ARIZONA STATE UNIVERSITY

Michael M. Crow

Performance Assessment

FY 2014

ARIZONA STATE UNIVERSITY

MEMORANDUM

June 30, 2014

TO: Mark Killian
President, Arizona Board of Regents

FROM: Michael M. Crow
President, Arizona State University

CC: Regents Executive Committee
Eileen Klein
Nancy Tribbensee

RE: FY2014 Performance Assessment

Please find attached my FY2014 Performance Assessment as it relates to the Arizona Board of Regents Performance Incentive program. This is my second submission relative to this program and it follows on last year's first cut at both the annual goals specified for last year and the initiation of the multi-year goals also specified last year.

Going forward, I have specific goals related to the performance incentive for this year as well as progress reports on additional goals that will ultimately be reviewed at the end of FY2015. Most of this report will address the three specific goals for FY2014 while offering progress, updates and issues relative to FY2015.

In all cases, the work that is being reported on and the progress that has been made is a product of the work of a substantial team of individuals at ASU. This team, led and directed by me, is committed to the attainment of these objectives and is working diligently to produce in provable outcome ASU as a model institution for the integration of academic excellence, academic accessibility and academic impact. In addition, to achieve the excellence, accessibility and impact objectives, ASU must remain efficient, effective and affordable. Thus, a number of the objectives that I am reporting are related to those aspects of the university's activities.

Regarding specifically my personal leadership efforts in all of these, it is important to note that these goals are derivative of a goal setting process that I lead. The teams engaged in pursuit of these objectives are working directly with me in each of our design adjustments as we work towards goal attainment and, at the end of the day, I am responsible for making the staffing,

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resource and organizational decisions necessary to facilitate these goals being attained. Thus, I am working personally to achieve these objectives.

I believe that the overall Vision 2020 objectives and our subsequently derived operational and tactical objectives have been a fantastically positive step in facilitating ASU's continued enhancement in performance and quality. These are all very difficult challenges to meet and thus they are worthy of the kind of attention that we give them. These performance indicators are also exemplars of other deeper and fundamentally challenging objectives wherein ASU must find a way to combine the very costly undertaking of academic excellence with the very costly undertaking of academic accessibility with the literal reduction in the cost of degree attainment all at the same time. This involves many factors that go well beyond any of these items detailed in this performance assessment but these are indicators of how we are doing and the progress that we are making.

Attached are the specifics for the FY2014 Performance Assessment detailed in two sections. The first section pertains to the FY2014 goals:

- Goal 1 is the performance incentive indicator of lowering cost to produce a degree.

- Goal 2 is the performance incentive objective of developing a comprehensive strategy for assessing academic quality regarding student achievement, particularly as it relates to our overall goal as a university attaining national leadership in "value added" for student achievement.

- Goal 3 is the performance incentive indicator associated with the exercise of my own personal leadership in the area of resource development. Resource development here means the acquisition of resources beyond those associated with either tuition or state appropriations. All of these additional revenue streams are essential to the success of the university and its accessibility at the end of the day.

The second section pertains to the performance assessment report which details progress on seven goals that we are working towards for an FY2015 evaluation.

I am pleased to submit this to you for your review and hope you will not hesitate to contact me should you have any questions or need some further details.

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FY 2014 Incentive Goals

Tab 1

FY 2014 Goal
Lowering Costs to Produce Degrees

ASU currently ranks in the lowest handful of research universities in terms of cost to produce a degree. A strategy document outlining progress made and plans towards lowering the cost to produce a degree to among the second or third lowest cost in the United States must be submitted to the Board prior to July 1, 2014. The strategy document must include detail regarding the process by which the university developed its strategy to lower the cost per degree and include information and data relied on in developing the strategy. The document should also detail what innovations and insights the university plans to employ in implementing the strategy.

Report

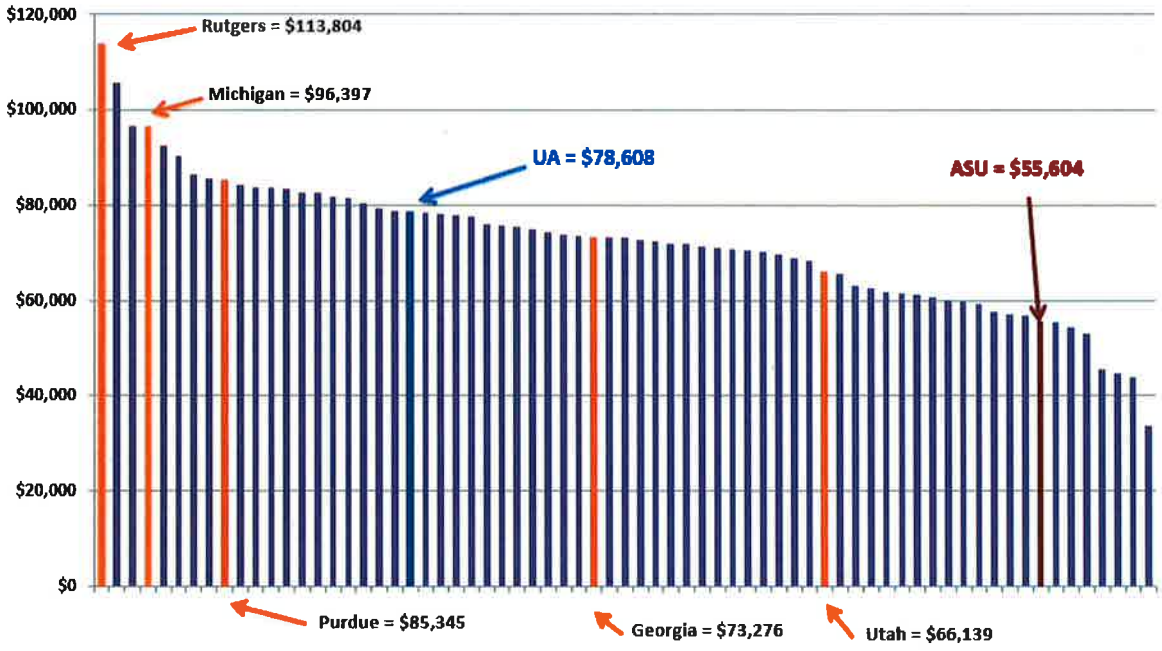
Demonstrated progress and national competitiveness:

The most recent data for comparing ASU cost effectiveness in producing a degree with other research universities can be found in the FY2012 IPEDS reports. (IPEDS is the Integrated Postsecondary Education Data System managed by the National Center for Education Statistics in the U.S. Department of Education. It is considered the best source for comparative data since its data definitions are clear and accepted by the higher education community.) The IPEDS reporting cycle is such that FY2013 comparative data will not be available until late in 2014.

There are 68 public universities classified in the most research intensive category (very high research). The amount of revenue for ASU from the IPEDS categories of "tuition and fees after deducting discounts and allowances" per degree awarded was $55,604.

At the high end of the spectrum of 68 institution are six universities with over $90,000 in revenue per degree. The median is $73,130 and the mean is $72,102. At $55,604, ASU places 8th lowest on the list; within the bottom 12%. At the low end of the spectrum are three universities under $50,000.

Tuition, Fees, and State Appropriations per Degree Awarded
All Public Very High Research Universities
IPEDS FY2012



The universities represented on the chart above with tuition/fees and state appropriations per degree under $60,000 are shown below.

Very High Research Universities (n = 68)
FY2012 IPEDS

University of Central Florida	$33,564
Florida State University	$43,847
Colorado State University	$44,594
University of South Florida	$45,434
Georgia State University	$52,743
University of Texas (Austin)	$54,203
University of South Carolina (Columbia)	$55,438
Arizona State University	**$55,604**
Washington State University	$56,750
SUNY Albany	$57,064
University of Florida	$57,478
University of Houston	$59,218
University of Missouri (Columbia)	$59,812

The performance incentive goal is to place as the second or third lowest. Continuing to improve in this national comparison remains a goal at ASU, but there are challenges due to the nature and circumstances of some of those eight with lower revenue per degree.

Three of the institutions below ASU are Florida universities (Florida State, Southern Florida, and Central Florida), where a generous state financial aid program allows their state universities to avoid many of the costs ASU faces in using its tuition revenue to fund financial aid programs.

Two of the institutions with lower revenues per degree than ASU have relatively low levels of research on both an absolute basis (below $125,000,000) and relative to enrollment (below $12,650 per degree awarded). These are University of Central Florida and Georgia State University. ASU's research activity, at $386,000,000 in FY2012 and at $20,150 per degree, is substantially higher and so these institutions might be said to be quite different than ASU.

The University of Texas at Austin is another institution below ASU on the list. Its financial circumstances are unique because it has an endowment created by the State of Texas from oil tax revenues. This serves as additional state funding, but is not captured as such in the IPEDS survey.

These are, however, fine universities doing innovative work with broad-based student demographics. ASU is working with three of them (University of Texas, Georgia State, and Central Florida) in a new foundation-supported collaborative group that will be announced later this summer to share the results of local innovations to increase retention and graduation and to improve cost effectiveness.

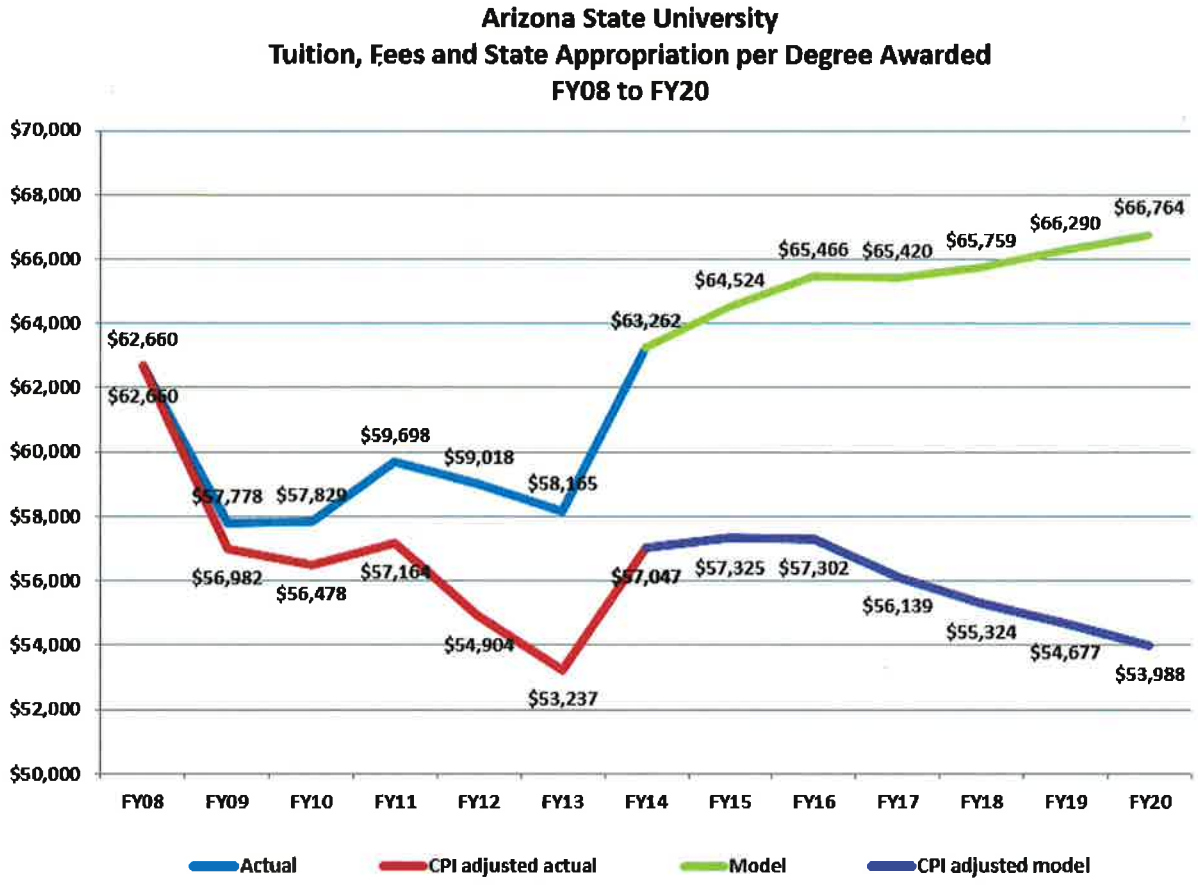
It is important to note the substantial progress that ASU has made on this front. Revenue per degree awarded from tuition and state investments is shown below. (The FY13 data has been reported to IPEDS but has not been published yet. The ASU numbers here are somewhat different in this list due to refinements made on the number internally that cannot be made with the other institutions'' numbers in IPEDS.)

FY2008:	$62,660
FY2009:	$57,778
FY2010:	$57,829
FY2011:	$59,698
FY2012:	$59,018
FY2013	$58,165

This represents a reduction of 7.2% over the last five years. On an inflation-adjusted basis the reduction is 15.1%.

Continued Progress

Looking towards 2020, if the ASU degree goals are exceeded, as expected, and the modest revenue assumptions for tuition rate increases and state investment in the strategic plan are achieved, modest growth is anticipated in the revenue from these sources per degree awarded, but a modest decrease in the inflation-adjusted level of these per-degree number. That decrease may be the range of 21% below the FY08 high-point and 7% below the current levels. The following chart taken from the February 2014 Strategic Enterprise Framework presentation illustrates the numbers.



Given the fact that ASU's current operations already result in such a low level of cost per degree awarded, and taking into account its needs to grow research productivity and maintain its financial aid commitments from tuition funds, the university will need to be very careful in the use of budget reductions and large scale redirection of existing funds as a means of making continued progress in cost effectiveness. It is crucial that cost to produce a degree does not come at the expense of a high quality educational experience and superior student learning and preparation outcomes.

Rather than budget reductions, the ASU strategy will remain focused on targeted investments of redirected funds and new funds from tuition and state sources in productive new technology or organizational changes in delivering needed services and in large improvements in retention and in degree attainment. The balance of this report is focused on ASU plans in these arenas.

ASU has been investing in, experimenting with, and innovating across a wide range of areas for the last five years. This simple graphic outlines the activities and the progress that has been made.

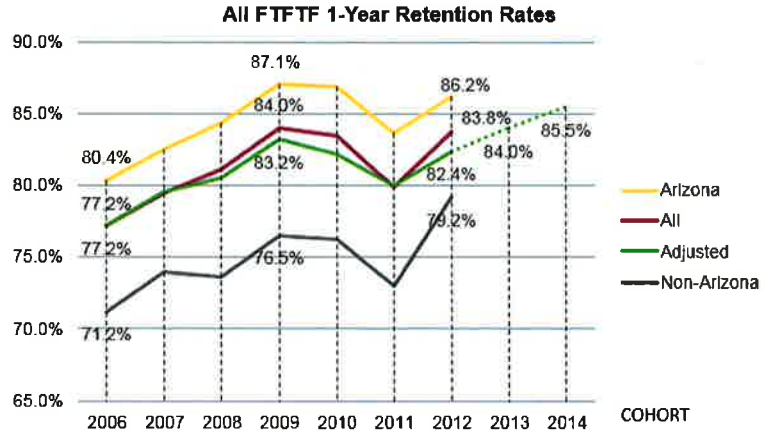
WHERE WE STAND

- **Initiatives start in 2007; unfold over the next 6 years**
- **All (official): Improves significantly from 2006, peaking in 2009. Recovered in 2013.**
  83.8% from 77.2%

  project 84% for 2013 cohort

  project 85.5 for 2014 cohort
- **Adjusted: The cohort (FTFT) is defined as in 2013 across all years.**
  Lies slightly below the official but follows the identical pattern.

  5.2 PTS above 2006 at 82.4%
- **AZ. Lies above the official**
  86.2% from 80.4%
- **NonAZ increased sharply last year hitting a historical peak**
  79.2% from 71.2%



2007	2008	2009	2010	2011	2012
ASU 101	JAC	JAC	JAC	Intro Math	Full coaching
eAdvisor	Critical Reading	Obama	↑tutoring	Academic recovery	Fall survey
↑ tutoring	Living/Learning: starts	Facebook		Tutoring	Early start
Fall Welcome	SI: starts	↑ tutoring			Dashboard
Orientation	↑ tutoring				PASS
	↑ Advisors				Scholarship maintenance
	Math Placement				Living/Learning: complete
	UNI 220				
	Early warning				

Continued progress in reducing the revenue required for each degree awarded requires progress to be made on a number of broad fronts. Some focus on increasing the number of graduates, some focus on cost improvement, and many have elements of both.

1. Increase the number of graduates through improved retention and graduation rates
   - Persistence rate and therefore, over time, graduation rate
   - Increased monitoring of predictive analytical data by advisors and course support staff
   - A detailed list of FY 2015 initiatives are shown later in the report.

2. Deploy technology to handle tasks that do not benefit from faculty and staff actions.
   - Increased use of adaptive learning modules and courses, particularly in the general education curriculum to improve performance (retention) as well as to lower instructional costs
   - Use of predictive analytics to target intervention strategies to the students most in need of help
   - Continue to build and develop the E-advisor suite of guidance and advising tools for students with routine needs

3. Accelerate the time to a degree.
   - Community college pathways
   - Grow the offerings of intensive seven-week courses to help students develop more manageable schedules with the 15 credits per term needed to graduate in four years
   - Experiment with financial aid incentives

4. Build enrollment in locations with under-utilized capacity or where economies of scale can be brought into play.
   - On campus programs at ASU West and ASU Polytechnic
   - ASU Online

5. Adjust the composition of the faculty and the support structures
   - Alter the mix of full-time tenure and tenure-track faculty with substantial teaching and research loads and full-time faculty who are instructional specialists with multi-year contracts with teaching responsibilities only.
   - Create a cadre of instructional support specialists/course coordinators to permit maximum teaching and research loads for faculty members

6. Increase ASU's national and international reputation
   - Greater attractiveness reduces the need to use merit financial aid awards to high-performing students with the ability to pay as incentive to enroll.
   - These students tend to have shorter times to degree and higher graduation rates.

