# The Annual Condition of Iowa's Community Colleges 2014


Community Colleges

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# The Annual Condition of Iowa's Community Colleges 2014

Iowa Department of Education
Division of Community Colleges

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# Acknowledgments

Many people have contributed to *The Annual Condition of Iowa's Community Colleges: 2014*. The project was supervised by Jeremy Varner and Kent Farver. The report was compiled and written by Vladimir Bassis, Monte Burroughs, Barbara Burrows, Eric St Clair, Kent Farver, Alex Harris, Paula Nissen and Geoffrey Jones assisted in the compilation of data.

In addition to those mentioned above, several people edited part or all of this document and provided invaluable feedback and help with layout: Rebecca Griglione and Stephanie Weeks.

# Preface

The mission of the community colleges of Iowa in the 21st century is to provide exemplary educational and community services to meet the needs and enhance the lives of Iowans. [2]

Iowa's 15 community colleges, in accordance with Iowa Code §260C.1 [1], offer comprehensive programs including arts and sciences, college transfer courses, career and technical education programs, training and retraining programs for the workforce of Iowa's businesses and industries, and a variety of adult education and non-credit courses for residents within each community college district.

Iowa Code §260C.1 [1] mandates development of a statewide strategic plan for community colleges. Specific goals include:

- Demonstrating effectiveness and efficiency for achieving the system mission.
- Providing high quality comprehensive educational programs and services accessible to all Iowans.
- Developing highly skilled workers to meet the demands of Iowa's changing economy.
- Maximizing institutional resources to assure provision of comprehensive community college services.
- Recruiting, enrolling, retaining, and/or graduating persons of underrepresented groups.

Since 1998, the Management Information System (MIS) group of the Division of Community Colleges has been responsible for compiling and publishing "The Annual Condition of Iowa's Community Colleges", commonly known as the condition report. Primary data sources for the condition report are each of the 15 public community colleges in Iowa. Every August, community colleges transmit data to the Department of Education. Upon receipt, MIS staff members review the data for discrepancies, then return summary reports to confirm accuracy. After confirmation, data files are aggregated for analysis and subsequent reporting.

The condition report describes and addresses key indicators associated with Iowa's community colleges. Some indicators covered in this report include demographics, enrollment in credit and non-credit courses, credit and contact hours, human resources, adult literacy, tuition and fees, and summary financial data. These indicators provide a snapshot of institutional effectiveness for a given fiscal year.

The body of the condition report emphasizes tables of summary data that provide snapshots of key indicators. Readers should study the narrative of each section to understand its content. These narratives help readers understand indicators cited throughout this document. Figures depict trends and changes over time, especially when those trends occur in areas critical to the mission of community colleges. Basic demographic data can help readers understand student populations served by a given college. Such information depicts relevant aspects of a college's outreach (i.e., whom the college serves) and provides additional context for the reported indicators.

The intent of this report is to help policymakers, governing entities, and community college officials make data-driven decisions on issues pertaining to Iowa's community colleges. Without the condition report, establishing points of reference for such decisions would be difficult. Policymakers would be at risk of relying upon inadequate or incomplete data to make decisions affecting community colleges.

The condition report is designed to give policymakers at the state and local levels a clear, objective understanding of essential indicators. Objective findings lend credence and transparency to this project and guide policymakers as they make informed decisions about community colleges. Best practices associated with using the condition report suggest integrating information from its various parts. Users of this document should maintain a holistic point of view when making inferences or communicating particular aspects about the condition report to their respective constituencies.

**References**

[1] Iowa Code §260C.1 (2013).

[2] Iowa Department of Education. Shaping the future: A five-year plan for Iowa's system of community colleges. Division of Community Colleges, 2001.

# 1 Iowa's Community Colleges

*"The mission of the community colleges of Iowa in the 21st century is to provide exemplary educational and community services to meet the needs and enhance the lives of Iowans."*

SOURCE: "Shaping the Future: A Five-Year Plan for the Community Colleges of Iowa, 2006-2011"

Community colleges have an "open door" policy, which means that nearly everyone who applies may be accepted.

Each of the 15 community colleges offers comprehensive programs including arts and sciences, college transfer (parallel) courses, career and technical education programs, training and retraining programs for the workforce of Iowa's businesses and industries, and a variety of adult education and non-credit courses for residents of each community college district.

## History of Iowa's Community Colleges

Mason City schools established the first two-year postsecondary educational institution in Iowa in 1918. At the time this junior college was organized, there was no law authorizing two-year postsecondary educational programs. Mason City Junior College proved to be successful and was accredited by the North Central Association of Colleges and Schools in 1919.

Additional public junior colleges were organized beginning in 1920, and the movement spread rapidly, until, by 1930, at least 32 towns and cities in Iowa had organized public junior colleges as part of their public school systems.

In 1927, the 42nd General Assembly passed the first law authorizing the establishment of public junior colleges. The law permitted the establishment of schools offering instructional programs at a level higher than an approved four-year high school course. The colleges had to be dually authorized by the voters and approved by the State Superintendent of the Iowa Department of Public Instruction (now the Director of the Iowa Department of Education). Such colleges were able to include postsecondary courses of one or two years. The Superintendent was authorized to prepare standards and to provide adequate inspection of these junior colleges.

The Iowa public junior college movement reached its crest in 1927 when nine public junior colleges were organized. After the year 1930, no public junior colleges were organized until 1946, when Clinton Junior College was founded. In 1931, the 44th General Assembly approved the first restriction to the development of public junior colleges, prohibiting the establishment of a public junior college in any school district having a population of less than 20,000. The 49th General Assembly in 1941 reduced the population requirement to 5,000.

Between the years 1918 and 1953, a total of 35 different public junior colleges were established through the operation of public school districts. Some of these colleges closed, although 10 of the closed colleges later reopened. The enrollment trend steadily increased over the years with the exception of the World War II years. During the 1955-66 decade, which immediately preceded the initiation of a community college system, enrollment almost quadrupled. By 1965, 16 public junior colleges were operating in Iowa and the total enrollment during the fall semester of the 1965-66 school year was 9,110. Local public school districts operated colleges; a dean who reported directly to the local superintendent administered each. These institutions offered arts and sciences programs equivalent to the first two years of the baccalaureate program and a limited number of occupational programs and adult education opportunities.

In 1958, Congress initiated a development parallel to the public junior college movement. Title VIII of the National Defense Education Act (NDEA) made federal funds available to states on a matching basis to develop area vocational programs. To implement this legislation, the Iowa State Board of Education modified the state vocational education plan to make local school districts and Iowa State University eligible to operate as "area schools." This legislation included a specific allocation of funds to develop area vocational programs under NDEA's Title VIII, a designation of area vocational-technical high schools, and the authorization for tuition-paying students to attend these schools and programs.

The Iowa State Board of Education eventually designated a total of 15 schools as area vocational-technical high schools. These schools were also designated as area schools for the purposes of Title VIII, and were to be used to initiate programming for the Manpower Development and Training Act. A total of 1,816 full-time day students enrolled in postsecondary vocational programs for the 1965-66 school year; the majority entered programs administered by agencies operating the area vocational-technical high schools or programs.

Even though public junior colleges and area vocational-technical high schools offered some opportunities for arts and sciences and preparatory vocational education, enrollment opportunities were limited for most Iowans. In 1959, the 58th General Assembly appropriated $25,000 to the Iowa Legislative Research Bureau to conduct a policy study of the needs of higher education in Iowa. Included in this report was a recommendation to establish regional community colleges. The report also recommended the state pay at least half the cost of building and operating these colleges. As a result of this study, the General Assembly directed the Iowa Department of Public Instruction to conduct a two-year study of the need to develop a statewide system of public community colleges.

The Iowa Department of Public Instruction submitted its report, "Education Beyond High School Age: The Community College," to the General Assembly in December 1962. The report made recommendations and proposed enabling legislation. It recommended restructuring the county educational system and forming 16 area education districts whose boundaries should be drawn along existing school district lines. These districts were intended to replace the county boards of education and provide programs and services that would complement those provided by local school districts. It was envisioned that the area districts would also serve as a legal structure through which a statewide system of community colleges could be developed.

In 1963, the 60th General Assembly took no action on the report. An interim legislative committee concluded that it would be appropriate to put vocational and two-year college education together in a single comprehensive system, but separated the county board consolidation issue (area education agencies were later established by the legislature in 1974). Staff of the Iowa Department of Public Instruction worked closely with various groups throughout the state, and arrived at conclusions similar to those of the interim committee. Passage of the Vocational Education Act of 1963 provided additional impetus to this planning.

After receiving the interim committee's report in 1964, the 61st General Assembly in 1965 enacted legislation that permitted the development of a statewide system of two-year postsecondary educational institutions, identified as "merged area schools." The Iowa Department of Public Instruction was to direct the operation of the development of merged area schools as either area community colleges or area vocational schools.

Legislation authorizing merged area schools, which are now referred to as "community colleges," provided for fiscal support for these institutions through a combination of student tuition and federal, state, and local funds. These resources included a local three-quarter mill levy on the property within the merged area for operational purposes, and an additional three-quarter mill levy for the purchase of sites and construction of buildings. State general aid was distributed to community colleges on the basis of $2.25 per day for the average daily enrollment of full-time equivalent students who were residents of Iowa. The 63rd General Assembly changed this formula in 1969 to determine enrollment and state aid on the basis of actual contact hours of instruction. Individual colleges were granted authority to establish tuition rates, except that tuition was not to exceed the lowest tuition rate charged by any one of Iowa's three public universities.

Legislation approved in 1965 was enthusiastically received. The Iowa Department of Public Instruction received the first plan for a community college on July 5, 1965; one day after the legislation was effective. Plans for the other community colleges followed in quick succession. Although the original plans called for 20 areas, the number was quickly reduced to 16 and later one area was split among adjacent areas. Fourteen (14) community colleges were approved and organized in 1966, and a 15th in January 1967. Fourteen (14) of these community colleges began operation during the 1966-67 school year.

Seven (7) districts were originally approved as Area Community Colleges: (current names)

North Iowa Area Community College
Iowa Lakes Community College
Iowa Central Community College
Iowa Valley Community College District
Eastern Iowa Community College
Des Moines Area Community College
Southeastern Community College

Eight (8) were approved as Area Vocational

Schools: (current names)

Northeast Iowa Community College
Northwest Iowa Community College
Hawkeye Community College
Kirkwood Community College
Western Iowa Tech Community College
Iowa Western Community College
Southwestern Community College
Indian Hills Community College

By July 1970, all of the area vocational-technical high schools and junior colleges had either merged into the new system or were discontinued. All areas of the state were included in community college service areas by July 1971.

The community colleges and area vocational schools grew quickly, both in terms of students served and services offered. In 1983, the Iowa Industrial New Jobs Training Act was established by the legislature adding contracted customized job training to the community colleges' list of services. Other job training programs followed, further expanding the role of community colleges in economic development. Currently, all 15 operate as comprehensive community colleges, offering arts and science (college transfer), vocational preparatory, and adult and continuing education programs. In 1987, Hawkeye Community College, the final Iowa college operating as a vocational school, received approval to operate as a comprehensive community college.

In 1989, the 73rd General Assembly passed Senate File 449, requiring that secondary vocational programs be competency-based, and that the competencies be articulated with postsecondary vocational education. This resulted in increased cooperation between local education agencies and the community colleges and a growth in programs in which high school students are awarded college credit for coursework completed in these articulated programs. The Postsecondary Enrollment Options Act of 1989 and later supplemental weighting allowed high school students to jointly enroll in college credit courses in significantly greater numbers.

In the late 1990s, the majority of community colleges expanded their role in workforce development by becoming Workforce Investment Act primary service providers and housing one-stop centers.

In 1999, the 78th General Assembly passed House File 680 mandating the Department of Education convene a committee to identify and study options for restructuring the governance of Iowa's community colleges. The committee's final report, which was submitted to the legislature in December 1999, reaffirmed the existing governance structure of Iowa's community colleges, with locally elected boards of directors and the State Board of Education with responsibility for statewide oversight and coordination. The study recommended the development of a statewide strategic plan for the system of community colleges.

House File 2433 mandates the development of a statewide strategic plan for the statewide system of community colleges every five years. The first plan was approved by the Iowa Association of Community College Presidents, the Iowa Association of Community College Trustees, and the State Board of Education, and forwarded to the legislature by July 2001. Specific goals included:

1. Provide high quality, comprehensive educational programs and services accessible to all Iowans.

2. Develop high-skilled workers to meet the demands of Iowa's changing economy.

3. Maximize financial and human resources to assure provision of comprehensive community college services to Iowans and to allow Iowa to compete on a national and international level.

4. Demonstrate effectiveness and efficiency for achieving the system mission and goals.

In January 2003, the State Board of Education amended the Community College Strategic Plan to include a fifth goal:

5. Recruit, enroll, retain, and/or graduate persons of underrepresented groups (i.e., gender, race/ethnicity, socioeconomic status) in all programs.

Within six months of implementing House File 2433, a progress report was published summarizing statewide and local community college responses to the five-year plan, "Shaping the Future." Annual progress reports are compiled by the Iowa Department of Education and presented to the State Board of Education. In spring 2006, the State Board of Education approved the second five-year statewide community college strategic plan. The following August, the State Board of Education approved performance measures for the plan. Baseline data on each of the measures was reviewed. An annual report is provided to the State Board of Education on these performance measures.

**Iowa Code**

The statement of policy describing the educational opportunities and services to be provided by community colleges is included in Section 260C.1 of the Iowa Code. This statement of policy identifies the following as services that should be included in a community college's mission.

- The first two years of college work, including pre-professional education.
- Vocational and technical training.
- Programs for in-service training and retraining of workers.
- Programs for high school completion for students of post-high school age.
- Programs for all students of high school age who may best serve themselves by enrolling in vocational and technical training, while also enrolled in a local high school, public or private.
- Programs for students of high school age that provide advanced college placement courses not taught at a student's high school while the student is also enrolled in the high school.
- Student personnel services.
- Community services.
- Vocational education for persons who have academic, socioeconomic, or other handicaps that prevent succeeding in regular vocational education programs.
- Training, retraining, and all necessary preparation for productive employment of all citizens.
- Vocational and technical training for persons who are not enrolled in a high school and who have not completed high school.
- Developmental education for persons who are academically or personally underprepared to succeed in their program of study.

In 2006, the Iowa Department of Education created a book entitled, *Forty Years of Growth and Achievement: A History of Iowa's Community Colleges*, which details the statewide, institutional history of the community colleges. For more information on the history of Iowa's community colleges, see this publication.

**Area 1 (NICC)**
Northeast Iowa Community College
Administrative Center
Box 400
Calmar, Iowa 52132

**Area 2 (NIACC)**
North Iowa Area Community College
Administrative Center
500 College Drive
Mason City, Iowa 50401

**Area 3 (ILCC)**
Iowa Lakes Community College
Administrative Center
19 South 7th Street
Estherville, Iowa 51334

**Area 4 (NCC)**
Northwest Iowa Community College
Administrative Center
603 West Park Street
Sheldon, Iowa 51201-1046

**Area 5 (ICCC)**
Iowa Central Community College
Administrative Center
330 Avenue M
Fort Dodge, Iowa 50501

**Area 6 (IVCCD)**
Iowa Valley Community College District
Administrative Center
3702 South Center Street
Marshalltown, Iowa 50158

**Area 7 (HCC)**
Hawkeye Community College
Administrative Center
1501 East Orange Road, Box 8015
Waterloo, Iowa 50704

**Area 9 (EICC)**
Eastern Iowa Community Colleges
Administrative Center
306 West River Road
Davenport, Iowa 52801

**Area 10 (KCC)**
Kirkwood Community College
Administrative Center
6301 Kirkwood Blvd., S.W., Box 2068
Cedar Rapids, Iowa 52406-2068

**Area 11 (DMACC)**
Des Moines Area Community College
Administrative Center
2006 South Ankeny Blvd.
Ankeny, Iowa 50021

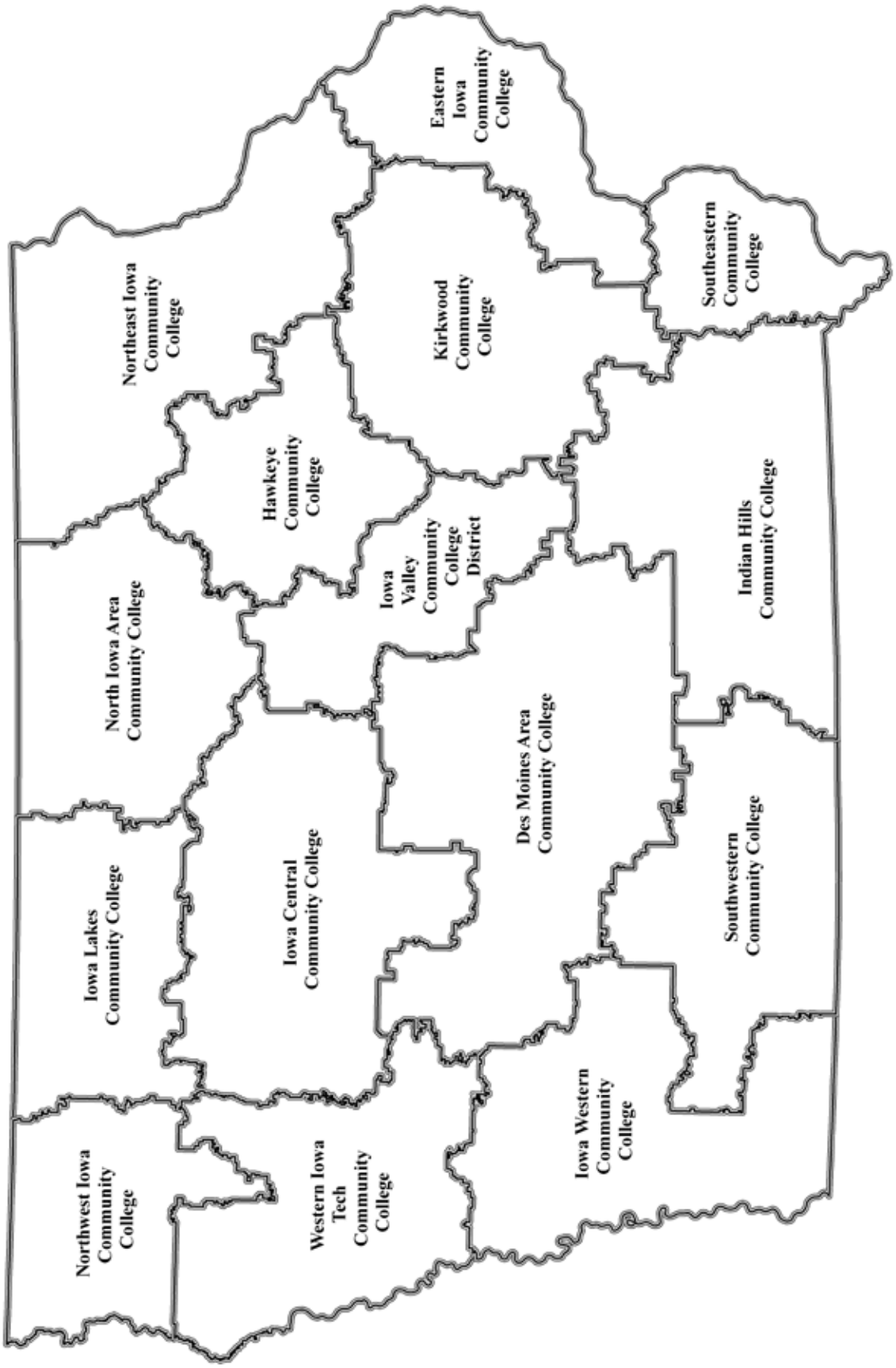
**Area 12 (WITCC)**
Western Iowa Tech Community College
Administrative Center
4647 Stone Avenue, Box 5199
Sioux City, Iowa 51102-5199

**Area 13 (IWCC)**
Iowa Western Community College
Administrative Center
2700 College Road, Box 4-C
Council Bluffs, Iowa 51502-3004

**Area 14 (SWCC)**
Southwestern Community College
Administrative Center
1501 West Townline Street
Creston, Iowa 50801

**Area 15 (IHCC)**
Indian Hills Community College
Administrative Center
525 Grandview Avenue
Ottumwa, Iowa 52501

**Area 16 (SCC)**
Southeastern Community College
Administrative Center
1015 South Gear Avenue, Box 180
West Burlington, Iowa 52655-0180



# 2 Fall Enrollment

Each fall, the Iowa Department of Education collects enrollment data from Iowa's community colleges. Data for this section were derived from the 2014-15 academic year (fiscal year 2015). Refer to the latest edition of the Fall Enrollment Report for more detailed information.

### Student Demographics

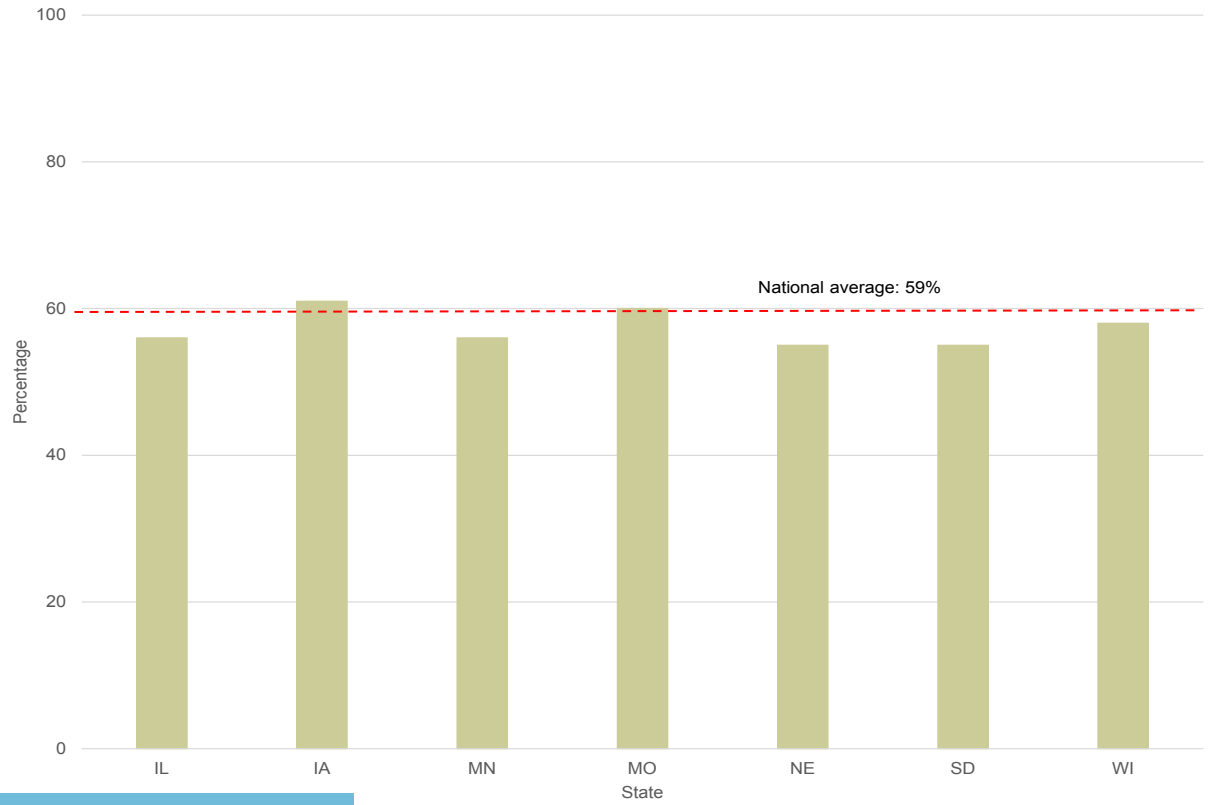
Last fall, 50,604 females accounted for almost 54 percent of all students. Figure 2-1 displays the percentages of females enrolled in community colleges in Iowa and neighboring states. Nationally, about 59 percent of students are females [1]. The average age of students attending Iowa's community colleges was 21.6 years, and the median age was 19 years. The national average age was 29 years [2].

Among community college students in Iowa, Whites accounted for 72,554 students (77.4 percent). Black and Hispanic students had equivalent percentages (6.4 percent per group). Asian students comprised the fourth largest group (2.4 percent). This fall, almost 18 percent of community college students identified themselves as minorities, a percentage that has been relatively stable

**Fall 2014 Enrollment**

| Fall Enrollment: | Change since Fall 2013 |
|---|---|
| 93,772 | -0.49% |
| **Credit Hours:** | **Average:** |
| 832,233 | 8.88 |
| -4.6% change from 2013 | -4.1%change from 2013 |

**Figure 2-1. Regional percentages of female community college students by state[1].**



since 2012. Nationally, Whites accounted for over two-thirds of community college students; Blacks, about 27 percent; Asians and Hispanics, about 1 percent each [1].

Over 90 percent of students were residents of Iowa. Domestic out-of-state residents accounted for almost eight percent of enrolled students. Foreign students and students with unknown residency status accounted for the balance.

## Credit Enrollment

Fall enrollment for 2014 was 93,772 students, down 0.49 percent from fall 2013. Table 2-1 displays enrollment figures for the latest five years.

According to the American Association of Community Colleges [1], 41% of all community college students attend classes on a full-time basis. Figure 2-2 depicts the percentages of full-time community college students in Iowa and surrounding states.

Enrollment fell at 11 of the 15 community colleges. More students were enrolled on a part-time basis (55,767) than were enrolled on a full-time basis (38,005). Students enrolled part-time accounted for 59.5 percent of total fall enrollment, compared to about 57.3 percent last fall. Enrollment of full-time students this fall was down 5.5 percent from last fall's enrollment of 40,213. Fall enrollment of part-time students increased 3.2 percent, from 54,021 students last fall to 55,767 students this fall.

### *Semester Hours*

Each semester hour represents at least 800 minutes of scheduled time for a classroom course; at least 1,600 minutes for a laboratory course; at least 2,400 minutes for clinical work; or at least 3,200 minutes of work experience. Typically, classes at community colleges vary between three and six semester hours. A full-time student must take at least 12 hours per semester, which corresponds to 9,600 classroom minutes per semester.

Table 2-2 depicts total enrolled semester hours since fall 2010. With an enrollment of 832,233 semester hours, fall 2014 marked the fourth consecutive year of declining enrollment, down 4.6 percent from last fall. The increase in the number of part-time students suggests students who attended community colleges in the fall of 2014 were enrolled in fewer hours.

Students were enrolled in an average of 8.9 semester hours during fall 2014, compared to an average 9.3 semesters in fall 2013. The course load among full-time students, however, averaged 13.8 semester hours, a statistic relatively unchanged from fall 2013.

**Table 2-1. Fall enrollment from 2010 to 2014.**

| *Year* | *Total* | *Full-time* | *Part-time* |
|---|---|---|---|
| 2010 | 106,597 | 53,883 | 52,714 |
| 2011 | 105,975 | 51,107 | 54,868 |
| 2012 | 100,519 | 42,186 | 58,333 |
| 2013 | 94,234 | 42,186 | 52,048 |
| 2014 | 93,772 | 38,005 | 55,767 |

### *Program Type*

Community college programs typically fall into one of three categories: college parallel; career and technical education (CTE); and college parallel/career option.

College parallel programs, which prepare students for matriculation to a four-year university, accounted for 63,357 students (67.6 percent) of the fall 2014 enrollment, compared to 61,866 students in 2013.

College parallel/career option programs, which prepare students for matriculation to a four-year university or entry into a career field, accounted for 2,368 students (2.5 percent), 1,035 fewer students than last year. Phasing out Associate of Science Career Option programs has contributed to the decline in student enrollment.

CTE programs, which prepare students for the workforce, accounted for 28,020 students (29.9 percent), 856 fewer students than last year.

### *Career Clusters*

The Iowa Department of Education categorizes CTE programs into 16 occupational categories, following the National Career Clusters Framework. Each major aligns to a category with other similar programs.

Enrollment in CTE programs can be divided into specific areas of study. Health science remains the largest occupational category within community colleges, followed by manufacturing, and business management and administration.

Health science enrollment fell 9.6 percent from 11,704 students last fall to 10,581 students this fall. Business management and administration fell 37.4 percent during the same time period, from 4,059 students to 2,540 students. Enrollment in manufacturing programs fell 1.9 percent from 2,893 students last fall to 2,839 students this fall.

**Figure 2-2. Regional percentages of full-time community college students by state[2].**

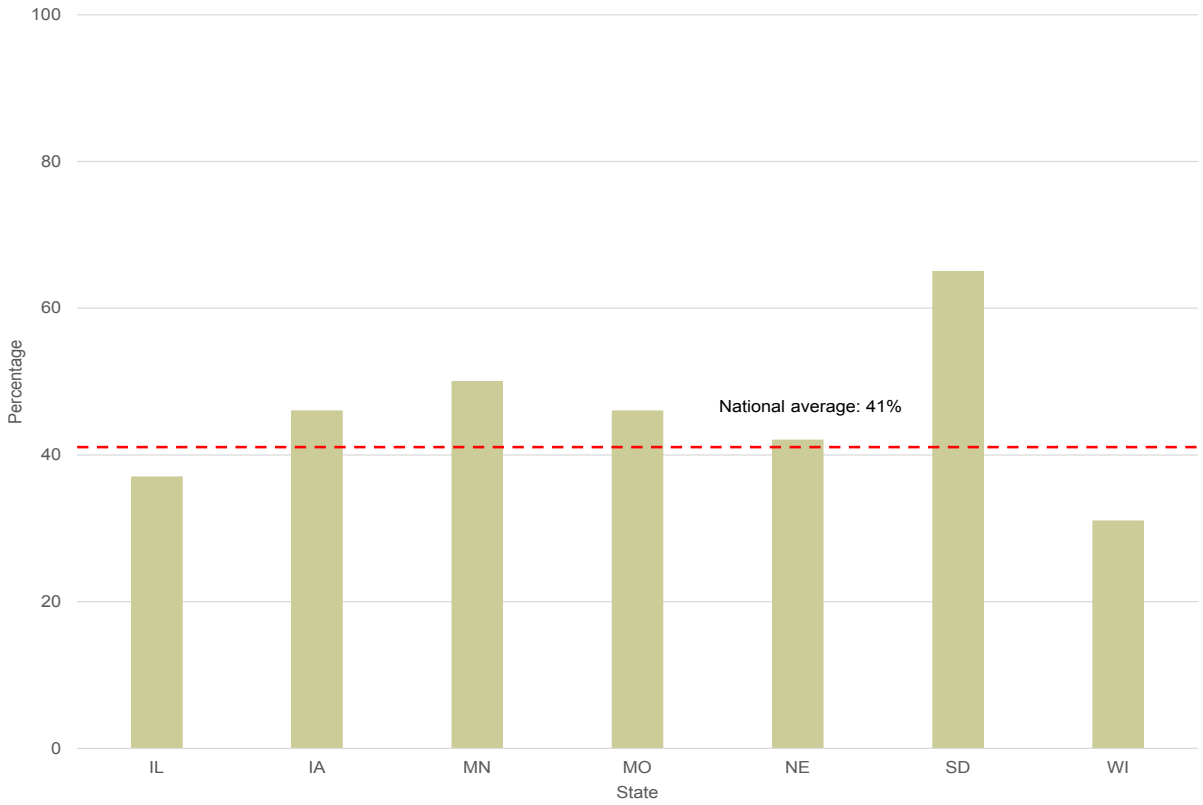



**Table 2-2. Fall semester hours from 2010 to 2014.**

| *Year* | *Total* | *Full-time* | *Part-time* |
|---|---|---|---|
| 2010 | 1,026,134 | 735,130 | 291,004 |
| 2011 | 1,006,098 | 697,495 | 308,603 |
| 2012 | 938,456 | 635,877 | 302,877 |
| 2013 | 872,744 | 581,693 | 291,052 |
| 2014 | 832,233 | 524,327 | 307,995 |

## Enrollment Projections

Last fall, between 89,804 and 98,120 students were projected to enroll in Iowa's community colleges. The actual fall enrollment for 2014 was 93,772 students.

Next fall, between 90,427 and 98,195 students are projected to enroll in Iowa's community colleges. Although total fall enrollment has declined 12 percent since fall 2010, when a record-breaking 106,597 students enrolled, overall enrollment numbers should begin to stabilize next fall.

Factors affecting enrollment include a paradigm shift towards non-linear education among postsecondary students, declining populations in rural communities, and costs associated with postsecondary education.

Recent changes to the performance funding model at Iowa's public universities may affect future enrollment at Iowa's community colleges. Despite having different educational missions, public universities and community colleges must attract new students from the same pool of candidates.

## References.

[1] American Association of Community Colleges. Community college enrollment. Electronic article, October 21, 2014. Retrieved from http://www.aacc.nche.edu/AboutCC/Trends/Pages/enrollment.aspx.

[2] American Association of Community Colleges. Students at community colleges. Electronic article, July 30, 2014. Retrieved from http://www.aacc.nche.edu/AboutCC/Trends/Pages/studentsatcommunitycolleges.aspx.

# 3 Fiscal Year Credit Enrollment and Demographics

Fiscal year credit enrollment follows students through the 2013-2014 academic year. Courses are counted each time a student takes a course, while headcount only includes a student once. Although enrollment dropped, the composition of community college students remained relatively the same.

Student enrollment decreased in 2014 to 141,226 students, which was a 2.9 percent enrollment decline from the prior year. This enrollment decline continues the trend started in 2012. Between 2010 and 2014, enrollment decreased an average of 1.4 percent each year (Figure 3-1).

Credit hours have also declined for the third time since 1999 at an even greater rate this past year to 1,942,821 hours, a 6.3 percent decrease since the prior year. This decrease in credit hours demonstrates a smaller number of courses taken by students this year. Over the entire fiscal year 2014, students enrolled in an average of 13.8 credit hours (Figure 3-2).

Enrollment declined moderately (two percent) for arts and sciences programs. These programs, which are designed to transfer to four-year colleges and universities, declined to 97,604 students. Despite this decline, arts and sciences enrollment increased to 69 percent of overall enrollment (Figure 3-3). The moderate decline in arts and sciences has not interrupted continuous increase in joint enrollment (Section 5), where students usually participate in arts and sciences programs.

### Credit Enrollment

Number of Students:
**141,226**

Decline since last year:
**2.9%**

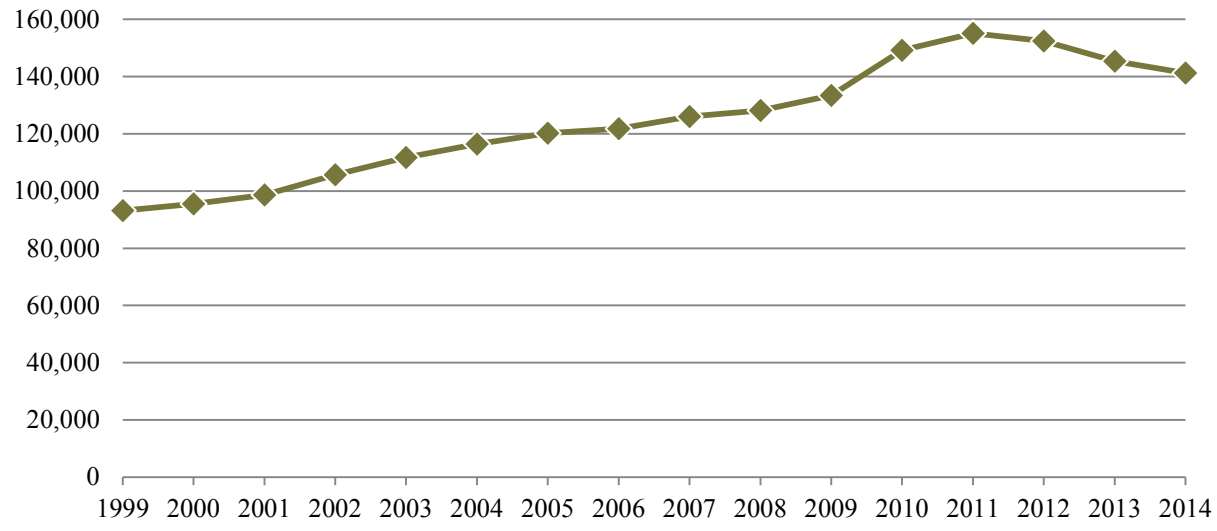
Credit Hours:
**1,942,821**
Down 6.3% since 2013

Credit Hours per Student:
**13.8**
Down from 14.3 in 2013

Largest Program Major:
**College Parallel**
69% of total enrollment

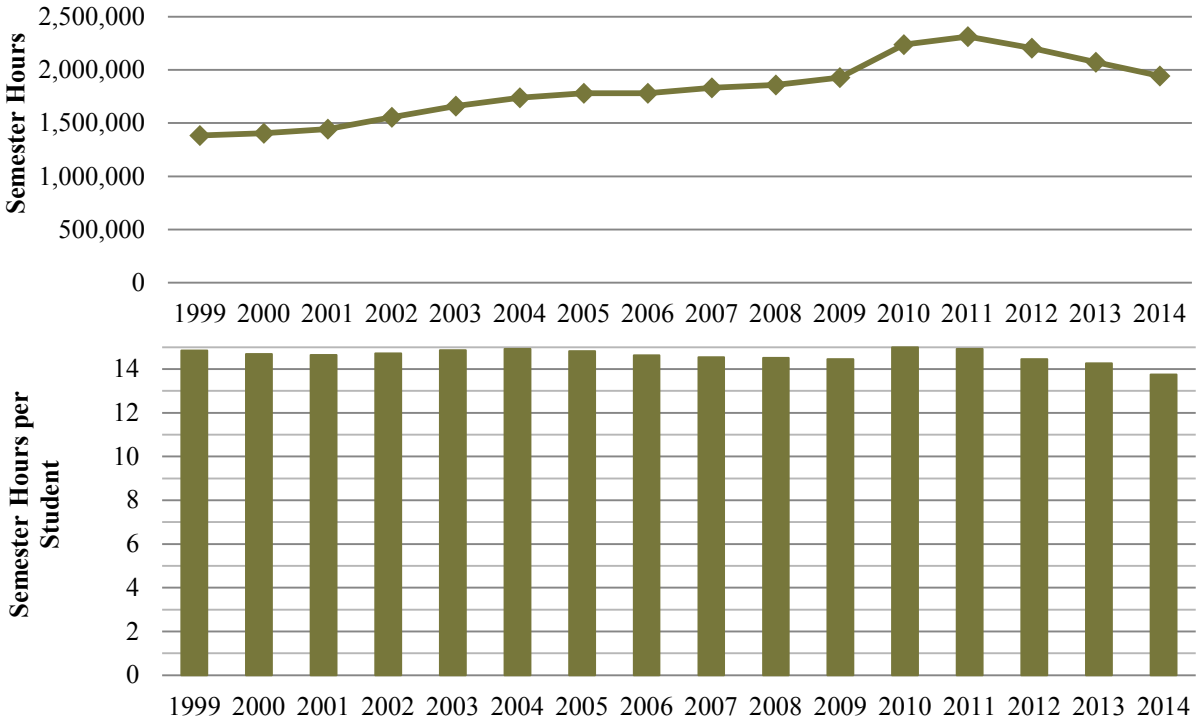
Career and technical education (CTE) programs decreased their enrollment by 635 (2 percent) students, to the total of 35,921 students (Figure 3.3). Health science remained the largest CTE program, followed by business management and administration, and manufacturing (Figure 3-6). Enrollment in health science decreased over nine percent to 15,943 students. Business management and administration programs enrolled 4,147 students, which was close to 33 percent less than last year.*

**Figure 3-1: Fiscal Year Credit Enrollment: 1999-2014**




*In 2014, CTE programs were brought to compliance with changed federal distribution of programs within federal Career Clusters. As the result, accounting programs migrated from Business to Financial Career Cluster, significantly reducing number of programs under Business Management and Administration Career Cluster.

**Figure 3-2: Fiscal Year Semester Hours (top) and Average Semester Hours per Student (bottom): 1999-2014**




Manufacturing, which is both the largest industry in Iowa and hardest hit by the 2008-09 recession, increased by 8.2 percent in 2014, demonstrating growth for the second consecutive year. Students enrolled in Science, Technology, Engineering and Mathematics (STEM) programs comprised only 0.2 percent of all enrollees in 2014, similar to the previous year.

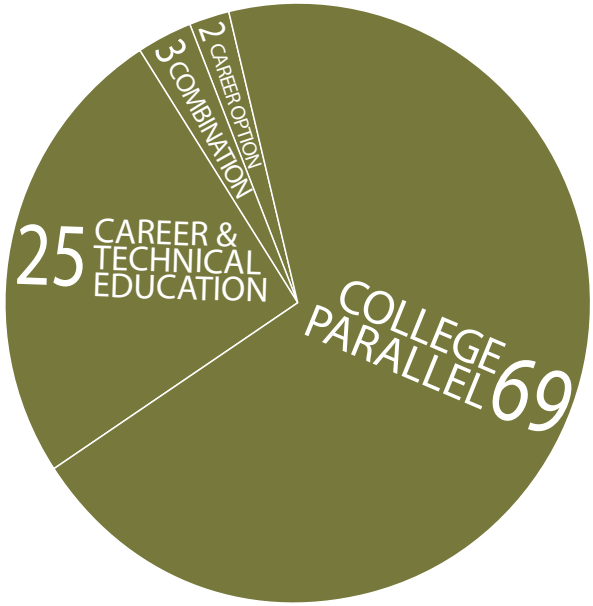
The Iowa Department of Education continuously realigns its program classification data with the federal career clusters in order to correspond to the most recent recommendations. Some of the enrollment changes were attributable to this realignment instead of actual growth or decline. For instance, the significant increase in human services majors and the substantial lack of enrollment in government and public administration majors were attributable to the career cluster realignment.

## Student Demographics

The typical community college student, as with prior years, is female, under 25, and white. However, the face of the typical student is slightly changing. Although predominately white, more minorities are enrolling in community colleges. With the exception of fiscal year 2012, when the number of minorities slightly declined, the enrollment of minorities was steadily growing for the past five years, with average annual growth of 8.1 percent.

On average, an Iowa community college student is slightly younger than an average community college student nationwide. According to the most recent National Center for Educational Statistics data (Fall 2013), Iowa enrolls over 28 percent of the students who are under 18 years old (the highest percent in the nation), while the national percent for that category is only 7.9. Iowa is also higher on students under 20 years old, but in other categories it is consistently lower than the national average.

**Figure 3-3: Enrollment by Program Type**



Compared to four-year public universities, Iowa community colleges tend to serve an older population; however, most students are of traditional age: 75 percent were under 25 years old. The median student age was 20 years old, which means half of the student population were under that age (Figures 3-5 and 3-7).

Females continue to outnumber males in community colleges, 55 to 45 percent, respectively (Figure 3-4). Since the community college Management Information System (MIS) was established, females have composed most of community college enrollment, remaining steady between 55 and 57 percent. Nationally, community colleges and undergraduate students in four-year institutions have similar female/male distribution: 56/44 and 54/46, respectively (2013). Females have outnumbered males in postsecondary institutions nationwide since 1978 (Snyder, Tan, and Hoffman, 2003).

Community colleges have become increasingly diverse. In 2007, 12 percent of students were racial or ethnic minorities. This proportion grew to 16 percent in 2010, and 18.5 percent in 2011. The percentage of minorities dropped to 16.8 percent in 2012, increased in

**Figure 3-4: Credit Student Gender: 2014**

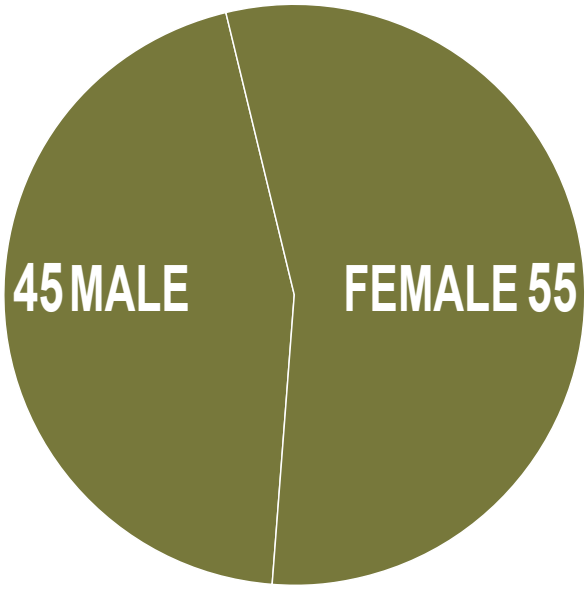
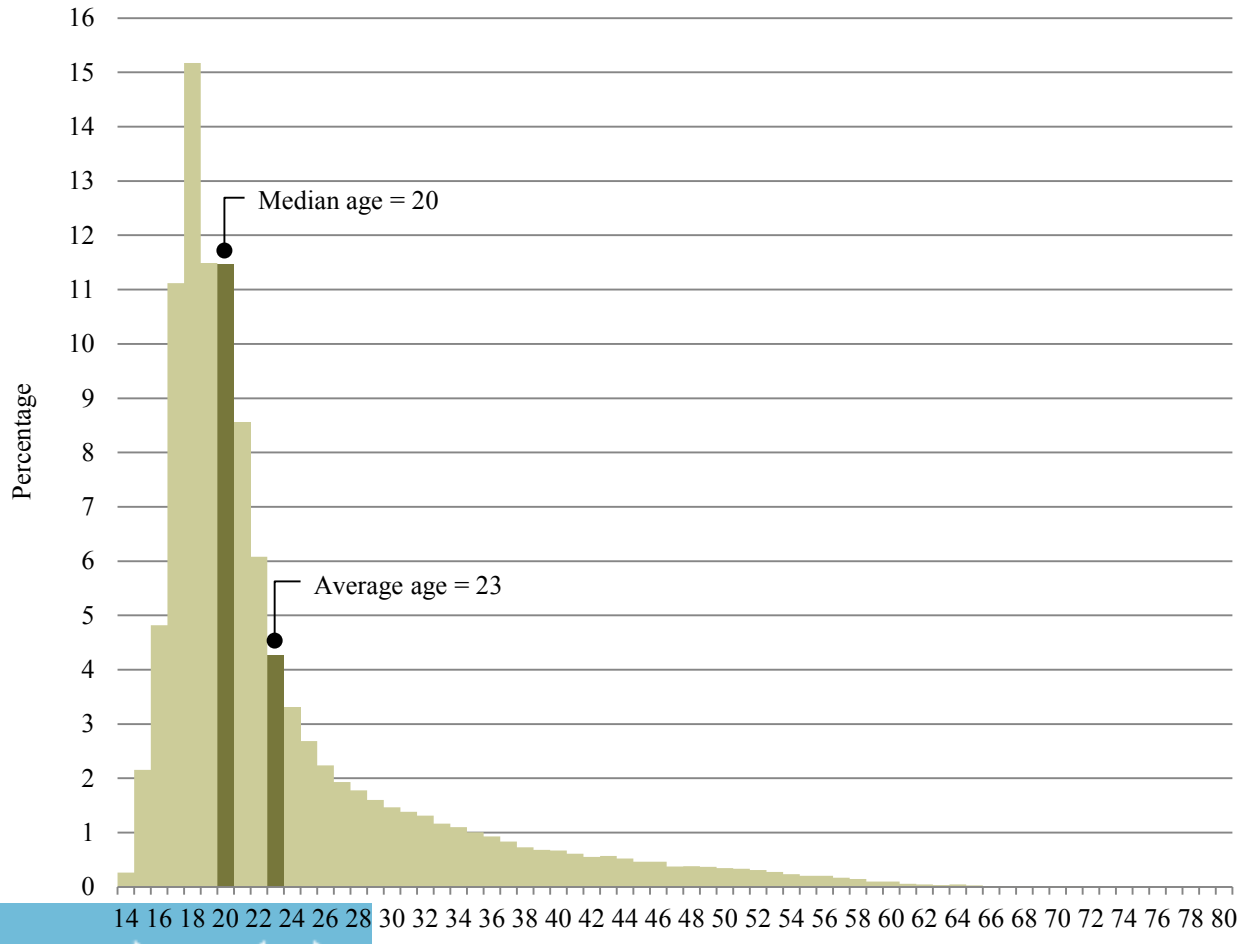
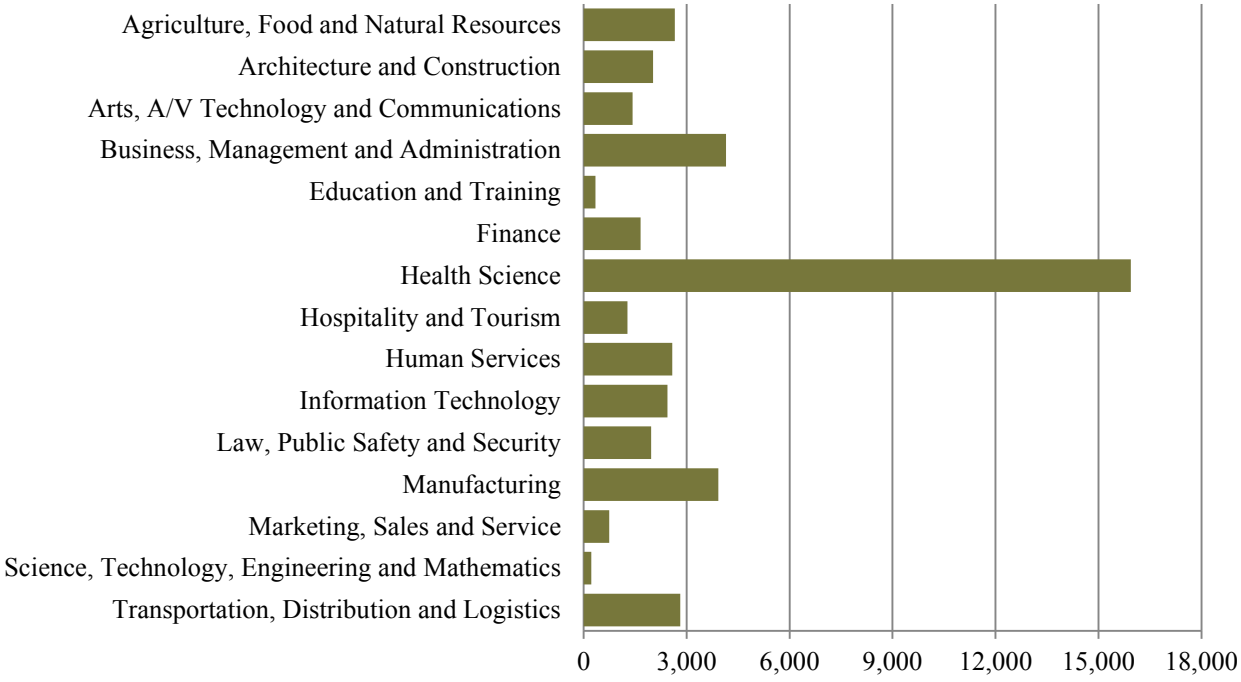



**Figure 3-5: Credit Student Age: 2014**



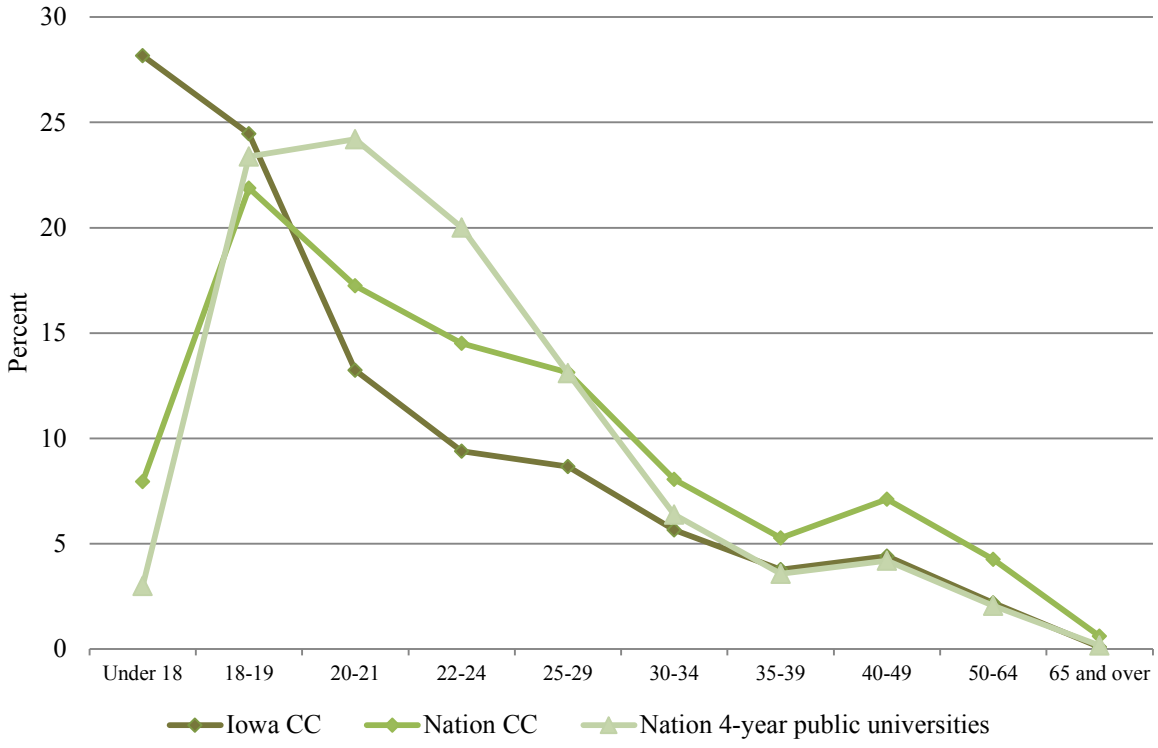
## Figure 3-6: Enrollment by Career and Technical Education Career Cluster: 2014




2013 to 17.6, and again in 2014 to 18.5 percent (Figure 3.7).

