2017 Postsecondary Feedback Report

Technical Notes

The 2017 Postsecondary Feedback Report (PSFR) is produced by the Kentucky Center for Education and Workforce Statistics (KCEWS) utilizing data from the Kentucky Longitudinal Data System (KLDS). This report is divided into five distinct sections: *Introduction, Undergraduate Enrollments, Undergraduate and Graduate Employment Outcomes, Graduates Pursuing Additional Degrees, and Transfer Students*:

Occasionally, data from one source will not conform to data from another source because of differences in cohorts, how variables are defined, the treatment of missing data, and other factors. This means that data published in this report may not be comparable to data published in other reports. Some values are redacted to preserve individual privacy and conform to state laws. Redaction rules can be found at the end of this document.

The PSFR allows one to filter individual reports for each education sector. Each education sector is comprised in the following way:

- **AIKCU (Association of Independent Kentucky Colleges and Universities)**
  This education sector includes all Kentucky 4-Year Independent Institutions: Alice Lloyd College, Asbury University, Bellarmine University, Berea College, Brescia University, Campbellsville University, Centre College, Georgetown College, Kentucky Christian University, Kentucky Wesleyan College, Lindsey Wilson College, Midway College, University of Pikeville, Spalding University, Thomas More College, Transylvania University, Union College, and University of the Cumberlands.
- **KCTCS (Kentucky Community and Technical College System)**
  This education sector includes all Kentucky 2-Year Public Institutions: Ashland Community & Technical College, Big Sandy Community & Technical College, Bluegrass Community & Technical College, Bowling Green Technical College, Elizabethtown Community & Technical College, Gateway Community & Technical College, Hazard Community & Technical College, Henderson Community College, Hopkinsville Community College, Jefferson Community & Technical College, Maysville Community & Technical College, Madisonville Community College, Owensboro Community & Technical College, Somerset Community College, Southeast Kentucky Community & Technical College, and West Kentucky Community & Technical College.
- **Public Comprehensive**
  This education sector includes all Kentucky 4-Year Public Comprehensive Institutions: Eastern Kentucky University, Kentucky State University, Morehead State University, Murray State University, Northern Kentucky University, and Western Kentucky University.
- **Public Research**
  This education sector includes all Kentucky 4-Year Research Institutions: University of Kentucky and University of Louisville.

Majors are grouped into seven distinct categories by Classification of Instructional Programs (CIP) Codes. Majors are represented by the symbols below and are used throughout the report. For a full list of 2-digit CIP Codes within these groups, see Appendix 1.

Figure 1: The classification of majors into Major Groups.

Arts and Humanities

Business

Social and Behavioral Sciences and Human Services

Education

STEM

Health

Trades

Dashboard 1: Introduction

This page provides a basic overview of the PSFR along with a key for the major symbols. It also includes a link to the technical notes.

Dashboard 2: Undergraduate Enrollments

This page provides a single year snapshot of the number of undergraduates enrolled by institution during AY 2014 by class and status. Additionally, a seven-year historic overview of the number of credentialed people being produced by an institution (or an average for an institution sector) is provided. The historic overview of credentialed people spans the AY 2008 through the AY 2014 and provides a breakdown by type of credential. The education sector is set to automatically include average undergraduate enrollments across all institutions in Kentucky by class and status as well as average number of credentialed students over time. The education sector filter allows an institution to filter averages by class and status as well as average number of credentialed students over time for a comparable education sector of similar institutions.

Each chart can be filtered at the same time by choosing any combination of the following:

- Education Sector, which includes:
    - AIKCU: Association of Independent Kentucky Colleges and Universities (4-Year Independent Institutions)
    - KCTCS: Kentucky Community and Technical College System (2-Year Public Institutions)
    - Public Comprehensive: (4-Year Public Comprehensive Institutions)
    - Public Research: (4-Year Research Institutions)
- Institution, excludes proprietary institutions due to lack of data

Credential types in the historic snapshot of credentialed people include: postsecondary certificate, postsecondary diploma, associate's degree, and bachelor's degree.

