

Arizona State University

# Strategic Enterprise Plan:

## 2021 Update & Operational and Financial Review

Michael M. Crow  
February 12, 2021





# The ASU Enterprise

## 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; and assuming **fundamental responsibility** for the economic, social, cultural and overall health of the **communities** it serves.





# ASU is leading the Fifth Wave

## First Wave

Greek Academies

## Second Wave

State Colleges

## Third Wave

Land-Grant Colleges

## Fourth Wave

Research Universities

## Fifth Wave

National Service Universities

**1636 Harvard College\***  
 1693 College of William and Mary  
 1701 Yale College  
 1746 College of New Jersey (Princeton)  
 1754 King's College (Columbia)  
 1755 College of Philadelphia (Penn)  
 1764 College of Rhode Island (Brown)  
 1766 Queen's College (Rutgers)  
 1769 Dartmouth College

Schools founded during the early Republic that established the prototype for the American residential liberal arts college

1783 Dickinson College  
 1793 Williams College  
 1794 Bowdoin College  
 1800 Middlebury College  
 1832 Wabash College  
 1833 Oberlin College  
 1837 Mount Holyoke College  
 1846 Grinnell College  
 1860 Bard College  
 1864 Swarthmore College  
 1871 Smith College  
 1885 Bryn Mawr College  
 1887 Pomona College, etc.

Liberal arts colleges established during the twentieth century as variants of the colonial colleges

1908 Reed College  
 1932 Bennington College  
 1946 Claremont McKenna College  
 1955 Harvey Mudd College  
 1969 College of the Atlantic  
 1997 Olin College, etc.

State-chartered colleges and universities, including teacher colleges and technological institutes, some private

**1785 University of Georgia\***  
**1789 University of North Carolina\***  
 1792 University of Vermont  
 1801 University of South Carolina  
 1816 University of Michigan  
**1819 University of Virginia\***

1848 University of Wisconsin  
 1851 University of Minnesota  
 1855 Michigan State University  
 1855 Penn State University  
 1856 University of Maryland  
 1858 Iowa State University  
 1861 Massachusetts Institute of Technology (MIT), etc.

1862 California State Normal School (California State University system)

1880 University of Southern California  
 1883 University of Texas, Austin  
 1885 Tempe Normal School (ASU)  
 1885 Georgia Institute of Technology (Georgia Tech)  
 1891 California Institute of Technology (Caltech), etc.

**1899 Northern Arizona University**  
 1909 Tennessee Tech  
 1944 Utah Valley University

1946 Portland State University  
 1963 University of Central Florida  
 1966 University of Maryland Baltimore County, etc.

2018 California Community College No. 115

Land-grant colleges and universities established as a consequence of the Morrill Act of 1862

**1865 Cornell University\***  
**1867 University of Illinois\***  
**1868 University of California\***  
 1869 Purdue University  
 1870 Ohio State University  
 1871 Texas A&M University, etc.  
 1885 University of Arizona

Second Wave schools subsequently designated land-grant universities

University of Wisconsin  
 University of Minnesota  
 Michigan State University  
 Penn State University  
 University of Maryland  
 Iowa State University  
 MIT, etc.

1890 land-grant institutions (HBCUs)  
 Alabama A&M University  
 Tuskegee University  
 West Virginia State University, etc.

1876 Johns Hopkins University\*  
 1885 Stanford University\*  
 1890 University of Chicago\*

First Wave colleges that evolved into research universities

Harvard University  
 Yale University  
 Princeton University  
 Columbia University  
 University of Pennsylvania  
 Brown University, etc.

Second Wave colleges and universities that evolved into research universities

University of Georgia  
 University of North Carolina  
 University of Michigan  
 University of Virginia  
 Georgia Tech  
 Caltech  
 Arizona State University, etc.

Third Wave universities that evolved into research universities

University of Wisconsin  
 University of Minnesota  
 Michigan State University  
 Penn State University  
 University of Maryland  
 Iowa State University  
 MIT  
 Cornell University  
 University of Illinois  
 University of California  
 Purdue University, etc.

**University of Arizona**

Fourth Wave institutions combining scale and accessibility with world-class research enterprises

**Arizona State University\***

Penn State University  
 University of Maryland system  
 Purdue University, etc.

## ASU is an emerging National Service University

**National Service Universities** aspire to **accelerate positive social outcomes** through the seamless integration of **cutting-edge technological innovation and scalability** with institutional cultures dedicated to the advancement of **academic enterprise and public value.**

## Our charter drives all we do

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**; and assuming **fundamental responsibility** for the **economic, social, cultural and overall health** of the communities it serves.

## Fulfilling our responsibility and the public trust

The charter is a **promise** to the citizens of Arizona.

ASU has a **responsibility** to fulfill the requirements of the Arizona Constitution to provide public education.

The responsibility is not one that is conditional upon the actions of the legislature; it is ASU's responsibility to find the means to fulfill its charter while seeking appropriate and fair public investment in the costs of education for Arizona resident students.

# Our design aspirations are how we work

## Leverage Our Place

ASU embraces its cultural, socioeconomic and physical setting.

## Transform Society

ASU catalyzes social change by being connected to social needs.

## Value Entrepreneurship

ASU uses its knowledge and encourages innovation.

## Conduct Use-Inspired Research

ASU research has purpose and impact.

## Enable Student Success

ASU is committed to the success of each unique student.

## Fuse Intellectual Disciplines

ASU creates knowledge by transcending academic disciplines.

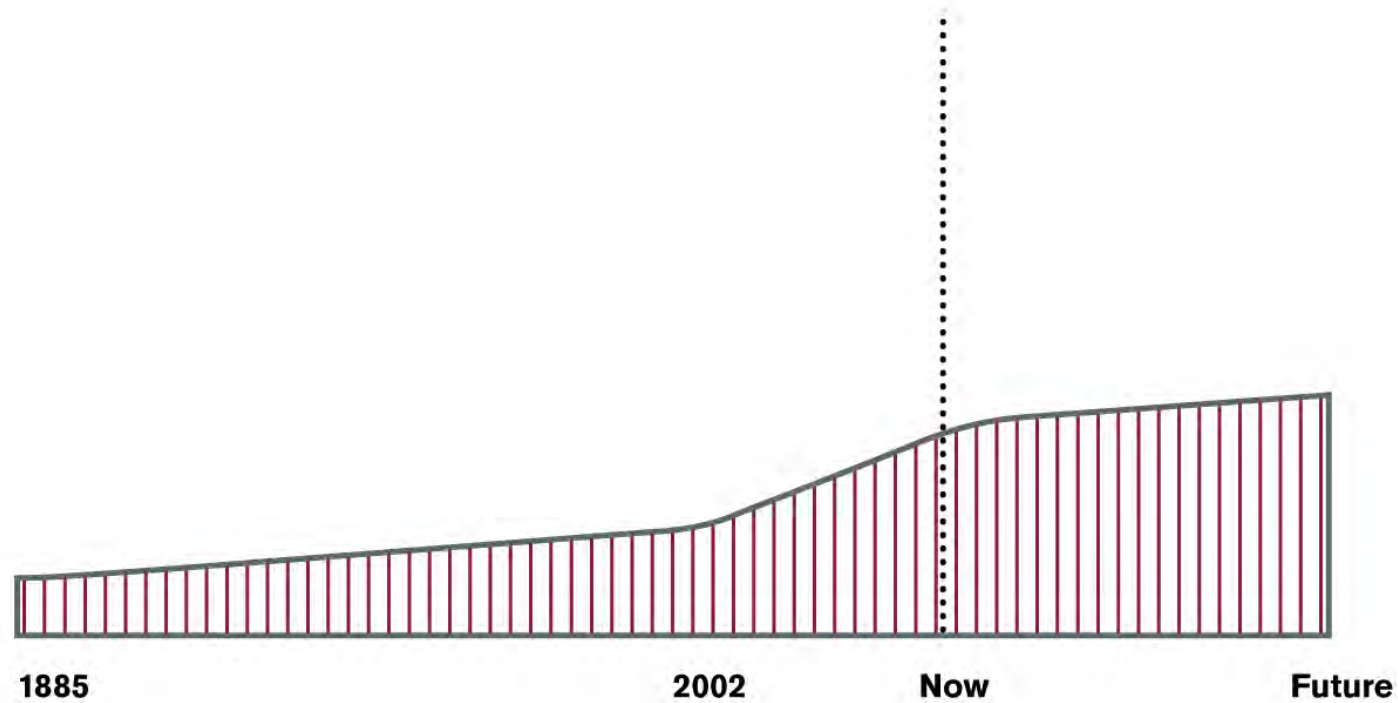
## Be Socially Embedded

ASU connects with communities through mutually beneficial partnerships.

## Engage Globally

ASU engages with people and issues locally, nationally and internationally.

# ASU's public enterprise continues to evolve

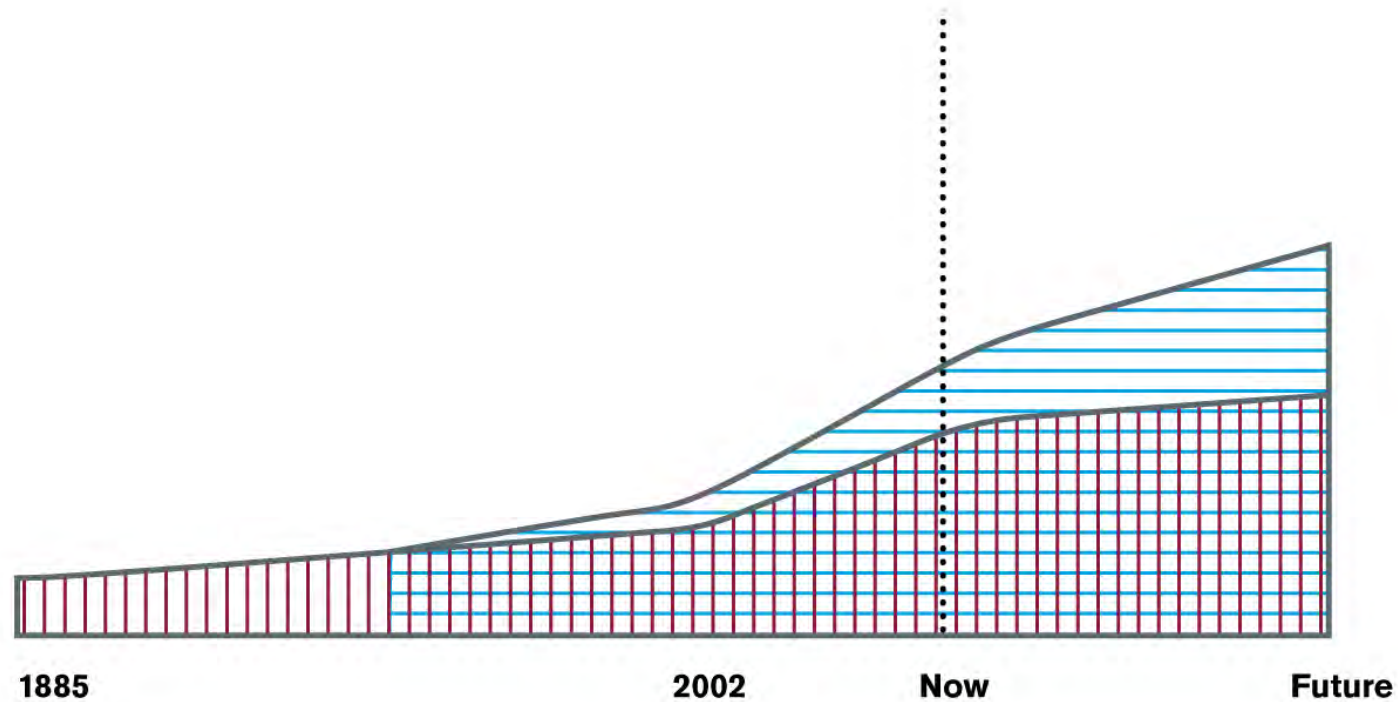


Academic Enterprise





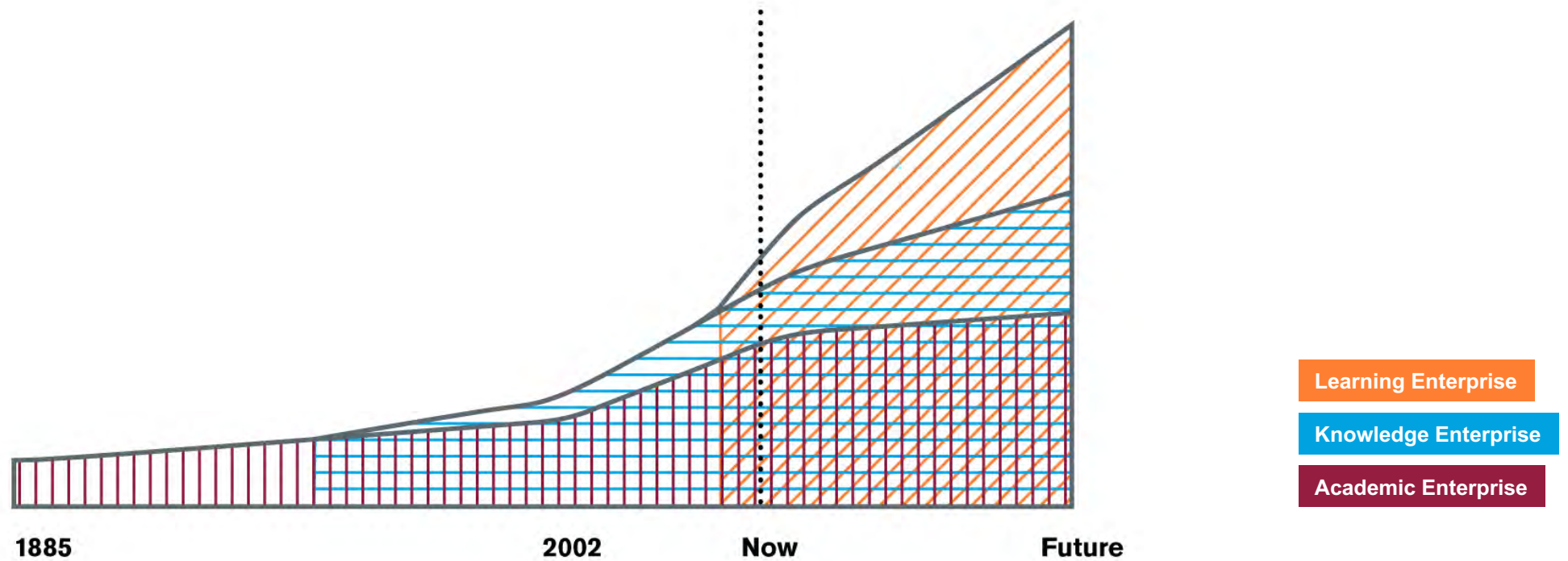
# ASU's public enterprise continues to evolve



Knowledge Enterprise

Academic Enterprise

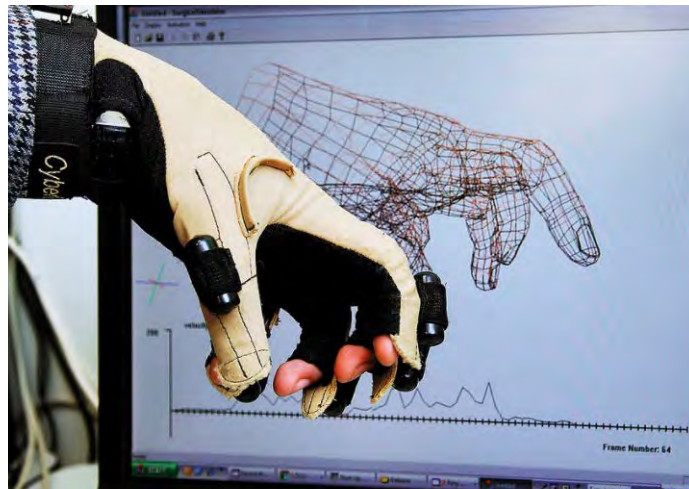
# ASU's public enterprise continues to evolve



