

A Strategic Agenda for Kansas Higher Education

Economic prosperity for individuals and the state relies on an educated workforce. For Kansans to succeed in the workforce, they must have an education that provides skills aligned with demand occupations and labor market value. While college completion typically ensures individuals will have higher average lifetime earnings than those without a degree or postsecondary certificate, different credentials and majors lead to different careers and significantly different earnings. Targeting public resources to meet the evolving needs of the economy can be enhanced if routine workforce data is collected, analyzed and publically reported and continuous program adjustments are made.

In Kansas, Foresight 2020 is the 10 year strategic agenda for the state's public higher education system. The plan sets achievement goals that are measurable, reportable and ensure the state's higher education system meets Kansans' expectations. In the workforce, level of degree matters, and although most degrees and credentials have value, certain credentials are more responsive to workforce and economic demands. To meet Kansas' goal of increasing to 60% the number of adults who have a certificate, associate or bachelor's degree by 2020, our two and four year public postsecondary institutions must produce an additional 60,203 postsecondary credentials (degrees and certificates of value) over and above current production. Currently, 37.2% of Kansans ages 25-49 have an associate degree or higher. Issues such as geography and an increase in the educational attainment gap between whites and minorities play an important role in defining workforce alignment issues.

Research by economists and workforce experts is clear. Demand for postsecondary education supporting advanced skills will continue to grow. The most recent report (2013) from Georgetown University's Center on Education and the Workforce indicates 65 % of all jobs in the economy will require some level of postsecondary attainment by 2020.¹ In Kansas, our public higher education system is the largest producer of individuals with the skills and credentials necessary to fuel the economy and meet projected workforce demands.

This report provides an update on workforce supply and demand, with considerations for action to address these issues. Informed with more comprehensive data, the Board can advocate for targeted investments in higher education to grow the Kansas economy and support better employment outcomes for individuals.

Previous Analysis of the Alignment of Higher Education with the Kansas Economy – January 2013

To gain a greater understanding of the labor dynamics in Kansas, a supply/demand analysis was initially conducted during 2012 to identify potential areas of misalignment in labor supply and demand for the 2010-2011 time period.² This study served two primary purposes – to report the workforce needs within the state (demand) and the number of individuals educated in the higher education system (supply) to fill those needs. The results of this analysis provided insight regarding the level of alignment between higher education and the Kansas economy.

¹ Carnevale, Anthony, Smith, Nicole and Jeff Strohl. 2013. *Recovery: Job Growth and Education Requirements Through 2020*. Georgetown University, Center on Education and the Workforce.

² It must be stressed that there is no perfect statistical method to determine the exact number of graduates needed in each program to align higher education with the economy; however, the results of this study do provide general direction and insight for further discussion and potential policy recommendations regarding labor supply and demand in Kansas.

Key Findings from 2012 Supply/Demand Study (presented January 2013)

Based on May 2011 State Occupational Employment and Wage Estimates, total employment in Kansas was 1,308,070. Average annual wages in 2011 were \$40,030. During academic year 2010-2011, there were 75,921 total completers from Regents' institutions within 511 unique 6-digit CIP categories, with approximately 60 % in four CIP categories – Health Professions/Related Programs (28.7%); Liberal Arts and Sciences/General Studies and Humanities (13.2%); Business, Management, Marketing and Related Support Services (10.2%); and Education (7.9%).