In 2010, the Iowa Department of Education changed its reporting methods for race. Students were allowed to identify themselves under multiple racial or ethnic categories. A total of 2,434 students, or over ten percent

## Figure 3-7: Credit Student Age, National Comparison: 2013




SOURCE: U.S. Department of Education, Integrated Postsecondary Data Systems, Fall 2013.

of all minorities, claimed themselves as multi-racial in 2014.

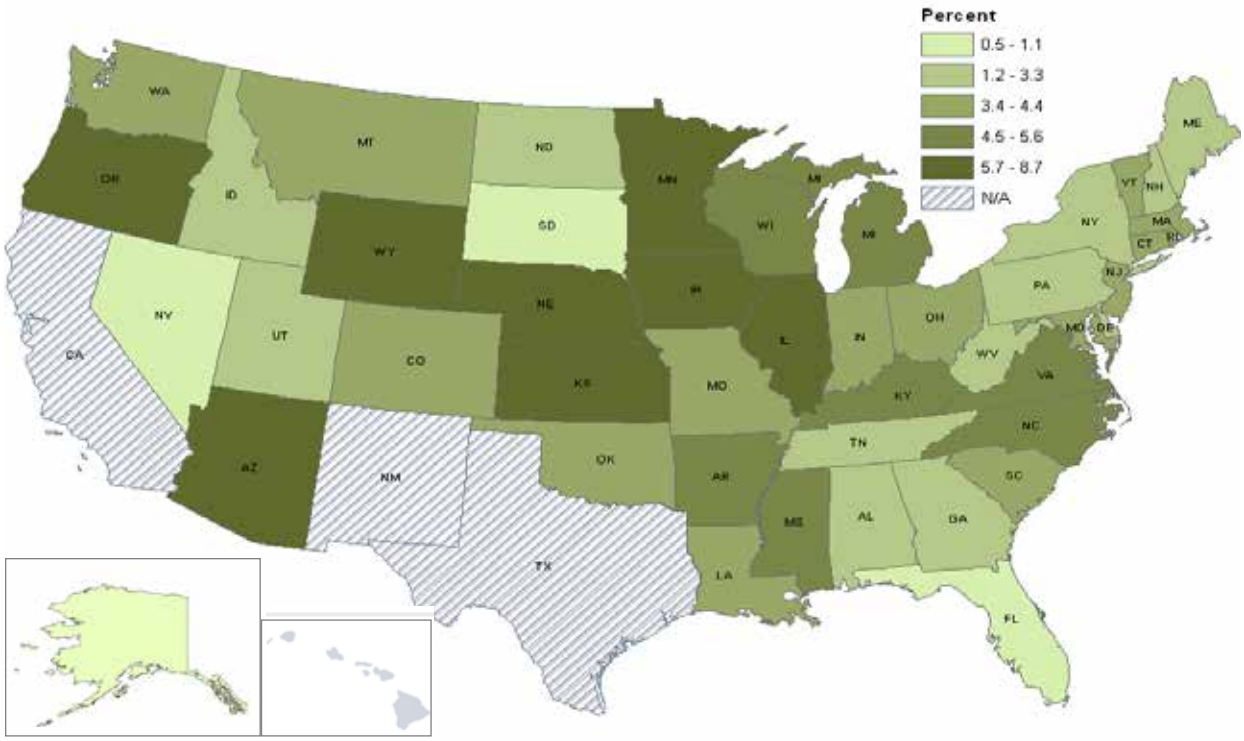
Nationally, community college enrollment of minorities varies from state-to-state, ranging from 8.3 percent in Maine, to 49.6 percent in Florida, with a nationwide average of 34.6 percent.

Though the percentage of racial and ethnic minorities is relatively low in Iowa community colleges, they enrolled a higher percentage of minorities (17.6 percent in 2013) compared to the state population. The U.S. Census Bureau (2013) estimated 10.5 percent of Iowans, 15 years of age and older, are non-white. In that group, 8.8 percent were enrolled in Iowa community colleges in the same year--for the past five years, the highest penetration rate of minorities in community colleges in the nation.* Iowa was followed by Minnesota (7.5 percent) and Illinois (7.4 percent) (Figure 3.8).

*Among states where non-white population is in minority.

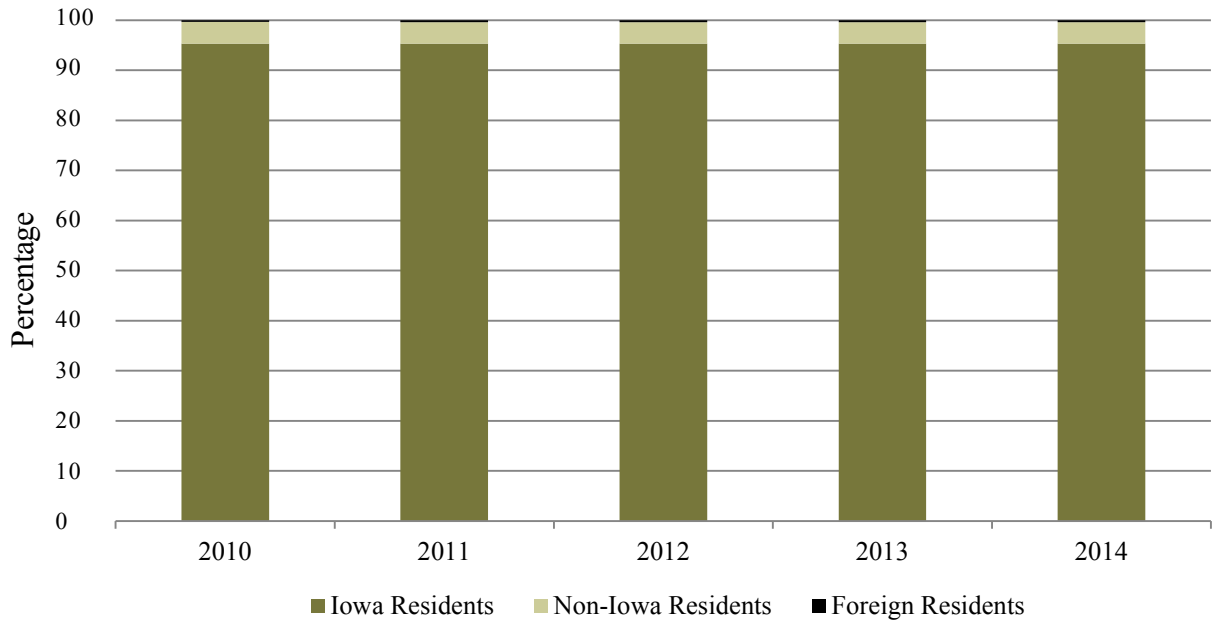
**Figure 3-7: Credit Enrollment by Race and Ethnicity: 2010-2014**


**Figure 3-8: Penetration Rate of Ethnic/Racial Minorities in U.S. Two-Year Public Colleges: 2013**




SOURCE: U.S. Department of Education, Integrated Postsecondary Data Systems (2013), and U.S. Census Bureau, 2013.

**Figure 3-9: Residency Status of Credit Students: 2010-2014**




## Student Residency

Credit enrollment in Iowa community colleges consists of Iowa residents, non-Iowa U.S. residents, and foreign residents. The residency status is reported to the Iowa Department of Education based on the type of students tuition and immigration status at the time of the reporting.

In 2014, Iowa community colleges enrolled 90.0 percent Iowa residents, 8.6 percent non-Iowa residents, and 1.3 percent foreign residents. These numbers have remained stable for the past five years, with a small but steady trend towards a larger component of non-Iowa residents: their enrollment increased from 6.8 percent in 2010 to 8.6 percent in 2014, with average annual growth of 6.2 percent. The number of foreign residents in Iowa community colleges remains low, even though it grew one tenth of a percent each year between 2011 and 2014 (Figure 3.9). Nationally, the average percentage of foreign residents in community colleges was 1.3 in 2013*, varying from zero in Vermont, New Hampshire and South Dakota to 3.3 percent in Maryland (U.S. Department of Education, Integrated Postsecondary Data Systems, 2013*).

*Latest available data.

## Developmental Education

For this section, a student is identified as enrolled in developmental education if he/she is enrolled in a course numbered below 100 (e.g., MAT-060).

During fiscal year 2014, 19,271 students enrolled in a developmental education course (11.9 percent decline from 2013), which represented 13.6 percent of the entire student body. Students enrolled in a total of 96,691 credit hours over the fiscal year, which is 12.0 percent less than last year.

Many students enrolled in developmental mathematics courses. In 2014, students took 13,723 developmental mathematics courses, which far exceeded the 5,510 developmental English, Communications, and Reading courses. Figure 3-10 shows a detailed list of popular developmental education courses. The four most popular developmental education courses were mathematics; MAT-078, MAT-064 and MAT-076 (College Preparatory Math) were the top three with a combined enrollment of 4,376 students.

Among English developmental courses, ENG-061 (College Preparatory Writing II), ENG-013 (Basic Writing), and ENG-060 (College Preparatory Writing I) collected the largest enrollment, 4,565 students, or close

### Developmental Education Enrollment

Enrollment
**19,271**
11.9% less than last year

Percent of total enrollment
**13.6%**

Credit Hours
**96,691**
12.0% less than last year

Average credit per student
**5.0**

Most Frequent Subject
**MATHEMATICS**
13,723 courses

to 83 percent of all developmental English enrollment.

Similar to the general population of students, most of those who took developmental education were females (57.7 percent). Racial/ethnic minorities, however, comprised 47.2 percent of all developmental education enrollees, a much higher percent than that of the general student population (18.5 percent). The average age for all community college students was 23 years old; yet, the average age for students in developmental education was two years higher--25. The median age was 21. The majority of developmental course enrollees (close to 58 percent) were between ages 18 and 22, with the peak participation being among19 year old students. This age group comprised over 24 percent of all developmental enrollment in 2014 (Figure 3-11).

**Figure 3-10: Number of Students Enrolled in Most Popular Developmental Courses**

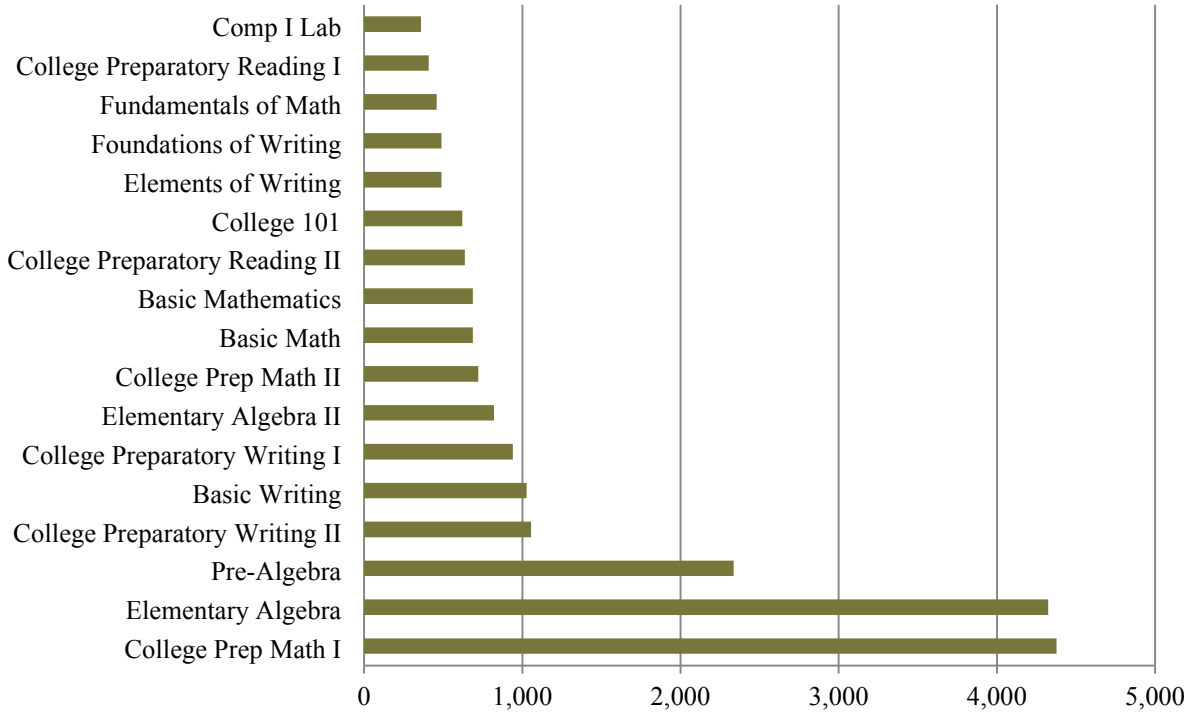
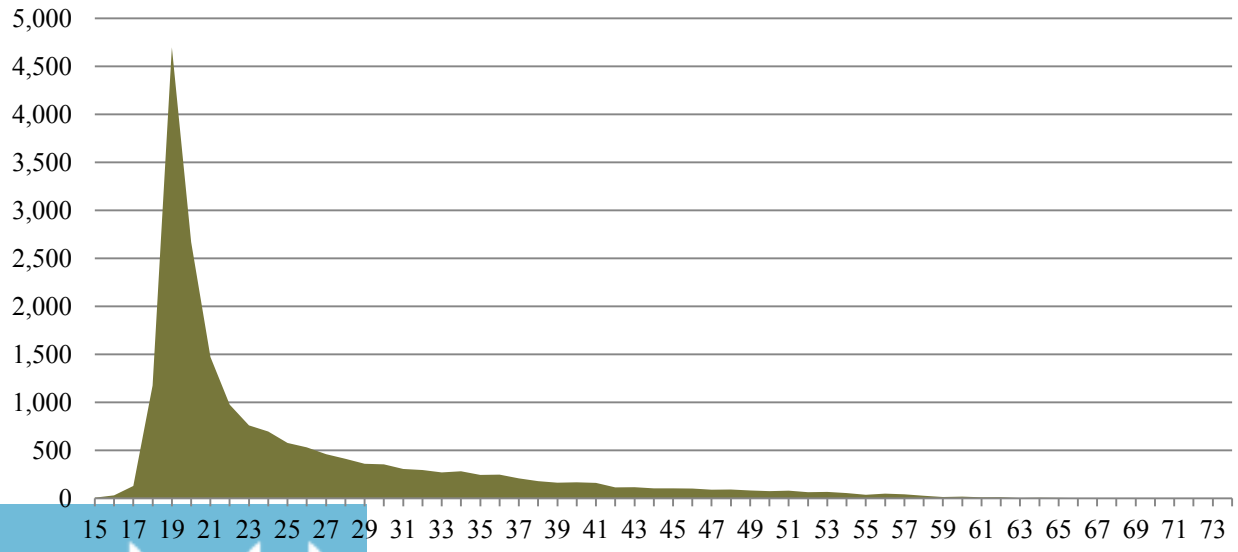



**Figure 3-11: Age of Developmental Education Students**



# 4 Online Credit Enrollment

The Iowa Department of Education (DE) has collected data on community college enrollment in distance education since FY 2007. The department collects data on online courses, defined as any course delivered entirely (100 percent) via the Internet. An online student is one who is enrolled in at least one online course. Data were not collected on other distance education categories such as hybrid or blended courses.

During FY 2014, 56,021 community college students enrolled in 388,685 semester hours of online courses, compared to 58,131 students who enrolled in 414,144 semester hours of online courses last fiscal year. This change in semester hours represents a decrease of 6.1 percent from FY 2013. Online semester hours accounted for one-fifth of total semester hours in FY 2014.

## Demographics

In Iowa, enrollment in online coursework decreased 3.6 percent, from 58,131 students last fiscal year to 56,021 students this fiscal year. As in previous years, almost 40 percent of all community college students enrolled in at least one online course during FY 2014.

The demographic profile of students enrolled in online courses is similar to that of the general population of community college students: white female residents of Iowa. Of the 56,021 students who enrolled in online coursework, 2,805 had incomplete demographic data. Removing these records yielded 53,216 records with complete demographic information, as displayed in table 4-1.

**Table 4-1: Online enrollment counts by subpopulation and sex for FY 2014**

| Subpopulation | Females | Males | Total |
|---|---|---|---|
| American Indian | 245 | 110 | 355 |
| Asian/Pacific Islander | 980 | 770 | 1,750 |
| Black | 1,885 | 1,337 | 3,222 |
| Hispanic | 1,598 | 896 | 2,494 |
| White | 29,663 | 14,977 | 44,640 |
| Other | 503 | 252 | 755 |
| **Total** | **34,874** | **18,342** | **53,216** |

*Note*: This table excludes 2,805 records with missing demographic data.

Of the 53,216 students who reported demographic information in FY 2014, 34,874 were females (65.5 percent), a percentage essentially unchanged from FY 2013. Whites comprised the largest racial group (83.9 percent), followed by Blacks (6.1 percent) and Hispanics (4.7 percent). Table 4-2 displays online enrollment by subpopulation per community college.

This year, residency statuses of 56,036 online students were reported for tuition purposes (table 4-3). The difference between enrollment by program type and enrollment by residency status occurred because a student's residency status can change from one term to the next. Of the 56,036 students who were reported for residency purposes, 47,968 students (85.6 percent) were residents of Iowa. Out-of-state residents accounted for 7,007 students (12.5 percent) enrolled in online courses, essentially unchanged from last fiscal year.

The average age of students taking one or more online courses was 24.8 years old, about 18 months older than the average age of all Iowa community college students. Students between 23 and 39 accounted for 35.6 percent of online enrollment.

## Enrollment by Program Type

Enrollment in Iowa's community colleges is disaggregated into four program types: college parallel, career option, career and technical education (CTE), and some combination of the three. Table 4-4 displays enrollment and semester hours by type of program. Table 4-5 displays enrollment for each college by sex and program type.

In FY 2014, of the 56,021 students who took online courses, 38,204 students (68.2 percent) were enrolled in college parallel programs. Furthermore, these 38,204 students accounted for 27 percent of total enrollment, 12.5 percent of total semester hours, and almost two-thirds of all online semester hours. Among the 97,604 college parallel students, 39.1 percent enrolled in online courses, accounting for almost 21 percent of the 1,214,739 semester hours attributed to college parallel students.

During the same time period, 14,503 out of 56,021 students (25.9 percent) who took online courses were enrolled in CTE programs. This group of students accounted for slightly more than 10 percent of total enrollment, almost 5 percent of total semester hours, and over 25 percent of all online semester hours. Among the

35,921 CTE students, over 40 percent enrolled in online courses, accounting for almost 15 percent of the 669,394 semester hours attributed to CTE students.

Career option programs accounted for 2,556 (1.8 percent) of the 141,226 students who enrolled during FY 2014, and 4.6 percent of students enrolled in online courses. Students enrolled in career option programs accounted for 1.2 percent of total semester hours and 6.5 percent of all online semester hours. Among the 4,469 students enrolled in career option programs, 57.2 percent enrolled in online courses, accounting for 13.3 percent of the 76,457 semester hours attributed to career option students.

**Table 4-2: Online enrollment by college and subpopulation for FY 2014**

| College | American Indian | Asian | Black | Hispanic | White | Two or more | Not reported | Total |
|---|---|---|---|---|---|---|---|---|
| Northeast | 7 | 22 | 85 | 47 | 2,782 | 18 | 96 | 3,057 |
| North Iowa Area | 4 | 36 | 116 | 110 | 1,898 | 28 | 5 | 2,197 |
| Iowa Lakes | 9 | 107 | 78 | 46 | 1,424 | 5 | 41 | 1,710 |
| Northwest | 6 | 30 | 16 | 62 | 1,419 | 25 | 66 | 1,624 |
| Iowa Central | 15 | 34 | 402 | 147 | 2,420 | 32 | 194 | 3,244 |
| Iowa Valley | 42 | 186 | 133 | 176 | 1,690 | 0 | 275 | 2,502 |
| Hawkeye | 17 | 126 | 298 | 92 | 3,166 | 44 | 0 | 3,743 |
| Eastern Iowa | 29 | 145 | 340 | 389 | 4,365 | 107 | 245 | 5,620 |
| Kirkwood | 32 | 405 | 414 | 196 | 4,958 | 116 | 631 | 6,752 |
| Des Moines Area | 32 | 322 | 644 | 422 | 8,773 | 195 | 622 | 11,010 |
| Western Iowa Tech | 67 | 98 | 105 | 367 | 3,398 | 66 | 242 | 4,343 |
| Iowa Western | 67 | 180 | 360 | 244 | 3,680 | 10 | 227 | 4,768 |
| Southwestern | 3 | 15 | 23 | 41 | 986 | 22 | 11 | 1,101 |
| Indian Hills | 10 | 25 | 158 | 90 | 2,167 | 34 | 109 | 2,593 |
| Southeastern | 15 | 19 | 50 | 65 | 1,518 | 53 | 37 | 1,757 |
| **Total** | **355** | **1,750** | **3,222** | **2,494** | **44,644** | **755** | **2,801** | **56,021** |

## Table 4-3: Online enrollment by residency status for FY 2014 tuition purposes

| College | In-state | Out-of-state | Foreign | Unknown | Total |
|---|---|---|---|---|---|
| Northeast | 2,602 | 448 | 7 | 0 | 3,057 |
| North Iowa Area | 1,969 | 190 | 38 | 0 | 2,197 |
| Iowa Lakes | 1,420 | 282 | 8 | 0 | 1,710 |
| Northwest | 1,362 | 255 | 7 | 0 | 1,624 |
| Iowa Central | 2,344 | 887 | 13 | 0 | 3,244 |
| Iowa Valley | 2,041 | 199 | 262 | 0 | 2,502 |
| Hawkeye | 3,414 | 318 | 11 | 0 | 3,743 |
| Eastern Iowa | 4,505 | 1,083 | 32 | 0 | 5,620 |
| Kirkwood | 6,032 | 388 | 332 | 0 | 6,752 |
| Des Moines Area | 10,503 | 273 | 247 | 0 | 11,023 |
| Western Iowa Tech | 3,606 | 732 | 5 | 0 | 4,343 |
| Iowa Western | 3,360 | 1,358 | 52 | 0 | 4,770 |
| Southwestern | 1,004 | 87 | 10 | 0 | 1,101 |
| Indian Hills | 2,311 | 248 | 34 | 0 | 2,593 |
| Southeastern | 1,495 | 259 | 3 | 0 | 1,757 |
| **Total** | **47,968** | **7,007** | **1,061** | **0** | **56,036** |

*Note*: Data for this table may be duplicated because students can change residency status from one term to the next.

## Table 4-4: Online enrollment and semester hours by program type for FY 2014

| | Enrollment | | Semester Hours | |
|---|---|---|---|---|
| Program | Total | Online | Total | Online |
| College parallel | 97,604 | 38,204 | 1,214,739 | 253,515 |
| CTE | 35,921 | 14,503 | 669,394 | 99,873 |
| Career option | 4,469 | 2,556 | 72,231 | 25,146 |
| Combination | 3,232 | 758 | 76,457 | 10,151 |
| **Total** | **141,226** | **56,021** | **2,032,821** | **388,685** |

## Table 4-5: Online enrollment by college, sex, and program type for FY 2014

| | | | Females | | |
|---|---|---|---|---|---|
| College | College parallel | Career option | CTE | Combination | TOTAL |
| Northeast Iowa | 1,132 | 0 | 983 | 36 | 2,151 |
| North Iowa Area | 960 | 20 | 278 | 0 | 1,258 |
| Iowa Lakes | 703 | 205 | 217 | 29 | 1,154 |
| Northwest | 889 | 35 | 120 | 29 | 1,073 |
| Iowa Central | 1,374 | 519 | 171 | 37 | 2,101 |
| Iowa Valley | 1,237 | 45 | 278 | 0 | 1,560 |
| Hawkeye | 2,005 | 0 | 432 | 48 | 2,485 |
| Eastern Iowa | 2,321 | 0 | 1,387 | 79 | 3,787 |
| Kirkwood | 2,392 | 59 | 1,750 | 86 | 4,287 |
| Des Moines Area | 5,309 | 783 | 772 | 136 | 7,000 |
| Western Iowa Tech | 1,747 | 0 | 1,225 | 0 | 2,972 |
| Iowa Western | 1,827 | 0 | 1,086 | 0 | 2,913 |
| Southwestern | 635 | 2 | 108 | 43 | 788 |
| Indian Hills | 809 | 2 | 878 | 16 | 1,705 |
| Southeastern | 949 | 95 | 143 | 67 | 1,254 |
| *Total females* | *24,289* | *1,765* | *9,828* | *606* | *36,488* |

| | | | Males | | |
|---|---|---|---|---|---|
| Northeast Iowa | 547 | 0 | 351 | 8 | 906 |
| North Iowa Area | 677 | 15 | 247 | 0 | 939 |
| Iowa Lakes | 378 | 99 | 71 | 8 | 556 |
| Northwest | 460 | 18 | 69 | 4 | 551 |
| Iowa Central | 761 | 116 | 254 | 12 | 1,143 |
| Iowa Valley | 810 | 40 | 90 | 0 | 940 |
| Hawkeye | 1,011 | 0 | 243 | 4 | 1,258 |
| Eastern Iowa | 1,370 | 0 | 438 | 25 | 1,833 |
| Kirkwood | 1,538 | 38 | 860 | 29 | 2,465 |
| Des Moines Area | 2,953 | 416 | 606 | 35 | 4,010 |
| Western Iowa Tech | 905 | 4 | 462 | 0 | 1,371 |
| Iowa Western | 1,492 | 0 | 311 | 0 | 1,803 |
| Southwestern | 273 | 1 | 63 | 9 | 346 |
| Indian Hills | 307 | 0 | 508 | 3 | 818 |
| Southeastern | 427 | 44 | 99 | 15 | 585 |
| *Total males* | *13,909* | *791* | *4,672* | *152* | *19,524* |
| ***GRAND TOTAL*** | ***38,198*** | ***2,556*** | ***14,500*** | ***758*** | ***56,012*** |

# 5 Joint Enrollment and Demographics

Each year, tens of thousands of Iowa high school students enroll in community college credit coursework. The Department of Education refers to these students as "jointly enrolled."

Joint enrollment of high school students accounts for over 30 percent of total community college credit enrollment and over one-sixth of total semester hours. Iowa is one of at least 38 states with state dual enrollment policies.[1] In Iowa, high school students enroll in community college credit courses in a variety of ways including Postsecondary Enrollment Option (PSEO), college courses offered through a contract between a local school district and a community college (e.g., concurrent enrollment), and independent enrollment in a college course as a tuition-paying student.

Most joint enrollment opportunities fall under the rubric of Senior Year Plus. The legislation, passed in 2008, consolidated and standardized several existing programs involving college credit opportunities for high school students including PSEO, concurrent enrollment (which entails supplementary weighted funding for local school districts), career and regional academies, and Advanced Placement (AP®). The Community College Management Information System (MIS) captures joint enrollment in three categories:

- PSEO
- Contracted courses (which may or may not be concurrent enrollment and generate supplementary weighting for the partnering local district),
- Tuition.

While sometimes referred to as dual credit, joint enrollment does not necessarily entail credit being issued

[1]Karp, Melinda Mechur, et al. State Dual Enrollment Policies: Addressing Access and Quality. U.S. Department of Education, Office Of Vocational and Adult Education. 2004. www.ed.gov

### Joint Enrollment

Number of Students: **42,996**

Growth since last year: **6.8%**

Semester Hours: **336,923**
Up 7.9% since 2013.

Semester Hours per H.S. Student: **7.8**
Up 1.3% since 2013.

**Figure 5-1: Fiscal Year Joint Enrollment: 2004-2014**

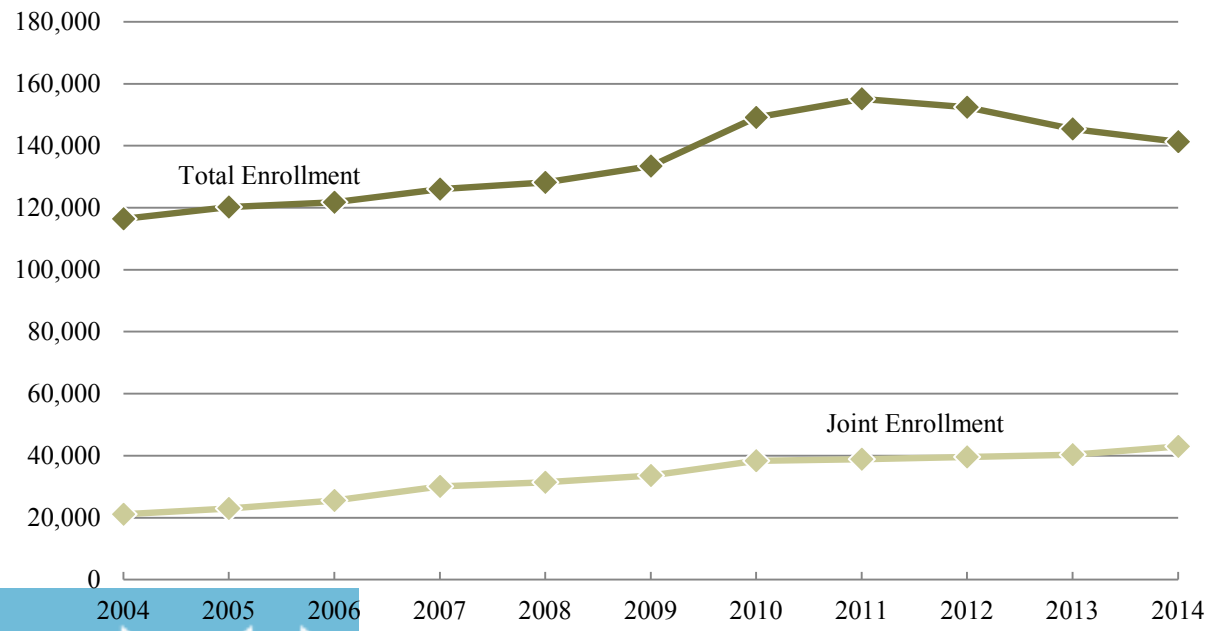


**Figure 5-2: Fiscal Year Joint Enrollment Semester Hours: 2004-2014**

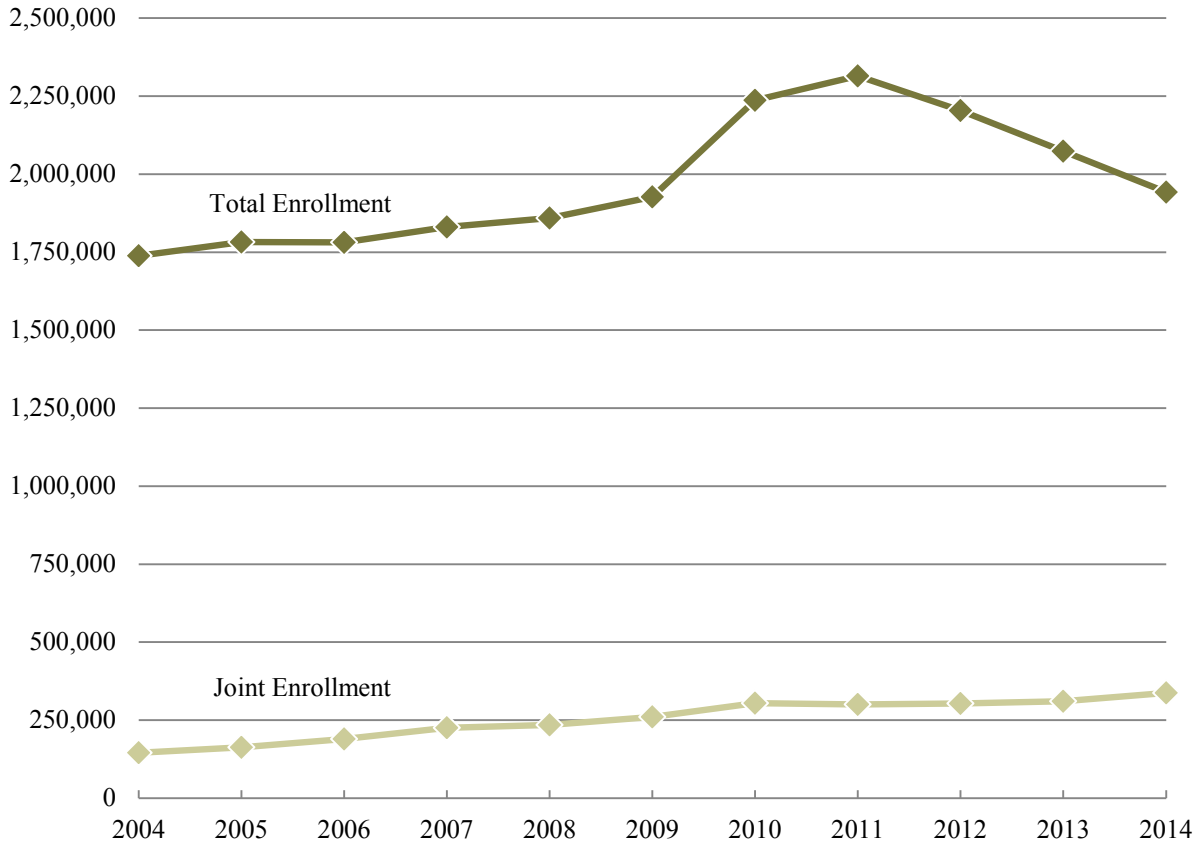



**Figure 5-3: Average Semester Hours per Jointly Enrolled Student: 2004-2014**

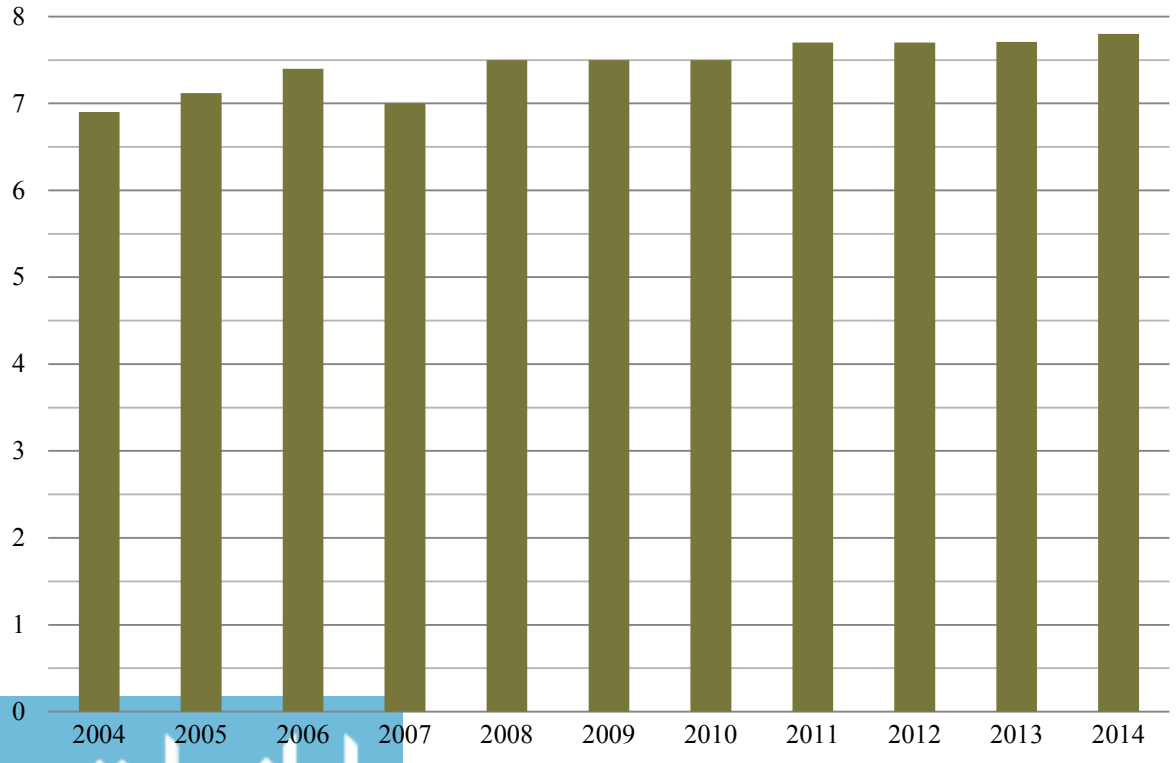
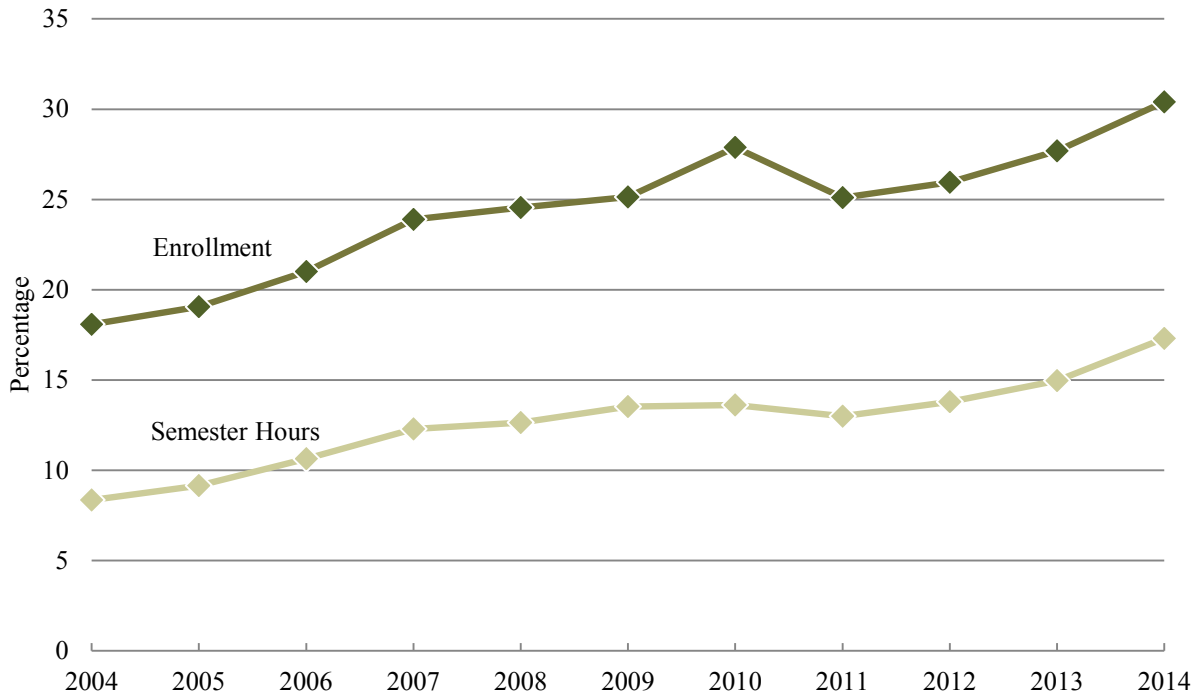


**Figure 5-4: Joint Enrollment and Semester Hours as a Percentage of Total Credit Enrollment and Semester Hours: 2004-2014**




at both the secondary and postsecondary levels. Some programs, such as PSEO and concurrent enrollment, require that credit be issued at each level, while other joint enrollment opportunities have no such requirement.

Joint enrollment in Iowa community colleges has steadily risen to a record high of 42,996 students in fiscal year (FY) 2014, which represents a 6.8 percent enrollment increase from 2013 (Figure 5-1). Since FY 2004, joint enrollment has increased 104 percent – approximately 7.4 percent per year. Enrollment growth of jointly enrolled students outpaced the growth of total credit enrollment, which declined 2.9 percent from last year.

Jointly enrolled students enrolled in a total of 336,923 semester hours in FY 2014 compared to 310,412 semester hours the previous year (Figure 5-2). The number of average semester hours taken by each student slightly increased to 7.8, equivalent to about 2 or 3 courses per student (Figure 5-3). In FY 2014, joint enrollment accounted for 17 percent of total semester hours. The number of semester hours taken per jointly enrolled student has increased about one semester hour since FY 2004. Because high school students generally enroll part-time, they account for a smaller proportion of total semester hours than for total enrollment (Figure 5-4).

The rate at which high school students enroll in community college coursework varies by local school district and community college region (Figure 5-8). Nationally, public two-year colleges offer college credit coursework to high school students at higher rates than

**JOINT ENROLLMENT BY OFFERING ARRANGEMENT**

39,884*

8.0%

Contracted Courses

3,335*

5.0%

PSEO

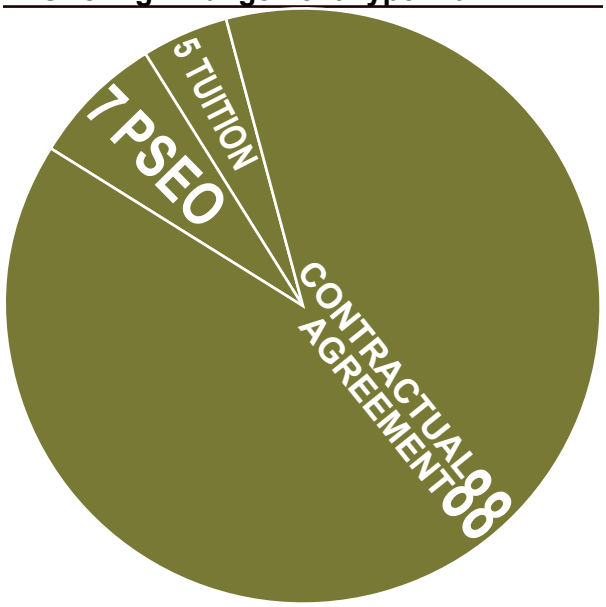
2,041*

19.5%

Tuition

*Note: Joint enrollment by offering arrangement exceeds unduplicated total 42,996 because some students are enrolled in multiple categories.

**Figure 5-5: Credit Joint Enrollment by Offering Arrangement Type: 2014**




other sectors of higher education. In 2005, 98 percent of public two-year colleges nationwide had high school students jointly enrolled in college credit coursework compared with 77 percent of public four-year institutions. In Iowa, delivery of programs to high school students is a part of the community colleges' mission (Iowa Code 260C.1); therefore, all 15 community colleges are committed to offering college semester opportunities to these students.[2]

### Joint Enrollment Offering Arrangements

Contracted courses had the largest enrollment of the three types of joint enrollment offering arrangements, accounting for close to 88 percent of jointly enrolled students in FY 2014 (Figure 5-5). Enrollment in contracted courses rose 8 percent from the previous year

[2]Kleiner, Brian and Laurie Lewis. Dual Enrollment of High School Students at Postsecondary Institutions: 2002-03. National Center for Education Statistics. 2005. www.nces.ed.gov

**IOWA'S TYPICAL JOINTLY ENROLLED STUDENT***

Caucasian 86%

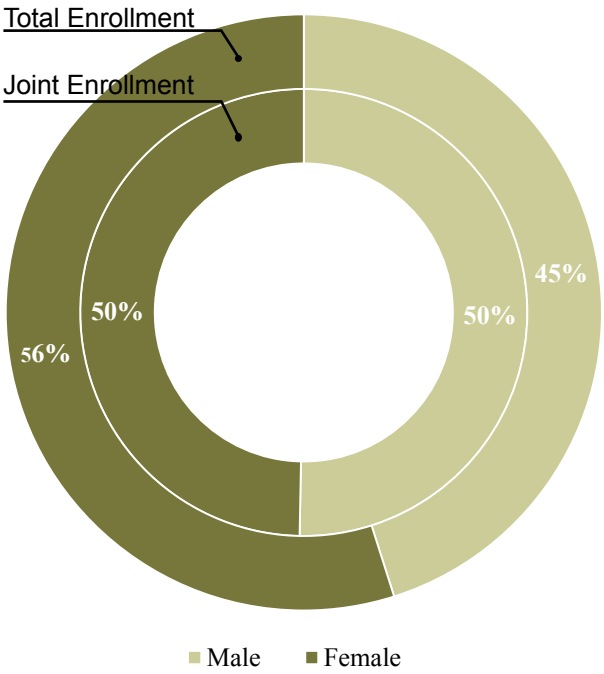
Young 18 years old

Male 50.3%

Resident 99.5%

*Students with unknown gender, age, race/ethnicity or residency are not included.

**Figure 5-6: Jointly Enrolled Credit Student Gender*: 2014**




*Students with unknown gender are not included.

