



Harper College Environmental Scan

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Harper College Environmental Scan – 2017



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The findings and conclusions presented in this report are those of the authors alone and do not necessarily reflect the views, opinions, or policies of the officers and/or trustees of Northern Illinois University.



Table of Contents

List of Figures	4
Executive Summary.....	6
Introduction	7
Key Trends and Considerations.....	8
Economic Trends.....	14
National Recession.....	14
Gasoline Prices	16
Impact of Illinois Pensions	17
Higher Education Funding.....	18
Taxation	19
Inflation.....	20
Economic Conclusion	20
Housing Trends	21
Foreclosures.....	21
Home Values	23
Homeownership.....	24
Housing Conclusion.....	26
Population Trends.....	26
Race-Ethnicity Changes.....	26
Languages & Foreign Born	30
Age Composition.....	32
Birth Rates.....	35
Public School Enrollments.....	36
High School Student Performance.....	39
College Readiness Exams	40
FAFSA Applications	41
Low Income Students in Primary and Secondary Schools	42
Population Conclusion	43
Workforce Trends	44
Unemployment	44
Wages.....	45
Household Income	47
Workforce Trends Conclusion.....	49
Technology Trends.....	50
Technology Trends Conclusion	51
Political Trends.....	53



Harper College Environmental Scan – 2017

Environmental Changes	53
Regulatory Trends	54
Postsecondary Educational Trends	55
Harper College Return on Investment	55
Credentialing and Documentation of Competency	57
Education Finance	57
Postsecondary Education Conclusion	58
Meeting the Needs of Business and Industry	60
Current Workforce	60
Location Quotients	61
Commuter Patterns	65
Worker Education Attainment	68
Currently Available Jobs	69
Future Workforce	71
Meeting the Needs of Business and Industry Conclusion	74
Appendices	75
Appendix A – Burning Glass Certifications	76
Appendix B – Burning Glass Employers	81
Appendix C – Burning Glass Industries	87
Appendix D – Burning Glass Occupations	92
Appendix E – Burning Glass Skills	97
Appendix F – Low Income Percentage of All Schools in Harper District	103
Appendix G – Top Occupations Typically Requiring an Associate’s Degree Ranked by Projected Job Growth Harper Community College Region*	106
Appendix H – Food Stamp Recipients by Reported Occupation*	107
Appendix I: Programs by CIP Code located within 25 Mile Radius	110



List of Figures

Figure 1: Percent of National Population by Income Quintile 14

Figure 2: National Median Net Worth of Families 14

Figure 4: Cook County Total Wages Paid 15

Figure 3: U.S. Gross Domestic Product 15

Figure 5: Gasoline Prices 2007 - 2016 16

Figure 6: Illinois Income Tax 17

Figure 7: 2016 Illinois Bond Ratings 17

Figure 8: Public Higher Education Educational Appropriations per FTE*: Percent Change, FY 2010-2015 18

Figure 9: State-Local Tax Burden Compared to U.S. Average 19

Figure 10: Annual Average CPI (unadjusted) 20

Figure 11: National Average Inflation Rate (%) 20

Figure 12: Total Completed Auctions 21

Figure 13: Foreclosures Completed among Housing Stock 22

Figure 14: Change in Home Values as Perceived by Homeowners 23

Figure 15: Home Sales and Median Home Price 24

Figure 16: Owner Occupancy Rate 24

Figure 17: Occupancy Characteristics 25

Figure 18: Harper District Race/Ethnic Composition 26

Figure 19: Projecting Majority-Minority Populations 27

Figure 20: Race/Ethnicity Change in Harper District, 2010-2015 27

Figure 21: Percent of Asian Population by Census Tract 28

Figure 22: Percent Hispanic Population by Census Tract 29

Figure 23: Change in Languages Spoken: 2010 to 2015 30

Figure 24: Harper College Foreign Born Population Origination - 2015 31

Figure 25: Median Age of Residential Population 32

Figure 26: Age Categories for Harper District - 2015 33

Figure 27: Change in Population Age Groups (5 Year Cohorts) 34

Figure 28: Birth Rates 35

Figure 29: New and Closed Schools 36

Figure 30: District Enrollment by Race/Ethnicity - 2016 37



Harper College Environmental Scan – 2017

Figure 31: Harper District Public School Enrollment, FY2016..... 38

Figure 32: School Performance Indicators..... 39

Figure 33: FAFSA Start and Completion Rates – 2016 41

Figure 34: Low Income Percentage by School - 2016 42

Figure 35: Unemployment Rate..... 44

Figure 36: Hourly Wage to Support a Single Parent with one Preschooler and School-Age Child 45

Figure 37: Food Stamp Recipients by Occupation* 46

Figure 38: Median Household Income, Municipalities within the Harper Community College District..... 47

Figure 39: Family Median Income, Municipalities within the Harper Community College District 49

Figure 40: Estimated Net Return for Harper Associate Degree Completers 56

Figure 41: Monetary Award Program (MAP) Eligibility and Paid Amounts 57

Figure 42: Monetary Award Eligibility by Income Level in Public 2-Year Illinois Institutions - 2015 58

Figure 43: Industry Employment and Specialization* 60

Figure 44: Location Quotients by Industry, Harper Community College Region* 62

Figure 45: Location Quotients by Industry Employment, Harper Region* 63

Figure 46: Harper Job Efficiency Trends..... 65

Figure 47: Commuting Characteristics of Worker by Industry Class 66

Figure 48: Commuting Pattern, Net Change by Age of Worker 2002 - 2014 67

Figure 49: Workforce Education Attainment, 2014..... 68

Figure 50: Establishments by Employment Size Class and Industry Sector, Harper Region*, 2014..... 69

Figure 51: Top Occupations by Number of Job Postings - Harper Community College District..... 70

Figure 52: Top Occupations Typically Requiring an Associate’s Degree Ranked by Projected Job Growth Harper Community College Region* 72

Figure 53: Occupation Projections by Education Required, Harper Community College Region* 73

Figure 54: Turnover in Occupations by Education Required in Harper College Region* 74



Executive Summary

Demographic changes in Illinois affect the Harper College district and are permeating each and every neighborhood. Birth rates are declining, young couples are waiting longer to have children, recovery from the 2008 recession has yet to return to pre-recession levels, and the housing industry still struggles to recover. As a result, school enrollments are declining while the student body becomes more diverse thus presenting new educational challenges. Funding for public schools and higher education is being reduced and threatened with further cuts, though additional services will be needed to meet the demands of the changing diversity. Yet performance indicators for feeder high schools have been higher than the statewide averages. And, low income for school-aged children is estimated at 25%, which is only half of the statewide figure.

The district is losing residents from the White community but gaining residents from the Hispanic community. Foreclosures have returned to an even lower rate than was experienced before the recession thereby allowing neighborhoods to return to more stable investments. Unemployment has returned to healthy levels, but the labor force participation rate remains on the decline. The baby boomer generation lost considerable savings for retirement in the recession, so they are remaining in the workforce longer and this makes it more difficult for new graduates to find entry level positions. Unemployment remains higher than 10% for those without at least a high school diploma, and for those without any higher educational experience, unemployment is over 7%. The critical importance of higher education is that it provides much better job security.

Earnings in Cook County have been improving for all industries except for educational services and arts, entertainment, and recreation. From 2010-2014, the largest industries that made great strides in the improvement of earnings include manufacturing, professional and technical services, and finance and insurance. Healthcare practitioners and technicians is an occupational class that is paying higher annual wage levels while at the same time expanding, thereby providing promising job opportunities for new graduates in these areas.

There is no doubt that much of the economy hangs in the balance as the current recovery has been slow in comparison with previous recoveries or in comparison to other regions of the country. Maintaining a focus on where the Harper district will be in the next ten years will be crucial in responding to the needs and demands of incoming enrollees to ensure a return on their investment on their futures.



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Introduction

Illinois and the nation have experienced dramatic changes in the past decade. These include the aging and diversification of the population and workforce, increasing globalization and unprecedented technological advancement and heightened concerns over terrorism and security both domestically and internationally. In addition, the impacts of economic recession of 2008-2009 continue to linger as many households and businesses remain cautious. While there are signs of improvement, the slow economic growth has hampered their ability to spend, borrow and invest as they did prior to the recession.

Economic indicators such as unemployment rates, housing values, wages, and many others, suggest that the resources needed to invest in post-secondary education have been directly impacted. This is a critical consideration for institutional planning. Campaign rhetoric in 2016 discussed the feasibility of offering students the first two years of community college for free. This would represent a potential game-changer for post-secondary education. However, funding concerns are likely to stall or prevent implementation, if even considered by the President. Other economic, demographic, workforce, technological, and political trends are important to consider as they all shape the opportunities and challenges before Harper Community College.

This environmental scan is intended to provide a baseline of information for Harper College's next strategic planning process to begin in 2017. Understanding the current operating environment and future trends at the local, state, national and global levels will assist Harper's leaders and stakeholders in choosing the best course of action.

Primary data sources used for this scan included public agencies such as the Illinois Department of Employment Security, Illinois State Board of Education, U.S. Bureau of Labor Statistics, U.S. Census Bureau, the National Center for Education Statistics, and the Illinois Department of Revenue. Additional resources also came from private institutions providing freely accessible data, such as the Woodstock Institute research on foreclosures. Several subscription-based data resources were from private vendors such as EASI Analytics and Labor Insight's Burning Glass. An additional data source is the Society for College and University Planning (SCUP).



Key Trends and Considerations

Economic Trends

Trend #1: Economic conditions in the country have shown signs of recovery. However, in Illinois the recovery has been slower than that of other states.

The loss of net worth has hit primarily middle class families, their nest egg to pay for their children's higher education.

Likelihood that the Trend Will Continue Over the Next 3 to 5 Years: High

Supporting Rationale:

- Nationally middle class households have lost nearly \$63,000 in median net worth after adjusting for inflation from 2007 to 2013.
- The past years of underfunding the Illinois pension system continues to plague Illinois recovery and budget impasse.
- Illinois bond ratings continue to be downgraded which will increase the costs to the state to operate.
- Higher education funding will be negatively impacted until Illinois is back on stable financial grounds.
- The higher state income tax rate was allowed to sunset further complicating Illinois finances.

Sources:

Pew Research Center, 2015.

Illinois Department of Employment Security, 2015.

Illinois Comptroller's Office, 2016.

State Higher Education Executive Officers, 2015.

Housing Trends

Trend #2: Foreclosures in the Harper district have been on the decline.

The effects of the economic recession in 2008 is still having impacts on housing in the Harper district.

Likelihood that the Trend Will Continue Over the Next 3 to 5 Years: Moderate

Supporting Rationale:

Only two, out of 23 municipalities, have foreclosure rates greater than 1%.

The overall rate of all municipalities that overlap the Harper district is 0.54%, still slightly higher than the state and national rates, but a strong improvement.

Sources:

Woodstock Institute, 2015.

U.S. Census Bureau.



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Trend #3: While real estate sales improve, perceptions of housing values still low.

Homeownership is critical to the Harper district due to the revenue generation through property taxes. Low home values and many homes being vacated or rented can be indicators of some communities becoming destabilized that could lead to property tax reductions.

Likelihood that the Trend Will Continue Over the Next 3 to 5 Years: Low

Supporting Rationale:

- Harper residents in municipalities reported having much lower perceived home value than may be reality.
- Median sales prices have steadily increased from 2010 to 2016.
- Owner occupancy rates are still lower in 2015 than in 2010 due to more transitioning into rentals or vacancies.
- Vacancy rates steadily improve except for three municipalities that remain much higher than the statewide average.

Sources:

U.S. Census Bureau, American Community Survey.
Illinois Realtor's Association

Population Trends

Trend #4: The Harper district population is becoming more diverse in race and ethnicity.

The country is becoming more diverse.

Likelihood that the Trend Will Continue Over the Next 3 to 5 Years: High

Supporting Rationale:

- Minorities represent 33.8% of the Harper population in 2015 compared to 30.7% in 2010.
- The Asian population has grown by an additional 5,000 residents from 2010 to 2015 primarily concentrated in the Schaumburg and Hoffman Estates areas.
- The Hispanic population has also increased by 1,548 residents from 2010 to 2015 primarily concentrating on the district boundary.
- The White Non-Hispanic population decreased by almost 3,500 residents.

Sources:

- US Census Bureau, American Community Survey.



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Trend #5: The Harper district is attracting those that speak languages other than English and/or born in other countries.

Immigrants tend to move to urban centers and Harper is poised to attract new immigrants and foreign born due to its geographic location close to Chicago.

Likelihood that the Trend Will Continue Over the Next 3 to 5 Years: High

Supporting Rationale:

- Township HSD 211 is experiencing a drastic increase in other languages being spoken other than Spanish, from 2,000 to almost 21,000 residents. Slight increases in the other two districts.
- The population over 5 years and up have increased, but the numbers of residents that speak only English have decreased.
- Those speaking Asian and Pacific Islander languages have increased from 29,000 to 38,000 since 2010 due to the influx of new Asian residents.
- Foreign born residents are primarily from Mexico (33.0%), India (14.6%) and Poland (9.5%).

Source:

- US Census Bureau, American Community Survey.

Trend #6: Birth rates have been declining for many years.

Due to the economic recession in 2008 and couples waiting until they are older to have children already being seen in the lower grades of the public schools.

Likelihood that the Trend Will Continue Over the Next 3 to 5 Years: Moderate

Supporting Rationale:

- Median age of the district population is increasing due to the lack of younger children to offset the Baby Boomer generation.
- The highest number of youths range in age from 10 to 14 years old in 2015. The subsequent five-year cohorts have decreased in number.
- Enrollments in 1st grade are at the lowest number among all grades in schools located in Harper's district.

Sources:

- US Census Bureau, American Community Survey.
- Illinois State Board of Education.



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Trend #7: Performance in the three sender districts to Harper remain high.

While the high schools have undergone changes in college readiness exam methodologies, the overall performance remains high compared to the statewide averages.

Likelihood that the Trend Will Continue Over the Next 3 to 5 Years: High

Supporting Rationale:

- The overall four-year graduation rate was 92.6%, much higher than Illinois' 85.3%.
- Low income eligibility in the Harper district has increased in the last few years, but is still much lower than the statewide average.
- Only three high schools have a mobility rate greater than the statewide average as an indicator of community stability.
- The dropout rates are much lower than the statewide average.
- The four and five-year graduation rates are higher for every district, some significantly, than the statewide average.

Sources:

- Illinois State Board of Education, Report Card Data, Accessed Online 12/02/2013

Workforce Trends

Trend #8: Despite signs of economic recovery and falling unemployment rates, many employers are reluctant to hire new employees or rehire laid-off workers.

While unemployment rates have fallen substantially over the past seven years since the last recession ended, labor force participation among key working aged populations continues to decline and the numbers of discouraged workers is growing.

Likelihood that the Trend Will Continue Over the Next 3 to 5 Years: High

Supporting Rationale:

- Even though unemployment rates continue to decline, much of this can be attributed to falling labor force participation. Although labor force participation has been declining nationwide since the mid-1990's, it has decline more sharply sine the past recession. Because of the slow pace of the recovery, leading many of the long-term unemployment to drop out of the labor force.
- The Economic Policy Institute estimated that as many as 2.3 million individuals of working age nationwide were unemployed and had given up on searching for a job, as of 2016.
- Important industry sectors in the Chicago metro area such as Construction, Manufacturing, Finance, Insurance and Real Estate were deeply impacted by the last recession and continue to suffer job losses since then. In addition, many losing jobs in those industries have skill-sets that are not readily transferable to growth industries like Healthcare, Education and Professional and Business Services making in more challenging to get dislocated workers back into gainful employment.

Sources:

- Illinois Department of Employment Security.
- Economic Policy Institute



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Trend #9: Wage and Income growth continues to struggle, threatening economic growth.

While the Harper district encompasses one of the more affluent parts of the Chicago metropolitan area, wage and income have stagnated or fallen in many communities. This creates a drag on the overall economy, pushing many in lower skilled occupations into the social safety net when the higher costs of living are taken into consideration.

Likelihood that the Trend Will Continue Over the Next 3 to 5 Years: High

Supporting Rationale:

- Median household income declined in 16 of the 23 communities in the Harper district between 2010 and 2015. Eight communities experienced a greater decline than the State average of \$3,177.
- Median family income declined in 14 of the 23 communities in the Harper district between 2010 and 2015. Ten communities experienced a greater decline than the State average of \$2,831.

Source:

- American Community Survey, U.S. Census Bureau.

Postsecondary Trends

Trend #10: Return on Investment for a Harper education. Study shows a Harper education has a high return on the investment in comparison to those not pursuing higher education at all.

Likelihood that the Trend Will Continue Over the Next 3 to 5 Years: High

Supporting Rationale:

- Increased earnings over time after graduation show, on average, an accumulated total of almost \$500,000 difference between a Harper degree and not having any higher education degree.
- Despite the decrease in grants available for two year programs, the value of a Harper education is strong.

Sources:

- Illinois Student Assistance Commission
- Northern Illinois University, Center for Governmental Studies



Meeting the Needs of Business and Industry

Trend #11. Post-Recession Job Growth has been slow and some key industry sectors continue to struggle. The Healthcare, Education and Business and Professional Services sectors have enjoyed substantial job growth over the past five years, boosting overall employment in the Chicago metro area. However, other important sectors such as Construction, Manufacturing, Finance, Insurance and Real Estate are continuing to suffer job losses.

Likelihood that the Trend Will Continue Over the Next 3 to 5 Years: High

Supporting Rationale:

- Although local factors can play a significant role in job gains and losses, it appears that changes in the global economy, technology and industry restructuring are having a greater influence.
- Because many of the jobs being created or lost between these industries require vastly different skill-sets, the demand for education and training for dislocated workers should be strong.

Sources:

- Illinois Department of Employment Security.
- EASI Analytics, Inc.

Trend #12. Most of the demand for workers over the next decade will stem from the need to fill existing positions rather than from new jobs.

As the population continues to age and employers face a wave of retirements the demand for workers to replace them will grow. Job openings from existing positions will outpace new job openings by a ratio of 2 to 1 overall.

Likelihood that the Trend Will Continue Over the Next 3 to 5 Years: High

Supporting Rationale:

- With two-thirds of projected jobs requiring only a high school degree or GED, Harper can play a role in helping students plan careers that begin with an entry-level job but grow into careers with expanded earnings potential.
- Manufacturing remains an industry sector of great strategic importance despite its loss of jobs over the last five years.
- Health care and social assistance, educational services, management of companies and enterprises, and accommodation and food services also offer significant employment opportunities.
- As Harper continues to partner with area employers and offer quality education and training programs for its students, a major challenge will be to help connect students with local employers and actual job opportunities.

Sources:

- Illinois Department of Employment Security.



Economic Trends

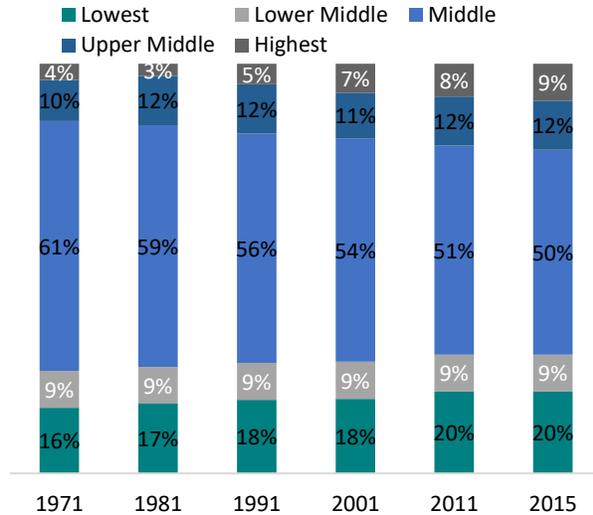
Economic forces have myriad implications for higher education. Federal and state budgets directly impact the funding that flows to postsecondary institutions, and the economy at all levels shapes employment and earning opportunities that translate to income available for college tuition.

National Recession

The national economy has largely recovered from the recession of 2008-2009, but remains in a slow-growth pattern that is uncharacteristic of past economic cycles. In addition, this growth has varied substantially geographically, as well as across industrial sectors, contributing to an overall sense of uncertainty about the future direction of the economy. There are also long-term phenomena that are adding to this perception. One aspect has been the growing disparity in household incomes with significant increases in lower and higher income households and a shrinking proportion middle income households. Research by the Pew Research Center found that (adjusted for inflation) middle income households has been reduced in proportion from 61% in 1971 to only 50%, in 2015 (Figure 1).

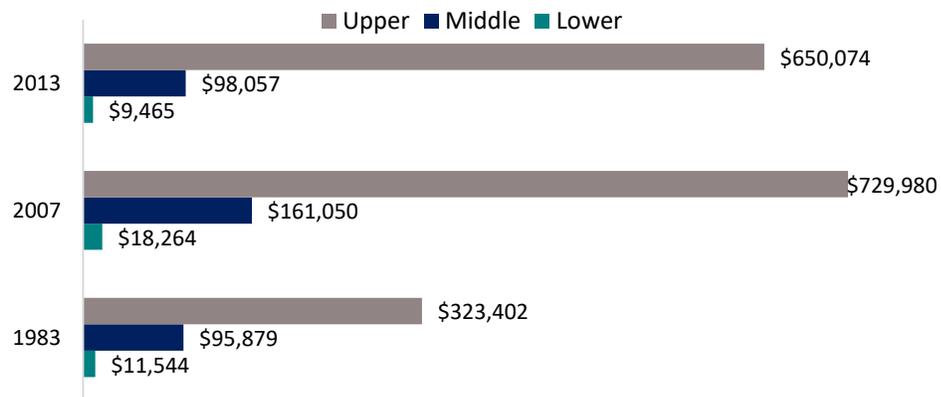
The phenomenon does not just impact income, but overall wealth (i.e. the value of assets) as well. The home mortgage crises of the mid-2000’s and the subsequent recession caused many middle income

Figure 1: Percent of National Population by Income Quintile



Source: Pew Research Center, 2015.

Figure 2: National Median Net Worth of Families



Source: Pew Research Center, 2015.



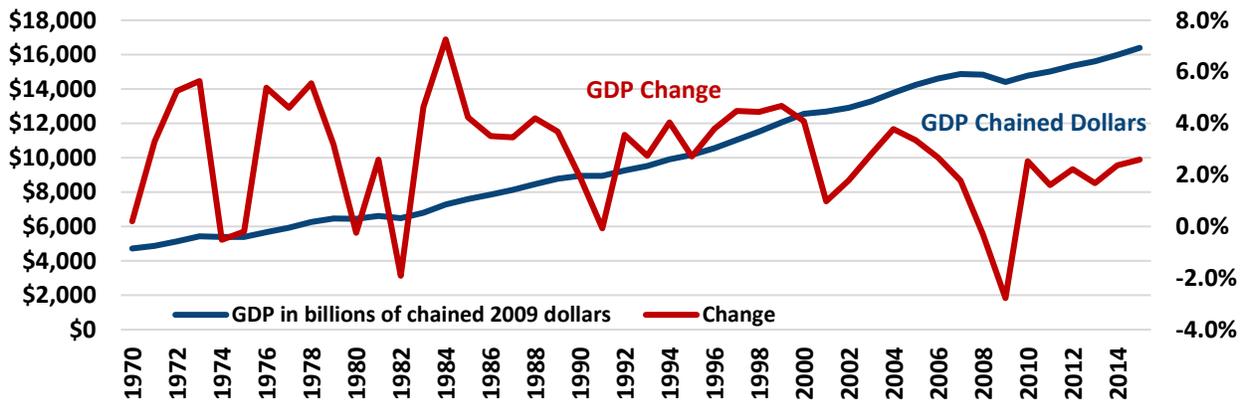
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families lose homes through foreclosure or have seen their homes lose value in a depressed market. Home equity is a traditional source of wealth for many Americans and is often used to supplement retirement income or finance college tuition for their children. Between 1983 and 2007 middle income families gained almost \$70,000 in median net worth (adjusted inflation and family size. However, from 2007 to 2013 the trend reversed with middle income families experiencing a loss of nearly \$63,000 in median net worth (see Figure 2).

A recession is defined as a significant decline in activity across the economy lasting longer than a few months and is characterized by decreases in industrial production, employment, income and consumer spending. As illustrated in Figure 3, the Great Recession of 2008-2009 precipitated a sharp decline in the Gross Domestic Product (GDP). The red line represents the percent change over time, and when compared with the recession of 1980, the subsequent loss in 1982 was not as great as the 2008 recession. However, GDP has been increasing since 2009 as one indicator the national economy is in recovery.

Wages in Cook County have recovered from the decline that followed the last recession (2008-2009) but

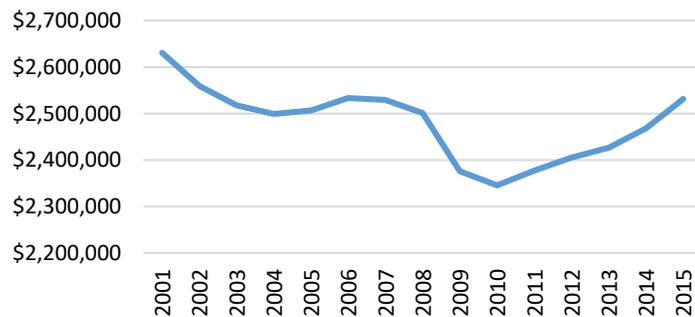
Figure 4: U.S. Gross Domestic Product



Source: Bureau of Labor Statistics.

have yet to reach the levels they were at prior to the 2001 recession. (see Figure 4). There are many factors that could be responsible for this situation, such as: mid- and late-career workers displaced from higher paying jobs being forced to take lower paying positions, the decline of high-wage industries (e.g.

Figure 3: Cook County Total Wages Paid



Source: Illinois Department of Employment Security, Unadjusted dollars.



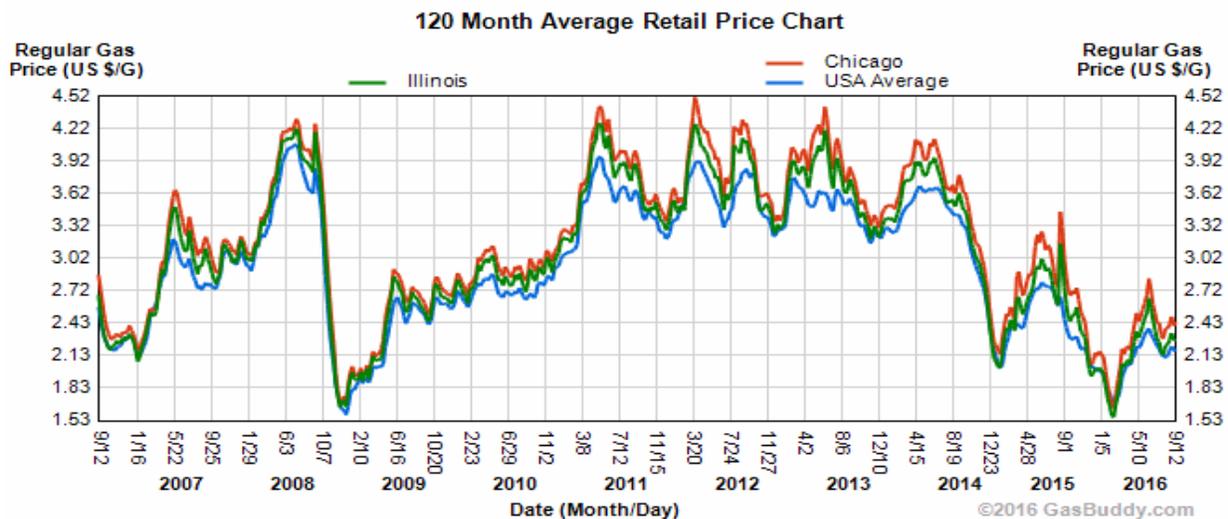
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manufacturing and finance), and job growth in lower paying industries and occupations (e.g. retailing and hospitality). Even so, the renewed growth trend is a positive sign that benefits the regional economy.

Gasoline Prices

Transportation costs dictate to a great degree the distances that people are will to travel to go to work or attend school. Fortunately, since the spike in 2011, gas prices on average have declined considerably. The high in March 2011 in Chicago to a multi-year low recently in March 2015. The trends have been consistent throughout Illinois and the nation. If prices remain stable the affordability to commute will remain higher than what has been experienced since the recession (See Figure 5).

Figure 5: Gasoline Prices 2007 - 2016





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Impact of Illinois Pensions

In fiscal year 2012, Illinois state agency budgets were cut across the board in an effort to help close an estimated \$100 billion pension shortfall. The State also enacted a temporary increase in income and corporate tax rates in an effort to generate additional revenue (see Figure 6). The temporary tax increase expired at the end of FY 2015. The administration of former Governor Pat Quinn approved legislation that altered current retiree benefits and capped the salary amount used to calculate pension benefits for future retirees. The Illinois Supreme Court subsequently found the changes to be unconstitutional. The Rauner administration has proposed to continue funding retirees even as public employee retirements increase and revenue collection lags. Projections indicate that future revenue growth will be insufficient to meet obligations. As a result, a greater share of the state funding will go towards paying pension obligations to keep the system solvent, leaving less money to spend on other programs.

The decline of Illinois’ bond ratings (Figure 7) will require the State to pay higher interest on its borrowing. Figure 7 shows the current ratings for Illinois general and special obligation bonds. Although credit agencies vary in their ratings, a AAA rating is generally considered prime with lesser ratings qualifying borrowers for high grade, upper medium grade, and lower medium grade interest rates. As interest payments consume a larger share of State revenue, the availability of funds for other priorities, such as education, will continue to decrease. As a result, institutions of higher education are having to cut costs and raise other sources of revenue, including tuition and fees, to cover the shortfall.