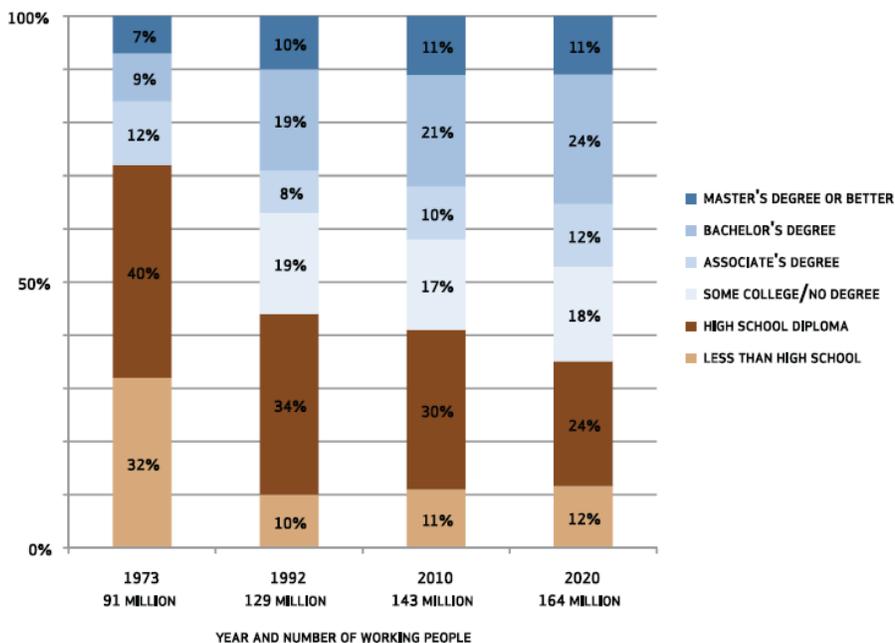
A substantial amount of data was yielded from the supply/demand analysis regarding potential mismatches between higher education and the needs of the Kansas economy. Based on the analysis, several occupations such as business and finance, computer, engineering, healthcare and construction appeared to have a potential undersupply. Those areas include jobs such as accountants; financial analysts; computer programmers; software developers; mechanical, chemical and civil engineers; pharmacists; physicians; registered nurses; and occupational, physical and respiratory therapists. However, when analyzing the results of this study, the less than perfect relationship between educational programs and occupations must be stressed.

The Importance of Postsecondary Educational Attainment

Georgetown University, Center on Education and the Workforce, estimates by 2018, in Kansas 64% of all the jobs in the economy will require some form of postsecondary education beyond high school. Updated estimates for 2020 indicate that nationally, that number is 65%. It is expected there will be as many as 55 million job openings in the economy through 2020; in Kansas that number is projected to be 553,000 (excluding military jobs). At current production rates, the U.S. is projected to fall 5 million short in number of workers available to fill projected job openings. Kansas is taking steps to ensure workforce needs are aligned with educational production to support a more robust economy.

By 2020, 65 percent of all jobs will require postsecondary education and training, up from 28 percent in 1973.

FIGURE 4: Postsecondary education and training



Like many states, Kansas has recognized the importance of postsecondary educational attainment and adopted goals regarding increases in postsecondary credential attainment. The Kansas Board of Regents has set an aggressive goal to increase the number of Kansas adults who have a certificate, associate or bachelor's degree to 60% by 2020. Additionally, the level of education and demand for postsecondary education supporting advanced skills continues to grow. Typically, lifelong earnings for college graduates are higher than those for non-graduates, and generally higher than the average median wage of \$40,630 [2012]. The following table illustrates median annual wages for employed workers age 25-64 by level of education for Kansas and the U.S.

Education Level	Kansas	U.S.
Less than High School	\$ 24,383	\$ 22,688
High School Graduate, GED, or Equivalent	30,479	30,938
Some College, No Degree	33,001	36,575
Associate's Degree	37,282	41,251
Bachelor's Degree	48,767	52,831
Graduate or Professional Degree	91,438	94,877
Source: U.S. Census Bureau, 2010 American Community Survey		
National Center for Higher Education Management Systems		

The National Center for Higher Education Management Systems (NCHEMS), in partnership with the Center for Law and Social Policy, has developed a model for projecting educational attainment goals based on student flow through postsecondary education, and the model has been specifically adapted for Kansas to fit the Board's Foresight 2020 goals. Current data indicates that 52.7 % of Kansans age 25-64 hold either a certificate, associate degree or higher, compared to 50.7 % nationwide.

