Arizona State University

Strategic Enterprise Plan:
2015 Update & Operational and Financial Review

Arizona Board of Regents
April 9, 2015
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.
Performance and Metrics
Who We Include
Total UG enrollment has increased by 34% since 2002
Financial aid and recruitment practices have resulted in substantial growth in enrollment of freshmen from families of lesser since 2002.
Pell recipients make up almost twice as much of the class as in 2002
ASU has expanded and will maintain its commitment to scholarship and aid investments from its funds.

Institutional Scholarship and Aid

Institutional Scholarship and Aid as a % of Gross E & G Revenues

Who We Include
How They Succeed
Freshman retention increases through ongoing process improvement
Ongoing efforts are pushing retention rates toward the metric goals

<table>
<thead>
<tr>
<th>2007</th>
<th>2008</th>
<th>2009-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASU 101</td>
<td>JAC</td>
<td>JAC</td>
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<tr>
<td>eAdvisor</td>
<td>Critical Reading</td>
<td>Obama</td>
</tr>
<tr>
<td>↑ tutoring</td>
<td>Living/Learning and SI: starts</td>
<td>Facebook</td>
</tr>
<tr>
<td>Fall Welcome</td>
<td>↑ tutoring</td>
<td>↑ tutoring</td>
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<td>Orientation</td>
<td>↑ Advisors</td>
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<td></td>
<td>Math Placement</td>
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<td>UNI 220</td>
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<td>Early warning</td>
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<td>2011</td>
<td>2012</td>
<td>2013-2014</td>
</tr>
<tr>
<td>Intro Math</td>
<td>Full coaching</td>
<td>Work study pilot</td>
</tr>
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<td>Academic recovery</td>
<td>Fall survey</td>
<td>Transition advising</td>
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<tr>
<td>Tutoring</td>
<td>Early start</td>
<td>Integrated academic, career, and</td>
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<tr>
<td></td>
<td>Dashboard</td>
<td>financial advising</td>
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<td></td>
<td>PASS</td>
<td>hubs</td>
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<td></td>
<td>Scholarship maintenance</td>
<td>More adaptive courses</td>
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<td></td>
<td>Living/Learning: complete</td>
<td>New mentoring approach</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Get Set social network</td>
</tr>
</tbody>
</table>
Graduation rate improvements are tracking retention increases

4 Year graduation rates are already up 20+ points

Total Freshman Cohort Graduation Rates

- 2002: 29.6%
- 2003: 30.0%
- 2004: 35.0%
- 2005: 40.0%
- 2006: 45.0%
- 2007: 50.0%
- 2008: 55.0%
- 2009: 60.0%
- 2010: 65.0%

Graduation rates

- eAdvisor and other retention work started with the 2006 cohort
- The 6-year rate is projected to reach 64% next year.
- The 6-year VSA rate is 69.7% for the 2008 cohort and is estimated to be 71.2% next year.
- The 4-year rate has improved much faster than the 6-year rate.
- The acceleration of time-to-degree saves students tens of thousands of dollars.
Arizona students show the highest rates and the greatest improvement

Arizona Graduation Rates

<table>
<thead>
<tr>
<th>Cohort Year</th>
<th>4-Year Graduation</th>
<th>5-Year Graduation</th>
<th>6-Year Graduation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>28.4%</td>
<td>49.3%</td>
<td>57.0%</td>
</tr>
<tr>
<td>2003</td>
<td>28.7%</td>
<td>51.2%</td>
<td>58.1%</td>
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<tr>
<td>2004</td>
<td>31.0%</td>
<td>53.0%</td>
<td>60.2%</td>
</tr>
<tr>
<td>2005</td>
<td>32.2%</td>
<td>53.2%</td>
<td>60.3%</td>
</tr>
<tr>
<td>2006</td>
<td>34.2%</td>
<td>54.5%</td>
<td>60.8%</td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td></td>
<td>62.5%</td>
</tr>
<tr>
<td>2008</td>
<td></td>
<td></td>
<td>61.4%</td>
</tr>
<tr>
<td>2009</td>
<td></td>
<td></td>
<td>66.3%</td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
<td>63.8%</td>
</tr>
</tbody>
</table>

UT Austin: 55.1%
Iowa State: 49.2%
Purdue: 50.7%

4-Years rates at peers
ASU is achieving its targets for degree production
ASU ranks 18th among Carnegie Doctoral Research Public Universities

ASU Peer comparisons (low score is best)

Washington Monthly’s rating of national universities best corresponds to the course set by ASU, identifying three categories for ratings:

- Scientific and humanistic research
- Fostering social mobility
- Promotion of community service
US News and World Report ratings show high marks in many programs

<table>
<thead>
<tr>
<th>Quality of Programs</th>
<th>Business Undgrad</th>
<th>Business Grad</th>
<th>Engineering Undgrad</th>
<th>Engineering Grad</th>
<th>Edu Grad</th>
<th>Law</th>
<th>Nursing Grad</th>
<th>Pub Affairs Grad</th>
<th>Sciences* Grad</th>
<th>Soc Science &amp; Humanities Grad **</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona</td>
<td>21</td>
<td>56</td>
<td>51</td>
<td>49</td>
<td>43</td>
<td>42</td>
<td>38</td>
<td>42</td>
<td>34</td>
<td>40</td>
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<tr>
<td>ASU</td>
<td>29</td>
<td>30</td>
<td>41</td>
<td>42</td>
<td>17</td>
<td>26</td>
<td>24</td>
<td>26</td>
<td>49</td>
<td>47</td>
</tr>
<tr>
<td>Cal Berkeley</td>
<td>2</td>
<td>7</td>
<td>3</td>
<td>3</td>
<td>17</td>
<td>8</td>
<td>--</td>
<td>8</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Cal LA</td>
<td>--</td>
<td>15</td>
<td>18</td>
<td>14</td>
<td>13</td>
<td>16</td>
<td>19</td>
<td>16</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td>Colorado</td>
<td>34</td>
<td>86</td>
<td>36</td>
<td>34</td>
<td>29</td>
<td>40</td>
<td>--</td>
<td>40</td>
<td>30</td>
<td>45</td>
</tr>
<tr>
<td>Oregon</td>
<td>51</td>
<td>79</td>
<td>--</td>
<td>--</td>
<td>12</td>
<td>82</td>
<td>--</td>
<td>82</td>
<td>53</td>
<td>54</td>
</tr>
<tr>
<td>Oregon State</td>
<td>113</td>
<td>U</td>
<td>73</td>
<td>76</td>
<td>124</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>68</td>
<td>--</td>
</tr>
<tr>
<td>Utah</td>
<td>51</td>
<td>70</td>
<td>57</td>
<td>56</td>
<td>59</td>
<td>42</td>
<td>26</td>
<td>42</td>
<td>45</td>
<td>74</td>
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<tr>
<td>Washington</td>
<td>21</td>
<td>23</td>
<td>22</td>
<td>27</td>
<td>6</td>
<td>28</td>
<td>4</td>
<td>28</td>
<td>18</td>
<td>27</td>
</tr>
<tr>
<td>Washington St</td>
<td>93</td>
<td>U</td>
<td>65</td>
<td>76</td>
<td>U</td>
<td>--</td>
<td>43</td>
<td>--</td>
<td>84</td>
<td>79</td>
</tr>
</tbody>
</table>