**Figure 5-7: Jointly Enrolled Credit Student Enrollment by Racial Minorities: 2014**

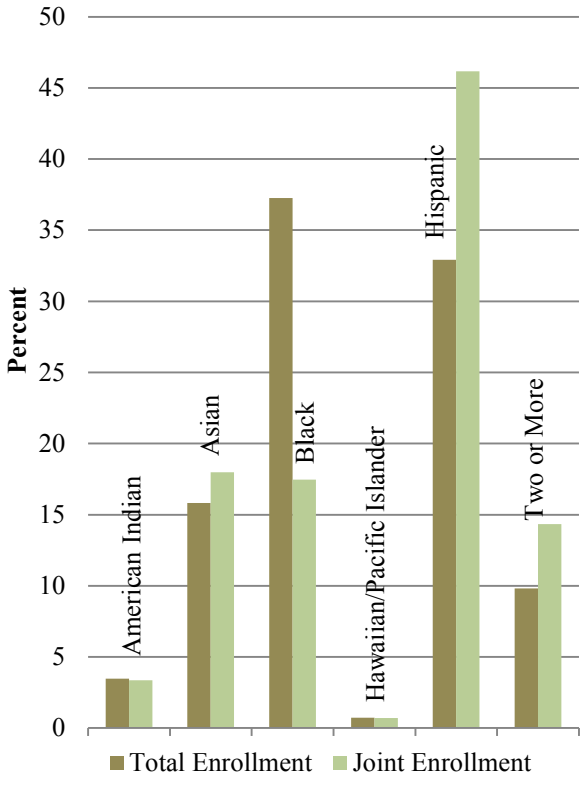
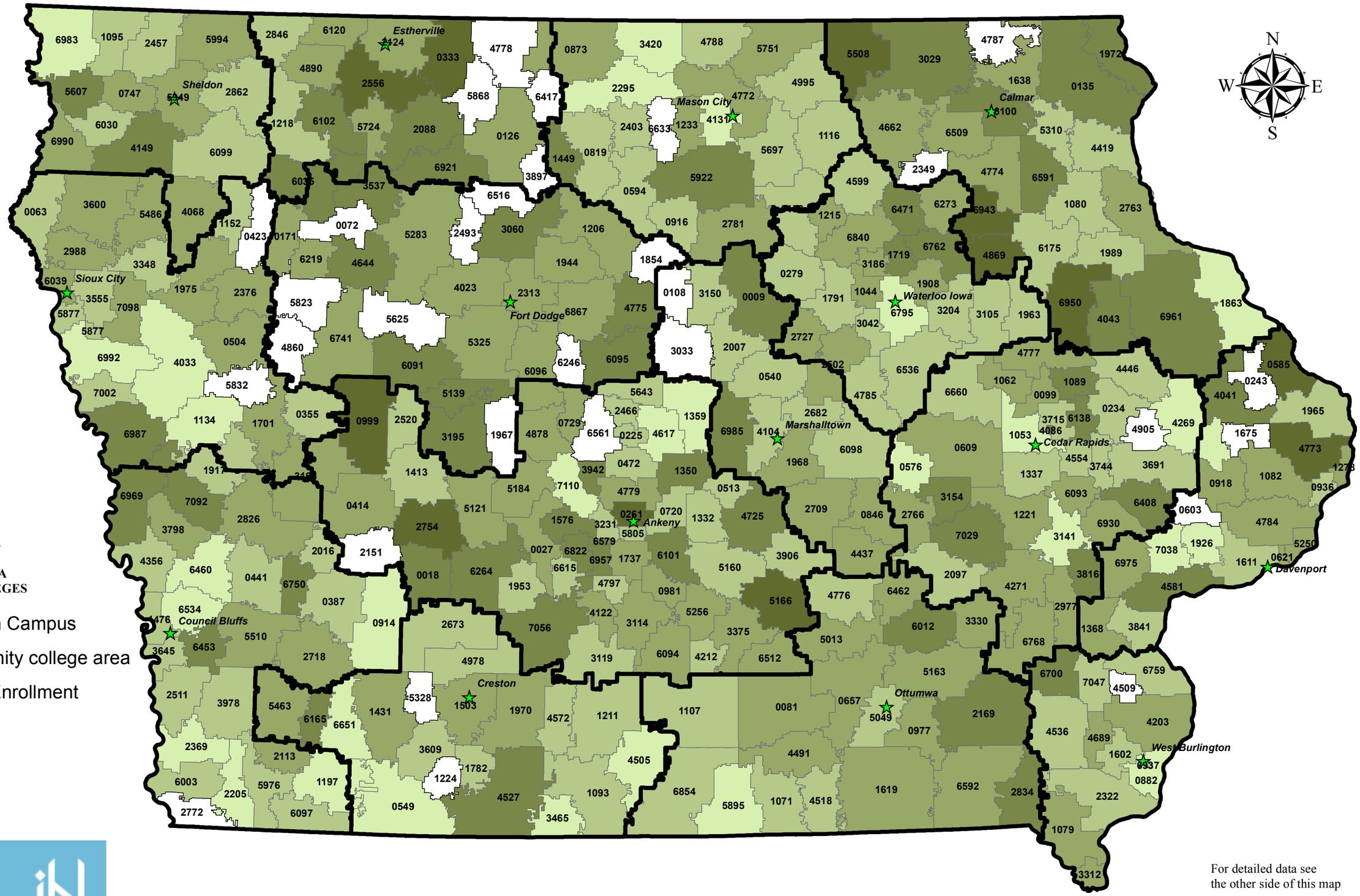


**FIGURE 5-8: PERCENT OF HIGH SCHOOL STUDENTS (9-12 GRADES) ENROLLMENT IN IOWA COMMUNITY COLLEGES DURING FY 2014**



| District Number | District Name | Percent (Joint) |
|---|---|---|
| 0009 | AGWSR | 48.48 |
| 0018 | ADAIR-CASEY | 43.82 |
| 0027 | ADEL-DESOTO-MINBURN | 28.60 |
| 0063 | AKRON WESTFIELD | 17.54 |
| 0081 | ALBIA | 27.37 |
| 0099 | ALBURNETT | 36.11 |
| 0126 | ALGONA | 35.68 |
| 0135 | ALLAMAKEE | 38.04 |
| 0153 | NORTH BUTLER | 22.10 |
| 0171 | ALTA | 30.41 |
| 0225 | AMES | 19.35 |
| 0234 | ANAMOSA | 20.98 |
| 0261 | ANKENY | 56.49 |
| 0279 | APLINGTON-PARKERSBURG | 20.61 |
| 0333 | ARMSTRONG-RINGSTED | 59.35 |
| 0355 | AR-WE-VA | 19.67 |
| 0387 | ATLANTIC | 20.83 |
| 0414 | AUDUBON | 36.32 |
| 0441 | A-H-S-T | 25.00 |
| 0472 | BALLARD | 17.61 |
| 0504 | BATTLE CREEK-IDA GROVE | 28.42 |
| 0513 | BAXTER | 24.03 |
| 0540 | BCLUW | 25.13 |
| 0549 | BEDFORD | 16.08 |
| 0576 | BELLE PLAINE | 15.29 |
| 0585 | BELLEVUE | 68.80 |
| 0594 | BELMOND-KLEMME | 24.88 |
| 0609 | BENTON | 34.39 |
| 0621 | BETTENDORF | 26.81 |
| 0657 | FREMONT | 29.07 |
| 0720 | BONDURANT-FARRAR | 24.42 |
| 0729 | BOONE | 34.08 |
| 0747 | BOYDEN-HULL | 29.44 |
| 0819 | WEST HANCOCK | 17.95 |
| 0846 | MALCOM | 29.67 |
| 0873 | NORTH IOWA | 26.62 |
| 0882 | BURLINGTON | 14.71 |
| 0914 | CAM | 10.00 |
| 0916 | CAL | 21.74 |
| 0918 | CALAMUS-WHEATLAND | 29.76 |
| 0936 | CAMANCHE | 17.16 |
| 0977 | CARDINAL | 33.78 |
| 0981 | CARLISLE | 29.74 |
| 0999 | CARROLL | 58.54 |
| 1044 | CEDAR FALLS | 30.79 |
| 1053 | CEDAR RAPIDS | 9.03 |
| 1062 | CENTER POINT-URBANA | 35.94 |
| 1071 | CENTERVILLE | 18.29 |
| 1079 | CENTRAL LEE | 32.43 |
| 1080 | CENTRAL | 25.53 |
| 1082 | CENTRAL CLINTON | 35.70 |
| 1089 | CENTRAL CITY | 44.52 |
| 1093 | CENTRAL DECATUR | 16.67 |
| 1095 | CENTRAL LYON | 23.27 |
| 1107 | CHARITON | 23.62 |
| 1116 | CHARLES CITY | 23.66 |
| 1134 | CHARTER OAK-UTE | 4.95 |
| 1152 | CHEROKEE | 22.56 |
| 1197 | CLARINDA | 8.69 |
| 1206 | CLARION-GOLDFIELD | 34.31 |
| 1211 | CLARKE | 21.24 |
| 1215 | CLARKSVILLE | 31.11 |
| 1218 | CLAY CENTRAL-EVERLY | 24.21 |
| 1221 | CLEAR CREEK-AMANA | 31.21 |
| 1233 | CLEAR LAKE | 31.93 |
| 1278 | CLINTON | 33.39 |
| 1332 | COLFAX-MINGO | 25.52 |
| 1337 | COLLEGE | 23.59 |
| 1350 | COLLINS-MAXWELL | 46.27 |
| 1359 | COLO-NESCO | 12.16 |
| 1368 | COLUMBUS | 31.82 |
| 1413 | COON RAPIDS-BAYARD | 22.90 |
| 1431 | CORNING | 28.63 |
| 1449 | CORWITH-WESLEY | 41.18 |
| 1476 | COUNCIL BLUFFS | 23.19 |
| 1503 | CRESTON | 32.99 |
| 1576 | DALLAS CENTER-GRIMES | 42.31 |
| 1602 | DANVILLE | 17.59 |
| 1611 | DAVENPORT | 19.56 |
| 1619 | DAVIS COUNTY | 26.53 |
| 1638 | DECORAH | 26.66 |
| 1701 | DENISON | 27.61 |
| 1719 | DENVER | 46.15 |
| 1737 | DES MOINES INDEPENDENT | 33.82 |
| 1782 | DIAGONAL | 18.75 |
| 1791 | DIKE-NEW HARTFORD | 17.67 |
| 1863 | DUBUQUE | 11.34 |
| 1908 | DUNKERTON | 31.16 |
| 1917 | BOYER VALLEY | 24.06 |
| 1926 | DURANT | 13.81 |
| 1944 | EAGLE GROVE | 35.63 |
| 1953 | EARLHAM | 24.52 |
| 1963 | EAST BUCHANAN | 21.74 |
| 1965 | EASTON VALLEY | 18.06 |
| 1968 | EAST MARSHALL | 30.39 |
| 1970 | EAST UNION | 32.03 |
| 1972 | EASTERN ALLAMAKEE | 48.15 |
| 1975 | RIVER VALLEY | 32.04 |
| 1989 | EDGEWOOD-COLESBURG | 18.75 |
| 2007 | ELDORA-NEW PROVIDENCE | 20.76 |
| 2016 | ELK HORN-KIMBALLTON | 25.36 |
| 2088 | EMMETSBURG | 40.83 |
| 2097 | ENGLISH VALLEYS | 20.42 |
| 2113 | ESSEX | 31.87 |
| 2124 | ESTHERVILLE LINCOLN CENTRAL | 32.89 |
| 2169 | FAIRFIELD | 44.94 |
| 2205 | FARRAGUT | 15.15 |
| 2295 | FOREST CITY | 12.30 |
| 2313 | FORT DODGE | 31.77 |
| 2322 | FORT MADISON | 19.97 |
| 2369 | FREMONT-MILLS | 15.27 |
| 2376 | GALVA-HOLSTEIN | 29.39 |
| 2403 | GARNER-HAYFIELD | 17.34 |
| 2457 | GEORGE-LITTLE ROCK | 22.30 |
| 2466 | GILBERT | 23.96 |
| 2502 | GLADBROOK-REINBECK | 30.99 |
| 2511 | GLENWOOD | 20.64 |
| 2520 | GLIDDEN-RALSTON | 25.00 |
| 2556 | GRAETTINGER-TERRIL | 60.44 |
| 2673 | NODAWAY | 18.69 |
| 2682 | GMG | 17.81 |
| 2709 | GRINNELL-NEWBURG | 34.54 |
| 2718 | GRISWOLD | 35.03 |
| 2727 | GRUNDY CENTER | 31.87 |
| 2754 | GUTHRIE CENTER | 58.86 |
| 2763 | CLAYTON RIDGE | 30.85 |
| 2766 | H-L-V | 29.59 |
| 2781 | HAMPTON-DUMONT | 27.32 |
| 2826 | HARLAN | 27.63 |
| 2834 | HARMONY | 36.99 |
| 2846 | HARRIS-LAKE PARK | 24.74 |
| 2862 | HARTLEY-MELVIN-SANBORN | 20.00 |
| 2977 | HIGHLAND | 30.95 |
| 2988 | HINTON | 35.74 |
| 3029 | HOWARD-WINNESHIEK | 43.40 |
| 3042 | HUDSON | 26.46 |
| 3060 | HUMBOLDT | 49.14 |
| 3105 | INDEPENDENCE | 25.66 |
| 3114 | INDIANOLA | 27.13 |
| 3119 | INTERSTATE 35 | 21.67 |
| 3141 | IOWA CITY | 11.51 |
| 3150 | IOWA FALLS | 19.27 |
| 3154 | IOWA VALLEY | 37.57 |
| 3168 | IKM-MANNING | 27.19 |
| 3186 | JANESVILLE CONSOLIDATED | 36.36 |
| 3195 | JEFFERSON-SCRANTON | 43.96 |
| 3204 | JESUP | 23.30 |
| 3231 | JOHNSTON | 20.68 |
| 3312 | KEOKUK | 27.67 |
| 3330 | KEOTA | 36.36 |
| 3348 | KINGSLEY-PIERSON | 25.56 |
| 3375 | KNOXVILLE | 29.50 |
| 3420 | LAKE MILLS | 10.80 |
| 3465 | LAMONI | 2.13 |
| 3537 | LAURENS-MARATHON | 45.35 |
| 3555 | LAWTON-BRONSON | 22.99 |
| 3600 | LE MARS | 32.42 |
| 3609 | LENOX | 21.48 |
| 3645 | LEWIS CENTRAL | 23.98 |
| 3691 | NORTH CEDAR | 23.19 |
| 3715 | LINN-MAR | 21.88 |
| 3744 | LISBON | 21.03 |
| 3798 | LOGAN-MAGNOLIA | 30.90 |
| 3816 | LONE TREE | 46.48 |
| 3841 | LOUISA-MUSCATINE | 21.46 |
| 3906 | LYNNVILLE-SULLY | 25.32 |
| 3942 | MADRID | 39.13 |
| 3978 | EAST MILLS | 20.78 |
| 4023 | WEBSTER | 31.25 |
| 4033 | MAPLE VALLEY-ANTHON OTO | 13.22 |
| 4041 | MAQUOKETA | 42.73 |
| 4043 | MAQUOKETA VALLEY | 39.52 |
| 4068 | CLEGHORN | 35.16 |
| 4086 | MARION INDEPENDENT | 36.53 |
| 4104 | MARSHALLTOWN | 26.31 |
| 4122 | MARTENSDALE-ST MARYS | 33.33 |
| 4131 | MASON CITY | 15.10 |
| 4149 | MOC-FLOYD VALLEY | 48.95 |
| 4203 | MEDIAPOLIS | 35.86 |
| 4212 | MELCHER-DALLAS | 20.51 |
| 4269 | MIDLAND | 15.27 |
| 4271 | MID-PRAIRIE | 32.45 |
| 4356 | MISSOURI VALLEY | 24.90 |
| 4419 | MFL MARMAC | 19.66 |
| 4437 | MONTEZUMA | 35.00 |
| 4446 | MONTICELLO | 21.68 |
| 4491 | MORAVIA | 30.09 |
| 4505 | MORMON TRAIL | 9.09 |
| 4518 | MOULTON-UDELL | 19.67 |
| 4527 | MOUNT AYR | 41.28 |
| 4536 | MOUNT PLEASANT | 21.50 |
| 4554 | MOUNT VERNON | 18.94 |
| 4572 | MURRAY | 20.75 |
| 4581 | MUSCATINE | 42.00 |
| 4599 | NASHUA-PLAINFIELD | 19.23 |
| 4617 | NEVADA | 12.94 |
| 4644 | NEWELL-FONDA | 41.04 |
| 4662 | NEW HAMPTON | 35.71 |
| 4689 | NEW LONDON | 29.27 |
| 4725 | NEWTON | 42.24 |
| 4772 | CENTRAL SPRINGS | 35.27 |
| 4773 | NORTHEAST | 55.35 |
| 4774 | NORTH FAYETTE | 29.64 |
| 4775 | NORTHEAST HAMILTON | 39.29 |
| 4776 | NORTH MAHASKA | 22.53 |
| 4777 | NORTH LINN | 27.69 |
| 4779 | NORTH POLK | 33.79 |
| 4784 | NORTH SCOTT | 36.15 |
| 4785 | NORTH TAMA COUNTY | 20.00 |
| 4788 | NORTHWOOD-KENSETT | 22.64 |
| 4797 | NORWALK | 17.68 |
| 4869 | OELWEIN | 52.50 |
| 4878 | OGDEN | 33.62 |
| 4890 | OKOBOJI | 28.03 |
| 4978 | ORIENT-MACKSBURG | 21.28 |
| 4995 | OSAGE | 24.92 |
| 5013 | OSKALOOSA | 26.76 |
| 5049 | OTTUMWA | 20.06 |
| 5121 | PANORAMA | 36.10 |
| 5139 | PATON-CHURDAN | 41.67 |
| 5160 | PCM | 18.57 |
| 5163 | PEKIN | 30.33 |
| 5166 | PELLA | 56.29 |
| 5184 | PERRY | 30.20 |
| 5250 | PLEASANT VALLEY | 29.95 |
| 5256 | PLEASANTVILLE | 29.03 |
| 5283 | POCAHONTAS AREA | 28.14 |
| 5310 | POSTVILLE | 19.78 |
| 5325 | PRAIRIE VALLEY | 30.66 |
| 5463 | RED OAK | 29.14 |
| 5486 | REMSEN-UNION | 30.51 |
| 5994 | SIBLEY-OCHEYEDAN | 29.46 |
| 5486 | REMSEN-UNION | 33.05 |
| 5508 | RICEVILLE | 60.00 |
| 5510 | RIVERSIDE | 30.00 |
| 5607 | ROCK VALLEY | 38.05 |
| 5643 | ROLAND-STORY | 24.83 |
| 5697 | RUDD-ROCKFORD-MARBLE RK | 22.22 |
| 5724 | RUTHVEN-AYRSHIRE | 28.79 |
| 5751 | ST ANSGAR | 32.74 |
| 5805 | SAYDEL | 21.44 |
| 5877 | SERGEANT BLUFF-LUTON | 23.81 |
| 5895 | SEYMOUR | 15.87 |
| 5922 | WEST FORK | 39.01 |
| 5949 | SHELDON | 28.52 |
| 5976 | SHENANDOAH | 18.86 |
| 6003 | SIDNEY | 17.89 |
| 6012 | SIGOURNEY | 47.85 |
| 6030 | SIOUX CENTER | 19.18 |
| 6035 | SIOUX CENTRAL | 41.67 |
| 6039 | SIOUX CITY | 28.59 |
| 6091 | SOUTHERN CAL | 38.91 |
| 6093 | SOLON | 26.68 |
| 6094 | SOUTHEAST WARREN | 28.67 |
| 6095 | SOUTH HAMILTON | 42.06 |
| 6096 | SOUTHEAST WEBSTER-GRAND | 33.79 |
| 6097 | SOUTH PAGE | 17.02 |
| 6098 | SOUTH TAMA COUNTY | 25.79 |
| 6099 | SOUTH O'BRIEN | 20.00 |
| 6100 | SOUTH WINNESHIEK | 47.30 |
| 6101 | SOUTHEAST POLK | 37.81 |
| 6102 | SPENCER | 43.00 |
| 6120 | SPIRIT LAKE | 27.80 |
| 6138 | SPRINGVILLE | 39.29 |
| 6165 | STANTON | 39.24 |
| 6175 | STARMONT | 18.58 |
| 6219 | STORM LAKE | 32.38 |
| 6264 | WEST CENTRAL VALLEY | 38.75 |
| 6273 | SUMNER | 31.97 |
| 6408 | TIPTON | 40.69 |
| 6453 | TREYNOR | 37.77 |
| 6460 | TRI-CENTER | 3.72 |
| 6462 | TRI-COUNTY | 35.80 |
| 6471 | TRIPOLI | 37.98 |
| 6509 | TURKEY VALLEY | 29.86 |
| 6512 | TWIN CEDARS | 26.90 |
| 6534 | UNDERWOOD | 8.26 |
| 6536 | UNION | 16.71 |
| 6579 | URBANDALE | 39.76 |
| 6591 | VALLEY | 50.00 |
| 6592 | VAN BUREN | 31.89 |
| 6615 | VAN METER | 22.75 |
| 6660 | VINTON-SHELLSBURG | 24.69 |
| 6700 | WACO | 39.53 |
| 6741 | EAST SAC COUNTY | 36.07 |
| 6750 | WALNUT | 36.84 |
| 6759 | WAPELLO | 25.10 |
| 6762 | WAPSIE VALLEY | 40.84 |
| 6768 | WASHINGTON | 32.29 |
| 6983 | WEST LYON | 12.90 |
| 6795 | WATERLOO | 11.35 |
| 6822 | WAUKEE | 44.07 |
| 6840 | WAVERLY-SHELL ROCK | 27.25 |
| 6854 | WAYNE | 24.83 |
| 6867 | WEBSTER CITY | 35.91 |
| 6921 | WEST BEND-MALLARD | 41.18 |
| 6930 | WEST BRANCH | 32.00 |
| 6937 | WEST BURLINGTON IND | 23.05 |
| 6943 | WEST CENTRAL | 72.92 |
| 6950 | WEST DELAWARE COUNTY | 51.70 |
| 6957 | WEST DES MOINES | 45.77 |
| 6961 | WESTERN DUBUQUE | 37.33 |
| 6969 | WEST HARRISON | 37.82 |
| 6975 | WEST LIBERTY | 32.18 |
| 6985 | WEST MARSHALL | 43.95 |
| 6987 | WEST MONONA | 40.51 |
| 6990 | WEST SIOUX | 26.67 |
| 6992 | WESTWOOD | 16.25 |
| 7002 | WHITING | 25.00 |
| 7029 | WILLIAMSBURG | 41.45 |
| 7038 | WILTON | 15.61 |
| 7047 | WINFIELD-MT UNION | 25.32 |
| 7056 | WINTERSET | 48.19 |
| 7092 | WOODBINE | 45.45 |
| 7098 | WOODBURY CENTRAL | 36.22 |
| 7110 | WOODWARD-GRANGER | 15.86 |

NOTE: Data excludes 2,361 (5.5 percent) jointly enrolled secondary students with missing district number or State ID.
SOURCE: K-12 Student Data and CC MIS.

**Racial/Ethnic Minority Background***

Joint Enrollment 13.6% Total Enrollment 18.5%

*Students with unknown race/ethnicity are not included.

to 39,884 students. Postsecondary Enrollment Options, which accounted for 7.3 percent of joint enrollment, fell about 5 percent from FY 2013. Despite the significant growth witnessed in FY 2013, enrollment of tuition-paying students declined 19.5 percent to 2,041 students.

## Jointly Enrolled Student Demographics

The typical jointly enrolled student is male, 18 years old, and white. This is the second consecutive year in which more males jointly enrolled than females. Compared with the overall student body, jointly enrolled students are proportionally more white and male. In FY 2014, slightly more than half of joint enrollees were male compared to about 45 percent of the overall student body (Figure 5-6).

The phenomenon of proportionally greater male enrollment is driven by contracted course enrollment, which was 50.8 percent male in FY 2014, and a higher portion of males enrolling as tuition-paying students compared to last year. In terms of gender, contracted course enrollment more closely mirrors high school enrollment than community college enrollment. In contrast, PSEO and tuition enrollment were 62.8 percent and 51.5 percent female, respectively.

The racial/ethnic background of joint enrollees is less diverse than either total community college enrollment or public K-12 enrollment. In FY 2014, approximately 13 percent of joint enrollees were reported as having a minority racial/ethnic background. Tuition course enrollment had the largest proportion of minority students (13.8 percent), followed by contracted course (13.2 percent) and PSEO (5 percent). Hispanics were the largest minority group with 46.2 percent of minority joint enrollment, followed by Asian and Black students, with 18 percent and 17.5 percent respectively (Figure 5-7). In contrast, the percent of the overall community college student population reporting a racial or ethnic minority background remained relatively unchanged from FY 2013 at 18.5 percent, 37.3 percent of which were black and 32.9 percent of which were Hispanic.

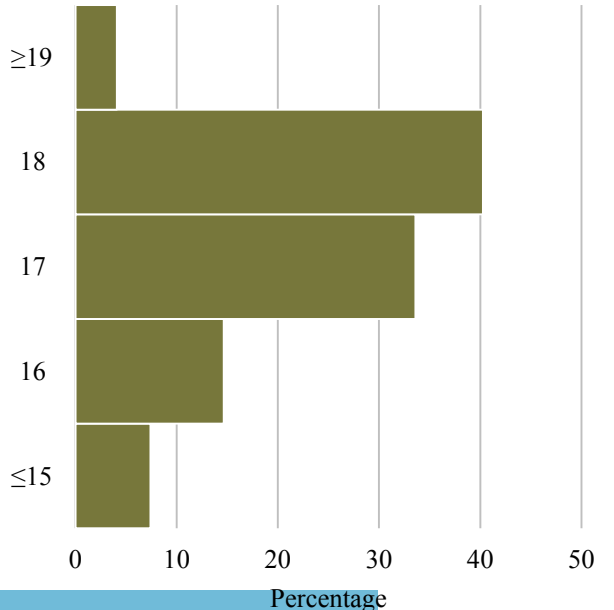
Jointly enrolled students were younger than the overall community college student body, with about 22 percent under 17 years of age. Almost 74 percent of jointly enrolled students were between 17 and 18 years of age (Figure 5-9).

Almost all jointly enrolled students (99.4 percent) were classified as residents of Iowa for tuition purposes. Only 206 out-of-state and 13 international students were jointly enrolled during FY 2014.

## Grade Level of Jointly Enrolled Students

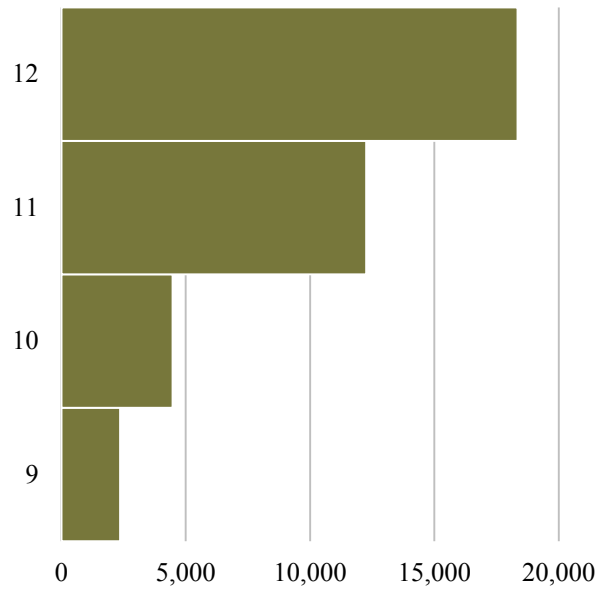
Jointly enrolled students tend to be upperclassmen in high school; more than 81 percent of jointly enrolled students were in their last two years of high school. Seniors accounted for 49 percent of jointly enrolled students while almost a third were juniors (Figure 5-10).

**Figure 5-9: Jointly Enrolled Credit Student Age*: 2014**




*Students with unknown age are not included.

**Figure 5-10: Jointly Enrolled Credit Student Grade Level: 2014**



# 6 Credit Student Awards

Fiscal year credit awards track students who received any type of community college award during fiscal year 2014. Award counts include the same student each time the student receives an award during this period of time. In 2014, the number of awards increased*, but the composition of community college awardees remained relatively the same.

In 2014, the number of awards increased to 19,061, a record growth of 22.2 percent. The growth is manifested by higher numbers of all awards: diplomas, two-year degrees, and certificates. This increase happened despite three years of consecutive decline in total enrollments. The award rate (number of awards per number of students) grew by close to three percent since last year, making an eleven-year record high 13.5 percent. On average, the number of awards in Iowa community colleges has increased 3.5 percent since tracking began in fiscal year 2000. Overall, the number of awards has been steady since year 2006, fluctuating between years 2000 and 2005, and on the rise continuously since year 2010 through year 2012 (Figure 6-1).

*In 2013, the time-frame to report awards has changed to align with state fiscal year. As the result, 2013 awards were reported based on nine months, while 2014 was reported based on new 12-month time-frame, thus making the difference between the two years higher than usual.

## Credit Awards

Largest Award Type:

**ASSOCIATE OF ARTS (AA)**

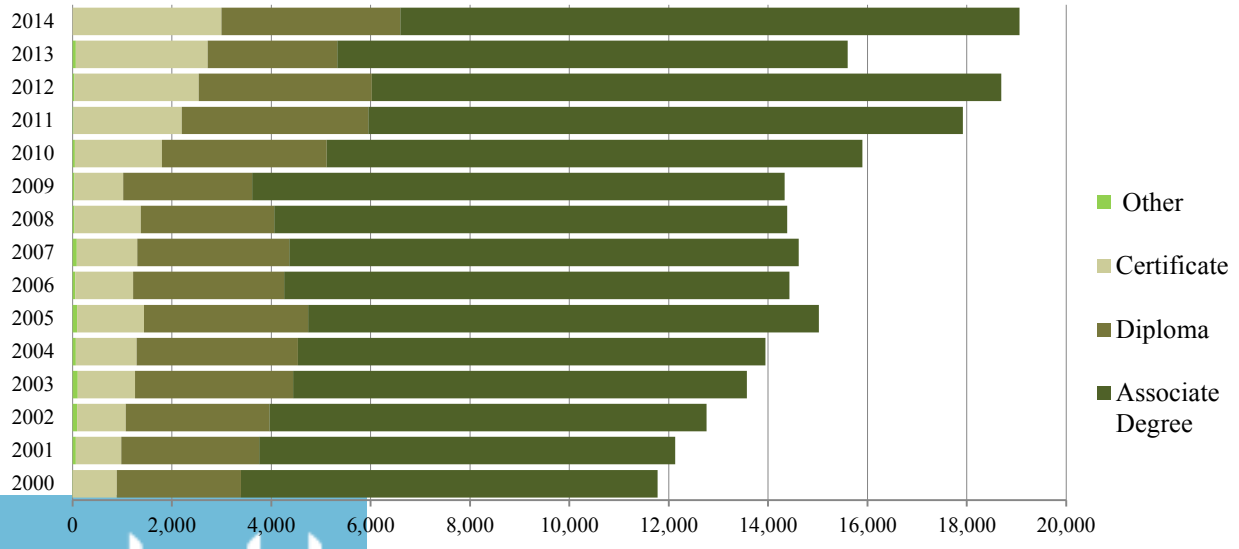
197 more awards than Associate of Applied Science

Number of Awards: **19,061**

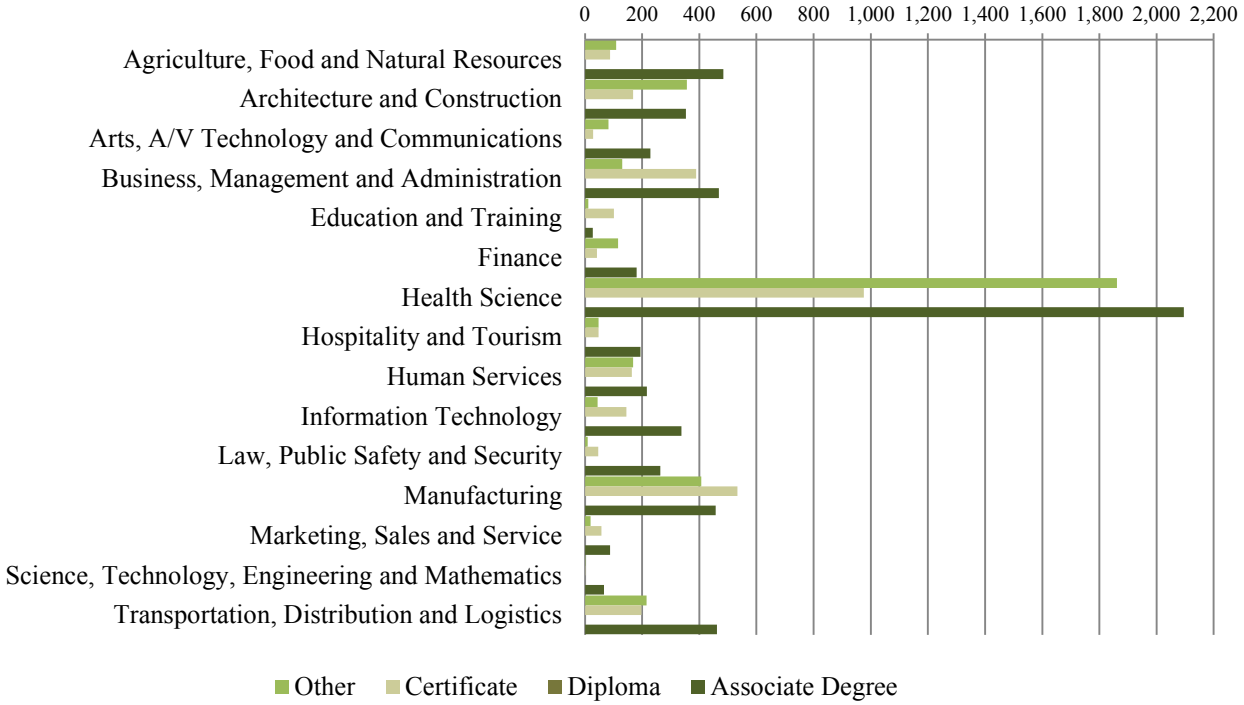
Increased since last year: **22.2%**

There are a variety of credit student awards granted by Iowa community colleges. Awards offered include Associate of Arts (AA), Associate of Science (AS), Associate of General Studies (AGS), Associate of Applied Arts (AAA), Associate of Applied Science (AAS), diplomas, and certificates. AA awards comprised 5,385 (28.3 percent) of the total credit student awards granted during fiscal year 2014. AAS awards accounted for another 5,188 (27.2 percent) of awards issued. The share of AS awards decreased from 7.3 percent in 2013, to 6.8 percent in 2014. The share of certificates decreased from 17.0 to 15.7 percent between the same years, still making a record high 2,997; the number of diplomas increased to 18.9 percent of all awards for a total of 3,599. AAA and AGS degrees, combined, presented slightly over three percent of all awards.

**Figure 6-1: Awards by Type: 2000-2014**



## Figure 6-2: Fiscal Year Student Award by CTE Program: 2014




NOTE: There were no awards in Government and Public Administration.

Credit student awards by program major have remained fairly consistent over the past five years. All areas reflect some fluctuations between fiscal year 2006 and fiscal year 2014, with some decline in 2013. In career and technical education (CTE) programs, the largest number of awards was granted in health science, followed by manufacturing, business, management and administration; transportation, distribution and logistics, architecture and construction, and agriculture, food and natural resources programs. Steady over the last 13 years, the prevailing number of degrees (over 47 percent) were associate degrees, followed by diplomas and certificates (Figure 6-2).

### Awardees Demographics

The typical community college awardee is a white female with an AA or AAS degree in health science. In general, the same distribution is true for credit student enrollment; the awards, however, tend to be distributed even more heavily toward women. While 55 percent of all enrollees in Iowa community colleges in fiscal year 2013 were women, 59 percent of all awardees were women (Figure 6-3). Nationally, women also earn more awards than men (U.S. Department of Education, Integrated Postsecondary Education Data Systems, IPEDS, 2013). Women earned 58 percent of all awards given by U.S. public two-year institutions.

A similar trend was present for the racial distribution. Although whites comprised over 81.5 percent of Iowa community college enrollees in fiscal year 2014, they comprised 87.0 percent of all community college awardees. Nationally, however, whites comprised only 64.1 percent of all public two-year institutions awards recipients (IPEDS, 2013).

## Figure 6-3: Awardees by Gender: 2014

The distribution of awards among racial minorities does not mirror enrollment, either. Blacks remained the largest group of enrollees among racial and ethnic minorities (38.2 percent) in 2014, but comprised only 33.0 percent of minority awardees. Students of Hispanic origin comprised 39.8 percent of all awardees among racial and ethnic minorities, with only 33.7 percent of all minority enrollees in fiscal year 2014 (Figure 6-4).

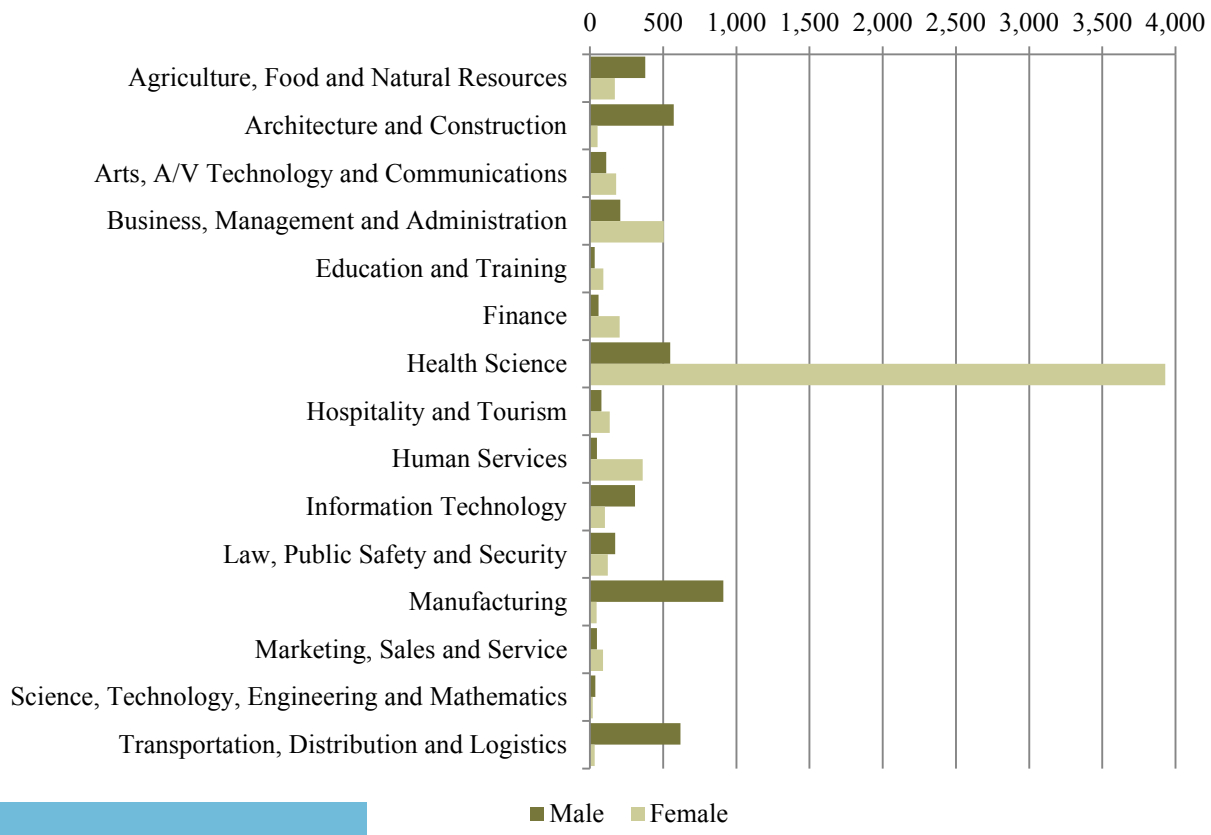
Similar to all awardees, the overwhelming majority of awards received by racial minorities in 2014 were two-year degrees (61.7 percent), followed by certificates (20.3 percent), and diplomas (18.0 percent). The number of awards among racial and ethnic minorities has continued to grow, with some fluctuations, between the years of 2000 and 2014, by 9.1 percent on average (Figure 6-6). This is consistent with the growth of the overall community college population.

In 2014, over 44 percent of all CTE awards were in health science. The gender distribution, however, is even higher: over 65 percent of all CTE awards received by women were in health science. Women also led in business, management and administration, education and training, human services, arts and communications, while men received more awards in transportation, manufacturing, architecture and construction, information technologies and agriculture (Figure 6-5).

**Figure 6-4: Awards by Racial and Ethnic Minorities, percent: 2014**

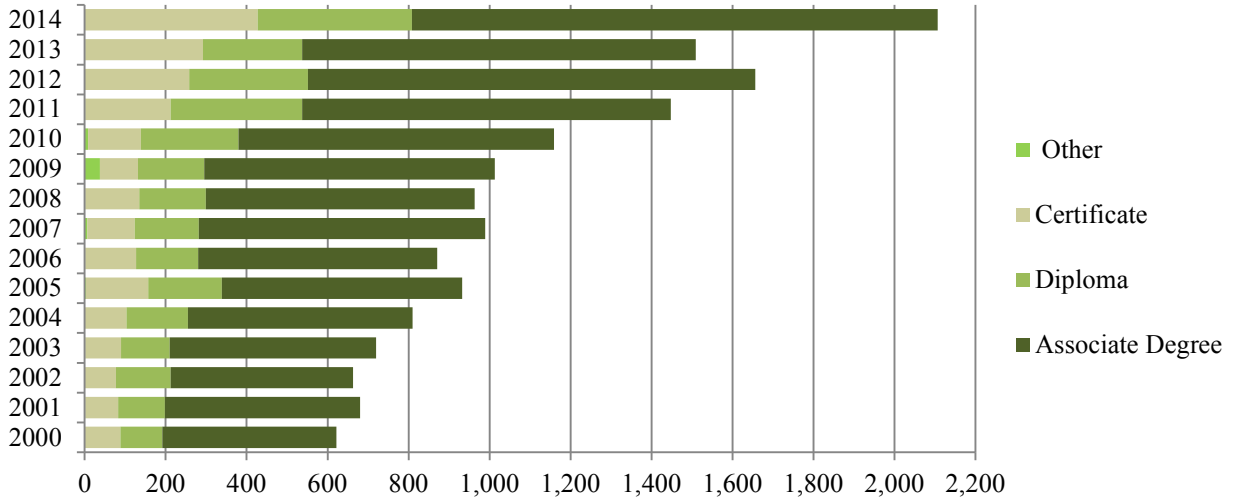

The majority of CTE awards for racial and ethnic minorities were among health science students, followed by awards in transportation, distribution and logistics. The distribution of awards was similar to all awardees. For example, 41.7 percent of all CTE awards received by minorities fell into health science (Figure 6-7).

**Figure 6-5: Award by Gender by Career Cluster: 2014**




NOTE: There were no awards in Government and Public Administration.

**Figure 6-6: Credit Student Awards within Racial/Ethnic Minority Group: 2000-2014**



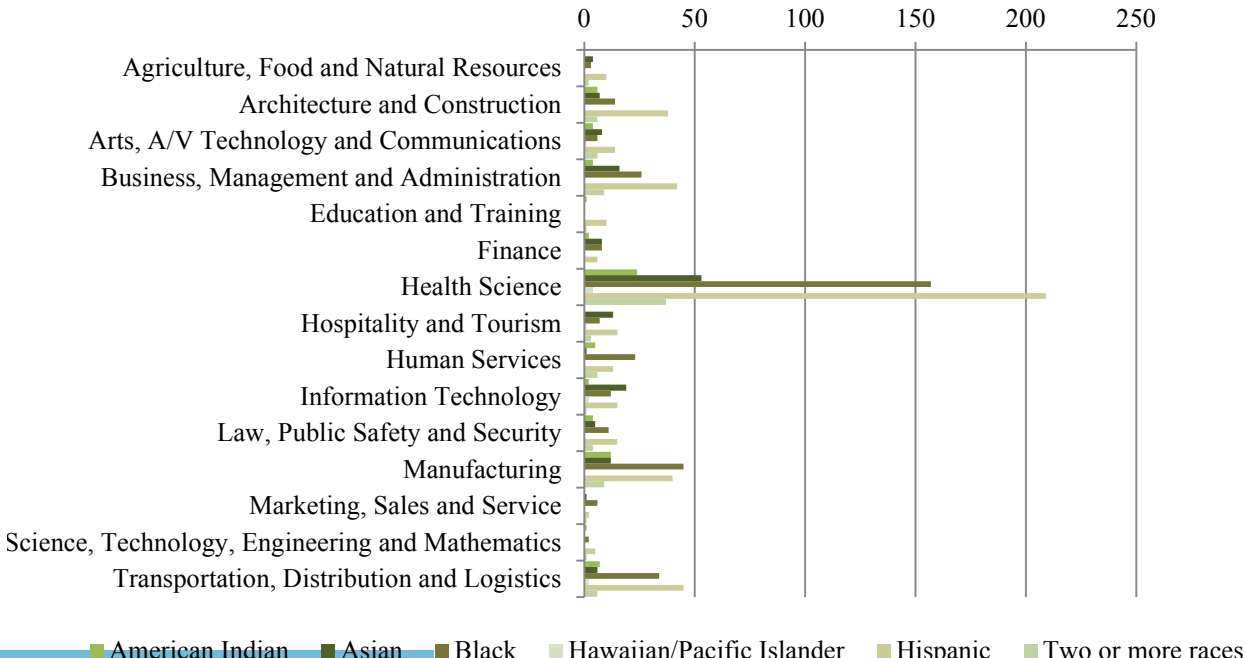

## Award Rates and Distribution in Other States*

Number of awards per number of enrolled students, known as award rate, is one of the ways to measure student success. Award rates were approached in several ways: as the ratio between all enrollment and all awards; between Associate degrees and all enrollment; between all awards and FTE (Full-Time Equivalent), and as the ratio between Associate degrees and FTE. Compared to awards in public two-year institutions in contiguous states, Iowa community colleges are above average (which is 11.5 percent) on all awards vs. all enrollment: 12.6 percent; third after South Dakota and Missouri on Associate degrees vs. all enrollment (8.4 percent); below average (which is 27.3 percent) on all awards vs. FTE with 25.6 percent; and third (after South Dakota and Minnesota) on Associate degrees vs. FTE with 17.0 percent (Figure 6-8). Nationwide, Iowa is higher than the 14.0 percent average on the number of Associate degrees per FTE, and ranks 14th among all states (Figure 6-9).

Although national data do not classify program areas in the same educational clusters, recent data aggregated by career clusters are analogous to Iowa community colleges. Similar to Iowa, most awards were granted in general studies intended to prepare for a four-year degree, followed by health/clinical sciences, and business (Figure 6-10).

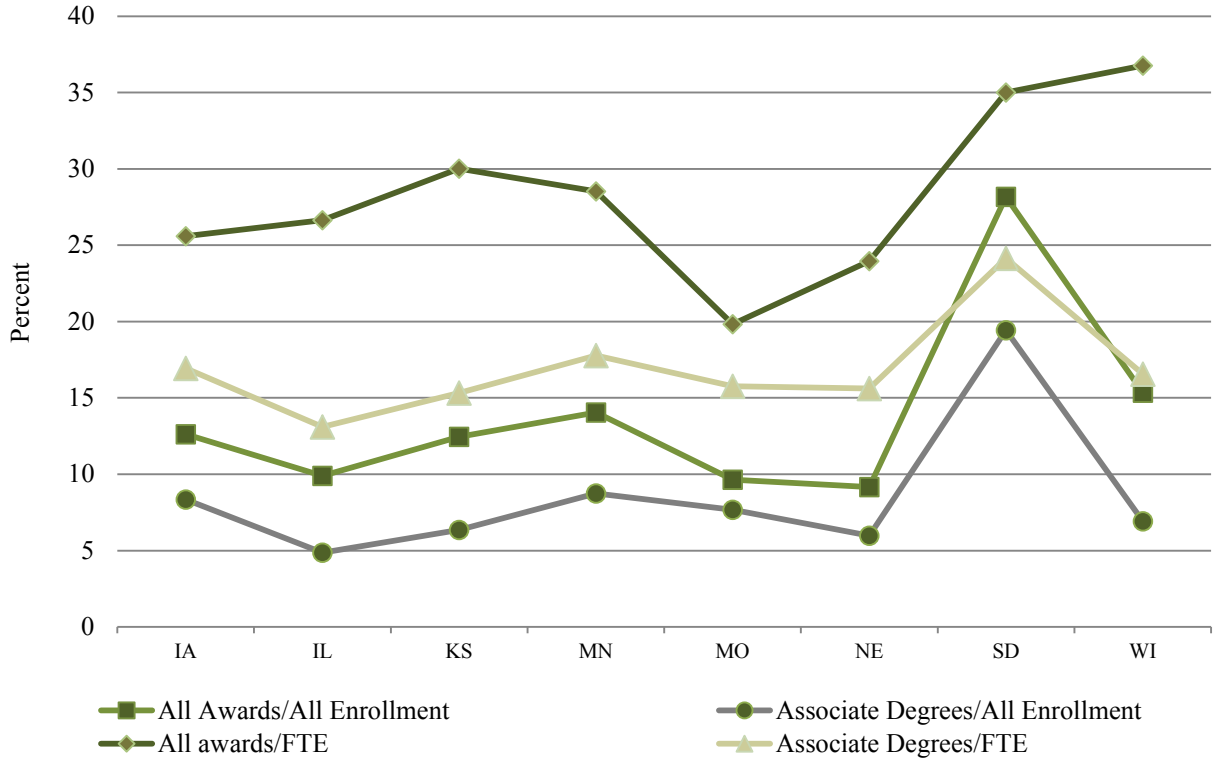
*Source: U.S. Department of Education, Integrated Postsecondary Education Data Systems, 2013.

**Figure 6-7: Credit Student Awards by CTE Program and Racial/Ethnic Minority: 2014**



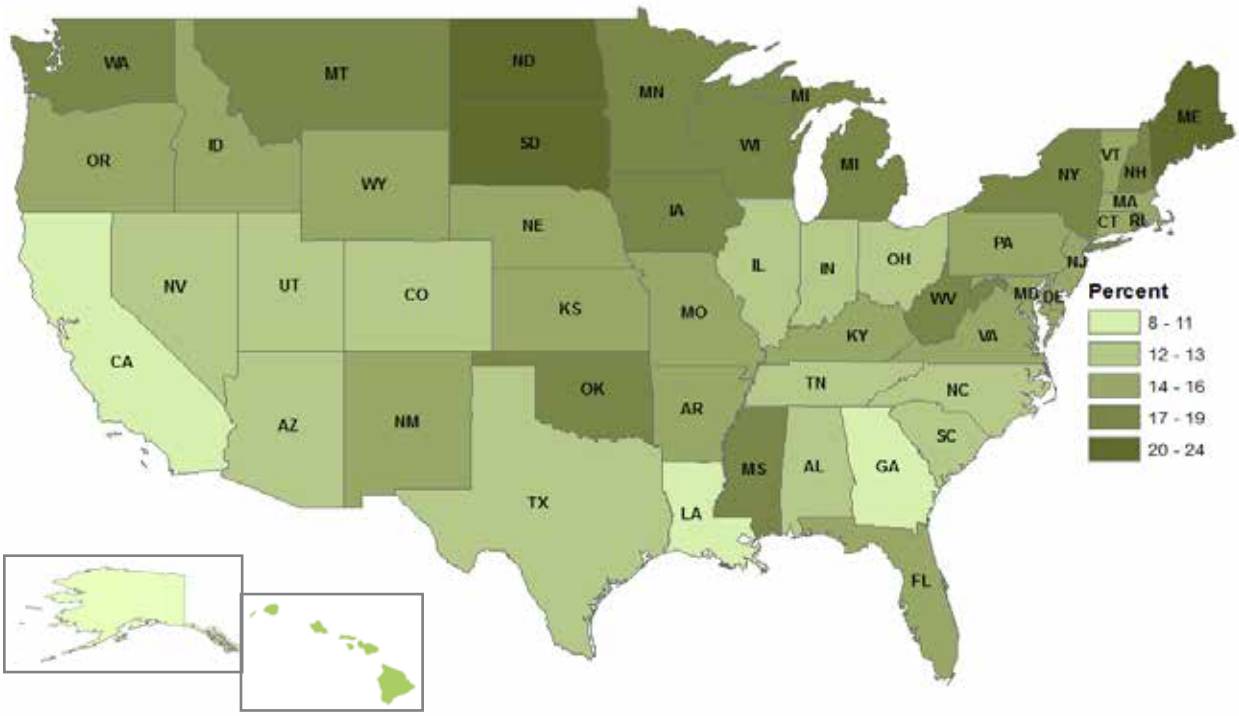

Note: There were no awards in Government and Public Administration.

## Figure 6-8: Credit Student Award Rates, Contiguous States: 2013



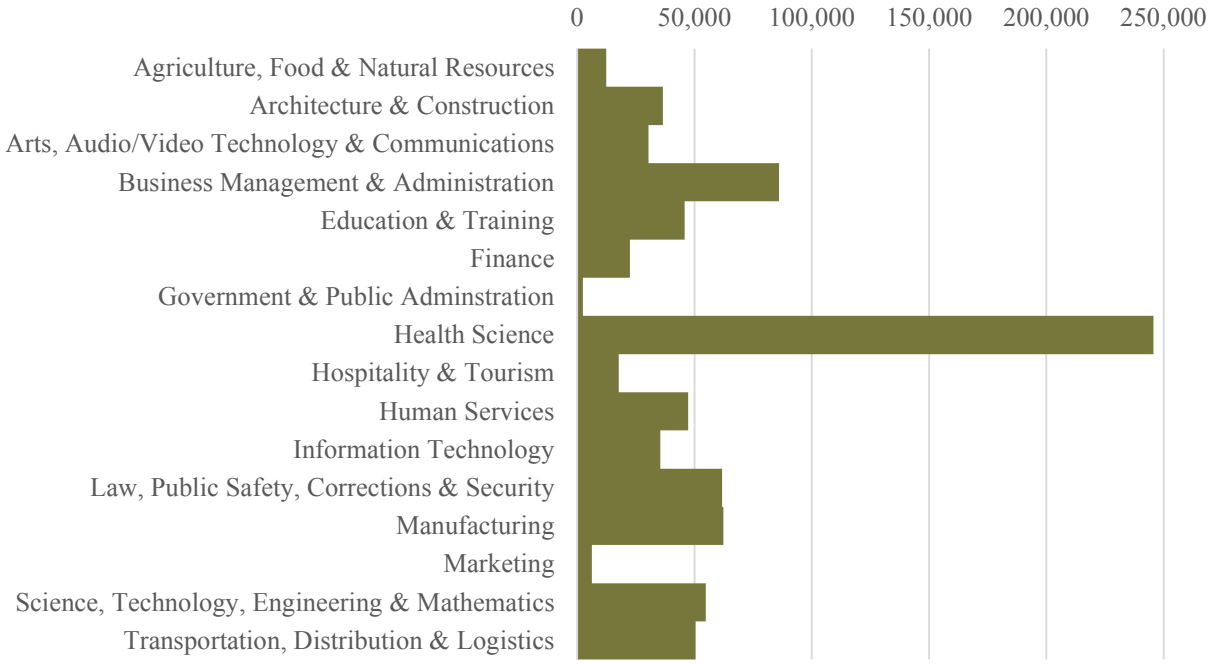

SOURCE: U.S. Department of Education, Integrated Postsecondary Data Systems, 2013.

## Figure 6-9: Number of 2-year Degrees per FTE Rate, 2-year Public Institutions: 2013




SOURCE: U.S. Department of Education, Integrated Postsecondary Data Systems, 2013.

**Figure 6-10: U.S. Credit Student Awards by CTE Program: 2013***




*SOURCE: U.S. Department of Education, Integrated Postsecondary Data Systems, 2013 and Perkins Collaborative Resource Network, 2013.

# 7 Credit Programs

Credit programs provided by Iowa's 15 community colleges fall under two general categories: arts and sciences (A&S) and career and technical education (CTE). The A&S programs consist of a college parallel (transfer) course of study designed to provide a strong general education component to satisfy the lower-division liberal arts and science requirements for a bachelor's degree. They consist of 60 to 64 semester credit hours designed to prepare students for transfer into four-year colleges or universities with junior standing. These programs culminate in an Associate of Arts (AA) or an Associate of Science (AS) degree, the latter consisting of at least 20 math and science credits.

In contrast, community college CTE programs are primarily designed to prepare students for immediate employment in specific occupations requiring less than a four-year degree. These programs culminate in Associate of Applied Arts (AAA), Associate of Applied Science (AAS), Associate of Science-Career Option (ASCO), and Associate of Professional Studies (APS) degrees, as well as diplomas and certificates. The ASCO award type was intended for transfer to a related baccalaureate program or immediate employment; however, in 2013, the Department promulgated administrative rules to phase out this award and introduce an alternative in the form of the Associate of Professional Studies. The APS maintains an emphasis on technical training, but has stringent requirements placed on its 62-68 semester credit hours, along with a minimum of three required articulation agreements to ensure technical courses transfer directly into related baccalaureate programs. Of the 12 colleges with ASCO programs, only one has transitioned into APS degrees for FY 2015. Since the ASCO programs must be phased out by August 2016, it is expected that more colleges will pursue this option; however, the majority are transitioning these programs into AA, AS, or AAS degrees.

Iowa community colleges offer CTE programs in each of the 16 National Career Clusters® (Figure 7-1), each representing a distinct grouping of occupations and industries based on the knowledge and skills required.[1] In 2014, there were 1,463 CTE programs of study offered statewide, with the majority being in Agriculture, Business, Health Sciences, Information Technology, and Engineering Technology/Manufacturing. Table 7-1 on the next page lists the most popular CTE programs offered in 2014, based on the number of community colleges with an active program in each area.

[1]See http://www.careertech.org/career-clusters/glance/at-a-glance.html for additional information regarding the Career Cluster® Framework.

**Figure 7-1: National Career Clusters®**

### Table 7-1: Most Popular CTE Programs Offered by Iowa Community Colleges in 2014

**Offered by all 15 Community Colleges**

- *Accounting/Bookkeeping*
- *Agriculture*
- *Automobile/Automotive Technology*
- *Dental Assisting or Dental Hygiene*
- *Information Technology*
- *Registered Nursing*
- *Licensed Practical Nurse Training*

**Offered by at least 11 Community Colleges**

- *Administrative Assistant and Secretarial Science*
- *Autobody/Collision and Repair Technology*
- *Business Administration and Management*
- *Child Care Provider/Assistant*
- *Criminal Justice/Police Science*
- *Electrical, Electronic and Communications Engineering Technology*
- *Emergency Medical Technology (EMT Paramedic)*
- *Energy Management and Systems Technology*
- *Industrial Mechanics and Maintenance Technology*
- *Machine Tool Technology/Machinist*
- *Welding Technology/Welder*

## Credit Program Approval and CurricUNET

Community colleges in Iowa are required to obtain approval from the Iowa Department of Education for all credit programs. Each of the state's 15 community colleges is approved to offer AA and AS degree programs, which are recorded under a single "Liberal Arts and Sciences/Liberal Studies" Classification of Instructional Programs (CIP). The specific details of these programs regarding the composition of general education and elective courses are maintained at the college level and are not accessible through the statewide database. However, state approval and storage of CTE programs is mandated by Iowa Code and therefore follows a more structured process that is managed by the Department through an online platform called CurricUNET.