# Three pillars anchor the public enterprise



**Academic Enterprise**

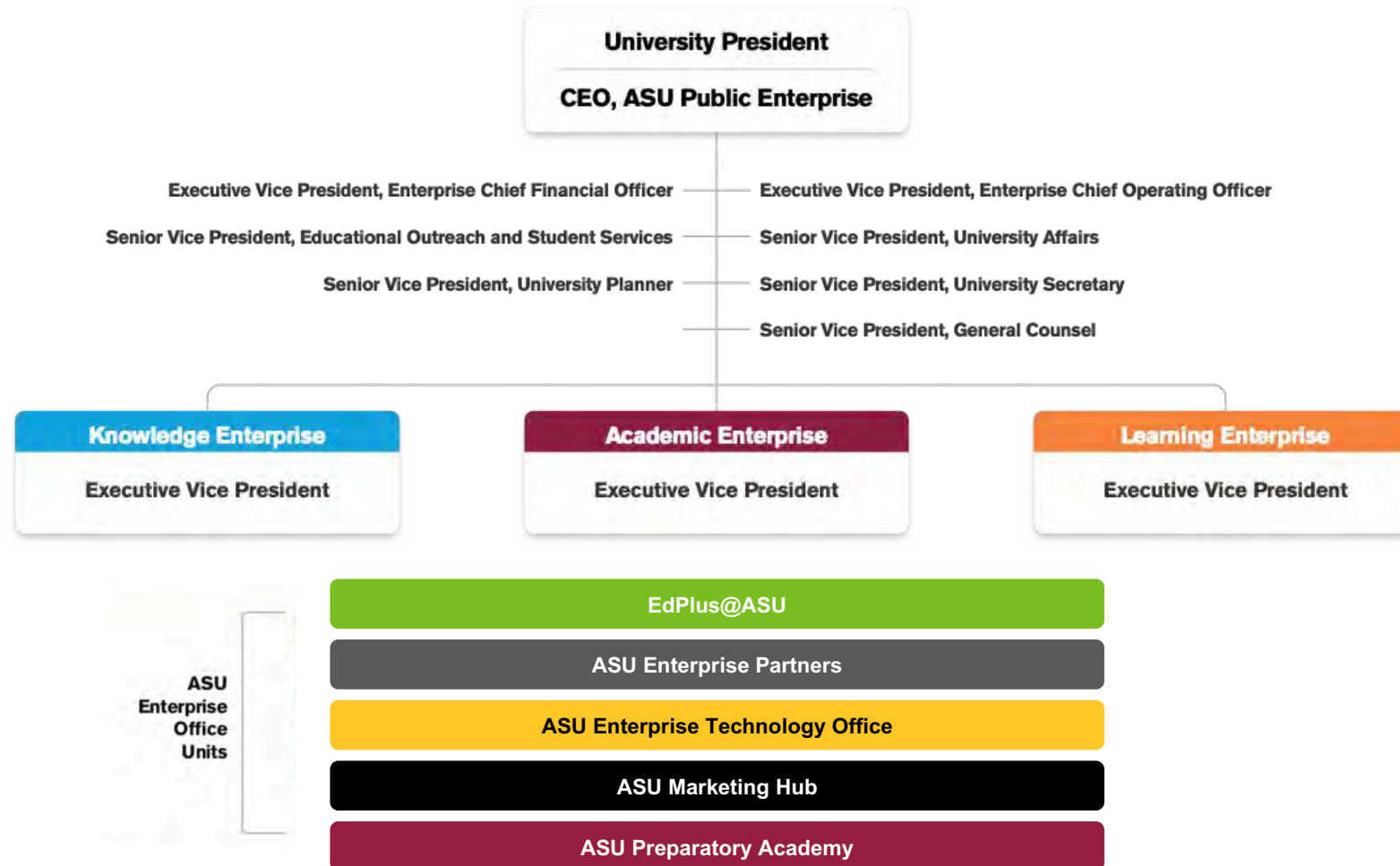


**Knowledge Enterprise**



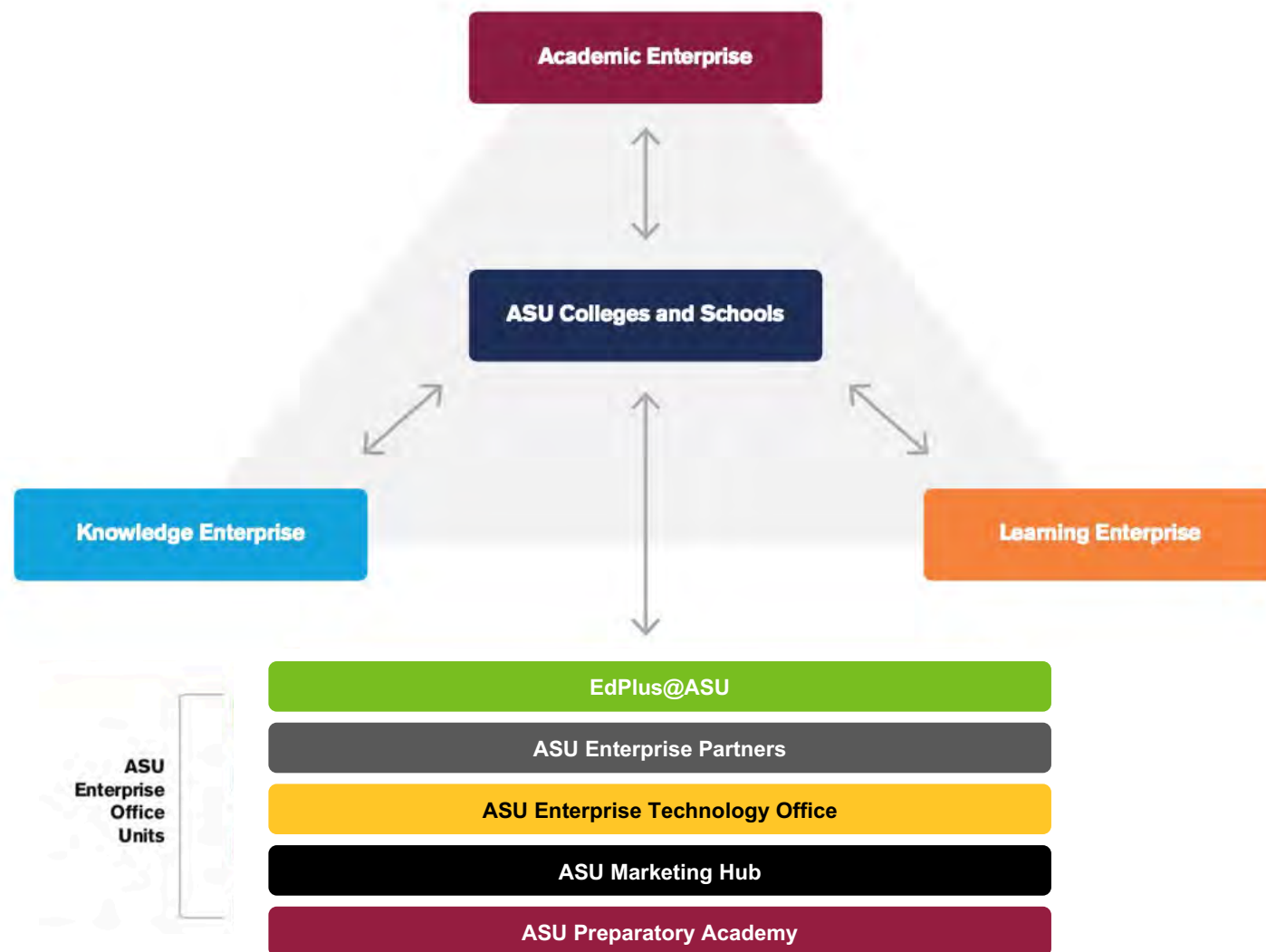
**Learning Enterprise**

# ASU: A public enterprise university in service to the nation

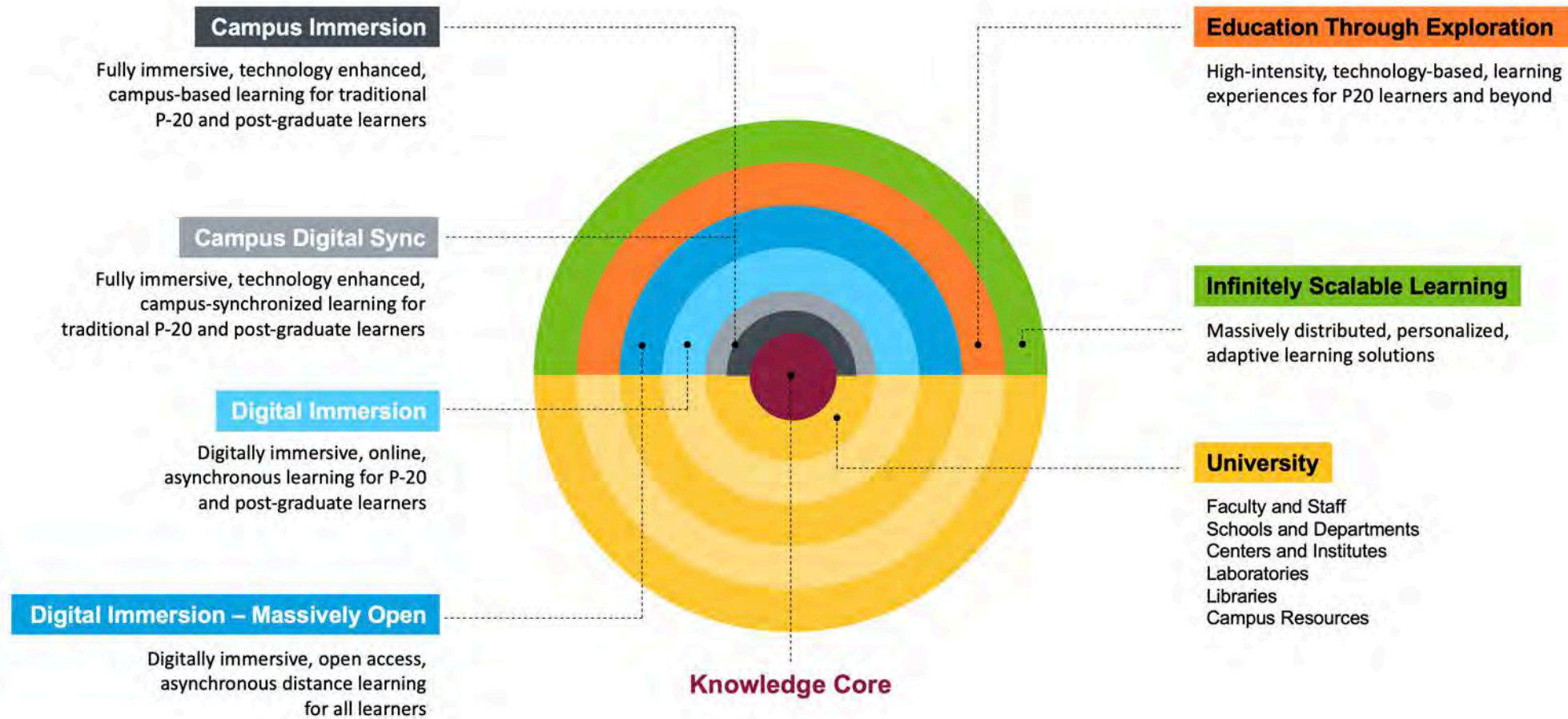




# The pillars and our colleges and schools work together



# ASU advances across teaching and learning realms



# Our design enables our response under all conditions

## Fragile

**The quality of being easily broken or damaged**

—The Oxford Dictionary

## Resilient

**“the capacity of a system to absorb disturbance and re-organize while undergoing change so as to still retain essentially the same function, structure, identity and feedbacks”**

—Walker et al., *Ecology and Society*, 2004

## Antifragile

**Something that “thrives and grows when exposed to volatility, randomness, disorder, and stressors and loves adventures, risk, and uncertainty”**

—Nassim Taleb, author of *The Black Swan*, 2007

# COVID Management

A healthcare worker wearing a blue face shield, a teal N95 mask, and a blue gown is performing a procedure. A hand in a black sleeve is visible in the foreground, holding a small white object. The background is a dark, textured wall.



## ASU as a resource for fighting COVID-19

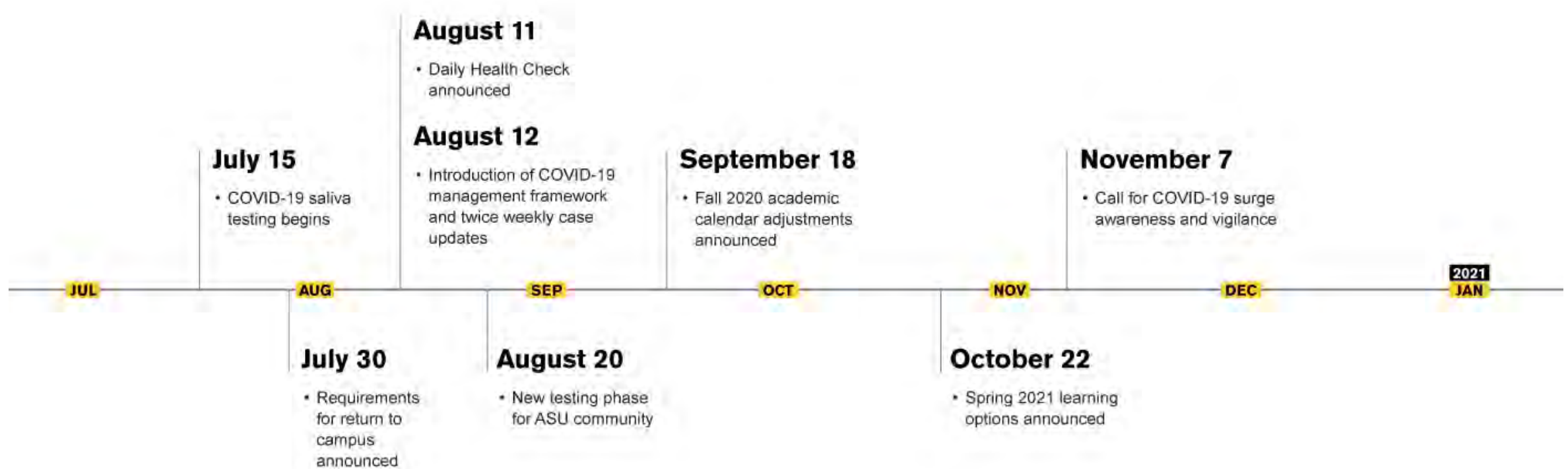
Throughout the past year, during a time of high stress and unique demands, leaders throughout the state have called upon Arizona State University to be of service.

ASU students, faculty and staff have relied on **innovation, ingenuity, hard work and determination** to take on assignments that have helped the state advance through unprecedented challenges.

# ASU COVID-19 response: 2020 Timeline



# ASU COVID-19 response: 2020 Timeline



# ASU COVID-19 response: Students

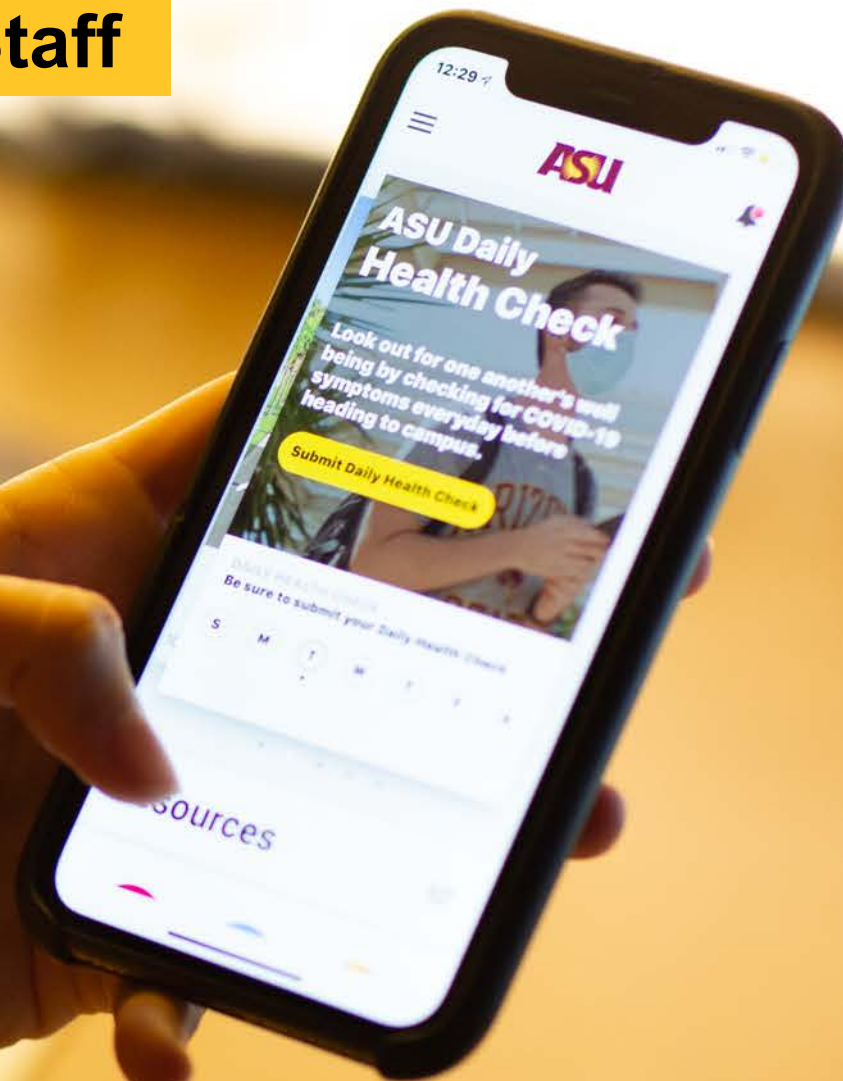
- Accessible and free COVID-19 testing
- Enhanced campus safety and cleaning protocols
- ASU COVID-19 Outbreak Response Unit
- Telemedicine and telecounseling
- COVID-19 management strategy and case data updates
- Three learning modalities: ASU immersion, ASU Sync, iCourses
- ASU 24/7 Experience Center
- Digital tools including laptops, WiFi hotspots
- Digital academic support programs
- Virtual orientations and campus visits
- CARES Act funding
- Modified dining options
- Physically distanced community activities
- Virtual commencement and convocation ceremonies





# ASU COVID-19 response: Faculty and Staff

- Enhanced safety protocols
- Accessible and free COVID-19 testing
- Daily health check app
- COVID-19 management strategy and case updates
- Employee Wellness Exposure Management Team
- Employee Assistance Office
- Phased return to work plan
- Online employee webinars
- Workplace accommodations
- ASU Telecommuting Resource Guide
- Classroom safety supplies
- Classroom technology upgrades
- Digital tools including laptops and WiFi hotspots
- ASU Sync classroom orientations, on-demand training modules, and digital tools and templates
- ASU 24/7 Experience Center
- Instructional videos to facilitate remote teaching (Zoom, Slack, etc.)
- UTO key modality data dashboard



# ASU COVID-19 response: Research

- Rapid robotic saliva testing
- PPE Response Network
- 100+ research groups mobilized (including COVID-19 vaccine teams)
- Weekly ASU Biodesign media briefings
- Wastewater COVID-19 tracking
- Point-of-care testing device
- Computational Modeling in Social and Ecological Sciences (CoMSES Net), international clearinghouse for computer models
- COVID Testing Commons, one-stop resource for comprehensive testing information
- Global Futures Laboratory





# ASU COVID-19 response: Community

- Accessible and free COVID-19 saliva testing
- Operation of the state's mass vaccination sites
- COVID-19 management strategy and case updates
- Wastewater COVID-19 tracking
- Outbreak Response Team traced 15,000 cases
- Maricopa County Serosurvey Program
- Edson mask-making tutorial
- COVID Resilience for Healthcare Professionals Facebook group (ECONHI)
- COVID-19 Diagnostic Commons
- Online music therapy for the elderly (School of Music)
- ASU Prep Digital and ASU For You
- MLFTC Sun Devil Learning Labs
- Virtual Field Trips
- Arizona PBS educational programming
- Center for Accelerating Operational Efficiency work on medical equipment and vaccine supply chain challenges
- Global Security Initiative's Center for Cybersecurity and Digital Forensics tracking of COVID-19 by online scammers

# **The ASU community stepped up to serve**

**Video: Thank You, Sun Devils**

**In response to COVID-19, many ASU students, personnel and alumni went above and beyond their daily work and studies to meet the needs of the university and Arizona's communities at large.**





## COVID-19 is not going away

These conditions **accelerate** the changes we knew were needed.

We believe there is more value in moving forward from here than going back to “normal.”

# Our ASU Sync modality is one way of moving forward through innovation

## Course options

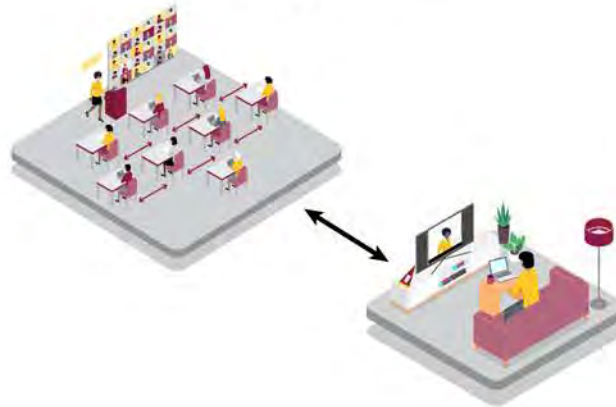
Learning environments

Full immersion



On-campus, in-person instruction.

ASU Sync



Blend of in-person and ASU Sync experiences. ASU Sync is fully interactive remote learning using live lectures via Zoom.

iCourse



On-campus immersion courses delivered entirely online with lectures available on demand.

ASU succeeded and set new goals

Video: Reflecting on college during a pandemic and planning for Spring 2021

We asked students to tell us  
what surprised them about the  
**fall** 2020 semester and what  
they're hoping for in **spring**  
2021.





# Evolution of the public enterprise



# ASU thrives on collaboration



Uber

Google



UDACITY

coursera



مؤسسة عبدالله  
الغريير للتعليم  
Abdulla Al Ghurair  
Foundation for Education



U.S. AIR FORCE

CINTANA  
EDUCATION

InStride™

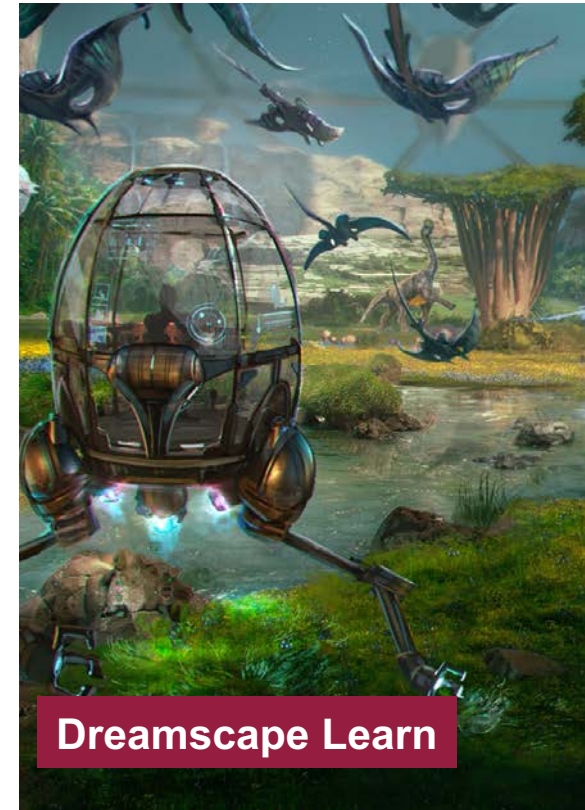


SANTA FE  
INSTITUTE

PLUS  
ALLIANCE



# ASU integrates capacity of major affiliates



# ASU operates in metropolitan U.S. cities





# ASU will open flagship center in Downtown Los Angeles architectural landmark in 2021

Five story, 80,000 square foot center for modern Los Angeles

Herald Examiner Building





# ASU academic engagement spans the globe



# ASU research engagement spans the globe



# Performance and Accomplishments



# ASU mission and goals make clear our expectations



Demonstrate **leadership** in academic excellence and accessibility



Establish **national standing** in academic quality and impact of colleges and schools in every field



Establish ASU as a **global center** for interdisciplinary research, discovery and development by 2025



Enhance our **local impact** and social embeddedness



# ASU progress is measured against our goals



## Demonstrate **leadership** in academic excellence and accessibility

- Maintain the fundamental principle of accessibility to all students qualified to study at a research university.
- Maintain university accessibility to match Arizona's socioeconomic diversity, with undifferentiated outcomes for success.
- Improve first-year persistence to **greater than 90 percent**.
- Enhance university graduation rate to **greater than 85 percent** and more than 32,000 graduates.
- Enhance quality while reducing the cost of a degree.
- Enroll **125,000** online and distance-education degree-seeking students.
- Enhance measured student development and individual student learning to national leadership levels.
- Engage **all learners on all levels**.