Among the most recognized rating systems is that of US News and World Report. While controversial for the factors and weights it uses, the ratings provide another perspective of quality of ASU programs relative to public universities in the PAC 12.

The citizens of Arizona are receiving very good value for their investment in their two PAC 12 institutions.

U University is unranked
* Average of biology, chemistry, computer science, earth science, math and physics
** Average of criminology, Economics, English, history, political science, psychology and sociology
Pass rates in licensure exams significantly exceed national averages

- 100% of ASU Clinical Psychology graduates who sat for the exam passed.

- 60% pass rate on the CPA exam. (National average is 48.2%)

- 86% of ASU graduates pass the Arizona bar the first time (statewide average is 80%)

- Nursing licensure examination rates exceed the national average in all categories (NCLEX = 92%; Adult Nurse Practitioner = 92%; Pediatric Nurse Practitioner = 93%; Family Nurse Practitioner = 95%; Adult Psychiatric Nurse Practitioner = 100%), all exceeding the national standard of 80%.

- 94% of ASU's graduates of the Mary Lou Fulton Teachers College passed the state teacher certification test last year.

- 100% of In the School of ASU dietetics program pass the National Examination for Registered Dieticians in 2013 (national average is 79%).

- Over 90% of graduates of the MAS degree in Marriage and Family Therapy in The Sanford School who have taken the AMFTRB exam pass.

- 96% 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.
Quality and Competiveness

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Devils in detail
How the 2014 Hyundai Sun Bowl teams match up off the field

<table>
<thead>
<tr>
<th></th>
<th>Sun Devils</th>
<th>Blue Devils</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACAD. ALL AMERICANS</td>
<td>109</td>
<td>105</td>
</tr>
<tr>
<td>TEACH. AS A FELLOW</td>
<td>11th</td>
<td>10th</td>
</tr>
<tr>
<td>NUMBER OF VETERANS ENROLLED</td>
<td>4400</td>
<td>250</td>
</tr>
<tr>
<td>VETERANS</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>PELL GRANTS AWARD.</td>
<td>24K</td>
<td>1K</td>
</tr>
<tr>
<td>NUMBER OF DIV. 1 ATHLETICS TEAMS</td>
<td>23</td>
<td>29</td>
</tr>
<tr>
<td>RESEARCH RANKING</td>
<td>32nd</td>
<td>67th</td>
</tr>
<tr>
<td>STUDENT FULBRIGHT AWD.</td>
<td>26</td>
<td>18</td>
</tr>
<tr>
<td>FACULTY NOBEL LAUREATES</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>PATENTS ISSUED</td>
<td>58</td>
<td>42</td>
</tr>
<tr>
<td>HIGH SCHOOL TOP 10 PERCENT ENROLLED</td>
<td>25</td>
<td>6</td>
</tr>
</tbody>
</table>

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Congratulations, ASU and Duke, on a thrilling 2014 Hyundai Sun Bowl!
ASU alumni – recent and past -- enjoy employment rates that are superior to national averages and peers.
ASU Gallup Study-Alumni Sense of Social Well-Being

How They Succeed

Arizona State University %
National GPI %
Public University %
Large Public University %
Private University %
ASU Gallup Study-Alumni Engagement at Work

How They Succeed

- Arizona State University: 47.4%
- National GPI: 39.4%
- Public University: 39.2%
- Large Public University: 29.7%
- Private University: 39.9%
Advancing Research
Research expenditures have almost tripled in ten years and are tracking with the metric target.
The key to increasing funded research is increasing proposals

Total Value of ASU Proposals by Calendar Year

- Billions
  - 2005: $0.92
  - 2006: $0.82
  - 2007: $1.03
  - 2008: $1.05
  - 2009: $1.37
  - 2010: $1.61
  - 2011: $1.18
  - 2012: $1.36
  - 2013: $1.25
  - 2014: $1.78

ARRA No vs. ARRA Yes
ASU continues to rise in the national rankings
2013 NSF HERD Rankings

<table>
<thead>
<tr>
<th>Research Area</th>
<th>Rank</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Research Expenditures</td>
<td>53</td>
<td>874</td>
</tr>
<tr>
<td>Total Research Expenditures without a Medical School*</td>
<td>12</td>
<td>728</td>
</tr>
<tr>
<td>NSF Funded Expenditures</td>
<td>28</td>
<td>874</td>
</tr>
<tr>
<td>HHS (including NIH) Funded Expenditures without a Medical School*</td>
<td>10</td>
<td>728</td>
</tr>
<tr>
<td>NASA Funded Expenditures</td>
<td>12</td>
<td>874</td>
</tr>
<tr>
<td>Department of Energy Funded Expenditures</td>
<td>28</td>
<td>874</td>
</tr>
<tr>
<td>Engineering Total Research Expenditures</td>
<td>21</td>
<td>874</td>
</tr>
<tr>
<td>Environmental Sciences</td>
<td>25</td>
<td>874</td>
</tr>
<tr>
<td>Social Sciences Research</td>
<td>8</td>
<td>874</td>
</tr>
<tr>
<td>Humanities Research</td>
<td>17</td>
<td>874</td>
</tr>
</tbody>
</table>
Large project acquisition is key to economic development and metrics

Engineering Research Center (ERC)

Existing NSF-DOE Center at ASU:
Quantum Energy and Sustainable Solar Technologies (QESST)

In 2014 - 4 out of 18 invitations nationally
2 in proposals in the final round of selection
• Bio-Mediated and Bio-Inspired Geotechnics (ASU)
• Nanosystems ERC for Off-Grid Nanotechnology Enabled Water Treatment (Partners with RICE)
International projects are an important new emphasis