Figure 6:
Illinois
Income Tax

	<i>Individual</i>	<i>Corporate</i>
2015	3.75%	7.75%
2011	5.00%	9.50%
1993	3.00%	4.80%
1989	3.00%	4.80%
1984	2.50%	4.00%
1983	3.00%	4.80%
1969	2.50%	4.00%

Source: Illinois Department of Revenue

Figure 7: 2016 Illinois
Bond Ratings

	Fitch Ratings	Moody’s Investors Service	Standard & Poor’s
General Obligation	BBB+ Negative Outlook	BAA2 Negative Outlook	BBB Negative Outlook
Special Obligation	AA+ Stable Outlook	BAA2	AA+ Stable Outlook

Source: Illinois Comptroller’s Office, 2016

The Harper district has been able to maintain their AAA bond rating issued by Moody’s since 2001 when Community Colleges begin being rated. The AAA is the highest possible rating and provides evidence of financial strength moving forward as that rating has been consistent through spring 2016, the most



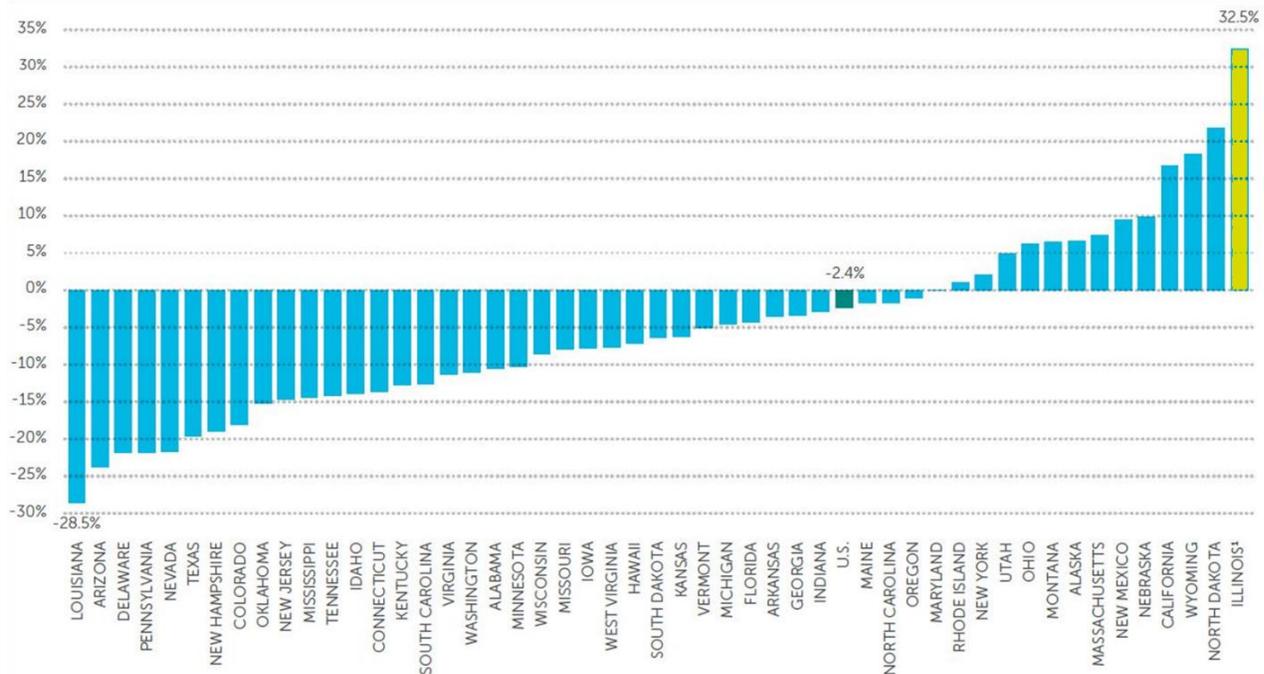
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recently available. However, Moody’s added a Negative Outlook to the unblemished rating due to the State’s poor financial status. Unlike the State of Illinois, Harper College will be able to obtain lower interest rates, reducing the cost of its borrowing.

Higher Education Funding

The States fund higher education at varying levels. Illinois experienced the largest increase of all the states in total educational revenue per FTE (see Figure 8) between 2010 and 2015: a 32.5% increase compared to an average national decrease of 2.4%. However, 37%, or \$1.08 billion, of that increase was used to shore up pension funds rather than to provide educational services.

Figure 8: Public Higher Education Educational Appropriations per FTE*: Percent Change, FY 2010-2015



*Full-Time Enrollee.

Source: State Higher Education Executive Officers.

The State Higher Education Funding report issued by the State Higher Education Executive Officers Association cited Illinois because of the serious challenges with its pension system. The Illinois public pension systems had been underfunded for a number of years until 2008 when the State began making large contributions in an attempt making up for the shortfall. However, because of the recent budget impasse, the report warned that funding for higher education was unstable and with it the State’s financial aid programs. The report further cautioned that the lack of funding for higher education will lead to



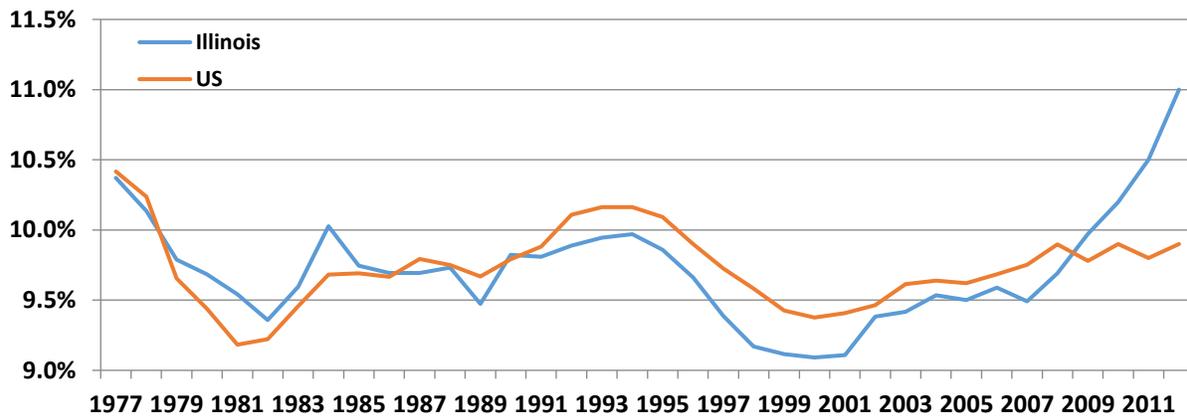
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negative impacts on enrollment, especially for students that rely on State grants. The institutional “solvency and viability”, along with the overall workforce competitiveness, will be impacted until Illinois is back on stable financial ground¹.

Taxation

At a local level, the ability of families to pay for higher education continues to be a challenge. The increase of the state income tax resulted in a large increase in the overall tax burden². Unfortunately the data is lagged several years so Figure 9 shows the large spike in comparison to the national averages. Since the higher tax rate expired in 2014 with the income tax rate falling to 3.75%, it is expected that it will drop to a level that is closer to the national average. However, the spike in income tax rates did not yield sufficient revenue to correct for the years of under-funding public pension systems. The State’s tax burden is currently the 5th highest in the nation. Illinois ranks 46th in lowest property tax rankings as well, meaning the property taxes are relatively high in compared to other states.

Figure 9: State-Local Tax Burden Compared to U.S. Average



Source: Tax Foundation calculations based on data from the Bureau of Economic Analysis, the Census Bureau, the Council on State Taxation, the Travel Industry Association, Department of Energy, and others.

¹ SOURCE: State Higher Education Executive Officers. State Higher Education Funding Report, Accessed online: http://sheeo.org/sites/default/files/project-files/SHEEO_FY15_Report_051816.pdf

² Illinois Department of Revenue, Accessed online: <http://www.revenue.state.il.us/TaxRates/IndividualPriorYears.htm>.

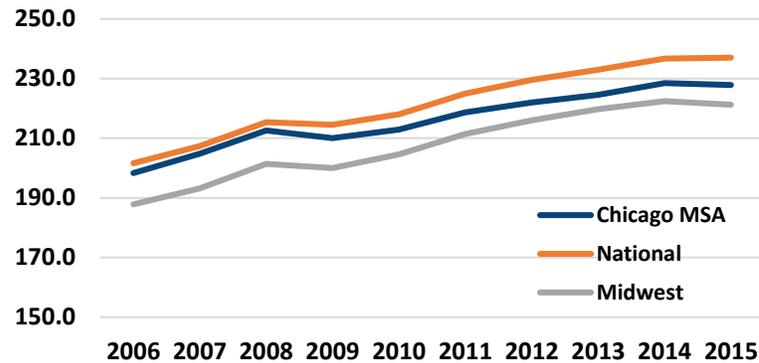


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Inflation

The Consumer Price Index (CPI) is a measure utilized by the Bureau of Labor Statistics to track changes in the buying power of the dollar across the nation and in selected metropolitan areas. The CPI is based on a monthly price survey of goods and services. The percentage change in the price of these goods and services over time determines the inflation rate.

Figure 10: Annual Average CPI (unadjusted)



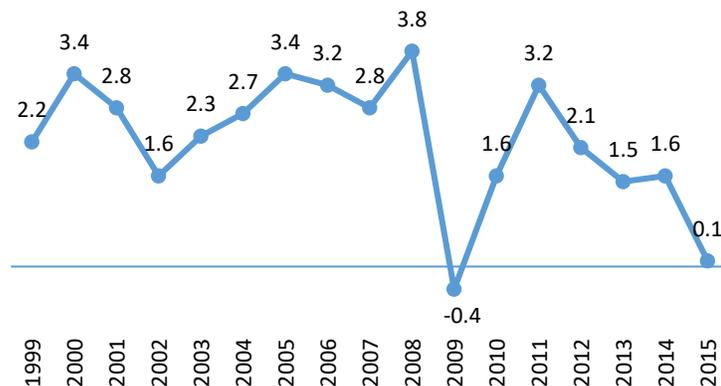
Source: Bureau of Labor Statistics, Unadjusted, All Urban

Figure 10 illustrates the average annual CPI since 2006. The recession in 2008-2009 can be easily identified with the CPI resuming an upward trend in 2010, continuing through 2014. Modest growth in the CPI is tolerable as long as income keeps pace and the overall buying power of consumers is not significantly impacted. As cited in in Figure 4, wages have been declining while the cost of goods has increased. This makes it more difficult for households to maintain their standard of living. From 2014 to 2015 the CPI flattened out, increasing by only 0.1% (see Figure 11). Lower inflation does not necessarily encourage saving or investments, but does make it easier individuals and households to maintain or improve their standard of living.

Economic Conclusion

The Illinois economy is still recovering from the last recession. Inflation was running approximately 2.8% on average in the years preceding the recession. In the following years the average has been approximately 1.7%. While lower inflation is good for lending rates and Illinois is recovering at a slow pace, if the number of residents leaving Illinois continues to outnumber those moving in there will be less tax revenue flowing through the Illinois economy.

Figure 11: National Average Inflation Rate (%)



Source: Bureau of Labor Statistics.



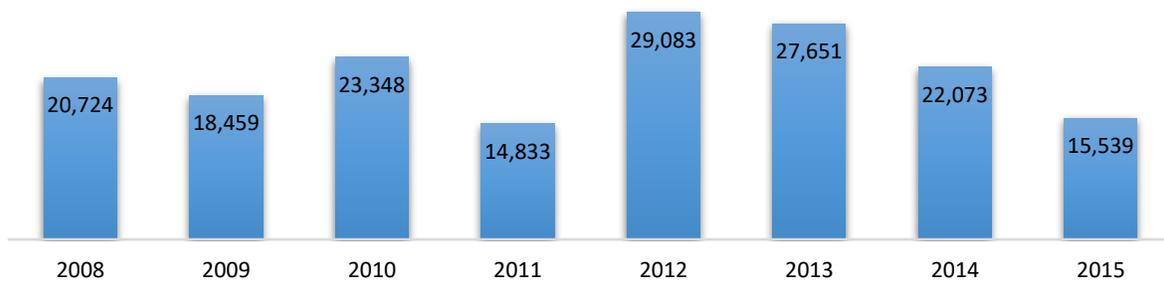
Housing Trends

Healthy neighborhoods affect higher education in many ways. Safe and stable communities translate to higher property values and property tax revenues, a principal source of education funding. Strong communities can also support healthy families that provide quality learning environments for students of all ages. Housing is a key indicator of neighborhood quality and is the main focus of this section. Since the collapse of the housing bubble at the end of the decade, many homeowners watched their property values plummet while others have lost their homes. This type of crisis can significantly increase the mobility of families and disrupt student learning, particularly in the K-12 sender schools within the Harper district. Many indicators show the economy has improved, but many communities are still struggling.

Foreclosures

Foreclosures are a crucial indicator of community well-being and the Chicago region has been hit hard. Counties in the Harper district all experienced dramatically increased foreclosure rates in 2010 and then another large increase in 2012, see Figure 12. The data shows an increasingly improved situation since 2012 as the numbers are now lower than pre-recession levels. The stability of local neighborhoods has generally returned, although there could be pockets of high foreclosures, but overall the trend is good news.

Figure 12: Total Completed Auctions



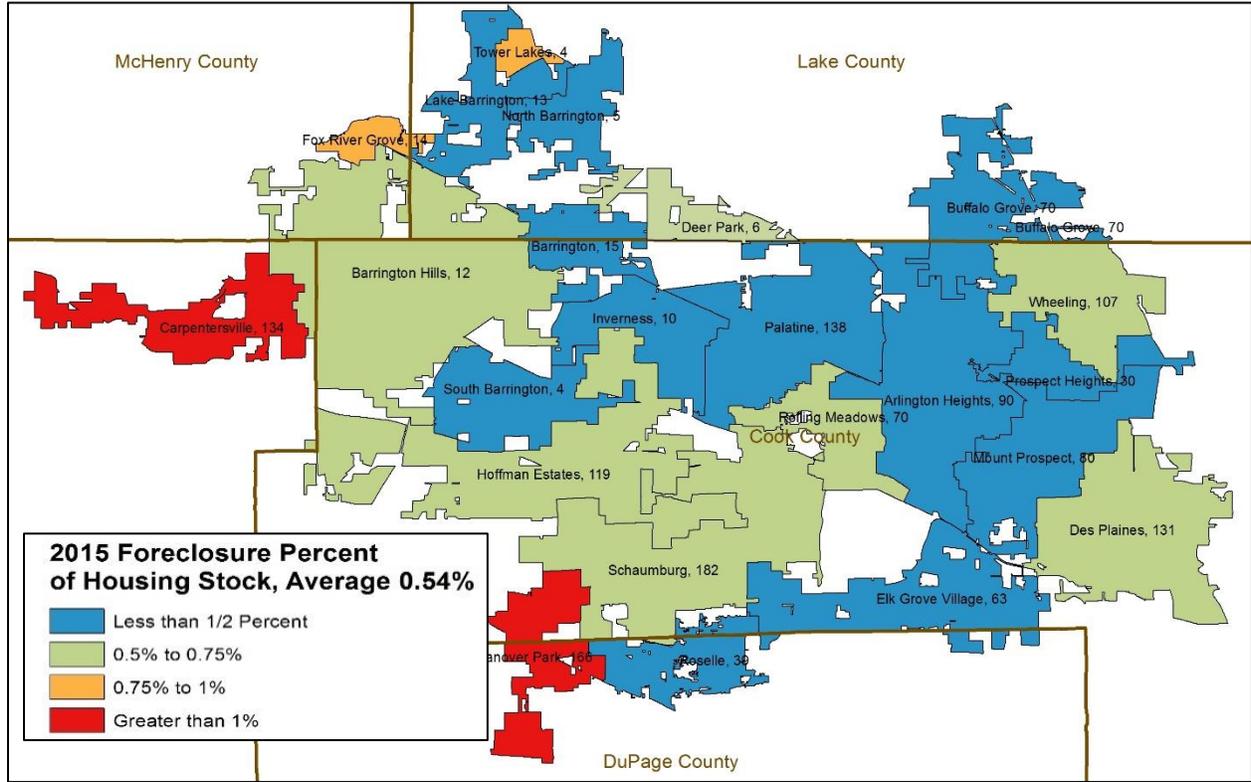
Source: Woodstock Institute.

Carpentersville and Hanover Park are the only municipalities with at least 1% of the housing stock completing the foreclosure process to auction. Both municipalities had much higher rates of foreclosure which peaked in 2012, Carpentersville had 333 and Hanover Park had 330 completed foreclosures, now at 134 and 166 respectively. The reduction in completed foreclosures is an indicator that neighborhoods are stabilizing and have reached pre-recession levels (See Figure 13 on the next page). The Illinois average is 0.10% and the national average is only 0.08%, so the area is still slightly high in comparison, but overall the trend is improving to very low percentages of the housing stock completing a foreclosure. Foreclosure rates provide insight into the ability of families to afford or even consider higher education for their children.



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Figure 13: Foreclosures Completed among Housing Stock



Source: Woodstock Institute.

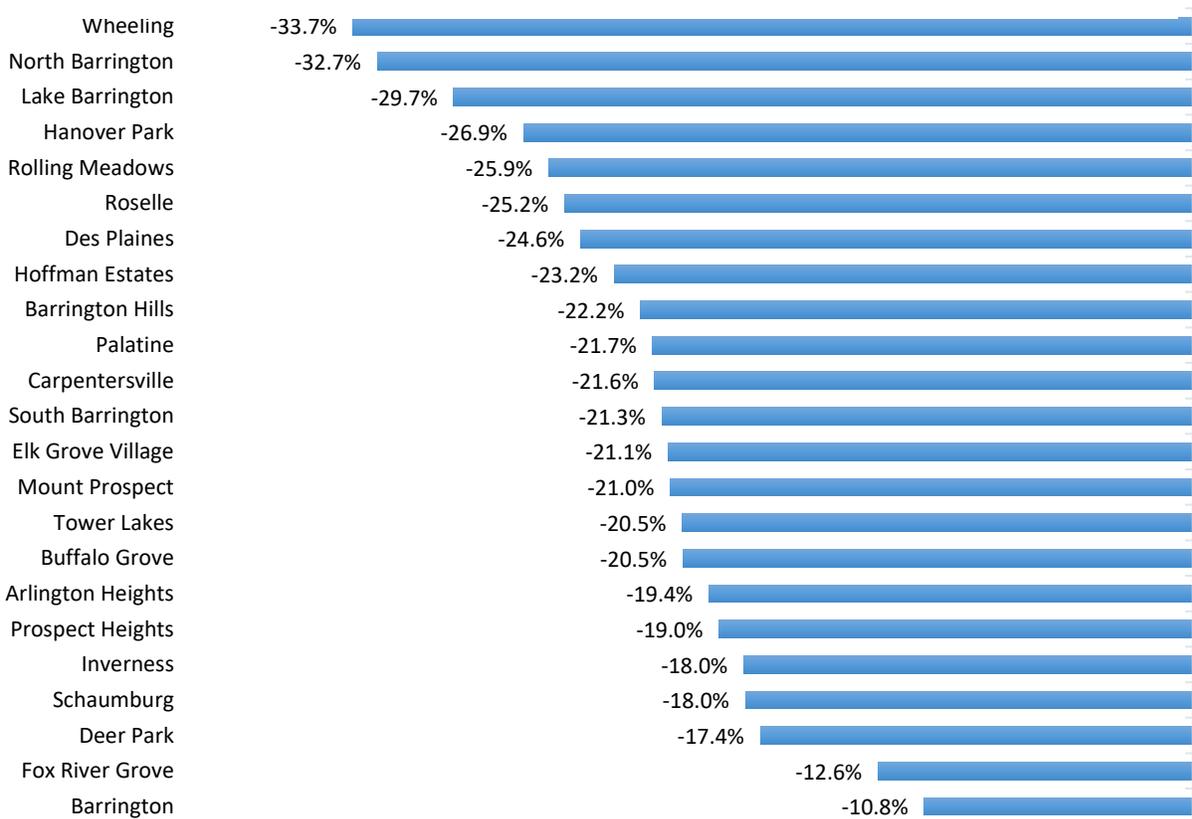


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Home Values

The U.S. Census Bureau surveys households as to what they perceive their housing unit would be worth on the market. From 2010 to 2015, those perceptions have changed decidedly for the worse. Homeowners in all of the communities overlapping the Harper College district perceive their homes as having lost value (See Figure 14). Barrington homeowners estimated that their homes lost 10.8% of their value (\$56,923), while Wheeling homeowners estimated that their residence’s value declined by 33.7% (\$87,547). These sentiments could certainly be an artifact of the 2008 housing crisis that devalued homes throughout the nation.

Figure 14: Change in Home Values as Perceived by Homeowners



Source: U.S. Census Bureau, American Community Survey.



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On the brighter side, the Illinois Realtor’s Association is reporting significant growth in both sales and the median sales price from 2010 to 2016. While Figure 14 can be shocking at first glance, the real data shows improvement in housing values which may take a few more years to reflect positive perceptions (See Figure 15).

Figure 15: Home Sales and Median Home Price

	2010 Q3		2016 Q3		Change	
	# Sales	Median Sales Price	# Sales	Median Sales Price	# Sales	Median Sales Price
Cook	11,768	\$180,000	18,119	\$235,100	6,351	\$55,100
DuPage	2,399	\$238,627	4,289	\$263,000	1,890	\$24,373
Kane	1,294	\$172,500	2,196	\$215,000	902	\$42,500
Lake	1,833	\$216,700	3,177	\$228,000	1,344	\$11,300
McHenry	836	\$178,450	1,661	\$195,000	825	\$16,550
Will	1,800	\$185,000	3,120	\$209,450	1,320	\$24,450

Source: Woodstock Institute

Homeownership

Effects of the housing market crash caused by the subprime mortgage crisis of 2002-2004 are still being felt throughout the U.S. Many homeowners found themselves with mortgages that were much higher than the value of their homes and, unable to afford their payments, went into foreclosure. Evidence of this in the Harper region is found in the decline in the percentage of owner-occupied homes between 2010 and 2015 (see Figure 16).

Figure 16: Owner Occupancy Rate Cook County Lake County McHenry County

	Cook County	Lake County	McHenry County
2010	62.3%	78.7%	84.6%
2015	57.0%	74.2%	80.6%

Source: US Census Bureau, American Community Survey, Five Year Estimates.



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These declines reflect homeowners who are no longer able to afford to remain in their homes and have turned them into rental properties or are vacant, potentially bank-owned. Fox River Grove and South Barrington are the only municipalities that improved during this same time frame. Fox River Grove increased owner occupied homes from 72.9% in 2010 to 79.8% in 2015, and South Barrington went from 96.8% to 97.8%. Statewide owner occupancy declined by 2.8%, leaving 14 municipalities below the statewide average (see Figure 17).

Figure 17: Occupancy Characteristics

	Owner Occupied Rate			Vacancy Rate		
	2010	2015	Change 2010-15	2010	2015 ↓	Change 2010-15
Barrington Hills	73.9%	67.1%	-6.9%	7.4%	15.8%	8.4%
Tower Lakes	98.1%	80.7%	-17.4%	0.4%	15.2%	14.8%
Barrington	85.4%	81.8%	-3.6%	8.7%	11.6%	2.9%
Illinois	62.7%	59.9%	-2.8%	9.4%	9.8%	0.3%
Carpentersville	76.5%	64.9%	-11.6%	4.3%	8.0%	3.6%
North Barrington	93.2%	88.2%	-5.0%	4.1%	7.6%	3.6%
Wheeling	60.4%	58.0%	-2.3%	6.9%	7.0%	0.1%
Rolling Meadows	71.6%	66.3%	-5.2%	4.6%	6.9%	2.3%
Mount Prospect	68.7%	65.3%	-3.4%	6.0%	6.6%	0.6%
Schaumburg	62.8%	59.2%	-3.6%	6.7%	6.3%	-0.4%
Palatine	68.1%	63.5%	-4.5%	6.6%	6.1%	-0.5%
Inverness	93.5%	88.5%	-5.0%	5.4%	5.9%	0.6%
Roselle	75.8%	73.6%	-2.2%	4.6%	5.6%	1.0%
Prospect Heights	69.4%	67.6%	-1.8%	6.8%	5.4%	-1.4%
Hanover Park	75.4%	72.8%	-2.6%	6.0%	4.7%	-1.3%
Fox River Grove	72.9%	79.8%	6.9%	11.1%	4.5%	-6.6%
Arlington Heights	72.8%	72.2%	-0.6%	5.3%	4.4%	-0.8%
Des Plaines	77.3%	75.0%	-2.3%	5.4%	4.1%	-1.3%
Hoffman Estates	72.9%	71.6%	-1.3%	4.8%	4.0%	-0.8%
Buffalo Grove	80.9%	76.2%	-4.7%	3.0%	3.7%	0.7%
Lake Barrington	88.8%	80.4%	-8.4%	8.1%	3.3%	-4.8%
Elk Grove Village	74.8%	71.3%	-3.5%	3.4%	3.3%	-0.1%
South Barrington	96.8%	97.8%	1.0%	1.8%	1.6%	-0.2%
Deer Park	96.4%	98.0%	1.1%	3.5%	1.2%	-2.4%

Source: U.S. Census Bureau, American Community Survey, Five Year Estimates.

Increasing residential vacancy rates and declining home ownership rates can destabilize communities, which can also lead to decreasing property values. This is a worrisome trend for community colleges that rely heavily on property taxes to support their operations.



Housing Conclusion

The Harper district is recovering from the housing crisis better than the Chicago metropolitan region as a whole. However, rising foreclosure rates combined with declining housing values signal an uncertain future in regard to local property tax revenues which fund a significant portion of Harper’s budget. Any policies or investments that support neighborhood stabilization and economic revitalization will benefit residents within the district, as well as Harper’s bottom line.

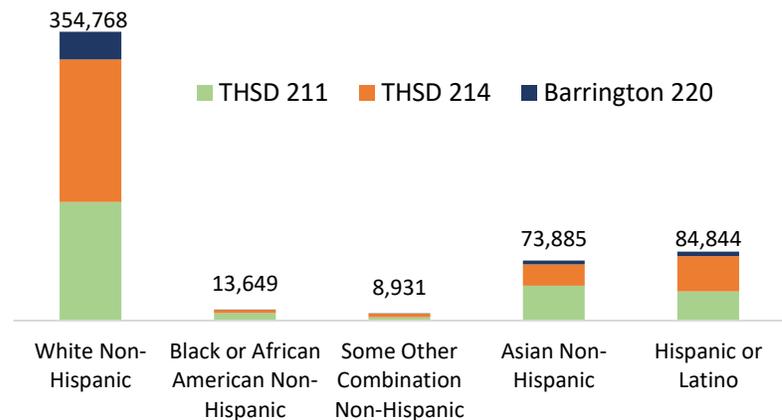
Population Trends

The population of the Harper district is changing similar to the changes taking place statewide. Understanding these changes helps Harper anticipate growth or decline in student enrollments and to adjust educational programming to meet residents’ needs. The population discussed in this section pertains to all residents or those who work within the district rather than Harper students specifically.

Race-Ethnicity Changes

The population of the Harper District has a more racially and ethnically diverse in recent years and it appears that this trend will continue (see Figure 18). When combined, minorities represented 33.8%, as compared to 30.1% in 2010, of the Harper district population in 2015. The transition from a majority of White Non-Hispanics is occurring throughout Illinois as they leave the state in increasing numbers. Minorities are moving in to fill those gaps. Since 2010, Illinois has experienced a net loss of more than 80,000 White Non-Hispanics. Combined with the increase of Asian Non-Hispanic population, minorities are increasingly becoming the majority in Illinois, following national trends.

Figure 18: Harper District Race/Ethnic Composition



Source: U.S. Census Bureau, American Community Survey, 2015 Five Year Estimates.



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Figure 19 is an infographic from the U.S. Census Bureau showing the national projection of the minority populations versus the Non-Hispanic White population. Currently this is occurring in the younger age groups and will continue to grow as the population ages. It is anticipated that by 2044 the total of minority populations will outnumber the White Non-Hispanic population.

The changes in the Harper District are trending similarly with a continued decline of the White Non-Hispanic population and the

continued increase in numbers of all minorities, most prominently in the Asian community. The Non-Hispanic Asian community has added over 11,000 residents into the district. This increase masks the loss of Not Hispanic Whites that moved out of the district. Therefore, the influx of new Hispanic or Latino residents and Not Hispanic Black or African American residents led to the population increase overall.

Figure 19: Projecting Majority-Minority Populations

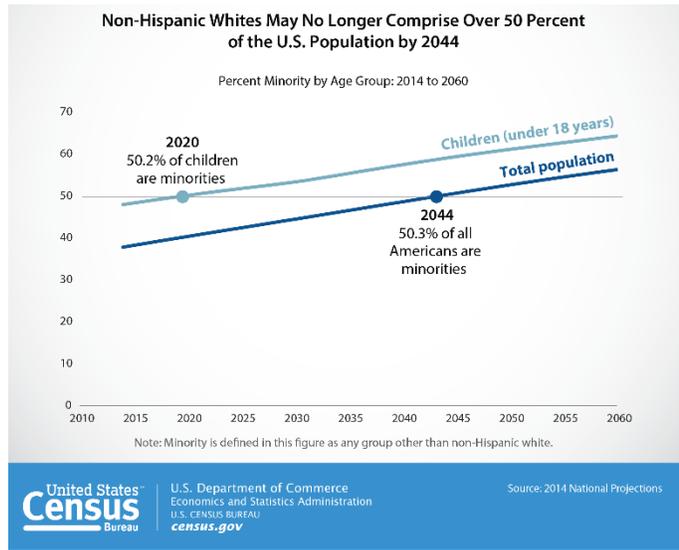
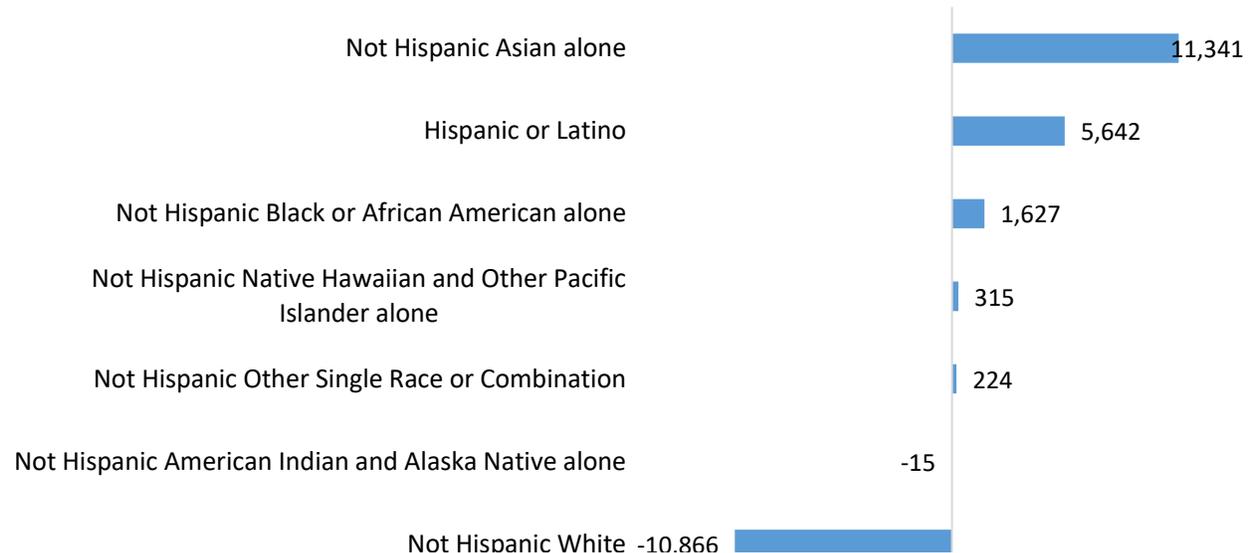


Figure 20: Race/Ethnicity Change in Harper District, 2010-2015



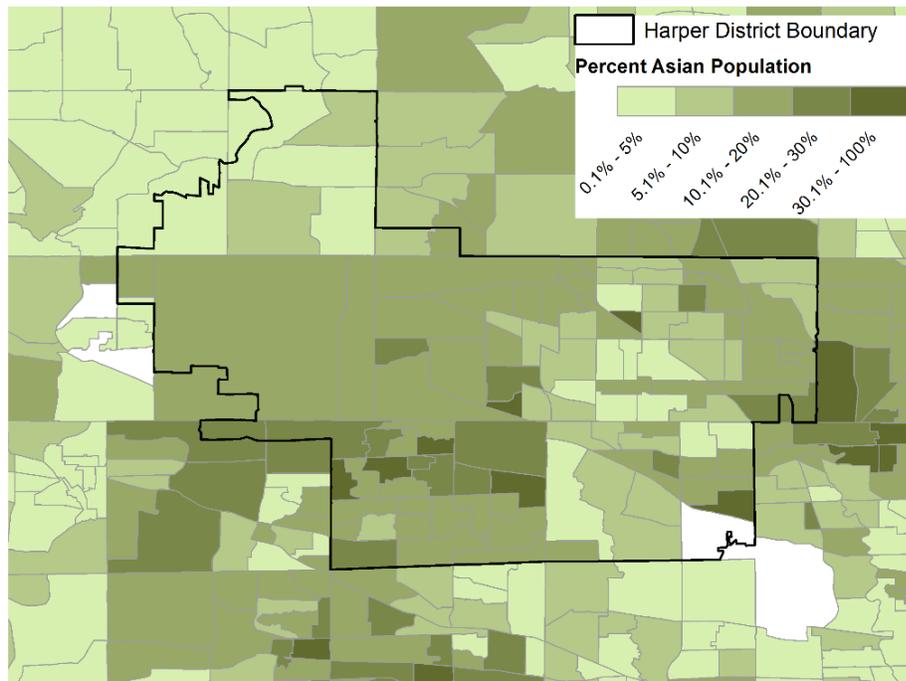
Source: U.S. Census Bureau, American Community Survey, 2015 Five Year.



