

The Arizona Higher Education Enterprise

Strategic Realignment 2010 Forward

Council of Presidents
Arizona Board of Regents

September 2010

(v.3.1 September 20, 2010)

Preface

Covenant with the People of Arizona

The public university system in Arizona, governed for the people by the Arizona Board of Regents and made up of the University of Arizona, Arizona State University and Northern Arizona University, is an enterprise devoted to the success of Arizona through high quality educational attainment, sustained academic excellence, the highest level of discovery and creativity possible, and a focus on serving the citizens of the state. As the university system moves forward with changes and adaptations to the social, cultural, economic and technological dynamics of Arizona, we do so with a renewed commitment to our core purpose. Our role since the founding of Arizona remains unchanged – our undiminished focus is to provide broad access for an innovative, world class university education to all segments of Arizona’s society. To achieve this goal, going forward, will require the Arizona Higher Education Enterprise to rethink everything from organizational and curricular design to the basic concept of effectiveness, to our relationship with the government of the state. This report outlines the framework for that rethinking and initiates a most critical strategic realignment.

The Arizona Higher Education Enterprise

At statehood in 1912, the Arizona Constitution established a university as a public institution charged with pursuing higher education through teaching and research. That university, founded in 1885 in Tucson, was empowered to provide people with access to university-level education following constitutionally mandated free public elementary and secondary education.

In 1945, the state's two teachers colleges (Tempe and Flagstaff) were added to that university (establishing a university system) as state colleges, and later as universities, to provide additional access, presence and educational choice.

One hundred years after statehood, Arizona's population has grown forty fold and these three higher education institutions that make up the Arizona University System have grown and adapted to the state's growth and change. Operating as a unique asset of the people of Arizona, the University System has evolved rapidly in the last 30 years into a large complex enterprise involving more than 30,000 employees and serving more than 100,000 students and conducting more than 10,000 individual research projects.

This teaching, learning and discovery organization has evolved from its origins in Tucson, Tempe and Flagstaff into three university platforms that are in and of themselves unique enterprises. Each university is a major economic engine for a distinct part of the state, offering academic programs and research that contribute to the region—southern Arizona, central Arizona, northern Arizona—as well as responding to state, national and global needs.

In 2010, the Arizona Board of Regents asked the executive team (Council of Presidents) of the higher education enterprise to conduct an enterprise-wide realignment effort so that the enterprise and each of its units might enhance its overall performance and adaptability so as to provide for greater educational and research outcomes. As Arizona enters its second century and as it continues to grow and diversify its social, economic, technical and cultural challenges have also grown. At the same time, the funding and operating models of the past have been frequently ignored (student growth based funding, state support for core needs such as personnel, utilities, new facilities' operations, and other funding agreements such as decision packages, research

infrastructure, and building renewal). The lack of certainty of public investment poses significant challenges to advancing the public university education and its ability to create direct and tangible impacts on Arizona's economy in service to the people of Arizona.

As a result and with the need for the University System to be even more effective and impactful going forward, a conceptual realignment was requested by the Board. The purpose of this realignment exercise is to provide a new framework for the "University System" that maximizes the unique strengths in each university's discovery, teaching, learning, and service missions while at the same time rewarding organizational adaptability, innovation and entrepreneurship in a high change environment.

Arizona Higher Education 2020 Vision

In 2009, the Arizona Board of Regents, following a multi-year planning effort, formally approved a new vision for Arizona's higher education enterprise. This vision sets out the rationale, mission and specific objectives for the universities in addressing Arizona's needs for the people and knowledge products the higher education enterprise can provide.

Specifically, ABOR defined the higher education enterprise mission through 2020 to:

- Increase the educational attainment of Arizona citizens, through enhanced access, by producing enough quality degrees for the state to be nationally competitive by 2020.
- Increase and enhance the prominence of the systems research enterprise so that it can contribute to the knowledge economy and improve the quality of life in Arizona.
- Provide the educated workforce, through enhanced access, needed to fill shortages and to stimulate demand for higher paying jobs in Arizona.
- Provide accessible and affordable undergraduate education in a broader variety of institutional formats and in more locations throughout the state.