PCASE Program
The Partnership Center for Advanced Studies in Energy (PCASE)

Designed to jumpstart training, research and innovation in renewable energy in Pakistan

- USAID funded centers ($48M)
- ASU coordinated and managed program development
- National University of Sciences and Technologies (NUST, Islamabad)
- University of Engineering and Technology (CET-Peshawar)
Mean Earnings by Age

2009 American Community Survey (ARC) Integrated Public Use Micro Sample
Educational Attainment and Public Assistance

Percentage of individuals 25 and older living in households participating in selected public assistance programs by education level

- Medicaid
- School Lunches
- SNAP

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Medicaid</th>
<th>School Lunches</th>
<th>SNAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than a High School Diploma</td>
<td>43%</td>
<td>22%</td>
<td>24%</td>
</tr>
<tr>
<td>High School Diploma</td>
<td>24%</td>
<td>11%</td>
<td>12%</td>
</tr>
<tr>
<td>Some college, No degree</td>
<td>19%</td>
<td>9%</td>
<td>10%</td>
</tr>
<tr>
<td>Associate Degree</td>
<td>17%</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Bachelor’s degree or higher</td>
<td>9%</td>
<td>2%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Education Pays 2013: The Benefits of Higher Education for Individuals and Society, College Board
Per Capita GDP Relative to US Average

- Arizona
- Colorado
- Nevada
- New Mexico
- Oregon
- Utah
- Washington
Relationship between Change in Educational Attainment and Economic Development in US States, 2000-2010

Change in Percent of 25 Year or Older Having Attained a Bachelors Degree or Higher, 2000-10

Data Sources: US Census Bureau,
Responsibility to the Community
Higher education needs to be available to all Arizonans
Percentage of All Youths Enrolling in Postsecondary Education

Responsibility to the Community
ASU Prep Academy demonstrates that all students can succeed

Phoenix K-12 (Downtown Phoenix)
• 76% of students qualify for free or reduced lunch
• Was inherited as a “failing” school; is now rated B

Polytechnic K-12 (Mesa)
• A rated

Graduation Results
• 100% of its first senior class will graduate in June
• 72% have been accepted at a four-year university
• 92% have been accepted at a college or university: average rate of graduating Arizona seniors is 54%
ASU Prep Academy demonstrates that all students can succeed

Responsibility to the Community

ASU Prep Academy
% of Students with a Passing Score on AIMS Reading Tests

<table>
<thead>
<tr>
<th>Year</th>
<th>Poly K-8</th>
<th>Phoenix K-8</th>
<th>State K-8</th>
<th>Poly HS</th>
<th>Phx HS</th>
<th>State HS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009–2010</td>
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<tr>
<td>2010–2011</td>
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<td>2011–2012</td>
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<td>2013–2014</td>
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</table>
ASU Prep Academy demonstrates that all students can succeed
Enterprise Plan Review
Enterprise and Charter in the 21st Century Public University

The goals of the Charter are not conditional.

ASU’s responsibilities under the Charter are not conditional.

The declining willingness of the State to invest in higher education does not mean that the need for public universities has decreased. In fact, 21st century advancement requires greater higher educational attainment than in previous generations.

An enterprise model is the only pathway to fulfilling the Charter.
ASU as Enterprise

ASU takes responsibility for finding the means to accomplish all aspects of its Charter.

The ASU enterprise model requires obtaining resources from a wide range of sources, developing the means for highly-efficient and highly effective program delivery, and creating partnerships of mutual benefit with like-minded public and private entities, while respecting its public purpose and its responsibilities to the citizens of Arizona.
The Charter, the Enterprise Plan and the ABOR 2020 Metrics

ABOR’s metrics for performance were outlined in 2010 in the Vision 2020 plan.

The metrics provide the formal and measurable goals for ASU’s performance and are entirely consistent with its Charter.

The enterprise plan was developed as a means of achieving the metric targets.

The Enterprise plan changes motivated by the public disinvestment may impact the speed at which targets will be achieved.
ASU’s Strategic Enterprise Plan

The principal elements of the enterprise plan have been consistent for five years

• First presented in January 2010
• Updates presented in February 2011, February 2012, February 2013, and February 2014

ASU has been operating under the elements of the plan that have been presented and approved.

Alternations are now needed.
The ASU Enterprise Plan: Goals

1. Provide capacity (with quality) to enroll all qualified Arizona residents in all programs of interest

2. Modest and predictable resident tuition increases

3. Maximize educational quality, graduation performance and student outcomes

4. Achieve ABOR metrics in research areas

5. Maintain cost effective program delivery
ASU Share of Degree and Enrollment Metrics

Share of Bachelor Degrees

- ASU
- UA
- NAU

Share of Master's Degrees

- ASU
- UA
- NAU

Share of Undergraduate Enrollment

- ASU
- UA
- NAU

Share of Total Enrollment

- ASU
- UA
- NAU

- 2020 metric share
- Fall 14 share
ASU has been able to implement a predictable low tuition plan since FY12

Resident UG Tuition Rate Increases

<table>
<thead>
<tr>
<th>Period</th>
<th>Higher Range</th>
<th>Actual</th>
<th>Projected</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY05 to FY07</td>
<td>30.3%</td>
<td>20.0%</td>
<td>10.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>FY08 to FY10</td>
<td>46.1%</td>
<td>25.0%</td>
<td>15.0%</td>
<td>5.0%</td>
</tr>
<tr>
<td>FY11 to FY13</td>
<td>42.1%</td>
<td>30.0%</td>
<td>20.0%</td>
<td>10.0%</td>
</tr>
<tr>
<td>FY14 to FY16</td>
<td>4.5%</td>
<td>4.5%</td>
<td>4.5%</td>
<td>4.5%</td>
</tr>
<tr>
<td>FY17 to FY19</td>
<td>6.2%</td>
<td>6.2%</td>
<td>6.2%</td>
<td>6.2%</td>
</tr>
<tr>
<td>FY20 to FY22</td>
<td>6.8%</td>
<td>6.8%</td>
<td>6.8%</td>
<td>6.8%</td>
</tr>
</tbody>
</table>
Total tuition and fee increases have been $435 over the last 3 years.
Enterprise Plan: Resources

