

# FORESIGHT 2020 ANNUAL PROGRESS REPORT

January 16, 2014
Presented by Dr. Andy Tompkins

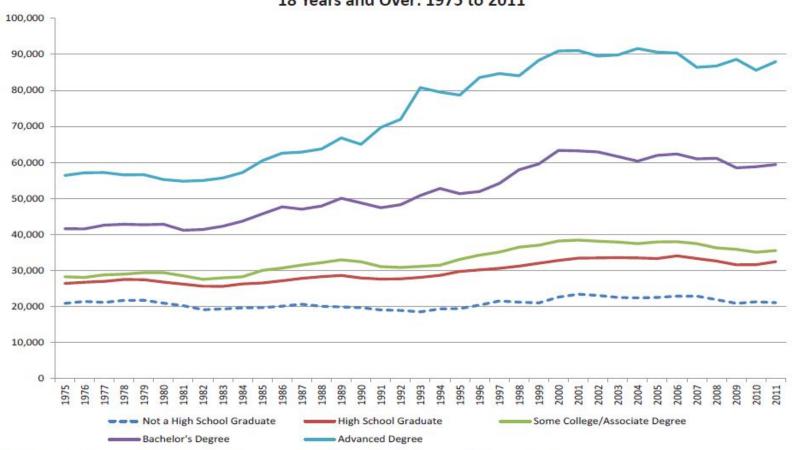


# Three Strategic Goals

- ★ Increase Higher Education Attainment Among Kansans
- ★ Improve Alignment of the State's Higher Education System with the Needs of the Economy
- ★ Ensure State University Excellence



U.S. Population Mean Annual Earnings of Workers 18 Years and Over: 1975 to 2011



Source: U.S. Census Bureau, Current Population Survey (adjusted for inflation; 2011 dollars)
Calculated by Art Hall, Director of the Center for Applied Economics at the University of Kansas School of Business

### Goal 1: Increase Higher Education Attainment Among Kansans

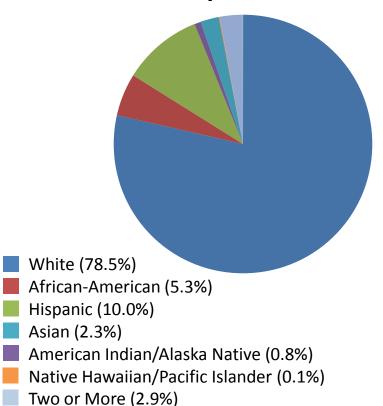
### Measures:

- Comparison of state demographics with higher education participation levels
- Review of higher education participation levels by age groups with comparison by age groups to the nation
- Number of adult education participants and percentage of participants transitioning to postsecondary education
- Three-year graduation rates for community and technical colleges
- Six-year graduation rates for universities
- First to second year retention rates
- Student Success Index
- Number of certificates and degrees awarded
- Number of adults returning to college to complete a certificate or degree

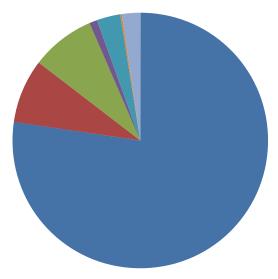
### Goal 1:

# Comparison of state demographics with higher education participation levels

### **Kansas Population in 2012**



### **Kansas Higher Education in AY2013**



	System (total)						
	AY2010	AY2011	AY2012	AY2013			
White	81.7%	79.7%	78.4%	77.4%			
African-American	7.6%	7.7%	8.1%	8.1%			
Hispanic	6.3%	7.5%	7.5%	8.1%			
All Other	4.4%	5.1%	6.0%	6.5%			

Goal 1: Review of higher education participation levels by age groups with comparison by age groups to the nation

**Adults with Associate Degree or Higher** 

	Kansas			U.S.		
	2010	2011	2012	2010	2011	2012
Adults 18-24	16%	15%	13%	14%	14%	14%
Adults 25-34	43%	44%	43%	40%	40%	41%
Adults 35-44	44%	43%	44%	40%	41%	42%
Adults 45-64	38%	39%	39%	37%	37%	38%

Concern: Among adults ages 18-24, while the national average has remained constant at 14 percent, the number of Kansans with an associate degree or higher in this age group has dropped from 16 percent in 2010 to just 13 percent in 2012.

