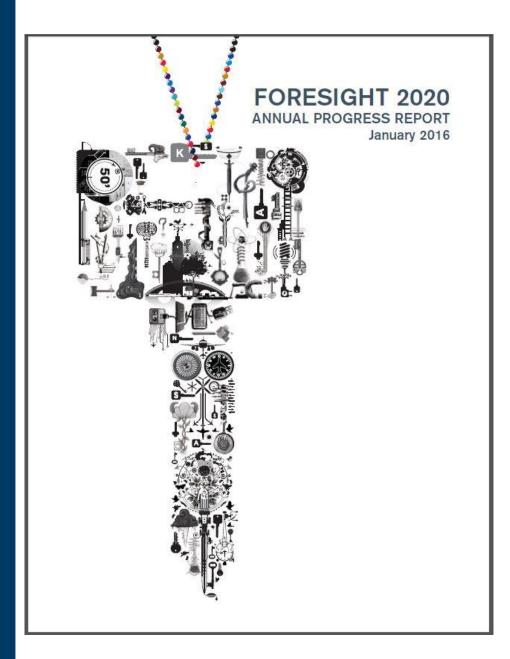


Foresight 2020 Fifth Annual Progress Report

Presented by Blake Flanders, Ph.D. January 20, 2016



THE COVER:

"Education is the key to success."

Design by Fort Hays State University Graphic Design Professors Karrie Simpson Voth and Chaiwat Thumsujarit. Additional illustrations by FHSU graphic design students.

Concept: The illustration depicts conceptual keys made up of elements representative of dozens of career choices which then make up the larger key symbolic of the thirty-two Regent's institutions, including blank keys for the prospect of new careers yet to be developed. The colorful ball chain uses the school colors of each institution coordinated by the Kansas Board of Regents.





Cornelius Minor

Staff Developer, Columbia University

"Data doesn't solve problems. It names them. Communities of practice solve problems."

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Foresight 2020 Strategic Goals

Goal One

Increase higher education attainment among Kansans

Goal Two

Improve alignment of the state's higher education system with the needs of the economy

Goal Three

Ensure state university excellence

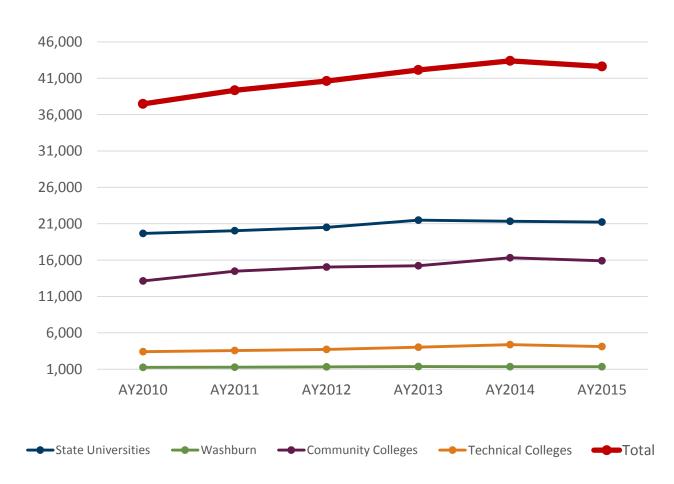
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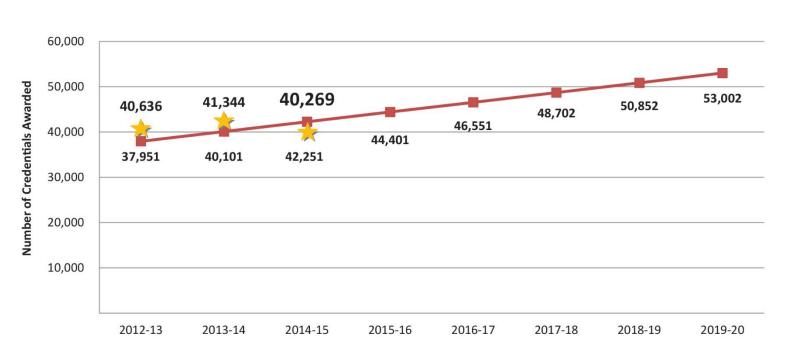
Goal 1: Increase Higher Education Attainment Among Kansans

What measures were selected to increase the number of Kansans with a postsecondary certificate or degree?

