SHAWNEE COMMUNITY COLLEGE'S ECONOMIC IMPACTS AND STUDENT EMPLOYMENT OUTCOMES

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By

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The Shawnee Community College's Economic Impacts report was prepared by the Center for Governmental Studies at Northern Illinois University (NIU) under agreement with the Illinois Community College Board (ICCB). Questions and inquiries regarding the contents of this report may be directed to Brian Richard at NIU (815/753-0162) or Nathan Wilson at ICCB (217/558-2067).

The findings and conclusions presented in this report are those of the NIU project team alone and do not necessarily reflect the views, opinions, or policies of the officers and/or trustees of Northern Illinois University nor those of the employees, officers, and/or trustees of the Illinois Community College System.

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Shawnee Community College Operating Environment

The demographics and economic conditions in the regions where they operate impact community colleges offerings as well as the success of their program completers. Declining populations, especially in younger residents can affect enrollment. Economic conditions, especially job opportunities in specific industries, are directly related to the workforce outcomes of college completers.

This report is meant as a supplement to a statewide report, *Illinois Community Colleges' Economic Impacts and Student Employment Outcomes.* The statewide report summarizes important demographic and economic conditions in Illinois, provides statewide Illinois community college student outcomes and estimates the economic impacts of the combined operations of the community colleges in Illinois.

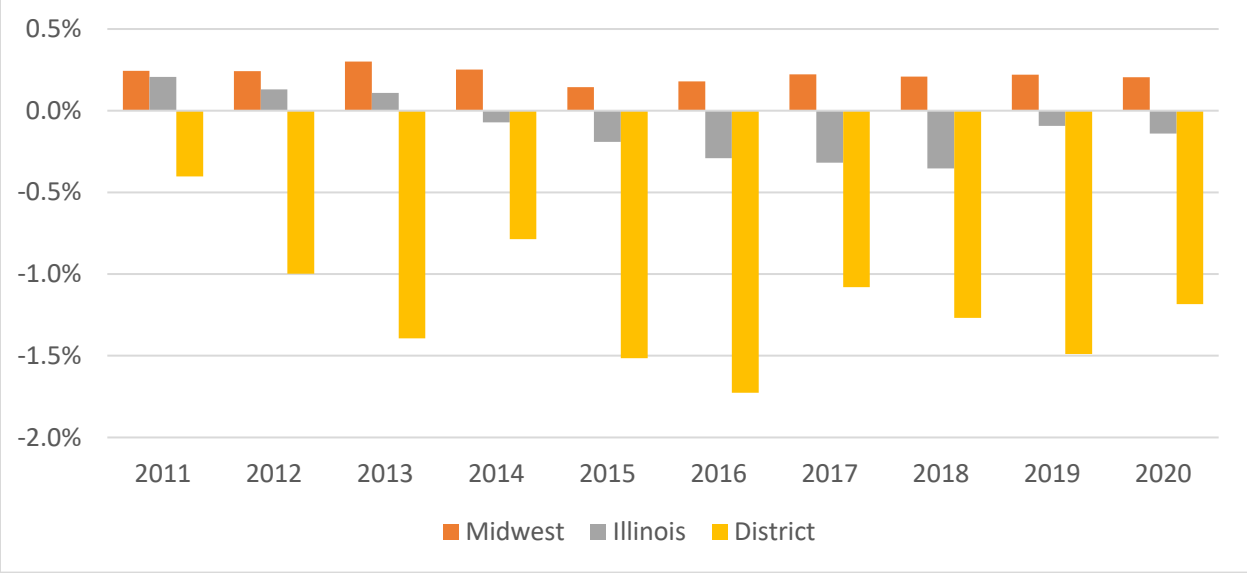
Demographic and economic data are not available for the exact Shawnee Community College district boundaries. In the following charts and tables, the district is approximated by the region comprised of Alexander, Johnson, Massac, Pulaski, and Union Counties.

Population

The population loss experienced in Illinois since 2013 has been minimal but certainly noteworthy, as the rate of decline gradually increased through 2018, then began to reverse. Figure 1 shows the net change in population since 2011 for the Shawnee Community College district, Illinois, and the Midwest. A decline in the birthrate, increase in the death rate, and changes in the patterns of international and domestic migration all contribute to these changes. The net loss of population in Illinois appears to have moderated in recent years.

The district lost population each year in the decade. The rate of decline was mostly consistent from year to year.

Figure 1. Net Change in Population, 2011-2020



Source: EMSI, 2020.

Race & Ethnicity Changes

The primary driver of population loss in Illinois has been the decrease in White and African American non-Latinx residents. Throughout this report, data reported for White and African American populations represent non-Latinx persons. The Latinx may contain multiple races. If it were not for the Asian, Other, and Latinx populations having higher birth rates or moving into Illinois, the population loss would be much greater. Figure 2 shows the change in the race and ethnicity categories for Illinois and the Shawnee district. Illinois has lost nearly 550,000 White and 68,000 African American residents since 2010. The Latinx population in Illinois grew by about 200,000. The Shawnee district's loss of White and African American residents was somewhat offset by gains in all other races and ethnicities. However, the district lost population overall.

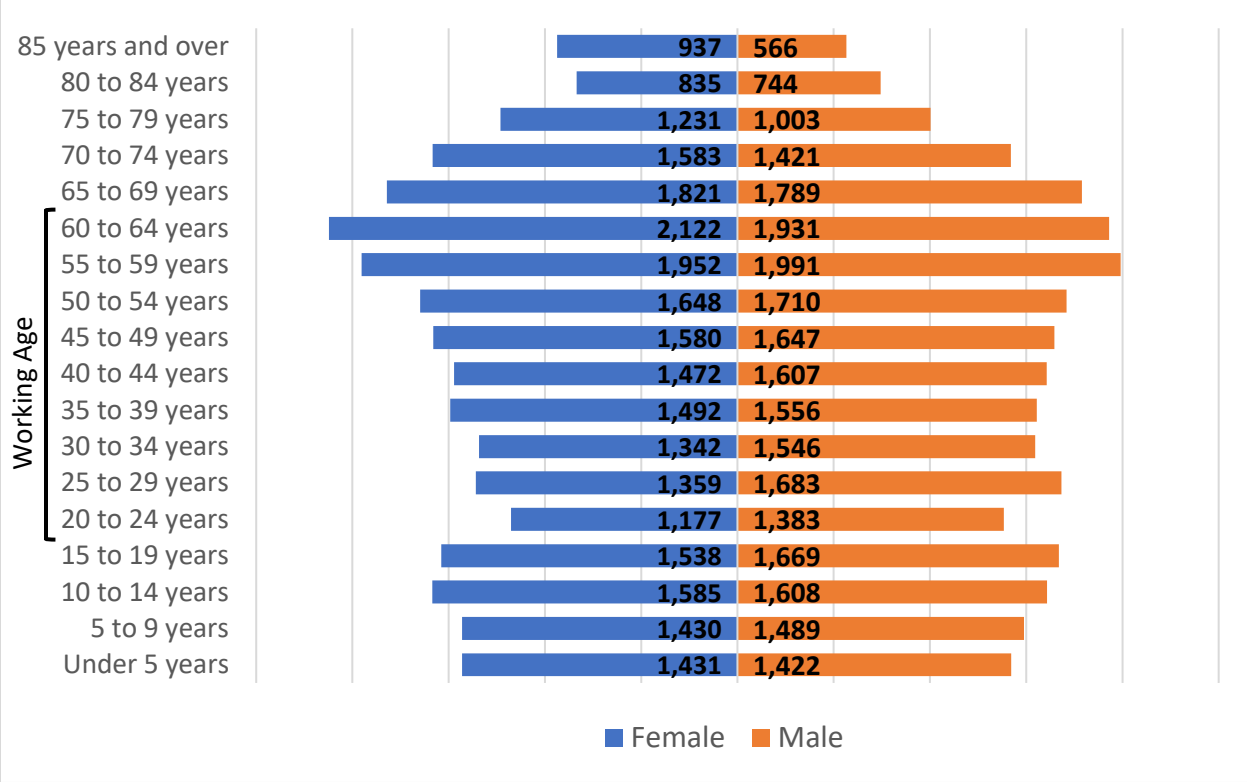
Figure 2. Race & Ethnicity Change in Population, 2010-2020

	Population Change	White	African American	Asian	Other	Latinx
Illinois	(221,803)	(544,675)	(67,721)	146,570	44,341	199,683
District	(6,499)	(5,261)	(1,826)	102	242	244

Source: EMSI, 2020.

Figure 3 shows the age and gender distribution of the district's population. There are significant numbers of people at or approaching retirement age (55-64). The district has considerably fewer residents in younger working-age populations.

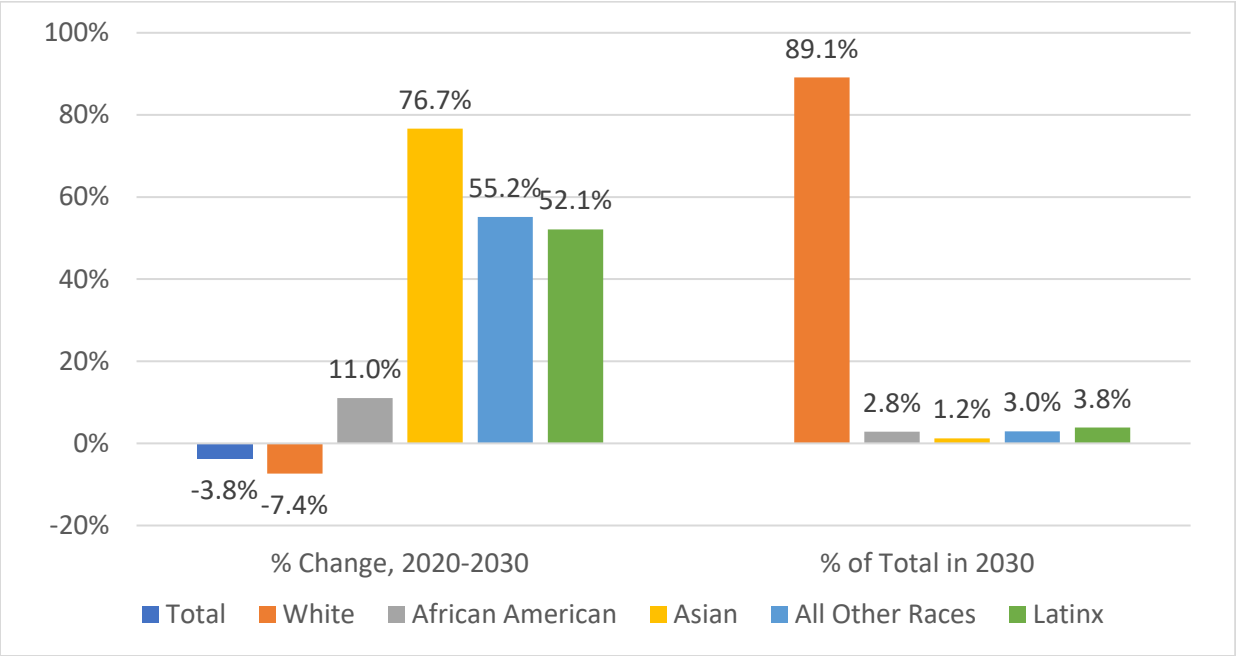
Figure 3. Age Pyramid for District, 2019



Source: EMSI, 2020.

