Arizona State University

Strategic Enterprise Plan
2017 Update & Operational and Financial Review

Arizona Board of Regents
February 3, 2017
ASU Charter

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

The charter is a promise to the citizens of Arizona.

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

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

Leverage Our Place
ASU embraces its cultural, socioeconomic and physical setting.

Transform Society
ASU catalyzes social change by being connected to social needs.

Value Entrepreneurship
ASU uses its knowledge and encourages innovation.

Conduct Use-Inspired Research
ASU research has purpose and impact.

Enable Student Success
ASU is committed to the success of each unique student.

Fuse Intellectual Disciplines
ASU creates knowledge by transcending academic disciplines.

Be Socially Embedded
ASU connects with communities through mutually beneficial partnerships.

Engage Globally
ASU engages with people and issues locally, nationally and internationally.
Scale of ASU’s Assignment and Ambition
Five Forces are Reshaping Higher Education

1. Economic and social disruption is continuing to accelerate, which is placing many institutions at risk.

2. The globalization of education is accelerating.

3. New business and delivery models are gaining traction.

4. Greater transparency about student outcomes is becoming the norm.

5. Student and family demands are rising for a greater return on investment in higher education.
The Imperative of Innovation

2030 Production Needed to Achieve 45% BA Attainment

2030 Production Needed to Achieve 40% BA Attainment

National Degree Production Needed to Accommodate Population Growth

Current National Degree Production

Six Year Graduation Rate

0% 100%
Public Value vs. Market

Traditional Public Research Universities (Rigid, Inflexible)

New American University (Adaptive, uses tech to increase quality and responsivity)

Emerging Innovation in Higher Education (Profit over Public Value, using technology to decrease cost, not increase quality)
Performance to Date
Undergraduate Enrollment Actual and Metric Goals

- Resident
- Non-Resident
- International

Legend:
- UG resident on-campus
- UG resident online
- UG non-resident on-campus
- UG non-resident online
- UG international on-campus
- UG international online

Metric Goals
Total Graduate Enrollment Actual and Metric Goals

- Graduate resident on-campus
- Graduate resident online
- Graduate non-resident on-campus
- Graduate non-resident online
- Graduate international on-campus
- Graduate international online
Total Graduate Degrees Actual and Metric Goals
Total Undergraduate and Graduate Degrees
Actual and Metric Goals

Metric Goals

Resident

Non-resident

International

Total resident on-campus

Total resident online

Total non-resident on-campus

Total non-resident online

Total international on-campus

Total international online

Research Expenditures Have Doubled Every Six to Eight Years

FY25 Metric = $815M
(similar to MIT's research activity)

FY98 = $92.0M
FY06 = $202.0M
FY13 = $405.2M
FY16 = $518.2M

$0 $100 $200 $300 $400 $500 $600 $700 $800 $900 $1000

$Million

FY25
FY21
FY17
FY16
FY15
FY14
FY13
FY12
FY11
FY10
FY09
FY08
FY07
FY06
FY05
FY04
FY03
FY02
FY01
FY00
FY99
FY98

Actural
Metric Goal

ASU
Arizona Resident Graduation Rates

X = 4-year grad rates at peers
Four Year Graduation Rates at UIA Campuses, 2015

- **3.75+ HS GPA**
- **3.5-3.74 HS GPA**

- **Arizona State University**
- **Other UIA Campuses**

- UC Average 62
- Cal State Average 19.1
Undergraduate Ethnicity On-Campus and Online
2015 National Science Foundation (NSF) Higher Education Research and Development (HERD) Rankings

Total Research Expenditures: 48 of 876 ahead of

- The University of Chicago
- Brown
- Princeton University

Total Research Expenditures among Institutions without a Medical School:

10 of 724 ahead of

- Caltech
- Princeton University
- Carnegie Mellon University

Non-Medical School Expenditures: 27 of 876 ahead of

- Stanford University
- The University of North Carolina at Chapel Hill
- Columbia University

Social Sciences: 5 of 486 ahead of

- Berkeley University of California
- Cornell University
- UCLA
- Penn University

Political Science: 5 of 332 ahead of

- Yale
- Columbia University
- Duke
Sociology: 5 of 371 ahead of
- Cornell University
- Stanford University
- Texas
- University of Maryland

Humanities: 12 of 379 ahead of
- Harvard University
- Berkeley
- Princeton University
- Cornell University

Business and Management: 17 of 350 ahead of
- UCLA
- University of Chicago
- Duke
- Columbia University

Non-Science and Engineering: 12 of 539 ahead of
- Stanford University
- Texas
- Columbia University
- Penn

Earth Sciences: 3 of 354 ahead of
- Stanford University
- Berkeley
- MIT
- Penn State

