



ARIZONA STATE UNIVERSITY

Michael M. Crow

At-Risk Assessment

FY 2023

July 26, 2023

TO: Fred DuVal
Chairman, Arizona Board of Regents

FROM: Michael M. Crow
President, Arizona State University



CC: Arizona Board of Regents
John Arnold
Jennifer Pollock

RE: FY2023 At-Risk Compensation Goals

I am pleased to provide my At-Risk goals report for FY2023. This has been a great year overall for Arizona State University in coming out of the COVID pandemic, and advancing on all of our overall goals. Including the fact that this year, we were recognized by election to the Association of American Universities (AAU) and a number of other overall institutional achievements.

This report specifically focuses on the ongoing assessment process that is associated with the At-Risk compensation model put in place by the Board many years ago. Each year, I report on progress against goals that the Board and I agree to. Some of these goals are one-year goals and some of these goals are three-year goals. This report will include accomplishments associated with both sets of goals, both one-year and three-year.

During FY2023, ASU broke record performance indicators in nearly all aspects of the institution's operations including: students enrolled, graduation rates, retention rates, diversity levels, research funding, basically, numbers of people that were working with us as learners versus students. The university is fully operational with all programs being delivered face-to-face and is evolving and expanding in a healthy and very positive way. Contextually, and to put these At-Risk compensation goals into perspective, the university, in 2023, also won the three largest research awards in its history—all more than 50 million dollars—and also evolved a significant national position in the race to become one of the leading centers in the resurgence of the American semi-conductor industry. This culminated in July of 2023 with a \$270 million initiative with industrial and other university partners at the Macro Technology Works in the ASU Research Park.

Specific to the one-year and three-year goals, the details are attached and additional material will be sent separately. Substantial progress was made against each of these goals, and each of them are summarized below in this memo as well as in the attached materials.

One-year At-Risk Goals:

- 1) FY2022-2023 At-Risk Goal #1: Design and launch a premium brand for ASU Online.**

Goal Status: ACCOMPLISHED

A substantial amount of energy was spent on both demonstrating our premium brand, what we refer to as preferred, in the terminology we are using. We believe that all aspects of both our brand strategy and brand assessment as the preferred brand for ASU Online among the many competing online university programs, is completed. Because of the detailed and substantially internal and trademark-oriented assessments that we have done, the report submitted is confidential. An appendix with further detailed analytics can be accessed by request.

It is critically important that ASU develop and evolve the preferred brand for its online activities as it is either the only or one of the very few universities in the country where its core faculty are also its designers, developers, and implementers of the overall online course offerings and degree programs. This means that we are putting into motion all of the creative powers of our faculty, matched with the technical capabilities of our EdPlus at ASU group to support the faculty, developing the most capable and most advanced degree programs in the world. We believe that we have done this, and will continue to advance ASU Online as a preferred pathway or a preferred brand. The materials that you will review involved a very detailed and focused analysis of the brand as well as the shaping of the brand in the market. The results are quite positive.

- 2) FY 2022-2023 At-Risk Goal #2: Develop and launch a plan to move the three core brands of W.P. Carey School of Business, the Fulton School of Engineering, and the Barrett Honors College into the three global brands.**

Goal Status: ACCOMPLISHED

These three schools are premier entities within the 20+ college federation that comprise Arizona State University. The W. P. Carey School of Business is one of the largest and most important business schools in the world, ranking in the top handful of business schools (less than 30) in the country, that performs at an extremely high level, given its size and diversity. The communication of this brand, more broadly, is complicated because of the program size and the movement by other business schools to pursue quality through exclusion,

something contrary to our design. What you will read in the attached materials and in the supplemental summary documents that will be sent to you, have secured, and further, maintaining and developing this brand as a global brand.

Regarding the Ira A. Fulton Schools of Engineering, one of the most unique schools of engineering in the world with more than 30,000 students pursuing degrees (22,000+/- on campus and 8,000+/- online) the advancement of this school, like the W. P. Carey School, because of size and the perception of inclusion, is quite challenging but we believe we have accomplished this brand as demonstrated by demand for the programs from around the world and the impact the college has had. The additional reports that will be sent under separate cover reveal the detailed brand analysis and brand enhancement activities developed in the past year to ensure this.

Barrett, the Honors College at Arizona State University, is the #1 honors college in the United States and is equivalent to other honors colleges that are either separate like Bowdoin College, Amherst College, Williams College, Colgate University, Oberlin College, etc., or to the honors colleges that are often confused with actual naming of the Ivy League universities, like Columbia College at Columbia University (where I was a professor for more than 10 years). Barrett is a world-class institution with world-class students and the branding enhancement exercises of this past year have allowed us to burnish the brand greatly and its projection. This will be demonstrated in the separate and lengthy report beyond this memo.

3) FY2022-2023 At-Risk Goal #3: Design and launch a new health futures strategy for ASU, including the development of a holistic approach around health sciences, similar to what ASU has done around engineering.

Goal Status: ACCOMPLISHED

The key dates of the accomplishment are outlined and we have launched. We are under full design and development modality for an entity called ASU Health. The entity will subsequently have a new medical engineering school, a new public health technology school, new initiatives in public education related to health and health outcomes, a new Arizona health observatory, and numerous other initiatives. This overall goal of design and launch has been met and the Regents are well aware of it, as we have presented it to the Regents in the last few months.

The Public Health Technology Initiative's charge was to design "a new entity in the emerging field of Public Health Technology". The footprint started with convening a council last summer that involved prominent national leaders in the field. A prototype team developed three subgroups – Education design, Research design, and Entrepreneurship and Innovation. The resulting report, which outlines both the process and the recommendations. The appendix can be

accessed for anyone interested. Major work was accomplished and the recommendations are already being implemented.

Multiple-year At-Risk Goals:

- 1) 2021-2024 Multiple-Year At-Risk Goal #1: Demonstrate increased enrollments and student success in adaptive learning courses through offering more than 15 courses, with an increase in overall course completion, grade C or better, to more than 80% from a base of less than 50%**

Goal Status: The overall success rate of 82% for C or better has been accomplished, so that part of the goal was met. Fifteen courses were also listed as part of the goal. As of this point, there are 9 courses. While there were 9 courses, they spanned over 200 sections, a substantial expansion of the program. The sections impacted 26,568 students enrolled in FY22-23, an 11% increase over FY21.

- 2) 2021-2024 Multiple-Year At-Risk Goal #2: Increase enrollment and number of graduates by more than 10% and number of graduates by more than 10%.**

Goal Status: Based on the goal above, the baseline projection indicates we will not attain this goal, although we have made more progress than all other institutions in Arizona. In terms of graduation, we are also not yet attaining the goal.

We will, of course, work to redouble our efforts to attain these goal outcomes through the strategies we are implementing and will continue to attempt to enhance.

- 3) 2021-2024 Multiple-year At-Risk Goal #3: Complete the design of the Global Futures Laboratory, with anticipated engagement of more than 700 faculty. Successfully merge the three schools of the College of Global Futures into a unique college with thousands of students, both students majoring and minoring in these programs.**

Goal Status: Substantial progress has been completed on this multi-year goal, and by the conclusion of this multi-year goal in 2024, Arizona State University will have the most significant laboratory and college focused on laying the foundations for new innovations, new ways of thinking about the oceans, new ways of advancing sustainability outcomes, and new ways of thinking about the fundamental math and tools to manage the complexities that lie ahead of any institution on the planet. Progress here has been sustained and is accelerating in every dimension. ASU recently won major new projects and initiatives in water

innovation, in electricity-driven heavy manufacturing systems design, in sustainability, in other wide and various areas of innovation and future-oriented solutions. Overall, the progress here is as significant as anything that we have undertaken at Arizona State University in my tenure.

4) 2021-2024 Multiple-year At-Risk Goal #4: Build and document enhanced regional collaboration research with a focus on increased collaboration within Arizona education.

Goal Status: Met and ongoing.

Multiple examples in the attached summary illustrate the combined efforts of NAU, U of A, and ASU, or some combination of two of the three. We have new initiatives related to ASU Health, which will involve all universities. We have initiatives related to space exploration, water innovation, advanced biotech projects, learning projects, learning technologies, etc. Even with the goal being met, we will continue active collaboration in research areas.

5) 2021-2024 Multiple-year At-Risk Goal #5: Submit a report that demonstrates substantial expansion of ASU Digital Prep within Arizona to at least 150 schools with a focus on rural and underperforming schools.

Goal Status: Met in the first year and continues to expand at rapid rates as noted earlier and in the attached materials.

Last year, 158 schools participated and that is now up to 180. A listing of the schools is attached in the summary. We now have 13,000 part-time learners that are being served and this is in addition to 8,000 full-time students. The attached report indicates that this multi-year goal has been achieved while continuing to evolve and expand rapidly.

In summary, the At-Risk compensation goals provide focus and ability for me to highlight certain interests of the Board in ways that motivate staff and others to be as innovative and creative as possible with regard to these project areas.

Substantial progress has been made on all these goals and even for the few goals that we are underachieving. The goals are very substantial, and we are making substantial progress. The substantial progress will continue in that these efforts are resulting or have resulted in transformations in how we operate, how we are organized, how we pursue things, how we count things, and how we keep track of the things that we are doing.

I appreciate the Board's emphasis on the areas that are a part of the one-year and three-year goals, and I look forward to talking about these at the appropriate review session.

As indicated, several additional, somewhat lengthy reports will be sent your way in the areas related to the branding questions because there is really no way to do that without showing you the totality of the branding exercises and branding materials that we have put together. You will receive those under separate cover.

As always, thank you for your guidance and support.

FY23 Individual At-Risk Goals

2022-2023 Individual At-Risk Goal 1

Design and launch a premium brand for ASU Online.

Goal Accomplished

Report Follows

Assignment

Design and launch a premium brand for ASU Online.

Definition of a premium brand: one that consistently delivers **differentiation** and **quality** in its products/services/experiences, insomuch that they are **highly considered** by constituents.

FY23 Highlights

ASU generally performs on par with or surpasses competitive schools among prospective undergraduate and graduate students on key perceptions of premium brands:

- Program excellence
- High quality academics
- Top ranked faculty
- Preferred choice

Building the ASUO Premium Brand

Consistent visual approach

A premium brand is confident and consistent in all its marketing efforts. Our creative campaign and its assets are designed with a cohesive visual look and feel that clearly aligns with the master brand, separating ASU Online from the competition by highlighting ASUO's unique quality proof points and brand values.

Proof points are facts that convey quality & support the credibility of a brand's messaging. For ASUO, our proof points focus on the quality of the faculty, our innovative approach to technology (i.e. Dreamscape Learn), our academic excellence (rankings) and more which support premium perceptions.

Our efforts focus on providing best-in-class prospective and current student experiences. With thoughtful web design, comprehensive coaching support, world-renowned faculty and access to cutting-edge technology, we empower our students and support them from enrollment to graduation and beyond.

With our program strategy we identify high yield & high converting programs. In addition, we identify programs that have untapped demand and high growth potential (i.e. one-of-a-kind programs) as well as signature programs that convey our premium positioning. This allows us to leverage our quality proof points at a program level.

Choice of media channels

Each communication channel is chosen based on the volume of quality web traffic and is vetted for brand safety. The selected channels play different roles within our media strategy (i.e. awareness vs. consideration) and help to build premium perceptions.

Our advanced tracking capabilities generate insights into how students engage with our website and what content they are interested in. That allows us to serve them with the right and relevant messages which helps drive premium brand perceptions.

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ASUO's Unique Premium Proof Points

Respected online degrees. At ASU, you earn the same degree and follow the same curriculum, whether online or on campus. All online diplomas and transcripts simply say, "Arizona State University."

Faculty excellence. ASU faculty members are committed to innovation and use-inspired research. They impact the lives of our students, our communities, outer space, and beyond.

- ASU faculty members are industry leaders and award-winning researchers, but their impact doesn't stop there. Our online students work alongside world-class leaders with years of experience in their fields.
- Feedback from our students demonstrates how our faculty have impacted their studies, how they learn, as well as their personal and professional lives.
- These same faculty members design and teach online classes, and mentor students.

Leaders in Education Technology. ASU faculty members partner with instructional designers to create courses with one-of-a-kind, leading-edge technology that provides a rich online learning experience with an emphasis on enhancing student outcomes/setting students up for success in their professional lives.

Repeatedly ranked #1.

- #1 in the U.S. for innovation for 8 years in a row ahead of MIT and Stanford, U.S. News & World Report, 2016-2023
- #1 in the U.S. and #6 in the world for global impact, Times Higher Education, 2023 (#1 U.S. since 2020, 4 years)
- #1 for sustainability in North America - STARS 2023
- Consistently ranked in the Top 10 for best online bachelor's programs, U.S. News & World Report, 2023
- The National Science Foundation, an organization that tracks higher education research and development investments, ranked ASU #1 for transdisciplinary science research expenditures ahead of MIT, Northwestern, and Johns Hopkins,

Highly personalized student support for a better experience. With our students at the center, we use the best of our human capital and our technology innovation to create customized journeys that build a supportive infrastructure through their journey to get them whatever they need whenever they need it.

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Premium Funnel Communication Across Campaigns



Awareness and brand building stage. Establishes why ASU should be in the prospect's consideration set, differentiating ASU with focus on quality proof points.



Retargeting audiences who have engaged with ASU, i.e., visited the home page. Provides them reasons to look deeper into the quality education ASU has to offer.



Retargeting audiences who have visited the ASU site multiple times and based on their activity, have a high intent to request information or apply. Provides them with more quality proof points to take that final action.

ASU Online
Sponsored

Earn your degree online at ASU. Explore 300+ programs each designed with state-of-the-art technology by renowned faculty.

ASU Online
Arizona State University

You're getting the same quality curriculum, you're getting the same access to quality professors.

Jessica P.
Master of Education
Educational Leadership (Principalship)

Learn More

ASU Online
Sponsored

Advance your professional path with a degree from ASU. Learn from renowned faculty dedicated to empowering your success.

Erin Rotheram-Fuller, PhD
Asst. Prof. Psychology and Behavioral Neuroscience
Mary Lou Fulton Teachers College

Learn More

ASU Online
Sponsored

Advance your professional path by earning a world-class degree from ASU - a 13 in the US for Employability.

ASU Online
Arizona State University

ASU has a phenomenal reputation for having a challenging and quality curriculum.

Brianna D.
BA Biological Sciences

Learn More

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Strategies to continue building perceptions of premium among prospective students

Build awareness and premium perceptions of ASU Online through quality messaging nationwide

Develop a new creative campaign for ASU Online with focus on superiority proof points compared to other institutions that offer programs online.

Premium awareness videos ranging from brand messages to faculty, student and alumni stories on YouTube.

National rollout of audio spots for broad awareness building that highlight diverse quality aspects of ASU Online.

Activation of tested messages that have demonstrated the ability to build perceptions of excellence & unique points of differentiation among key constituents in all communication channels.

Quality brand messaging through paid search and Pay Per Lead (PPL) campaign strategies.

Ads featuring ASUO preferred messaging such as faculty or student stories on social media channels.

Owned media including blog and video strategies, SEO and web/UX strategies, optimized to the preferred messaging to further integrate storytelling and tone across the ASUO web ecosystem.

Leverage national campaign planning for targeted messaging to recruit prospective students to ASUO in Arizona.

Continue to incorporate key preferred messaging throughout digital campaigns for online to support perceived differentiation and positive online student experience targeted to residents of Arizona.

Air the current ASU brand spot on Connected TV and develop a new spot to positively impact premium brand perceptions.

Re-targeting of CTV audience with radio spots featuring diverse quality proof points.

Create written and video content for owned channels highlighting ASU faculty and students as exemplars of a premium student experience, that will increase organic web traffic and RFI submissions.

Continued collaboration with Media Relations and Strategic Communications to build thematic storytelling focused on programmatic stories, faculty thought leadership, student stories, ASU traditions, milestone/holiday and graduation stories targeting prospective students.

Academic Enterprise collaboration for **Taskforce AZ**, testing premium messaging with both campus and online modality options.

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Target California as key geography with quality messaging as a unique recruitment tactic.

Communicate premium university messages to the CA audience, targeting key programs relevant to CA residents for high growth career areas. Highlight access to counter impact issues in the CA university system.

Air the current ASU brand spot on Connected TV and develop a new spot to positively impact premium brand perceptions.

Re-targeting of CTV audience with radio spots featuring diverse quality proof points.

With premium messaging established, highlight **student and alumni stories** of students who earned their degree online and who are thriving in CA.

Customize premium messaging via blog and video strategies in earned media, for strategic placement in California, as part of an ongoing ASU Online effort in the state.

Excellence Results- FY23 Brand Tracker

Prospective Undergraduate Students

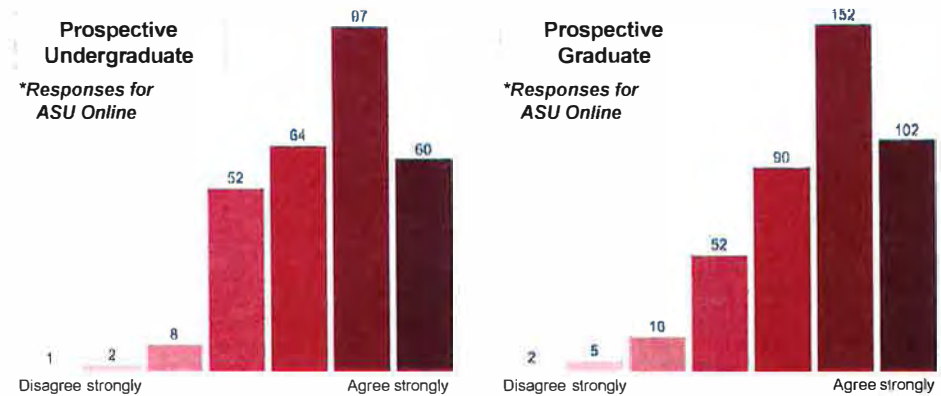
% Agree Strongly/ Moderately	ASU	GCU	Penn State	SNHU	UMGC	Phoenix	WGU	UAGC	UF	Purdue
Base:	(284) - A	(143) - B	(77) - C	(104) - D	(56) - E	(234) - F	(70) - G	(80) - H	(90) - I	(86) - J
Well recognized for excellence in its degree programs	55% B	47%	49% □	54%	59%	49%	63% BCF	55%	56%	62% BF

Prospective Graduate Students

% Agree Strongly/ Moderately	ASU	Penn State	UF	Purdue	USC	UMGC	WGU	SNHU
Base:	(419) - A	(134) - B	(159) - C	(141) - D	(170) - E	(117) - F	(136) - G	(158) - H
Well recognized for excellence in its degree programs	61% CG	64% CG	52%	59%	63% □CG	62% G	51%	56%

ASU performs on-par or better compared to competitive schools on recognition for its program excellence.