1. Build new enrollments with tuition at market rates
2. Build total enrollments via improved retention
3. Grow ASU Online
4. Grow new educational modalities
5. Stabilize state investment and gain some performance-based funding
6. Leverage partnerships

Many resource strategies also provide opportunities to develop improved educational services for our students
Growth has resumed after the recessionary downturn

Total Resident Undergraduate Fall Enrollment
Actual and Modeled Results
ASU’s improving reputation and quality has resulted in steady growth

Non-resident and international enrollment have grown by 70% since 2002
Enrollment will reach 17,000 students in FY16

ASU Online Headcount Enrollment (Actual and Projected)

Note: Starbucks College Achievement Plan enrollments are not included in the headcounts.
Revenue Sources: Gross Tuition and Fees

FY08: $.5B
FY12: $.80B
FY14: $1.0B
FY16: $1.2B
FY18: $1.4B
FY20: $1.6B

- **ASUOnline (gross)**
- **Fees and summer session**
- **Graduate tuition**
- **Non-Resident UG tuition**
- **Resident UG tuition**

<table>
<thead>
<tr>
<th>Year</th>
<th>ASUOnline</th>
<th>Fees and summer</th>
<th>Graduate tuition</th>
<th>Non-Resident UG tuition</th>
<th>Resident UG tuition</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY08</td>
<td>38%</td>
<td>30%</td>
<td>15%</td>
<td>14%</td>
<td>33%</td>
</tr>
<tr>
<td>FY12</td>
<td>38%</td>
<td>30%</td>
<td>14%</td>
<td>13%</td>
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<td>10%</td>
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<td>Other E&amp;G sources</td>
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<td>Online tuition (gross)</td>
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<tr>
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<tr>
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<td>Non-Resident UG tuition</td>
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<table>
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<tr>
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<th>Resident UG tuition</th>
<th>Fees and summer session</th>
<th>Graduate tuition</th>
<th>Online tuition (gross)</th>
<th>Other E&amp;G sources</th>
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<th>Gifts *</th>
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<th>State appropriations</th>
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<tr>
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<td>10%</td>
<td>17%</td>
<td>14%</td>
<td>14%</td>
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</tbody>
</table>
Enterprise Plan: Cost Effectiveness

Resources per degree at low end of the public universities

Employees per student ratio at the low end of public universities

Leadership in application of technology to improved educational effectiveness with lower costs

Leadership in innovative organizational structure

Intensive facility use
ASU level of resource use continues to compare very favorably to public research universities

<table>
<thead>
<tr>
<th>University</th>
<th>Tuition, Fees, and State Appropriations per Degree Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>UCLA</td>
<td>$88,624</td>
</tr>
<tr>
<td>Ohio State</td>
<td>$83,379</td>
</tr>
<tr>
<td>Iowa</td>
<td>$78,514</td>
</tr>
<tr>
<td>UA</td>
<td>$77,393</td>
</tr>
<tr>
<td>Indiana</td>
<td>$76,071</td>
</tr>
<tr>
<td>Kansas</td>
<td>$73,819</td>
</tr>
<tr>
<td>Utah</td>
<td>$69,283</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>$66,062</td>
</tr>
<tr>
<td>ASU</td>
<td>$58,104</td>
</tr>
</tbody>
</table>

Cost Effectiveness
ASU’s relative position remains consistent when compared only to universities without medical schools

Tuition, Fees, and State Appropriations per Degree Awarded
Very High Research Public Universities without Medical Schools
IPEDS FY2013

ASU = $58,104 per degree awarded
ASU’s revenue per degree has consistently been at the low end among research universities.

Tuition, Fees, and State Appropriations per Degree Awarded
ASU and Median of Very High Research Universities
FY03 to FY13 IPEDS in Constant FY13 Dollars

- ASU used 22% less in resources per degree produced than the median of similar universities nationally.
- ASU’s use is 15% lower in constant dollars than at the FY08 high point in funding.
Per FTE measurements are less valid measures since they measure input and not results, but ASU remains at the low end of universities.
Similar results are seen in per FTE resources compared to publics without medical schools

Tuition, Fees, and State Appropriations per FTE Student
Very High Research Public Universities without Medical Schools
IPEDS FY2013

ASU = $16,093 per FTE
ASU faculty perform at a very high level of productivity. 10-20% growth is required to achieve all of the metric goals.

FTE Faculty Employees Per 100 FTE Students (Excludes Medical School Employees)

<table>
<thead>
<tr>
<th>Institution</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
<th>FY13</th>
<th>FY14</th>
</tr>
</thead>
<tbody>
<tr>
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<td>9.77</td>
<td>9.99</td>
<td>10.3</td>
<td>10.31</td>
<td>10.36</td>
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<tr>
<td>University of Minnesota-Twin Cities</td>
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<td>8.08</td>
<td>8.08</td>
<td>8.82</td>
<td>9.13</td>
</tr>
<tr>
<td>University of Washington-Seattle Campus</td>
<td>5.19</td>
<td>5.73</td>
<td>5.6</td>
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<td>8.67</td>
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<tr>
<td>Rutgers University-New Brunswick</td>
<td>8.03</td>
<td>7.58</td>
<td>7.81</td>
<td>8.27</td>
<td>8.28</td>
</tr>
<tr>
<td>Pennsylvania State University-Main Campus</td>
<td>7.58</td>
<td>7.63</td>
<td>7.56</td>
<td>8.05</td>
<td>8.14</td>
</tr>
<tr>
<td>University of Wisconsin-Madison</td>
<td>5.87</td>
<td>5.8</td>
<td>5.71</td>
<td>9.14</td>
<td>7.63</td>
</tr>
<tr>
<td>Michigan State University</td>
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<td>5.56</td>
<td>5.52</td>
<td>5.27</td>
<td>7.22</td>
</tr>
<tr>
<td>University of Connecticut</td>
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<td>5.25</td>
<td>5.37</td>
<td>6.45</td>
<td>6.62</td>
</tr>
<tr>
<td>University of California-Los Angeles</td>
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<td>6.07</td>
<td>6.97</td>
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<tr>
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<td>6.45</td>
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<td>6.57</td>
<td>6.35</td>
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<tr>
<td>University of Illinois at Urbana-Champaign</td>
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<td>6.06</td>
<td>5.86</td>
<td>5.98</td>
<td>6.07</td>
</tr>
<tr>
<td>University of Iowa</td>
<td>5.62</td>
<td>5.66</td>
<td>5.82</td>
<td>5.77</td>
<td>5.79</td>
</tr>
<tr>
<td>The University of Texas at Austin</td>
<td>5.68</td>
<td>5.48</td>
<td>5.42</td>
<td>5.43</td>
<td>5.76</td>
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<tr>
<td>University of Arizona</td>
<td>5.46</td>
<td>5.66</td>
<td>5.71</td>
<td>5.41</td>
<td>5.66</td>
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<tr>
<td>Florida State University</td>
<td>5.04</td>
<td>4.81</td>
<td>4.74</td>
<td>4.93</td>
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<tr>
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<td>4.92</td>
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<tr>
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<td>4.06</td>
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<tr>
<td>Peer Median</td>
<td>5.87</td>
<td>5.80</td>
<td>5.82</td>
<td>6.51</td>
<td>6.62</td>
</tr>
</tbody>
</table>