### Goal 1:

Number of adult education participants and percentage of participants transitioning

### **Enrollment in Adult Education Programs**

	AY2010	AY2011	AY2012	AY2013
Number Participating	9,034	8,100	7,642	9,560

### Adult Education Students Transitioning to Postsecondary Within Three Years

Cohort:	AY2007	AY2008	AY2009	AY2010
% Transitioning	20.8%	22.9%	24.8%	26.6%

Trend Reversed: the number of Kansans enrolled in adult education is the highest it has been since 2004, due to the introduction of enrollment targets, updated performance-based funding policies, and a new vision focused on college and career readiness.



### Goal 1:

### **Graduation Rates**

	AY2010	AY2011	AY2012
National (6-year)	56.0%	56.5%	
State Universities (6-year)	55.3%	53.9%	55.9%
Washburn (6-year)	42.3%	37.9%	33.7%
National (3-year)	20.4%	20.2%	
2-year Sector (3-year)	31.0%	32.0%	30.3%
Community Colleges (3-year)	26.7%	27.7%	27.1%
Technical Colleges (3-year)	73.3%	67.9%	63.3%

Trend Reversed: The state universities saw graduation rates ranging from a low of 41 percent to a high of 64 percent in AY2012, averaging 55.9 percent – coming close to the national average.

Improved Economy: Graduation rates for the two-year public sector ranged from a low of 13 percent to a high of 81 percent in AY2012. The sector had a decline in the average graduation rate to 30.3 percent but this is still 50 percent higher than the national average.



### Goal 1:

### **Retention Rates**

	AY2010		AY2	011	AY2012	
	Institution	System	Institution	System	Institution	System
System	66.3%	74.6%	66.6%	74.7%	67.2%	74.7%
State Universities	76.8%	85.7%	75.7%	84.1%	77.7%	85.2%
Washburn	62.1%	76.3%	66.4%	75.5%	64.5%	74.7%
2-year Sector	68.8%	77.6%	65.1%	74.0%	64.5%	72.8%
Community Colleges	55.7%	63.4%	56.4%	64.7%	55.2%	63.0%
Technical Colleges	65.2%	68.1%	64.5%	67.4%	64.8%	67.7%

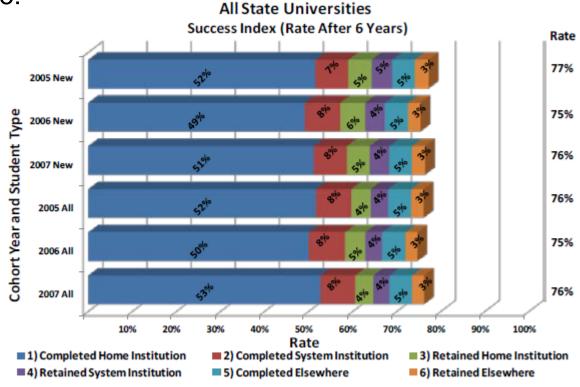
The average retention rate nationally in AY2011 was 79.3 percent for 4-year public institutions and 58.9 percent for 2-year public institutions – Kansas exceeded in both sectors (83.5 and 74.0 percent, respectively).



