WE are Oregon’s statewide university with nearly 150 years of teaching, research and outreach that serves every corner of the state. But our impact extends much further. Because leadership knows no borders. Excellence makes lives better everywhere. And innovation changes the world.
The past decade’s momentum has truly transformed Oregon State University into an internationally recognized public research university that continues to grow in strength and impact throughout Oregon, the nation and the world.

Buoyed by the historic achievements of The Campaign for OSU and the accomplishment of raising more than $1.14 billion for the university, Oregon State continues to invest in excellence, innovation and leadership in teaching, research and service to others. For the first time ever, our enrollment exceeded 30,000 students in the fall of 2014, making OSU the largest university in the state.

We are the destination of choice for Oregon’s best and brightest high-achieving students. With Oregon residents totaling 74 percent of incoming freshmen in Corvallis — and with teaching and research staff in each of Oregon’s 36 counties — OSU is Oregon’s statewide university. Our commitment to access and affordability is unwavering, as each year nearly 3,000 Oregon students attend OSU without paying any tuition or fees thanks to the university’s Bridge to Success program.

Oregon State’s rise in international prominence was confirmed when U.S. News & World Report recently ranked us among the top 1.5 percent of more than 16,000 universities worldwide.

Stories of the university’s significant achievements are detailed within this Impact 2015 brochure. This year’s edition also updates Oregon State’s vast economic reach throughout the state and around the world. Please take a few minutes to read about our growing contributions.

This is my 12th year of service as Oregon State’s president. I continue to be inspired by our faculty, students and graduates on a daily basis and am optimistic about OSU’s future. We are not done. I assure you the best is yet to come for Oregon State.

Edward J. Ray
President | Oregon State University
By the numbers: Oregon State continues upward trajectory

- **30,058 Students**
  - Enrollment for 2014 grew by 3.5 percent overall, including 24,383 students in Corvallis, 1,172 students at OSU-Cascades in Bend and 4,503 students taking courses exclusively online through Ecampus.

- **#5 Online Nationwide**
  - U.S. News & World Report ranks Oregon State’s Ecampus at No. 5 out of nearly 300 online bachelor’s degree programs nationwide, with a score of 95 points out of 100.

- **4,410 Graduate Students**
  - Oregon State’s Graduate School has grown by 33 percent since 2009, with graduate students accounting for 15 percent of the university’s overall enrollment.

- **5,878 Graduates**
  - The class of 2014 was Oregon State’s largest ever with graduates from 35 Oregon counties, 49 states, three U.S. territories and 55 countries.

- **22% Students of Color**
  - Since 2009, enrollment of U.S. minority students at Oregon State has increased by 78 percent to 6,320.
Oregon State continues to attract high-achieving students, including 44 percent of incoming freshmen with a high school grade point average of 3.75 or higher. Among top academic achievers from Portland-area high schools, 75 chose Oregon State in 2014, more than any other university.

Oregon residents make up nearly three quarters of the freshmen enrollment in Corvallis. Among all undergraduates, 69 percent are Oregonians, supporting the university’s land grant mission of providing accessible education for the state.

More than 100 countries are represented among Oregon State’s 3,202 international students, a 186 percent increase since 2009.

U.S. News & World Report’s inaugural Best Global Universities Rankings place Oregon State in the top 1.5 percent of 16,000 institutions worldwide, the highest ranking in Oregon.
Capital campaign transforms university

More than a decade ago, Oregon State University quietly began its first-ever comprehensive capital campaign. By the time The Campaign for OSU was publicly launched in October 2007, more than $350 million had been raised toward a $625 million goal.

At the time, such a goal seemed ambitious. Daunting even.

But by October 2010, a year ahead of schedule, more than 53,000 donors had contributed $629 million. So the OSU Foundation and campus leaders raised the goal to $850 million. Then, with momentum still growing, the campaign goal was increased again: $1 billion by the end of 2014.