- The number of certificates and degrees awarded by public higher education institutions, and progress made according to our Attainment Model
- Graduation and Retention rates of students enrolled as well as a more holistic view of student success
- Enrollment trends compared to state demographics including Pell Grant eligibility, race/ethnicity, and age
- Adult Education participation, including the number who transition to postsecondary within three years of enrollment
- Success at attracting students with some college, but no degree, to return to complete a certificate or degree
- The number of courses guaranteed to transfer and the number of students who receive Reverse Transfer awards

Progress - The number of certificates and degrees awarded by public higher education institutions





The Board continues to monitor the number of undergraduate certificates and degrees issued by public and independent universities and colleges in Kansas to assess total attainment by 2020.

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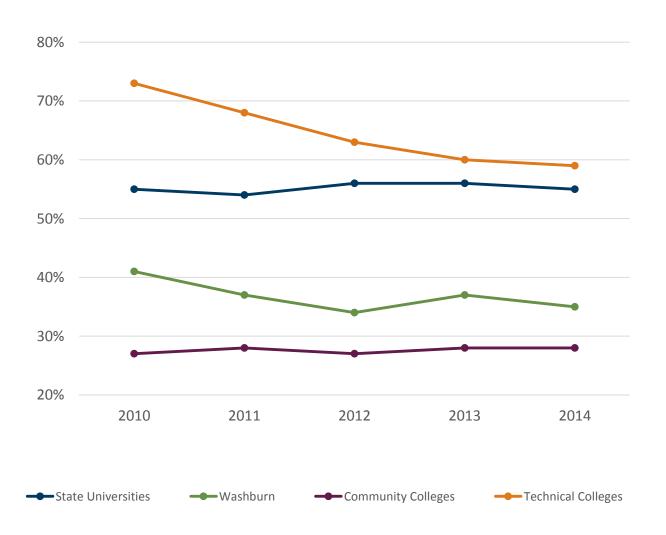
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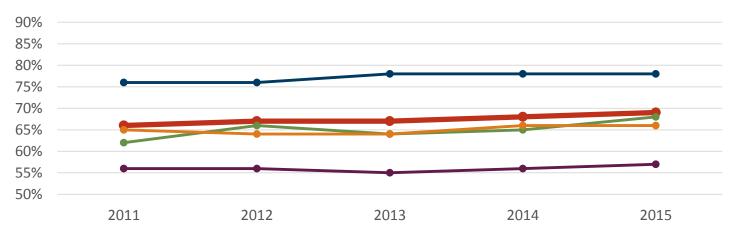
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Progress - Graduation Rates (150%)

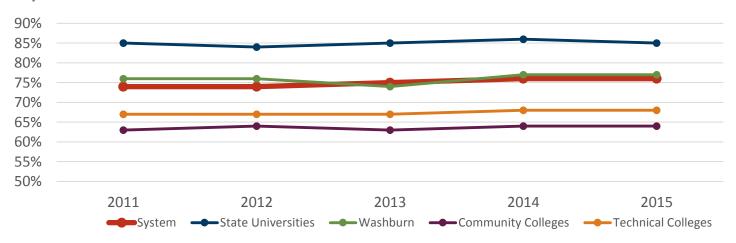


Progress - Retention Rates

Institution Retention



System Retention



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Goal 1: Attainment

Progress - Student Success Index Rates



Goal 1: Metric 5

Source: KBOR KHEDS AY Collection 2010-2015 and National Student Clearinghouse Note: Due to rounding, numbers may not add to 100 percent.