7. Increase non-tuition sources of funds to help limit tuition rate needs
   - Endowment gifts, with particular focus on financial aid
   - Pursue a state-funded financial aid program
   - Pursue income opportunities from sources not associated with educational delivery such as real estate and technology transfer.

Specific Plans for the 2014-15 Academic Year

The larger goals outlined above can only be achieved through the initiation of specific initiatives each year. Those related to improving retention and graduation are the responsibility of the Provost. The Provost's specific plans for the coming year have been developed in detail for improving retention and for increasing graduation. Over $3 million in new funding will be devoted to implementation of this plan. An overview of the new initiatives follows.

Freshman Retention

To date the initiatives to improve retention have focused on large scale actions that target as many students as possible. There have been major success from these actions with freshman retention growing from 79.5% for the Fall 2007 entrants returning in Fall 2008 to a forecast of 86% for the class that entered in Fall 2013 that will be returning this fall. However, there will be diminishing improvements possible from these larger strategies. Going forward, new initiatives will be built on a

more individualized approach differentiated by students. This is now possible due to the development over the last few years of the Student 360 tool and what ASU now knows about students.

Cognitive Approaches to Improving Retention:

- Improve advising: provide training; equip advisors with better software; and locate advising centers more conveniently (e.g., consolidated Advising Hubs and, over time, a Learning Center in the vacated Law Library on the Tempe campus)
- Expand academic support program for underprepared freshmen into the sophomore year
- Strengthen advising for students transitioning to a different major
- Add career coaching (major ≠ career)
- Redesign challenging freshman courses into an adaptive learning format and construct multi-functional project courses that build skills and achieve course credit towards a degree in the chosen major

Expansion of Current Non-cognitive Approaches to Improving Retention:

- Conduct more intensive and intrusive monitoring based on better early warning indicators (e.g., attendance in ASU101, Academic Status Reports, resiliency measures)
- Conduct pre-orientation outreach on financial obligations and the effort required to succeed
- Intensify coaching for underprepared students and extend coaching into the second year to address "sophomore slump"
- Improve the case management system embedded in the First Year Success program
- Prepare first-year American Indian students for academic excellence through the S.P.I.R.I.T. Program

New Non-cognitive Approaches to Improving Retention for 2015

- Launch experiments to test the efficacy of five initiatives:

    1. University-funded work-study program linked directly to students with financial need and retention challenges
    2. Requiring a financial literacy course for students on financial aid or those with an indicator of financial stress

3. The ability of students to cope with small and large failures increasingly seems to be at the heart of many retention problems. Assessment of resiliency, determination, and cultural issues will be stressed.

NEW INITIATIVES: Noncognitive

- **Test for resiliency, determination and cultural issues**
  vendors such as CSI, ETS and others

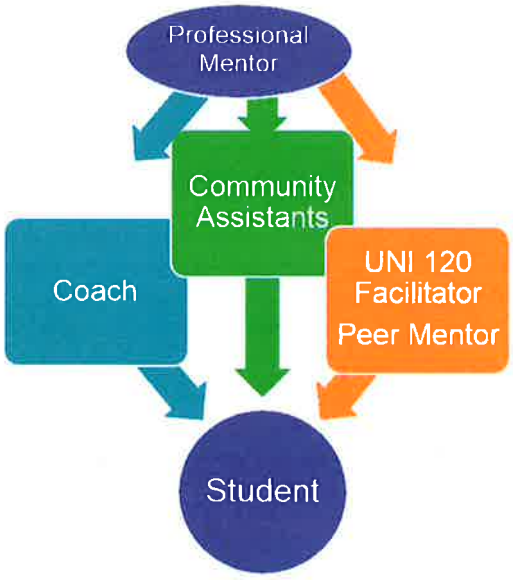
- **Intensive and intrusive monitoring at the first warning:**
  Better early warning indicators
  (attendance in ASU101, ASR's, resiliency measures)

  Deal with the "sophomore slump."

4. A social network style application linking students to others with similar goals and concerns (e.g., Get Set)

5. A team approach linking success coaches + peer mentors + professional mentors (volunteers). The planned design is shown below.

Team Support of 25 Students



- Improve engagement with commuter students (1-1 peer mentors, web-based tutoring, clubs and activities designed specifically for commuter students)

- Create a leadership program for underprepared students who maintain a certain GPA through the first year. Employ as mentors in years beyond the first year.

- Drop totally unengaged students and refund them tuition before the 21st day.

- Examine the characteristics of students that lead to success as they progress to graduation and then track them (possibly using an outside specialty firm)

Transfers-- Strategies to Realize Goals

Growing the number of Arizona transfer students is another important element to expand the number of graduates. The Provost's current plans include the following activities.

- Improved transfer pathways with community college partners

- Provide eAdvisor access to Maricopa Community College students who express interest in transferring to ASU

- Develop reverse transfer of credit program with Maricopa Community College District. Yavapai and Central Arizona College would follow.

- Assess if a stronger need-based financial aid program can increase community college enrollment.

- Identify best approach for reenergizing community college enrollment for students interested in business programs at ASU at the West Campus.

- Clarify and promote concurrent degrees

- Expand working relationships with the veteran affairs staff at the Maricopa community college campuses

- Expand the application of data analytics in partnership with an outside firm

Other Specific Actions for Reducing Costs to a Degree

1. The leadership in the Provost's Office and ASU Online is charged with maintaining close contact with the rapidly-growing entrepreneurial sector that is focused on educational technology. ASU and its faculty use over 100 third-party tools in developing and delivering courses. We have direct regular contact with over 50 companies in this sector, and monitor the work of many

more. By integrating innovations from these companies, ASU can make faster and better improvements in course design, predictive analytics, and student services.

2. Innovative ideas can come from many places. ASU watches new programs and approaches at other universities across the country and seeks to understand, through site visits and consultations, those that look promising. ASU has been a leader in forming a group of 11 universities devoted to access and graduation rate improvements for students from across the economic spectrum who are pledged to share innovations. That group will be foundation-funded and announced later this summer.

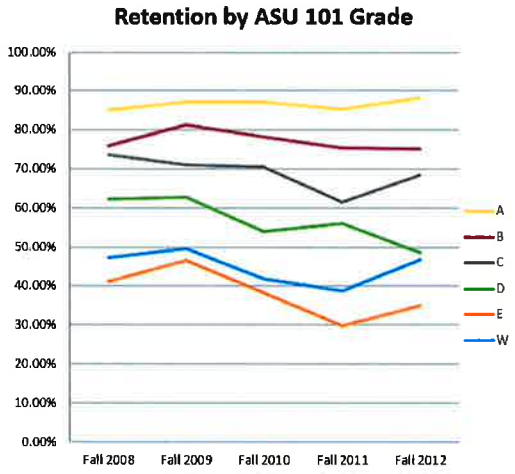
How ASU does its analytical work

The basis for much of this effort is careful data analysis using ASU's growing trove of information on student behaviors and the constant search for causative patterns.

Here is one example that looks at the results of the ASU101 course used for teaching students how to be successful college students.

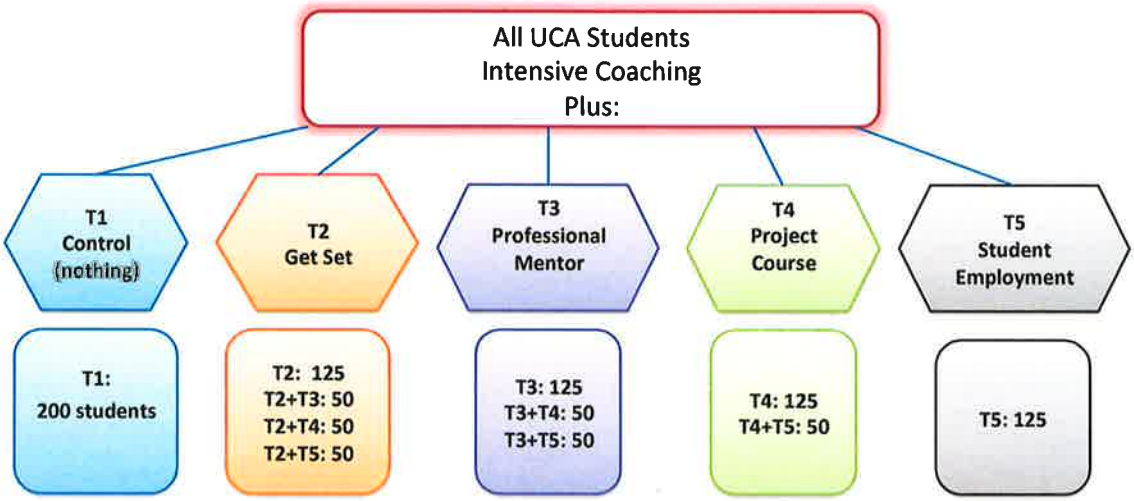
ISSUE OF MOTIVATION & ENGAGEMENT

- **ASU 101 is one early signal.**
- **Students who do not pass ASU 101 are retained below 50%.**
- **760 students earned below a C in Fall 2013.**
- **The Fall GPA for D-E-W students averaged 1.7, 1.1 and 2.0 respectively.**



With the identification of potential causes for problems with retention, it is often important to do controlled experiments with new ideas for innovations. Controlled testing of different approaches is critical to knowing which ideas are worthy of full scale application. The following is an example of plans to test different innovations for helping students with lesser preparation coming out of high school.

UCA Experimental Structure



FY 2014 Incentive Goals

Tab 2

FY 2014 Goal
Comprehensive Strategy
Assessing Academic Quality regarding Student Achievement

The goal is to design a comprehensive strategy for ASU to advance an academic output and quality evaluation and metric system to better assess its production and achievements. This should include quantitative and qualitative responses to the questions "what we produce," "who we produce," and "what they achieve." The strategy must include details on how the university will assess its production and achievements. The strategy should also include measurable goals by which the Board may evaluate its success, and should be outlined in a report submitted to the Board by July 1, 2014.

Comprehensive Strategy to Assess Academic Quality regarding Student Achievement

Arizona State University has been committed to enhancing the quality of the university learning experience and environment for its students as part of its overall mission and goals. The strategic emphasis is based on the values of excellence, access and impact. The university seeks to perform at the highest levels as reflected by student and faculty achievement, the broadest possible access to students who meet the qualifications for admission to the university, and impact the communities, state, nation and the globe through the students' contributions upon graduation and from the faculty members' contributions to knowledge development and application.

I am fully committed to enhance measured student development and individual learning to national leadership levels. A multi-pronged strategy is in place and commands the attention of the whole university to achieve. Moreover, while this plan is not specifically about retention, there is a clear linkage between retention of students and helping them to learn at levels of high distinction.

The assessment strategy incorporates numerous components including external and internal reports. In addition, to advance student academic quality requires two important input measures – the distinguished faculty continually augmented by newly recruited outstanding scholars and a learning environment that enables students to learn effectively and at the cutting edge of knowledge.

ASU Faculty

The faculty are the critical lynchpin to the learning process. They design the experiences for each course, develop the content, and actively engage students in assignments, projects, research, and other initiatives to advance learning. Thus, it is critical that outstanding faculty are continually hired and retained at the university. While very successful in this regard, it is a constantly challenging environment with other universities seeking to attract ASU faculty. The competition for high quality faculty has seldom been so intense.

In the past three years, over 300 faculty members have been hired and 54 of them have been at the most senior levels. Exemplars include Raymond Dubois, leading the Biodesign Institute, James Levine joined ASU for a 40% appointment and Mayo 60% co-directing the ASU Obesity Solutions project, Michael Hanemann in the Department of Economics and School of Sustainability, William Riley in the College of Health Solutions, Barry Bozeman in the School of Public Affairs.

Among the exemplary faculty, ASU has 12 National Academy of Science Fellows, 2 Nobel Laureates, 25 IEEE Fellows, 25 Guggenheim Fellows, 4 Pulitzer Prize winners, 9 National Academy of Engineering Fellows, 11 American Academy of Arts and Sciences Fellows, 5 National Academy of Public Administration Fellows, and 3 Institute of Medicine Fellows.

Adaptive Learning

ASU is a national leader in employing innovative adaptive learning platforms. Nearly 7,000 students were in one or more of 3 math classes designed in an adaptive learning environment this past year. These courses have been quite successful but still more progress is anticipated after additional innovations are complete. Six other large general education courses are being redesigned whereby students will be taken out of large lecture halls, replaced by adaptive and active learning environments. The goals are to improve student success in the course; improve student success in subsequent courses; improve retention and graduation; and promote the higher learning skills of critical thinking and problem solving. It is estimated that more than 17,000 students will take these courses when the project goes to full scale. Two additional courses will begin pilot testing in Fall 2014. The others will follow soon after.

COMPREHENSIVE STRATEGIES AND ILLUSTRATIVE OUTCOME MEASURES

EXTERNAL MEASURES

- Accreditation

  First and foremost in assessing the academic quality is the university's requirement to maintain accreditation with the North Central Association of Universities and Colleges Higher Learning Commission. This accreditation process engaged the university for more than two years in preparation. The outcome was successful and the university recently received re-accreditation through 2022-2023. Within the accreditation cycle, a 35,000 word report on ASU's continuing progress and metrics must also be submitted.

  In addition to university accreditation, program specific accreditations must be maintained which ensure the university is competitive with peer institutions and those institutions which are of significant national standing. The specific program accreditations include the Association to Advance Collegiate Schools of Business for W.P. Carey School of Business, the Accreditation Board for Engineering and Technology for Fulton Schools of Engineering, Council on Social Work Education for the School of Social Work, American Psychological Association for Department of Psychology, and many more. These accreditations assess ASU's programs against national criteria.

- National Proficiency Profile Test from ETS

  The university is in the final stage of completing a four year longitudinal study of the students' growth in four important skill areas: quantitative reasoning, critical thinking, reading and writing. The national Proficiency Profile test, administrated by the ETS is used to gauge their progress. The entering cohort of freshmen in Fall 2011were tested for their baseline skill levels. 4,829 students completed the test in 2011. Of those students who took the test in 2011, nearly 600 took the test again at the end of their sophomore year. The results were quite strong. From the 2011 to the 2013 test

administration, every skill category (reading/critical thinking, writing, mathematics) saw an increase in the proportion of students who were classified as proficient, significant at the .05 level. The average percent increase across the time span was 14%. The largest increase was in Reading. Mathematics experienced the second greatest improvement. The study will be completed Spring 2015 when this cohort is in its fourth year. The test will be applied to students who took the test as freshmen and are in their fourth year at ASU. Proficiency will be measured in the four skill areas and measures of value added during their four years of study will be constructed.

- External Honors and Awards earned by students

ASU students compete in a virtually all national competitions. Some of these are specific to their field of study (e.g., Journalism) and some are open to all university students (e.g., Fulbrights). A very large number of students also earn national distinction prior to coming to ASU such as being named a National Merit Scholar, National Hispanic Merit Scholar, or Gates Millennium Scholar. Their selection of ASU is a strong indicator of the high regard these students and their families hold ASU.

Fulbright Scholars: In 2013-14 ASU tied for third in the nation for Fulbright awards (tied with Princeton) and behind Harvard and University of Michigan).

National Merit Scholars – ASU ranked in the top 20 nationally for 2013 in enrolling national merit scholars and was one of the top 5 of public universities. Other universities in the top 20 were: Harvard, University of Chicago, Stanford, Princeton, Yale, Washington University, MIT, Georgia Tech, Duke, Northwestern University, University of Pennsylvania, USC, Vanderbilt, Texas A&M, University of Minnesota, Northeastern, University of Oklahoma, University of Alabama and University of California-Berkeley.

National Hispanic Scholars – ASU attracted 245 out of 5,000 (5%) of all students awarded a National Hispanic Scholarship. Work continues to encourage more students to apply for this award similar to other national awards through the National Awards Office housed in the Barrett Honors College.

Flinn Scholars – This is the most prestigious scholarship awarded within Arizona for Arizona high school students. ASU has been very successful in attracting half of the 20 scholarships awarded last year and again half coming this fall, 2014.

Gates Millennium Scholars – This national competition for high school students funds 1000 scholarships for 1,000 students. ASU attracted 5% (50) of those students. Given the breadth of the choices students have, this is another indicator of how ASU fares when students compare ASU to other universities.

In 2013-14, three ASU juniors were awarded Goldwater Scholarships. These scholarships are highly competitive and the university must nominate the students

interested and are limited to nominating four students annually. The success is a substantial achievement as only 300 scholarships are awarded annually and with hundreds of universities nominating students.

This past year, one student received a Marshall Scholarship. Only forty such awards are made annually and the award provides a student with the opportunity to study at the graduate level in the United Kingdom.

- Student Assessment Measured By External Licensure

Additional confirmatory evidence of how well ASU prepares students for future employment is supplied by the passage rates on national professional licensure tests.