Donor contributions surpassed the $1 billion mark last January, and by the end of 2014, more than 106,000 donors had given $1.14 billion for scholarships, faculty endowments and construction projects across campus. Only 35 public universities nationwide have raised more than $1 billion in a capital campaign.

The campaign is much more than just a big number, according to Oregon State President Ed Ray. The Campaign for OSU has been about investing in excellence, supporting world-class faculty, helping students enroll and succeed, enhancing innovative programs and making a positive impact in Oregon, the nation and the world.

“The campaign is about developing and energizing a community of dedicated advocates, people who share our vision of what Oregon State can accomplish,” Ray says. “These partners have changed Oregon State forever — and I believe the best is yet to come.”
As Oregon’s statewide and largest university, OSU has a broad economic impact that reaches across Oregon, the nation and the world. And it continues to grow.

Oregon State education, research and engagement programs contributed $2.371 billion to the global economy in 2014. That includes $2.232 billion added to the Oregon economy and 31,660 jobs created statewide. The university’s global economic footprint has grown by $311 million — a 15 percent increase — since 2011.

Direct spending by Oregon State contributed $933 million to the economy in 2014, including $571 million in payroll, $208 million in goods and services and $154 million in capital construction. In addition, more than 500,000 visitors to Corvallis spent $40 million to tour campus, attend athletic, university or cultural events, participate in research meetings or use campus facilities.

Student spending accounted for $318 million, an average of about $10,500 per student in addition to the cost of tuition and on-campus housing.
Statewide Job Creation
31,660 jobs

- **DIRECT IMPACT**
  - 22,170 jobs | 70%
- **INDIRECT IMPACT**
  - 2,720 jobs | 8.6%
- **INDUCED IMPACT**
  - 6,770 jobs | 21.4%

Job Creation in Benton and Linn counties
25,110 jobs

- **DIRECT IMPACT**
  - 20,570 jobs | 81.9%
- **INDIRECT IMPACT**
  - 800 jobs | 3.2%
- **INDUCED IMPACT**
  - 3,740 jobs | 14.9%

Money OSU Infused into the Oregon Economy in 2014
$1.291 billion

- **PAYROLL**
  - $571 million | 44.2%
- **GOODS & SERVICES PURCHASED**
  - $208 million | 16.1%
- **CAPITAL CONSTRUCTION**
  - $154 million | 12%
- **STUDENT SPENDING**
  - $318 million | 24.6%
- **VISITOR SPENDING**
  - $40 million | 3.1%

Economic Impact in Benton and Linn counties
$1.334 billion

- **DIRECT IMPACT**
  - $805.8 million | 60.4%
- **INDIRECT IMPACT**
  - $101 million | 7.6%
- **INDUCED IMPACT**
  - $427.2 million | 32%

SOURCE: ECONorthwest analysis of 2014 Oregon State University expenditure data, visitor data, student enrollment data and 2013 Oregon Travel Impacts Study/Dean Runyon and Associates.
How Oregon State’s impact was measured

Economic consulting firm ECONorthwest analyzed data provided by the university and calculated the impact of Oregon State’s expenditures, employment, student enrollment and visitors. The university’s economic footprint comes from three sources:

- **Direct impacts** result from Oregon State spending on operations, goods and services, capital construction and payroll.
- **Indirect impacts** result from companies purchasing additional supplies or hiring additional employees to support spending by Oregon State.
- **Induced impacts** result from the purchasing power of Oregon State employees.

**Job Creation in Portland**

2,350 jobs

- **DIRECT IMPACT**
  - 330 jobs | 14%
- **INDIRECT IMPACT**
  - 1,370 jobs | 58.3%
- **INDUCED IMPACT**
  - 650 jobs | 27.7%

**Economic Impact in Portland**

$401.9 million

- **DIRECT IMPACT**
  - $64.4 million | 16%
- **INDIRECT IMPACT**
  - $253 million | 63%
- **INDUCED IMPACT**
  - $84.5 million | 21%

SOURCE: ECONorthwest analysis of 2014 Oregon State University expenditure data, visitor data, student enrollment data and 2013 Oregon Travel Impacts Study/Dean Runyon and Associates.
Oregon State joins national initiative to support student retention, graduation

Oregon State University and 10 other major public research universities have formed the University Innovation Alliance, a nationwide initiative to raise first-year retention and six-year completion rates for first-generation students and students from low-income families.