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Figure 21 shows the concentrations of the Asian population throughout the district. The heaviest concentrations are in the Schaumburg and Hoffman Estates area. The growth of the Asian population is also part of a broader, national trend. Asians immigrating to this country became the majority over Hispanics and Latinos in 2010. Asians tend to have higher educations and income than other immigrants³.

Figure 21: Percent of Asian Population by Census Tract



Source: U.S. Census Bureau, American Community Survey, 2015 Five Year. Percentages by Census Tract. No data is shown where the margin of error exceeds 40%.

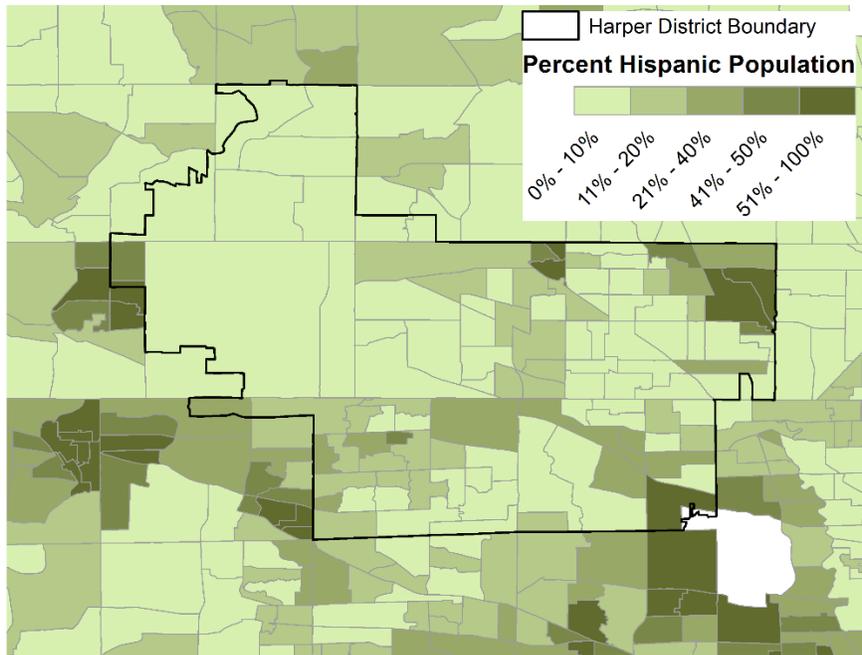
³ Pew Research Center, *The Rise of Asian Americans*, Accessed online: <http://www.pewsocialtrends.org/2012/06/19/the-rise-of-asian-americans/>.



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Figure 22 shows the Hispanic population by census tract with the heaviest concentrations in Hoffman Estates in the central region, Palatine to the north, Wheeling and Elk Grove Village on the east, and a portion of Barrington Hills on the west. The darkest shade indicates a majority of Hispanic residents.

Figure 22: Percent Hispanic Population by Census Tract



Source: U.S. Census Bureau, American Community Survey, 2015 Five Year. Percentages by Census Tract. No data is shown where the margin of error exceeds 40%.



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Languages & Foreign Born

English language acquisition can be a challenge for those needing to continue their education. In the Harper region the diversification of languages being spoken is evident. Those who speak only English have declined by 1.7% throughout the district, or 5,630 fewer people. Those who speak Spanish has decreased only in Township High School District 214 while increasing in the two other districts for a net gain of 1,701 more people speaking Spanish as either a primary or secondary language. The number of Asian speaking residents has increased by almost 30% in the district, accounting for just over 23% of the statewide increase. A much greater portion is in the “Other Languages” category where 19,725 additional residents speak another language besides Spanish, Indo-European and Asian, accounting for almost 75% of the statewide increase. These drastic changes would be seen primarily in Township High School District 211. Figure 23 summarizes these changes.

Figure 23: Change in Languages Spoken: 2010 to 2015

	Population > 5	Speak only English	Speak a language other than English	Spanish	Indo- European Languages	Asian and PI*	Other Languages
Twp 211	5,075 (2.3%)	-3,918 (-2.7%)	8,993 (12.2%)	2,127 (8.7%)	2,876 (9.6%)	6,860 (40.6%)	18,829 (914.9%)
Twp 214	2,259 (1.0%)	-1,759 (-1.2%)	4,018 (4.5%)	-1,025 (-2.9%)	2,166 (5.5%)	2,006 (16.4%)	787 (57.5%)
Barrington 220	1,021 (2.4%)	48 (0.1%)	972 (10.3%)	599 (15.3%)	-62 (-1.7%)	343 (10.2%)	109 (155.7%)
Harper District	8,355 (1.7%)	-5,630 (-1.7%)	13,985 (8.1%)	1,701 (2.7%)	4,980 (6.8%)	9,209 (29.8%)	19,725 (564.1%)
Illinois	172,325 (1.4%)	14,363 (0.2%)	157,962 (6.1%)	83,730 (5.5%)	5,025 (0.8%)	39,852 (13.0%)	26,672 (27.6%)

Source: U.S. Census Bureau, American Community Survey.

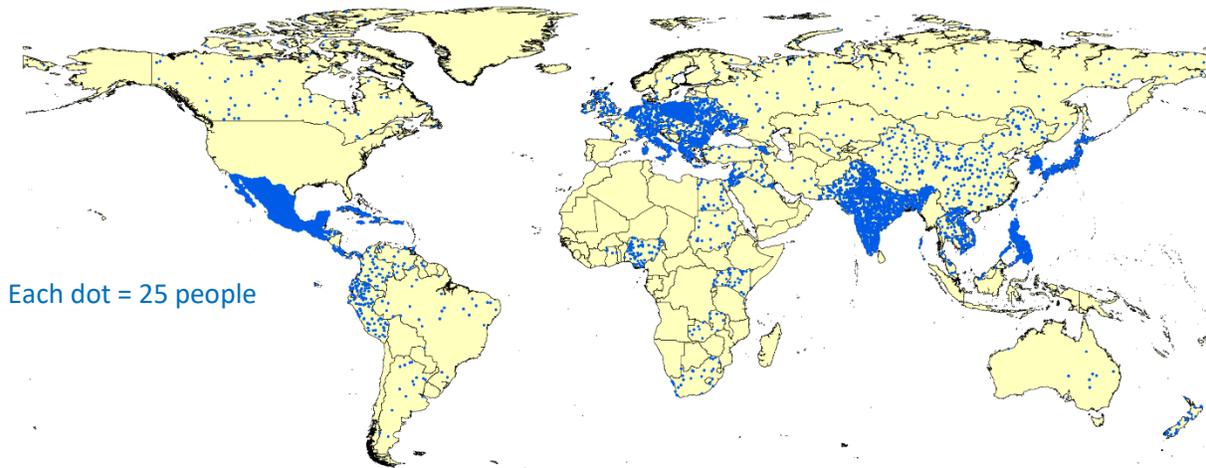
*PI = Pacific Islander.



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Figure 24 is a map of Harper area residents and where they were born if not in the United States or related territories. Each dot represents 25 people. The largest concentrations of foreign-born come from Mexico (33.0%) which is a large jump in proportion from 2011 (19.8%). Next is India (14.6%) which also increased in proportion from 12.6% in 2011. Third is Poland (9.5%) which dropped in proportion from 11.6% in 2011. India is considered part of Asia, which would help to account for the large increase in the Asian population. When aggregating by continent, almost 40% migrated from Asia.

Figure 24: Harper College Foreign Born Population Origination - 2015



Source: IPUMS-USA, University of Minnesota, www.ipums.org.

First generation immigrants make up an estimated 26.9% of Harper area residents in 2015, up from 25.9% in 2011. These numbers are much greater than the statewide proportion of 14.0%, which is a slight decrease from 14.3% in 2011. This is not surprising given that the vast majority of immigrants live in major urban areas, such as the Harper region⁴. Increasing numbers of migrants moving into the Harper district to be close to Chicago is not anticipated to change course in the near future.

Higher education plays a unique role in exposing students to new ideas and perspectives through engagement in a racially diverse student body. When people from segregated backgrounds are introduced to diverse environments they change, a process often leading to intellectual and socio-emotional growth (Gurin, Dey, Gurin, & Hurtado, 2004). Diversity on higher educational campuses can enrich the educational experience and produce a work force better able to thrive in a global economy. The challenge for Harper and other institutions serving diversifying populations is to attract a student body and faculty that mirrors their regions.

⁴ Corbett, John. Ernest George Ravenstein: The Laws of Migration, 1885. Center for Spatially Integrated Social Science. 2011. URL <http://www.csiss.org/classics/content/90>.



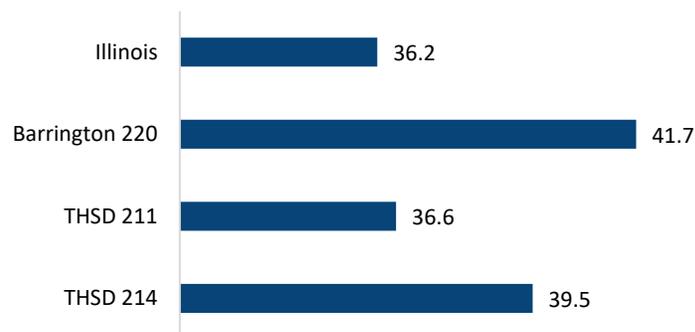
Age Composition

The age of a community helps to define the services that will be in demand today along with gauging what to prepare for tomorrow. School-aged children need different services than the older citizens. Nationally the trend is showing the population aging because of the Baby Boomers (those born in 1946 through 1964) reaching retirement age. Since there are so many of them in comparison to other age groups the impact is being felt by pension systems not prepared for as many retirements and increasing demand for health care.

The median age for the residential population in Barrington 220 district is 41.7 years old, which is much higher than the statewide median age of 36.2 years in Illinois and 37.4 year nationally. Township HSD 211 is the youngest at 36.6 years, which partially explains the sudden increase in diversity in that district. Most new immigrants are younger and would be interested in creating families (see

Figure 25).

Figure 25: Median Age of Residential Population



Source: U.S. Census Bureau, American Community Survey, 2015 Five Year Estimates

TEEN’S ONLINE HABITS

The Pew Research Center finds that 92 percent of teens go online daily—and that nearly a quarter (24 percent) say they are online “almost constantly.” Mobile devices drive this trend: nearly three-fourths of teens (73 percent) own or have access to a smartphone. A similar percentage of teens (71 percent) are on Facebook.

In terms of campus technology, pedagogy, student support, career development, and student communication in general, is your institution prepared to support a generation of students that essentially “lives” online? How well does your institution use online technology to support today’s diverse student populations, including adults and part-time learners? Is your campus’s IT infrastructure robust enough to support the explosion in use of mobile devices?

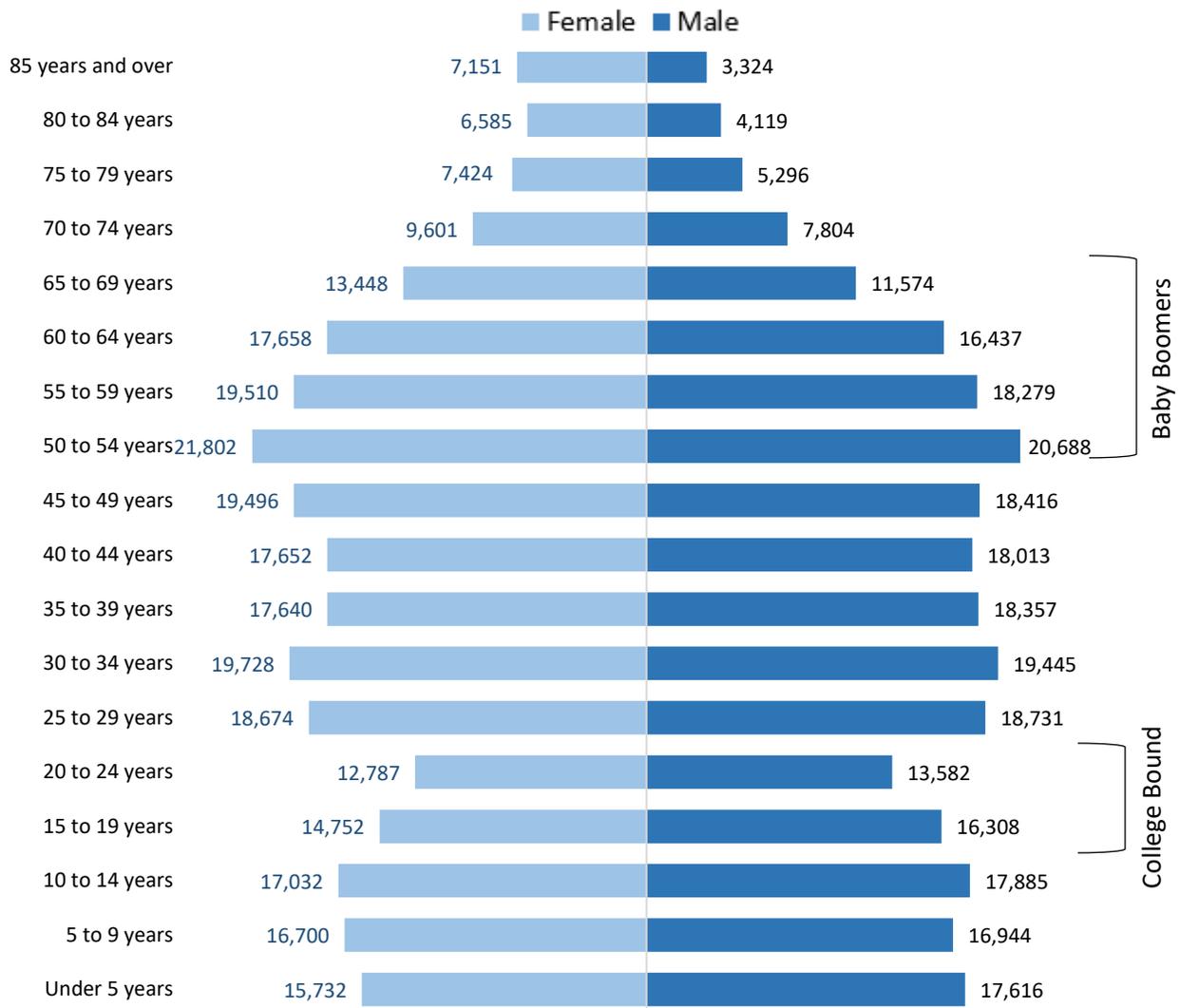
Source: SCUP 2015.



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The age pyramid (Figure 26) shows the distribution of males and females by 5-year age groups. A bulge in the graph indicating the Baby Boomer generation can be seen along with an indent of those graduating high school and moving away to college. Since there is not a large college or university in the Harper district there are fewer residents within those age categories. If compared with the same graphic of Champaign or DeKalb Counties the college age groups would be very large due to the residential college students. At the bottom of the pyramid are those in the youngest age categories where the decline in births can be viewed. The decline in youths is already being felt in the school systems with declining enrollments in the primary grades. The phenomenon is taking place nationally.

Figure 26: Age Categories for Harper District - 2015



Source: U.S. Census Bureau, American Community Survey, Five Year Estimates.

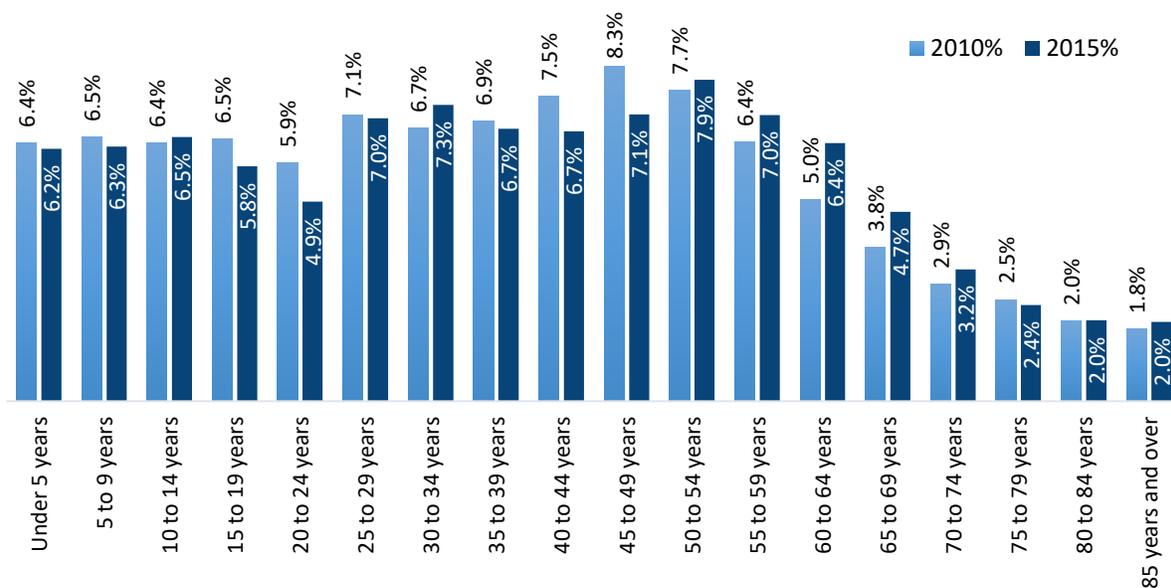


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Baby Boomers represent a significant and growing market for higher education. Many will need to seek professional development in their present careers to remain competitive. Others that have been edged out due to technological advances or shrinking of the workforce in various industries will need to be retrained for new careers to remain in the workforce. The education and training needs and preferences of mature workers, including the Traditionalists (born before 1945) and the Boomers, are often different than those of younger, mid-skill workers, such as the Generation X (born between 1965 and 1980) and the Millennials (born between 1981 and 1999). Each generation has its own ideas, behaviors, expectations and motivators that should be taken into account when developing programming. These differences may be reflected in individual communication and learning styles, comfort with technology, and the need for scheduling flexibility.

Baby Boomers were born from 1946 through 1964 after World War II causing a larger than normal birth rate during that period. Now those Baby Boomers are reaching retirement age (52 to 70 years of age) bringing to light the pension and Medicare funding issues. The Baby Boomer generation can be seen when looking at the population age cohorts over time in the Harper region. From 2010 to 2015, each age group has decreased in proportion for everyone under the age of 50, with the only exception being the 30 to 34 age group that increased from 6.7% to 7.3%. Among those over the age of 50 each cohort has increased with the only exception being the 75 to 79 years age group that slightly decreased in proportion (see Figure 27).

Figure 27: Change in Population Age Groups (5 Year Cohorts)



Source: U.S. Census Bureau, American Community Survey, 2015 Five Year Estimates.

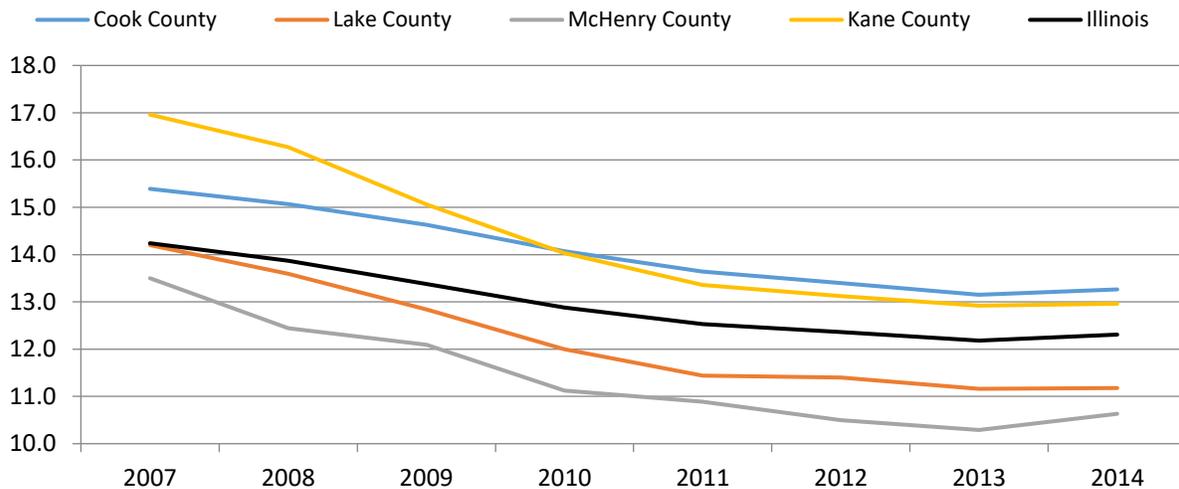


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Birth Rates

Figure 28 illustrates the declining birth rate for counties surrounding Harper College. Birth rates across the developing world have been on the decline since 2007. Prior to 2007 there were some decreases primarily due to couples waiting to have children. However, since 2007 the economy is playing a larger role. According to SCUP, some states are taking measures to further enhance immigration to shore up the younger age groups. In-state tuition is being offered in some cases and others have changed admissions standards that weight minority or legacy status to those based on socioeconomic status.⁵ These are some considerations for Harper College if the younger age groups remain low in numbers. It is hoped that the birth rate will now at least stabilize as it looks like from 2013 to 2014 most of the decline has ceased.

Figure 28: Birth Rates



Source: Center for Disease Control, WONDER data.

⁵ Society for College and University Planning, *Planning for Higher Education Journal*, 2012



Harper College Environmental Scan – 2017

Public School Enrollments

There have been a few new schools opened in the last few years along with two that have closed. Figure 29 lists the school names with the affiliated district and grades being served. Barrington District 220 added an early learning center, Township district 214 changed names from “Forest View Alternative School” to “The Academy at Forest View” serving high school grades. Township 211 also made a transition from “District 211 Academy – South” to the “Higgins Education Center.” The Schaumburg District 54 added a new early learning center as well called “The District 54 Early Learning Center.”

Figure 29: New and Closed Schools

Status	School	District	Grades
New	BARRINGTON EARLY LEARNING CENTER	Barrington 220	P-K
New	THE ACADEMY AT FOREST VIEW	Township 214	9-12
New	THE DISTRICT 54 EARLY LEARNING CENTER	Schaumburg CCSD 54	P
New	SIGWALT CLS CENTER	Township 214	12
New	HIGGINS EDUCATION CENTER	Township 211	9-12
Closed	Forest View Alternative School	Township HSD 214	9-12
Closed	District 211 Academy - South	Township HSD 211	9-12

Source: Illinois State Board of Education, Report Card Data, 2015 & 2016.

THE PERFECT STORM

Student loan debt and need are colliding. As other countries disinvest in higher education as a public good, they are likely to see similar problems.

- The majority of student loan borrowers, 53 percent, do not believe they will be able to repay their student loan debt.
- The likely effects of excessive student debt appear to be occurring already, including delayed marriage and lower birth rates. That’s not surprising given the average student loan debt is over \$25,000, an increase of 25 percent in the last decade.
- The National Survey of Student Engagement (NSSE) included questions on finance in this year’s survey. Financial concerns are reported to interfere with academic performance for 32 percent of first-year students and 36 percent of seniors; concerns about cost influenced the decision not to purchase required academic materials (27 percent of freshman and 34 percent of seniors).

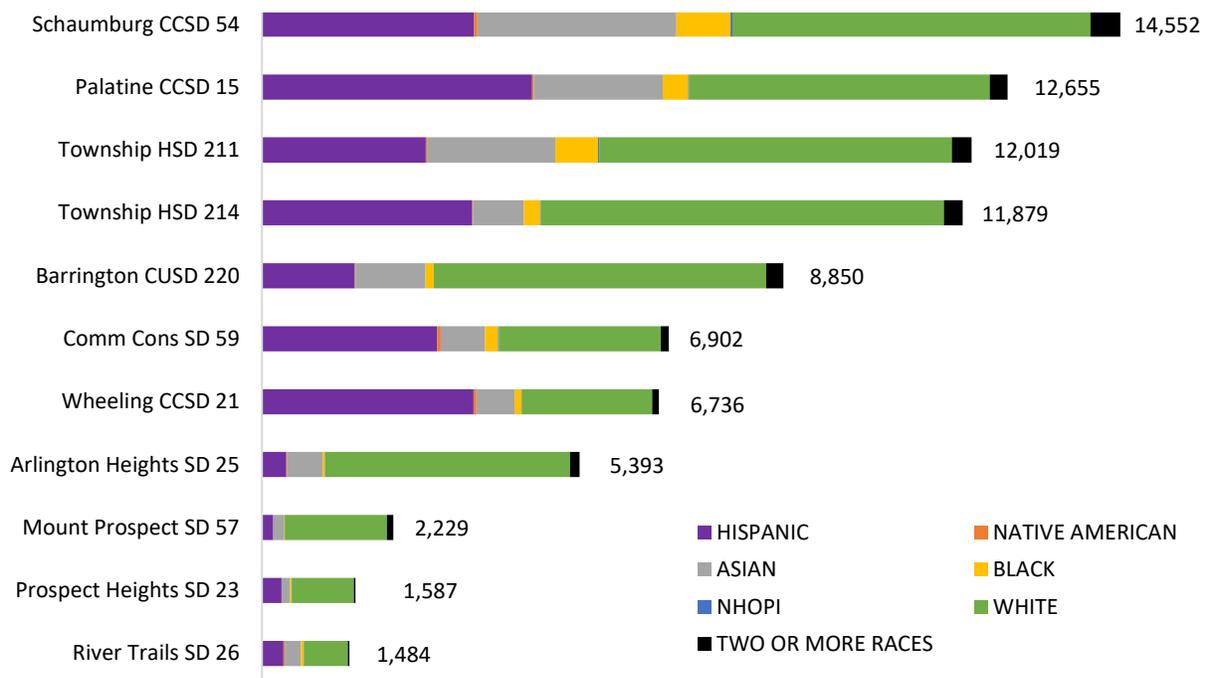
Source: SCUP 2013



Harper College Environmental Scan – 2017

The Harper district includes all or part of 11 districts, two of which are high school districts. The largest district is Schaumburg Community Consolidated District #54 with an enrollment of 14,552 students in 2016. The River Trails School District #26 is the smallest with 1,484 students. Districts are becoming more diverse with increasing Hispanic and Asian populations (see Figure 30). The 11 districts total 84,286 students enrolled in public schools. The public schools are comprised of 50.1% White, 28.4% Hispanic, 14.7% Asian, 3.5% Black, 0.3% Native American and 0.1% Native Hawaiian or Pacific Islander.

Figure 30: District Enrollment by Race/Ethnicity - 2016



Source: Illinois State Board of Education.

HELPING HISPANIC STUDENTS SUCCEED

The Pew Research Center recently reported that a record 7 in 10 (69 percent) US Hispanic high school graduates in the class of 2012 enrolled in college that fall, a slightly higher rate than their White counterparts (67 percent). Still, the survey found that Hispanic students were less likely than their White counterparts to attend college full time or enroll in a four-year or selective college and were less likely to complete a bachelor’s degree.

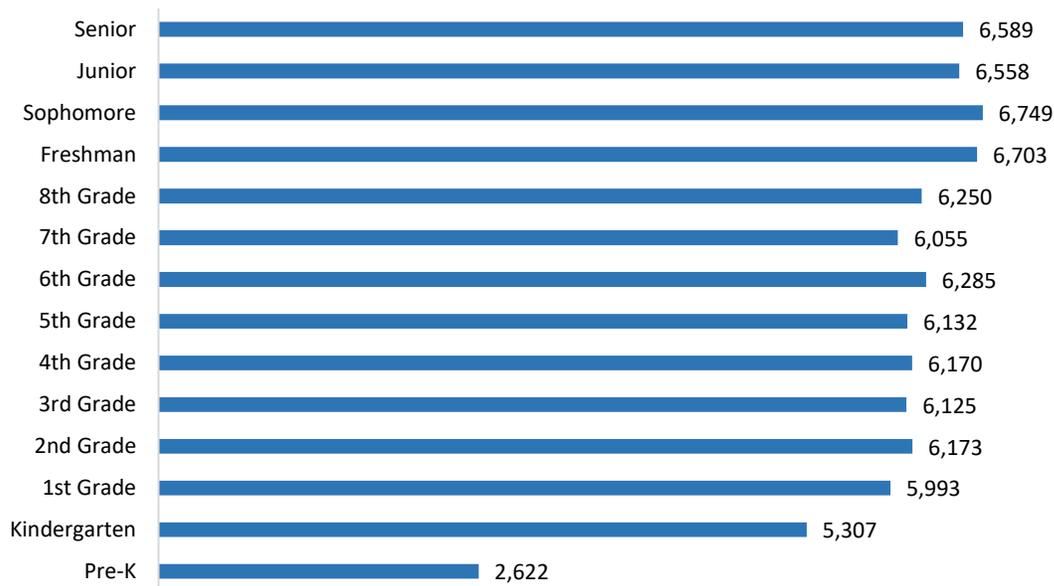
How well does your institution recruit and serve the growing population of Hispanic students? Does it tailor its recruitment to reflect the unique interests and needs of the Hispanic community, perhaps including family education about the processes of selecting, applying to, and paying for college? How well does your institution support Hispanic students once they enroll? Does it help Hispanic students succeed academically and complete their degrees? *Source: SCUP 2016.*



Harper College Environmental Scan – 2017

The effect of declining birth rates can be seen in the grade enrollments in Figure 31. The peak seems to be the sophomore class in FY2016 and the trend generally declines. Now that birth rates are either stagnating or growing there may be hopes of filling those empty seats. From 1st grade to senior year there is a difference of approximately 600 students, which could lead to school closures if enrollments do not pick up again.

Figure 31: Harper District Public School Enrollment, FY2016



Source: Illinois State Board of Education

WHO'S COMING TO COLLEGE

Federal data released in April 2016 underscore recent student demographic trends. The National Center for Education Statistics projects that enrollment of students aged 18 to 24 years old will increase 12 percent between 2012 and 2023, compared to 23 percent for students aged 25 to 34 and 17 percent for students 35 and older. During that same period, increases in enrollments of Black and Hispanic students are projected to jump 25 percent and 34 percent respectively, while enrollment of White students will increase just 7 percent.⁴³

Upcoming changes in the student population have been well documented for some time. Accordingly, many institutions have significantly retooled not just their enrollment management strategies but also the way they serve and support new student populations. Has your institution fully addressed the impact of a changing student body across all campus functions? What more could and should it be doing?

Source: SCUP 2016



Harper College Environmental Scan – 2017

High School Student Performance

Despite economic stresses that may impact the community, family, and individual, students attending the sender high school districts to Harper College have performed well above the statewide average. The Barrington district has had continued marked success in achieving high percentages of students who met or exceeded the national benchmarks. Although township districts 211 and 214 have consistently scored lower than Barrington, both districts are well above the statewide percentages. The three high school districts are preparing a greater proportion of their students for college than most Illinois schools.