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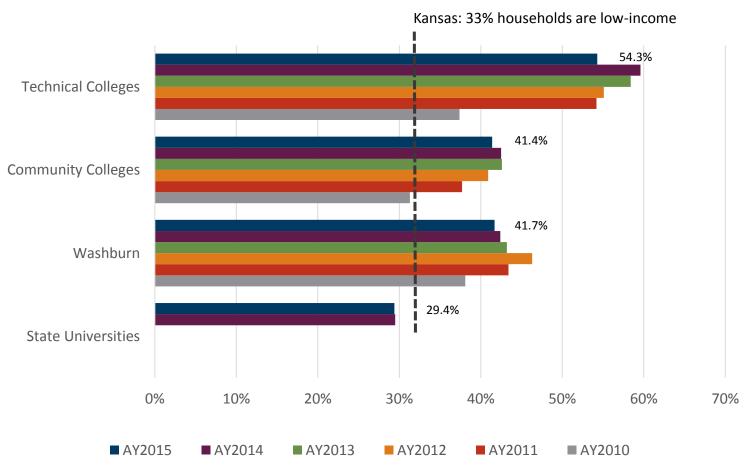
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Goal 1: Attainment

Progress - Enrollment compared to state demographics

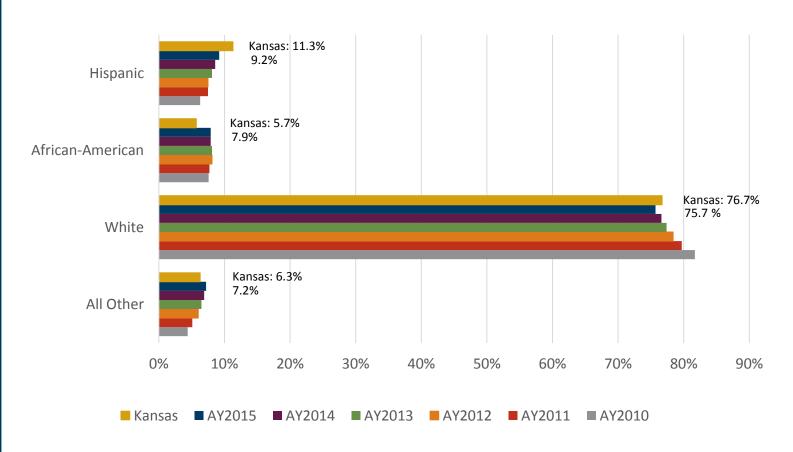
Goal 1: Metric 6

In AY2015, 35.9% of students at public postsecondary institutions received Pell Grants, which matches the national average of 35%.



Progress - Enrollment compared to state demographics

In AY2015, 7.9% of students identified as African-American, and 9.2% identified as Hispanic. In Kansas, 5.7% of the population identifies as African-American and 11.3% identifies as Hispanic.



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Goal 1: Metric 6 & 7

Progress - Enrollment compared to state demographics

- There has been an increase in participation among students under 18 and among those ages 18-19, and continues to be a decrease among students over 25.
- Across all four age groups, Kansas attainment exceeds the national percentage by 1-3% depending on age group.

| | Kansas Population | System Enrollment | Percent Served | مكيم |
|------------------|----------------------|----------------------|-------------------|------|
| 18-24 year olds: | 300,013 | 144,813 | 48% | م |
| 25-34 year olds: | 387,054 | 54,692 | 14% | |
| 35-44 year olds: | 349,971 | 19,780 | 6% | |
| | | | | |