Access to higher education and student success have long been a priority for Oregon State President Ed Ray, himself a first-generation college student.

“This alliance is near and dear to my heart because I know firsthand how important it is to provide mentoring and resources for these students,” Ray says. “Oregon State has some innovative and successful programs, and we look forward to sharing our ideas and learning from other institutions ways we can do even more.”

Other alliance members are Arizona State University; Georgia State University; Iowa State University; Michigan State University; The Ohio State University; Purdue University; University of California, Riverside; University of Central Florida; University of Kansas and University of Texas at Austin. Together these schools enroll almost 400,000 students.

Studies show the United States will face a shortage of at least 16 million college graduates by 2025. Alliance members are focused on addressing this gap at a time when public funding for higher education has been decreasing.

For example, a successful program at Georgia State increased retention rates by 5 percent and reduced the time-to-degree by almost half a semester. If scaled across the 11 member institutions over the next five years, an estimated 61,000 more students would graduate, and students and taxpayers would save almost $1.5 billion.
Oregon State research extends around the world

Oregon State University continues to expand the size, scope and global impact of its research enterprise. The $285 million in grants and contracts for 2014, which includes a record $37 million from private industry, reflect a research portfolio that is deep and wide.

For example:
- Technology firms are working with Oregon State researchers and spinoff companies to make semiconductors and display screens faster, less expensive and more environmentally friendly.
- Pharmacists and other health care providers are working with Oregon State scientists to make advances in pharmaceuticals, medical isotopes, reproductive care and diet that save lives and money.
- New production methods developed at Oregon State are showing up in forest products, transportation, electronics, energy and agriculture.
- 21 startup companies have been launched with support from the Oregon State University Advantage Accelerator program.

These accomplishments are the result of partnerships extending from Oregon and across North America to Asia, Europe, South America and Africa. And their impacts, which improve people’s lives, protect the environment and drive economic growth, are global as well.
Oregon State scientist helps develop promising drug to battle Ebola

When the Ebola virus showed up in the United States last fall, a pharmaceutical company with an Oregon State connection was ready with a promising treatment.

Patrick Iversen, a professor in the College of Agricultural Sciences and adjunct professor in the College of Science, led the research team at Sarepta Therapeutics that developed an anti-viral drug — AVI-7537 — which works by slowing the progress of the Ebola virus so the body can eliminate it.

Iversen, who has 200 medical patents, helped develop AVI-7537 using gene-blocking agents, a more efficient and much faster method for fighting viral infections. Ebola only has seven genes, and Iversen found VP24 — the gene that makes the protein that blocks the host’s immune response — to be the most effective gene for the drug to inhibit.

“What we did is put a little clamp on the cell so it can’t make the virus’ protein,” Iversen says. “We’re messing up the virus’ ability to be successful.”

Researchers conducted multiple clinical trials on infected monkeys and found AVI-7537 to be effective on 60 to 80 percent of the sick subjects. Usually the next step in getting Food and Drug Administration approval would be tests on infected humans, but Iversen expects the company can get emergency approval from the FDA for use in the United States if needed. Sarepta has also offered assistance to the Wellcome Trust, a global health charitable foundation that is supporting humanitarian and medical efforts in West Africa.
A student’s passion for global change

It doesn’t take long to see the determination behind Jenna Wiegand’s wide smile. As she talks about finance and sustainability, her words are expressions of an underlying passion for global change. Wiegand, a University Honors College and College of Business senior from Wilsonville, Oregon majoring in finance and sustainability, was one of 50 students nationwide to receive a $5,000 Udall Scholarship.