For Arizona to enhance its social, economic, cultural and technical transformation in ways conducive to success, the universities will need to make significant contributions to a new state profile by 2020. This profile for higher education calls for the following changes:

	<u>2010</u>	<u>2020</u>
Adults with Bachelor's Degrees in Arizona	~25%	29-30%
Bachelor's Degrees Produced Annually	~21,000	28-36,000
Freshmen Retention	~79%	85-90%
6 year Graduation Rate	~57%	70-75%
College Going Rate (from K-12)	~50%	60%
Community College Transfers	~9,000	16-24,000
Community College Transfers to Earn Bachelor's Degrees	~6,000	10-15,000
Undergraduate Enrollment	~100,000	130-155,000
Total Research Expenditures	~\$900M	\$2.0B

In addition to the 2020 metrics detailed above, our enterprise-wide objectives of student diversification and low actual cost of attendance are also critical outcome measurements of success.

The rationale for this vision and these specific metrics is essential to the state because:

- Educated Arizonans will enjoy greater economic prosperity
- All Arizonans, not just those with a degree, will benefit as more become educated
- Arizona will reap both economic and social rewards from university research
- Moving Arizona's economy forward will demand higher paying, more economically diverse jobs that require a more highly educated workforce
- Connecting the work and service of the universities to the communities will improve the quality of life in Arizona

In advancing toward this vision, ABOR outlined four goals for the universities to focus on. Each of these goals is detailed below:

Goal 1 Educational Excellence and Access

“To be nationally competitive in the percentage of Arizona’s citizens with a high-quality bachelor's degree by providing affordable access through a well-coordinated and aligned system.”

Key Indicators of Progress

- Number of bachelor’s degrees awarded
- Number of master’s degrees awarded
- Number of Arizona community college students who transfer to a university
- Number of Arizona community college transfer students awarded bachelor’s degrees
- Educational quality as reported in National Survey of Student Engagement (NSSE)
- Actual cost of attendance as a percentage of Arizona median family income
- Graduation Rate
- Freshmen Retention Rate

Goal 2 Research Excellence

“To increase the research capabilities and performance of the Arizona University System to a level of competitive prominence with peer rankings of top American research universities.”

Key Indicators of Progress

- Total research expenditures
- Number of doctoral degrees awarded
- Number of invention disclosures transacted
- Patents issued
- Intellectual Property income
- National Research University ranking

Goal 3 Workforce & Community

“To utilize research, economic development, community engagement, and service contributions of the universities to create and disseminate knowledge to strengthen Arizona’s economy and improve Arizona’s quality of life.”

Goals 2 & 3 are inextricably linked. A driving force for the research and community outcomes is, in fact, the research excellence outcomes, and this should be considered in looking at all of the Key Indicators of Progress.

Key Indicators of Progress

- Impact of community engagement activities
- Total income and expenditures related to service and engagement activities
- Number of degrees awarded in high demand fields
- Diversity of graduates
- Percentage of degrees awarded in high demand fields
- New companies started
- Milken Institute State Science and Technology ranking

Goal 4 Productivity

“To maximize the use of existing resources so that the system can produce greater numbers of degrees and with greater efficiency of resources per degree without sacrificing quality.”

Key Indicators of Progress

These indicators of progress must be partnered quality measures. Education research goals need to be maximized with each other.

- Number of bachelor’s degrees awarded per 100 FTE students
- Composite financial index (CFI)
- Tuition at average of peer institutions
- Online degrees
- Employment index of graduates
- Number of baccalaureate degrees from community college transfers

University as Enterprise and Arizona's Three Higher Education Institutions

Typically in the United States, clusters of public higher education institutions are designed to operate as administrative systems closely aligned with a state government. These systems of universities are usually organized around a group of institutions that each performs a range of teaching and research missions, often in a particular niche. Each university system operates as a simple administrative unit comprising multiple universities with different and discreet mission assignments.

As the Arizona University System has not operated as a classic system and as the world of 2010 is very different than the era in which the great university systems emerged (California, Maryland, North Carolina, New York) in the last 50 years or so, we have by historical setting and context emerged three highly adaptive, efficient and unique higher education institutions. In the case of Arizona, the forces of high speed growth, modest government investment, rapid social, cultural and economic change, and the physical size and unique urban/rural character of Arizona have, when matched with its western spirit of free enterprise, driven the universities down the path of independence and variation. In this case, it is, in fact, the lack of a traditional system level design and the lack of the standard twentieth century administrative and hierarchical model that gives Arizona its greatest advantage at this moment in time.