The district population is projected to decline slightly in the next decade. As displayed in Figure 4, the White population is expected to decline. Offsetting those declines, all other racial groups are expected to grow. By 2030, the White population is expected to comprise about 89.1% of the total, Latinx 3.8% and African American 2.8%.

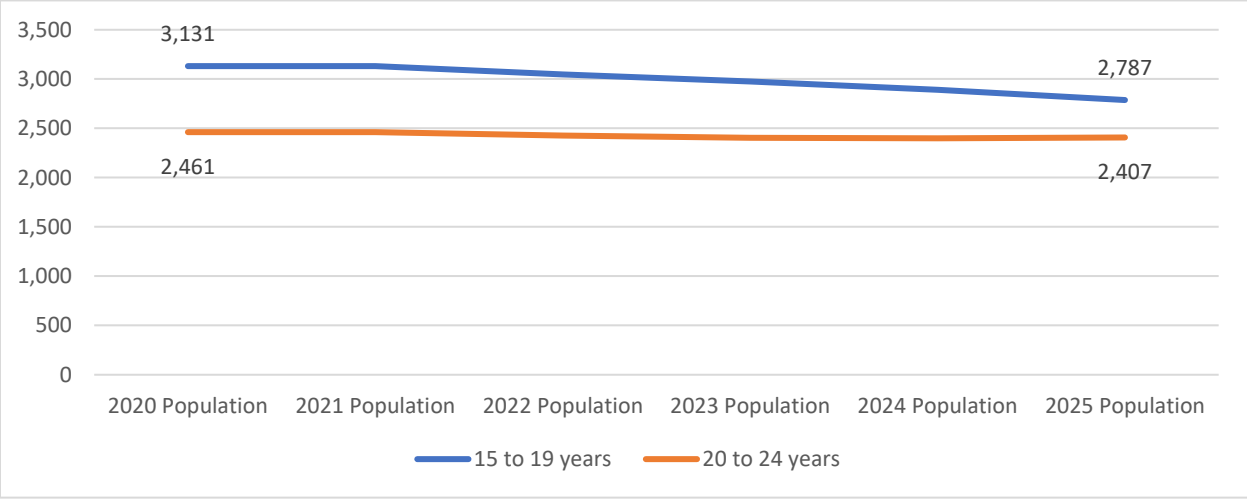
Figure 4. Population Projections by Race and Ethnicity, 2020-2030



Source: EMSI, 2020.

Reflecting declines at the national and state level, the population of typical college aged students will be decrease in the coming years (Figure 5) in the Shawnee Community College district. The population ages 15 to 19 is projected to decrease 11.0% and the population ages 20 to 24 is projected to decrease 2.2%.

Figure 5. College-Aged Population Projections, 2020-2025



Source: EMSI, 2020.

Meeting the Needs of Business and Industry

Illinois community colleges support local workforce and economic development services through employer and business engagement. Activities ranged from curriculum and apprenticeship development and review, contract training, internships, and professional development to job placement for graduating students.

Community colleges meet the demands of local business and industry needs and respond to the many changes in the workforce. Although the Great Recession officially ended in June 2009, the economic recovery in Illinois has been relatively weak when compared to the rest of the nation. While unemployment rates fell substantially in the years before the pandemic, labor force participation among key working aged populations continue to decline. This section looks at employment trends and the related demand for skills in Illinois. We examine employment conditions from the perspective of industry and occupation. *Industry* refers to the types of goods produced or services provided by the employer. *Occupation* refers to the work activities conducted by the employee. For example, registered nurse is an occupation in the health care industry.

Industry Employment Trends

Educational services, wholesale trade, and accommodation and food services were the fastest growing sectors in the district between 2010 and 2020 (Figure 6). Going forward, these growth patterns may be altered by the ongoing, perhaps permanent, impacts of the Coronavirus pandemic. See the discussion later in this document for more detail about these impacts.

Figure 6. Change in Industry Employment

	Employment		2010-2020 Change	
Description	2010	2020	Number	Percent
Agriculture, Forestry, Fishing and Hunting	580	518	-61	-10.6%
Mining, Quarrying, and Oil and Gas Extraction	148	143	-4	-2.9%
Utilities	372	214	-158	-42.4%
Construction	693	526	-167	-24.1%
Manufacturing	895	571	-323	-36.1%
Wholesale Trade	282	372	90	32.0%
Retail Trade	1,502	1,373	-129	-8.6%
Transportation and Warehousing	675	432	-243	-35.9%
Finance and Insurance	421	362	-59	-14.1%
Real Estate and Rental and Leasing	94	69	-25	-26.8%
Professional, Scientific, and Technical Services	385	313	-72	-18.7%
Management of Companies and Enterprises	28	11	-16	-58.7%
Admin, Support, Waste Mgmt and Remediation Svcs	376	330	-47	-12.4%
Educational Services	76	227	152	200.0%
Health Care and Social Assistance	2,281	2,035	-246	-10.8%
Arts, Entertainment, and Recreation	686	94	-592	-86.2%
Accommodation and Food Services	1,053	1,324	271	25.7%
Other Services (except Public Administration)	1,299	830	-469	-36.1%
Government	5,045	5,482	438	8.7%
Total	16,962	15,287	-1,675	-9.9%

Source: EMSI, 2020.

Currently Available Jobs

The demand for workers, as well as the required skills, credentials, and other attributes can now be assessed through web-based technologies that scan millions of job and applicant postings on popular sites such as Monster, SimplyHired, and Indeed or posted by various state and local employment bureaus.

Job Posting Analytics (JPA), developed by EMSI can help measure the demand for talent in a given region. It is more granular than traditional labor market information (LMI), providing details about the labor market (e.g. specific skills requested by employers) that LMI simply can't.

The top advertised occupations in the district cover a wide range of occupations, but show a strong demand for truck driving, sales, and nursing and other health care fields occupations (Figure 7).

Figure 7. Occupations by Number of Job Postings, 2020

Occupation	Unique Postings
Heavy and Tractor-Trailer Truck Drivers	5,726
Insurance Sales Agents	328
First-Line Supervisors of Retail Sales Workers	322
Light Truck Drivers	313
Registered Nurses	219
Driver/Sales Workers	208
Retail Salespersons	189
Customer Service Representatives	152
Home Health and Personal Care Aides	133
Software Developers and Software Quality Assurance Analysts and Testers	120

Source: EMSI, 2020.

The high number of postings for truck drivers is reflective of the nationwide demand for professional drivers, as well as Illinois' position as an important transportation and distribution center. Job posting data can be useful in identifying immediate workforce needs of local employers. However, the number of postings may be either higher or lower than the number of actual hires. Further, analysis of total job postings does not necessarily reflect long-term career opportunities, to the extent that it includes temporary positions. Postings might outnumber hires when a company is trying hard to find talent, or postings may be significantly fewer than hires because certain types of jobs (e.g., roofers, welders, and other blue-collar jobs) aren't typically advertised online. When this happens, EMSI de-duplicates the postings as much as possible and then provides a realistic ratio of unique postings to hires.

Current Demand for Workers

Figure 8 displays the industries that have the greatest job posting activity in the district. The largest number of postings came from companies in the transportation and warehousing sector. Other sectors with significant hiring activity include professional, scientific, and technical services, retail trade, and health care and social assistance.

Figure 8. Top Industries Seeking Employees, 2020

Industry	Unique Postings
Transportation and Warehousing	5,568
Unclassified Industry	998
Professional, Scientific, and Technical Services	801
Retail Trade	797
Health Care and Social Assistance	711
Administrative and Support and Waste Management and Remediation Svcs	581
Finance and Insurance	465
Public Administration	350
Accommodation and Food Services	339
Manufacturing	257

Source: EMSI, 2020.

When analyzing the top skills requested by employers, duplication is very evident as most job ads list multiple skillsets. Figure 9 gives a sense of the kinds of skills that employers in the district are seeking in new employees, although it is difficult to assess how, and to what degree, employers evaluate these skills (e.g., it could be based on the applicant's on-the-job experience, credentials obtained, pre-employment testing, etc.). However, 'soft-skills' or 'people skills' (such as customer service, customer contact, sales and relationship building) are highly valued for a wide range of jobs. These skills are more value-oriented but educational programs could integrate instilling values, such as ethics and professionalism. Furthermore, some aspects of customer service or sales also involve increased use of technology (e.g., social media marketing). Community colleges can recruit additional students by offering more credentialed courses for these skills.

Figure 9. Top Skills by Number of Job Openings, 2020

Skill or Qualification	Frequency in postings
Flatbed Truck Operation	14.3%
Over-the-Road Driving	7.8%
Merchandising	5.6%
Dry Van Truck Operation	4.9%
Cash Register	4.2%
Customer Satisfaction	3.8%
Cash Handling	3.6%
Nursing	3.0%
Restaurant Operation	2.0%
Cardiopulmonary Resuscitation (CPR)	1.9%

Source: EMSI, 2020.

The certifications listed in Figure 10 were found within the job postings and are ranked according to the number of postings in which they appeared. Commercial driver's licenses dominates this list. This is not surprising given truck driving's position at the top of the occupation demand list (Figure 7 above). Nurses and other related healthcare certifications appeared frequently as well.

Figure 10. Top Qualifications Sought by Employers, 2020

Skill or Qualification	Frequency in postings
Commercial Driver's License (CDL)	39.1%
Transportation Worker Identification Credential (TWIC) Card	1.3%
Hazmat Endorsement	1.2%
Tanker Endorsement	1.2%
Licensed Practical Nurse	0.9%
Certified Nursing Assistant	0.9%
Doubles Endorsement	0.5%
Master Of Business Administration (MBA)	0.4%
Nurse Practitioner	0.3%
Bachelor of Science in Business	0.2%

Source: EMSI, 2020.

Workforce Trends

Occupational Employment

Occupations in Illinois with expected annual openings that often require a career and technical education certificate and/or a professional license (typically defined as "some college no degree" by the US Census or "some college or postsecondary nondegree award" by US Department of Labor) are displayed in Figure 11. Example occupations include truck driving, emergency medical technicians, and hairstylists.

Nursing assistants and Truck drivers are expected to be in high demand in coming years. While some of the hires will be from industry growth, these occupations experience large numbers of employees leaving their jobs each year. These employees may leave because the occupation is a poor fit for their skills or desired lifestyle or as they advance into other careers. Skills training for these occupations should be paired with education about the working conditions and pay levels that workers can expect when they enter these jobs.

Figure 11. Job Growth in Occupations that Often Require a Certificate and/or License

SOC	Description	2020 Jobs	2030 Jobs	Growth Rate	Annual Openings
31-1131	Nursing Assistants	364	383	5.2%	43
53-3032	Heavy Truck Drivers	291	327	12.4%	36
29-2053	Psychiatric Technicians	184	232	25.6%	20
49-3023	Automotive Service Technicians and Mechanics	127	128	0.7%	12
29-2061	Licensed Practical and Vocational Nurses	121	143	18.5%	11

Source: EMSI, 2020.

Figure 12 displays occupations with more than 2 expected annual openings in the district that typically require an associate degree for entry. Some occupations that are expected to grow slowly or even decline still are expected to have job openings. These openings will be due to retirements and incumbent workers being promoted to higher level occupations or changing careers. Projected job openings for occupations typically requiring a bachelor's degree, including registered nursing, are shown later in Figure 20.