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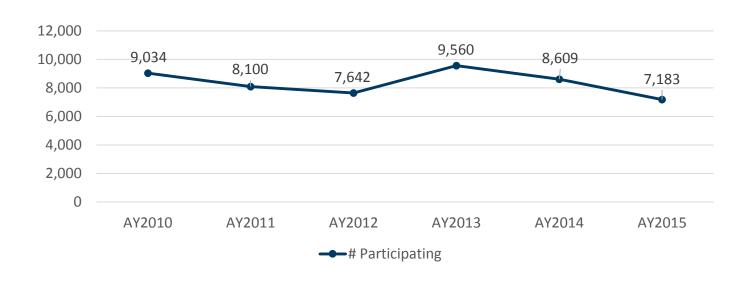
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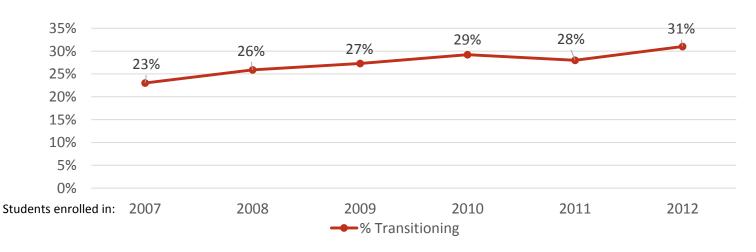
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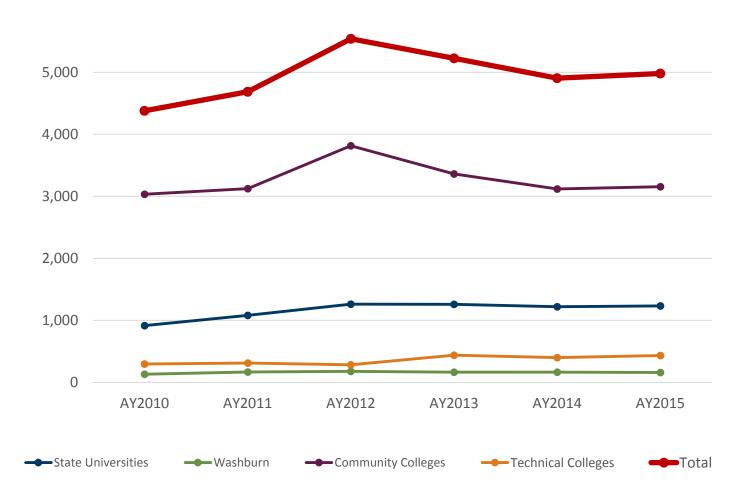
Goal 1: Attainment

Goal 1: Metric 8

Progress – Adult Education







Goal 1: Attainment

Progress - Transfer and Articulation

• **56 courses** have now been approved for guaranteed course transfer across the public higher education system, with **another ten being added by you today**, if approved.

Goal 1: Metric 10

 Reverse transfer has now been implemented systemwide, so that students who transfer to a state university can complete the necessary coursework for any associate degree already started and then be awarded that degree by the community or technical college the student last attended.

164 awards were granted in AY2015 through this new policy.

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Goal 2: Improve Alignment of the State's Higher Education System with Economy

What measures were selected to improve alignment with the needs of the Kansas economy?

- Employment and average wages of graduates (in Kansas)
- Occupations that are in high-demand and the success of public higher education institutions in meeting the demand
- Progress made on special state initiatives
- Technical Program alignment with the needs of business and industry through established program outcome metrics
- Percent of certificates and degrees awarded in **STEM fields**
- Student Performance on **Foundational Skills** needed by business and industry of all graduates

Goal 2: Alignment

Goal 2: Metric 1

Progress - Employment and average wages

Read straight-across to follow one cohort of graduates across multiple years.

| Bachelor's Degre | es |
|------------------|----|
|------------------|----|

| | 5.00.000 | | | | | | | | | |
|--------|-----------|----------|-----------|----------|----------------|----------|-----------|----------|-----------|----------|
| | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | |
| | % | | % | | % | | % | | % | |
| | graduates | | graduates | | graduates | | graduates | | graduates | |
| | employed | Average | employed | Average | employed | Average | employed | Average | employed | Average |
| Cohort | in Kansas | Earnings | in Kansas | Earnings | in Kansas | Earnings | in Kansas | Earnings | in Kansas | Earnings |
| 2008 | 53.99% | \$34,168 | 51.47% | \$36,863 | 50.40% | \$38,274 | 48.60% | \$42,849 | 47.11% | \$45,969 |
| 2009 | | | 52.83% | \$33,346 | 50.38% | \$35,673 | 48.86% | \$38,956 | 47.98% | \$42,022 |
| 2010 | - | | | | 52.58% | \$32,780 | 50.41% | \$36,562 | 48.96% | \$39,369 |
| 2011 | | 1.77 | | | Marine Comment | | 52.87% | \$34,353 | 50.46% | \$37,893 |
| 2012 | | | | 22 | | | - | | 53.04% | \$35,578 |

Read diagonal to compare various cohorts over a comparable length of time post-graduation.