Both prospective undergraduate students and graduate students exhibit a similar distribution of responses, which shows a pronounced peak in "Agree moderately".



A/B/C/D/E/F/G/H/I = Significant at the 90% confidence level; □ = Significant increase/decrease from Total FY22 at the 90% confidence level
Base: T3B Familiar with School

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Quality Results - FY23 Brand Tracker

Prospective Undergraduate Students

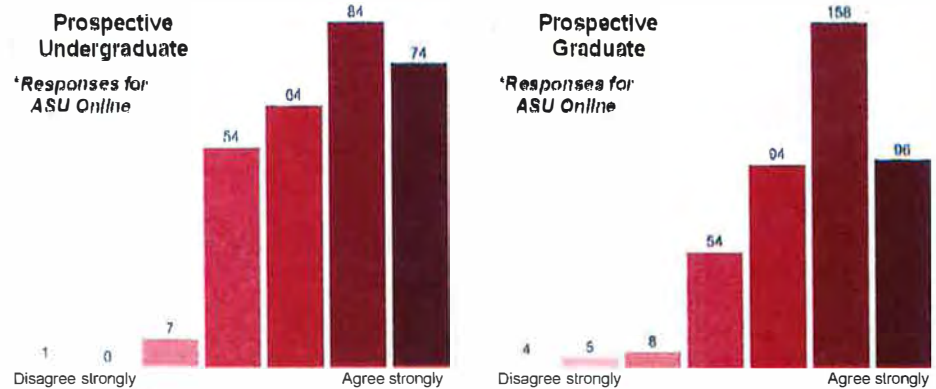
% Agree Strongly/ Moderately	ASU	GCU	Penn State	SNHU	UMGC	Phoenix	WGU	UAGC	UF	Purdue
	Base: (284) - A	(143) - B	(77) - C	(104) - D	(56) - E	(234) - F	(70) - G	(80) - H	(90) - I	(86) - J
Maintains a high standard of academic excellence	56% BF	43%	47%	55% B	52%	49%	61% BCFH	48%	59% BCF	57% B

Prospective Graduate Students

% Agree Strongly/ Moderately	ASU	Penn State	UF	Purdue	USC	UMGC	WGU	SNHU
	Base: (419) - A	(134) - B	(159) - C	(141) - D	(170) - E	(117) - F	(136) - G	(158) - H
Maintains a high standard of academic excellence	61% G	63% GH	57%	58%	63% GH	54%	53%	54%

ASU performs on par with or surpasses competitive schools when it comes to maintaining academic excellence.

The most common response from the prospective students responded is "Agree moderately," followed by "Agree strongly."



A/B/C/D/E/F/G/H/I = Significant at the 90% confidence level; □ = Significant increase/decrease from Total FY22 at the 90% confidence level
Base: T3B Familiar with School

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Faculty Results - FY23 Brand Tracker

Prospective Undergraduate Students

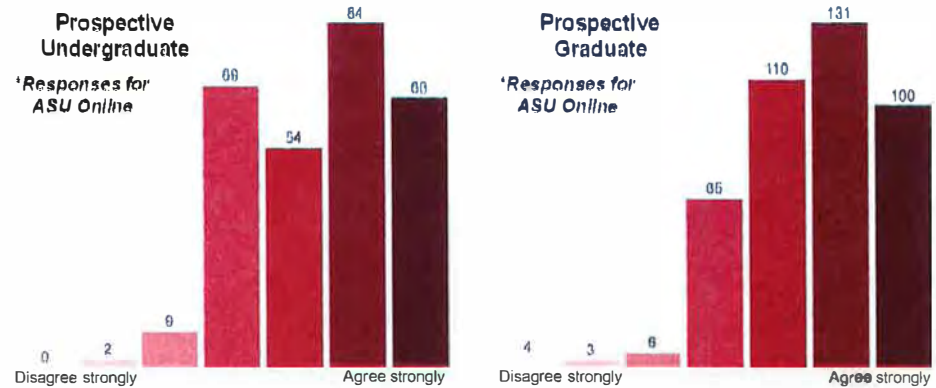
% Agree Strongly/ Moderately	ASU	GCU	Penn State	SNHU	UMGC	Phoenix	WGU	UAGC	UF	Purdue
Base:	(284) - A	(143) - B	(77) - C	(104) - D	(56) - E	(234) - F	(70) - G	(80) - H	(90) - I	(86) - J
Has top ranked faculty	53% BF	40%	47%	49%	52%	40%	47%	50%	50% F	51% BF

Prospective Graduate Students

% Agree Strongly/ Moderately	ASU	Penn State	UF	Purdue	USC	UMGC	WGU	SNHU
Base:	(419) - A	(134) - B	(159) - C	(141) - D	(170) - E	(117) - F	(136) - G	(158) - H
Has top ranked faculty	55%	58%	52%	55%	62% CGH	56%	49%	49%

ASU performs on par with or surpasses competitive schools when it comes to measuring the perception of our faculty.

The distribution of responses displays a slight distinction between prospective undergraduate students and prospective graduate students.



A/B/C/D/E/F/G/H/I = Significant at the 90% confidence level; □ = Significant increase/decrease from Total FY22 at the 90% confidence level
Base: T3B Familiar with School

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Preferred Choice - FY23 Brand Tracker

Prospective Undergraduate Students

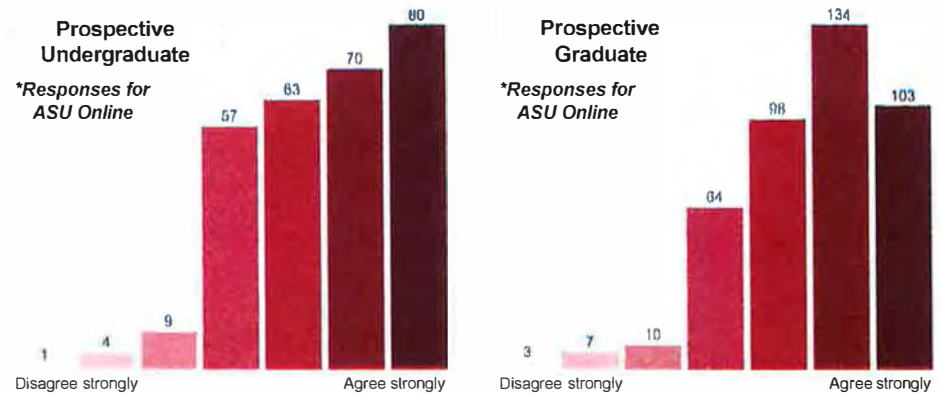
% Agree Strongly/ Moderately	ASU	GCU	Penn State	SNHU	UMGC	Phoenix	WGU	UAGC	UF	Purdue
Base:	(284) - A	(143) - B	(77) - C	(104) - D	(56) - E	(234) - F	(70) - G	(80) - H	(90) - I	(86) - J
Preferred choice to earn a degree online	53% B	41%	48%	55% B	50%	48%	57% B	53% B	48%	49%

Prospective Graduate Students

% Agree Strongly/ Moderately	ASU	Penn State	UF	Purdue	USC	UMGC	WGU	SNHU
Base:	(419) - A	(134) - B	(159) - C	(141) - D	(170) - E	(117) - F	(136) - G	(158) - H
Preferred choice to earn a degree online	57% C	58% C	48%	60% CH	51%	56%	55%	50%

ASU performs on-par or better compared to competitive schools on perception question used to evaluate prospective students' preferred choice.

The distribution of responses show a strong skew towards "Agree Strongly/Moderately".



A/B/C/D/E/F/G/H/I = Significant at the 90% confidence level; □ = Significant increase/decrease from Total FY22 at the 90% confidence level

Base: T3B Familiar with School

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Strategies for other key audiences

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Strategies to continue to build perceptions of premium among additional populations: The Academy

Continue to **build awareness of ASU Online as a premium brand to peer institutions nationwide.**

Targeted communications from Phil Regier focused on ASUO achievements, storytelling, advancements, etc.

Expand the ASU Online Higher Ed Monitor to include additional distribution to peer institutions, beginning with all the Universities that tour and learn about ASUO and EdPlus.

Publish stories/case studies/white papers featuring EdPlus leadership on the topic of digital teaching and learning, in higher ed publications, as seen [here](#).

Opportunity to **cross promote Study Hall as a thought leadership piece** and promote via earned and owned media channels nationwide.

Target university leadership of peer and competitor institutions at a national level through dedicated LinkedIn campaign* to share ASUO achievements, advancements in digital teaching and learning.

Targeted messaging to key stakeholders in higher education in the state of Arizona.

Targeted communications from Phil Regier focused on ASUO achievements, storytelling, advancements, and opportunities specific to Arizona residents, through the lens of thought leadership in the state.

Collaboration with MRSC to **meet with key reporters and editors from Arizona outlets** (print, TV and radio) culminating with a media tour of EdPlus.

Target university leadership across the state through dedicated LinkedIn campaign to share ASUO achievements, advancements in digital teaching and learning.

Advance initiatives in California to position ASUO as a premium institution.

Publish stories/case studies/white papers featuring EdPlus leadership on the topic of digital teaching and learning, and how the work is impacting California.

Leverage the ASU Online Higher Ed Monitor to **expand thought leadership initiatives and content** specifically focused on solutions ASUO is providing to further higher education in California. Increase distribution of the newsletter to peer institutions, beginning with all the Universities that tour and learn about ASUO and EdPlus.

Utilize social media platforms, such as LinkedIn, to **pilot targeted campaigns*** reaching higher ed leaders at universities across California to share ASUO achievements, advancements in digital teaching and learning.

* LinkedIn will be tested on a small population. Based on success, additional funding would be needed to leverage platform advertising on a broader scale.

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Strategies to continue to build perceptions of premium among additional populations: Companies

Continue to **build awareness of ASU Online** while incorporating proof points of our premium brand in messaging to companies nationwide.

Build upon Starbucks successes, and collaborate to refine messaging that can be used to show the success of the partnership at the national level in order to reach other corporate leaders.

Expand the ASU Online Higher Ed Monitor to include relevant content for corporate leadership and build further distribution in this sector nationwide.

Learner and corporate partner focused storytelling with a goal of securing coverage in top tier consumer and business focused publications.

Leverage premium messaging to corporate partners in Arizona to build student pipelines and workforce development.

Collaborate with Media Relations and Strategic Communications at ASU to **develop and place partner focused stories and student success stories** in key publications: Arizona Republic, Phoenix Business Journal, KJZZ, etc.

Create written and video content for owned channels highlighting ASU faculty and students as exemplars of a premium student experience tied to corporate partnerships in Arizona.

Expand the ASU Online Higher Ed Monitor to include relevant content for corporate leadership and build further distribution targeting corporations with a presence in Arizona.

Academic Enterprise collaboration for **Taskforce AZ**, testing premium messaging around workforce development and employability.

Further develop targeted messaging in California around workforce development to corporate partners.

Collaborate with Media Relations and Strategic Communications on **learner and partnership focused stories** with the LA Times, San Francisco Chronicle, Los Angeles Business Journal, Sacramento Business Journal, San Diego Union-Tribune, etc.

Expand the ASU Online Higher Ed Monitor to include relevant content for corporate leadership and build further distribution targeting California corporations.

Customize premium messaging via blog and video strategies in earned media, for strategic placement in California, as part of an ongoing ASUO effort in the state.

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Strategies to continue to build perceptions of premium among additional populations: Decision Elite

Continue to **build awareness of ASU Online as a premium experience/modality to key decision makers nationwide.**

Tie relevant degree programs into CHIPS Act, which has been the primary topic at the federal level for ASU. Plan to invite group to observe and understand what the online experience is at ASU. Including invitation to tour EdPlus.

Initial effort will start with the federal delegation for Arizona with an opportunity to highlight what ASU is doing to advance STEM starting at 7th/8th grade and moving into college with a **tie back to online offerings that meet state needs for economic growth.**

Expand the ASU Online Higher Ed Monitor to include relevant content for federal leaders and/or their staff in this sector nationwide.

Utilize faculty voices who have experience teaching via multiple modalities and can highlight the rigor that goes into developing online courses, the quality of the programs, top tier faculty, etc.

Target policymakers on a national level through dedicated LinkedIn campaign* to share information and proof points highlighting success stories.

Leverage premium messaging to policy makers in Arizona to build student pipelines and workforce development.

Tie relevant degree programs into **New Economy Initiative** which has been the primary topic at the state and local level for ASU. Plan to invite group to observe and understand what the online experience is at ASU. Including invitation to tour EdPlus.

Initial effort will start with City Council with an opportunity to **highlight what ASU is doing to advance STEM** starting at 7th/8th grade and moving into college with a tie back to online offerings that meet state needs for economic growth.

Expand the ASU Online Higher Ed Monitor to include state and local leadership to the biweekly distribution.

Target local city council members and state leadership through dedicated LinkedIn campaign* to share information and proof points highlighting success stories.

Further develop targeted messaging in California around ASU Online as a premium brand.

Utilize faculty voices who have experience teaching via multiple modalities and can highlight the rigor that goes into developing online courses, the quality of the programs, etc. with a focus uniquely on California and the options to residents.

Expand the ASU Online Higher Ed Monitor to include state, city and local leaders and/or their staff in California.

Work with reporters in the state who are already talking about online education.

Utilize social media platforms, such as LinkedIn, to **pilot targeted campaigns*** reaching California policymakers and state leadership.

* LinkedIn will be tested on a small population. Based on success, additional funding would be needed to leverage platform advertising on a broader scale.

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2022-2023 Individual At-Risk Goal 2

Develop and launch a plan to move the three core brands of the W.P. Carey School of Business, the Fulton Schools of Engineering and the Barrett Honors College into three global brands.

Goal Accomplished

Report Follows

Develop and launch a global positioning plan for the W. P. Carey School of Business, the Fulton Schools of Engineering, and the Barrett Honors College

Significant progress continues to be made in advancing the comprehensive global position of the W. P. Carey School of Business, the Ira A. Fulton Schools of Engineering and Barrett, The Honors College. For each of these colleges, a disciplined approach is being advanced that has resulted in raising awareness, interest and engagement in ASU's highly-ranked, highly-accessible programs. A comprehensive positioning plan guides the work of each college, weaving them into the overall brand portfolio to increase the impact. The Board will soon receive three books that illustrate progress in deploying the global positioning strategies of these colleges (digital copies are also available at <https://issuu.com/arizonastateuniversity>). Each book lays out the approach to positioning the colleges and provides numbers, facts and statistics along with hundreds of stories of ASU's faculty, staff and students that bring those accomplishments to life. Highlights from the book are provided on the following pages.

W. P. Carey Arizona positioning

We focus on building sustainable high-value relationships among students, faculty, business and our community.

We recruit top faculty from around the globe to teach, mentor and conduct research in and for Arizona. We work with corporate partners to develop and execute successful research and recruiting strategies that support their thriving businesses.

W. P. Carey transforms Arizona through access, excellence and innovation in business knowledge. The school sparks positive change in business and society by educating students and growing talent to enrich and lead organizations, producing groundbreaking and impactful research and engaging actively with business, government and communities. Valuing excellence, integrity, impact and community, W. P. Carey is a catalyst for economic growth and resilience for the state of Arizona.

100+
years of partnership
with the Arizona
business community

107
Arizona-based
employer partners

Top 25 in the U.S.
29 programs and disciplines
highly ranked, more than
University of Arizona and Northern
Arizona University

- U.S. News & World Report, 2023/2024



120
Arizona
media
mentions
of W. P. Carey
experts in 2022

Highest-ranked MBA in Arizona,
ahead of University of Arizona and Northern Arizona University

- U.S. News & World Report, 2023

Largest MBA enrollment in Arizona,
ahead of University of Arizona and Northern Arizona University

- U.S. News & World Report, 2023



19,814 total students,
more than University of Arizona and University of Texas at Austin

38%
of students
from underrepresented
populations

63,500+
alumni
living in Arizona

16% of first-year students
are the first in their family
to attend college

35% increase
of undergraduate student
population in just 5 years
2017-2022

77%
of undergraduates
accepted a job offer
with an average starting
salary of \$56,404

165
National Merit Scholars

156
tenure or
tenure-track faculty

5,276
degrees conferred
in 2022

850+
peer-reviewed articles
published between
2018-2022

More than \$16M
in research expenditures in 2021

W. P. Carey national positioning

W. P. Carey is the largest and one of the top ranked business schools in the country. With more than 19,000 students, 29 programs and disciplines ranked in the U.S. News top 25, more than USC and Pennsylvania State University, and one of the highest employment rates for new graduates among U.S. business schools, W. P. Carey is where access meets excellence.

W. P. Carey's mission is to educate tomorrow's business leaders, take an entrepreneurial approach to learning and conduct groundbreaking research to create positive change. Research at the business school tackles global and local challenges from food waste and climate change to health care. With its mission focused on inclusive excellence, technological innovation and positive societal impact through business education, W. P. Carey ranks in the top 25 across 10 MBA specialty areas in U.S. News & World Report's graduate school rankings.