### Goal 1:

### Student Success Index

For the first time, Kansas institutions can now monitor the success of a broader number of students who are retained and/or complete elsewhere:

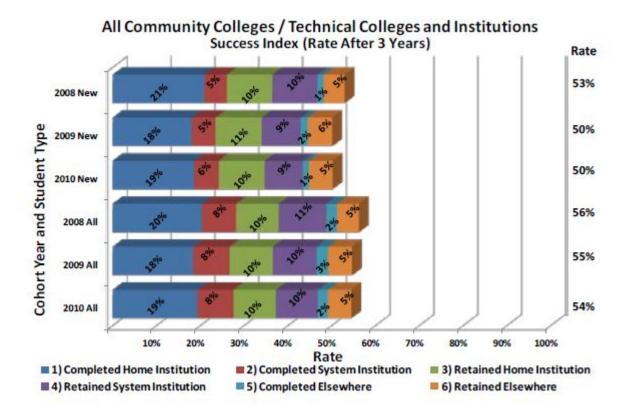




### Goal 1:

### Student Success Index

The impact of this new measurement is even more significant for community and technical colleges:



### Goal 1: Number of certificates and degrees awarded

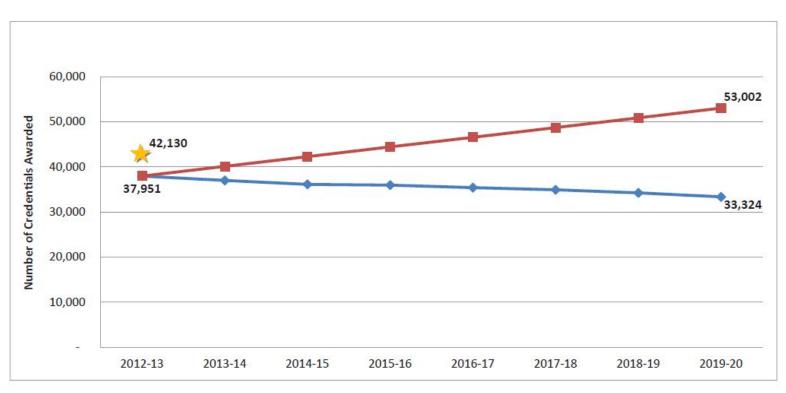
In AY2013, the Kansas postsecondary system awarded 42,130 credentials – putting the state above goal projections which outline the number that will need to be awarded annually to increase to 60 percent the number of Kansas adults who have a certificate, associate or bachelor's degree by 2020.

**AY2013 Certificate and Degree Production** 

	AY2010	AY2011	AY2012	AY2013
State Universities	19,661	20,032	20,507	21,500
Washburn	1,248	1,276	1,330	1,368
Community Colleges	13,129	14,467	15,056	15,226
Technical Colleges	3,424	3,569	3,721	4,036
Total	37,462	39,344	40,614	42,130



### **Attainment Model Pathway**





2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
37,951	36,962	36,098	35,940	35,370	34,881	34,206	33,324
37,951	40,101	42,251	44,401	46,551	48,702	50,852	53,002



### Goal 1:

# Number of adults returning to college to complete a certificate or degree

### Adults with Some College Credit but No Degree Returning

36	AY2010	AY2011	AY2012	AY2013
State Universities	916	1,081	1,261	1,259
Washburn	132	168	178	165
Community Colleges	3,034	3,125	3,816	3,362
Technical Colleges	297	311	285	438
Total	4,379	4,685	5,540	5,224

Improvement: While there was a decrease in AY2013, there has been a 37.4 percent increase since AY2010 in this student population at the state universities, a 47.5 percent increase at the technical colleges, and a 10.8 percent increase at the community colleges.

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

### Measures:

- Performance of students on institutional assessments\*
- Performance of students on selected third-party technical program credential assessments\*
- Percent of graduates employed in Kansas
- Average wages earned by graduates
- Improvement in quality measures on technical program outcome metrics\*
- Number of certificates and degrees awarded in high-demand occupations
- Percent of certificates and degrees awarded in STEM fields

<sup>\*</sup>Assessment scheduled to begin in AY2014



### Goal 2:

### Performance of students on institutional assessments

The Board has determined the most direct measurement of the system's ability to meet and exceed business and industry expectations is to assess core workplace skills in:

- mathematics/analytical reasoning
- written and oral communication
- critical thinking/problem solving

Starting in AY2014, the following identified instruments, along with program-based assessments, will be used to report student learning:

### University Assessment Instruments:

Collegiate Learning Assessment
Collegiate Assessment of Academic Proficiency
iSkills Assessment
ETS Proficiency Profile
National Survey of Student Engagement

### Community and Technical College Assessment Instruments:

Collegiate Learning Assessment
Collegiate Assessment of Academic Proficiency
COMPASS
ASSET and ACT
WorkKeys
Community College Survey of Student Engagement



### Goal 2:

Performance of students on selected third-party technical program credential assessments

- Starting in AY2014, systematic reporting of third-party assessments will be tracked and reported.
- An incentive-based pilot initiative is now underway in Healthcare, Transportation, and Manufacturing disciplines to best understand how to secure accurate counts of industry-recognized credentials.



### Goal 2:

### Percent of graduates employed in Kansas and Average wages earned by graduates

	One-Year	Post Graduation	Two-Years I	<b>Two-Years Post Graduation</b>			
	% Employed in Kansas	Average Earnings	% Employed in Kansas	Average Earnings	% Difference in Earnings		
Technical Certificates	76.1%	\$19,724	71.2%	\$20,843	5.7%		
Associate Degrees	71.3%	\$30,070	66.6%	\$30,540	1.6%		
Bachelor's Degrees	63.6%	\$29,057	58.3%	\$32,036	10.3%		
Master's Degrees	55.5%	\$44,955	52.3%	\$46,731	4.0%		
Professional Degrees	45.2%	\$58,276	41.6%	\$64,283	10.3%		
Doctoral Degrees	35.4%	\$51,694	31.4%	\$57,678	11.6%		

New research conducted Donna Ginther, Professor at the University of Kansas, links Kansas postsecondary data with current labor data, provided by the Kansas Department of Labor.



### Goal 2:

# Improvement in quality measures on technical program outcome metrics

Input was collected from key stakeholders to identify specific program performance metrics important to business and industry in Kansas. As a result of these discussions, the following three metrics were strongly supported and recommended for adoption:

- 1) student attainment of industry-recognized credentials,
- 2) employment of students after exiting postsecondary education, and
- 3) wages earned by those students after exiting.

These were formally approved by the Board in Sept 2012. During the past year, institutional feedback and data reporting processes have been reviewed. The pilot initiative now underway is key to advancing the reporting on this metric and will establish minimum thresholds.



### Goal 2:

# Number of certificates and degrees awarded in high-demand occupations

Occupational Title	Average Annual Wage	Total Job Demand 2010 - 2020*	AY2013 Awards Granted
Registered Nurses	\$58,750	12,808	1,695
Accountants and Auditors	\$64,680	4,057	677
Lawyers	\$103,840	1,431	324
Electricians	\$48,310	2,173	121
Pharmacists	\$113,760	1,300	473
Electrical Engineers	\$83,470	833	200
Physicians and Surgeons, All Other	\$205,860	1,223	160
Industrial Engineers	\$74,960	578	92
Mechanical Engineers	\$73,770	968	295
Civil Engineers	\$73,670	732	160
Physical Therapists	\$74,780	764	76
Dental Hygienists	\$63,840	955	84
HVAC Mechanics and Installers	\$43,810	1,143	157
Radiologic Technologists and Technicians	\$49,240	1,032	155
Aircraft Mechanics and Service Technicians	\$57,520	982	192



### Goal 2:

Percent of certificates and degrees awarded in STEM fields

#### **Number of Awards Granted in STEM Fields**

	AY2010		AY2011		AY2012		AY2013	
	STEM	%	STEM	%	STEM	%	STEM	%
Certificates	6,623	70.7%	7,184	70.3%	7,240	69.5%	7,181	68.6%
Associate Degrees	2,004	26.3%	2,069	25.1%	2,219	25.3%	2,258	24.3%
Bachelor's Degrees	3,575	24.9%	3,682	25.9%	4,012	27.7%	4,487	28.5%
Advanced Degrees	1,900	31.7%	2,074	32.2%	2,169	32.9%	2,076	33.0%
Total	14,102	37.8%	15,009	38.4%	15,640	38.8%	16,002	38.3%

In AY2012, the regional average of credentials awarded in STEM fields across credential types was 34.3 percent. Kansas continues to exceed this rate with 38.3 percent of all credentials having been awarded in these fields.