Arizona's higher education enterprise, in the form of the University of Arizona, Arizona State University and Northern Arizona University, has tremendous capacity for unique and creative design, entrepreneurial behavior and highly efficient operations. As a result, this strategic realignment plan does not draw from the 1960 model of university systems but rather leap frogs that evolutionary stage and envisions the University as an enterprise manifesting itself through three unique semi-autonomous enterprise platforms. In this model each of Arizona's universities is assumed to be a differentiated and unique institution with a unique assignment and approach to education that helps the system as a whole to meet its goal. Through this model the Arizona Higher Education Enterprise, as governed by the Arizona Board of Regents, is designed for flexible adaptation for the future.

As the operating units of the Arizona Higher Education Enterprise, the three universities will work through unique mission assignments to meet the goals of the Arizona Board of Regents collectively. Enterprise-wide mission and goal attainment will be coordinated by the Council of Presidents operating as the enterprise executive committee. In this mode, the Council of Presidents is empowered by the Board to make adjustments and changes in mission assignments so that the full set of objectives can be attained. The Council will monitor and evaluate movement toward the full set of metrics outlined in the previous section and will adjust assignments, structures, and resources accordingly.

Furthermore, in the Enterprise, each President will have a dual assignment. First, to deliver their individual institution to full goal attainment and, second, to engage in overall enterprise goal attainment. Presidents will focus their energy on individual institutional goals as well as enterprise goals, and will work together in a cooperative manner to achieve enterprise-wide success in goal attainment.

The specific assignments to each unit of the Higher Education Enterprise are summarized as follows.

