



**MISSOURI'S PUBLIC UNIVERSITIES**

# Adding to the State's Bottom Line

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Investing in Missouri's public universities creates opportunities and adds value to the state for four major reasons:

**1** We develop the advanced workforce of the 21st century.

**2** We “teach the teachers.” Our graduates are educating the state's next generation of leaders, from preschool through doctoral programs.

**3** We fuel the economic engine of Missouri every day of every year.

**4** We improve the quality of life in Missouri by providing public benefits, as well as personal benefits.

When you invest in higher education, you invest in the long-term future of Missouri.



University of Missouri System



Southeast Missouri State University



Missouri's 13 public four-year universities comprise the Council on Public Higher Education in Missouri (COPHE). Brian Long is the COPHE Director and can be reached at [brianklong@mchsi.com](mailto:brianklong@mchsi.com)

# 1 Developing the workforce of the 21st century

## THE FACTS ARE OVERWHELMING: HIGHER EDUCATION IS A NECESSITY

- By 2018, it is estimated that 63 percent of all available jobs in America will require a postsecondary education. (*Georgetown University Center On Education And Workforce*)
- Of Missouri's top 50 high-wage occupations projected to have the most job openings by 2018, 34 of these careers (68 percent) require at least a bachelor's degree. (*Missouri Department of Economic Development*)
- Increasing the number of professionals in "STEM" (science, technology, engineering and math) fields and health care fields continues to be a priority for Missouri and the nation. Most of these careers require at least a bachelor's degree, and many require an advanced degree.

## WHAT EMPLOYERS, STUDENTS AND THE PUBLIC ARE SAYING

- Nearly 7 in 10 U.S. adults (69 percent) strongly agree or agree that having a college degree is essential for getting a good job. (*Gallup Poll, 2011*)
- Economic development, more than anything, depends on a talented workforce. And developing that workforce begins in our classrooms. (*Missouri Chamber of Commerce and Industry*)

- 86 percent of college graduates surveyed say college has been a good investment for them personally. (*Pew Research Center, 2011*)

## ONLY COLLEGE GRADUATES CAN FILL OR CREATE THE JOBS OF THE FUTURE

- The Missouri economy needs more college graduates to meet current job demands and to help create the jobs of the future.
- In 2010, Missouri's 13 public universities produced 28,656 graduates, students who earned either bachelor's or advanced degrees. This represents an increase of 14.5 percent over the past five years.

- In 2010, 8,230 students earned bachelor's and advanced degrees in "STEM" (science, technology, engineering and math) and/or health care disciplines. This represents 29 percent of all degrees awarded by Missouri public universities and a 32 percent increase over the past five years.

- In 2010, Missouri public universities awarded 2,500 health care degrees including the following:
  - Physicians . . . . . 191
  - Dentists . . . . . 96
  - Nurses . . . . . 1,130
  - Pharmacists . . . . . 120
  - Optometrists . . . . . 41
  - Comm & Rehab Therapists & Assistants . . . . . 384

## UNIVERSITIES PLAY A MAJOR ROLE IN SHAPING THE STATE'S WORKFORCE

- Workforce development is a continuum, starting in preschool and moving through doctoral-level training and beyond. It begins with strong basics and continues through advanced degrees and lifelong learning.
- Advanced workforce development at public universities builds on the two-year technical workforce development provided by the state's community colleges and other two-year institutions. For example, in 2010, almost 9,000 students transferred from public community colleges and technical colleges to Missouri public universities to pursue upper-division course work and improve their employability.

## STUDENTS KNOW HIGHER EDUCATION IS CRUCIAL — AND MORE ARE ENROLLING

- In 2010, almost 143,000 students were enrolled full- or part-time at Missouri's 13 public universities. This represents a 20 percent increase in enrollment over the past decade, a time in which the state's population increased by only 7 percent.

# 2 Teaching the teachers

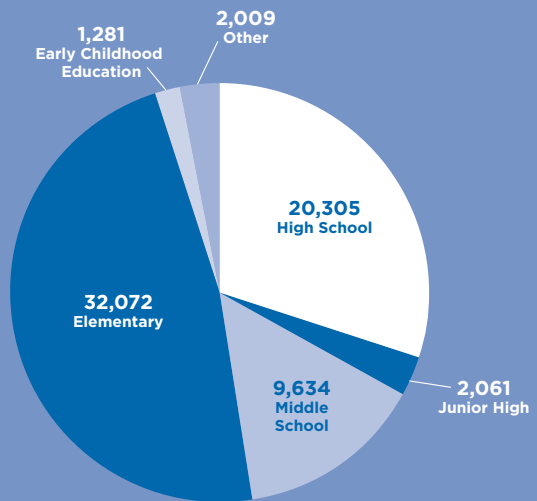
## A WELL-EDUCATED POPULACE IS THE FOUNDATION FOR A STATE'S SUCCESS

- There is nothing more basic to a strong economy for Missouri than excellence in elementary and secondary schools. The foundation for the state's success depends on the education students receive from preschool through high school.
- Missouri's public universities "teach the teachers." Our graduates can be found in Missouri classrooms from preschool through 12th grade. Our graduates also teach at community colleges, technical colleges, private colleges and state universities.