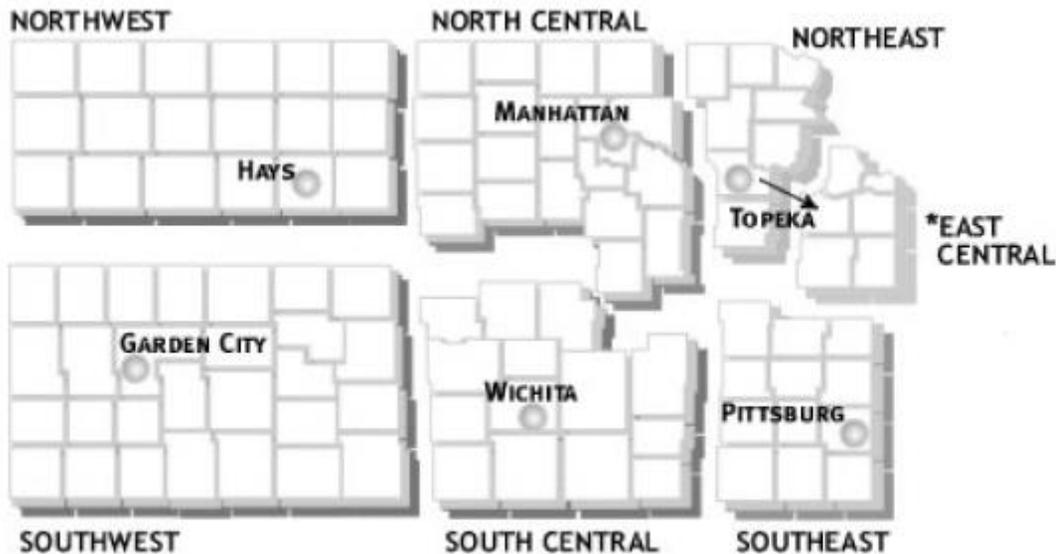
Percent of Population Age 25-64 with	Kansas	U.S.
College Degrees - Associate's or Higher	40.7%	38.7%
Certificates	12.0%	12.0%
Total	52.7%	50.7%
Source: U.S. Census Bureau, 2011 American Community Survey		
2008 SIPP Survey of Income and Program Participation		
National Center for Higher Education Management Systems		

Population Demographics and Educational Attainment

Meeting the Board's postsecondary attainment goal of 60% requires 7.3 % more Kansas adults ages 25-64 with a certificate, associate or bachelor's degree. A population with increased postsecondary training and credentials also translates directly to better outcomes for the Kansas economy. Of the total population estimate for Kansas in 2012 (2.89M) approximately half (1.47M) are between the ages of 25-64.

Kansas is a diverse state, both geographically and demographically. To achieve the Board's postsecondary attainment goals, it is important to have an understanding of statewide population demographic trends on a regional and county-specific basis. Further analysis may illustrate specific trends not necessarily evident at the state level, thus a *targeted approach* may be required to meet the specific needs of a county or region.

For the purposes of this study, Kansas counties were grouped into six In-State Business/Economic Development Regions as defined by the Kansas Department of Commerce. [northeast and east central regions combined]



Statewide and Regional Population Demographics

The 2012 Kansas population estimate of 2.9 million included close to one million (915,433) ages 25-49. Of the remaining 50 %, approximately 10.3 % (296,942) were ages 18-24; 13.7 % (394,269) were over the age of 65. Statewide, Hispanics number 317,061, over 10 % of total population. Within each region, figures are typically driven by the most populous counties, so regional demographics may not be reflective of all counties within a given region.

The following table summarizes 2012 population demographics in Kansas.

Area	Total Population	Male	Female	<18	18-24	25-34	35-49	50-64	65+	Non Hispanic	Hispanic
Northeast Region	1,423,503	706,377	717,126	351,657	157,446	203,825	268,647	265,592	176,336	1,284,372	139,131
		49.6%	50.4%	24.7%	11.1%	14.3%	18.9%	18.7%	12.4%	90.2%	9.8%
South Central Region	801,030	397,721	403,309	207,758	75,656	106,009	144,515	156,672	110,420	712,666	88,364
		49.7%	50.3%	25.9%	9.4%	13.2%	18.0%	19.6%	13.8%	89.0%	11.0%
North Central Region	177,253	88,639	88,614	40,784	17,825	21,184	29,456	36,972	31,032	164,560	12,693
		50.0%	50.0%	23.0%	10.1%	12.0%	16.6%	20.9%	17.5%	92.8%	7.2%
Southwest Region	170,754	86,979	83,775	50,299	16,286	21,815	30,820	30,212	21,322	105,950	64,804
		50.9%	49.1%	29.5%	9.5%	12.8%	18.0%	17.7%	12.5%	62.0%	38.0%
Southeast Region	270,458	133,854	136,604	64,645	26,253	29,954	47,679	55,848	46,079	260,530	9,928
		49.5%	50.5%	23.9%	9.7%	11.1%	17.6%	20.6%	17.0%	96.3%	3.7%
Northwest Region	42,907	21,711	21,196	9,161	3,476	4,664	6,865	9,661	9,080	40,766	2,141
		50.6%	49.4%	21.4%	8.1%	10.9%	16.0%	22.5%	21.2%	95.0%	5.0%
State Total	2,885,905	1,435,281	1,450,624	724,304	296,942	387,451	527,982	554,957	394,269	2,568,844	317,061
		49.7%	50.3%	25.1%	10.3%	13.4%	18.3%	19.2%	13.7%	89.0%	11.0%