Figure 12. Job Growth in Occupations that Typically Require an Associate Degree

SOC	Description	2020 Jobs	2030 Jobs	Growth Rate	Annual Openings
25-2011	Preschool Teachers	57	64	12.6%	7
19-4071	Forest and Conservation Technicians	19	17	-9.6%	2
31-2021	Physical Therapist Assistants	13	16	21.5%	2

Source: EMSI, 2020.

The Aging of the Workforce

As the Baby Boomers age into retirement, many occupations will face significant departures. Figure 13 displays occupations that typically require an associate degree for entry that have the highest percentages of workers over the age of 55. Data aren't available in many rural areas to make significant conclusions about this issue.

*Figure 13. Employment Distribution by Age: Occupations that Typically Require an Associate Degree**

SOC	Description	2020 Jobs	Age 25-34	Age 35-44	Age 45-54	Age 55-64	Age 65+
25-2011	Preschool Teachers	57	14	14	11	0	0
19-4071	Forest and Conservation Technicians	19	data not available				
29-2034	Radiologic Technicians	19	data not available				
29-1292	Dental Hygienists	14	data not available				
31-2021	Physical Therapist Assistants	13	data not available				

Source: EMSI, 2020.

* Only top ranked occupations by the share of workers age 55 years and older are shown.

Equity

The Illinois Community College System and ICCB are committed to create, support, and expand workforce training opportunities in high-need communities focused on specific sectors with identified workforce gaps. The recently implemented Workforce Equity Initiative (WEI) in 2019 is evidence of Illinois community college efforts on improving education and employment opportunities in at-risk communities. The ICCB granted $18.7 million dollars to community colleges throughout Illinois to help address education and unemployment gaps in the African American and other minority communities. The funding will be used across 17 community colleges throughout the state that serve larger African American populations under Illinois' Workforce Equity Initiative, now in its second year. Programs within WEI accelerate the time to enter and succeed in education/training programs. Illinois community colleges and ICCB are devoted to initiatives like WEI and others to promote gainful employment for underrepresented populations.

There are several state and federal initiatives that the Illinois Community College System and ICCB are committed to and collaborating on with state agency and business/workforce partners. One of Governor Pritzker's earliest actions was to issue Executive Order 2019-03 (EO3), focused on strengthening the state's commitment to workforce development and job creation. EO3 directed the Department of Commerce and Economic Opportunity (DCEO) to deliver a report containing three components: identifying target growth industries, review of effective and efficient investment in targeted industries, and report on improving alignment of workforce resources for disenfranchised communities. That final component stated the report should contain "comprehensive recommendations for improving the alignment of workforce resources for communities that have been disenfranchised, including rural and urban communities."

The report prepared in response by DCEO in cooperation with Departments of Employment Security and Human Services and the Illinois Community College Board includes three *Action Areas* (An Action Agenda, p. 3-4):

- Action Area 1. Unite workforce development partners around regional cluster strategies: Regional cluster strategies will focus resources on the industries with the highest potential to add jobs and increase prosperity in regions across Illinois. These strategies bring together the public and private sectors in each region to build on their unique strengths.
- Action Area 2. Prepare Illinois workers for a career, not just their next job: Regardless of background, life circumstances, or education level, Illinois workers can be prepared for high-demand careers by developing core academic, technical, and essential employability skills throughout their lifetimes.
- Action Area 3. Connect job seekers with employers: Illinois businesses can find the productive workers they need through more efficient training and better services for job seekers and employers.

Action Area 2 included a strategy focused on equity: *Establish and support equity goals*. "Preparing workers to meet the needs of business while connecting them to viable career pathways in Illinois' most vibrant industries will lead to economic prosperity at all levels. An important focus of these efforts must be ensuring that disenfranchised populations have access to these employment opportunities" (An Action Agenda, p. 15). This strategy had several Action Steps, including (An Action Agenda, p. 16):

- Disaggregate data by race, gender, and target population to reveal where disparities and inequities exist in policies and programs.
- Compel advisory and oversight boards/councils to set equity goals and prepare action plans to achieve them.

Subsequent to the release of the EO3 report, a number of economic, education and workforce development plans have been developed and released. These plans have increasingly placed an importance on equity issues. The Illinois economic development plan includes an Aspirational Goal focused on equity (A Plan to Revitalize, p. 3):

> Reduce the Equity Gap by investing in, providing support to, and taking down barriers for economically disadvantaged populations. We will track our progress toward this goal by tracking average earnings relative to the statewide average for the following populations:
>
> - Women
> - Rural residents
> - People of color
> - People with disabilities
> - Veterans
> - Justice-impacted populations
> - Immigrant populations

The Illinois Perkins V plan includes a *Foundational Tenet* focused on increasing educational equity for members of special populations (Illinois' Perkins V State Plan, p. 5):

> Illinois aims to place equity at the forefront of decisions made regarding career and technical education (CTE) programming, acknowledging that opportunity and achievement gaps exist for members of special populations. Perkins V affords Illinois the opportunity for an increased focus on meeting the needs of members of special populations by improving systems to identify and understand equity gaps, aligning resource systems, and providing professional learning to support the implementation of CTE programs that are accessible and effective for all students.

Similarly, the Illinois Workforce Innovation Board guided the development of the Illinois Workforce Innovation and Opportunity Act (WIOA) Unified State Plan, which includes a set of principles as part of its vision statement. One focuses on equity:

> Equitable Access and Opportunity for All Populations - Connecting individuals with relevant supports, such as transportation, child care and transition services will enable the system to be responsive to the workforce readiness needs of all individuals and help targeted populations prepare for and advance along a career pathway.

While these plans place an importance on equity issues, only the economic development plan provides guidance on how equity should be quantified and tracked. There are other resources that suggest metrics for tracking progress on equity. The Center for Urban Education states that "Effective state attainment goals are based on an understanding of for whom and by how much higher education access and success must improve" (Making Equity Part, p. 4). This understanding answers these questions:

- Which populations have the lowest rates of postsecondary attainment historically?

- Which populations are the fastest-growing in the state?
- What career fields and occupations in the state have strong labor market demand currently? In five, 10, 15 years? What are the levels of educational attainment required for those jobs? What are the projected shortfalls of adults with those credentials?
- At current rates of educational attainment, will some populations in the state be disproportionately excluded from opportunities in high-wage, high-demand jobs?

Similarly, a report from Education Trust cites degree attainment as an important regional measure of equity. Based on an analysis of social mobility (the ability of people to achieve higher incomes than their parents), the authors conclude that education is a way out of poverty. Thus, they suggest three ways of looking at educational attainment (Del Pilar & Berger, p. 16):

- Overall degree attainment
- Growth in degree attainment
- Gaps in degree attainment

The Office of Community College Research and Leadership at University of Illinois at Urbana-Champaign also suggests metrics for ensuring programs align with labor market needs and demands, with a particular focus on equity (Welton & James-Gallaway, p. 9-11). These includes using data to identify inequitable employment outcomes.

Regional Equity Indicators

Income and Poverty

Household incomes by race and ethnicity are difficult to compare, due to insufficient data in several counties, and the American Community Survey estimates can vary widely due to limited numbers of responses in the counties with data in both years. Racial and ethnic income disparities are significant and persistent in Illinois and in the district. White workers earn significantly more than African American and Latinx workers. Consequently, African American and Latinx households are more likely to be in poverty.

In 2010, across all counties where data are available in the district, the median income for African American households was significantly lower than the income for White households (Figure 14). The disparities persisted in 2019. African American household incomes decreased slightly in 2019 in Pulaski County.

In counties with available data, Latinx households were typically lower than incomes for White households. Care must be taken when comparing incomes for Latinx households, since Latinx ethnicity can include any race.

Figure 14. Median Household Income by Race, 2010 and 2019

	Alexander County		Johnson County		Massac County	
	2010	2019	2010	2019	2010	2019
All Households	$28,833	$36,806	$41,619	$52,774	$41,077	$47,481
Non-Latinx White	$40,321	$40,967	$41,544	$52,879	$42,466	$48,542
African American	$23,803	$27,214		$43,750		
Asian	$47,813		$77,857		$22,500	
Latinx			$29,375	-		

	Pulaski County		Union County	
	2010	2019	2010	2019
All Households	$31,173	$34,640	$39,760	$50,625
Non-Latinx White	$35,556	$41,910	$40,089	$51,534
African American	$26,429	$24,875		
Asian	$48,523			$16,641
Latinx	$33,750		$21,818	$37,708

Source: American Community Survey, 5 year estimates

The percentage of persons with income below the poverty level in the district decreased from 17.9% to 17.4% between 2010 and 2019 (Figure 15). White persons are significantly less likely to be low income by this measure. The percentage of African American, Asian, and Latinx persons below the poverty level increased. African American, Asian and Latinx persons were more than twice as likely to be in poverty as White persons.

Figure 15. Percentage of Persons with Income Below the Poverty Level by Race, 2010 and 2019

	2010	2019
All Households	17.9%	17.4%
Non-Latinx White	16.0%	14.8%
African American	31.5%	33.4%
Asian	14.5%	31.5%
Latinx	30.2%	37.8%

Source: American Community Survey, 5 year estimates

Based on the review of state education and workforce development plans and higher education equity research, two main indicators of workforce equity were chosen to give broad insight into the racial and ethnic income disparities. As Del Pilar & Berger (2019) assert, education is a way out of poverty. Thus, educational attainment is an important indicator. Welton & James-Gallaway, (2019) suggest using data to identify inequitable employment outcomes. Occupational employment and wage rates by race are the best available measure of employment outcomes.

Educational Attainment

White residents of the district were more likely than African American residents to complete high school and have a Bachelor's degree in 2010 (Figure 16). Asian persons were significantly more likely to continue their educations past high school. About one-third of White persons had at least some college or an associate degree. An additional 14% had a bachelor's degree or higher. About 18% failed to finish high school.

The percentage of African American persons that earned a high school diploma but did not continue their education was about 33%, slightly less than the rate of White persons. African American persons were less likely to earn a bachelor's degree or higher than Whites. Over 30% of African American persons had not earned a high school diploma or equivalent.

Latinx persons had significantly lower attainment rates than the other groups. About half had not completed high school in 2010. They were also much less likely to continue their education beyond high school.

Figure 16. 2010 Educational Attainment by Race and Ethnicity for Population Age 25 and Over

	Total	White	African American	Asian	Latinx
Total	42,313	35,907	4,863	191	862
Less than high school diploma	20.1%	17.8%	30.9%	29.3%	50.9%
HS graduate (incl equivalency)	33.7%	34.1%	32.7%	4.7%	29.2%
Some college or associate deg	32.1%	33.4%	28.0%	12.6%	4.8%
Bachelor's degree or higher	14.1%	14.7%	8.4%	53.4%	15.1%

Source: American Community Survey, 5 year estimates

Educational attainment rates generally increased by 2019 (Figure 17). For all persons over 25 years old, the percentage at least completing high school improved by nearly 7 percentage points and the percentage of those obtaining a bachelor's degree or higher improved by 2 percentage points. About 52% had furthered their education beyond high school, compared with about 46% in 2010.

While the bachelor's degree attainment rates for Asian persons fell, those with college or associate degree increased drastically, making the total percentage of Asian persons with at least some college attainment increase overall. African American persons lagged farther behind Whites and Asians in 2019. About 78% of African American persons had at least completed high school, compared with 89% of White persons. Of those that completed high school, non-Latinx Whites were more likely than African American or Latinx persons to further their education, including more likely to complete a bachelor's degree or higher.