- Data from the Association of State and Provincial Psychology Boards show that from 2007 – 2012 (the latest data available), 100% of ASU Clinical Psychology graduates who sat for the exam passed.
- In the W. P. Carey School of Business, the first-time sitting for the CPA exam pass rate is 60.4% compared with a national average of 48.2%.
- In the Sandra Day O'Connor College of Law, the first-time writers achieved an 86.4% bar passage in Arizona compared with the statewide average of 80.21%.
- BSN graduates from ASU have a National Council Licensure Examination (NCLEX) first-time pass rate of 92% compared to the national average of 82%.
- Students from the College of Nursing and Health Innovation have three-year average first-time pass rates of 92% for Adult Nurse Practitioner, 93% for Pediatric Nurse Practitioner, 95% for Family Nurse Practitioner, and 100% for Adult Psychiatric Nurse Practitioner, all exceeding the national standard of 80%.
- The School of Nutrition and Health Promotion has the largest dietetics program in the country. Graduates of the ASU dietetics program had a 100% first time pass rate on the National Examination for Registered Dieticians in 2013 (national average is 79%). Graduates of the ASU Dietetic Internship program have maintained the 100% first time pass rate for the past seven years.
- To become a licensed Marriage and Family Therapist in Arizona, a candidate must pass the national exam given by The Association of Marital & Family Therapy Regulatory Boards (AMFTRB). Since the program's inception in 2007, graduates of the MAS degree in Marriage and Family Therapy in The Sanford School who have taken the AMFTRB exam have a pass rate on the first attempt greater than 90%.
- In the Masters of Counseling degree program, 96% of ASU graduates pass the National Counseling Exam on their first try. The average score of ASU's graduates is 1.5-2 standard deviations above the national average.
- Ninety-four percent (94%) of ASU's graduates of the Mary Lou Fulton Teachers College passed the state teacher certification test last year (most recent data available). There is no national comparison data as all states have their own processes for certification.

Whenever students do not achieve at the levels expected on these examinations, a review is initiated of the curriculum and teaching methods to ensure that any possible gaps are able to be addressed to improve students' performance.

- Gallup-Purdue Index

The Gallup-Purdue Index is a premier collaborative national research project aimed at measuring and improving the career and life success of college graduates. Gallup, in partnership with Purdue University, is conducting the largest nationally representative study of college graduates in U.S. history. The Gallup-Purdue Index will be the first measure of college graduates' long-term success in pursuing great jobs and great lives. It will be conducted annually to create a longitudinal view.

ASU will be one of a select few that will be conducting the same study surveying ASU graduates for comparison to the Purdue Index results. For this study, Gallup will:

- conduct Web-based surveys asking ASU graduates about their engagement with their work, their overall life evaluation and well-being across five domains — purpose, social, physical, financial, and community — and their engagement with ASU.
- evaluate how Arizona State University graduates compare with college graduates on a national basis via the Gallup-Purdue Index — a nationally representative survey of college graduates in the U.S.
- provide annual reports and a presentation that highlight key insights

This research will help Arizona State University understand how it uniquely prepares graduates for engaging and fulfilling careers and lives. This study will create new, more meaningful measures for colleges and universities to utilize when determining the value of the education and degrees they offer. Most importantly, it will serve as a powerful framework for continuous program, process, and quality improvement through a collaborative research effort.

INTERNAL ASSESSMENT

- Graduating seniors, graduate students, alumni surveys

The University Office of Evaluation and Educational Effectiveness (UOEEE) conducts annual surveys of ASU's graduating students, recent graduates, and alumni. Approximately 70-75 percent of graduating seniors, graduate students, and law students complete an exit questionnaire (*Graduating Senior Report Card* or *Graduate and Law Student Report Card*).

Questions focus on students' overall experiences at ASU, as well as within their academic major, in general education courses (where applicable), and with a sampling

of university programs and services. Students are asked to reflect upon their years at the university and to "grade" their experiences, including preparation for employment and further study. They are also asked a series of questions about post- graduation employment and future education plans. Key item results for academic units are posted in the university's Academic Program Profile and are shared annually with colleges and schools/departments. Employment data are also shared with career service units at the university and college levels. A detailed account of post- graduation employment data can be found at asu.edu/career/gradstats.

These annual institutional-level surveys provide important, accurate, and useful feedback to inform university decisions about its academic offerings. During the most recent administrations of the exit surveys, for example:

- 85 percent of 2010-2013 graduating seniors reported that ASU prepared them effectively or very effectively for a job in their major, while 89 percent reported that ASU had effectively or very effectively prepared them for graduate or professional study in their field.
- 87 percent of graduate and law students perceived that an ASU education had prepared them effectively or very effectively for a job in their fields, while a slightly larger percentage (90 percent) rated preparation for further study in their field in a similar fashion (2010-2013).

Recent graduates are surveyed by UOEEE three to six months after graduation from ASU. Questions on the ASU Recent Graduate Survey focus primarily on post-graduation employment and educational pursuits. Graduates who also earned certificates or minors are asked additional questions about these academic experiences. Undergraduate and graduate alumni are also sent a questionnaire (Undergraduate Alumni Survey; Graduate Alumni Survey) three years after graduation from ASU. Alumni are asked about their perceptions of ASU, how well ASU prepared them for subsequent employment and education, and their post-graduation activities (employment and further education).

External validation such as the 2010 Wall Street Journal study placing ASU 5th in the United States in "producing graduates with the skills to succeed in the workplace" validates ASU's own student surveys.

- EPortfolios

Another measure of students' progress is being conducted in the College of Liberal Arts and Sciences. Some students have begun building ePortfoios which will contain samples of work over a number of years. Progress isn't scientifically measured, as in the ETS, but superior qualitative judgments of progress will be available based on samples of academic work entered into the ePortfolio.

GOALS FOR FUTURE ASSESSMENT

The goals for future assessment of Arizona State University's progress in achieving academic quality:

1. Sustain the necessary accreditations of the university and specific academic programs.
2. Sustain or increase the pass rate of students on external licensure examinations (some are at 100% already).
3. Increase the awards ASU students received from external organizations.
4. Develop benchmarks for the Gallup-Purdue Survey to develop subsequent strategies for enhancing the academic quality experiences of ASU students.
5. Develop benchmarks from the National Proficiency Profile Test and subsequent strategies for enhancing the academic quality experiences of ASU students.

FY 2014 Incentive Goals

Tab 3

FY 2014 Goal
Personal Leadership in Resource Development

University President's personal leadership of resource development efforts resulting in a substantial increase, as determined by the Board in its sole discretion, in the non-tuition and non-research grant generated resource base for Arizona State University.

Personal Leadership in Resource Development

Introduction

As regents are well aware, Arizona State University is a high student enrollment, large scale institution for which state resources on a per student basis are presently at the lowest levels since the early 1950s, and by some estimations even earlier. The state investment in the institution over the last several decades has nonetheless provided us an opportunity, combined with the willingness of the board, to allow the university to operate in an enterprise mode and on an entrepreneurial basis. Through this approach, we have the means to move ahead toward our objectives with a broad revenue base.

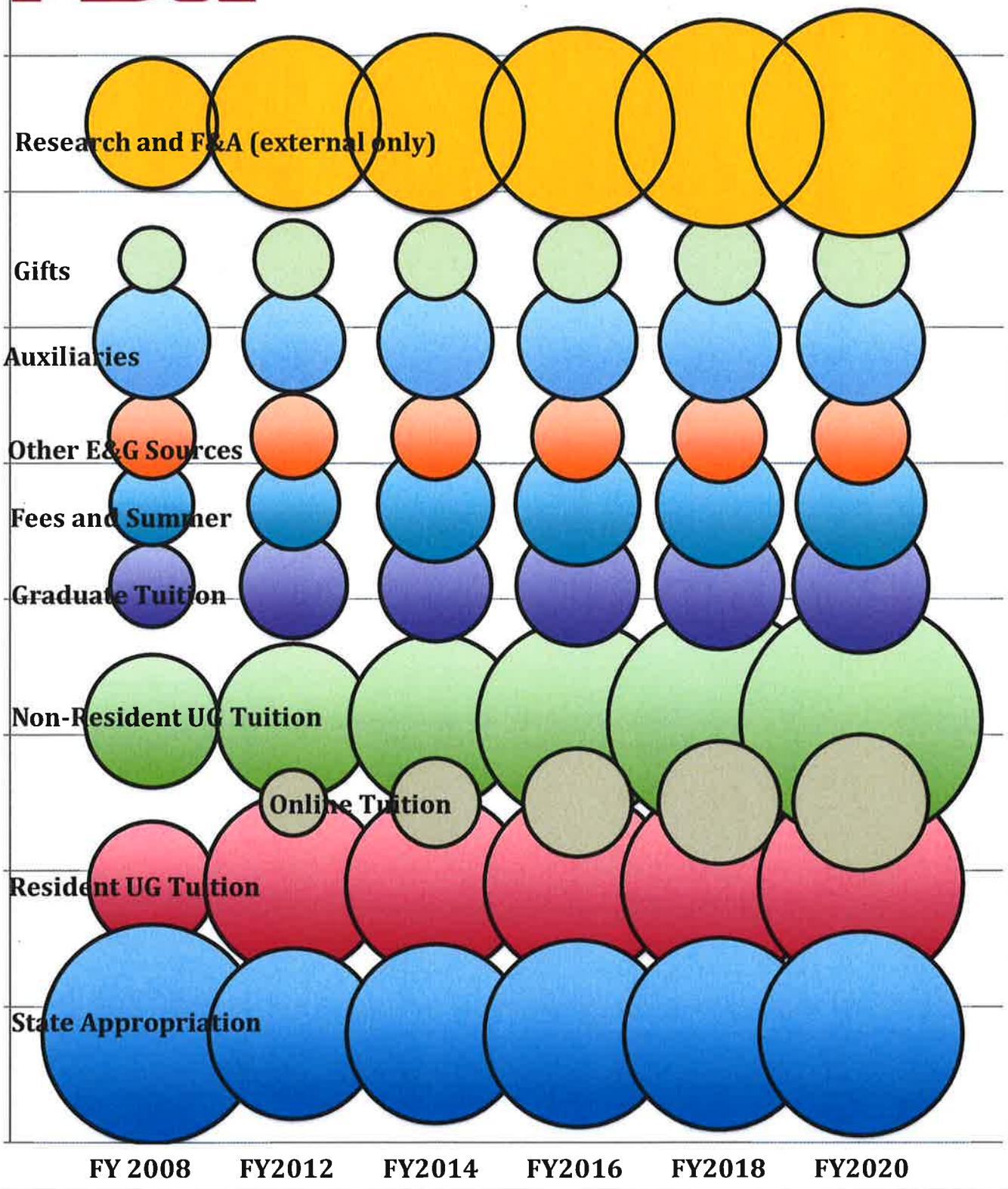
The acquisition of additional revenue for advancing the university is never easy, particularly after decades of dependence on state appropriations. We have as a part of our overall evolution altered significantly the culture of the university from that of being an agency oriented academic institution to becoming an enterprise-driven academic institution. The institution cannot be successful without acting and behaving in entrepreneurial ways to drive revenues which would allow the institution to achieve its objectives from a more modest state level investment.

As the chief executive of the institution and as the principal architect of the enterprise model, my personal leadership in resource diversification has been a critical factor to the changing of the culture at ASU from agency to enterprise. This is detailed graphically in the following bubble chart wherein just from the beginning of the recession through FY2014 and ongoing to FY2020, the relative growth in university resources is detailed. Specifically, we are anticipating less in state appropriations, tremendous increase from zero in online tuition, tremendous increase in non-resident undergraduate tuition as well as substantial increases in the graduate tuition as well as gifts and other miscellaneous sources of revenue. In addition to these changes, which are detailed numerically in the attached chart, we are working on other revenue "sources" that are harder to quantify.

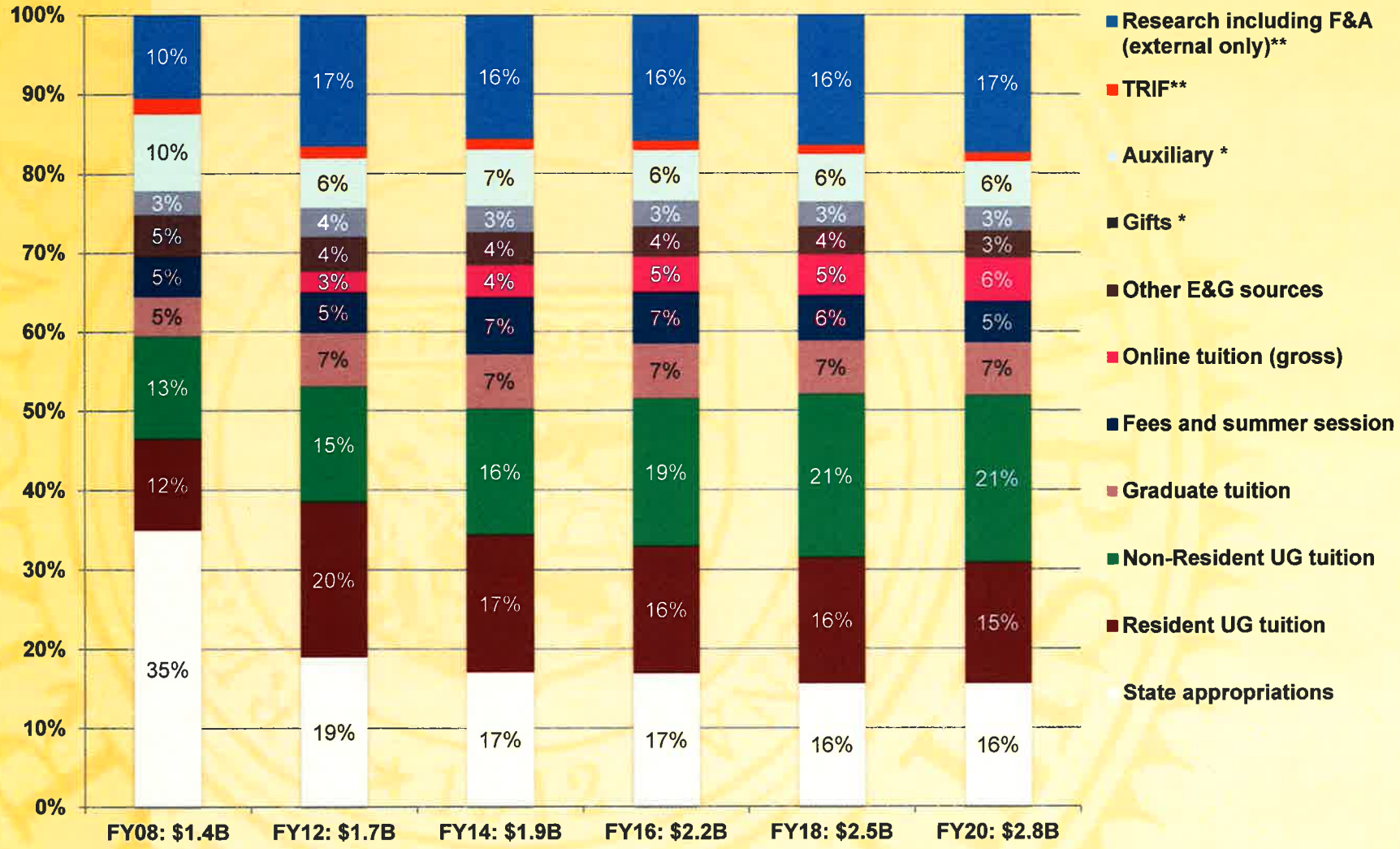
In the past, we have obtained more than $450 million of investment from municipal governments, hundreds of millions of dollars of investments from private partnerships (for specific projects) as well as new revenue streams from technology transfer activities (small but growing) and real estate activities (growing rapidly and critically important) as well as a few other miscellaneous sources. All of these sources combined together will allow the university to achieve its objectives and also articulate an operating vision for the institution very different than the operating vision for the institution when I was appointed in 2002. At that point, almost 50% of the revenue for the institution was from state appropriations and nearly all of the remaining revenue was either tuition or research. As you can see from the attached contribution chart alone from the ASU Foundation, the amount of resources being delivered to the university in the last 10 years has gone up dramatically.

All of these revenue areas and their enhancement are driven in part by my recruitment, hiring and retention of the executives, the establishment and management of the team, the identification, setting and assessing of the goals as well as the general operation of the university itself in this new enterprise mode of operation. I feel confident that the new model for resource acquisition for ASU is in place, that it is successful and that it is continuing to move forward.