The Arizona Higher Education Enterprise

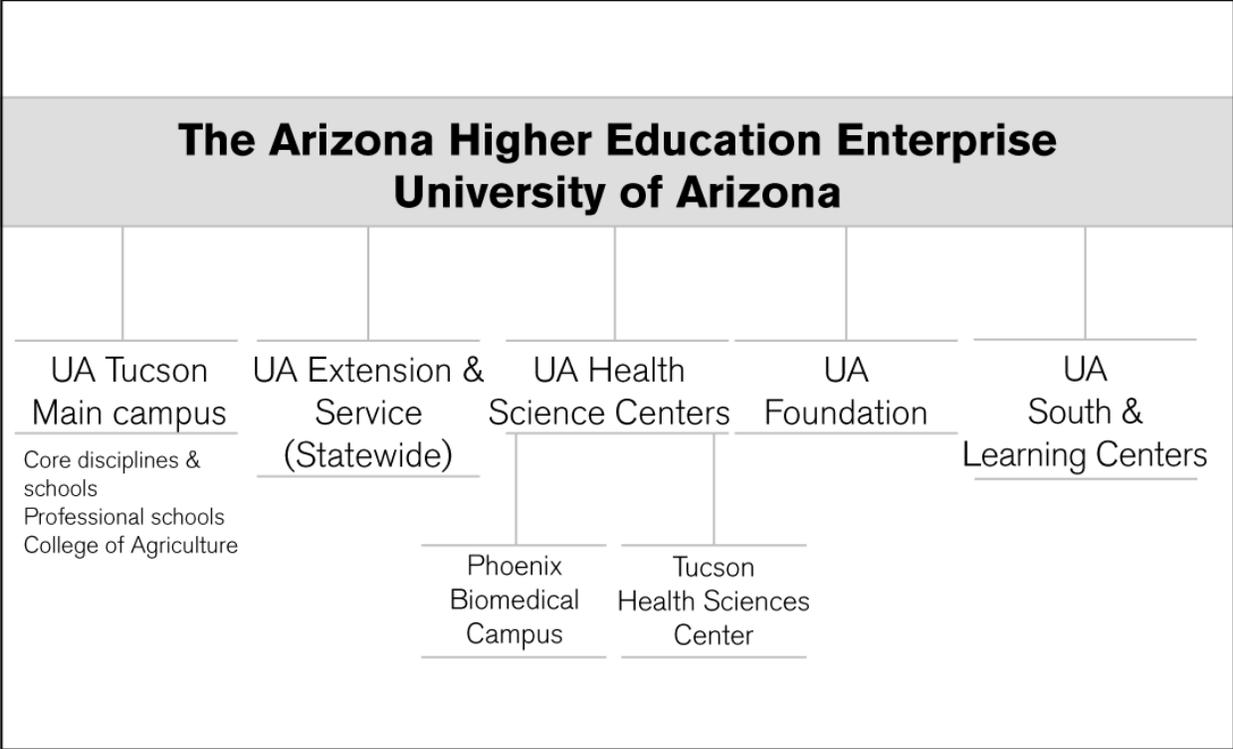
University of Arizona



One of America's great land-grant universities, the University of Arizona is a peer of the University of Wisconsin at Madison and other national land-grant universities. UA operates the state's only public colleges of medicine, pharmacy, public health, and agriculture. Today, the University is comprised of 13 academic colleges on the main campus in Tucson. Beyond Tucson, UA has undergraduate and graduate programs at the UA South branch campus in Sierra Vista, a second academic health science center with MD, Pharmacy and Public Health degrees located in downtown Phoenix, and expanding academic learning degree centers.

Today, the UA ranks among the nation's top twenty public research universities with more than \$600 million in research expenditures. One of 63 members of the Association of American Universities (AAU), the UA is committed to providing university access to the state's citizens through top quality undergraduate, graduate, and professional instruction; through promoting the discovery, application, and dissemination of new knowledge; and through enhancing the quality of life by engaging with Arizona's citizens and communities. UA's core mission of providing access, discovery and a quality education to the people of the state of Arizona and beyond is embedded in the University's identity.

In going forward, the UA needs to move in several new directions to enhance its value for the future of Arizona. These new directions are summarized in both the enterprise chart and the list of strategic needs detailed below:



University of Arizona Strategic Targets – 2010 Forward:

- 1) Enrollment on the main campus from 39,000 to \leq 40,000 students with \leq 15,000 being out of state.
- 2) Improvement in freshmen retention rate to more than 90% (up from 78%).
- 3) Graduation rate (6 year) 70% (up from 58%).
- 4) Health Science Centers Enterprise expansion to multiple campuses and ~ \$500 million in research (up from \$125 million).
- 5) Continued research expansion at Tucson campus to ~ \$700 million (non-medical research) (up from \$440 million).
- 6) Growth of alternative pathways to UA degrees from beyond the main campus from 1,500 to 10,000 at a lower tuition basis.

Arizona State University



As the public university in one of America's largest and fastest growing cities, Arizona State University has embarked on the path of building a comprehensive metropolitan research university analogous to the historic University of London with its University College London, Kings College London and dozens of other smaller distributed urban schools, such as the London Business School, London School of Economics, and the Royal Holloway College.

ASU has advanced from a territorial teachers' academy that offered no degrees until 1925 to a high performing comprehensive research university after 1990. In 2010, ASU is recognized as one of eight universities without a medical school or agricultural school with more than \$325 million in research expenditures (the others being Princeton, MIT, CalTech, Rockefeller, Georgia Tech, Carnegie Mellon, and Texas).

In going forward, the ASU enterprise is focused on a strategic re-positioning as a large scale distributed university (a modern version of the University of London) that is at once providing for Arizona the core services and productivity of a research grade university. In moving ahead on its agenda as a New American University, ASU has a number of strategic targets. These targets and the enterprise chart are detailed below:

The Arizona Higher Education Enterprise Arizona State University

ASU at the
Tempe campus

Colleges @
ASU

ASU at the
Polytechnic
campus

ASU at the
Downtown
Phoenix campus

ASU at the
West campus

ASU Online

ASU Foundation for
the New American
University

Arizona State University Strategic Targets – 2010 Forward:

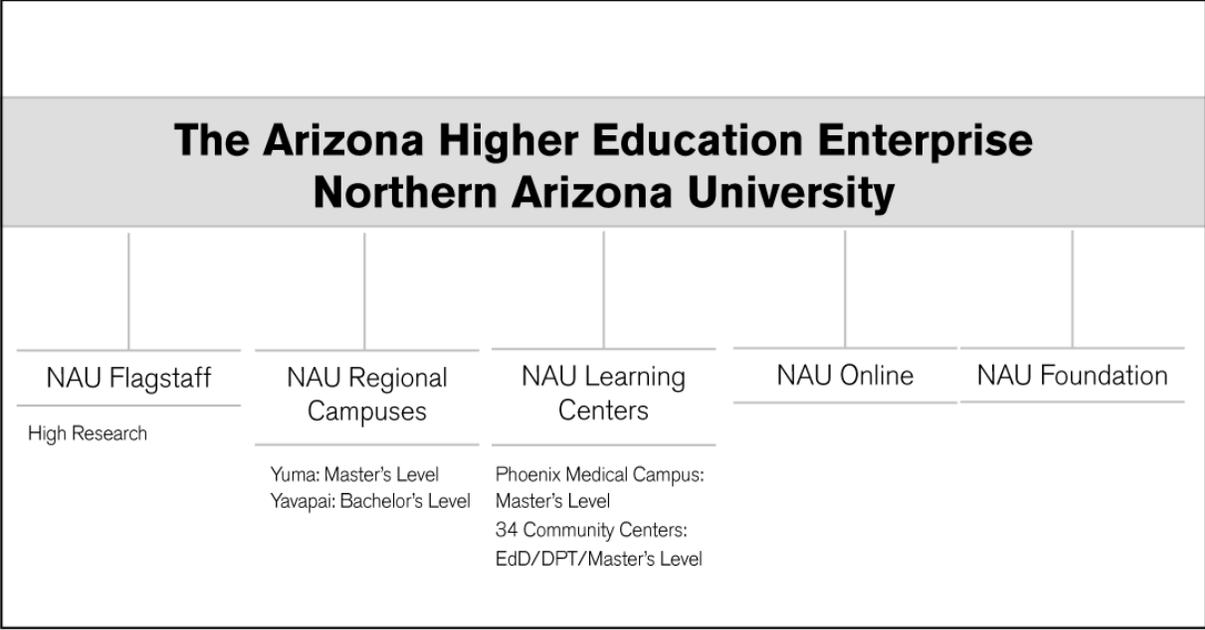
- 1) University-wide enrollment management to 85,000 (up from 70,000) students at the colleges located on the four campuses of ASU.
- 2) Improvement in freshmen retention rate to ~ 90% (up from 83%).
- 3) Graduation rate (6 year) to greater than 70% (up from 56%).
- 4) ASU Online enrollment to 30,000 (up from 3,000) (with differentiated tuition).
- 5) Colleges@ASU enrollment to 5,000 (up from zero) (with differentiated tuition).
- 6) Transformation of curriculum and academic structure to address large/diverse distributed student body.
- 7) Continued research expansion to > \$700 million (non-medical research) (up from \$335 million).
- 8) Deep integration of teaching, learning and discovery mission into the Phoenix urban fabric and outstate Arizona measured by enhanced economic competitiveness indicators.
- 9) Joint initiatives with community colleges focused on bachelor's degree production so as to more than double this pathway for degree completions.



Northern Arizona University

Northern Arizona University offers outstanding undergraduate residential education strengthened by graduate programs and a significant, but selective research mission at its Flagstaff location. NAU-Flagstaff is analogous to Kent State University (Ohio) and Western Michigan University. NAU-Flagstaff is recognized for its educational and research expertise in biotechnology, business, environmental sciences, engineering, teaching and learning, and research focused on challenges faced by the Colorado Plateau and the interior Western U.S. It is known nationally as a center for undergraduate research and creative work. The Extended Learning Centers of NAU allow, and will increasingly allow in the future, students to pursue higher education through alternative learning environments. NAU currently offers over 70 degree, certificate, and endorsement programs – online and also available at the local level via campuses located throughout Arizona. The Extended Learning Centers of NAU have typically served professionals seeking career advancement through higher education, but are growing undergraduate online program enrollment. Northern Arizona University is also overseeing two emerging regional campuses (master’s level) with a primary mission to provide programming valued by the local communities of Yuma and Yavapai/Prescott. Northern Arizona University’s Extended Learning Centers, including NAU-Yuma and NAU-Yavapai, will not duplicate the high research mission of the Flagstaff campus. They will, however, join the Flagstaff campus in being important economic engines for their communities.

In the future, the NAU enterprise has a unique and challenging state-wide assignment and needs to move in several directions. These new directions are summarized in both the enterprise chart and the list of strategic needs detailed below:



Northern Arizona University Strategic Targets – 2010 Forward:

- 1) Enrollment management at NAU-Flagstaff to ~25,000 students (up from ~16,000).
- 2) Regional universities enrollment management to ~3,000 students (up from ~700).
- 3) Improve NAU-Flagstaff retention to 85% (up from 71%).
- 4) NAU-Flagstaff graduation rate (6 year) to 65% (up from 50%).
- 5) Continued research expansion at NAU-Flagstaff to ~ \$100 million (up from \$50 million).
- 6) Online and extended learning centers throughout Arizona to ~15,000 (up from ~7,000).
- 7) Community college partnerships, joint admissions eliminating most transfer issues and accelerated and other innovative learning options.
- 8) Implement differential tuition and admissions standards at regional campuses.

