Arizona State University
Achievements
2002 – 2014
In 2002, Arizona State University initiated its transformation into a revolutionary model for higher education: the New American University. Six years later, Newsweek hailed ASU’s transformation as “one of the most radical redesigns in higher learning since the modern research university took shape.” In 2014, that New American University blueprint officially became the

**ASU Charter**

ASU is a comprehensive public research university, measured not by whom it excludes, but by whom it includes and how they succeed; advancing research and discovery of public value; assuming fundamental responsibility for the economic, social, cultural and overall health of the communities it serves.

Here is a sampling of the many achievements advanced by Arizona State University, from 2002 to 2014. Information current through 2015 is provided if available.
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No student qualified to learn at the research university level should be denied access to a college education of the highest order. Since 2002, ASU has expanded institutional access to historic levels while increasing academic rigor and quality.

Measured by whom it includes and how they succeed...
Student economic diversity

ASU has made major progress in its mission that no qualified Arizona student be denied access to a college education based on an inability to pay.

- Total financial aid for undergraduate students grew from $195 million in 2002 to $829 million in 2014, an increase of 325 percent. The number of undergraduate students receiving financial aid grew from 25,594 in 2002 to 57,761 in 2014, a 125-percent increase.
- Pell Grant recipients (first-time freshmen) increased 165 percent from 2002 to 2014, from 1,209 to 3,200 students.
- In May 2009, the university announced the President Barack Obama Scholars program, which more than tripled the number of students from families with the greatest financial need who are eligible for financial aid that helps cover the direct cost of college attendance.
- ASU has twice awarded $1 billion in all forms of financial aid. In 2014, 69,283 students benefited; $466 million of that total was awarded in the form of scholarships and grants to 54,392 students.
- Average indebtedness of ASU undergraduates continues to be below the national average of $25,600 for public universities, according to College Board figures for 2012–13 graduates. ASU bachelor’s degree recipients who were Arizona residents had an average loan debt of $21,944.
- ASU is a top destination for transfer students, according to U.S. News & World Report. A record 9,363 new students transferred to ASU from community colleges or other universities in fall 2014; up 69.3 percent from 2002.
Student ethnic diversity

- **ASU has greatly increased access to the university while more closely reflecting the demographics of Arizona in faculty, staff and student populations.**

  - While enrollment has increased 49.8 percent — 55,491 in fall 2002 to 83,147 in 2014 — minority enrollment increased from 20.7 percent of the student population to 34 percent.
  
  - International student enrollment has grown by 149.7 percent, from 3,544 in 2002 to 8,851 in 2014.
  
  - Undergraduate international enrollment increased by 259.8 percent, from 1,324 in 2002 to 4,764 in 2014. International students constitute 7 percent of undergraduate student enrollment.
  
  - Graduate international enrollment increased by 84.1 percent, from 2,220 in 2002 to 4,087 in 2014. International students constitute 25.9 percent of graduate student enrollment.

ASU is ranked among the best institutions in the U.S. for ethnic minorities by publications focused on diversity. Diverse Issues in Higher Education placed 27 ASU programs among the top 10 graduate and professional degree producers for minorities. More than 90 ASU programs were among the top 100.

**Diverse Issues in Higher Education, 2013 U.S. rankings**

- 1st — Native American doctorate (all disciplines, education, public administration/social service, law)
- 2nd — Hispanic doctorate (foreign languages, literature, linguistics)
- 2nd — Native American master's (engineering)
- 3rd — Hispanic doctorate (mathematics, statistics)
- 3rd — Hispanic master's (architecture and related)
- 3rd — Native American master's (all disciplines)
- 5th — Asian American doctorate (education)

**Hispanic Outlook in Higher Education, 2014 U.S. rankings**

- 6th — colleges granting graduate and undergraduate degrees to Hispanics
- 13th — Hispanic enrollment in graduate degree programs

**The Condition of Latinos in Education, Fact Book 2015**

- 15th — Latino bachelor's degrees (all disciplines)
- 17th — Latino doctorate degrees
Student success

With every graduating class, ASU students have proved they are ready to take their place as innovative and dynamic leaders. Levels of achievement, degree attainment and persistence climb year after year.

- For the fall 2014 freshman class, the median score on the SAT was 1110 — up from 1100 a year ago — and 24.0 on the ACT.
- In 2013, ASU’s University Student Success Centers logged 139,400 visits, a sevenfold increase since 2007.
- ASU is one of the top 10 producers of Fulbright students in the nation: 207 since 2002. In 2013–14, ASU tied for third place for Fulbright student awards with Princeton and Rutgers.
- ASU has produced six Truman Scholars and seven Marshall Scholars since 2002.
- 421 National Merit Scholars were enrolled at ASU in fall 2013, a 22-percent increase over 345 in 2001.
- 245 National Hispanic Scholars were enrolled at ASU in fall 2013, a 528-percent increase over 39 in 2001.
- ASU is one of the top recipients in the nation of National Security Education Program/Boren grants for study in countries of critical interest to U.S. security: 95 grants have been awarded since 2002.
- For the past three years, more than half of Arizona’s highest-achieving students awarded prestigious scholarships from the Flinn Foundation have chosen ASU; 47 of 82 Flinn scholars.
- 50 Bill and Melinda Gates Millennium Scholars were enrolled at ASU in fall 2013.

Degree production and persistence

- ASU awarded 19,761 degrees in 2014, up from 18,916 the previous year.
- The six-year graduation rate for the fall 2008 freshman cohort was 63 percent, up from 52 percent for the cohort that entered in fall 1996.
- Freshman persistence through fall 2014 was 84 percent, up from 77 percent in 2002.

Faculty excellence

ASU has increased the number of faculty who have achieved high levels of accomplishment and recognition in their fields by adding these award recipients, fellows or academy members:

- Nobel laureates — 2, both since 2002 (ASU faculty and researchers also contributed to the Intergovernmental Panel on Climate Change which shared the 2007 Nobel Peace Prize.)
- Pulitzer Prize — 6 winners; 3 since 2002
- Woodrow Wilson International Center for Scholars — 1 fellow since 2002
- American Academy of Arts and Sciences — 11 members (including 1 emeritus faculty); 9 since 2002
• National Academy of Engineering — 8 members (including 3 emeritus faculty); 6 since 2002
• National Academy of Sciences — 11 members; 10 since 2002
• Institute of Medicine — 2 members since 2002
• National Academy of Education — 4 members (including 2 emeritus faculty); 2 since 2002
• National Academy of Public Administration — 5 members (including 1 emeritus faculty); 4 since 2002
• National Endowment for the Humanities — 29 fellows (including 9 emeritus faculty); 7 since 2002
• National Humanities Center — 6 fellows; 1 since 2002
• The Royal Society — 3 members; 1 since 2002
• American Philosophical Society — 1 member
• American Association for the Advancement of Science — 65 fellows; 45 since 2002
• American Educational Research Association — 16 fellows
• Sloan Research Fellows — 5; 1 since 2002
• Fulbright program — 99 Fulbright American Scholars with 127 awards; 57 with 74 awards since 2002
• Guggenheim Fellows — 28 (including 5 emeritus faculty); 18 since 2002
• MacArthur Fellows — 1
• Institute of Electrical and Electronics Engineers — 24 fellows; 13 since 2002
• American Council of Learned Societies — 8 fellows (including 2 emeritus faculty); 3 since 2002
• Ford Foundation fellowships — 19 recipients; 13 since 2002
• Harvard Society — 1 junior fellow
• American Academy of Nursing — 17 fellows
• American Academy of Nurse Practitioners — 6 fellows
• National Academies of Practice — 3 fellows
• Center for Advanced Study in the Behavioral Sciences — 10 fellows (including 2 emeritus faculty); 3 since 2002
• Robert Wood Johnson Foundation — 1 executive nurse fellow
• National Academy of Kinesiology — 2 fellows
• American College of Sports Medicine — 5 fellows, 1 past president
• Center for Advanced Study in the Behavioral Sciences — 10 fellows (including 2 emeritus faculty); 3 since 2002
• Robert Wood Johnson Foundation — 1 executive nurse fellow
• National Academy of Kinesiology — 2 fellows
• American Academy of Nutrition and Dietetics — 2 fellows
• American Heart Association — 1 fellow
• American Speech-Language-Hearing Association — 4 fellows
• Institute of Medicine — 3 members
• President’s Commission on Educational Excellence for Hispanics — 1 member
Dozens of ASU faculty in their early careers have been recognized with these awards as those who will lead the advancement of scholarship in their fields for the future.

- National Science Foundation Early Career Development Award — 61 recipients
- National Institutes of Health Director's Early Independence Award — 1 recipient
- U.S. Department of Energy Early Career Principal Investigator Program Award — 1 recipient
- U.S. Department of the Army Young Investigator Program — 1 recipient
- Presidential Early Career Awards for Scientists and Engineers — 7 recipients; 6 since 2002

Faculty and staff ethnic diversity

- In 2014, minority employees (excluding graduate assistants) accounted for 28 percent of ASU faculty and staff, an increase of 38.8 percent since 2002.
  - The number of Blacks/African-Americans increased from 344 to 428, a 24.4-percent increase.
  - The number of American Indians/Alaska Natives declined from 193 to 159.
  - The number of Asian-Americans grew from 1,122 to 1,538, a 37.1-percent increase.
  - The number of Hispanics/Latinos also grew from 1,122 to 1,538, a 37.1-percent increase.

- From 2002 to 2014, ASU’s tenured and tenure-track faculty grew from 1,671 to 1,839, a 10.1-percent increase. During that same period, the number of minority faculty members among tenured and tenure-track faculty increased 54.4 percent.
  - The number of Blacks/African-Americans declined from 45 to 41.
  - The number of American Indians/Alaska Natives grew from 16 to 21, a 31.3-percent increase.
  - The number of Asian-Americans grew from 132 to 250, an 89.4-percent increase.
  - The number of Hispanics/Latinos grew from 116 to 150, a 29.3-percent increase.
ASU’s identity as a force for meaningful, purpose-based research and discovery attracts the best students and faculty, makes learning experiential, trains 21st-century minds, and benefits our community, the nation and the world.
Research growth

- ASU’s research enterprise has more than tripled in the past decade. Research expenditures grew from $123 million in 2002 to $426 million in 2014.

ASU’s rankings as a research enterprise, according to data from the National Science Foundation:
- In the last five years, one of the fastest-growing research enterprises among U.S. universities with research expenditures exceeding $100 million.
- Research expenditures rank 17th of 768 U.S. universities without medical schools.

Of 912 U.S. universities, ASU’s research expenditures rank:
- 19th for engineering and non-science disciplines.
- 8th for the humanities.
- 14th for the social sciences.

- To accommodate this acceleration in research, the university has added more than 1.5 million square feet of space in new research buildings since 2002.
ASU’s research enterprise has been expanded with the addition of the following centers, institutes and initiatives:

- Adaptive Intelligent Materials and Systems Center
- Advanced Computing Center
- Advanced Technology Innovation Center
- American Indian Policy Institute
- Arizona Center for Algae Technology and Innovation
- Arizona Center for Medieval and Renaissance Studies
- Arizona Initiative for Renewable Energy
- ASU–Sichuan University Joint Confucius Institute
- Beyond: Center for Fundamental Concepts in Science
- Biodesign Institute
- Bob Ramsey Executive Education
- Center for Adaptive Neural Systems
- Center for Advanced Studies in Global Education
- Center for Advancement of Evidence-Based Practice
- Center for Advancing Business through Information Technology
- Center for Aging and Life Course Biology
- Center for Applied Behavioral Health Policy
- Center for Applied Nanoionics
- Center for Applied Structural Discovery
- Center for Archeology and Society
- Center for Asian Research
- Center for Behavior, Institutions and the Environment
- Center for Bio-Inspired Solar Fuel Production
- Center for Binarchaeological Research
- Center for Biodiversity Outcomes
- Center for Bioelectronics and Biosensors
- Center for BioEnergetics
- Center for Bioenergy and Photosynthesis
- Center for Biological Physics
- Center for Biology and Society
- Center for Biomolecular Integrated Circuits
- Center for Biosignatures Discovery Automation
- Center for Civic Education and Leadership
- Center for Cognitive Ubiquitous Computing
- Center for Competitiveness and Prosperity Research
- Center for Computational Nanoscience
- Center for Convergence of Physical Sciences and Cancer Biology
- Center for Critical Inquiry and Cultural Studies
- Center for Digital Antiquity
- Center for Earth Systems Engineering and Management
- Center for Educational Research for Global Sustainability
- Center for Embedded Systems
- Center for Emergency Management and Homeland Security
- Center for Environmental Economics and Sustainability Policy
- Center for Environmental Fluid Dynamics
- Center for Environmental Security
- Center for Evolution and Medicine
- Center for Evolutionary Medicine and Informatics
- Center for Film, Media and Popular Culture
- Center for Games and Impact
- Center for Global Health
- Center for Health Information and Research
- Center for Healthy Families Research
- Center for Healthy Outcomes in Aging
- Center for Indian Education
- Center for Infectious Diseases and Vaccinology
- Center for Innovations in Medicine
- Center for Jewish Studies
- Center for Law and Global Affairs
- Center for Law, Science and Innovation
- Center for Metabolic Biology
- Center for Metabolic and Vascular Biology
- Center for Meteorite Studies
- Center for Molecular Design and Biomimetics
- Center for Nanotechnology in Society
- Center for Negative Carbon Emissions
- Center for Organizational Research and Design
- Center for Personalized Diagnostics
- Center for Photonics Innovation
- Center for Policy Informatics
- Center for Political Thought and Leadership
- Center for Population Dynamics
- Center for Practice, Research and Innovation in Mathematics
- Center for Real Estate Theory and Practice
- Center for Renewable Energy Electrochemistry
- Center for Research on Education in Science, Mathematics, Engineering and Technology
- Center for Science and the Imagination
- Center for Services Leadership
- Center for Single Molecule Biophysics
- Center for Social Cohesion
- Center for Social Dynamics and Complexity
- Center for Solid State Electronics Research
- Center for Strategic Communication
- Center for Strategic Supply Research
Center for the Study of Institutional Diversity
Center for the Study of Race and Democracy
Center for the Study of Religion and Conflict
Center for Supply Networks
Center for Sustainable Health
Center for Sustainable Tourism
Center for Translational Health Science
Center for Urban Innovation
Center for Violence Prevention and Community Safety
Center for World Health Promotion and Disease Prevention
Center on the Future of War
Ceramics Research Center
Complex Adaptive Systems Initiative
Confucius Institute
Consortium for Health Promotion and Behavioral Change
Consortium for Science, Policy and Outcomes
Decision Center for a Desert City
Decision Theater
Diane Halle Center for Family Justice
Donald W. Reynolds National Center for Business Journalism
Edson Student Entrepreneur Initiative
Edward C. Prescott Center for the Advanced Study in Economic Efficiency
Family and Human Dynamics Research Institute
Flexible Electronics and Display Center
Future Arts Research
GeoDa Center for Geospatial Analysis and Computation
Hartford Center of Gerontological Nursing Excellence
Healthcare Delivery and Policy Program
Healthcare Transformation Institute
Healthy Lifestyles Research Center
Herberger Institute Research Center
Hispanic Research Center
Information Assurance Center
Institute of Human Origins
Institute for Humanities Research
Institute for Interdisciplinary Salivary Bioscience Research
Institute for Social Science Research
International Institute for Species Exploration
JP Morgan Economic Outlook Center
Julie Ann Wrigley Global Institute of Sustainability
Knight Center for Digital Media Entrepreneurship
Kyí Center for Water Policy
L. William Seidman Research Institute
Laboratory for Algae Research and Biotechnology
Learning Sciences Institute
LeRoy Eyring Center for Solid-State Science
Lincoln Center for Applied Ethics
LightWorks
Lodestar Center for Philanthropy and Nonprofit Innovation
McCain Institute for International Leadership
Melikian Center: Russian, Eurasian and East European Studies
Morrison Institute for Public Policy
National Center for Excellence on SMART Innovations
North American Center for Transborder Studies
Office of Clinical Partnerships
Origins Project
Osher Lifelong Learning Institute
Partnership for Research in Spatial Modeling
Power Systems Engineering Research Center
Practice, Research and Innovation in Mathematics Education Center
Prevention Research Center
Quantum Energy and Sustainable Solar Technologies
Research and Education Advancing Children’s Health
Security and Defense Systems Initiative
Sensor Signal and Information Processing Center
Simon A. Levin Mathematical, Computational and Modeling Sciences Center
Solar Power Laboratory
Southwest Interdisciplinary Research Center
Stardust Center for Affordable Homes and the Family
Sustainable Algal Biofuels Consortium
Swette Center for Environmental Biotechnology
TUV Rheinland Photovoltaics Test Lab
Virginia G. Piper Center for Creative Writing
Water and Environmental Technology Center
Wireless Integrated Nano Technology Center
W. P. Carey Center for Entrepreneurship