1. **Undergraduate Enrollments:** Undergraduate enrollments were calculated based on Council for Postsecondary Education (CPE) data for fall AY 2014. This is the total number of undergraduate students enrolled at a given Kentucky postsecondary institution excluding students classified as 'House Staff,' 'Auditor,' or 'High School.' Duplication across institutions may occur. Classification as Full-Time (FT) or Part-Time (PT) and Class Status are based on fall enrollment of AY 2014. When looking at the count of enrollments by education sector, average enrollment is calculated as a rounded mean of the values from applicable institutions within each education sector.

2. **Total Credentialed Students:** This is the number of students earning a credential in that academic year. Students acquiring a credential in multiple academic years are counted in each academic year when the credential was earned. When a credential earner acquired multiple degrees at the same institution in the same academic year, the highest is retained. Duplication across institutions occurs if a person received a credential from multiple institutions. When looking at the number of credentialed people by education sector, average number of credentialed people is calculated as a rounded mean based on values from applicable institutions within each education sector.

Dashboard 3: Undergraduate and Graduate Employment Outcomes

This dashboard displays employment rates, median wages, and employment sectors at different time points post-graduation for both undergraduate and graduate students. All credential earners from AY 2008 to AY 2014 are included in this report. Those re-enrolled in AY 2015 are not included for employment outcomes. The highest credential earned from AY 2008 to 2014 is where that person is placed for potential employment. Employment data are limited to workers employed by firms covered by the Kentucky Unemployment Insurance (UI) System and outcomes are only for those employed in

Kentucky. Those credential earners employed out-of-state are not included. Some values are redacted to preserve individual privacy.

Each chart can be filtered by choosing any combination of the following:

- Education Sector (described above)
- Institution
- Credential, which includes:
  - Postsecondary Certificate, Postsecondary Diploma, Associate, Bachelor, Master, Doctoral
- Major (see Figure 1 above, filter is applied by clicking the icon)

Variables Displayed in Charts:

1. **Wages and Employment Percentage for 3, 5, and 7 years**:
   a. *Wages:* Average wages are calculated by summing the wages for the 2015 Federal Fiscal Year (FFY) for applicable individuals and calculating a median wage for each group. Wage data include individuals employed by firms covered under Kentucky's unemployment insurance system. Those employed out-of- state are not included. Information can be seen by hovering over the People Icons.
   b. *Employment Percentage*: The percentage employed and average wages 1-year, 3-years, 5-years, and 7-years post-graduation are dependent on when the highest credential was earned for those not re-enrolled in AY 2015 (see Appendix 2 for calculations based on AY of highest credential earned). Employment outcomes were produced on a rolling scale. In other words, multiple cohorts of years were grouped into each yearly outcome. For instance, 3-year outcomes start with graduates in AY 2008 and look at FFY 2011 wages and include AY 2009 graduates with FFY 2012 wages, AY 2010 graduates with FFY 2013 wages, AY 2010 graduates with FFY 2014 wages, and AY 2011 graduates with FFY 2015 wages.

2. **Top Industries of Employment 3 Years after Graduation**: Industry sectors are assigned according to 2-digit North American Industry Classification System (NAICS) codes. The top eight (by count of people employed) industries are displayed with all other individuals being grouped into 'Other Industries'. Only individuals employed by firms covered by the Kentucky UI system with NAICS codes were included in this calculation.

3. **Graduates Working in Kentucky – Wage Change from 3 to 7 Years Post-Graduation:** This calculation compares two cross-sectional snapshots, wages from 3-years out and wages from 7-years out, to show the difference in wages at these two time points. This is the average wage difference between these two

distinct cohorts, not necessarily the change a given individual would see across time.

Dashboard 4: Graduates Pursuing Additional Degrees

This dashboard provides an overview of graduates, either associate or bachelor degree earners, who enroll to pursue additional education. Enrollment counts for AY 2015 by institution where students are pursuing additional education are presented for both associate degree earners (blue) and bachelor degree earners (green). These enrollment counts are disaggregated by the Major Group.