Figure 17. 2019 Educational Attainment by Race and Ethnicity for Population Ages 25 and Over

	Total	White	African American	Asian	Latinx
Total	39,852	33,740	4,464	103	1,171
Less than high school diploma	13.6%	11.3%	21.9%	2.9%	48.5%
HS graduate (incl equivalency)	34.8%	35.5%	33.4%	22.3%	23.2%
Some college or associate deg	35.1%	35.8%	34.8%	49.5%	17.9%
Bachelor's degree or higher	16.5%	17.4%	10.0%	25.2%	10.3%

Source: American Community Survey, 5 year estimates

Occupational Employment

There were about 15,000 jobs in the district in 2020[1]. Overall, about 53% of jobs were held by women, 22% held by non-White persons, and 7% held by Latinx persons. Figure 18 displays data for occupations employing at least 40 in the district that have a typical entry education level of 'Some College or Postsecondary Nondegree Award' according to the U.S. Department of Labor. Example occupations include truck driving, emergency medical technicians, and hairstylists.

Occupations in this category tend to have very low gender diversity. A few occupations have insufficient data by gender, but those with data available were all more than 70% female. The occupations with

[1] The data in Figures 18-20 display numbers of jobs. A single person can hold more than one job. According to the US Bureau of Labor Statistics, the total number of persons employed In Illinois in 2019 was just under 6.2 million.

insufficient local data on gender are male-dominant nationally. Of the four occupations with median earnings below $16 hourly, three were predominantly female.

NonWhite persons represent 22% of the workforce in the district and are well-represented in several jobs requiring a certificate. However, jobs in those occupations held by higher percentages of non-White persons also tended to be lower paying. Three out of five occupations employing more than 25% non-White persons median earnings of less than $15/hour. An exception to this was Medical Records Specialists, which employed over 32% non-White persons and had a median wage of $20.49/hour.

There was insufficient data to draw significant conclusions about Latinx representation in occupations requiring a certificate.

Figure 18. Employment for Occupations Often Require a Certificate and/or License

SOC	Description	2020 Jobs	Avg. Annual Openings	Pct Female	Pct Non-White	Pct Latinx	Median Hourly Earnings
25-9045	Teaching Assistants	373	35	90%	26%	12%	$11.40
31-1131	Nursing Assistants	364	43	88%	38%	4%	$13.52
53-3032	Heavy Truck Drivers	291	36	Insf. Data	10%	Insf. Data	$20.55
29-2053	Psychiatric Technicians	184	20	72%	57%	11%	$18.37
43-3031	Bookkeeping, Accounting, and Auditing Clerks	152	17	88%	10%	Insf. Data	$17.44
49-3023	Automotive Service Technicians and Mechanics	127	12	Insf. Data	14%	8%	$17.14
29-2061	Licensed Practical and Vocational Nurses	121	11	89%	23%	Insf. Data	$20.39
33-2011	Firefighters	76	5	Insf. Data	21%	Insf. Data	$10.40
31-9092	Medical Assistants	50	7	91%	29%	Insf. Data	$14.99
29-2098	Medical Dosimetrists, Records Specialists, and Health Technicians, All Other	44	4	84%	32%	Insf. Data	$20.49

Source: EMSI, 2020.

Figure 19 displays employment in the district for occupations that typically require an associate degree. Many of these occupations have insufficient demographic information to draw conclusions about gender, racial, or ethnic representation. Statewide, Diversity is generally more balanced for these occupations relative to the lower skilled occupations in Figure 18. However, significant challenges remain statewide in some occupations to increase diversity.

Figure 19. Occupational Employment, Associate Degree Typical Entry Level Education

SOC	Description	2020 Jobs	Avg. Annual Openings	Pct Female	Pct Non-White	Pct Latinx	Median Hourly Earnings
25-2011	Preschool Teachers	57	7	98%	20%	Insf. Data	$13.61
19-4071	Forest and Conservation Technicians	19	2	53%	Insf. Data	Insf. Data	$25.19
29-2034	Radiologic Technicians	19	1	69%	Insf. Data	Insf. Data	$23.19
29-1292	Dental Hygienists	14	1	98%	1%	0%	$28.90
31-2021	Physical Therapist Assistants	13	2	Insf. Data	Insf. Data	Insf. Data	$25.99
15-1231	Computer Network Support Specialists	12	1	Insf. Data	Insf. Data	Insf. Data	$23.20
23-2011	Paralegals and Legal Assistants	11	1	Insf. Data	Insf. Data	Insf. Data	$24.00
29-2056	Veterinary Technicians	11	1	Insf. Data	2%	0%	$14.20

Source: EMSI, 2020.

Information about occupations employing more than 70 in the district that typically require a bachelor's degree for entry are displayed in Figure 20. It should be noted that while U.S. Department of Labor identifies a bachelor's degree as the 'typical' entry level education required, there are pathways to occupations on this list that do not require a bachelor's degree. For example, it is possible to become a registered nurse without earning a bachelor's degree.

Women are well represented in these occupations. While the highest paying occupation, general and operations managers, is male dominated, all others are majority female. Many of these occupations have wages above $25/hour.

Four of the occupations in this category have higher percentages of non-White persons than the average of all occupations (22%). Among these occupations, substitute teaching is the lowest paying occupations in the category.

As with other skill levels, there was insufficient data to draw conclusions about Latinx representation in the district for bachelor's degree occupations.

Figure 20. Occupational Employment, Bachelor's Degree Typical Entry Level Education

SOC	Description	2020 Jobs	Avg. Annual Openings	Pct Female	Pct Non-White	Pct Latinx	Median Hourly Earnings
29-1141	Registered Nurses	397	31	89%	32%	3%	$28.99
25-2021	Elementary School Teachers	332	26	79%	17%	6%	$25.85
11-1021	General and Operations Managers	215	20	25%	7%	Insf. Data	$31.55
25-2031	Secondary School Teachers	107	8	59%	15%	Insf. Data	$24.43
21-1021	Child, Family, and School Social Workers	96	10	86%	39%	Insf. Data	$29.47
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	93	13	71%	24%	Insf. Data	$20.34
25-2022	Middle School Teachers	89	7	79%	17%	Insf. Data	$25.35
25-3031	Substitute Teachers	78	9	72%	29%	Insf. Data	$12.43
13-2011	Accountants and Auditors	74	8	59%	15%	Insf. Data	$26.43

Source: EMSI, 2020.

Coronavirus Pandemic

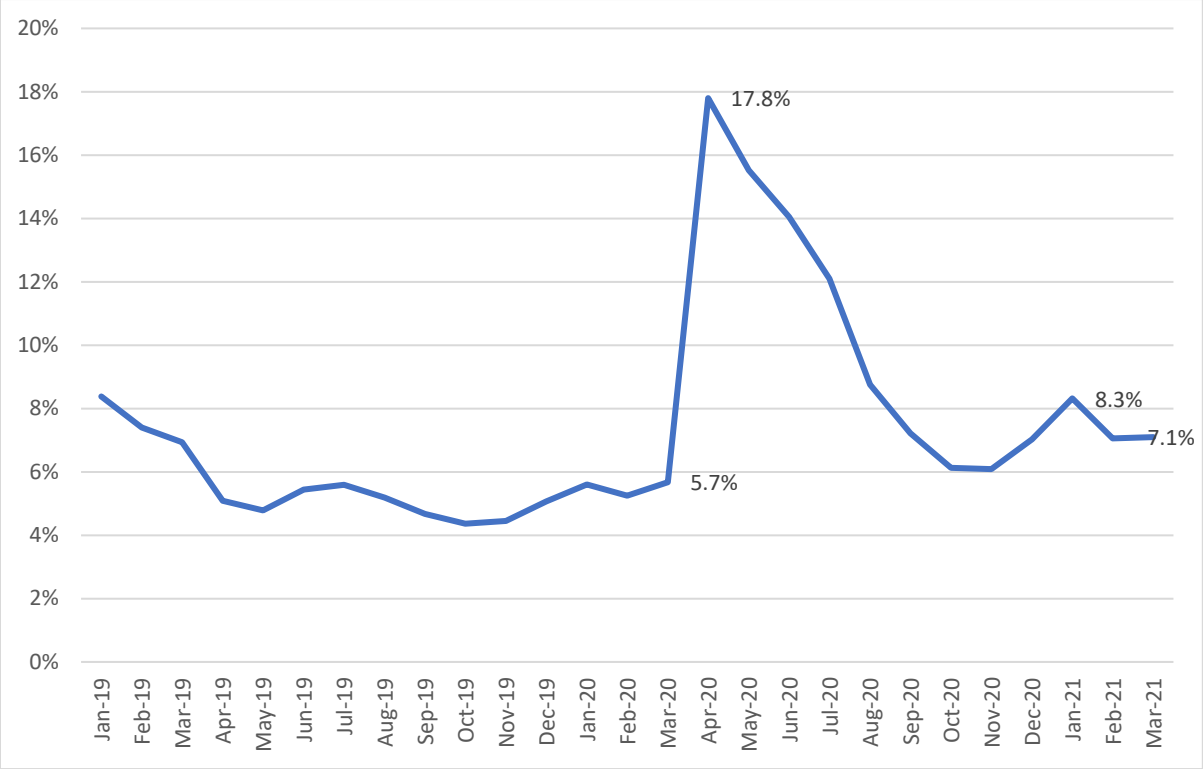
In early 2020 the Coronavirus pandemic disrupted the social and economic structures of communities worldwide. Government regulations such as stay-at-home orders and restrictions on business operations changed the way many businesses could operate. In addition, individuals changed their spending habits to avoid contracting the virus. The impact on employment was rapid and severe, with many businesses laying off employees or completely closing their doors. While significant recovery occurred by early 2021, employment levels remained below 2019 averages.

In late 2019 Illinois unemployment rates had fallen below 4%, hitting a low of just 3.4% in February 2020. Between February and April 2020, about 1.1 million out of about 6.2 million Illinois workers lost their jobs. The unemployment rate soared to 17.2%.

About 600,000 workers had regained their jobs by January 2021, bringing the unemployment rate below 8%. By comparison, during the 'Great Recession' of 2008-2009 the Illinois unemployment rate peaked at 11.3%. During the Coronavirus pandemic, the U.S. unemployment rate peaked at 14.7% in April and fell to 8% by October 2020.

In the district, the monthly unemployment rate peaked at nearly 18% April 2020 (Figure 21). The rate declined steadily, falling to 7% in late 2020. After increasing to nearly 8% in January it declined to about 7% in March 2021. Unemployment trends in the district were largely consistent with the state.

Figure 21. District Unemployment Rate Trend



Source: Illinois Department of Employment Security, Economic Information and Analysis

The pandemic had uneven impacts. The U.S. Bureau of Labor Statistics publishes national unemployment rates by various demographic groups. Figure 22 displays national quarterly unemployment rates (this level of detail is not available at the county level). The rate for all persons 16 and over rose from 3.5% in 2019 to 12.9% in 2020. The rate for youth 16-19 rose from an already significant 13.4% to 28.7% and for those 20-24 years it rose from 6.5% to 22.7%. Those in older age brackets fared better but still experienced rates above 11%. Women were impacted to a greater degree than men, with an unemployment rate reaching 14% vs. just under 12% for men.