Figure 32 shows the numbers typically referenced as one method to gauge school performance and any figures that score worse than the statewide average is highlighted in red. All of the sender schools score better in dropout, truancy, and four-year graduation rates than the state. Only three scored higher in mobility rate which may be partially due to the large influx of immigrants into the region. Seven out of twelve of the schools have lower attendance rates, but only marginally lower. Wheeling High School has the lowest attendance rate of 85.9%, which is very low as the previous years at Wheeling High School the attendance rate was on par with the other sender schools of 93-94%.

Figure 32: School Performance Indicators

2015-2016	Dropout Rate	Chronic Truancy	Mobility	Attendance	4-Year Graduation ↓
Barrington High School	0.5	1.0	3.0	93.6	97.2
John Hersey High School	0.7	0.2	8.0	91.4	96.2
Prospect High School	1.1	0.0	5.0	94.3	95.4
Buffalo Grove High School	0.5	0.5	9.7	92.8	95.0
Hoffman Estates High School	0.4	0.9	4.2	95.1	94.4
Elk Grove High School	1.0	0.1	12.6	92.9	94.2
Wm Fremd High School	0.1	0.5	1.8	95.7	93.3
Rolling Meadows High School	1.4	1.3	12.1	92.0	92.9
J B Conant High School	0.5	0.9	3.4	95.4	92.2
Wheeling High School	1.0	0.9	15.1	85.9	91.2
Palatine High School	1.5	3.8	5.0	93.4	90.2
Schaumburg High School	0.6	1.2	3.7	94.3	90.2
Statewide	2.0	10.0	12.0	94.0	86.0

Source: Illinois State Board of Education, Report Card data, 2016.



Harper College Environmental Scan – 2017

College Readiness Exams

Illinois has undergone changes in how to gauge college entrance capability. Traditionally the ACT exam has been used to quantify college readiness, but due to federal pressure to align with Common Core standards the ACT was discontinued in the 2014-2015 school year and replaced with PARCC (Partnership for Assessment of Readiness for College and Careers). However, the exam was not found to be useful at the high school level, so the 2016-2017 school year is using the SAT instead of PARCC to align with Illinois standards and provide a universal method of quantifying college readiness. The PARCC was also not designed for post-secondary institutions to utilize in placement decisions whereas the SAT provides that quantification. Therefore, at this point there is no trending capability on college readiness for 11th graders due to all of these recent changes.

THE DEMOGRAPHIC SWIRL

Shifts in demographic and economic trends are bringing sometimes dramatic changes to college student populations. “Nontraditional” is fast becoming the “new traditional.” But whether the focus is on adult learners, transfer students, “minorities,” international students, online learners, veterans, or first-generation students, the reality for higher education is that each of these groups comes to college with different needs and expectations. In terms of student services, pedagogy, enrollment marketing, alumni relations, and so many other dimensions of college operations, the “one-size-fits-all” mentality that might have worked when most students were 18-to-22-year-olds no longer applies. The challenge for higher education is to tailor strategies that best serve the varied needs of today’s diverse student body. As just one example, consider adult learners. Marketing college to adults requires different enrollment management strategies. Adults may want colleges to give them credit for past learning—and life—experiences. They may want streamlined application processes. They may resist requirements to take entry-level courses. They may want support services on demand, not just during business hours. They may be better served with different approaches to teaching than those that work for teenagers. Downstream, adult alumni may want to engage with the institution in different ways than their younger peers.

Source: SCUP 2015.

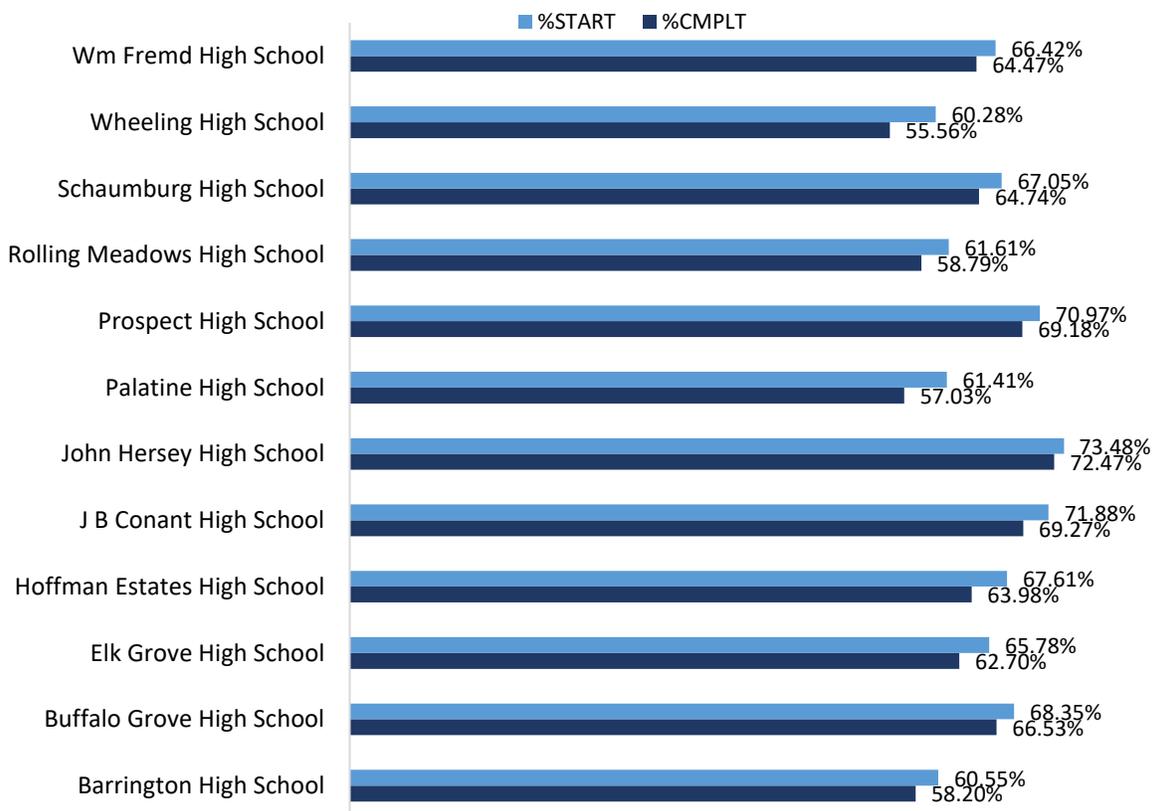


Harper College Environmental Scan – 2017

FAFSA Applications

FAFSA applications that are completed is a way to gauge intent to attend college. Students are encouraged to file the FAFSA during high school and the resulting percentages of those who started a FAFSA application. These percentages are calculated as a first-time filer no older than 18 who will have received their high school diploma by the start of the school year to which they are applying for aid and then the percentage who completed the application out of that group. The statewide average for completing the FAFSA applications is 61.3%. The high school districts overlapping Harper’s district of FAFSA completions range from 55.6% at Wheeling HS to a high of 72.4% at John Hersey High School. High completion rates are also an indicator of schools working effectively with students to consider college and file the application, see Figure 33. Schools without a high start and completion in high income areas can also indicate the lack of interest in public funding for higher education.

Figure 33: FAFSA Start and Completion Rates – 2016



Source: Illinois Student Assistance Commission. Calculated by those 18 and under filing a FAFSA that are anticipated to attend college the following year, divided by the 12th grade enrollment reported by NCES.



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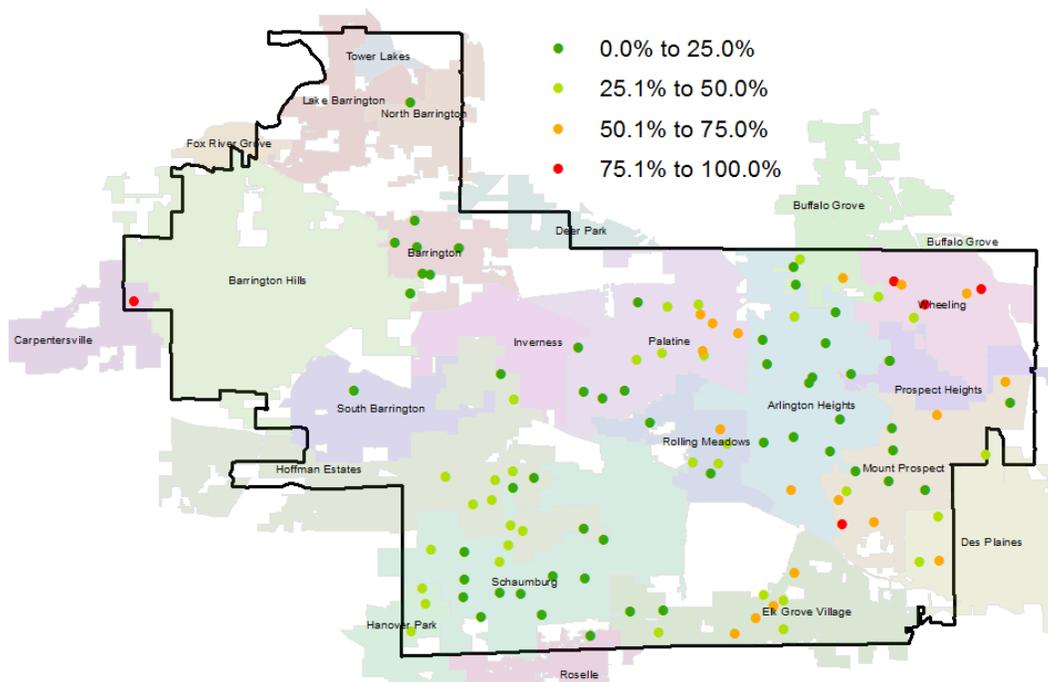
Low Income Students in Primary and Secondary Schools

In the Harper district, all three sender high school districts have seen increases in the numbers of low income students, with High School District 211 having the highest percentage of 33% for FY2016. As a comparison, the current statewide percentage of low income students is much higher at 50%.

This increase in low income students reflects a larger phenomenon of growing suburban poverty that is characteristic of the Chicago area and many other urban centers. This is due in part changes in the economy over recent business cycles, shifts in affordable housing and jobs, immigration, and population dynamics. As a result, between 2000 and 2010 the suburbs in the Chicago metropolitan area witnessed an increase in low income residents from 39% to 76%, compared with an increase of only 10% in the region’s urban hubs. By 2010, a majority of the Chicago region’s poor lived in the suburbs.⁶ These trends are continuing today.

Figure 34 shows each school within the Harper district and the percentage of low income students as measured by those who qualify for free or reduced lunch. According to the Illinois Report Card, there were 23 schools in the Harper district with percentages of low income students that were higher than the statewide average of 50.0%. Ninety-two schools are below the state average. The full listing is included in Appendix F.

Figure 34: Low Income Percentage by School - 2016



Source: Illinois State Board of Education, Report Card Data, 2016.

⁶ Kneebone, E. & Berube, A. (2013). *Confronting Suburban Poverty in America*. Washington, D.C.: The Brookings Institution.



Harper College Environmental Scan – 2017

Population Conclusion

There have been many changes in the population in and surrounding the Harper district. Non-Hispanic Whites have been moving out and are being replaced by primarily Hispanic residents and an increasing number of Asian residents. Students attending Harper from the Hispanic community have increased in number every year since FY2012, currently at 6,335 students or 24.9% of the student population in FY2016. White Non-Hispanic students are on the decline, but in FY2016 are still the overwhelming majority at 55.8% of those conferred, and 53.9% of those attending.⁷

GEEZER BOOMLET?

According to Pew Research Center data cited in the 2015 Society for College and University Planning (SCUP) publication, *Trends for Higher Education*, those over the age of 65 are expected to reach 16.6% of the population by 2020, which represents twice their share of the national population in 1950. Due to constrained resources it will be likely that families will consolidate as the need to care for older relatives increases. SCUP further suggests that this may open new markets in higher education of yet-untapped non-traditional students, a broader pool of alums for support, and the thought of elder housing on or near campus to consider (Society, 2015). The share of population over age 65 in the Harper district has already exceeded the 16.6% mark.

Source: SCUP 2015

⁷ Harper College. Fact Book FY2016-2017. Accessed online:
<http://goforward.harpercollege.edu/about/leadership/planning/factbook.php>.



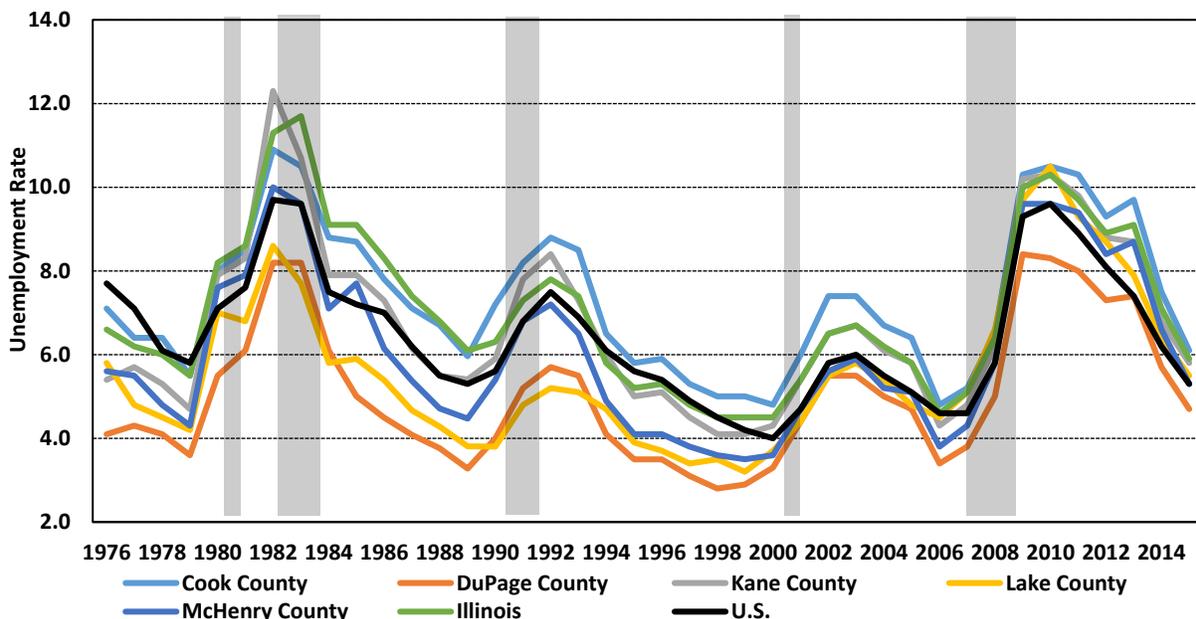
Workforce Trends

There have been many changes in the workforce since 2008. Although the recession officially ended in June 2009, the economy recovery has been weak, especially in Illinois. While unemployment rates have fallen substantially over the past seven years, labor force participation among key working aged populations continues to decline and the numbers of discouraged workers is growing. This section looks at unemployment trends, the necessary hourly wage to sustain a family, and household income trends in the municipalities within the Harper district.

Unemployment

Six months after the end of the last recession, unemployment peaked in the Chicago metropolitan area at 12.2% in January 2010. Since then the unemployment rate has improved steady but slow improvement, falling to 5.3% in November 2016.⁸ Figure 35 shows the fluctuations that have taken place over several decades that include two major and three minor recessions. The 2007-2009 recession resulted in across-the-board increases in unemployment, with some counties in the Harper region, such as DuPage and Lake, reaching record highs in unemployment. While these two counties have only a small portion of their territory overlapping the Harper district, the labor shed (the area from which Harper area employers draw their workers) includes a much larger region.

Figure 35: Unemployment Rate



Source: Illinois Department of Employment Security. 2015.

⁸ The unemployment rate is based upon who is actively seeking work in the last week when surveyed. If a potential worker is not currently employed and not actively seeking employment, then they are not considered to be in the labor force.



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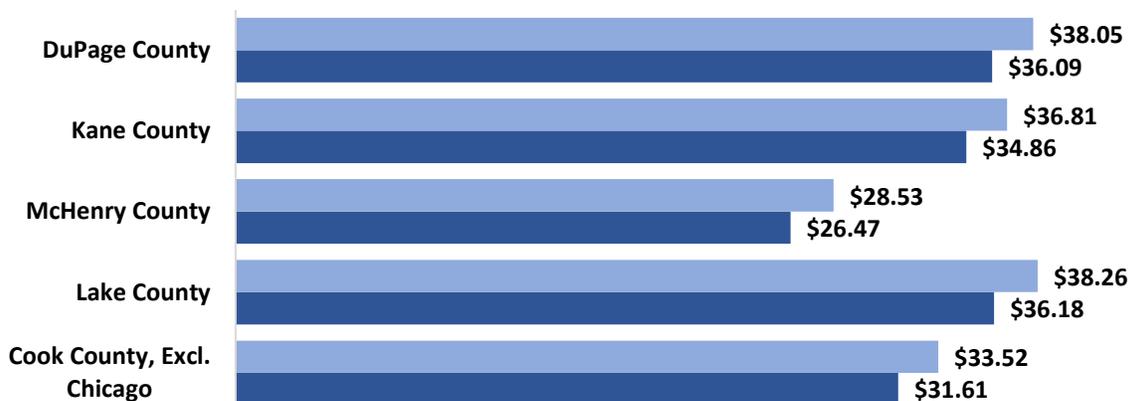
It is important to note that unemployment rates exclude people who have unsuccessfully sought employment over a long period of time and have stopped looking: the “discouraged worker”. In a period of prolonged slow economic growth and job creation the numbers of discouraged workers typically increase. Using data from the U.S. Bureau of Labor Statistics, the Economic Policy Institute estimates there is the potential of 2.3 million workers that have given up on searching for a job, which is a significant increase since 2009 as seen in Figure 36. The EPI estimates the number of missing or discouraged workers using the employment-to-population ratio of the working age population (i.e. those 16 to 64 years of age). When there is a significant drop in the proportion working or seeking work, there is an increase in those who are considered discouraged. During a recession it is anticipated there would be an increase in discouraged workers due to the lack of available jobs.

Wages

A national discussion is taking place around whether to raise the minimum wage. Illinois currently has one of the highest minimum wages in the country at \$8.25, 14% higher than the national rate of \$7.25 that took effect in July 2009. The City of Chicago implemented its own minimum wage ordinance in December 2014. Under its provisions, the minimum wage for most workers to \$10.00 per hours in July 2015 and to \$10.50 in July 2016. It will increase to \$11.00 per hour in July 2017 with additional adjustments scheduled to though 2020. Supporters argue that the minimum wage would have to be increased significantly to reflect a sustainable wage.

As an example, the Institute for Women's Policy Research publishes a self-sufficiency standard by county that would be necessary for a single parent to support a preschooler and a school-age child with and without public assistance (see Figure 36). “Typical” hourly wages vary due to the differences in the cost of living. However, DuPage and Lake Counties are among the highest in the metro are at \$38.05 per hour and \$38.26 per hour, respectively.

Figure 36: Hourly Wage to Support a Single Parent with one Preschooler and School-Age Child



Source: Institute for Women's Policy Research, 2016.



Harper College Environmental Scan – 2017

One indication that wage levels are inadequate to support families is provided by the percentages of workers by occupation who rely on food stamps (also known as SNAP) to supplement their incomes. For example, in Northwest Cook County the occupation with the most receiving food stamps are the 387 grounds maintenance workers, or 31.6% of those who reported as receiving their primary income from that occupation. (see Appendix H for a complete listing). Many of the occupations with the highest numbers of food stamp recipients are in the service sector, which includes many low wage, low skill jobs (Figure 37).

Figure 37: Food Stamp Recipients by Occupation*

	Total on SNAP	Percent on SNAP
Grounds Maintenance Workers	387	31.6%
Cashiers	351	10.5%
Stock Clerks and Order Fillers	308	18.6%
Miscellaneous managers, including funeral service managers, postmasters and mail superintendents	279	6.2%
Unemployed, with No Work Experience in the Last 5 Years or Earlier or Never Worked	258	19.7%
Cooks	256	15.5%
Customer Service Representatives	244	10.2%
Nursing, Psychiatric, and Home Health Aides	229	21.4%

*The aggregated region consists of 2000 PUMA #3401, 3402 and 3403.

Source: IPUMS-USA, University of Minnesota, www.ipums.org, 2015 Five-Year American Community Survey.



Harper College Environmental Scan – 2017

Household Income

Households in the Harper district have seen their incomes erode since the onset of the Great Recession. Figure 38 presents the change in inflation-adjusted median household income for all communities in the Harper district between 2010 and 2015. Only seven out of 23 communities experienced income growth during this period. Incomes in every other community saw decreases that ranged from 1.2% to 24.6%.

Figure 38: Median Household Income, Municipalities within the Harper Community College District

Municipality	2010 Households	2015 Households	2010 Median HH Income (Adjusted)	2015 Median HH Income	Numeric Change	Percent Change
Fox River Grove	1,865	1,590	\$84,068	\$96,102	\$12,034	14.3%
Deer Park	1,118	1,092	\$139,248	\$155,952	\$16,705	12.0%
Buffalo Grove	16,350	16,094	\$94,889	\$100,098	\$5,209	5.5%
Inverness	2,517	2,609	\$155,053	\$161,838	\$6,786	4.4%
Barrington	3,991	3,766	\$111,583	\$116,062	\$4,479	4.0%
Hoffman Estates	17,971	18,154	\$82,302	\$84,583	\$2,281	2.8%
Schaumburg	31,378	30,011	\$72,748	\$74,086	\$1,338	1.8%
Arlington Heights	30,211	30,358	\$82,030	\$81,059	-\$971	-1.2%
Prospect Heights	6,352	6,078	\$62,413	\$61,442	-\$971	-1.6%
Des Plaines	21,917	22,191	\$66,354	\$65,109	-\$1,245	-1.9%
Hanover Park	11,019	11,239	\$69,377	\$67,650	-\$1,727	-2.5%
Tower Lakes	473	391	\$157,641	\$152,917	-\$4,724	-3.0%
Carpentersville	11,239	10,893	\$60,303	\$58,008	-\$2,295	-3.8%
Rolling Meadows	9,031	8,983	\$64,989	\$62,299	-\$2,690	-4.1%
North Barrington	995	1,078	\$159,269	\$151,250	-\$8,019	-5.0%
State of Illinois	4,769,951	4,786,388	\$60,751	\$57,574	-\$3,177	-5.2%
Mount Prospect	20,447	20,290	\$73,991	\$69,520	-\$4,471	-6.0%
Roselle	8,441	8,342	\$84,156	\$77,650	-\$6,506	-7.7%
Wheeling	14,606	14,132	\$60,897	\$56,110	-\$4,787	-7.9%
South Barrington	1,247	1,523	\$191,075	\$173,650	-\$17,425	-9.1%
Elk Grove	12,852	13,323	\$75,466	\$68,527	-\$6,939	-9.2%
Palatine	25,939	26,242	\$80,725	\$71,573	-\$9,152	-11.3%
Barrington Hills	1,497	1,352	\$148,150	\$128,529	-\$19,621	-13.2%
Lake Barrington	2,148	2,348	\$120,666	\$90,938	-\$29,728	-24.6%

Source: American Community Survey, U.S. Census Bureau, 2016.



Harper College Environmental Scan – 2017

However, the family median income can be more informative as to the ability to pay tuition. Family households tend to have higher median incomes as there are usually two wage-earners whereas nonfamily households include single person or older homeowners that are retired. The median family income in Illinois is \$71,546, which is a decrease of almost \$3,000 from 2010 after adjusting for inflation. The weighted median family income of the municipalities in Figure 39 is \$90,826, which is down from \$94,792 in 2010, a \$4,000 drop per year in buying power. The percentages are similar to the median household income, but not as extreme in the variance. Inverness gained the most on average almost an additional \$16,000 per year, while Barrington Hills declined just over \$41,000, which is a large drop, but still remains almost double the statewide average. These trends are not unique to the Harper region; this is taking place throughout the country making it difficult for households to maintain their standard of living.



Harper College Environmental Scan – 2017

Figure 39: Family Median Income, Municipalities within the Harper Community College District

Municipality	2010 Families	2015 Families	2010 Median Family Income (Adjusted)	2015 Median Family Income	Numeric Change	Percent Change ↓
Inverness	2,188	2,609	\$169,672	\$185,667	\$15,995	9.4%
Deer Park	973	962	\$151,999	\$165,105	\$13,106	8.6%
Fox River Grove	1,153	1,590	\$103,387	\$110,329	\$6,942	6.7%
Rolling Meadows	6,076	8,983	\$79,496	\$82,653	\$3,157	4.0%
Buffalo Grove	11,682	16,094	\$112,326	\$116,579	\$4,253	3.8%
Hanover Park	9,186	11,239	\$70,326	\$72,565	\$2,239	3.2%
Prospect Heights	4,177	6,078	\$67,616	\$68,537	\$921	1.4%
Hoffman Estates	13,496	18,154	\$93,264	\$94,230	\$966	1.0%
Barrington	2,841	3,766	\$136,137	\$136,331	\$194	0.1%
South Barrington	1,193	1,523	\$192,372	\$191,375	-\$997	-0.5%
North Barrington	901	1,078	\$165,166	\$163,068	-\$2,098	-1.3%
Arlington Heights	20,077	30,358	\$105,883	\$102,734	-\$3,149	-3.0%
Schaumburg	18,634	30,011	\$90,323	\$87,390	-\$2,933	-3.2%
Illinois	3,161,547	3,124,683	\$74,377	\$71,546	-\$2,831	-3.8%
Tower Lakes	433	391	\$163,773	\$157,500	-\$6,273	-3.8%
Des Plaines	14,437	22,191	\$83,459	\$79,636	-\$3,823	-4.6%
Elk Grove	97	13,323	\$93,967	\$88,125	-\$5,842	-6.2%
Carpentersville	8,578	10,893	\$63,518	\$58,750	-\$4,768	-7.5%
Palatine	17,163	26,242	\$97,715	\$89,648	-\$8,067	-8.3%
Mount Prospect	13,983	20,290	\$91,133	\$82,803	-\$8,330	-9.1%
Roselle	5,973	8,342	\$97,158	\$87,195	-\$9,963	-10.3%
Wheeling	9,474	14,132	\$74,123	\$64,591	-\$9,532	-12.9%
Lake Barrington	235	2,348	\$146,442	\$121,067	-\$25,375	-17.3%
Barrington Hills	1,162	1,352	\$175,354	\$134,310	-\$41,044	-23.4%

Source: American Community Survey, U.S. Census Bureau, 2016.

Workforce Trends Conclusion

Despite signs of economic recovery and falling unemployment rates, many employers are reluctant to hire new employees or rehire laid-off workers. At the same time other companies are unable to find workers with the needed skills, credentials and experience. Prolonged unemployment is straining the social safety net and deferring achievement of the American Dream for many individuals and families. The job market for graduating Harper students will be a challenge as those already in the workforce who are eligible for retirement continue to hang onto their jobs.



Technology Trends

Technology is transforming the higher education landscape much the same as all levels of education. Cost, storage, faculty education, MOOC's (Massive Open Online Courses), cyber-attacks, software and hardware maintenance, fake news, information overload, and many other topics that were unheard of just ten years ago have become mainstream. Convenience, self-paced learning, and lower cost are features that make these models attractive to working adults, people located in more remote areas, individuals with limited financial resources, and persons with disabilities. However, the hoped-for improvements in efficiency and effectiveness that were predicted to arise from increased technology have not yet materialized in postsecondary education. SCUP observed that the online model only works for those who are disciplined enough to follow through or those seeking personal development.

EduCause has identified key trends occurring in higher education as it relates to digital technologies:

- *The evolution or morphing of the campus IT organization, in its role as the provider of the IT environment and also with respect to its role in teaching and learning,*
- *The increased independence of instructors and students, using their own tools to form their connections, resulting in custom pathways to achieve learning goals,*
- *The trend away from large central applications, run on campus servers, in favor of confederations of apps, many of which run in the cloud,*
- *The growing importance of interoperability and interface standards,*
- *The increase in multiple mobile device ownership, and*
- *The capacity of data analytics to proffer custom portraits of learners and to make predictions and suggestions based on those portraits.⁹*

These trends highlight how the embracing of digital technologies is necessary to engage today's generations and remain competitive. The centralized role of IT is now branching out to be more fragmented in order to meet individual department and/or classroom pedagogy. The art of using technology properly is to not teach to the new tools, but rather learning how to utilize them to make teaching more effective, requiring professional development to learn what is available and how to apply the tools in order to make those informed decisions.

⁹ Brown, Malcom. Six Trajectories for Digital Technology in Higher Education. Published by EduCause. June 22, 2015. Accessed Online: <http://er.educause.edu/articles/2015/6/six-trajectories-for-digital-technology-in-higher-education>.



Harper College Environmental Scan – 2017

Technology Trends Conclusion

Higher education is exploring the boundaries of existing technology as new devices, applications, and teaching strategies undergo exponential growth. To remain competitive in a dense educational landscape, Harper will need to stay on the cutting edge of this technology and knowledgeable about how these tools can support learning. Striking a balance between resources to maintain knowledge of technology as it morphs and grows while not receiving an expected return on investment is difficult. Internal technology infrastructure is a moving target to meet expectations of younger generations. However, many models have been tested with many lessons learned along the way on what helps in the classroom. The usage of virtual reality in the classroom is still at the cutting edge, but evidence from Oculus Rift and the Pokémon Go software has mainstreamed this type of technology that would lend itself well into the classroom, especially for intricate procedures that would be dangerous outside the virtual reality environment, such as surgery, as being used at the Augmentarium at the University of Maryland.¹⁰

WE ASSUME THEY'RE NOT PLAYING 'OPERATION'

While researchers say more research is needed, evidence is building that games can help people learn. Reviewing the scientific literature, Italian researchers found several studies that demonstrate that students in the health professions “who practiced . . . serious game training have better results than users experiencing traditional learning processes.” Researchers have shown that games can help students retain knowledge and keep learners engaged in learning. Your institution may offer courses or even a major in game development, but how well does it understand the science that connects games and learning? How effectively does it integrate games into the curriculum? What kinds of resources would it take to invest in gaming pedagogy? How can you convince campus skeptics that games can be good learning tools?

Source: SCUP 2016.

¹⁰ Society for College and University Planning, Planning Journal, Accessed online: Subscription Based, http://www.scup.org/page/resources/SCUP_PHE, 2016.



CAN GUNS AND LEARNING CO-EXIST?

Ten states have now enacted legislation allowing the carrying of concealed weapons on college campuses. That phenomenon prompted the American Council on Education to offer a session at its 2016 annual meeting exploring how guns on campus may change the nature of the learning environment. Panelists said campus carry laws may have unintended consequences on learning—particularly when classroom discussions focus on sensitive topics.

If “campus carry” is a factor in your state, have administrators, faculty, trustees, students, and other stakeholders at your institution engaged in conversations about how such policies might affect the learning environment? Has your institution reviewed policies and practices that might be affected—such as those concerning the training and conduct of campus police?

Source: SCUP 2016.

THE RISE OF THE “LEARNING ENGINEER”

In a recent MIT report on online education policy, researchers suggested that higher education needs more “learning engineers”—experts with “a knowledge base in the learning sciences, familiarity with modern education technology, and an understanding of and practice with design principles.” The report said such professionals can “provide a natural pipeline from research to practice by designing and redesigning learning experiences through a combination of rigorous design principles and insights from research.”

Different modes of educational delivery are becoming more common in universities, and higher education curricula are becoming more applied and interdisciplinary. How is the curriculum developed at your institution? Does that process need reengineering? Could new expertise—such as from learning engineers—bolster curricular development at your institution? Does your institution engage in discussions about how what we are learning about learning should drive changes in the curriculum?

Source: SCUP 2016.