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Research milestones

An ambitious trajectory begun in 2002 has established ASU as one of the fastest-growing research enterprises in the U.S. In 2014 alone, the university’s research expenditures exceeded $426 million — all of it dedicated to confronting challenges, finding solutions and making them reality for the benefit of all.

Research milestones 2013–2014

• Researchers at the Flexible Electronics and Display Center, working with Army Research Lab scientists, broke their own record for the world's largest flexible color organic light-emitting display prototype. At 14.7 diagonal inches, the display nearly doubled the size of the earlier prototype, and offers high performance at low cost with low power. FEDC researchers also produced the world's largest flexible X-ray detector prototype.

• ASU was selected by the National Geospatial-Intelligence Agency for a five-year, $20-million award to launch a partnership to research strategies for anticipating and mitigating national security risks associated with climate change. Known as the Foresight Initiative, the cooperative venture explores how the effects of climate change on resources such as water, food and energy could contribute to political unrest and instability.

• The Bill and Melinda Gates Foundation awarded $5.8 million to Kurt VanLehn from the School of Computing, Informatics and Decision Systems Engineering to develop technologies for enhancing mathematics education. The Office of Naval Research awarded $1.5 million to VanLehn to develop an intelligent tutoring system for science education.

• An ASU engineering research team led by electrical engineering professor Cun-Zheng Ning made a major advance in nanoscale laser technology. The breakthrough should enable the improvement of many electronic devices to perform reliably at room temperature, paving the way for their use in a variety of practical applications.

• Higher Education for Development, a USAID funding agency for institutions of higher learning, awarded $1.3 million to Victor Agadjanian from the Melikian Center to conduct a Women's Leadership Project in Armenia, titled “Advancing Gender Equality and Women's Empowerment in Armenia.”

• The U.S. Department of Energy's Advanced Research Projects Agency–Energy awarded funding to Dan Buttry, professor and chair of the Department of Chemistry and Biochemistry, to develop technologies to capture carbon emissions from power plants. This is the third ARPA-E award ASU has received.

• The U.S. Department of Energy awarded $15 million to the ASU-led ATP3, the national Algae Testbed Public-Private Partnership that will position the Arizona Center for Algae based in the Ira A. Fulton Schools of Engineering Technology and Innovation as the leading facility of its kind in the U.S.

• ASU opened one of the university's largest research buildings to date, Interdisciplinary Science and Technology Building IV. ISTB 4 advances research and discovery, and encourages children in the community to explore futures as scientists and engineers with high-tech labs, interactive environments and open spaces that allow the public to witness research and technology development.
• The National Institutes of Health awarded more than $8 million in three grants to the College of Nursing and Health Innovation to study significant health issues in minority populations through community-based interventions. The studies will examine ways to promote colorectal cancer screening among underserved populations, obesity prevention among low-income Mexican-American women and children, and insulin sensitivity and weight-specific quality of life in obese Latino adolescents.

• Meg Breuning, assistant professor in the School of Nutrition and Health Promotion, received a High Risk-High Reward grant from the National Institutes of Health; one of only 15 of such awards that are funded directly from the office of the NIH director. The $1.25-million grant, to be used over a five-year period, will allow Breuning to establish a program to examine how friendship networks impact and predict eating, physical activity and weight among diverse youth in a college environment. Her findings will inform the development of interventions to improve the health of young people at risk for weight-related problems.

• Randy Nelson, director of the Molecular Biosignature Analysis Unit at the Biodesign Institute, was awarded a four-year, $5-million investment from the National Institutes of Health to research biomarkers that help predict cardiovascular disease, and new treatments for Type 2 diabetes.

• The National Institutes of Health awarded a $3.3-million grant to Emily Beth Winslow in the Department of Psychology to study a parenting-skills intervention program that could help prevent substance abuse and mental health disorders in children.

• ASU researchers are part of solar energy projects funded by the Australian and U.S. governments, with $68 million for two eight-year programs and $15.5 million for 11 collaborations. Professors Christiana Honsberg and Liping Wang in the Ira A. Fulton Schools of Engineering, and Ellen Stechel, deputy director of ASU LightWorks, lead ASU’s efforts.

• The Mellon Foundation awarded $600,000 to an international team of researchers to study humanities and sustainability. ASU’s Institute for Humanities Research is the U.S. lead on the project, with IHR Director Sally Kitch as coprincipal investigator. Partners include the University of Sydney and Trinity University. The project examines cultural changes necessary to address sustainability problems.

• Researchers in the Biodesign Institute were awarded $3.3 million from the National Institute on Drug Abuse to research DNA nanoscaffolds as platforms for a vaccine to reduce nicotine dependence. Principal investigators include Yung Chang, Hao Yan, Sidney Hecht, Li Liu and Sudhir Kumar from ASU, and Paul Pentel from the Minnesota Medical Research Foundation. Their work was also published in Science on March 22, 2013.

• Researchers in the Ira A. Fulton Schools of Engineering, led by Kaushal Rege, developed a safer alternative to stitches and staples for bowel surgery using nanocomposite materials that act like surgical solder. Their work appeared in the March 29, 2013, issue of ACS Nano.

• Scientists in the School of Life Sciences, led by Ferran Garcia-Pichel, discovered that temperature determines where key soil microbes can thrive — microbes critical to forming topsoil crusts in arid land. This work appeared as the cover story in the June 28, 2013, issue of Science.

• The journal Science cited ASU research on protein structures as one of the top 10 breakthroughs of 2012. For the first time, scientists determined the three-dimensional structure of a protein by femtosecond nanocrystallography. The technique, developed by the ASU team and their collaborators at the Linac Coherent Light Source free-electron laser in the SLAC National Accelerator Laboratory, allows scientists to study reaction chemistry involving proteins in real time.
Researchers at the Flexible Display Center successfully manufactured the world's largest flexible color organic light-emitting display prototype using advanced mixed oxide thin-film transistors.

The Global Institute of Sustainability received a $27.5-million investment from the Walton Family Foundation to develop and deploy promising solutions to sustainability challenges and to educate future sustainability leaders.

ASU was awarded a $30.7-million, four-year contract from the Department of Defense to develop a diagnostic technology called immunosignaturing for rapid detection of exposure to infectious disease agents before symptoms occur. The effort is led by researchers in the Biodesign Institute's Center for Innovations in Medicine.

ASU established the McCain Institute for International Leadership, named for U.S. senator from Arizona John McCain. The institute promotes character-driven leadership, and research and decision-making in the areas of humanitarian work, human rights and national security.

The National Science Foundation selected ASU as host university for EarthScope. This program explores the structure and evolution of the North American continent and Earth's structure and dynamics. It is the world's largest science project, recording data over 3.8 million square miles. Popular Science called the program one of the universe's 10 most epic projects.

The Virginia G. Piper Charitable Trust established a $10-million strategic investment at ASU to improve all aspects of health care delivery. The initiative includes biomedical informatics, clinical data and public health surveys to assess health care outcomes and determine best prevention and treatment practices.

ASU was awarded $18 million from the National Science Foundation and the U.S. Department of Energy to establish the Engineering Research Center for Quantum Energy and Sustainable Solar Technologies. The Ira A. Fulton Schools of Engineering lead the QESST center, which uses quantum mechanics to make harnessing solar power economically viable and sustainable. The center has attracted more than 40 industry partners.

Faculty in the School of Earth and Space Exploration were selected by NASA to lead the team constructing an instrument for OSIRIS-REx, a mission to collect asteroid samples and measurements. This instrument will be the first piece of intricate space hardware to be constructed on the ASU campus.

The April cover of Science magazine featured 3-D DNA nanoforms created by ASU Biodesign Institute researchers. The forms were constructed through a revolutionary technique known as “DNA origami” and have potential applications in many areas, including computing and health care.

G3Box, a startup company created by a team of ASU undergraduate and graduate students, was named 2011 College Entrepreneur of the Year by Entrepreneur magazine. Three of the five finalists in the competition (including the winners) were ASU teams in the Edson Student Entrepreneurship Initiative.
• Biodesign Institute researcher Cheryl Nickerson received the **Exceptional Scientific Achievement Medal**, NASA’s highest commendation for contributions to science. NASA designated Biodesign as its No. 1 university customer, putting the institute first in line for zero-gravity experiments on the International Space Station.

• A team of ASU students created the Note-Taker, a camera that assists visually impaired students in the classroom. The device won awards for software design in the **Microsoft Imagine Cup U.S. finals** (1st place) and the Imagine Cup World Finals (2nd place).

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**Research milestones 2010**

• Mary Lou Fulton Teachers College received $19 million from T. Denny Sanford to launch the **Sanford Education Project**, adapting successful tools from Teach For America to attract, prepare, support and retain highly effective teachers.

• ASU created the **Center for Convergence of Physical Science and Cancer Biology** with funding from the National Institutes of Health’s National Cancer Institute. The center, one of 12 in the U.S., unites physical scientists, mathematicians and engineers to study cancer cells as physical objects.

• Elinor Ostrom, founding director of ASU’s Center for the Study of Institutional Diversity, won the **2009 Nobel Prize in Economic Sciences**. Ostrom, a leading scholar in the study of common pool resources, was the first woman to win the economics prize.

• ASU launched **LightWorks**, an initiative to position ASU as a leader in solar-based energy and light-inspired research. LightWorks capitalizes on ASU’s strengths in renewable energy fields including artificial photosynthesis, biofuels and next-generation photovoltaics.
The White House named ASU home to the Energy Frontier Research Center for Bio-inspired Solar Fuel Production. The Department of Energy funded the project with $14 million over a five-year period.

ASU’s Flexible Display Center was named one of the Top 10 Technologies of 2008 by Wired magazine.

ASU launched the Origins Initiative with the Origins Symposium, bringing together 70 leading scientists and scholars, including Steven Pinker, Richard Dawkins, Donald Johanson, Brian Greene, Craig Venter and Lawrence Krauss. Stephen Hawking participated via video.

ASU became the only university to receive two grants from the U.S. Department of Energy’s Advanced Research Projects Agency–Energy program. The grants were directed toward work on a new class of high-performance metal-air batteries and the use of photosynthetic bacteria to produce automotive fuel from sunlight, water and carbon dioxide.

On June 18, NASA launched the Lunar Reconnaissance Orbiter with the Lunar Reconnaissance Orbiter Camera. ASU professor Mark Robinson was principal investigator of the LROC imaging system.

Research into algae as a biofuel, led by researchers in ASU’s Laboratory for Algae Research and Biotechnology, was among Time magazine’s Top 50 Inventions of 2008.

Phil Christensen, Joshua Bandfield and Alice Baldrige used the Mars Orbiter Camera with JMARS software, designed and operated at ASU’s Mars Space Flight Facility, to find the first evidence of salt deposits on Mars, showing where water once existed. Their report was published in the March 31 issue of Science.

The International Institute for Sustainability was established in 2004 with a $15-million gift from Julie Ann Wrigley. It was renamed the Global Institute of Sustainability in 2005.

In 2005, ASU created a visualization center connecting the science and expertise of ASU with the needs of the community. Decision Theater assists policy makers and others through complex issues including urban growth, public health, education and the environment.

The Flexible Display Center was created through a five-year cooperative agreement between ASU and the Army Research Laboratory, with a $43.7-million grant from the Army. The center develops electronics that are flexible, rugged and lightweight, operating on low power.
## Entrepreneurship and economic development

Entrepreneurship in a university setting has traditionally been housed within a single college or program — typically the business or engineering school. ASU makes entrepreneurship available in every program of study, embracing it as a mindset; a way of approaching not only venture creation, but learning, education and faculty-student-staff interaction. ASU's efforts in entrepreneurship span programs and operations.

### AzTE

Established in 2003, Arizona Technology Enterprises is the intellectual property management and technology transfer organization for ASU. AzTE works with faculty, investors and industry partners to speed the flow of innovation from research laboratories to the marketplace.

- Since 2003, 76 companies have been created based on ASU research discoveries.

**According to data from the Association of University Technology Managers, among U.S. universities with more than $300 million in research expenditures, ASU's 2013 rankings were:**

- 3rd for invention disclosures.
- 7th for startups.
- 8th for licensing agreements per $10 million in research expenditures.

**In 2014, ASU set records for:**

- number of invention disclosures — 261.
- U.S. patents — 58.
- number of startup companies — 12.
- major agreements licensing ASU technologies for commercial use — 90.