# ASU progress is measured against our goals



Establish **national standing** in academic quality/ impact of colleges/schools in every field

- Attain national standing in academic quality for each college and school (top 5 percent).
- Attain national standing in the learning value added to our graduates in each college and school.
- Become the leading university academically (faculty, discovery, research, creativity) in at least one department or school within each college and school.

# ASU progress is measured against our goals



Establish ASU as a **global center** for interdisciplinary research, discovery and development

- Become the leading American center for discovery and scholarship in the integrated social sciences and comprehensive arts and sciences.
- Enhance research competitiveness to more than **\$1 billion** in annual research expenditures.
- Transform regional economic competitiveness through research and discovery and value-added programs.
- Become a leading American center for innovation and entrepreneurship at all levels.

# ASU progress is measured against our goals



## Enhance our **local impact** and social embeddedness

- Strengthen Arizona's interactive network of teaching, learning and discovery resources to reflect the scope of ASU's comprehensive knowledge enterprise.
- Co-develop solutions to the critical social, technical, cultural and environmental issues facing 21st-century Arizona, ensuring sustainability and resilience.
- **Meet the needs of 21st-century learners** through the Universal Learner® initiative by increasing individual success through personalized learning pathways and promoting adaptability to all accelerated social-technical changes.



# ASU excellence earns recognition

**#1 in U.S. for innovation**

**ASU Ahead of Stanford and MIT**

— U.S. News & World Report 2016-2021

**Top 1% of institutions of higher education worldwide**

— Center for World University Rankings, 2020

**29 top 10 graduate programs in the nation, including law, education, business, public affairs, fine arts and others**

— U.S. News & World Report, 2021

**Top-producing university for elite scholars for 10 consecutive years**

— Frank Office for National Scholarships Advisement

**Top 15 in the world for U.S. patents**

— U.S. National Academy of Inventors and Intellectual Property Owners Association, 2020

**Top 10% Athletics Academic Progress Rate in the Pac-12, highest in ASU history**

— NCAA, 2020

**#1 in the U.S. and #5 in the world for advancing global impact (poverty, hunger, clean water, energy and gender equality)**

— Times Higher Education, 2020

**Top 10 “Best Buy” public school**

— Fiske Guide to Colleges, 2021

**Named a “best college” with “one of the best journalism schools in the nation”**

— The Princeton Review, 2020

**Top 20 producer of Fulbright U.S. Student and Fulbright U.S. Scholar awards**

— The Chronicle of Higher Education, 2020

**Top 20 university for undergraduate education**

— U.S. News & World Report, 2020

**Top 10 in first-year experiences**

— U.S. News & World Report, 2020

**Top 10 nationally for best online undergraduate programs**

— U.S. News & World Report, 2020

**Top 10 university for technology company hires**

— SHL, 2020

**Top 10 best  
fine arts  
programs**

— U.S. News & World  
Report, 2020

**No. 6  
nationally in  
total research  
expenditures  
for universities  
without a  
medical school**

— National Science  
Foundation Education  
Research and Development  
rankings, 2019

**Top 10 school  
of choice for  
international  
students**

— Institute of International  
Education, 2020

**Top 10 in the  
U.S. among  
prestigious  
Hearst  
Journalism  
Awards**

— Hearst Journalism  
Awards, 2002-2020

**Top 10 in the  
U.S., Canada  
for preparing  
students in  
science and  
technology**

— Popular Mechanics

**One of the  
nation's best  
colleges for  
veterans**

— Military Times, 2020

**#3 in the U.S.  
and #5 in the  
world in  
management  
education**

— Shanghai Academic  
Ranking of World  
Universities, 2020

**Top 20 in the  
world in  
business  
administration  
education**

**Ahead of Stanford,  
USC and Cornell**

— Shanghai Academic  
Ranking of World  
Universities, 2020

**Top 25 of MBA  
entrepreneurship  
rankings**

— Inc., 2020

**Top 15 school  
for students  
studying  
abroad**

— Institute for International  
Education, 2020

**A world leader  
in executive  
education**

— The Financial Times,  
2020

**Top 10  
producer of  
Peace Corps  
volunteers**

— Peace Corps, 2020

**#4 among  
North  
America's  
greenest  
colleges and  
universities**

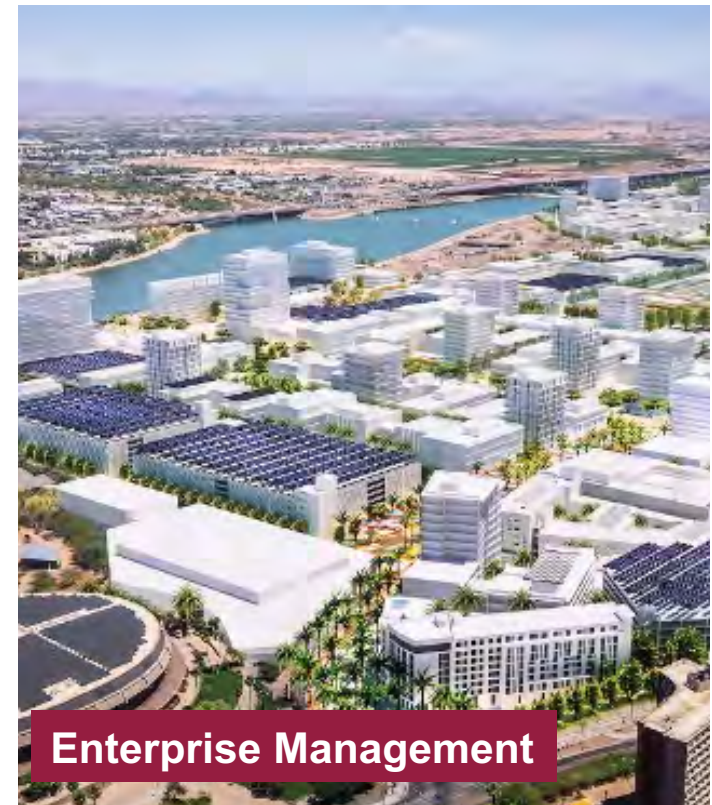
— Sierra Club, 2020

**A "world's  
best full-time  
MBA program**

— The Economist



# ASU continues to achieve on all fronts







# Student Success



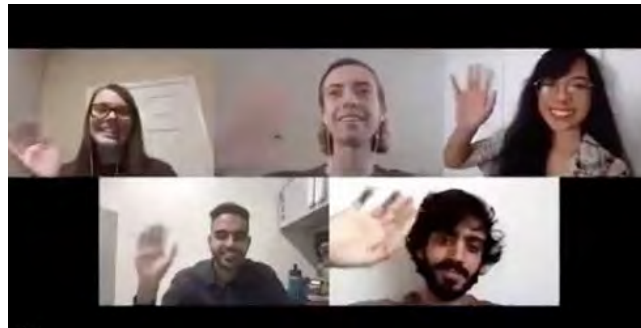
# ASU students demonstrate excellence and innovation in 2020



**Udall Undergraduate Scholarship**

## **Three ASU winners**

- Outstanding undergraduates pursuing environmental careers and Native American students who want to work in tribal public policy or tribal health
- Nekiyah Draper
- Tahiry Langrand
- Grant Real Bird
- Two additional ASU honorary mentions



**XPRIZE Next-Gen Mask**

## **First place winners**

- Challenge to create a more comfortable effective and affordable face covering
- Floe Mask anti-fogging mask
- \$500,000 prize
- Selected over 1,000+ other teams



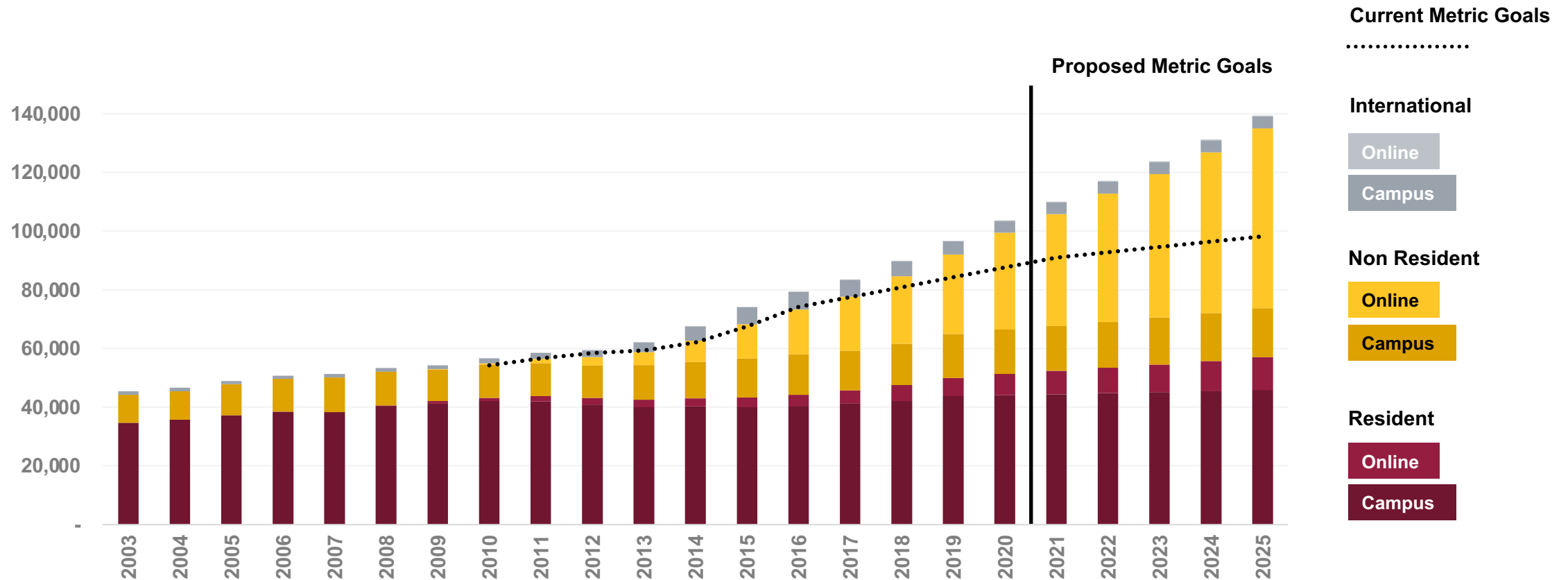
**Churchill Scholarship**

## **Two ASU finalists in 2020-2021**

- Established by Sir Winston Churchill to fulfil his vision of US–UK scientific exchange
- One year of Master's study at Cambridge
- Maeve Kennedy
- Alexis Hocken
- Barrett Honors College 2020 alumni

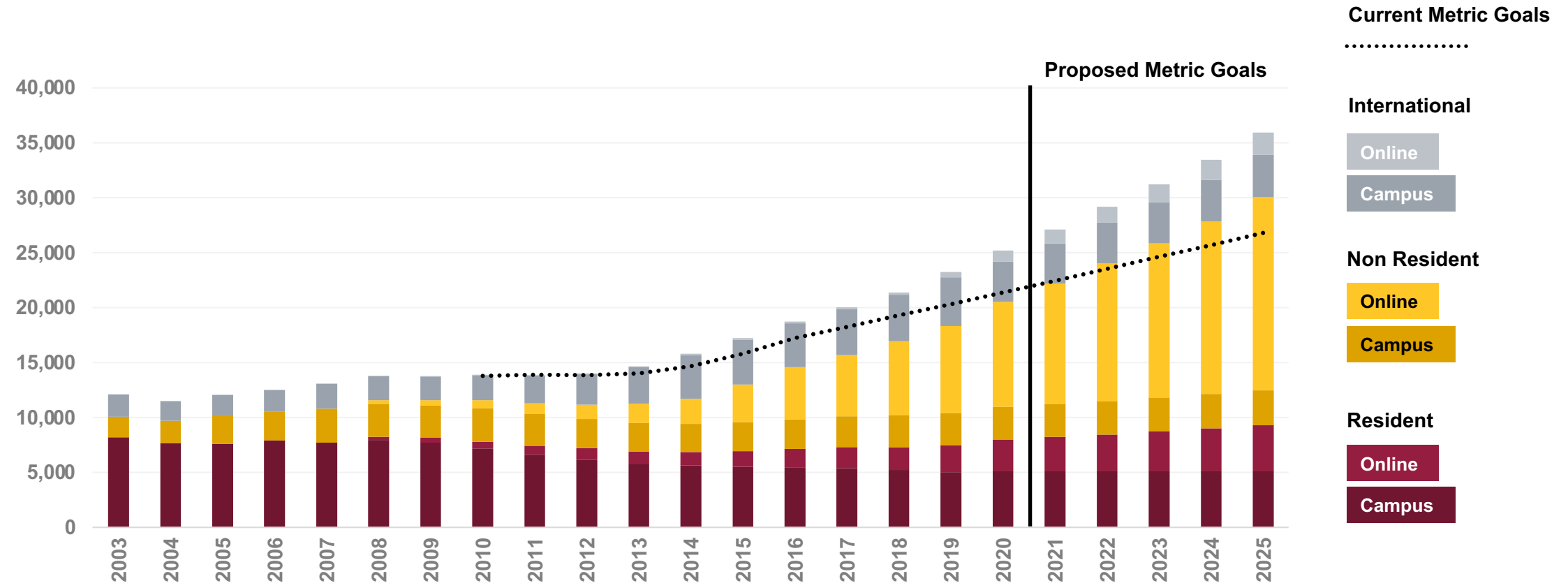
# Undergraduate enrollment reaches highest ever levels

Undergraduate enrollment actual, current metric goals, and proposed goals (2003-2025)



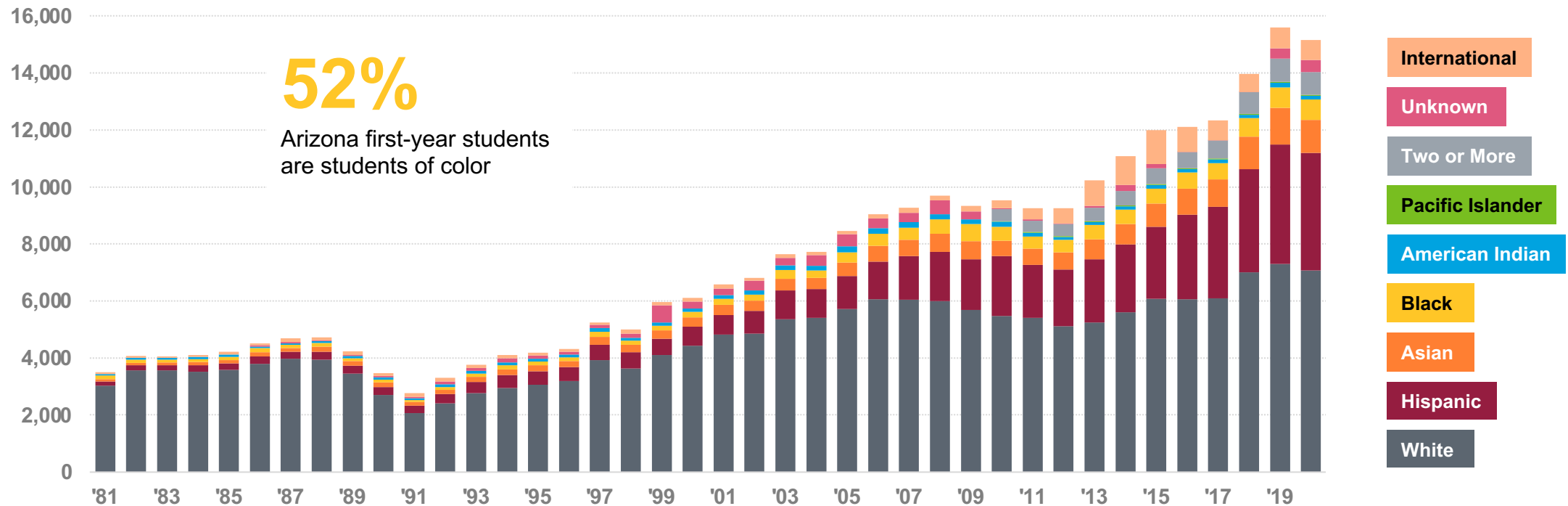
# Graduate enrollment has continued to outpace goals

Graduate enrollment actual, current metric goals, and proposed goals (2003-2025)



# First-year student enrollment has grown across all populations

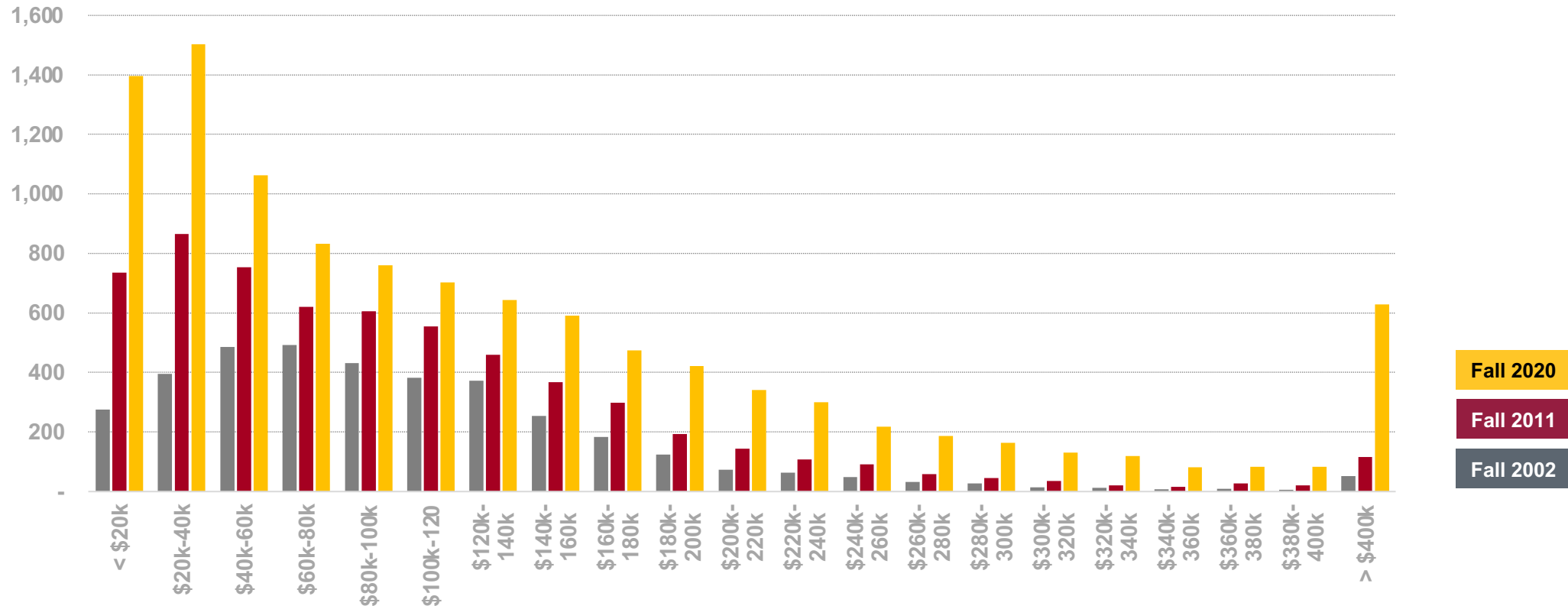
First-time, first-year enrollment by race/ethnicity (1980-2020)