Top MBA Programs

#2 in the U.S.
Full-time MBA for return on investment, ahead of Penn State, University of Massachusetts, University of Arizona and Harvard

- U.S. News & World Report, 2023

#4 in the U.S.
Executive MBA, ahead of UCLA and Georgetown

- Poets & Quants

#7 in the U.S.
Online MBA programs, ahead of Penn State and Rice University

- U.S. News & World Report, 2023

#1 in the U.S.
online undergraduate business programs, ahead of University of Pennsylvania and University of Arizona

- U.S. News & World Report, 2023

#1 in the U.S.
master's degree program in homeland security, ahead of George Washington University, Columbia University and University of Southern California

- U.S. News & World Report, 2023

#2
Supply chain and logistics, ahead of MIT and Pennsylvania State University

- U.S. News & World Report, 2022

#6
Greatest resources for minority students, ahead of Stanford University, Rice University

- The Princeton Review, 2022

17,444
U.S. students

1,419
Honors undergraduates

7,507
students from underrepresented populations

4,585
online students

Top full-time MBA employers

Amazon, McKinsey & Co., Applied Materials, NTT Data, Vizient, American Express, Walmart Corporate, Microsoft

100%
of women students accepted offers 90 days post-graduation

96%
of full-time MBA graduates have full-time accepted job offers in 90 days post-graduation with an average base starting salary of \$124,664



W. P. Carey world positioning

ASU's W. P. Carey School of Business is dedicated to preparing students for an ever-changing world and business environment. Our graduate recruiting team visits 23 countries across four continents, — including partner schools in Asia, Africa, Latin America and the Indian Subcontinent — to bring the power of a W. P. Carey degree to more learners worldwide.

W. P. Carey School of Business is dedicated to preparing students for an ever-changing world and business environment. The school's commitment is evident through the number of W. P. Carey business students who come from other countries; who study abroad each year; through outreach trips to leading businesses on six continents; and through the relationships the school is forging with international institutions. The school's highly ranked academic programs are designed with faculty and industry feedback to align with best practices and leading-edge advancements. This focus on evolving programs and collaboration with international partner schools makes W. P. Carey degrees applicable and transferable anywhere in the world.

Global alumni hail from more than 160 countries. Here are the top 10:

1. U.S.
2. China
3. India
4. Canada
5. Mexico
6. Taiwan
7. Japan
8. Saudi Arabia
9. United Kingdom
10. South Korea

105,566
W. P. Carey alumni worldwide

We are redefining global business

International Academic Partnerships make W. P. Carey degrees applicable and transferable anywhere in the world with 10 universities in China, Ghana, India, South Korea and Taiwan. A few of these partnerships include the KNUST School of Business in the West African nation of Ghana, the Shanghai National Accounting Institute, the Institute of Management Technology – Dubai and the Institute of Management Technology Ghaziabad in India. We are actively seeking more to better prepare business students around the world.

2,398
international students from 126 countries

1,742
international undergraduate students

127
countries represented

99
international faculty

3,000+
W. P. Carey alumni living in China

15+
STEM-designated programs

#1 in the U.S.
for online undergraduate business programs, ahead of University of Pennsylvania and University of Arizona

— U.S. News & World Report, 2023

#4 in the World for Information Systems department ranking, world wide research, 2016-2021, ahead of University of Arizona and University of Washington

— Association for Information Systems Research Rankings

#1 in the U.S., **#9** in the world for global impact

ASU is ranked best in the nation and ninth in the world by Times Higher Education for advancing the United Nations' Sustainable Development Goals



Fulton Schools Arizona impact by the numbers

The Ira A. Fulton Schools of Engineering is **built as the engineering college of the future** – simultaneously increasing access to advance student success and achieving excellence in use-inspired research.

In Arizona, we are training for the engineering jobs that companies need, for the entrepreneurial ventures being founded and for the jobs of the future.

The Ira A. Fulton Schools of Engineering not only provides a world-class education but also creates transformative changes that positively impact individuals, the economy and Arizona's future. Our faculty nurtures students through innovative programs, focusing on creativity, critical thinking and problem-solving. By promoting the importance of a diverse community, the Fulton Schools invites all voices to drive innovative solutions to complex societal issues.

Economically, the Schools propel Arizona forward with a stream of highly trained and capable engineering graduates who are ready to contribute to key state industries such as technology, energy and healthcare. Our research breakthroughs fuel entrepreneurial ventures, stimulating investment and job creation. As Arizona continues to build a diverse, resilient economy, its future will be based on embracing advanced technologies, sustainable energy and critical infrastructure, and the Fulton Schools of Engineering will always be an important partner on that journey.

100+ industry partners from local entrepreneurs to Fortune 100 companies

\$145 million in research expenditures led by Fulton schools faculty in FY22

Intel's largest supplier of talent in Arizona and worldwide, ahead of MIT, Stanford and UC Berkeley

26% of Barrett, the Honors College students are Fulton Schools students.

Driving 21st century industry growth in Arizona

ASU's Science and Technology Centers are providing the expertise, facilities and infrastructure to enable the innovative breakthroughs that will position Arizona as a global leader in emerging industries.

STCs help nurture the collaborations necessary to take big ideas from the lab to market. Through industry-relevant research, STCs are catalyzing job creation, entrepreneurship and workforce development across the state.



30,000+ current students

4,798 first-generation students

4,814 Hispanic students

7,275 female students

11,366 Arizona residents

6,793 grads from bachelors, masters and doctoral programs in 2022-23

\$292.6M economic impact

2-year economic impact on Arizona from ASU startups and affiliated businesses for the fiscal years 2019 and 2020

\$52M raised

to date in external funding for ASU's entrepreneurial programs

\$69,000 Median full-time starting salary

for a Fulton Schools graduate with a bachelor's degree in engineering

First in the U.S.

to create a fully online accredited electrical engineering undergraduate degree

#2 in nation for NSF awards

ASU faculty earned 14 National Science Foundation early-career awards in 2017, ranking second in the U.S. among all universities and among the top three for engineering schools, ahead of Stanford, UC Berkeley and Carnegie Mellon.

Top 5 in the U.S.

interdisciplinary science total research expenditures

ahead of MIT, UCLA and Carnegie Mellon

60% of the Phoenix metro area workforce is employed in advanced industries

such as manufacturing, business and financial services, technology, biosciences and health care, up from 48% before the 2007 recession.

— FORBES

Fulton Schools national positioning

The Ira A. Fulton Schools of Engineering is at the cutting edge of use-inspired research and is leading several national initiatives.

The Fulton Schools leads two NSF Engineering Research Centers, a \$70M DOE Clean Energy Manufacturing Innovation Institute and is pioneering advances in microelectronics, geotechnical engineering, photovoltaics and clean water.

As the most comprehensive and largest engineering program in the United States, the Ira A. Fulton Schools of Engineering has earned its reputation not just by producing highly qualified engineers, but by inspiring them to be pathfinders, innovators and change-makers.

There's a sense of dynamism and agility here that is the hallmark of the New American University in the 21st century. An unwavering dedication to student success, faculty excellence, and the creation of an environment where inclusion is woven into a rich mosaic, forming the very fabric of this vibrant institution.

With over 25 undergraduate degrees, we are creating the future workforce for America's foundation to support and improve the complex web of our national infrastructure. Our graduates will fill critically important jobs throughout the country to keep our economy growing and thriving for generations to come.

#6 graduates hired into top tech companies ahead of Carnegie Mellon, Georgia Tech and UCLA

— SHL ASPIRATIONAL ACADEMICS 2020

#15 in the U.S. online master's in engineering, in the top 15, along with UCLA, Purdue, Columbia and USC

— U.S. NEWS & WORLD REPORT 2023

#19 in the U.S. undergraduate engineering*, ahead of UT Austin, University of Washington and UC Irvine

— U.S. NEWS & WORLD REPORT 2023

* among public universities

Largest in the U.S.

The Ira A. Fulton Schools of Engineering is the largest and most comprehensive engineering program in the United States.

Fulton Schools has incredible scale. The Ira A. Fulton Schools of Engineering offers 25 undergraduate programs and 50+ graduate programs in its eight schools, with many ranked nationally in their disciplines.



30,000+ current students from all 50 states, Washington, D.C., Guam, Puerto Rico and the U.S. Virgin Islands

#6 in the U.S. in awarding bachelor's degrees to underrepresented minorities

105 National Hispanic Scholars

46% of faculty from diverse backgrounds

4,800 first-generation students

85 Members of National Academies and distinguished societies

30 CAREER awards to young faculty members from the National Science Foundation in the last three years positioning Fulton Schools as a national leader in quality for the future.

295 patents led by Fulton Schools in the past three years

31 startups led by Fulton Schools in the past three years

Over the last 10 years, ASU has become one of the nation's leading producers of elite scholars.

- 1,840 National Merit Scholars
- 1,296 National Hispanic Scholars
- 23 Goldwater Scholars
- 185 Fulbright Scholars
- 1 Rhodes Scholar
- 1 Churchill Scholar
- 5 Marshall Scholars
- 5 Truman Scholars

Prestigious engineering faculty memberships in national academies

- 42 IEEE Fellows
- 10 National Academy of Engineering members
- 3 National Academy of Construction members
- 6 National Academy of Inventors members
- 135 NSF CAREER awardees since 1995

Fulton Schools world positioning

The Ira A. Fulton Schools of Engineering is built as the engineering college of the future – simultaneously increasing access to advance student success and achieving excellence in use-inspired research.

Across the world, the Fulton Schools' global impact is immense and growing as learners worldwide access ASU's renowned faculty through innovative distance education formats.

Our student body, a vibrant tapestry made up of individuals from all 50 states, Washington, D.C., Guam, Puerto Rico, the U.S. Virgin Islands, and an astonishing 135 countries, testifies to the universal appeal of the "Fulton Difference."

The "Fulton Difference" is rooted in principles that nurture success in and beyond the classroom. It champions use-inspired research and promotes an entrepreneurial spirit. It honors the fact that our faculty's dedication extends beyond transformational research and exemplary engineering education to building bridges that span cultures, industries and communities around the world.

We don't end our mission with local or national impact - we aspire to make lasting global change. In the Fulton Schools, we are not just shaping the next generation of engineers, we're developing the visionaries who will create tomorrow's world.

Globally-connected

The Fulton Schools benefit from a globally diverse undergraduate student body that brings different perspectives and ideas to solving the world's great problems through engineering and technology.

Our next stage of evolution is underway through a globally-connected network of higher education institutes and government entities providing greater access to engineering education to transform society and improve our quality of life.



#15 in environmental science and engineering, ahead of Univ. of Copenhagen, Delft University of Technology and UC Berkeley

ACADEMIC RANKINGS OF WORLD UNIVERSITIES 2022

Co-founding partner of TEDI-London, an innovative engineering and design institute in the United Kingdom with Kings College London and UNSW Sydney

Engineering current international footprint

With a presence in London through TEDI: The Engineering & Design Institute London and programs on the ground in Egypt, Pakistan and Vietnam, the Fulton Schools are truly global in reach as well as impact. The Global School serves as the engineering-focused manifestation of the ASU charter on an international scale.

30,000+
current students from
135 countries

and all 50 states,
Washington, D.C.,
Guam, Puerto Rico and
the U.S. Virgin Islands

5,998
international
undergraduate students

5,217
international masters
students

781
international doctoral
students in 2022-23

139
international faculty

18,712
alumni from
168 countries

The Fulton Schools offers convenient "anytime, anyplace" online delivery for global learners.

19
Online
undergraduate
degree offerings

19
Online graduate
degree offerings

5
Online graduate
certificates,
including
semiconductor
processing, nuclear
power generation
and biomimicry

Barrett Honors College Arizona impact

Barrett, The Honors College at ASU is a residential college community of academically outstanding undergraduates at an expansive and innovative university.

Barrett students now constitute 18 percent of ASU's first-year class, and they typically take one-third of their classes inside the honors college.

Since the inception of Barrett, The Honors College 35 years ago, the college has developed into the largest honors residential community among the nation's public universities. With more than 7,200 students enrolled in Barrett across ASU's four metropolitan campuses, the college provides a highly personalized academic experience, faculty members who are pioneers in their fields and state-of-the-art facilities. Barrett faculty constitute a distinguished cohort of master teacher-scholars who perform the essential teaching, mentoring and leadership roles that help make Barrett widely recognized among honors colleges in the U.S. This interdisciplinary and talented faculty publish research in top-tier academic journals, write award-winning books and win national teaching awards.

With Barrett students attending from Arizona and across the nation, and international students hailing from around the globe, the top-ranked college attracts the brightest minds, as evidenced by the number of National Merit, National Hispanic and Flinn Scholars who have selected the honors college. Barrett alumni attend prestigious graduate schools, have tremendous success in national fellowship competitions and accept positions with prominent nonprofit and Fortune 500 companies.

Barrett Benefits

It is impossible to list every benefit students with different goals for college who are in various majors will find with Barrett. Barrett students get the best of both worlds – access to the massive resources and opportunities of ASU, while enjoying the close, personal attention of the dedicated Barrett faculty and staff. The customizable honors college curriculum allows students to delve deeper into their interests and helps our graduates stand out when applying for jobs, graduate programs, medical, or law school.

72%

of Barrett Honors students come from Arizona

Barrett is nationally prestigious, and is among the top 20 universities in the US for recipients of the Fulbright fellowship.

Barrett is the only honors college that has a Nobel Prize recipient teaching undergraduates. Additional Nobel Laureates are on the ASU faculty in other colleges.

#1 Honors college in the U.S.

—PREPSCHOLAR RANKS BARRETT HONORS COLLEGE NO. 1 ON ITS LIST OF THE BEST HONORS COLLEGES IN THE U.S. (2022)

Barrett has a presence on ASU's four campuses, Tempe, Polytechnic, West and Downtown Phoenix. It's also available online. **The Barrett Online program is the first of its kind offered by a top-rated honors college in the country.**

4.35

weighted GPA of incoming first year students

On campus (Fall 2022)

7,100+

Total students enrolled in Barrett across all campuses

30% are the first in their families to attend college

14 colleges

278 majors

represented by on campus students

544,000

square-foot campus for honors students, including state-of-the-art LEED certified silver residential hall facilities

Online (Fall 2022)

123

Online campus students in 2023, an increase of over 250% from the initial cohort of 48 students.

12 colleges

54 majors

represented by online students

Barrett Honors College national impact

As the honors college on all four campuses of the nation's largest public university, Barrett offers the best of both worlds – a highly-personalized academic experience backed by the resources and expansive opportunities of a Research I university.

Its success has been a model for others across the nation.

Upon graduation, Barrett scholars are making a positive impact on our nation's social, political and economic health. Students are encouraged to fully embrace the unique academic and social opportunities as an undergraduate that will help launch them into their next step after ASU and use their knowledge and skills to create solutions to societal challenges.

Just as Barrett students are incredibly diverse in major and academic goals, so too are their plans after graduation. Across the board, Barrett students attend top master's and doctorate degree programs at such esteemed institutions as Harvard, Duke and Yale; enjoy tremendous success in national competitions including Fulbright, Truman, Goldwater, Udall and Marshall fellowships; and accept positions with prominent nonprofit and Fortune 500 companies such as Mayo Clinic, Johns Hopkins Hospital, Honeywell Aerospace, Google and Goldman Sachs.

76%
of Barrett students graduate in 4 years, a higher rate than Stanford.

71%
increase in total enrollment in Barrett from 4,181 to 7,144 from 2012 to 2022.

\$12 million
endowment exclusively supports honors students and their projects.

Alumni Success

Barrett students are encouraged to fully embrace the unique academic and social opportunities as undergraduates that will help launch them into their next step after ASU. Just as our Barrett students are incredibly diverse in major and academic goals, so too are their plans after graduation.

Across the board, Barrett students attend the best graduate schools, have tremendous success in national fellowship competitions, and accept positions with prominent non-profit and Fortune 500 companies.

Top 10 states of origin (outside of Arizona)

1. California
2. Illinois
3. Texas
4. Washington
5. Colorado
6. New Mexico
7. Oregon
8. Minnesota
9. Nevada
10. Pennsylvania



20,000+
alumni

7,100+
students in Barrett

30%
are the first in their families to attend college

23%
of students in 2022 were from underrepresented minority groups

600+
Honors academic experiences per semester

21 Goldwater
169 Fulbright
3 Rhodes
1 Churchill
5 Marshall
3 Truman

Over the last 10 years ASU has become one of the nation's leading producers of elite scholars



Among the medical schools attended by Barrett grads

- Creighton
- Harvard
- Stanford
- UCLA
- UC San Francisco
- University of Chicago
- University of Texas
- Vanderbilt
- Yale

Among the engineering/arts and sciences schools attended by Barrett grads

- Arizona State University
- Cornell
- Duke
- George Washington
- Harvard
- New England Conservatory of Music
- Northwestern
- Stanford
- UC Berkeley
- University of Rochester
- Roehampton, London
- USC

Among the law schools attended by Barrett grads

- Arizona State University
- Cornell
- Emory
- Georgetown
- Harvard
- Notre Dame
- UC Berkeley
- University of Chicago
- Yale

Barrett Honors College world impact

From its inception, Barrett has attracted high-achieving students from across the globe, including students from China, Canada, India, Mexico, South America, Africa and Europe.

Programs include global travel, Barrett Global Classroom, GlobalResolve, Distinguished Global Leaders Lecture Series and Distinguished Global Leader Scholar-In-Residence.

Barrett, The Honors College provides a wide variety of global initiatives and study abroad opportunities to expose Barrett students to life-changing and culturally immersive experiences, empowering them to make a positive impact in the world. Programs include GlobalResolve, an international service learning program designed to involve students in real-world projects that positively impact communities with need around the world; Distinguished Global Leader series focused on bringing global leaders to campus; study abroad opportunities to encourage the values of global citizenship; and Global Honors Flex for first-year students to study in Berlin.

Barrett boasts a remarkable record in the number of nationally competed postgraduate fellowships won by its student scholars, including Fulbright, Truman, Goldwater, Udall and Marshall fellowships. ASU is a perennial top-producer of Fulbright recipients, many of whom are Barrett Honors College graduates. Sponsored by the U.S. Department of State, the Fulbright U.S. Student Program provides full-cost awards to support yearlong post-graduate study, research, artistic and teaching experiences in over 140 countries.

In addition to the exceptional programs available to Barrett students seeking international scholarship, the college has established a global footprint that will continue to expand, attracting high-achieving international students from 32 countries and with alumni representing 61 countries.

An elite scholarship powerhouse

ASU is in the ranks of an elite group of universities with Rhodes, Marshall and Churchill scholarship winners.