Relative Change in Gross Revenue Categories FY08 to FY20 (State approriation in FY08 = 1.0)



Gross Revenue Sources: All Funds

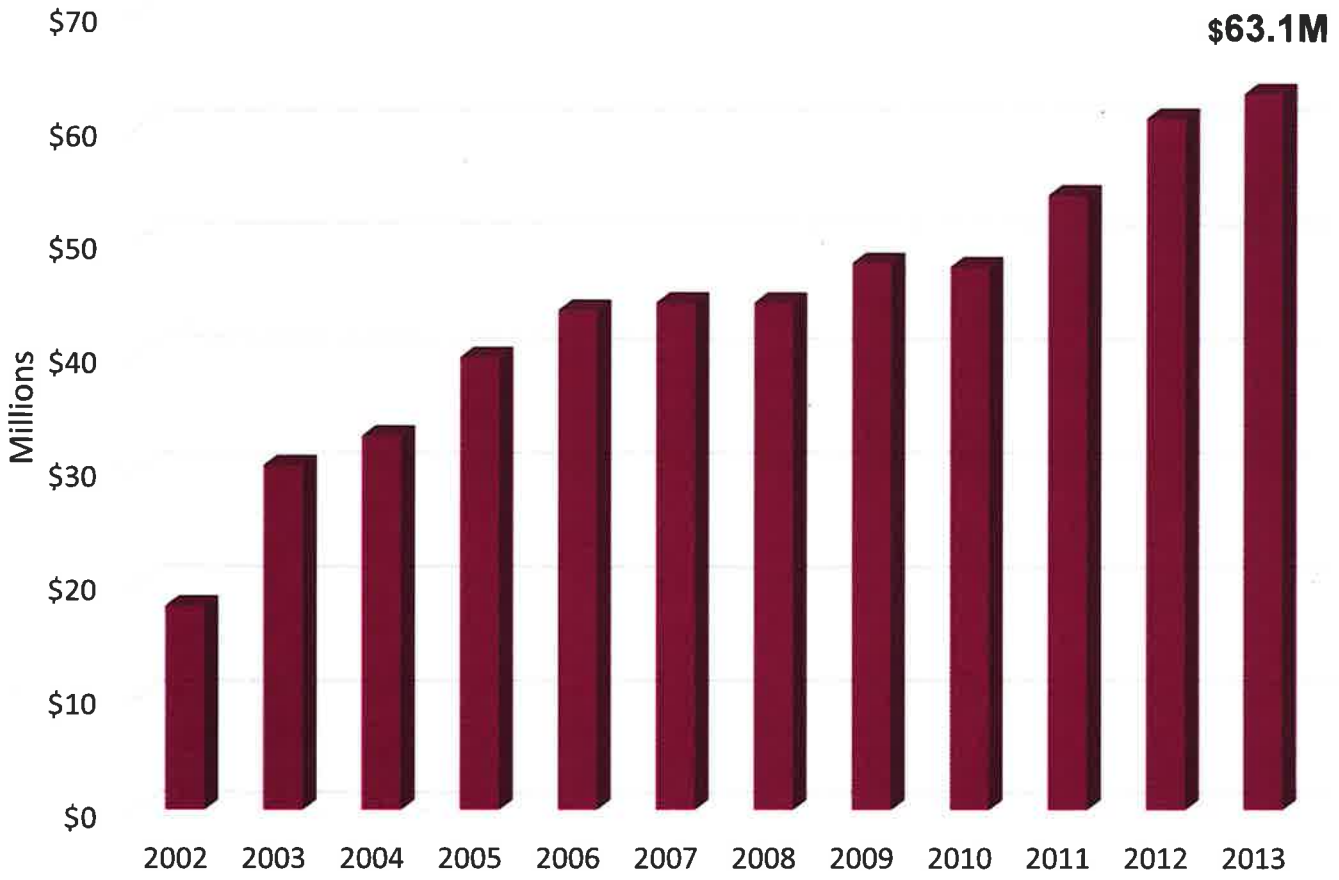


ASU Foundation for A NEW AMERICAN UNIVERSITY

ARIZONA STATE UNIVERSITY

successful fundraising

Amount to/for ASU



FY 2015 Incentive Progress Reports

Introduction

At the initial design of the performance incentive plan, a number of multi-year goals were identified. Each of these goals were somewhere between intractable and impossible, just the kind of goals that I think we should be working toward. Tab 4 reviews progress towards each of these goals as well as outlines some of the issues associated with goal attainment. Each of the goals are identified specifically with a progress report following.

In addition for each goal, I have outlined what it will take to hit the goal without making an assessment of whether or not we will. Just to reiterate, all of these goals are unbelievably challenging.

FY 2015 Incentive Progress Reports

Tab 1

FY 2015 Goal 1

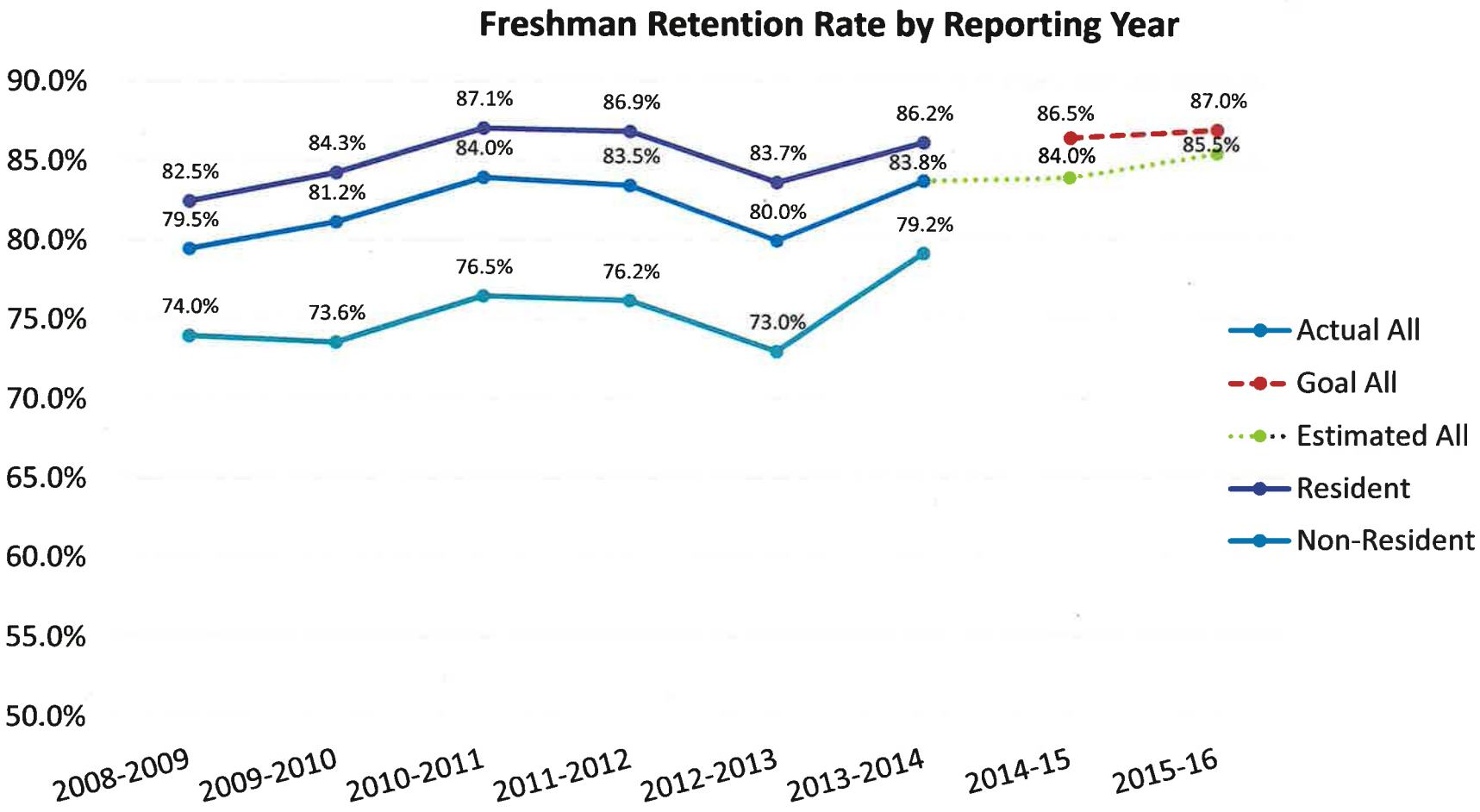
Enterprise Metrics Performance Incentives:

Freshman Retention Rate of 86%. Overachieving this goal would equal a Freshman Retention Rate of 86.5%.

Progress report attached

Achieving Freshman Retention Goal:

Arizona resident retention on track; non-resident retention closing the gap



Achieving Vision 2020 Metric:

90% Freshman Retention

Strategies to Realize Goals

Existing initiatives:
Mostly large scale initiatives, targeting as many students as possible

New initiatives:
Will individualize success, student by student

Number of students impacted:
Δ 360 freshman retained by 2014
Δ 760 freshman retained by 2020

New Initiatives: Cognitive

- Improve advising: provide training; equip with better software; and locate more conveniently (e.g., Advising Hubs and a Learning Center in the vacated Law Library on the Tempe campus)
- Expand academic support program for underprepared freshman into the sophomore year
- Strengthen advising for students transitioning to a different major
- Add career coaching (major ≠ career)
- Redesign challenging freshman courses into an adaptive learning format
- Construct multi-functional project courses that build skills and achieve course credit towards a degree in the chosen major

Expanding Existing Initiatives: Non-cognitive

- Conduct more intensive and intrusive monitoring based on better early warning indicators (e.g., attendance in ASU101, Academic Status Reports, resiliency measures)
- Conduct pre-orientation outreach on financial obligations and the effort required to succeed
- Intensify coaching for underprepared students and extend coaching into the second year to address "sophomore slump"
- Improve the case management system embedded in the First Year Success program
- Prepare first-year American Indian students for academic excellence through the S.P.I.R.I.T. Program

New Initiatives: Non-Cognitive

- Launch experiments to test the efficacy of five initiatives:
  - University-funded work-study program
  - Requiring a financial literacy course for students on financial aid or those with an indicator of financial stress
  - Assessment of resiliency, determination, and cultural issues
  - A social network style application linking students to others with similar goals and concerns (e.g., Get Set)
  - A team approach linking success coaches + peer mentors + professional mentors (volunteers)
- Improve engagement with commuter students (1-1 peer mentors, web-based tutoring, clubs and activities designed specifically for commuter students)
- Create a leadership program for underprepared students who maintain a certain GPA through the first year. Employ as mentors in years beyond the first year.
- Drop totally unengaged students and refund them tuition before the 21st day.
- Examine the characteristics of students that lead to success as they progress to graduation and then track them (possibly using Civis)

FY 2015 Incentive Progress Reports

Tab 2

FY 2015 Goal 2

Attaining research expenditures of $419 million for FY 2014; aspirational goal of $444.9 million.

Progress report

For FY 2014 (2013-2014 expenditures) – ASU expects to achieve $418 million. The ABOR target for FY 2014 was $415 million, hence exceeding the target.

Hiring additional high research faculty with existing research funding will assist in reaching the FY 2015 goal.

To reach the aspirational goal, the university must acquire soft funded centers.

ASU Knowledge Enterprise Development

ARIZONA STATE UNIVERSITY

June 2014

Research Enterprise Overview

Advancing Research, Entrepreneurship and Economic Development

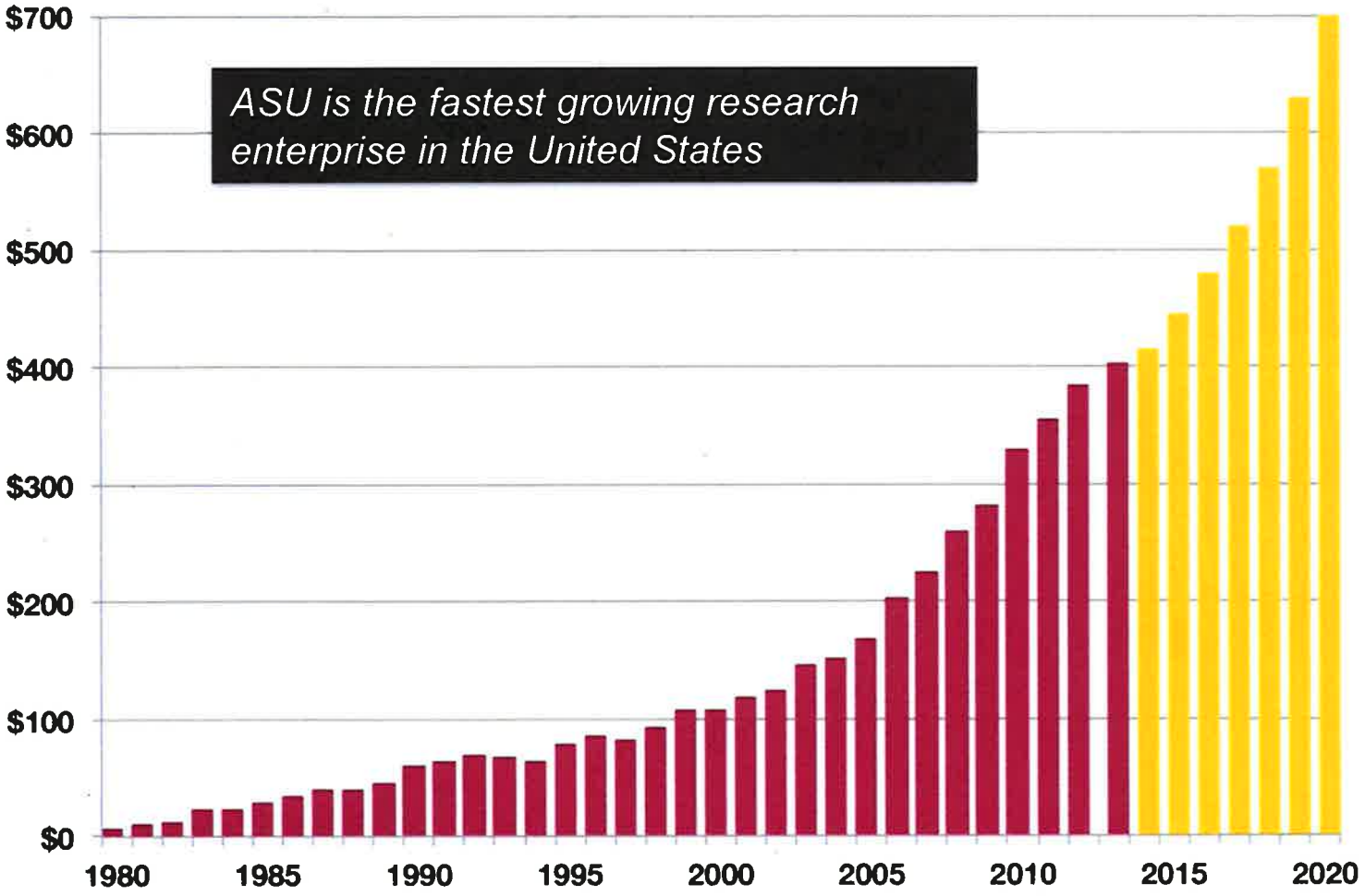
researchmatters.asu.edu

Achieving the ABOR Metrics

Expanding Research Activity

- Growth in tenure and tenure track faculty and externally-funded research faculty and staff
- Ongoing laboratory facility expansion
- Large scale inter-disciplinary research programs
- Social & Behavioral Science and Arts/Humanities expansion
- Acquisition of targeted “soft money” centers

ASU Research Growth: 1980-2020



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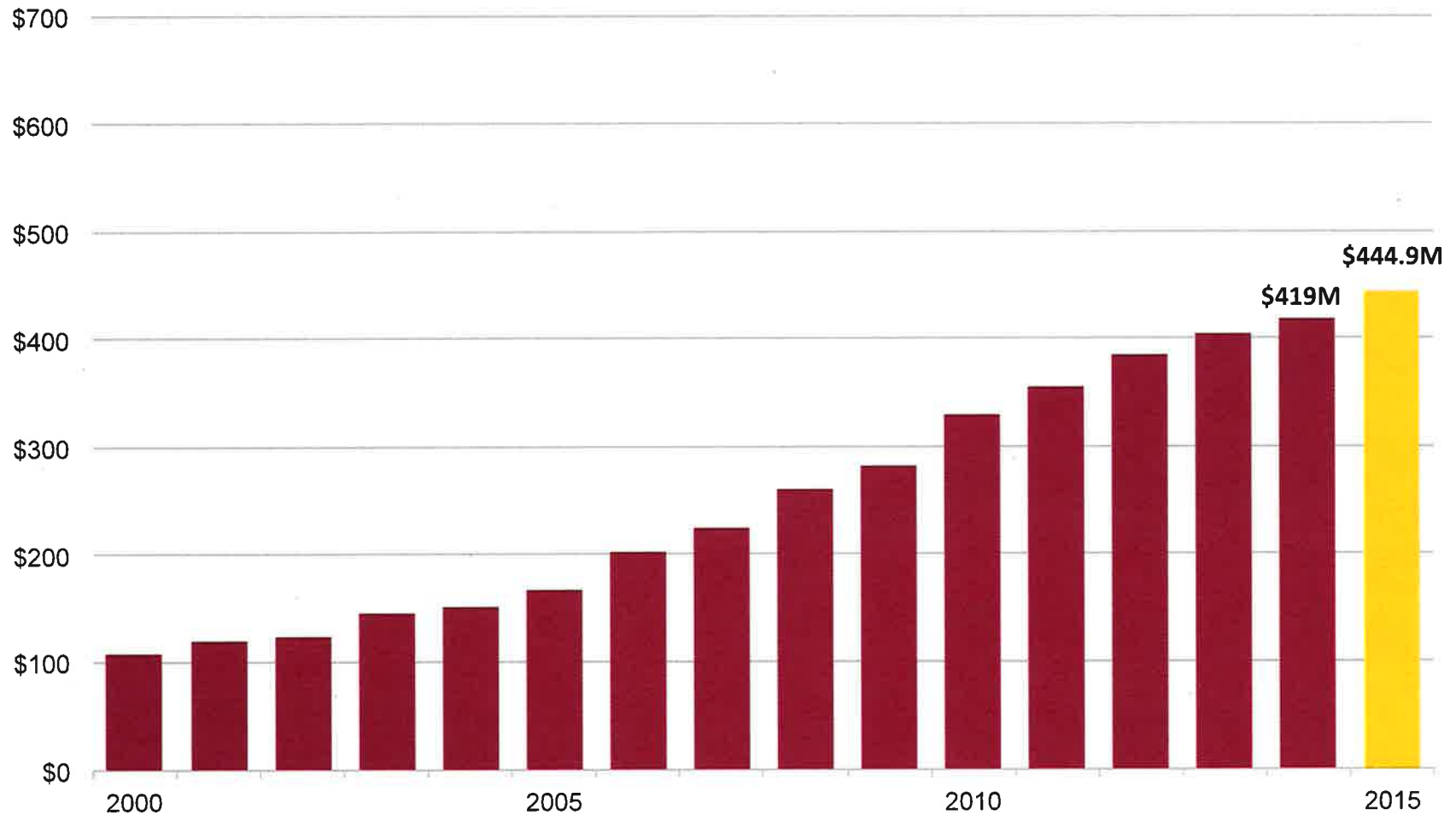
ASU Research Growth: 2000-2015



ASU is becoming increasingly sophisticated in securing large research grants

- ASU was recently awarded a $20M project from the (NGA) National Geospatial-Intelligence Agency on "Research Education and Development: Person Centric Information Landscapes and Location Based Analytics“
- ASU has submitted over $1.2B in proposals and another $200M in grants, contracts, and cooperative agreements for globally devoted projects to funding agencies such as USAID, the U.S. Department of State, and the World Bank
- ASU was chosen to lead 3 Engineering Research Center (ERC) Proposals and ASU is also partnering with Rice and Yale for the 4th. Only 18 were chosen to submit full proposals nationally
- ASU is enhancing strategic partnerships with large corporate partners to achieve at least $50-75M in annual research investments by 2020.