# ASU is now more accessible to low-income students

First-year enrollment by income (2002, 2011, 2020)

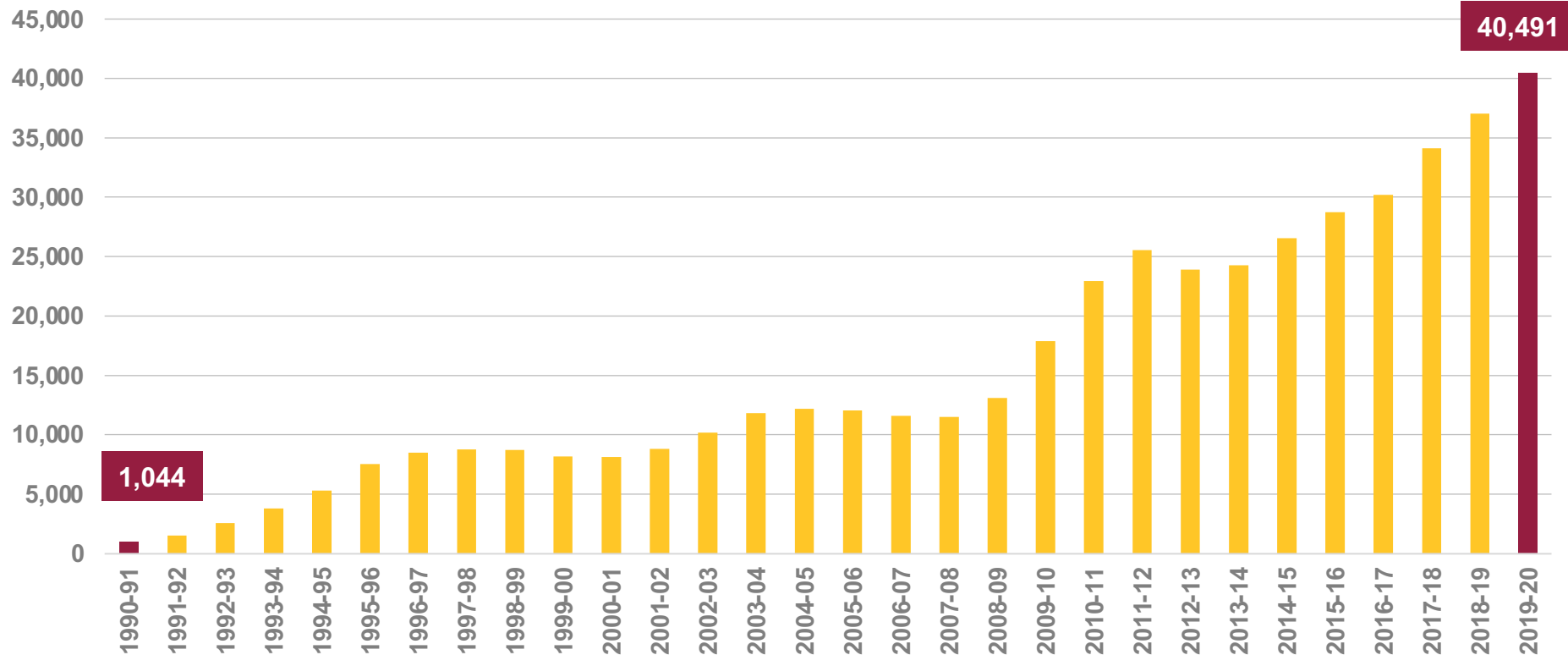


All incomes adjusted to 2018 dollars using CPI.



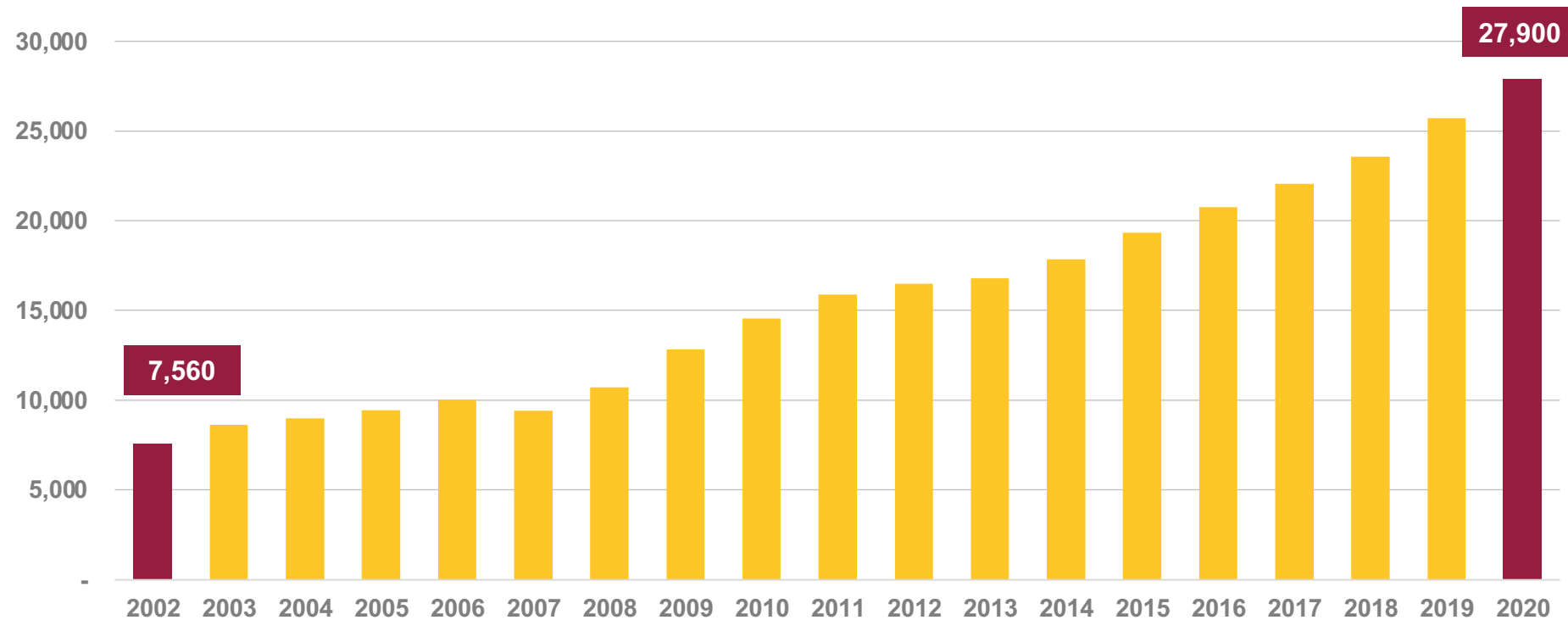
# Pell Grant recipient enrollment is more than triple that of the Ivy League

## Undergraduate Pell Grant recipients by academic year



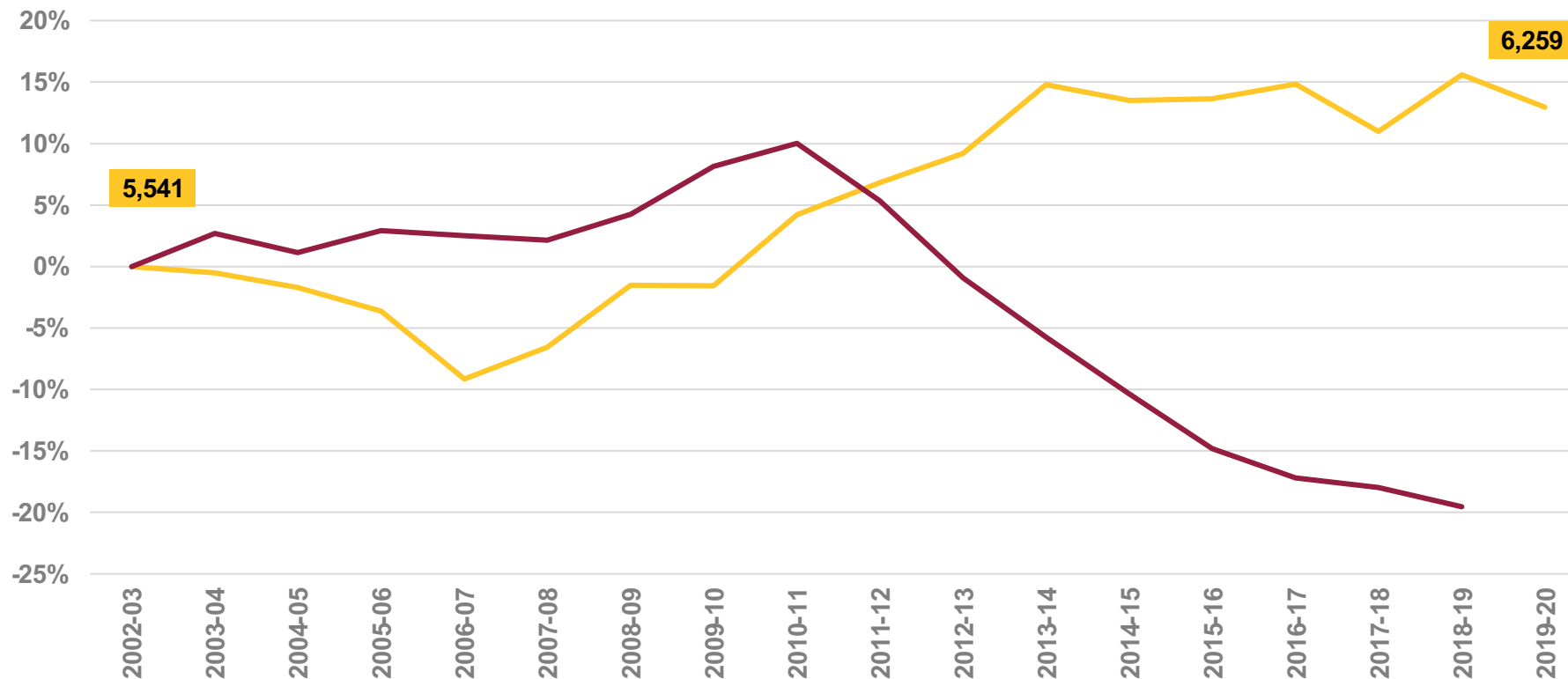
# First-generation student enrollment has tripled since 2002

First-generation student enrollment (Fall 2002-Fall 2020)



# Arizona community college transfer enrollment has grown

Percentage change in 12-month enrollment compared to 2002-03



Over a period during which community college enrollment has declined, ASU has consistently increased enrollment, with four-year graduation rates of 70% in 2018-19.

New Transfers from AZ CCs

AZ CC Enrollment





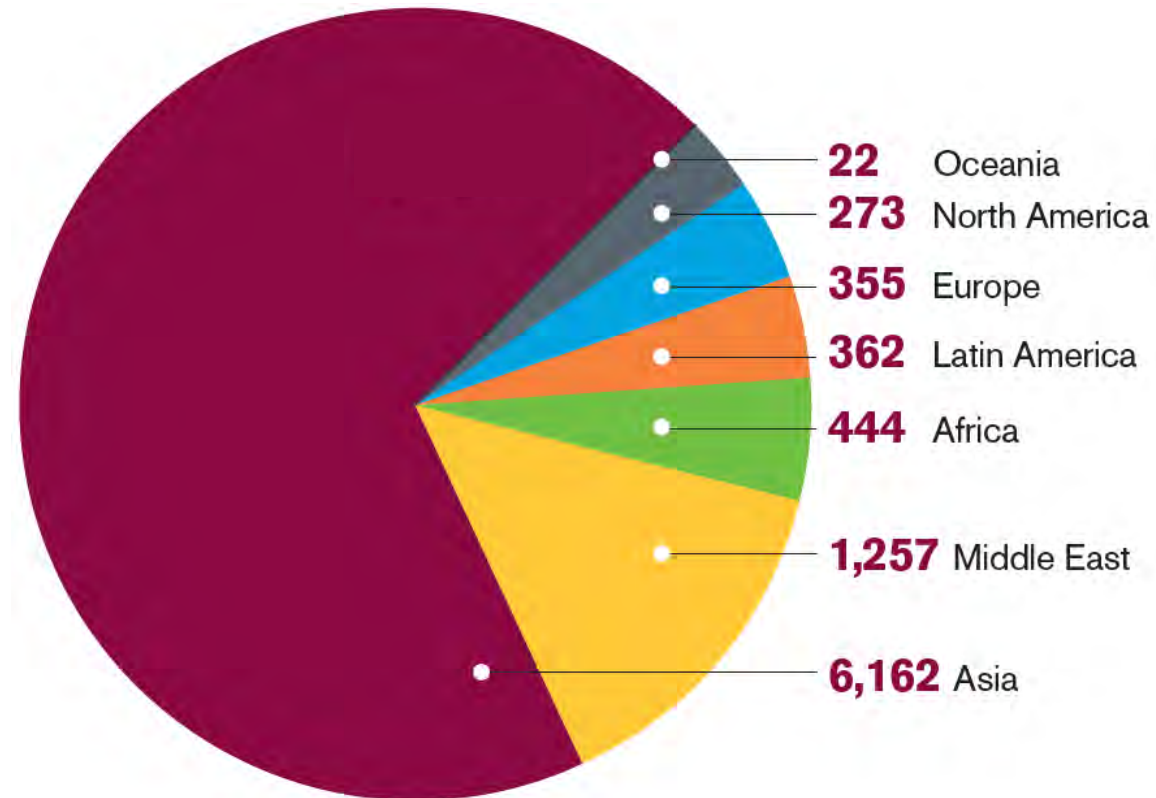
# ASU has created geographic diversity

Student body includes 8,875 international students from 145 countries

**#6**

**in the U.S. for hosting  
international students**

Institute for International Education 2020

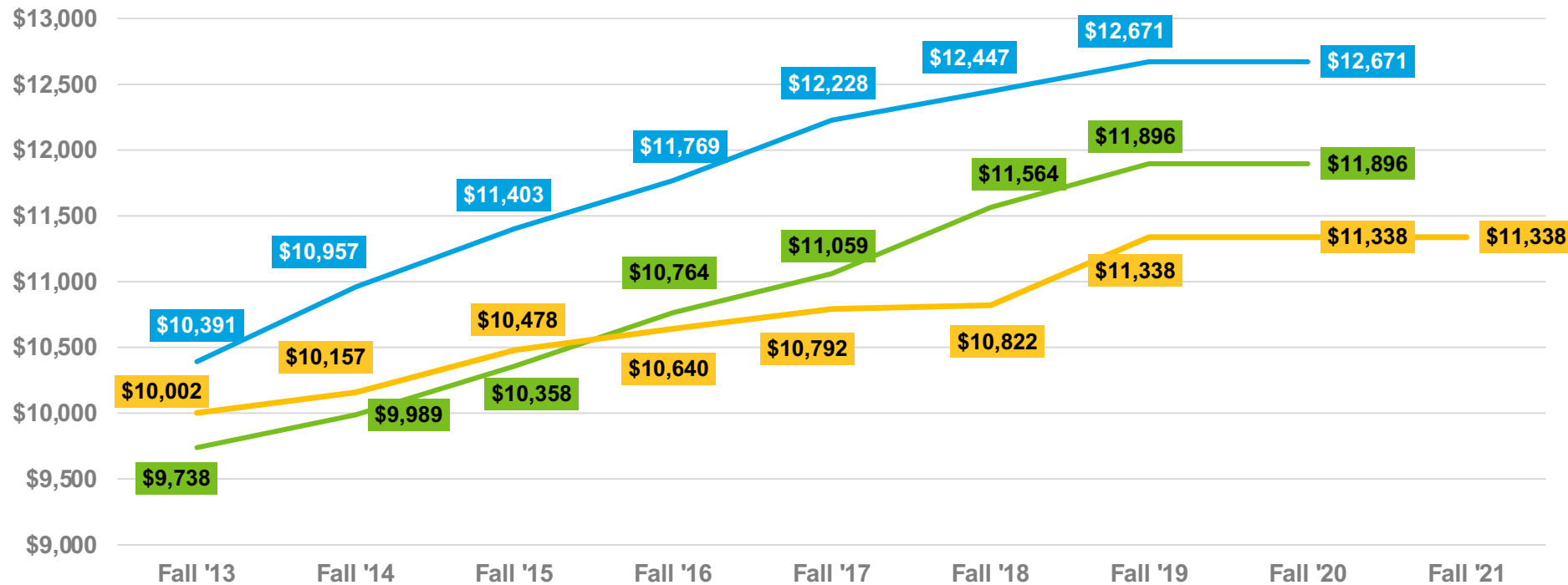


## Top 10 countries

China  
India  
Saudi Arabia  
Canada  
Republic of Korea  
Taiwan  
United Arab Emirates  
Mexico  
Egypt  
Kuwait

# ASU is committed to low annual tuition adjustments

Tuition and fees for new resident, first-year students (Fall 2013-Fall 2021)



Beginning in Fall 2019, ASU streamlined tuition and fees and included class fees (which averaged \$321 in 2018-19) in total.