The statewide implementation of CurricUNET's program and course management system has greatly enhanced and expedited the program approval, modification, and archival processes. This web-based system facilitates course and program development and approval internally for each college, as well as approval and storage at the state level. The website is also maintained for public access, offering information regarding courses and CTE programs offered by each of Iowa's community colleges. This public site is continually being improved to make it easier to navigate and more informative.

## New Credit CTE Programs

Over the last five fiscal years, an annual average of 20.6 new CTE programs have been approved for Iowa's community colleges. Fiscal year 2014 closely mirrored that trend with 21 new program award options approved for implementation at eight community colleges. Table 7-2 provides a listing of the specific programs approved with additional award options listed in parentheses.

These new programs spanned nine of the 16 Career Clusters®. Manufacturing accounted for 38.1 percent of the new award options, due primarily to the statewide acquisition of the Iowa Advanced Manufacturing Grant, to help address the state's need for certified welders and industrial technicians. Figure 7-3 provides the distribution of the new programs by percentage. The 13 non-manufacturing award options were distributed among Agriculture, Food and Natural Resources; Architecture and Construction; Arts, A/V Technology and Communications; Business, Management and Administration; Health Science; Information Technology; Science, Technology, Engineering and Mathematics; and Transportation, Distribution and Logistics.

Of the 21 new CTE programs, 12 (57.2 percent) offered an associate degree, including 11 associate of applied science (AAS) and one associate of applied arts (AAA) degrees. In addition, there were four (19.0 percent) diplomas, including two stand-alone programs and two options within AAS programs, and five (23.8 percent) certificate programs, including four stand-alone programs and one option. These percentages are illustrated in Figure 7-2.

### Figure 7-2: New Credit Career and Technical Education Programs by Award Type: FY 2014

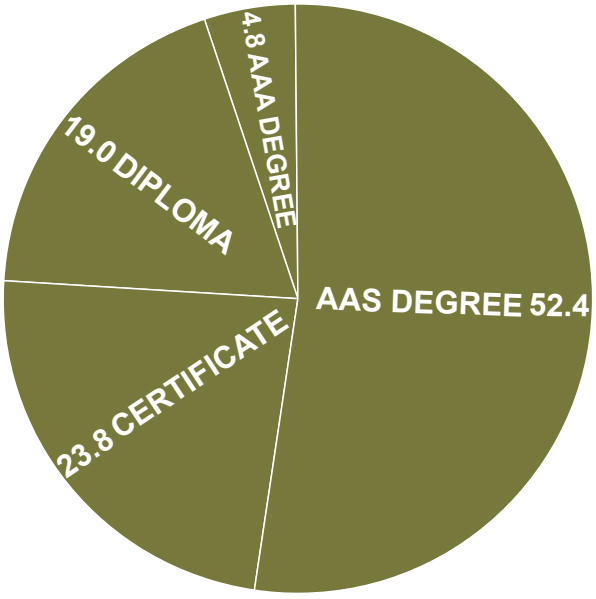


**Table 7-2: New CTE Programs Approved for Implementation during FY 2014**

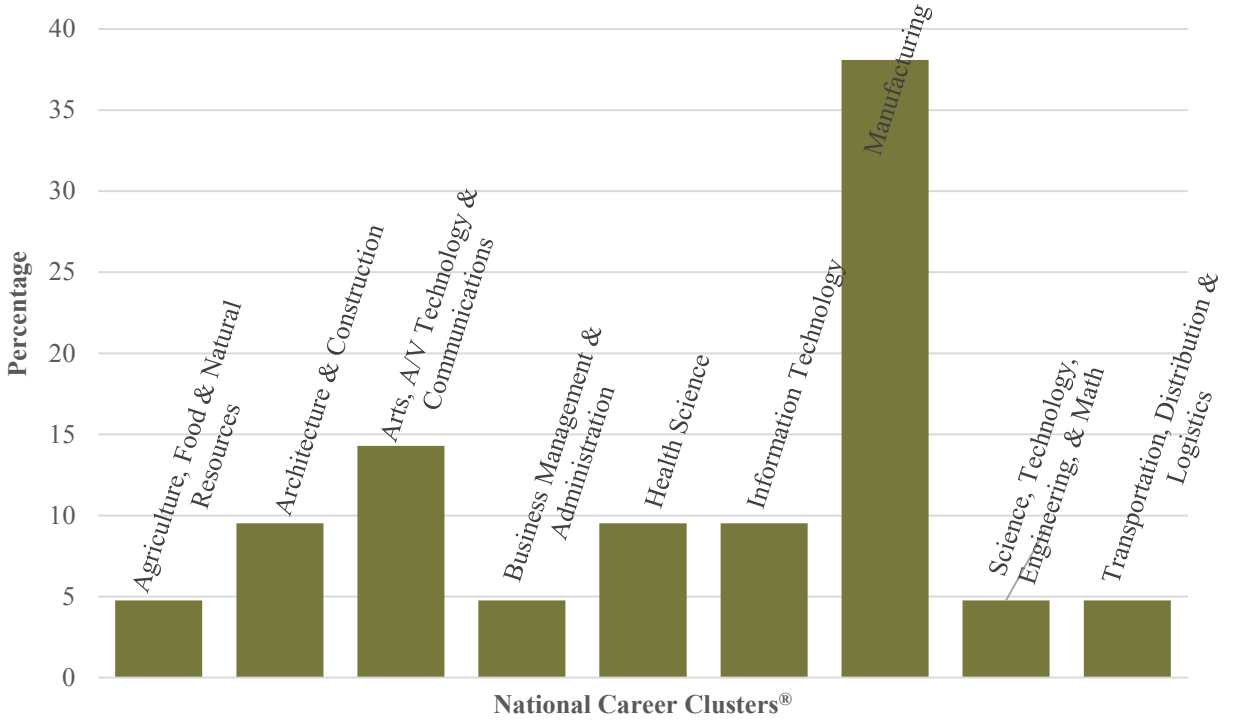
| College | Local Program Title | National Career Clusters |
|---|---|---|
| North Iowa Area | Management | Business Management and Administration |
| North Iowa Area | Diesel Mechanics Technology/Technician | Transportation, Distribution and Logistics |
| Iowa Lakes | Game Design and Development | Arts, A/V Technology and Communications |
| Iowa Lakes | Heating, Ventilation, and Air Conditioning Technology | Architecture and Construction |
| Iowa Lakes | Water Quality Technology | Agriculture, Food and Natural Resources |
| Northwest Iowa | Advanced Welding Technology | Manufacturing |
| Iowa Valley | Gunsmith Technology | Manufacturing |
| Hawkeye | Digital Mass Media | Arts, A/V Technology and Communications |
| Hawkeye | Sustainable Construction and Design | Architecture and Construction |
| Hawkeye | Construction/Heavy Equip/Earthmoving Equipment Operations | Manufacturing |
| Kirkwood | Automation and Instrumentation Technologies | Science, Technology, Engineering and Mathematics |
| Iowa Western | Technical Music | Arts, A/V Technology and Communications |
| Iowa Western | Nursing Assistant | Health Science |
| Iowa Western | Sterile Processing | Health Science |
| Iowa Western | System Administration | Information Technology |
| Iowa Western | Programming Certificate | Information Technology |
| Southwestern | Industrial Maintenance Technology (AAS and Diploma) | Manufacturing |
| Southwestern | Welding Technology (AAS, Diploma, and Certificate) | Manufacturing |

## Maintaining an Accurate CTE Program Database

In addition to developing and submitting new programs for approval, Iowa community colleges may request modifications to active programs, program deactivation, or program classification changes. The latter may involve CIP changes, which must be handled carefully in order to crosswalk the enrollment for annual reporting. A somewhat easier change can be made regarding an ITSO code, which is used to code a program's Instructional Level, Type, Special Emphasis, and Object and Purpose. CurricUNET has made it much easier for Department consultants to analyze all program codes and, if necessary, initiate corrections to properly classify programs in accordance with their career focus and instructional or delivery attributes.

In FY 2014, Iowa's 15 community colleges offered 1,463 CTE program award options. The 690 two-year associate degrees (AAA, AAS, and ASCO) range from 60 to 86 credits, comprised of at least 12 general education credits from three areas (Communication, Social Studies/Humanities, and Science/Math) and at least 50 percent technical core coursework. The 404 one-year diploma programs range from 15 to 48 credits, including at least three general education credits among their heavy technical emphasis. The 369 certificate programs range from 1 to 48 technical credits with no general education requirement. The advent of CurricUNET has made it easy to check these programs for compliance regarding the number of credits, number of weeks, average number of credits per term, general education categories, and technical core coursework. Colleges can easily monitor their compliance by accessing color-coded reports that indicate areas of non-compliance in red font, and areas that violate state recommendations, but are not out of compliance with Iowa Code, in yellow font. Colleges can then submit program modifications to correct compliance issues.

**Figure 7-3: New CTE Programs by National Career Clusters®: 2014**




In addition to the 21 new program award options submitted for approval, Iowa's community colleges submitted 22 Notice of Intent proposals to offer new programs, 342 program modifications, 26 program deactivations, and one CIP/ITSO Reclassification for implementation during FY 2014. Getting through this volume of requests in their established 30- to 90-day timeframes is manageable because of the workflow, notification, and archival processes offered through CurricUNET. In fact, the colleges have come to expect that a program modification request will be processed in less than two weeks and a new program approved in less than a month, including its mandatory 14-day peer review. Not only has CurricUNET expedited these review/approval processes, it has facilitated bringing existing programs into compliance, managing the common course numbering system, improving communication between IDOE consultants and college program developers, and motivating conversations about ways to improve the access to and resources available via the Department's website and CurricUNET.

# 8 Non-Credit Enrollment and Programs

Non-credit programs contain a variety of instructional offerings, including personal and academic basic skill development, skill development for preparation of individuals entering the workforce, technical courses directly related to specific industry-based work opportunities, and courses to pursue special interests.

In FY 2014, 241,500 individuals participated in non-credit programs and courses. Enrollment has dropped 2.05 percent since last year with an average decrease of 2.7 percent since 2010 (Figure 8-1). The same pattern is applicable to contact hours, with a decrease of 4.32 percent since last year. Since 2010, there has been an average decline of 3.9 percent (Figure 8-2).

**Non-Credit Enrollment**

Number of Students: 241,500 — Declined since last year: 2.1%

Contact Hours: 7,003,805 — Contact Hours Per Student: 29.0

Down 4.3% since 2013 — Down 0.7% since 2013

## Non-Credit Courses and Programs

Enrollment in non-credit courses is disaggregated into several program categories and included 425,431 courses in 2014, only a slight decrease of 0.73 percent from the previous year. (Figure 8-3). The largest of these categories, 51.65 percent in 2014, consisted of non-credit courses designed to enhance students' employability or academic success. If adult basic skills, adult learning, and family/individual development and health were included in the definition of enhancing students' employability and academic success, this would total 60.17 percent of course offerings in 2014. The second largest category of non-credit enrollment included recertification and licensing (16.23 percent). Slightly fewer were courses designed for state- or federally-mandated, state-recognized, or court-ordered or referred courses (16.13 percent of all programs). Courses within mandated, or court-ordered courses include drinking drivers', driver improvement (DIP), community rehabilitation programs, used auto dealer training, mine safety and health, along with various vehicle operators training.

**Figure 8-1: Fiscal Year Non-Credit Enrollment: 2004-2014**

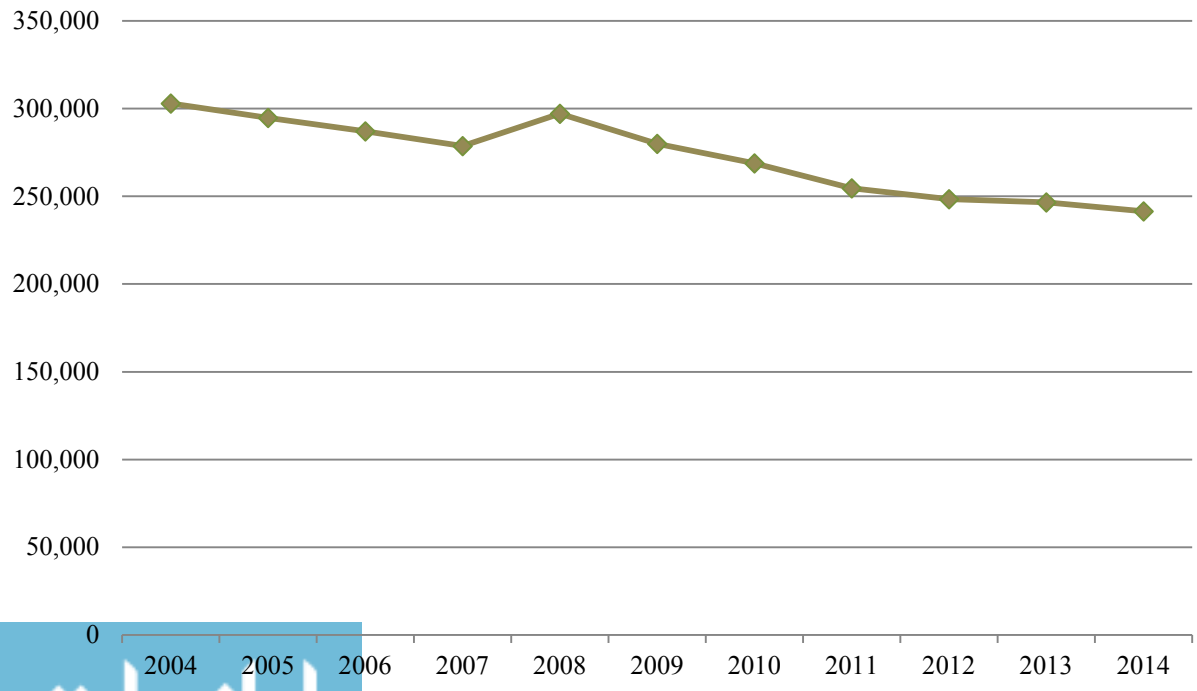


**Figure 8-2: Fiscal Year Non-Credit Contact Hours: 2004-2014**

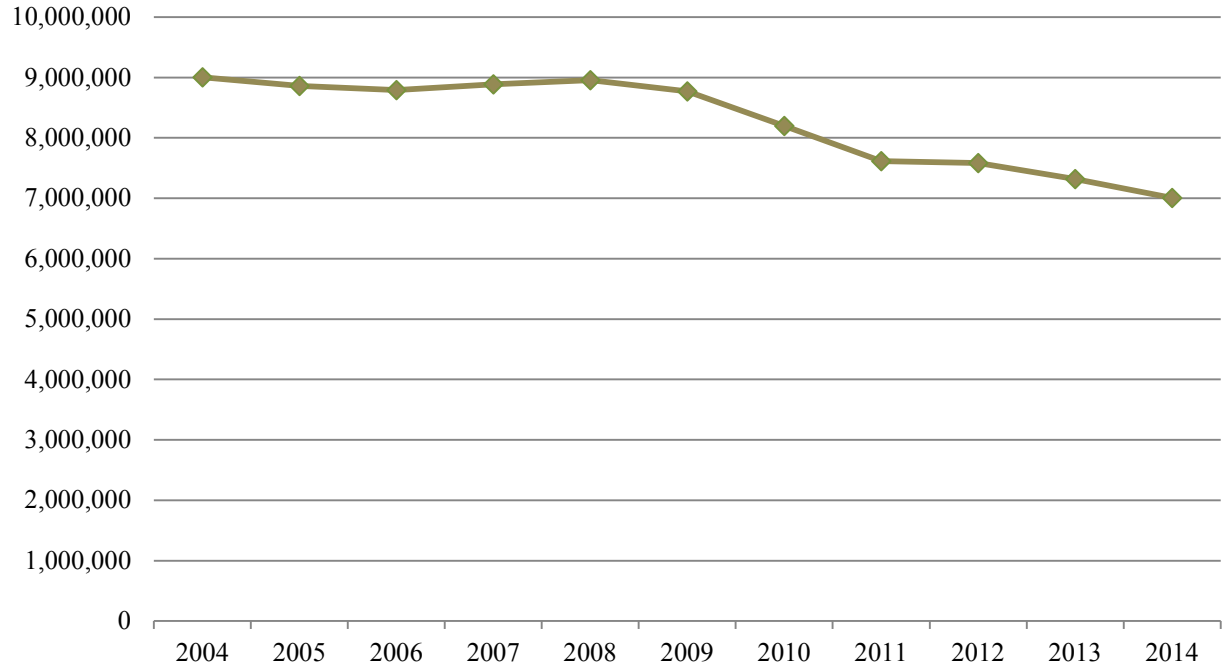
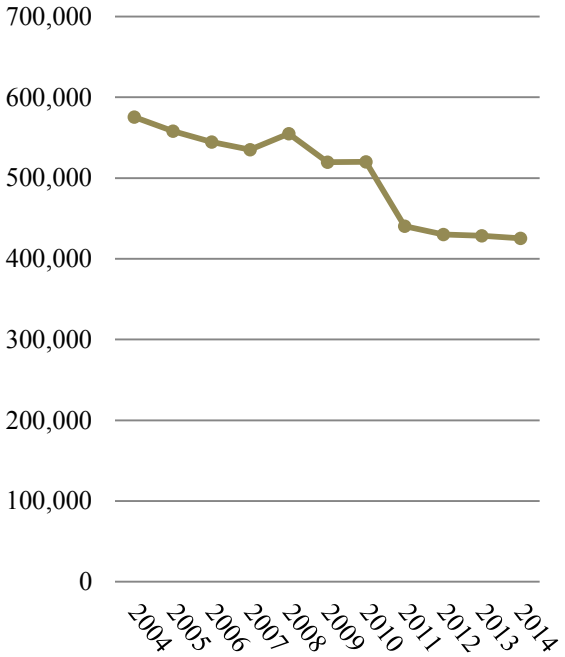



**Figure 8-3: Non-Credit Courses Delivered: 2004-2014**




### Gender and race/ethnicity of Non-Credit Programs Participants

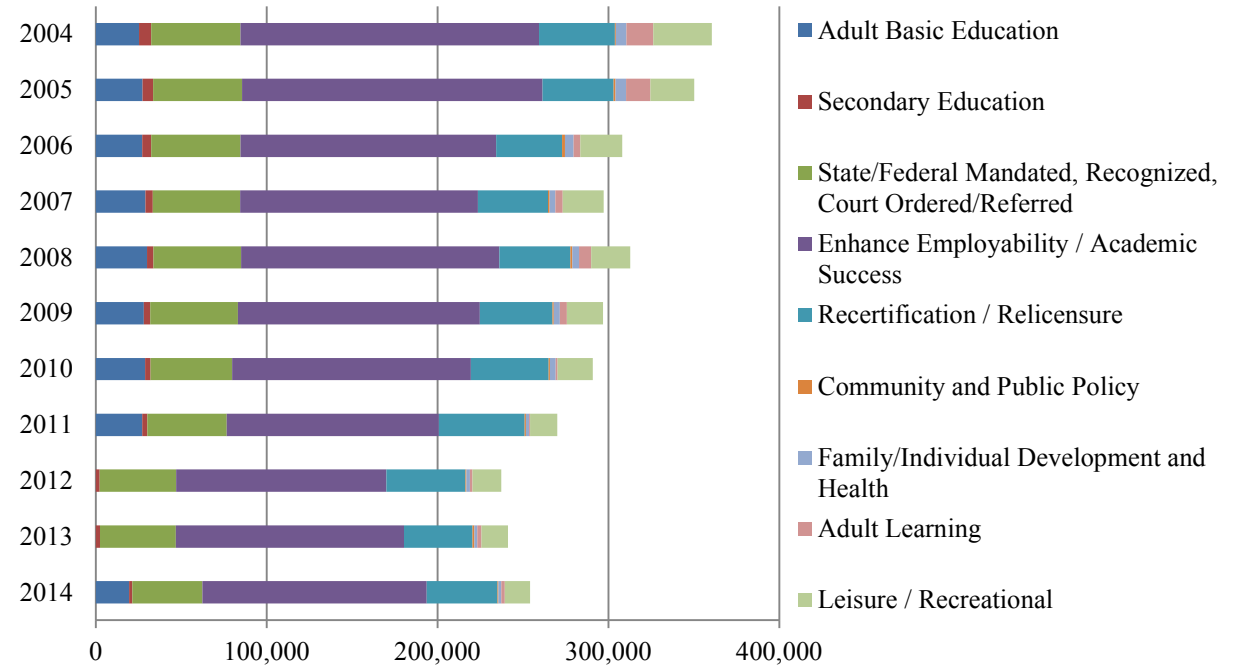
Historically, females have composed most of community college non-credit enrollment. Conclusions based on reported gender data should be made cautiously as 37,376 enrollees, or 15.3 percent, were reported without a gender category in FY 2014. Of those students with reported gender, 49.9 percent were men, and 50.1 percent were women (Figure 8-5).

While 57.1 percent of the total non-credit participants did not report ethnicity and race, of those who did, the majority were Whites (83.3 percent); 6.8 percent identified themselves as Hispanic or Latino, 6.3 percent as Black, 1.9 percent as Asian, 0.7 percent as American Indian, 0.1 percent as Hawaiian/Pacific Islander, and 0.8 percent reported more than one race (Figure 8-6).

## Non-Credit Skill Enhancement Enrollment by Career Clusters™

Skill enhancement courses in the non-credit reporting category are designed to provide short-term programs and non-credit courses for the specific purpose of training persons for employment and upgrading and retraining the skills of persons presently employed. Courses and programs designated as short-term preparatory are also included within this category. Skill enhancement courses include many options that align with the 16 national career clusters, the framework for organizing and delivering career and technical education programs. In FY 2014, 131,291 students were enrolled in skill enhancement courses with 126,605 reported in one of the 16 national career clusters. Colleges reported over 2,297,891 contact hours with only 44,334, or 1.9 percent, of the total contact hours reported as not taken within one or more of the national career clusters. Non-credit

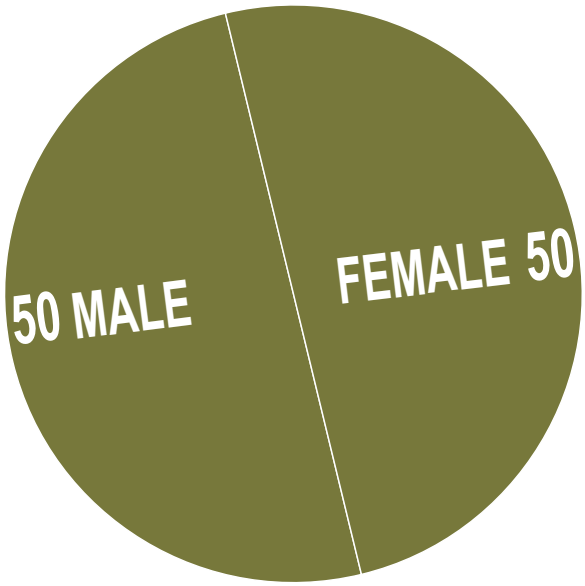
**Figure 8-4: Enrollment by Program Type: 2004-2014**




enrollment at Iowa community colleges, distributed among national career clusters, contains a high percentage of student contact hours in health sciences (36.2 percent), transportation, distribution and logistics (25.2 percent), business, management and administration (8.8 percent), and manufacturing (8.4 percent). For a comparison with credit student enrollment, see Section 3, Fiscal Year Credit Enrollment and Demographics.

Over 63,200 students were enrolled in non-credit health science courses in FY 2014. This is a 2.7 percent decrease since last year and represents 49.92 percent of the total enrollment for skill enhancement. Colleges reported 11.50 percent of enrollees in business, management, and administration courses. A total of 9.59 percent were enrolled in government and public administration, followed by 5.04 percent in transportation, distribution and logistics, 4.56 percent in law, public safety and security, 2.95 percent in agriculture, food, and natural resources, 2.43 percent in in architecture and construction, and 2.22 percent of enrollees in manufacturing. (Figures 8-7 and 8-8).

**Figure 8-5: Non-Credit Enrollment by Gender**




## State and Federally Mandated Programs

As previously stated, non-credit courses include state- or federally-mandated, court-ordered or referred courses, and programs that are designed to meet legislated or licensing requirements as defined in the Code of Iowa.

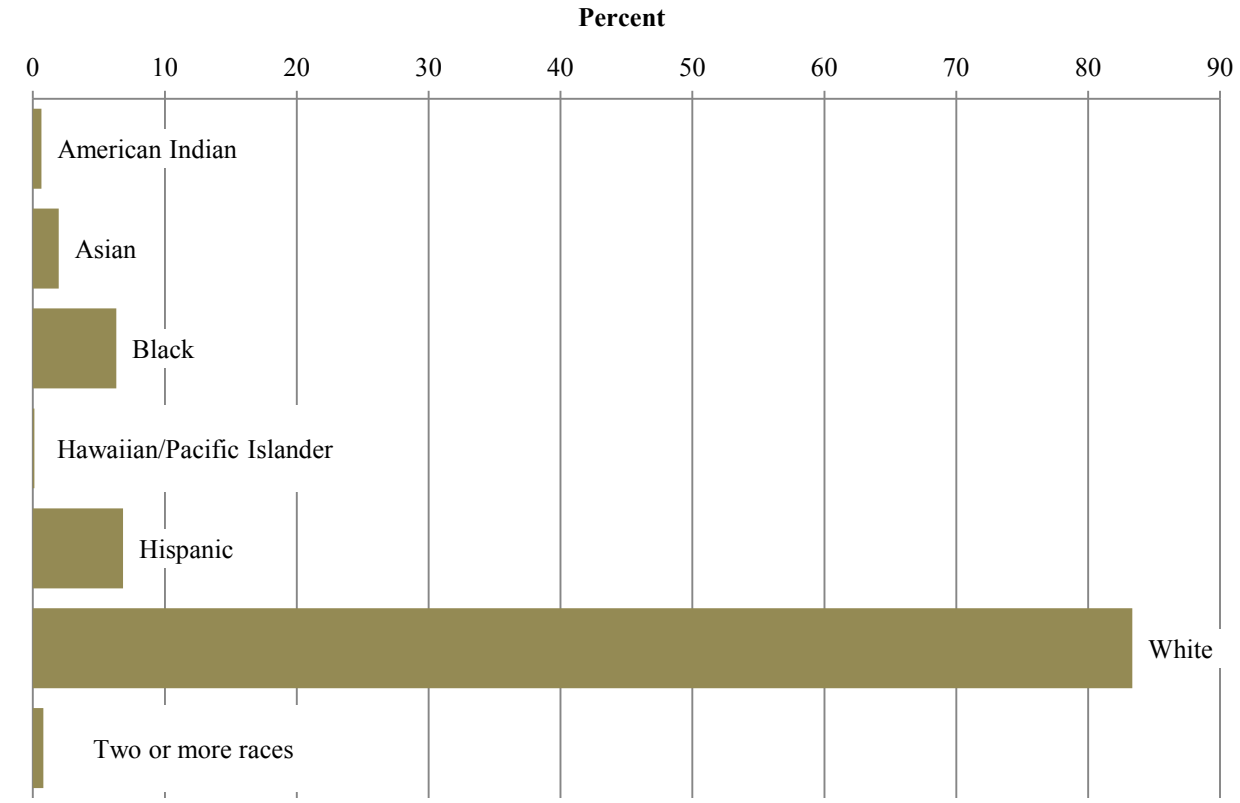
State and federally mandated coursework enrollment declined by 7.6 percent from the previous year (Figure 8-9). The average annual decrease in enrollment in this category from 2010 to 2014 was 5.7 percent.

State- and federally-mandated programs vary in their scope and level of enrollment, as displayed in Figure 8-11.

### Non-Credit Mine Safety and Health

The Iowa Department of Education administers a federal grant from the U.S. Department of Labor and

## Figure 8-6: Non-Credit Enrollment by Race/Ethnicity




## Figure 8-7: Non-Credit Skill Enhancement Enrollment by Career Cluster

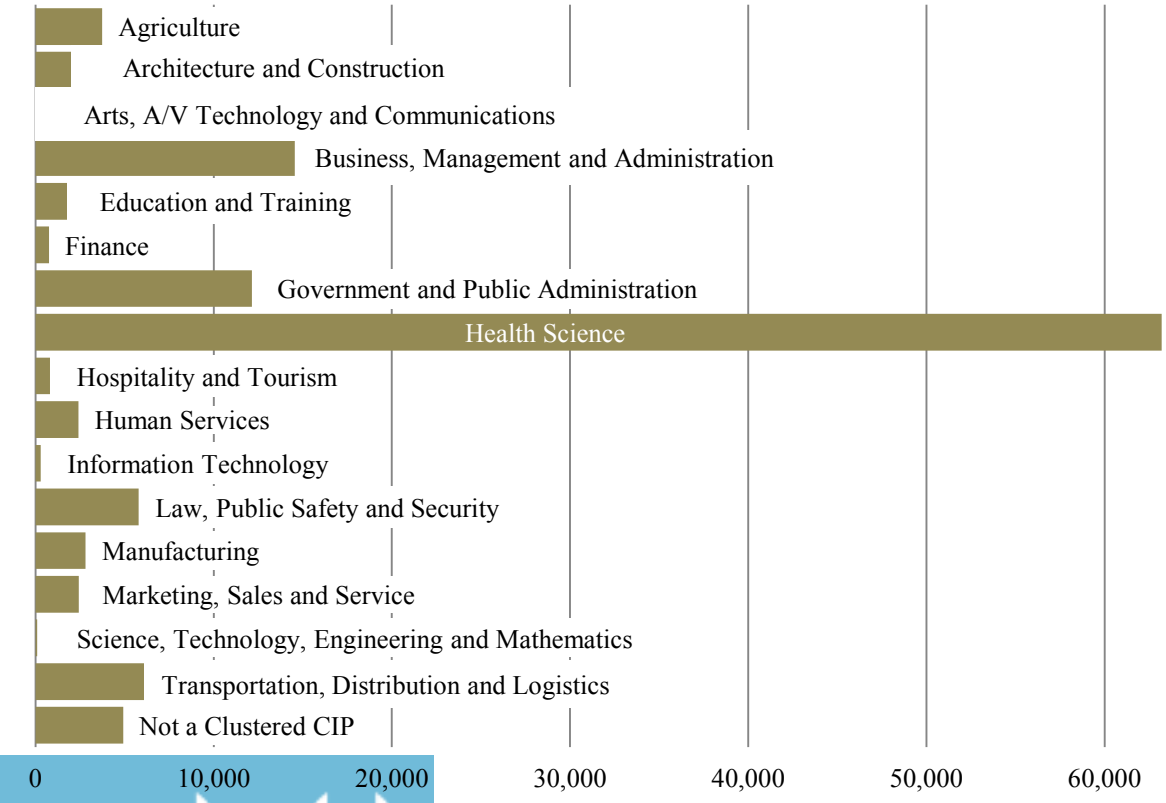


**Figure 8-8: Non-Credit Skill Enhancement by Career Cluster Contact Hours**

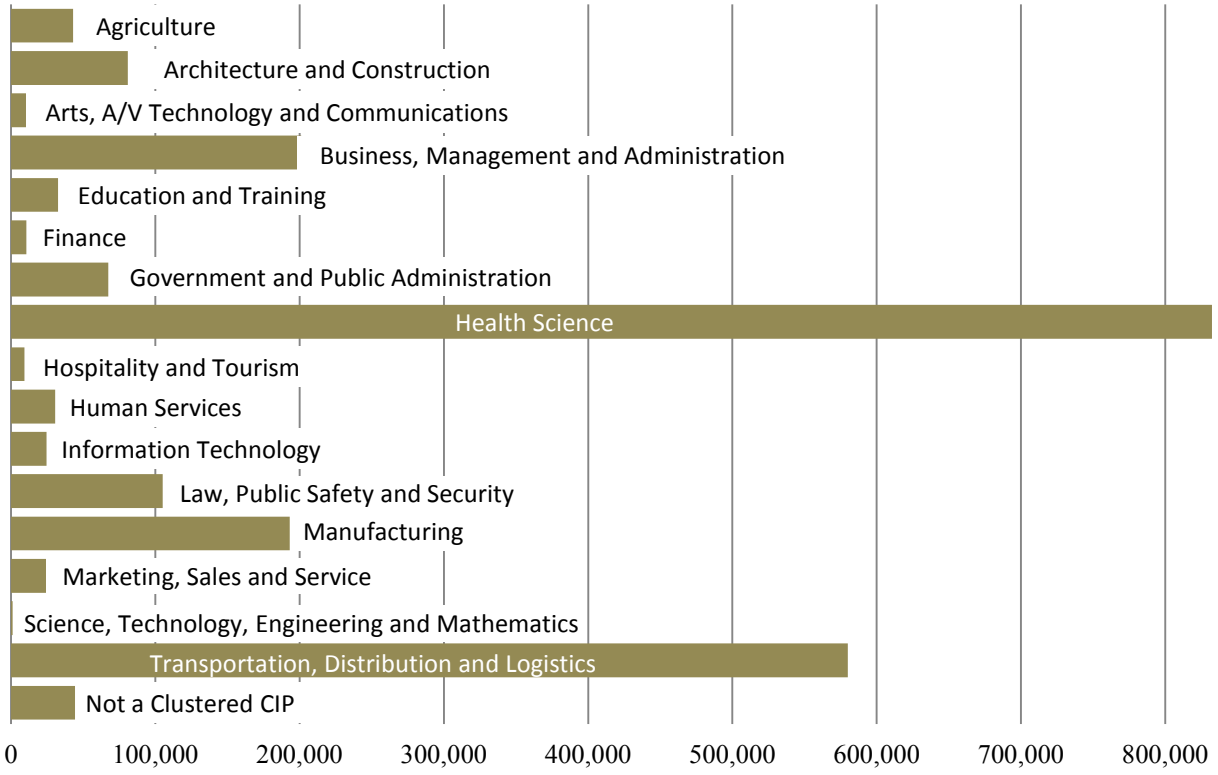
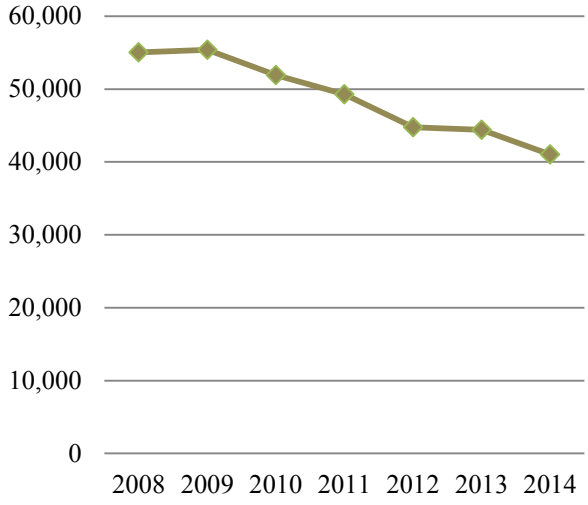
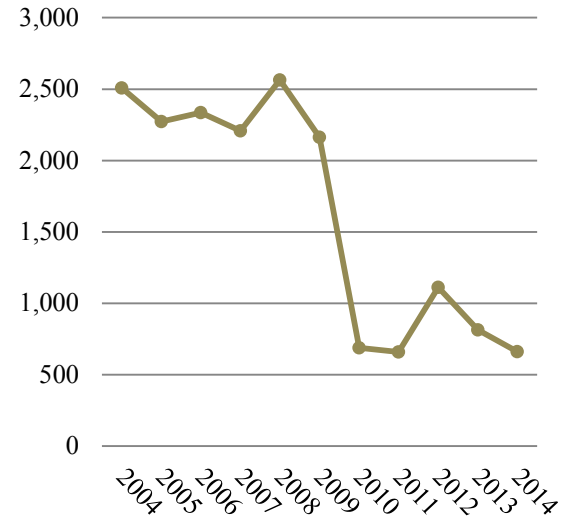



**Figure 8-9: State and Federally Mandated, Recognized, Court Ordered or Referred Enrollment: 2008-2014**




Mine Safety and Health Administration (MSHA), which provides funds for training and services delivered to mine owners, operators, and contractors in the state of Iowa. Enrollment in MSHA programs between 2010 and 2014 has dropped by one percent with 661 students enrolled in FY 2014 (Figure 8-10).

**Figure 8-10: MSHA Enrollment: 2004-2014**




## Non-Credit Drinking Drivers (DUI) Course Enrollment

The Iowa course for drinking drivers is the state-mandated course for drivers convicted of driving while under the influence of drugs and/or alcohol. Iowa community colleges and private providers, licensed through the Iowa Department of Public Health, offer the state-approved program. Enrollment in drinking driver

**Figure 8-11: State/Federal Mandated, Recognized, Court Ordered/Referred Programs**

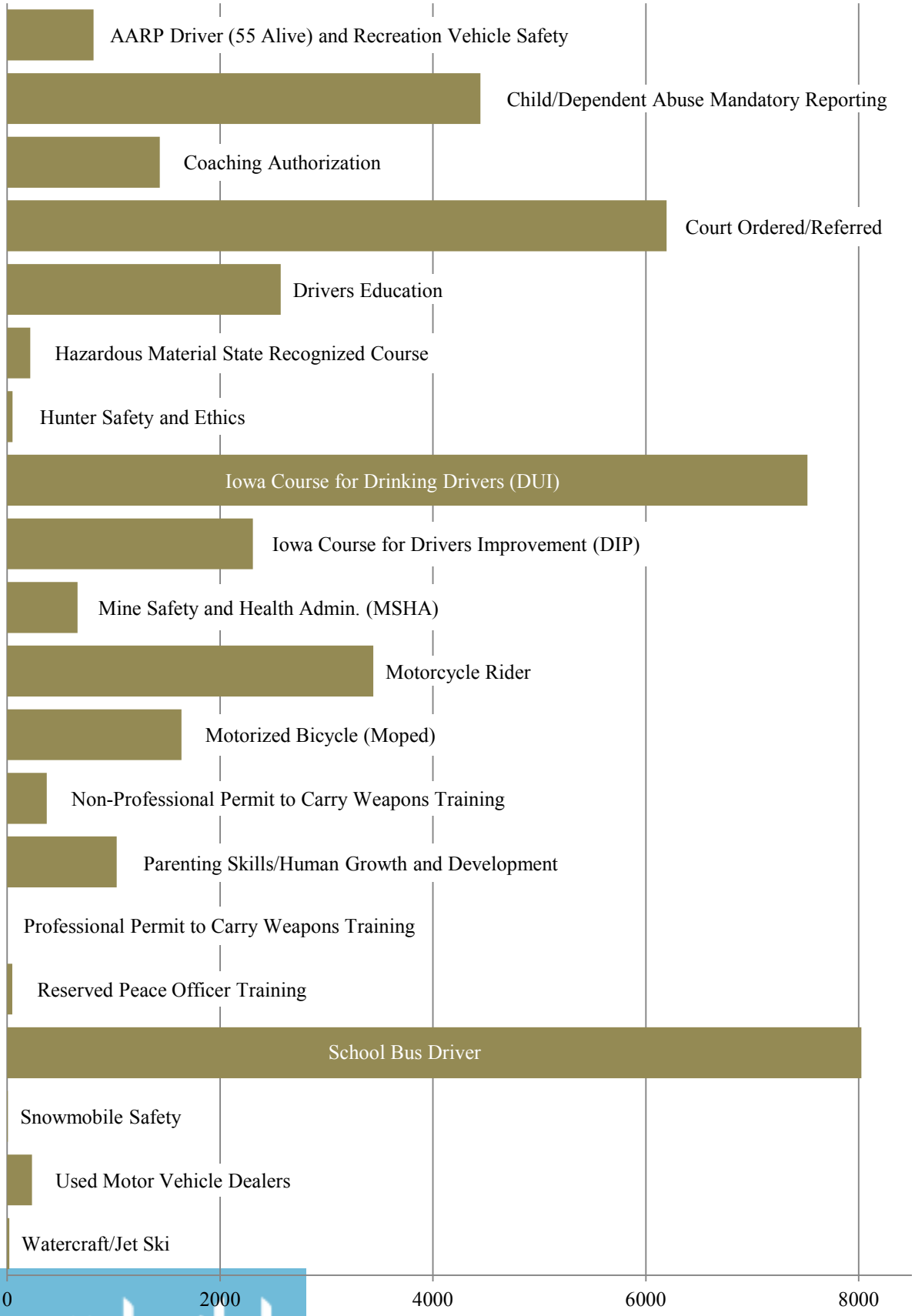


**Figure 8-12: Iowa Drinking Driver Course Enrollment: 2008-2014**

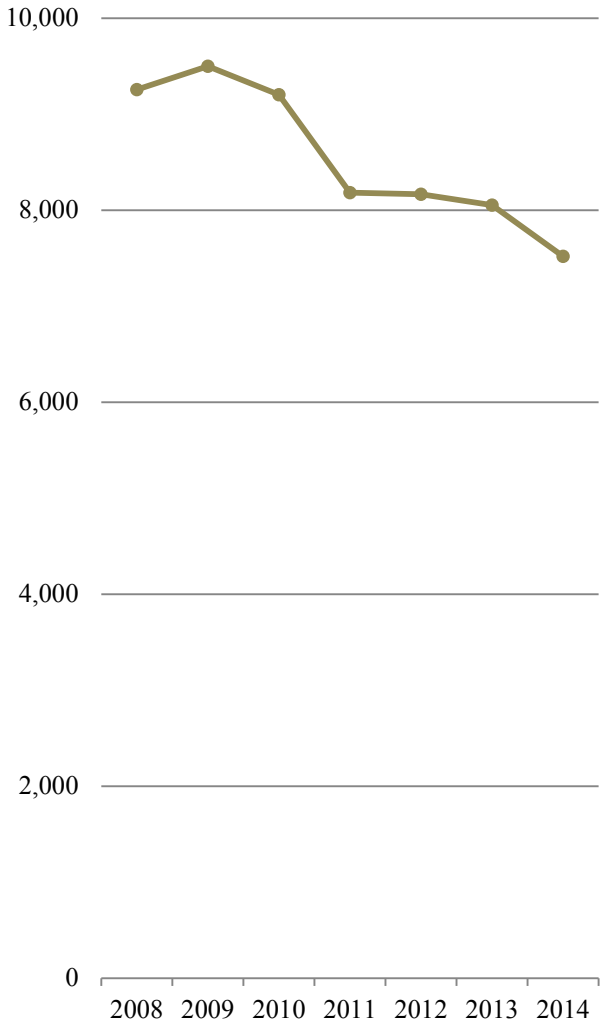
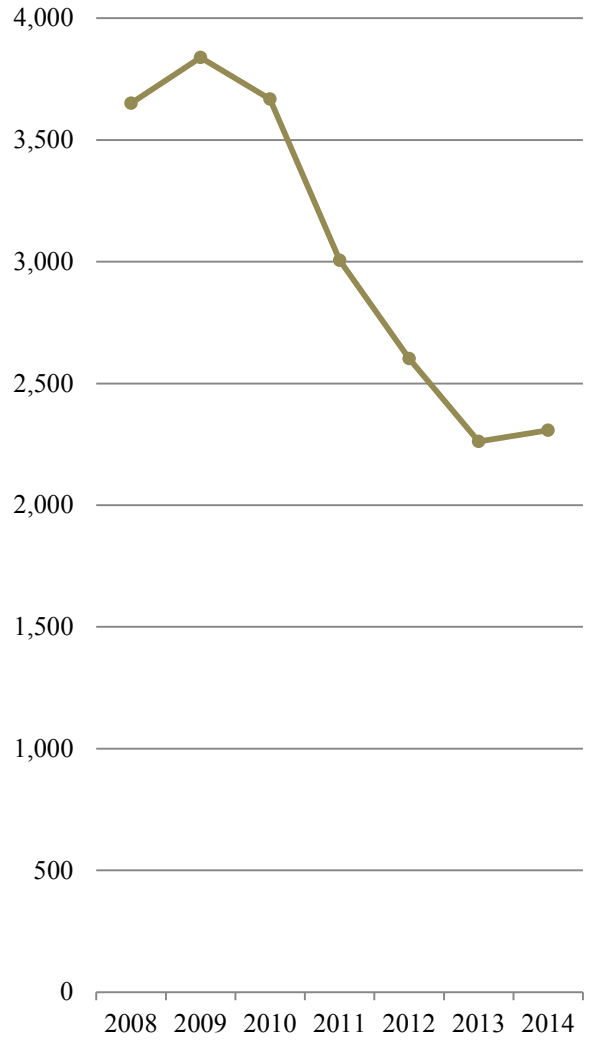



**Figure 8-13: Iowa Driver Improvement Enrollment: 2008-2014**




education courses decreased an average of 4.9 percent annually between 2010 and 2014, with a corresponding 5.4 percent decline in contact hours (Figure 8-12).

### Non-Credit Driver Improvement (DIP) Enrollment

Iowa course for driver improvement (DIP) is the state mandated course designed for persons who have committed a serious violation of a motor vehicle law in Iowa. Iowa community colleges provide the program with assistance from the Iowa Department of Transportation. Despite an increase in enrollment for 2014 of 1.95 percent, enrollment decreased an average of 10.9 percent annually from FY 2010 to FY 2014 (Figure 8-13). Contact hours for the driver improvement courses also decreased. From the previous year, there was a 2.78 percent increase in contact hours but a 10.8 percent average decrease between FY 2010 and 2014.

## Recertification and Licensing

The coursework under this category is designed for individuals employed in occupations that may or may not require a four-year degree and whose positions require them to be re-certified or licensed to maintain employment (e.g., chemical application, insurance). The recertification or relicensing is coursework that does not lead to an additional degree. Of the 41,265 students enrolled in recertification and licensing coursework in 2014, 79.8 percent were in healthcare related courses, including practical nursing, EMT paramedics, and allied health services.

Overall, recertification and licensing enrollment increased by 2.89 percent in 2014 from the previous year. In this category, average annual enrollment between 2010 and 2014 declined by 2.7 percent (Figures 8-14 and 8-17).

**Figure 8-14: Recertification and Licensing Enrollment: 2008-2014**

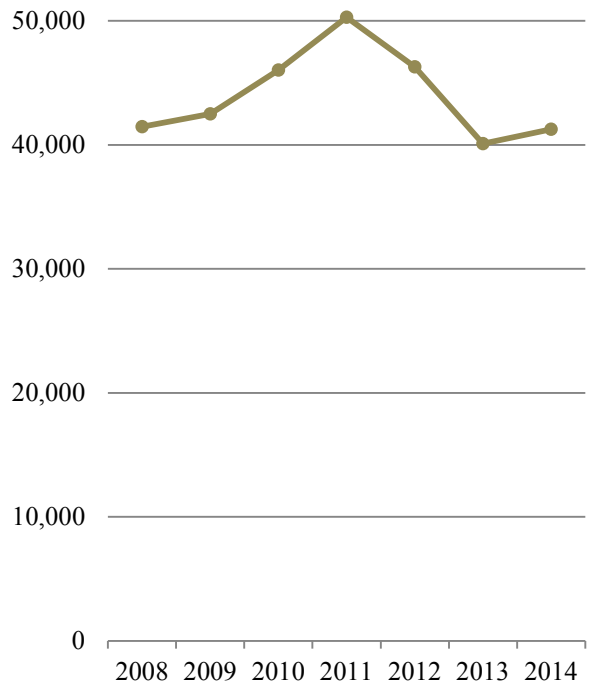
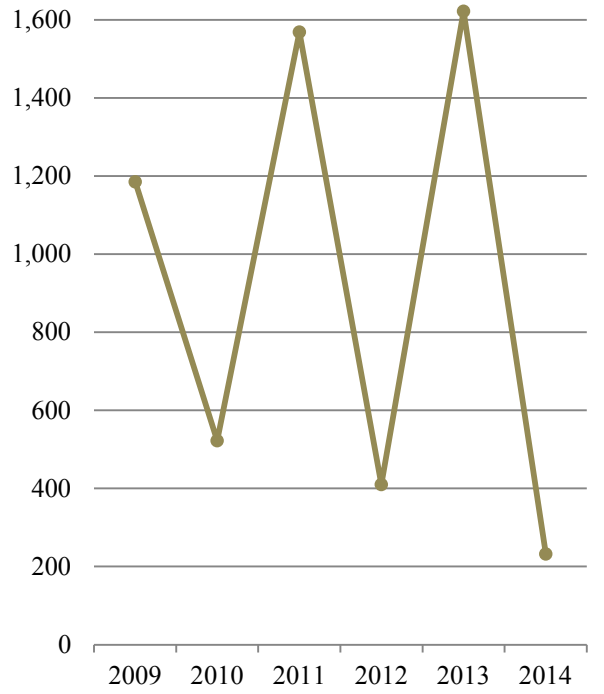



**Figure 8-15: Used Motor Vehicle Dealer Education Enrollment: 2009-2014**




### Used Motor Vehicle Dealer Education

The Used Motor Vehicle Dealer coursework ensures that pre-licensing requirements, established in Iowa Code (Chapter 21) in 2009, are met for used auto dealers in Iowa. The curriculum is delivered through continuing education departments at Iowa community colleges. The number of students enrolled in used auto dealer courses is cyclical as illustrated in Figure 8-15. Fiscal year 2014 resulted in a 85.7 percent decrease with 232 students enrolled; however, the average annual enrollment has decreased 18.4 percent from 2010 to 2014. Contact hours decreased an average of 15.7 percent from 2010 to 2014, consistent with the pattern of the enrollment changes between program years.

## Community and Public Policy

Community and Public Safety Policy is a program that focuses on the systematic analysis of public policy issues and community decision processes. Classes include instruction in the role of economic and political factors in public decision-making and policy formation and microeconomic analysis of policy issues. Enrollment in Community and Public Safety Policy programs for fiscal year 2014 decreased by 43.3 percent with 562 enrolled. Overall there has been an average decrease of 2.5 percent annually from 2010 to 2014 (Figure 8-16).