- Startup companies that license ASU intellectual property have attracted nearly $425 million in funding from venture capital firms and other investors.
- Three ASU spinoffs — Fluidic Energy, HealthTell and Heliae — employ more than 370 people worldwide, with 215 of those jobs currently in Arizona.
**SkySong**

In 2008, ASU opened SkySong, an innovation and entrepreneurship hub created in partnership with the city of Scottsdale. A 2012 study by the Greater Phoenix Economic Council found that SkySong and its tenants generate $113.6 million in annual regional economic output. At the close of 2014, SkySong housed more than 900 employees in more than 300,000 square feet of space. SkySong has a combined occupancy of 92 percent, including 40 companies representing six nations. A $44-million, 325-unit apartment complex, constructed in 2013, is 80-percent occupied. SkySong has also become a premier event facility for the Phoenix metropolitan area. In 2013–14, SkySong hosted more than 5,100 events with combined attendance of nearly 68,000.

**E + I**

ASU is creating a universitywide culture that values entrepreneurship through the Office of Entrepreneurship and Innovation. E+I supports economic growth by encouraging entrepreneurism and innovation in students, faculty and units, and in communities ASU serves. E+I's vision is to be a national model for entrepreneurship and innovation at a public research university, with solutions that meet growth goals of the university and strategic partners while making lasting contributions to the region’s entrepreneurial ecosystem.

E+I’s ASU incubator supports students who want to launch early-stage startups. They receive office space, mentoring, the possibility of funding and a path to the Edson Student Entrepreneur Initiative. The incubator was launched in late 2014 to make entrepreneurial programs and resources available to more students.
The Edson Student Entrepreneur Initiative gives students opportunities to develop innovative ideas and launch startup ventures.

- The initiative provides funding, office space, training and mentorship to help students launch and grow for-profit ventures as well as more-than-profit initiatives — those that sell or distribute a product or service for profit while simultaneously funding social change.

- Since its inception in 2005, the Edson Initiative has provided 260 unique student ventures with nearly $2.5 million in seed funding grants. In the last three years these student ventures created more than 150 full- and part-time jobs, filed more than 30 patents and raised more than $2 million in external investment.

- The 2014–15 cohort is setting a record pace: In the first two quarters, teams raised more than $1 million in external funding and filed seven patents, and nine of the 20 ventures are in revenue.

**Accolades for recent Edson teams include:**

- 1st-place winning teams in the Microsoft Imagine Cup, 2011 and 2012
- Entrepreneur magazine College Entrepreneur of the Year — winner in 2011; finalists, four years
- AppSumo Lean Startup competition — winner (first time)
- Ford College Community Challenge 2013 — winner
- Arizona Commerce Authority Innovation Challenge 2013 — winner (first time)
- Cleantech Open — Rocky Mountain regional winner (first time)
- Idea to Product Global competition — two finalists; placed second (2012 and 2013)
- Entrepreneurs Organization Accelerator — one accepted (first time)
- Global Student Entrepreneur Award Global Finals, graduate level — one accepted (first time)
- Startup Open global competition — two in top 50 finalists (first time)
- Inc. magazine Coolest College Startup in America — two finalists; 1st, 2nd place overall (first time)
- Arizona Commerce Authority Fast Grants 2013 — two winners (first time)
- $200,000 investment in 2014 from Maricopa County Industrial Development Authority Manufacturing Fund for Edson startup Bosse Tools
- Arizona Governor’s Innovation Council 2014 Startup of the Year — finalists: Bosse Tools, EBook Glue

E+I established its Women’s Entrepreneurship Initiative in 2014 with a $175,000 grant from JPMorgan Chase and a $50,000 grant from the U.S. Small Business Administration. These programs will encourage women entrepreneurs, vastly outnumbered by men, to launch and scale successful ventures. As part of the initiative, ASU is providing an intensive training curriculum and an accelerator program for a cohort of women entrepreneurs.

The Arizona Furnace Technology Transfer Accelerator forms, incubates and launches new companies created from technologies and intellectual property licensed from premier research institutions.

- Furnace provides seed funding, office space and access to top industry mentors to commercialize discoveries made in university research labs. Furnace is recommended for graduate and postdoctoral students and junior researchers.
- Furnace’s pilot program successfully launched, inviting into the accelerator more than 50 applicants and 10 new companies formed from unique technologies discovered in Arizona. This inaugural cohort culminated with a Demo Day, with the 10 companies pitching their businesses to investors and business community members. The companies have raised an additional $300,000 in grants and external venture funding.
- Through a $1-million grant from the U.S. Department of Defense, Furnace expanded to serve entrepreneurs in Rome, New York; San Diego, California; and Natick, Massachusetts. These sites are home to major U.S. Armed Forces laboratories through which ASU helps match area entrepreneurs with laboratory inventions and intellectual property.

The Entrepreneurship Outreach Network provides collaboration spaces in public libraries, creating networks for people to connect and find valuable resources regarding entrepreneurship and small business ownership. The collaboration spaces, which are free and open to the public during library hours, provide access to coworking space as well as resources, such as ASU Startup School, that people can use to move ideas forward. In 2014, ASU received a $249,000 grant from the Institute of Museum and Library Services to expand entrepreneurship education to communities across the country.
E+I programs resulted in ASU's ranking by the University Business Incubator Index as 18th among the top 20 University Business Incubators in the World, and 10th on the list of the Top 10 University Business Incubators in the U.S. The UBI Index reviewed 550 university incubators around the world and studied 150 university business incubators in 22 countries. Incubators were measured with more than 50 performance indicators.

ASU's support for student entrepreneurship has transformed the university into a leading school in the field. Since 2007, more than 2,000 applications have been received for ASU's entrepreneurship competitions, more than 48,000 students enrolled in entrepreneurship courses within their programs of study, and more than 900 entrepreneurs trained in programs at SkySong. In only the first two months of 2015, programs designed by E+I, including ASU Launch Days on campus, have reached more than 5,500 students.

These initiatives and entrepreneurial successes were recognized on an international level in 2010 when ASU was one of the first universities worldwide invited into the Changemaker Campus Consortium by Ashoka, a global network of more than 2,500 social entrepreneurs.
A New American University is responsive to the communities it serves and advances solutions through innovation, outreach and groundbreaking partnerships. The ASU knowledge enterprise works collaboratively with organizations, cities, states and international partners.

Assuming responsibility for the community
Social embeddedness

- **ASU has transformed itself to carry out the mission of assuming fundamental responsibility for the good of the broader community.**

  - Each year since 2008, ASU has been named to the President's Higher Education Community Service Honor Roll, the highest federal recognition a university can receive for commitment to volunteering, service learning and civic engagement. In academic year 2012–13, more than 16,000 students engaged in 660,000 hours of community service.

  - ASU’s commitment to higher education as an agent for positive social transformation earned the university a place in the Changemaker Campus Consortium, announced in 2010 by Ashoka, a global nonprofit network of more than 2,500 social entrepreneurs. Today, ASU is one of an elite group of 25 colleges and universities, including Johns Hopkins, Cornell, Tulane and Duke.

  - In 2011, Changemaker Central opened on ASU’s four Arizona Metropolitan Academic Campuses. Changemaker Central is a student-run organization that provides opportunities and resources to inspire, catalyze and sustain student-driven social change. Signature programs include 10,000 Solutions, the Innovation Challenge, and Devils in Disguise. The last, a student-organized day of service, had unprecedented impact in 2013 with more than 1,600 students volunteering at 40 Phoenix-area organizations.

  - Each year since 2010, ASU has been named one of the Peace Corps’ Top Colleges and Universities. In 2015, ASU ranked 15th among large colleges and universities for production of Peace Corps volunteers, its ninth consecutive year in the top 25. Currently, 39 ASU alumni are participating in the corps, part of the 989 ASU alumni who have served overseas with the corps since its inception in 1961.
• ASU was awarded the Carnegie Foundation for the Advancement of Teaching’s Community Engagement classification in 2006 and again in 2015, qualifying in both areas: curricular engagement, and outreach and partnerships.

• The Lodestar Foundation donated $5 million, the largest gift in its history, to the ASU Center for Nonprofit Leadership and Management, which was renamed the Lodestar Center for Philanthropy and Nonprofit Innovation.

• ASU has 498 community outreach programs in 180 locations offered by 124 units of the university, totaling 841 outreach opportunities.

• ASU Preparatory Academy opened the ASU Preparatory Academy Polytechnic in 2008, and its Phoenix location in 2009. Only five years later the Arizona Department of Education named the Polytechnic high school the state’s No. 1-performing charter school.

• American Dream Academy, a program giving parents in low-income, disadvantaged areas skills and tools to transform their children’s educational experience, won the regional and national 2009 C. Peter Magrath University Community Engagement Award. More than 25,000 parents have graduated from the academy since 2006. The program has served more than 400 schools and organizations, indirectly benefiting more than 60,000 low-income, minority youth throughout the Phoenix area.

• The President’s Medal for Social Embeddedness, launched in 2004, recognizes ASU teams that demonstrate excellence in identifying community needs and addressing them by cultivating partnerships.

• Established in 2003, the Stardust Center for Affordable Homes and the Family engages in design and build efforts to create affordable, sustainable housing that is also culturally specific.

• Since 2010, Ignite @ ASU has engaged more than 80 speakers to share their ideas for change with 1,150 students, staff and community members on four campuses. Community partners have included Arizona State Credit Union and Ignite Phoenix.

• Since 2008, ASU has been among the top 20 large universities in the U.S. for Teach For America corps member placement. In 2013, ASU ranked 14th for TFA placement with 42 members, up from 41 the previous year. ASU ranked 3rd for applications produced, and No. 1 for Latino applicants.

• In 2010, ASU launched the Sanford Inspire Program with a five-year, $18.85-million investment from entrepreneur and philanthropist T. Denny Sanford. Based on ASU’s partnership with Teach For America, Inspire transforms the way ASU recruits, selects and prepares K–12 teacher candidates.

• For two consecutive years, Washington Monthly has named ASU among the top 50 U.S. universities for commitment to the public good. Examining a school’s social mobility, research and service, the 2013 survey listed ASU 49th overall and 7th for social mobility, a measure of recruitment and graduation of low-income students.

• ASU strengthened its partnership with the Valley of the Sun United Way by forming one of only six student United Way groups in the western region. ASU Student United Way received the 2012 Signature Program Award from United Way Worldwide for its commitment to the Alternative Spring Break program. In 2014 the group was named Student United Way Organization of the Year for raising $70,000 and collecting 5,000 pounds of food and 1,300 children’s books.
• ASU is one of 33 universities in the Clinton Global Initiative University network. As a member of this consortium, ASU supports, mentors and provides seed funding to leading Sun Devil student innovators and entrepreneurs. In 2014 ASU hosted the 7th annual CGI U international congress, providing students opportunities to meet experts and form partnerships.

• In 2012, ASU began a partnership with the MasterCard Foundation to support economically disadvantaged students from Sub-Saharan Africa in preparing to become leaders who effect social and economic change in their home countries. Now in its third year, the MasterCard Foundation Scholars program at ASU supports 70 students.

• The College of Nursing and Health Innovation operates a nurse-managed health clinic, ASU Health Services NP Health Care. This 4,000-square-foot clinic makes health care available within four blocks of any Downtown Phoenix campus facility and many downtown businesses and government offices. Students, faculty and staff from any ASU campus and even members of the public can access quality, affordable health care while studying or working in the area.

• Department of Speech and Hearing Science clinics provide high-quality professional services to individuals of all ages with needs in communication and hearing improvement. In addition to serving the community, these clinics are training and research facilities for students studying audiology and speech-language pathology.

• In 2013, students from ASU, Northern Arizona University and the University of Arizona began collaborating to create the student-run health care clinic, Student Health Outreach for Wellness. S.H.O.W. utilizes the Health Care for the Homeless clinic on the Human Services Campus in downtown Phoenix. Guided by faculty, student volunteers provide client-centered, after-hours health services to the homeless. Clinic volunteers experience interprofessional collaboration through team-based training and hands-on experience.

• Engineering Projects in Community Service is an award-winning, national community service and social entrepreneurship program. Students work in teams to design, build and deploy systems to solve engineering-based problems for charities, schools and other nonprofits. “EPICS@ASU” is a program of the Ira A. Fulton Schools of Engineering.

• The High School Engineering Research program was established in 2012 to allow students to learn under the direction of the Ira A. Fulton School of Engineering faculty before entering college. More than 70 students participated in the inaugural program.

The Department of Community and Municipal Relations embeds ASU in the community through faculty, student, staff, community and municipal relationships, partnerships, collaborations, events and other community engagement activities. CMR strengthens the university’s relationship with communities and municipalities, creating opportunities for learning.

• CMR efforts have allowed ASU representation or participation with more than 50 boards of directors, chambers of commerce, committees and community groups.
• Since 2002, ASU has held hundreds of forums, community relations programs and cultural programs in Arizona, Washington, D.C., and locations throughout the U.S. In 2013, CMR held Challenges Forums for African-American and Asian-American outreach, Arizona forums on immigration reform, a tribal government leadership forum and two national-level forums at the National Press Club in Washington, D.C.

• CMR’s annual State of Arizona Reports were initiated in 2006 to highlight issues facing Arizona’s diverse populations and offer solutions. Reports reflect on the challenges and contributions of Latinos, African-Americans, American Indians, Asian-Americans and Pacific Islanders in Arizona to inform policy makers and promote growth in the state.

Partnerships and collaborations

- As a New American University, ASU is engaged in service to the state, the nation and the world. Partnerships with groups and institutions are central to achieving this mission, including these collaborations established since 2002:

**Health**

**ASU–Mayo Clinic** — In 2005, ASU and Mayo Clinic initiated several joint educational and research programs. In 2011, this partnership was elevated with a shared presence on the Web, additional research and educational programs, continued seed grant funding and a commitment to planning an Arizona campus of the Mayo Medical School.

- The School for the Science of Health Care Delivery and the Department of Biomedical Informatics are already integrated with Mayo Clinic, and will expand this connection. Components of the Science of Health Care Delivery degree will be incorporated into the Mayo Medical School curriculum when the Scottsdale campus opens.

- Joint degree programs exist combining medicine law, business, communications, biomedical informatics, and biologic and health systems engineering. ASU nursing students can receive clinical training at the Mayo Clinic hospital and are often extended job offers from Mayo upon degree completion. Mayo Clinic participates in an innovative undergraduate capstone program centered on the design of medical devices for real-life problems.

- Collaborative research areas include biomedical informatics, metabolic and vascular biology, and cancer, with shared laboratory and office space on both ASU and Mayo Clinic Arizona campuses. Joint seed funding is $1.3 million to date for research projects in cancer, Alzheimer’s disease, cellular and molecular biomedicine, genetics, dual energy CT applications, carpal tunnel syndrome and sensory motor coordination.