Electrical Engineering: 8 of 285 ahead of
- Texas
- Stanford University
- Carnegie Mellon University
Bioengineering: 13 of 185 ahead of

Engineering Expenditures: 20 of 388 ahead of

HHS (including NIH) Funded Expenditures among Institutions without a Medical School:
10 of 409 ahead of

NASA Funded Expenditures: 11 of 433 ahead of

NSF Funded Expenditures: 25 of 586 ahead of
DOE Funded Expenditures: 24 of 366 ahead of

Yale
Columbia University
Penn
Carnegie Mellon University

DOD Funded Expenditures: 32 of 454 ahead of

Cornell University
Purdue University
U.S. Air Force
USNA
United States Naval Academy
West Point

Produced by ASU Office of Knowledge Enterprise Development. Feb 2017
© 2017 Arizona Board of Regents. All rights reserved.
In FY14, ASU used 20% fewer resources per degree awarded than the national median. If spending were at the median, costs would have been $300 million greater.
ASU Net Position
(in millions)

Fiscal year ended June 30

Net investment in capital assets
Restricted
Unrestricted
GASB 45/68 Adjustments
Unrestricted Net Position to Operations

Fiscal year ended June 30
What Kinds of Investments are Needed?
Student Success and Research Growth Drive from Faculty Productivity

ASU has a reasonable mix of tenure/tenure track faculty and a healthy age profile.

ASU Enterprise Plan supports adding 800-1,000 new faculty members.

Age demographics suggest an additional 400+ vacant positions.

Hiring will be focused on raising the proportion of tenure/tenure track to support research growth and maintain a strong balance in the teaching mix as enrollment grows.
1,000 additional faculty members can contribute 35% to 40% of the required research growth from their individual awards.

Productivity gains among existing and faculty hired to fill vacancies can contribute 10% of the growth.

Large scale projects and funded centers, which are supported by regular faculty and research faculty, must provide the balance.
While there are large increases in enrollment projected, a substantial proportion will be in ASU Online programs, so the need for teaching space growth will be muted.

New research activities are projected to grow at 2.5 times the growth of on-campus enrollment.

Research cannot be expanded without new space, and new research fields often require new types of facilities, so space needs will lean towards research space.
ASU productivity per SF has progressed (from $419 in 2011 to $466 per NASF in 2015) and exceeds that of all of its ABOR peers without medical schools.

The ASU Enterprise Plan projects an increase in research space of 475,000 NASF (48%) by 2025.

At the projected research volume, the expenditures per SF will need to rise from around $500 per NASF to $560 in 2025.
Where Will the Resources Come From?
Gross revenue as of 7/1/02 was $775M

ASU University Gross Revenue Sources: All Funds ($ millions)

- FY08: $1.5B
- FY12: $1.9B
- FY16: $2.6B
- FY18: $2.9B
- FY20: $3.5B
- F25: $4.4B
In FY2017, the shortfall between the State investment and the goal of its providing 50% of the cost of education amounts to over $200 million annually at ASU.

While the goal remains reaching the 50% support target, the ASU Enterprise Plan assumes a more modest level of State investment which would maintain the current proportion of support for resident students as enrollment grows.
The disinvestment that took place beginning in 2009 required a period of large tuition increases for residents in order to maintain the quality of education.

The ASU Enterprise Plan projects continuing the modest increase policy that ASU has followed since FY13 with increases in the range of zero to 3% annually.
ASU’s commitment to financial aid continues to be crucial to affordability.

Slow shifts to further emphasize need in resident aid policies can support growth in access as K-12 and community college pipelines improve.
Source: Analysis of FAFSA data. All data adjusted to 2016 dollars using CPI.
Fall 2016 data preliminary as of 1/20/17. Analysis limited to dependent students.
Market Price Model

The market (measured by non-resident and international student demand) values an ASU education at $30,000 per year.

Residents receive excellent value at $10,000 less substantial financial aid.

Building the brand quality and recognition will allow further revenue opportunities in the non-resident markets.
ASU Marketing Hub
Insights are needed to impact and improve perceptions

brand tracker
The Hub has been measuring brand perceptions since June of 2014 across a wide range of constituents totalling over 12,000 to date.

For some, we are now able to examine long-term effects of marketing and communications efforts designed to impact perceptions of the brand.

structural equation models
With the tracker data, we are able to perform complex analyses that help us understand the causal factors and their relative importance in influencing perceptions and behaviors.

A structural equation model (SEM) exists for all key constituents to help guide marketing strategies and plans.

message testing
The SEM helps us decide where to focus to achieve desired outcomes while message testing helps us determine the optimum communication, by constituent, to deploy.

To date we have tested over 600 messages to determine their potential impact on brand perceptions.

marketing effects analysis
The Hub conducts post-program analyses on all marketing efforts to measure the effects.
Enterprise and Innovation
Innovation Outcomes

• **Improved value**
  ASU is Top Ten in the quality of graduates for employment.