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Goal 2: Alignment

Goal 2: Metric 1

Progress - Employment and average wages

Associate Degrees

| | 201 | 2010 | | | 201: | 2 | 201 | 3 | 201 | 4 |
|--------------------|--------------------------------------|------------------|--------------------------------------|------------------|--------------------------------------|------------------|--------------------------------------|------------------|--------------------------------------|------------------|
| Completion Year | % graduates employed in Kansas | Average Wages |
| 2009 | 59.23% | \$33,126 | 58.08% | \$33,808 | 58.51% | \$35,541 | 57.52% | \$37,865 | 56.01% | \$40,250 |
| 2010 | <u> 22</u> 8 | 220 | 57.31% | \$31,950 | 56.87% | \$34,196 | 55.45% | \$36,472 | 55.22% | \$39,243 |
| 2011 | H 1 | | (## | 1 to 1 to 1 | 58.45% | \$31,703 | 57.45% | \$34,217 | 56.32% | \$36,704 |
| 2012 | 278 | ### | 553 | 3000 | 955 | 650 | 59.94% | \$33,178 | 58.93% | \$35,779 |
| 2013 | 228 ° | 220 | (EE) | 922 | 322 | (22 | 222 | 226 | 59.76% | \$32,763 |

Bachelor's Degrees

| | 2010 | 0 | 2011 | į. | 201 | 2 | 201 | 3 | 201 | .4 |
|--------------------|--------------------------------------|------------------|--------------------------------------|------------------|--------------------------------------|------------------|--------------------------------------|------------------|--------------------------------------|------------------|
| Completion Year | % graduates employed in Kansas | Average Wages |
| 2009 | 52.83% | \$33,346 | 50.38% | \$35,673 | 48.86% | \$38,956 | 48.00% | \$42,042 | 46.92% | \$46,833 |
| 2010 | 55.5 | (80) | 52.58% | \$32,780 | 50.41% | \$36,577 | 49.02% | \$39,375 | 47.79% | \$43,763 |
| 2011 | 2520 | 623 | 422 | | 52.87% | \$34,353 | 50.51% | \$37,898 | 49.32% | \$41,989 |
| 2012 | Har (| 200 | 1944 | 9 44 | 700 | 844 | 53.12% | \$35,582 | 50.22% | \$39,330 |
| 2013 | 578 | === | 9575 | 3877 | 9755 | 0.50 | 678 | 3.00 | 52.24% | \$37,938 |

It appears the percentage of graduates employed in Kansas diminishes with each subsequent year of employment, and with each level of education attained (from certificates to doctoral degrees).

| Occupational Title | 2015 Median Wages | AY2015 Awards Granted | Occupational Projections Have: 2012 | Occupational Projections Need: 2022 | Proje | ational ctions |
|---|-------------------------|-----------------------------|---|---|-------|-------------------|
| Accountants and Auditors | \$58,570 | 686 | 12,457 | 14,467 | 2,010 | 16.1% |
| Aircraft Mechanics and Service Technicians | \$56,770 | 109 | 1,893 | 1,966 | 73 | 3.9% |
| Civil Engineers | \$71,970 | 169 | 1,647 | 2,019 | 372 | 22.6% |
| Computer Systems Analysts | \$75,650 | 139 | 2,965 | 3,791 | 826 | 27.9% |
| Dental Hygienists | \$69,790 | 84 | 1,708 | 2,075 | 367 | 21.5% |
| Electrical Engineers | \$82,090 | 222 | 2,114 | 2,453 | 339 | 16.0% |
| Electricians | \$48,500 | 127 | 5,515 | 6,182 | 667 | 12.1% |
| Heating, Air Conditioning, and Refrigeration Mechanics and Installers | \$44,200 | 145 | 2,686 | 3,065 | 379 | 14.1% |
| Industrial Engineers | \$72,980 | 145 | 2,096 | 2,367 | 271 | 12.9% |
| Lawyers | \$79,250 | 262 | 4,948 | 5,610 | 662 | 13.4% |
| Mechanical Engineers | \$69,440 | 392 | 1,815 | 2,079 | 264 | 14.5% |
| Network and Computer Systems Administrators | \$63,730 | 152 | 5,024 | 5,728 | 704 | 14.0% |
| Pharmacists | \$122,620 | 166 | 3,281 | 3,785 | 504 | 15.4% |
| Physical Therapists | \$78,940 | 84 | 1,876 | 2,387 | 511 | 27.2% |
| Physicians and Surgeons | ۸ | 189 | 2,877 | 3,312 | 435 | 15.1% |
| Radiologic Technologists | \$48,110 | 76 | 2,207 | 2,559 | 352 | 15.9% |
| Registered Nurses | \$55,880 | 1,615 | 28,438 | 33,460 | 5,022 | 17.7% |
| Software Developers, Systems Software | \$90,830 | 220 | 2,863 | 3,500 | 637 | 22.2% |