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ASU partners with ACA and GPEC to attract and expand economic development in Arizona

intel

GM

ZocDoc
Get well sooner.

Infusionsoft

Go Daddy.COM

StateFarm™

Top 20 National Rankings

Non-medical school expenditures

Rank (of 763)	Academic Institution	2012 Expenditures
1	Massachusetts Institute of Technology	824,130
2	University of California, Berkeley	730,348
3	Texas A&M University, College Station	693,421
4	Georgia Institute of Technology	688,905
5	University of Texas M. D. Anderson Cancer Center	685,814
6	University of Texas at Austin	621,538
7	Purdue University, West Lafayette	602,501
8	University of Illinois at Urbana-Champaign	583,754
9	University of Maryland, College Park	502,406
10	Virginia Polytechnic Institute and State University	454,417
11	Rutgers, The State University of New Jersey, New Brunswick	434,901
12	North Carolina State University	404,225
13	Scripps Research Institute	398,673
14	University of Colorado Boulder	392,004
15	***Arizona State University***	***385,959***
16	Colorado State University, Fort Collins	375,919
17	California Institute of Technology	365,243
18	University of Georgia	351,395
19	Washington State University	335,930
20	Rockefeller University	292,896

Non-science & Engineering expenditures

Rank (of 907)	Academic Institution	2012 Expenditures
1	University of Wisconsin-Madison	139,174
2	Brown University	130,214
3	Emory University	78,170
4	University of Michigan, Ann Arbor	75,031
5	Purdue University, West Lafayette	74,361
6	University of Texas at Austin, The	72,226
7	Massachusetts Institute of Technology	53,763
8	Stanford University	48,658
9	University of South Florida, Tampa	48,512
10	Washington State University	47,237
11	University of Florida	46,997
12	Ohio State University	46,431
13	Harvard University	45,459
14	University of Washington, Seattle	43,594
15	Columbia University in the City of New York	41,678
16	***Arizona State University***	***41,348***
17	Colorado State University, Fort Collins	40,583
18	University of Georgia	39,897
19	University of Alaska Fairbanks	38,767
20	Michigan State University	35,441

SOURCE: National Science Foundation

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Top 20 National Rankings

Social Science expenditures

Rank (of 907)	Academic Institution	2012 Expenditures
1	University of Michigan, Ann Arbor	153,279
2	University of Maryland, College Park	87,641
3	University of North Carolina at Chapel Hill	84,837
4	University of Wisconsin-Madison	51,313
5	Harvard University	47,182
6	University of California, Berkeley	43,292
7	Rutgers, The State University of New Jersey, New Brunswick	38,782
8	***Arizona State University***	***35,223***
9	Michigan State University	34,601
10	University of California, Los Angeles	33,654
11	Indiana University, Bloomington	30,759
12	Washington State University	30,674
13	Purdue University, West Lafayette	30,134
14	University of Minnesota, Twin Cities	29,866
15	George Washington University	29,100
16	Cornell University	28,813
17	Pennsylvania State University, University Park and Hershey Medical Center	27,422
18	University of California, Davis	25,931
19	Princeton University	24,701
20	University of Arizona	23,138

Humanities expenditures

Rank (of 907)	Academic Institution	2012 Expenditures
1	University of Michigan, Ann Arbor	21,315
2	Brown University	15,515
3	University of Wisconsin-Madison	14,350
4	Florida International University	13,272
5	Johns Hopkins University	10,621
6	University of California, Irvine	9,057
7	University of Notre Dame	8,810
8	University of Georgia	7,820
9	Columbia University in the City of New York	7,728
10	Princeton University	7,000
11	University of California, Los Angeles	6,090
12	University of Southern California	5,943
13	***Arizona State University***	***5,499***
14	University of Nebraska-Lincoln	4,968
15	Emory University	4,572
16	University of Pennsylvania	4,482
17	University of Virginia Charlottesville	4,462
18	George Mason University	4,354
19	SUNY Binghamton University	4,342
20	Iowa State University	4,328

ASU Knowledge Enterprise Development
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World Class Faculty

Professor Josh LaBaer

Chemistry and Biochemistry and the Biodesign Institute

The founder and former Director and his team from the Harvard Institute of Proteomics recruited to ASU in 2009

LaBaer's Nexus freezer weighing in at 6.5 tons with the capacity of 855,000 DNA samples.

Attracted over $60M in new funding awards

Featured in Nature, Science and other top publications

Created core facilities like DNASU a repository for plasmid clones, distributing over 200,000 plasmids

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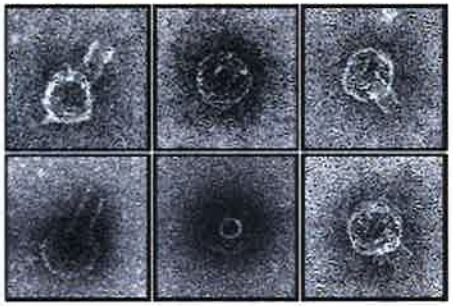
World Class Faculty

Professor Hao Yan

Chemistry and Biochemistry and the Biodesign Institute

One molecule bottle
70 nm long



2004 Assistant Professor
2008 Professor
2012 Glick Distinguished Professor
2013 Founding Director

109 Publications
Citation index, h=50
$17M Impact as Leader
$11M Assigned Research Expenditures
13 Ph.D.'s Graduated
Leads 3 Multi-institution efforts

Entrepreneurial Faculty

Prof. Cody Friesen

Fluidic Energy, founded in 2007 to create sustainable energy storage solutions, received two significant rounds of venture capital funding and several millions from Dept. of Energy

FLUIDICENERGY™

- **Fluidic has received two significant rounds of venture capital funding**
- **Over $100M in venture capital investment**
- **110 employees in Arizona and 270 worldwide**
- **3 ARPA-E (high risk – high reward) DOE investments totaling more than $12M**

ASU Arizona State University

ASU Arizona State University

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ASU ranks
4th in patents issued among U.S. universities without a medical school along with MIT, Caltech and Georgia Tech

ASU Arizona State University

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Top Producers of U.S. Fulbright Students by Type of Institution, 2013-14

Research Institutions	Number of Applicants	Number of Awards
Harvard University	134	39
University of Michigan at Ann Arbor	151	32
Arizona State University	**60**	**26**
Princeton University	82	26
Rutgers University	129	26
Northwestern University	106	23
University of Texas at Austin	70	22
Columbia University	107	21
Yale University	106	21
Cornell University	67	20
University of Chicago	98	20
Boston College	85	19
University of California at Berkley	62	18
Duke University	54	16
Ohio State University	72	16
Stanford University	75	16
University of Pennsylvania	81	16
University of Maryland at College Park	41	15
University of Rochester	32	15
College of William & Mary	53	14
University of North Carolina at Chapel Hill	91	14
Georgetown University	50	13
University of Colorado at Boulder	42	13
University of Pittsburgh	51	13
Fordham University	44	12
University of California at San Diego	25	12
University of Southern California	81	12
Washington University in St. Louis	43	12

THE CHRONICLE of Higher Education

November 1, 2013

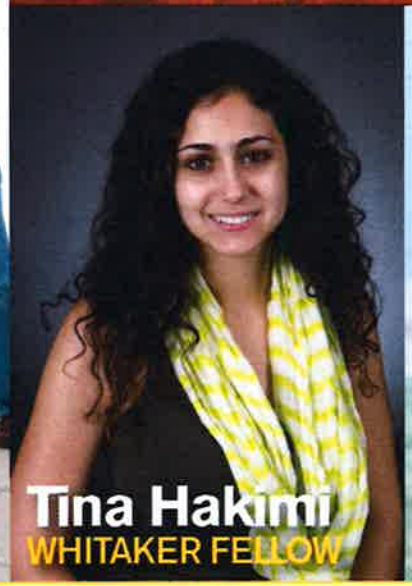
Entrepreneurial Students

FlashFood
FIRST-PLACE FINISH
MICROSOFT IMAGINE CUP

33 Buckets
TOP-FIVE FINISH, DELL SOCIAL INNOVATION CHALLENGE

Madeline Grade
MARSHALL SCHOLAR

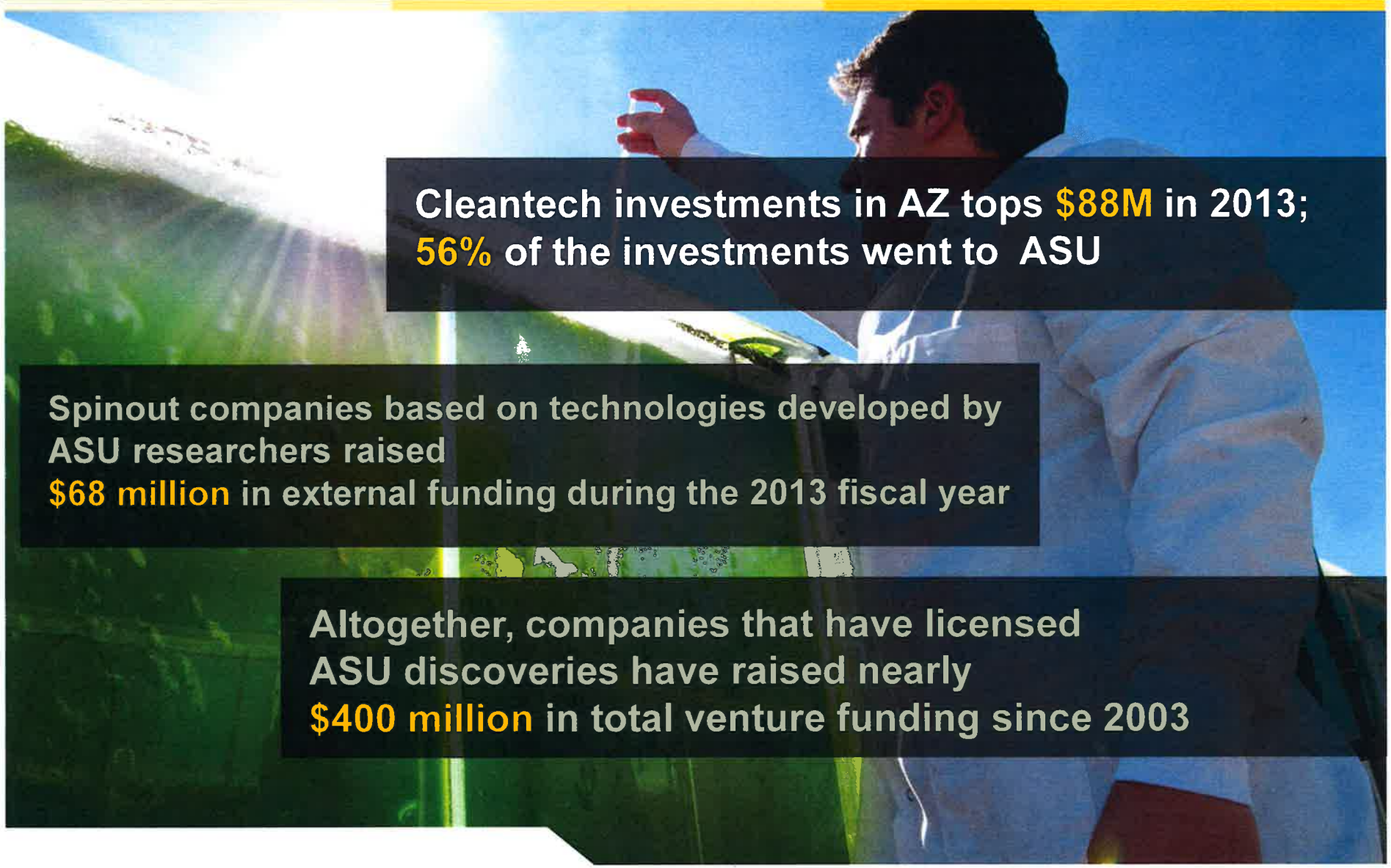
G3 Box
COLLEGE ENTREPRENEUR OF THE YEAR



Tina Hakimi
WHITAKER FELLOW

Maddie Sands
MARSHALL SCHOLAR

ASU Arizona State University

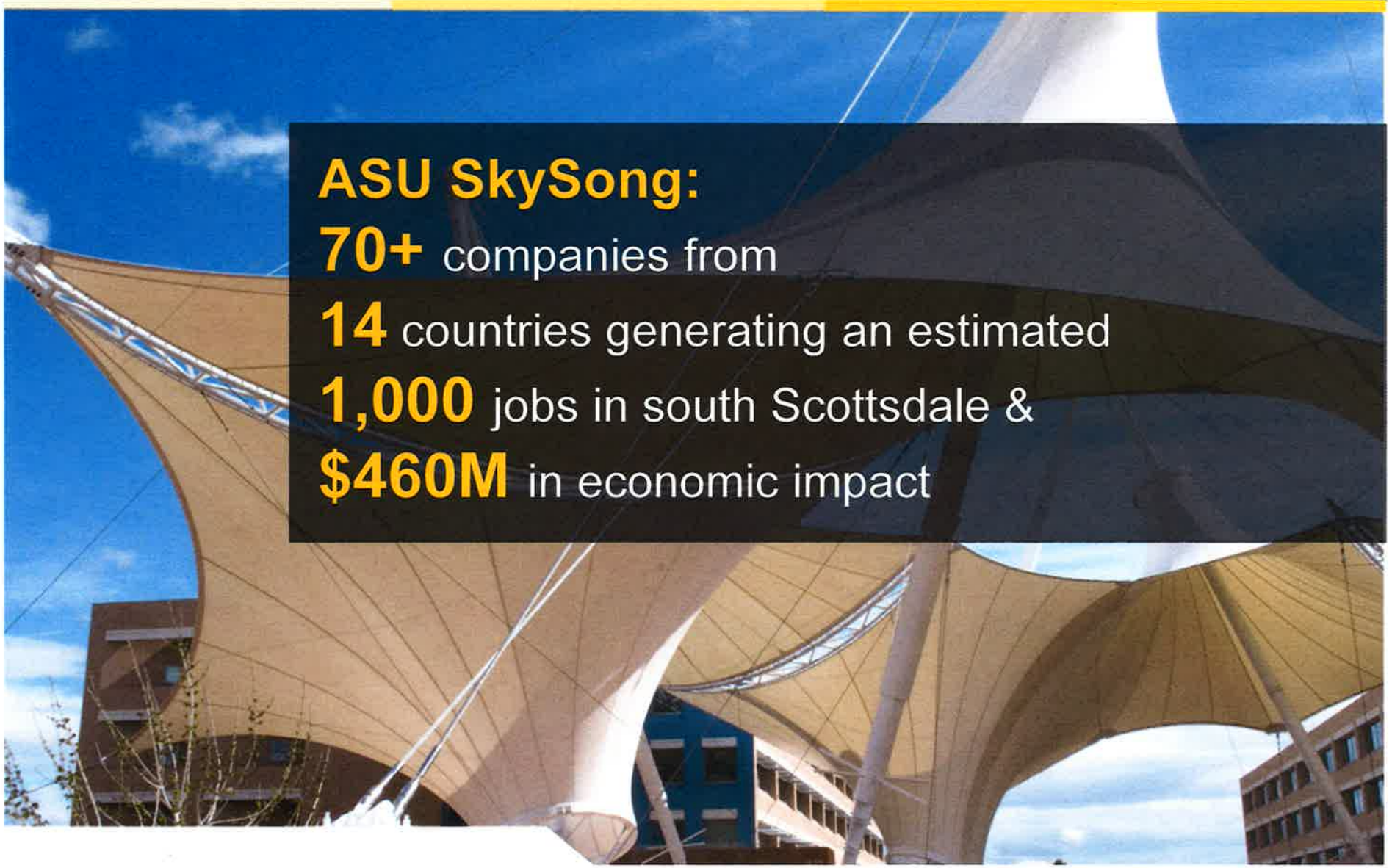


Cleantech investments in AZ tops $88M in 2013;
56% of the investments went to ASU

Spinout companies based on technologies developed by ASU researchers raised
$68 million in external funding during the 2013 fiscal year

Altogether, companies that have licensed ASU discoveries have raised nearly
$400 million in total venture funding since 2003

ASU Arizona State University



Entrepreneurship Activities in the Community

Alexandria Co-Working Network
supports entrepreneurs, innovators, inventors and small business in our communities. Currently in the Scottsdale, Phoenix, coming soon in Goodyear and beyond

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Advancing Research Playbook

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Core Projects

Objectives

1. Increase faculty participation and success in research proposals/awards/expenditures
2. Expand proposal writing resources

3. Develop stronger bi-directional connectivity between OKED and Units
4. Increase pool and effectiveness of emerging leaders to develop multi-PI, multi-institutional proposals
5. Groom/encourage larger number of research visionaries

6. Develop incentive system for successful investigators

Objective 1. Increase faculty participation & success in research proposals/awards/expenditures