Unemployment rates for White workers were slightly lower than the overall averages for all age groups and genders. African Americans, already experiencing higher unemployment rates than other races experienced an unemployment rate of over 16% during the height of the pandemic. Their unemployment rates were higher than the overall averages for all age groups. African American male unemployment rates rose higher than females, which was not the case for other races/ethnicities.

Asians had lower unemployment rates prior to the pandemic than the overall averages. However, their rates increased to above the rates for White workers for all age groups and genders. Asians aged 20-24 were especially hard hit, rising from 4% to nearly 30% unemployment rates.

Latinx workers had unemployment rates similar to the overall averages in 2019. The pandemic caused their rates to rise more significantly than White workers. Latinx youth aged 16-19 years had the highest rate of any group examined, with 1 out of 3 being unemployed.

Figure 22. National Quarterly Unemployment Rates by Gender, Race, and Ethnicity

	2020				2021
	1st	2nd	3rd	4th	1st
White					
Total, 16 Years and Over	3.3	12.2	7.8	6	5.5
Men, 20 Years and Over	3.1	10.7	7.2	5.8	5.4
Women, 20 Years and Over	3	12.8	7.9	5.6	5.1
Both Sexes, 16 to 19 Years	11	27.2	15.9	13.6	13.1
African American					
Total, 16 Years and Over	6.3	16.3	13.1	10.3	9.6
Men, 20 Years and Over	6.2	15.8	13.6	11	9.8
Women, 20 Years and Over	5.2	15.7	12	8.9	8.7
Both Sexes, 16 to 19 Years	23.4	29.3	21.7	22.1	18.4
Asian					
Total, 16 Years and Over	3.2	14.4	10.5	6.7	5.9
Latinx					
Total, 16 years and over	4.9	17	11.2	8.9	8.3
Men, 20 years and over	3.9	14.8	9.9	8.3	7.6
Women, 20 years and over	5.1	18.1	11.8	8.8	8.2
Both sexes, 16 to 19 years	15.4	33.2	20.8	16.6	17

Source: U.S. Bureau of Labor Statistics, *Labor Force Statistics from the Current Population Survey*, 2020.

National research by the Pew Research Center found that the true impacts on employment were more significant than the government unemployment statistics suggest. Their analysis estimated that the true national unemployment rate in May 2020 was 16%, higher than the 'official' rate calculated from U.S. Census Bureau's Current Population Survey (CPS) of 13% (Kochhar, 2020). The discrepancy was largely due to the fact that millions of workers were listed as 'employed but absent from work' in the unemployment survey. These workers were not counted as unemployed. They found that the rate for women was nearly 18% (higher than the 14.3% CPS estimate) and about 20% for African Americans, Asians, and Latinx persons (16.6%, 14.9%, and 17.2% CPS estimates respectively).

Data from Illinois indicate that the impacts on various demographic groups have been mostly similar to the rest of the nation. Figure 23 displays averages of initial unemployment claims in the district for 2019 (pre-pandemic), the 2nd quarter of 2020 (pandemic impact peak) and the first quarter of 2021 (most recent available). Claims increase by nearly 20% at the height of the pandemic impacts. By early 2021, claims had actually fallen below 2019 levels.

As indicated by the national unemployment statistics, youth were impacted to a greater degree. Claims by workers aged 16-24 increased by 182.7% from less than 200 in 2019 to nearly 500 at the height of the impacts in Q2 2020. In contrast, claims for workers in the 45-64 age group decreased at the height of the pandemic impacts.

White workers experienced a slightly greater initial increase in claims compared to the overall total. African American workers had a smaller increase in claims and the number of Latinx claims decreased. Asians had the highest percentage increase in claims.

The increases in claims in the district appears to be driven almost entirely by female workers. The level of claims for male workers actually fell 13.0% from 2019 to Q2 2020. The national data also indicate that women were more severely impacted by the pandemic.

Figure 23. District Initial Unemployment Claims by Age, Gender, Race, and Ethnicity

	Initial UI Claims			% Change	
	2019	Q2 2020	Q1 2021	2019 vs Q2 2020	Q2 2020 vs Q1 2021
TOTAL	3,076	3,663	1,758	19.1%	-52.0%
Age 16-24	173	489	160	182.7%	-67.3%
Age 25-44	1,491	2,075	952	39.2%	-54.1%
Age 45-64	1,990	1,868	913	-6.1%	-51.1%
Age 65 and Older	204	265	148	29.9%	-44.2%
RACE/ETHNICITY					
White/Not of Latinx Origin	3,052	3,852	1,567	26.2%	-59.3%
Share of total	99.2%	105.2%	89.1%		
African American/Not of Latinx Origin	377	401	323	6.4%	-19.5%
Share of total	12.3%	10.9%	18.4%		
Asian or Pacific Islander	2	31	8	1450.0%	-74.2%
Share of total	0.1%	0.8%	0.5%		
Latinx Origin	239	204	176	-14.6%	-13.7%
Share of total	7.8%	5.6%	10.0%		
GENDER					
Male	2,058	1,790	1,083	-13.0%	-39.5%
Female	1,010	1,855	667	83.7%	-64.0%
Female Share	32.8%	50.6%	37.9%		

Source: Illinois Department of Employment Security, Characteristics of Unemployment Insurance Claimants by State and County, 2021 (data are averages of monthly levels).

Due to their high levels of person-to-person interaction, employment in service industries were impacted the greatest by the pandemic. Retail trade, education and health services, leisure and hospitality, and other services all had greater than 100% increases in unemployment claims (Figure 24). Moving in to early 2021, claims in most sectors had fallen below 2019 levels. A major exception was in leisure and hospitality, but the increase was likely due to seasonal variations. Claims for mining also increased, but there are very few claimants in this industry overall.

Figure 24. District Initial Unemployment Claims by Industry Sector

	Initial UI Claims			% Change	
	2019	Q2 2020	Q1 2021	2019 vs Q2 2020	Q2 2020 vs Q1 2021
Agriculture, forestry, fishing and hunting	439	160	173	-63.6%	8.1%
Mining	5	4	7	-20.0%	75.0%
Construction	3,383	1,631	2,009	-51.8%	23.2%
Manufacturing	3,793	2,383	753	-37.2%	-68.4%
Wholesale trade	380	487	328	28.2%	-32.6%
Retail trade	919	1,970	502	114.4%	-74.5%
Transp, Warehousing, and Utilities	618	699	302	13.1%	-56.8%
Information	122	100	47	-18.0%	-53.0%
Financial Activities	388	319	162	-17.8%	-49.2%
Professional and Business Services	1,747	1,981	1,053	13.4%	-46.8%
Educational and Health Services	924	2,471	629	167.4%	-74.5%
Leisure and Hospitality	676	4,483	980	563.2%	-78.1%
Other Services	242	831	145	243.4%	-82.6%
Public administration	385	301	202	-21.8%	-32.9%

Source: Illinois Department of Employment Security, Characteristics of Unemployment Insurance Claimants by State and County, 2021 (data are averages of monthly levels).

Statewide, service occupations were the most impacted by the pandemic, but the most-impacted occupations in the district differed considerably (Figure 25). Arts and entertainment occupations had the highest increase in unemployment claims in the 2nd Quarter 2020. The largest number of claims were in construction and food preparation occupations.

Job losses in some of these sectors may be permanent. Using data from the Federal Reserve Bank of Atlanta/Chicago Booth/Stanford Survey of Business Uncertainty (SBU), Barrero, Bloom, and Davis (2020) estimate that 42% of the jobs lost in the U.S. will be permanently eliminated. "But even as many firms were shedding workers, some were hiring. The April SBU showed that the COVID-19 shock caused three new hires in the near term for every 10 layoffs. A restaurant server, for instance, might take a job with a delivery service or a clothing store clerk might go to work in an online retailer's distribution center."

As long-term changes to the economy become more apparent, community colleges and other parts of the workforce development system can help retrain those that have permanently lost their jobs.

Figure 25. Shawnee Community College District Initial Unemployment Claims by Occupation

	Initial UI Claims			% Change	
	2019	Q2 2020	Q1 2021	2019 vs Q2 2020	Q2 2020 vs Q1 2021
Management	197	316	136	60.4%	-57.0%
Bus. & Fin. Operations	44	106	25	140.9%	-76.4%
Computer & Math.	2	11	6	450.0%	-45.5%
Architecture & Eng.	4	12	13	200.0%	8.3%
Life Phys. & Soc. Sci.	6	7	1	16.7%	-85.7%
Comm. & Social Service	30	36	23	20.0%	-36.1%
Legal	5	11	4	120.0%	-63.6%
Edu. Training & Library	132	152	55	15.2%	-63.8%
Art Ent. Sport & Media	12	147	15	1125.0%	-89.8%
Healthcare Pract. & Tech.	59	202	73	242.4%	-63.9%
Healthcare Support	94	200	126	112.8%	-37.0%
Protective Service	35	113	11	222.9%	-90.3%
Food Prep. & Serving	112	610	157	444.6%	-74.3%
Building & Grounds Maint.	169	199	145	17.8%	-27.1%
Personal Care	80	156	63	95.0%	-59.6%
Sales & Related	187	367	106	96.3%	-71.1%
Office & Admin. Support	173	275	135	59.0%	-50.9%
Farm Fishing & Forestry	144	77	79	-46.5%	2.6%
Const. & Extraction	1,226	655	548	-46.6%	-16.3%
Instal. Maint. & Repair	287	283	167	-1.4%	-41.0%
Production	276	376	120	36.2%	-68.1%
Transportation	305	260	91	-14.8%	-65.0%

Source: Illinois Department of Employment Security, Characteristics of Unemployment Insurance Claimants by State and County, 2021 (data are averages of monthly levels).

Shawnee Community College Student Outcomes

Illinois community colleges are multipurpose institutions with the capacity to offer short- and long-term certificate programs for high demand jobs, associate's degrees for career preparation or transfer to bachelor's degree programs, college preparatory courses, and noncredit continuing education. Community colleges are diverse throughout Illinois and exist to meet the needs of the communities they serve.

Community college programs prepare individuals for high-skill, in-demand employment that furthers Illinois' global competitiveness. Education programs offer flexible scheduling, work-based learning, and stackable credentials that provide a pathway from education to employment not only for recent high school graduates, but also for returning adults, veterans, and incumbent workers. Success in education programs like Career and Technical Education areas of study are amplified by academic support services, work-based learning opportunities, and business engagement. CTE's reach in Illinois' workforce continues to be expansive; in academic year 2020, there are over 4,300 different CTE program offerings across the community college system.

Figure 26. Academic Year 2020 Illinois Community College Annual Headcount Enrollments by Instructional Program Area

Area of Instruction	Academic Year 2020
General Associate	28,346
Baccalaureate/Transfer	249,146
Career & Technical Education	119,269
Vocational Skills	27,898
ABE/ASE/ESL	46,603
General Studies Cert	1,216
Total	472,478

Figure 27. Annual Duplicated Headcount for Continuing Noncredit Education by Category of Activity

Category of Activity	Academic Year 2020
Business and Industry Contract	8,066
Professional/Vocational Development	21,244
Personal and Social Development	92,415
Youth Programs	18,083
Total	139,808

Most students attend college to improve skills that will be valuable to employers. The following section details workforce outcomes of community college completers. It begins by calculating the return on investment of a typical Illinois community college completers. It then details program completion rates by various academic programs and student groups. Finally average annual earnings for various demographic groups and program types are presented.