Source: Kansas Department of Labor, LMIS; KBOR KHEDS AY Collection 2015 ^ Figure suppressed due to confidentiality and/or reliability standards.

Goal 2: Alignment

Progress – Excel in Career Technical Education

In 2012, Senate Bill 155 became law, providing state-funded college tuition for high school students enrolling in postsecondary technical education courses.

| | AY2011 | AY2012 | AY2013 | AY2014 | AY2015 |
|--------------------------------|--------|--------|--------|--------|--------|
| Participating Headcount | 3,475 | 3,870 | 6,101 | 8,528 | 10,390 |
| College Credit Hours Generated | 28,000 | 28,161 | 44,087 | 62,787 | 77,204 |
| Credentials Earned | | 548 | 711 | 1,419 | 1,682 |

Source: KBOR KHEDS AY Collection 2010-2015

Goal 2: Metric 2

Enrollment has nearly tripled since the program began, and the number of college credit hours earned has increased by 175%.

Progress – University Engineering Act

There were 1,178 engineering graduates in AY2015:



Goal 2: Alignment

Progress – Kansas Nursing Initiative

Established in 2006, this initiative charged the higher education system with increasing the number of nursing students by 250 per year as a 10-year initiative.

Achievements: FY2007 - FY2014

- 3,455 additional nursing students admitted (172% above goal)
- 307 additional full-time faculty hired
- 335 additional part-time faculty hired
- 200 Nurse Educator Service Scholarships awarded
- 27 new human patient simulators placed in classrooms
- 2,462 additional nursing students graduated

Progress – University Research Grants

Grants for KU, KSU, and WSU have focused research on cancer, global food systems, veterinary medicine, and aviation – all important contributors to the Kansas economy.



- NCI designation
- expanded clinical trials
- Midwest Cancer Alliance



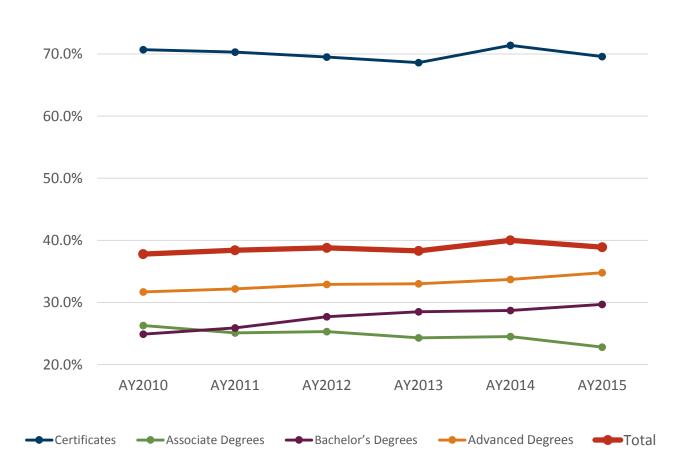
- vaccine development
- NBAF partnership
- increased entrepreneurship



- #1 industry-financed research
- advanced research projects
- NIAR improvements

Progress – Technical Program Alignment (K-TIP)