University of Arizona

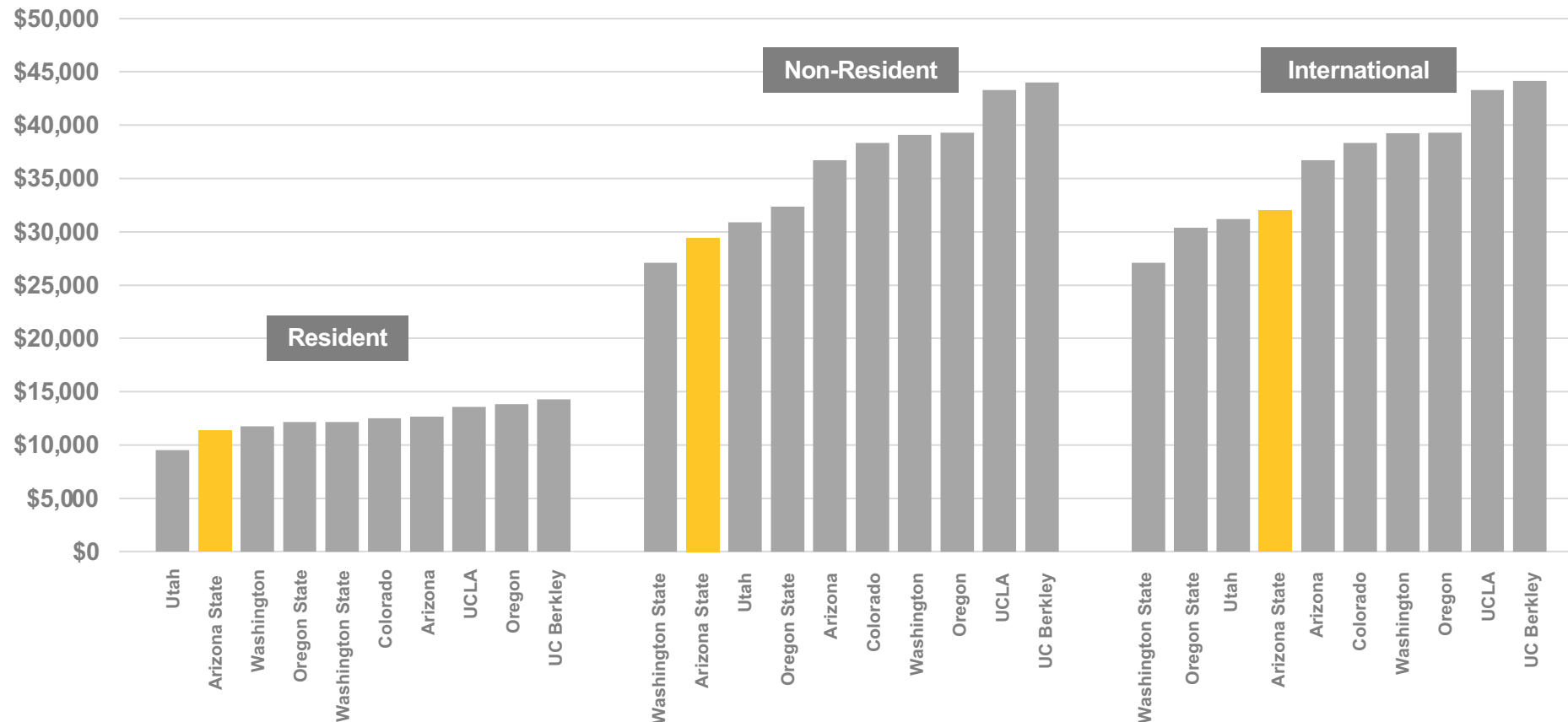
Northern Arizona University

Arizona State University



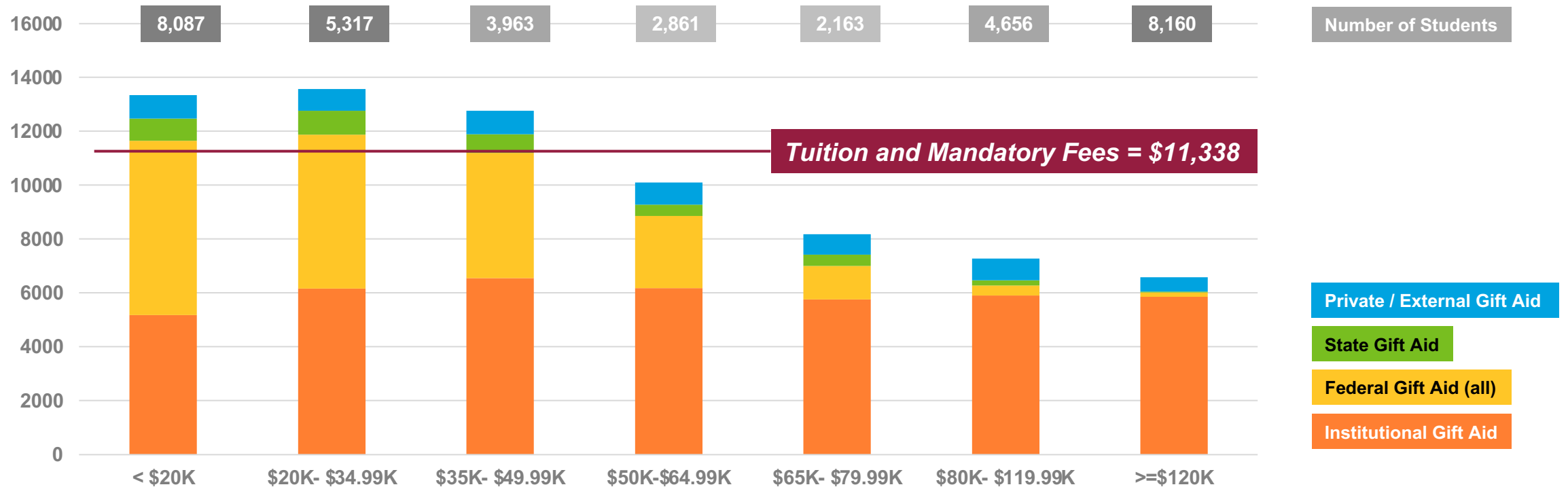
# ASU tuition remains low across all groups compared to Pac-12 public universities

Full-time tuition for new resident undergraduate students (2020-21)



# ASU is committed to affordability by providing gift aid

Average gift aid awards by family income for 42,034 resident undergraduate students (2019-2020)



AZ Median Household Income = \$58,945

U.S. Median Household Income = \$62,843

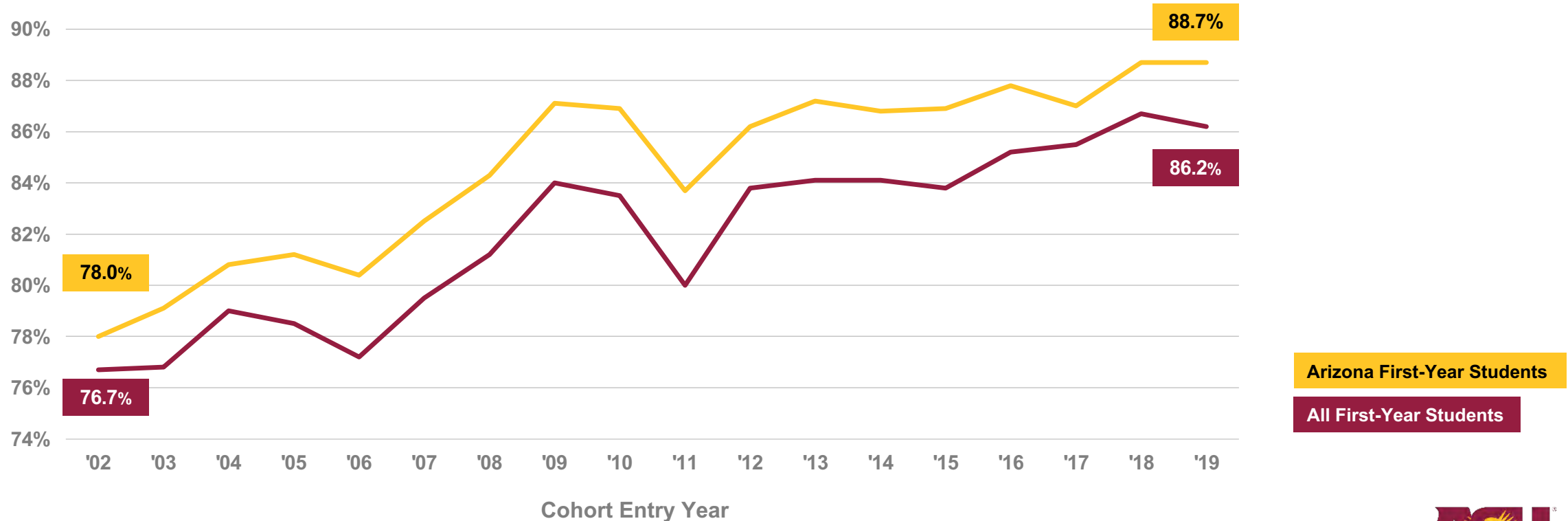
Source: U.S. Census Bureau, 2019

Chart does not include data for 6,827 students for whom income data is unavailable



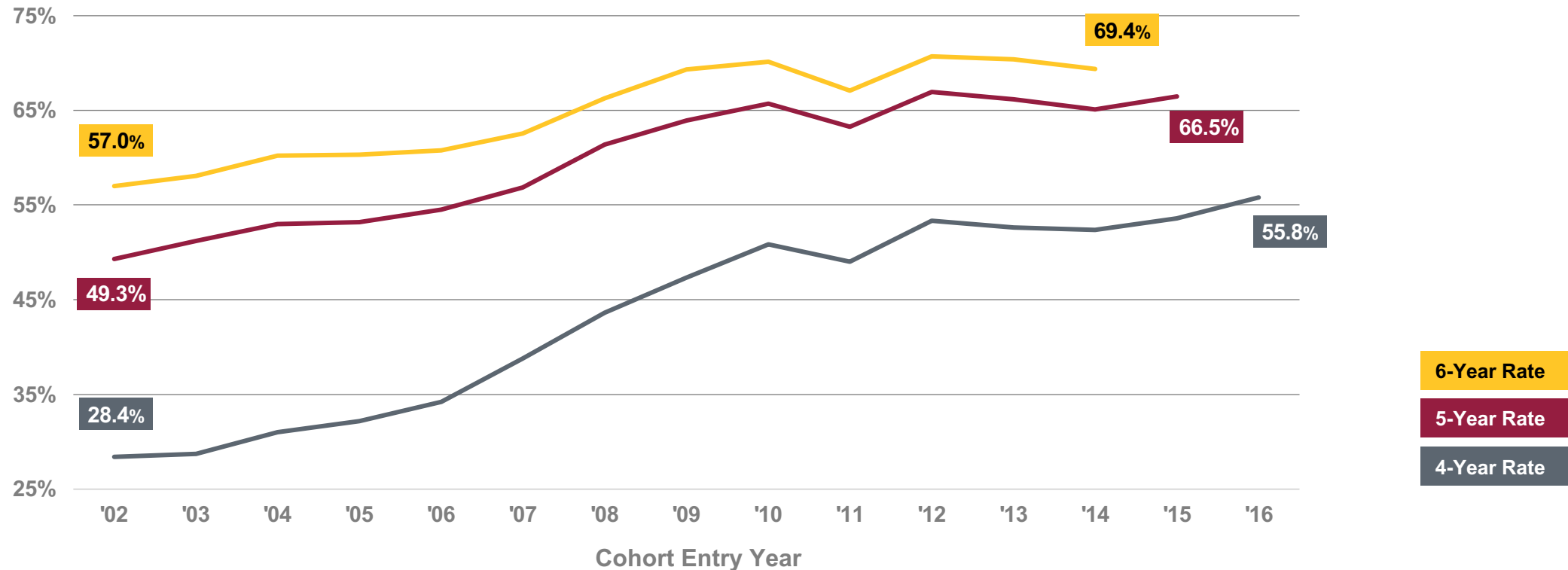
# ASU first-year retention is nearing 90% goal

First-year student retention rates (2002-2019)



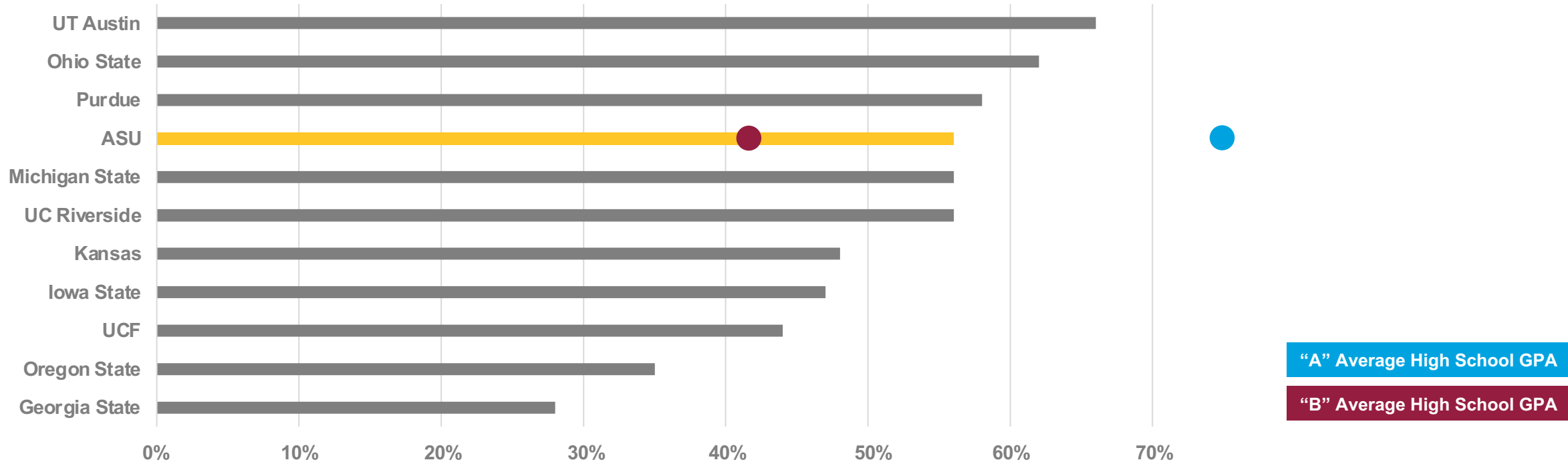
# Graduation rates have increased markedly since 2002 and the four-year rate has nearly doubled

First-year resident student cohort graduation rate (Fall 1983-Fall 2016)



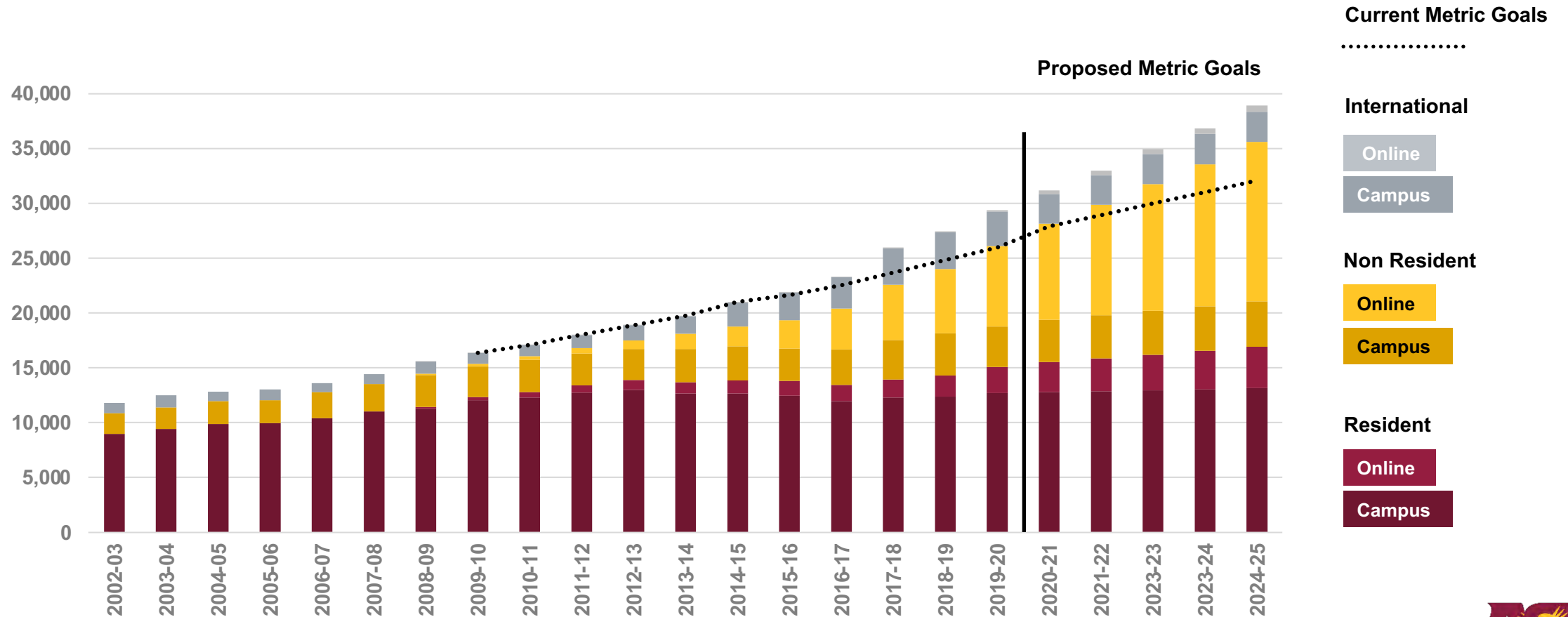
# Four-year graduation rate compares well with UIA schools

Four-year graduation rate of University Innovation Alliance member universities



# ASU degrees awarded have nearly tripled since 2002-03

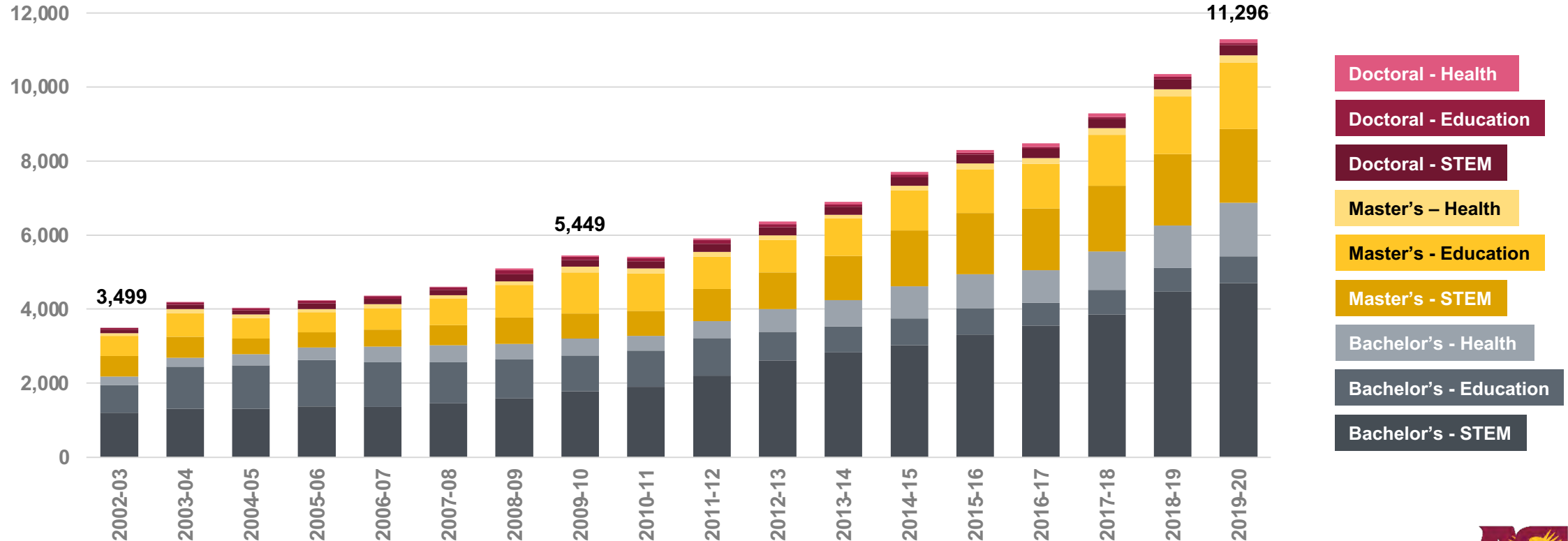
Undergraduate and graduate degrees by year (2002-2025)





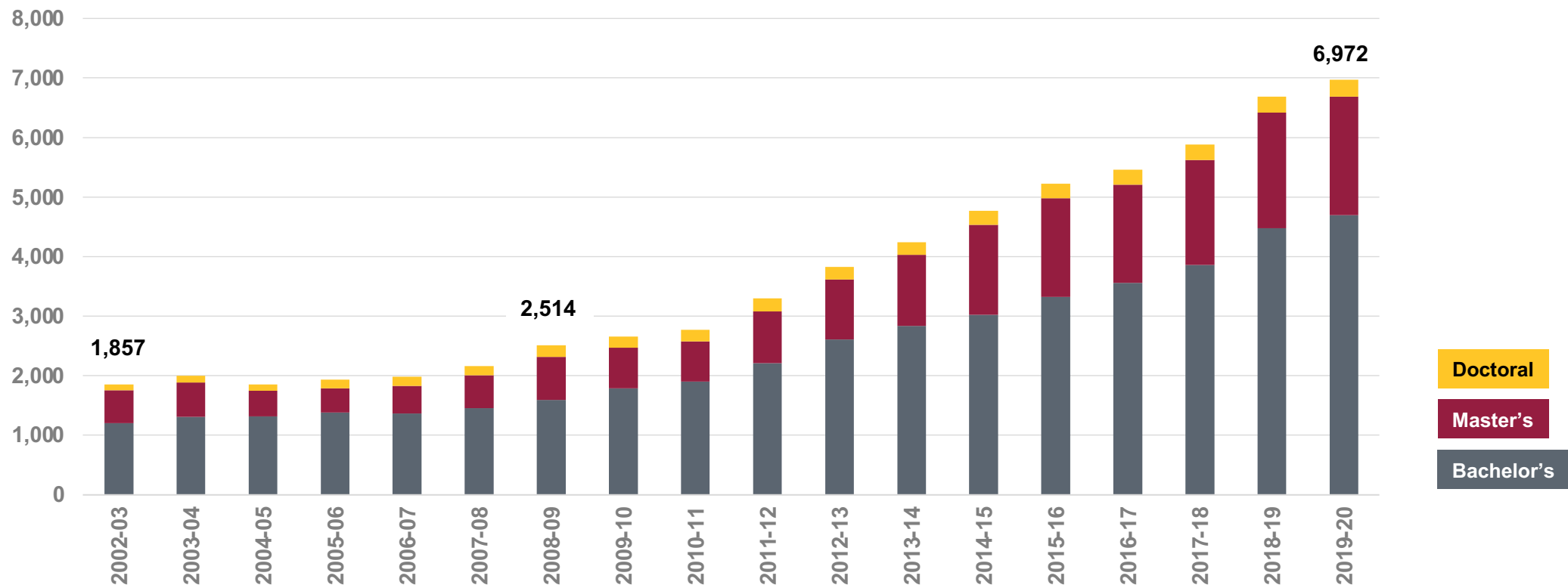
# Number of ASU degrees awarded in high-demand fields doubled over 10 years