**Figure 8-16: Community and Public Policy Enrollment: 2009-2014**

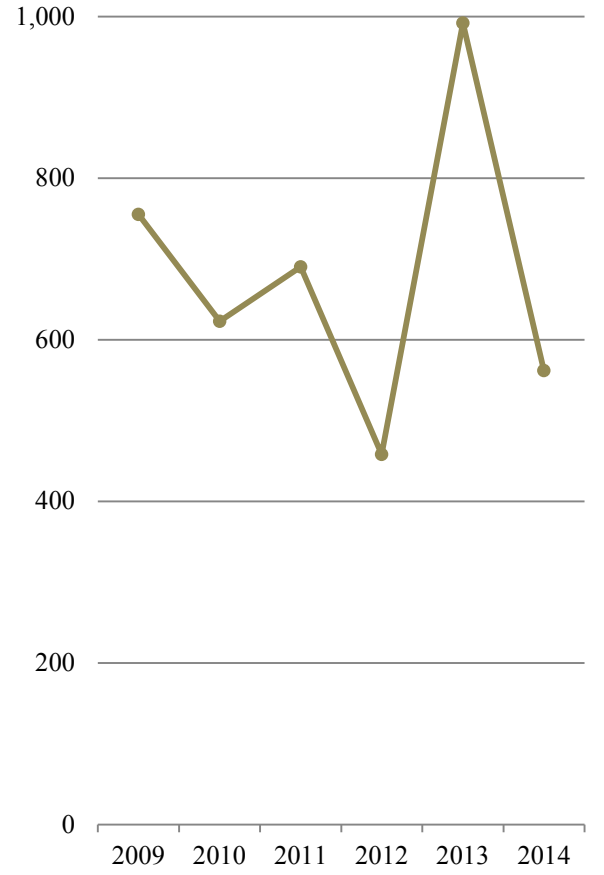


**Figure 8-17: Recertification and Licensing Programs**

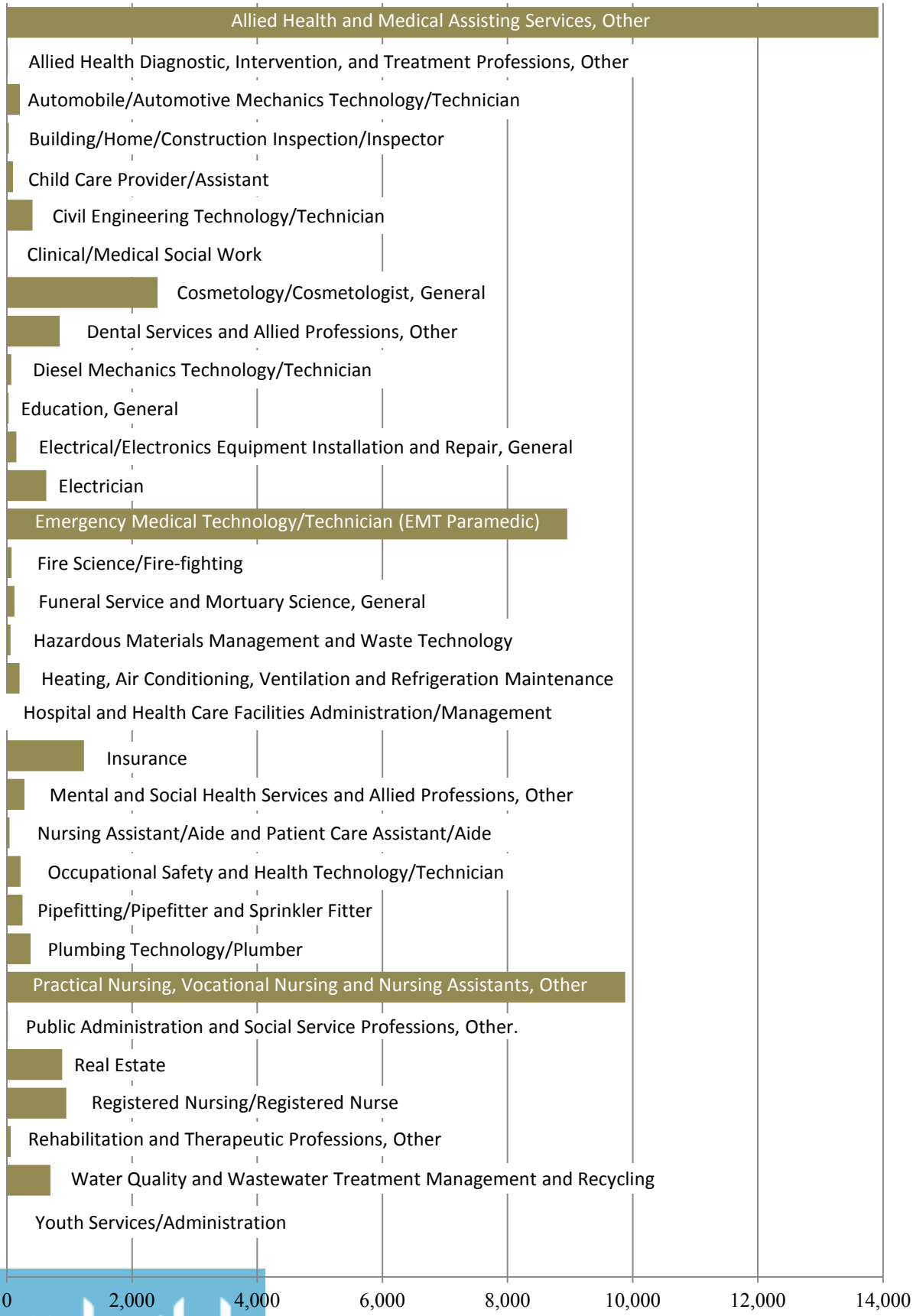
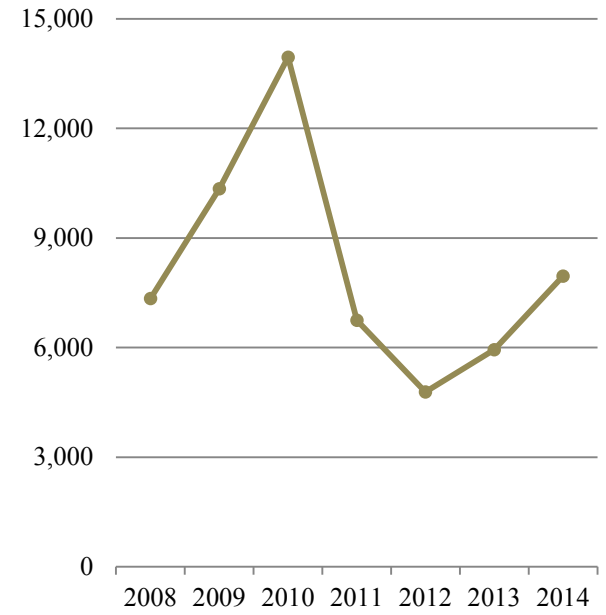


**Figure 8-18: Online Courses Delivered: 2008-2014**

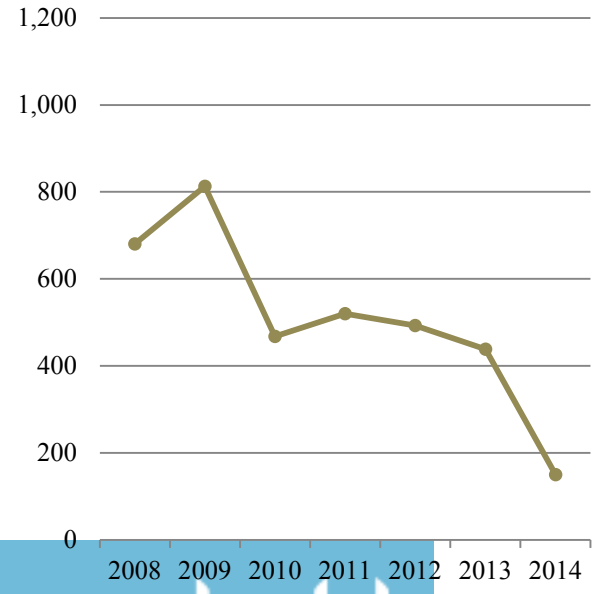



## Online Non-Credit Courses

Online non-credit enrollment increased in 2014 by 134 percent from the previous year (Figure 8-18). Average enrollment between 2010 and 2014 has decreased by 13.1 percent. However, contact hours have increased over the same five year period by four percent. Students in 2014 averaged 28.61 contact hours each.

Overall, 3.29 percent of all students enrolled in non-credit coursework received instruction through on-line delivery in 2014.

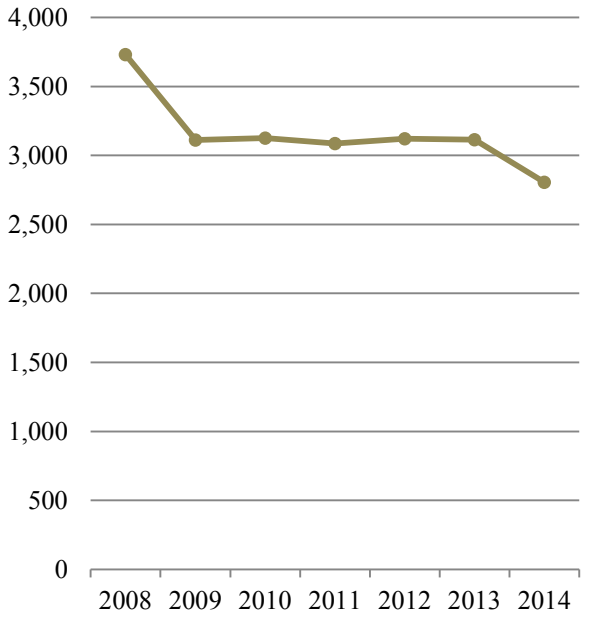
**Figure 8-19: Community Rehabilitation and Sheltered Workshop Enrollment: 2008-2014**




## Community Rehabilitation and Sheltered Workshops

Iowa community colleges deliver programs for people in community rehabilitation centers (sheltered workshops). Enrollment in these programs continue to decrease an average of 21.9 percent annually between 2010 and 2014 (Figure 8-19). Three colleges reported enrollment and contact hours (32,520 hours) in sheltered workshops for 2014.

**Figure 8-20: Enrollment in Correctional Institutions: 2008-2014**




## Enrollment in Correctional Institutions

Iowa community colleges delivered non-credit coursework to residents of correctional institutions to enhance the life skills, academic skills, and employability success of criminal offenders. Enrollment in 2014 was 2,806 students, a decrease of 9.89 percent (Figure 8-20). Nine of the 15 colleges reported 5,211 courses delivered in 2014. Average decrease in enrollment for the past five years has been 2.6 percent.

# 9 Adult Literacy Enrollment and Programs

The federally-funded adult education and literacy programs administered by the Iowa Department of Education (IDOE) Division of Community Colleges provide lifelong educational opportunities and support services to eligible participants. Programs assist adults in obtaining the knowledge and skills necessary for work, further education, family self-sufficiency, and community involvement. Iowa's adult education and literacy programs are delivered through the state's 15 community colleges. By improving the education and skill levels of individual Iowans, the programs enhance the competitiveness of state's workforce and economy. Through non-credit instruction in adult basic education (ABE), adult secondary education (ASE) and English as a Second Language (ESL), programs help learners to:

- Gain employment or better their current employment.
- Obtain a high school equivalency diploma by passing the state approved assessment.
- Attain skills necessary to enter postsecondary education and training.

## Adult Literacy Enrollment

Number of Students: **19,548**

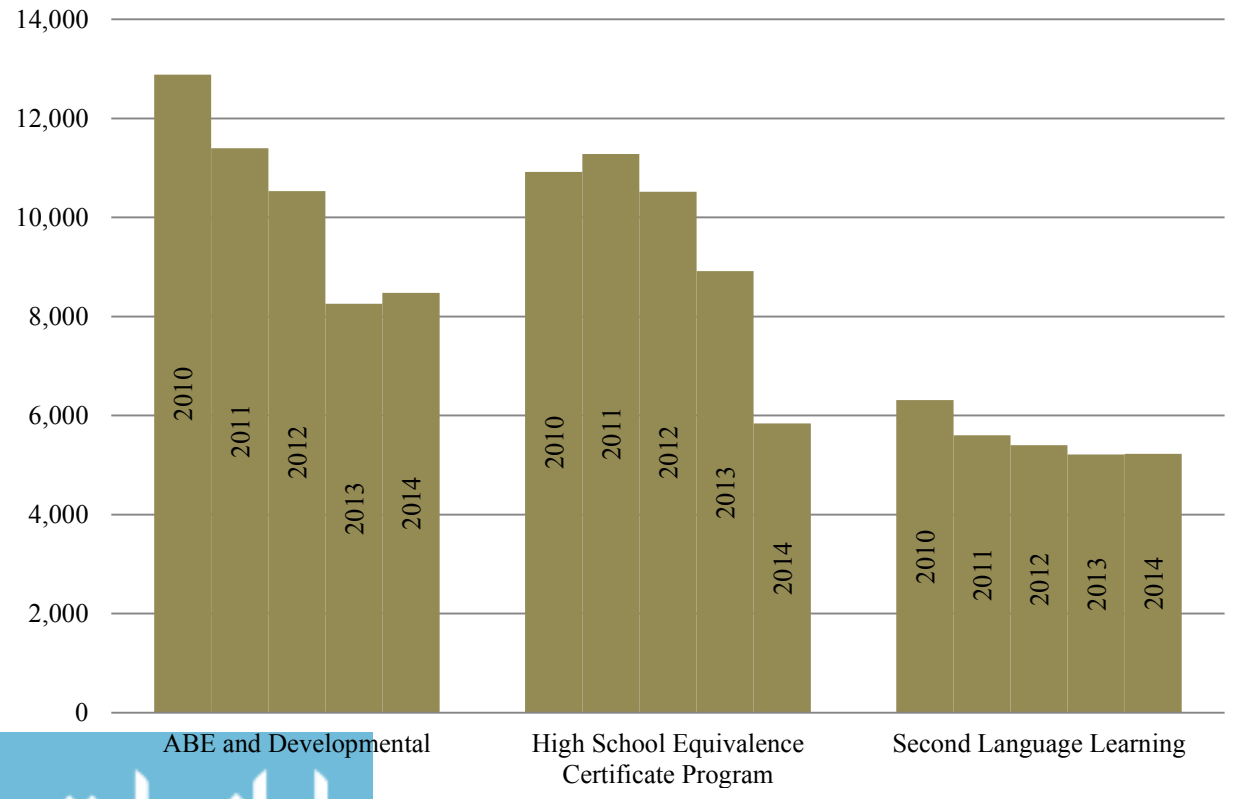
Decrease Since Last Year: **12.7%**

Students Reported per NRS Requirements: **9,991**

Increase Since Last Year: **8.1%**

- Exit public welfare and become self-sufficient.
- Learn to speak, to read, and to write the English language.
- Master basic academic skills to help their children succeed in school.
- Become U.S. citizens and participate in a democratic society.
- Gain self-esteem, personal confidence, and a sense of personal and civic responsibility.

**Figure 9-1: Adult Literacy Program Enrollment (MIS): 2010-2014**



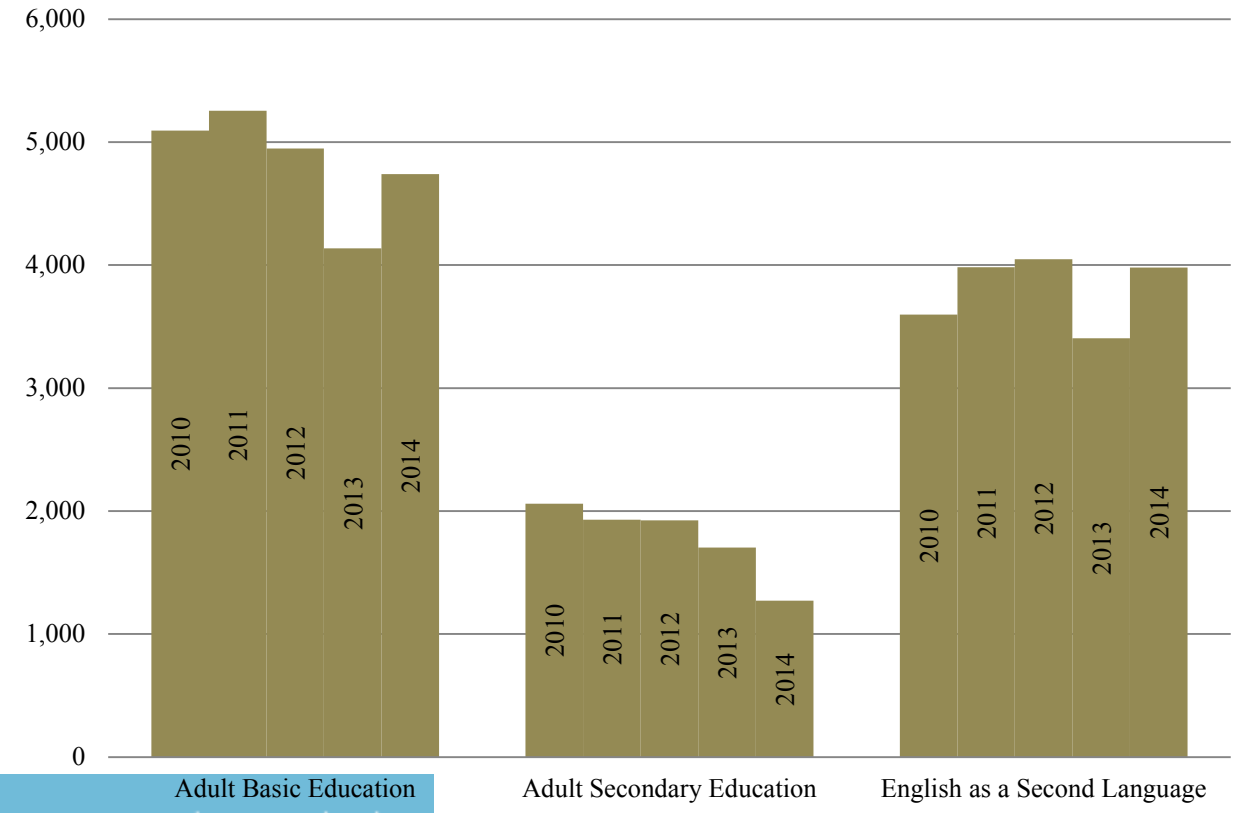
ABE, ASE and ESL levels of instruction are classified in the Community College Management Information System (MIS) as Basic Skills, Developmental and Remedial Education, High School Equivalence Program, and Second Language Learning. Adult education and literacy program enrollment, reported through the MIS, decreased an average of 9.2 percent annually from fiscal year 2010 to 2014 (Figure 9-1). While this table might include duplicate participants enrolled in multiple adult education programs, Figure 9-1 reflects actual headcount for the past five years. Individual headcount for 2014 represented 18,075 participants, a 7.5 percent difference. The greatest area of decrease was in High School Equivalence Program, averaging an 14.5 decline over the past five years. Enrollment in Basic Skills, Developmental and Remedial Education decreased by 216 students since last year, and has averaged a 9.9 percent decrease from 2010 to 2014.

Total adult education and literacy enrollment data collected through the MIS includes all students who attended at least one, 50-minute class period. Of these, 17,869 were included in the data management system used to report for federal accounting purposes. Of these students, 9,991 were eligible for and included in federal year-end reporting based on the National Reporting System (NRS) requirements. The NRS is the accountability system for the federally-funded Adult Education and Family Literacy Act (AEFLA), state administered adult education program. The NRS specifies parameters for students to be included in reporting to the U.S. Department of Education Office of Career, Technical and Adult Education (OCTAE). Eligibility for enrollment includes persons that are at least 16 years of age and not enrolled or required to be enrolled in a secondary school under Iowa Code chapter 299.1A; and meet one of the following:

1) Lack sufficient mastery of basic educational skills to enable them to function effectively in society;
2) Do not have a secondary school diploma or a recognized equivalent, and have not achieved an equivalent level of education; or
3) Are unable to speak, read, or write the English language.

While only a portion of the overall population served by adult education and literacy programs, this subset represents learners that are assessed for achieving follow up core measures fundamental to academic and vocational success, including education level gains, achieving their secondary diploma, entering and retaining employment, and transitioning to postsecondary or training.

**Figure 9-2: Program Enrollment as Reported on NRS: 2010-2014**



## NRS Enrollment in Instructional Programs

Adult education and literacy instructional programs represent a progression of basic skill attainment as defined by the NRS educational functioning levels. Each level has a description of basic reading, writing, numeracy, and functional and workplace skills that can be expected from a person functioning at that level. The levels for ABE are beginning literacy, beginning basic education, low and high intermediate basic education. ASE has only two levels, low and high. The six ESL levels are beginning literacy, low beginning ESL, high beginning ESL, low and high intermediate ESL, and advanced ESL. ABE instruction had the most enrollees in 2014 with 4,739 participants; 47 percent of the total enrollment. ESL was the second largest group of participants with 3,980 participants while ASE represented 11 percent with 1,272 enrollees (Figure 9-2). There has been a five year average increase of 2.5 percent in ESL enrollment.

Of those that were enrolled in 2014 and federally reported, 55 percent were female and 37 percent self identified as white (Figures 9-3 and 9-4). Thirty percent of participants identified themselves as Hispanic or Latino. Black or African American represented 18 percent while Asians were 12 percent. The remaining three categories (Native American, Hawaiian or Pacific Islander, and two or more races) combine to about 3 percent of the participants (Figure 9-4).

The largest age group served by adult education and literacy programs ranged between 25-44 years of age with 48 percent in this category. The next largest group, 19-24 accounted for 26 percent. The 45-59 age group had 1,277 participants which was slightly higher than the 16-18 age group with 1,090 participants (Figure 9-5).

Additional, optional demographic information is collected from participants in the adult education and literacy program that can assist programs in directing resources to target needs. The three highest optional secondary status measures, as indicated upon entry into

**Figure 9-3: NRS Enrollment by Gender**

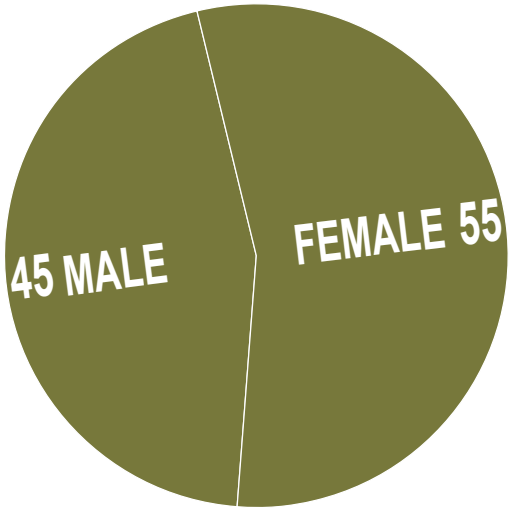



**Figure 9-4: Adult Education and Literacy Student Racial and Ethnic Background**

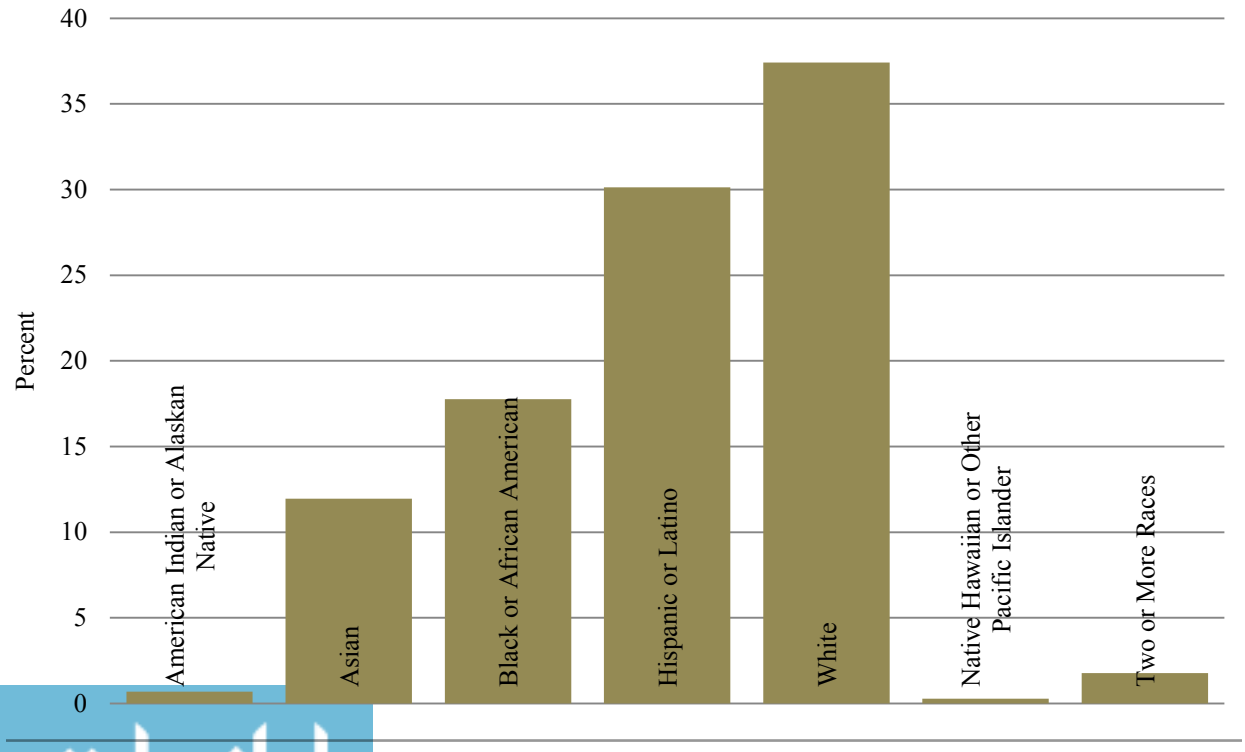
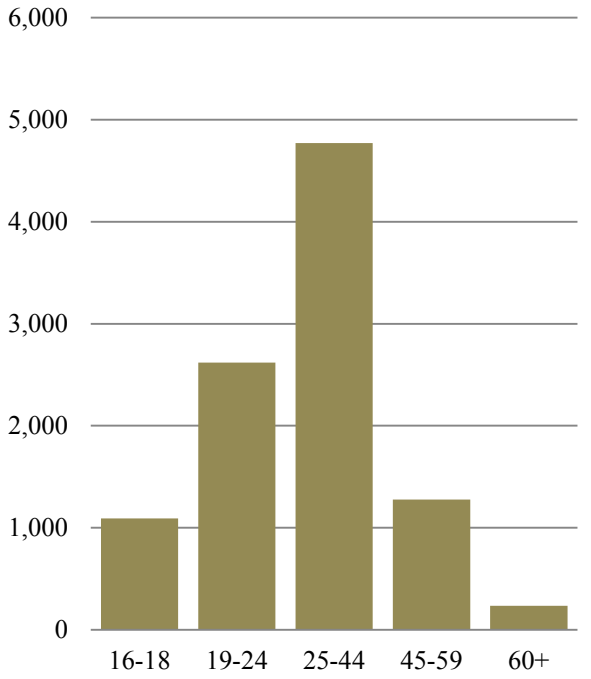


**Figure 9-5: NRS Enrollment by Age**




the adult education and literacy program, included the following: self-identified as receiving public assistance (948); participants self-identified as a single parent (818); and participants self-identified as being a dislocated worker (58). It is important to note that a participant might indicate more than one status measure

## Core Outcome Measures

The five NRS core outcome measures are educational gain, entered employment, retained employment, receipt of a secondary credential, and entered postsecondary education. Iowa is measured based on performance in these categories. The U.S. Department of Education negotiate a target for and measures program effectiveness, in part, by whether these targets are met. This section presents information on each of these targets.

**Educational Gain** – This measure is the primary purpose of the adult education and literacy programs: to improve the basic literacy skills of participants. The NRS approach to measuring educational gain is to define a set of educational functioning levels; at which students are initially placed based on their abilities to perform literacy-related tasks in specific content areas; math, reading, or listening. Iowa's adult education and literacy program uses the federally-approved Comprehensive Adult Student Assessment System (CASAS) to assess all incoming students for level placement. After 70-100 hours of instructional intervention (or a minimum of 40 hours), students are again assessed to determine their skill levels. If their skills have improved sufficiently to be placed one or more levels higher, an "advance" is recorded for that student. Of the 9,991 reported in NRS, 71 percent self-identified their highest level of school completed as between the 9th and 12th grade. Those completing 6th and 8th grade was the second largest group (14 percent, Figure 9-6).

In 2014, 5,891 (55.3 percent of total NRS reported) participants persisted beyond the minimum hours of instruction and was administered a post-assessment. This represents an increase from 2013, when of the 9,244 NRS reported participants, only 45.4 percent persisted. Of those that persisted in 2014, 3,948 completed or advanced at least one educational functioning level in the fiscal year (Figure 9-7). Over 46 percent (1,854) of the participants advanced multiple levels.

**High School Equivalency Diploma** – For many participants in adult education and literacy programs, the main goal is to achieve a high school equivalency diploma. The Iowa Department of Education awarded 3,408 equivalency diplomas in 2014. However, to qualify for the cohort, the participant must have completed all five sub-tests and exited from the program. Only 1,759 participants were eligible for the cohort (Figure 9-8). With a 79 percent match rate, 1,383 participants achieved this outcome.

**Entered Employment** – Upon enrollment in adult education and literacy programs, participants are required to indicate employment status. Of the 9,991 participants reported in the NRS, 711 were not seeking employment and 14 (0.1 percent) did not report employment information (Figure 9-9). Fifty one percent of the remaining enrollees self-reported as unemployed. To qualify for follow up within this cohort to NRS, a participant must also exit the program, either by completing instruction or no longer participating. There

**Figure 9-6:Highest Level of School Completed by Participants**

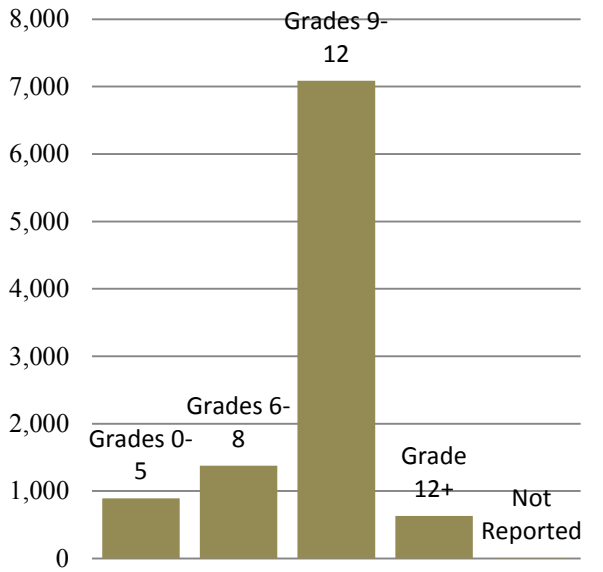
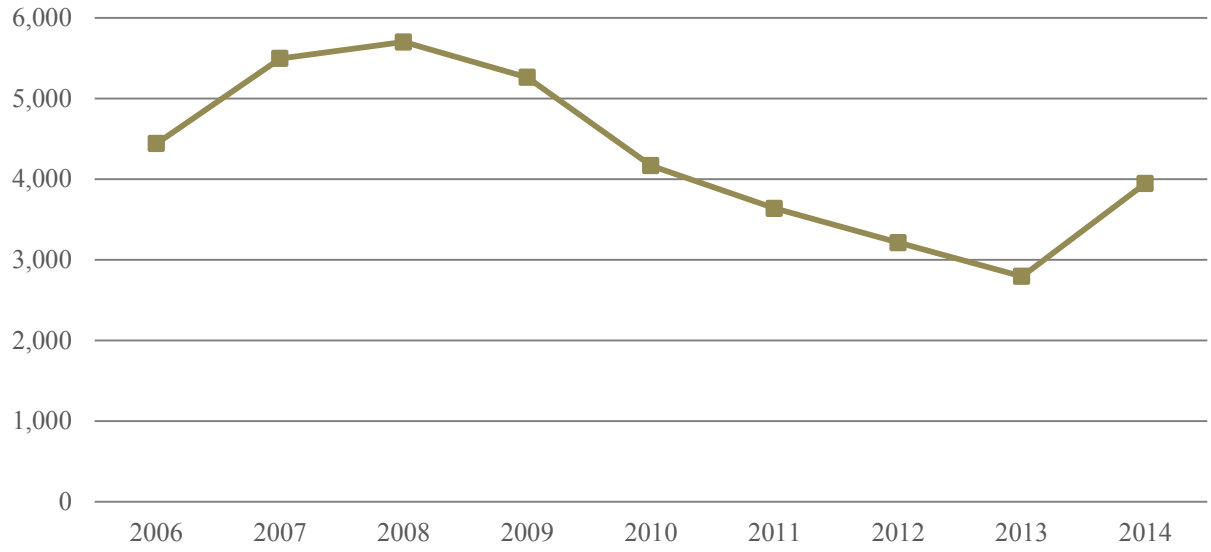


**Figure 9-7: Educational Functioning Level Gains as Reported on NRS: 2006-2014**




were 2,181 participants that qualified for consideration in this cohort. Iowa participates as a data match state by partnering with Iowa Workforce Development for employment wage information. Nineteen percent of the cohort was not able to be matched due to missing data. However, of the 81 percent that was matched, 712 participants were identified as achieving employment within one quarter of exiting the adult education and literacy program.

**Retained Employment** – In 2014, 2,382 of the 9,991 participants in the adult education and literacy program, as reported to NRS, self-identified as employed. To qualify for follow up within this cohort to NRS, a participant must also exit the program, either by completing instruction or no longer participating. In addition, all successfully employed participants from the entered employment cohort (712) are added. Therefore, 3,094 participants qualified for consideration in this cohort. With a 77.8 percent match rate, 1,071 (42 percent) participants retained their employment three quarters later after their exit from the adult education and literacy program.

**Entered Postsecondary Education or Training** – In this measure the participant must have achieved their High School Equivalency Diploma while enrolled in adult education and literacy programs or have a secondary

**Figure 9-8: Core Outcome Measure - Awarded Secondary Diplomas: 2008-2014**

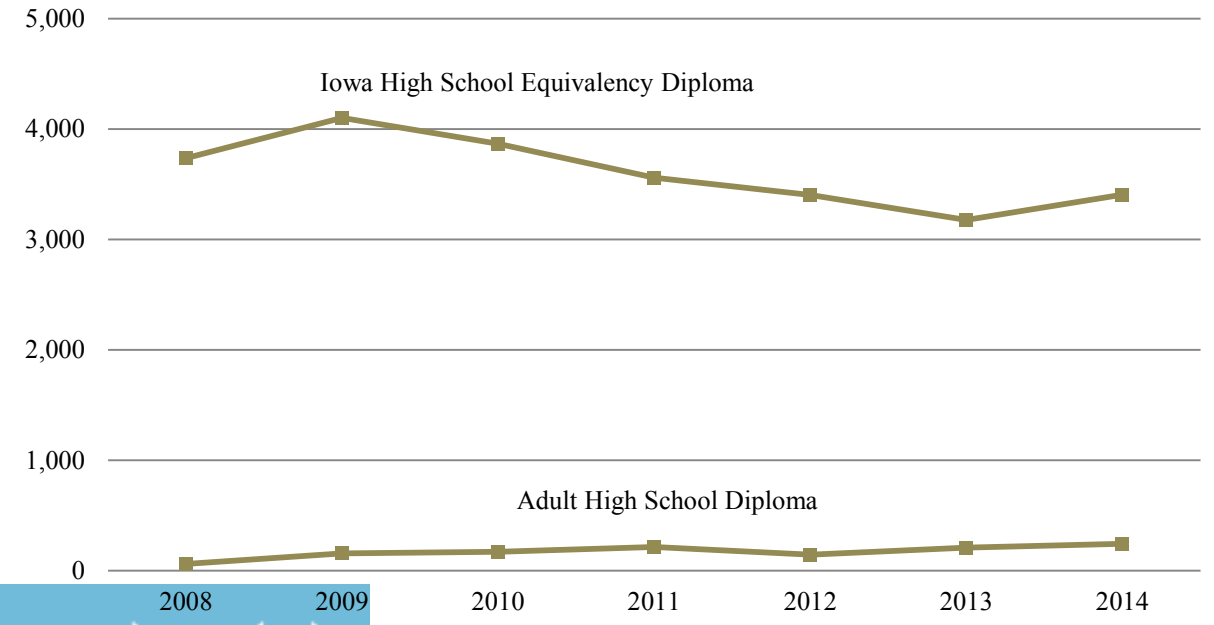


**Figure 9-9: Employment Status Upon Entry to Program**


credential at entry and exit the program. The participant must then enroll in a transition or postsecondary course or a training program within the program year. In 2014, there were 2,023 participants eligible for this cohort. Participants were matched against MIS data only. The report from the National Student Clearinghouse did not arrive in time of publication. With a 79.2 percent match rate, 866 (54 percent) entered postsecondary education or training (Figure 9-10).

### Specific Target Populations

Within NRS reported participants there are two subsets reported separately: distance learners and participants from corrections. By reviewing the data from each of these subsets, adult education and literacy programs are able to identify patterns and needs.

**Distance Learners** – This subset includes all participants that received more than 51 percent of their instruction from online curriculum. In 2014, a total of 120 participants were reported as being distance learners. Of those, 79 were enrolled as ABE and 39 were enrolled as ASE participants. Seventy four participants (61.7 percent) achieved an educational level gain during the program year.

**Corrections** – In Iowa, five community colleges work with the Iowa Department of Corrections to provide adult education and literacy programs. In 2014, 653 participants were included as part of the total enrollment reported to NRS. While this does not represent all of the adults served in corrections, it does indicate that of the cohort reported, 239 achieved an educational level gain and 80 (12.3 percent) were awarded a High School Equivalency Diploma.

**Figure 9-10: Core Measure Benchmark Comparison**

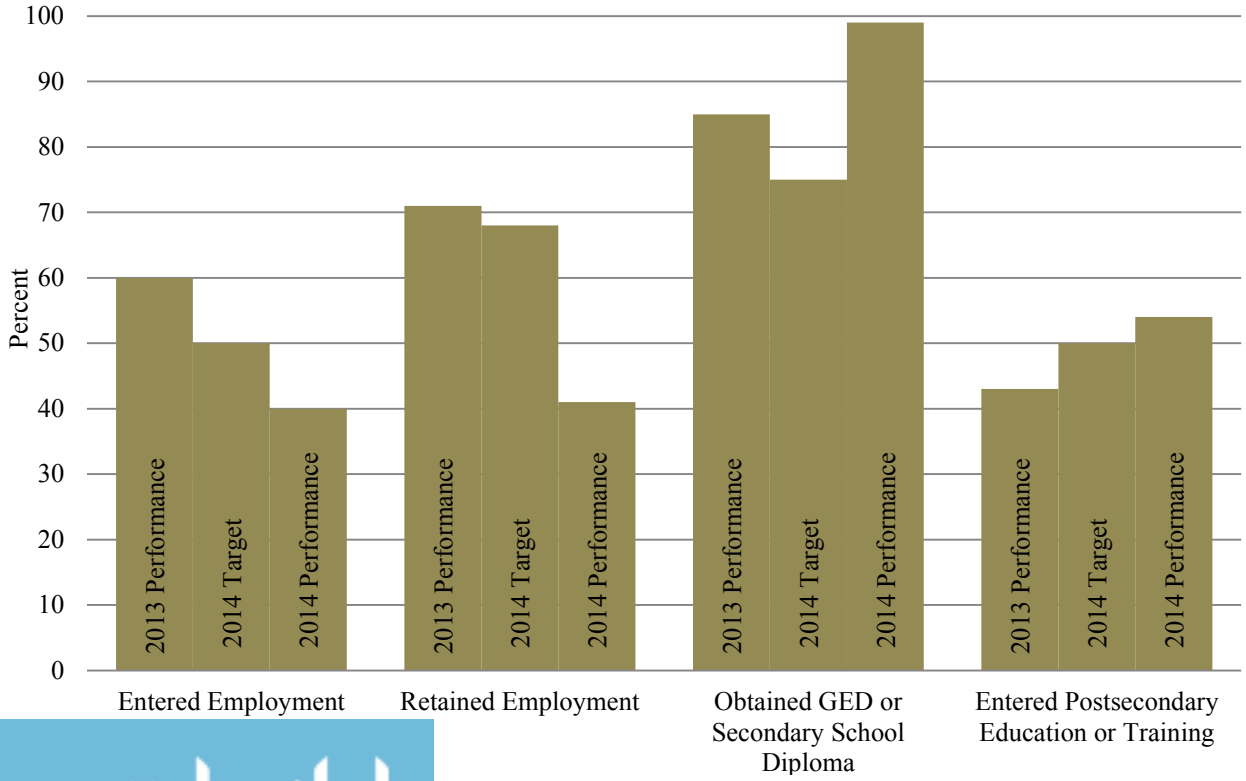
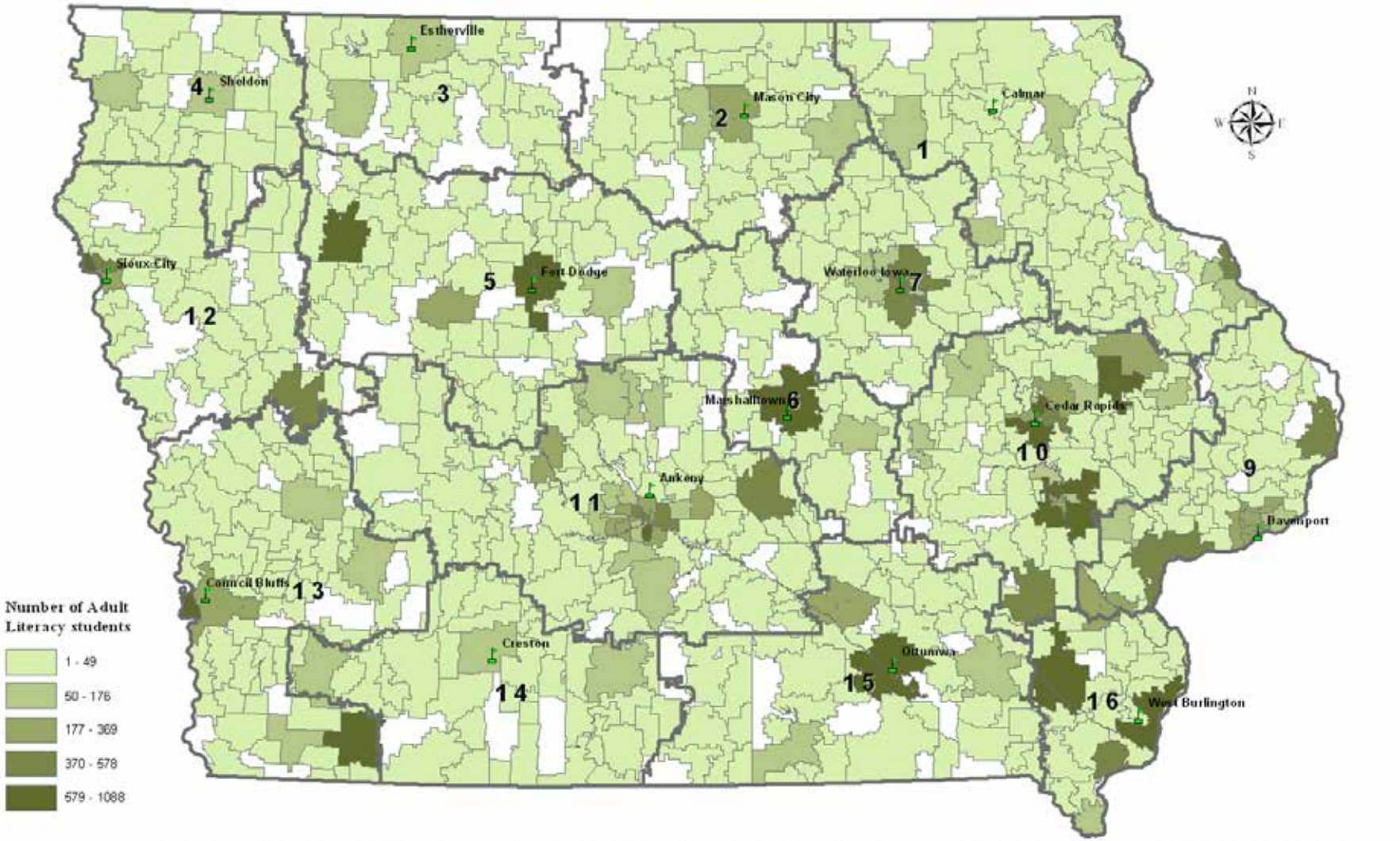


**Figure 9-11: MIS-Reported Adult Literacy Program Enrollment by Zip Code Area: 2014**




Counts include 35,938 Adult Literacy students with valid Iowa ZIP codes. Counts do not include students with not reported ZIP codes or ZIP codes outside of Iowa. White areas represent zip code areas with no reported students.

# 10 Iowa Skilled Worker and Job Creation Fund

## History of Iowa Skilled Worker and Job Creation Fund

In 2013, the Iowa legislature made an historic investment in a portfolio of education, workforce development, job training, and adult literacy programs designed to address Iowa's growing shortage of skilled workers. The Iowa Skilled Worker and Job Creation fund was created to support worker training and job creation efforts, with funding from the State's gaming industry receipts. This investment allows Iowa's community colleges to serve an increased number of Iowans from all social and economic backgrounds to help them acquire the skills and industry-recognized credentials needed to secure gainful employment.

The following existing and new community college education, workforce development, job training, and adult literacy programs are now supported with this new fund. All of these programs are now under the administrative oversight of the Department of Education, with the exception of the Kibbie Tuition Grant Program, which is managed by the College Student Aid Commission (ISCAC) and the ACE program managed by the Iowa Economic Development Authority (IEDA):

- Workforce Training and Economic Development Fund (260C.18A);
- Pathways for Career and Employment Program (260H);
- GAP Tuition Assistance Program (260I);
- Work-Based Learning Intermediary Network (256.40);
- Accelerated Career Education Infrastructure Program (260G);
- Adult Basic Education and Adult Literacy Programs (260C.50);
- Kibbie Skilled Worker Shortage Tuition Grant Program (261.130).

For purposes of this section of the Condition Report, we will be highlighting all of the programs excluding Adult Basic Education and Adult Literacy, as it has its own section within the Condition Report, in addition to the Kibbie Skilled Worker Shortage Tuition Grant and ACE program, administered by ISCAC and IEDA respectively.

## Workforce Training & Economic Development (WTED) (260C.18A)

The Workforce Training and Economic Development (WTED) Fund was established in 2003 as part of the Grow Iowa Values Fund. This fund has become an important source of financing for community college new program innovation, development, and capacity building, particularly for career and technical education.

The funds in the Workforce Training and Economic Development Fund may be used to support the following community college activities:

- Career academies;
- Career and Technical Education (CTE) programs;
- Entrepreneurship education and small business assistance;
- General training, retraining, and in-service educational initiatives for targeted industries.

Other programs with separate funding sources may be supplemented with WTED funds, including:

- Accelerated Career Education (ACE) Infrastructure (260G);
- GAP Tuition Assistance Program (260I);
- Iowa Jobs Training (260F);
- National Career Readiness Certification (NCRC);

**Figure 10-1: FY 2014 WTED Fund**

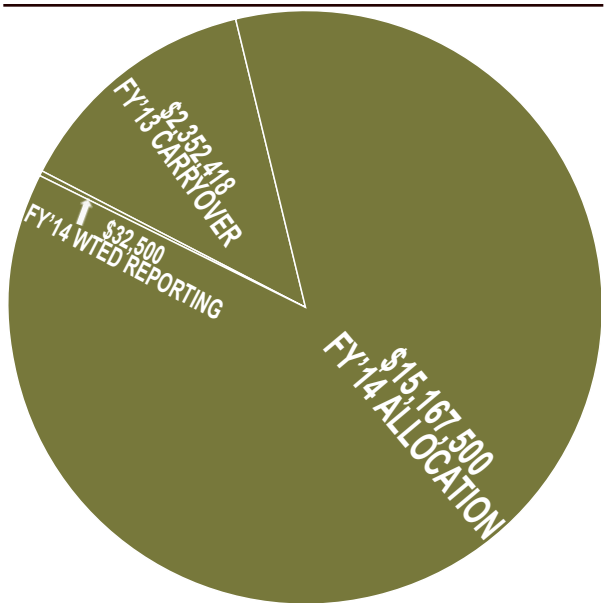
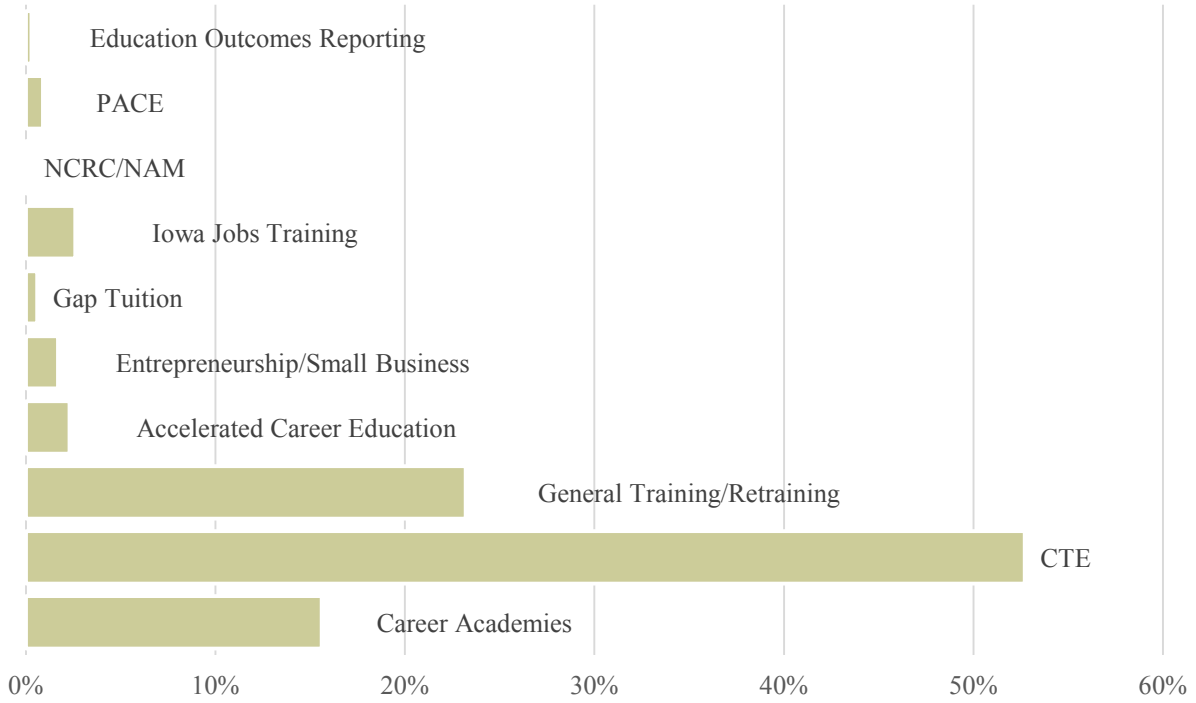


**Figure 10-2: WTED Percent of Expenditures by Program**




- National Advanced Manufacturing Certification (NAM);
- Pathways for Academic Career & Employment (PACE) (260H).

Overall expenditures totaled $12,943,374 for FY 2014, and FY 2014 Obligated or Planned Funds total $4,320,804 across the programs depicted in Figure 10-1.

## Pathways for Academic Career and Employment (PACE) (260H)

The PACE program provides funding to Iowa's community colleges for the development of academic and employment training programs. An individual must meet one or more of the following criteria to participate in a PACE program:

- Are deemed by definition to be low skilled;
- Earn incomes at or below 250 percent of the federal poverty level;
- Are unemployed;
- Are underemployed;
- Are dislocated workers.

In addition to assisting individuals with obtaining gainful, quality employment, PACE programs must be designed to help individuals acquire competency in basic skills and a specific technical field, complete a specified level of postsecondary education, earn credentials of value to employers, and satisfy local and regional economic need.

**Table 10-1: PACE Budget Summary**

| | Amount ($) |
|---|---|
| FY 2014 Allocation | 5,000,000 |
| Expenses: | |
| Financial & Education Support | 649,815 |
| Personal Support | 126,746 |
| Career Support | 3,607 |
| Salary & Personnel | 1,553,259 |
| Travel | 53,971 |
| Supplies & Equipment | 57,295 |
| Other | 254,024 |
| Total Expenses | 2,700,181 |
| FY 2015 Carry forward | 2,299,819 |

The Iowa Legislature appropriated $5 million for the PACE program in FY2014 (Table 10-1). Of this appropriation, colleges spent of total a $2,700,181. Expenses include education, personal, and career support for participants, such as tuition, tutoring, travel assistance, and more. Colleges may also expend PACE funds on program supports such as staff, travel, supplies, and equipment.

Over 3,300 individuals submitted applications to be considered for participation in a PACE program in FY 2014 (Table 10-2). Of those applicants, 2,311 individuals were approved to participate, 1,989 of which were

## Table 10-2: Summary of PACE Participants

| Category | Counts |
|---|---|
| Number of Completed Applications | 3,355 |
| Number of Approved Participants | 2,311 |
| **Actively Participating in Program/Training** | |
| HSED and Basic Skills Training | 540 |
| Certificate Programs | 737 |
| Degree Programs | 640 |
| Diploma Programs | 72 |
| Total | 1,989 |
| **Completed Program/Training** | |
| HSED and Basic Skills Training | 129 |
| Certificate Programs | 569 |
| Degree Programs | 20 |
| Diploma Programs | 11 |
| Total | 729 |
| **Receiving Support Services[a]** | |
| Personal Support | 460 |
| Career Support | 676 |
| Receiving Both Supports | 917 |
| Not Receiving Supports | 576 |

[a] Totals include active participants and program completers.

participating in a PACE program at the time of reporting. Another 729 individuals had completed their training. Broken down further, 129 individuals completed a high school equivalence or basic skills training, 569 completed a certificate program, 20 completed a degree program, and 11 completed a diploma program.

## Gap Tuition Assistance (260I)

The gap tuition assistance program (GAP) provides funding to Iowa's community colleges for need-based tuition assistance to applicants for completion of approved continuing education certificate training programs.

Eligibility for the program is based on a number of factors, including financial need. An individual earning an income at or below 250 percent of the federal poverty level satisfies the program's financial need eligibility requirement. In addition, an individual must demonstrate:

- The ability to complete an eligible certificate program;
- The ability to enter a postsecondary certificate, diploma, or degree program for credit;
- The ability to gain and maintain full-time employment.

Eligible programs must be non-credit, but aligned with a credit certificate, diploma, or degree program. The program must offer training in an in-demand occupation, including information technology, healthcare, advanced manufacturing, and transportation and logistics.

## Table 10-3: GAP Budget Summary

| Source: | Amount ($) |
|---|---|
| FY 2013 Carry Forward | 1,021,256 |
| FY 2014 Allocation | 2,000,000 |
| FY 2014 Total Funds | 3,021,256 |
| **Expenses:** | |
| Tuition & Books | 1,890,835 |
| Equipment | 35,075 |
| Fees, Assessment, Testing | 73,856 |
| Staff Support & Services | 160,065 |
| Total Expenses | 2,159,831 |
| FY 2015 Carry forward | 861,425 |

The gap tuition assistance program received a $2 million appropriation from the Iowa Legislature in FY 2014. Accounting for the $1.02 million of funding carried forward from FY 2013, community colleges had a total of $3,021,253 to spend over the past year. Table 10-3 shows that in FY 2014, colleges spent a total of $2,159,831 on tuition and books, equipment, fees and testing, and program staff (allowable expense as of FY 2014). By category, $1,890,835 was spent on tuition and books, $35,075 on equipment, $73,856 on fees, assessments, and testing, and $160,065 on staff support and services.