- Strategic joint faculty hires — key to shared translational research missions — have begun, including a first hire for cancer research. Mayo Clinic faculty have also been given appointments in ASU departments.
ASU–Barrow Neurological Institute

This partnership allows research collaborations in magnetic resonance imaging, neuroscience, cardiovascular disease, biomedical informatics, infectious disease, immunology, cancer and tissue banks.

- An interdisciplinary neuroscience graduate program was created, and approved by the Arizona Board of Regents, with joint appointments for ASU faculty and BNI clinicians.

- A small-animal 7T MRI center at BNI was created in connection with the institute’s Keller Imaging Lab. The imaging center, which opened in spring 2009, is funded by a National Institutes of Health grant and BNI.

ASU–Banner Health

Banner and ASU collaborate in research on cancer, diabetes, spinal cord injury and rehabilitation, Alzheimer’s disease, Parkinson’s disease, interventional biomaterials and haptics research.

- A grant from the U.S. Department of Health and Human Services allows ASU faculty and Banner administrators to develop practices in patient process flow to reduce walkout rates in Banner emergency rooms.

- A $4.96-million grant from the U.S. Department of Labor to the Arizona Diversity Business Development Center, with Banner and ASU’s College of Nursing and Health Innovation as sub-recipients, provides a career path for nurses and nurse assistants in Arizona. Maricopa Workforce Connections is another partner in the initiative.
**ASU–Department of Veterans Affairs**

ASU and the Phoenix VA Health Care System are developing research projects, which include joint faculty appointments, to study diabetes, mental health and post-traumatic stress disorder.

- Other collaborative research includes cardiovascular disease, metabolic disorders, mental health and sleep disorders and musculoskeletal disorders.
- The College of Nursing and Health Innovation is one of six U.S. nursing schools selected for the VA Nursing Academic Partnership program. The five-year program provides $4 million to fund three additional faculty positions at the college and seven in the Phoenix VA Health Care System.

**ASU–Phoenix Children’s Hospital**

ASU has research collaborations with the hospital and the Children’s Neuroscience Institute in brain-computer interfaces, bioinformatics, cancer research and biomarkers.

- The College of Nursing and Health Innovation is partnering with the hospital on the Latino Childhood Asthma Project and childhood obesity education and prevention.
- ASU researchers and physicians at PCH are collaborating on some of the first applications of technologies to significantly aid in the correction of heart defects: custom-made, three-dimensional physical models of hearts developed by an ASU research team led by David Frakes, assistant professor in the Ira A. Fulton Schools of Engineering. The precise, individualized models will allow for improved surgical strategies.

**ASU–Maricopa Integrated Health System**

ASU researchers and MIHS clinicians collaborate in the fields of orthopedics, burns, depression, trauma, obstetrics and gynecology, coronary artery disease and diabetes.

- Partnerships between MIHS and ASU’s Southwest Interdisciplinary Research Center led to the Familias Sanas (Healthy Families) project to assist special populations.
- Partnerships between MIHS and ASU’s College of Nursing and Health Innovations led to studies unique to the challenges of special populations for healthy outcomes in aging.

**ASU–Translational Genomics Research Institute**

This partnership in genetic and molecular research has resulted in more than two-thirds of TGen’s faculty submitting joint extramural research grant proposals with ASU faculty and staff in neurogenomics, cancer and diagnostics, regenerative medicine, and biological database integration and modeling.

- Other joint initiatives include maintenance of a supercomputer facility, educational programs, TGen’s assistance in recruiting senior ASU faculty and internships for students.
ASU–University of Arizona
This partnership established the first allopathic medical school in Maricopa County. This included cross-appointments of faculty from departments across ASU and the newly formed department of Biomedical Informatics, which developed and delivered the curriculum.

ASU–Center for Health Information and Research
ASU and CHIR established a network of hospital partners in the Phoenix area to create Arizona HealthQuery. This model community-health data system could act as a centralized repository of health information, allowing the health care of individuals and populations to be tracked over time and across providers.

ASU–Dignity Health
Researchers in ASU’s School of Biological and Health Systems Engineering are partnering on projects that model congenital heart defects for surgical planning, and on hypoxia imaging for prognosis of hypoxia-targeted cancer therapy.

ASU–Healthcare Transformation Institute
This nonprofit joint venture between ASU, the Chan Soon-Shiong Family Foundation and the University of Arizona assists hospital teams with governance, leadership, clinical model and outcomes development, data analysis, business case development and financial management.

- The institute has worked with Banner Health and Sun Health on their Care Transitions Program, a partnership with Banner hospitals, community physicians and other health providers that will assist residents with chronic health issues in self-managing their conditions and reducing hospitalizations.

- The institute also works with Banner Health and the University of Arizona College of Medicine to develop approaches for full-spectrum health care, including disease prevention and wellness promotion, and new models of primary and quaternary care.

Graduate Nurse Education Demonstration Project
The U.S. Center for Medicare and Medicaid Services is providing funding to five sites to increase the number of advanced-practice nursing student graduates. Scottsdale Healthcare Medical Center was selected to collaborate with ASU’s College of Nursing and Health Innovation, Grand Canyon University, Northern Arizona University and the University of Arizona. Funding will increase the number of advanced-practice nursing student graduates in the state and support clinical training for more than 400 nurse practitioners and clinical nurse specialists.
ABC News chose the Walter Cronkite School of Journalism and Mass Communication to be its partner in **ABC News on Campus**. The initiative provides an opportunity for students to report on stories in their regions and produce content for ABC News’ national broadcast platforms.

## Energy

### Renewable biofuels partnership

ASU is leading a project researching photosynthetic microbes — cyanobacteria — as a source of renewable, carbon-neutral fuel. The initial two-year, $4.7-million project began in 2007 with funding from Science Foundation Arizona, British Petroleum and ASU.

- Since 2009, a $5.2-million continuation of the project, led by School of Life Sciences professor Wim Vermaas and Biodesign Institute researchers, has been funded by the U.S. Department of Energy’s Advanced Research Projects Agency–Energy, and achieved several critical research milestones.

### TUV Rheinland PTL

Created by a partnership between ASU’s Photovoltaic Testing Laboratory, TUV Rheinland and Arizona Public Service, TUV Rheinland PTL is the most comprehensive, state-of-the-art facility in the world for the testing and certification of solar energy equipment.

### Arizona Center for Algae Technology and Innovation

This center was created in 2010 as a national test-bed for researching and commercializing algae-based products such as biofuels, pharmaceuticals and nutraceuticals, and other algae biomass coproducts. Embedded within the Ira A. Fulton Schools of Engineering and located on ASU’s Polytechnic campus, AzCATI has a research portfolio of more than $22 million and leads sponsored projects with the U.S. departments of Energy and Agriculture, Salt River Project and the Arizona Board of Regents.
Quantum Energy and Sustainable Solar Technologies Engineering Research Center
Funded by the National Science Foundation and the U.S. Department of Energy, the initiative is the nation’s leading university center for photovoltaic technology. The QESST ERC advances photovoltaic science, technology and education to address the challenge of transforming electricity generation to sustainably meet the world’s growing demand for energy. The center is one of fewer than 20 national ERCs.

Power Systems Engineering Research Center
Based in the Ira A. Fulton Schools of Engineering, and a National Science Foundation Industry–University Cooperative Research Center, PSERC is addressing challenges facing the electric power industry. Most recently, PSERC’s research into transforming the nation’s electric grid into a more sustainable energy system was boosted by a $5.5-million grant from the U.S. Department of Energy. Directed by electrical engineering professor Vijay Vittal, PSERC partners with private and public organizations that provide integrated energy services, transmission and distribution services, power-system planning and control, market management services and public policy development.
Social service

Arizona Indicators
ASU has partnered with the Arizona Community Foundation, Valley of the Sun United Way, The Arizona Republic and the Arizona Department of Commerce to create a website detailing Arizona’s development. Easy-to-understand visuals include data on education, economics, innovation, sustainability, quality of life, health, human services, criminal justice, children and families.

Ashoka: Innovators for the Public
In 2010, ASU joined a consortium of colleges and universities, Ashoka’s Changemaker Campus initiative, to accelerate teaching, research and action in social entrepreneurship.

Project RISE
Reentry Intervention and Support for Engagement is a program of Mary Lou Fulton Teachers College, funded with a $1.5-million grant from the U.S. Department of Education Office of Special Education Programs. Project RISE transitions youths in the state’s juvenile justice system back into their communities, engaging them in school or work. Project leaders and team members work in collaboration with more than 20 community partners to improve reentry outcomes.

Teacher preparation

ASU–Teach For America
In 2013, ASU was 14th in the nation among large universities for the number of graduating seniors joining Teach For America.

- A partnership between Mary Lou Fulton Teachers College and TFA provides corps members teacher support and development through a tailored master’s program. Since 2007, more than 640 corps members have graduated from ASU with master’s degrees in education.
- Of TFA corps members who joined in 2014, 75 enrolled in an ASU master’s program in education. A fellowship is also available to support the development of TFA alumni school leaders.
- In 2013, nearly 700 corps members worked with 3,500 students at ASU’s annual TFA summer institute.
In-STEP: India Support for Teacher Education Project
Through this two-year project funded by the U.S. Agency for International Development and in collaboration with India’s Ministry for Human Resources Development, more than 100 educators from teacher preparation institutes in India are participating in a three-month professional development program at Mary Lou Fulton Teachers College. Topics include teaching methods, in-service and pre-service teacher education, and assessment techniques. Indian educators observe American schools and education best practices, and work with ASU faculty to draft proposals for reform in specific areas of education in their respective states.

Arizona Ready-for-Rigor Project
A five-year, $44-million Teacher Incentive Fund grant from the U.S. Department of Education established this project providing educators with mentors, support groups, professional development and a performance-based compensation system focused on student growth and teacher evaluation. Its goal is to work with underperforming Arizona schools to increase student achievement. In 2013–14, 59 schools from 10 districts participated, with 83 percent of grant schools increasing or maintaining their performance ratings from the previous year.

SEED: Support Effective Educators Development
A partnership between the National Institute for Excellence in Teaching and Mary Lou Fulton Teachers College was awarded an $11.6-million SEED grant from the U.S. Department of Education for 2013–16. The resulting project, Planting the SEED, aims to recruit and prepare 220 students to pursue science, technology, engineering and mathematics careers by providing living-wage stipends to teacher candidates planning to teach math and science in grades 7–12. Students are placed in all 29 Teachers College iTeachAZ cohorts. In its first year, the SEED project—a collaboration between Teachers College and ASU’s Ira A. Fulton Schools of Engineering—exceeded its goal of 40 new middle school math and science teachers by 25 percent. The project also provides teachers in 21 Arizona school districts with professional development in the writing standards for Arizona’s College and Career Ready Standards.

Integrating STEM, Literacy and Language to Prepare All Teachers to Teach English Language Learners
The nearly $12-million project enlists 20 partner school districts to equip 600 teachers and 2,000 graduate students. It will reform traditional ELL discipline-specific learning into cross-discipline projects by integrating evidence-based practices for STEM, assessment and literacy.

ASU–Smithsonian Tropical Research Institute in Panama
Titled “Preparing Pre-service Teachers for Science Success,” this collaboration helps teachers overcome anxiety about science and prepares them to teach science effectively. In June 2013, seven aspiring teachers from Mary Lou Fulton Teachers College traveled to Panama for the 10-day PPSS field experience, engaging in hands-on science and learning how to design effective science lessons. In 2014–15, half the teacher participants are developing materials for ASU’s Ask-a-Biologist, an online question-and-answer resource for K–12 students and their instructors.
Apache Teacher Corps
A $1-million grant funds this partnership between ASU, the San Carlos Apache Tribe and the San Carlos Unified School District to recruit and prepare 15 American Indian participants as early-childhood educators. The goals are to train teachers who make instructional decisions based on student needs, local and state data, and research-based best practices; and to prepare teacher candidates who are employed in local education agencies that enroll 5 percent or more American Indian students after graduation.

Navajo Nation Early Childhood Professional Development
This $570,000 project will develop highly qualified teachers to serve in Navajo Nation early childhood programs. The goal of the project is to recruit and prepare effective practitioners who will work with young children and families.

Higher education | workforce preparation

ASU–Starbucks
The Starbucks College Achievement Plan was announced in 2014 by Starbucks President and CEO Howard Schultz and ASU President Michael Crow. It provides all full- and part-time Starbucks partners (employees) in the United States the opportunity to earn a bachelor’s degree, with full tuition coverage by Starbucks, through ASU’s top-ranked online degree program.

ASU–Thunderbird School of Global Management
Since 1946, the Thunderbird School of Global Management has educated leaders from around the world in the intricacies of international management. In 2014, Thunderbird became part of the ASU knowledge enterprise, combining the strengths of an international business-education icon with the resources of an innovative public research university.

ASU–Georgetown University
The Higher Education Leadership Academy was created in 2014 by ASU and Georgetown as the premier training ground for senior leadership in higher education. The eight-month, design-based program began in November 2014 with an inaugural class of 21, focusing on bringing ideas to practice, linking theory to application and scaling innovations that can transform higher education institutions.

ASU–Arizona community colleges
The university collaborates with every community college in the state to establish curricular pathways, accessible via the Web, that are understandable to students and parents. These pathways create a “culture of transfer,” allowing more students to achieve associate’s and bachelor’s degrees by reducing time to graduation and the costs of higher education.
Maricopa to ASU Pathways Program
MAPP began in 2009, offering 32 majors. Today, more than 225 majors are available to thousands of students from the Maricopa Community Colleges who sign up for the program each year. MAPP helps community colleges increase the number of associate’s degree completers, makes students well-prepared for success at ASU, and works in the best interests of students, encouraging them to complete steps leading to success.

Transfer Admission Guarantee programs
TAGs have been developed with Arizona Western College, Central Arizona College, Cochise College, Coconino Community College, Eastern Arizona College, Mohave Community College, Northland Pioneer College, Pima Community College and Yavapai College. With dozens of majors available, hundreds of community college students participate in these seamless pathway programs every year.

Associate of Applied Science to Bachelor of Applied Science Pathways Program
Students who study in areas such as aviation maintenance or respiratory therapy in Arizona community colleges can apply those credits toward specified Bachelor of Applied Science degrees.

RN to BSN
A specialized partnership program for community college nursing students called Registered Nurse to Bachelor of Science in Nursing allows students to proceed from their Associate of Applied Science in Nursing certificates into a bachelor’s degree program, with all remaining ASU coursework available online. This partnership is in place with all Arizona public community colleges.

Success@ASU
This $4-million collaboration with the Phoenix Union High School District will develop, implement and evaluate innovations to increase access and completion rates for low-income students at ASU. Pilot projects will utilize a develop-test-revise-test protocol. Approximately 1,600 first-generation students and students from underrepresented minority groups will participate over the next four years.