Student Return on Investment

Obtaining a credential at a community college is an investment. The time and money invested in education results in higher earnings after completion. Students attending college pay for their education in both cash and in foregone earnings. The net cash price is the cost of tuition, fees, books, and room and board. Foregone earnings result when a student spends time going to school and studying in place of earning money at work.

The analysis in this section focuses on the return on investment of students aged 20 to 29 that completed a two year program that was not focused on transfer to a 4-year institution (AAS or long-term certificate) in FY2018. The cost of attending school during the FY2017 and FY2018 school years is compared with projected earnings over a 40 year post graduation time frame. The results are net present value (NPV) and internal rate of return (IRR) estimates for the average completer in FY2018. Within the community college system, a considerable portion of the student population is non-traditional (older population) and may be working in a career job already as they are upskilling. However, for this particular model the focus is more on the traditional matriculation of high school to college and full-time status within the community college system. There are many different paths to completing a community college credential. This analysis focuses on a student that completes their program within two years in their early 20s, and does not work during their time in school. After completion, the calculations assume a 40 year working career.

There are many different paths to completing a community college credential. This analysis focuses on a student that completes their program within two years in their early 20s, and does not work during their time in school. After completion, the calculations assume a 40 year working career.

If a student works while in school this may reduce their initial investment (by reducing opportunity costs), thereby increasing the ROI and NPV. If a student takes longer than 2 years to complete their degree this may increase their initial investment, thereby reducing the ROI and NPV.

The net cash price of attending school was obtained from the National Center for Education Statistics' College Navigator tool. College Navigator employs Integrated Postsecondary Education Data System (IPEDS) data from the National Center for Education Statistics to calculate the *average net price*[2] for annual attendance at each school. The statewide figure is the average (weighted by student enrollment counts) of individual Illinois community colleges.

The other major cost for college attendees is their foregone earnings, often referred to as the 'opportunity cost' of attending college. The estimate for foregone earnings is based on average high school graduate earnings levels. In Illinois, average earnings for a 20-year old high school graduate is $9,751[3], increasing to $10,919 for a 21 year old. These values are used as the estimates for the opportunity costs of attending a community college in the ROI calculations.

[2] "Average net price is generated by subtracting the average amount of federal, state/local government, or institutional grant or scholarship aid from the total cost of attendance. Total cost of attendance is the sum of published tuition and required fees (lower of in-district or in-state), books and supplies, and the weighted average for room and board and other expenses." (Source: National Center for College Statistics, COLLEGENavigator. https://nces.ed.gov/collegenavigator/)

[3] Source: U.S. Census Bureau, 2014-2018 American Community Survey.

The major benefit of completing college is the resulting increased earnings. Earnings data for ICCS completers in a 2014 study showed that earnings gains for statewide completers totaled about 31% of post-completion earnings. This is very similar to the earnings difference between associates degree holders and high school graduates for persons in their early 20s. Thus, first year earnings gains are estimated as 31% of post-completion earnings of $34,553, or $10,711. Other studies[4], as well as Census data on earnings by age, indicate that earnings gains from educational attainment grow significantly in the first decade of a worker's career, and subsequently flatten. Based on these data, earnings gains from credential attainment are assumed to grow by 7% per year in the 10 years following completion then remain stable.

Figure 28 presents the net return analysis based on the calculations noted above. The total cost during the two years the student is in school, including out of pocket expenses and foregone earnings is $40,734. The return on investment occurs over a 40 year working life, where increased earnings for a degree completer are estimated to total more than $660,000 (compared to someone not attending community college).

Figure 28. Estimate Net Return for AAS Degree and Long-Term Certificate Completers

Year	Net Price	Opportunity Cost	Total Cost	Post Completion Earnings Gains	Discounted Cash Flow
-1	$10,682	$9,751	$20,433		-$21,250
0	$9,382	$10,919	$20,301		-$20,301
1				$10,711	$10,283
2				$11,461	$10,563
3				$12,264	$10,850
4				$13,122	$11,145
5				$14,040	$11,448
6				$15,023	$11,760
7				$16,075	$12,079
8				$17,200	$12,408
9				$18,404	$12,746
10				$18,404	$12,236
⋮				⋮	⋮
38				$18,404	$3,901
39				$18,404	$3,745
40				$18,404	$3,596
		Total Increased Earnings		$662,024	NPV $258,307
					IRR 23.4%

[4] See for example *Ranking ROI Of 4,500 US Community Colleges And Universities* from the Georgetown Center on Education and the Workforce.

The net present value of investing in a Shawnee Community College associate degree or long-term certificate is about $258,000. The internal rate of return on their investment is 23.4%. In other words, if a student put $40,734 in an investment that returned 40 annual payments equivalent to the earnings gains from an associate degree/long-term certificate, they would earn interest at a rate of 23.4%.

Student Employment Outcomes

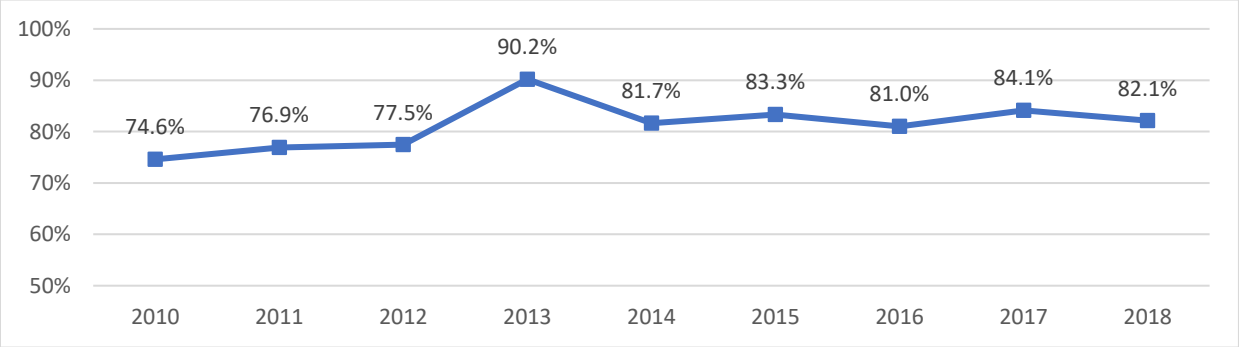
Information on student outcomes derives from the Institutional Researcher (IR) Tool dataset, which connects individual-level data from ICCB and Illinois Department of Employment Security ((DES) administrative data systems to generate student outcomes on employment and wages. The IR dataset includes information on ICCS completers who completed a credential in 2009 through spring 2018, including their earnings and employment status before and after completion.

In this study, a mix of panel data and snapshot data provide information about student outcomes from multiple angles. Panel data shows outcomes for the same group of completers over time. For example, we use panel data to show the trajectory or earnings for students who completed in 2009. Snapshot data shows the characteristics of students that completed each year, such as the employment rate for the class of 2009, the employment rate for the class of 2010 and so on. Next, student outcomes are examined in terms of employment rates, postsecondary enrollment, and earnings. All information is presented on a fiscal year basis, with the year corresponding to the calendar year of the spring semester, e.g., FY2018 begins with the summer 2017 term and ends with the spring 2018 term.

Employment

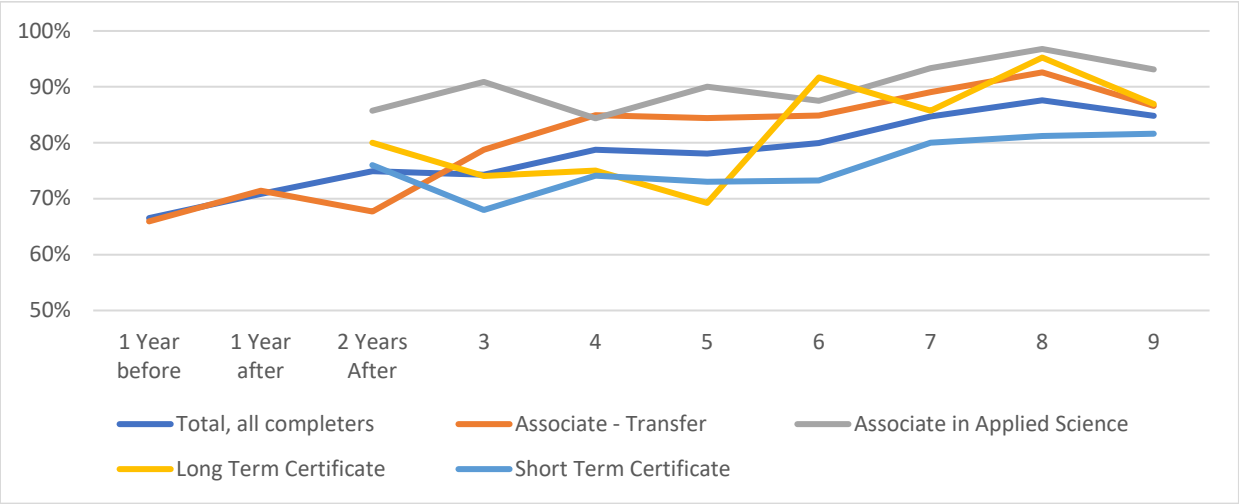
According to ICCB data, in recent years more than 70% of completers of long-term certificate programs or Associate in Applied Science programs at Shawnee Community College are employed in career jobs within a year of graduation. This trend was consistent for completers each fiscal year through FY2018, which includes those who completed programs in the spring of 2018. Completers of short-term and transfer programs are excluded from the one-year employment rates because they typically pursue further education in the year after completion. The career job employment rate for Shawnee Community College completers improved between FY2014 and FY2018.

Figure 29. Career Job Employment Rate One Year After Completion (Long-Term Certificates and Associate in Applied Science Completers)



Career job employment rates typically improve for Shawnee Community College completers over time. Among those who completed programs in 2009, 70.8% were employed one year after graduating, and 84.8% were employed in career jobs after 10 years. Starting two years after completion, AAS completers had the highest employment rate.

*Figure 30. Career Job Employment Rate for 2009 Completers**

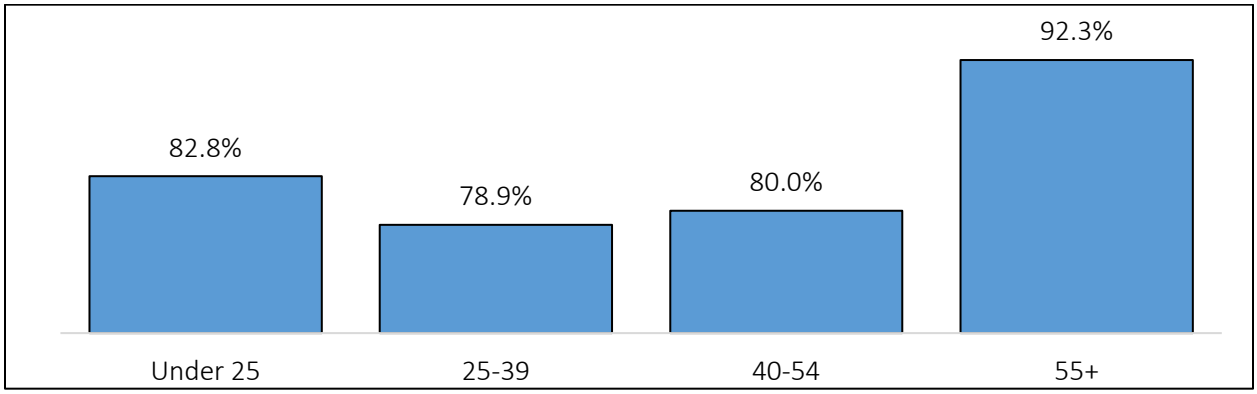


*Career job employment rate is excluded for short-term certificate completers, and long term certificate completers 1 year after, due to insufficient data.