Political Trends

Environmental Changes

The creation of innovative spaces in which to learn are being tried to see what works with students. Bentley University completely revamped the way in which the classrooms were set up to represent more of a design studio for the MBA students. Rather than a traditional setting the students are allowed to work on smartboards and various technologies that encourage “collaboration and student engagement” coined as *collaboratories*. Teaching the various technologies along with the traditional materials necessary for knowledge in their field has built confidence and creativity.¹¹

The design of the classroom environment has been linked to positive learning experiences. Steelcase Education has been able to demonstrate a “significant connection between classrooms specifically designed for active learning and improved student engagement.”¹² Planning for changes in the classroom design and providing.

If you are looking for evidence that the classroom environment directly impacts a student’s engagement in learning there is a case study that makes that case. In the SCUP journal *Planning for Higher Education*, the Steelcase Education company demonstrated a statistically significant connection between classrooms specifically designed for active learning and improved student engagement. For skeptics, data about how classroom design improves learning can speak volumes in allocating resources to make changes.

¹¹ Society for College and University Planning, Planning Journal, Accessed online: Subscription Based, http://www.scup.org/page/resources/SCUP_PHE, 2016

¹² Society for College and University Planning, Planning Journal, Accessed online: Subscription Based, http://www.scup.org/page/resources/SCUP_PHE, 2016.



FOOD FOR THOUGHT: “DIGITAL REINVENTION IN ACTION”

A thought-provoking new paper from IBM suggests that after two decades of “working through a digital maturation,” organizations now need to focus on “digital reinvention.” This next phase of the digital revolution combines multiple technologies, including cloud, mobile, and the Internet of Things, in ways that fundamentally rethink customer and partner relationships. To succeed at digital reinvention, IBM suggests that organizations need to “pursue a new strategic focus, build new expertise, and establish new ways of working.”

The paper notes that digital technologies have altered how people and businesses interact, disrupting traditional businesses and changing the economics of how organizations function. The paper warns that organizations will need to either digitally reinvent their enterprises “or watch as their businesses decompose around them.”

Every university recognizes that digital technology has disrupted higher education. Accordingly, many institutions have made significant changes, such as introducing online and blended learning. But are more fundamental changes still needed? The IBM paper argues that “for traditional organizations, digital reinvention involves a fundamental ground-up reinvention of strategy, operations, and technology.” Do universities need to fundamentally reframe operational structures, business practices, and policies to better position themselves for success in the digital age? What investments will institutions need to make to realize this promise?

Source: SCUP 2016.

Regulatory Trends

According to SCUP Regional Trends 2016, there has been a steady stream of state-based efforts to help guide the usage and availability of student data. How institutions handle the information internally to inform student learning while maintaining privacy standards will continue to be debated nationally. “The Data Quality Campaign reported it was tracking 94 student data privacy bills in 31 states.”¹³

¹³ Society for College and University Planning, Planning Journal, Accessed online: Subscription Based, http://www.scup.org/page/resources/SCUP_PHE, 2016. Further information on the Data Quality Campaign can be found at <http://dataqualitycampaign.org>.



Postsecondary Educational Trends

Harper College Return on Investment

In 2014, the Illinois Community College Board commissioned Northern Illinois University's Center for Governmental Studies (CGS) to conduct a statewide economic impact analysis as well as provide individual community college impact analyses each individual college. The reports analyzed earnings outcomes for program completers. Education at a community college can be viewed as an investment. Students attending college pay for their education in both cash and in foregone earnings. The net cash price is the cost of tuition, fees, books, and room and board. Foregone earnings result when a student spends time going to school and studying in place of earning money at work.

The analysis in this section focuses on the return on investment of students that completed a program, referred to as 'completers', in FY2011. The cost of attending school during the FY2010 and FY2011 school years is compared with projected earnings over a 40-year post graduation period. The results are net present value (NPV) and internal rate of return (IRR) estimates for the average completer in FY2011.

The net cash price of attending school was obtained from the National Center for Education Statistics' College Navigator tool. College Navigator employs Integrated Postsecondary Education Data System (IPEDS) data from the National Center for Education Statistics to calculate the 'average net price' for annual attendance at each school.

The other major cost for college attendees is their foregone earnings, often referred to as the 'opportunity cost' of attending college. The estimate for foregone earnings is based on completers' earnings in the 12 months prior to their enrollment in the college. It is assumed that their average income would have increased by 3% per year during their two years in college.

The major benefit of completing college is the resulting increased earnings. Pre-enrollment to post-completion earnings gains were calculated for graduates of 2-year Associate of Applied Science and 2-year certificate programs at Harper College. These are the completers most likely to directly enter the workforce and not pursue additional education directly following their community college completion. Gains for these graduates averaged \$6,616 in the first year.

Figure 40 on the next page presents the net return analysis based on the calculations noted above. The total cost during the two years the student is in school, including out of pocket expenses and foregone earnings is \$42,903. The return on investment occurs over a 40-year working life, where increased earnings for a degree completer are estimated to total almost \$500,000 (compared to someone not attending community college).



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Figure 40: Estimated Net Return for Harper Associate Degree Completers

Year	Net Price	Opportunity Cost	Total Cost	Increased Earnings	Discounted Cash Flow
-1	\$5,447	\$15,624	\$21,071		(\$21,914)
0	\$5,739	\$16,093	\$21,832		(\$21,832)
1				\$6,616	\$6,892
2				\$6,815	\$6,815
3				\$7,019	\$6,738
4				\$7,230	\$6,663
5				\$7,447	\$6,588
...
38				\$19,751	\$4,543
39				\$20,343	\$4,492
40				\$20,954	\$4,442
Total Increased Lifetime Earnings			\$498,871	NPV	\$179,446
				IRR	13.60%

Source: Center for Governmental Studies (2014). *Illinois Community Colleges' Economic Impacts*.

MAKING IT EASIER TO TRANSFER

Tracking trends in academic credit transfer policies, the Education Commission of the States notes that more than 30 states now have policies mandating transferable core lower-division courses and statewide guaranteed transfer of an associate's degree. The ECS says the fact that 15 states now have reverse transfer policies—offering more mobility of credits between two- and four-year institutions—signals “a growing change in the way we think about transfer of credit and conferring degrees.”

The ECS reports that a third of the students who entered higher education in 2008 transferred to a different institution at least once within six years. Demographic trends suggest that tomorrow's students will continue to move between institutions. In response to such trends, has your institution updated its academic credit transfer policies? Do those policies serve the evolving needs of today's and tomorrow's students?

Source: SCUP 2016.



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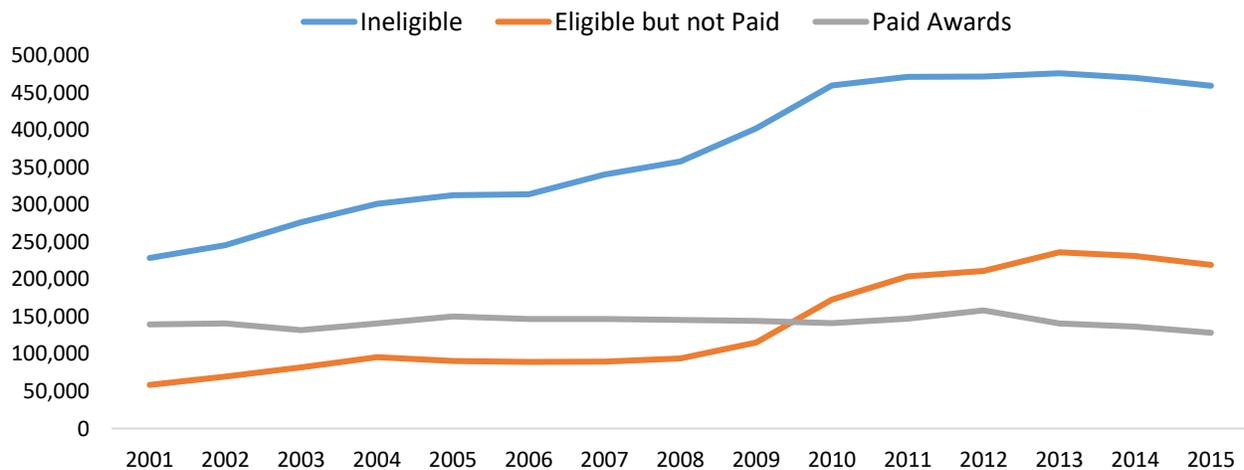
Credentialing and Documentation of Competency

The question of what students learn in college, and what they learn in the real world that can be assessed and credited, continues to stimulate discussion and debate. Students and employers expect more comprehensive credentialing that documents the knowledge and skills acquired during a lifetime of learning. Three areas are shaping much of this discussion: digitizing diplomas and credentials for easier access; integrating other important educational credentials (e.g. dual enrollments, study abroad programs, badges, and non-traditional certifications) into the academic record as a full-market value credential, and facilitating the exchange of credential information among institutions of higher education and with students and employers.

Education Finance

State funding available to help students with the cost of postsecondary education has not kept pace with need. Although there has been a shortfall in meeting students' financial needs since the inception of the Illinois Monetary Awards Program (MAP) in 1996, the gap between those that are eligible for funds but did not receive an award and those who did receive funding has widened dramatically since 2010 (Figure 41). Among those that are eligible only 36% were awarded, leaving over 219 thousand students without MAP assistance in Illinois.

Figure 41: Monetary Award Program (MAP) Eligibility and Paid Amounts



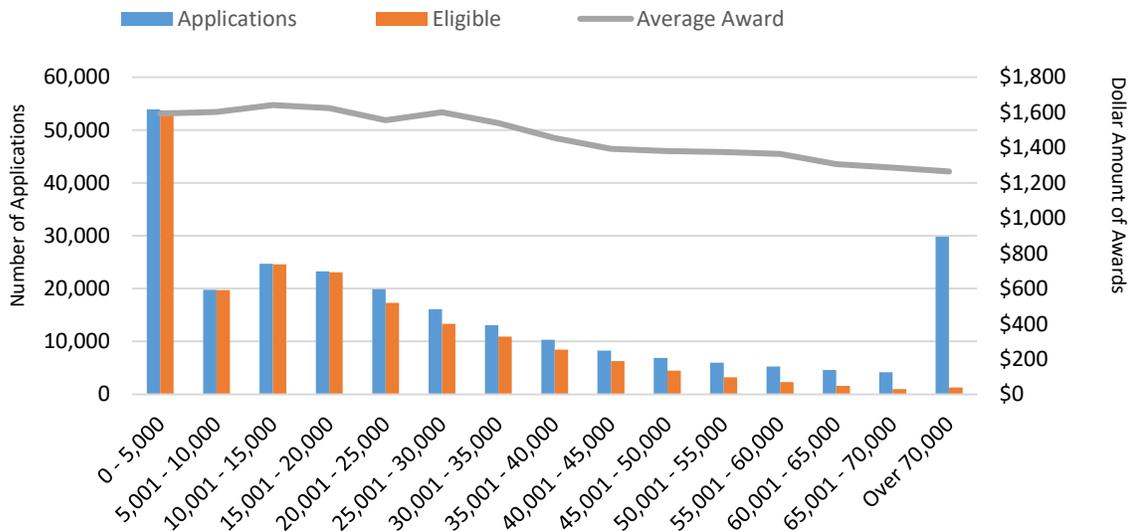
Source: Illinois Student Assistance Commission, Table 2.4c of the 2015 ISAC Data Book for Public 2-Year Institutions.



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A breakdown of MAP awards by income levels in 2015 illustrates that the most grants were awarded to students with the lowest incomes. The amount of the awards ranged between \$1,265 and \$1,642, the higher awards were given to those with the lowest income (see Figure 42).

Figure 42: Monetary Award Eligibility by Income Level in Public 2-Year Illinois Institutions - 2015



Source: Illinoist Student Assistance Commission, 2015 Data Book.

Postsecondary Education Conclusion

Higher education is arguably facing more criticism now than at any other time in its history. Current and prospective students are finding college prohibitively expensive and are demanding specific, value-add career related outcomes from their education. Institutions of higher education are grappling with challenges of retaining students. As expectations rise, funding is declining. A slow economic recovery and competing social priorities have reduced revenues significantly throughout Illinois, a trend that is unlikely to reverse in the near future.

Despite these serious challenges, community colleges remain the most affordable and flexible option for many learners. Exciting opportunities exist to boost enrollment and retention through multi-channel instructional delivery methods, leveraging technology to enhance teaching and learning, and expanding national and international markets through online learning. Community colleges also benefit from historically strong relationships with local employers and are able to start up and retool their programs with relative speed so as to respond to emerging workforce opportunities. Finally, in northern Illinois, student transitions from K-12 to postsecondary are being strengthened through regional and state-level P-20 initiatives and linkages to the workforce development system.



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Harper College’s challenge remains unchanged and is shared by every other higher education institution in the U.S.: offer the best education and workforce preparation value in its market for an ever more diverse array of aspiring learners.

FORCES OF CHANGE: ENVISIONING A NEXT-GENERATION INFRASTRUCTURE FOR LEARNING

When it comes to anticipating the next-generation infrastructure for higher education, planners may feel the ground is shifting beneath them—and in many ways it is. Our thinking about learning itself is fast evolving, as exemplified in recent trends in online learning, hybrid classes, and makerspaces.

Given these trends, planners need to transform their thinking. A recent article in the *EDUCAUSE Review*, for example, argued that the rise of digital technology in higher education should shift university technologists from focusing on IT tools toward “the learners and the learning experiences that the technology enables.” Indeed, a similar shift may be necessary among all university administrators and staff.

Reflecting similar concerns, the newly announced Digital Learning Lab aims to drive the adoption of digital learning at MIT while pursuing innovations. A related effort, the MIT Integrated Learning Initiative (MITili), is a newly created umbrella for the university’s work in the integrated science of learning, which it says is emerging “as a significant field of research.” New administrative positions at MIT include a dean of digital learning and a vice president for open learning.

The continued shift toward digital learning along with insights emerging from cognitive science research will have many implications for college and university infrastructure. Even as they think about changes in the short term, planners need to also consider the longer- term, big-picture ramifications of what macro changes in the learning environment portend.

Source: SCUP 2016.



Meeting the Needs of Business and Industry

Determining what types of skills are needed by local employers and offering curriculum, credentials, and work experience to fill those needs is a continuous challenge for community colleges. This section presents current and projected workforce demand of employers and industries and the supply of education and training programs in the region.

Current Workforce

Employment opportunities for workers have been improving throughout the Chicago Metropolitan Area albeit at a slow pace. Manufacturing remains an industry sector of great strategic importance to the state and the region, but tops the list of biggest job losses (Figure 43). Between 2010 and 2016, manufacturing lost 6.5% of its employment base or 36,188 jobs. Conversely, health care and social assistance experienced the largest net gain in jobs at 28,269, or an average of 4,712 jobs per year. Educational services, management of companies and enterprises, and accommodation and food services have also added

Figure 43: Industry Employment and Specialization*

	2010 Employment	2016 Employment	Employment Change 2010-2016		Illinois Employment Percent Change 2010-16
			Number	Percent	
Agriculture, Forestry, Fishing and Hunting	12,427	12,739	312	2.5%	-1.9%
Mining, Quarrying and Oil and Gas Ext.	2,317	2,454	137	5.9%	0.0%
Construction	232,778	213,064	-19,714	-8.5%	-8.2%
Manufacturing	555,850	519,662	-36,188	-6.5%	-6.0%
Wholesale Trade	142,586	130,734	-11,852	-8.3%	-7.7%
Retail Trade	464,312	459,139	-5,173	-1.1%	-1.4%
Transportation and Warehousing	234,606	234,579	-27	0.0%	-0.6%
Utilities	26,474	26,145	-329	-1.2%	-1.5%
Information	100,571	94,140	-6,431	-6.4%	-6.0%
Finance and Insurance	266,037	243,272	-22,765	-8.6%	-7.2%
Real Estate and Rental and Leasing	82,257	76,910	-5,347	-6.5%	-5.4%
Professional, Scientific, and Technical Services	337,828	349,482	11,654	3.4%	2.6%
Management of Companies and Enterprises	6,205	5,889	-316	-5.1%	-4.4%
Administrative and Support and Waste Mgmt.	197,749	202,566	4,817	2.4%	2.2%
Educational Services	399,043	415,835	16,792	4.2%	2.1%
Health Care and Social Assistance	545,943	574,212	28,269	5.2%	3.3%
Arts, Entertainment, and Recreation	99,746	101,626	1,880	1.9%	1.8%
Arts, Entertainment, Acc. & Food Services	298,102	317,026	18,924	6.3%	3.9%
Other Services	210,315	212,790	2,475	1.2%	-0.1%
Public Administration	153,231	151,103	-2,128	-1.4%	-1.2%
Total, All Industries	4,368,377	4,343,367	-25,010	-0.6%	-1.2%

Source: EASI Analytics, 2016.

*Chicago-Naperville-Elgin Combined Statistical Area, IL-IN-WI (2010-16).



Harper College Environmental Scan – 2017

significant numbers of jobs. Overall, the metro area experienced a net loss of 25,010 jobs or 0.6%, between 2010 and 2016.

Location Quotients

Specializations or concentrations of related industries are a widely recognized economic development phenomenon and play an important role in promoting and maintaining the vitality of cities, regions, and states. Location quotients (LQ) are one of several methodological tools used in economic research to quantify and compare concentrations of industries in a particular area to another and are critical for assessing an area's economic strengths and weaknesses. Location quotients are especially useful in identifying both the distinguishing industries and the commonalities between regional economies. They can serve to confirm the intuitively obvious or identify emerging trends as economies change, grow, and diversify. If the LQ is 1.0, that industry has the same share of employment as the U.S. If the LQ is greater than 1.0, it has a greater share of local area employment than the national average, and if less than 1.0, a smaller share. For example, the LQ for the entertainment industry in Los Angeles, California is well above 1.0 because of the high concentration of employment in that sector.

Industries with high LQs are usually export-oriented, which is important because they bring money into an area, rather than recirculate it like retail and food service operations do. LQs also help identify industries that distinguish Harper region (Cook, Lake and McHenry counties) from the surrounding metro area.

In the Harper region, see Figure 44, the Management of Companies and Enterprises has the highest LQ of all industries, even though it is one of the smaller industry sectors in terms of employment and it has suffered a net loss of 1,396 jobs between 2010 and 2016. Professional, Scientific, and Technical Services represents one of the emerging industry sectors in the region, employing 248,978 in 2016, an increase of 1.5% (3,678 jobs) from 2010. Transportation and Warehousing and Finance and Insurance also have a significant presence with an LQ of 1.3 in 2016, despite a net loss of jobs.

Manufacturing still remains an important sector, despite decades of declining employment. Between 2010 and 2016, manufacturing employment fell by 7.2%, although its location quotient remained unchanged (1.1). The decline of manufacturing employment stems from increased global competition, automation and the impact of new production technologies, as well as local business costs. Despite this, the Chicago metro area has considerable competitive advantages in terms of research and development, production technology, and specializations in the manufacturing of pharmaceuticals, electrical and electronic equipment, and fabricated metal products.

Health care and social assistance grew the most in employment, adding another 19,236 jobs, but has an LQ of 1.0. If it continues to grow, this sector could emerge as an export industry and be positioned to bring money into the region. Nationally, the health care and social assistance industry is projected to



Harper College Environmental Scan – 2017

grow by 5.0 million becoming the largest industry by 2022¹⁴. The Harper region seems to be following the trend as it already is the largest industry when combining Cook, Lake and McHenry Counties employing over 385,000 in 2016.

Figure 44: Location Quotients by Industry, Harper Community College Region*

Industry Description	2010 LQ	2016 LQ	2010 Employment	2016 Employment	Percent Change (2010-2016)
Agriculture, Forestry, Fishing and Hunting	0.14	0.15	5,679	5,938	4.6%
Mining, Quarrying and Oil and Gas Extraction	0.07	0.07	1,050	1,180	12.4%
Construction	0.78	0.72	147,633	127,646	-13.5%
Manufacturing	1.11	1.08	343,642	318,757	-7.2%
Wholesale Trade	1.08	0.98	89,554	77,027	-14.0%
Retail Trade	0.89	0.91	299,038	302,450	1.1%
Transportation and Warehousing	1.31	1.35	159,055	158,500	-0.3%
Utilities	0.55	0.52	14,078	13,255	-5.8%
Information	1.11	1.07	71,397	66,150	-7.3%
Finance and Insurance	1.33	1.30	186,474	175,011	-6.1%
Real Estate and Rental and Leasing	1.05	0.99	59,145	54,565	-7.7%
Professional, Scientific, and Technical Services	1.31	1.30	245,300	248,978	1.5%
Management of Companies and Enterprises	1.95	1.70	4,426	3,836	-13.3%
Administrative and Support and Waste Management Services	1.11	1.08	134,466	134,266	-0.1%
Educational Services	0.95	0.98	261,311	267,746	2.5%
Health Care and Social Assistance	0.94	0.96	366,609	385,845	5.2%
Arts, Entertainment, and Recreation	1.09	1.13	67,308	71,026	5.5%
Accommodation & Food Services	1.01	1.06	206,516	223,936	8.4%
Other Services	1.00	1.02	144,350	148,065	2.6%
Public Administration	0.74	0.75	107,609	107,503	-0.1%
Total, All Industries	1.00	1.00	2,914,640	2,891,680	-0.8%

*The Harper Community College Region consists of Cook, Lake and McHenry counties.

Source: EASI Analytics, Inc., 2016.

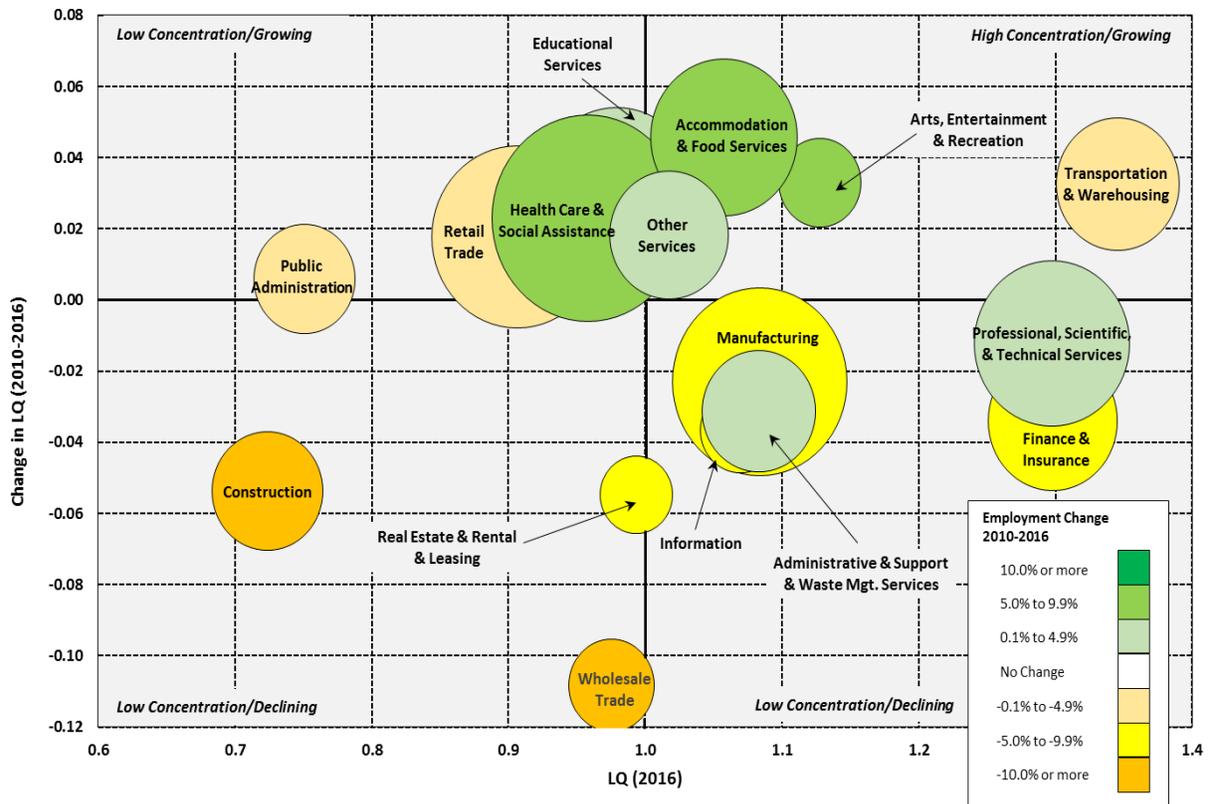
¹⁴ Bureau of Labor Statistics, Publication. January 2014. Accessed online 02-01-2014 at http://www.bls.gov/opub/ted/2014/ted_20140110.htm.



Harper College Environmental Scan – 2017

Figure 45 is a visualization of this information in Figure 44. The size of the bubble is proportionate to employment in 2016. The bubbles are color coded based on the percentage change in employment from 2010 to 2016. The location quotient is located on the X axis, while the percent change in location quotient from 2010 to 2016 is on the Y axis. The graphic is divided into four quadrants.

Figure 45: Location Quotients by Industry Employment, Harper Region*



Note: Bubble size is equivalent to employment.

*The Harper Region consists of Cook, Lake and McHenry Counties.

Source: EASI Analytics, Inc., 2016

Quadrant 1 (upper left) contains industries that are growing and have a lower than average concentration. These sectors may provide significant opportunities because they are showing signs of strength (growth) and room for continued growth (lower than average concentration). The industries are proportionately underrepresented, especially Educational and Health Care and Social Assistance. The greater Chicago metro area also have tremendous strength in both industries. Educational services include a number of public and private institutions. Educational services have, so far, been able to maintain their strength within the region despite less than favorable demographic trends among younger age groups. The Health Care and Social Assistance industry is growing throughout the Chicago metro area, as well as within the



Harper College Environmental Scan – 2017

Harper region. As the aging of the population continues over the next decade, the demand for these services is expected to increase.

Quadrant 2 (upper right) represents growing industries that have a higher than average presence in the county, such as Transportation and Warehousing. Another interesting note is the high growth in Accommodation and Food Services. The Chicago metro area has historically been a center for conventions, conferences and trade shows, as well as tourism that drives this industry. Accommodation and Food Services was one the highest growth sectors, adding over 17,000 jobs between 2010 and 2016. While these are not all high wage-high skill jobs they do offer great entry level opportunities.

Quadrant 3 (lower left) includes those industries that are contracting and have a low concentration. Although the Construction industry has shown some signs of recovery following the housing crisis of the mid-2000s, it has been very uneven and it continued to shed jobs in the Harper region. Real Estate and Rental and Leasing is also continuing to struggle as markets continue to deal with weak demand, high vacancies and a backlog of available properties in many areas.

Quadrant 4 (lower right) includes industries with a strong presence in the region compared to the U.S., but are declining. The most notable among the industries in this quadrant is manufacturing. Although it remains a top employer in the region, it continues to lose employment. Since 2010, it lost nearly 25,000 jobs in the Harper region, more than any other industry sector. The impact of the decline of manufacturing poses a serious problem for the regional economy going forward as these jobs are often high skill and high wage jobs.

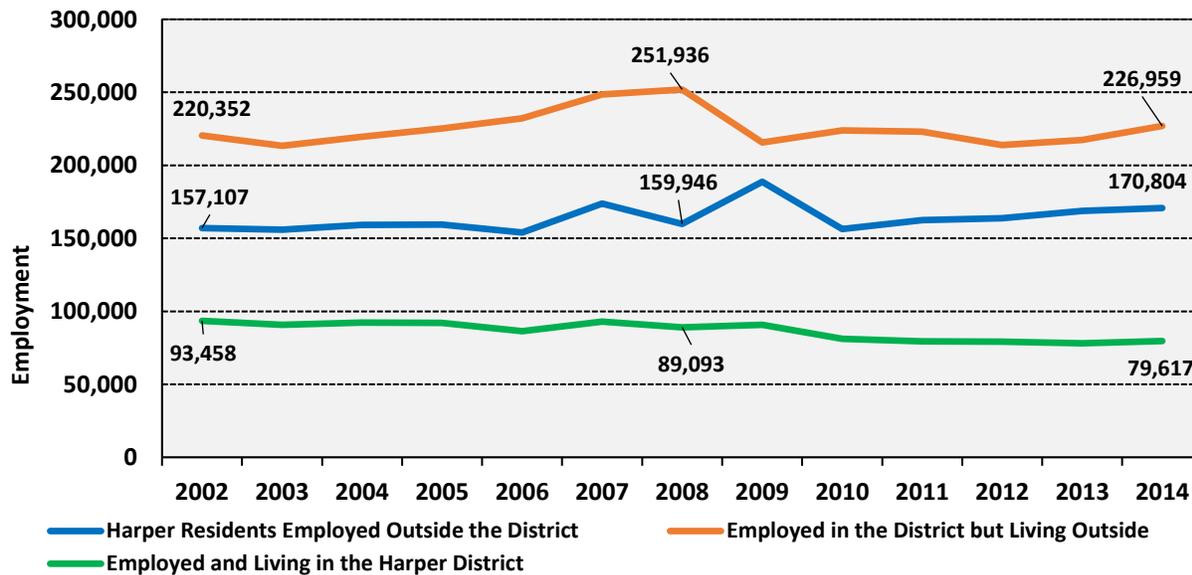


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Commuter Patterns

The Harper district has a defined boundary. However, because in-district tuition is provided to those who also work within the district the actual “labor shed” of the district extends well beyond the established boundary. There are three groups of workers to consider: those who live in the district but commute outside the district to work, people who live outside the Harper district but work within the district, and those who live and work within the Harper district (Figure 46).

Figure 46: Harper Job Efficiency Trends



Source: Illinois Department of Employment Security, Local Employment Household Dynamics, OnTheMap.

There were 170,804 residents who worked outside the district, 226,959 jobs filled by those living outside the district, and a total of 79,617 jobs in the Harper district filled by those who also lived within the district in 2014. These numbers have fluctuated over time but there have always been more jobs in the district than residents available to fill them. In 2009 as the number of jobs declined in the Harper district, many residents were forced to seek jobs outside of the district causing an uptick for those commuting workers. Numbers of those who both live and work within the district have also been slowly declining, particularly since 2009.



Harper College Environmental Scan – 2017

All three commuter categories experienced net decreases between 2002 and 2014 in the three broad industry groups listed in Figure 47, with major exceptions in the “Trade, Transportation, and Utilities” and the “All Other Services” category. In the “Trade, Transportation and Utilities” group commuters into the District increased by 6,018 or 11.2%. While in the “All Other Services” group residents commuting outside the district and people residing outside the district and commuting in were 23.4% and 13.2%, respectively. Decreases in the “Goods Producing” industries reflect the loss of jobs in manufacturing and related industries throughout the region.