Action Recommendations for the Arizona Higher Education Enterprise

The following is a set of Council of Presidents recommendations regarding critical enterprise-wide issues and design improvements to promote enhanced effectiveness and efficiency for the enterprise.

Councils in the areas of finance, capital, academic affairs and information technology will be formed to define the approach, desired outcomes, timing and resource requirements to successfully address each of the recommendations.

Each of the following categories consists of a number of specific recommendations that when complete will contribute to Board and University Strategic Realignment decision-making. A preliminary date for the presentation of findings and specific implementation recommendations for the Council of Presidents is specific for each recommendation detailed below.

Outcome Driven Higher Education Enterprise

From 2010 forward, the Arizona Higher Education Enterprise will be governed, managed and funded with the focus being outcome driven objectives. Those basic outcomes for the enterprise level, detailed earlier as targets and goals, and the specific university target outcomes detailed in the last section will serve as the metrics of success.

The Council of Presidents will have responsibility for enterprise-wide attainment and each University President for individual university attainment.

Presidential performance will be evaluated according to outcome attainment and operational execution of University programs and activities.

Specific Recommendations –

- 1) Establish Council of Presidents as Enterprise Executive Committee responsible to Arizona Board of Regents for Enterprise outcomes. (*Immediate*)
- 2) Arizona Board of Regents establish on university recommendations University outcome metrics on 1 – 5 year and 10 year basis. (*December 2010*)

- 3) Arizona Board of Regents establish on Council of Presidents recommendations Higher Education Enterprise outcome metrics on 5 – 10 year basis with annual review. *(January 2011)*

New Compact with the State of Arizona

For the Enterprise to be successful it must operate at the highest speed and with the highest degrees of focus on effectiveness and efficiency possible and in a new spirit of cooperation with the State of Arizona.

Specific Recommendations –

- 1) Establish a public corporation (independent of the state of Arizona) for enhanced operating effectiveness. *(April 2011)*
- 2) Separation of administrative support requirements or linkages with the state *(January 2011)*
- 3) Develop new performance based investment/funding model for the state based on university productivity (outcome success) and state economic growth. *(January 2011)*

Enhancing Enterprise Efficiency and Effectiveness

The Arizona Higher Education Enterprise has an unalterable commitment to the highest quality in all of its endeavors: instruction, scholarship, and outreach to the residents of Arizona. Within this context, we will continually strive to contain its costs, drive its efficiencies and enhance its effectiveness so as to maintain maximum access. In so doing, both the Enterprise and the Universities will work to implement the following recommendations.

Specific Recommendations –

- 1) Eliminate - underperforming academic programs by 2012. *(April 2011)*
- 2) Develop new lower cost tuition options at NAU (selected campuses), ASU (Colleges@ASU) and UA South and selected UA Learning Centers. *(February 2011)*
- 3) Advance accelerated and enhanced general education curricula so as to speed graduation and contain cost. *(June 2011)*
- 4) Leverage on an Enterprise level all business operations where cost savings and performance enhancements can be realized. *(May 2011)*

- 5) Eliminate unnecessary duplication (academic and non-academic) at the Enterprise level and at the University level by 2012. *(April 2011)*
- 6) Develop new programs for new campuses that are more highly structured and more attuned to the needs of the local communities. *(May 2011)*
- 7) Expand online offerings.
- 8) Complete streamlining community college matriculation *(May 2011)*

Admissions

To meet Enterprise outcomes admissions, requirements are recommended for variation as follows:

Specific Recommendations –

- 1) Maintain ABOR existing policy for UA, ASU, NAU-Flagstaff *(March 2011)*
- 2) Following separate accreditation, new - admissions standards for NAU-Yuma, NAU-Yavapai, and Extended Learning Centers. *(October 2010)*