- All teachers in Missouri's public schools (kindergarten through 12th grade) must have at least a bachelor's degree, and the vast majority of our classroom teachers earn their degrees at Missouri's public universities.
- Educating the next generation of educators is an important part of almost every public university's mission. The public universities are also the primary providers of advanced teaching degrees as well as specialized training for practicing teachers already in the classroom.
- In 2010, Missouri's public universities awarded 4,502 degrees in education. Of this total, 1,858 were master's degrees.

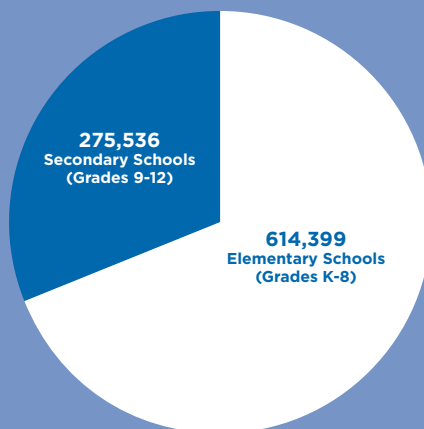
### NUMBER OF CLASSROOM TEACHERS IN MISSOURI (2010-11)

*(Missouri Department of Elementary & Secondary Education)*



### NUMBER OF STUDENTS ENROLLED IN MISSOURI SCHOOLS (2010-11)

*(Missouri Department of Elementary & Secondary Education)*



# 3 Fueling the economic engine of Missouri

## HIGHER EDUCATION IS AMONG THIS STATE'S MAJOR INDUSTRIES

- Missouri's 13 public universities are located in every region of the state and are important employers and engines of economic development.
- Public universities are frequently among the largest employers in their communities and provide stable, well-paying jobs to area residents.
- Missouri public universities employ around 25,538 full-time workers, slightly more than the combined Missouri workforce of all 11 Fortune 500 companies with headquarters in this state (including corporate giants like Monsanto, Express Scripts, Emerson Electric and Peabody Energy).
- In 2010, public universities spent a total of almost \$3.5 billion on wages, supplies, utilities, equipment, contract services, etc. These expenditures, coupled with the economic activities generated by students, support thousands of additional jobs which are multiplied throughout the regional and state economies.
- While there is little agreement regarding the proper method of quantifying the multiplier effects of investments in public universities, studies from other states indicate that a rate of return on a dollar invested ranged from \$2.40 to \$3.00.
- The facilities at Missouri's public universities are a major state asset and have a total replacement value of \$6.7 billion (not including auxiliary facilities). Maintaining these buildings provides another boost to local economies.

## UNIVERSITIES IMPROVE THE STATE'S ECONOMY IN MANY IMPORTANT WAYS

- Missouri's public universities partner with many local, state and national economic development organizations to improve the state's economy, and are important players in efforts to attract and retain employers.
- Every public university has a business development center, innovation center and/or business incubator located on its campus. These offices provide services and counsel for new and existing business throughout the state. For example, the 4,474 clients served in 2011 by universities participating in the Extension Business Development Network reported that this assistance increased sales by \$235 million and was directly responsible for the retention or creation of 7,473 jobs.
- Each year, most of the state's public universities generate revenue from sponsored programs and research. Each year, public universities seek outside funding to carry out their educational and/or research missions. In 2010, the University of Missouri alone spent approximately \$320 million in research, using funds attracted primarily from outside the state but spent within the state; was issued 35 patents and filed 57 patent applications; created seven startup companies based on UM technologies; and brought in \$10.1 million in licensing income.

# 4 Improving the quality of life in Missouri

## THE MORE COLLEGE GRADUATES IN THE STATE, THE MORE WE ALL BENEFIT

### Personal benefits

- College attainment increases one's earning power. Over an adult's working life, high school graduates can expect, on average, to earn \$1.2 million; those with a bachelor's degree, \$2.1 million; and people with a master's degree, \$2.5 million. (*U.S. Census Bureau*)
- College graduates with a master's degree earn twice as much as high school graduates, and with a professional or doctoral degree, earnings are more than two and a half times as much as high school graduates.
- College graduates are much more likely to stay employed, even during economic downturns. The unemployment rate for workers with a bachelor's degree is about half the rate for people with only a high school diploma. Unemployment rates are even lower for those with advanced degrees.