Figure 47: Commuting Characteristics of Worker by Industry Class

Industry Group	Commuter Origination	Numeric Change	Percent Change
Goods Producing	Residents Commuting Outside the District	-5,043	-17.5%
	Commuters into the District	-14,687	-29.1%
	Residents working within District	-4,982	-31.8%
Trade, Transportation, and Utilities	Residents Commuting Outside the District	-1,272	-3.0%
	Commuters into the District	6,018	11.2%
	Residents working within District	-1,231	-7.3%
All Other Services	Residents Commuting Outside the District	20,012	23.4%
	Commuters into the District	15,276	13.2%
	Residents working within District	-7,628	-12.5%

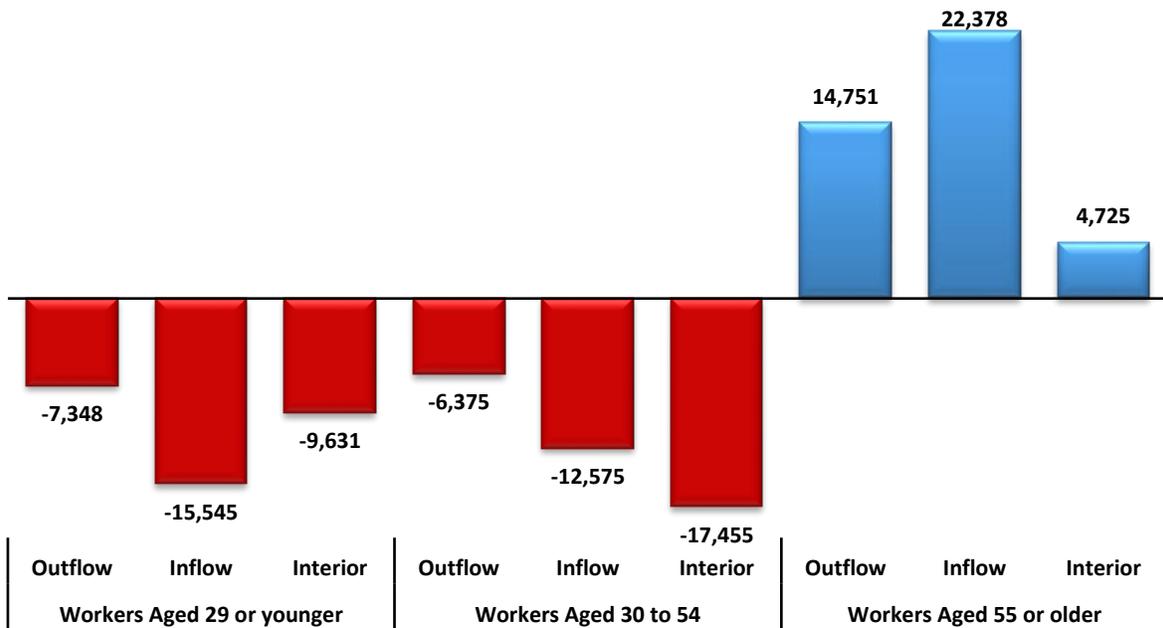
Source: US Census Bureau, Local Origination Destination Employment Data, 2002-2012, All Jobs



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Because Baby Boomers are staying in the workforce longer and since there are more of them, age has a disproportionate influence on the region’s commuter profile. Figure 48 shows commuter origination data by age group and all have declined with the exception of those 55 or older. This data reflects changes between 2002 and 2014, so there are an additional 41,854 workers over the age of 55 that are employed or residing in the Harper district. The net loss of workers under age 55 represents 68,929 jobs, the majority of which are workers under the age of 29.

Figure 48: Commuting Pattern, Net Change by Age of Worker 2002 - 2014



Source: US Census Bureau, Local Household Employment Dynamics, 2016.

However, what about the proportion of those aged 55 or older compared to the remaining Harper market? In 2002 the proportion of jobs held by those aged 55 or older was 14.3% or 72,768 jobs. Workers aged 29 or younger were at 25.9%, or 131,725 jobs, and those middle-aged held the remaining 59.8%, or 304,063. In 2014 the middle aged group had declined to 55.6%, or 257,658 jobs. Young workers fell to 20.6%, or 99,201 jobs. Those aged 55 or older increased to 23.8% of the workforce, or 114,622 jobs.

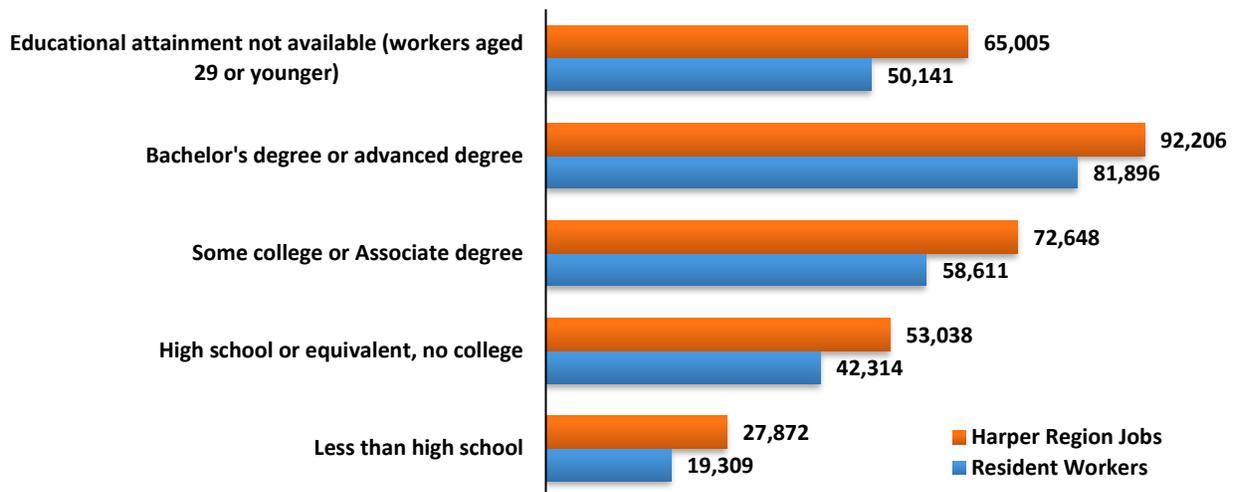


Harper College Environmental Scan – 2017

Worker Education Attainment

Educational attainment of workers in 2011 reveals that the majority of jobs are held by those with a postsecondary credential (see Figure 49). There are 310,769 jobs within the Harper district and 53.0% of them, or 164,854 jobs, are held by those with at least some college experience. Of the jobs occupied by workers who live within the Harper district, 55.7% are held by persons with at least some college experience. In comparison, statewide the percentages are 49.1% and 48.9% respectively.

Figure 49: Workforce Education Attainment, 2014



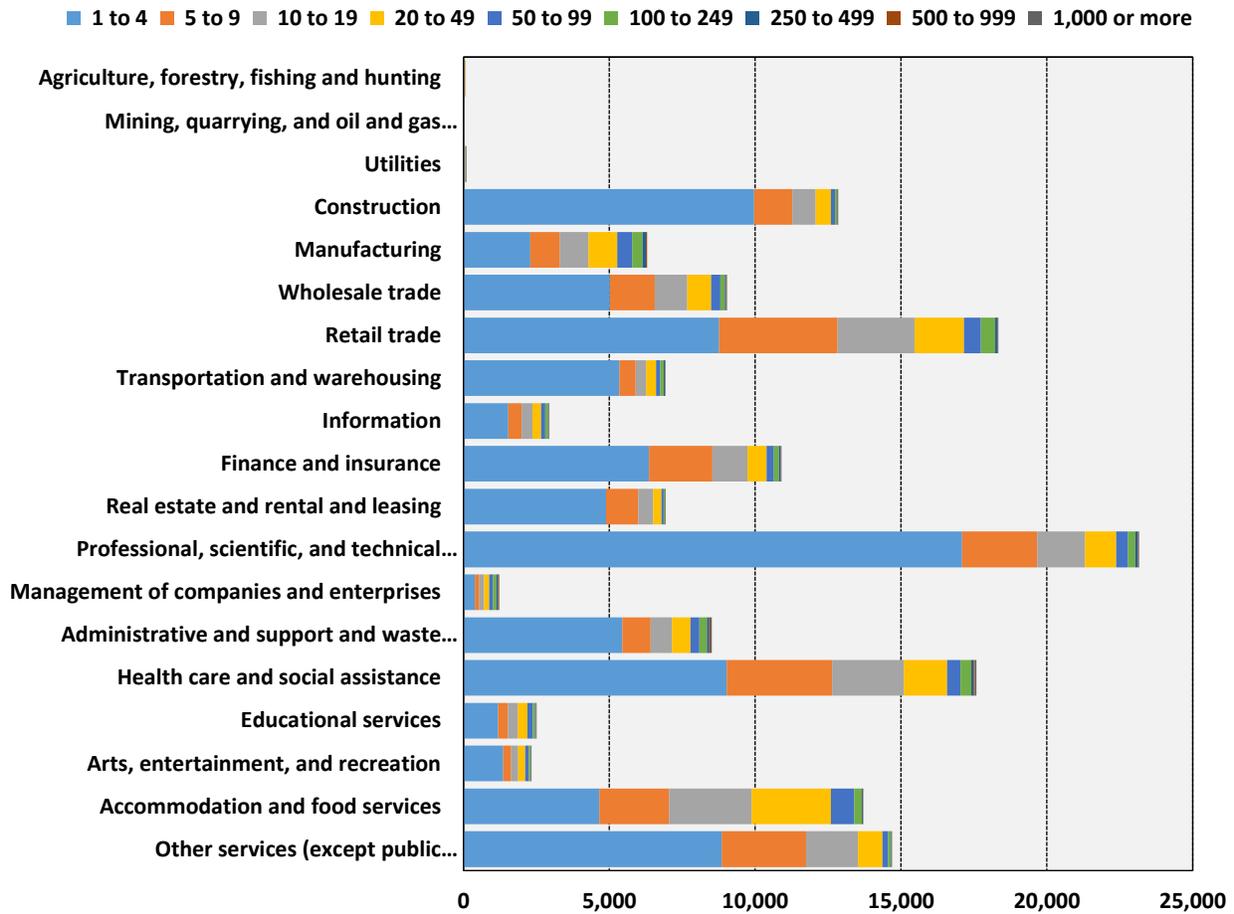
Source: US Census Bureau, Local Household Employment Dynamics, 2014.

Small businesses dominate the regional economy. Establishments with fewer than ten employees account for nearly three-quarters of all private businesses (Figure 50 on the next page). These smaller enterprises are especially prominent in professional, scientific and technical services, construction, retailing and healthcare and social assistance. According to the U.S. Census Bureau, from 2010 to 2014, companies in the Chicago Metropolitan area with fewer than five employees increased by 2.0% (2,668 establishments). The proportion of establishments in this size category remained unchanged at 57.3%. This compares favorably to the national growth rate of 1.1% for the same period. In the U.S. businesses that have fewer than five employees made up 54.5% of total establishments in 2014, down from 55.1% in 2010.



Harper College Environmental Scan – 2017

Figure 50: Establishments by Employment Size Class and Industry Sector, Harper Region*, 2014



*The Harper Community College Region consists of Cook, Lake and McHenry counties.
Source: U.S. Census Bureau, County Business Patterns, 2014.

Currently Available Jobs

The real-time demand for workers, as well as the required skills, credentials and other attributes can now be assessed through web-based technologies that scan millions of job and applicant postings on popular sites such as Monster, SimplyHired, and Indeed or posted by various state and local employment bureaus. Labor Insight™, developed by Burning Glass Technologies, is one such tools for measuring current demand for workers across a broad variety of industries and occupations. While some employers do not post job listings on public job sites, it does give a sense of the types of jobs available within the Harper Community College District. A complete listing will be provided separately in the form of an Excel workbook.

The top advertised occupations in the Harper District cover a wide range of occupations, but show a strong demand in the IT, financial, sales and management fields (Figure 51). The high number of postings for truck drivers is reflective of the nationwide demand for professional drivers, as well as the Chicago area's



Harper College Environmental Scan – 2017

position as an important transportation and distribution center. Job posting data can be useful in identifying immediate workforce needs of local employers. However, it should be noted that some industries tend to advertise online more often than others who rely on word-of-mouth, professional associations, or other outlets to market openings.

Figure 51: Top Occupations by Number of Job Postings - Harper Community College District

Occupation Title	Job Postings
Heavy and Tractor-Trailer Truck Drivers (53-3032)	2,196
Retail Salespersons (41-2031)	1,066
Sales Reps, Wholesale and Manufacturing, Except Technical and Scientific Products (41-4012)	953
Customer Service Representatives (43-4051)	783
Software Developers, Applications (15-1132)	750
Registered Nurses (29-1141)	721
Computer Occupations, All Other (15-1199)	610
First-Line Supervisors of Retail Sales Workers (41-1011)	501
Managers, All Other (11-9199)	443
Accountants and Auditors (13-2011)	358
Laborers and Freight, Stock, and Material Movers, Hand (53-7062)	327
Human Resources Specialists (13-1071)	310
Bookkeeping, Accounting, and Auditing Clerks (43-3031)	297
Management Analysts (13-1111)	296
Sales Managers (11-2022)	281
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive (43-6014)	280
First-Line Supervisors of Food Preparation and Serving Workers (35-1012)	264
Computer User Support Specialists (15-1151)	257
Marketing Managers (11-2021)	250
Combined Food Preparation and Serving Workers, Including Fast Food (35-3021)	248
Maintenance and Repair Workers, General (49-9071)	233
Financial Analysts (13-2051)	225
Computer Systems Analysts (15-1121)	220

Note: Based on information taken from job postings for the period of Aug 6, 2016 through Nov 3, 2016.

Source: Labor Insight Jobs (Burning Glass Technologies), 2016.



Harper College Environmental Scan – 2017

Future Workforce

The Illinois Department of Employment Security (IDES) periodically issues forecasts of job openings for specific occupations based on assumptions about job creation resulting from projected economic growth, as well as replacement needs based on demographic trends and expected turnover caused by workers changing jobs or careers, relocating or other voluntary or involuntary separations. When combined with information on local annual wages and national information on the typical education required to enter a particular occupation, the information is helpful for educational institutions when planning for future degree and certificate programs, as well as other technical and professional training.

WHAT THE WORLD NEEDS NOW: SKILLS, SKILLS, SKILLS

According to research by the World Economic Forum's Global Agenda Council on the Future of Software and Society, creativity, emotional intelligence, and cognitive flexibility are the new must-have skills for the workplace, while a worker's ability to be a good active listener, though still valued, is becoming less important relative to other skills.

For discussion

How well is your institution investing students with the "soft" skills they will need in tomorrow's workplace? Is your institution helping students learn to be more creative, for example, and to practice emotional intelligence? Are courses, programs, and degree requirements aligned with such 21st-century skills?

Source: SCUP 2016



Harper College Environmental Scan – 2017

Figure 52 shows the occupations in the Harper Community College Region that typically require an Associate level or comparable degree. They are ranked according to the anticipated number of annual average job openings between 2012 through 2022. Registered Nurses lead the list of top occupations, accounting for 21.5% of all job openings that typically require an associate’s degree (the full list of occupations are presented in Appendix G).

Figure 52: Top Occupations Typically Requiring an Associate’s Degree Ranked by Projected Job Growth Harper Community College Region*

	Employment 2012	Change 2012- 2022	New Jobs	Replacement Jobs	Median Wage 2015
Registered Nurses	59,110	6,821	683	11,470	\$69,755
Preschool Teachers, Ex. Special Education	8,855	185	8,855	2,490	\$30,255
Paralegals & Legal Assistants	8,346	1,450	8,346	1,360	\$54,347
Electrical & Electronic Engineering Techs	2,268	36	2,268	470	\$62,297
Engineering Techs, Ex. Drafters, All Other	1,640	-49	1,640	340	\$52,731
Architectural & Civil Drafters	1,640	-141	1,640	220	\$46,541
Chemical Technicians	1,369	109	1,369	340	\$48,099
Civil Engineering Technicians	1,038	-23	1,038	220	\$56,472
Mechanical Engineering Technicians	1,022	18	1,022	210	\$56,396
Dental Hygienists	4,044	296	30	1,040	\$75,247
Life/Phys/Social Science Techs, All Other	692	63	762	290	\$48,547
Industrial Engineering Technicians	751	14	751	150	\$51,615
Mechanical Drafters	771	-44	771	110	\$57,233
Broadcast Technicians	717	53	717	130	\$34,597
Medical & Clinical Lab Technicians	3,003	422	42	790	\$47,092
Environmental Science & Protection Techs	495	51	495	190	\$36,667
Radiologic Technologists	3,843	258	25	530	\$63,583
Agricultural & Food Science Technicians	402	-13	402	140	\$37,811
Computer Network Support Specialists	358	150	14	440	\$60,564
Environmental Engineering Technicians	357	38	357	70	\$45,394

*The Harper Community College Region consists of Cook, Lake and McHenry counties.

Source: Illinois Department of Employment Security, Employment Projections, Occupations – Long Term, 2012-2022.



Harper College Environmental Scan – 2017

Many other healthcare related occupations are also expected to have a substantial number of job openings. It is interesting to note that the primary source of job openings in the healthcare occupations is expected to come from the demand for replacing existing positions. Pre-school teachers are another occupation is expected to have a high number of job openings, but in contrast to the healthcare professions, most of the openings are expected to result from new job growth. The balance of the top occupations is in manufacturing or related technical positions, perhaps an indication that despite slow growth or declining overall employment in their related industry sectors, good employment opportunities will still exist.

It is projected that approximately 220,000 new job openings will occur in Cook, Lake, and McHenry counties between 2012 to 2022 (Figure 53). Another 714,000 job openings will occur because of replacement demand. This equals a total job potential openings of 934,000 over 10 years, or approximately 93,000 per year. Two-thirds of these job openings are expected to occur in occupations that require a high school diploma or less. With the exception of 0.1% of jobs for which the required level of education is unknown, the remaining 304,679 jobs to be filled be workers that have at least some college credit or a degree.

Figure 53: Occupation Projections by Education Required, Harper Community College Region*

Education Attainment Level	2012 Employment	New Jobs	Replacements	Job Potential
Less than high school	789,565	70,191	239,570	309,761
High school diploma or equivalent	1,235,020	58,932	259,650	318,582
Some college, no degree	35,607	1,724	7,550	9,274
Postsecondary non-degree award	163,546	16,185	33,240	49,425
Associate's degree	119,708	12,209	23,970	36,179
Bachelor's degree	591,179	48,236	123,490	171,726
Master's degree	47,731	4,603	9,940	14,543
Doctoral or professional degree	78,481	7,882	15,650	23,532
Unknown	5,450	-75	930	855
TOTAL	3,066,287	219,887	713,990	933,877

*The Harper Community College Region consists of Cook, Lake and McHenry counties.

Source: Illinois Department of Employment Security, Employment Projections, Occupations – Long Term, 2012-2022.



Harper College Environmental Scan – 2017

In comparison, the state is projected to experience a higher turnover in occupations requiring a high school diploma or less (Figure 54). A more equal distribution of occupations among all education attainment categories exists in the Harper district, although the highest turnover is projected in those occupations with less than high school education required.

Figure 54: Turnover in Occupations by Education Required in Harper College Region*

Education Attainment Level	2010-2020	2012-2022
Less than high school	29.0%	30.3%
High school diploma or equivalent	22.0%	21.0%
Some college, no degree	22.7%	21.2%
Postsecondary non-degree award	20.9%	20.3%
Associate's degree	20.2%	20.0%
Bachelor's degree	22.2%	20.9%
Master's degree	23.2%	20.8%
Doctoral or professional degree	19.3%	19.9%
Unknown	26.3%	17.1%
Total, All Categories	15.8%	23.3%

*The Harper Community College Region consists of Cook, Lake and McHenry counties.

Source: Illinois Department of Employment Security, Employment Projections, Occupations – Long Term.

Meeting the Needs of Business and Industry Conclusion

Harper College serves a diverse industrial and employer base representing a wide range of career opportunities for its students and alumnae. Manufacturing remains an industry sector of great strategic importance despite its loss of jobs over the last five years. Health care and social assistance, educational services, management of companies and enterprises, and accommodation and food services also offer significant employment opportunities. As Harper continues to partner with area employers and offer quality education and training programs for its students, a major challenge will be to help connect students with local employers and actual job opportunities. Further, with two-thirds of projected jobs requiring only a high school degree or less, Harper can play a role in helping students plan careers that begin with an entry-level job but grow into careers with expanded earnings potential. Harper can also play a role in strengthening the connections between local employers and Harper graduates. Commuter data show that almost 171,000 Harper district residents commute to jobs outside the district, while another 227,000 jobs within the district are held by people who live outside the district. By preparing students for jobs within its district, Harper provides employers with quality workers and its graduates with employment that is closer to home.



Appendices



Harper College Environmental Scan – 2017

Appendix A – Burning Glass Certifications¹⁵

Certifications	Job Postings
CDL Class A	1,082
Registered Nurse	595
First Aid CPR AED	432
Certified Public Accountant (CPA)	322
Commercial Driver's License	243
Project Management Certification (E.G. PMP)	165
Security Clearance	137
Certified Nursing Assistant	133
Certified Pharmacy Technician	109
Pharmacy Technician Certification Board (PTCB)	102
Real Estate Certification	98
Emergency Medical Technician (EMT)	76
Series 7	74
Critical Care Registered Nurse (CCRN)	71
Automotive Service Excellence (ASE) Certification	70
Series 6	70
Accident Health And Life (Insurance)	64
Insurance License	63
Forklift Operator Certification	60
Servsafe	57
Registered Health Information Technician	56
Certified Information Systems Security Professional (CISSP)	53
Certified Medical Assistant	52
Certified A+ Technician	48
Mortgage License	46
Nurse Practitioner	42
Registered Health Information Administrator	42
Series 63	42
Paramedic Certification	41
Professional In Human Resources	40
Social Work License	39
Certified Professional Coder	35
Cisco Certified Network Associate	35
It Infrastructure Library	33
Life And Health Insurance License	33
Basic Cardiac Life Support Certification	32
Series 66	32

¹⁵ Burning Glass is data that is collected from Online, Newspapers and other resources and categorized based upon the information in the ad. While the data is not comprehensive, as not all job types broadcast job openings, but does provide an idea of what types of job openings are becoming available in an area. Note: Based on information taken from job postings for the period of Aug 6, 2016 through Nov 3, 2016. Source: Labor Insight Jobs (Burning Glass Technologies), 2016.



Harper College Environmental Scan – 2017

Cisco Certified Network Professional (CCNP)	30
Certified Information Systems Auditor (CISA)	29
Certified Occupational Therapy Assistant (Cota)	28
Chartered Property Casualty Underwriter	28
Leadership In Energy And Environmental Design (LEED)	26
American Speech - Language Hearing Association	25
Certified Hospice And Palliative Nurse	25
Epic Certification	25
Pharmacist	25
Certified Case Manager	24
Certified Medical Laboratory Technician	23
Paralegal Certification	22
Senior Professional In Human Resources	22
Six Sigma Certification	22
American Heart Association Certificate	21
Cisco Certified Internetwork Expert (CCIE)	21
Network+ Certified	21
Certified Ambulatory Perianesthesia Nurse	20
Certified Quality Engineer	20
Phlebotomy Certification	20
Microsoft Certified Solutions Expert (MCSE)	19
Microsoft Certified Professional (MCP)	18
Department Of Transportation (Dot) Certified	17
Food Service Sanitation Certification	17
Psychologist License	17
American Heart Association Certification	16
Certified Coding Specialist	16
Certified Information Security Manager (CISM)	16
Microsoft Certified Technology Specialist (MCTS)	16
Property And Casualty License	16
Agile Certification	15
American Council Of Pharmaceutical Education (ACPE)	15
Cosmetology License	15
HVAC Technician Certification (E.G. EPA 608)	15
Licensed Professional Counselor	15
Scrum	15
American Physical Therapy Association (APTA)	14
Board Certified Behavior Analyst	14
Home Health Aide	14
Human Resources (E.G. GPHR)	14
Certified In Production And Inventory Management	13
Certified Occupational Health Nurse	13
Six Sigma Green Belt	13
Certified Quality Auditor	12
Neonatal Nursing	12
Refrigeration Technician Certification (E.G. Cfc Type 2)	12



Harper College Environmental Scan – 2017

Teaching License	12
Vmware Certified Professional	12
Advanced Cardiac Life Support (ACLS) Certification	11
American Registry Of Radiologic Technologists (ARRT)	11
Board Certified/Board Eligible	11
Certified Financial Planner	11
Licensed Vocational Nurse (LVN)	11
Six Sigma Black Belt	11
Training For Intervention Procedures (Tips) Certification	11
Advanced Practice Nurse	10
American Board For Engineering And Technology (Abet) Accredited	10
Certified Energy Manager	10
Certified Surgical Technician	10
Certified Teacher	10
Neonatal Resuscitation	10
Adjuster Certification	9
Air Brake Certified	9
American Society For Quality (ASQ) Certification	9
Cash Handling Certification	9
Certified Fraud Examiner	9
Electrician Certification	9
Registered Cardiovascular Invasive Specialist	9
American Occupational Therapy Association (AOTA)	8
Environmental Protection Agency Certification	8
Financial Accounting Standards Board (FASB)	8
Information Technology Certification	8
Licensed Alcohol And Drug Counselor	8
Master Project Management	8
Personal Fitness Trainer Certification	8
Registered Dietitian	8
Security Guard Certification	8
Series 65	8
Alcohol Server Certification	7
ASCP Board Certification	7
Basic Computer Skills	7
CCL Class B	7
Certified Dialysis Nurse	7
Certified Nephrology Nurse	7
Certified Professional Coder-Hospital Outpatient	7
Citrix Certified Integration Architect	7
Department Of Transportation (Dot) Medical Certification	7
Food Service Certification (E.G. FMP)	7
Fundamental Payroll Certification	7
GIAC Certified Project Manager	7
Medical Billing And Coding Certification	7
National Board For Certification In Occupational Therapy (NBCOT)	7



Harper College Environmental Scan – 2017

Professional Engineer	7
Quality Management Certification (E.G. CMQ)	7
Variable Annuity License	7
Alcohol Awareness Certification	6
Certified Compensation Professional	6
Citrix Certified Enterprise Engineer (CCEE)	6
Nursing Specialty Certification	6
Oncology Certification	6
Teaching Certificate	6
Airs Certification	5
CDL Class C	5
Certified In Risk And Information Systems Control	5
Certified Oncology Nurse	5
Certified Payroll Professional	5
Certified Pool Operator	5
Certified Regulatory Compliance Manager	5
Certified Surgical Technologist	5
Cisco Certified Design Professional (CCDP)	5
Illinois Bar	5
Insurance Agent Certification	5
Investment Advisor	5
Learning Behavioral Specialist I	5
Licensed Barber	5
Pediatric Advanced Life Support (Pals) Certification	5
Radiography Certification	5
Taxation Certification (E.G. Graduate Tax Certificate)	5
Togaf	5
Administrator's License	4
Alcohol Seller Certification	4
American Academy Of Dermatology (AAD)	4
American Registry For Diagnostic Medical Sonography (ARDMS)	4
APICS (American Production And Inventory Control Society) Certification	4
Apple Certified Technical Coordinator	4
Certified Biomedical Auditor	4
Certified Dental Assistant	4
Certified Ethical Hacker	4
Certified Infection Control	4
Certified Network Administrator	4
Certified Nurse Educator	4
Certified Procurement Manager	4
Certified Professional In Supply Management	4
Certified Professional Utilization Management	4
Certified Reliability Engineer	4
Certified Safety Professional	4
Certified Software Quality Engineer	4
Chartered Life Underwriter (CLU)	4



Harper College Environmental Scan – 2017

Cisco Certified Security Professional	4
Computer Software	4
Contractors License	4
Hazard Analysis And Critical Control Point (HACCP) Certification	4
I-Car	4
Institutional Review Board (IRB)	4
Lean Certification	4
Life Insurance License	4
Medical Technician	4
Microsoft Certified Systems Administrator (MCSA)	4
Police Officer	4
Regulatory Affairs Certification	4
Sans/GIAC Certification	4
Server+	4
Tool And Die	4
Advertising Certification	3
Auto Sales	3
Breath Alcohol Technician	3
Certified Accounts Payable Professional	3
Certified Cardiographic Technician	3
Certified Diabetes Educator (CDE)	3
Certified Employee Benefit Specialist (CEBS)	3
Certified Internal Auditor	3
Certified Professional Secretary	3
Certified Rehab Nurse	3



Harper College Environmental Scan – 2017

Appendix B – Burning Glass Employers¹⁶

Employers	Job Postings
Sears	489
Alexian Brothers Health System	242
UnitedHealth Group	226
Macy's	206
Advocate Health Care	193
CVS Caremark	154
Amita Health Alexian Brother Health System	143
Northwest Community Hospital	142
Northrop Grumman	137
Celadon Trucking Services	130
Zurich Insurance	129
Mb Financial Bank	128
United States Foods	128
Panera Bread	114
Optum	92
Berkshire Hathaway	91
Marriott International Incorporated	89
New York Life	86
Nordstrom	78
Automatic Data Processing Incorporated	71
Citi	71
Motorola Inc.	71
HCR ManorCare	70
Northwest Community Healthcare	67
Nation Pizza And Foods	66
Bank of America	65
Mb Financial Incorporated	65
Target	65
The Home Depot Incorporated	65
United States Xpress Enterprises Incorporated	65
Best Buy	64
West Side Transport	64

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Harper College Environmental Scan – 2017

Schneider Electric	61
Barr-Nunn	60
Reyes Holdings	59
Capital One	58
Presence Health	57
Advantage Sales & Marketing	56
BMO Financial Group	56
Adventist Midwest Health	55
Paylocity	55
JP Morgan Chase Company	54
Jc Trucking Positions	53
Steak N' Shake	52
Chipotle Mexican Grill	51
AT&T	50
Harper College	50
CVS Health	49
Dunkin' Donuts	49
Simon Property Group	49
Belmont Village Senior Living	47
Dish Network	47
HSBC	47
Bosch	46
Bridgestone / Firestone	46
Hyatt	46
Presence Health Network	46
Oakton Community College	45
Siemens	45
Cabelas	44
Petco	44
AlliedBarton Security Services	43
CDK Global	43
Veriha Trucking	42
Avon	41
H&R Block	41
Select Advantage Incorporated	41
TCF Financial Corporation	41
Abbott Laboratories	40
Compass Group	40
Wells Fargo	40
Aramark	39



Harper College Environmental Scan – 2017

Boyd Brothers Transportation	39
Gap Inc.	39
Kar Auction Services	39
Verizon Communications Incorporated	39
CDK	38
Crete Carrier Corporation	38
United Parcel Service Incorporated	38
Bright Horizons	37
Connect Search, Llc	36
FedEx	36
Procare Therapy	35
Roehl Corporation	35
IKEA	34
Toys"R"Us, Inc	34
AutoNation	33
C.R. England, Inc	33
Grand Island Express	33
Kohl's	33
Little City Foundation	33
Starbucks Coffee Company	33
Wheeling Park District	33
A&R Logistics	32
Boston Market	32
Lifetime Fitness	32
Securitas Security Services USA Incorporated	32
Wendy's Restaurants	32
Journeycare	31
Presence Covenant Medical Center	31
Psav Presentation Services	31
Restaurant Depot	31
Sodexo	31
Whole Foods Market, Inc.	31
Allstate	30
CRST International	30
Jobgiraffe	30
Roehl Transport	30
United Energy Services	30
Buffalo Wild Wings	29
PepsiCo Inc.	29
Psa Healthcare	29



Harper College Environmental Scan – 2017

Aflac	28
Aurico	28
Brookdale Senior Living	28
Friendship Village Of Schaumburg	28
Homeadvisor	28
J&R Schugel Trucking Inc	28
JCPenney	28
Jiffy Lube	28
L Brands	28
Summitt Trucking	28
Us Class A Drivers	28
Danaher Corporation	27
Dick's Sporting Goods Incorporated	27
Einstein Noah Restaurant Group, Inc	27
Sysco Corporation	27
Touchpoint Support Services	27
Chico's	26
National Agents Alliance	26
Rr Cig Lp Bypass	26
Schaumburg	26
Tmc	25
Carsons	24
First American Corporation	24
General Electric Company	24
Loews	24
Sunrise Senior Living, Inc.	24
Wheels Incorporated	24
CEVA Logistics	23
Jbs Carriers	23
Jimmy John's	23
Marten Transport	23
Oaken Community College	23
Office Depot	23
RR Donnelley	23
Smith Transport	23
Bergners	22
Brookdale Incorporated	22
Chicago Behavioral Hospital	22
Experian	22
Omnicare Incorporated	22