Three students from Barrett, The Honors College put ASU in the company of Harvard, Stanford and the University of Chicago as the only U.S. institutions with all "Big 3"

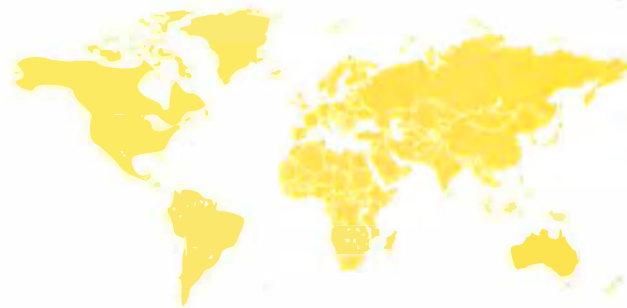
Fulbright U.S. Student Program supports independent study or research, teaching, graduate study or artistic practice abroad. Sponsored by the U.S. Department of State's Bureau of Educational and Cultural Affairs, it is the largest and most prestigious educational exchange fellowship program in the world.

The Gates Cambridge Scholarship provides full-cost scholarships to outstanding applicants from countries outside of the U.K. to pursue postgraduate degrees in any subject at the University of Cambridge. The award recognizes outstanding intellectual ability, leadership potential and a commitment to improving the lives of others.

The Marshall Scholarship enables intellectually distinguished young Americans, anticipated to be the country's future leaders, to study in the U.K. so they may gain an understanding and appreciation of contemporary Britain and act as ambassadors.

Top 5 countries of origin (outside the US)

1. India
2. Canada
3. China
4. Mexico
5. South Korea



88

more international students in 2022 than in 2012 for a total of 127 international students in Barrett.

15:1

Student-to-faculty ratio in classes taught by Barrett faculty

10

consecutive years as a 'Top producing' university of elite scholars.

—LEADERSHIP RANKING OF TOP 10 SCHOLARSHIP FELLOWSHIP 2022

1 of 9
top producers of
Fulbright awards
for both students and faculty
among doctoral institutions

—Chronicle of Higher Education, 2021

218 elite scholars
In the last 10 years, ASU students have been awarded Goldwater, Fulbright, Churchill, Marshall, Rhodes and Truman scholarships

61 countries
represented by alumni

32 countries
represented in the student body

127 international
undergraduate students

6 continents
where alumni lead businesses

2022-2023 Individual At-Risk Goal 3

Design and launch a new Health Futures Strategy for ASU,
including:

- Developing a holistic approach around health sciences (similar to what ASU has around engineering)
 - January 26, 2023: presented the comprehensive design for the new Health Futures Strategy for ASU at a special ABOR meeting. Received concept approval.
 - June 1, 2023: presented the public launch of the new Health Futures Strategy for ASU at a special ABOR meeting. PowerPoint was distributed.
 - Presentation Link: https://www.dropbox.com/s/vzo25dwdvd84wzu/ASU_Health_Update_Original_051023.pptx?dl=0
- Designing and preparing for the launch of the Public Health Technology School.
 - Design and launch of the Public Health Technology School, report follows:

Goals Accomplished



**PUBLIC HEALTH
TECHNOLOGY INITIATIVE
● ASU Prototype Design**

FINAL REPORT

Executive Summary

Arizona State University is setting out to design a new entity in the emerging field of Public Health Technology. Inspired by an op-ed written by national health expert Dr. Susan Blumenthal, the Public Health Technology Innovation Initiative is co-chaired by Dr. Blumenthal and Sir Malcolm Grant.

An Advisory Council of public health and technology experts spent the summer of 2022 exploring needs and opportunities in this area. In July 2022, a convening of Council members and national leaders took place in Washington, DC to explore possibilities for a nascent field of Public Health Technology. ASU is engaging in this area in order to advance a new paradigm of education for public health technology. In October 2022, a group of ASU leaders and faculty joined the design team charged with crafting the blueprint for the Public Health Technology entity. This design process was led by ASU's University Design Institute.

Over the course of eight months, the ASU Prototype Design Team worked in 3 sub-teams to conduct discovery research, meet with various stakeholders and key experts to learn and test ideas and collaborate during monthly studios. This document contains the outcomes of those efforts in the form of design recommendations that leverage technology along with the resources and strengths of the ASU Enterprise to address diverse learner, industry, community and societal needs.

The Education design team recommends four interconnected initiatives to create new opportunities that prepare students to work in the emerging area of Public Technology. These include **modular curriculum development** led by a steering committee of faculty, industry and community partners, **public health technology undergraduate and graduate degrees**, a **Public Health Technology Corps** of ASU students and **professional and technical development offerings** that leverage modular learning objects to generate diverse learning solutions.

The Research design team plans to leverage existing strong relationships and more than 325 unique public health technologies that already exist across the ASU enterprise through **co-creative research** with communities that focuses on **digital and social determinants of health**. With an emphasis on **secure and equitable technology**, the team seeks to utilize **transparent systems** to address public health threats in real time and **empower diverse communities** to use their health data for decision making.

The Entrepreneurship and Innovation team will address major challenges around data ownership and access, funding and monetization of public health prevention, and collaboration across public health silos. They recommend leveraging the ASU ecosystem to **reduce risk, friction, and barriers for public health and public health adjacent startups**, establish an **aggregator of data and insights** to generate unique value for the public health technology ecosystem, and **identify new technologies and innovations with public health relevance** and create opportunities that link them to solving pressing public health challenges.

Overview of the Initiative

Powered by **transdisciplinary** teams, ASU will co-create a new entity in Public Health Technology that **advances innovative ideas in education, research, entrepreneurship and innovation**. This entity will drive transformational outcomes at the state level that can then be scaled nationally and globally.

Key Questions shaping entity design

1. What needs to be addressed in the public health system so we are better prepared for the next public health crisis?
2. What is the most urgent public health problem that can be addressed through technology?
3. What could be the most transformative outcomes in public health using technology?
4. How might technology impact outcomes around socio-cultural determinants of health?

Design Principles

1. Use a **participatory and equity-centered** approach by including communities we serve; co-design with community members
2. Build **trust** and emphasize ethical considerations
3. Recognize and **address the link between inequality and health**; social determinants of health are at the forefront
4. **Leverage existing technologies and partnerships**
5. Connect clearly to the **emerging needs of the workforce** in this area
6. Design should be anchored in **quadruple-helix partnerships**: academia, business, government, community/citizens
7. Engage **interdisciplinary** teams
8. **Design with the end in mind**: articulate the outputs, outcomes, and future we want to see
9. Start with **specific challenges** and work backwards
10. Co-create solutions for changing human behavior, decisions, **actions at ALL levels**
11. **Use Arizona as a testbed for prototypes**

Co-Chairs



Susan Blumenthal MD, MPA
Rear Admiral (Retired)

Senior Fellow, New America
Health Policy Program

Former U.S. Assistant
Surgeon General

Former White House Health
Advisor and Unit Chief, NIH



Sir Malcolm Grant LL.D.

Chancellor, University of York
Former President, University
College London

Founding Chairman, NHS,
England

Advisory Council



Dr. David Kong



Ellen Levy



Dr. Shantanu Nundy



Margie Ross Decter



Jennifer Pahlka



Shirley Bergin

An Advisory Council of public health and technology experts spent the summer of 2022 exploring needs and opportunities. This group met every other week between April and July to collectively explore the critical topics including:

- technology
- behavioral health
- community engagement and social determinants of health

Across multiple Advisory Council meetings three key areas of opportunity emerged: Education, Research, Entrepreneurship & Innovation. These became the focus areas for the Arizona State University prototype design team.



Dr. Sally Morton



Dr. Matt Hulver



Dr. Nancy Gonzales

July Convening

To discuss the future of public health and the transformational potential of combining public health with the technological disciplines, New America in partnership with Arizona State University, convened a group of public health and technology experts from across the United States government, academia, private and nonprofit sectors. Participants and speakers included leaders in technology, public health, medicine, engineering, computer sciences, informatics, communications, and design. From entrepreneurs and policy makers to scientists, academics, practitioners, and clinicians, this distinguished group contributed to the vision of a new field of public health technology and its potential to advance health in America and globally.



The Summit on Public Health Technology was convened on July 17 and 18, 2022 in the New America offices in Washington, D.C. The meeting included case study presentations along with small- and large-group discussions about the underlying conditions and root causes of challenges in the public health system and ways that technology might contribute to solutions for strengthening public health infrastructure now and in the years ahead. Participants discussed opportunities and strategies for developing a new field, its key components, and factors for success as the field emerges.

Summit Goals

The goals of the Summit were to identify and explore the pillars of a new field of public health technology. Specific objectives for the event included:

- 1) Defining the field's purpose and mission
- 2) Establishing disciplinary components and values
- 3) Exploring curricular elements
- 4) Discussing a potential research agenda
 - i) Developing strategies for ensuring diversity, equity, and inclusion
- 6) Identifying potential funding entities to support and catalyze the new field
- 7) Envisioning potential career trajectories for public health technology graduates.

ASU Prototype Design Process

ASU Design Team Focus Areas

Over the course of eight months, the ASU Prototype Design Team worked in 3 sub-teams to conduct discovery research, meet with various stakeholders and key experts to learn and test ideas and come together to collaborate during monthly studios. The three sub-teams, and their particular area of focus, included:

Education

The education team is conceptualizing a multidisciplinary entity that emphasizes collaborative skill-building, practice-based learning, and high collaboration with private, governmental, and community partners. Possible outcomes include certificates, credentials for students in other fields, and public health tracks in engineering and IT disciplines.

Research

The research team is emphasizing the study and transformation of data - how data functions, how it's collected, how it's stored and accessed, and what data is missing. Their work centers trust-building, transparency, and a vision toward prevention rather than response.

Entrepreneurship & Innovation

The entrepreneurship and innovation team is imagining how to create an environment for accelerating business prototypes to address critical issues. Key opportunities are in monetizing prevention and private/public partnerships, but a challenge is re-thinking data ownership between individuals, companies, and the government.

ASU Prototype Design Process

The Design team proceeded through a series of phases outlined below. The studios were sequenced to ensure each sub-team had time to focus on their own topic and research, punctuated by studios that allowed them to share progress, ask for feedback and learn more about each other's efforts.



1. Discover

Understand needs, opportunities for impact, ASU assets

LAUNCH: Oct 20 & 21

- Convene ASU design team
- Listen to local experts
- Hear overview of vision
- Introduce process & people



2. Design

Create initial idea/ concept and plan to get feedback

Design Studio #1: Nov 18

- Present and discuss insights
- Refine design principles & values
- Generate initial concepts
- Prepare plans for feedback



3. Develop

Integrate feedback to create a draft blueprint, specify remaining gaps

Design Studio #2: Jan 20

- Present feedback and progress
- Identify resources and strategies for securing them
- Create rough draft of blueprint
- Layout plans to refine design



4. Deliver

Finalize and submit blueprint.

Design Studio #3: Feb 17

- Present progress
- Refine plans and resource identification
- Create plan for finalizing blueprint

Design Studio #4: Mar 17

- Teams present finalized blueprints

The **Public Health Technology Initiative at ASU [website](#)** contains various resources utilized by the Design Team as well as an archive of the design process and presentations of final design recommendations.

ASU Prototype Design Process

ASU Design Launch

The design team came together for the first time on October 20th and 21st to launch the design process and begin discovery work. The first day included Listening Sessions with a panel of local and regional public health experts and a panel of tribal health experts. ASU President Michael Crow set the stage on the second day with his vision for the initiative. The design team then organized into three sub-teams focusing on Research, Education, and Entrepreneurship & Innovation. Teams collected initial ideas and made a plan for their discovery work. A report documenting outcomes of the launch event can be found [here](#).

Panel 1: Arizona Health Experts



Susan Robinson

Chief Business Intelligence Officer, Arizona Department of Health Services

Siman Qaasim

Health Equity Administrator, Office of Health Equity, Arizona Department of Health Services

Jessica White

Manager, Office of Epidemiology and Data Services at Maricopa County

Amanda Sapp, MPH

Public Health Informatics and Data Services Program Manager at Pima County Health Department



Moderator, Panel 1

Dr. Matt Hulver

Vice President of Research Knowledge Enterprise

Moderator, Panel 2

Jacob Moore

Associate Vice President Tribal Relations University of Office Affairs



Panel 2: Tribal Health Experts



Rosemarie Kennaley, MD

Wassaja Memorial Health Clinic, Fort McDowell Yavapai Nation

David Reede

Director, HHS, San Carlos Apache Tribes

Lance Monahan

CFO, SRPMIC Community Health and Human Service

Kim Russell

Director, Arizona Advisory Council on Indian Health Care

ASU Prototype Design Team



Nancy Gonzales
Executive Vice President &
University Provost



Sally Morton
Executive Vice President
Knowledge Enterprise



Matthew Hulver
Vice President of Research
Knowledge Enterprise



Marc Adams
Associate Professor, College of
Health Solutions & Program
Director for the PhD in Population
Health



James Collofello
Vice Dean & Professor (ACD),
School of Computing &
Augmented Intelligence



Tamara Deuser
Vice President
Office of University Provost



Sherine Gabriel
University Professor of the Future of
Health Outcomes & Medicine; Chair
of the ASU Health Outcomes Design
Council



Abigail Gewirtz
Professor
Psychology



Elaine Jones
Vice Provost for
Undergraduate Education,
Office of University Provost



Ellen Levy
Investor, Entrepreneur,
Consultant



Jill Messing
Professor School of
Social Work



Heather Ross
Clinical Associate Professor,
SFIS & Edson College of
Nursing and Health Innovation



**Patrick Rossol-
Allison**
Associate Vice President, Strategic
Initiatives, Learning Enterprise



Sridhar Seetharaman
Vice Dean, Research &
Innovation, FSE



Tyler Smith
Director
Luminosity Lab



Ryan Stoll
Dissemination & Implementation
Scientist, Psychology



**Michelle
Villegas-Gold**
Director, Health & Clinical Partnerships



Neal Woodbury
VP and Chief Science &
Technology Officer,
Knowledge Enterprise



Nicole Woodrick
Director, Corporate
Engagement & Strategic
Partnerships

Design Team Support



Gemma Garcia
Project Manager
Design Team: Education



Michelle Villegas-Gold
Project Manager
Design Team: Research



Jessica Faison
Project Manager
Design Team: E&I



Amritha Panchanathan
Innovation Health Fellow
for Discovery research

Design Recommendations

Education



Sally Morton



Anne Jones



Jill Messing



Marc Adams



Jim Collofello



Patrick
Rossol-Allison

Public Health Technology is an essential and emerging area requiring a workforce with diverse disciplinary backgrounds including public health, engineering, computer science, data science, information technology, medical sciences, social sciences, business, ethics, etc. Rapid technological evolution in the field necessitates a foundational and continuous approach to learning. The proposed educational initiatives here seek to create new opportunities to prepare students to work in this area while simultaneously positioning ASU as the leader in this developing field.

Four interconnected projects are recommended to address this need and next steps to execute these initiatives:

1. Modular Curriculum Development: Establish a steering committee consisting of faculty, industry and community partners to define curricular priorities and lead development of modular, and meta-data tagged public health technology teaching resources to be deployed throughout the entire suite of educational initiatives. The leadership for these educational programs is not envisaged as residing within a single school or college, i.e. this is to be a pan-university group.

2. Public Health Technology Undergraduate and Graduate Degrees: Leveraging the core, modular curriculum developed in the first initiative, this project will launch a collection of undergraduate and graduate degrees in public health technology. Degrees will not be localized in a single college but rather distributed throughout the university. For example, there might be a public health technology degree with an engineering focus in FSE and another degree with an ethics focus in The College. All degrees will consist of the required public health technology core curriculum complemented by other relevant disciplinary knowledge.

3. Public Health Technology Corps: Through a combination of research, industry partnerships, and community projects, this initiative will build a Public Health Technology Corps at ASU of students from across the university. Students in the corps will complete project-based learning opportunities in public health technology in parallel to the modular units developed in project 1. Contingent upon funding (for example, through AmeriCorps), students would have the opportunity to earn scholarships for their participation. This corps will also be developed as a “destination” in which students from other locations and institutions join ASU projects - facilitating growth of the field.

4. Professional and Technical Development Offerings: Leveraging the modular learning objects underpinning this initiative, we propose to create learning solutions including but not limited to short-form content, courses, certificates, and bootcamps focused on mid-level career technical and functional skills. Custom partnerships will be offered to ASU's current and prospective employer partners in healthcare.

The proposed projects could be governed by a single pan-university structure, leverage shared curricular assets, and serve a common group of stakeholders. Additionally, to support development of the nascent field outside ASU and position ASU as a leader, the modular assets could be deployed via platforms outside ASU, including internationally. For example, ASU could offer a Public Health Technology certificate of the core courses to be embedded in degrees offered by other institutions. That would have the advantage of catalyzing growth of the field.

Design Recommendations

Research



Nancy Gonzales



Matt Hulver



**Michelle
Villegas-Gold**



Heather Ross



**Sridhar
Seetharaman**



Abigail Gewirtz

Arizona State University is well poised to become the leading institution for accelerating research in Public Health Technologies, particularly around critical areas (e.g., mental health, climate change and health). In fact, ASU is already designing, developing, deploying, and/or evaluating more than 325 unique PHTs, from continuous glucose monitors, heat mapping tools, and novel diagnostics for Valley Fever, to remote biomaterial collection, HEDIS metrics monitoring, and community-based tools for mental health screening and assessment. Additionally, ASU is currently collaborating with state and other local health departments to advance public health surveillance efforts, and bring together, map, and visualize diverse clinical, public health, and environmental datasets to promote informed decision making and policy. Without a medical school or school of public health, these activities are taking place in virtually every part of the university, including but not limited to 61 health-related institutes, centers, offices, and 159 labs, some of which are specifically designed to advance research at the convergence of health and technology (e.g., the School of Biological and Health Systems Engineering and the Biodesign Center for Bioelectronics and Biosensor Research). Instead of having a single affiliated hospital or medical school, ASU has over 280 known health and clinical partnerships, including partnerships with state and local health departments and 37 medical organizations of scale operating in and/or serving residents of Maricopa County. Situated in the Southwest region of the United States, with five distinct campuses across Arizona and a growing national and international presence (e.g., in Los Angeles, DC, and Mexico), ASU is well-positioned to co-create research in equitable, principled, and mutually-beneficial ways with diverse communities, and in particular, those who have been historically and systemically excluded from health and clinical research, and those who have been harmed or wronged by public health and medicine (e.g., older adults, veterans, Tribal/Urban Native communities, Latinx populations, refugees, and 100,000+ members of the "ASU family").