### Goal 2:

Enhance understanding of the role of university research in supporting the economy.

Three key initiatives underscore the role of university research across the state, bringing together university partners and related entrepreneurial organizations focused on the state's core strengths:

- 1) The Innovation Growth Program (\$1.25M in FY2014),
- 2) University Engineering Initiative Act (\$3.5M each for 10 years), and
- 3) University Research Grants (\$5M each to three universities, requiring a 1:1 match from each university):
  - Kansas State University Animal Health Research
  - The University of Kansas Cancer Center
  - Wichita State University National Institute for Aviation Research



# Goal 3: Ensure State University Excellence

### Measures:

- Institutional performance on quality measures compared to peers, including select regional and national rankings\*
- Increase in proportion of federal research dollars awarded
- Increase in private giving to universities

<sup>\*</sup>Assessment scheduled to begin in AY2014



### Goal 3:

Institutional performance on quality measures compared to peers, including select regional and national rankings

Revised peers were approved in October 2013, along with metrics to be used in reporting comparative performance.

### Research Universities Approved Performance Metrics:

- Six-year Graduation Rate
- First-to-Second-Year Retention Rate
- Number of degrees awarded at each level (bachelor's, master's, doctoral)
- Annual research and federal research expenditures
- Endowment Size
- Faculty Awards, National Academy Members
- Progress toward university and Board approved ranking aspirations

### Regional Universities Approved Performance Metrics:

- Six-year Graduation Rate
- First-to-Second-Year Retention Rate
- Number of degrees awarded at each level (bachelor's, master's, doctoral)
- Average ACT of lowest and highest quartiles
- Endowment Size
- Participation (total headcount)



### Goal 3:

# Institutional performance on quality measures compared to peers, including select regional and national rankings

#### **Research Universities**

#### **University of Kansas**

**Revised Peers:** Indiana University, University of Missouri, University of Oregon, Michigan State University, University of Buffalo

Aspirational Peers: University of Virginia, University of North Carolina, University of Colorado, University of Iowa, University of Florida

#### **Kansas State University**

**Revised Peers:** Auburn University, Clemson University, Colorado State University, Oklahoma State University, University of Massachusetts-Amherst

Aspirational Peers: Iowa State University, Louisiana State University, North Carolina State University, Oregon State University, Washington State University

#### Wichita State University

**Revised Peers:** New Mexico State University, University of Massachusetts - Lowell, University of Nevada - Reno, University of North Dakota, Wright State University

**Aspirational Peers:** Auburn University, Clemson University, Oklahoma State University, University of Akron, University of Texas - El Paso



### Goal 3:

Institutional performance on quality measures compared to peers, including select regional and national rankings

### **Regional Universities**

#### **Emporia State University**

**Revised Peers:** Colorado State University - Pueblo, Northwest Missouri State University, Pittsburg State University, University of Nebraska - Kearney, West Texas A&M University

Aspirational Peers: Northeastern State University, South Dakota State University, Southeast Missouri State University, University of Central Missouri, University of Central Oklahoma

#### **Pittsburg State University**

**Revised Peers:** Arkansas Tech University, Ferris State University, Indiana University of Pennsylvania, Northwest Missouri State University, Valdosta State University

**Aspirational Peers:** California State University - Chico, Salisbury University, University of Northern Iowa, University of Wisconsin - Stout, Western Washington University

#### Fort Hays State University

**Revised Peers:** Northwest Missouri State University, Colorado Mesa University, Northeastern State University - OK, Southeast Missouri State University, Tarleton State University