Almost 3,300 individuals completed an application to be considered for financial assistance under the gap tuition program in FY 2014 (Table 10-4). Of these applicants, 1,631 were approved for tuition assistance. At the time of reporting, 998 individuals had completed an eligible training program. The other 466 approved individuals were either actively participating or waiting to participate in a program. The state-wide completion rate in FY 2014 was approximately 84 percent.

There are currently 191 approved certificate programs in which participants of the gap tuition program may enroll. The programs which saw the highest enrollment include certified nursing assistance, commercial drivers license/transportation, and welding.

## Table 10-4: Summary of GAP Participants

| Category | Total |
|---|---|
| Number of Completed Applications | 3,279 |
| Number of Approved Participants | 1,631 |
| **Status of Approved Participants** | |
| Completed Training | 998 |
| Did Not Complete Training | 167 |
| Completion Rate | 85.67% |
| Number of Earned 3rd Party Credentials | 500 |

## Work-Based Learning Intermediary Network (256.40)

The Department was appropriated $1.45 million for the development and implementation of a statewide work-based learning intermediary network. This funding was awarded on a competitive basis to 15 regional intermediary networks. Funds received by the regional intermediary networks from the state through this grant are to be used to develop and to expand work-based learning opportunities within each region.

The statewide system of 15 regional intermediary networks will serve within each region as a one-stop contact point for information on work-based learning opportunities, thus helping to better prepare students in making informed postsecondary and career decisions. The 15 regional networks will prepare students for the workforce by connecting students, the education system, business and the community through relevant, work-based learning activities, particularly related to science, technology, engineering, or mathematics (STEM), occupations related to critical infrastructure and commercial and residential construction, or the targeted industries of advanced manufacturing, biosciences, and information technology.

In addition, each regional network:

- Provides a one-stop contact point for students;
- Provides core services;
- Conducts a needs assessment in collaboration with school districts within the region to inform the development of core services;
- Prepares students to make informed postsecondary education and career decisions;
- Facilitates the attainment of portable, industry-recognized credentials;
- Builds and sustains relationships between employers and local youth, the education system, and the community;
- Works collaboratively within the statewide intermediary network and with stakeholders to expand services.

Some intermediary regional networks have been in operation for a number of years—prior to the creation of the Iowa Skilled Worker and Job Creation Fund—whereas others began operation with the advent of state funding. Much of the variance in reported expenses and participants between networks is attributable to this factor. New intermediary networks found it necessary to hire staff, establish program processes, and develop relationships with regional stakeholders prior to extending services to secondary schools in their region.

Work site core services were provided to 15,447 students. Furthermore, there were other core services provided to 19,112 students in regards to career fairs, career camps, NCRC testing, etc.

There were also 292 educators who participated in teacher tours, externships and other teacher experiences.

FY 2014 Allocation: $1,450,000
FY 2014 Expenditures: $ 837,020
(October 2013 to June 2014)

More information on the programs discussed above may be found on the Department's website: https://www.educateiowa.gov/adult-career-community-college/publications.

# 11 Apprenticeship

Apprenticeship programs utilize the most up-to-date technologies that are available in the workplace. The Bureau of Apprenticeship and Training must approve all apprenticeship projects funded through the Iowa Economic Development Authority (IEDA). This section includes apprenticeship programs offered through the community colleges and funded through IEDA as well as those apprenticeship programs that were not funded through IEDA.

In the fiscal year (FY) 2014, the total number of students in all apprenticeship programs increased by 427 from the previous year to 3,372. Since FY 2013, the number of students in noncredit apprenticeship programs has increased by 13.6 percent while the number of noncredit contact hours increased by 10.7 percent.

The number of students in credit apprenticeship programs totaled 244, an increase of 27.8 percent from

**Apprenticeship Programs**

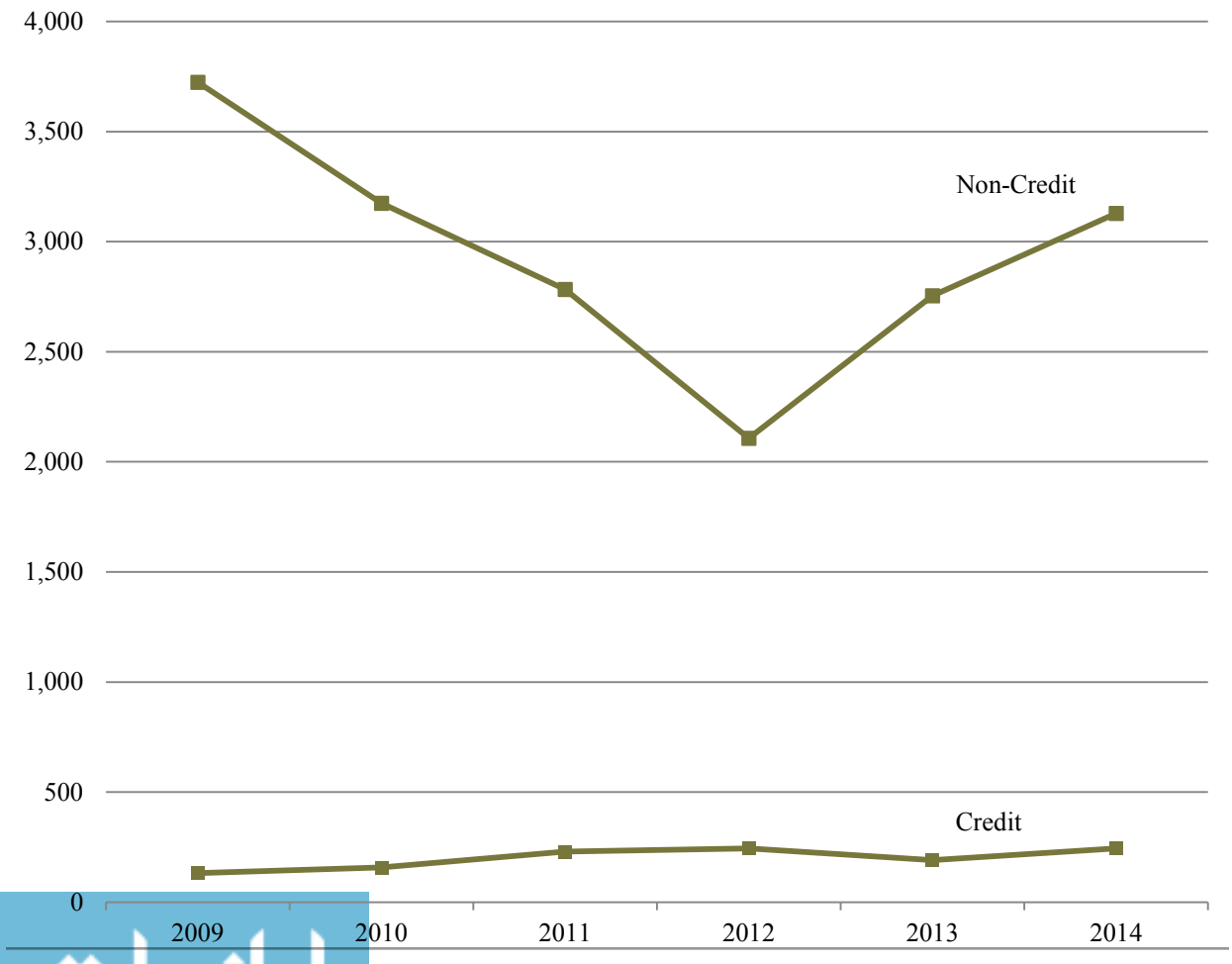
Students (Non-Credit): 3,128

Growth since last year: 13.6%

Students (Credit): 244

Growth since last year: 27.8%

**Figure 11-1: Apprenticeship Program Enrollment, Credit and Non-Credit: 2009-2014**



the previous year. The number of semester hours taken, 2,719 in FY 2014, remained relatively unchanged from the previous year. Since FY 2010, the number of credit students has increased by 86 and the number of semester hours taken has increased by 342.

## IEDA-Funded Apprenticeship Programs

The Iowa New Jobs Training Program (260E) assists businesses which are creating new positions or new jobs. The dollar amount available for training through the program is dependent upon training and development needs and projected tax revenue available to repay the certificates. Applications for this program must be made through the local community college. In FY 2014, five students enrolled in 18 contact hours through an apprenticeship program funded by the Iowa New Jobs Training Program (260E).

The Iowa Jobs Training Program (260F) provides job training services to current employees of eligible businesses which are located in Iowa. Job training services are defined as any training needed to enhance the performance of a business' employees. This program is administered by the IEDA and services are provided by Iowa's 15 community colleges. Each community college works with eligible businesses to assess training needs, determine funds availability, and provide training. A total of 2,111 students participated in an apprenticeship funded through the Iowa Jobs Training Program (260F) in FY 2014. Since FY 2010, the number of students participating decreased by 355 while the number of contact hours decreased by 113,853.

## Programs Not Funded by IEDA

A total of 91 students participated in a noncredit apprenticeship program that was not funded by the IEDA in FY 2014. These 91 students enrolled in 10,224 contact hours. Enrollment in non-IEDA apprenticeship programs is up markedly from FY 2013, when no students enrolled in such programs.

**Figure 11-2: Apprenticeship Non-Credit Contact Hours: 2009-2014**

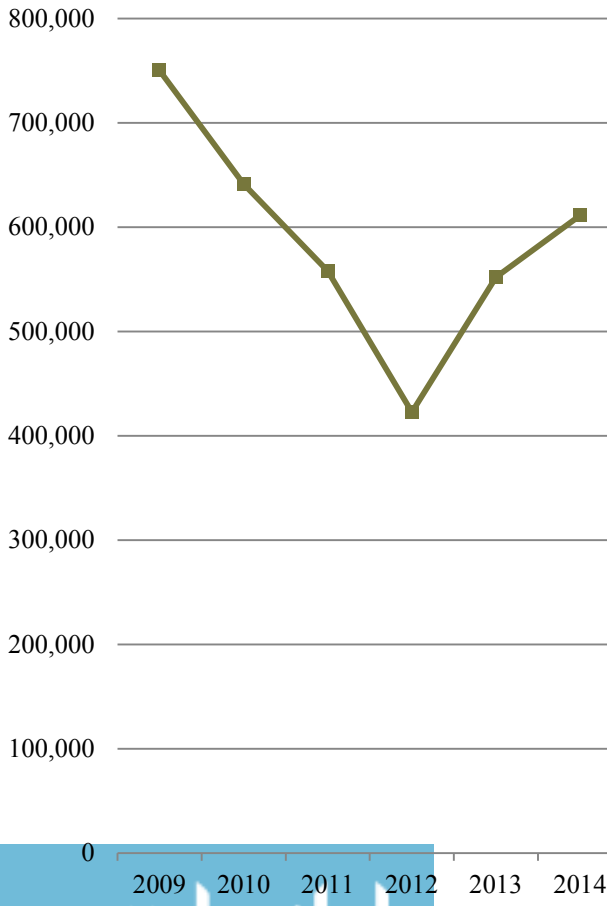
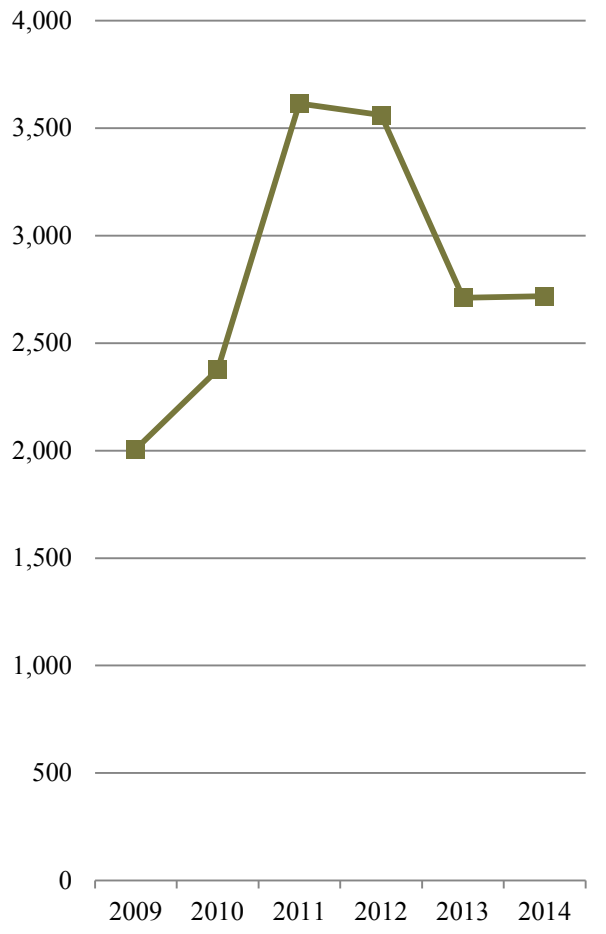



**Figure 11-3: Apprenticeship Semester Hours: 2009-2014**



# 12 Student Success

Students enroll in community colleges for several reasons. Some students plan to earn awards such as diplomas or Associate degrees, others intend to transfer credits earned at a community college to a four-year college or university.

Success, however, transcends graduation and transfer rates. For example, improving one's job skills through adult basic education is another measure of success. Adults lacking a high school diploma or equivalent are at an economic disadvantage compared to those with higher levels of education. By acquiring new skills and completing adult basic education, students can enter or return to the labor market as more economically productive citizens.

**Summary of Success**

| Overall Success Rate: | Overall Graduation Rate: |
|---|---|
| 41.4% | 27.2% |
| FY 2012 Cohort | Associates Degrees Only |
| **Overall Transfer Rate:** | **Median Weekly Wages:** |
| 25.3% | $619.60 |
| FY 2012 Cohort | *Source:* [3]r |

## Graduation, Transfer, and Success Rates

Four possible outcomes exist for each student within a given cohort. A student could:

- transfer to a four-year college or university before graduating with a two-year award;
- transfer to a four-year college or university after graduating with a two-year award;
- graduate with a two-year award, but not transfer; or
- neither transfer nor graduate.

Appendix A describes the methods used to identify a cohort and to calculate graduation, transfer, and success rates. As table 12-1 shows, 2,435 students from the 2012 cohort graduated with a two-year award, yielding a graduation rate of 27.2 percent. Of these, 1,438 students (59.1 percent) graduated with two-year awards, but did not transfer to four-year colleges or universities.

Among the 8,959 students from the 2012 cohort, 2,268 transferred to four-year colleges or universities, yielding a transfer rate of 25.3 percent. Of these, 1,271 students (56.0 percent) transferred to four-year colleges or universities before graduating with two-year awards. The remaining 997 students (44.0 percent) transferred to four-year colleges or universities after graduating with two-year awards. Overall, 3,706 students from the 2012 cohort transferred prior to graduating, graduated, or transferred after graduating, yielding a success rate of 41.4 percent. Table 12-2 displays outcomes by college.

## Demographics of Success

Table 12-3 summarizes success rates by sub-population and sex. Of the 8,959 records for the 2012 cohort, 1,993 had missing demographic data, and subsequently were excluded from analysis. Of the remaining 6,966 students, 3,306 (47.5 percent) were females and 3,330 (52.5 percent) were males. Success rate among females (41.3 percent) was almost equal to the success rate among males (41.4 percent). Females (n = 1,367) accounted for 47.4 percent of all students classified as successful (n = 2,883); males, 52.6 percent.

**Table 12-1: Graduation by transfer contingency table**

| | Transferred[a] | | |
|---|---|---|---|
| Graduated[b] | No | Yes | *Total* |
| No | 5,253 | 1,271 | *6,524* |
| Yes | 1,438 | 997 | *2,435* |
| **Total** | **6,691** | **2,268** | **8,959** |

[a] Students within a cohort who transferred to a four-year college or university within three years.
[b] Students within a cohort who earned a two-year award within three years.

## Table 12-2: Graduation and transfer outcomes by college

| College | Cohort | Graduated[a] | Transferred[b] | Both[c] | Neither[d] | Success rate (%) |
|---|---|---|---|---|---|---|
| Northeast Iowa | 386 | 79 | 49 | 26 | 232 | 39.9 |
| North Iowa Area | 392 | 60 | 53 | 57 | 222 | 43.4 |
| Iowa Lakes | 460 | 127 | 42 | 51 | 240 | 47.8 |
| Northwest | 195 | 53 | 8 | 12 | 122 | 37.4 |
| Iowa Central | 447 | 67 | 73 | 77 | 230 | 48.5 |
| Iowa Valley | 439 | 55 | 66 | 67 | 251 | 42.8 |
| Hawkeye | 739 | 145 | 110 | 88 | 396 | 46.4 |
| Eastern Iowa | 632 | 75 | 75 | 55 | 427 | 32.4 |
| Kirkwood | 2,187 | 312 | 315 | 243 | 1317 | 39.8 |
| Des Moines Area | 920 | 80 | 180 | 62 | 598 | 35.0 |
| Western Iowa Tech | 234 | 55 | 28 | 11 | 140 | 40.2 |
| Iowa Western | 959 | 106 | 180 | 108 | 565 | 41.1 |
| Southwestern | 185 | 37 | 23 | 38 | 87 | 53.0 |
| Indian Hills | 527 | 142 | 41 | 72 | 272 | 48.4 |
| Southeastern | 257 | 45 | 28 | 30 | 154 | 40.1 |
| **Total** | **8,959** | **1,438** | **1,271** | **997** | **5,253** | **41.4** |

*Note:* Success rate = ((Cohort - Neither)/Cohort) * 100%

[a] Earned a two-year award, but did not transfer to a four-year college or university.
[b] Transferred to a four-year college or university *before* earning a two-year award.
[c] Transferred to a four-year college or university *after* earning a two-year award.
[d] Neither earned a two-year award nor transferred to a four-year college or university.

Of students who self-reported demographics, whites were the largest sub-population (78.0 percent), followed by Blacks (10.4 percent), and Hispanics (6.6 percent).

The overall success rates among Hispanics (n = 458) and Blacks (n = 726) were 31.7 percent and 33.3 percent respectively. Of the 2,883 students classified as successful, whites (n = 2,376) accounted for 82.4 percent. By comparison, Blacks (n = 242) accounted for 8.4 percent and Hispanics (n = 145) accounted for 5.0 percent.

### Graduates' Wages

Iowa Workforce Development (IWD) provides "occupational information in the areas of employment, job openings, pay, career preparation requirements,

## Table 12-3: Success rates by subpopulation and sex

| | Females | | | Males | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Success | | | Success | | | Success | |
| Subpopulation | Cohort | N | % | Cohort | N | % | Cohort | N | % |
| American Indian | 32 | 7 | 21.9 | 31 | 9 | 29.0 | 63 | 16 | 25.4 |
| Asian/Pacific Islander | 89 | 34 | 38.2 | 88 | 28 | 31.8 | 177 | 62 | 35.0 |
| Black | 270 | 86 | 31.9 | 456 | 156 | 34.2 | 726 | 242 | 33.3 |
| Hispanic | 199 | 61 | 30.7 | 259 | 84 | 32.4 | 458 | 145 | 31.7 |
| Two or more | 50 | 18 | 36.0 | 61 | 24 | 39.3 | 111 | 42 | 37.8 |
| White | 2,666 | 1,161 | 43.5 | 2,765 | 1,215 | 43.9 | 5,431 | 2,376 | 43.7 |
| **Total** | **3,306** | **1,367** | **41.3** | **3,660** | **1,516** | **41.4** | **6,966** | **2,883** | **41.4** |

*Note:* Success Rate = (N Success/Cohort) * 100%.. Refer to appendix A for a more detailed discussion about methods used in this chapter. This table excludes 2,462 records with missing demographic data.

and top skills" for jobs across Iowa [3]. Weekly wages were derived from short-term occupational projections prepared by IWD [3]. Projections from IWD suggest that median entry-level wages of Iowa workers with associate degrees were $619.60 per week.

Entry-level wages are usually defined as the 25th percentile of wages for a given occupational or demographic category. Data published by the U. S. Bureau of Labor Statistics [1] indicate the 25th percentile of weekly wages for workers holding associate degrees during the third quarter 2014 were $533.00, up $2.00 from the same quarter in 2013.

Projections from IWD suggest median entry-level weekly wages of Iowa workers with associate degrees are $86.60 higher than national entry-level weekly wages.

## Adult Basic Education

A primary focus of Iowa's Adult Basic Education (ABE) program is to help students acquire basic skills so they can earn a high school equivalency diploma, which will subsequently give them access to post-secondary credit education. ABE programs in Iowa's community college cover many non-credit training opportunities, including skilled training for occupations in high demand.

Participants of ABE programs receive help setting employment goals. Workforce and basic skills are assessed and ABE staff work with participants to determine career readiness and skills needed to obtain a job in a desired field. Iowa tracks participants who indicate their intent to secure or retain employment as a goal during the program year.

In 2014, the year for which most recent data are available, 866 students (54 percent) continued with post-secondary education. During this same period, 40 percent of ABE participants who were unemployed at time of entry were employed within one quarter after exiting adult education services. and 42 percent who were employed retained employment three quarters later.

## Time to Award

A national survey conducted on behalf of Complete College America [4] found that associate degrees require an average 81.5 semester hours. Of the states listed in table 12-4, community colleges in Illinois have the lowest average number of semester hours (70.3) required for associate degrees, whereas community colleges in New Mexico have the highest average (99.2 semester hours). By comparison, Iowa community colleges, which were not included in the survey, require an average 70.1 semester hours for associate degrees.

The cohort to calculate time to award started with 12,113 records of community college students who earned associate degrees during FY 2014. A time limit of five years excluded 3,591 records. Another 822 records with incomplete data were excluded. After accounting for these exclusions, 7,700 records remained for analysis.

The national average time-to-award for full-time community college students was 2.74 years [4]. Students attending Iowa community colleges took an average 2.82 years to earn an associate degree. As figure 12-1 shows, over 31 percent of students in the cohort earned associate degrees within two years. After three years, the cumulative graduation rate was 61 percent.

Figure 12-2 depicts a box plot of time to award by subpopulation. Overlapping notches among groups suggest median times to award are statistically equal. Black students (median = 2.35 years) took a statistically shorter amount of time to complete associate degrees than the other groups. Median times to award for Whites (2.75 years), American Indians (2.75 years), Hispanics (2.76 years), and Asian/Pacific Islanders (2.765 years) were statistically equivalent.

**Table 12-4. Average number of semester hours required for associate degrees among selected states.**

| State | Avg. | State | Avg. |
|---|---|---|---|
| Arkansas | 75 | Mississippi | 72 |
| California | 79 | Missouri | 79 |
| Colorado | 88 | New Mexico | 99 |
| Connecticut | 77 | Ohio | 86 |
| Georgia | 77 | Oklahoma | 82 |
| Hawaii | 77 | Oregon | 76 |
| Idaho | 94 | Rhode Island | 71 |
| Illinois | 70 | South Dakota | 90 |
| Indiana | 81 | Tennessee | 78 |
| Kentucky | 90 | Texas | 87 |
| Maryland | 75 | Utah | 84 |
| Massachusetts | 73 | West Virginia | 96 |

*Source*: [2]

## References


[1] Bureau of Labor Statistics. Usual weekly earnings of wage and salary workers, third quarter 2014. News release USDL-14-1966, U.S. Department of Labor, Washington, DC, October 27, 2014.

[2] Paul Fain. Credit creep. Inside Higher Ed, June 17, 2013.

[3] Iowa Workforce Development. Iowa short term occupational projections 2013-2015. Retrieved from http://iwin.iwd.state.ia.us/, October 27, 2014.

[4] Nate Johnson, Leonard Reidy, Mike Droll, and R. E. LeMon. Program Requirements for Associate's and Bachelor's Degrees: A National Survey. Complete College America, Washington, DC, July 2012. www.completecollege.org


**Figure 12-1. Cumulative time to degree of community college students who earned associate degrees.**

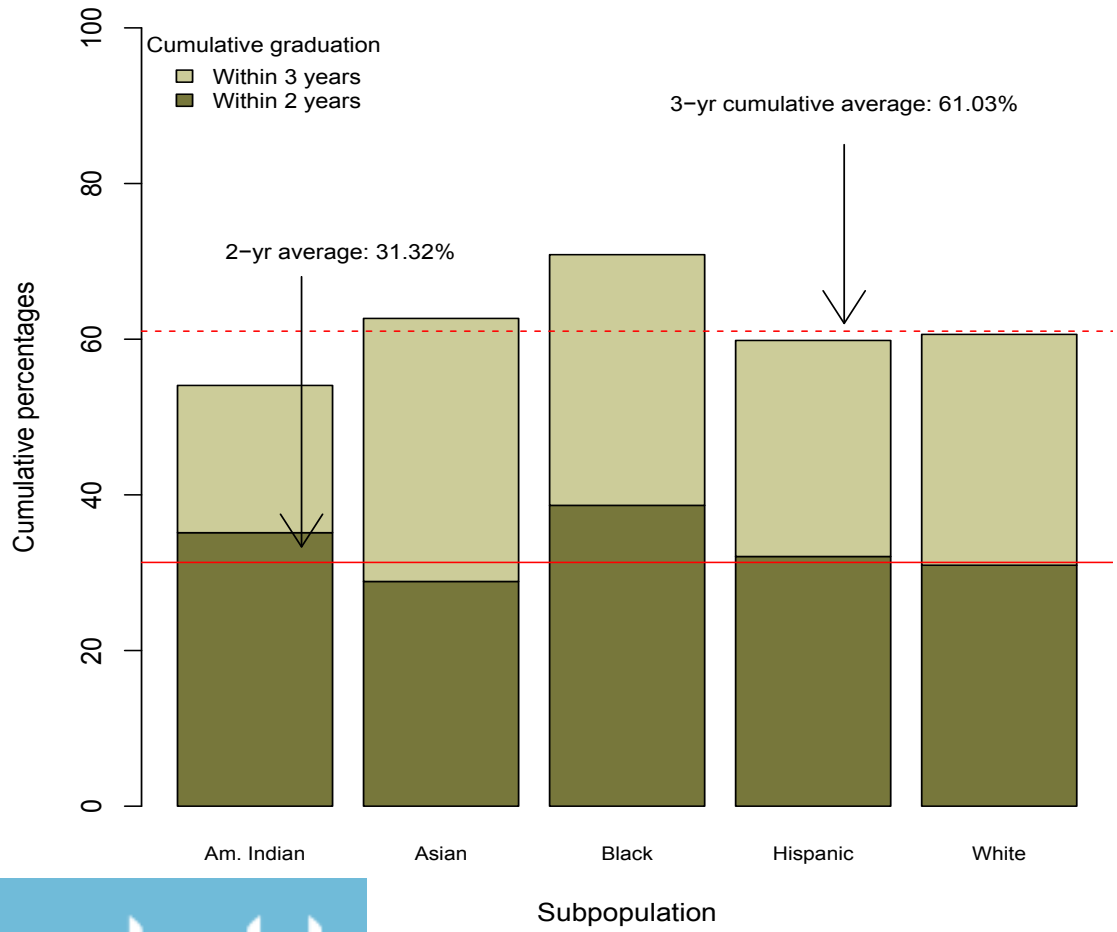
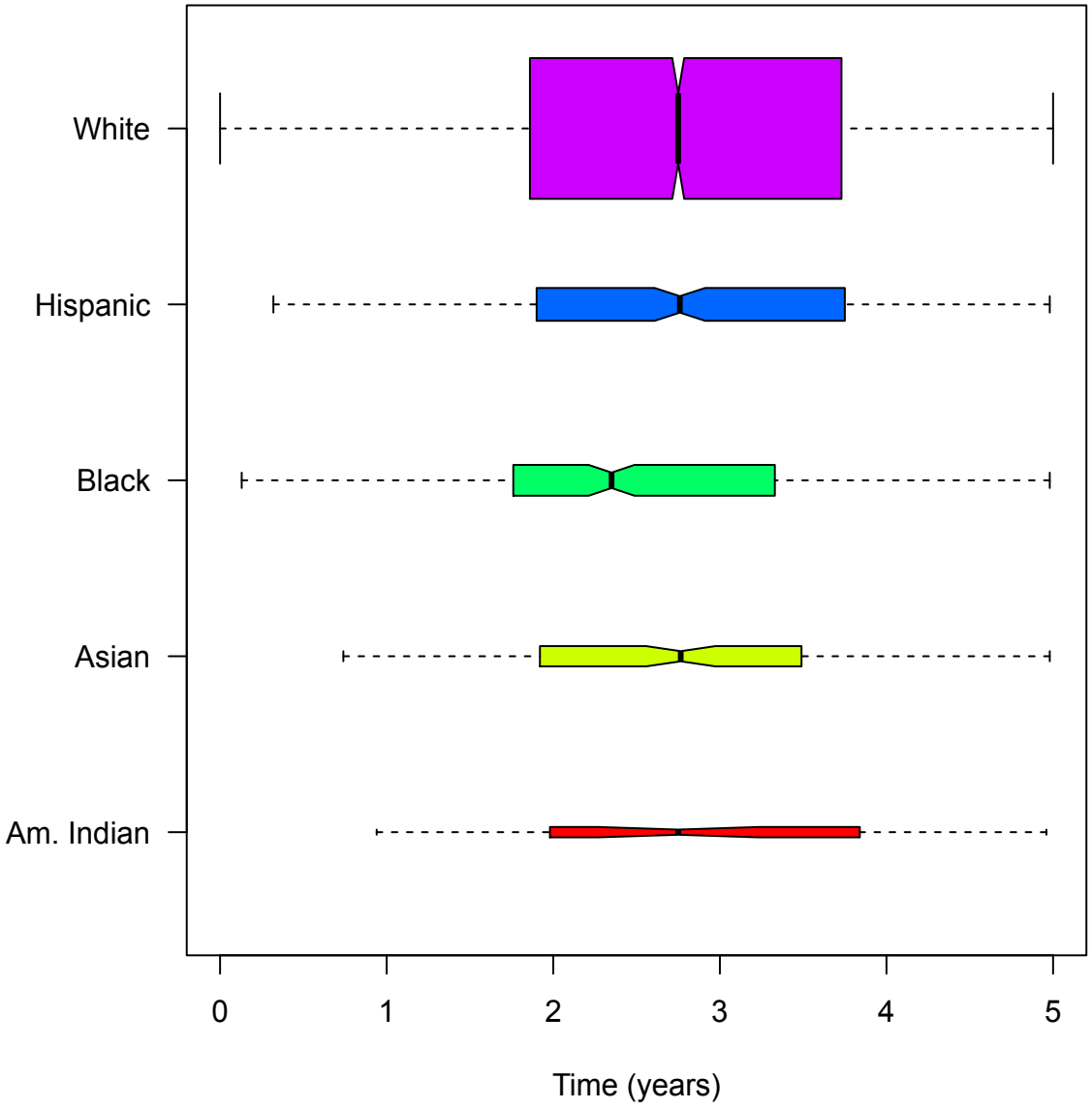


**Figure 12-2. Box plots of time to award by subpopulation.**



# 13 Tuition and Fees

Each fall, the Iowa Department of Education collects data about tuition and fees from Iowa's community colleges. Institutional data for this report were collected from a survey of community college business officers. National and regional data were collected from the Integrated Postsecondary Education Data System (IPEDS).

Unless noted otherwise, tuition, fees, and total cost of enrollment (TCE) are expressed as dollars per semester hour. Any calculations of extended costs assume students are residents of Iowa as defined by Iowa Code [1] and are enrolled in two semesters (fall and spring) of full-time study at 15 semester hours per term. Refer to the latest edition of the tuition and fees report for more detailed information.

## Cost of Enrollment

The sum of tuition and mandatory fees for an academic year defines total cost of enrollment (TCE). This cost does not include expenses such as books, room and board, transportation, or other additional fees.

During FY 2015, a full-time student who is a resident of Iowa can expect to pay between $4,110 and $5,370, depending upon where the student is enrolled. The average cost of enrollment per semester hour increased $4.56 for FY 2015 to $157.78, a 3.2 percent increase from the previous year. Table 13-1 shows year-to-year changes in TCE per semester hour by college for in-state students.

**Table 13-1. Year-to-year change in total cost of enrollment**

| College | FY 2014 ($) | FY 2015 ($) | Change (%) |
|---|---|---|---|
| Northeast Iowa | 163.00 | 163.00 | 0.0 |
| North Iowa Area | 153.75 | 156.75 | 2.0 |
| Iowa Lakes | 166.58 | 172.08 | 3.3 |
| Northwest Iowa | 172.00 | 175.00 | 1.7 |
| Iowa Central | 151.00 | 157.00 | 4.0 |
| Iowa Valley (Ellsworth) | 174.00 | 179.00 | 2.9 |
| Iowa Valley (Marshalltown) | 174.00 | 179.00 | 2.9 |
| Hawkeye | 147.00 | 151.00 | 2.7 |
| Eastern Iowa | 134.00 | 137.00 | 2.2 |
| Kirkwood | 140.00 | 145.00 | 3.6 |
| Des Moines Area | 136.00 | 139.00 | 2.2 |
| Western Iowa Tech | 147.00 | 151.00 | 2.7 |
| Iowa Western | 146.00 | 152.00 | 4.1 |
| Southwestern | 154.00 | 160.00 | 3.9 |
| Indian Hills | 149.00 | 155.00 | 4.0 |
| Southeastern | 145.00 | 153.00 | 5.5 |
| *Average* | *153.27* | *157.80* | |
| *Standard deviation* | *13.04* | *13.01* | |

### *Tuition*

Over the past 10 years, the average tuition has increased from $97.00 per semester hour in FY 2006 to $145.36 per semester hour in FY 2015, representing an annualized increase of 4.6 percent. The difference between maximum and minimum tuition rates has widened from $15.00 in FY 2006 to $24.00 in FY 2015, as seen in table 13-2.

### *Online Tuition*

State policy allows community colleges to establish separate tuition rates for distance education courses that are delivered through a consortium agreement approved by the department. The Iowa Community College Online Consortium (ICCOC) sets tuition and fees for online courses on behalf of its seven members. Community colleges that do not participate in the consortium set their own tuition and fees for online courses.

**Table 13-2. Differences between highest and lowest TCE from 2006 to 2015.**

| Academic year | High ($) | Low ($) | Difference ($) | Avg ($) |
|---|---|---|---|---|
| 2006 | 105.00 | 90.00 | 15.00 | 97.00 |
| 2007 | 110.00 | 96.00 | 14.00 | 102.00 |
| 2008 | 115.00 | 100.00 | 15.00 | 107.00 |
| 2009 | 122.00 | 104.00 | 18.00 | 112.00 |
| 2010 | 130.00 | 110.00 | 20.00 | 119.00 |
| 2011 | 137.00 | 116.00 | 21.00 | 125.00 |
| 2012 | 145.00 | 124.00 | 21.00 | 132.00 |
| 2013 | 150.00 | 125.00 | 25.00 | 137.00 |
| 2014 | 150.00 | 128.00 | 22.00 | 140.00 |
| 2015 | 155.00 | 131.00 | 24.00 | 144.00 |

### *Other Tuition Rates*

Through a reciprocity agreement approved by the Iowa Department of Education, Iowa Lakes Community College allows residents of Minnesota pay $166.00 per semester hour. Mandatory fees are the same as for other students.

International students who attend Kirkwood Community College pay $290.00 per semester hour for tuition. Mandatory fees are the same as for other students.

### *Mandatory Fees*

Ten community colleges charge their students mandatory fees; five do not. Mandatory fees do not include fees applied to specific programs. In FY 2015, average mandatory fees are $12.42 per semester hour compared to $11.56 per semester hour in FY 2014.

Average mandatory fees have increased from $9.16 per semester hour in FY 2006 to $12.42 per semester hour in FY 2015, representing an overall increase of 35.6 percent, or an annualized increase of 3.4 percent. The difference between maximum and minimum fees widened from $22.50 in FY 2006 to $28.00 in FY 2015.

## Revenue Sources

Table 13-3 highlights the major sources of revenue for Iowa's community colleges adjusted for inflation since 1980. Tuition and fees are the largest share of general operating fund revenues. During FY 2013, tuition and fees accounted for 55.5 percent of total revenues. During FY 2004, state, local, and federal funds accounted for 45.5 percent of general operating revenue. By FY 2013, this percentage had dropped to 38.8 percent. Between FY 2004 and FY 2013 state support fell from 36.6 percent to 32.1 percent. During this same period, local funding also dropped from 5.5 percent to 5.0 percent. Figure 13-1 shows revenue sources as percentages of total revenue since 1980.

## Comparisons

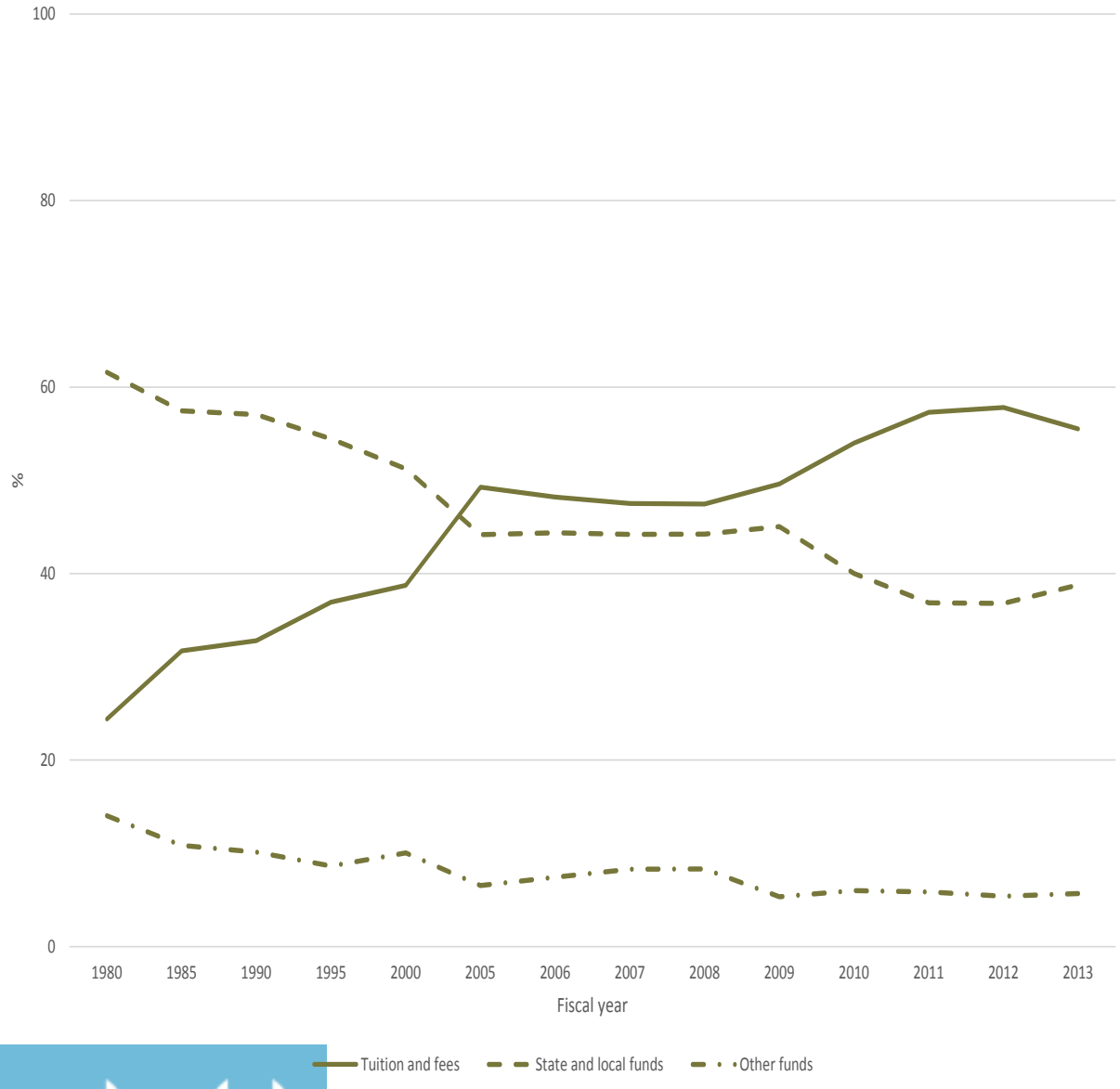
Comparisons in this sections were based upon provisional data collected from the Integrated Postsecondary Education Data System (IPEDS) [2] through FY 2013. IPEDS reports tuition and fees for an academic year, assuming 30 semester hours per year.

For reporting purposes, raw data collected for regional comparisons from IPEDS were converted to cost per

**Table 13-3. Historical sources of revenue for community colleges.**

| FY | Tuition and fees (%) | State and local funds (%) | Other funds (%) |
|---|---|---|---|
| 1980 | 24.4 | 61.6 | 14.0 |
| 1985 | 31.7 | 57.4 | 10.8 |
| 1990 | 32.8 | 57.1 | 10.1 |
| 1995 | 36.9 | 54.4 | 8.6 |
| 2000 | 38.7 | 51.2 | 10.0 |
| 2005 | 49.3 | 44.2 | 6.6 |
| 2010 | 54.0 | 40.0 | 6.0 |
| 2011 | 57.3 | 36.9 | 5.8 |
| 2012 | 57.8 | 36.8 | 5.4 |
| 2013 | 55.5 | 38.8 | 5.7 |

**Figure 13-1. Funding sources as percentages of total revenue.**



semester hour. Data for institutional comparisons were collected from a survey of community college business officers and from tables of tuition and fees published on Iowa's public universities' respective web sites.

### *National*

Average TCE at Iowa's community colleges increased 19.4 percent while the national average increased 23.1 percent, representing annualized increases of 4.5 percent and 5.3 percent respectively. By comparison, annualized rate of inflation during this period was 2.1 percent. According to data from IPEDS , average TCE among Iowa's community colleges ($147.18 per semester hour) was $24.83 per semester hour (20.3 percent) higher than the national average.

### *Regional*

Average tuition and fees, based upon in-state rates, were collected from data sets available through IPEDS. As table 13-4 shows, TCE per semester hour was higher in Illinois, Minnesota, and South Dakota for FY 2013 than corresponding costs in Iowa.

Data from IPEDS suggest average TCE at Iowa's community colleges ($147.18 per semester hour) was 15 percent lower than the regional average ($173.09 per semester hour) in FY 2013. Nebraska had the lowest average TCE within the region ($102.22 per semester hour). From FY 2012 to FY 2013, average TCE increased 3.5 percent in Iowa. By comparison, the rate of inflation for this time period was 2.3 percent [3].

Average TCE increased 4.8 percent in Kansas, 4.7 percent in Illinois, and 4.3 percent in Wisconsin. Average TCE in South Dakota declined 5.1 percent. Figure 13-2 shows year-to-year percentage change by state within the region.

### *Institutional*

By law, tuition at Iowa community colleges cannot exceed the minimum tuition at the public universities [1]. In 2015, average annual TCE per semester hour at Iowa community colleges ($157.78) was 41.1 percent lower than corresponding costs at Iowa's public universities ($267.87).

## References


[1] Iowa Code 260C.14 2 (2014).

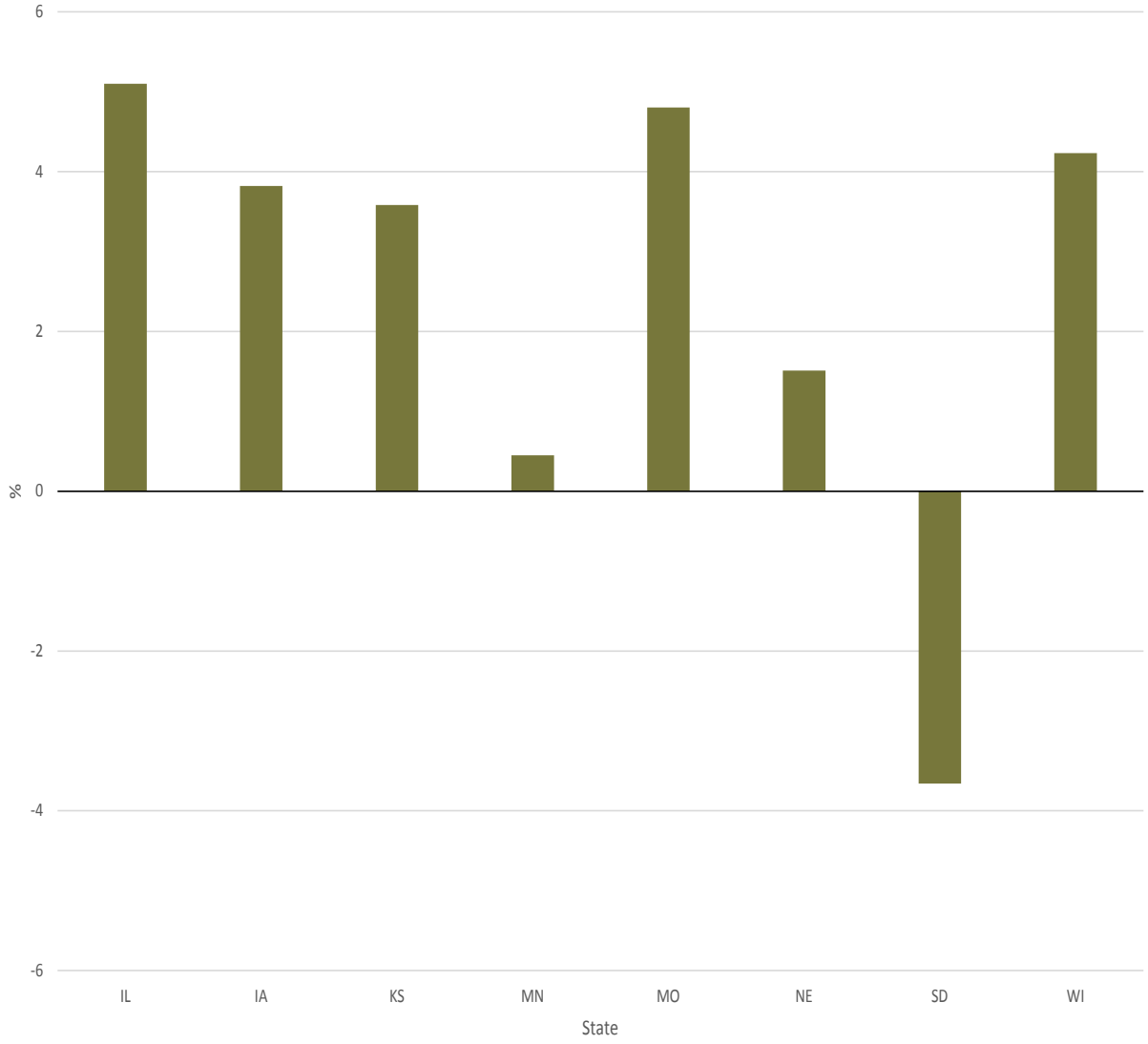
[2] Integrated Postsecondary Educatoin Data System. IPEDS Data Center. Retrieved from http://nces.ed.gov/ipeds/datacenter/login.aspx, August 6, 2014.

[3] U.S. Inflation Calculator, Historical inflation rates: 1913-2014. Retrieved from http://www.usinflationcalculator.com/. Interactive database.


**Table 13-4. Regional comparison of TCE by state for resident students.**

| Year | IL | IA | KS | MN | MO | NE | SD | WI |
|---|---|---|---|---|---|---|---|---|
| 2003 | 1,662 | 2,559 | 1,640 | 2,880 | 1,792 | 1,567 | 3,167 | 2,555 |
| 2004 | 1,792 | 2,686 | 1,783 | 2,812 | 1,940 | 1,678 | 3,414 | 2,583 |
| 2005 | 1,952 | 2,876 | 1,882 | 3,839 | 2,128 | 1,772 | 2,840 | 2,796 |
| 2006 | 2,104 | 3,032 | 1,938 | 4,085 | 2,247 | 1,899 | 3,154 | 2,965 |
| 2007 | 2,252 | 3,139 | 1,942 | 4,359 | 2,284 | 1,991 | 3,495 | 3,163 |
| 2008 | 2,377 | 3,264 | 2,029 | 4,535 | 2,385 | 2,128 | 3,730 | 3,694 |
| 2009 | 2,519 | 3,415 | 2,091 | 4,614 | 2,456 | 2,220 | 3,931 | 3,536 |
| 2010 | 2,670 | 3,549 | 2,212 | 4,791 | 2,406 | 2,248 | 4,357 | 3,543 |
| 2011 | 2,947 | 3,769 | 2,463 | 4,965 | 2,440 | 2,391 | 4,700 | 3,695 |
| 2012 | 2,710 | 3,811 | 2,013 | 4,648 | 2,335 | 2,238 | 2,853 | 3,511 |

**Figure 13-2. Regional year-to-year changes (%) by state.**



# 14 Financial Aid

Iowa community college students receive financial aid from federal, state, institutional, and other sources. Student financial aid includes grants, scholarships, and loans. *The Chronicle of Higher Education Almanac of Higher Education 2014* reports that in fiscal year (FY) 2014 the State of Iowa spent a total of $57,609,721 on need-based student aid, $5,188,561 on non-need based student aid, and $957,985 on non-grant student aid.

In analyzing aid by source to the community colleges from the Iowa College Student Aid Commission, federal aid was $431,346,206, state aid was $10,015,102, institutional aid was $18,287,695, and other aid was $10,084,527. The breakdown of community college financial aid shows that in 2014, 92% of all aid was from the federal government, four percent was from community colleges, two percent from other aid sources, and two percent from the State of Iowa (Table 14-2).

Various financial options are available to students who need assistance financing the cost of their postsecondary education. Such assistance may come in the form of federal, state, institutional, and/or other financial loans, grants, scholarships, or work-study.

## Grants and Scholarships

Grants and scholarships are a form of financial assistance which, unlike loans, do not have to be repaid upon graduation from a postsecondary institution. Several state-funded grants and scholarships are provided through the Iowa College Student Aid Commission. Students of Iowa's community colleges currently receive assistance through the Iowa Vocational-Technical Tuition Grant, Kibbie Grant, Iowa National Guard Educational Assistance Program, Iowa Grant, All Iowa Opportunity Scholarship Program, Education Training Voucher Program, All Iowa Opportunity Foster Grant Program, and GEAR UP Iowa scholarship (Table 14-3). Through these state-funded programs, a total of 8,828

**Table 14-1. 2013-2014 Award Year Pell Grant Volume by School**

| District | School | YTD Recipients | YTD Disbursements |
|---|---|---|---|
| 1 | NORTHEAST IOWA COMMUNITY COLLEGE | 3,281 | $6,256,188 |
| 2 | NORTH IOWA AREA COMMUNITY COLLEGE | 1,911 | $3,746,954 |
| 3 | IOWA LAKES COMMUNITY COLLEGE | 1,633 | $3,502,881 |
| 4 | NORTHWEST IOWA COMMUNITY COLLEGE | 734 | $1,374,274 |
| 5 | IOWA CENTRAL COMMUNITY COLLEGE | 5,247 | $11,184,393 |
| 6 | ELLSWORTH COMMUNITY COLLEGE | 852 | $1,995,604 |
| 6 | MARSHALLTOWN COMMUNITY COLLEGE | 1,314 | $2,710,491 |
| 7 | HAWKEYE COMMUNITY COLLEGE | 3,998 | $7,979,340 |
| 9 | EASTERN IOWA COMMUNITY COLLEGES | 6,085 | $11,126,472 |
| 10 | KIRKWOOD COMMUNITY COLLEGE | 10,071 | $19,918,222 |
| 11 | DES MOINES AREA COMMUNITY COLLEGE | 14,166 | $26,076,626 |
| 12 | WESTERN IOWA TECH COMMUNITY COLLEGE | 4,512 | $9,341,380 |
| 13 | IOWA WESTERN COMMUNITY COLLEGE - COUNCIL BLUFFS | 5,680 | $11,689,598 |
| 14 | SOUTHWESTERN COMMUNITY COLLEGE | 1,056 | $2,291,781 |
| 15 | INDIAN HILLS COMMUNITY COLLEGE | 4,928 | $7,712,964 |
| 16 | SOUTHEASTERN COMMUNITY COLLEGE | 2,626 | $5,304,759 |
| | TOTAL | 68,094 | $132,211,927 |

Federal Student Aid, Title IV Program Volume Reports, www.studentaid.ed.gov

students received over $10 million of financial assistance in FY 2014. The Kibbie Grant, awarded to students who enroll in certain career technical programs and demonstrate financial need, serves the largest population of community college students. Through this grant, over $4.8 million in financial assistance was awarded to 4,746 students in FY 2014.