Wiegand’s long-term goal is to create a microfinance company that gives small loans to residents in developing countries like Haiti and Jamaica so they can start their own businesses. With development comes economic, social and environmental changes, and she believes microfinance can help people become economic participants and have a voice in how such changes impact their livelihoods.

This objective was solidified by her trip to South Caicos through the School for Field Studies in 2013. On this 8-square-mile island of about 1,600 in the Turks and Caicos archipelago southeast of Florida, Wiegand conducted research on the impacts an impending influx of tourists will have on the livelihoods of local islanders and the marine environment. Her research was part of a larger report to advise the island’s government on development and marine resource management.

“The goal was to create a platform for community members to be heard in national development decisions, something that has never happened before,” Wiegand says.
Oceanography boot camp

If they had come home early, you wouldn’t have been surprised. Half of them got seasick. Equipment failed. And the weather changed unexpectedly. But 11 students from Oregon State University, the University of Oregon and Clatsop Community College brought back valuable data on underwater habitats in the Cape Perpetua Marine Reserve.

Graduate students Alejandra Sanchez (pictured at right) and Rosie Gradoville led the four-day expedition on Oregon State’s research vessel Oceanus. They looked for causes of abnormally low oxygen conditions that created hypoxia “dead zones” in the area and the subsequent effects on fish, crabs and other sea life. Fishing restrictions in the reserve went into effect in 2013, and scientists want to know whether future ecosystem changes are due to natural variability or to changes in fishing.

For the students, the research cruise gave them real-world experience in data gathering, teamwork, logistics and adapting when things don’t go according to plan.

“You have to plan every minute of the cruise, and when something changes, you have to make quick decisions,” Sanchez says.

That’s what they did when oxygen sensors on the ship’s ocean sampler failed and some sensors were lost in heavy seas. To compensate, the students collected extra water samples and relied heavily on measurements from two autonomous underwater gliders.

The students’ results are providing scientists with useful data about the marine reserve. And according to faculty advisor Kipp Shearman, the students got even more from their research experience.

“They had a profound lesson in doing real oceanography.”
New initiative to extend Oregon State leadership in marine studies

Oregon State University has long had a stellar reputation for excellence in marine science research and graduate education. Now the university is looking to use its strengths as a springboard to create an even more dynamic and far-reaching program.

Last year, Oregon State President Ed Ray announced the launch of the Marine Studies Initiative — a university-wide effort involving all 12 Oregon State colleges and the OSU Hatfield Marine Science Center in Newport.

During the next decade, Oregon State will expand its marine studies education, research and outreach programs. By 2025, the university plans to have 500 students-in-residence in Newport. Plans call for a $50 million state-of-the-art teaching and research facility, a new undergraduate marine studies degree and collaboration with partners that include state and federal agencies, private industry, all of Oregon’s coastal community colleges and other universities.

“The importance of the world’s oceans cannot be overstated, and we are at the confluence of a litany of emerging coastal issues, resulting research needs and a demand for increased education and outreach about these issues,” Ray says. “Oregon State is uniquely qualified — and prepared — to take on this challenge.”

Among the issues are climate change, rising sea levels, sustainable fisheries, expected major earthquakes and the impacts of probable tsunamis, ocean acidification, harmful algal blooms, increasing storm intensity and wave heights, coastal erosion, and hypoxia — low-oxygen waters that lead to marine “dead zones.”

There are also opportunities in areas where Oregon State is already an international leader, including wave energy, the development of new seafood products and the use of genetic studies to help endangered whales and other species.
Forestry initiative aims high for advanced wood products

Oregon State is building on its international reputation as a premier natural resources university by creating a $60 million complex to accelerate forestry education programs and research on advanced wood products. The initiative will capitalize on growing global demand for sustainable wood construction materials that can be used in high-rise buildings.

“We are excited about leading a new national effort to advance the science and technology necessary to primarily use wood in the construction of 5- to 20-story buildings,” says Thomas Maness, dean of the College of Forestry.