Full time equivalent postsecondary teachers whose principal activities are for instruction, research, and/or public service. They may hold academic rank titles of professor, associate professor, assistant professor, instructor, lecturer or equivalent of any of those academic ranks.
ASU staff also perform at a very high level of productivity. The number per 100 FTE is 10% lower than four years earlier.

Non-Faculty FTE Employees Per 100 FTE Students (Excludes Medical School Employees)

<table>
<thead>
<tr>
<th>University</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
<th>FY13</th>
<th>FY14</th>
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<tbody>
<tr>
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<td>21.94</td>
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<tr>
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<td>21.98</td>
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<tr>
<td>University of Connecticut</td>
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<td>22.71</td>
<td>21.55</td>
<td>21.63</td>
<td>21.71</td>
</tr>
<tr>
<td>Pennsylvania State University-Main Campus</td>
<td>23.25</td>
<td>23.42</td>
<td>21.03</td>
<td>20.74</td>
<td>20.61</td>
</tr>
<tr>
<td>The University of Texas at Austin</td>
<td>22.46</td>
<td>23.52</td>
<td>23.35</td>
<td>27.34</td>
<td>20.24</td>
</tr>
<tr>
<td>University of Wisconsin-Madison</td>
<td>20.97</td>
<td>21.06</td>
<td>20.71</td>
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<td>19.27</td>
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<tr>
<td>University of Illinois at Urbana-Champaign</td>
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<td>18.39</td>
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<tr>
<td>Ohio State University-Main Campus</td>
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<tr>
<td>Michigan State University</td>
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<td>Indiana University-Bloomington</td>
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<td>13.70</td>
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<tr>
<td>Florida State University</td>
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<td>10.59</td>
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<td><strong>Arizona State University</strong></td>
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<td><strong>19.65</strong></td>
<td><strong>17.71</strong></td>
<td><strong>18.16</strong></td>
</tr>
</tbody>
</table>

Cost Effectiveness
Service partnerships are important elements in controlling costs and providing high quality service

Numerous educational technology partners provide tools for curricular development.

Online services provided by Pearson.

Public-private partnerships deliver state-of-the-art student housing without ASU capital investment.

Jointly managed help desk support with Blackboard.

Privately-capitalized and constructed solar power plants producing almost 25MW of electricity on campus.

Management services agreements providing bookstore management, custodial services, food service, event management, data center support, and other functions cost-effectively.
Why Changes to the Enterprise Plan are Needed
Why Do We Need to Modify the Enterprise Plan?

State resources had been a moderate but crucial component of the prior plan.

The plan assumed a stable base post the 2009-2012 reductions with adjustments due to parity.  This was accomplished.

The plan assumed modest additional growth due to performance ($75 million over five years).

**FY16 reduction reversed the entire parity adjustment ($45M) plus and additional $8M**

Can no longer assume stable, modestly increasing State investment, and must find new pathways to preserve low tuition/high aid predictability
Resource investment needs do not change

Teaching resources to properly support growth in enrollment demand

Faculty and facilities to achieve research growth and diversification

Technology to advance cost-effective teaching and retention improvements

Investments in financial aid to assure affordability
Towards Metric Targets
FY 2008

- Research expenditures: $700 million
- In-Person enrollment: 85,000
- ASU Online enrollment: 20,000
- Total degrees: 25,000
- Freshmen retention: 90%
- 6-year graduation: 75%
- 6-year graduation: 75%
Towards Metric Targets FY2014

Research expenditures
$700 million

In-Person enrollment
85,000

ASU Online enrollment
20,000

Total degrees
25,000

Freshmen retention
90%

6-year graduation
75%

FY08
FY14
Goal
Towards Metric Targets
FY2017

- Freshmen retention: 90%
- 6-year graduation: 75%
- Research expenditures: $700 million
- In-Person enrollment: 85,000
- ASU Online enrollment: 20,000
- Total degrees: 25,000

Percentage Progress
Towards Metric Targets
FY 2020

- Research expenditures: $700 million
- In-Person enrollment: 85,000
- ASU Online enrollment: 20,000
- Total degrees: 25,000
- Freshmen retention: 90%
- 6-year graduation: 75%

Percentage Progress

- FY08
- FY14
- FY17
- FY20

Goal
Achieving the Metrics: FY16 to FY20

Planned growth in FTE students:
- 13,000 in immersion programs (18%)
- 11,000 in online programs (120%)

Planned growth in annual degrees awarded
- 4,800 in immersion programs (28%)
- 3,800 in online programs (125%)

Planned growth in research expenditures
- $100 million in base programs (25%)
- $150 million in new centers and collaborative projects (200%)

Required growth is the rough equivalent of growing a new research university the size of the University of California at Riverside.
Total Enrollment: Actual and Projected vs. Metric Target

Total UG Actual
Graduate Actual
Projected
Projected
Metric

2007/08
2008/09
2009/10
2010/11
2011/12
2012/13
2013/14
2014/15
2015/16
2016/17
2017/18
2018/19
2019/20

Total Degrees: Actual and Projected vs. Metric Target

Total UG Actual
Total Graduate Actual
Projected
Projected
Metric
New investments needed by 2020 to reach the metrics

Supporting access and affordability

- Planned growth in financial aid to maintain access ($100M)
- Represents approximately 20% of gross tuition growth

Supporting quality educational outcomes

- 500 new faculty to support higher enrollment ($95M)
- A weighted hiring rate of one per 30-35 new FTE students
- Modest salary pools to retain faculty and staff ($115M)
- Information technology enhancements ($15M)
- Modest new construction and renovation/upgrading of existing facilities ($200M to $250M)
New investments needed by 2020 to reach the metrics

Expanding research of public value
• Faculty expansion (within the previous number)
• Equipment and other start-up costs (annual new investment $15M)
• New lab facilities- (debt services and O&M on $350M to $450M of new construction)

Meeting externally-determined costs
• Benefits, utilities, inflation ($35M)

Maintaining the physical plant and IT infrastructure
• Minimum of $150M needed over 5 years
What does the state disinvestment mean in terms of the financial plan?