It was not possible to compare employment rates by race and ethnicity, due to limited data for non-White completers.

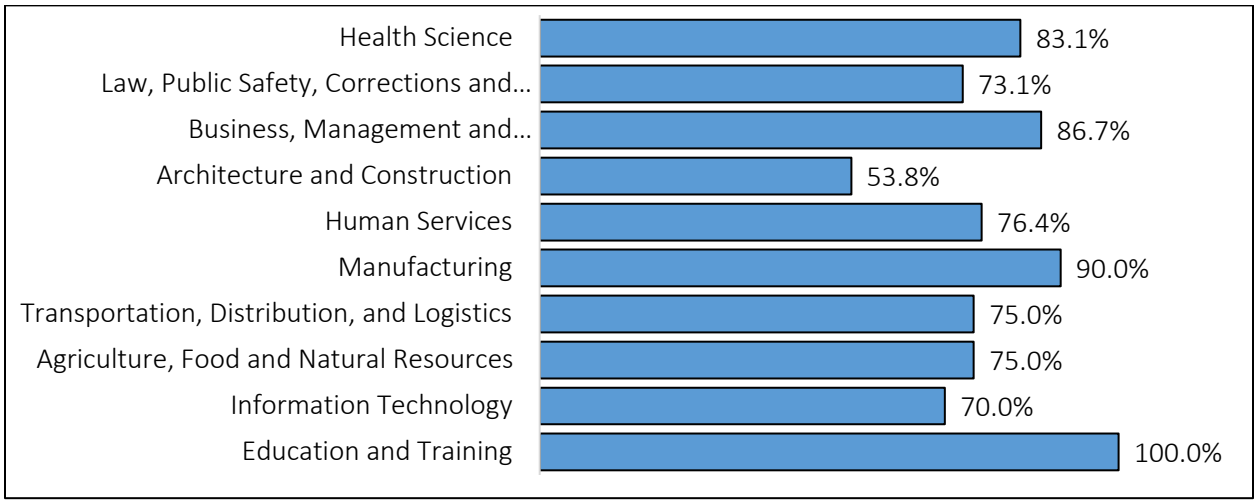
Employment rates varied by age. About 82.8% of completers of long-term certificate programs or AAS programs in the traditional college age, under age 25, were employed in career jobs six months after graduating. About 78.9% of completers in the 25-39 age range were employed in career jobs, and completers over age 39 had similar employment rates. In some cases, the employment rate is lower because completers defer working full-time to pursue a university degree. Employment rates rose significantly for the oldest (55+) completers.

Figure 31. Career Job Employment Rate One Year After Completion by Age (Long-Term Certificates and Associate in Applied Science Completers)



Employment rates also varied considerably by the career clusters that completers studied for. The highest career job employment rates were for those who studied for education. The lowest career job employment rates were for completers of programs in architecture.

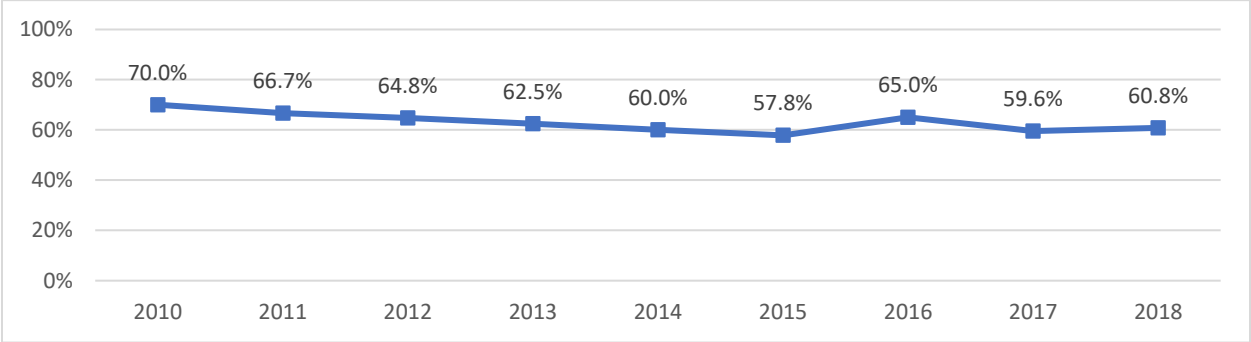
Figure 32. Career Job Employment Rate One Year After Completion by Career Cluster (Long-Term Certificates and Associate in Applied Science Completers)



Postsecondary Enrollment

A fairly substantial number of Shawnee Community College completers continue their education in the same institution or another 2- or 4-year educational institution within a year after graduating. Students sometimes complete CTE programs as part of a sequence of credentials that can be accumulated or are "stackable" over time to build up an individual's qualifications and help them to move along a career pathway or up a career ladder to different and potentially higher-paying jobs. Students in associate degree transfer programs, of course, also continue education in their path to a Bachelor's degree The postsecondary enrollment rate, the percentage of completers who enroll in a four-year degree program within a year of completion, for Shawnee Community College completers varied slightly from year to year, although the general trend shows a slight decline. These figures do not include completers who pursue further education after their first year out of community college. They also exclude completers who pursue shorter-term training or education, such as additional credentials in the ICCB system. Postsecondary enrollment rates have decreased from 70.0% for FY2010 to 60.8% in spring 2018.

*Figure 33. Postsecondary Enrollment Rate by Year of Completion**

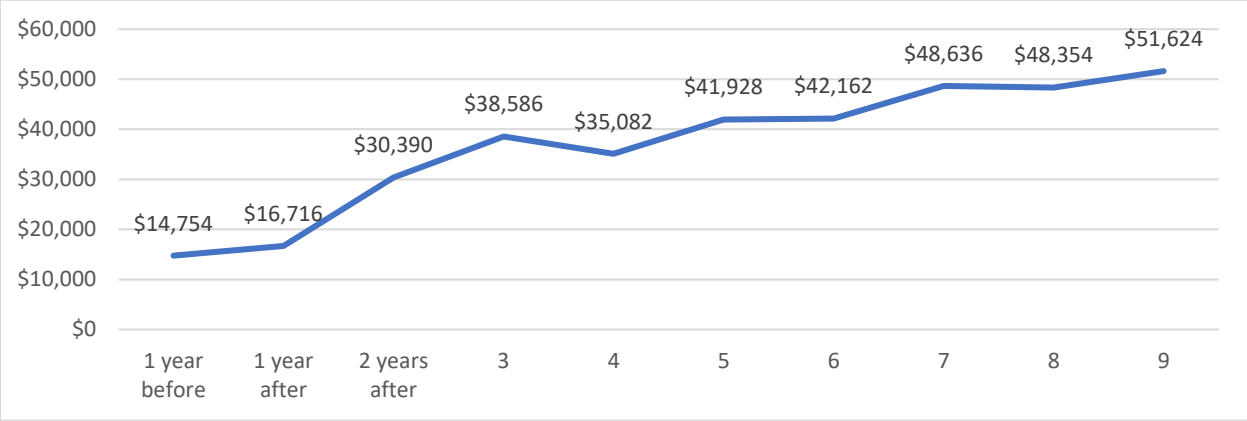


*Spring only for 2018.

Earnings

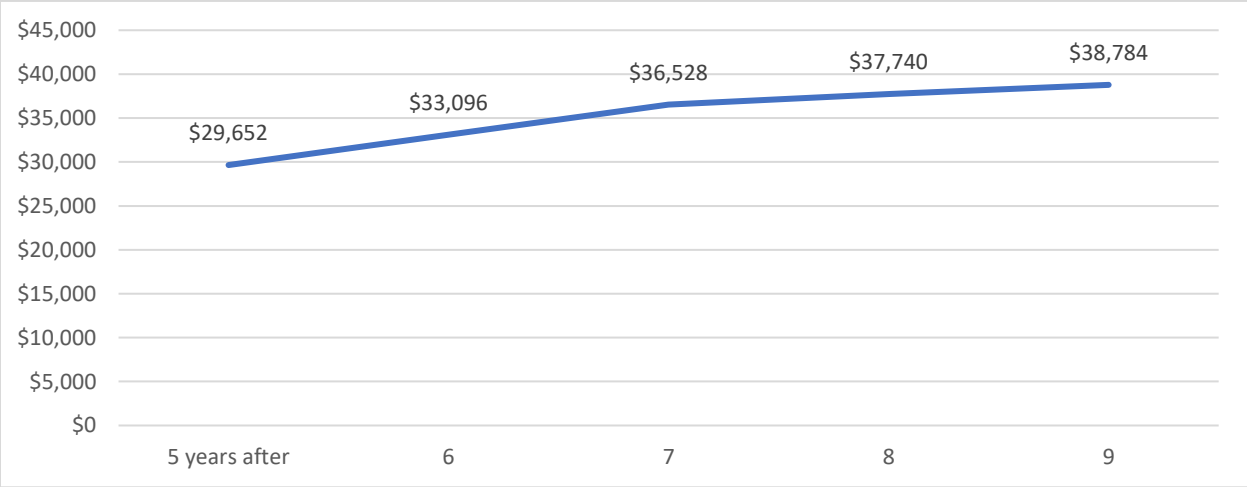
Looking at a longer time horizon, the class of 2009 earned $51,624 nine years after graduating, representing an average annual growth rate of 25.0%. The earnings growth is most significant in the first few years after graduation. Some of the earnings growth in the first year include transitioning from part-time to full-time employment.

Figure 34. Median Earnings Over Time for 2009 Completers (Long-Term Certificates and Associate in Applied Science Completers)



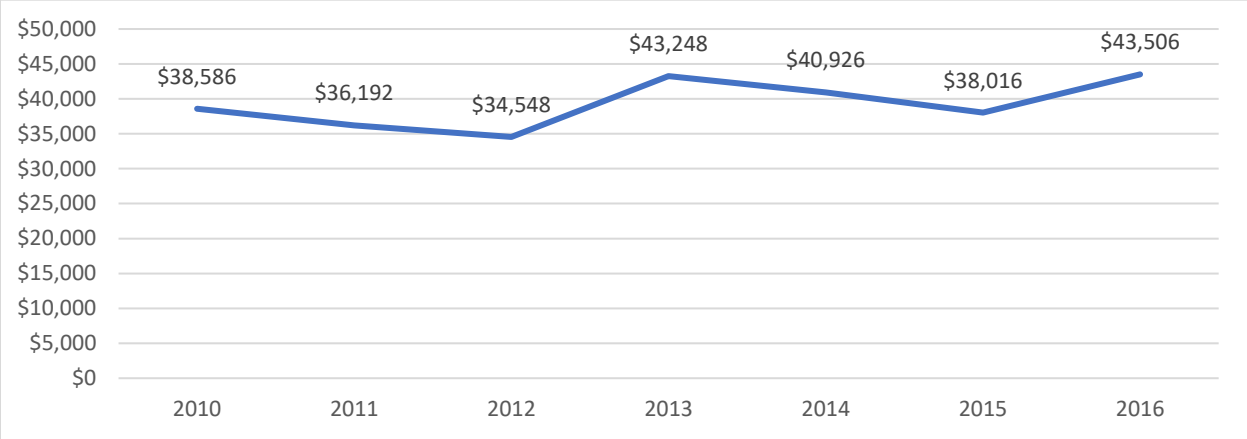
Completers of associate degrees for transfer to other institutions earned a median of $29,652 five years after completing their program at Shawnee Community College. Ten years after completion, the median earnings were $38,784, which represented a 6.2% increase each year. Earnings for the first five years are excluded because these completers are still finishing their four-year degrees at this time. Statewide, earnings for associate transfer completers are typically lower than for AAS and long-term certificate completers.