The Oregon Forest Science Complex will include new construction and renovation of existing College of Forestry facilities to expand its teaching and research capacity while showcasing innovative uses of engineered wood products. The project has a $30 million fundraising goal, and $30 million in matching bonds from the state are included in the governor’s proposed 2015 capital budget.

“Developing these new, competitively priced, environmentally friendly products will not only increase the value of Oregon’s natural resources, but also grow jobs in our rural communities, with substantial benefits for the state,” Maness says.

Oregon State is already a global leader in developing adhesives and manufacturing techniques for engineered wood products, and new research will focus on cross-laminated timbers. Made by bonding together perpendicular layers of dimensional lumber, panels can be more than a foot thick and 80 feet long. Cross-laminated timbers can replace steel or concrete in high-rise construction and are gaining acceptance in Austria, Norway, Canada and New Zealand.

A new 20,000-square foot Advanced Wood Products Laboratory will include large-scale performance testing, computer-controlled and robotic manufacturing systems, plus a pilot plant designed as a learning laboratory for students. Renovations to Peavy Hall, the College of Forestry’s main academic building, will feature advanced wood products in design and construction.
“In addition to concerns about sustainability, there’s a lot of interest in engineered wood construction because these spaces are beautiful, very inviting places to live and work,” Maness says. “We want to show what you can do, creating a place that will be inspiring to our students as well as industry representatives.”

New space is needed to meet increased demand for trained forestry professionals. Over the last decade, the College of Forestry has grown to about 1,000 students, and the college aims to double enrollment. Last year, Oregon State University was named the world’s seventh-best university for forestry and agriculture by Quacquarelli Symonds World University Rankings in a survey of more than 200 schools.
OSU-Cascades focuses on collaboration with Central Oregon

Oregon State University’s branch campus in Bend continues making progress toward its expansion in 2015 to a four-year university that will serve the education, economic and community needs of Central Oregon. OSU-Cascades will welcome its first freshmen class this fall.

Planning for OSU-Cascades’ new campus has been highly collaborative, with more than 100 community members, civic leaders, faculty and students involved in the process. A Campus Expansion Advisory Committee and its task forces developed 115 recommendations, 92 of which have been adopted to address health care, housing, neighborhood livability, regional collaboration, sustainability and transportation.

Last October, the Bend City Council approved the university’s site plan application for its 10-acre parcel in southwest Bend. This was the third approval by the city as part of an ongoing state and local land use review process. The site plan includes buildings for academic space, dining and student housing to accommodate close to 2,000 students.

RESEARCH AND OUTREACH
OSU-Cascades’ Energy Systems Laboratory is leading a $500,000 project to benchmark home natural gas-fueled generators and the performance of commercially available generators.

OSU-Cascades was one of 15 universities nationwide to receive a $305,000 grant from the U.S. Department of Health and Human Services to develop programs that support student mental health and identify and respond to students who are at risk of suicide.

OSU-Cascades’ counseling clinic expanded last year to serve veterans in Central Oregon. Counseling sessions through the graduate counseling program provide a valuable service to veterans and others in the community while allowing master’s students to develop expertise under faculty and clinical supervision.
OSU–Cascades: By the numbers

459
STUDENTS
Nearly 40 percent of students complete internships, practicums and study abroad programs with businesses, organizations and agencies in Central Oregon and around the world.

14%
STUDENTS OF COLOR
165 students identify as coming from a diverse background.

5.5%
ENROLLMENT GROWTH
Total enrollment grew to 1,172 students in 2014.

$2.5
MILLION
Research funding supports projects in energy, teaching, mental health and natural resources.

18
UNDERGRADUATE DEGREES
Degree programs in accountancy and hospitality management were added in 2014.

10.5%
MORE GRADUATE STUDENTS
Enrollment in OSU-Cascades’ three graduate programs grew to 168 students in 2014.
The driving force behind many successful small food and beverage entrepreneurs is passion. And Oregon State University offers multiple resources to bring passion and creative ideas success in the marketplace.