- The Kansas Training Information Program (K-TIP) Report includes data for all approved postsecondary career technical programs offered at community and technical colleges.
- Compiled annually, K-TIP provides data by academic discipline and by institution.
- Approved metrics for quality assessment include:
 - Employment 80% of graduates within six months
 - Wages 95% of the statewide entry level wage for that occupation
- 6 Academic Disciplines (aggregate statewide) met both targets
- Another 2 met the employment target only
- Another 1 met the wages target only



Progress - Foundational Skills

- Common outcomes identified as needed by business and industry leaders include:
 - Mathematics/Quantitative/Analytical Reasoning
 - Written and Oral Communications
 - Critical Thinking/Problem Solving
- AY2015 focused on mathematics.
- All institutions reported on assessment of student learning in this area, established benchmarks and baselines against which to measure future results and make comparisons with national results.

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Goal 3: Ensure State University Excellence

What does the Board track in order to ensure state university excellence?

- Performance of state universities compared to peers on selected metrics
- Support universities receive through private giving
- Federal research expenditures which have historically been a national indicator of excellence, especially for research universities, and the role of Industry in supporting research
- The creation of a **University Excellence Profile** for each, reviewing select rankings, Composite Financial Index, and an assessment of economic impact

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Goal 3: Excellence

Progress - Performance compared to peers

| | Rankings Among Peers | | | | | | |
|--|----------------------|-----|-----|-----|-----|-----|--|
| | ES | SU | PS | SU | FH | SU | |
| Graduation Rate | 51 | th | 21 | nd | 4th | | |
| Retention Rate | 2nd | | 2nd | | 3rd | | |
| Degrees Awarded | 31 | rd | 51 | th | 1st | | |
| Endowment | 1st | | 1st | | 1st | | |
| Enrollment | 6th 5th | | 5th | | 1 | st | |
| ACT Scores (25 th /75 th) | 3rd | 3rd | 3rd | 3rd | 4th | 3rd | |

Goal 3: Metric 1

ESU Peers:

Colorado State University - Pueblo Pittsburg State University West Texas A&M University

Northwest Missouri State University University of Nebraska - Kearney

FHSU Peers:

Northwest Missouri State University Colorado Mesa University Northeastern State University - OK **Tarleton State University**

Southeast Missouri State University

PSU Peers:

Arkansas Tech University Indiana University of Pennsylvania Valdosta State University

Ferris State University Northwest Missouri State University

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Goal 3: Excellence

Progress - Performance compared to peers

| | Rankings Among Peers | | | | | | |
|--------------------------|----------------------|-----|-----|--|--|--|--|
| | KU | KSU | WSU | | | | |
| Graduation Rate | 6th | 6th | 5th | | | | |
| Retention Rate | 6th | 5th | 4th | | | | |
| Degrees Awarded | 5th | 6th | 6th | | | | |
| Endowment | 3rd | 4th | 2nd | | | | |
| Research Expenditures | 3rd | 3rd | 5th | | | | |
| Faculty Awards | 2nd | 6th | 6th | | | | |
| National Academy Members | 4th | 6th | 6th | | | | |

Goal 3: Metric 1

KU Peers:

Indiana University University of Oregon University of Buffalo University of Missouri Michigan State University

KSU Peers:

Auburn University
Colorado State University

Clemson University
Oklahoma State University

University of Massachusetts-Amherst

WSU Peers:

New Mexico State University University of Nevada – Reno Wright State University University of Massachusetts - Lowell

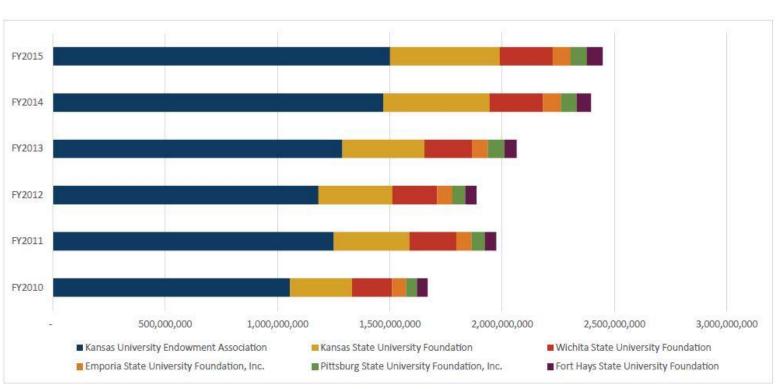
University of North Dakota

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Source FY2005 to FY2014: National Association of College and University Business Officers (NACUBO) and Commonfund Institute
*Source FY2015: Individual University Endowment Association or Foundation