Aspirational Peers: Eastern Washington University, Morehead State University, Troy University - AL, University of Central Missouri, University of Nebraska - Kearney



### Goal 3:

Increase in proportion of federal research dollars awarded

### Federal Research & Development Dollars Awarded, Percent of Total, and Percent Rate of Change

1	FY2012									
	Total R&D \$	Federal R&D \$	% of total R&D	% Rate of change 2011-2012	% Rate of change 2010-2012					
United States	65,774,524,000	40,130,460,000	61%	-1.57%	7%					
State Universities Total	526,218,000	269,253,000	51%	2.84%	17%					
University of Kansas	286,262,000	171,043,000	60%	5.11%	16%					
Kansas State University	176,141,000	77,689,000	44%	0.96%	13%					
Wichita State University	61,279,000	19,078,000	31%	-7.25%	39%					
Pittsburg State University	1,479,000	989,000	67%	-22.73%	-1%					
Emporia State University	479,000	218,000	46%	-28.29%	-					
Fort Hays State University	578,000	236,000	41%	-	-					



### Goal 3:

### Increase in private giving to universities

#### Market Value (in thousands) and Percentage Change in Value

	FY2010		FY2011		FY2012		FY2013*		10 yr
	\$	%	\$	%	\$	%	\$	%	% Change
Kansas State University Foundation	277,584	6.8%	337,460	21.6%	329,240	-2.4%	364,675	10.8%	76.9%
Kansas University Endowment Association	1,054,739	10.4%	1,250,443	18.6%	1,182,333	-5.4%	1,288,995	9.0%	51.8%
Wichita State University Foundation	177,017	20.1%	208,667	9.1%	199,316	-4.5%	212,178	6.5%	63.8%
Emporia State University Foundation, Inc.	62,795	8.5%	67,569	18.1%	67,291	-0.4%	71,009	5.5%	46.9%
Pittsburg State University Foundation, Inc.	48,101	20.5%	59,333	23.4%	57,241	-3.5%	73,912	29.1%	94.0%
Fort Hays State University Foundation	47,464	17.2%	50,624	6.7%	50,457	-0.3%	53,852	6.7%	61.6%

It's important to note, private gifts are administered not by the university directly, but by foundations or associations affiliated with the university. Each year, income is transferred from endowed funds to the university with the goal of providing a consistent level of "above and beyond" support for the universities in perpetuity. Across the state, private giving has increased substantially.



# Summary

### ⋆ Goal One

- We have made progress increasing our Hispanic student population.
- We have made significant progress in serving our adult basic population and transitioning them to postsecondary education.
- We have made some progress in our graduation rates, and our retention rates are higher than national averages.
- The new student success index gives us a better picture of educational pathways and the success of our students.
- Our overall success in attracting returning adults has been good even though we experienced a decrease this last year.
- Our production of certificates, associate, and bachelor's degrees continues to increase and exceeds the projected need for reaching the 60 percent goal by 2020.



# Summary

### ⋆ Goal Two

- Institutions have met the goal for having student learning assessments identified and in place by 2014.
- We are making progress in identifying and then eliminating barriers for the use of student results on third-party credentials.
- We have the methodology to track employment and wages but need to expand our efforts to the contiguous states.
- We have identified outcome metrics for quality technical programs and organized a pilot project to help guide implementation.
- We have a new database for assessing high-demand occupations in Kansas, the average wages for each, and the number of graduates being produced in the system annually in each field.
- We have a more focused effort at broadening the understanding regarding the importance of university research.



# Summary

### ⋆ Goal Three

- Revised and aspirational peers for each university, and a set of metrics for use in comparing to these peers, has been approved.
- Federal dollars for university research has increased.
- Private philanthropy in support of the universities has significantly increased.

The full 2014 Foresight 2020 annual progress report will be available on our website at: kansasregents.org/foresight\_2020