Eastern Arizona College
In 2012, Eastern Arizona College in Thatcher became an ASU Arizona Learning Center offering on-site bachelor’s degrees. Students choose from four degrees at a reduced level of tuition. Like ASU’s Colleges at Lake Havasu City, the partnership offers affordable, accessible higher education, while addressing community needs for qualified employees in key areas.
**Tribal colleges**
ASU works with Diné College and Tohono O'odham Community College to provide direct student support and engage faculty and staff in joint activities. In 2014, ASU agreed to assist the San Carlos Apache community in the development of a tribal college.

**Guaranteed Program for Admission**
Available at more than 60 community colleges in California and 10 in Washington, this program attracts well-prepared transfer students to Arizona to study.

**Ira A. Fulton Schools of Engineering Career Center**
Engineering collaborates with the Greater Phoenix Economic Council, the Arizona Commerce Authority and the City of Phoenix Community and Economic Development Department to provide workforce solutions for high-tech industries in the region, including companies with Arizona-based operations and others the state seeks to attract.

**Ira A. Fulton Schools of Engineering–Gore Company**
This career-oriented partnership will develop a talent pipeline to provide skilled employees and student interns for Gore's Phoenix and Flagstaff operations. In return, Gore will support university mentoring programs, entrepreneurship, student research projects, and job and internship events to provide students a path into the workforce.

**Ira A. Fulton Schools of Engineering–Aerojet Rocketdyne**
The Fulton Schools of Engineering and Aerojet Rocketdyne, a subsidiary of GenCorp, signed an agreement for long-term collaborations, including research and education efforts, engineering projects, workforce development and philanthropic activities. GenCorp is a major technology-based manufacturer of aerospace and defense systems and products.

**Civic | municipal**
**MAG/Brookings Institution**
ASU's Thunderbird School of Global Management partners with the Maricopa Association of Governments and the Greater Phoenix Economic Council through a pilot program supported by the Brookings Institution to help regions create economic development strategies.
Southwest Interdisciplinary Research Institute
ASU joined with 35 Phoenix middle schools to develop, test and evaluate Keepin’ It REAL, a culturally grounded substance abuse prevention program. An adapted and enhanced version of KIR is being tested in a randomized trial with seven Phoenix school districts, 32 schools, 96 teachers and more than 2,000 students.

Western Occupational Safety and Health Administration Training Institute Education Center
ASU is home to this OSHA center which offers workplace safety and health training to businesses, industries, public agencies and private organizations. The center is housed in the Del E. Webb School of Construction in the School of Sustainable Engineering and the Built Environment, one of the Ira A. Fulton Schools of Engineering.

Entrepreneurship | innovation

GSV Asset Management
ASU and GSV host the ASU SkySong Education Innovation Summit, an annual conference that brings together small businesses in the education sector, capital investors and policymakers to catalyze change in education.

SkySong
ASU’s Scottsdale Innovation Center provides soft-landing services to client companies seeking to start operations in the U.S., including SPRING Singapore; iAxil; Multimedia Development Corporation (Malaysia); Pontifícia Universidade do Rio Grande do Sul (Brazil); KOTRA, the Korea Trade-Investment Promotion Agency in Los Angeles; the Israeli General Counsel; the Selangor State Accelerator (Malaysia); the Malaysian Industrial Development Corporation; and the National University of Singapore.

Alion/Mesa
ASU and the city of Mesa are partnering with Alion Science and Technology Corporation to reconfigure the Air Force Research Laboratory into a public-private, classified-research facility that will augment the Valley’s aerospace and defense industry.

Industrial Technology Research Institute
ASU has a collaboration agreement with ITRI Taiwan to investigate research partnerships and potential entrepreneurship training and soft-landing services.
Global partnerships

Instituto Tecnológico de Monterrey
ASU partners with Tec de Monterrey for on-campus and online networks, a binational laboratory and entrepreneurial networking.

- ASU and Tec jointly launched the Latin America Office of ASU's Global Institute of Sustainability, an extension to conduct research, offer an innovative curriculum and develop business solutions to accelerate the adoption of a sustainable culture. It will leverage linkages with Tec's Mexico City campus to promote clean technologies and projects that create green jobs, and public policies that preserve natural capital through active participation of all sectors of Mexico's society.

Sichuan University
ASU's relationship with one of the largest universities in the People's Republic of China enables collaboration in cultural and health initiatives.

- The universities created the SCU-ASU Center for American Culture to improve cross-cultural understanding. The center introduces intellectual capital of faculty at both universities to students — the next generation of China's leaders — using literature, media, arts, history, philosophy, religion, ethnography and other academic disciplines to tell the American story.

- The U.S. Embassy in Beijing views the center as a model for engagement beyond the superficial American culture of movies, television and music. The center's goal is a series of university-to-university partnerships throughout China devoted to serious study of American topics. Specific outcomes include a large cohort of educated young Chinese who will enter positions of responsibility in business, government, education and other key fields with a deep understanding of American values and culture.

- This collaboration has provided an opportunity for the College of Nursing and Health Innovation to establish relationships with the School of Nursing and the West China Medical School. Faculty have taught immersion classes in nursing and public health and are currently collaborating on research.

Dublin City University
ASU and Ireland's DCU collaborate for technology transfer, a biosensor laboratory, and the study of conflict management and innovation.

- In 2014, ASU and DCU announced the creation of the International School of Biomedical Diagnostics, offering the first degree program of its kind and establishing diagnostics as an independent discipline.
Vietnam
The Vocational and University Leadership and Innovation Institute was created through an ASU-directed U.S. government/corporate partnership that includes USAID, Intel Corporation and a growing list of industry partners.

- Focusing on engineering and technical education, VULII will improve higher education in the U.S. while strengthening the human and institutional capacity of Vietnam to grow economically with training programs for government officials, university administrators and professors.

- Partners include Ho Chi Minh City University of Technology, Hanoi University of Science and Technology, Ho Chi Minh City University of Technical Education, Cantho University, Danang University of Technology, Cao Thang Technical College, Industrial University of Ho Chi Minh City and Ho Chi Minh Vocational College of Technology.

- ASU’s Ira A. Fulton Schools of Engineering continue to expand the activities of the Higher Engineering Education Alliance Program. This alliance with the government of Vietnam, the U.S. Agency for International Development, and Intel and other corporate partners recently hosted its second annual Vietnam Engineering Education Conference. The goal of HEEAP is to modernize engineering education in Vietnam to produce a more highly trained workforce for the high-tech industry in Southeast Asia.

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Vocational Training and Education for Clean Energy

VOCTEC is a global public/private partnership of higher education institutions and service providers. Its training programs allow participants worldwide to develop and implement clean energy programs. ASU’s partners include Appalachian State University and Green Empowerment. VOCTEC is funded through a cooperative agreement with USAID.

Decision Theater

ASU’s Decision Theater and the School of Earth and Space Exploration are partnering with Tec De Monterrey, Latin American beverage giant FEMSA and the Inter-American Bank to develop a sustainable water planning model in Nuevo Leon, Mexico.

- The collaboration addresses flood prevention and water sustainability and planning in the wake of Hurricane Alex and the flooding that damaged the center of Monterrey in 2010.
- Decision Theater also cofounded the Global Decision Theater Alliance with China’s Huazhong University of Science and Technology and Harbin Institute of Technology. The alliance builds on the experience and expertise of members to increase resource efficiency and sustainability through the integration of the best science, research and decision systems.

Global Biosignatures Network

This initiative by ASU’s Center for Sustainable Health harnesses scientific, academic, industry and health-care system resources to define rigorous standards of practice for biosignatures research. The GBN will work with forward-thinking partners to establish additional Biosignatures Centers within member systems, each enabling molecular and digital technologies for managing disease, with emphasis on prevention, early detection and therapeutic interventions.

TechBA Arizona

This business accelerator, the result of a partnership between the state of Arizona, the United States–Mexico Foundation, Mexico’s Ministry of the Economy and ASU’s SkySong, brings representatives of knowledge-based Mexican businesses to Arizona. TechBA’s rapid success required a larger space in Phoenix, but they maintain the collaborative relationship with SkySong.

Japan Technology Group

Arizona Technology Enterprises established a formal partnership in 2010 with eight top Japanese research universities represented by JTG to cross-market technology.
Hearing for Humanity

2015 will be the fifth year ASU sends students to Malawi, Africa, for the Hearing for Humanity program. Doctor of Audiology students, as well as undergraduates from the Department of Speech and Hearing Science in the College of Health Solutions, spend a month in Africa working to provide and promote sustainable audiology care.
ASU recognizes and celebrates its past accomplishments in advancing the core values of public education, yet strives to be nimble and adaptive as an exemplar of how 21st-century higher education prepares master learners.
The evolution of higher education

- ASU has evolved into a New American University — a revolutionary paradigm for the public research university that transforms higher education. It is a university that commands recognition across the country and around the world.

Academic Ranking of World Universities
Compiled annually by the Shanghai Ranking Consultancy (formerly by Shanghai Jiao Tong University), this assessment compares 1,200 higher education institutions worldwide and is one of the three most influential world university rankings.

- In 2014, ASU was ranked 88th among the top 100 universities in the world. ASU is 48th among all universities in the United States and 26th among U.S. public universities.

- ASU entered the rankings in 2003 and first achieved top 100 status in 2006.

Times Higher Education World University Rankings
Compiled annually by Britain’s Times Higher Education magazine using data supplied by Thomson Reuters, this ranking employs 13 performance indicators to evaluate excellence in the core elements of a university’s mission: teaching, research, knowledge transfer and international outlook.

- The 2014–15 THE ranking named ASU 188th of universities worldwide, and 60th in the world for studies in the social sciences. In 2011, ASU was ranked 21st in the world in mathematics, above Columbia, Cornell, Oxford, MIT and Cambridge.
U.S. News & World Report

- U.S. News’ Best Colleges annual report has ranked ASU in the top tier of national universities since 2009. For 2015, ASU’s undergraduate programs were ranked No. 129 among the nearly 1,600 rated by U.S. News, and 63rd among America’s public colleges and universities.
- ASU has been one of U.S. News’ “Up and Coming Schools” each year since the category was added to recognize schools to watch for promising and innovative changes in academics, faculty, students, campus life, diversity and facilities. ASU was No. 4 in the nation in this category in 2009, climbing to No. 2 for 2015.

Other significant U.S. News rankings (see “Top Programs” for rankings of individual schools and colleges):

- School of choice for transfer students, 2013 — 4th
- Best Colleges for Veterans, 2015 — 34th
- Best Online Programs, 2015 — six ASU online programs place in the top 25 in the U.S.
- Best Graduate Programs, 2015 — 17 ASU graduate programs place in the top 50 in the U.S.
- Most Connected School, 2013 — 11th, for accessibility of information technology
- Best Global Universities, 2015 — 143rd; seven global ASU programs place in the top 100
- Best Online Student Services and Technology, 2012 — 1st
- In 2013, ASU was highly ranked for Most Connected Campus

Princeton Review

- The Princeton Review, one of America’s most widely known education services and test preparation companies, has named ASU one of the “Best 378 Colleges” in the U.S. every year since its first publication in 1992. The report has said ASU’s “greatest strength is the great depth of its faculty and a wealth of opportunities offered to students,” and said the university provides “the best of both worlds: a large research university and an honors program tailored for individual needs.”
- In February 2015, The Princeton Review released “Colleges That Pay You Back,” a book with ranking lists to help families find affordable colleges that deliver exceptional jobs. ASU is one of only 77 public colleges and universities that qualified for the list of 200 institutions.

Additional accolades

- A 2010 Wall Street Journal survey of corporate recruiters named ASU No. 5 in the U.S. for producing the best-qualified graduates — those most prepared and academically well-rounded, who fit with company cultures and produce the best employment track records.
- The Fiske Guide to Colleges “Best Buys of 2015” names ASU No. 1 among the 22 U.S. public universities selected based on the quality of their academic offerings in relation to cost of attendance.
- Kiplinger’s Best College Values 2015 places ASU 92nd among U.S. public universities for value for out-of-state students, and 87th for in-state students.
- The 2013 National University Rankings by Washington Monthly placed ASU at 49th among U.S. universities based on “social mobility (recruiting and graduating low-income students), research (producing cutting-edge scholarship and Ph.D.s), and service (encouraging students to give something back to their country).”
- In 2014, Washington Monthly named ASU 46th among all U.S. universities, public and private, for “Best Bang for the Buck.”
- In its 2014 rankings, Forbes and the Center for College Affordability and Productivity placed ASU 98th among America’s Best Public Colleges.
- ASU has been named a Military Friendly School by G.I. Jobs magazine each year, 2010–15. The list honors the top 20 percent of colleges, universities and trade schools that deliver the best experience for military students. Standards set for this qualification by the G.I. Jobs’ Academic Advisory Board increase in stringency each year.
- ASU is ranked 8th in the U.S. as a top choice for international students according to the Open Doors 2014 report by the Institute of International Education.
- In 2010, Time magazine named ASU President Michael Crow one of the 10 best college presidents in the U.S. based on ASU’s achievements under his leadership.
- President Crow was one of four winners of the Carnegie Corporation’s Academic Leadership Award for 2013, joining honorees from Duke, Stanford and Spelman College.

Recognition of sustainability efforts

- Sierra Magazine “Coolest Schools” — This survey of the greenest college campuses in the nation ranked ASU 26th for 2014.
- Association for the Advancement of Sustainability in Higher Education — For 2015, ASU is one of 79 institutions to receive the AASHE STARS Gold rating. The Sustainability Tracking, Assessment and Rating System provides a transparent self-assessment framework to allow colleges and universities to gauge progress towards sustainability; 697 institutions have registered to use the STARS Reporting Tool.
Top Programs

W. P. Carey School of Business

- In 2003, as part of ASU’s commitment to global engagement, the business school began offering its executive MBA program in Shanghai. The China executive MBA program now has approximately 1,000 alumni — top business and government leaders among them — and is ranked No. 29 worldwide by the Financial Times.

- More than a decade ago, the W. P. Carey School also became one of the first highly regarded business schools to launch an online MBA program. U.S. News & World Report now ranks the program No. 4 among online MBA programs nationwide.

- In 2008, U.S. News & World Report ranked the W. P. Carey School's full-time MBA program among the top 25 in the nation, only 17 years after the program graduated its inaugural class. The full-time MBA has now ranked among the top 30 in the U.S. for eight years.

- U.S. News also ranked the business school among the top 30 in the nation for undergraduate business programs in nine of the last 10 years.


- The latest Academic Ranking of World Universities named the W. P. Carey School No. 22 in the world for economics and business.

- Many of the business school’s departmental programs consistently achieve top 25 rankings from U.S. News & World Report, including accountancy, information systems and supply chain management. Supply chain management routinely ranks among the top 10 in the U.S. The entrepreneurship programs were also ranked among the top 25 in the most recent report.