1.1 **Conduct unit level analyses and action strategies with chairs/directors to identify…**

a) Highly productive/successful faculty – help to do more and provide leadership training to engage others

b) Faculty who submit many proposals but achieve a low hit rate – develop a system of improvement and mentorship

c) Faculty who have submitted proposals but are not currently active
- engage to identify and address issues
- encourage and connect with opportunities

d) Research active faculty who are not submitting proposals
- engage to identify and address issues
- encourage and connect with opportunities

1.2 **Conduct capacity analyses, identify strengths, gap analyses, opportunity analyses towards influencing faculty hiring**

Objective 2. Expand proposal writing resources

2.1 Expand resource base for critiquing and building research proposals

2.2 Mentorship and writing services

2.3 Greater use of red teams

2.4 Increase pool of reviewers and grantsmanship mentors

- Investigate existing models (at other research universities)
- Broaden sources, e.g., retired faculty, scientists, researchers
- Leverage existing pool of non-TT faculty associates

Objective 3. Develop and reinforce bi-directional connectivity between OKED and Units

3.1 Capacity analyses (system of development and efficient updating)

3.2 Engage with Deans in faculty recruiting/hiring and support coordination between units/colleges

3.3 Opportunity identification and development

3.4 All-levels culture of proactive engagement with sponsors

Objective 4. Increase pool and effectiveness of emerging leaders to develop multi-PI, multi-institutional proposals

4.1 Develop breadth and depth of bench

4.2 Broaden leadership training services

4.3 Increase seed investments

- Encourage idea and program development
- Proactively seek out faculty with opportunities

Objective 5. Groom more research visionaries

5.1 Broaden participation and actively engage in strategic planning exercises

5.2 Increasing solicit and invest our own faculty participation

5.3 Recruit research faculty to lead efforts in collaboration with T/TT faculty

Objective 6. Develop incentive system for successful investigators

6.1 Increase incentives for existing faculty to increase research activity

a. Information campaign on existing incentive programs for highly productive faculty
   - Work with Provost's office towards comprehensive awards system consistent with excellent teaching and service
   - Work with unit chairs/directors to identify candidates

b. Explore other incentive mechanisms
   - Study incentives used by other high ranking universities
   - Examine issues of awards in proportion to funding/productivity

6.2 Expand research faculty program

a. Develop mechanisms for awarding engagement of larger communities of ASU faculty/researchers in funded projects

b. Address concerns of longer term employment security and cultural acceptance

ASU Knowledge Enterprise Development

ARIZONA STATE UNIVERSITY

Large Projects

Objectives

O1 – Task Force: Stand up and maintain task forces (at the University level) around national / global challenge themes to support proactive opportunity development

- **O1 Impact: $25M**

O2 – FFRDC: Acquire $25M/year funding from FFRDC/UARC alliances and/or other relationships

- **O2 Impact: $25M**

O3 – Investments: Refine strategic investment framework

- **O3 Impact:**

O4 – Institutes and Initiatives: Implement strategic planning through Institutes and Initiatives with regular benchmarking against goals

- **O4 Impact:**

O5 – Research Staff: Develop and implement clear career paths for research faculty/scientists/staff

- **O5 Impact: $20M (@ $200K / staff, 100 staff)**

O6 – Sponsors: Develop and maintain focused sponsor relationships

- **O6 Impact:**

O7 – Transdisciplinary: Develop and implement incentive structure for transdisciplinary research

- **O7 Impact:**

Objective 1. Stand up and maintain task forces (at the University level) around national / global challenge themes to support proactive opportunity development

1.1 Identify themes

a) Review federal budget, NSF reports, Quadranneal Defense Review, etc.

b) Develop and maintain close relationships with funding agencies

c) Participate in agency strategic planning exercises (where possible)

d) Natural progression from Task Force to Initiative to Institute (some maybe be within a current Institute / Initiative)

1.2 Identify an ASU lead for each task force

a) The lead must drive the task force and take significant ownership
   - Solicit task force leads candidates from Institute and Initiative Directors, Deans, Unit Directors
   - Supports developing leaders and prevents burnout of current leadership

b) Incentivize the lead with
   - Growth opportunities
   - Investment to build capacity (where needed)

1.3 Develop "the ASU" story for each of the areas

a) Must include partnerships

1.4 Engage external audiences (funding agencies)

Objective 2. Acquire $25M / year of funding from FFRDC / UARC alliances and/or other relationships

2.1 Develop partnerships with existing National Laboratory (to establish ASU as a key player)

a) Existing: Sandia, National Renewable Energy, Lawrence Berkeley

b) Emerging: Oak Ridge, Argonne, Pacific Northwest, MIT Lincoln

c) Develop partnerships with other free-standing research entities such as the Santa Fe Institute

2.2 Identify opportunities for satellites and re-competes (to augment existing capacity)

a) Review FFRDC contracting cycles

b) Identify targets for engagement

c) Develop and maintain strong relationship to position ASU

2.3 Grow ASURE

a) Develop an engagement model for ASURE – potential option: expert consulting

b) Staff ASURE to support responsiveness to opportunistic engagements

2.4 Create UARC or UARC-like entity (around Institute, Initiative, or Task Force area)

Objective 3. Refine strategic investments framework

3.1 Energize well performing Centers and Faculty to take them to the "Next Level"

a) Leverage analysis and follow up with both Unit Directors and Center / Faculty leads

b) Reward faculty with postdoc funds based on proposal rate
   - Define a threshold, threshold may vary based on unit

3.2 Develop a process for OKED sponsored calls for proposals

a) Calls driven by emerging areas (Task Forces)

3.3 Request and support development of transition plans (to externally funded) for all funding allocations

3.4 Leverage Institute and Initiative strategic plan updates as opportunities for investment

3.5 Engage Deans and Directors in rolling and periodic funding requests

3.6 Consistently communicate strategic investments goals and expectations to investment recepients

Objective 4. Implement strategic planning through Institutes and Initiatives with regular benchmarking against goals

4.1 Implement a regular (quarterly or biannual) review cycle

a) Update strategic plan with progress for each review
   - (Relatively) Static elements of the plan: Vision, Trends/Challenges/Opportunities, Lay of the Land, Goals (Research, Mission, Funding, …)
   - Updated elements: Status (progress towards goals), Approach

b) Leverage reviews for strategic investment opportunities

4.2 Biodesign - $100M/year

4.3 Global Institute of Sustainability - $100M/year

4.4 Security and Defense Systems Initiative - $25M/year (was $50M)

4.5 Complex Adaptive Systems Initiative

4.6 Macrotechnology Works - $20M/year

4.7 Space Initiative - $5-10M/year

4.8 Decision Theater

4.9 Institute for Social Science Research

4.10 Institute for Humanities Research

Objective 5. Develop and implement clear career paths for research faculty/scientists/staff

5.1 Survey existing research faculty (baseline)

a) Identify distribution by discipline, salary, experience, etc

b) Identify current existing non-tenure track Pis

5.2 Identify research faculty with leadership potential (priority)

5.3 Identify research faculty needs based on capacity gaps in context of Task Force / II areas

5.4 Recruit and hire research faculty based on 5.3

5.5 Develop a University-wide separate track for research faculty / leaders

Objective 6. Develop and maintain focused sponsor / funding agency relationships

5.1 Identify under-exercised funding opportunities

5.2 Identify an Engagement Officer (EO) for each *targeted* engagement

a) EO is responsible for:
- Setting goals
- Refining goals
- Coordinating across the University
- Maintaining regular contact with the funding agency / proactive engagement
- Understanding the processes, culture, and engagement opportunities at assigned agency

b) Request nominations for EOs from units
- Position should be considered a "service" and contribute to annual review
- Position should be a rotating position – for example 2 years, with formal time allocation (10-20% + travel)
- Candidates should have leadership potential and broad research interests / curiosity
- Potential option: on-site fellowship
- OKED will select from the nominee pool and work closely with each EO to set targeted goals and support / track progress

5.3 Targeted focus areas

a) DARPA / IARPA
b) Broader Department of Defense (by service) / Intelligence Community (by agency)
c) Department of Energy / National Oceanic and Atmospheric Administration
d) Industry
e) Global

Objective 7. Develop and implement incentive structure for transdisciplinary research

7.1 Survey existing transdisciplinary leaders

a) Identify a set of proven strategies

7.2 Survey PIs with transdisciplinary potential

a) Identify a set of setbacks – why do people not engage?

7.3 Implement reward structure for submitting successful transdisciplinary proposal

a) OKED Fellow Program

b) Postdoc / research scientist support

c) Teaching buyout

7.4 Engage Chairs and Directors on importance of transdisciplinary research for both faculty development and mission of scientific advancement

FY 2015 Incentive Progress Reports

Tab 3

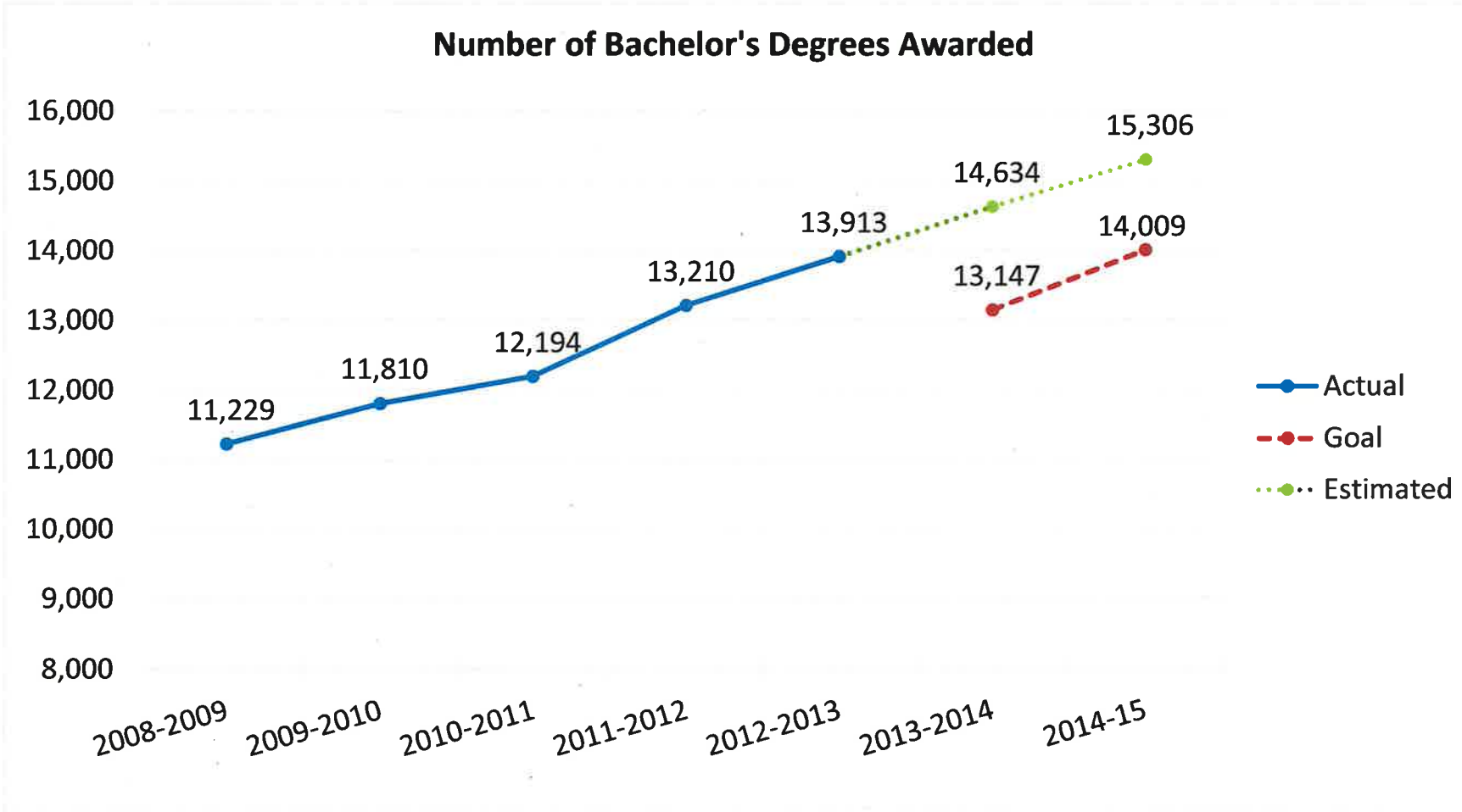
FY 2015 Goal 3

Enterprise Metric goal in Bachelor's Degrees awarded of 14,900.

Progress report attached.

Achieving Degree Goal:

On track to exceed our goals for 2013-14 and 2014-15



Achieving Vision 2020 Metric:

25,000 Degrees Awarded

Strategies to Realize Goals

- Continued improvements in retention and graduation rates
- Improved transfer pathways with community college partners
- New Military and Veterans transfer initiatives
- Clarifying and promoting concurrent degrees
- Data analytics in partnership with Civis

FY 2015 Incentive Progress Reports

Tab 4

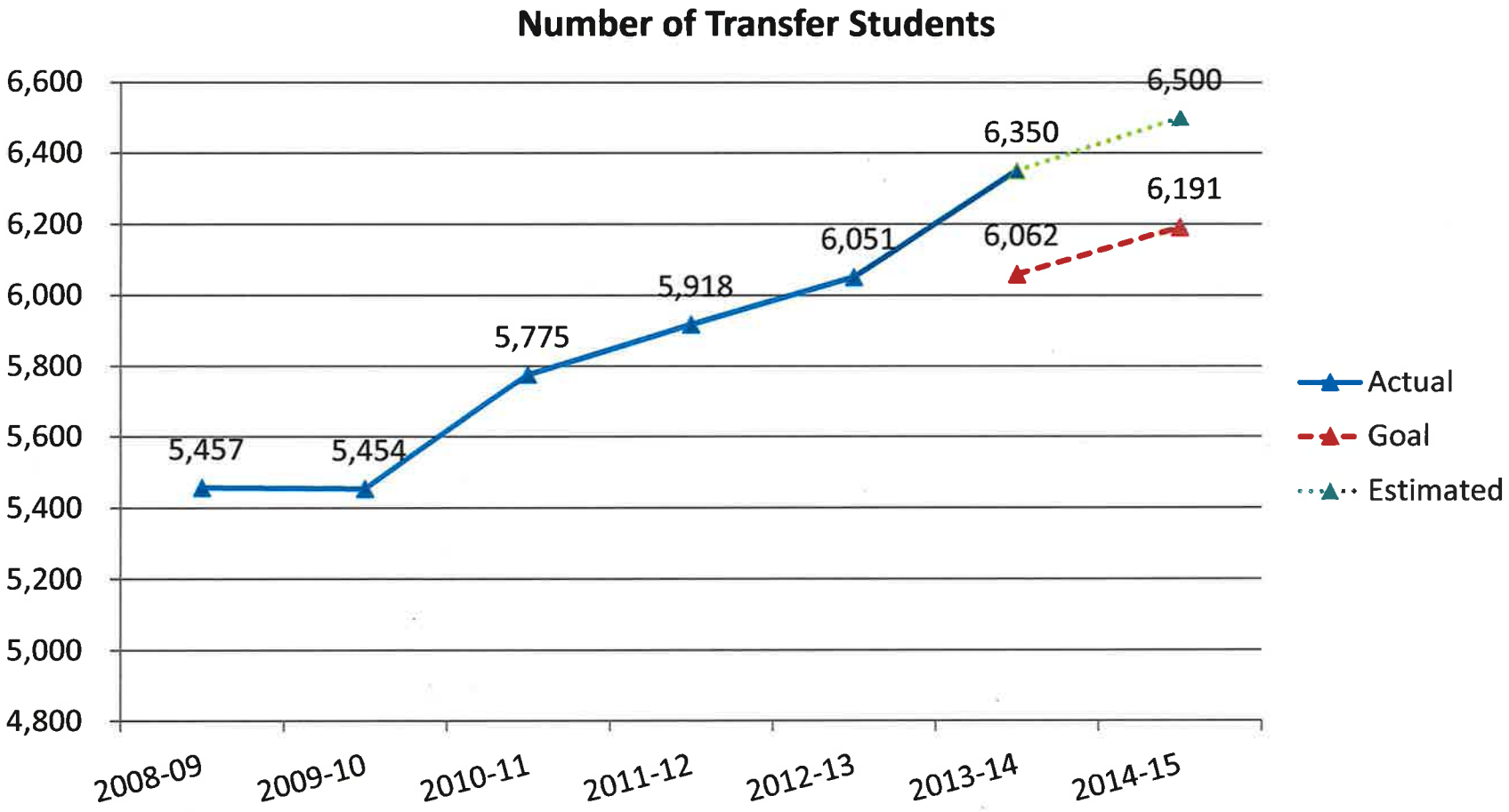
FY 2015 Goal 4

Achieving Enterprise Metric goal of 6,000 community college transfer students enrolling.

Progress report attached

Achieving Arizona Community College Transfer Goal:

On track to exceed our goal for 2014-15



Achieving Vision 2020 Metric:

6,629 AZCC Transfer Students Enrolled at ASU

Strategies to Realize Goals

- Provide eAdvisor access to Maricopa Community College students who express interest in transferring to ASU
- Develop reverse transfer of credit program with Maricopa Community College District. Yavapai and Central Arizona College would follow
- Assess if a stronger need-based financial aid program can increase community college enrollment
- Identify best approach for reenergizing community college enrollment for students interested in business programs at ASU at the West Campus
- Expand working relationships with the veteran affairs staff at the various Maricopa community college campuses

FY 2015 Incentive Progress Reports

Tab 5

FY 2015 Goal 5

Academic Quality Measure that is based upon senior surveys.

Progress report

In the ABOR Academic Affairs committee, the three universities pointed out that these measures are not very useful given the relative high scores and predicting future responses is very difficult. So, after some discussion, all three universities agreed that the increments for the scale would be .01 annually and for satisfaction measures, the increases would be .1 (see attached chart).