We cannot responsibly make the needed investments to achieve our charter without some replacement of the losses.

Recent actual increases in net assets are in the range of 4% to 7% of revenue. This is a modest but responsible level to maintain balance sheet strength, ensuring a healthy credit rating and the ability to withstand financial volatility.

Without the FY16 cut of $53M and the elimination of the previously modeled performance funding, the FY2020 net asset increases would remain in that healthy range.
### UNIVERSITY OPERATING BUDGET
FY 2012–2014 ACTUAL WITH PROJECTIONS THROUGH FY 2020 ($ millions)

<table>
<thead>
<tr>
<th></th>
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<td>(276.4)</td>
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<td><strong>Total Revenues</strong></td>
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<td>$1,799.2</td>
<td>$1,962.4</td>
<td>$2,093.3</td>
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<td>$2,402.7</td>
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<td>$2,768.9</td>
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| **Expenses**         |         |         |         |         |         |         |         |         |         |
| Salaries and Wages   | 231.4   | 236.0   | 268.0   | 280.2   | 294.7   | 318.1   | 338.7   | 362.0   | 387.4   |
| Benefits             | 432.1   | 480.8   | 523.9   | 570.0   | 651.0   | 698.5   | 769.1   | 842.1   | 924.0   |
| All Other Operating  | 125.7   | 125.1   | 140.4   | 157.3   | 182.4   | 192.8   | 208.9   | 224.5   | 241.1   |
| Scholarships & Fellowships, Net of Scholarship | 98.0    | 107.0   | 112.3   | 113.0   | 116.0   | 129.0   | 139.8   | 143.4   | 146.5   |
| Depreciation         | 48.1    | 53.3    | 52.7    | 56.4    | 64.0    | 67.0    | 86.9    | 90.0    | 91.2    |
| Interest on Indebtedness |         |         |         |         |         |         |         |         |         |
| **Total Expenses**   | $1,614.9| $1,714.2| $1,859.1| $2,000.9| $2,176.0| $2,343.6| $2,543.0| $2,731.4| $2,935.2|

| **Net Increase (Decrease)** | $121.2  | $85.0   | $103.3  | $92.4   | $76.8   | $59.0   | $39.1   | $37.6   | $33.6   |
### ASU and ASU Peers

**Moody’s and S&P Bond Ratings**

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* Debt is issued at the System level and rating is for the System

** Debt is issued by the State of Wisconsin and the rating is for the State

ASU is currently rated Aa3 by Moody’s, the fourth highest rating, and AA by S&P, the third highest rating.
Arizona State University  
Credit Ratings  
FY 2004 through FY 2015

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<tr>
<th>Fiscal Year</th>
<th>Moody's Rating</th>
<th>Standard &amp; Poor's (S&amp;P) Ratings</th>
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**Rating Factors**

Positive rating factors include ASU’s role as a large, comprehensive, multi-campus research university with co-flagship status in the Arizona public higher-education system, in addition to ASU’s growing enrollment and online program, strong and sustained growth of tuition revenue, increasing research presence and consistent positive operating results.

Offsetting factors include high debt burden and thin balance sheet resources, in addition to continued lower levels of state funding, and anticipated capital investment needed to accommodate growth and aging plant.
What does $53 million mean in terms of resident students?

We cannot balance the budget on the backs of resident students

- Equivalent to the net tuition collected from 7,800 resident UG’s
- 15% reduction in state investment per resident FTE: $1,140
- 12% of the FY15 base resident UG & G tuition rate
- 17% of average FY15 net resident UG tuition after financial aid
- 35% of institutional financial aid to resident UG’s
What does $53 million mean in terms of our other students?

We cannot balance the budget on the backs of our other students

- Equivalent to the net tuition paid by 3,100 non-resident immersion students (roughly the growth over the last five years)
- Equivalent to a 12% increase in NR tuition— a substantial market risk
- Equivalent to the net revenue from over 8,500 FTE ASU Online students (roughly the growth since the inception of the program)
Educational Resources per Resident Student (including Institutional financial aid)

- **Total Resources Used**: $7,434
- **Gap requiring other resources**: $1,716
- **State appropriations**: $6,781
- **Net tuition (after financial aid)**: $3,231
- **Used for financial aid (reduction of gross tuition)**: $0
Educational Resources per Resident Student
(including Institutional financial aid)

FY15 Gross

$0
$2,000
$4,000
$6,000
$8,000
$10,000
$12,000
$14,000
$16,000
$18,000
$20,000

- State appropriations: $7,434
- Net tuition (after financial aid): $6,781
- Gap requiring other resources: $1,716

Total Resources Used
Educational Resources per Resident Student (including Institutional financial aid)

- Total Resources Used
- Gap requiring other resources
- State appropriations
- Net tuition (after financial aid)

FY16 Gross:
- $6,353
- $6,294
- $3,163
- $0

Additional amounts:
- $2,000
- $4,000
- $6,000
- $8,000
- $10,000
- $12,000
- $14,000
- $16,000
- $18,000
- $20,000
Can We Cut our Way to Handling $53 million?

Faculty
• Equivalent to 320 faculty lines (15%)
• ASU currently has the lowest # of faculty per 100 FTE students

Staff
• Equivalent to 650-700 staff lines (25%)
• ASU currently has the lowest # of staff per 100 FTE students

Financial Stability:
• 55% of net asset growth forecast for FY15
• Eliminates the ability to build net assets
Moderate costs are assumed in the planning

Gross E&G Revenue per Degree Awarded

Goal included projected revenues and targeted increments needed to achieve

excludes Thunderbird and CAP/Starbucks revenue and degrees
Changes to the Enterprise Plan
The response to State disinvestment

Cutting to achieve financial balance is not a path to pursue-- we already operate at extremely low costs.

Pushing tuition to unaffordable levels and/or reducing expenditures to poor quality and service levels cannot be the source of replacement funds over time if we are to achieve our degree goals and our state development responsibility role.