- The University of Texas–Dallas has repeatedly ranked the W. P. Carey School among the top 30 programs worldwide for business-school research productivity. The business school’s management department consistently ranks among the top 10 for management-research productivity, according to statistics from Texas A&M University and the University of Florida.

Herberger Institute for Design and the Arts

- Since 2003, the Herberger Institute's School of Art has been ranked in the top 25 nationally for university graduate fine arts programs by U.S. News & World Report. Its graduate printmaking program has been in the top five since 2003, and its graduate photography program has been in the top 11 since 2002. In 2012, its graduate ceramics program ranked No. 7.

- Since 2008, the Design School undergraduate interior design program has been ranked in the top 10 programs in the U.S. — first in the region — and its graduate program has been ranked in the top 10 since 2012 by DesignIntelligence's America's Best Architecture and Design Schools. The industrial design undergraduate program has been ranked in the top 15 nationally since 2011, first in the region, and the graduate program is in the top 10, third in the region. The industrial design program entered the top 10 in 2008.
Additionally, ASU’s industrial design program placed fourth in the nation, and was named by deans and faculty throughout the country as one of the most-admired undergraduate programs for its design innovation and integrated curriculum. It was also ranked first among programs nationally in 2011 for research and theory.

The Design School’s architecture program ranks in the top three in the region, and the graduate architecture program has been one of the top five in the region — top 20 nationally — since 2011.

U.S. News & World Report ranks the School of Film, Dance and Theatre dramatic writing program 15th among public institutions, and its theatre for youth program in the top three nationally.

The School of Arts, Media + Engineering led the way in curriculum innovation by establishing the first digital culture Bachelor of Arts in the U.S.

The School of Music graduate programs are ranked in the top 20 nationally, and No. 8 among public institutions by U.S. News & World Report.

Ira A. Fulton Schools of Engineering

The 2015 U.S. News & World Report rankings place the Fulton Schools undergraduate engineering program 41st among U.S. colleges and universities — 23rd among public institutions; and the graduate programs 42nd — also 23rd among public schools.

The Fulton Schools Online Engineering Graduate Programs were ranked 14th in the U.S.

U.S. News’ Graduate School Specialty rankings included these engineering programs in the Ira A. Fulton Schools:

- Aerospace — 23rd
- Bioengineering — 41st
- Chemical — 45th
- Civil — 31st
- Computer Engineering — 31st
- Computer Science — 48th
- Electrical — 27th
- Environmental — 20th
- Industrial — 19th
Walter Cronkite School of Journalism and Mass Communication

- In eight of the last nine years, the Cronkite School finished with the best record in the Society of Professional Journalists’ Mark of Excellence national competition.
- In the Broadcast Education Association's Festival of Media Arts competition, Cronkite students have won more awards than any school in the U.S. for five consecutive years.
- The Cronkite School has finished in the top 10 nationally for more than a decade, including two first-place finishes, in the Hearst Journalism Awards, known as the Pulitzer Prizes of college journalism. For three consecutive years, the winner of the Hearst Awards national television championship has been a Cronkite student.
- In the past six years, Cronkite students have won three Robert F. Kennedy Journalism Awards, which celebrate excellence in investigative journalism.

College of Nursing and Health Innovation

- The 2015 rankings by U.S. News & World Report placed ASU's master's degree in nursing at 24th in the nation, making it the highest-ranked such program in Arizona.
- In 2014, Bachelor of Science in nursing graduates had a 92-percent first-time pass rate on the National Council Licensure Examination. The national average for nursing schools is 82 percent. The college is fully accredited by the Commission on Collegiate Nursing Education.
- Also in 2014, the college received two years of maximum funding from the Health Resources and Service Administration through the Advanced Education Nursing Traineeship program. This grant increases the number of advanced-education nurses prepared to practice as primary care providers and/or nursing faculty. ASU's proposal funds traineeships that pay for all or part of tuition, books and fees, as well as living expenses during the traineeship period.
- The college was granted continuation of the American Indian Students United for Nursing project that will fund eligible nursing students through 2016. Started in 1990 with a grant from the Indian Health Service, AISUN has provided academic support services, cultural engagement activities and financial assistance to assist 67 American Indian/Alaska Native students to graduate with bachelor’s or master’s degrees in nursing.

College of Health Solutions

- The audiology program in the Department of Speech and Hearing Science was ranked 17th in the U.S., and the speech and hearing pathology program 21st, by U.S. News & World Report. The department is fully accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology and the American Speech-Language-Hearing Association.
• The School of Nutrition and Health Promotion has one of the largest dietetics programs in the U.S. It is the first to integrate the academic, research and professional fields of nutrition and exercise and wellness.

• In 2013, graduates of the School of Nutrition and Health Promotion had a 100-percent first-time pass rate on the National Examination for Registered Dietitians. The national average is 82 percent. The Bachelor of Science in nutrition dietetics concentration and the dietetic internship program are accredited by the Accreditation Council for Education in Nutrition and Dietetics of the Academy of Nutrition and Dietetics.

Barrett, the Honors College

• Barrett was named one of the top three of 64 honors colleges in the U.S. in the 2005 Readers Digest report, “America's Best Honors Colleges.”

• The 2014 edition of the book, “A Review of Fifty Public University Honors Programs,” gives Barrett the highest rating of 5 Mortarboards, one of only seven honors programs in the U.S. to achieve that distinction. The book’s author said, “Barrett is the best, based on the most current and most extensive data that anyone could possibly have.”

• In 2010, USA Today called Barrett “outstanding,” citing it as one factor in naming ASU one of America’s 100 Best Value Colleges.

Mary Lou Fulton Teachers College

• The 2015 U.S. News & World Report rankings place Mary Lou Fulton Teachers College 17th among 246 public and private graduate education programs. Those graduate offerings include doctoral degrees in educational policy and evaluation; learning, literacies and technologies; and leadership and innovation.

• Teachers College was honored with the Association of Teacher Educators.

Additional accolades

• ASU Online was named the 2012 Pearson Product of the Year, the first time the award was presented to a service-based educational partnership rather than educational content, such as a textbook or software.

• Ranked No. 25 in the nation by U.S. News & World Report in 2011 and 2012, the School of Public Affairs jumped to 16th in 2013. Five of its programs ranked in the top 20 in the nation, including city management and urban policy (No. 2) and environmental policy and management (No. 10).
• The 2015 U.S. News & World Report rankings name the Ira A. Fulton Schools of Engineering 42nd among the nation's undergraduate and graduate engineering programs.

• The Sandra Day O'Connor College of Law continues to move up in the U.S. News & World Report rankings, from 29th-best law school in the nation in 2013 to 26th in 2015. Other ASU law program rankings are: legal writing, 8th; dispute resolution, 11th; health law, 12th.

• A 2012 joint study at Florida State University and University of Texas–Dallas ranked the School of Criminology and Criminal Justice 3rd in the nation for scholarly research.

• The anthropology program in the School of Human Evolution and Social Change was ranked in the top 5 in the Chronicle of Higher Education's 2007 Faculty Scholarly Productivity Index, and 4th in the Center for a Public Anthropology's 2006 national ranking of public outreach in anthropology departments.

Doctoral programs
In 2010, the National Research Council, under the National Academies of Sciences, issued a report assessing research doctorate programs in the U.S. based on data collected in 2005. ASU submitted 25 doctoral programs for assessment, in the social sciences, humanities, natural sciences and engineering. The report ranked more than half of those ASU programs in the top 25 percent of their kind nationally, with more than 16 programs showing significant improvement since the previous ratings in 1993. ASU’s highest-rated programs and their peer groups included:

• Psychology — peer group includes the universities of Washington, Southern California, Texas–Austin, Michigan State and Penn State

• Geography — UCLA and UC–Berkeley

• Electrical Engineering — USC, Carnegie Mellon, Ohio State, Johns Hopkins

• Civil and Environmental Engineering — CalTech, Cornell, USC, Ohio State, Duke

• Materials Science and Engineering — UCLA, Duke, Michigan, Carnegie Mellon, Georgia Tech, Johns Hopkins

• Chemistry — Texas A&M, Maryland, Emory

• Spanish — UC–Berkeley, NYU

• Communication — Texas–Austin, Missouri

• Public administration — Harvard, Texas–Austin

• Other programs ranked highly were history, economics and English
When the report was released, ASU Executive Vice President and Provost Elizabeth Capaldi noted the data were not current, adding, “Our programs have continued to improve since these data were collected.” ASU’s expenditures for projects in the programs rated by the NRC had increased by 38 percent between data collection and the report’s publication.

**Entrepreneurism and innovation**

- ASU’s Entrepreneurship and Innovation Group was named a top University Business Incubator — 10th in the U.S. and 18th in the world — in the 2013 *University Business Incubator Index*.
- ASU received the 2013 *Most Promising Technology-Based Economic Development Initiative* award from the State Science and Technology Institute. Spinoff companies based on technologies developed by ASU researchers raised $68 million in external funding during the 2013 fiscal year.

**Organizational transformation**

Since 2002, ASU has transformed itself from an organization based on traditional academic departments into a truly interdisciplinary institution. That transformation led to the creation of these colleges and schools:

- **School of Sustainability** — a university college-level enterprise engaging units throughout the university
- **In the W. P. Carey School of Business:**
  - Morrison School of Agribusiness
  - School of Accountancy
  - School of Health Management and Policy
- **In the Herberger Institute for Design and the Arts:**
  - The Design School
  - School of Arts, Media + Engineering
  - School of Film, Dance and Theatre
- **In the Ira A. Fulton Schools of Engineering:**
  - The Polytechnic School
  - School of Biological and Health Systems Engineering
  - School of Computing, Informatics, and Decision Systems Engineering
  - School of Electrical, Computer and Energy Engineering
  - School for Engineering of Matter, Transport and Energy
  - School of Sustainable Engineering and the Built Environment
- Walter Cronkite School of Journalism and Mass Communication
- School of Letters and Sciences
- Mary Lou Fulton Teachers College — created by merging the Mary Lou Fulton Institute and Graduate School of Education with the College of Teacher Education and Leadership
- College of Technology and Innovation
- College of Health Solutions, which now includes:
  - School for the Science of Health Care Delivery
  - School of Nutrition and Health Promotion
  - Department of Biomedical Informatics
  - Department of Speech and Hearing Science
  - International School of Biomedical Diagnostics
  - Medical Studies
  - Doctor of Behavioral Health program
- New College of Interdisciplinary Arts and Sciences, including:
  - School of Humanities, Arts and Cultural Studies
  - School of Mathematical and Natural Sciences
  - School of Social and Behavioral Sciences
• In the College of Liberal Arts and Sciences:
  • Hugh Downs School of Human Communications
  • School of Aging and Lifespan Development
  • School of Earth and Space Exploration
  • School of Geographical Sciences and Urban Planning
  • School of Politics and Global Studies
  • School of Historical, Philosophical and Religious Studies
  • School of Human Evolution and Social Change
  • School of International Letters and Cultures
  • School of Life Sciences
  • School of Materials
  • School of Mathematical and Statistical Sciences
  • School of Social and Family Dynamics
  • School of Social Transformation
  • School of Transborder Studies
• In the College of Public Service and Community Solutions:
  • School of Community Resources and Development
  • School of Criminology and Criminal Justice
**Investment**

In 2002, ASU relied primarily on state funding. At the time the university’s low-tuition model provided few resources for financial aid, which meant help was unavailable for students with the most need. Private investors were few. Since then, the ASU Foundation for A New American University has demonstrated the value of investing in ASU to local and state governments, students and their families, and private investors. As a result:

- ASU’s endowment grew from $206 million at the end of June 2002, to an estimated $625 million at the end of June 2014; growth of more than 200 percent. In the same period, total assets of the ASU Foundation grew from $228 million to an estimated $940 million — an increase of 312 percent — and the number of individual donors per year grew by 22 percent.

- The ASU Foundation raised $194 million for scholarships from 2002 through 2014.

- Since 2002, the ASU Foundation has raised $66 million in support of endowed faculty positions.

- Funds raised for capital projects by the ASU Foundation between 2002 and 2014 totaled $125 million. ASU Foundation figures include outright gifts, new pledges and face value of planned gifts, but exclude contributed services and payments on pledges.

- Arizona’s investment in ASU through state appropriations grew from $311.8 million in 2003 to $482.9 million in 2008, a 50-percent increase. Economic stresses in the state brought a reduction in that investment in 2012, to $301.7 million, or 38 percent of the 2008 peak. State investment grew moderately to $311.9 million in 2013, about the same level as 10 years earlier.

- ASU’s total assets in 2003 were $1.40 billion. Over 10 years that figure increased more than 102 percent, to $2.83 billion at the end of 2013. ASU’s net assets increased by 53 percent, from $876 million to $1.34 billion. ASU’s revenue grew from $846 million to $1.80 billion, an increase of 112 percent.

- Local governments have made unprecedented investments in a state university, with Phoenix allocating more than $220 million in voter-approved bond money to build the Downtown Phoenix campus, and Scottsdale donating a $41.5-million parcel of land with $45 million in infrastructure improvements to build the SkySong Innovation Center. In 2011, Mesa invested $15 million for road and utility infrastructure for the Polytechnic campus.
Infrastructure

History

In 2002, ASU's infrastructure was inadequate for the university's existing student population and unprepared for the growing number of qualified high school graduates. Classrooms, research laboratories and offices were cramped and poorly equipped with many in disrepair. Institutional software systems were outdated. With few residence halls available, most students lived off campus even as freshmen, exacerbating problems with retention. Relations with the city of Tempe were strained by concerns over traffic congestion and the negative impact on property values of large numbers of students living in off-campus rental housing.

In addition to the Tempe campus, two satellite campuses provided programs viewed as duplicating main-campus offerings at a lower level of quality. On the West campus, buildings were relatively new and in good condition. The Polytechnic campus comprised World War II-era Air Force base buildings retrofitted as classrooms, offices, research labs and residences. No building on any ASU campus had been designed or repurposed with consideration for utility costs and environmental impact.

ASU's commitment to the citizens of Arizona was that no qualified in-state student would be denied access to a college education. Analysis predicted ASU would need to accommodate 100,000 students by 2020. To prepare for this need, ASU reshaped itself as an entrepreneurial entity, seeking investment and partnerships to enable growth. In 2003, ASU worked with stakeholders — local government, utilities and other suppliers — to establish a long-term build-out plan to meet the needs of all. The Comprehensive Development Plan, published in 2005 and updated in 2012, is ASU's framework for new construction and renovation.

Since 2002, despite one of the nation's worst economic recessions, ASU has carried out an unprecedented amount of construction and upgrades. Classroom, laboratory, library, office, residence hall and other space increased by 190 percent. Research laboratory space expanded by 55 percent with nearly $600 million invested in renovations and new facilities. Concurrent with expanded capacity in existing locations, a new campus and a global innovation park were opened.