Approach:

- Bring together and lift up the work researchers across ASU are doing at the convergence of public health and technology, as well as related and adjacent fields of interest (e.g., global health and healthcare policy and delivery).
- Focus on areas where ASU can have real, measurable impact now (e.g., using remote monitoring to prevent hospital readmissions, leveraging telemental health to address lack of appropriate and specialized mental health care in rural areas, use AI/ML and novel diagnostics to advance digital psychiatry tools)
 - Develop and deploy remote monitoring equipment and devices
 - Expand telehealth, telemedicine, and telemental health
 - Leverage AI/ML to create predictive analytics in collaboration with clinical partners
 - Develop dashboards capable of combining data from diverse sources to track health data in real-time
 - Create health Apps and partner with existing companies to scale utilization up and out
 - Scale diagnostics and testing
- Leverage, expand, and deepen existing community, clinical, and cross-sector partnerships (including payers and tech companies) and create new partnerships

Design Recommendations

Research continued

Additional Considerations:

- Consider the importance of human behavioral decision making
- Engage public health economists to determine ROI on potential PHTs
- Address complex data challenges (gaps in data, issues around interoperability, find a way for clinical data and public health data to coexist)
- telemental health
- and leveraging existing community, clinical, and cross-sector partnerships, ASU has the ability to accelerate use-inspired research of public benefit and co-create solutions to pressing health issues in Arizona and beyond.

What We Plan to Do:

1. Co-create research with communities in equitable, principled, mutually beneficial, use-inspired, and socially-responsive ways;
2. Address digital and social determinants of health and health-related social needs;
3. Leverage existing community, clinical, and cross-sector partnerships in AZ and beyond;
4. Develop, deploy, and evaluate trusted, transparent, secure, accessible, and equitable tech;
5. Design and evaluate secure, equitable, transparent, and efficient systems to detect, track, model, and mitigate naturally occurring, deliberate, and accidental public health threats in real-time;
6. Empower diverse communities to access, understand, and use their health data and environmental markers to change behavior/decision making.

Design Recommendations

Entrepreneurship & Innovation



**Neal
Woodbury**



**Sherine
Gabriel**



**Nicole
Woodrick**



Ryan Stoll



Tyler Smith



**Tamara
Deuser**



Ellen Levy

The public health sector is run on outdated technology and relies on multiple, disconnected systems that can't talk to each other with many units relying on manual data entry. Communities have technology infrastructure but it's aging, fragmented, and inconsistent between *and* within zip codes. Major challenges to the successful re-engineering of public health tech infrastructure to better serve the realities and needs of stakeholders include: (a) Data access, ownership, and sharing; (b) Lack of sustainable funding and dependence on small grants; (c) Limited mechanisms to monetize public health prevention; and (d) Communication and collaboration barriers between public health silos (e.g., government, industry, academia). ASU is uniquely positioned to create an environment that incubates, accelerates, and deploys entrepreneurial innovations that equitably address critical public health issues. To successfully create such an environment, a PHT entity must be responsive to the above challenges while recognizing that its success hinges on partnerships and relationships. Building on the needs of agencies and communities, along with insights from industry leaders and startups, we have identified three opportunities to pursue within the PHT E&I space:

- 1. Reduce risk, friction, and barriers for public health and public health adjacent startups across all stages of innovation development.** By leveraging the university's full ecosystem, ASU could connect ventures to the right information / data / expertise at the right time, provide sandbox environments to develop new cost models and accelerate product-market fit, and facilitate strategic relationships.
- 1. Establish an aggregator of data and insights to generate unique value for the public health technology ecosystem.** By bringing together and analyzing multiple data and information sources relevant to PHT E&I (e.g., from industry, community, labs), ASU could generate new insights for ventures, researchers, policy-makers, and communities, while protecting the unique assets of contributors.
- 1. Identify new technologies and innovations with public health relevance and create opportunities that link them to solving pressing public health challenges.** By using the university's unique vantage point and convening power, ASU could canvas the E&I landscape for technological solutions that could be applied to public health technology challenges, create enthusiasm and interest around public health technology, and significantly increase the number of entities currently outside the public health space that join the effort.

2021-2024 Multiple-Year At-Risk Goals

2021-2024 Multiple-Year At-Risk Goal 1

Demonstrate increased enrollment and student success in adaptive learning courses through offering more than 15 courses, with an increase in overall course completion (grade C or better) to more than 80% (from a base of less than 50%).

Progress Report Follows

Strategies to increase the numbers of students successfully learning in adaptive learning courses **by 2024.**

Goal: Demonstrate **increased enrollment and student success** in adaptive learning courses through offering more than 15 courses, with an increase in overall course completion (grade C or better) to more than 80% (from a base of less than 50%).

2023 Update: Adaptive learning courseware, combined with active learning exercises, is now centrally deployed in many courses that previously experienced relatively high D-E-W rates, spanning over 200 sections across nine courses.

- Adaptive efforts are focused on lower division intro math, intro economics, psychology, biology, and astronomy
 - Enrollment in the courses reached 26,568 students in 2021-22, an 11% increase over 2020-21.
 - Preliminary outcomes for Fall 22 – Spring 23 show **overall success rate (C or better) of 82%** and mastery (B or better) of 60%.

Enrollment targets for the next four years have been increased based on recent trends (see ABOR institutional metrics):

ABOR IM 4.1	2022-23	2023-24	2024-25	2025-26
Prior goal	25,219	25,579	25,964	26,374
Updated goal:	26,887	27,705	28,514	29,201

2021-2024 Multiple-Year At-Risk Goal 2

For Arizona students, increase enrollment and number of graduates by more than 10%.

Progress Report Follows

New Goal

For Arizona students, **increase enrollment and number of graduates by more than 10%.**

Note: In these slides, progress toward this goal is measured by the number of Arizona resident undergraduates enrolled and earning bachelor's degrees.

Importance of the goal to ASU's Strategic Enterprise Plan

A bachelor's degree remains a strong investment for individuals.

In terms of increased wages relative to tuition, fees, and forgone earnings, the current net present value of a college degree is \$480,000 for men and \$342,000 for women. This equates to a **return on investment of 14.2% per year for men and 13.9% per year for women.**

A bachelor's degree remains a strong investment for the state of Arizona.

Economists estimate that bringing Arizona's share of workers with a bachelor's degree to the national average would result in **direct effect of \$14.3 billion, a spillover effect of \$17.9 billion, and an increase in state government general fund revenue of \$1.7 billion** over the course of the next 32 years.

As such, **ASU continues to create capacity for increasing the number of students as implicit in the ASU Charter;** emphasizing access, inclusion, discovery, and fundamental responsibility for the communities it serves.

For Arizona students, **increase enrollment by more than 10%.**

56,503

Fall 2023 Resident Undergraduate Enrollment Goal

52,279

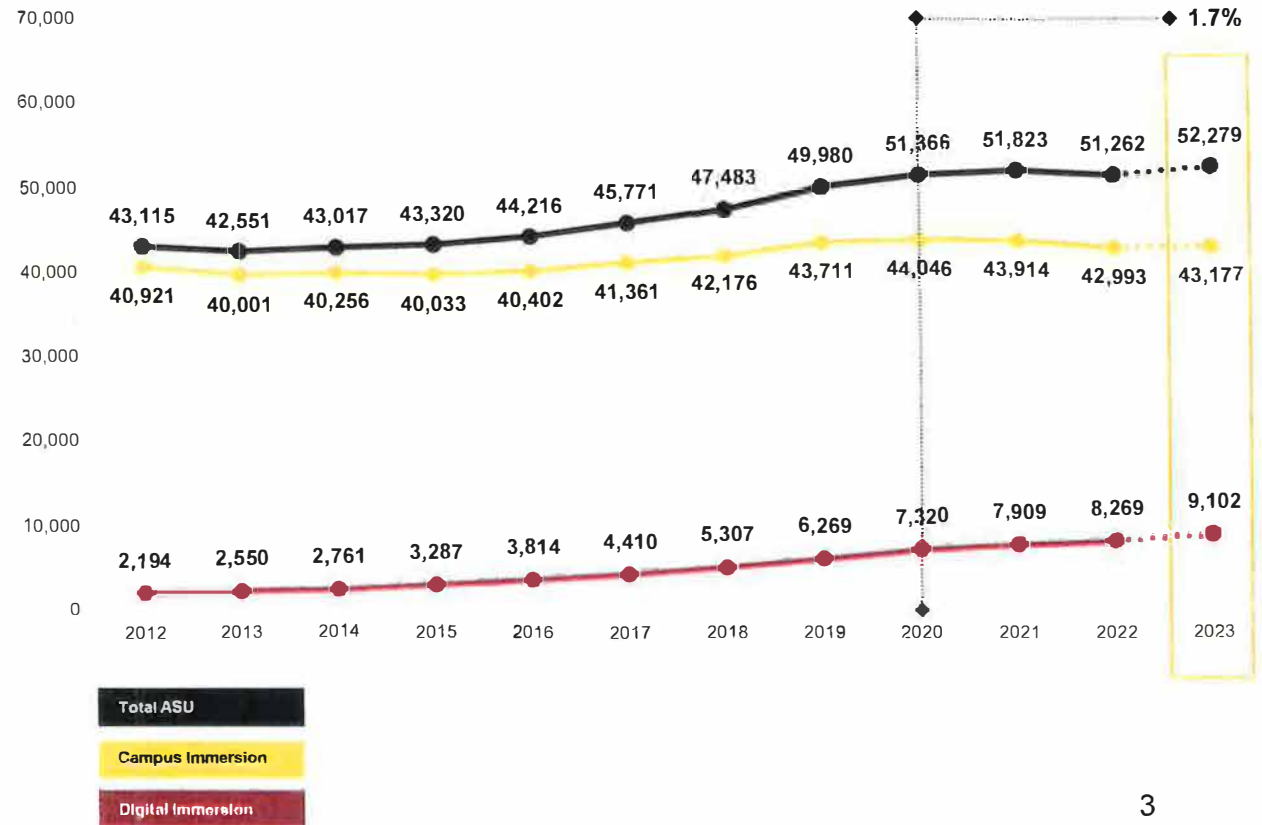
Fall 2023 Resident Undergraduate Enrollment Projected

51,366

Fall 2020 Resident Undergraduate Enrollment Baseline

ASU would need to enroll an additional **5,137 Arizona-resident undergraduates** in order to exceed the 10% goal set from the baseline enrollment in fall 2020.

2020-2023 Individual Multiple-Year Goal
10% growth in resident undergraduate enrollment (IPEDS) fall 2020 (baseline) to fall 2023



Ongoing efforts to **maximize Arizona undergraduate enrollment.**

ASU seeks to **serve increasing numbers of students** through multiple pathways, including:

- **For high school students**, expand high school letter campaign from seven high school districts for 2022-2023 to 31 in 2023-2024. This campaign provides personalized guidance to help ensure students are on track toward ABOR admission standards, while offering seamless pathways to admission for students.
 - Increasing the number of participants in existing outreach programs
- Increase the number of MyPath2ASU enrollees from community colleges by 30% annually.
- Reinvigorate “cold” leads and build new nurture campaigns that drive student to Earned Admission and then degree options.
- Academic program expansion at the West campus and the Polytechnic campus to serve students across the Phoenix metropolitan region.
- For online growth, present a compelling value proposition versus for-profit and private universities relative to tuition and employment outcomes, and continue to simplify the transfer process into ASU.

ASU continues efforts to **improve student persistence, which leads to increases in overall enrollment.** Strategies include:

- Set persistence targets and develop explicit strategies to support groups beyond new freshmen.
- Expand coordinated care strategy to additional groups of students at risk for not persisting as determined by predictive analytics.
- Review and revise policies and business processes that are inconsistent with inclusive student success.
- Deploy student-facing advising and communication tools designed for self-service by members of Generation Z.
- Support faculty to drive curricular innovation that improves learning outcomes.

For Arizona students, **increase number of undergraduates earning a degree by more than 10%.**

13,850

2023-24 Resident Bachelor's Degrees Goal

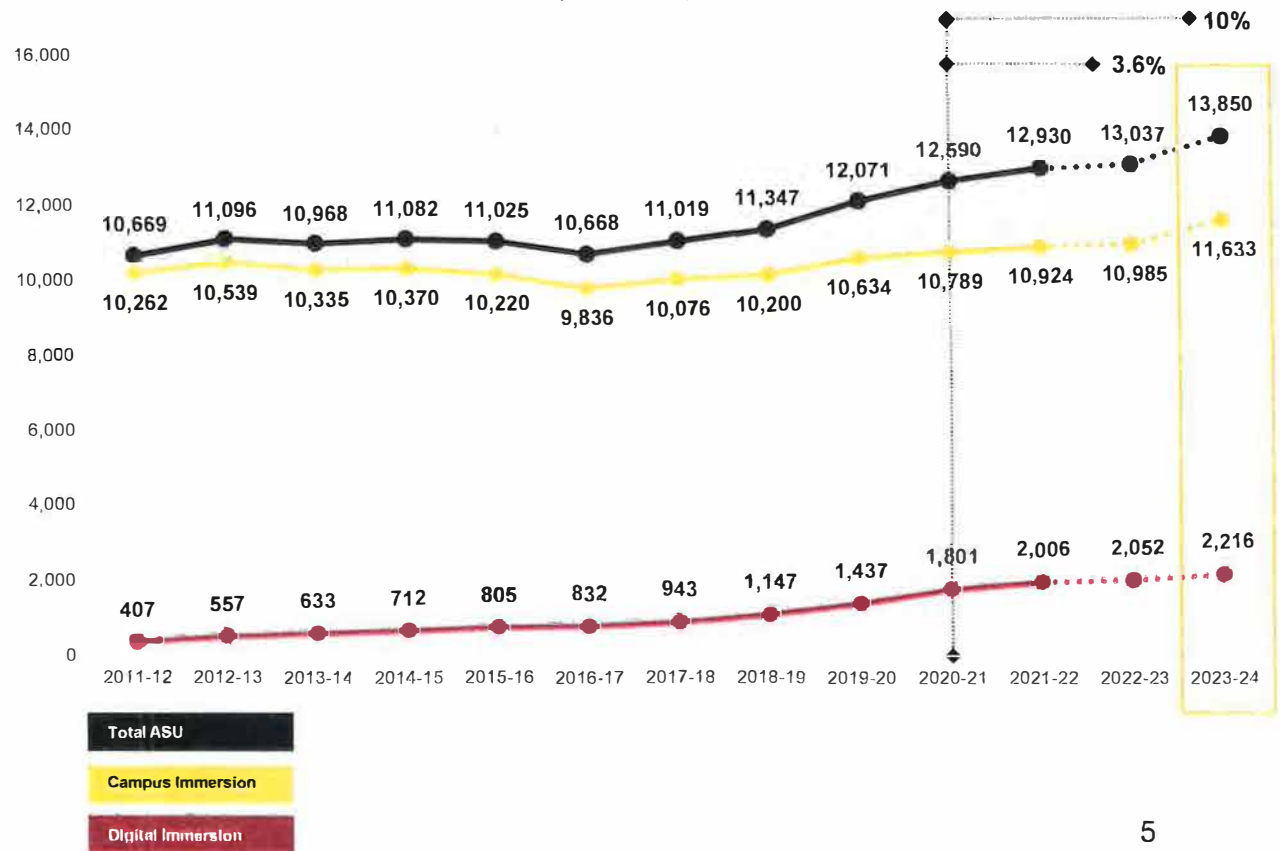
12,590

2020-21 Resident Bachelor's Degrees Baseline

ASU anticipates an increase of **1,260 Arizona-resident undergraduates earning a degree** between AY 2020-21 and AY 2023-24 in order to exceed the 10% goal.

2021-2024 Individual Multiple-Year Goal

10% growth in resident bachelor's degrees
2020-21 (baseline) to 2023-24



Strategies leading to **achievement of graduation goal by 2023-2024.**

- Continue to grow the number of students enrolling in the first-year cohort, maximizing the Arizona Promise Program.
 - The number of Arizona-resident first-year students has increased by 96% since 2002, from 4,582 in 2002 to 8,987 in fall 2022.
- Continue to grow transfer pathway programs with community college partners.
- Continue to add new undergraduate degree program offerings. ASU offers over 400 undergraduate degree programs across multiple campuses, locations and modalities, and continues to grow with over 54 programs added in the last 5 years.
- Continue to increase online program offerings. More than 156 undergraduate degree programs are offered through ASU Online
- Highlight and promote the earned admission pathway for Arizona residents.

2021-2024 Multiple-Year At-Risk Goal 3

Complete the design of the Global Futures Laboratory, with anticipated engagement of more than 700 faculty. Successfully merge the three schools of the College of Global Futures into a unique college with thousands of students (majors and minors).

Progress Report Follows

PROGRESS REPORT: COMPLETE THE DESIGN OF GFL, WITH ANTICIPATED ENGAGEMENT OF MORE THAN 700 FACULTY

In 2019, ASU established the Julie Ann Wrigley Global Futures Laboratory as a first-of-its-kind initiative designed to find actionable solutions to the most challenging issues facing global society and our planet. The Julie Ann Wrigley Global Futures Laboratory is rooted in the conviction that we can and must make a meaningful contribution to ensuring a habitable planet and a future in which well-being is attainable for all humankind.

Designing a thriving future requires a holistic approach defined by transdisciplinary research and open collaboration among universities, businesses, policymakers and the general public. GFL's mission consists of diagnosing social and environmental pressure points, developing new ways of acquiring data from all components of the Earth system, and developing options for trajectories into a future that is positive for people and the planet.

The laboratory consolidates existing research efforts and schools and augments them with new ones. For example, the Global Institute of Sustainability and the Institute for the Future of Innovation in Society have merged to become an encompassing research institution: the Global Institute of Sustainability and Innovation.