Goal 3: Excellence

Progress - Research Expenditures

Federal Support fell at all three research universities, and the percent of research expenditures from federal dollars declined as well, however total dollars received increased at nearly every institution:

| | KU | KSU | WSU | PSU | ESU | FHSU |
|---------------------|---------------|---------------|--------------|-------------|-----------|-----------|
| FY2014 | | | | | | |
| Total R&D dollars | \$301,534,000 | \$184,945,000 | \$58,859,000 | \$2,475,000 | \$326,000 | \$775,000 |
| Federal R&D dollars | \$165,442,000 | \$67,438,000 | \$10,424,000 | \$1,023,000 | \$187,000 | \$485,000 |
| Federal % of total | 55% | 36% | 18% | 41% | 57% | 63% |

Source: Higher Education Research and Development (HERD) Survey, FY2010-2014

Goal 3: Metric 3

Industry Support in AY2015 included:

- More than \$12.7 million in industry-sponsored research at KU
- 31 active start-up companies based on KU research
- 1,656 grant proposals submitted at K-State
- K-State approval for unmanned commercial flight training
- \$20 million from 234 clients in contract funding to NIAR at WSU
- Airbus relocating to WSU's new Innovation Campus

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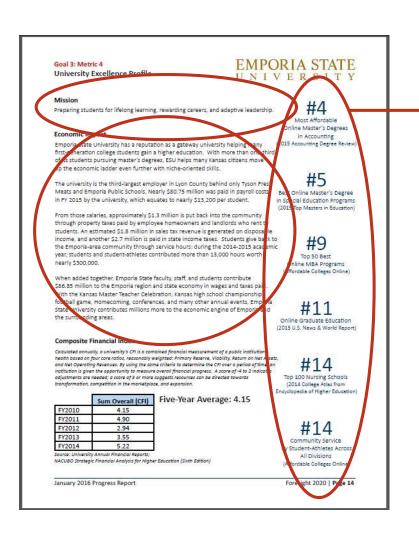
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Goal 3: Excellence

Goal 3: Metric 4

Progress - University Excellence Profiles



Mission, statement of Economic Impact, and select rankings were authored by each university.

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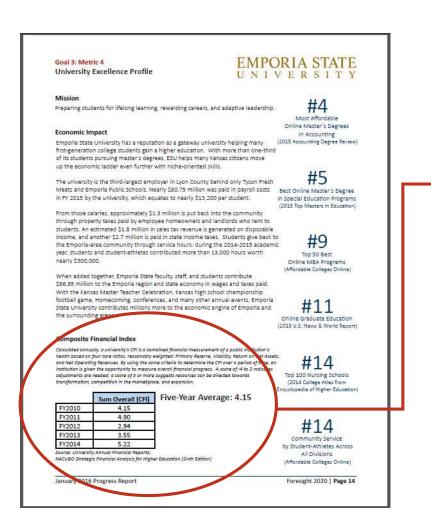
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Goal 3: Excellence

Goal 3: Metric 4

Progress - University Excellence Profiles



Composite
Financial Index
Information
is calculated
to provide
measurement
of a public
institution's
financial health.

Some Closing Thoughts

- As predicted, the difficulty in making progress on our attainment goal is becoming apparent.
- We have now secured employment and wage data for graduates who relocate to Missouri – this will improve the picture of wages and jobs of our graduates tremendously, however we need continue to pursue agreements with other contiguous states.
- Modifications to the Foresight 2020 report, including the reordering throughout Goal 1, clarification to metrics in Goal 2, and the addition of several metrics in Goal 3, are helpful and an improvement.
- Continuing to assess the value of some metrics, and revision to others, should be considered.