### Public benefits

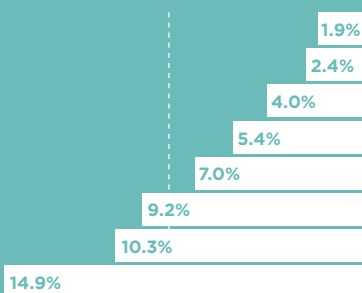
- The higher wages earned by college graduates result in more tax revenue for all levels of government (without these governments having to institute new taxes or higher tax rates).
- College graduates are more likely to participate in civic engagement and less likely to need government assistance.

### High School Graduates vs. College Graduates

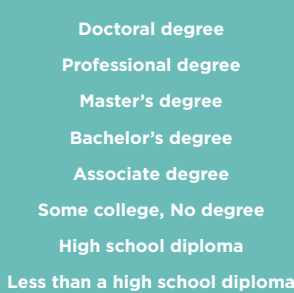
	High School Graduates	College Graduates
Have Health Insurance	55%	84%
Receive Food Stamps	8%	1%
Regularly Vote	55%	79%
Regularly Volunteer	18%	42%

- College graduates are more likely to serve in elected or appointed leadership positions in their communities and statewide organizations. For example, 70 percent of the members of the Missouri General Assembly have earned bachelor's or advanced degrees, compared to 21.6 percent of all Missouri adults. Thirty-eight percent of the members of the Missouri General Assembly have degrees from Missouri public universities.
- Universities add to the quality of life of all residents by providing artistic and cultural opportunities open to the public.
- University students and employees provide many hours of volunteer work in their communities, and perform many other types of community outreach.
- Public universities improve the quality of health in the state. These institutions train doctors and nurses, many of whom stay in the region to work. These institutions also have researchers whose work often explores health and wellness issues that affect many Missourians.

## UNEMPLOYMENT IN 2010



Average: 8.2%



Average: \$782

(U.S. Bureau of Labor Statistics)

# We are determined to achieve state and national goals

## UNIVERSITIES WORK TOWARD GOALS SET BY PUBLIC POLICY MAKERS

- State and national leaders have set a goal of increasing the proportion of the adult population with a college degree or with community college credentials to 60 percent by 2020. This will be challenging in Missouri, since about 37 percent of the population currently meet this standard — but we are up to the task.
- One of the ways we are keeping on track is to annually report our progress on performance measures adopted by the Missouri Joint Committee on Education. These statewide performance measures focus on:
  - Educational attainment
  - Contributions to the economy
  - Investments in the future

## PUBLIC UNIVERSITIES ARE GETTING LEANER AND COLLABORATING WITH EACH OTHER

- Missouri's public universities are continually implementing ways to improve efficiency without reducing the quality of the education that attracts students and serves employers. For example, we have:
  - Reallocated resources within our budgets;
  - Participated in a statewide effort to eliminate degree programs that do not produce very many graduates (72 programs are being discontinued);
  - Redesigned 13 entry-level, high-enrollment courses (with more to come) in a statewide effort to improve student performance and reduce costs;
  - Designated seven courses (with more to come) to be offered statewide to students at any Missouri public university in order to share resources and improve efficiency; and
  - Piloted a purchasing consortium to increase market share and reduce the cost of items and services commonly used at universities.

## UNIVERSITIES ARE DOING MORE EVEN AS THEY RECEIVE LESS SUPPORT FROM THE STATE

- There is no doubt that Missouri's 13 public universities have increased productivity in the face of declining state support while simultaneously holding tuition increases to among the lowest in the nation.
- In fiscal year 2012, state operating appropriations to Missouri's 13 public universities totaled \$703 million. This total is less than the amount appropriated to these universities a decade ago in fiscal year 2002 ... without any adjustment for inflation.
- In the past three years, state appropriations for university operating expenses have fallen 13 percent. During this same period, enrollment has increased by 10.3 percent. This means that state support per full-time equivalent student has dropped 21 percent.
- During the past three years, the costs for average in-state undergraduate tuition and required fees have only increased by a total of about 5 percent, not nearly enough to replace lost state funding.
- During the past three years, the number of degrees awarded at Missouri public universities has increased by 11.5 percent.

## HOWEVER, THIS TREND IS NOT SUSTAINABLE

- Further reductions in state support will outpace our ability to find efficiencies and will threaten our ability to serve students and support Missouri's economic development.
- Missouri needs a vibrant system of public higher education and we need your support — the state's future depends on it!