Political environment suggests that ongoing dis-investment is as likely as any more positive outcome, and we will cannot be passive about preparing for that possibility.
Some Things are Consistent

Seeking to achieve degree and research goals and developing the resources to do so

Operating at very high levels of efficiency and effectiveness as compared to competitors

Growth in all student cohorts: resident, non-resident and international

Aggressive growth in ASU Online

Seeking new partnerships
Changes to the ASU Enterprise Plan

Key New Elements for FY 2016 to FY 2025

New educational products and partnerships.

Growth of executive education

Accelerated curriculum efficiencies

Re-establish the state partnership. State budget efforts become more political

Investment partnerships for economic development support

Goal is no change to current tuition policy, but success in new endeavors is crucial to accomplishing this objective
Short Term Changes: FY 2016

ASU will propose modestly higher rate increases than planned – but maintain market-driven tuition rates

Reduced rate of new investment- partially supported by base budget reallocations among all units

Continued pursuit of revenue growth in ASU Online

Develop new technology-driven educational vehicles for new domestic and international markets

Accelerate the creation of partnerships for new markets

Work to create a coalition of political support for investments in education

Review new asset monetization opportunities
Mid-Term Changes: FY 2017

ASU renews its commitment to a low tuition environment for immersion resident students and a mid-range and competitive rate for others

Modest rate of new investment- partially supported by base budget reallocations among all units

Active pursuit of restoration of State investment and future funding commitments

Continued pursuit of revenue growth in ASU Online

Begin to see net revenue from new markets and partnerships
The Longer Term: FY 2018 to FY 2025

Substantial new net revenue from new markets and partnerships begins to be realized

Substantial new revenue from executive education begins to be realized

Resource investments needed to fulfill the charter continue

Current tuition rate goals are dependent on success in generating new revenue and/or restoring the state partnership

More diverse commercial relationships and partnerships
What Will We Be Working to Achieve with the State?

- Autonomy in benefit plan design
- Autonomy in retirement plan design
- Autonomy in insurance plan design
- Potential savings from autonomy are estimated at $15M to $20M annually

Other deregulation items

- Sufficient state funding to support low resident tuition via a minimum of $8,500 per resident FTE, performance funding, or state-based financial aid
What Will We Be Working to Achieve with ABOR?

Multi-year tuition planning and flexibility to respond to additional state changes

Greater autonomy in establishing governance structures to pursue commercial and international partnerships

Support for developing novel sources of investment capital and commercial relationships for new ventures

Political support to pursue ASU’s State goals
Partnerships
ASU’s growth and improvement would not have been possible without the resources and talent infusion that comes with partnerships.

Willingness to experiment and to move rapidly is the key to finding partners.

The Enterprise Plan will be highly dependent on continuing to find ways to leverage our resources with those of compatible partners.
Capacity to Serve More Students

Enrollment and Capacity Building

- City of Phoenix- downtown campus
- Community colleges- pathway programs
- City of Phoenix- athletics venues
- Mayo Clinic- nursing cohorts and BMI programs
- City of Mesa- Polytechnic infrastructure
Opening New Educational Opportunities

New Venues
• Lake Havasu Education Foundation- higher education in rural Arizona
• Eastern Arizona College– four year degrees

Experimenting with New Access Programs
• Starbucks- College Achievement Plan
Advancing Research
- Mayo Clinic- joint research activities
- State of Arizona- research infrastructure 1 (2005)

Promoting Economic Development
- City of Scottsdale- SkySong
- City of Chandler and TechShop- innovation center and maker space
Accelerating the Creation of New Teaching Tools

- Pearson- ASU Online services
- Knewton- adaptive learning
- Numerous technology vendors- ASU Online curriculum
Capital Investment

- American Campus Communities- student residence expansion
- Capstone- student residence expansion
- Inland America- student residence expansion
- State of Arizona- Athletic Facilities District
- Private sector partners- solar power expansion to 25 megawatts
New Opportunities

University Innovation Alliance- partnering with 10 universities to innovate to better serve lower income students

Desert Ridge biomedical campus- partnering with City of Phoenix, State Land Department, Mayo Clinic, and private sector developer

Pima County, Town of Oro Valley, pharmaceutical companies- build a bio-technology incubator to serve southern Arizona

China research initiatives

Banner – develop research capabilities to support clinical neuroscience activities

Dozens of universities in large scale research center proposals
Need to make the State a partner once again

What can we offer?

Improved outcomes
Expanded number of new graduates
Direct support for recruitment of new firms
Increased production of new technologies and businesses
Better service to our communities
Increasing Graduates
Access
Cost Efficiencies
Quality
1. Progress in Degree Completion

1.1 Access: New Student Growth

- The number of degrees conferred is related to the size of the freshman cohort and the number of transfer students.
- The freshman cohort has increased from 6,820 in 2002 to 11,079 in 2014.
- Transfer have increased from 5,531 in 2002 to 9,363 in 2014.
1. Progress in Degree Completion

1.2 Increase Learning Support to More Students

- Improving students’ performance in classes is crucial to improving learning outcomes.
- Tutoring is now provided at 24 different locations across multiple campuses.
- In 2007, University Student Success Centers logged 20,500 visits.
- In 2013, University Student Success Centers logged 139,400 visits (46,000 in math) a nearly sevenfold increase.
1. Progress in Degree Completion

1.2 More Students with Improved Learning: GPA

- ASU has overseen major improvements in GPA performance as learning support has been continuously expanded since 2006.

- The first semester GPA is a key predictor of retention and graduation.
  - Students with a GPA below 2.0 are retained at very low rates, well below 50%.

- Students who use learning support are retained at significantly higher rates.
  - Users were retained at a rate of 84%.
  - Non-users were retained at a rate of 76.6%.
  - Students with lower levels of academic preparation are retained at an average 10.8 percentage points higher than comparable students who did not use the services.
1. Progress in Degree Completion

1.3 More Students with Improved Retention

- The first-year retention rate has improved from 76.7% for the 2002 cohort to a 84.1% for the 2013 cohort.

- The rate for AZ students is now at 87.1%

- Initiatives to impact retention started in 2007 and have increased substantially each year.

- The drop off for the 2011 cohort is due to multiple factors: increase in unmet cost of attendance, stricter renewal criteria for a scholars program, cumulative effect of the recession, increased number of students with math deficiencies.
1. Progress in Degree Completion

1.3 Improved Retention with Access

Continue to increase the retention rate to the enterprise goal of 89% while maintaining the mission of access.