Arizona State University
Student Satisfaction Goals
Measure of Teaching Effectiveness and Student Learning

Measure	2012-2013 Mean (out of 4)	2013-14 Goal	2015 Goal	2016 Goal	2017 Goal	2018 Goal	2019 Goal	2020 Goal
Writing clearly and effectively	3.06	3.07	3.08	3.09	3.10	3.12	3.14	3.16
Thinking critically and analytically	3.36	3.37	3.38	3.39	3.40	3.42	3.44	3.46
Analyzing quantitative problems	3.15	3.16	3.17	3.18	3.19	3.21	3.23	3.25
Overall Average	3.19	3.20	3.21	3.22	3.23	3.25	3.27	3.29
Measure	**2012-2013 Mean (out of 4)**	**2013-14 Goal**	**2015 Goal**	**2016 Goal**	**2017 Goal**	**2018 Goal**	**2019 Goal**	**2020 Goal**
Overall educational experience at this institution	3.22	3.23	3.24	3.25	3.26	3.28	3.30	3.32
Anticipated number of student respondents	10,519	10,819	11,119	11,419	11,719	12,019	12,319	12,619

Arizona State University
Student Satisfaction Goals
Measure of Teaching Effectiveness and Student Learning

Measure	2012-2013 Very Much/Quite a bit	2013-14 Goal	2015 Goal	2016 Goal	2017 Goal	2018 Goal	2019 Goal	2020 Goal
Writing clearly and effectively	74%	74.88%	75.75%	76.63%	77.50%	78.38%	79.25%	80%
Very much	36%	36.73%	37.45%	38.18%	38.90%	39.68%	40.45%	41%
Quite a bit	38%	38.15%	38.30%	38.45%	38.60%	38.70%	38.80%	39%
Thinking critically and analytically	87%	87.25%	87.50%	87.75%	88%	88.25%	88.50%	90%
Very much	51%	51.20%	51.30%	51.50%	51.70%	51.90%	52.10%	53.55%
Quite a bit	36%	36.05%	36.20%	36.25%	36.30%	36.35%	36.40%	36.45%
Analyzing quantitative problems	78%	78.25%	78.50%	79%	80%	81%	82%	83%
Very much	41%	41.15%	41.30%	41.60%	42.4%	43.20%	44.10%	45%
Quite a bit	37%	37.10%	37.20%	37.40%	37.60%	37.80%	37.90%	38%
Overall Average	80%	80.63%	81.25%	81.88%	82.50%	83.13%	83.75%	84%
Measure	**2012-2013 (Excellent/Good)**	**2013-14 Goal**	**2015 Goal**	**2016 Goal**	**2017 Goal**	**2018 Goal**	**2019 Goal**	**2020 Goal**
Overall educational experience at this institution	87%	87.50%	88%	89%	90%	91%	92%	93%
Excellent	38%	38.35%	38.80%	39.65%	40.50%	40.75%	41.25%	42%
Very good	49%	49.15%	49.20%	49.35%	49.50%	50.25%	50.75%	51%
Anticipated number of student respondents	10,519 (out of 14,765 who applied for graduation)	10,819	11,119	11,419	11,719	12,019	12,319	12,619

Data collected from the ASU Graduating Senior Report Card

Prepared May 8, 2014

FY 2015 Incentive Progress Reports

Tab 6

FY 2015 Goal 6

University Initiative Performance Incentives:

Development and implementation of a comprehensive strategy concerning ASU's health solutions education model. The strategy should include a detailed description of the innovative approaches necessary for ASU to serve as a knowledge exchange and catalyst for collaboration and support for health-related academic programs, transdisciplinary research initiatives, and strategic partnerships. The strategy must provide specific goals and measurable outcomes by which the Board may evaluate the strategy and the importance of any strategic partnerships associated with the strategy.

Progress report attached

Comprehensive Strategy for College of Health Solutions

Purpose: The goal of the College of Health Solutions (CHS) is to promote better health, at lower costs, for more people. The College plans to realize this goal by working with others at ASU to train and develop the health work force of the future.

Background: Occupations and industries related to health care are projected to add the most new jobs (5 million) to the U.S. economy through 2020, according to the U.S. Bureau of Labor Statistics. Of the 30 occupations projected to have the largest percentage increase, 14 are related to health care. With skyrocketing health care costs, more people entering the system, a rise in chronic conditions, and an aging population, we need to change the paradigm to promote health and deliver health care in new ways. ASU is taking a bold stance in how it prepares the next generation of health professionals. The College of Health Solutions equips students to influence healthier lifestyle choices and develop creative interventions to improve the health of people and populations. Students are prepared to work interprofessionally, think critically to solve problems, and remain flexible as the health care industry changes.

Finance and the Science of Health Care Delivery: Despite health care accounting for only 10% of the health of a population, it consumes 95% of the dollars spent in this arena, including the estimated $800 billion that are wasted in the system each year. The application of the Science of Health Care Delivery, within the College of Health Solutions, has the potential to prevent waste more effectively and to deliver high value, appropriate care to enhance health and lower costs. ASU is ideally situated to lead the nation in this area. The absence of an embedded academic medical center at the university frees us from preexisting models of care and the investment in expensive facilities. Furthermore, the interdisciplinary model at ASU lends itself to the growing emphasis on interprofessionalism in health delivery which is also expected to lower costs by having individuals functioning at their highest level of training and licensure.

Health vs Health Care: The focus on health, rather than only health care, has the potential to reduce the need for health care overall. It is estimated that 60–70% of expenditures now could be prevented with appropriate lifestyle modification. The College's already robust and continuing to thrive School of Nutrition and Health Promotion underscores ASU's preexisting commitment to this area. CHS' strength and close ties with Nursing and Health Innovation, Biological and Health Systems Engineering, Business, Law and others help ensure the broad understanding of this rapidly evolving landscape. As the focus moves to delivery of care in homes, schools, businesses and communities, CHS' evolving partnership with the Teacher's College and Public Programs will facilitate this process. Part of the change we foresee will require even greater emphasis on data management to support decisions, which our Department of Biomedical Informatics is ideally suited to do. Risk stratification and early disease detection are important for us, as work is done by biologists in the Center for Metabolic and Vascular Biology and the Biodesign Institute, and more broadly in the School of Life Sciences.

Clinical Partnerships: This interplay of various health and health care activities, both within the university and with clinical partners throughout the Valley, is one of the unique features that the College of Health Solutions brings to the university, particularly as it seeks to align ASU's educational services and to meet our overarching health goals. In conjunction with the College of Nursing & Health Innovation and the School of Biological & Health Systems Engineering, we have formed an advisory board with representation from a wide array of major health organizations, public health entities, federally qualified associations, and county, city, and state delegates with an interest in health to provide invaluable insight from an industry perspective.

Components of a Health System: In order to develop a health system to deliver the goals of better health, at lower costs for more people, the following components need to be considered: a) the role of the home, school, work place, and community as places to promote health; b) hospitals, clinics, and homes as places to provide health care; c) the importance of reinforcing behavior change to healthy lifestyles; d) the value of information management to inform decisions; e) predictors of health and disease; f) the diversity of the people affected by the system along the continuum from patient to populations; g) the variety of providers working within the system; h) finances/economics of such a system; and h) health policies governing the system. To reach this goal of better health, at lower costs for more people, it will be critical to align activities and resources with determinants of health which are: lifestyle (50% - diet, exercise, stress, and behaviors), environment (20%), biology (20%), and health care delivery (10%).

School for the Science of Health Care Delivery: As CHS continues to evolve and grow, it will build on existing strengths which include the novel School for the Science of Health Care Delivery, one of the first in the nation. As the school begins its second year, it will welcome students into several new degree programs (BS Science of Health Care Delivery, BS Public Health, and University of Minnesota's Master of Public Health program) which will better prepare them to face the critical needs of the health work force moving forward. This program is already being marketed in the region and with a new director, the reach will become national. Already, the concepts of this program are being modeled in the nationally known Mayo Medical School. The new joint Masters in Public Health with the University of Minnesota will help address the pressing need for public health workers in the state and nation; and the newly launched undergraduate program in public health will further support this effort. Other, critical issues facing society that CHS is considering how to address include obesity and aging (healthy).

Biomedical Informatics: Additionally, CHS has embraced another emerging focal point in health – Biomedical Informatics and health information technologies. This is the most rapidly expanding area in health and something ASU has been interested in since the conceptualization of the UA College of Medicine Phoenix. At that time, ASU launched a Department of Biomedical Informatics (BMI) with world renowned faculty. This particular department has extensive growth potential looking ahead. Beginning in fall 2014, it will begin offering an undergraduate

degree to interested students with the goal to attract them into the field earlier in their educational career paths. The co-location of BMI at Mayo Clinic and shared faculty between the two institutions organically provides a unique and unparalleled learning opportunity for students and potential for research collaborations for faculty. The director of the department, George Runger, is also an active member of the Ira A. Fulton Schools of Engineering and is already leveraging collaborative opportunities between the two units. The new International School of Biomedical Diagnostics, in conjunction with Dublin City University, is already leveraging the ASU strengths in Biomedical Diagnostics in its curriculum.

Speech & Hearing Science: The department of Speech & Hearing Science is being actively reviewed by the faculty to reconceptualize its structure around three major areas: communication health and wellness, communication sciences, and communication technologies. This will allow the group to strategically advance toward a "School of Human Communication Sciences and Technology" and better leverage their already robust strengths.

Mayo Clinic Partnership: Both the School for the Science of Health Care Delivery and the Department of Biomedical Informatics are already integrated with and will continue to expand their connection to Mayo Clinic even more so in the future. Components of the Science of Health Care Delivery degree will be incorporated into the Mayo Medical School curriculum when the branch campus opens in Scottsdale in 2017. In addition to co-locating at Mayo Clinic, BMI is also in the process of conducting searches for multiple joint faculty hires which will be completed in the next few months. The connection between the school, department and Mayo Clinic continues to be a source of endless opportunity and one that CHS intends to expand into the future.

College of Health Solutions into the Future:

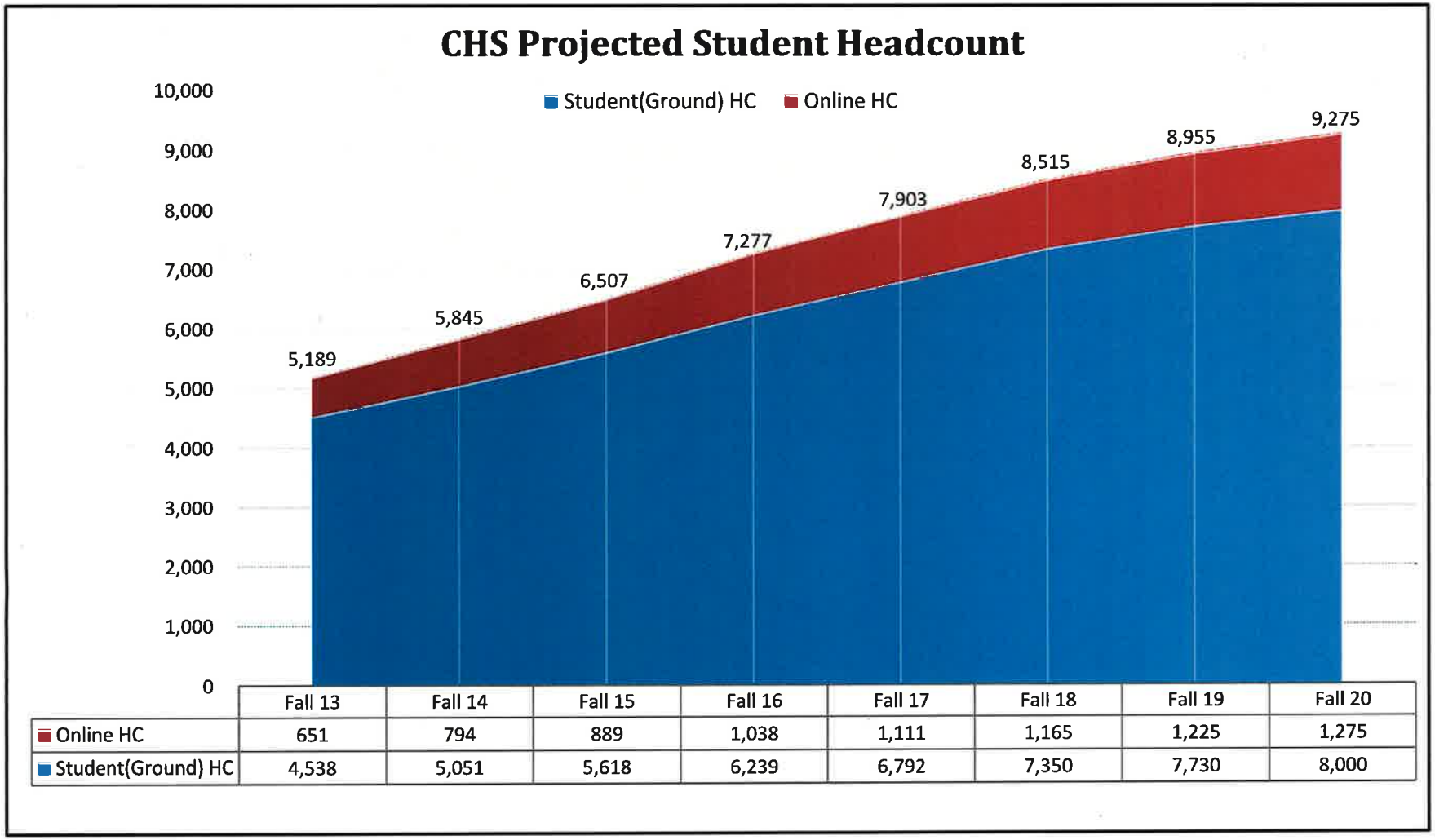
Enrollment: The College of Health Solutions, introduced in May 2012 and includes previously strong academic programs such as Nutrition, Exercise & Wellness, Kinesiology, and Speech & Hearing Science, has had some early wins. Enrollment grew 33% fall 2013 over fall 2012. The college has graduated its first School for the Science of Health Care Delivery cohort of 35 students, with near perfect retention. It launched 11 new undergraduate and graduate degree programs (BS Medical Studies, BS Science of Health Care Delivery, BS Public Health, BS Biomedical Informatics, BS Health Education and Health Promotion, BS Nutrition with concentration in Food and

Tourism Management, MS Clinical Exercise Physiology, MS Obesity Prevention and Management, MS Exercise and Wellness with concentration in Health Aging, MPH hosted by ASU and offered by the University of Minnesota, and MS Biomedical Diagnostics in partnership with Dublin City University) for fall 2014 to meet changing state and national health care workforce needs. The projected enrollment for CHS is shown in *Figure 1* and details are available in the second column of *Appendix A*.

Organization: CHS has developed a newly proposed organizational structure that will help better portray and articulate the activities of the College. Additionally, this new structure will facilitate improved visibility and an enhanced understanding of the College to its public audience (see *Appendix B*). This will also help us to be more intentional as we recruit the needed additional faculty to support our anticipated growth (see *Figure 2*).

Research: In order to demonstration American leadership in academic excellence and establish ASU as a global center for interdisciplinary research, discovery and development, CHS must continue to build organizational capability and capacity to support aggressive research targets and increase development funding; a clearer depiction of our organization and offerings will help further attract interest in the College. Making strategic faculty hires, leveraging existing faculty more effectively, lowering barriers of entry for pursuing grants, and providing the right incentives, will help fully realize the college's strengths in areas including behavior change, community embeddedness, big data management, obesity, rehabilitation, interprofessional education, healthy aging, and others. Further cultivating relationships/stewardship with donor prospects and community partners will enable the college to build a pipeline for sustainable growth and enhance the student experience through scholarships and other means. The expectation for research growth overall is shown in *Figure 3* and details are provided in column 4 of *Appendix A*.