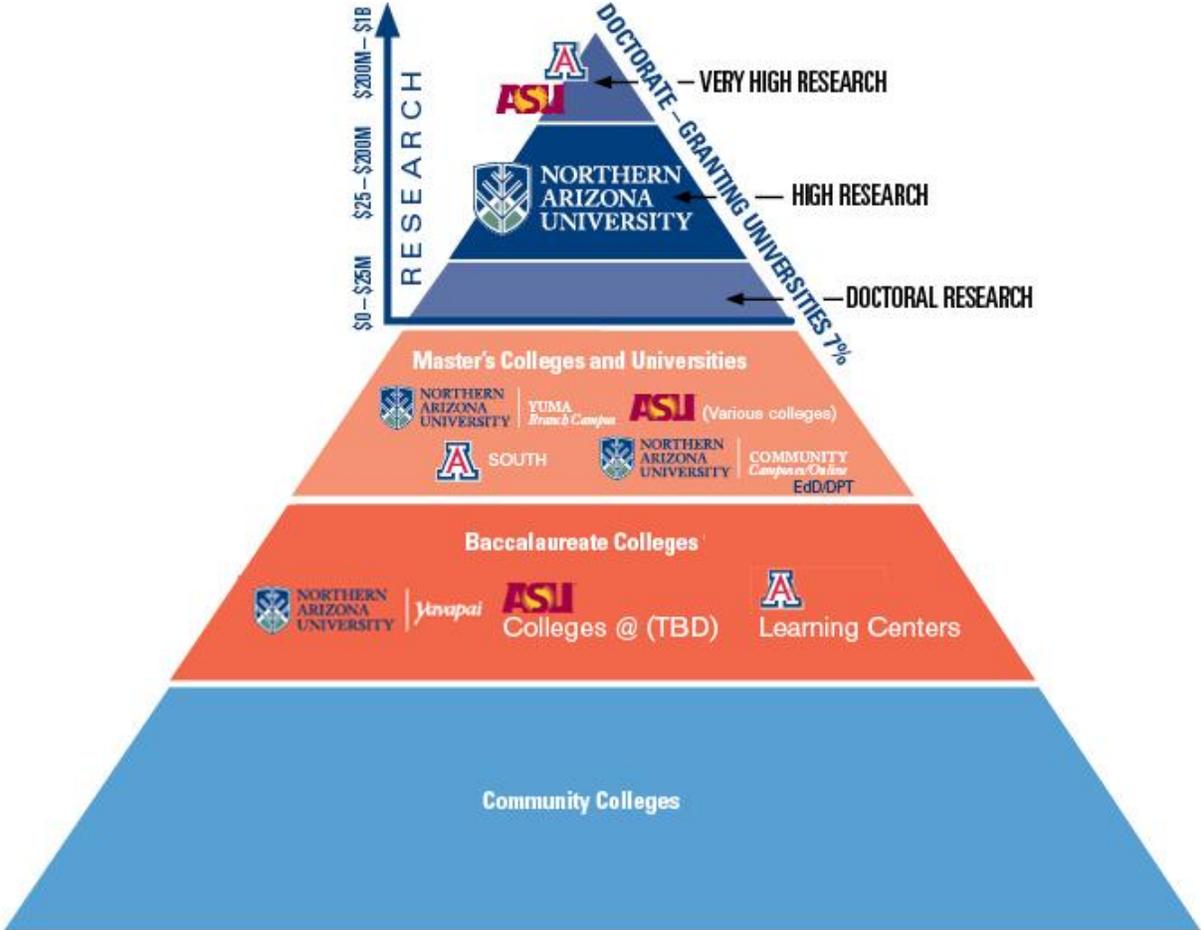
Tuition and Cost of Access

At the Enterprise level, we must have greatly expanded points of access and tuition levels to serve a broad constituency.

Specific Recommendations –

- 1) UA, ASU, NAU-Flagstaff base tuition at median or average of peers (phased in). *(February 2011)*
- 2) NAU-Yuma, NAU-Yavapai, Colleges@ASU and UA South have 20% - 50% lower tuition. *(February 2011)*
- 3) Online and distance programs priced at market. *(February 2011)*

Ultimately, this plan provides a pathway to the often cited problem of higher education in Arizona, that we are trying to educate all students in research universities. If we are successful, the figure below indicates how students can choose from a variety of institutions based on accessibility, affordability and program mix.