The university's information technology organization and infrastructure was overhauled. High-cost, internally developed applications were replaced with free, continually updated programs provided by Google and other companies. Wireless networks were deployed on all campuses, expanding network and computing capacity. Fragile legacy software was replaced with new platforms that enhanced the student experience and allowed for a massive expansion of online course delivery.
As the West and Polytechnic campuses were physically improved, another strategic redesign, *One University in Many Places*, established distinct but equal missions for all ASU campuses, and set the expectation that academic standards would be equally rigorous throughout the university.

Today’s ASU includes:

- **four Arizona Metropolitan Academic Campuses** — Tempe, Polytechnic, West and Downtown Phoenix.
- **two Arizona Learning Centers** — the Colleges at Lake Havasu City and Eastern Arizona College.
- **ASU Online** — one of the most robust Web campuses of any public university in the U.S.
**Tempe campus**

- ASU partners with American Campus Communities to provide more than 2 million square feet of student housing on the Tempe campus on long-term leases. This includes the campus-within-a-campus of Barrett, the Honors College. ASU now provides on-campus living for 14,322 students.

- The **Campus Solarization Project** will enable the university to generate 20 percent of its own power. By August 2015, the four Arizona Metropolitan Academic Campuses and the ASU Research Park are projected to have solar power generating systems totaling 24.8 megawatts DC, producing nearly 41 million kWh of electricity a year. ASU’s Tempe campus hosts the largest solar energy capacity on a single U.S. university campus. Solarization is funded entirely by a public/private university partnership.

- **The Brickyard**, an ASU-owned office-retail complex at the main intersection in downtown Tempe, contains more than 204,000 square feet of mixed-use space. The complex houses the Decision Theater, the dean’s office of the Ira A. Fulton Schools of Engineering, and the School of Computing, Informatics and Decision Systems Engineering.

- Completed in 2004, **Lattie F. Coor Hall** houses the schools of Politics and Global Studies; Historical, Philosophical and Religious Studies; and Geographical Sciences and Urban Planning. It also is home to the Institute for Social Science Research; the Department of Speech and Hearing Science; and the centers for Russian and East European Studies, Medieval and Renaissance Studies, Jewish Studies and Geospatial Analysis and Computation.

- **Fulton Center**, completed in 2005, houses the College of Liberal Arts and Sciences, ASU administration and the ASU Foundation for A New American University.

- **Hassayampa Academic Village** is a self-contained academic and residential community with classrooms, computer labs, tutorial spaces, residential dining and retail venues. Opened in two phases in 2006 and 2007 via a public-private partnership, the complex can accommodate 2,000 freshmen. It earned a silver rating from the U.S. Green Building Council’s LEED system.

- Completed in 2008, **Vista del Sol** provides 1,850 beds of apartment-style housing for upperclassmen and graduate students on the southernmost boundary of the Tempe campus. Programs at Vista del Sol serve a more mature, independent residential population. The Villas at Vista del Sol opened in 2012 with three- and four-bedroom living units and 16 townhouse units. Both Vista del Sol properties are third-party projects with American Campus Communities.

- Wrigley Hall, which formerly housed the school of nursing, was renovated to become home to the **Julie Ann Wrigley Global Institute of Sustainability**. The building is now one of the most ecologically friendly on any ASU campus.

- **Biodesign Institute Building A** was completed in 2004. With its 183,460 square feet, plus Biodesign Institute Building B and Interdisciplinary Science and Technology Buildings I, II and IV (ISTB 4 having opened in 2012), ASU added more than 700,000 square feet of research space.
A new facility was constructed to house the **ASU Police Department**, doubling the size of the previous building and significantly improving access for faculty, staff and students.

The **Weatherup Indoor Basketball Facility**, with 51,742 square feet of practice space, was completed in 2009. The **Verde Dickey Dome**, completed in 2008, provides 105,505 square feet of indoor practice space for the Sun Devil football team and is also used by the Sun Devil Marching Band, summer football camps, ASU intramurals and other athletic department events.

**Barrett, the Honors College at ASU** is the nation's first complete four-year, residential honors college campus. Its 496,000 square feet include residence halls, a dining hall, social lounges, study areas, a computer lab, and outdoor courtyards with an amphitheater and a volleyball court. It was completed in 2009 in a public university/private partnership.

In 2010, ASU purchased **Centerpoint Building A**, a four-story office building built in 1985 at the northwest corner of Mill Avenue and University Drive, adjacent to the Tempe campus. The purchase allowed the consolidation of leased office space for university uses that are currently geographically dispersed. Prior to the purchase, the university had leased more than 40,000 square feet of space in the building. Centerpoint A offers 85,748 square feet and 320 structured parking spaces.

In fall 2010 the university completed renovation of nearly 87,000 square feet in **Psychology North, Coor Hall, Schwada and Wilson Hall** to accommodate the expansion of psychology programs.

With a **commitment to sustainability**, ASU repurposes existing facilities whenever possible. New or expanded programs in renovated space on the Tempe campus include the Learning Sciences Institute, promoting interdisciplinary research in the learning sciences, the Herberger Digital Studio, and the School of Transborder Studies, all completed in 2011.

**The W. P. Carey School of Business** required a 22,000-square-foot expansion to the Computing Commons building to alleviate space shortages. Included in the project was the creation of student collaboration space and more than 60 faculty, staff and Ph.D. office spaces. The project was completed in 2011.

**The Aberration Corrected Electron Microscopy Center** is a 5,200-square-foot building addition completed in 2011 on the Tempe campus. Because the facility provides space for four aberration-corrected electron microscopes capable of unprecedented resolution, it was designed to maximize their performance by mitigation of electromagnetic fields, mechanical vibration, noise, room temperature and barometric pressure fluctuation. The facility allows researchers from across the Southwest to perform cutting-edge research in materials and biological sciences.

A major renovation and expansion of the **Health Services Building**, completed in 2012, added 20,000 square feet, creating space for acute care services, increasing patient capacity and decreasing wait times.
• **Interdisciplinary Science and Technology Building IV**, completed in 2012, provides flexible laboratories with adjoining workspace for the School of Earth and Space Exploration, the College of Liberal Arts and Sciences, and research programs in the Ira A. Fulton Schools of Engineering, including environmental engineering and energy research initiatives. On the ground floor, a 250-seat auditorium and gallery area serves as university classroom space, as well as an outreach function for K–12 educational programs and public events.

• **McCord Hall**, a 129,000-square-foot addition to the W. P. Carey School of Business, was completed in 2013. Its design emphasizes collaboration, discussion-based learning and flexibility. McCord Hall features modern architecture, technologically advanced tiered and flat classrooms, a multipurpose event space, a graduate-level career center, team rooms, study areas and outdoor assembly areas, all configured for 21st-century business education and public conferences. McCord Hall is environmentally friendly, with less water and energy use than comparable buildings, and a solar array that returns power to the campus grid. These considerations earned the hall Gold Certification from the U.S. Green Building Council's LEED Leadership in Energy and Environmental Design program.

• Two major projects completed in 2013 include an 84,500-square-foot addition to the **Sun Devil Fitness Complex**, its $32-million cost financed by student fees, and an extensive $50-million renovation to **Manzanita residence hall** carried out by American Campus Communities.
Downtown Phoenix campus

ASU entered into an innovative agreement with the city of Phoenix in 2005 through which the city would provide land and buildings; and ASU the academic programs, student housing and parking. The plan was approved by the citizens of Phoenix in a March 2006 bond election, and on August 15, 2006, ASU opened the Downtown Phoenix campus. By fall 2013 the campus was bringing more than 20,000 students and 1,000 employees to a sluggish urban core. The first phase of the campus included the colleges of Nursing and Health Innovation and Public Programs, and University College.

- The University Center offers 296,212 square feet of modern classrooms, offices, labs, seminar rooms and study areas. It houses Student Services, Information Commons (student computing and ASU Library), the ASU Bookstore and a small café and coffee house. The College of Public Service and Community Solutions, School of Letters and Sciences, and University College administration also operate within this building.

- ASU completed a major renovation to the 101,154-square-foot, historic Phoenix Post Office building in 2013. The renovation provided additional student services space for student advocacy, rights and responsibilities, career services, campus services hotline, conference rooms, recreation space, lounges and more.

- The Walter Cronkite School of Journalism and Mass Communication/KAET 8 building, with 244,964 square feet of space, opened in 2008, bringing the school closer to more major metropolitan news operations than any journalism school in the country. In 2009 Arizona PBS affiliate Eight/KAET-TV moved into a new, state-of-the-art studio in the shared facility.

- Taylor Place is ASU’s premier downtown Phoenix residential community. Its two towers, each 12 stories above a shared first floor, were completed in 2008 and 2009 to house 1,250 students and provide a dining facility and retail store. The facility was financed by a public university/private partnership.

- Nursing and Health Innovation Building, phases 1 and 2 were completed in 2009 with third-party financing. In 2010 the Department of Nutrition, Exercise and Wellness was consolidated within the College of Nursing and relocated from the Polytechnic
campus to the Downtown Phoenix campus, becoming the School of Nutrition and Health Promotion in the College of Health Solutions (itself launched in 2012). In spring 2011, the first floor of NHI 1 was renovated to accommodate a commercial-grade instructional kitchen facility for nutrition students. That summer, instructional exercise and wellness rooms and faculty offices were built on the fourth floor of NHI 2, and additional instruction space was renovated through a partnership with the local YMCA. Research functions were added in fall 2012. In summer 2013 the 5th floor, previously shell space, was completed and now houses the deans’ offices for the colleges of Health Solutions and Nursing and Health Innovation. This workspace was positively highlighted by The Wall Street Journal and the Phoenix Business Journal. NHI-2 provides 84,000 additional square feet.

- The Downtown Sun Devil Fitness Center opened in 2013, adjacent to the downtown YMCA and connected at ground level. The five-story, 87,703-square-foot building gives students, faculty and staff access to gymnasiums, a weight room, an indoor track, group activity gyms, multipurpose areas and a rooftop leisure pool. The $25-million fitness center, financed through student fees, also houses classrooms and exercise labs for the ASU Kinesiology program.

- In 2014, the Herberger Graduate Art Programs relocated to 605 E. Grant St. The renovated warehouse now hosts the graduate intermedia, fibers, photography, sculpture, painting and drawing student studios and workshops, as well as lecture and critique spaces, the Northlight Gallery, the Step Gallery and faculty studio space.

Polytechnic campus

- Completed in 2008, the Polytechnic Academic Complex provides classrooms, classroom laboratories and other specialized instructional spaces, and faculty and departmental offices. Comprising the Santa, Picacho, Peralta and Santa Catalina halls and the Applied Arts Pavilion, the complex added 286,686 square feet of space to the Poly campus.
• ASU partnered with Inland American Communities for housing and a new dining facility on the Poly campus.

• Interdisciplinary Science and Technology Building III is a 50,385-square-foot facility, opened in 2006, devoted to laboratories that support research in biological sciences, psychology, healthy lifestyles and plant-made pharmaceuticals.

• Space was repurposed in the Exercise and Wellness building for the ASU Preparatory Academy, a tuition-free, 9–12 grade public school. The 16,770-square-foot facility accommodates classrooms, multipurpose space, a learning lab and administration offices. The project was completed in 2010. In 2013, ASU converted a 28,000-square-foot portion of Creativity Hall into educational space for elementary school students, allowing the school to accommodate both traditional instruction and smaller, focused breakout areas.

• In 2012, Polytechnic campus students welcomed the completion of Century Hall, a 318-bed freshman residence hall and dining facility. The complex includes access to academic resources and student services, along with a 20,000-square-foot dining facility and a recreation/fitness center. It was created through a public/private partnership between ASU and Inland American Communities.

West campus

• On-campus student housing was introduced in 2004 with the opening of Las Casas Apartments, a three-story, $11.5-million project. Casa de Oro, a 365-bed freshman residence hall opened in 2012 as part of an academic village. Built by American Campus Communities at a cost of $7.2 million, the three-story hall includes social and gaming lounges, study rooms, a community kitchen, laundry facilities, a business center, an interior landscaped courtyard and 20,000 square feet of dining space.

• Devils Den, a major project to provide more space for students in the University Services Building, opened in 2009. The area includes food service, a student lounge and patio, student offices and meeting rooms and an office of the ASU student newspaper, The State Press. The ASU Bookstore and cafeteria were also expanded and enhanced, and the Student Health Services clinic expanded and relocated.

• ASU renovated 6,200 square feet at the FAB Annex for an outreach program for middle school students, the Herberger Young Scholars Academy. The academy personalizes education by matching individuals’ academic talents and interests with advanced college preparatory coursework and mentorship opportunities. The project was completed in 2011.

• A new Sun Devil Fitness Complex opened in 2013. The $25-million, 63,800-square-foot complex, funded by student fees, offers fitness equipment, an outdoor pool and fields, gym, racquetball courts and wellness service space as well as a demonstration kitchen.
The Colleges of ASU at Lake Havasu City

- ASU formed a community partnership to bring programs to western Arizona, collaborating with Lake Havasu City, the Lake Havasu United School District and the Lake Havasu Foundation for Higher Education. Phase 1 of the colleges, including the renovation of a middle school, opened in 2012. Additional student housing will be introduced in 2015.

ASU Research Park

- ASU acquired a unique $100-million flat-panel display building being closed by Motorola, for $29 million, and also acquired a Motorola research group being disbanded. Both were instrumental in ASU being awarded an Army research grant for flexible display computers. The Flexible Display Center at ASU is a government/industry/academia partnership advancing full-color flexible display technology and fostering development of a manufacturing ecosystem to support the rapidly growing market for flexible electronic displays. The center’s 250,000-square-foot capacity includes 43,500 square feet of advanced clean-room space, 22,000 square feet of wet/dry laboratories and extensive office and meeting areas.

SkySong

- The Scottsdale City Council approved a 198-year lease to the ASU Foundation for a $41.5-million, 42-acre parcel of land for the university to build a research/innovation park. SkySong, the ASU Scottsdale Innovation Center opened in 2008 with 20 global startup and midsized companies from eight countries. At build-out, SkySong will comprise 1.2 million square feet of office, research and retail space, along with a hotel/conference center.

- In 2012, SkySong’s two existing buildings, with 314,000 square feet, reached 98 percent occupancy, including 44 companies. Four others use SkySong services and support without a physical presence.

- SkySong is being constructed through a public university/private partnership. The $44 million, 325-unit apartment complex opened in 2013. Construction on the $32-million building 3 was completed in 2014. Building 4 is being planned.