• **Greater efficiency**
  CPI-adjusted resources used per degree are 11% below FY08 levels.

• **Enhanced productivity**
  Research support and development improvements contributed to a four-fold increase in research activity.

• **Satisfaction of market and national/public needs**
  ASU Online provides degree pathways for a wider range of students.

• **Greater competitiveness**
  Inter-disciplinary emphasis attracts top faculty.

• **Beneficial partnerships**
  Mayo Clinic-ASU Alliance advances education and research capability.

• **Better outcomes**
  Four-year graduation rates are close to double those of 2002.

• **Improved quality of life**
  Moderate tuition/high financial aid policy changes quadrupled access for low-income families.
Educational innovation has driven the progress in student success and academic excellence

eAdvisor
Interdisciplinary schools and colleges
ASU Online
Starbucks College Achievement Plan
ePortfolio and other learning outcome tools
Adaptive and active course redesign
Mayo Clinic partnership
University Innovation Alliance
Operating and financial innovation has driven the resource strategies

Moderate tuition/high financial aid

OKED research development and support teams

Municipal partnerships

Santa Monica office

Residence hall partnerships

Marketing hub
The ASU Enterprise Plans strategies and tactics require ongoing innovation

Educational programs
Research and education alliances
Enterprise resource acquisition
Proliferating the ASU model
ASU Teaching and Learning Realms

**Realm 01**
- Full Immersion
- On-campus
- Technology Enhanced

**Realm 02**
- Digital Immersion
- Online
- Technology Enhanced

**Realm 03**
- Digital Immersion
- Massive Scale
- Technology Enhanced

**Realm 04**
- Education through Exploration
- Technology Enhanced
ASU Teaching and Learning Realms

Realm 01
Full Immersion
On-campus
Technology Enhanced

Knowledge

The ideas and means of the university

Realm 02
Digital Immersion
Online
Technology Enhanced

Realm 03
Digital Immersion
Massively Open
Technology Enhanced

Realm 04
Education through Exploration
Technology Enhanced

TBD
Emerging Innovation Strategies: Educational Programs

Global Freshman Academy

Adaptive courses offered through a broad platform

ASU Preparatory Digital Academy

University to Business programs

Multiple executive education formats

Targeted programs in professional degree and non-degree education

Realm 4: Education through exploration
Emerging Innovation Strategies: Alliances

Mayo Clinic and ASU Alliance for Health Care

PLuS Alliance (with New South Wales and King’s College London)

Partnerships to advance shared large-scale and long-term interests with major philanthropies
Emerging Innovation Strategies: Resource Acquisition and Operating Improvements

Most educational and alliance efforts have both programmatic and resource acquisition elements

A more comprehensive look at potential resources via ASUF Enterprise Partners

New forms of marketing and brand enhancement to support multiple goals

Next generation platform including mindset elements– for ASU and the broader market

Salesforce uses for service improvement and reaching new sources of support
Special Innovation Reports
Special Innovation Reports

Learning outcomes and teaching quality
Mark Searle, Executive VP and University Provost and Professor

Multiple pathways to ASU to be supported by Global Freshman Academy
Phil Regier, CEO and Dean, EdPlus and Associate Professor

ASU Digital Academy as a means of supporting K-12 success
Beatriz Rendon, VP Educational Outreach and CEO ASU Preparatory Academy
Leah Lommel, Assistant VP and COO, EdPlus

How to be successful with large scale multi-partner research programs: 16Psyche
Lindy Elkins-Tanton, School Director and Professor, School of Earth and Space Exploration
Sethuraman Panchanathan, Executive VP OKED and Chief Research & Innovation Officer

Managing deferred maintenance in a sub-optimal system
Morgan Olsen, Executive VP, Treasurer and CFO

Adaptive learning
Adrian Sannier, Senior Technology Fellow, EdPlus and Professor of Practice
The Challenges
Challenges

ASU’s business plan has anticipated many of the challenges outlined here and has articulated strategies for dealing with them.

Worthy of discussion since there is a role for the Regents in addressing many of the challenges
National and International Challenges

Outdated perception of ASU

Growing competition for students and changes by competitors in use of financial aid

General demographic challenges
State and Local Challenges

High school performance

Community college relationship

Resident graduate enrollment

No predictable investment model regarding the value of education

Limited reaction to Arizona’s lagging pace of economic recovery
Management Complexity

Balancing #1 and #2

**#1**: Sailing the ship -- Assuring regular improvements in day-to-day operations

**#2**: Speeding up the ship (without sinking it) -- Integrating innovation at scale

- Design of innovations and how to pilot
- Analysis
- Implementation

Balancing momentum and financial risk
Discussion