Figure 1



	Fall 13	Fall 14	Fall 15	Fall 16	Fall 17	Fall 18	Fall 19	Fall 20
Online HC	651	794	889	1,038	1,111	1,165	1,225	1,275
Student(Ground) HC	4,538	5,051	5,618	6,239	6,792	7,350	7,730	8,000

Appendix A

College of Health Solutions, 2013 - 2020	Students 2013 – 2020	Faculty 2013 - 2020	Research $$ 2013 - 2020
College of Health Solutions – Goals: ▪ Re-conceptualize the design and delivery of health-related programs in higher education ▪ Grow and expand use-inspired research ▪ Identify academic, industry, community and global partnerships to advance research opportunities	**Increase student enrollment:** On-ground: 4,538 → 8,000 Online: 651 → 1,275 **Increase student retention and graduation:** Retention: 79% → 90% Graduation: 52% → 90% **Space:** Develop modular space to facilitate class sizes ranging from 50-300, reducing the number of sections delivered each semester	Establish faculty **mentor groups** across the College to enhance instructional delivery and facilitate funding success. Increased Revenue: Research $ 11,790,000 Enrollment $ 12,680,000 Faculty needed: Research 131 $ 15,720,000 Teaching 66 $ 7,920,000 Revenue less Expense 830,000	Increase **research expenditures**, 2013-2020: $9.7M** →$50-100M **Does not include CMVB
School of Nutrition & Health Promotion ▪ Recruit School Director to promote & develop research ▪ Achieve UG and G enrollment growth targets ▪ Rename school to emphasize health & wellness ▪ Enhance competitive graduate recruitment strategies	**Increase SNHP enrollment:** 3,893 → 4,600 (UG); 92 → 220 (G); 404 → 630 (online)	**Recruit** 21 TT faculty in clusters of three, 2014-2020. **Recruit** total of 7-10 junior faculty/non-TT, 2014-2020. **Space** needs include 5,000ft² office, 7,000ft² shared lab and 1,000ft² behavioral research space. **Salary requirements**: Increased Revenue: Research $ 1,440,000 Enrollment 2,100,000 Faculty needed: Research 16 1,920,000 Teaching 15 1,800,000 Revenue less Expense (180,000)	**Cumulative annual research expenditures, per cluster:*** 2014: $1.300M 2015: $1.635M 2016: $2.305M 2017: $3.310M 2018: $4.248M 2019: $5.769M 2020: $8.000M
Department of Speech & Hearing Science ▪ Re-conceptualize as the School of Human Communication Sciences and Technology (working title) ▪ Organize School around three major concentrations: Communication Health and Wellness, Communication Sciences, and Communication Technology ▪ Expand research and build on current success ▪ Continue to strengthen ties with Engineering	**Increase SHS enrollment:** 345 → 415 (UG); 121 → 185 (G)	**Recruit** 5+TT faculty per year, 2014-2020 (total = 30). **Recruit** total of 10 junior faculty/non-TT, 2014-2020. **Space** needs include 6000ft² office and 16,000ft² lab. **Salary requirements:** Increased Revenue: Research $ 3,600,000 Enrollment 480,000 Faculty needed: Research 40 4,800,000 Teaching 0 - Revenue less Expense (720,000)	**Cumulative annual research expenditures:*** 2014: $4.000M 2015: $5.005M 2016: $7.015M 2017: $10.030M 2018: $12.844M 2019: $17.407M 2020: $24.100M

International School of Biomedical Diagnostics ▪ Launch MS in Biomedical Diagnostics with Dublin City University and Ventana Medical Systems ▪ Develop BS in Biomedical Diagnostics ▪ Establish connections with existing Medical Laboratory Science program (with Phoenix College), Gateway Community College, East Valley Institute of Technology, and Mayo Clinic	**Increase BMD enrollment:** 0 → 80		
School for the Science of Health Care Delivery ▪ Recruit School Director ▪ Continue successful on-ground MS in the SHCD ▪ Implement online MS in the SHCD, fall 2014 ▪ Develop executive program MS in the SHCD ▪ Implement the BS in the SHCD, fall 2014 ▪ Garner national recognition (influence placement in U.S. News & World Report's "Health Care Management" category or establish new one)	**Increase SHCD enrollment, to include PBH:** 0 → 500 (UG); 36 → 150 (G); 50 → 265 (online)	**Recruit** 1 TT faculty per year, 2014-2020 (total = 7). **Recruit** 8-10 junior faculty/non-TT, 2014-2020. **Space** needs include 1,800ft² office, 5,000ft² shared lab space. **Salary requirements** Increased Revenue: Research $ 270,000 Enrollment 1,700,000 Faculty needed: Research 3 360,000 Teaching 14 1,680,000 Revenue less Expense $ (70,000)	**Cumulative annual research expenditures:*** 2014: $300,000 2015: $370,000 2016: $510,000 2017: $720,000 2018: $916,000 2019: $1.234M 2020: $1.700M
Public Health ▪ Recruit Program Director ▪ Implement MPH cores with the University of Minnesota, fall 2014 ▪ Implement BS in PBH, fall 2014 ▪ Partner with ASU global to increase impact, presence	See SHCD (PBH and SHCD combined above)	See SHCD (PBH and SHCD combined above)	See SHCD (PBH and SHCD combined above)
Department of Biomedical Informatics ▪ Continue to grow graduate program ▪ Continue to forge links with Mayo (academically & faculty appointments) ▪ Develop an applied degree program ▪ Develop an executive program ▪ Implement BS in Biomedical Informatics, fall 2014	**Increase BMI enrollment:** 0 → 175 (UG); 51 → 175 (G)	**Recruit**: 6 TT faculty per year, 2014-2020 (total = 42). **Recruit** 8-10 junior faculty/non-TT, 2014-2020. **Space needs** include7500 ft² office, 8000 ft² shared lab space. **Salary requirements**: Increased Revenue: Research $ 4,500,000 Enrollment 800,000 Faculty needed: Research 50 6,000,000 Teaching 0 - Revenue less Expense $ (700,000)	**Cumulative annual research expenditures:*** 2014: $5.100M 2015: $6.410M 2016: $9.030M 2017: $12.960M 2018: $16.628M 2019: $22.575M 2020: $31.300M

Doctor of Behavioral Health Program ▪ Recruit Program Director ▪ Align with University procedures ▪ Consider expanding to include master's & certificate programs to meet perceived strong need	**Increase DBH enrollment** 247 → 380 (online; cap for 3 years)	Increased Revenue: Research $ - Enrollment 1,500,000 Faculty needed: Research 0 - Teaching 2 240,000 Revenue less Expense $ 1,260,000	
Medical Studies ▪ Implement BS in Medical Studies, fall 2014 ▪ Continue to identify and establish industry and academic **partnerships** to augment the pre-college, university and post-graduate/professional continuum	**Increase MED enrollment** 0 → 1,500 fall 2020	**Recruit** 1 TT faculty per year, 2014-2020 (total = 7). **Recruit** 25-30 junior faculty/non-TT, 2014-2020. **Space** needs include 1,800ft² office, 5,000ft² shared lab space. **Salary requirements** Increased Revenue: Research $ 180,000 Enrollment 4,000,000 Faculty needed: Research 2 240,000 Teaching 35 4,200,000 Revenue less Expense $ (260,000)	**Cumulative annual research expenditures:*** 2014: $0 2015: $55,000 2016: $165,000 2017: $330,000 2018: $484,000 2019: $734,000 2020: $1.100M
CMVB – Center for Metabolic and Vascular Biology		**Recruit:** 15 TT faculty, 2014-2020. **Recruit** 5-7 junior faculty/non-TT, 2014-2020 **Salary requirements:** Increased Revenue: Research $ 1,800,000 Enrollment 2,100,000 Faculty needed: Research 20 2,400,000 Teaching 0 - Revenue less Expense 1,500,000	**Cumulative annual research expenditures:*** 2014: $2.300M 2015: $2.740M 2016: $3.620M 2017: $4.940M 2018: $6.172M 2019: $8.170M 2020: $11.100M
Medical School ▪ Continue to explore possibilities with Mayo Medical School and others			

*Note: Research expenditure growth model assumes exponential growth across units based upon a return to achieve $75 million in expenditures by 2020. The model also assumes adequate resources to hire qualified faculty with start-up packages to support success, as well as adequate space, facilities, etc. to meet research expansion needs for both new and existing faculty.
Assumptions for Faculty estimates:
Revenues: Enrollment based on current funding formula ($3,000 per increased fte) and existing program fees; Research estimate assumes 75% of salary recovered through sponsored projects.
Expenses: Faculty expense (including ere and 20% for support staff) = $120,000. Teaching Faculty assumes 30:1 Student Faculty Ratio; Research Faculty based upon $500,000 research expenditures/year.

Appendix B

ASU College of Health Solutions

ARIZONA STATE UNIVERSITY

School of Health Delivery

Science of Health Care Delivery

Public Health

School of Health Promotion

Nutrition

Exercise Science

Obesity Studies

Behavioral Health

School of Human Communication Science & Technology*

Speech & Hearing Science

Audiology

American Sign Language**

School of Biomedical Diagnostics & Informatics

Biomedical Informatics

Biomedical Diagnostics

Medical Lab Sciences

Other Degree Programs

Medical Studies

Other Interests & Initiatives

Center for Health Policy

Center for Metabolic & Vascular Biology

Center for Health Information Research

Healthy Aging

Obesity Solutions

*Working Title

**Not a degree program

May 28, 2014

Figure 2

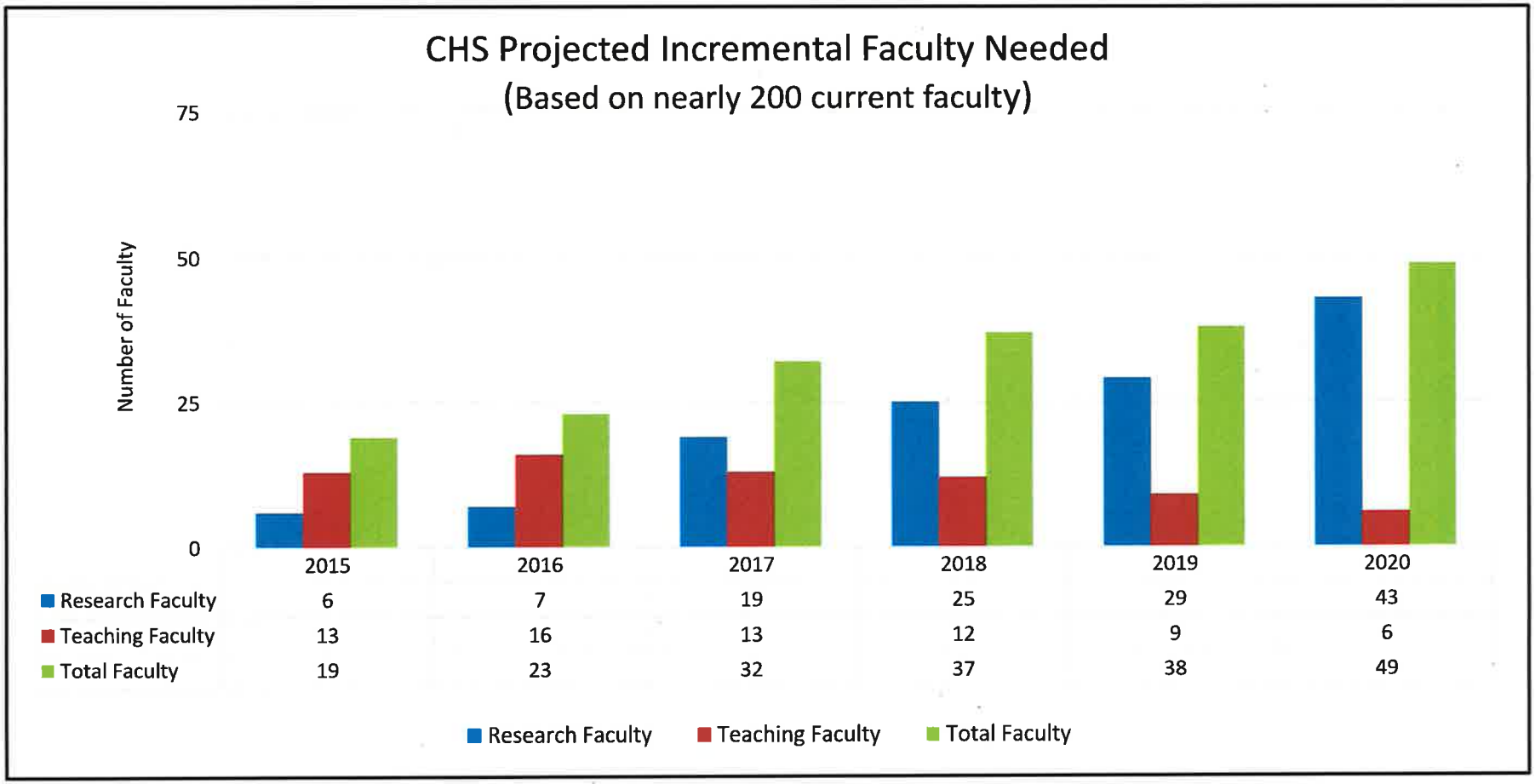
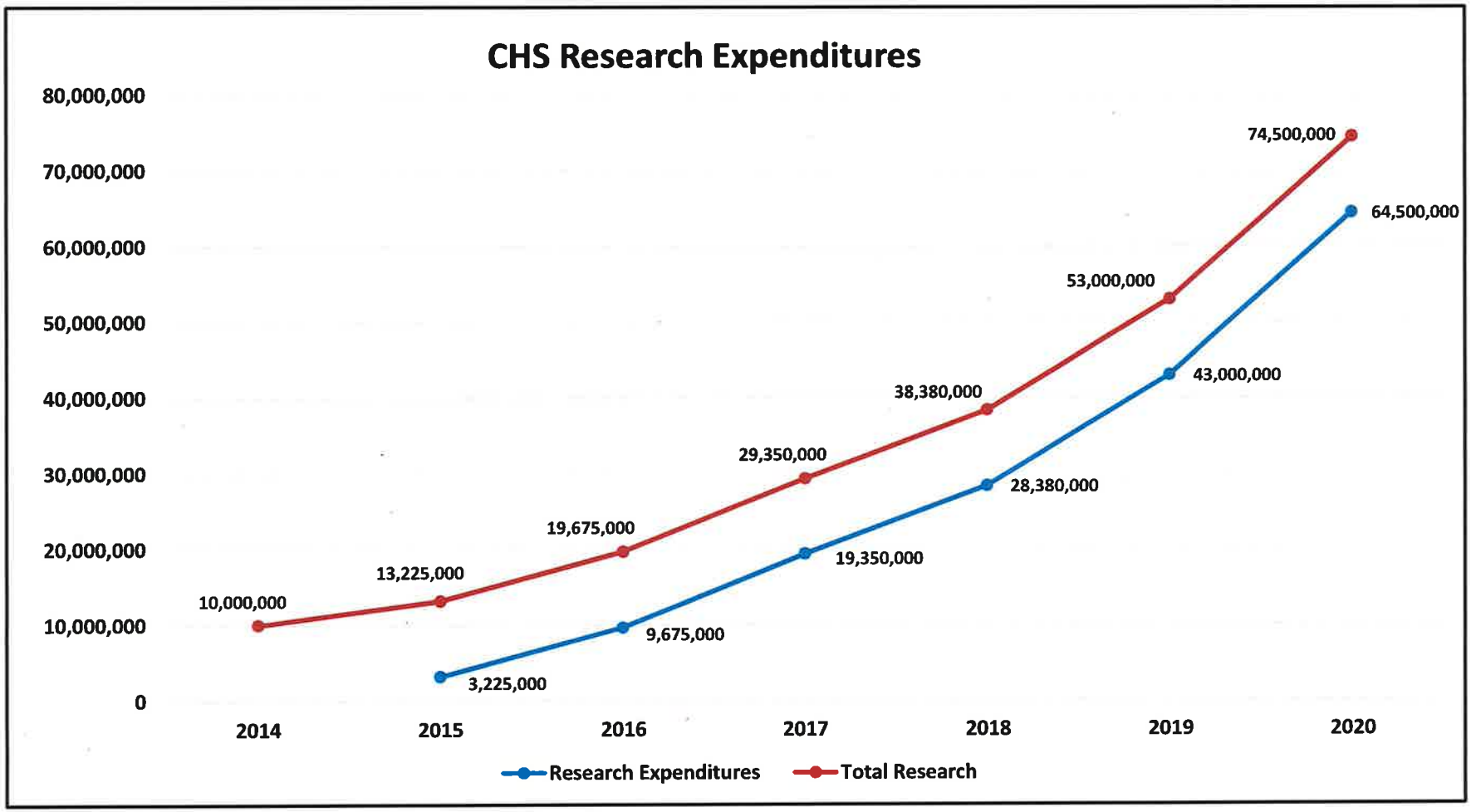

CHS Projected Incremental Faculty Needed
(Based on nearly 200 current faculty)
Number of Faculty
75
50
25
0
2015
2016
2017
2018
2019
2020
Research Faculty 6 7 19 25 29 43
Teaching Faculty 13 16 13 12 9 6
Total Faculty 19 23 32 37 38 49
Research Faculty
Teaching Faculty
Total Faculty

Figure 3


CHS Research Expenditures
80,000,000
70,000,000
60,000,000
50,000,000
40,000,000
30,000,000
20,000,000
10,000,000
0
2014
2015
2016
2017
2018
2019
2020
10,000,000
13,225,000
19,675,000
29,350,000
38,380,000
53,000,000
74,500,000
3,225,000
9,675,000
19,350,000
28,380,000
43,000,000
64,500,000
Research Expenditures
Total Research

FY 2015 Incentive Progress Reports

Tab 7

FY 2015 Goal 7

Evaluation of the university's implementation of and progress towards the measurable goals identified in the June 2013 strategic plan regarding distance learning.

Progress report

The overarching goals are to reach 20,000 online students by 2020 while graduating 4,000 annually. ASU is well above the overall trajectory to meet this goal. Below are specific measurements drawn from last year's report, using the ABOR deck submitted as a guide, that indicate progress in headcount, graduation, program offerings and number of online courses.

- Headcount toward the 2020 goal was set. A goal of enrolling 9060 students for the Fall 2013 semester. In reality, 10,469 students enrolled, surpassing the goal by 1,409 students.
- Headcount. For both the Fall 2013 and Spring 2014, the number of students enrolled in ASU Online programs exceeded the number presented. For Fall 2013, a goal of 9200 students in managed programs and 793 in college managed was established. In reality, there were 9,491 (+291) and 978 (+185). For Spring 2014, a goal of 8,100 students in managed programs and 600 in college managed was set. In reality, online had 10,287 (+2187) and 1019 (+419).
- Graduation toward goal. In the Fall 2013/Spring 14 academic year, the target number was exceeded by 16 graduates (ASU online graduated 1,864 students versus the goal of 1,848). Important to note is that this number is an underestimate because degrees are still being recorded in the data warehouse for the Spring 2014 term.
- Programs offered. In Spring 2014, the stated goal number of ASU Online managed programs offered (59) to students was met. In Fall 2014, ASU online is positioned to exceed the goal number of ASU Online managed programs offered to students (the actual number of programs is 71 versus 63).
- Course versions. In the 2013-2014 academic year, faculty worked on 620 course projects in approximately 60 programs/subject areas.

On every measurement, ASU online exceeded the goals and is well on the way to 20,000 online students by 2020.