High demand degrees awarded (2002-2020)



# ASU degrees awarded in STEM fields nearly tripled since 2002-03

STEM degrees awarded (2002-2020)





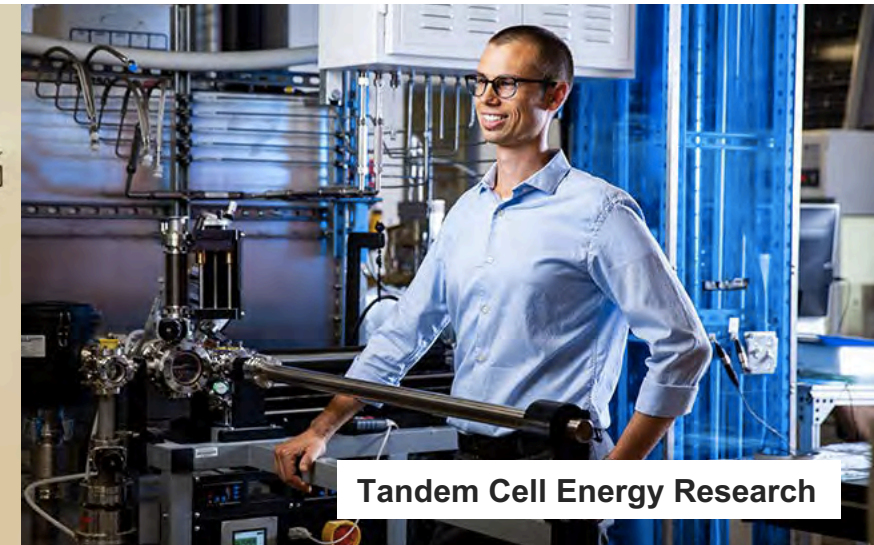
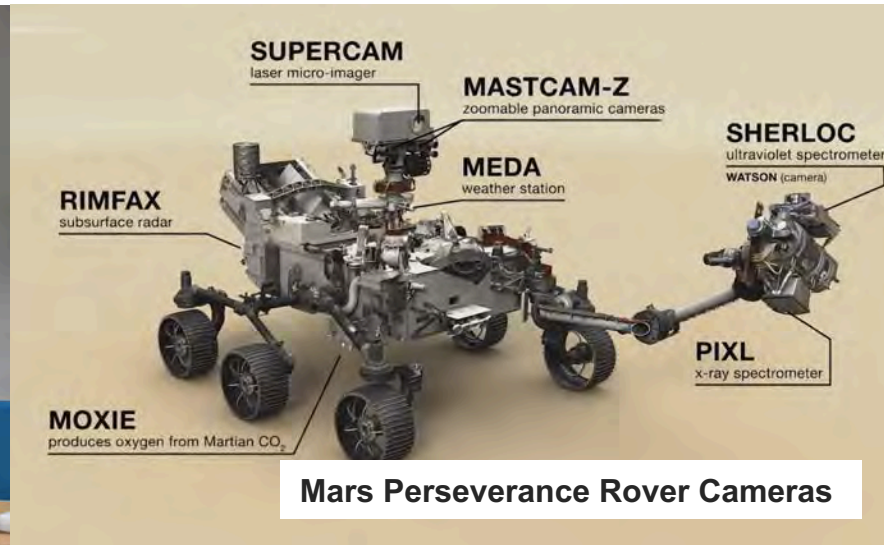


# Research



# ASU produces pioneering research

Game-changing, use-inspired discovery happens here



# World-class new faculty continue to join ASU



**Donatella Danielli**

**Professor and Director, School of Mathematical and Statistical Sciences**

Expertise: Partial differential equations, calculus of variations and geometric measure theory

2017 fellow of the American Mathematical Society

2020 Class of Fellows of the Association for Women in Mathematics



**Landry Signé**

**Professor and Senior Director, Thunderbird School of Global Management**

Leads the Fourth Industrial Revolution and Globalization 4.0 Initiative and the Washington, DC-based Executive Master of Global Affairs and Management

Senior fellow, Brookings Institution  
Distinguished fellow, Stanford University  
World Economic Forum Young Global Leader



**Robert Kaindl**

**Professor, Department of Physics  
Director, Beus CXFEL Laboratory  
Biodesign Institute at ASU**

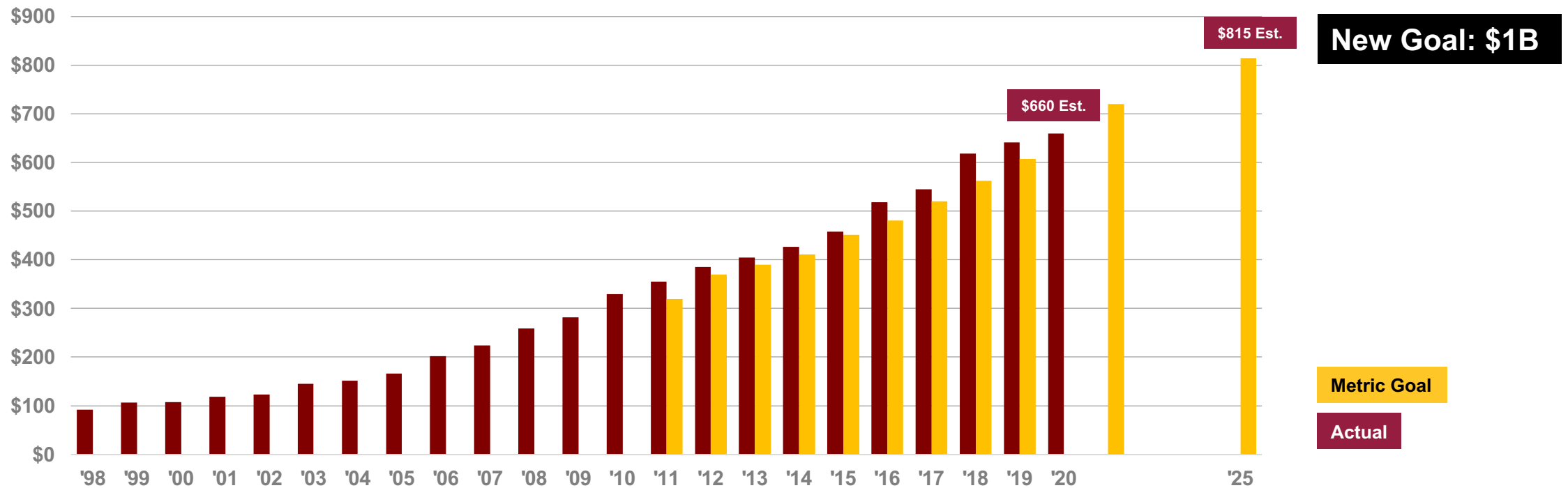
Lawrence Berkeley National Laboratory and 2019 fellow of the American Physical Society

Expertise: Quantum materials and ultrafast science, light-driven materials phenomena, multi-modal probes, terahertz and photoelectron spectroscopies



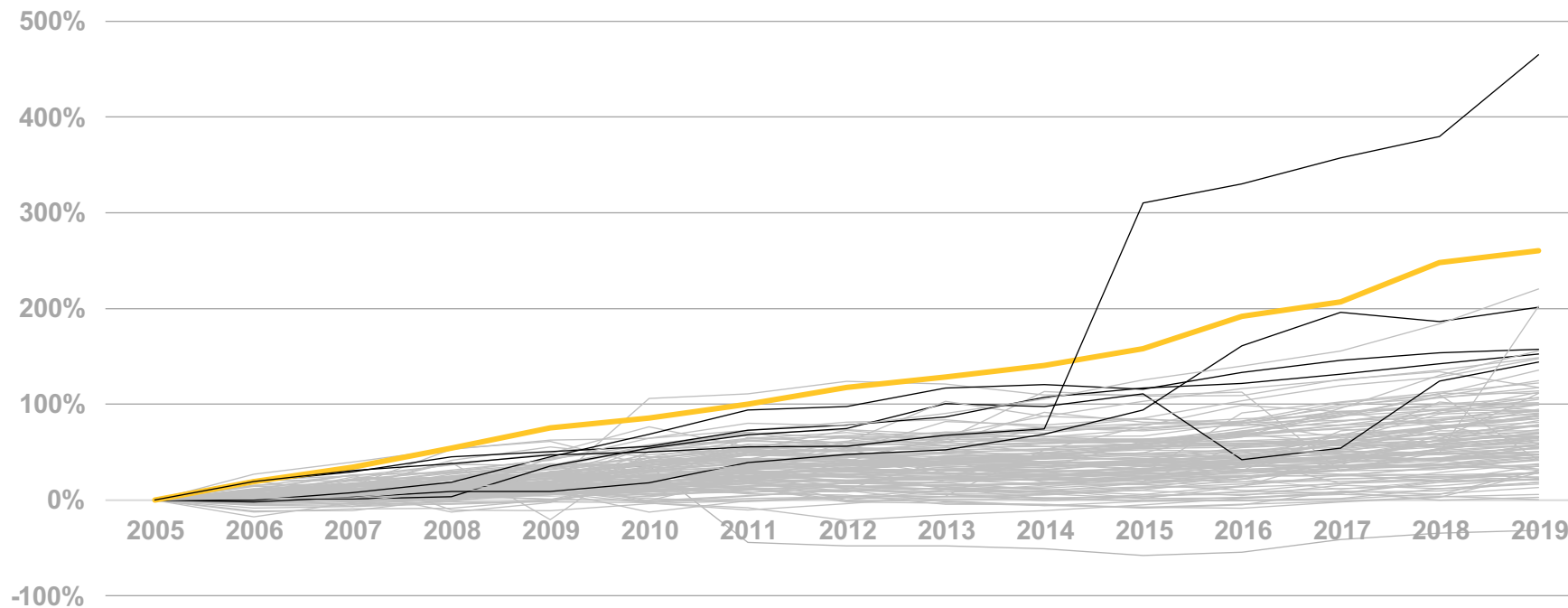
# Research expenditures doubled over the last decade

Dollars in millions



# Research growth has outpaced nearly all other universities

Percentage growth for institutions with research expenditures greater than \$100M annually



Indiana

Indiana U. Bloomington gained IUPUI's medical school in 2015.

Arizona State

NYU

UNC

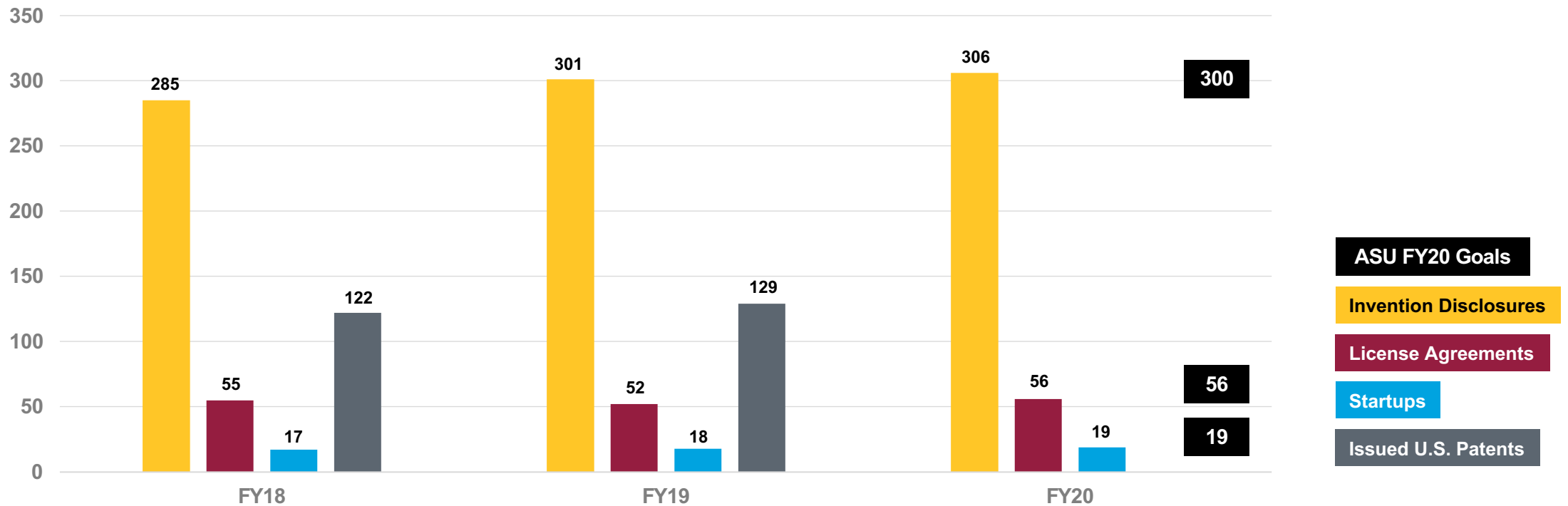
UT

-M.D. Anderson Cancer Center

Utah

# Research growth has fueled heightened impact

Technology transfer as advanced by SkySong Innovations

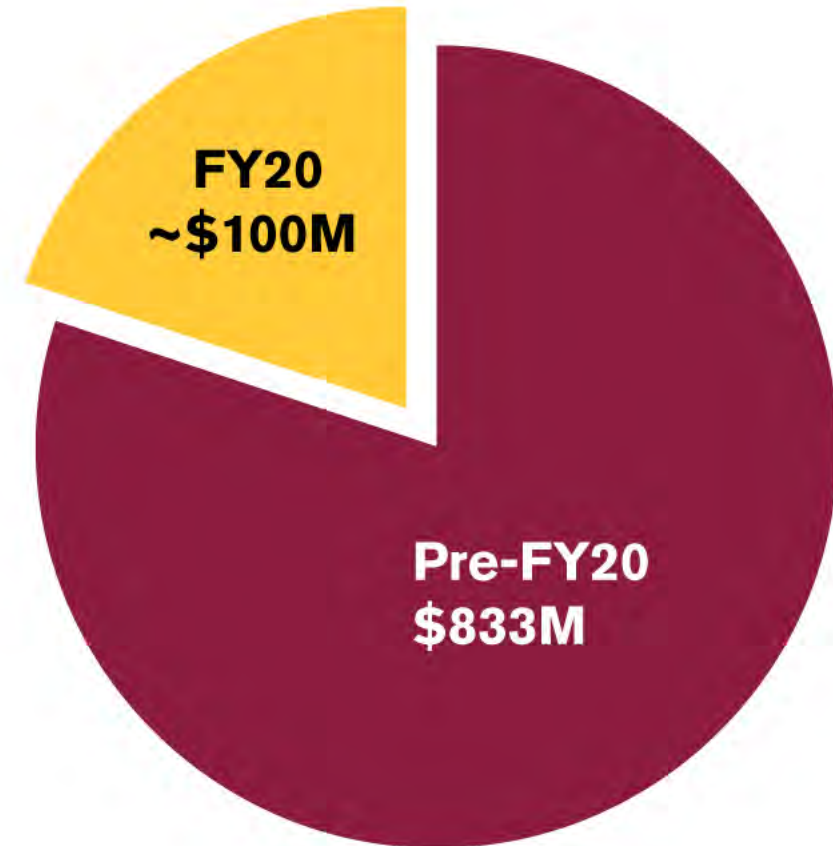


## SkySong Innovations supports start-up growth

### **SI's startup portfolio continues to thrive.**

Nationally, these companies supported more than 2,000 jobs and contributed \$222 million to the economy, with the bulk of that impact in Arizona.

**In FY20, ASU startups also raised approximately \$100 million in external funding.** By the end of next year, if economic conditions stabilize, we may approach or surpass \$1 billion in all-time funding raised by ASU-connected startups.



# ASU leads across research disciplines

National Science Foundation Higher Education Research and Development rankings (2019)

Total Research Expenditures: **43 of 916** ahead of



BROWN



PRINCETON  
UNIVERSITY

Caltech



THE UNIVERSITY OF  
ALABAMA AT BIRMINGHAM



University of Colorado  
Boulder



Total Research Expenditures among Institutions without a Medical School: **6 of 759** ahead of



PRINCETON  
UNIVERSITY

Carnegie Mellon University

THE ROCKEFELLER UNIVERSITY  
*Science for the benefit of humanity*



THE  
SCRIPPS  
RESEARCH  
INSTITUTE



UNIVERSITY OF  
NOTRE DAME



UNIVERSITY OF  
GEORGIA

Non-Medical School Expenditures: **19 of 916** ahead of

Stanford  
University



COLUMBIA UNIVERSITY  
IN THE CITY OF NEW YORK



RUTGERS



THE UNIVERSITY  
of NORTH CAROLINA  
at CHAPEL HILL



THE UNIVERSITY  
OF ARIZONA



THE OHIO STATE  
UNIVERSITY





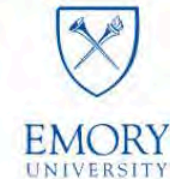
Public institutions: **26 of 405** ahead of



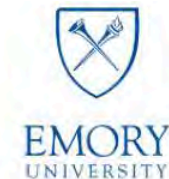
Geological and Earth Sciences: **1 of 353** ahead of



Anthropology: **1 of 242** ahead of



Humanities: **18 of 399** ahead of



Social Sciences: **4 of 487** ahead of



Cornell University

**UCLA**



**Berkeley**  
UNIVERSITY OF CALIFORNIA



**PennState**



**Penn**  
UNIVERSITY of PENNSYLVANIA

Transdisciplinary (other sciences): **1 of 247** ahead of

**Northwestern**  
University



University of  
**Pittsburgh**



**JOHNS HOPKINS**  
UNIVERSITY



**THE OHIO STATE**  
UNIVERSITY



**Massachusetts**  
Institute of  
Technology



**MICHIGAN STATE**  
UNIVERSITY



**THE UNIVERSITY**  
OF ARIZONA.

Electrical, Electronic, and Communications Engineering: **12 of 289** ahead of

**Stanford**  
University

**Carnegie**  
**Mellon**  
University



**USC** University of  
Southern California



**UNIVERSITY of**  
**WASHINGTON**



**THE UNIVERSITY**  
OF ARIZONA.



**VANDERBILT**  
UNIVERSITY

Political Science and Government: **5 of 342** ahead of



**PennState**

**Duke**  
UNIVERSITY

**Tufts**  
UNIVERSITY



**THE UNIVERSITY**  
OF ARIZONA.

**UC San Diego**



**UNIVERSITY of**  
**WASHINGTON**





Economics: **11 of 319** ahead of



Yale



Psychology: **11 of 430** ahead of

UC San Diego



Cornell University



University of  
Pittsburgh



University of Colorado  
Boulder

Non-Science and Engineering: **14 of 543** ahead of

Stanford  
University



USC University of  
Southern California



THE OHIO STATE  
UNIVERSITY

Business and Management and Business Administration: **4 of 377** ahead of



THE UNIVERSITY OF  
CHICAGO



COLUMBIA UNIVERSITY  
IN THE CITY OF NEW YORK



PennState



GEORGETOWN UNIVERSITY



THE UNIVERSITY  
OF ARIZONA



Education: **26 of 451** ahead of



Northwestern  
University

UCDAVIS



UNIVERSITY OF MINNESOTA  
Driven to Discover<sup>SM</sup>



Massachusetts Institute of Technology



THE UNIVERSITY  
OF ARIZONA.

