero-waste-conference-coming-to-humboldt-state/> CSU.  
The Impact of the California State University, Humboldt State University. 2010.  
<https://www.calstate.edu/impact/campus/humboldt.html>  
KHSU Diverse Public Radio. About KHSU. <https://www.khsu.org/about-khsu#stream/0>

# HSU is a Regional Center for Lectures, Arts, and Performances

## ■ Educational Conventions

- **Sustainable Speakers Series:** This series stimulates cross- disciplinary discussions and collaboration around community issues related to energy, the environment, and society.
- **Zero Waste Conference:** Aims to reduce waste, promote resource recovery and conservation, and minimize landfill-bound waste.

## ■ HSU Center Arts

- Center Arts hosts numerous musical guests and speakers that are open to all the community members.
- In AY 2017-18, Center Arts hosted 59 events, including specials, artists & schools, and Associated student presentations, for 38,150 participants

## ■ KHSU Public Radio

- Licensed to HSU, KHSU is a public, community-supported, non-commercial radio station that often highlights University and student activities.
- The KHSU broadcast reaches approximately 135,000 people across Northwest California and Southwest Oregon.

# HSU impacts the region by...

- **Boosting the local economy:** Spending associated with Humboldt State University supports over 6,200 jobs, over \$180 million in labor income, more than \$567 million in industry activity, and \$38.2 million in state and local tax revenue each school year.
- **Supporting the education pipeline** by providing higher education to a diverse student body of nearly 8,000, assisting underserved high school students, and offering opportunities for continuing education.
- **Meeting regional workforce needs** by educating students and directly involving them in contributing to the community in industries with the most need.
- **Operating as the research and innovation engine** in its many learning community programs and the Schatz Center leadership in microgrid creation.
- **Supporting and starting local businesses** by providing students with entrepreneurship education and opportunities, and collaborating with the NorCal SBDC.
- **Actively serving the community** with CCRP research, student volunteer work, and providing a center for conventions, performances, and radio entertainment.



# Updating HSU's Economic Impact

- The 2018 analysis builds upon a previous study conducted by ICF in 2010. Due to differences in the methodology used to calculate the model inputs, the study results are not directly comparable.
- The table below shows a comparison of the direct spending (model inputs) analyzed in each study.
- Several components of the analysis differ, including:
  - Expected fluctuations in capital expenditures
  - Change in methodology used to calculate student spending
    - 2010 Study only accounted for spending from out-of-region students (~3,000 fewer students)
    - Differing assumptions for living situation (on vs off-campus) and per-student expenditures
  - Decreased leakage associated with student spending

Input Category	2010 Study (\$ Millions)	2018 Study (\$ Millions)
University Operating & Auxiliary Expenditure	\$160.1	\$194.2
Capital Expenditure	\$30.1	\$5.5
Student Spending	\$42.2	\$101.7
<b>Total</b>	<b>\$232.2</b>	<b>\$301.4</b>

Student Spending Data Inputs	2010 Study	2018 Study
Number of Students in On-Campus Housing	1,612	2,049
Number of Students in Off-Campus Housing	3,158	5,635
Number of Students Living with Parents	N/A	90
Average Annual On-Campus per Student Spend	\$3,180 (\$3,654*)	\$6,167
Average Annual Off-Campus per Student Spend	\$ 11,730 (\$13,479*)	\$15,673
Average Annual Spend per Student Living with Parents	N/A	\$7,973
Total Student Spending	\$42.2 Million (\$48.5 Million*)	\$101.7 Million

\*Average per-student expenditures were converted to 2018 dollars for the purposes of comparison