Figure 35. Median Earnings Over Time for 2009 Completers (Associate - Transfer Completers)



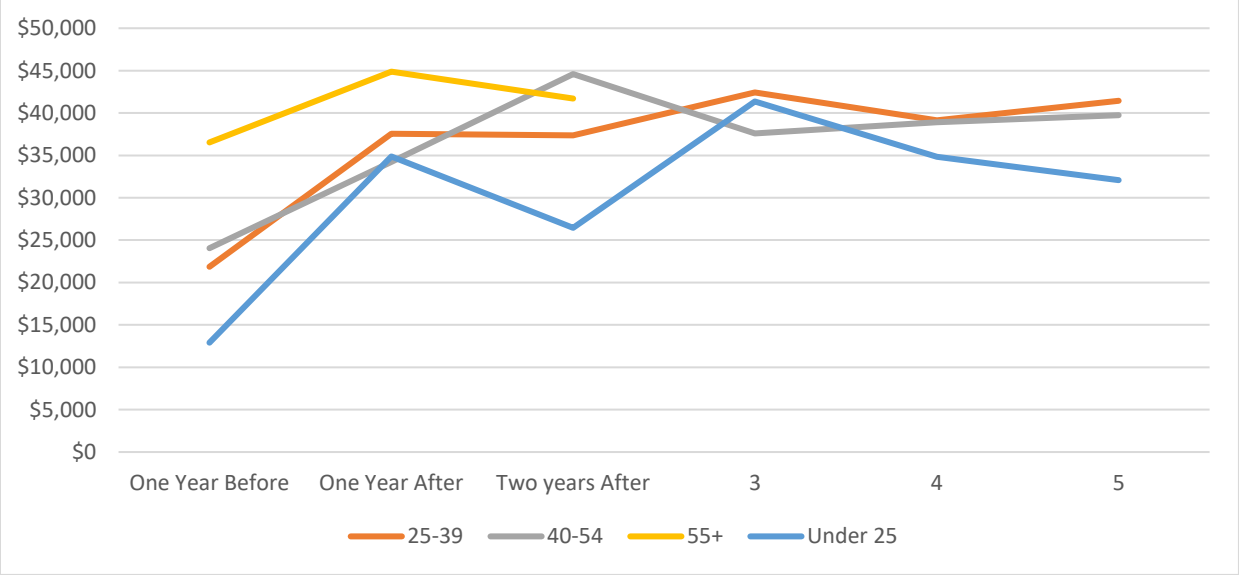
The earnings of Shawnee Community College completers varied slightly by year of completion. Those who completed their program in FY2010 earned a median of $38,586 after three years. For FY 2016, completers earned a median of $43,506 after three years. Median earnings were somewhat lower for completers in FY2011, but they increased for FY2012 onward.

Figure 36. Median Annual Earnings 3 Years After Graduation, by Year of Graduation (Long-Term Certificates and Associate in Applied Science Completers)



Unsurprisingly, 1st-year earnings increased with graduate age. Completers in the 25-39 age group typically earned more than completers under age 25. Earnings are affected by work experience and hours worked.

Figure 37. Median Earnings Over Time for 2013 Completers by Age (Long-Term Certificates and Associate in Applied Science Completers)



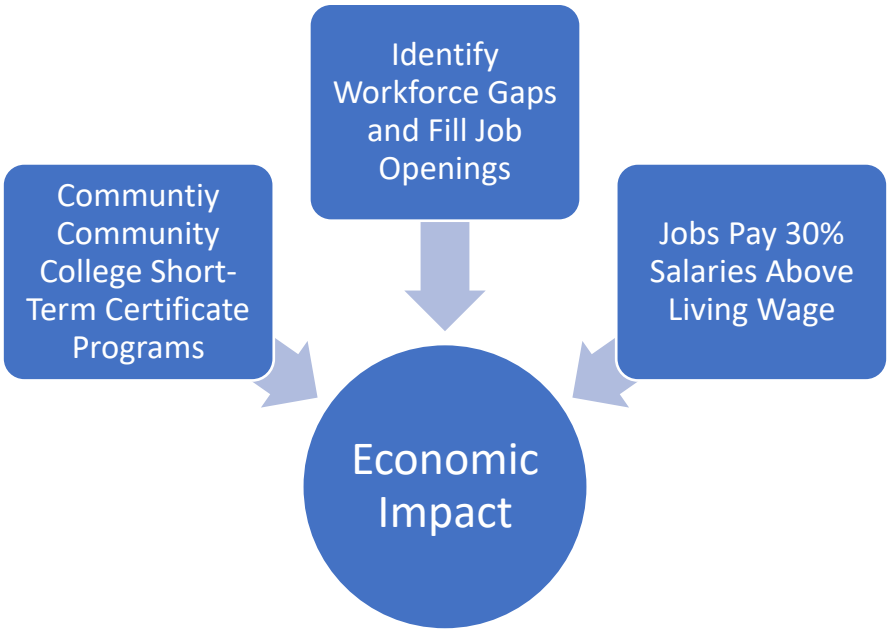
There was not possible to compare earnings over time by race/ethnicity or industry, due to limited data availability.

Short-Term Certificate Student Employment Outcomes

Illinois community colleges are committed to continuing growth in short-term certificate opportunities particularly in high-need communities focused on areas specific sectors with identified workforce gaps. The Workforce Equity Initiative (WEI) in particular, is evidence of Illinois community college efforts on short-term certificate expansion in high demand-careers. In addition, WEI also targets low-income individuals, those living in high crime and high poverty areas, and unemployed individuals and minorities. Illinois community colleges are leaders in workforce development and WEI, with its evidence-based model, even further economically impacts students, particularly underrepresented groups. The figure below illustrates WEI's model of developing short-term certificate programs in high-demand occupations that provide a salary 30% above a living wage within that region.

The Illinois community college system's commitment to strengthening job creation and workforce development is evident in the alignment of the short-term certificate graduate instructional areas (Figure 40) and many of the occupations with considerable job openings and/or growth rates projected through 2029 in Figure 11.

Figure 38. Illinois Community College Workforce Equity Initiative (WEI) Model



Illinois community colleges offer a variety of associate degrees and certificate programs of varying lengths. Short-term certificates (under 30 credit hours) provide students with a quick and focused program of study that can lead to immediate employment. Examples of short-term certificates include Truck Driving, Welding Web Design, HVAC Technician, Electrician, and Firefighting. Many of the short-term certificates allow students to enter the workforce but then are also embedded in a program of student that allows continued education toward an advanced certificate or full associate degree that allows even further expansion in career opportunities.

Earnings for completers of short-term certificates can vary widely by program. The figure below shows the top short-term programs by median earnings after three years, and the number of completers

between FY2014 and FY2016. There may be other programs associated with high earnings, however data cannot be displayed for those with less than 10 completers. Certificate programs with the highest earnings include ground transportation, precision metal working, and health administration.

Figure 39. Median Earnings Three Years After Completion, FY2014-2016 Short-Term Completers

Curriculum	No. of Completers With Earnings, FY14-16	Median Earnings After 3 Years
Ground Transportation	28	$42,324
Precision Metal Working	11	$37,800
Health and Medical Administrative Services	10	$30,158
Mental and Social Health Services and Allied Professions	26	$23,122
Practical Nursing, Vocational Nursing and Nursing Assistants	91	$17,476

The occupations linked to short-term certificate programs at Shawnee Community College are expected to gain employment in the district between 2020 and 2030. Employment for truck drivers is projected to increase 12.4%, including 36 annual job openings in the district. Employment for substance abuse and mental health counselors is projected to increase 35.3%, including 13 openings per year. These employment projections are conservative, given that completers are not strictly limited to employment opportunities in the district they studied in, and completers can pursue stackable credentials for further employment opportunities.

Figure 40. Job Growth in Occupations Related to Short-Term Certificate Programs

SOC	Description	2020 Jobs	2030 Jobs	Growth rate	Annual Openings
53-3032	Heavy Truck Drivers	291	327	12.4%	36
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	93	125	35.3%	13
29-2061	Licensed Practical and Licensed Vocational Nurses	121	143	18.5%	11
43-6013	Medical Secretaries and Administrative Assistants	55	66	18.8%	7
51-4041	Machinists	14	19	36.4%	2

Source: EMSI, 2020.

Economic Impacts

Shawnee Community College is an important source of expenditures and employment for the region. As part of their day-to-day operations, each college purchases goods and services, many of them from the local economy. They also pay their employees, who in turn spend their wages and salaries in the local economy. Additionally, the college invest in site improvements, remodeling, and new construction that generate additional expenditures and jobs.

Any change in economic activity, such as the purchase of a commodity or a service, has direct and indirect effects. The direct effects are the employment, payroll and purchases of goods and services directly by the colleges. The indirect effects occur through a variety of channels. For example, when a community college hires a local printer to produce its catalogues and brochures, these orders contribute directly to the income of the local printing industry. The printers' employees spend at least some of their income locally, and these purchases contribute to the employment and the income of other local industries and services. The printers spend part of their income from the community college's orders on the supplies that they need to run their businesses. To the extent that these purchases are local, they contribute to the incomes of employees in other industries, who in turn spend their incomes on still other goods and services with these effects again induced by the college's initial purchase.

IMPLAN Pro economic modeling software was used to produce estimates of the indirect economic impacts of Shawnee Community College, based on the direct impacts. Direct impacts are simply the set of expenditures or employment applied to the predictive model for impact analysis. Indirect impacts are then derived as additional effects caused by industries purchasing from other industries. Induced impacts take into account the spending in the local economy of the new income generated by the new employment produced from the impact.

Data provided by Shawnee Community College to the Illinois Community College Board (including wages, salaries, and capital costs) identified $13.1 million in operating expenditures during fiscal year 2020. Shawnee Community College paid over $6.3 million in wages and benefits to their 172 employees that lived in the region. These direct impacts rippled through the economy creating additional jobs, payrolls, and other economic activity. These impacts are summarized below in Figure 44. About 205 jobs in the district could be attributed to the college operations. These operations were associated with about $17.1 million in economic output (equivalent to total sales of a business or total spending of a government enterprise). Value added, which is a measure similar to Gross State Product, totaled over $8.8 million.

Figure 41. Shawnee Community Colleges' Operational Expenditures Output and Employment Impact - FY2020

Impact Type	Direct Effect	Indirect Effect	Total Effect
Employment	172	33	205
Output	$13,100,069	$3,957,590	$17,057,659
Total Value Added	$6,786,538	$2,014,935	$8,801,472
Employee Compensation	$6,334,823	$957,366	$7,292,188

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