Engineering Expenditures: **20 of 404** ahead of



Cornell University

Caltech



Rensselaer



RUTGERS



THE UNIVERSITY  
OF ARIZONA.



UNIVERSITY OF MINNESOTA  
Driven to Discover<sup>SM</sup>

NASA Funded Expenditures: **3 of 441** ahead of

Stanford  
University

Georgia  
Tech

UCLA



THE UNIVERSITY OF  
ALABAMA AT BIRMINGHAM.



UNIVERSITY of  
WASHINGTON



THE UNIVERSITY  
OF ARIZONA.



UNIVERSITY OF  
MICHIGAN

HHS (including NIH) Funded Expenditures among Institutions without a Medical School: **10 of 415** ahead of



UNIVERSITY OF  
OREGON



PRINCETON  
UNIVERSITY

Brandeis University



PURDUE  
UNIVERSITY

Carnegie  
Mellon  
University

Georgia  
Tech





NSF Funded Expenditures: **23 of 604** ahead of



Visual and Performing Arts: **11 of 323** ahead of



Cornell University



UNIVERSITY OF  
SOUTH FLORIDA

UNLV



THE UNIVERSITY  
of NORTH CAROLINA  
at CHAPEL HILL



Nonprofit Funded Expenditures: **25 of 562** ahead of



Northwestern  
University



RUTGERS



TEXAS  
The University of Texas at Austin



Computer and Information Sciences: **28 of 447** ahead of



UCLA



NEW YORK UNIVERSITY

Caltech



Civil Engineering: **14 of 266** ahead of



Mathematics and Statistics: **30 of 451** ahead of



DOE Funded Expenditures: **42 of 348** ahead of



Law: **14 of 164** ahead of





Communications and Communication Technologies: **8 of 266** ahead of



Sociology, Demography and Population Studies: **33 of 361** ahead of



Total Research Expenditures among Public Institutions without a Medical School: **5 of 306** ahead of



Public Institutions Excluding Medical School Expenditures: **15 of 400** ahead of





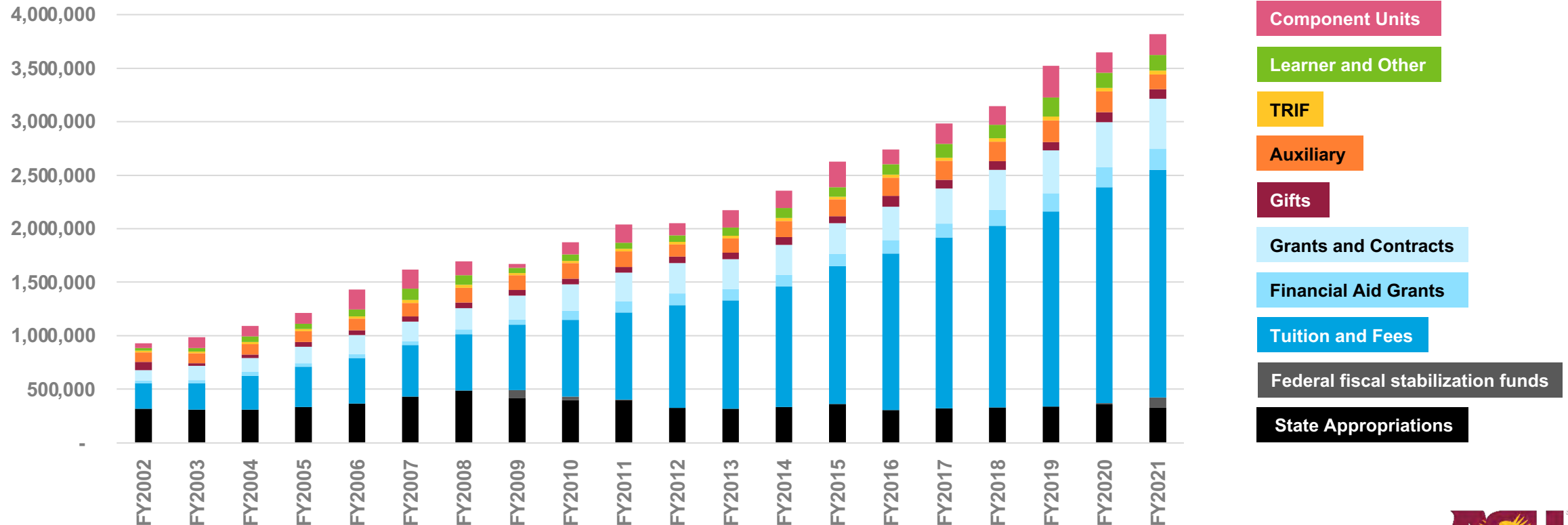
An aerial photograph of a city, likely Phoenix, Arizona, featuring a river, mountains in the background, and a large stadium in the foreground. The stadium has a large, curved roof with a grid pattern. The city is filled with modern buildings, including a large white building with a grid pattern. The text "Enterprise Management" is overlaid on the image in a large, bold, black font.

# Enterprise Management



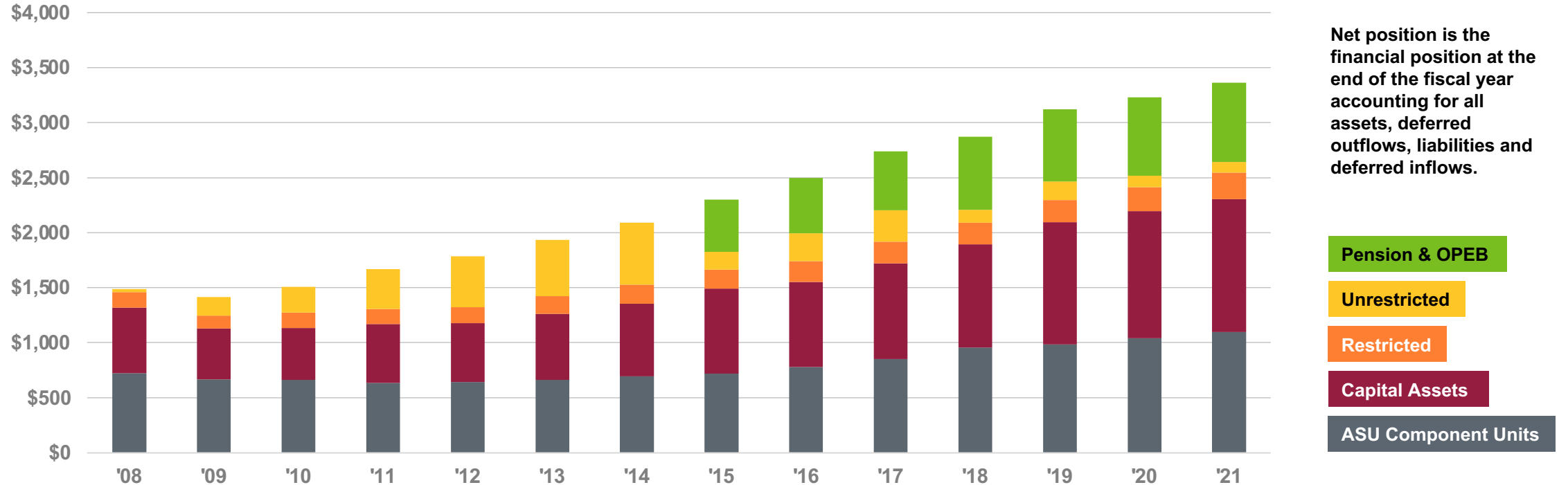
# Revenues have more than tripled over past two decades

Net revenues for ASU and component units in millions (2008-2021)



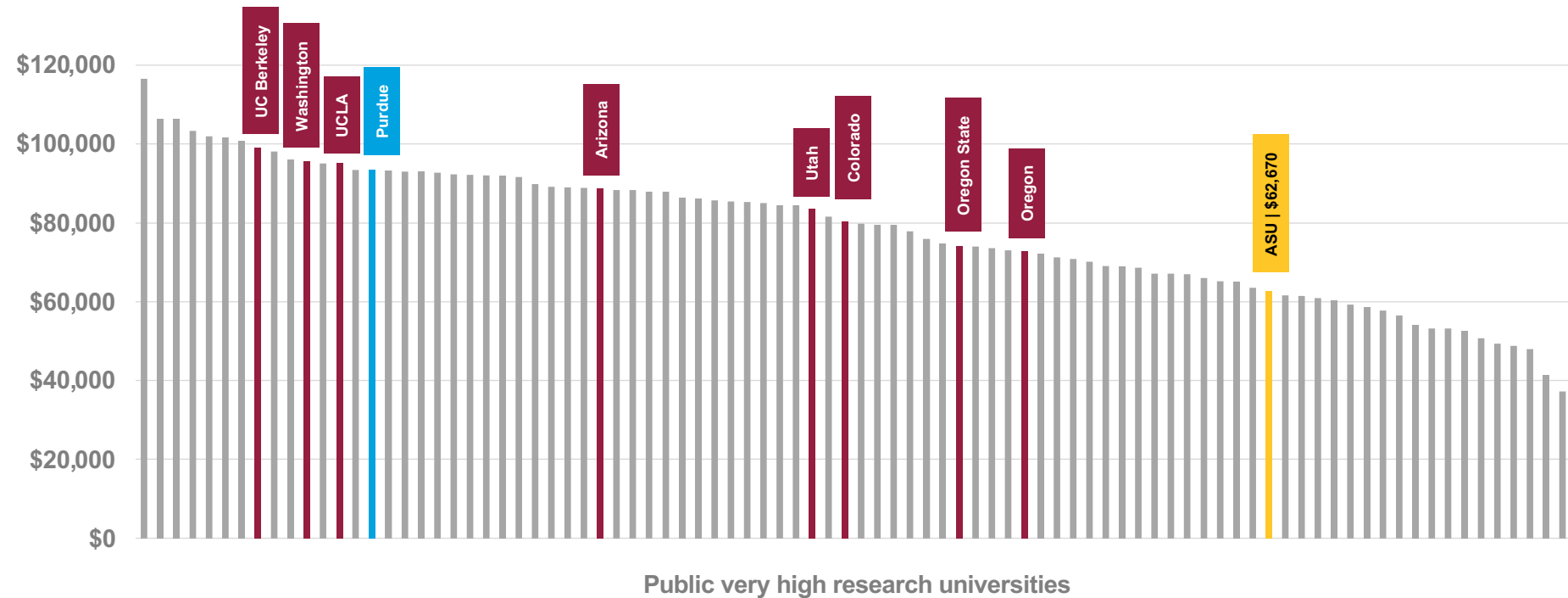
# ASU's net position has more than doubled since 2008

Net position and component units in millions (2008-2021)



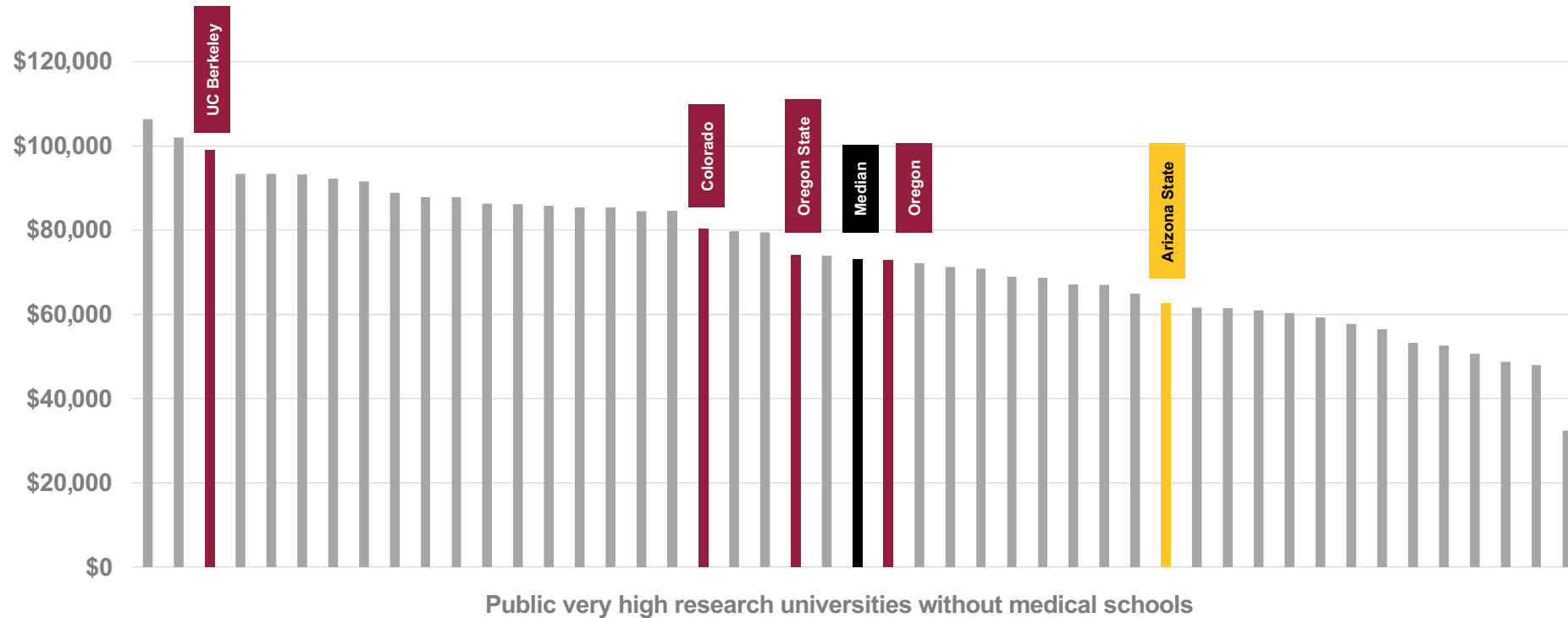
# ASU uses 21% fewer resources per degree awarded than the national median

Tuition and state appropriation per degree awarded (FY2018)



# ASU uses 14% fewer resources per degree awarded than the median of universities without medical schools

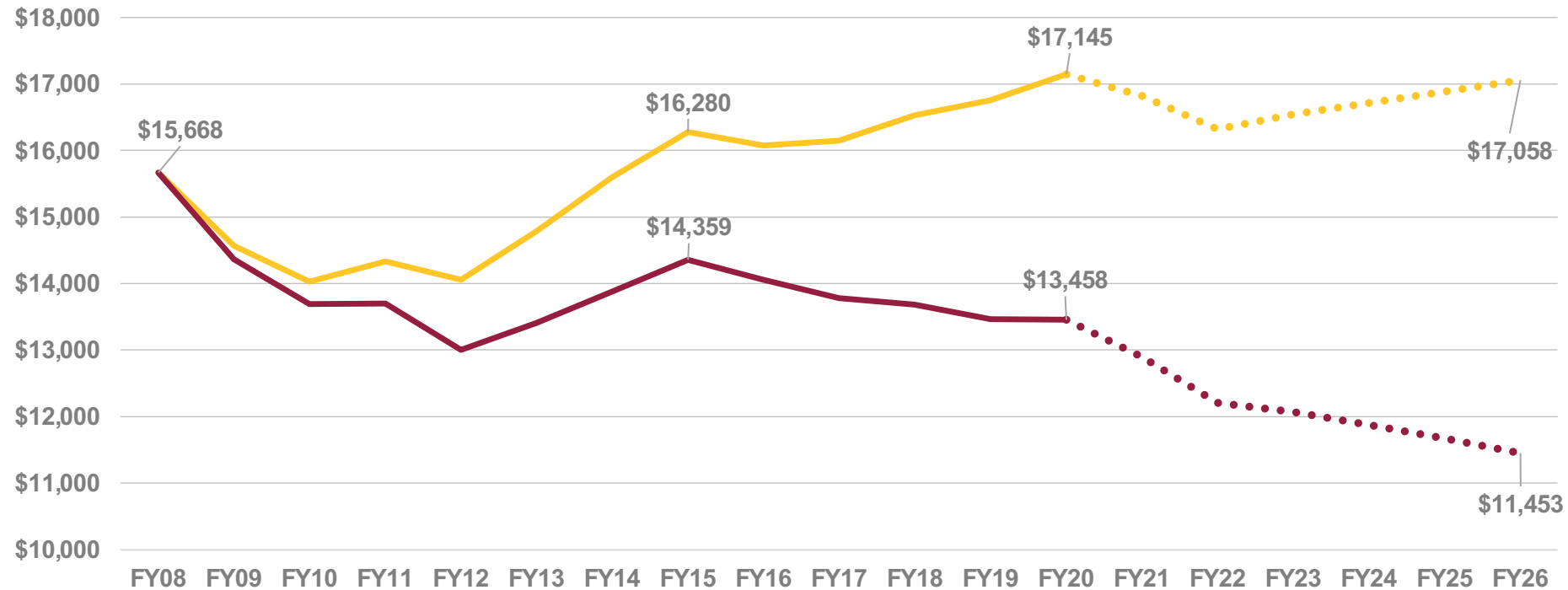
Tuition and state appropriation per degree awarded (FY2018)





# Cost discipline, application of technology, and economies of scale are projected to maintain current cost levels

E&G expense net of scholarship allowance per FTE ABOR methodology

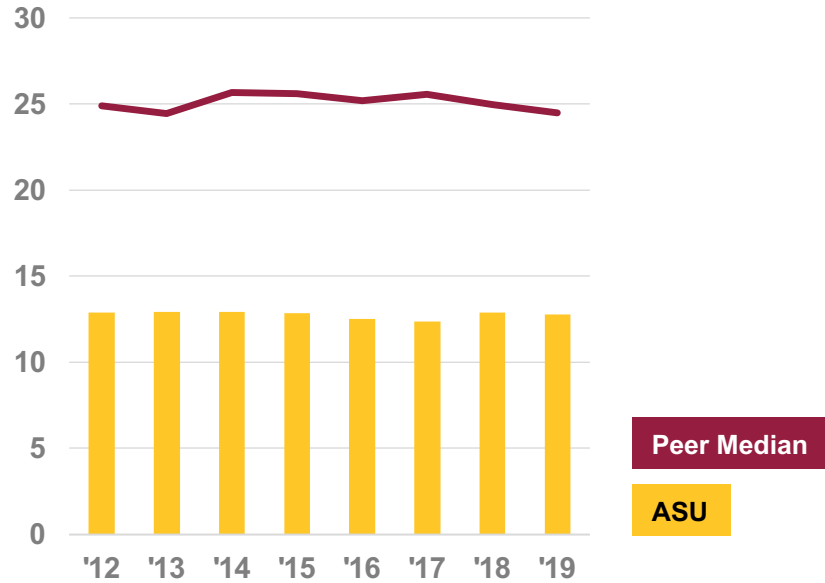


ABOR E&G

Adjusted for 2% Inflation

# For 5 years, ASU has operated with about half the staff per student as its peers

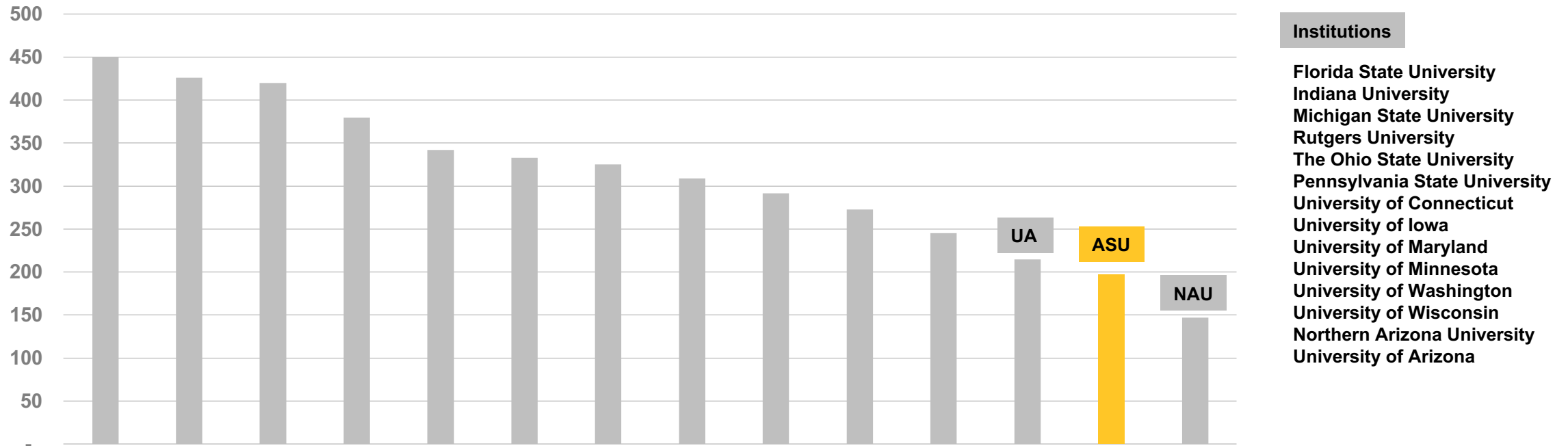
FTE employees per 100 FTE students (FY2012 - FY2019)