“Most of our business resources came from OSU; it’s all right there in Portland and on the website,” says Shane Sinclair, co-owner of Grandma Chonga’s Salsa. “OSU is pretty much our go-to resource.”

The university’s Food Innovation Center in Portland and Recipe to Market program have helped hundreds of food entrepreneurs test recipes, develop production methods, create marketing and distribution plans and learn best practices from successful local startups. Professional and Continuing Education (PACE) at Oregon State now offers Recipe to Market online.

PACE also offers a series of craft beer and cider workshops in Corvallis, Portland, Bend and Hood River. Courses developed for beer-industry professionals and craft-brewing entrepreneurs feature expert faculty from Oregon State’s premier fermentation sciences program.

One success story is Audra Gaiziunas, an accountant in Raleigh, North Carolina. Deciding to make a career change and pursue her interest in brewing, she completed the PACE program to develop her technical skills and learn firsthand from experienced brewers.

Gaiziunas’ consulting business, Brewed for Her Ledger, provides accounting, finance, business plans and operations strategies for the craft-brewing industry.

“Follow your passion, not the money,” Gaiziunas says. “You will figure out how to make it a sustainable path.”

With help from Oregon State, she has found hers.
As Oregon’s statewide university, OSU takes education well beyond its Corvallis and Bend campuses. OSU Open Campus, a collaborative effort of the OSU Extension Service and Ecampus, combines university and local resources to meet the unique education and economic development needs of rural communities across Oregon.

In Madras, for example, a small business owner faced closure due to a lack of qualified welders in the area. OSU Open Campus stepped in with a plan and set up use of a local high school welding lab. Central Oregon Community College (COCC) provided an instructor, and a local nonprofit brought in funds for equipment. In all, 17 participants completed the course, including eight high school students and nine unemployed or underemployed adults. All the adults now have good-paying welding jobs, two businesses were saved, and one of the younger students finished his GED and is now enrolled at COCC.

In Klamath Falls, a degree partnership program between Ecampus and Klamath Community College (KCC) allows students to work toward an Oregon State bachelor’s degree in agricultural sciences close to home. The online degree program includes on-the-ground mentoring in Southern Oregon from OSU Extension and KCC faculty.

“OSU Open Campus expands the university’s commitment to the people of Oregon,” says Oregon State President Ed Ray. “In six communities throughout the state, progress is being made in college attainment, economic development and successful partnerships to encourage a seamless transition into and through the educational pipeline.”

OSU Open Campus communities include Tillamook, Hood River, Madras, Prineville, Klamath Falls and Coos Bay, with plans for further expansion statewide.
Dynamic research builds national reputation for Oregon State robotics program

When Jonathan Hurst became Oregon State’s first roboticist in 2008, he quickly created the university’s laboratory on robot locomotion. Since then, his next-generation device — known as ATRIAS 2.1 — has become the world’s first robot that accurately reproduces two-legged walking dynamics. This approach has the potential for agile, efficient movement, including walking up and down stairs or over unpredictable, rough terrain. Such robots could perform routine household tasks for the disabled or take on dangerous emergency response and military missions.

Oregon State’s fast-growing robotics program is becoming a national leader. Hurst is one of almost a dozen Oregon State researchers specializing in biomechanics, environmental sensing, human interaction and autonomous networks.

In addition, the university’s Open Source Lab hosts the Robot Operating System (ROS), an open-source software infrastructure with about 100,000 worldwide users, which is rapidly becoming the de facto standard for robotics software development in academia and industry.

Oregon State has one of a few degree-granting graduate robotics programs in the nation, offering both master’s and doctorate degrees. Recent graduates have been hired by organizations such as NASA, the Jet Propulsion Laboratory, Hewlett-Packard, SpaceX and DF Friedrich Automation. Research partners include Daimler Trucks North America and SRI International, along with the University of Michigan, Carnegie Mellon University, Texas A&M University, Virginia Tech and Delft Technological University in the Netherlands.