The Global Futures Laboratory draws on ASU's deep commitment to use-inspired research, the ongoing work in sustainability and service to the global community in which we live, explored across [five core spaces](#):

Discovery Learning Solutions Networks Engagement

The hub of the physical home of the Global Futures Laboratory is the Rob and Melani Walton Center for Planetary Health on the Tempe campus, a \$200 million facility hosting more than 500 faculty, staff and 1,300 students. Although the building will serve as the lab's headquarters, the initiative's impact will extend far beyond its walls to engage partners across ASU's campuses, out in the field and around the world.

A major part of the concept of the Global Futures Laboratory is engaging more than 800 dedicated scholars and scientists across multiple disciplines gathering knowledge and data about how the planet functions across various systems. This is essential for creating solutions and interventions that create positive outcomes.

Examples of Global Futures Laboratory Scientists and Scholars led activities are included in the supporting documents **(#1)**.

DESCRIBE STRATEGIC IMPORTANCE OF THE GOAL TO THE UNIVERSITY/ENTERPRISE STRATEGIC PLAN

“We need to focus on the future of the planet, not only fixing problems we have created but also using knowledge and innovation to secure its habitability. This is urgent, and this is how what we have built at ASU can have the biggest impact on the world.” Michael M. Crow President, Arizona State University

“We are pushing the limits of our planet, and we are seeing increasing challenges resulting from humanity’s collective impact on both the natural world and our global societal systems. We have to take immediate action to correct our course and ensure Earth’s habitability into the future.” Peter Schlosser, Vice President and Vice Provost, Global Futures Laboratory, Arizona State University

As evidenced by these quotes, drawing on 800+ scientists and scholars, in addition to creating future generations of leaders, optimally positions us to apply our knowledge and innovation in addressing increasing pressure on planetary systems.

Representing every ASU college, campus and beyond, the Global Futures Scientists and Scholars (GFSS) network advances GFL’s mission of designing implementable options to sustain global habitability and improve well-being for all humankind. This program supports network members across the spaces and, by extension, enhances the visibility, thought leadership and impact for GFL and all of ASU, across fourteen [focal areas](#).

DESCRIBE ACHIEVEMENT OF THE GOAL AS ASSIGNED Through strategic collaboration of Knowledge Enterprise and Academic Enterprise, GFL is increasing preparedness, increasing funding successes, and building the careers of promising and committed Global Futures Scientists and Scholars in support of ASU’s research expenditure targets.

Intellectual Expertise:

We broaden and diversify collaborations, tracks and networks for Global Futures Scientists and Scholars through targeted inquiries, i.e. the recent [NSF Global Centers](#) survey or last year’s [IPCC survey](#). We are better able to understand whether and how network members and their work tie into strategic funding opportunities and events of national or global public significance.

• **Targeted engagement** with individual network members builds a deeper understanding of a faculty member’s expertise, facilitating future collaborations, award nominations and similar opportunities.

- **Proof of concept:** The network is a subset of all ASU faculty, and as we gather data and measure their successes, the processes we implement at this scale may be valuable at the enterprise level.

- **Communicating Successes:** Demonstrate ASU's reputation in global futures, make GFL a partner across the globe.

- **Documenting successes** in a public-facing way provides evidence that ASU is already a player on the world stage with respect to topics of national or global significance.

- **Sharing of findings** with ASU News and Media Relations, with the Collaboratory, with colleagues in academic units, and on public-facing profiles provides a service that will advance individual visibility and broaden the influence of GFL across ASU units.

- **A ready repository of experts** allows responses in a timely way to media opportunities, funding opportunities, award nomination opportunities, and important RFIs.

Strengthening our Research: Supporting the scholarship of all GFL faculty and students through education and training, with a focus on generating use-inspired research leading to real-world impact and affirmative outcomes.

- **Global Futures Office of Research Development and Strategy** supports all aspects of the GFL Discovery Space, working to enhance funding success by facilitating partnerships and collaborations, as well as creating training and infrastructure to build capacity.

- **Global Futures Assistant Directors for Research** expand our capacity for faculty-to-faculty contact. Five ADRs aligned around strategic areas of research development serve our network members.

- **Global Futures College Ambassadors**, appointed in each college-level unit at ASU, help us learn about new accomplishments and research endeavors within their respective colleges, while sharing and reinforcing opportunities that may benefit their colleagues – both current and prospective network members.

- **Global Futures Office of Research Services (GFORS)** connects GFL-affiliated scholars to research development, research advancement and other services within GFL and Knowledge Enterprise.

DESCRIBE PROGRESS TOWARD ACHIEVEMENT OF GOAL

Through mid-June 2023, there are over 800 Global Futures scientists and scholars, contributing to \$734M in proposals and \$230M in awards, with representation across academic units. Through these collaborations, questions are being asked that no one else is asking, and the right teams are being assembled to answer these questions to achieve the positive impact needed at scale.

Research performance for the College of Global Futures is developing in a very positive direction. Strengths (from the chartbook through first 9 months of recent fiscal year) that bode well for the future include:

- Increases in the total dollar value of proposals over 12 months (+152% to \$141M) and FYTD (+65% to \$21M);
- Increases in the total dollar value of awards over 12 months (+54% to \$17M) and FYTD (+82% to \$15M); and
- Increases in expenditures over 12 months (+26% to \$14M) and FYTD (+20% to \$11M).

	12m prop (YR/YR)	12m award (YR/YR)	12m expend (YR/YR)	12m F&A (YR/YR)
SFIS	\$99M (+\$62M)	\$9.8M (+\$3.8M)	\$9.1M (+\$1.4M)	\$1.5M (+0.27M)
SOS	\$27M (+\$14M)	\$4.3M (+1.6M)	\$2.7M (-0.3M)	\$0.5M (-0.0M)
SCAS	\$12M (+\$8.3M)	\$1.9M (+0.2M)	\$0.7M (+0.4M)	\$0.2M (+0.07M)
SOF	\$1.7M (+\$1.7M)	\$0.1M (+0.1M)	\$1.2M (+1.2M)	\$0.03M (+0.02M)
CGF	\$1.0M (-0.7M)	\$0.4M (+0.1M)	\$0.3M (+0.2M)	\$0.05M (+0.03M)

PROVIDE DATA OR OTHER EVIDENCE DEMONSTRATING ACHIEVEMENT

GFL accomplishments are highlighted by the following examples:

- Arizona State University, together with partners, was awarded an \$18 million NextGen grant by the United States Department of Agriculture (USDA) to create a pipeline of diverse young leaders trained and ready for jobs in the food and agriculture sector, especially at the USDA. Nearly \$5 million will be directed to ASU’s School of Sustainability students via scholarship support and paid internships over five years to study sustainable food systems. [\(source\)](#)
- With a group of core partners, Arizona State University is creating a new \$25 million collaboration, ‘Āko‘ako‘a, to enable Hawaii’s coastal and reef sustainability

for generations to come. The community-based effort looks to fuse state-of-the-art science programs with the leadership and cultural knowledge of Hawaii's community partners to greatly expand restorative work on coral reefs and coastlines of Hawaii and beyond. ([source](#))

The Global Futures Office of Research Services (GFORS) serves the institute, the college, the focal areas, and the GFSS network.

GFSS growth: From 210 in 2010 to 810 in 2023
GFSS faculty across academic units: 27.1% of GFSS come from CLAS and 16.2% come from FSE.

Proposals: \$431M proposals in 2019 to \$734M in 2023

Awards: \$142M in 2019 to \$230 in 2023 (through mid-June)

Rankings: ASU's continued high placement in the Times Higher Education impact rankings (based on the UN Sustainable Development Goals) demonstrates the capability and capacity of GFL to help propel ASU to national and global recognition.

As the result of the SDG & Beyond task force, co-chaired by GFL and Thunderbird, [ASU is ranked #1 in the US for Impact and](#) top ten globally.

ASU is ranked [#1 by Sierra magazine's 15th "coolest schools"](#) competition due to sustainability being an enterprise wide effort.

Please see supporting documents (**#2**) for charts related to GFORS and the GFSS network.

SUCCESSFULLY MERGE THREE SCHOOLS INTO A UNIQUE COLLEGE WITH THOUSANDS OF STUDENTS (MAJORS AND MINORS)

Working with some of the world's foremost experts at the nation's most innovative university, students receiving a degree from the College of Global Futures have the knowledge and skills needed to thrive and make positive impacts on a future ASU graduates will help to define.

Individual schools joined under the College of Global Futures by a common purpose to create new knowledge, engage diverse communities and educate future leaders. The transdisciplinary composition of schools enables unique integrated learning and training opportunities in support of the goal to engage 5,000 students by 2025. These opportunities attract a diverse group of learners, by allowing students to explore solutions to some of the most pressing challenges and will prepare them for professions dedicated to solving existing problems through application of the most advanced decision support tools.

The School for the Future of Innovation in Society (SFIS) is a transdisciplinary unit at the vanguard of ASU's commitment to linking innovation to public value. SFIS pursues a vision of responsible innovation that anticipates challenges and opportunities, integrates diverse knowledge and perspectives, and engages broad audiences. By examining the ways imagination is translated into innovation — and how technical and social concerns are blended, along the way — we learn to build a future for everyone.

The School of Sustainability (SOS): Established in 2006 as the nation's first, the School of Sustainability's mission is to foster innovative research, impactful education and engaged communities to achieve environmental integrity, social equity and well-being.

The School of Complex Adaptive Systems (SCAS): Our planet is the ultimate complex system with many intertwined subsystems that envelop natural, social and technological systems and transcend traditional disciplinary boundaries. This visionary school engages wide-ranging national and international collaborations to advance the exploration of these systems and disseminate fundamental transdisciplinary knowledge through a unique set of academic graduate offerings.

The School of Ocean Futures (SOF): The newly formed School of Ocean Futures will expand capacity to study the Earth system holistically (the ocean covers about 70 percent of the Earth's surface). It will address the role of the ocean in the Earth system at a time when human activities place increasing pressure upon the life supporting systems of our planet. Specifically, it will address the fundamental dynamics of the ocean as part of the Earth system, as well as its response to perturbations caused by global change. Changes in the ocean such as increasing sea surface temperatures and rising sea level have implications for the entire globe including its land surface.

This school will establish ASU as a leader in field-based ocean research and learning opportunities on the Tempe campus, the Bermuda Institute of Ocean Sciences (BIOS), and in Hawaii.

DESCRIBE STRATEGIC IMPORTANCE OF THE GOAL TO THE UNIVERSITY/ENTERPRISE STRATEGIC PLAN

The College of Global Futures is the heart of the learning space in the Julie Ann Wrigley Global Futures Laboratory, the world's first comprehensive, university-based approach to ensuring a habitable planet and a future where well-being is attainable for all humankind.

Urgent issues across the globe require informed action. Our responsibility is to develop viable options that ensure well-being for everyone.

The ASU Charter tasks us with taking fundamental responsibility for the economic, social, cultural and overall health of our community. The College of Global Futures

speaks to the global community, and ASU's conviction to make a meaningful contribution to ensuring a habitable planet and future in which well-being is attainable for all.

DESCRIBE ACHIEVEMENT OF THE GOAL AS ASSIGNED

Our achievement toward this goal started by taking an assessment of ASU's independent resources and intellectual expertise and combining them to create a more powerful academic presence in the College of Global Futures. The composition of the College of Global Futures expands our expertise and tools to address the most pressing problems, and create a cadre of leaders who are prepared to tackle these challenges.

In the College of Global Futures, students are prepared to address some of the greatest challenges of our time, from ensuring the social benefits of powerful new technologies and creating just and sustainable futures, to exploring solutions to emerging issues that transcend the limitations of conventional thinking.

Faculty recruitment:

In AY 2022-23, Global Futures hired 30 faculty members, a mix of tenure and career track. As part of our commitment to transdisciplinary collaboration, most of these faculty members split their appointments across multiple schools. Among these hires, 14 were in the new School of Ocean Futures.

Student Success:

Graduate Success: The 2022 College of Global Futures Employment Survey of alumni indicates 93% of respondents are employed or in graduate school and of those employed 76% have jobs in degree-related careers.

Fall 21 full-time first-year student retention: 92.2% - CGF retention has consistently been higher than the ASU average.

Enrollment:

With a goal of 5,000 students by 2025, college enrollments for 2022 – 2023 are just over 1300 students.

With the expansion in program offers, the College of Global Futures now has more online students than immersion students. This trend is anticipated to continue and assist in meeting enrollment growth targets.

New programs:

The College of Global Futures continues to formulate programming to round out the knowledge base.

Multiple new/recently established and approved degree programs are in place, in addition to three Applied Math programs transitioning to SCAS in Fall 2023. See Appendix #3 for details.

PROVIDE DATA OR OTHER EVIDENCE DEMONSTRATING ACHIEVEMENT

Please see #3 for data related to enrollment and retention.

SUPPORTING DOCUMENTS:

(#1) Examples of activities led by Global Futures Laboratory Scientists and Scholars:

ASU - Starbucks Center for the Future of the People and the Planet

The ASU-Starbucks Center for the Future of People and the Planet will advance Starbucks' transformative agenda by leveraging ASU's applied research, networks, expert faculty, and innovation through shared aspirational commitment to the betterment of people, the planet and global communities.

<https://starbucks.corporate.asu.edu/center-for-the-future>

BRIDGES

BRIDGES is an inclusive coalition of intergovernmental, governmental and non-governmental organizations, institutes and formal networks organized within UNESCO's international science programme Management of Social Transformations (MOST). The coalition is committed to helping higher education and research institutions, in collaboration with non-academic partners, as together they work to address the greatest challenges facing societies during the UN Decade of Action (2021-2030) to deliver the Sustainable Development Goals (SDGs).

Center for Energy and Society

The Center for Energy & Society at Arizona State University was established to put people at the center of the conversation about the future of energy. Over the next few decades, a global energy revolution will fundamentally transform energy systems and infrastructures all over the planet. That revolution—the German word for energy transition, *energiewende*, means transformation or peaceful revolution—has profound human implications. The ASU Center for Energy & Society's goal is to understand those implications and ensure that they are fully accounted for in the decisions made by energy business and policy leaders between now and 2050 as they redesign the world's energy systems. <https://ifis.asu.edu/content/center-energy-and-society>

Center for Global Discovery and Conservation Science

The Center for Global Discovery and Conservation Science leads spatially explicit scientific and technological research focused on mitigating and adapting to global environmental change. <https://gdcs.asu.edu/>

Center for Innovation in Informal STEM Learning

The Center for Innovation in Informal STEM Learning is dedicated to improving how people across generations learn science, technology, engineering, and math (STEM). The center works with informal learning organizations, such as museums and libraries, to facilitate public education and conduct applied research. Center projects examine space exploration, climate and environment, socio-technical change, responsible innovation, citizen science, and storytelling. With strong expertise in science communication, the center animates STEM learning, builds literacy among participants, and democratizes science and technology education. <https://pit.asu.edu/center-innovation-informal-stem-learning>

Center for Negative Carbon Emissions

CNCE is advancing carbon management technologies that can capture carbon dioxide (CO₂) directly from ambient air in an outdoor operating environment. <https://globalfutures.asu.edu/cnce/>

Global Locust Initiative

ASU's Global Locust Initiative engages key actors in locust research and management to develop partnerships and solutions for transboundary pest management in agroecosystems around the world. <https://sustainability-innovation.asu.edu/global-locust-initiative>

LightWorks

LightWorks pulls light-inspired research at Arizona State University under one strategic framework. It is a multidisciplinary effort to leverage ASU's unique strengths, particularly in solar-electric energy, sustainable fuels and products, and energy and society. <https://sustainability-innovation.asu.edu/lightworks/>

Pacific RISA

Funded by the National Oceanic and Atmospheric Administration, the center supports research into how Pacific Island communities can build resilience to extreme climate events.

Sustainable Phosphorus Alliance

In early 2014, participants at the Phosphorus Sustainability Research Coordination Network (P RCN) proposed to create the Sustainable Phosphorus Alliance (SPA) in order to implement sustainable P solutions. The Alliance is North America's central

forum and advocate for the sustainable use, recovery, and recycling of phosphorus in the food system. <https://phosphorusalliance.org/>

Swette Center for Sustainable Food Systems

The Swette Center for Sustainable Food Systems develops innovative ideas and solutions to the many challenges of current food systems. Taking a holistic and transdisciplinary approach, the Center's work encompasses water and energy use, carbon footprint and nutrition, innovations in agtech, and the well-being and livelihood of farmers and others working in food systems. <https://sustainability-innovation.asu.edu/food>

Multiple Provost-approved GFL-affiliated centers have been added to the expanding GFL portfolio:

Center for an Arizona Carbon Neutral Economy (AzCaNE)

AzCaNE was founded by four Arizona energy providers and the state's three public universities. The Center was established to create, nurture, and grow a diverse and inclusive ecosystem of stakeholders working together toward a common goal, a carbon-neutral thriving Arizona and desert southwest economy by 2050.

Arizona Water Innovation Initiative (AWII)

The Arizona Water Innovation Initiative was established through funding from the Arizona Governor's Office to provide immediate, actionable and evidence-based solutions to ensure that Arizona will continue to thrive with a secure future water supply. Through this initiative, ASU researchers will work with industrial, municipal, agricultural, tribal and international partners to rapidly accelerate and deploy new approaches and technology for water conservation, augmentation, desalination, efficiency, infrastructure and reuse.