U.S. Census Bureau – Population Estimates – Annual County Resident Population Estimates by Age, Sex, Race, and Hispanic Origin: April 1, 2010 to July 1, 2012.

<http://www.census.gov/popest/data/index.html>

Regionally:

- The highest percentage of 25-49 year olds is located in the northeast part of the state; conversely the northwest region contains the highest percentages of ages 50-65+
- Kansas City and Wichita metropolitan areas were the most populous (2.2M or 76% of total state population); the northwest 12 county region is the least populous (43,000 or 0.148% of total)
- Regionally, the Hispanic population is as high as 38 % (64,804) in the southwest region

Statewide and Regional Educational Attainment

Educational attainment of the existing Kansas population is an additional factor influencing alignment of the workforce with supply and demand dynamics. Statewide almost 40% of the population ages 25-49 have a high school diploma or less; combined, over 50% of Kansans have a high school diploma/less, or “some college” but no degree.

Statewide

- Almost 40 % (354,571) of adults ages 25-49 have only a high school education or less
- Almost 25 % (219,652) of adults ages 25-49 have “some college” but no degree
- Only 7.3 % (61,177) of adults ages 25-49 have an associate’s degree

The following table summarizes educational attainment based on 2011-2012 population estimates.

Area	Age 25-49	Age 25-49 High School or less	Age 25-49 Some college- no degree	Age 25-49 Associate degree	Age 25-49 Bachelor's degree	Age 25-49 Graduate or professional
Northeast Region	51.7%	159,737	105,541	31,891	111,644	63,660
		33.8%	22.3%	6.7%	23.6%	13.5%
South Central Region	48.4%	101,939	65,532	18,602	43,870	20,581
		40.7%	26.2%	7.4%	17.5%	8.2%
North Central Region	42.7%	22,138	13,047	4,122	7,646	3,687
		43.7%	25.8%	8.1%	15.1%	7.3%
Southwest Region	50.5%	27,592	11,487	4,052	6,742	2,762
		52.4%	21.8%	7.7%	12.8%	5.2%
Southeast Region	43.2%	35,754	20,074	6,898	10,151	4,756
		46.1%	25.9%	8.9%	13.1%	6.1%
Northwest Region	38.1%	5,063	3,056	1,161	1,693	556
		43.9%	26.5%	10.1%	14.7%	4.8%
State Total	49.1%	354,571	219,652	67,177	179,631	94,402
		38.7%	24.0%	7.3%	19.6%	10.3%

U.S. Census Bureau – Population Estimates – Annual County Resident Population Estimates by Age, Sex, Race, and Hispanic Origin: April 1, 2010 to July 1, 2012.

U.S. Census Bureau - 2007-2011 American Community Survey 5-Year Estimates - Educational Attainment