Harper College Environmental Scan – 2017

Red Robin	22
Sprint Corporation	22
Super Service Training	22
Goodyear	21
Extended Stay Hotels	20
Great Clips	20
Isaca	20
Knight Transportation	20
Plexus	20
Quad Graphics Incorporated	20
Rr Donnelly	20
Seasons Healthcare Management	20
Sephora	20
Speedway	20
Staples	20
The Bon-Ton	20
Yusen Logistics	20
Brunswick	19
Cambridge Educational Services	19
Cintas	19
Comcast	19
Diversified Transfer & Storage	19
Goodwill	19
Honeywell	19
Intertek	19
Koch Trucking	19
Pearson	19
Swift Transportation	19
The Nielsen Company	19
Wti Transport	19
Younkers	19
Airwatch, Llc	18
Home Instead Senior Care	18
Intertek Group	18
Ross Dress for Less	18
XPO Logistics	18
Bob Rohrman Auto Group	17
Cbre	17
Groendyke Transport	17
Liberty Mutual	17



Harper College Environmental Scan – 2017

Mcfarland Truck Lines Incorporated	17
Revolution Technologies	17
Superior Carriers	17
The Waggoners Trucking Company	17
Wintrust Financial Corporation	17
Art Van Furniture	16
Ati Physical Therapy	16
Bloomington's	16



Harper College Environmental Scan – 2017

Appendix C – Burning Glass Industries¹⁷

Industry	Job Postings
General Medical and Surgical Hospitals (6221)	1,057
Department Stores (4521)	1,019
Insurance Carriers (5241)	925
General Freight Trucking (4841)	920
Depository Credit Intermediation (5221)	824
Restaurants and Other Eating Places (7225)	766
Business Support Services (5614)	606
Traveler Accommodation (7211)	363
Health and Personal Care Stores (4461)	359
Offices of Other Health Practitioners (6213)	215
Clothing Stores (4481)	198
Aerospace Product and Parts Manufacturing (3364)	177
Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly (6233)	177
Grocery and Related Product Merchant Wholesalers (4244)	177
Scientific Research and Development Services (5417)	164
Automotive Parts, Accessories, and Tire Stores (4413)	156
Accounting, Tax Preparation, Bookkeeping, and Payroll Services (5412)	149
Investigation and Security Services (5616)	144
Sporting Goods, Hobby, and Musical Instrument Stores (4511)	142
Advertising, Public Relations, and Related Services (5418)	137
Special Food Services (7223)	135
Colleges, Universities, and Professional Schools (6113)	133
Cable and Other Subscription Programming (5152)	128
Employment Services (5613)	127
Elementary and Secondary Schools (6111)	125
Other Financial Investment Activities (5239)	110
Building Material and Supplies Dealers (4441)	108
Wireless Telecommunications Carriers (except Satellite) (5172)	108
Nursing Care Facilities (Skilled Nursing Facilities) (6231)	101
Management, Scientific, and Technical Consulting Services (5416)	100
Specialized Freight Trucking (4842)	99
Home Health Care Services (6216)	95
Offices of Physicians (6211)	95

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Harper College Environmental Scan – 2017

Other Professional, Scientific, and Technical Services (5419)	93
Electronics and Appliance Stores (4431)	89
Individual and Family Services (6241)	89
Services to Buildings and Dwellings (5617)	84
Automobile Dealers (4411)	82
Architectural, Engineering, and Related Services (5413)	80
Communications Equipment Manufacturing (3342)	79
Couriers and Express Delivery Services (4921)	74
Junior Colleges (6112)	69
Other Amusement and Recreation Industries (7139)	69
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing (3345)	68
Pharmaceutical and Medicine Manufacturing (3254)	67
Soap, Cleaning Compound, and Toilet Preparation Manufacturing (3256)	67
Fruit and Vegetable Preserving and Specialty Food Manufacturing (3114)	66
Lessors of Real Estate (5311)	66
Office Supplies, Stationery, and Gift Stores (4532)	65
Furniture Stores (4421)	64
Computer Systems Design and Related Services (5415)	62
Residential Building Construction (2361)	62
Household Appliance Manufacturing (3352)	59
Automotive Repair and Maintenance (8111)	58
Child Day Care Services (6244)	58
Commercial and Service Industry Machinery Manufacturing (3333)	58
Grocery Stores (4451)	57
National Security and International Affairs (9281)	54
Personal Care Services (8121)	53
Activities Related to Real Estate (5313)	52
Management of Companies and Enterprises (5511)	51
Wired Telecommunications Carriers (5171)	51
Other Miscellaneous Store Retailers (4539)	50
Printing and Related Support Activities (3231)	50
Building Equipment Contractors (2382)	49
Other General Merchandise Stores (4529)	49
Legal Services (5411)	45
Wholesale Electronic Markets and Agents and Brokers (4251)	44
Freight Transportation Arrangement (4885)	43
Building Finishing Contractors (2383)	41
Agencies, Brokerages, and Other Insurance Related Activities (5242)	33
Specialized Design Services (5414)	33
Business, Professional, Labor, Political, and Similar Organizations (8139)	31
Newspaper, Periodical, Book, and Directory Publishers (5111)	29



Harper College Environmental Scan – 2017

Nondepository Credit Intermediation (5222)	29
Other Ambulatory Health Care Services (6219)	28
Used Merchandise Stores (4533)	28
Automotive Equipment Rental and Leasing (5321)	26
Offices of Real Estate Agents and Brokers (5312)	26
Outpatient Care Centers (6214)	26
Motor Vehicle Manufacturing (3361)	25
Scheduled Air Transportation (4811)	24
Gasoline Stations (4471)	21
Nonresidential Building Construction (2362)	21
Data Processing, Hosting, and Related Services (5182)	20
Drycleaning and Laundry Services (8123)	20
Ship and Boat Building (3366)	19
Shoe Stores (4482)	19
Warehousing and Storage (4931)	19
Audio and Video Equipment Manufacturing (3343)	18
Software Publishers (5112)	18
Motor Vehicle Parts Manufacturing (3363)	17
Postal Service (4911)	16
Civic and Social Organizations (8134)	15
Offices of Dentists (6212)	15
Pulp, Paper, and Paperboard Mills (3221)	15
Activities Related to Credit Intermediation (5223)	14
Cut and Sew Apparel Manufacturing (3152)	14
Medical and Diagnostic Laboratories (6215)	14
Electric Lighting Equipment Manufacturing (3351)	13
Vocational Rehabilitation Services (6243)	13
Other General Purpose Machinery Manufacturing (3339)	12
Other Miscellaneous Manufacturing (3399)	12
Other Schools and Instruction (6116)	12
Bakeries and Tortilla Manufacturing (3118)	11
Charter Bus Industry (4855)	11
Machinery, Equipment, and Supplies Merchant Wholesalers (4238)	11
Natural Gas Distribution (2212)	11
Religious Organizations (8131)	11
Computer and Peripheral Equipment Manufacturing (3341)	10
Electronic Shopping and Mail-Order Houses (4541)	10
Home Furnishings Stores (4422)	10
Other Information Services (5191)	10
Plastics Product Manufacturing (3261)	10
Iron and Steel Mills and Ferroalloy Manufacturing (3311)	9



Harper College Environmental Scan – 2017

Medical Equipment and Supplies Manufacturing (3391)	9
Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers (4231)	9
Securities and Commodity Exchanges (5232)	9
Support Activities for Air Transportation (4881)	9
Book Stores and News Dealers (4512)	8
Spectator Sports (7112)	8
Travel Arrangement and Reservation Services (5615)	8
Waste Treatment and Disposal (5622)	8
Water, Sewage and Other Systems (2213)	8
Converted Paper Product Manufacturing (3222)	7
Other Electrical Equipment and Component Manufacturing (3359)	7
Other Food Manufacturing (3119)	7
Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance (8113)	6
Commercial and Industrial Machinery and Equipment Rental and Leasing (5324)	6
Drinking Places (Alcoholic Beverages) (7224)	6
Drugs and Druggists' Sundries Merchant Wholesalers (4242)	6
Grantmaking and Giving Services (8132)	6
Jewelry, Luggage, and Leather Goods Stores (4483)	6
Performing Arts Companies (7111)	6
Promoters of Performing Arts, Sports, and Similar Events (7113)	6
Basic Chemical Manufacturing (3251)	5
Death Care Services (8122)	5
Executive, Legislative, and Other General Government Support (9211)	5
Household Appliances and Electrical and Electronic Goods Merchant Wholesalers (4236)	5
Household and Institutional Furniture and Kitchen Cabinet Manufacturing (3371)	5
Insurance and Employee Benefit Funds (5251)	5
Other Motor Vehicle Dealers (4412)	5
Psychiatric and Substance Abuse Hospitals (6222)	5
Technical and Trade Schools (6115)	5
Waste Collection (5621)	5
Administration of Economic Program (9261)	4
Independent Artists, Writers, and Performers (7115)	4
Lime and Gypsum Product Manufacturing (3274)	4
Museums, Historical Sites, and Similar Institutions (7121)	4
Other Personal Services (8129)	4
Petroleum and Coal Products Manufacturing (3241)	4
Rail Transportation (4821)	4
Semiconductor and Other Electronic Component Manufacturing (3344)	4
Specialty (except Psychiatric and Substance Abuse) Hospitals (6223)	4
Steel Product Manufacturing from Purchased Steel (3312)	4



Harper College Environmental Scan – 2017

Clay Product and Refractory Manufacturing (3271)	3
Foundation, Structure, and Building Exterior Contractors (2381)	3
Industrial Machinery Manufacturing (3332)	3
Oil and Gas Extraction (2111)	3
Other Furniture Related Product Manufacturing (3379)	3
School and Employee Bus Transportation (4854)	3
Social Advocacy Organizations (8133)	3
Specialty Food Stores (4452)	3
Utility System Construction (2371)	3
Administration of Human Resource Programs (9231)	2
Animal Slaughtering and Processing (3116)	2
Electric Power Generation, Transmission and Distribution (2211)	2
Grain and Oilseed Milling (3112)	2
Justice, Public Order, and Safety Activities (9221)	2
Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing (3327)	2
Miscellaneous Durable Goods Merchant Wholesalers (4239)	2
Motion Picture and Video Industries (5121)	2
Other Specialty Trade Contractors (2389)	2
Paint, Coating, and Adhesive Manufacturing (3255)	2
Residential Intellectual and Developmental Disability, Mental Health, and Substance Abuse Facilities (6232)	2
Securities and Commodity Contracts Intermediation and Brokerage (5231)	2
Taxi and Limousine Service (4853)	2
Alumina and Aluminum Production and Processing (3313)	1
Cement and Concrete Product Manufacturing (3273)	1
Chemical and Allied Products Merchant Wholesalers (4246)	1
Community Food and Housing, and Emergency and Other Relief Services (6242)	1
Consumer Goods Rental (5322)	1
Educational Support Services (6117)	1
Forging and Stamping (3321)	1
Gambling Industries (7132)	1
Lumber and Other Construction Materials Merchant Wholesalers (4233)	1
Other Telecommunications (5179)	1
Other Textile Product Mills (3149)	1
Professional and Commercial Equipment and Supplies Merchant Wholesalers (4234)	1
Railroad Rolling Stock Manufacturing (3365)	1
Rubber Product Manufacturing (3262)	1
Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing (3334)	1



Harper College Environmental Scan – 2017

Appendix D – Burning Glass Occupations¹⁸

Occupations	Job Postings
Heavy and Tractor-Trailer Truck Drivers (53-3032)	2,196
Retail Salespersons (41-2031)	1,066
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (41-4012)	953
Customer Service Representatives (43-4051)	783
Software Developers, Applications (15-1132)	750
Registered Nurses (29-1141)	721
Computer Occupations, All Other (15-1199)	610
First-Line Supervisors of Retail Sales Workers (41-1011)	501
Managers, All Other (11-9199)	443
Accountants and Auditors (13-2011)	358
Laborers and Freight, Stock, and Material Movers, Hand (53-7062)	327
Human Resources Specialists (13-1071)	310
Bookkeeping, Accounting, and Auditing Clerks (43-3031)	297
Management Analysts (13-1111)	296
Sales Managers (11-2022)	281
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive (43-6014)	280
First-Line Supervisors of Food Preparation and Serving Workers (35-1012)	264
Computer User Support Specialists (15-1151)	257
Marketing Managers (11-2021)	250
Combined Food Preparation and Serving Workers, Including Fast Food (35-3021)	248
Maintenance and Repair Workers, General (49-9071)	233
Financial Analysts (13-2051)	225
Computer Systems Analysts (15-1121)	220
Stock Clerks and Order Fillers (43-5081)	207
First-Line Supervisors of Office and Administrative Support Workers (43-1011)	185
Nursing Assistants (31-1014)	176
Medical and Health Services Managers (11-9111)	174
Securities, Commodities, and Financial Services Sales Agents (41-3031)	174
Financial Managers (11-3031)	171
General and Operations Managers (11-1021)	169
Market Research Analysts and Marketing Specialists (13-1161)	153
Pharmacy Technicians (29-2052)	148
Cooks, Restaurant (35-2014)	140

¹⁸ Burning Glass is data that is collected from Online, Newspapers and other resources and categorized based upon the information in the ad. While the data is not comprehensive, as not all job types broadcast job openings, but does provide an idea of what types of job openings are becoming available in an area. Note: Based on information taken from job postings for the period of Aug 6, 2016 through Nov 3, 2016. Source: Labor Insight Jobs (Burning Glass Technologies), 2016.



Harper College Environmental Scan – 2017

Medical Records and Health Information Technicians (29-2071)	134
Merchandise Displayers and Window Trimmers (27-1026)	133
Speech-Language Pathologists (29-1127)	132
Security Guards (33-9032)	125
Office Clerks, General (43-9061)	122
Cashiers (41-2011)	121
Shipping, Receiving, and Traffic Clerks (43-5071)	117
Insurance Sales Agents (41-3021)	113
Waiters and Waitresses (35-3031)	113
Light Truck or Delivery Services Drivers (53-3033)	111
Receptionists and Information Clerks (43-4171)	111
Automotive and Watercraft Service Attendants (53-6031)	110
Production Workers, All Other (51-9199)	106
Database Administrators (15-1141)	105
Information Security Analysts (15-1122)	105
Web Developers (15-1134)	105
Occupational Therapists (29-1122)	100
Purchasing Agents, Except Wholesale, Retail, and Farm Products (13-1023)	97
Computer Network Architects (15-1143)	94
Medical Assistants (31-9092)	92
Data Entry Keyers (43-9021)	90
Network and Computer Systems Administrators (15-1142)	89
Driver/Sales Workers (53-3031)	87
Bill and Account Collectors (43-3011)	85
First-Line Supervisors of Production and Operating Workers (51-1011)	85
Mechanical Engineers (17-2141)	85
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products (41-4011)	85
Engineers, All Other (17-2199)	84
Human Resources Managers (11-3121)	84
Industrial Truck and Tractor Operators (53-7051)	83
Demonstrators and Product Promoters (41-9011)	82
Food Service Managers (11-9051)	82
Personal Financial Advisors (13-2052)	78
Dishwashers (35-9021)	71
Educational, Guidance, School, and Vocational Counselors (21-1012)	71
Industrial Production Managers (11-3051)	71
Physical Therapists (29-1123)	71
Maids and Housekeeping Cleaners (37-2012)	69
Compensation, Benefits, and Job Analysis Specialists (13-1141)	67
Janitors and Cleaners, Except Maids and Housekeeping Cleaners (37-2011)	67
Loan Officers (13-2072)	66
Real Estate Sales Agents (41-9022)	66
First-Line Supervisors of Mechanics, Installers, and Repairers (49-1011)	65
Hotel, Motel, and Resort Desk Clerks (43-4081)	61
Medical Secretaries (43-6013)	61



Harper College Environmental Scan – 2017

Teachers And Instructors, All Other, Except Substitute Teachers (25-3099)	60
Logisticians (13-1081)	59
Sales Representatives, Services, All Other (41-3099)	59
Automotive Service Technicians and Mechanics (49-3023)	57
Transportation, Storage, and Distribution Managers (11-3071)	57
Payroll and Timekeeping Clerks (43-3051)	56
Production, Planning, and Expediting Clerks (43-5061)	56
Inspectors, Testers, Sorters, Samplers, and Weighers (51-9061)	55
Medical and Clinical Laboratory Technicians (29-2012)	55
Administrative Services Managers (11-3011)	53
Licensed Practical and Licensed Vocational Nurses (29-2061)	52
Claims Adjusters, Examiners, and Investigators (13-1031)	51
Engineering Technicians, Except Drafters, All Other (17-3029)	51
Training and Development Specialists (13-1151)	51
Food Preparation Workers (35-2021)	50
Personal Care Aides (39-9021)	50
Preschool Teachers, Except Special Education (25-2011)	50
Architectural and Engineering Managers (11-9041)	48
Operations Research Analysts (15-2031)	48
Billing and Posting Clerks (43-3021)	47
Business Operations Specialists, All Other (13-1199)	47
Counter Attendants, Cafeteria, Food Concession, and Coffee Shop (35-3022)	46
Financial Specialists, All Other (13-2099)	46
Nurse Practitioners (29-1171)	46
Electronic Home Entertainment Equipment Installers and Repairers (49-2097)	45
Hairdressers, Hairstylists, and Cosmetologists (39-5012)	45
Team Assemblers (51-2092)	45
Clinical, Counseling, and School Psychologists (19-3031)	44
Electrical Engineers (17-2071)	43
Packers and Packagers, Hand (53-7064)	43
Bakers (51-3011)	41
Credit Analysts (13-2041)	41
Meeting, Convention, and Event Planners (13-1121)	41
Protective Service Workers, All Other (33-9099)	41
Tellers (43-3071)	41
Graphic Designers (27-1024)	40
Property, Real Estate, and Community Association Managers (11-9141)	40
Fitness Trainers and Aerobics Instructors (39-9031)	39
Lawyers (23-1011)	39
Cost Estimators (13-1051)	38
Public Relations Specialists (27-3031)	38
Recreation Workers (39-9032)	37
Life, Physical, and Social Science Technicians, All Other (19-4099)	36
Pharmacists (29-1051)	36
Education Administrators, Postsecondary (11-9033)	35
Executive Secretaries and Executive Administrative Assistants (43-6011)	34



Harper College Environmental Scan – 2017

Health Technologists and Technicians, All Other (29-2099)	34
Compliance Officers (13-1041)	33
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic (51-4031)	33
Vocational Education Teachers, Postsecondary (25-1194)	33
Computer Programmers (15-1131)	31
Construction Managers (11-9021)	31
Paralegals and Legal Assistants (23-2011)	31
Computer Network Support Specialists (15-1152)	30
Electrical And Electronics Engineering Technicians (17-3023)	30
Industrial Engineers (17-2112)	30
Lodging Managers (11-9081)	30
Teacher Assistants (25-9041)	30
Aircraft Structure, Surfaces, Rigging, and Systems Assemblers (51-2011)	29
Printing Press Operators (51-5112)	29
Office and Administrative Support Workers, All Other (43-9199)	28
Public Relations and Fundraising Managers (11-2031)	28
Telemarketers (41-9041)	28
Carpenters (47-2031)	27
Credit Counselors (13-2071)	27
Dining Room and Cafeteria Attendants and Bartender Helpers (35-9011)	27
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop (35-9031)	27
Home Health Aides (31-1011)	26
Weighers, Measurers, Checkers, and Samplers, Recordkeeping (43-5111)	26
Education Administrators, Elementary and Secondary School (11-9032)	25
Instructional Coordinators (25-9031)	25
Insurance Claims and Policy Processing Clerks (43-9041)	25
Loan Interviewers and Clerks (43-4131)	25
Occupational Therapy Assistants (31-2011)	25
Writers and Authors (27-3043)	25
Computer and Information Systems Managers (11-3021)	24
Dietitians and Nutritionists (29-1031)	24
Medical and Clinical Laboratory Technologists (29-2011)	24
Sales Engineers (41-9031)	24
Electricians (47-2111)	23
Physicians and Surgeons, All Other (29-1069)	23
Postsecondary Teachers, All Other (25-1199)	23
Bartenders (35-3011)	22
Middle School Teachers, Except Special and Career/Technical Education (25-2022)	22
Procurement Clerks (43-3061)	22
Sales and Related Workers, All Other (41-9099)	22
Special Education Teachers, All Other (25-2059)	22
Construction Laborers (47-2061)	21
Cooks, Short Order (35-2015)	21
Compensation and Benefits Managers (11-3111)	20
Electronics Engineers, Except Computer (17-2072)	20



Harper College Environmental Scan – 2017

First-Line Supervisors of Non-Retail Sales Workers (41-1012)	20
Helpers--Production Workers (51-9198)	20
Human Resources Assistants, Except Payroll and Timekeeping (43-4161)	20
Social Workers, All Other (21-1029)	20
Taxi Drivers and Chauffeurs (53-3041)	20
Technical Writers (27-3042)	20
Training and Development Managers (11-3131)	20
Cargo and Freight Agents (43-5011)	19
Chemical Engineers (17-2041)	19
Child, Family, and School Social Workers (21-1021)	19
Childcare Workers (39-9011)	19
Concierges (39-6012)	19
Heating, Air Conditioning, and Refrigeration Mechanics and Installers (49-9021)	19
Insurance Underwriters (13-2053)	19
Statisticians (15-2041)	19
Surgical Technologists (29-2055)	19
Bus and Truck Mechanics and Diesel Engine Specialists (49-3031)	18
Chefs and Head Cooks (35-1011)	18
Health Educators (21-1091)	18
Machinists (51-4041)	18
Mail Clerks and Mail Machine Operators, Except Postal Service (43-9051)	18
Tire Repairers and Changers (49-3093)	18
Cardiovascular Technologists and Technicians (29-2031)	17
Phlebotomists (31-9097)	17
Physical Therapist Assistants (31-2021)	17
Coaches and Scouts (27-2022)	16
Computer and Information Research Scientists (15-1111)	16
Computer-Controlled Machine Tool Operators, Metal and Plastic (51-4011)	16
Interior Designers (27-1025)	16
Tax Preparers (13-2082)	16
First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand (53-1021)	15



Harper College Environmental Scan – 2017

Appendix E – Burning Glass Skills¹⁹

Skills	Job Postings
Customer Service	3,758
Microsoft Excel	3,237
Sales	2,695
Microsoft Office	2,624
Scheduling	2,131
Project Management	1,699
Retail Setting	1,437
Customer Contact	1,425
Budgeting	1,423
Supervisory Skills	1,197
Microsoft Word	1,187
Accounting	1,145
Microsoft Powerpoint	1,112
Repair	1,061
SQL	889
Merchandising	844
Data Entry	800
Cleaning	744
Customer Billing	743
Staff Management	738
Inspection	717
Business Development	700
Product Knowledge	691
Product Sales	689
Sales Goals	647
Technical Support	617
Cardiopulmonary Resuscitation (CPR)	572
Patient Care	568
Process Improvement	553
Software Development	548
Store Management	547
Labeling	529

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Harper College Environmental Scan – 2017

Spreadsheets	511
Administrative Support	482
Customer Checkout	479
Oracle	468
Retail Sales	467
Financial Analysis	465
SAP	460
Prospective Clients	459
Forklift Operation	457
Business Process	456
Product Development	446
Purchasing	440
Teaching	419
Description and Demonstration of Products	418
Microsoft Outlook	416
Sales Management	410
Forecasting	402
JAVA	399
Key Performance Indicators	393
Enterprise Resource Planning (ERP)	389
Appointment Setting	366
Loss Prevention	355
Microsoft Access	341
Business Analysis	340
Packaging	332
Scanners	329
Financial Reporting	328
Inventory Management	324
Software Engineering	324
Cash Handling	322
Guest Services	314
JavaScript	313
Client Base Retention	310
Microsoft Windows	310
Food Safety	309
Validation	309
Occupational Health and Safety	308
Cost Control	305
Negotiation Skills	290
Record Keeping	290
Financial Statements	289



Harper College Environmental Scan – 2017

Contract Management	288
Calculator	286
Salesforce	281
Inventory Control	276
LINUX	269
Conflict Management	268
Optimization	268
Treatment Planning	268
Microsoft C#	267
General Ledger	266
Inside Sales	266
Legal Compliance	266
Systems Development Life Cycle (SDLC)	264
Logistics	260
Procurement	260
Information Systems	258
Onboarding	256
Performance Management	256
Web Development	256
Administrative Functions	254
Account Reconciliation	253
Machinery	253
Data Analysis	251
Account Management	249
Calculation	248
Business Planning	247
Change Management	247
Hand Tools	247
Therapy	242
Data Management	241
SQL Server	239
.NET Programming	233
Marketing	233
Outside Sales	232
Sales Support	231
Store Operations	230
Performance Appraisals	228
Risk Management	228
UNIX	226
Telecommunications	224
Training Programs	223



Harper College Environmental Scan – 2017

Cross Sell	216
HIPAA	216
Seminars	216
Workshops	215
Home Health	214
Extensible Markup Language (XML)	213
Business Administration	212
Relational Databases	212
E-Commerce	211
Mailing	210
Food Service Experience	209
General Office Duties	209
Microsoft Visio	208
Prospecting	205
Case Management	200
Social Media	199
Cooking	198
Systems Integration	197
Employee Training	196
Product Management	196
Python	195
Routing	192
Help Desk Support	190
Claims Knowledge	189
Economics	189
Technical Writing / Editing	189
Asset Protection	186
Systems Analysis	186
Microsoft Sharepoint	185
Pharmacy Technician	184
Supply Chain Management	184
Good Manufacturing Practices (GMP)	182
Inventory Maintenance	180
Sales Planning	180
Business Strategy	176
Object-Oriented Analysis and Design (OOAD)	176
Internal Auditing	175
Microsoft Project	175
Plumbing	175
ASP	172
Rehabilitation	171



Harper College Environmental Scan – 2017

Business Operations	170
External Auditing	170
Hospice	170
Operations Management	169
Trade Shows	169
jQuery	167
Accounts Payable / Accounts Receivable	166
HVAC	164
Customer Accounts	162
Test Equipment	162
Debugging	161
Information Technology Industry Experience	159
Pivot Tables	158
Medical Coding	157
Office Management	157
Sorting	155
Expense Reports	154
Market Trend	154
C++	152
Generally Accepted Accounting Principles (GAAP)	152
Balance Sheet	150
Market Strategy	150
Supply Chain Knowledge	149
Food Preparation	148
Patient Direction	148
Invoicing	147
Training Materials	146
Business Management	143
Instruction	142
SAS	141
Cisco	140
Market Research	140
Payroll Processing	139
Public Accounting	139
ITIL	138
Request for Proposal (RFP)	138
Managed Care	137
Sarbanes-Oxley (SOX)	137
Acute Care	136
Printers	136
Shipping and Receiving	136



Harper College Environmental Scan – 2017

Insurance Underwriting	135
Electrical Engineering	134
Invoice Processing	132
Computer Aided Drafting/Design (CAD)	131



Harper College Environmental Scan – 2017

Appendix F – Low Income Percentage of All Schools in Harper District

School	District	Grades	Low-Income %
Sunny Hill Elem School	Barrington CUSD 220	K 1 2 3 4 5	91.3
Walt Whitman Elem School	Wheeling CCSD 21	PK K 1 2 3 4 5	83.0
Eugene Field Elem School	Wheeling CCSD 21	K 1 2 3 4 5	78.2
John Jay Elem School	Comm Cons SD 59	K 1 2 3 4 5	77.9
Mark Twain Elem School	Wheeling CCSD 21	PK K 1 2 3 4 5	76.6
Oliver W Holmes Middle School	Wheeling CCSD 21	6 7 8	72.3
Rupley Elem School	Comm Cons SD 59	K 1 2 3 4 5	71.6
Adm Richard E Byrd Elem School	Comm Cons SD 59	K 1 2 3 4 5	69.2
Jane Addams Elem School	Palatine CCSD 15	K 1 2 3 4 5 6	67.8
Juliette Low Elem School	Comm Cons SD 59	K 1 2 3 4 5	66.1
Virginia Lake Elem School	Palatine CCSD 15	K 1 2 3 4 5 6	65.8
Robert Frost Elem School	Comm Cons SD 59	K 1 2 3 4 5	64.0
Salt Creek Elem School	Comm Cons SD 59	K 1 2 3 4 5	60.5
Joyce Kilmer Elem School	Wheeling CCSD 21	K 1 2 3 4 5	59.4
Lake Louise Elem School	Palatine CCSD 15	K 1 2 3 4 5 6	58.8
Robert Frost Elem School	Wheeling CCSD 21	K 1 2 3 4 5	58.5
Kimball Hill Elem School	Palatine CCSD 15	PK K 1 2 3 4 5 6	54.3
Euclid Elem School	River Trails SD 26	PK K 1 2 3 4 5	54.0
Grove Jr High School	Comm Cons SD 59	6 7 8	53.6
Holmes Jr High School	Comm Cons SD 59	PK 6 7 8	52.3
Winston Campus Jr High	Palatine CCSD 15	7 8	52.2
Jack London Middle School	Wheeling CCSD 21	6 7 8	52.1
Devonshire School	Comm Cons SD 59	K 1 2 3 4 5	51.3
Palatine High School	Township HSD 211	9 10 11 12	49.6
Hoffman Estates High School	Township HSD 211	9 10 11 12	49.1
John Muir Literacy Academy	Schaumburg CCSD 54	K 1 2 3 4 5 6	47.0
Lincoln Elementary School	Palatine CCSD 15	K 1 2 3 4 5 6	46.9
Gray M Sanborn Elem School	Palatine CCSD 15	PK K 1 2 3 4 5 6	46.6
Brentwood Elem School	Comm Cons SD 59	K 1 2 3 4 5	45.4
Friendship Jr High School	Comm Cons SD 59	6 7 8	44.7
Winston Campus Elementary	Palatine CCSD 15	K 1 2 3 4 5 6	43.7
Carl Sandburg Jr High School	Palatine CCSD 15	7 8	43.5
Wheeling High School	Township HSD 214	9 10 11 12	42.9
Lakeview Elem School	Schaumburg CCSD 54	K 1 2 3 4 5 6	42.1
Enders-Salk Elem School	Schaumburg CCSD 54	K 1 2 3 4 5 6	41.0
Stuart R Paddock School	Palatine CCSD 15	K 1 2 3 4 5 6	38.9
Central Road Elem School	Palatine CCSD 15	PK K 1 2 3 4 5 6	38.8
Booth Tarkington Elem School	Wheeling CCSD 21	PK K 1 2 3 4 5	38.2
Barrington Early Learning Center	Barrington CUSD 220	PK K	37.6