Each chart can be filtered by choosing any combination of the following:

- Education Sector (described above)
- Institution

Dashboard 5: Transfer Students

This dashboard provides an overview of the flow of transfer students from one institution to another. Specifically, the flow shows the outgoing students from the 'Institution From Which Students Transferred' to the 'Institutions To Which Students Transferred'. Hovering over any part of the chart will give the number of students who left one institution for another.

Method of Defining Transfers: Transfers were defined as those whose primary institution in Fall AY 2014 was different in either Spring AY 2014 or Fall AY 2015. Primary institution was defined as the institution in which a student had the most enrolled credit hours. For instance, if a student was enrolled for five credit hours at Institution A and three credit hours at Institution B, their primary institution would be Institution A. This was done for each semester (fall and spring of AY 2014 and Fall AY 2015). If there was a tie in credit hours, the student was considered 'co-enrolled' and removed from the analysis on transfer students (which affected <1% of all students). A student could be labeled a transfer if their primary institution was different in any of the semesters. The primary institution from the preceding semester would be considered the 'Institution From Which Students Transferred' and the primary institution from the following semester would be considered the 'Institution To Which Students Transferred'.

Redaction Rules

The Kentucky Center for Education and Workforce Statistics follows strict redaction and suppression guidelines to ensure the privacy of all students. The following redaction rules were applied to the PSFR to redact or mask some of the data based on the small cell-size counts that could be used to identify individual students. In general, categories must have a base denominator of 10 to be present in the report. If two categories are exhaustive (ex: males and females) if either group has less than 10 students, both groups are redacted. All rules apply at

the institution, education sector, major group, and credential level. All graphs include data already presented in the report unless otherwise noted. If these data are redacted in the report, they are also redacted in any accompanying charts and graphs.

APPENDIX 1: CLASSIFICATION OF ACADEMIC MAJORS INTO MAJOR GROUPS

Major Group	2-Digit CIP Code	2-Digit CIP Family Title
Arts & Humanities	05	Area, Ethnic, Cultural, Gender, & Group Studies
	16	Foreign Languages, Literatures, & Linguistics
	23	English Language & Literature/Letters
	24	Liberal Arts & Sciences, General Studies & Humanities
	30	Multi/Interdisciplinary Studies
	38	Philosophy & Religious Studies
	39	Theology & Religious Vocations
	50	Visual & Performing Arts
	54	History
Business & Communication	09	Communication, Journalism, & Related Programs
	10	Communications Technologies/Technicians & Support Services
	52	Business, Management, Marketing, & Related Support Services
Education	13	Education
Health	51	Health Professions & Related Programs
Social & Behavioral Sciences & Human Services	19	Family & Consumer Sciences/Human Sciences
	22	Legal Professions & Studies
	25	Library Science
	31	Parks, Recreation, Leisure, & Fitness Studies
	42	Psychology
	44	Public Administration & Social Service Professions
	45	Social Sciences
STEM	01	Agriculture, Agriculture Operations, & Related Sciences
	03	Natural Resources & Conservation
	04	Architecture & Related Services
	11	Computer & Information Sciences & Support Services
	14	Engineering
	15	Engineering Technologies & Engineering-related Fields
	26	Biological & Biomedical Sciences
	27	Mathematics & Statistics
	28	Military Science, Leadership & Operational Art
	40	Physical Sciences
	41	Science Technologies/Technicians
Trades	12	Personal & Culinary Services
	43	Homeland Security, Law Enforcement, Firefighting & Related Protective Services
	46	Construction Trades
	47	Mechanic & Repair Technologies/Technicians
	48	Precision Production
	49	Transportation & Materials Moving

Appendix 2: Calculation of Wages

Academic Year	FFY for 1 year Post-Graduation Employment Outcomes	FFY for 3 year Post-Graduation Employment Outcomes	FFY for 5 year Post-Graduation Employment Outcomes	FFY for 7 year Post-Graduation Employment Outcomes
2008	2009	2011	2013	2015
2009	2010	2012	2014	-
2010	2011	2013	2015	-
2011	2012	2014	-	-
2012	2013	2015	-	-
2013	2014	-	-	-
2014	2015	-	-	-