Chandler Innovation Center

- In partnership with the city of Chandler, the ASU Chandler Innovation Center opened in 2013, providing students from the College of Technology and Innovation access to machinery, tools and software, including welding stations, plasma cutters, hand tools and 3-D printers. The 27,785-square-foot center is an engineering and technology-based education and research hub at Chandler’s former public works yard.
ASU student-athletes are committed to excellence in competition — earning national titles for teams and individuals — and in the classroom as high-achieving scholars; milestones they accomplish while working as volunteers to improve the lives of others.
Sun Devils win

- Student-athletes and coaches have upheld and enhanced the long-standing winning tradition of Sun Devil Athletics since 2002. SDA experienced unprecedented growth in all varsity sports, highlighted by a school-best 4th-place finish in the NACDA Directors’ Cup in 2007–08.

- 18 All-American student-athletes for 2013–14 (9 All-American honors, 9 Freshman honors)
- 71 Olympic appearances
- 42 individual national championships
- 29 Pac-10/Pac-12 Coach of the Year awards
- 16 Pac-10/Pac-12 championship teams
- 8 national Coach of the Year awards
- 7 national championship teams
- 12 team top-10 finishes in the past three years

In 2014:

- Sun Devil Baseball finished its 52nd consecutive season with more than 30 wins.
- Women’s Golf was selected for the NCAA Championships for the 23rd consecutive year.
- Women’s Tennis made its 27th consecutive NCAA Tournament appearance.
- Football Head Coach Todd Graham became ASU’s first to secure back-to-back 10-win seasons since Frank Kush from 1970–73.
Sun Devils graduate

- With the 7th-most Academic All-Americans in the nation since 2000, Sun Devil Athletics is committed to the academic success of its student-athletes. With its “Scholar Baller” program, ASU became the first institution to acknowledge academic success on game jerseys. SDA also developed cohort programming, resulting in improvement in all areas of the student-athlete experience. This evolution is exemplified by the Women’s Tennis team, earning a perfect Academic Progress Rate score every year the measurement has been in existence, while advancing to the NCAA tournament in 27 consecutive years.

Additional Sun Devil accolades:
- 4 Academic All-Americans for 2013–14
- 101 student-athletes named Pac-12 All-Academic or All-Academic Mountain Pacific Sports Federation in 2013–14
- In the last 10 years, ASU has had 51 Academic All-Americans; two earned the highest national distinction, Academic All-American of the Year.

Academic Progress Rates:
- Baseball — among the top 10 percent in the nation
- Men’s Tennis — among the top 10 percent in the nation for 10th consecutive year, with an average APR of 1000 since 2003–04
- Women’s Tennis — 1000 APR for nine consecutive years
- Sun Devil student-athletes achieved an all-time high graduate success rate in 2013–14, with 82 percent receiving degrees. This GSR ranked 4th in the Pac-12.

Sun Devils serve

- Sun Devil Athletics carries its responsibility to Phoenix-area communities and the state by visiting elementary schools and children’s hospitals, partnering with nonprofit organizations and volunteering at events.
- Sun Devil Athletics accounted for more than 6,000 volunteer hours in 2013–14, serving more than 240,000 community members.
- Pat’s Run is an ASU-hosted 4.2-mile run/walk fundraising event coordinated by the Pat Tillman Foundation. The Tempe run and its associated shadow runs in 36 markets across the country have grown to include more than 132,000 participants annually. Pat’s Run raises scholarship funds for Tillman Scholars who strive to make an impact on their communities and their country.
- Sun Devil wrestler Anthony Robles won the 2011 NCAA National Title and was honored at the 2011 ESPYs with the Jimmy V Award for Perseverance and named the Best Male Athlete with a Disability.
Philanthropy

- In 2013–14, the Sun Devil Club exceeded its cash goal by nearly $2 million and its pledge goal by more than $20 million.
- The Sun Devil Club has tripled athletic department endowments, reaching $17 million in 2013–15; an 80-percent increase in only four years.
- Sun Devil Athletics has the largest donor group in the Pac-12.

Attendance

Nearly 7 million fans have attended ASU sporting events in the past 10 years, creating an inclusive atmosphere around ASU's Tempe campus.

- Total student attendance for the 2013–14 football season was 51,809.
- Men's basketball had an average of 825 students in attendance per game in 2013–14, an all-time high.
- The “942 Crew” was ranked 1st in the Pac-12 for the Naismith Foundation Student Section of the Year award for 2013–14.
- Attendance for football, men's and women's basketball, baseball and softball has been increasing since 2011.
- In 2013–14, Sun Devil Athletics set an all-time high for average football student attendance at 7,685.
- Sun Devil Athletics has hosted non-ASU events, including NCAA offerings, Arizona Cardinals football games, bowl games and community occasions.
• In 2009, SDA hosted President Barack Obama’s ASU commencement speech in Sun Devil Stadium for a crowd of more than 70,000; the largest U.S. audience for Obama since his inauguration.
• Sun Devil Athletics hosted 146 home events for 2013–14, with attendance of 755,485.
• Sun Devil Athletics hosted 101 post-season and special events in 2013–14, with attendance of more than 200,000.

Facilities

SDA has invested more than $100 million in its facilities since 2002 to ensure its varsity sports remain in the upper echelon of athletic programs. State-of-the-art indoor practice facilities for football, basketball and other sports make ASU a destination for aspiring Sun Devil student-athletes.

Capital projects

Sun Devil Athletics has built more than $45 million in capital projects in 10 years:
• Riches Wrestling Complex
• John Spini Gymnastics Center
• Weatherup Center basketball facility
• Verde Dickey Dome football practice facility
• Sun Devils Sports Performance training facility

Capital projects have included improvements to existing facilities:
• Sun Angel Stadium
• Mona Plummer Aquatic Complex
• Wells Fargo Arena
• Sun Devil Stadium
• Carson Student-Athlete Center
• Farrington Stadium
• Kajikawa Football Practice Field
• Whiteman Tennis Center
• Hobbs Practice Facility
• SDA has spent more than $100 million in 10 years to maintain current facilities. Major projects have included:
  • Sun Devil Stadium structural improvements.
  • baseball’s transition to Phoenix Municipal Stadium.
  • improvements to Camp Tontozona.
• 2014 brought announcements about the future of Sun Devil Stadium, a new baseball stadium, a new home course for the golf teams and plans for renovating several sports venues.
• Sun Devil Athletics has been named one of the top 10 college athletics departments in the nation for sustainability, implementing zero-waste programs at all SDA facilities.

Achievements

Sun Devil Athletics achieves success in all varsity sports while enabling student-athletes to excel during their time at ASU and after graduation. Evidenced by its representation at the Women’s World Cup, the NBA Finals, the Super Bowl and the Master’s, SDA is a training ground for those looking to shine on the world’s brightest athletic stages.

• ASU’s achievements in the 19-year history of the Directors’ Cup, awarded by the National Association of Collegiate Directors of Athletics, include:
  • 15 top-20 finishes.
  • 11 top-15 finishes.
  • seven top-10 finishes.
  • a school-best 4th-place finish in 2008.
• Also in 2008, ASU was named the nation’s Top College Athletics Program by Sports Illustrated.
• In 2011, SDA unveiled a comprehensive rebranding campaign for the athletic department that included a new primary logo and uniforms. The campaign received national media coverage and acclaim.
• SDA has experienced 66 percent growth in its social media platforms.
• SDA events available via live stream in 2013–14 attracted average viewership of 1,539 per event.
Alumni are valuable members of our university community, maintaining tradition and reflecting the overall success and spirit of a learning institution. A 2014 Gallup study found ASU graduates are more likely to thrive.
Profile

- 55 percent are younger than 45; 33 percent are younger than 35.
- The majority — 220,626 — live in Arizona; particularly Maricopa County — 198,792.
- Other states with the largest ASU alumni presence are California, Texas, Colorado, Illinois, Washington, New York, Florida, Oregon, Virginia and Nevada.

Membership

- Since 2003, ASUAA membership has grown to nearly 39,000 dues-paying members. Since 2008, a strategic partnership with the ASU Bookstore has increased membership among new graduates 260 percent.
- In 2006, the Student Alumni Association adopted a membership dues structure to more fully support its programs. SAA experienced a 300-percent growth in membership in 2011, after forming a partnership with the Student Sun Devil Club. At the end of 2014, membership in SAA numbered more than 3,200.
- Also in 2006, the Alumni Association established the U Devils group for faculty and staff. By the end of the year membership had grown to nearly 1,000 employees.
- Established in 2008, the Gold Life Membership category now includes more than 1,600 members.
Networks

- In 2010, ASUAA created Arizona State Young Alumni to engage alumni under age 35 with social, career and community service programming and events in Maricopa County.

- ASUAA increased staff and resources to strengthen its network for alumni outside Arizona. That network now numbers 78 chapters and clubs in the U.S. and 43 international connection groups.

- The Student Alumni Association actively supports game-day activities, plays an integral role in pep rallies and upholds Sun Devil traditions, including whitewashing and protecting the "A," and hosting the annual mud volleyball tournament known as Oozeball. SAA also offers special programming for ASU seniors, assisting them with the transition to graduate studies or in finding their first professional positions.

- The association created Sun Devil Generations in 2008 for ASU families with children from infant to 8th grade. Generations introduces the values and culture of a major public research university and fosters a lifelong relationship with ASU. The program grew from 78 children enrolled to 133 in 2014, with seven member events hosted for total attendance of 414.

- ASUAA partnered with ASU Undergraduate Admissions to recruit 925 national and international volunteer Alumni Admissions Ambassadors.

- The association instituted the Sun Devil Advocates Network, enlisting supporters to advocate for the university and higher education. SDAN has more than 2,150 participants.

Communications

ASU Magazine

- Since 2005, circulation has increased by 72 percent. ASU Magazine is delivered to more than 350,000 households including alumni, dues-paying association members, faculty and staff, and select donors.

- Since 2007, the magazine has been printed on paper that is FSC- and SFI Chain of Custody-certified, using vegetable-based soy ink.

- ASU Magazine has received 57 awards for writing, design and overall excellence.

- In 2012, the magazine’s companion website, magazine.asu.edu, was enhanced to offer content from the print edition as well as online-only features, additional photos, video and audio content, and a blog.

- The magazine is also offered through an iPad application, available at no charge in Apple’s iTunes store, allowing users to view the latest edition and read past issues.

- ASUAA continues to enhance its website, alumni.asu.edu, with simplified navigation and robust content. Since 2005, the site has received nearly 1.5 million visits.

- The association uses social media to share university, alumni and athletics news, and photos and updates from alumni. The Facebook page, launched in 2008, has more than 31,000 fans. The association has more than 13,000 followers on Twitter, and hosts the largest LinkedIn group of ASU graduates, with more than 30,000 Sun Devils around the world.
Programs | services

• In 2009, the association transformed the existing ASU Cares day of service project from a local into a national event, ASU Cares Across the Nation. Chapters and clubs have participated in 129 service projects in six years.

• In 2009, ASUAA inaugurated “shadow runs” sponsored by chapters across the nation in conjunction with the 4.2-mile Pat’s Run held each April in Tempe. More than 30 chapters hosted runs in 2014.

• The association’s chapter for ASU alumni who are military veterans, created in 2011, now reaches more than 3,500 graduates. This group has participated in ASU events such as the annual Salute to Service, and has held networking events for its members. The chapter hosts fall and spring graduation ceremonies for student veterans, presenting them with special military stoles to be worn at commencement.

• Chapters have increased their fundraising efforts for student scholarships in their geographic areas or in affiliation with their special interest areas.

• ASU collegiate license plates — known as Sparky plates — on the road in Arizona number more than 16,000. Sales of the plates generate support for the Medallion Scholarship Program; $300,000 in 2013, an increase of 236 percent since 2003. 2011 brought a new design featuring Sparky on an all-gold background.

• ASUAA revitalized its Homecoming Week activities in 2008 with the annual pregame Legends Luncheon. The luncheon has become a fall signature event for the university. In 2013, the event honored the more than 200 Sun Devils who played in the NFL, and boasted nearly 700 guests.

Founders Day

• The Alumni Association’s signature spring event has grown since 2003, from a budgeted expense to a revenue generator.

• ASUAA partnered with the ASU Foundation for Founders Day 2009 to unveil The Challenges Before Us initiative and honor faculty and alumni exemplars of ASU’s work to solve contemporary issues. Attendance was 620.

• In 2010, the first Founders’ Day Award given to an international recipient was presented to His Excellency Sultan Saeed Nasser Al Mansoori, a 1988 ASU graduate; and Gregory and Emma Melikian received the inaugural Philanthropist of the Year Award. Attendance was 600.

• In 2011, event attendance reached 680, and in 2012, paid attendance exceeded 775.

• Founders Day 2013 honored all Sun Devils who served or are currently serving in the military. Attendance was 780.

• In 2014, Founders Day honored Innovators in Health Solutions and maintained attendance of 780.
Travel

- ASUAA supports lifelong educational interests of alumni with ASU Travel and Tours. Created in 2008, the travel program has seen a significant increase in alumni engagement.
- In 2011, the association created Travel to Arizona to support alumni returning to the Valley of the Sun for ASU-themed events. The portal features discounted rates and exclusive deals for Sun Devils at 15 Phoenix-area hotels.

Career

- Responding to economic conditions and alumni requests, the association launched Alumni Career Resources in 2011, in partnership with ASU Career Services.
- In its inaugural year, the initiative provided three programs and one webinar on professional development topics, one-on-one career coaching (in-person and online), a quarterly newsletter, a blog focused on career issues, and networking events.
- Events now include luncheons, Maroon and Gold Mixers and Women in Business Mixers attended by more than 1,000 alumni each year.
- ASUAA facilitates service and volunteer opportunities to connect and unite alumni, advance the university and enhance the alumni experience. In 2013, more than 700 volunteers of all ages provided more than 10,000 hours of service.
- The ASUAA Medallion Scholarship was revised in 2005 from a one-year stipend to a four-year scholarship program, and from $2,000 to $3,000, awarded to 27 recipients throughout Arizona. Medallion Scholarships are supported by the ASU license plate program and donors, and provided $300,000 in direct support in 2012.
- Since 2006, the association has hosted 264 Sun Devil Send-offs with ASUAA geographic chapters nationwide. The send-offs are receptions for freshman and incoming to other new students.
- The Legacy Scholarship program offers $1,200 scholarships ($600 per semester) to relatives of Alumni Association members. Since 2010, the scholarship has been awarded to more than 30 students.
- Between 2002 and 2013, the ASUAA presented 756 Moeur Awards to honor undergraduates who achieve the highest academic standing while attending ASU in eight consecutive fall and spring semesters.
To learn more about ASU’s recent progress as a New American University, read the 2014 Annual Report: “ASU's most significant year,” at annualreport.asu.edu.

Follow ASU’s progress and learn how you can be part of the evolution of American higher education at newamericanuniversity.asu.edu