Center for Energy Research and Policy (CERP)

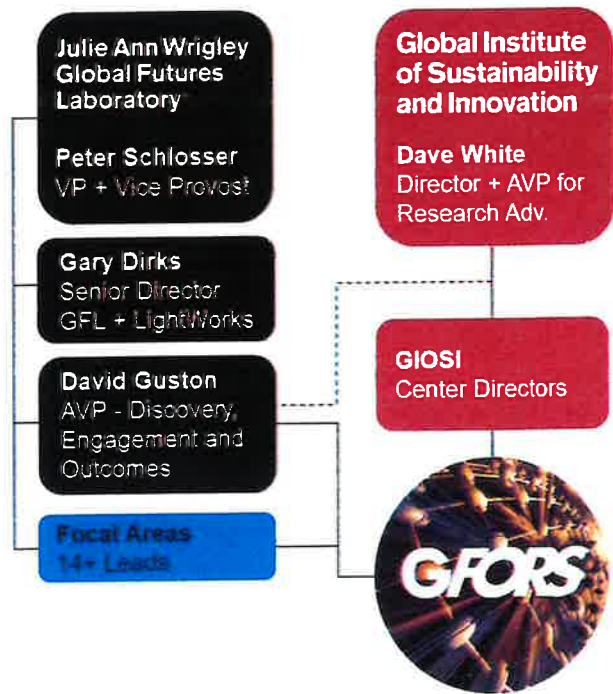
The Center for Energy Research and Policy provides unbiased research, critical analysis and thought leadership on the current and emerging energy issues affecting the Southwest. Housed within [Lightworks](#), a unit of the Global Futures Laboratory, CERP's research and analysis is drawn from in-house competencies in engineering, environmental science, finance, economics and public policy. This multidisciplinary expertise allows CERP to fully evaluate the consequences of current and future energy policy and stimulate robust debate among all stakeholders.

Just Energy Transition Center (JET)

The Just Energy Transition Center works to assist communities, workers and states facing the difficult economic and social consequences of closing coal plants.

(#2). GFSS and GFORS charts

GFORS is a **GFL-wide function**, serving the institute, the college, the focal areas, individual scientists & scholars.

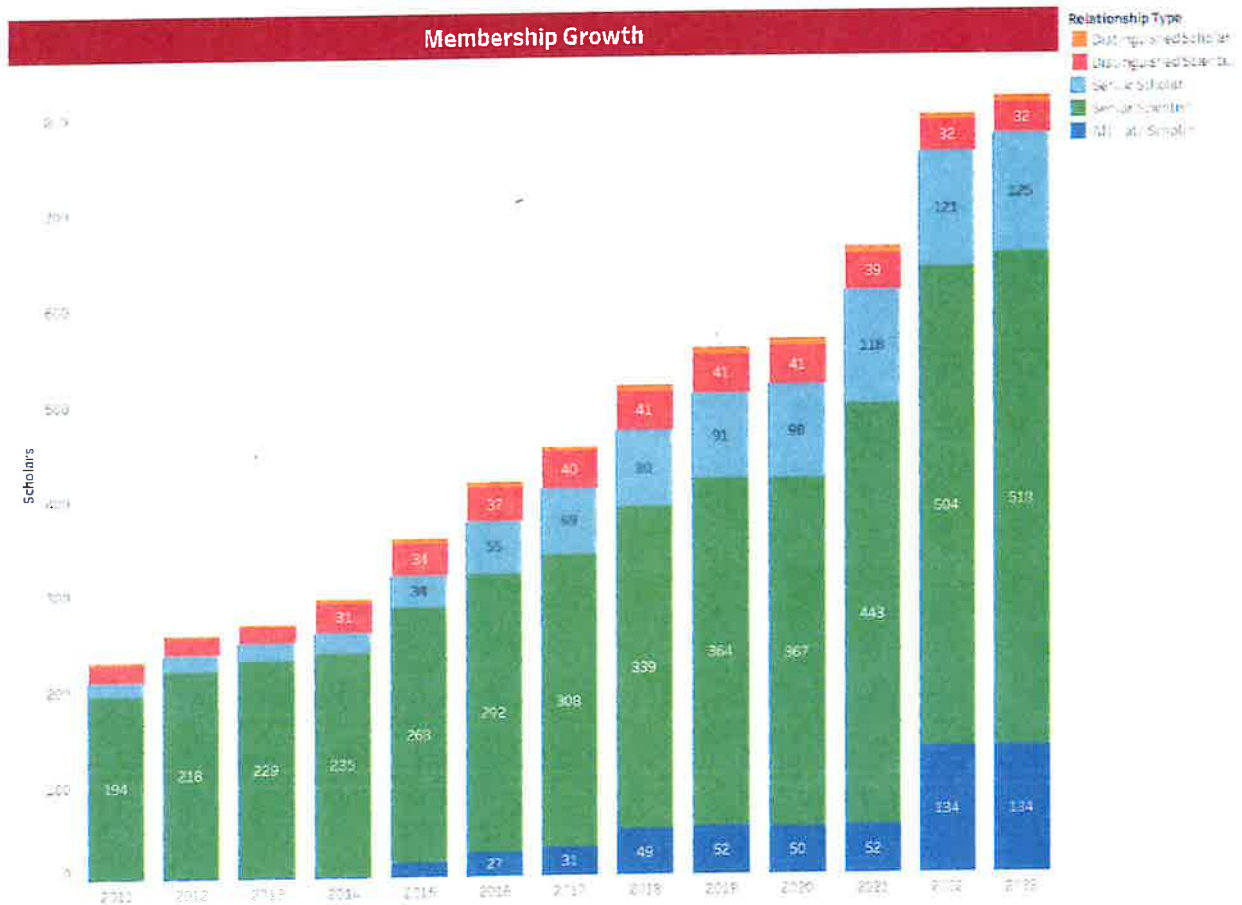


GFSS Proposals, Awards, Expenditures

	FY23	FY22	FY21	FY20	FY19
Proposals	\$733,877,485	\$877,036,833	\$641,588,525	\$504,772,988	\$432,057,678
Awards	\$230,189,489	\$229,542,481	\$156,006,159	\$140,331,249	\$142,554,837
Expenditures	\$173,435,600	\$204,063,166	\$140,352,581	\$146,532,880	\$143,414,260
Total GFSS	810	797	658	563	555
Active GFSS	478	494	419	402	394
Percent Active	59%	62%	64%	71%	71%
Proposals/Member	\$906,022	\$1,100,423	\$975,059	\$896,577	\$778,482
Awards/Member	\$284,185	\$288,008	\$237,091	\$249,256	\$256,856
Expenditures/Member	\$214,118	\$256,039	\$213,302	\$260,272	\$258,404
Proposals - Top Five	\$211,173,144	\$440,631,712	\$122,172,720	\$63,036,552	\$104,470,647
Awards - Top Five	\$94,995,392	\$40,280,160	\$34,868,586	\$39,422,309	\$49,194,996
Expenditures - Top Five	\$23,569,367	\$25,950,716	\$30,160,114	\$35,897,899	\$43,876,480

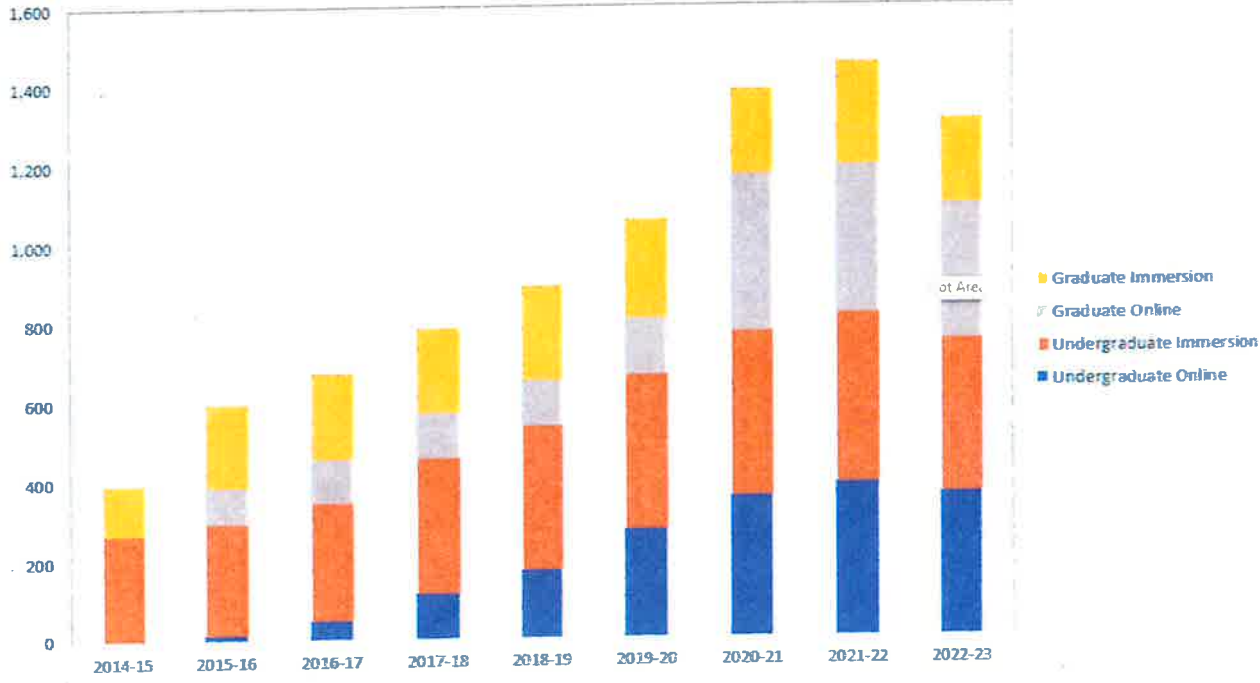
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Scientists and Scholars

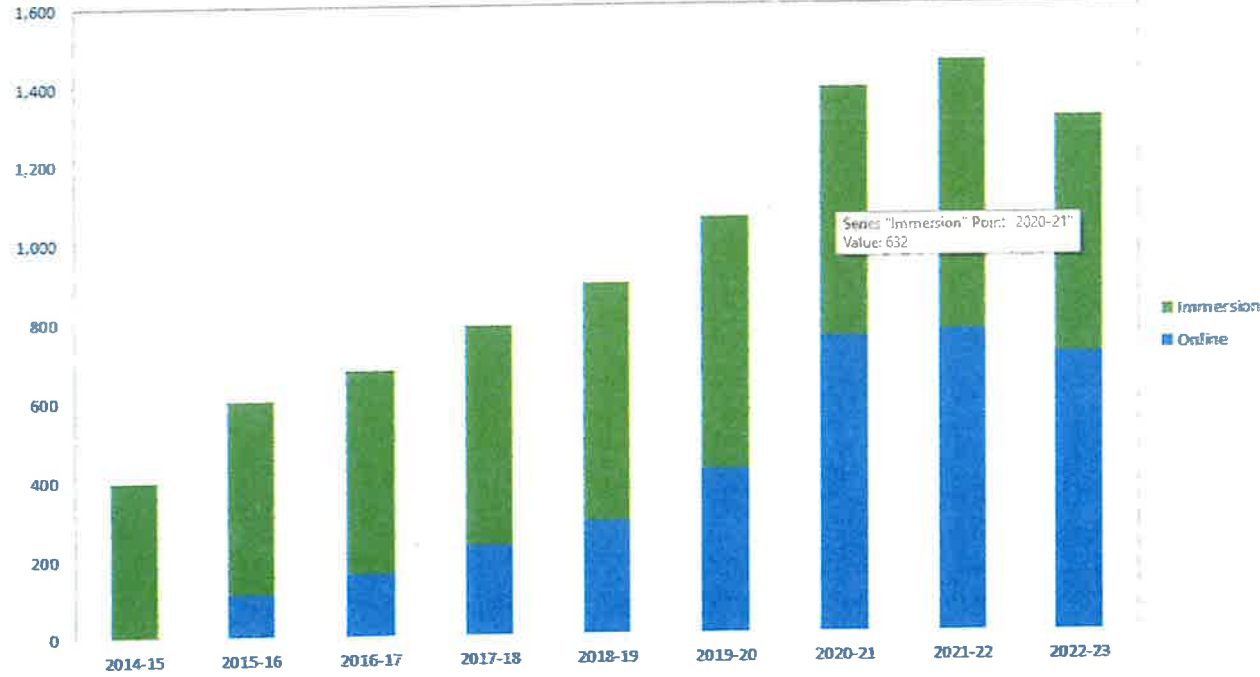


#3. College of Global Futures

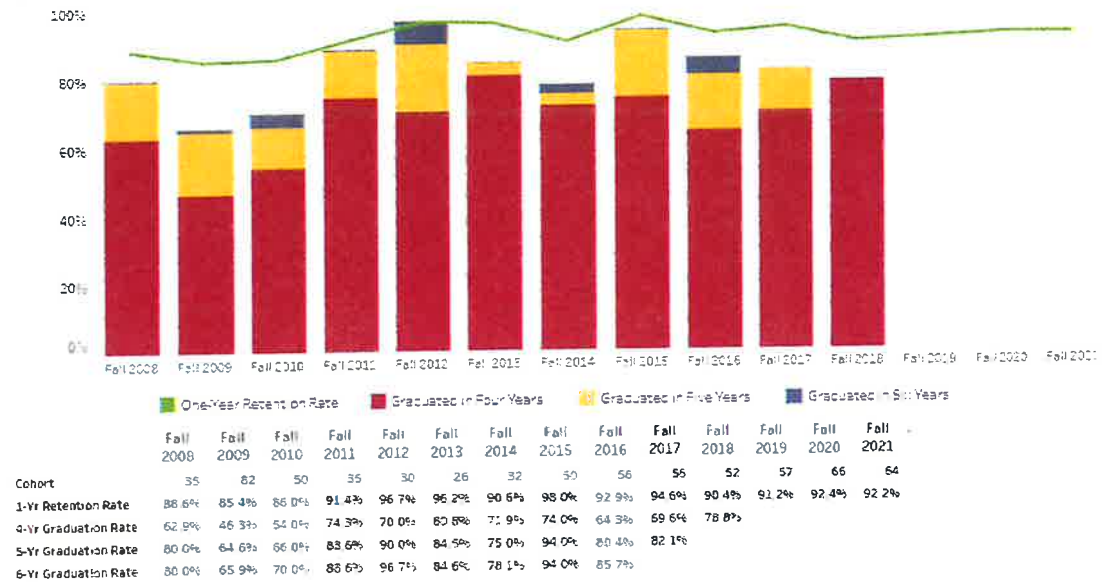
College Enrollment



College Enrollment - Online vs Immersion



Retention and Graduation Rates for Full-Time First-Year Students



NEW/RECENTLY ESTABLISHED AND APPROVED PROGRAMS:

Newly Established Programs (past 2 years)

Program	School
PhD Complex Adaptive Systems Science (Tempe)	SCAS
MS Complex Systems Science (Tempe, Online)	SCAS
MS Futures and Design (Mesa)	SFIS & HIDA
Graduate Certificate in Energy and Sustainability (Tempe)	SOS
Accelerated Master's Option: BS Sustainable Food Systems (Online) + MS Sustainable Food Systems (Online)	SOS

Programs Transferring into CGF in Fall 2023

Program	School
<u>BS Applied Math for the Life and Social Sciences</u> (Tempe)	SCAS
<u>PhD Applied Math for the Life and Social Sciences</u> (Tempe)	SCAS
<u>PhD Applied Math for the Life and Social Sciences (Complex Adaptive Systems Science)</u> (Tempe)	SCAS

2021-2024 Multiple-Year At-Risk Goal 4

Build and document enhanced regional collaboration in research, with a focus on increased collaboration within Arizona higher education.

Goal met and ongoing.

Progress Report Follows



As the most innovative school and one of fastest growing research enterprises in the nation, Arizona State University advances groundbreaking research and translates solutions into impact. It accelerates discovery by bringing the best and brightest minds together:

Through powerful partnerships.

In FY23, Arizona State University (ASU) researchers collaborated with colleagues from the University of Arizona (UA) and Northern Arizona University (NAU) on nearly 500 awards valued at approximately \$486 million. Overall, total award obligations between ASU and ABOR universities has increased by 169% since 2010 (Table 1).

Fiscal Year	ASU/NAU	ASU/UA	ASU/UA/NAU	Total
2010	\$3,712,041	\$17,086,189	\$4,242,986	\$25,041,216
2011	\$2,727,608	\$13,340,520	\$3,072,462	\$19,140,590
2012	\$2,837,906	\$24,523,511	\$1,993,957	\$29,355,374
2013	\$3,289,978	\$34,271,766	\$2,307,003	\$39,868,747
2014	\$2,941,445	\$22,477,483	\$2,534,196	\$27,953,124
2015	\$5,406,199	\$19,976,917	\$3,499,299	\$28,882,415
2016	\$6,536,414	\$22,471,071	\$2,296,578	\$31,304,063
2017	\$9,566,497	\$13,486,988	\$2,677,041	\$25,730,526
2018	\$11,969,930	\$25,352,957	\$5,041,993	\$42,364,880
2019	\$7,374,112	\$28,330,043	\$3,465,545	\$39,169,700
2020	\$9,864,182	\$32,064,104	\$1,665,215	\$43,593,501
2021	\$6,623,838	\$25,408,493	\$1,936,333	\$33,968,664
2022	\$5,464,266	\$23,897,034	\$3,198,694	\$32,559,994
2023	\$9,231,359	\$53,267,180	\$9,174,378	\$67,395,840
Total	\$87,343,776	\$352,470,182	\$46,514,676	\$486,328,634

Table 1: Partnerships with ABOR Universities

The three universities formed the Valley Fever Collaborative to start an integrated, statewide research project to identify, characterize and map hot spots and routes of exposure for infectious disease. Through the most recently approved FY23 Regents' Research Grants, opportunities for collaboration across Arizona public universities have expanded to accomplish more research in critical areas that impact Arizona residents. Examples include:

- **Fighting Cancer in Firefighters:** ASU and the University of Arizona, in partnership with the Arizona Fire Chiefs Association, will study the effectiveness of whether blood or plasma donations lower cancer-causing levels in firefighters.

- **Enhancing Arizona’s groundwater supply:** ASU, UA, and NAU, in partnership with the Arizona Department of Water Resources and localities, will examine water runoff, suitable locations to recharge this water into groundwater, and where runoff may be directed in the future to address Arizona drought conditions.
- **Smart tree watering to make urban environments more livable:** ASU and UA in partnership with the Arizona Department of Forestry and Fire Management will compare standard tree watering practices with new techniques that are expected to result in water savings as more urban areas seek to provide heat relief by increasing tree canopy.

ASU has also seen a tremendous increase in regional collaborative research. The impact continues to expand as we engage industry, nonprofits and philanthropic organizations, with 145% growth in obligations from Arizona sponsors since fiscal year 2010 (Figure 1).