	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19
<b>Arizona State University</b>	<b>12.91</b>	<b>12.93</b>	<b>12.92</b>	<b>12.85</b>	<b>12.52</b>	<b>12.36</b>	<b>12.90</b>	<b>12.78</b>
Florida State University	15.3	15.8	16.1	16.0	16.1	16.2	16.8	17.5
Indiana University-Bloomington	20.1	20.5	20.1	20.8	20.3	20.8	22.1	22.5
Michigan State University	22.7	21.5	21.3	21.6	21.9	22.8	22.9	23.0
Ohio State University-Main Campus	24.3	23.0	23.0	22.9	22.7	22.9	23.5	23.5
Pennsylvania State University-Main Campus	28.6	28.8	28.8	29.0	29.6	29.3	30.1	31.7
Rutgers University-New Brunswick	23.0	23.9	25.7	25.0	24.7	25.9	29.9	29.9
The University of Texas at Austin	28.8	32.8	26.0	26.7	27.4	27.7	27.2	27.6
University of California-Los Angeles	27.3	26.7	28.4	26.4	26.9	26.7	27.1	29.4
University of Connecticut	26.9	28.1	28.3	27.6	27.2	27.9	28.5	26.8
University of Illinois at Urbana-Champaign	24.3	24.4	25.1	25.2	25.2	24.2	24.0	23.9
University of Iowa	23.2	23.3	23.5	24.1	24.2	23.5	23.2	23.1
University of Maryland-College Park	24.9	25.8	26.0	27.4	25.5	25.6	25.0	24.5
University of Minnesota-Twin Cities	29.6	30.3	30.9	31.2	31.6	31.7	31.9	32.3
University of Washington-Seattle Campus	25.6	24.4	25.3	25.6	21.7	25.6	24.7	24.0
University of Wisconsin-Madison	26.4	26.9	26.9	27.6	27.5	27.8	28.0	30.1
<b>Peer Median</b>	<b>24.9</b>	<b>24.4</b>	<b>25.7</b>	<b>25.6</b>	<b>25.2</b>	<b>25.6</b>	<b>25.0</b>	<b>24.5</b>

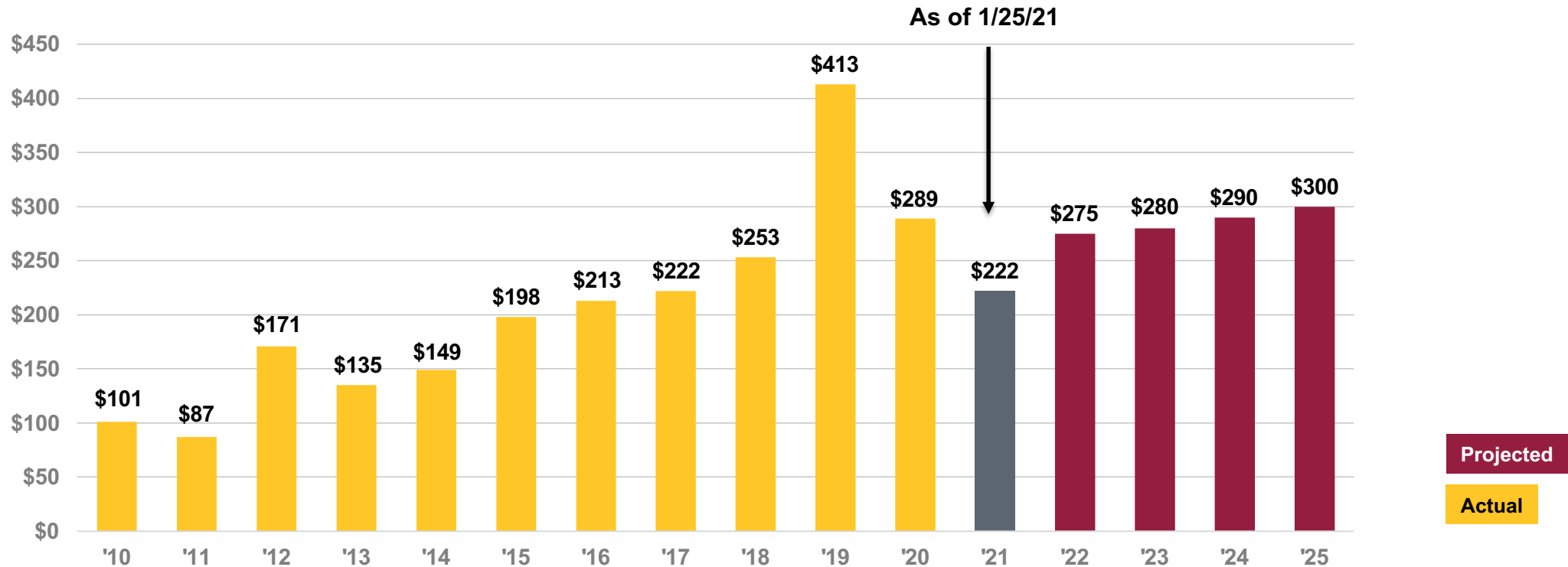
# ASU use of space is efficient compared to ABOR peers

Space density: Net assignable square footage per FTE



# ASU Foundation is core to long-term health

FY10-FY25 performance and projections for new gifts and commitments (in millions)





# Highlights of the Campaign 2020

**Final total: \$2.354B**

Timeframe of Campaign ASU 2020  
July 1, 2010 – Dec. 31, 2020

## Donor Count

- 359,699 unique donors (gave at least 1 gift during campaign)
- 213,473 first-time donors (first-ever gift to ASU during campaign)
- 59.35% of total donors are first-time donors
- 107,144 alumni donors
- 65,992 alumni first-time donor count (first-ever gift to ASU during campaign)
- 29.79% of alumni donors/total unique donor count

## Gift Value

- 2,591,571 in total gift count
- \$835 average gift amount
- 39% increase in average gift amount
- 88% of all gifts were \$100 or less
- 10,206 gifts were greater than \$25,000

## Student Access and Excellence

- Raised \$375M for scholarships (undergraduate/graduate)
- Disbursed \$269M through ASUF privately-funded awards
- Disbursed 76,441 scholarships as ASUF privately-funded awards
- 40% increase in total scholarship amount awarded annually (FY11 vs. FY20)
- 22% increase in total number of unique scholarships awarded (FY11 vs. FY20)

## Faculty Excellence

- \$85.5M raised for chairs/professorships
- 60 new chairs/professorships established
- 53% growth in number of chairs/professorships established

## Faculty/Staff Giving

- 75,837 faculty/staff gift count
- \$21.8M raised from faculty/staff
- 4,747 faculty/staff unique donor
- 109% growth in faculty/staff donor count

A silhouette of a graduate in a cap and gown, holding a diploma, stands on a hill against a bright sunset. Another graduate is visible in the distance. A building and palm trees are also silhouetted against the sky.

# What It Will Take

**ASU is a catalyst for Arizona's economic future**

As Arizona leaders plan for a revitalized state economy in 2021 in this reshaped world, **ASU is prepared for its next assignment.**

# FY22 Public Investment request: New Economy Initiative

**\$46M**

**An investment in ASU's assignment to drive Arizona's economy through engineering and technology education and advancement, critical components of responding to COVID-19 and key catalysts for future economic growth and resiliency.**



## **Student support, academic programs and faculty**

To meet the the workforce demands of the new economy and to the a resource for disruption and displacement caused by the pandemic, ASU seeks investment to expand its experiential learning programs and additional student support, such as career services, placement, and coaching. New programs will be developed within emerging New Economy fields in the natural sciences, neuroscience, digital culture and design, media arts, computer science, data science, and allied health professions and will promote knowledge acquisition and skill development for individuals at all stages of life



## **Science and Technology Centers**

State investment will establish five Science and Technology Centers (STCs) – attracting private capital investment and pairing new companies with FSE students who will perform research and technology development via capstone projects, entrepreneurial fellowships, and other curricular and extra-curricular pathways. This unique set of collaborations and engagements will enable companies to accelerate the transition of discoveries from laboratory to market, in turn attracting new startups and technology-oriented businesses to Arizona over the long-term. STCs will foster the growth of New Economy industries, thereby directly leading to job creation, workforce training, startups, and STEM education advances.



# Ira A. Fulton Schools of Engineering

The largest and one of the most comprehensive engineering schools in the nation

## #1

Largest and one of the most comprehensive engineering schools in the nation

## 42

CAREER awards in the last 5 years.  
13 in 2020

## 58,000+

Alumni

### 8,000

Online students

### 5,300

Female students

### 5,200

Under-represented groups

### 232

National Hispanic Scholars

### 218

National Merit Scholars

### 85

Members of the National Academies and distinguished societies

## 50+

Graduate degree programs

### 25

Undergraduate degree programs

### 7

Transdisciplinary schools

### #13

Online engineering graduate programs

### #11

Online engineering graduate programs for veterans

### #8

Bachelor's degrees awarded to Hispanics

### #6

Women as tenure/tenure-track faculty

## \$127M

Research expenditures  
FY 2019-2020

### 60

Patents per year

### #7

Licenses and Options

### #6

IP Disclosures

### #5

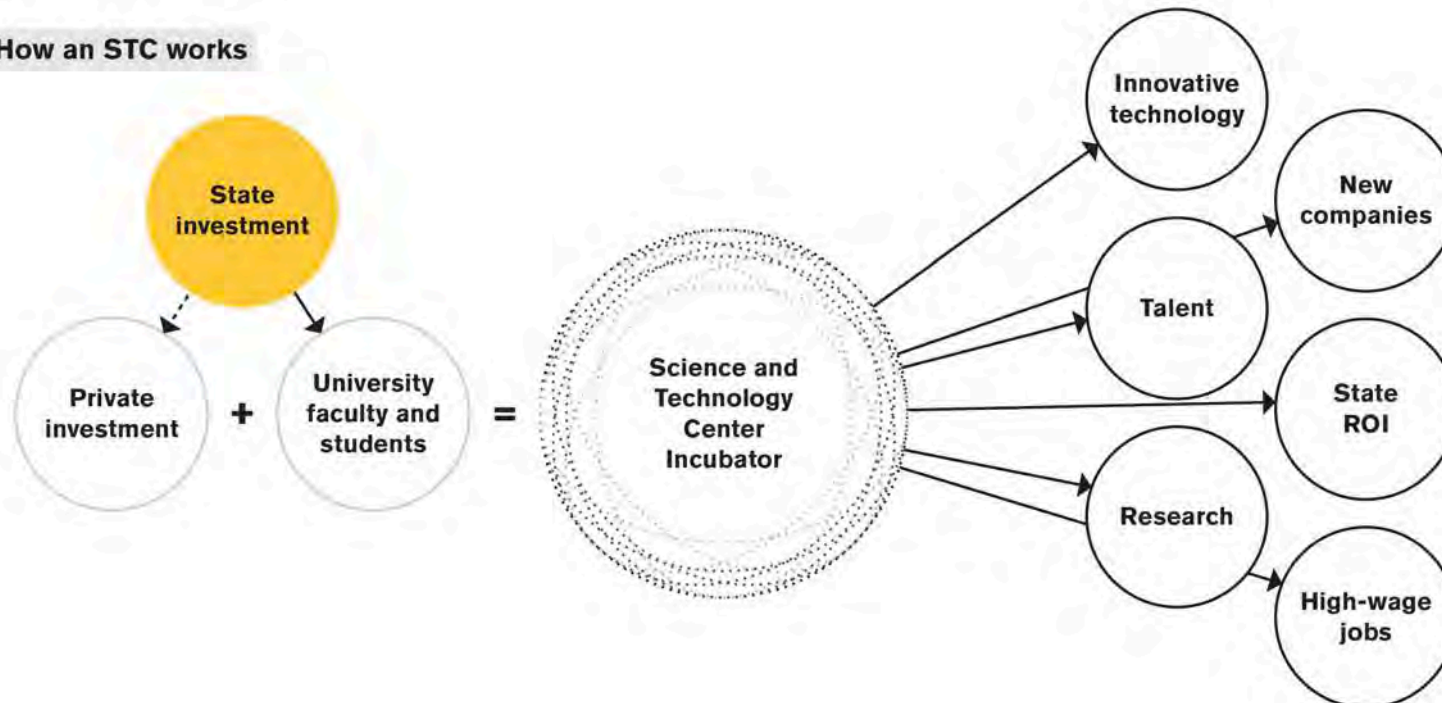
Startups

# Science and technology centers generate collaboration and innovation

## Learning, discovery, entrepreneurship

While classroom and online instruction is an important part of educating the next generation of engineers, students say that real world applied learning opportunities is where they learn the most. Science and Technology Centers are one way we bring students, faculty researchers, and private sector partners together to innovate, create and produce, serving both learning and the objectives of business.

### How an STC works



# Future science and technology centers in new economy industries



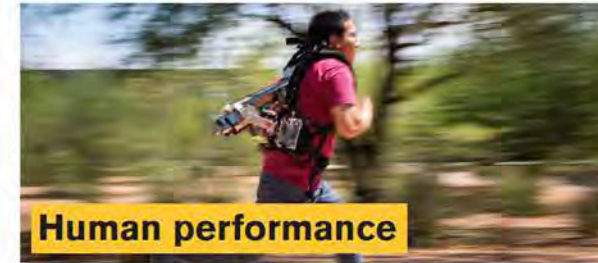
## Future communications technologies

Focus on driving Arizona to the forefront of physical information systems for sensing and communications.



## Extreme environments

Focus on engineering resiliency into transportation, energy, water and materials systems of future cities.



## Human performance

Focus on enhancing physical and cognitive performance, as well as medical prevention and intervention.



## Energy and materials

Focus on advancing new energy materials and device technologies to market, growing industry engagement.



## Advanced manufacturing

Focus on new technologies that strengthen links to private industry support in aerospace and defense.

**These five STCs will add to Arizona's existing two applied research centers focused on industry-led research – WearTech and Blockchain.**



# Arizona's return on investment toward a stronger economy



## Creation of high-value jobs

- Technology startups with AZ founders and innovators
- Applied learning opportunities for students, internships and a pathway to high wage jobs
- Partnerships with established AZ technology companies



## Workforce training

- Hands-on research experience produces thought leaders
- Entrepreneurial training paves way from lab to captured value
- Reskilling and upskilling opportunities to enhance and adapt current workforce to cutting edge technologies and innovations



## Attraction and retention of leading corporations

- People, facilities, intellectual leadership
- Partnerships and acquisition opportunities for established companies
- Access to the largest diverse technical talent pool in the nation
- Multiplier opportunities for joint projects and next stage technological development



# ASU is prepared to operate and create progress in all realms

## Realm 1

### Campus Immersion

Full Immersion  
On-campus  
Technology Enhanced

#### Needs

21<sup>st</sup> century digital learning spaces  
Artificial intelligence-based advising  
Ubiquitous content delivery mechanisms  
Intelligent tutoring platform  
Personalized learning at scale

## Realm 1b

### Campus Digital Sync

Full Immersion  
Campus-synchronized  
Technology Enhanced

## Realm 2

### Digital Immersion

Digital Immersion  
Online  
Technology Enhanced

#### Needs

Technology to support human relationships and build organizational affinity  
"Integrated" human-tutor interface  
Real time assessment  
Development-based assessment

## Realm 3

### Open Scale

Digital Immersion  
Massively Open  
Technology Enhanced

#### Needs

Technologies that derive value from scale  
Content and delivery for any life stage  
Multi-organizational pathway mapping

## Realm 4

### Education Through Exploration

Education Through Exploration  
Technology Enhanced

#### Needs

Virtual augmented reality for learning  
Direct human cognition linkages  
Intelligent tutoring through verbal query  
Group learning tools

## Realm 5

### Infinitely Scalable Learning

Massively distributed, personalized, adaptive learning solutions

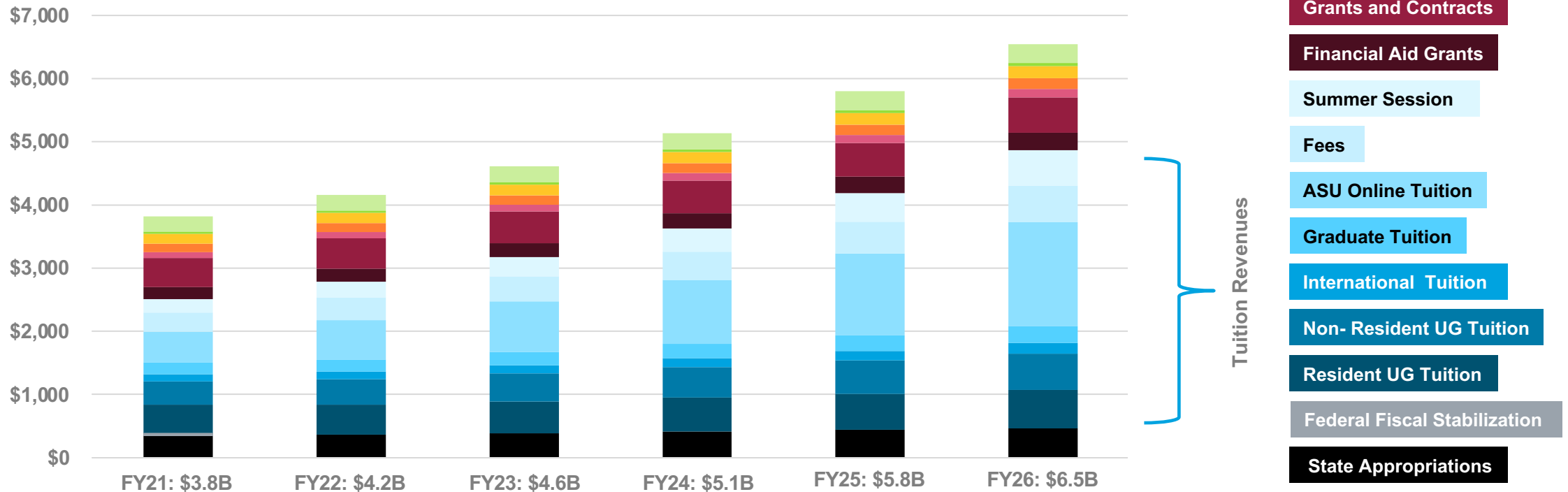
#### Needs

Infinitely scalable teaching  
Advanced game-based learning  
Seamless integration of individualized learning across life stages  
Lifelong intelligent tutoring

Math and science mastery for all

# ASU Enterprise will continue to grow and diversify revenue streams

ASU gross revenues in millions (FY2021-FY2026 projected)



**Dreamscape Learn / Outdoor Learning / COVID-19**

# What's next?





**New Economy Initiative**

# What's next?