After the Kibbie Grant, the largest state-funded aid programs are the Iowa Vocational-Technical Tuition Grant and the Iowa National Guard Education Assistance program. The Iowa Vocational-Technical Tuition grant is made available to students enrolled in community college career and technical education and career option courses. In FY 2014, 2,656 students received awards totaling $2,256,718 - an average of $850 per recipient.

Service members of the Iowa Air and National Guard are eligible to receive college financial assistance through the Iowa National Guard Educational Assistance Program. In FY 2014, a total of 1,077 service members received an average assistance of $4,029. Of the 1,077 recipients, 477 enrolled in a community college program and, combined, accounted for $1,258,339 of total awarded funding.

The federal government administers a number of need-based grants. The largest of these programs is the federal Pell grant, awarded to students who demonstrate sufficient financial need. According to data from all 15 of Iowa's community colleges made available through the office of Federal Student Aid for the 2013-2014 award year, a total of 68,094 students received financial assistance totaling $132,211,927 through the federal Pell grant – an average of approximately $1,942 per recipient (Table 14-1).

## Loans

Many federal financial assistance programs are run through the office of Federal Student Aid. Students may apply for federal financial aid by filing a Free Application for Federal Student Aid (FAFSA). The FAFSA is used to customize a student aid package, or financial aid offer. The offer may include a varying assortment of grants, loans, or other forms of financial assistance. Iowa residents in 2013-2014 filed 184,872 FAFSA applications, a five percent decrease from the previous year. Of these applicants, 24,053, or 13 percent of applicants, were high school seniors.[1]

The largest federal student loan program is the William D. Ford Federal Direct Loan Program. This program includes four types of student loan: Direct Subsidized Loans, Direct Unsubsidized Loans, Direct PLUS Loans (for graduate and professional students and parents of undergraduate students), and Direct Consolidation Loans. In FY 2014, 39,481 students received a Direct Subsidized Loan; 35,310 received a Direct Unsubsidized Loan; and 979 individuals borrowed under the Direct Parent PLUS program. Total financial assistance disbursed to these borrowers equaled $226,767,125.

[1]Iowa College Student Aid Commission. Free Applications for Student Aid (FAFSA) filed by Iowa Residents. 2014. https://www.iowacollegeaid.gov/sites/files/college_aid/FAFSA2014.pdf

## Default rates

Failure to make loan payments per the schedule stipulated in a student's promissory note results in the student defaulting on his or her student loans. The default rate indicates how many students enter into default on an institutional basis. The default rate is the percentage of a school's borrowers who enter repayment on certain federal student loans during a particular federal fiscal year and default prior to the end of the next fiscal year. The federal government calculates a three-year cohort default rate. Cohorts are identified by the fiscal year in which a borrower entered repayment. This section includes information on the FY 2011 cohort, which consists of borrowers who entered repayment in FY 2011 and tracks whether the borrower defaulted on his or her loans in FY 2011, FY 2012, or FY 2013. The data shows that 28,630 community college students in Iowa entered into repayment in FY 2011. Of those students who entered repayment, 6,929 – 22.8 percent – defaulted on their loans.[2]

[2]Federal Student Aid. Three-year Official Cohort Default Rates for Schools.2014. http://www2.ed.gov/offices/OSFAP/defaultmanagement/cdr.html

**Table 14-2. 2011-2013 Distribution of Community College Student Aid**

| | 2011 | | 2012 | | 2013 | |
|---|---|---|---|---|---|---|
| Source | Amount | % | Amount | % | Amount | % |
| Federal | $489,012,519 | 93% | $458,778,089 | 94% | $431,346,206 | 92% |
| Institutional | $14,472,564 | 3% | $21,577,612 | 3% | $18,287,695 | 4% |
| Other | $9,842,949 | 2% | $9,593,702 | 2% | $10,084,527 | 2% |
| State | $6,272,339 | 2% | $6,878,524 | 1% | $10,015,102 | 1% |
| Total | $519,600,371 | | $496,827,927 | | $469,733,530 | |

Source: Iowa College Student Aid Commission.
Note: Fiscal year 2014 data on federal campus-based financial assistance programs was not available.

## Table 14-3. FY 2014 Summary of Grant Awards by Institution

| District | School | Iowa Voc-Tech Tuition Grant Program | | Iowa Grant Program | | All Iowa Opportunity Scholarship Program | | Iowa National Guard Education Assistance Program | | Education Training Voucher Program | | All Iowa Opportunity Foster Grant Program | | Kibbie Grant | | Gear Up Iowa Scholarship | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | YTD Recipients | $ Award Amount | Recipients | $ Award Amount | Recipients | $ Award Amount | Recipients | $ Award Amount | Recipients | $ Award Amount | Recipients | $ Award Amount | Recipients | $ Award Amount | Recipients | $ Award Amount |
| 1 | Northeast Iowa CC | 156 | 137,894 | 21 | 8,884 | 3 | 10,665 | 9 | 20,400 | 10 | 23,750 | 11 | 11,823 | 256 | 253,605 | 0 | 0 |
| 2 | North Iowa Area CC | 97 | 88,438 | 14 | 5,723 | 6 | 25,255 | 9 | 27,212 | 5 | 13,750 | 5 | 6,502 | 163 | 174,166 | 0 | 0 |
| 3 | Iowa Lakes CC | 85 | 78,412 | 12 | 5,633 | 8 | 34,128 | 10 | 33,998 | 4 | 13,750 | 5 | 8,866 | 120 | 136,812 | 0 | 0 |
| 4 | Northwest Iowa CC | 78 | 73,764 | 3 | 1,982 | 0 | 0 | 11 | 48,008 | 3 | 11,203 | 3 | 4,728 | 133 | 178,971 | 0 | 0 |
| 5 | Iowa Central CC | 137 | 128,510 | 15 | 12,613 | 16 | 50,895 | 24 | 60,552 | 19 | 61,859 | 16 | 25,513 | 260 | 294,516 | 1 | 975 |
| 6 | Iowa Valley CC District | 57 | 44,075 | 21 | 7,817 | 5 | 21,330 | 8 | 22,142 | 4 | 13,750 | 4 | 6,501 | 129 | 113,143 | 9 | 8,884 |
| 7 | Hawkeye CC | 247 | 212,289 | 24 | 10,140 | 16 | 54,898 | 35 | 98,418 | 9 | 31,018 | 10 | 18,894 | 414 | 441,131 | 1 | 758 |
| 9 | Eastern Iowa CC | 181 | 143,477 | 43 | 17,512 | 1 | 4,266 | 17 | 44,924 | 2 | 3,750 | 1 | 1,182 | 384 | 345,955 | 8 | 9,965 |
| 10 | Kirkwood CC | 435 | 369,510 | 81 | 31,724 | 15 | 61,857 | 96 | 256,641 | 18 | 54,167 | 20 | 28,961 | 687 | 687,981 | 4 | 5,525 |
| 11 | Des Moines Area CC | 523 | 412,397 | 101 | 44,441 | 34 | 128,512 | 143 | 324,632 | 44 | 144,567 | 36 | 53,786 | 841 | 836,876 | 14 | 25,458 |
| 12 | Western Iowa Tech CC | 182 | 156,130 | 15 | 12,391 | 30 | 112,162 | 49 | 124,410 | 11 | 30,705 | 6 | 7,329 | 284 | 255,486 | 4 | 4,550 |
| 13 | Iowa Western CC | 133 | 115,386 | 17 | 11,714 | 18 | 70,923 | 19 | 67,257 | 13 | 53,750 | 14 | 26,004 | 341 | 348,023 | 5 | 8,450 |
| 14 | Southwestern Iowa CC | 51 | 38,731 | 10 | 3,262 | 11 | 44,793 | 3 | 9,656 | 4 | 15,000 | 4 | 5,910 | 74 | 86,355 | 0 | 0 |
| 15 | Indian Hills CC | 189 | 167,908 | 16 | 15,634 | 12 | 39,278 | 28 | 76,960 | 15 | 46,109 | 14 | 21,079 | 443 | 479,910 | 3 | 1,950 |
| 16 | Southeasterm Iowa CC | 105 | 89,797 | 19 | 6,823 | 0 | 0 | 16 | 43,129 | 1 | 5,000 | 1 | 2,364 | 217 | 192,800 | 1 | 975 |
| | **TOTAL** | **2,656** | **2,256,718** | **412** | **196,293** | **175** | **658,962** | **477** | **1,258,339** | **162** | **522,128** | **150** | **229,442** | **4,746** | **4,825,730** | **50** | **67,490** |

Source: Iowa College Student Aid Commission, Preliminary Summary of Payments by Institution.

# 15 Financial

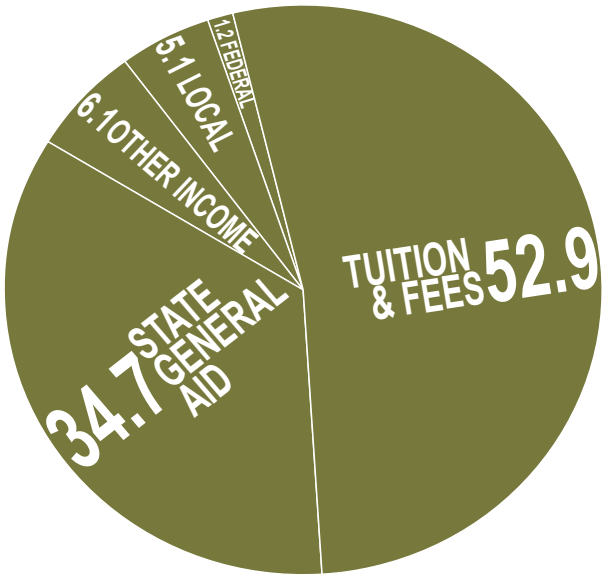
## Unrestricted General Fund Revenues by Source

In fiscal year (FY) 2014, the unrestricted general revenues increased $4,466,438 to a statewide total of $557,463,429. This represented a nominal increase of .81 percent compared to the previous year. A majority of this increase can be attributed to the $16 million increase in state general aid appropriated by the state legislature for FY 2014. Other revenue sources indicated small increases. Federal revenue decreased, although a large portion of this decrease was due to an accounting change mandated by the Iowa Department of Education beginning in FY 2014. Pass-through funds to the community colleges, such as Carl Perkins funds and Adult Education and Family Literacy (AEFLA) funds from the federal government, were traditionally recorded in Fund 1 unrestricted general fund by the colleges for statewide reporting. This year marks a transition year wherein colleges were asked to move these funds to their Fund 2 restricted funds. This requirement was optional in FY 2014 but will be mandatory beginning in FY 2015. Some of the colleges implemented this change during this fiscal year, while others were not able to do so. The recording of these funds in Fund 2 will precipitate a drop in the percentage of revenue in their Fund 1 unrestricted general fund from federal sources during this fiscal year and succeeding fiscal years. The chart indicates the percent distribution of revenue in the community colleges Fund 1 unrestricted general fund revenue sources for the fiscal year. Tuition and fees continues to be the leading source of unrestricted general fund revenue while state general aid increased to just under 35 percent. The change in reporting required by the state moving forward will decrease the amount of federal funding being reported in the colleges' Fund 1 unrestricted general fund. This change is necessitated by the fact that the federal funds convey specific purposes and are restricted in their use. In the event that the colleges receive federal funding that is not restricted in its use, the funds will still remain in the Fund 1 unrestricted general fund. Total revenues, adjusted to 2014 dollars, have shown an overall decrease of .76 percent from the previous year. In real terms, tuition and fees revenue decreased 5.41 percent from FY 2013, while local revenue showed a real increase of 2.31 percent and other income a 6.87 percent increase. State general aid showed a real increase of 7.33 percent from FY 2013.

**Table 15-1: Nominal Revenue Totals by Source 2010-2014**

| YEAR | Tuition & Fees | Local | State General Aid | Federal | Other Income | Total Revenue |
|---|---|---|---|---|---|---|
| 2010 | $280,576,464 | $24,287,204 | $148,754,233 | $34,904,942 | $31,257,259 | $519,780,102 |
| 2011 | $308,633,060 | $25,406,419 | $158,754,232 | $14,478,452 | $31,507,835 | $538,779,998 |
| 2012 | $314,657,804 | $26,471,137 | $163,774,647 | $10,142,936 | $29,392,828 | $544,439,352 |
| 2013 | $307,054,107 | $27,428,532 | $177,274,655 | $9,710,256 | $31,529,441 | $552,996,991 |
| 2014 | $295,035,559 | $28,505,519 | $193,274,647 | $6,421,205 | $34,226,499 | $557,463,429 |

**Figure 15-1: Unrestricted Fund Revenue by Source 2014**



## Table 15-2: Adjusted Revenue Totals by Source (2014 Dollars)

| YEAR | Tuition & Fees | Local | State General Aid | Federal | Other Income | Total Revenue |
|---|---|---|---|---|---|---|
| 2010 | $302,885,379 | $26,218,304 | $160,581,831 | $37,680,269 | $33,742,555 | $561,108,338 |
| 2011 | $327,823,210 | $26,986,136 | $168,625,234 | $15,378,691 | $33,466,925 | $572,280,198 |
| 2012 | $324,723,689 | $27,317,947 | $169,013,788 | $10,467,408 | $30,333,103 | $561,855,935 |
| 2013 | $311,902,330 | $27,861,614 | $180,073,729 | $9,863,576 | $32,027,274 | $561,728,522 |
| 2014 | $295,035,559 | $28,505,519 | $193,274,647 | $6,421,205 | $34,226,499 | $557,463,429 |

### Unrestricted General Fund Expenditures by Source

The total unrestricted general fund expenditures in FY 2014 increased $2,872,803 from the previous year in nominal terms. This represented a .52 percent increase. The increase in expenditures included a .19 percent increase in salaries and benefits, a 1.12 percent increase in service expenses while materials, supplies, and travel expenses decreased by 4.13 percent. The chart indicates the breakdown by category for the unrestricted general fund expenses statewide. Salaries continue to comprise the majority of community college expenditures at just under 75 percent while services come in second at 13 percent.

The services categories are defined below:

1.Salaries – all salaries paid by the community college including administrative, instructional, professional, secretarial and clerical, and service staff. Includes other payroll costs, such as fringe benefits and worker's compensation insurance.

2.Services – items such as professional fees, memberships, publications, rental of materials, buildings and equipment, and insurance.

3.Materials, Supplies, and Travel – expenses such as materials and supplies, periodicals, vehicle materials and supplies, and travel expenses.

4.Current Expenses – items such as purchase for resale, payment on debt principal, student compensation, and transfers.

5.Capital Outlay – items such as furniture, machinery, and equipment, lease purchase equipment, vehicles, land, buildings and fixed equipment, and other structures and improvements.

### Table 15-2: Unrestricted Fund Expenditures by Source 2014


Total unrestricted general fund expenditures, adjusted to 2014 dollars, decreased 1.04 percent from 2013. During this time, salaries decreased 1.37 percent, while service expenses decreased .45 percent.

## Table 15-3: Nominal Expenditure Totals by Source 2010-2014

| YEAR | Salaries | Services | Materials, Supplies & Travel | Current Expenses | Capital Outlay | Total |
|---|---|---|---|---|---|---|
| 2010 | $371,766,262 | $65,185,796 | $29,145,352 | $32,158,884 | $5,923,243 | $504,179,537 |
| 2011 | $388,716,147 | $74,592,882 | $32,105,574 | $28,309,254 | $5,388,948 | $529,112,805 |
| 2012 | $403,231,685 | $72,680,073 | $32,800,924 | $28,672,940 | $3,905,209 | $541,290,831 |
| 2013 | $415,637,586 | $73,268,714 | $31,376,295 | $28,884,390 | $3,321,037 | $552,488,022 |
| 2014 | $416,422,359 | $74,088,407 | $30,079,274 | $31,855,054 | $2,915,731 | $555,360,825 |

## Unrestricted General Fund Expenditures by Function

Total Unrestricted General Fund expenditures by function, adjusted to 2014 dollars, indicate that arts and sciences remains the largest expenditure function at 24.12 percent, with vocational technical spending close behind at 24.06 percent. Adult education represented 7.81 percent of statewide unrestricted general fund spending.

In terms of inflation-adjusted changes from FY 2013, many of the functions indicated a real decrease as a percentage of total spending. Arts and science decreased 3.68 percent while vocational technical functions decreased 2.53 percent. General institution costs decreased by .44 percent. Physical plant spending was up statewide in adjusted terms, showing a real increase of 6.67 percent from the previous year.

**Table 15-4: Adjusted Expenses by Source in 2014 Dollars**

| YEAR | Salaries | Services | Materials, Supplies & Travel | Current Expenses | Capital Outlay | Total |
|---|---|---|---|---|---|---|
| 2010 | $401,325,769 | $70,368,784 | $31,462,728 | $34,715,869 | $6,394,206 | $544,267,356 |
| 2011 | $412,885,694 | $79,230,910 | $34,101,831 | $30,069,463 | $5,724,021 | $562,011,919 |
| 2012 | $416,131,043 | $75,005,104 | $33,850,224 | $29,590,186 | $4,030,136 | $558,606,693 |
| 2013 | $422,200,285 | $74,425,588 | $31,871,710 | $29,340,459 | $3,373,474 | $561,211,517 |
| 2014 | $416,422,359 | $74,088,407 | $30,079,274 | $31,855,054 | $2,915,731 | $555,360,825 |

In looking at a five-year history of inflation adjusted expenditures by function, arts and science shows a 3.11 percent increase, vocational technical a 2.42 percent increase, and adult education a 3.61 percent increase.

The function categories are defined below:

1. Arts and Sciences – all administrative and instructional organizational units of the community college that provide instruction in the area of college parallel and career option/college parallel (CO/CP).

2. Career/Vocational Technical – all organizational units designed to provide vocational, technical, and semi-professional training.

3. Adult Education – all organizational units designed to provide services, courses, and programs intended mainly for part-time students who are not a part of one of the instructional divisions of arts and sciences or career/vocational technical functions. Some examples include Adult Basic Education (ABE), high school completion, and short-term preparatory.

4. Cooperative Programs or Services – all organizational units designed to provide instruction for secondary joint effort activities and all activities concerning Chapter 260E (Industrial New Jobs Training) and Chapter 260F (Jobs Training).

5. Administration – all expenses of the Community College Board of Trustees, the CEO, and business office, which serve the entire community college.

6. Student Services – all organizational units, which are primarily concerned with providing services for students.

7. Learning Resources – all organizational units, which provide for storage, distribution, and use of educational materials throughout the entire community college.

8. Physical Plant – all organizational units, which are responsible for the operation and maintenance of the community college's physical facilities.

9. General Institution – all other expenses except those included in the above functions. Some examples include institutional development, data processing, general printing, communication, alumni affairs, early retirement, and telecommunications.

**Figure 15-3: Unrestricted Fund Expenditures by Function 2014**

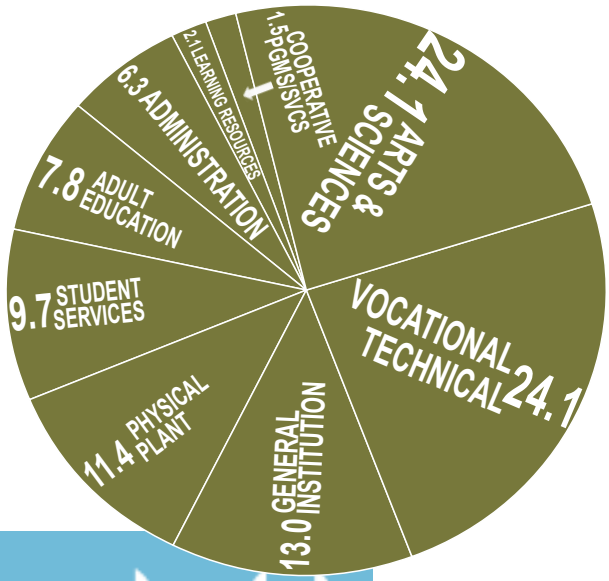


**Table 15-5: Nominal Expenditure Total by Function in 2010-2014**

| YEAR | Arts & Science | Vocational Technical | Adult Education | Cooperative Pgms/Svcs. | Administration | Student Services | Learning Resources | Physical Plant | General Institution | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| 2010 | $120,317,448 | $120,836,241 | $38,766,333 | $8,849,659 | $33,879,257 | $42,437,670 | $12,721,169 | $58,051,938 | $68,319,825 | $504,179,540 |
| 2011 | $130,259,783 | $128,641,754 | $41,667,813 | $7,478,647 | $32,846,251 | $44,353,827 | $12,399,995 | $61,864,517 | $69,600,224 | $529,112,811 |
| 2012 | $135,005,848 | $130,382,868 | $44,757,665 | $8,726,482 | $35,131,272 | $48,204,240 | $11,535,924 | $58,071,504 | $69,475,026 | $541,290,829 |
| 2013 | $136,885,664 | $134,946,776 | $46,501,354 | $7,601,465 | $33,694,159 | $51,220,170 | $11,507,477 | $58,501,424 | $71,629,533 | $552,488,022 |
| 2014 | $133,927,078 | $133,603,435 | $43,358,594 | $8,330,886 | $35,024,744 | $53,747,409 | $11,540,103 | $63,386,497 | $72,442,077 | $555,360,825 |

**Table 15-6: Adjusted Expenses by Function in 2014 Dollars**

| YEAR | Arts & Science | Vocational Technical | Adult Education | Cooperative Pgms/Svcs. | Administration | Student Services | Learning Resources | Physical Plant | General Institution | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| 2010 | $129,884,009 | $130,444,051 | $41,848,683 | $9,553,304 | $36,573,031 | $45,811,932 | $13,732,642 | $62,667,706 | $73,752,003 | $544,267,359 |
| 2011 | $138,359,061 | $136,640,426 | $44,258,629 | $7,943,653 | $34,888,561 | $47,111,654 | $13,171,000 | $65,711,122 | $73,927,819 | $562,011,926 |
| 2012 | $139,324,677 | $134,553,808 | $46,189,460 | $9,005,642 | $36,255,119 | $49,746,291 | $11,904,958 | $59,929,208 | $71,697,528 | $558,606,691 |
| 2013 | $139,047,017 | $137,077,515 | $47,235,586 | $7,721,488 | $34,226,172 | $52,028,910 | $11,689,174 | $59,425,131 | $72,760,526 | $561,211,517 |
| 2014 | $133,927,078 | $133,603,435 | $43,358,594 | $8,330,886 | $35,024,744 | $53,747,409 | $11,540,103 | $63,386,497 | $72,442,077 | $555,360,825 |

## Unrestricted General Fund Revenues vs. Expenditures

After adjusting for inflation (using 2014 dollars), total revenue decreased by .76 percent from FY 2013 to FY 2014 and total expenditures decreased by 1.04 percent. Since FY 2010, Unrestricted General Fund revenues have decreased .65 percent while Unrestricted General Fund expenditures have increased 2.04 percent.

## Full-Time Equivalent Enrollment (FTEE)

The Full-Time Equivalent Enrollment (FTEE) calculation is utilized when determining state general aid (SGA) and is a standardized method for measuring enrollment. Due to timing of the calculation to meet Iowa Legislative deadlines, the enrollment used to calculate SGA is two years behind the year of the aid (i.e., FY 2014 enrollments are used to calculate fiscal year 2016 SGA). Twenty-four (24) credit semester hours equals one FTEE, while 600 non-credit contact hours equals one FTEE.

FY 2014 saw a decrease of 5,620 FTEE from the previous year, down to a total of 91,075.43. This represented a 5.81 percent decrease from the previous year. This enrollment figure continues to trend downward matching other measures of enrollment both statewide and nationally.

**Figure 15-4: Total Revenue Vs. Total Expenditure 2010-2014 in 2014 Dollars**

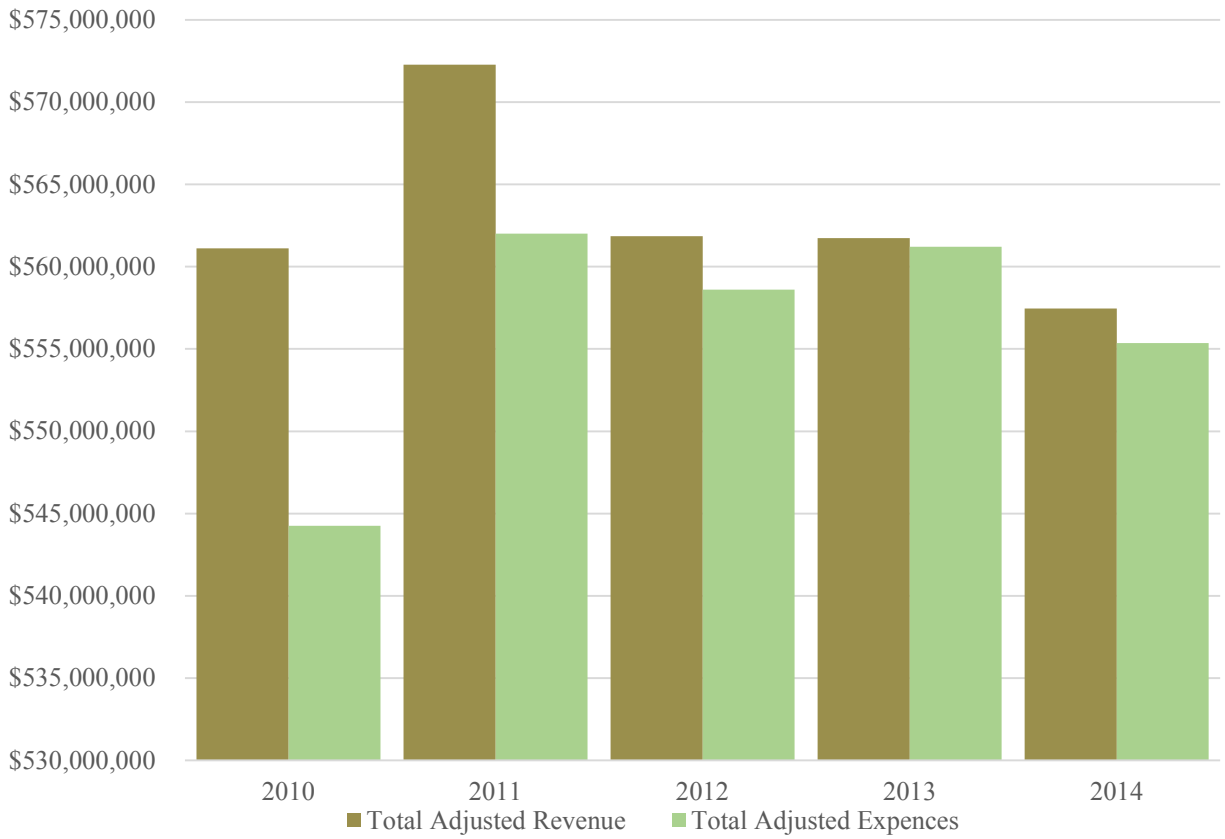



**Table 15-7: Adjusted Revenue and Expenditures/FTEE in 2014 Dollars**

| YEAR | Revenue | Expenditures | FTEE Total | Revenue/FTEE | Expenditures/ FTEE |
|---|---|---|---|---|---|
| 2010 | $561,108,338 | $544,267,356 | 104,811 | $5,354 | $5,193 |
| 2011 | $572,280,198 | $562,011,919 | 107,251 | $5,336 | $5,240 |
| 2012 | $561,855,935 | $558,606,693 | 102,504 | $5,481 | $5,450 |
| 2013 | $561,728,522 | $561,211,517 | 96,696 | $5,809 | $5,804 |
| 2014 | $557,463,429 | $555,360,825 | 91,075 | $6,121 | $6,098 |

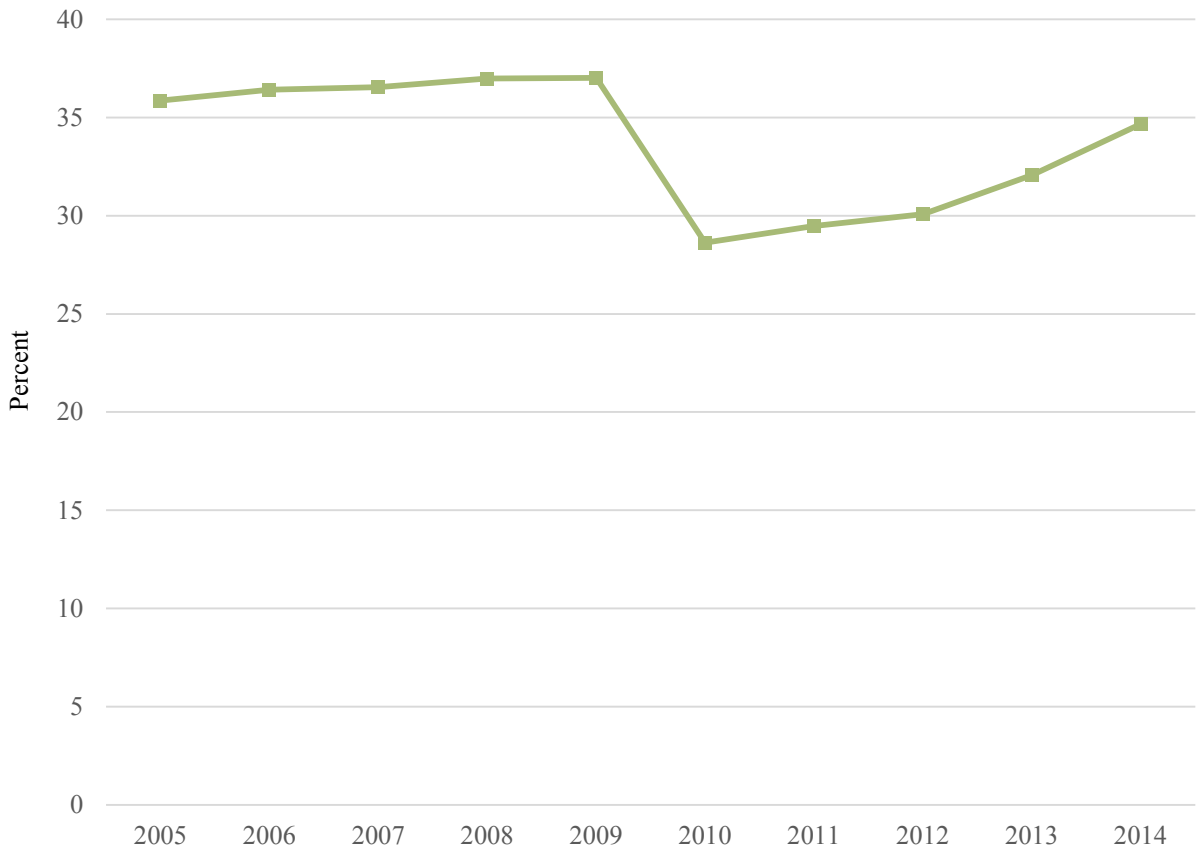
**Table 15-8: State General Aid (SGA) Totals in 2014 Dollars**

| YEAR | Adjusted SGA Amount, $ | FTEE | $/ FTEE |
|---|---|---|---|
| 2005 | 171,455,698.16 | 86,614.34 | 1,979.53 |
| 2006 | 176,444,671.91 | 86,247.10 | 2,045.80 |
| 2007 | 184,412,983.36 | 88,494.93 | 2,083.88 |
| 2008 | 190,566,420.47 | 89,512.99 | 2,128.92 |
| 2009 | 199,764,658.40 | 92,349.23 | 2,163.14 |
| 2010 | 160,581,830.78 | 104,810.67 | 1,532.11 |
| 2011 | 168,625,234.12 | 107,251.01 | 1,572.25 |
| 2012 | 169,013,788.31 | 102,504.34 | 1,648.85 |
| 2013 | 180,073,720.37 | 96,695.92 | 1,862.27 |
| 2014 | 193,274,647.00 | 91,075.43 | 2,122.14 |

## State General Aid (SGA)

The FY 2014 SGA amount was $193,274,647. This amount represented an increase of $16,000,000, or nine percent over the previous year. After adjusting previous SGA amounts into 2014 dollars, the SGA has increased 12.7 percent in real dollars since FY 2005. As a percent of total revenue in inflation adjusted dollars, state general aid is back up to 35 percent of total revenue for the first time since FY 2009. The chart below indicates the changes in the percentage of total revenue in adjusted dollars over the last ten years.

**Figure 15-5: SGA as Percent of Revenue Adjusted for Inflation**



# 16 Human Resources

During fiscal year 2014 (FY 2014, or 2014 in references under this section for this or other fiscal years), Iowa community colleges had 14,152 employees, which included administrative, instructional, professional, secretarial and clerical, and service positions. Some employees were included in more than one reporting category; for example, an administrator who might also teach a course. Thus, there were 16,073 full-time, part-time, temporary, and adjunct positions reported in 2014. The Community College Management Information System (MIS) data does not include employees teaching only non-credit courses for community colleges, unless they are full-time non-credit instructors.

While the total number of employees decreased by 3.5 percent from 2013, the professional composition of community college employees has remained relatively the same for the past seven years. The largest group was instructional (49.4 percent), followed by professional (24.0 percent), secretarial and clerical (19.1 percent), service (14.3 percent), and administrative (0.9 percent). Before 2005, secretarial and clerical staff outnumbered professional staff (Figure 16-1).

## Community College Employees

Number of Employees:
**14,152**

Change since last year:
**3.5%**

Faculty:
**6,985**
Down 4.6% since 2013

Faculty, of all employees:
**49.4%**
Up 3.0% since 2013

The distribution by the type of employment has been relatively stable since the tracking began in 2000. In 2013, one deviation from the stable pattern occurred: the growth in overall numbers of positions was mainly due to increased numbers of part-time and temporary workers rather than full-time employees and adjuncts. Temporary/seasonal staff positions has grown steadily since experiencing dramatic change in 2008, when a sharp increase occurred that raised the number from 542 to 1,990 employees — a gain of 353 percent. In 2014, the distribution returned to the usual pattern, and temporary/seasonal staff constituted 15.5 percent of all types of positions (Figure 16-2).

**Figure 16-1: Iowa Community Colleges Employees by Position Type: 2000-2014**

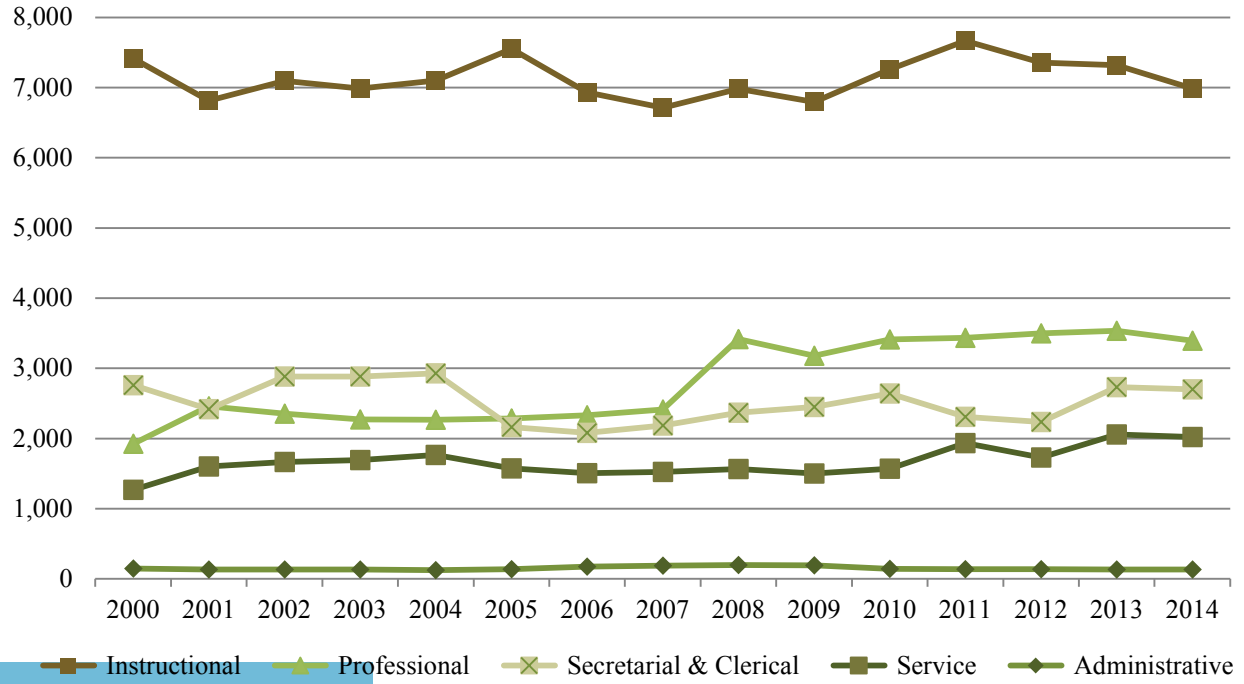
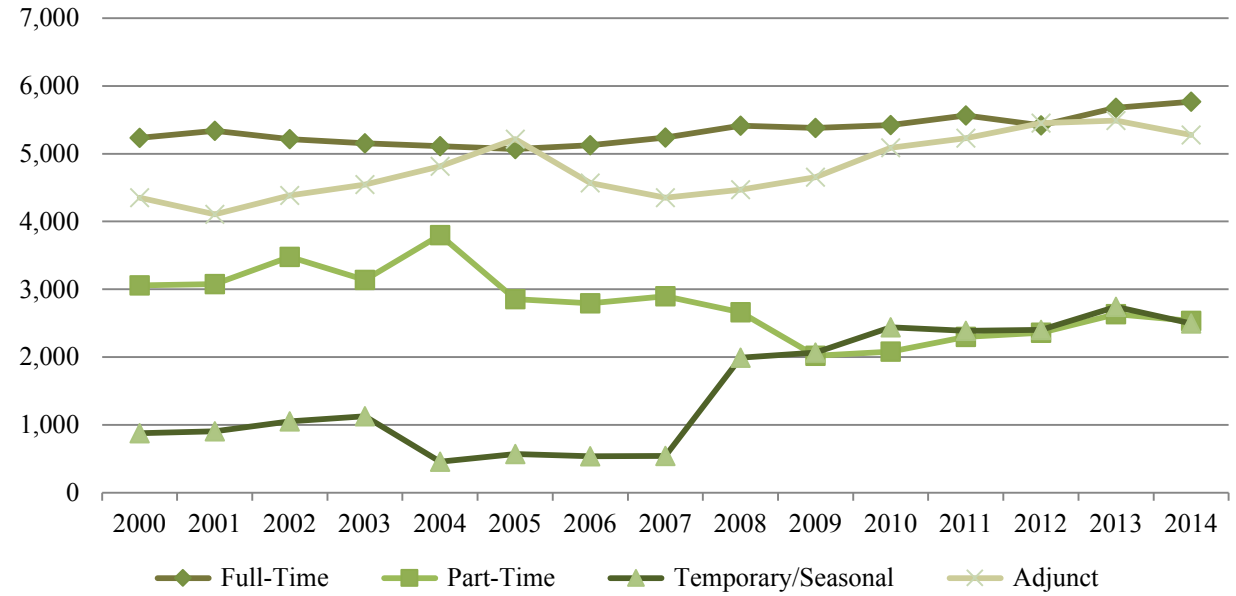


**Figure 16-2: Employment by Type: 2000-2014**




## Employee Education and Demographics

Iowa community college instructors and administrators continuously improve their education. However, the number of instructors and administrators with doctoral degrees, which demonstrated a steady 18 percent average growth between 2004 and 2011, dropped to 234 in 2012, then to 204 in 2013, and increased to 249 in 2014. The percentage for master's degree or higher fluctuated between 61.2 in 2004 and a record high of 64.9 in 2010. In 2013 it dropped to a record low 58.6 percent, and in 2014 it grew back to 63.4 percent. The percentage of bachelor's degree instructors and administrators remained stable from 2008 through 2012 (19.9 percent on average), increased to a record high 23.3 percent in 2013, and dropped back to 18.5 in 2014. The percentage of associate degree holders has remained stable for the past ten years, though it also increased to a record-high 11.2 percent in 2013, before it dropped back to 11.0 percent in 2014 (Figure 16-3).

The percent of racial/ethnic minorities grew between 2013 and 2014 from 8.1 to 8.6, and the 15-year trends demonstrated a steady increase in the number of racial/ethnic minorities among Iowa community college employees. The average growth between 2000 and 2014 was 6.3 percent (Figure 16-4).

The distribution within the racial minorities was not as linear. The percentage of American Indians fluctuated between 6.4 (2000) and record low 3.3 in 2014. Asians also demonstrated increases and declines between 2000 and 2014, and their representation dropped to a record low 17.3 percent in 2014. The percentages of Blacks has been relatively stable but did show a slight decline (0.3 percent) in 2014 compared to 2013. The percentages of Hispanics increased to 30.4, a 1.3 percent raise since last year. Hawaiians or other Pacific Islanders remain within one percent of all minorities. Since 2010, when

**Figure 16-3: Instructors and Administrators Degrees: 2004-2014**

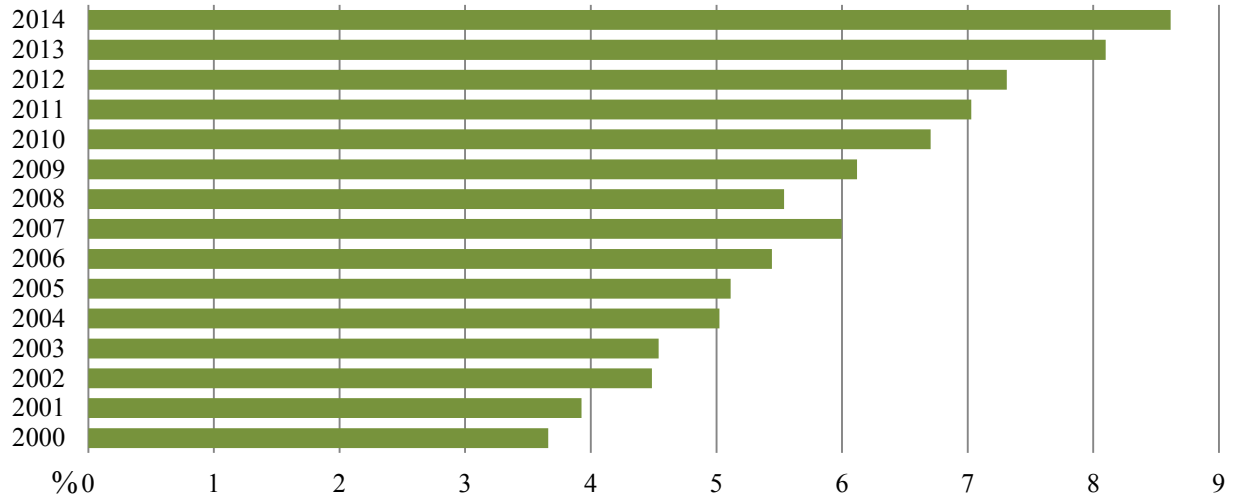

RACE:
CAUCASIAN
91 percent

GENDER:
FEMALE
58 percent

AGE:
MID FORTIES
Mean age: 44 years-old

EDUCATION:
POSTGRAD
63.4 percent with Master's or higher

**Figure 16-4: Percent of Racial Minorities Among Employees: 2000-2014**




the new standards allowed reporting of more than one race, the population of more than one race grew from three percent in 2010 to a high of 8.5 percent in 2012. In 2014, this percentage dropped to 6.1 (Figure 16-5).

A typical community college instructor, as in prior years, was female, 48 years old, and white.

Gender composition of Iowa community college employees has remained stable. In 2000, females composed close to 58 percent; in 2014 they were 58.2 percent of all employees (Figure 16-6).

In 2014, the age distribution of Iowa community college employees presented a wide palette of groups, from teen years to mid-eighties. The largest groups were among those between 19-20 and 42-62, peaking at 20. Together, these two groups represented over 51 percent of all community college employees. The average age of community college employees was 44 years old, while the median age was 45 (Figure 16-7).

Distributed among seven age groups, from under 17 to over 55, the largest group of employees in 2014 was between 40 and 55 years old. This group has remained the largest for the past ten years. The fastest growing group, however, was over 55 years old. In 2004, this group comprised 19 percent of all employees. It steadily grew to 27.9 percent in 2012. In 2013, it has declined to 27.5 percent for the first time since 2004, but in 2014 it grew to a record high 28.2 percent.

The largest group of community college administrators was between 53 and 59 years old. In 2014, the average age of administrators was 54 years old and the median age was 56 years old (Figure 16-7). In 2013, those numbers were 54 and 55, correspondingly.

**Figure 16-5: Distribution of Racial\Ethnic Minorities Among Employees: 2000-2014**

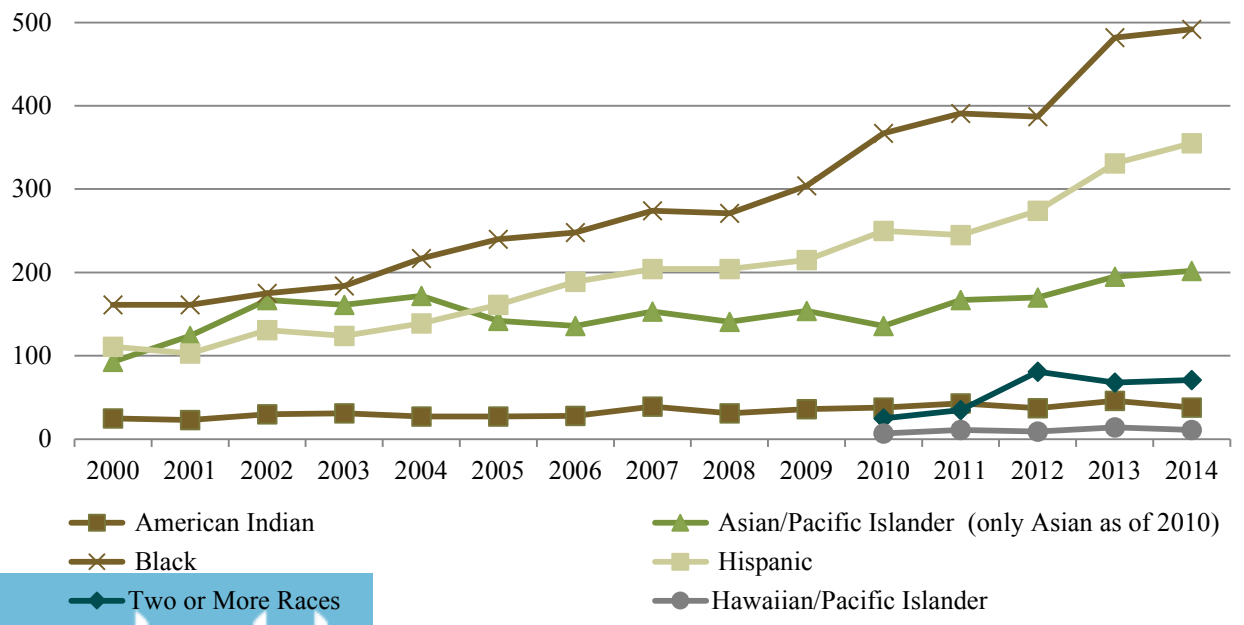
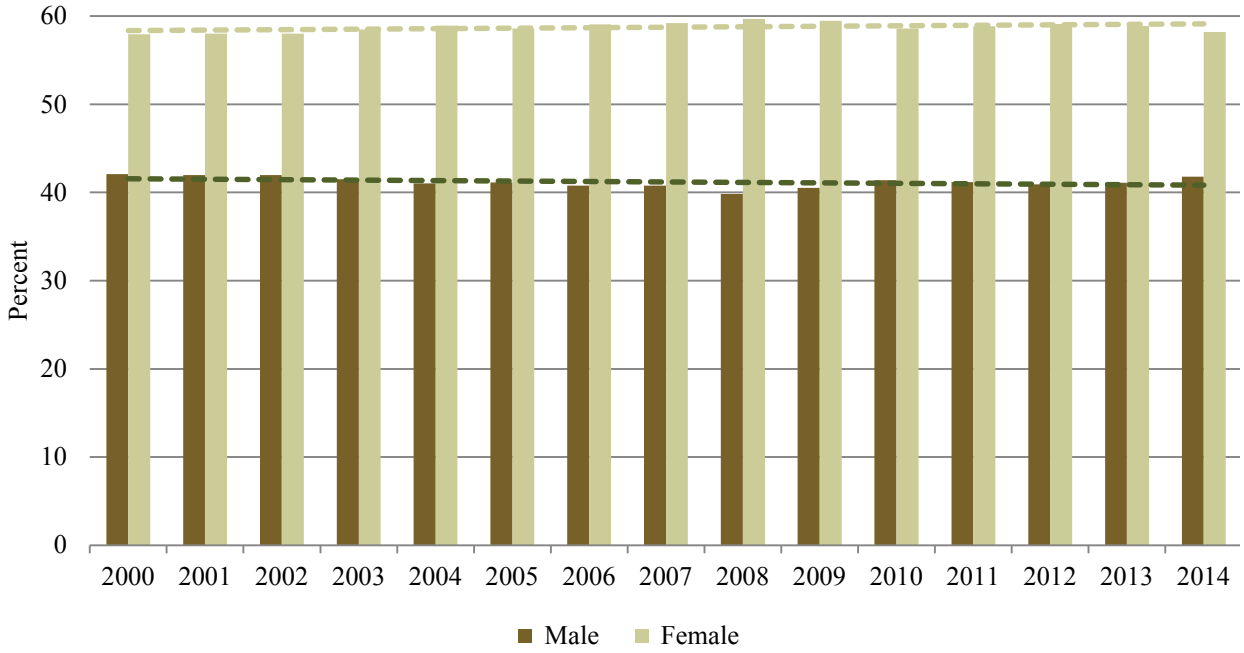


**Figure 16-6: Gender Distribution of Employees: 2000-2014**

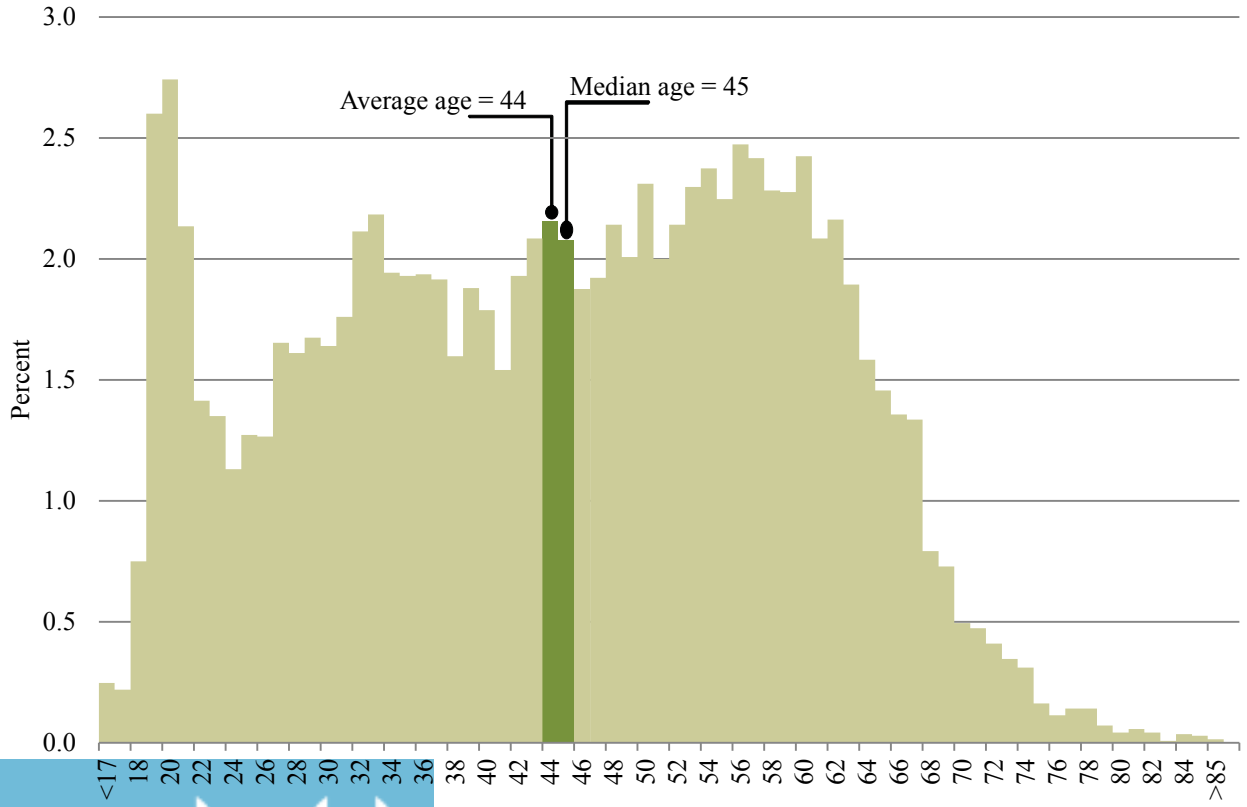



Iowa community college full-time instructional staff was comprised of all ages between 25 and 81. The largest group was between 52 and 60, peaking at 56. The average age of community college full-time instructors was 48 years, and the median age was 51 (Figure 16-8).