Special Focus Institutions/Tribal Colleges (19%) not included

Financial Aid

In addition, we recommend that ABOR pursue a state-wide financial aid program of ~\$350 million as a means of expanding financial access and freeing some university tuition revenue for investment in university programs.

Privatization

Our plan includes movement away from public support for segments of the universities as a part of a new trajectory.

Specific Recommendations –

- 1) Develop privatization plans for selected professional schools. (ASU Law School as the prototype) (*June 2011*)
- 2) Privatize -new residence halls and eventually entire program. (*Ongoing*)
- 3) Develop public/private/university partnership-- model for - new research facilities. (*June 2011*)

University Research and Economic Development Performance Metrics

For the Enterprise to be successful as a driver for enhanced economic competitiveness for Arizona and for each of the Enterprise units to gain sufficient performance and reputational status to drive the individual University brands forward, research and economic development performance metrics have been established that will move each institution to the level of a high performer in its peer group as well as drive an enterprise-wide research and economic development expenditures number at the level sufficient to be catalytic at the state level.

Specific Recommendations –

- 1) Develop research competitiveness to the level of annual research expenditures of \$2 billion within the Enterprise.
- 2) Perform in all indicators of research impact (patenting, startups, spin outs, licenses, etc.) and economic development expenditures (new companies started, partnerships with businesses and state agencies, total economic impact) at the upper 10% level of universities on a funding level basis.

In moving forward, the Council of Presidents will establish individual metrics for the research performance of the universities intended to move forward the overall research expenditure goal established earlier. Specific metrics, which will be reviewed by the Board as a part of the annual review of each President and as a part of the annual Enterprise review sessions, will include all indicators of research performance and output and all comparables for research and impact with peer institutions.

Enrollment and Graduation Performance

The Enterprise has established, as noted in the previous section, retention, graduation and other performance indicators associated with the production of graduates. Each of these indicators on an enterprise-wide basis will be used as a part of the formal review of each President, both at the Enterprise level and at the University level. In moving forward, there are several specific guidelines that the Board needs to establish to allow the universities to be successful.

Specific Recommendations –

- 1) Establish specific enrollment targets for each University and each of its targets or goals as a part of formal policy. (Details listed previously.) (*March 2011*)
- 2) Carry-out a formal performance evaluation for University enrollment and graduation performance on an annual basis. (*Ongoing*)

Administrative Changes

The Enterprise needs to focus its energy on its outcomes and goals. To do this, we need dramatic changes in areas of administration.

Specific Recommendations –

- 1) Revise all HR policies (under ABOR employer authority) to enterprise mode. (*June 2011*)
- 2) Establish “cafeteria” benefits and other university benefits so as to contain costs. (*April 2011*)
- 3) Centralize -functions for which efficiency can be enhanced at Enterprise level. (*April 2011*)

Summary

In the 2009 report entitled Vision 2020, the Arizona Board of Regents outlined the objective of raising Arizona to the national average of college graduates in the work force and moving Arizona to the status of a large scale center for academic research. This realignment plan outlines how both of these significant goals will be achieved in an era of more modest public investment. These achievements will be made possible through a series of dramatic realignments, including:

- 1) Establishment of the Arizona higher education system as an enterprise model of operations wherein the enterprise:
 - a. Is measured, governed and invested in based on performance metrics.
 - b. Is managed by presidents acting individually as university CEOs and together as an enterprise executive committee.
 - c. Is organized and operated without the constraints operating within the limits of the state of Arizona.
- 2) The restructuring of academic programs, support units and curricular design so as to maximize excellence and success for students, while containing cost.
- 3) Expansion of access to baccalaureate degrees through the establishment of new baccalaureate degree campuses, expanded community college access and expanded online access.
- 4) Broadening admission standards for selected academic units and campuses so as to expand the number of students eligible to pursue baccalaureate degrees.
- 5) Total restructuring of the state of Arizona investment model from the outdated enrollment growth model to a funding model built on performance indicators.
- 6) The privatization (no public investment) of select, self-sustainable academic programs.

- 7) The expansion of the research enterprise to \$2 billion per year, second only to California in the West, and movement of research impact indicators to the highest level of universities in the country.
- 8) Reaffirmation of the commitment of outreach to the people of Arizona as exemplified by the Extension Service and similar programs that address the practical concerns of the state's businesses and residents.

In summary, these changes in direction and design represent the most significant realignment of higher education in Arizona since the founding of the territorial university in 1885.