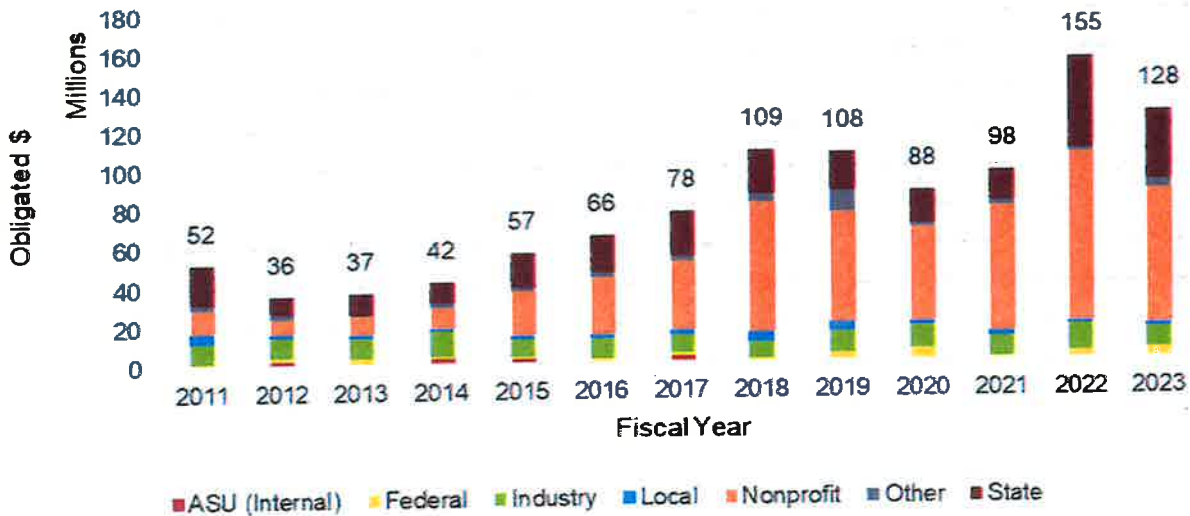


Figure 1: Awards Sponsored by Arizona Funders

In addition, there has been a 48% growth in sponsored project award obligations with non-ABOR regional research partner organizations since FY10.

ASU has also continued to grow its portfolio of successful partnerships across a broad array of industries including health, microelectronics and semiconductors, technology, and space. Examples include:

Health

The Mayo Clinic and Arizona State University Alliance for Health Care formed its flagship program, the Mayo Clinic and ASU MedTech Accelerator, to empower medical startups to navigate challenges better while bringing forth life-changing health innovations. As of FY23, participating companies have raised over \$200M in venture capital and employ over 530 people in Arizona and beyond.

The Arizona Community Engagement Alliance Against COVID-19 Disparities (AZ CEAL) provides \$15M in funding from the American Rescue Plan to 11 teams conducting research and outreach to help strengthen COVID-19 vaccine confidence and access, as well as testing and treatment, in communities of color. This is a collaborative effort among ASU, NAU, UA, and Mayo Clinic.

ASU is working with the Vice Presidents of Research at NAU and UA, ABOR, and leadership at Arizona Department of Health Services (ADHS) to identify areas within the 2021-2025 Arizona Health Improvement Plan (AzHIP) where the three universities can join to have real, measurable impact and improve the health of Arizonans. ASU hosted a workshop this spring around a critical area of overlapping interest (areas being considered are telehealth for rural/underserved communities, improved access to care for pregnant and postpartum women, expanding broadband infrastructure and data capabilities in Tribal communities).

ASU is collaborating with UA on implementation teams for the pandemic recovery and resiliency plan (PRR), a sub-plan of the AzHIP. The goal of the PRR is to bring people together across the state to help Arizona recover from the COVID-19 pandemic and build more resilient communities, systems, and infrastructure as SARS-CoV-2 becomes endemic and we face future threats (including but not limited to emerging infectious diseases).

The Arizona COVID-19 Genomics Union, comprised of ASU, NAU, UA, and the Translational Genomics Research Institute (TGEN) worked together to sequence the SARS-CoV-2 viral genome to track existing and emerging variants of concern and variants of interest as part of a broader, public health surveillance effort sponsored by ADHS and the CDC. The ASU timeline is 4 days from sequencing to displaying results on a dashboard. It is one of the most current and relevant dashboards for tracking variants in the nation and has gained the investigator (Dr. Efreem Lim) national recognition as a result.

The Institute for the Future of Health, a joint venture between ASU and UA, is working with NAU, UA, and TGEN to determine how to advance efforts around biosurveillance and biosecurity in Arizona. Efforts include convening key players and stakeholders, hosting a symposium last fall, and identifying funding opportunities to pursue jointly.

Technology

The Quantum Collaborative, a new regional initiative led by ASU, includes several major national and international partnerships – IBM, Google, Dell and others - and emphasizes new technology development and workforce development in the region. ASU and UA are also working towards the integration of their quantum information science and technology initiatives. This affords significant competitive advantages when pursuing the largest-scale funding opportunities available through Department of Energy, National Science Foundation, Department of Defense, and other federal agency programs.

The ASU, UA, and NAU research offices and libraries collaborated to develop a state-level open access policy for research data in response to new regulation being implemented by federal

agencies. Once fully implemented, this policy represents a competitive advantage for all proposals submitted.

ASU, UA, and NAU are working with ADHS to coalesce health data under a single honest broker model for data security and management. This is a key step toward ensuring researchers from any Arizona Universities, the Phoenix Biosciences Core, or clinical partners are able to discover datasets of potential interest housed at any of the three universities.

ASU and NAU have been funded by the Flinn Foundation to establish research data infrastructure and capability for Valleywise Health and a data-enabled research strategy initially focused on the health of supported Arizona's refugee populations.

ASU, ADHS, UA, and NAU collaborated on an ASU-led engagement with Contexture supported by the Northern Arizona Regional Behavioral Health Authority (NARBHA) Foundation and centered around pathing toward use of the state's health information exchange (HIE) data for public health and eventually more broad research work.

Microelectronics

ASU is positioning Arizona as a national center for the semiconductor industry via a variety of avenues including its partnership with the Taiwan Semiconductor Manufacturing Company (TSMC). TSMC is investing \$1M in ASU to fund microelectronics research projects and create lab programs and a symposium for students and faculty to showcase their work and network with TSMC's employees.

Space

ASU was involved in various space missions in flight or development in partnership with NASA and other ABOR universities during the year. ShadowCam, a system developed by ASU and Malin Space Science Systems is funded by NASA to map the terrain of the Moon and search for evidence of frost or ice deposits in the Moon's permanently shadowed regions. The NASA Galactic/Extragalactic ULDB Spectroscopic Terahertz Observatory mission will fly an Ultralong-Duration Balloon from Antarctica carrying a telescope with carbon, oxygen and nitrogen emission line detectors. ASU is part of the UA-lead team that will untangle the complexities of the interstellar medium, and map out large sections of the plane of our Milky Way galaxy and the nearby galaxy known as the Large Magellanic Cloud. Additionally, ASU is part of the UA-lead OSIRIS-Rex mission, mapping Bennu, a carbonaceous asteroid that has a high probability of impacting the earth in the 22nd century.

Through our commitment to the community.

The New Economy Initiative (NEI) is helping ASU to build and strengthen the Arizona economy of the future by expanding educational and training opportunities and industry partnerships. In FY23, the number of NEI affiliated industry partners grew to 40 with \$3.6M in expenditures. We co-funded 11 projects with industry, with businesses contributing \$485K in investment.

ASU's MacroTechnology Works is home to startups and corporate partnerships and plays a key role in how the university will help Arizona and the nation lead in the microelectronics and semiconductor industry. ASU was fortunate to host tours of the facility for two Biden administration officials in FY23.

ASU Core Facilities train a high volume of university students, staff and faculty, and industry partners, contributing significantly to hands-on workforce development. Many ASU student trainees move on to work in local industry as scientists and engineers, utilizing the skill sets they develop under this training program. The three state universities mutually share access to core facilities through a statewide memorandum of understanding that includes advanced computing, secure research facilities, and a wide array of related services all researchers can utilize.

ASU launched a research data fellowship with tribal colleges and universities this summer that has been co-developed with the American Indian Higher Education Consortium (AIHEC). ASU has also been asked by AIHEC to organize their annual meeting in New Mexico. The event, the first AIHEC in-person gathering since before the pandemic, included over a thousand tribal colleges and universities students, many faculty, and additional stakeholders and supports such as tribal leadership from Arizona and around the country. A maker fair was developed to inspire tribal colleges and universities students to engage with new technologies.

ASU is now working closely with the Centers for Disease Control and Prevention (CDC), Phoenix Children's Hospital and Valleywise Health to monitor the efficacy of vaccines for both COVID-19 and influenza considering the ever-changing nature of these viruses, with a particular interest in addressing disparities experienced by underserved populations.

Through innovation.

As of FY23, more than 180 companies have launched based on ASU innovations, attracting more than \$1 billion in external funding and 1,140 patents. In FY23, 86 new U.S. patents were secured by Skysong Innovations (SI), putting ASU on track to remain within the top 10 for patents according to data published by the Association of University Technology Managers (AUTM). Moreover, SI anticipates an uptick in invention disclosures as ASU's New Economy Initiative Science Technology Centers begin generating innovation.

ASU's technology transfer activities bolster the state's economy, which gained a cumulative \$851 million in gross state product, \$565 million in labor income, \$76 million in state and local tax revenues in 2016-21, according to a Seidman Research Institute economic impact analysis. By 2025, Seidman projects the economic impact of SkySong Innovations (SI) and these ASU-linked companies will exceed \$2.9 billion, with most of that impact — \$1.6 billion — realized in Arizona. Since the close of FY23, SI advanced the launch of 20 new startup companies founded upon ASU innovations ranging from new vaccines to safer battery technologies. Of the 20 new companies, 18 are based in Arizona, culminating in local economic impact as these companies create new jobs and contribute to the Arizona economy.

2021-2024 Multiple-Year At-Risk Goal 5

Submit a report that demonstrates substantial expansion of ASU Digital Prep within Arizona to at least 150 schools, with a focus on rural and underperforming schools.

This goal was accomplished in the first year.

Updated growth:

FY22 158 schools

FY23 180 schools

2021-2024 Individual Multiple-Year At-Risk Goal ASU Preparatory Academy within Arizona

Goal: substantial expansion within Arizona to at least 150 schools, with a focus on rural and underperforming schools.

June 2023 Progress Update

- As of June 2023, ASU Prep has exceeded its multiple-year at-risk goal of expansion to 150+ schools in Arizona with a focus on rural and underperforming schools.
- ASU Prep is currently collaborating with **180 school partners** to increase academic achievement by deploying high quality teaching and digital content.
 - **13,000 part-time learners** are being served through Arizona digital teaching and learning school partnerships. This is outside of ASU Prep’s 8,000 full-time academy students.
 - 10K of these learners are in rural and underserved schools
- In addition to the 180 school collaborations directly serving students, ASU Prep has trained **19,000 teachers from 1500** Arizona schools since 2020, as part of the ASU Prep Digital Arizona Virtual Teaching Institute.

Partnership	District/Parent Org	Number of Schools
Tempe Elem School District 3	Tempe Elem SD 3	1
Brophy College Prep HS	Diocese of Phoenix	1
Bourgade Catholic High School	Diocese of Phoenix	1
Miami Jr Sr High School	Miami USD	1
North Valley Christian Academy	Private	1
Arizona School for the Arts	AZ State Board for Charters	1
Blue Ridge High School	Blue Ridge USD	1
Yuma	Yuma Un HSD	5
Chandler Unif School Dist 80	Chandler USD	15
Herberger Young Scholars Academy	Private	1
Desert Garden Montessori Sch	Private	1
Desert View Middle School	AZ State Board for Charters	1
Desert View Online High School	AZ State Board for Charters	1

Mountainside High School	Nadaburg USD	1
Nogales High School	Nogales USD	1
Pendergast District-Wide HS	Pendergast ESD	12
St David High School	St. David USD	1
San Luis High School	Yuma Un HSD	1
San Carlos High School	SCAT/Access ASU grant	1
Desert Oasis Elementary School	Nadaburg USD	1
Tempe Preparatory Academy	AZ State Board for Charters	1
Arts Academy Estrella Mountain	AZ State Board for Charters	1
Morristown Elem Sch Dist 75	Morristown ESD	1
Notre Dame Preparatory HS	Diocese of Phoenix	1
Bourgade Catholic High School	Diocese of Phoenix	1
Loretto Catholic School	Diocese of Tucson	1
Sahuarita Online Academy	Sahuarita Unif School Dist 30	1
Salpointe Catholic High School	Diocese of Tucson	1
Seton Catholic Prep High School	Diocese of Phoenix	1
St. John Paul II High School	Diocese of Phoenix	1
Desert Garden Montessori Sch	Private	1
Arizona Cultural Academy	Private	1
Queen of Peace Catholic School	Diocese of Phoenix	1
Faith Lutheran School	Diocese of Tucson	1
Sierra Middle School	Sunnyside USD	1
Tuba City High School	TCUSD	1
Greyhills Academy HS	AZ State Board for Charters	1
Mexicayotl Academy	AZ State Board for Charters	1
City HS (Tucson)	AZ State Board for Charters	1
Red Mesa Elementary	RMUSD	1
Round Rock Elementary	RMUSD	1

Salome Elementary	SESD	1
Scottsdale Middle Schools	Scottsdale Unif Sch Dist 48	3
Joseph City Schools	JCUSD	2
Vernon Elementary	VESD	1
La Paloma Academy – Lakeside campus	LPA	1
Taylor Made Prep Academy	TMPA	1
Empowerment Academy		1
Hope Academy HS	Maricopa Co RSD	1
	First Star ASU	28
Desert Ridge HS (Gilbert)		
Glendale Online Academy		
Cesar Chavez HS (Phoenix)		
Glendale High School		
Canyon Valley HS (Gilbert)		
North Canyon HS (Paradise Valley)		
Casa Grande HS		
Poston JHS (Mesa)		
J.O. Combs HS		
Casteel HS (Chandler)		
Eastmark HS (Queen Creek)		
West Point HS (Tolleson)		
Westwood HS (Mesa)		
Mesa HS		
Desert Edge HS (Goodyear)		
Youngker HS (Buckeye)		
Agua Fria High School (Avondale)		
Linda Abrile HS (Phoenix)		
Ombudsman Charter HS-Northwest		
Corona Del Sol High School (Tempe)		
Desert Vista High School (Tempe)		
North High School (Phoenix)		
Highland High School (Gilbert)		
Bioscience High School (Phoenix)		
Ironwood High School (Peoria)		
Skyline HS (Mesa)		

Shadow Ridge HS (Surprise) La Joya High School (Tolleson) East Valley Institute of Technology (EVIT) San Tan Charter School (Queen Creek)		
Tempe Summer Math/Science	Tempe Un HSD	3
Peoria MET (serves 7 high schools)	Peoria Unified Sch Dist	7
Total		121

Math Momentum Partnerships

Glassford Hill Middle School
Coyote Springs Elementary
Granville Elementary School
Bradshaw Mountain Middle School
Lake Valley Elementary School
Mountain View Elementary School
Salt River Elementary School
Amberlea Elementary
Rio Vista Elementary
Canyon Breeze Elementary
Copper King Elementary
Desert Horizon Elementary
Desert Mirage Elementary School
Garden Lakes Elementary School
Pendergast Elementary School
Sonoran Sky Elementary School
Sunset Ridge Elementary School
Villa De Paz Elementary School
Westwind Elementary School
T.G. Barr Academy
Bernard Black Elementary

Maxine O Bush Elementary
Ignacio Conchos Elementary
Cesar Chavez Elementary
J.R. Davis Elementary
C.O. Greenfield Elementary
C.J. Jorgensen Elementary
Percy L. Julian Elementary
V.H. Lassen Elementary
Sunland STEAM Academy
AVIA online academy
Atkinson Middle School
Borman Elementary School
Mobile Elementary School
Willis Jr High
Tempe Online Academy
Fees College Prep
Rover Elementary
Canyon Day JHS
Alchesay HS
Westwood High School
Phoenix iAcademy
Desert Foothills Jr. High
Coyote Springs Elementary
Stanfield Elementary
Tuba City Elem
Dzil Libei Elem (Cameron school)
Tuba City JHS
Tuba City HS

Khalsa Montessori	
Villa Montessori	
Desert Sands Middle School	
Bradshaw Mountain High School	
Red Mesa High School	
Red Mesa Junior High	
Red Mesa Elementary	
Round Rock Elementary	
Alhambra: AOA Online	
Avondale Middle School	
TOTAL	59

**ANNUAL DISCLOSURE STATEMENT OF AFFILIATIONS
AND
OUTSIDE COMPENSATION
FOR PRESIDENT**

Arizona Board of Regents Policy 6-1101 and the president's employment require annual disclosure of all organizations with which the president is affiliated and all outside compensation received. Outside compensation includes any consideration related to outside board affiliation, consulting or other services, or provided by a university foundation or university-affiliated entity. However, Presidents are not required to report personal and passive investment income.

Please complete this disclosure form, and update this form throughout the applicable fiscal year as information changes.

Board appointments, including current and anticipated appointments and any related compensation, excluding payments for honoraria and speaking engagements: *(If no appointment or compensation, state "none.")*

Name of Organization	Amount of Compensation (if any)
Workiva (Director) - software technology	~\$70,000 & annual stocks
In-Q-Tel (Director & Chair)	~\$40,000

Outside employment, consulting relationships and related compensation, excluding payments for honoraria and speaking engagements: *(If no employment, consulting relationship or related compensation, state "none.")*

Name of Outside Employer or Name of Entity Receiving Consulting Services	Amount of Compensation (if any)
Speaking	All fees to ASUF
Royalties	All fees to ASUF

Other organizations with which the President is affiliated and any outside compensation not otherwise identified above:

Name of Organization	Amount of Compensation (if any)
ASU Foundation President's Leadership Chair	\$200,000

Signature of President Michael Crow

Date 8/9/23

Printed Name of President Michael M. Crow