The trends nationwide support the notion of an aging faculty. For example, in 2012, 34.2 percent of full-time faculty in California community colleges were between ages 55 and 64, and the average age of the full-time faculty was 51.8.* The percentage of Iowa community

*Faculty Association of California Community Colleges Education Institute, 2012.

**Figure 16-7: Age of Community College Employees: 2014**

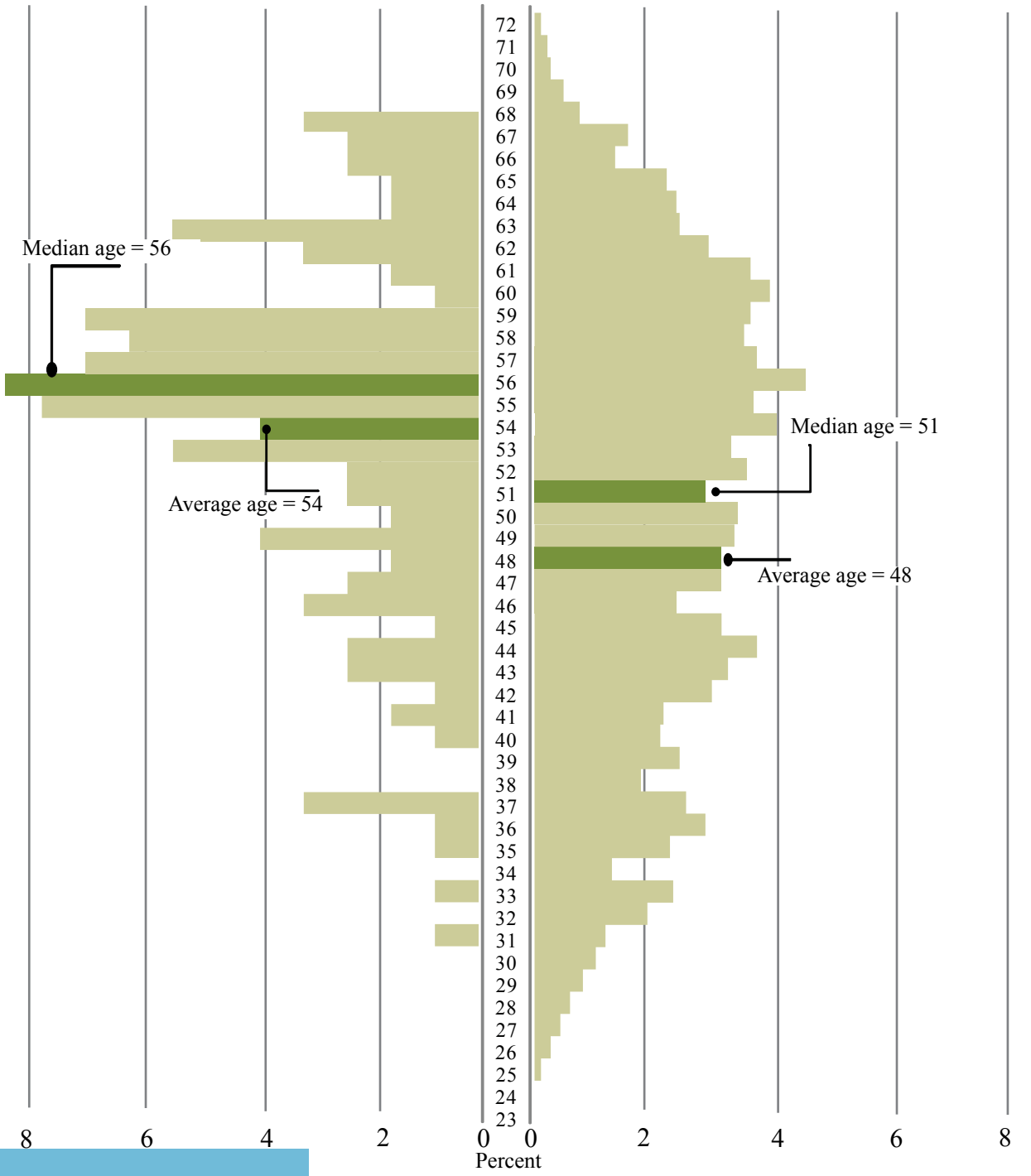


college full-time faculty in the same age group was 31.2. Average age of full-time faculty gradually increased from 2004 through 2011, when it peaked at 50.1. After dipping to 49.5 years in 2012, it rose to 50.0 in 2013., and dropped to 48 percent in 2014. The median age remained at 51 since 2012 (Figure 16-8 and 16-9).

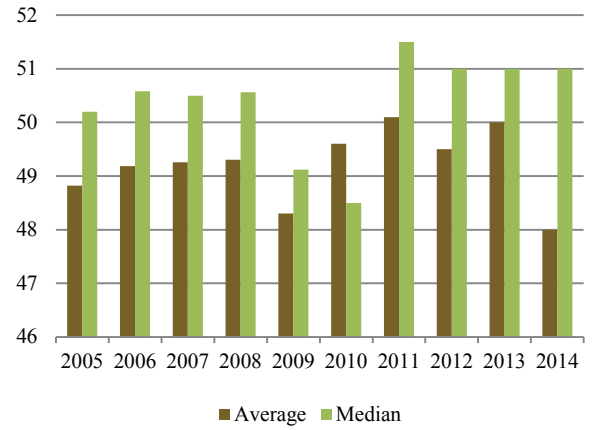
### Instructors' Salaries

The average base salary for a nine-month contract for full-time instructional employees increased from $56,692 in 2013 to $59,947 in 2014. The average increase of full-time instructional staff salaries since 2001 is 3.3 percent (Figure 16-10).

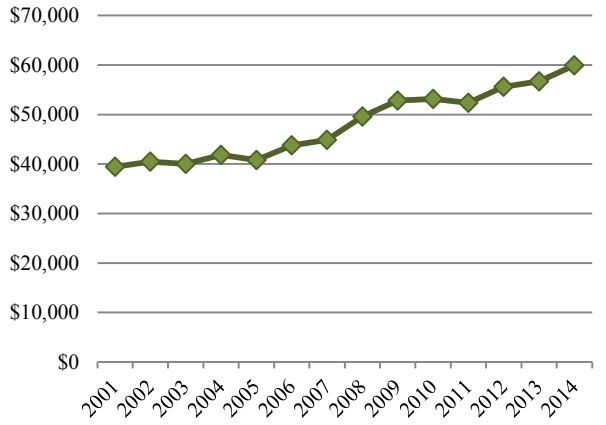
**Figure 16-8: Distribution of Administrators (Left) and Instructors (Right) by Age: 2014**



## Figure 16-9: Average and Median Age of Full-Time Instructors: 2005-2014



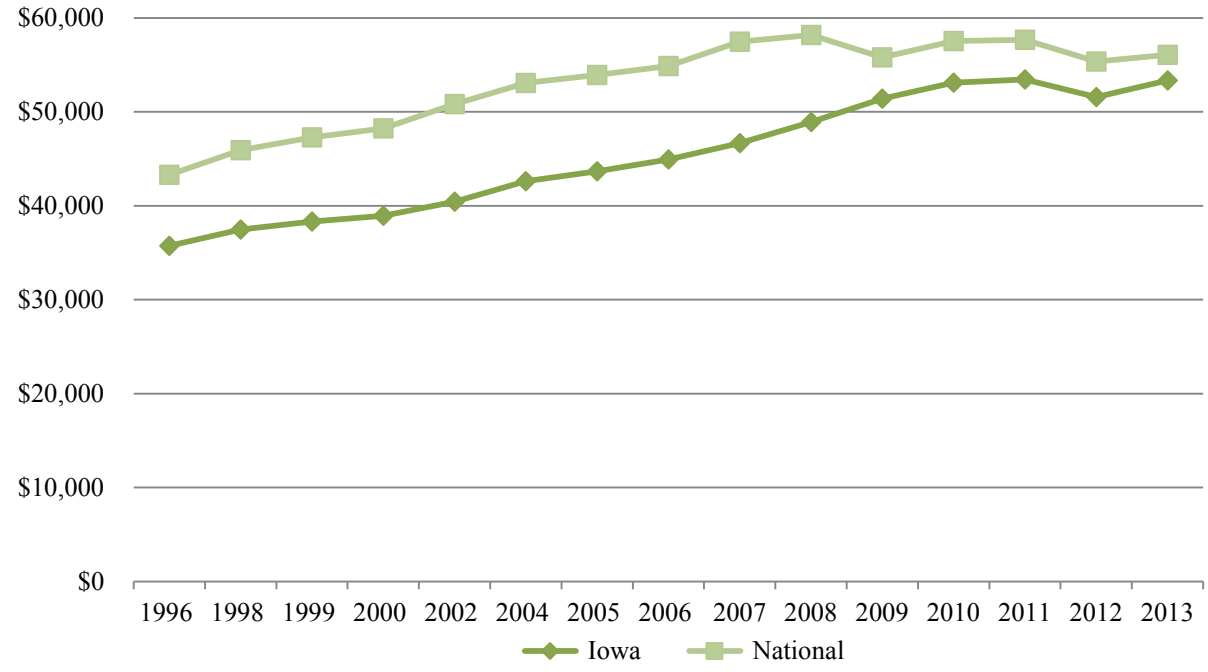

## Figure 16-10: Average Base Salary of Full-Time Instructors: 2001-2014




In addition to the Management Information System (MIS), there are a number of other state and federal reports that publish faculty salaries. Variances across those reports are due to differences in factors (i.e., definitions, classification systems, and contract periods). For example, the National Center for Educational Statistics (NCES) published $56,075 as an average salary of full-time instructors* in two-year public institutions based on nine-month contracts, for fiscal year 2013.

The *Chronicle of Higher Education Almanac* publishes annual numbers for colleges nationwide and by state. According to those numbers, Iowa community college instructors were paid on average 95.1 percent of the national average salary for two-year public institutions in fiscal year 2013 (latest available data). Based on the data from 1996 through 2013, the average salary steadily increased for Iowa full-time community college instructors. In 2013, the increase was 3.3 percent, while the average salary increase nationally was 1.3 percent (Figure 16-11). Iowa 15-year average salaries demonstrated an increase of 2.9 percent since 1996, while the national average increased 1.9 percent during the same time period.

## Figure 16-11: Comparison of Iowa and National Average Salaries for Full-Time Faculty Members: 1996-2011




SOURCE: *The Chronicle of Higher Education Almanac* Issues 1998 through 2013.
*NOTE: Before 2004, *The Chronicle of Higher Education Almanac* published the data every other year.

# 17 Special Supplement: Education Outcomes

The Iowa Community Colleges Education Outcomes: Diploma, Certificate and Associate Degree Programs Report, expected to be published annually, attempts to answer some of the elusive questions about the outcomes of students completing community college programs. This report may be used by policymakers and community college administrators, for planning and program improvement purposes.

Unit record tracking of student data is a preferred way of reporting education outcomes by program. However, the inability to access and link individual student records to employment and wages has been a challenge for most researchers due to regulations and confidentiality laws restricting the use of the data.

In Iowa, as in many states throughout the nation, education records and employer records are held in two different agencies of state government, the DE and IWD, respectively. This often causes obstacles which must be addressed prior to conducting research.

The Iowa Department of Education (DE) and Iowa Workforce Development (IWD) have overcome this hurdle by forming a partnership dedicated to researching and reporting education outcomes for community college programs as they relate to diploma, certificate, and associate degree awards.

Data sharing agreements were constructed which adhere to all Unemployment Insurance (UI) and Family Educational Rights and Privacy Act (FERPA) regulations and rules. Research objectives are clearly stated and limited staff have access to the data. Those with access to the data have signed confidentiality agreements pertaining to the records.

Throughout this report, employment and earnings are analyzed to illustrate the important role that education and training have on employment opportunities and wages. Program and award levels are analyzed separately in order to address the benefits of each. Though there are outcomes for all programs, research parameters were set to include programs consisting of 22 credit-hours or more. This number of credit hours excludes short-term programs and ensures a uniform approach to the research for the purposes of this report.

Employment and wage data were analyzed for three annualized cohorts of students that received awards in fiscal years 2010, 2011, and 2012. This report tracks students three years after graduation; subsequent reports will track students for a five year period. The research will be limited to five years because previous program outcomes research for a two-year college education has shown that wages plateau within a five-year period. For this analysis, records of the following types of awards were used:

- 32,931 Associate Degrees
- 9,437 Diplomas
- 1,030 Certificates

The full report of the findings can be found at https://www.educateiowa.gov/community-colleges.

## Methodology

In order to properly execute the research for this report, data criteria was established based on a 22 credit-hour minimum for associate, diploma, and certificate awards. The 22 credit-hour threshold is the threshold between full-time and short-term programs within the MIS at the DE. Based on this determined criteria, all data were extracted from the MIS and grouped by state fiscal year (July 1 through June 30). Those students who received awards in FY 2010, FY 2011, or FY 2012 are analyzed in this report.

Once the data was extracted from the MIS, it was sent by annual cohort to the National Student Clearinghouse (NSC) in order to identify transfer students. These individuals may have transferred from one community college to another, continued their education at their current location, or transferred to a four-year institution. Transfer students were analyzed by college type (two-year or four-year and private or public) and by transfer location, allowing for the study of graduate out-migration.

The data set was then sent via secure file transfer to Iowa Workforce Development (IWD) in order to match the education records to the Unemployment Insurance (UI) wage records,[1] which provided employment, wage,

1 The UI wage records do not cover those employers exempt from paying UI tax such as: federal employees, members of the armed forces, the self-employed, proprietors, unpaid family workers, church employees, and railroad workers covered by the railroad unemployment insurance system, as well as students employed in a college or university as a part of a financial aid package.

and industry data by fiscal year for each award type and cohort.

Due to the confidentiality of the wage record data, IWD processed the records based on the research objectives and sent back aggregate data for DE analysts to interpret and use in this report.

The data from DE and IWD were thoroughly scrutinized in order to maintain confidentiality and abide by all rules, regulations, and restrictions for each of the data sources. Additionally, data sharing agreements have gone through rigorous legal review.

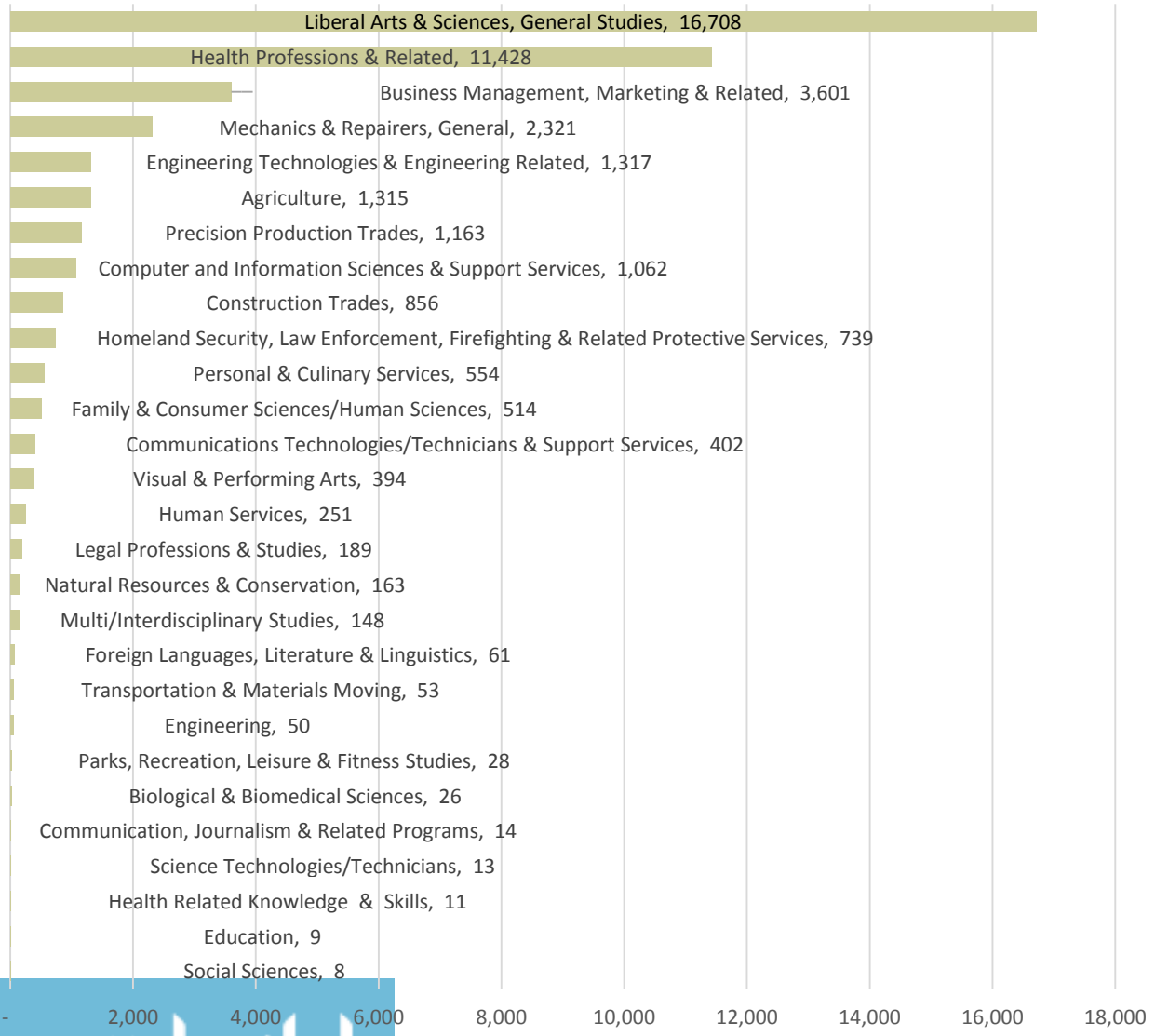
## Awards by Classification of Instructional Program (CIP)

The purpose of the CIP is to provide a taxonomic scheme that will support the tracking, assessment, and reporting of fields of study and program completion activity. The CIP system was originally developed by the U.S. Department of Education's National Center for Education Statistics (NCES) in 1980 with subsequent revisions.

For portions of this report six-digit CIPs as they allow for more specific information pertaining to each program however, some of the data needed to be reported at a higher level (two-digit) CIP level in order to abide by confidentiality rules and restrictions. Figure 17-1 lists the top fifteen programs and the total (aggregate) awards earned by students in the FY 2010 to FY 2012 cohorts.

The majority of awards earned were in the liberal arts and sciences, health professions, business management, marketing, mechanics and repairers, and engineering technologies. It is important to note that not all community colleges offer the same programs; offerings vary based on regional need.

**Figure 17-1. Awards by CIP FY201 to FY2012**



## Time to Degree

In order to measure the time-to-degree for graduates, data were extracted from the MIS for the previous six years for all students that had received an award between FY 2010 and FY 2012. For example, FY 2012 graduates, as enrolled, were found in the records for each year (FY 2011, FY 2010, FY 2009, FY 2008, FY 2007, and FY 2006). Annual cohorts include students who entered an Iowa community college during any term within the fiscal year (July 1-June 30).

Figures 17-2 and 17-3 show the distribution of aggregate number of years they took to complete an associate degree, diploma or certificate for each of the three cohorts. Though there is a variance in completion time, on average, 47.9 percent of aggregate associate degree types, 56.7 percent of diplomas, and 61.7 percent of certificates are earned within a two-year period of time.

**Figure 17-2. Time-to-Degree, Associate Degrees**

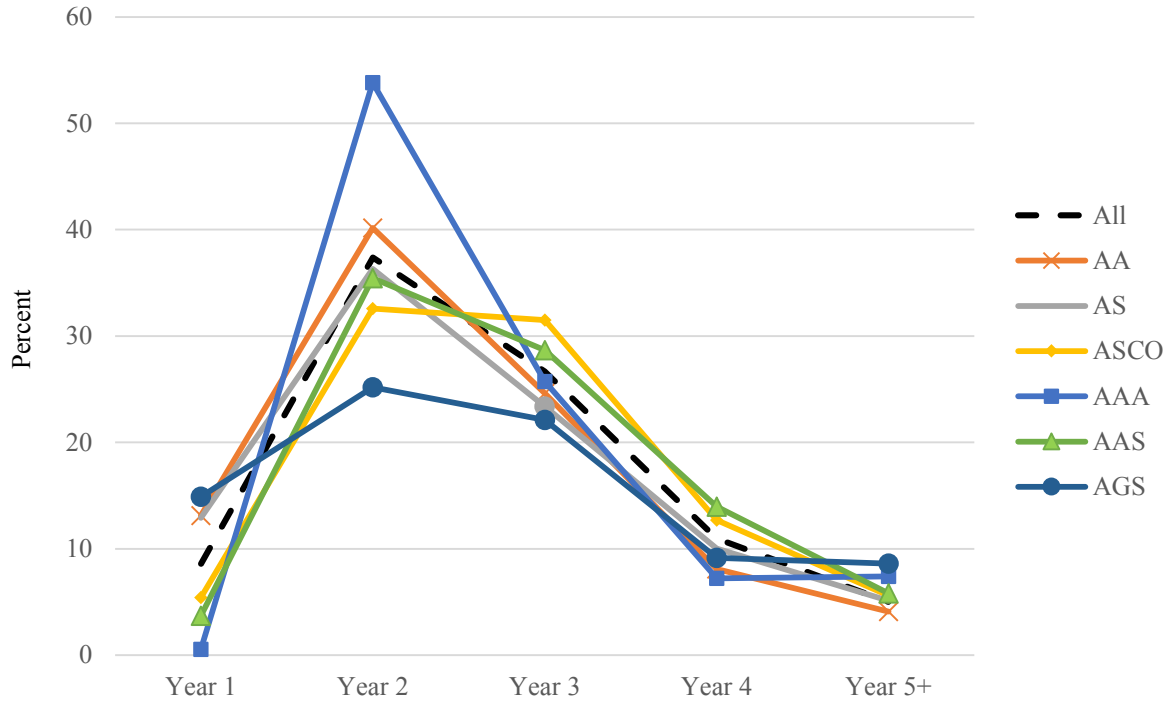
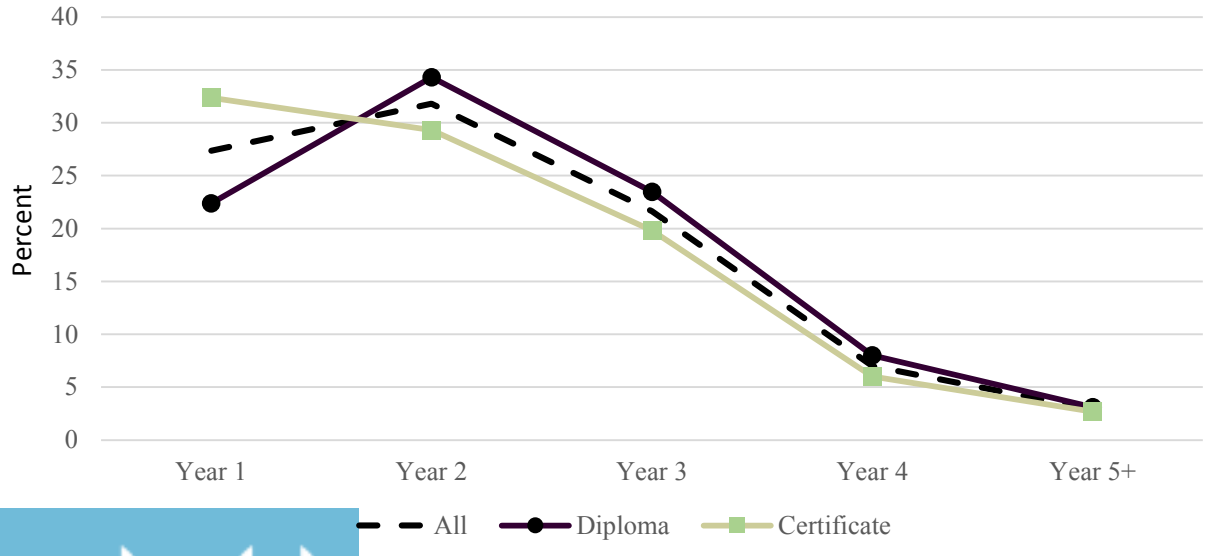



**Figure 17-1. Time-to-Degree, Diplomas and Certificates**



## Workforce and Transfer Cohorts

In order to more explicitly study the community college graduates, each cohort was split into two different groups - those that continued their education after completion of their program and those that did not. The purpose of analyzing these groups separately is to gain an understanding of the impact that both graduates who continued their education and those who left with their award to enter the workforce had on the state of Iowa.

In order to identify each of these groups, the student cohorts were initially matched with the National Student Clearinghouse (NSC) database to measure participation in two- or four-year and public or private institutions for the immediate year following their community college award.

If a graduate was matched or found within the NSC database they were placed into the "pursuing further education" cohort for further analysis. If they were not matched or found within the NSC, they were placed into the "workforce" cohort.

## Retention and Migration

The vast majority of Iowa community college graduates remained in Iowa in the first year after completing their programs (86.3 percent). Over 50 percent continued their education at an Iowa college, while over one-third (33.9 percent) joined the workforce. Conversely, a small percentage of graduates transferred to a college or sought employment outside of Iowa (5.7 percent and 3.5

### Table 17-1. FY 2010 to FY 2012 Retention and Migration On-Year after Award

| | FY2010 | FY2011 | FY2012 | 3-Year Total |
|---|---|---|---|---|
| Further Education (In-State) | 6,749 | 7,958 | 8,033 | 22,740 |
| Further Education (Out-of-State) | 846 | 801 | 830 | 2,477 |
| Did not Continue Education | 5,437 | 6,192 | 6,552 | 18,181 |
| Total Community College Graduates | 13,032 | 14,951 | 15,415 | 43,398 |

### Table 17-2. FY 2010 to FY 2012 Further Education, First Year following Award

| FY of Enrollment After Award | Institutional characteristics | | Continued Education: In-state | | Continued Education: Out-of-State | |
|---|---|---|---|---|---|---|
| | Level | Control | Count | % | Count | % |
| 2010 Cohort | | | | | | |
| 2011 | 2-year | Private | 0 | 0 | 6 | 1 |
| | | Public | 4,250 | 63 | 100 | 12 |
| | 4-year | Private | 1,104 | 16 | 294 | 35 |
| | | Public | 1,395 | 21 | 446 | 53 |
| Total 2010 Cohort | | | 6,749 | 100 | 846 | 100 |
| 2011 Cohort | | | | | | |
| 2012 | 2-year | Private | 0 | 0 | 2 | 0 |
| | | Public | 5,645 | 71 | 83 | 10 |
| | 4-year | Private | 1,051 | 13 | 280 | 35 |
| | | Public | 1,262 | 16 | 436 | 54 |
| Total 2011 Cohort | | | 7,958 | 100 | 801 | 100 |
| 2012 Cohort | | | | | | |
| 2013 | 2-year | Private | 0 | 0 | 6 | 1 |
| | | Public | 5,581 | 70 | 81 | 10 |
| | 4-year | Private | 1,141 | 14 | 278 | 33 |
| | | Public | 1,303 | 16 | 465 | 56 |
| Total 2012 Cohort | | | 8,025 | 100 | 830 | 100 |

percent respectively) (see Table 17-1). Of those students that continued their education at an institution outside of Iowa, most enrolled in contiguous states.

Using the FY 2010 cohort as an example, 7,595 students enrolled in college the fiscal year after receiving their award (combining all semesters). Just under three-fifths (57.3 percent) of the cohort continued their education at a public 2-year college (both in and out of state combined). One-fourth (24.2 percent) transferred to a four-year public college either in- or out-of-state.

Of those who remained in Iowa (6,749), 4,250 continued their education at a two-year public college, 1,104 transferred to a private four-year and 1,395 to a public four-year college (see Table 17-2). By analyzing each of the cohorts separately, there is a noticeable increase in the number and percentage of graduates from the FY 2011 to FY 2012 cohorts who either transferred or continued their education at a two-year public college in Iowa, while the number of transfers to the four-year public institutions in Iowa declined.

## Employment and Wages of the Employed

After analyzing the data regarding those who continued their education, a cohort was developed to analyze the employment of the remaining graduates. Both in- and out-of-state employment data were gathered using the Iowa Unemployment Insurance (UI) database and the Wage Record Interchange System (WRIS). Out-of-state wage data was not available for the entirety of fiscal year FY 2011 and the first quarter of fiscal year FY 2012 (July-September FY 2011) for this analysis; however, the Iowa UI records were available to identify in-state employment for prior years.

All out-of-state employment is measured using the WRIS system which was is not available prior to the fourth quarter of FY 2011 (October-December 2011), so out-of-state wage data for the FY 2010 and FY 2011 cohorts are incomplete. Consequently, the number of unmatched records includes those that could not be matched to out-of-state records and those who may have been unemployed for the described periods of time.

The FY 2010 cohort is used as an example in Table 17-3 due to the availability of three years of wage data. This figure illustrates the aggregate employment and wages for the FY 2010 cohort using the first three fiscal years of data available after the receipt of award. A cost of living adjustment was applied and documented as the Adjusted Median Wage in order to determine whether real wages have actually increased over the study period.

The data show that in FY 2011 (July 1, 2010 to June 30, 2011), 82.8 percent of the FY 2010 non-transfer cohort were employed in an average of 3.6 quarters, earning an adjusted median wage of $24,723 per year. The wages for this cohort have increased annually and reflect a 25.1 percent increase over the three-year study period.

It is important to note that all industries are encompassed when analyzing wage data. Some industries (e.g. manufacturing) pay higher wages than others (e.g. retail). High concentrations of certain industries may have an impact on averages wages, therefore if a state has a higher concentration of manufacturing jobs it might show higher wages. Conversely, if a state has a high number of retail establishments, the average wage may be lower.

**Table 17-3. Median Wages, FY 2011 to FY 2013**

| | FY 2011 | FY 2012 | FY 2013 |
|---|---|---|---|
| Matched to employment (%) | 82.8 | 89.8 | 90.3 |
| Average quarters matched | 3.6 | 3.64 | 3.82 |
| Unadjusted median wages | 23,626 | 28,972 | 33,030 |
| Adjusted median wages | 24,723 | 29,455 | 33,030 |

## Employment and Wages by Award

When analyzing employment and wage data, it is important to note the restrictions and limitations of the Iowa UI and WRIS data, as explained in the Process and Methodology section of this report. Two important factors that impact the data the most are (1) the wage data only represents people who work for a company that pays unemployment insurance tax, and (2) hours worked are not reported within the data, making it impossible to identify part- or full-time employment. The reason the median annual wage is utilized for analysis is due to the lack of knowledge pertaining to hours worked, as this approach eliminates outliers and gives a more accurate representation of the typical employed earnings than the mean would.

Using the FY 2012 statewide "workforce" cohort of students, recipients were matched to the UI and WRIS data to determine if they obtained employment within the first year of their award. Figure 17-4 reflects the

employment percentage and wages in- and out-of-state, in aggregate, for all those in the FY 2012 cohort that were employed in the year following receipt of their award. The bars represent the percent of the cohort that matched employment records and the dots represent the aggregate FY 2013 median annual wage by award type.

Of the Iowa community college AAS degree recipient, 93.6 percent were employed within the year following receipt of their award and earned a median wage of $30,379 in FY 2013. Though the percentage of AAS graduates who became employed within one year of their graduation is the highest of the degree types listed, it is important to point out that all other awards had an employment percentage of 80.0 percent or higher as well.

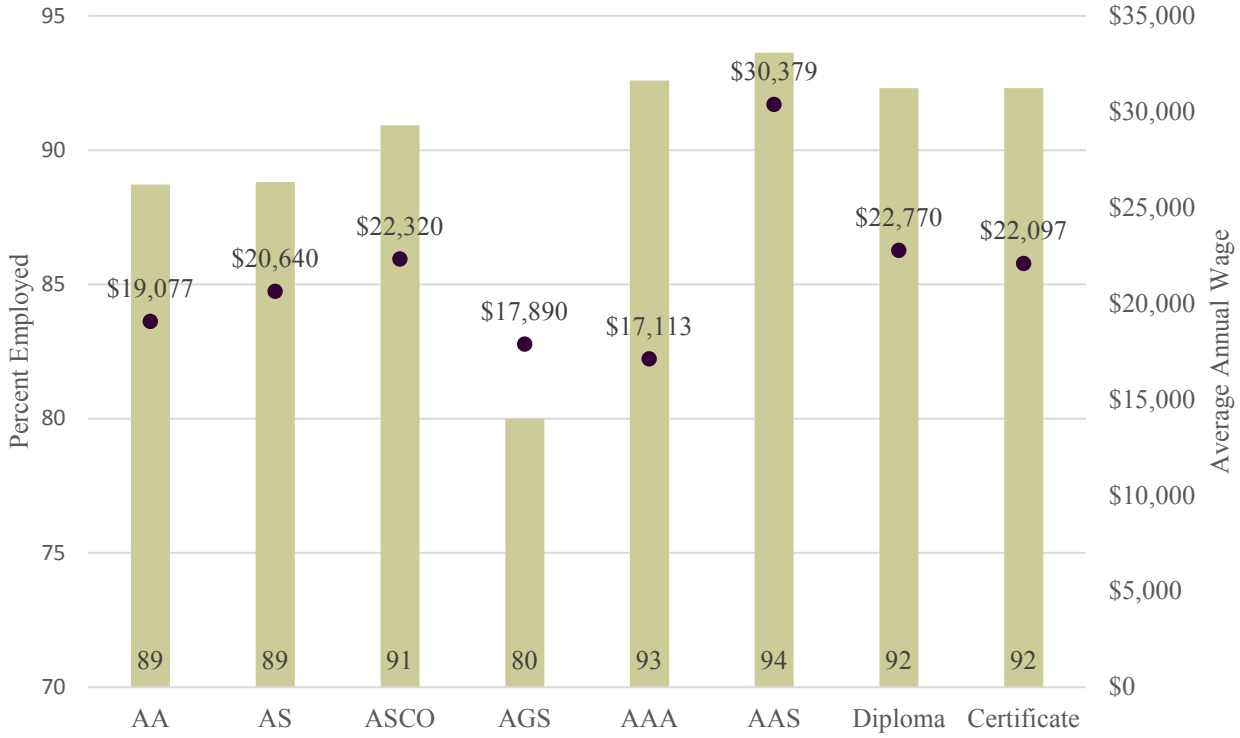
## Awards by Career Cluster

Career clusters are designed to prepare students for success in a career field of interest, concentrating on a particular skill set that will help them with job placement. However, when researching career clusters it is important to note that each cluster represents multiple industries and a vast number of occupations.

Career clusters encompass multiple programs at the community college level. Figure 17-5 illustrates the number of awards by college parallel/liberal arts and career cluster graduates for the years FY 2010 to FY 2012.

College parallel/liberal arts and the health science career cluster make up the vast majority of awards

**Figure 17-4. FY 2012 Cohort, FY 2014 Employment & Wages by Award Type**



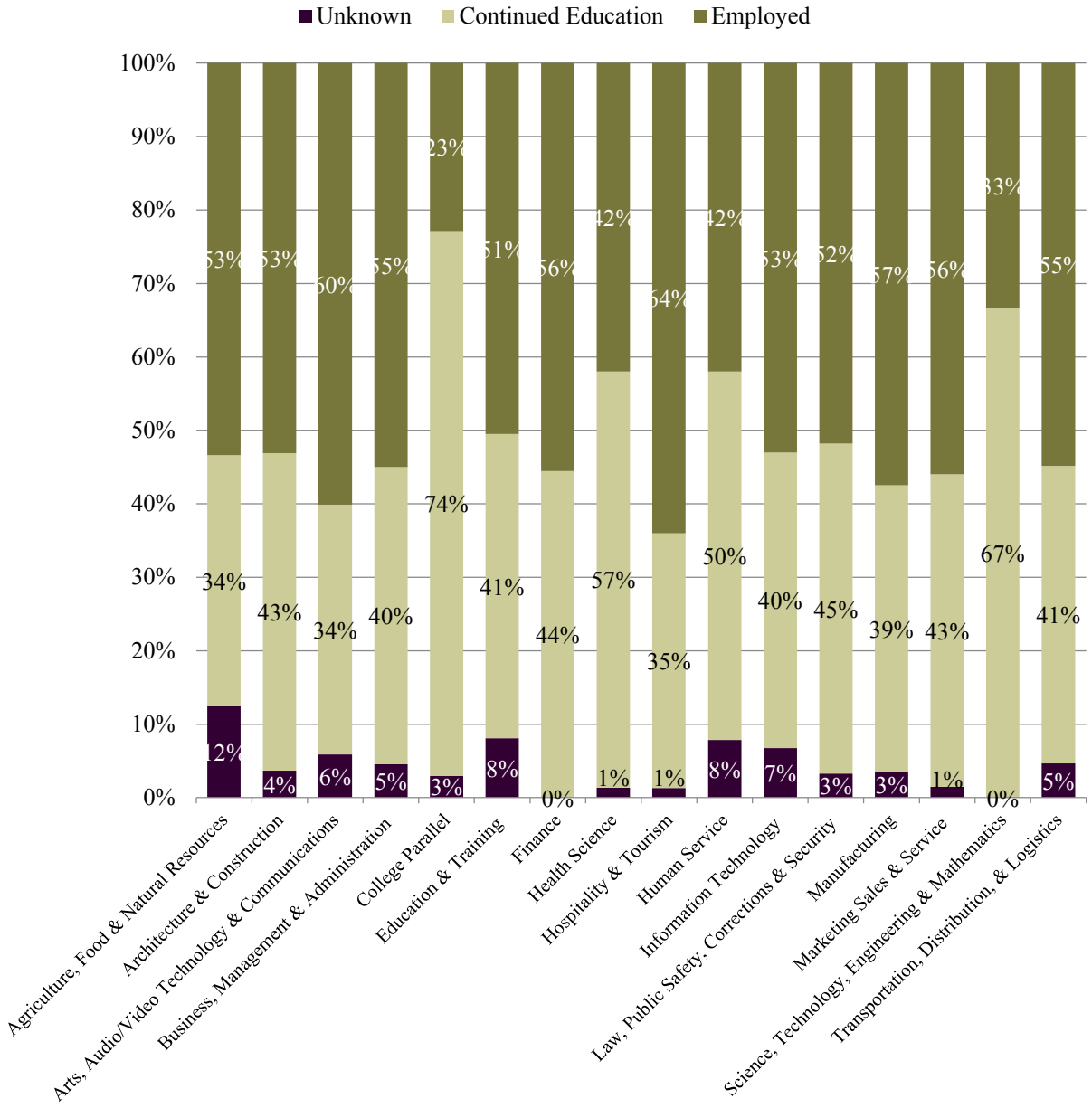

throughout the state. Most students in the college parallel/liberal arts category will transfer to higher education upon graduation so therefore have been separated from the clusters for this analysis. Most of the career cluster graduates move directly into the workforce and are the focus of the employment and wage research.

In the previous sections, career cluster and primary industry sector of employment were analyzed independently. A major point of interest to researchers is the cross-tabulation of these career clusters to industry, identifying which industry sectors hire graduates from each career cluster. Figure 17-6 plots these two variables for the FY 2010, FY 2011 and FY 2012 cohorts in aggregate.

The Iowa UI Wage record database and WRIS provide the industry information of each community college completer used in this illustration. The right side of the circle represents the industry sectors in which community college graduates are employed. Each of the gray bars corresponds to one of the twenty aggregate industry sectors shown. The width of each bar is determined by employment in the overall industry. Similarly, the left side of the chart, represented by colored bars, are career clusters and college parallel. Hundreds of ribbons (denoting graduates) connect the bars on the left to those on the right illustrate the correlation between clusters and the industry of principal employment.

These data show the industry sector in which

**Figure 17-5. Community College Awards by Career Cluster Mapped to Industry Employment**




completers are primarily employed, not the occupations. For instance, a person that received a degree in health science could be a pharmaceutical technician working in the pharmacy of a large retail store. While the work is related to the health care field, employment is technically within the retail trade sector. The distinction between occupation and industry sector is important to consider when analyzing the flow from career cluster to industry shown in Figure 17-6.

Students that chose the college parallel route and the health science career cluster represent the largest portion of FY 2010 to FY 2012 graduates, which explains why the red and green sectors on the left of Figure 17-6 are so wide. All graduates who entered the workforce within one year of graduation are graphically represented (the "no match" section corresponds to those graduates that did not match UI wage records). For example, the majority of health science completers obtained employment within the health care and social assistance industry, individuals from this cluster are found in nearly every industry. The college parallel completers were disbursed as well, but the largest industry sectors of employment were retail trade, health care and social assistance, and finance and insurance.

**Figure 17-6. FY 2012 Cohort Outcomes by Career Cluster, First Year Following Award Earned during FY 2013**

# Appendix A: Methods

## Definitions

This appendix offers definitions of terms that appear throughout the condition report.

**Academic year:** A 12-month period that begins with the first day of the fall term for a community college and continues through the day preceding the start of the next fall term as indicated in the community college's official calendar.

**Calendar year:** A 12-month period that begins January 1 and ends December 31.

**Cohort:** A group of people who share a common set of characteristics or experiences within a defined period.

**Contact hour:** The number of minutes allocated for an instructional activity. The minimum requirement for one contact hour is 50 minutes.

**Credit hour:** A unit of measure awarded by a postsecondary institution in recognition of a student's completion of an activity, course, or program.

**Fiscal year:** A 12-month period that an organization uses to make appropriations and provide financial reporting. The state of Iowa uses a fiscal year beginning July 1 and ending June 30 the following year. The federal government uses a fiscal year beginning October 1 and ending September 30 the following year. Unless noted otherwise, "fiscal year" refers to that used by the state of Iowa.

**Graduation rate:** The percentage of students within a defined cohort who earn a two-year award in three years or less.

**Success rate:** The summed percentages of students within a defined cohort who achieved one of the following outcomes in three years or less:

- earned a two-year award, but did not transfer to a four-year college or university, or;
- transferred to a four-year college or university *before* earning a two-year award, or;
- transferred to a four-year college or university *after* earning a two-year award.

**Transfer rate:** The percentage of students within a defined cohort who transfer to a four-year college or university in three years or less.

**Year:** A calendar year, unless noted otherwise.

## Sources

The primary data sources are each of Iowa's 15 community colleges. Every August, community colleges transmit data to the Department of Education. Upon receipt, Management Information System (MIS) staff members review the data for discrepancies then return summary reports to confirm accuracy. After confirmation, data files are aggregated for analysis and subsequent reporting. The MIS staff's objective findings help guide policymakers as they make informed decisions about community colleges.

Secondary sources of data are also used, which help readers compare Iowa's community colleges with similar postsecondary institutions within the region and throughout the United States. Examples of secondary sources include the National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), and the National Student Clearinghouse (NSC). Data from Iowa Workforce Development are also utilized to offer insight into jobs and earnings of graduates.

The use of secondary source data calls for guarded inferences. Statistical bias is a major concern. No researcher can confirm the veracity of secondary source data because s/he had no control during the collection process. Although we rely upon data from secondary sources to make certain comparisons, we acknowledge the shortcomings of its use. Please refer discrepancies within secondary sources to their respective owners.

## Analyses

Analyses within the condition report are generally limited to descriptive statistics such as frequencies, means, medians, and percentages. Cross-tabulations are used wherever appropriate. The condition report also makes appropriate use of charts and graphs to help readers see trends over time.

Certain sections of the condition report contain discussions of inferential statistics. In such instances, an assumption was made that readers have limited knowledge of statistics; therefore, the discussions are written accordingly.

## Suggested Usage

Best practices suggest integrating information from various parts of this report. Judgments about any particular college should especially include year-to-year indicators such as demographics, credit hours, and non-credit contact hours. Focusing solely upon a specific indicator will provide an incomplete evaluation of a college, possibly leading one to make inaccurate judgments. There-

fore, a holistic viewpoint is encouraged when making inferences from the data.

The 2014 condition report contains numerous changes to past data as well as new data for the most recent fiscal year. Hence, analysts should rely primarily upon the 2014 report instead of data from prior condition reports.

## Student Success

*Cohorts*

The procedure outlined below was used to define a cohort:

1. Distinct records of students who planned to earn two-year awards from three fiscal years earlier. For example:
   a. A cohort of students from fiscal year 2010 would be used to calculate student success in the 2012 Condition Report.
   b. Fiscal year 2012 would represent 150 percent of allocated time for these students to earn two-year awards.
2. Records were selected for inclusion from those in which students:
   a. Were enrolled any time during the initial fiscal year for the first time at a given community college; and
   b. Had completed at least 24 semester hours during that year.
3. Data elements
   a. Names of community colleges students attended.
   b. Sex;
   c. Race/ethnicity;
   d. Graduation status, indicating whether or not a student earned an associate degree within three years from the first date of enrollment.
   e. Transfer status, indicating, based on data from National Student Clearinghouse, whether or not a student transferred to a four-year college or university within three years from the first date of enrollment.

*Calculations*

Both graduation status and transfer status have two possible outcomes. Cross-tabulations were performed to calculate the numbers and percentages of students for each of the four possible outcomes as seen in table A1:

- neither transferred nor earned a two-year award (cell "A");
- transferred before earning a two-year award (cell "B");
- earned a two-year award, but did not transfer (cell "C");
- transferred after earning a two-year award (cell "D").

**Table A1: Generic Contingency Table**

| | | X | | |
|---|---|---|---|---|
| | | Col 1 | Col 2 | Row totals |
| Y | Row 1 | A | B | A+B |
| | Row 2 | C | D | C+D |
| | Column totals | A+C | B+D | Grand total |

*Graduation Rate*

Graduation rate describes the percentage of students from a given cohort who earned two-year awards within three years from the first date of enrollment, whether or not they transferred to a four-year college or university.

Equation A1 displays the formula to calculate graduation rate $G$:

$$G = \left(\frac{\text{Row 2 total}}{\text{Grand total}}\right) \times 100\%, \tag{A1}$$

*Transfer Rate*

Transfer rate describes the percentage of students from a given cohort who transferred to a four-year college or university within three years from the first date of enrollment, whether or not they earned two-year awards.

Equation A2 displays the formula to calculate transfer rate $T$:

$$T = \left(\frac{\text{Col 2 total}}{\text{Grand total}}\right) \times 100\%, \tag{A2}$$

*Success Rate*

Success rate describes the summed percentages of students from a given cohort who met one of the following criteria within three years from the first date of enrollment:

- transferred to a four-year college or university before earning a two-year award (cell "B");
- earned a two-year award, but did not transfer to a four-year college or university (cell "C");
- transferred to a four-year college or university after earning a two-year award (cell "D").

Although one could divide the sum of these three cells by the grand total to calculate success rate, equation A3 displays an easier method:

$$S = \left(\frac{\text{Grand total} - A}{\text{Grand total}}\right) \times 100\%, \tag{A3}$$

*Time to Award*

Studies associated with time to degree usually attempt to follow certain cohorts from entry to completion [1] [2]. One study by Maryland [3] used focus groups. The

University of California-Davis (US-Davis) eschewed cohorts, looking backwards, instead, "from completed degrees to where and when the degree recipient started" [4]. Following a selected cohort and moving forward can be quite difficult. Numerous data sets must be queried in order to capture as many records as possible.

The method described by UC-Davis queried earned undergraduate degrees for a given year, and then back-tracked to individual students' matriculation dates. This method has the advantage of easy replication from one year to the next, which provides a consistent means of comparison.

Although all techniques have their limitations, the UC-Davis technique appeared to be the least onerous. The data sets available to MIS are similar to respective data sets that UC-Davis used. Based on this model, the following method was developed to estimate time to award for students who earned an associate degree during fiscal year 2014.

A query selecting five data element—name of community college, student identification number, date of first enrollment at the listed community college, award date, and type of associate degree—was created from unique records based on student ID by an inner join of the current fiscal year student file and the current fiscal year awards file (listing 1).

### Listing 1. Query of Records

```
-- This SQL query selects records used
-- to calculate time to degree
SELECT
CommColl, -- community college
SSN, -- student's ID number
FirstEnroll, -- as char(6) text format
AwardCode, -- associate's degree codes 1-5
AwardDate -- as date format
FROM Awards_FY2014
WHERE (
(AwardCode) = "1" Or
(AwardCode) = "2" Or
(AwardCode) = "3" Or
(AwardCode) = "4" Or
(AwardCode) = "5"
);
```

In the MIS data base, a student's date of first enrollment (*FirstEnroll*) is stored as a text field in the format YYYYMM. However, the award date (*AwardDate*) is stored as a date field in the format YYYY-MM-DD. Any mathematical calculations with dates required recoding *FirstEnroll* to an actual date format.

After records were selected, *FirstEnroll* was renamed as *FirstEnrollRC* and recoded to a standard date format, using the 15th day of each month as the date. Thus, 201008 from *FirstEnroll*, for example, was recoded as 2010-08-15 for *FirstEnrollRC*.

Next, *FirstEnrollRC* was subtracted from *AwardDate* and then divided by 365.25 to estimate years of study (*YOS*). Records were retained for further analysis in R [5] if $.25 < YOS \leq 5$. Listing 2 displays the code used to calculate summary statistics in R.

### Listing 2. Calculation of Group Statistics

```
# Calculations performed in R
# use plyr package to calculate group statistics
require( plyr)
# read yos (years of study) data from a .csv file
yos <-read.csv (file.choose(),header=T)
# create a new summary table called ccsum
# round summary stats to 2 decimal places
# group by college
ccsum<-round(ddply (yos, ~ college, summarize,
headcount=table(college),
mean=mean(years),
sd=sd(years),
median=median(years)), 2)
# write ccsum to csv file
write.csv(ccsum,"path/to/ccsum.csv")
```

## Fall Enrollment Projections

Autoregressive integrated moving average (ARIMA) is a statistical model used in time series analysis to describe an event and predict its future course. By filtering a signal from background noise, an ARIMA model can extrapolate the signal when calculating a predictive model. Independent variables in an ARIMA model are lags of the autoregressive dependent variable (AR), lags of the predictive errors from the moving average (MA), or both.

Using fall enrollment data from 2007-2013, an autoregressive integrated moving average (ARIMA) with default settings was used to estimate fall credit enrollment for 2014. Calculations were performed in R, with listing 3 displaying an R script for the ARIMA .

### Listing 3. ARIMA Code

```
# Time series analysis with R
# Set working directory
# Call 'forecast' package.
library("forecast")
# Extract current year from system time
# and declare the year as numeric variable
y <- format(Sys.time(), "%Y")
y <- as.numeric(as.character(y))
#
# 'file.choose()' will prompt user to select
# a file for analysis.
# Import tab-delimited data with headers
```

```
fall <- read.table(file.choose(),head=T, sep=`\t')
#
# Convert data to time series.
fall <- ts(fall, end=y, freq=1)
#
# Assign latest 10 years as row names.
rownames(fall) <- c((y-9):y)
# Calculate Holt-Winters
fithw <- holt(fall, h=3, damped=T, level=c(55,70),
 fan=F,initial="optimal", exponential=F)
#
# Create and save graph based on Holt-Winters model
# ylim describing enrollment numbers may need
# adjusting.
# R will save graph to current working directory,
# unless directed otherwise.
#
# Save as PNG image
png("hw_model.png") # calls png driver
# generate plot
plot(fithw,
 ylim=c(60000,110000),
 main="", xlab="Year",
 ylab="Enrollment",
 shadecols=c("gray90","gray75"))
# close device driver
dev.off()
#
# E O F
```

## References


[1] Douglass S. Kalika. *Graduate Student Time-to-Degree Report*. University of Kentucky, 2001.

[2] Lap-Pun T. Lam. Enrollment patterns, time-to-degree, and degree progression for baccalaureate degree recipients at a large urban public university. A paper presented at the 47th annual forum of the Association for Institutional Research, June 2007.

[3] Maryland Higher Education Commission. Study of time-to-degree in Maryland, December 1996.

[4] Office of Resource Management & Planning. Undergraduate time to degree: Completion rates by college and division. Issue report, University of California-Davis, March 2004.

[5] R Core Team. *R: A Language and Environment for Statistical Computing*. R Foundation for Statistical Computing, Vienna, Austria, 2012.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