Regionally

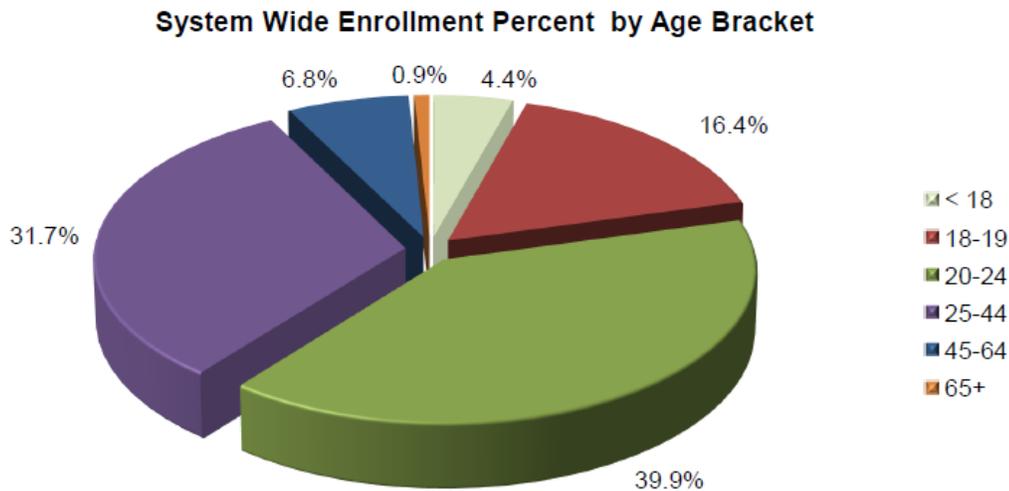
- Over 260,000 of the 354,571 adults ages 25-49 with a high school education or less are in the northeast and south central regions
- Over 170,000 of the adults ages 25-49 with some college, but no degree *are also* located in the northeast and south central regions
- In the south central region, only 7.4% (18,602) of adults ages 25-49 have earned an associate's degree
- Excluding the northeast and south central regions, 90,547 adults ages 25-49 have a high school diploma or less; 47,664 adults ages 25-49 have some college, no degree

Other interesting attainment patterns worth noting –

- Statewide, over 550,000 individuals ages 25-49, range from a high school diploma or less, to some college, no degree
- Over 400,000 of those 550,000 reside in either northeast or the south central regions

Current Enrollments by Age Bracket

A review of Regents data from the Kansas Higher Education Reporting System (KHERS) for Academic Year (AY) 2012 reveals enrollment patterns of students at Kansas institutions (supply). System wide in AY 2012, approximately 39.4 % of students were age 25 and over, compared to 56.3 % of students age 18-24.



Source: Kansas Board of Regents. System Enrollments and New Initiatives. March 14, 2013.

An analysis by institution type shows similar trends at four year universities and community colleges with a slightly larger adult enrollment population at technical colleges.

Considerations for the Board

- Kansas institutions should broaden target areas for recruiting to specifically include outreach to out-of-state and Hispanics students of all ages
- Kansas institutions should target the most intensive efforts toward the most populated areas to increase enrollments and completions in support of Foresight 2020 goals
- Kansas institutions should increase the level of student services at colleges and universities to support multiple, diverse adult populations
- Kansas institutions should implement strategies toward current initiatives supporting the Board’s goal of 60% degree attainment by 2020, such as Accelerating Opportunity: Kansas (targeting 237,000 adults statewide without a high school diploma or GED); Prior Learning Assessment (PLA) initiative (targets adults with “some college” or some credits – CAEL survey shows students with PLA are 2.5 times more likely to persist to graduation; Hispanics with PLA eight times more likely to graduate)

Resources

An Analysis of the Alignment of Higher Education and the Kansas Economy. Kansas Board of Regents. January 2013.
<http://www.kansasregents.org/resources/PDF/2296-EconomicAlignmentWorkforce012013.pdf>

American Fact Finder – American Community Survey 2011 ACS 5-year estimates – Educational Attainment by County.
<http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>

Carnevale, Anthony, Smith, Nicole and Jeff Strohl, June 2013. *Recovery: Job Growth and Education Requirements Through 2020.* Georgetown University, Center on Education and the Workforce.
<http://cew.georgetown.edu/recovery2020/>

Getting to 60% PSE Attainment by 2020: Why and How. Prepared for the Kansas Board of Regents by the National Center for Higher Education Management Systems. September 2013.

Kansas Higher Education Reporting System (KHERS), Academic Year 2012-2013 Enrollment by Age Bracket, retrieved February 2014. <http://www.kansasregents.org/>

Kansas 10 Year Job Outlook 2010-2020. Kansas Department of Labor, Labor Market Information Services. November 2012.
<https://klic.dol.ks.gov/default.asp>

U.S. Census Bureau – Population Estimates – Annual County Resident Population Estimates by Age, Sex, Race, and Hispanic Origin: April 1, 2010 to July 1, 2012.
<http://www.census.gov/popest/data/index.html>