Achieving the goals while maintaining access is a challenge few research universities outside of Arizona attempt.

- On the basis of a four-year average, ASU is outperforming many research universities with similar access challenges (blue dot).

- On a one-year basis, retention has improved from 77% in 2006 (red dot; slightly underperforming peers) to about 84% in 2013 (green dot; outperforming many peers) without changing admissions standards.
1. Progress in Degree Completion

1.4 Graduation Improvement Follows From Retention

6-year graduation rate has risen from 56.9% for the 2006 cohort to 62.6% for the 2008 cohort.

✓ It is projected at 64% next year.

✓ The 6-year rate for AZ students is now 66.3%

✓ The VSA rate is 69.7% for the 2008 cohort and is estimated at 71% next year.

4-year graduation rate has risen from 33.5% for the 2006 cohort to 49.2% for the 2010 cohort.

✓ The 4-year rate for AZ students is now 51%
1. Progress in Degree Completion

1.5 Reduce the Cost to Student

Concerted efforts to improve student success yields cost savings for students.

- Substantial increases in learning support decreased D/E/W grades from 19% to 14% for Freshmen in 2013 compared to 2006.
  For freshmen alone, savings total $6.6 million when they do not repeat these courses.

- The reduction in D/E/W reduced the percent of students with first semester GPA’s below 2.0 from 20% to 12% in 2014 compared to 2006. On average, 60% of the students below 2.0 will not return the next year.
  For a freshmen cohort of 10,000 students, 480 more students maybe retained. If they are not retained and the average tuition is $10,000, the aggregate loss to the students is $4.8 million.

- Substantial increases in student support has accelerated graduation such that the four year graduation rate improved from 33.5% to 49.2%.
  For a freshmen cohort of 10,000 students, 1,570 more students will save the 5th year of tuition, a savings of $15.7 million @ $10,000 tuition.
1. Progress in Degree Completion

1.6 Degrees Conferred

Degree growth, 2002-14:
- forty-five percent (45%) increase since 2006-07
- in 2013-14 degrees increased to 19,761
- goal is 25,000 in 2020
1. Progress in Degree Completion

1.6 Degrees Conferred

Degrees Awarded by College

Degrees by College 2013-14

STEM increases since 2006-07:

- Engineering: 2,562 from 1351 (90% increase)
- Natural Sciences: 1,216 from 689 (76% increase)
- Life Sciences: 633 from 360 (76% increase)

Some other significant increases:

- Health Solutions and Nursing: 1,604 from 778 (106% increase)
- Business and Economics: 3,659 from 2,819 (30% increase)
- Social Sciences and Public Programs: 62% and 83% increases respectively
1. Progress in Degree Completion

1.6 STEM Degrees Conferred

STEM Degrees Awarded

STEM degrees awarded by ASU will likely exceed 5,000 per year by 2015-16
2. Improving Learning Outcomes

2.1 Master Learner
2. Improving Learning Outcomes

2.1 Master Learner: Develop skills for the 21st Century

The goal is to improve content proficiency while also improving critical thinking and problem solving abilities.

Passive learning environments such as large lectures produce the worse critical thinking skills.

- Adaptive + Active learning in general education courses
- LEAD
- PROMOD
2. Improving Learning Outcomes

2.2 Curricular Innovations: Adaptive/Active Learning in General Education Classes
LEAD (Learn, Explore, Advance, Design) for academically at-risk students

• First-year curriculum that is project based learning

• Builds fundamental skills necessary for success in other courses.

• Three courses integrated around university success, communication and critical thinking
  ✓ Fall: Critical Reading & Writing; COM 101; University Success Course
  ✓ Spring: Applied logic (Philosophy); Multimedia Communication; University Success Course

• Involves team work, debates and projects that integrate the skills learned from the same conventional courses as taken by other students.

• First semester results exceed expectations considerably
  ✓ Spring Retention: LEAD 95% vs Non-LEAD Comparison 89%
  ✓ FALL GPA: LEAD 3.04 vs Non-LEAD 2.55
First in the World Grant—$4 million provides:

- Project-based learning in a degree program from freshman thru senior year that integrates the learning around critical thinking, problem solving and team work.

- Cohere elective courses, general education courses and courses in the major around a single integrated project so that all of the courses have direct applicability to the major.

- Measuring and mastering learning objectives instead of time in seats.

- Applications of the learning objectives to projects central to the degree.

- Ten majors to launch pilots in fall 2015.
ASU measures the acquisition of general learning skills associated with a college education with more planned in the immediate future.

- Critical thinking, writing and numerical reasoning are being measured by the Educational Testing Service (ETS) Proficiency Profile in a longitudinal study of ASU students.
- ASU students were tested as incoming freshmen in fall 2011.
- They were retested in spring 2013, after their first two years at ASU.
- The study will be completed in spring 2015 as the students from the 2011 cohort conclude eight semesters at ASU.

- It is notoriously difficult to conduct these tests as universities across the country have learned. One national expert explains:

  “One of the biggest reasons is that universities quickly find that it's easy to get incoming students to take tests during freshman orientation (and take them seriously); it's difficult to get seniors to do the same.”
A new method that seems superior to standardized tests involves the use of an ePortfolio.

- Students have an ePortfolio from their freshmen year through their senior that contains samples of work.

- Progress isn't scientifically measured, as in the ETS or CLA, but superior qualitative judgments of progress will be available based on samples of academic work entered into the ePortfolio.

- Students will own their portfolio, which they can edit and produce for a job market search or entrance into post-graduate programs.

- Personalized electronic resumes also can be produced showing competencies that specific employers are seeking,
  - It could have samples of work demonstrating critical thinking, quantitative reasoning, team work and all manners of communication.
Provide training for general career skills

It is common to hear employers contend that the ability of students to convert academic preparation to career readiness is low.

**ASU is starting a pilot project with an external partner to fill the gap.**

Fullbridge is one such company, providing career-building skills for colleges and universities as well as companies. Among others, they have partnered with:

- Harvard Law
- Washington University
- Bowdoin
- Wesleyan
- Google
- Intel
- Citi®
4. Co-Curricular Innovations

4.3 Degree Completion: The Arizona Solution – Improve the Arizona Pipeline

The (Me3) Project: Expanding eAdvisor to high schools.

- Connect student interests and skills to academic majors
- Provide high school major maps designed to prepare students for their selected major
- Interactive tool to motivate students to prepare, attend and complete college