Harper College Environmental Scan – 2017

River Trails Middle School	River Trails SD 26	PK 6 7 8	37.0
Elk Grove High School	Township HSD 214	9 10 11 12	36.3
Forest View Elem School	Comm Cons SD 59	K 1 2 3 4 5	35.9
Adlai Stevenson Elem School	Schaumburg CCSD 54	K 1 2 3 4 5 6	34.8
Clearmont Elem School	Comm Cons SD 59	K 1 2 3 4 5	34.1
Anne Fox Elem School	Schaumburg CCSD 54	K 1 2 3 4 5 6	33.3
Hanover Highlands Elem School	Schaumburg CCSD 54	K 1 2 3 4 5 6	32.4
Cooper Middle School	Wheeling CCSD 21	6 7 8	32.3
Schaumburg High School	Township HSD 211	9 10 11 12	31.7
Thomas Jefferson Elem School	Palatine CCSD 15	PK K 1 2 3 4 5 6	31.5
Elizabeth Blackwell Elem School	Schaumburg CCSD 54	K 1 2 3 4 5 6	31.5
Dwight D Eisenhower JHS	Schaumburg CCSD 54	7 8	30.1
Rolling Meadows High School	Township HSD 214	9 10 11 12	29.9
Neil Armstrong Elem School	Schaumburg CCSD 54	K 1 2 3 4 5 6	29.1
Albert Einstein Elem School	Schaumburg CCSD 54	K 1 2 3 4 5 6	28.6
Helen Keller JHS	Schaumburg CCSD 54	7 8	28.3
MacArthur Intrntl Spanish Acad	Schaumburg CCSD 54	K 1 2 3 4 5 6	28.0
Ridge Family Center for Learning	Comm Cons SD 59	K 1 2 3 4 5	26.9
Dwight D Eisenhower Elem School	Prospect Heights SD 23	PK K 1	26.0
Edgar A Poe Elem School	Wheeling CCSD 21	PK K 1 2 3 4 5	25.1
Buzz Aldrin Elem School	Schaumburg CCSD 54	K 1 2 3 4 5 6	24.5
J B Conant High School	Township HSD 211	9 10 11 12	24.3
MacArthur Middle School	Prospect Heights SD 23	6 7 8	24.0
Anne Sullivan Elem School	Prospect Heights SD 23	4 5	23.5
Willow Bend Elem School	Palatine CCSD 15	K 1 2 3 4 5 6	23.4
Betsy Ross Elem School	Prospect Heights SD 23	2 3	21.8
Walter R Sundling Jr High Sch	Palatine CCSD 15	7 8	19.5
Buffalo Grove High School	Township HSD 214	9 10 11 12	19.4
Barrington Mdle Sch- Prairie Cmps	Barrington CUSD 220	6 7 8	19.4
Barrington High School	Barrington CUSD 220	9 10 11 12	18.9
Adolph Link Elem School	Schaumburg CCSD 54	K 1 2 3 4 5 6	17.4
Barrington Middle Sch Station	Barrington CUSD 220	6 7 8	16.6
Fairview Elem School	Mount Prospect SD 57	2 3 4 5	16.5
Jane Addams JHS	Schaumburg CCSD 54	7 8	16.3
Robert Frost JHS	Schaumburg CCSD 54	7 8	15.8
J W Riley Elem School	Wheeling CCSD 21	PK K 1 2 3 4 5	15.0
Nathan Hale Elem School	Schaumburg CCSD 54	K 1 2 3 4 5 6	14.7
Roslyn Road Elem School	Barrington CUSD 220	K 1 2 3 4 5	14.4
Arnett C Lines Elem School	Barrington CUSD 220	K 1 2 3 4 5	14.4
Margaret Mead JHS	Schaumburg CCSD 54	7 8	14.0
Hoover Math and Science Academy	Schaumburg CCSD 54	K 1 2 3 4 5 6	13.8



Harper College Environmental Scan – 2017

Wm Fremd High School	Township HSD 211	9 10 11 12	13.6
John Hersey High School	Township HSD 214	9 10 11 12	13.4
Indian Grove Elem School	River Trails SD 26	PK K 1 2 3 4 5	13.2
Everett Dirksen Elementary Sch	Schaumburg CCSD 54	K 1 2 3 4 5 6	13.1
Hunting Ridge Elem School	Palatine CCSD 15	PK K 1 2 3 4 5 6	12.7
Fairview Elem School	Schaumburg CCSD 54	K 1 2 3 4 5 6	12.4
Campanelli Elem School	Schaumburg CCSD 54	K 1 2 3 4 5 6	12.2
Winston Churchill Elem School	Schaumburg CCSD 54	K 1 2 3 4 5 6	12.1
Frederick Nerge Elem School	Schaumburg CCSD 54	K 1 2 3 4 5 6	11.4
Michael Collins Elem School	Schaumburg CCSD 54	K 1 2 3 4 5 6	11.2
Prospect High School	Township HSD 214	9 10 11 12	10.9
Grove Avenue Elem School	Barrington CUSD 220	K 1 2 3 4 5	10.9
Lions Park Elem School	Mount Prospect SD 57	2 3 4 5	10.4
Westbrook Early Learning Cntr	Mount Prospect SD 57	PK K 1	10.3
Frank C Whiteley Elem School	Palatine CCSD 15	PK K 1 2 3 4 5 6	10
Henry W Longfellow Elem School	Wheeling CCSD 21	PK K 1 2 3 4 5	9.5
Plum Grove Jr High School	Palatine CCSD 15	7 8	9.3
Lincoln Middle School	Mount Prospect SD 57	6 7 8	9.0
Lincoln Prairie School	Schaumburg CCSD 54	K 1 2 3 4 5 6 7 8	7.2
South Middle School	Arlington Heights SD 25	6 7 8	7.1
Hough Street Elem School	Barrington CUSD 220	K 1 2 3 4 5	6.9
Thomas Dooley Elem School	Schaumburg CCSD 54	K 1 2 3 4 5 6	6.2
North Barrington Elem School	Barrington CUSD 220	K 1 2 3 4 5	5.9
Thomas Middle School	Arlington Heights SD 25	6 7 8	5.6
Pleasant Hill Elem School	Palatine CCSD 15	PK K 1 2 3 4 5 6	5.6
Countryside Elem School	Barrington CUSD 220	K 1 2 3 4 5	4.2
Marion Jordan Elem School	Palatine CCSD 15	K 1 2 3 4 5 6	3.3
Windsor Elementary School	Arlington Heights SD 25	K 1 2 3 4 5	2.8
Barbara B Rose Elem School	Barrington CUSD 220	K 1 2 3 4 5	2.0
Greenbrier Elem School	Arlington Heights SD 25	PK K 1 2 3 4 5	1.7
Dryden Elem School	Arlington Heights SD 25	K 1 2 3 4 5	1.3
Ivy Hill Elem School	Arlington Heights SD 25	K 1 2 3 4 5	1.2
Westgate Elem School	Arlington Heights SD 25	K 1 2 3 4 5	1.1
Olive-Mary Stitt School	Arlington Heights SD 25	K 1 2 3 4 5	0.7
Patton Elem School	Arlington Heights SD 25	K 1 2 3 4 5	0.6



Harper College Environmental Scan – 2017

Appendix G – Top Occupations Typically Requiring an Associate’s Degree Ranked by Projected Job Growth Harper Community College Region*

Occupation	Employment 2012	Change 2012-2022	New Jobs	Replacement Jobs	Employment Potential	Median Wage 2015
Registered Nurses	59,110	6,821	683	11,470	12,153	\$69,755
Preschool Teachers, Ex. Special Education	8,855	185	8,855	2,490	11,345	\$30,255
Paralegals & Legal Assistants	8,346	1,450	8,346	1,360	9,706	\$54,347
Electrical & Electronic Engineering Techs	2,268	36	2,268	470	2,738	\$62,297
Engineering Techs, Ex. Drafters, All Other	1,640	-49	1,640	340	1,980	\$52,731
Architectural & Civil Drafters	1,640	-141	1,640	220	1,860	\$46,541
Chemical Technicians	1,369	109	1,369	340	1,709	\$48,099
Civil Engineering Technicians	1,038	-23	1,038	220	1,258	\$56,472
Mechanical Engineering Technicians	1,022	18	1,022	210	1,232	\$56,396
Dental Hygienists	4,044	296	30	1,040	1,070	\$75,247
Life/Phys/Social Science Techs, All Other	692	63	762	290	1,052	\$48,547
Industrial Engineering Technicians	751	14	751	150	901	\$51,615
Mechanical Drafters	771	-44	771	110	881	\$57,233
Broadcast Technicians	717	53	717	130	847	\$34,597
Medical & Clinical Lab Technicians	3,003	422	42	790	832	\$47,092
Environmental Science & Protection Techs	495	51	495	190	685	\$36,667
Radiologic Technologists	3,843	258	25	530	555	\$63,583
Agricultural & Food Science Technicians	402	-13	402	140	542	\$37,811
Computer Network Support Specialists	358	150	14	440	454	\$60,564
Environmental Engineering Technicians	357	38	357	70	427	\$45,394
Web Developers	196	436	44	360	404	\$73,063
Drafters, All Other	335	15	335	50	385	\$47,508
Physical Therapist Assistants	1,492	481	48	330	378	\$57,891
Electro-Mechanical Technicians	305	13	305	70	375	\$48,067
Electrical & Electronics Drafters	330	24	330	40	370	\$62,951
Respiratory Therapists	2,053	190	19	300	319	\$56,624
Air Traffic Controllers	662	60	6	300	306	\$114,046
Social Science Research Assistants	175	6	175	70	245	\$51,872
Medical Equipment Repairers	667	169	17	190	207	\$45,670
Occupational Therapist Assistants	643	246	24	170	194	\$60,928
Veterinary Technologists & Technicians	1,590	260	27	160	187	\$33,487
Diagnostic Medical Sonographers	1,088	312	31	150	181	\$77,508
Cardiovascular Technologists & Techs	845	129	13	120	133	\$49,222
Aerospace Engineering & Operations Techs	104	10	104	20	124	\$55,329
Dietetic Technicians	976	80	7	100	107	\$22,621
Morticians/Undertakers/Funeral Directors	441	31	2	90	92	\$82,423
Desktop Publishers	485	-100	0	90	90	\$38,560
Radiation Therapists	348	32	3	70	73	\$81,005
Avionics Technicians	283	29	3	60	63	\$60,167
Funeral Service Managers	264	18	1	60	61	\$51,745
Magnetic Resonance Imaging Techs	386	34	3	50	53	\$77,297
Nuclear Medicine Technologists	342	23	2	40	42	\$75,565
Respiratory Therapy Technicians	204	12	1	20	21	\$40,782
Camera/Photographic Equip. Repairers	60	5	0	10	10	\$37,703

*The Harper Community College Region consists of Cook, Lake and McHenry counties.

Source: Illinois Department of Employment Security, Employment Projections, Occupations – Long Term, 2012-2022.



Harper College Environmental Scan – 2017

Appendix H – Food Stamp Recipients by Reported Occupation*

Occupation	Total on SNAP	Percent on SNAP
Grounds Maintenance Workers	387	31.6%
Cashiers	351	10.5%
Stock Clerks and Order Fillers	308	18.6%
Miscellaneous managers, including funeral service managers, postmasters and mail superintendents	279	6.2%
Unemployed, with No Work Experience in the Last 5 Years or Earlier or Never Worked	258	19.7%
Cooks	256	15.5%
Customer Service Representatives	244	10.2%
Nursing, Psychiatric, and Home Health Aides	229	21.4%
Sales Representatives, Wholesale and Manufacturing	229	9.2%
Receptionists and Information Clerks	205	12.7%
Packers and Packagers, Hand	203	25.8%
Miscellaneous production workers, including semiconductor processors (see 7855)	201	23.9%
Maids and Housekeeping Cleaners	199	16.5%
General and operations managers	195	13.4%
Childcare Workers	173	11.6%
Bookkeeping, Accounting, and Auditing Clerks	169	13.0%
First-Line Supervisors of Retail Sales Workers	166	6.2%
Laborers and Freight, Stock, and Material Movers, Hand	165	8.6%
Miscellaneous Assemblers and Fabricators	161	24.5%
Retail Salespersons	159	4.0%
First-Line Supervisors of Food Preparation and Serving Workers	156	23.5%
Cargo and Freight Agents	148	46.3%
Food Preparation Workers	129	18.4%
Waiters and Waitresses	126	7.6%
Janitors and Building Cleaners	123	7.5%
Clergy	122	37.3%
Packaging and Filling Machine Operators and Tenders	118	48.8%
Bus Drivers	116	20.2%
Personal Care Aides	114	11.0%
Miscellaneous metal workers and plastic workers, including multiple machine tool setters	113	15.0%
Driver/Sales Workers and Truck Drivers	110	4.8%
Marketing and sales managers	102	7.0%



Harper College Environmental Scan – 2017

Sales Representatives, Services, All Other	94	8.5%
Chief executives ¹ and legislators ²	91	3.7%
First-Line Supervisors of Construction Trades and Extraction Workers	90	17.8%
Carpenters	82	8.4%
Registered nurses	80	2.8%
Industrial Truck and Tractor Operators	79	19.4%
Real Estate Brokers and Sales Agents	78	12.1%
Athletes, Coaches, Umpires, and Related Workers	77	16.4%
Management analysts	75	5.4%
Insurance Sales Agents	73	13.2%
Inspectors, Testers, Sorters, Samplers, and Weighers	70	9.2%
First-Line Supervisors of Housekeeping and Janitorial Workers	68	35.2%
Construction Laborers	66	4.8%
Secretaries and Administrative Assistants	66	2.0%
Clinical Laboratory Technologists and Technicians	64	25.1%
Shipping, Receiving, and Traffic Clerks	63	7.4%
Medical Records and Health Information Technicians	54	63.5%
Maintenance and Repair Workers, General	53	14.2%
First-Line Supervisors of Non-Retail Sales	52	4.7%
Office Clerks, General	51	3.9%
First-Line Supervisors of Office and Administrative Support Workers	51	3.9%
Coin, Vending, and Amusement Machine Servicers and Repairers	49	23.4%
Printing press operators	49	12.4%
Hairdressers, Hairstylists, and Cosmetologists	49	9.5%
Painters and paperhangers	49	7.3%
Butchers and Other Meat, Poultry, and Fish Processing Workers	48	57.1%
Counter Attendant, Cafeteria, Food Concession, and Coffee Shop	43	20.7%
Nonfarm Animal Caretakers	43	14.4%
Hotel, Motel, and Resort Desk Clerks	42	32.6%
Automotive Service Technicians and Mechanics	42	11.0%
Carpet, Floor, and Tile Installers and Finishers	40	55.6%
Data Entry Keyers	40	5.8%
Health practitioner support technologists and technicians	39	10.8%
Musicians, Singers, and Related Workers	38	20.1%
Combined Food Preparation and Serving Workers, Including Fast Food	38	9.6%
Travel Agents	36	20.0%
First-Line Supervisors of Personal Service Workers	35	8.0%
Transportation Security Screeners	34	40.0%
Computer programmers	34	3.0%



Harper College Environmental Scan – 2017

Financial managers	34	2.6%
Administrative services managers	33	21.3%
Mail Clerks and Mail Machine Operators, Except Postal Service	33	17.4%
Bakers	33	16.3%
Personal Care and Service Workers, All Other	32	18.5%
Counselors	29	5.4%
Construction equipment operators except paving, surfacing, and tamping equipment operators	29	5.2%
Secondary School Teachers	29	2.2%
Architects, Except Naval	28	9.3%
Medical and health service managers	27	6.9%
Painting Workers	26	100.0%
Dentists	26	11.5%
Network and Computer Systems Administrators	25	6.0%
Computer systems analysts	24	3.2%
Sewing Machine Operators	23	19.7%
Flight Attendants† (part of 4550)	23	15.2%
Machinists	23	14.8%
Correspondent clerks and order clerks	23	13.5%
Wholesale and retail buyers, except farm products	23	13.2%
Insurance underwriters	23	11.9%
Electricians	23	4.2%
Chiropractors	22	43.1%
Miscellaneous agricultural workers including animal breeders	22	23.7%
Other Teachers and Instructors	22	2.2%
Dental assistants	21	18.9%
Insurance Claims and Policy Processing Clerks	21	8.5%
Computer Operators	20	17.9%
Tellers	20	7.2%
Miscellaneous food preparation and serving related workers	20	6.1%
Statistical Assistants	19	33.3%
Artists and Related Workers	19	17.0%
Food Servers, Nonrestaurant	19	8.8%
Pest Control Workers	18	9.8%
Human resource workers	18	2.1%
Small Engine Mechanics	17	100.0%
Bartenders	17	13.2%
Host and Hostesses, Restaurant, Lounge, and Coffee Shop	17	8.6%
Computer support specialists	16	2.1%
Food service managers	16	1.7%
Elementary and Middle School Teachers	16	0.4%



Harper College Environmental Scan – 2017

Preschool and Kindergarten Teachers	14	3.6%
Social Workers	13	3.8%
Personal financial advisors	13	3.7%
Cleaners of Vehicles and Equipment	10	4.0%
Couriers and Messengers	10	2.9%
File Clerks	4	0.8%

*The aggregated region consists of 2000 PUMA #3401, 3402 and 3403.

Source: IPUMS-USA, University of Minnesota, www.ipums.org, 2015 Five-Year American Community Survey.

Appendix I: Programs by CIP Code located within 25 Mile Radius

CIP	School	Program
30506	Northern Illinois University	Geographical Information Systems (GIS) Certification
110101	Columbia College	Bachelor of Science in Management Information Systems
110101	Computer Training Source, Inc.	IT Management/PMP
110101	Computer Training Source, Inc.	PMP, Six Sigma, MS Project, MySQL Program
110101	Computer Training Source, Inc.	Project Management Professional (PMP)
110101	AMFASOFT Corporation	MICROSOFT CERTIFICATION
110103	SOLEX College	Information Technology Project Managers
110103	MicroTrain Technologies	IT Management +3
110103	AMFASOFT Corporation	SAP:SD
110103	AMFASOFT Corporation	SAP: All in One
110103	AMFASOFT Corporation	COMPTIA A+ COMPUTER TECHNICIAN
110103	Premier Technology Consultants, Inc.	Certified Business Intelligence Professional Advanced (CBIP)
110103	Premier Technology Consultants, Inc.	CBIP, ITIL Foundation
110103	Premier Technology Consultants, Inc.	Certified Business Intelligence Professional (CBIP)
110201	Illinois Institute of Technology	Certificate in Software Development +4
110201	Illinois Institute of Technology	Certificate in Software Development +3
110201	Illinois Institute of Technology	Certificate in Software Development +5
110201	Illinois Institute of Technology	Certificate in Software Development +6
110201	AMFASOFT Corporation	ORACLE DEVELOPER CERTIFICATION PACKAGE
110201	AMFASOFT Corporation	Microsoft IPV6 Certification
110202	TEC Services Consulting, Inc.	Microsoft Certified Solutions Developer (MCSD)
110202	TEC Services - Melrose Park	Microsoft Certified Solutions Developer (MCSD)
110202	Illinois Institute of Technology	C++ Programming
110202	Illinois Institute of Technology	ASP.Net with C#
110202	Illinois Institute of Technology	C++/Intermediate C++ Programming
110202	Illinois Institute of Technology	Java/SQL Databases/Data Analytics
110202	Directions Training Center, Inc	A+, Net + and MCSA: Windows 10
110202	Directions Training Center, Inc	.NET Programming with Visual Studio 2013
110202	Directions Training Center, Inc	A+, Net +, MCSA and CISCO
110202	Directions Training Center, Inc	MCSA: SQL 2014



Harper College Environmental Scan – 2017

110202	Directions Training Center, Inc	Adobe Creative Suite
110202	Directions Training Center, Inc	MCSA: SQL and MCSE: Business Intelligence 2014
110202	Directions Training Center, Inc	PMP and Intro to .Net Programming
110202	Directions Training Center, Inc	Microsoft Office Specialist and Accounting
110202	MicroTrain Technologies	IT Management +4
110202	AMFASOFT Corporation	SAP:FICO
110203	COMNet Group Inc.	Android Software Development
110203	MicroTrain Technologies	VM Training +3
110203	MicroTrain Technologies	VM Training +2
110299	Management & Information Technology Solutions (MITS)	Comprehensive Masters Certificate Program
110299	Management & Information Technology Solutions (MITS)	E-commerce (for Programmers) Webmaster: Internet App. Devlp
110299	Management & Information Tech Solutions (MITS)	E-commerce (for Programmers) Webmaster: Internet App. Devlp
110299	Management & Information Tech Solutions (MITS)	Comprehensive Masters Certificate Program
110299	BIR Training Center	Application Development (C1)
110299	Management and Information Tech Solutions (MITS)	E-commerce (for Programmers) Webmaster: Internet App. Devlp
110299	Management and Information Tech Solutions (MITS)	Comprehensive Masters Certificate Program
110299	AMFASOFT Corporation	WEB DEVELOPMENT
110501	Management & Information Technology Solutions (MITS)	Big Data Analytics, Oracle and Hadoop Combo
110501	Management & Information Technology Solutions (MITS)	PMP, Quality Management and ERP Combo
110501	Management & Information Tech Solutions (MITS)	Big Data Analytics, Oracle and Hadoop Combo
110501	Management & Information Tech Solutions (MITS)	PMP, Quality Management and ERP Combo
110501	Computer Training Source, Inc.	Business Analysis/PMP
110501	Computer Training Source, Inc.	PMP/Agile/Six Sigma/ITIL
110501	Computer Training Source, Inc.	Agile/BA/CAP/PMP Program
110501	Illinois Institute of Technology	Certificate in System Analysis + 2
110501	Illinois Institute of Technology	Certificate in Systems Analysis + 3
110501	Illinois Institute of Technology	Certificate in Systems Analysis + 4
110501	Illinois Institute of Technology	Certificate in Systems Analysis + 5
110501	Illinois Institute of Technology	Certificate in Systems Analysis + 6
110501	Directions Training Center, Inc	Business Analysis, Agile Scrum, Six Sigma and MS Project
110501	Directions Training Center, Inc	Business Analyst and Agile Boot Camp
110501	Directions Training Center, Inc	MCSA: Office 365 and MCSE: SharePoint 2013
110501	Directions Training Center, Inc	MCSA: SQL 2014 and Software Testing
110501	Directions Training Center, Inc	MCSA: SQL Server , MCSE: Data Platform 2014 & SharePoint
110501	Directions Training Center, Inc	MCSA: Windows Server 2012



Harper College Environmental Scan – 2017

110501	Management and Information Tech Solutions (MITS)	PMP, Quality Management and ERP Combo
110501	America Business College, Inc	Database and Systems Administrators
110501	AMFASOFT Corporation	SOFTWARE QUALITY ASSURANCE
110501	AMFASOFT Corporation	COMPTIA STRATA CERTIFICATION
110601	Aquarius Institute Of Computer Sciences	Microsoft Office (MOUS), Accounting Medical Billing
110601	Directions Training Center, Inc	Basic Computer Skills and 2013 Microsoft Office
110601	MicroTrain Technologies	MOS Master Certification +
110601	MicroTrain Technologies	MOS Master Certification
110801	Management & Information Technology Solutions (MITS)	Web Design and Developemnt
110801	Management & Information Technology Solutions (MITS)	Careerpro E-commerce Comp.
110801	Management & Information Technology Solutions (MITS)	Computer System Analysis Pro
110801	Management & Information Tech Solutions (MITS)	Computer System Analysis Pro
110801	Management & Information Tech Solutions (MITS)	Web Design and Developemnt
110801	Management & Information Tech Solutions (MITS)	Careerpro E-commerce Comp.
110801	Illinois Institute of Technology	Java Programming/Intermediate Java/Project Management for IT
110801	Illinois Institute of Technology	Java Programming/Internet Technologies/Database w/ Oracle
110801	Directions Training Center, Inc	Adobe Graphic Design 2
110801	Directions Training Center, Inc	Adobe Creative Suite and Six Sigma Green Belt
110801	Directions Training Center, Inc	Mastering Adobe: Adobe Creative Suite
110801	Management and Information Tech Solutions (MITS)	Web Design and Developemnt
110801	Management and Information Tech Solutions (MITS)	Computer System Analysis Pro
110801	Management and Information Tech Solutions (MITS)	Careerpro E-commerce Comp.
110802	Management & Information Technology Solutions (MITS)	Oracle Apps 11i DBA / Technical Foundations of Oracle Apps
110802	Management & Information Technology Solutions (MITS)	Oracle DBA and Oracle 11i Apps DBA combo
110802	Management & Information Tech Solutions (MITS)	Oracle DBA and Oracle 11i Apps DBA combo
110802	Management & Information Tech Solutions (MITS)	Oracle Apps 11i DBA / Technical Foundations of Oracle Apps
110802	Illinois Institute of Technology	Certificate in Data Center Operations and Mangement +2
110802	Illinois Institute of Technology	Certificate in Data Center Operations and Mangement



Harper College Environmental Scan – 2017

		+5
110802	Illinois Institute of Technology	Certificate in Data Center Operations and Mangement +6
110802	Illinois Institute of Technology	Certificate in Data Analytics +2
110802	Illinois Institute of Technology	Certificate in Data Center Operations and Mangement +3
110802	Illinois Institute of Technology	Certificate in Data Management & Analytics + 5
110802	Illinois Institute of Technology	Certificate in Data Management & Analytics + 6
110802	Illinois Institute of Technology	Certificate in Data Management & Analytics +3
110802	Illinois Institute of Technology	Certificate in Data Management +2
110802	Management and Information Tech Solutions (MITS)	Oracle Apps 11i DBA / Technical Foundations of Oracle Apps
110802	Management and Information Tech Solutions (MITS)	Oracle DBA and Oracle 11i Apps DBA combo
110803	Directions Training Center, Inc	Adobe Media Design
110899	Management & Information Technology Solutions (MITS)	Quality Assurance and Software Testing Comprehensive
110899	Management & Information Tech Solutions (MITS)	Quality Assurance and Software Testing Comprehensive
110899	Management and Information Tech Solutions (MITS)	Quality Assurance and Software Testing Comprehensive
110901	Illinois Institute of Technology	A+/Network+I&II
110901	Illinois Institute of Technology	Certificate in Digital Voice & Data Comm Tech +6
110901	Illinois Institute of Technology	Network+ Certification Training I&II
110901	Illinois Institute of Technology	Certificate in Digital Voice & Data Comm Tech +3
110901	Directions Training Center, Inc	CCNA Plus 1 Class
110901	Directions Training Center, Inc	MCSA: Windows 10
110901	MicroTrain Technologies	A +/ Network +
110901	MicroTrain Technologies	A+, Network +, MCP
110901	MicroTrain Technologies	CCNA
110901	MicroTrain Technologies	CCNA- Voice
110901	MicroTrain Technologies	CCNP
110901	MicroTrain Technologies	Cisco Basic (CCNA and 2 CompTIA Certifications)
110901	MicroTrain Technologies	Cisco Professional (CCNA + 2)
110901	MicroTrain Technologies	Computer Technician/Help Desk (A+, Net+, Security +)
110901	MicroTrain Technologies	Network +
110901	MicroTrain Technologies	Network +/- CCNA
110901	MicroTrain Technologies	Network Professional
110901	AMFASOFT Corporation	CCNA & CCNP PACKAGE
110901	AMFASOFT Corporation	CCNA I & II
110901	AMFASOFT Corporation	CCNA: SECURITY
110901	AMFASOFT Corporation	CCNA: VOICE
110901	AMFASOFT Corporation	CCNA: SECURITY & VOICE
110901	AMFASOFT Corporation	CCNP
110901	AMFASOFT Corporation	COMPTIA NETWORK +
110901	AMFASOFT Corporation	LINUX SYSTEM ADMINISTRATION



Harper College Environmental Scan – 2017

110901	AMFASOFT Corporation	UNIX SYSTEM ADMINISTRATION
111001	Humboldt Park Vocational Center-Wright College	Networking Advanced Certificate
111001	Humboldt Park Vocational Center-Wright College	Networking AAS
111001	Management & Information Tech Solutions (MITS)	Network and Systems Administration
111001	America Business College, Inc	A+, N+, MCSA(Win 2012 SVR)-Network & PC System Architect
111001	Computer Training Source, Inc.	Adobe Certified Expert (ACE) Program-CTS
111001	Computer Training Source, Inc.	Certified Technical Trainer (CTT+)
111001	Computer Training Source, Inc.	Internet Marketing Program
111001	Computer Training Source, Inc.	IT Support Specialist Program
111001	Illinois Institute of Technology	A+/Network+/Linux+
111001	Illinois Institute of Technology	Certificate in System Administration +2
111001	Illinois Institute of Technology	Certificate in System Administration +3
111001	Illinois Institute of Technology	Certificate in System Administration +4
111001	Illinois Institute of Technology	Certificate in System Administration +5
111001	Illinois Institute of Technology	Certificate in System Administration +6
111001	Illinois Institute of Technology	Shell Scripting for Sys Admin/DB Oracle/OO Sys Anl Mdl Dsg
111001	Directions Training Center, Inc	CCNAx Boot Camp
111001	Directions Training Center, Inc	MCSA and MCSE 2012: Server Infrastructure
111001	MicroTrain Technologies	A+/ Network +/ MCSA
111001	MicroTrain Technologies	A+/MCITP
111001	MicroTrain Technologies	CCNA/CCNP
111001	MicroTrain Technologies	MCSA
111001	MicroTrain Technologies	MCSA/MCSE 2012
111001	MicroTrain Technologies	Network +/ MCITP
111001	MicroTrain Technologies	Network +/ MCSA
111002	Directions Training Center, Inc	CCNA + 3 classes
111002	Directions Training Center, Inc	CCNA + 6
111002	Directions Training Center, Inc	MCSA: Server 2012, CCNA or VMware
111002	Directions Training Center, Inc	PMP, Agile Scrum, ITIL and MS Project
111002	Directions Training Center, Inc	PMP, CCNA and MCSA
111002	Directions Training Center, Inc	PMP, Six Sigma Green Belt, ITIL, Net+ and Cicso
111002	Directions Training Center, Inc	Vmware Certified Professional (VCP6)
111002	MicroTrain Technologies	A+/ Network+/MCITP/CCNA/PMP
111002	MicroTrain Technologies	A+/ Network+/MCTS
111002	MicroTrain Technologies	A+/Net+/MCP/CCNA
111002	MicroTrain Technologies	A+/Network +/ MCTS/ CCNA
111002	MicroTrain Technologies	CCNP-Routing
111002	MicroTrain Technologies	CCNP-Switching
111002	MicroTrain Technologies	MCITP/CCNA
111002	MicroTrain Technologies	Project Management Professional +1
111002	MicroTrain Technologies	Project Management Professional +4



Harper College Environmental Scan – 2017

111003	Computer Training Source, Inc.	Agile/CISSP/ITIL/PMP
111003	Illinois Institute of Technology	Certificate in Cyber Security Management +3
111003	Illinois Institute of Technology	Certificate in Cyber Security Management +4
111003	Illinois Institute of Technology	Certificate in Cyber Security Management +5
111003	Illinois Institute of Technology	Certificate in Cyber Security Management +6
111003	Illinois Institute of Technology	Certificate in Cyber Security Technologies +3
111003	Illinois Institute of Technology	Certificate in Cyber Security Technologies +4
111003	Illinois Institute of Technology	Certificate in Cyber Security Technologies +5
111003	Illinois Institute of Technology	Certificate in Cyber Security Technologies +6
111003	Illinois Institute of Technology	Network+/Cyber Sec Tech/SQL DB/DB Sec/OO Progrmng
111003	Illinois Institute of Technology	Network+/Cyber Security Tech/Project Mgmt for IT
111003	Directions Training Center, Inc	A+, Net +, Security + and MCSA: Windows 10
111003	Directions Training Center, Inc	CISSP and Microsoft SQL 2014
111003	Directions Training Center, Inc	CISSP Certification
111003	Directions Training Center, Inc	CISSP, ITIL and PMP
111003	Directions Training Center, Inc	PMP and CISSP
111003	MicroTrain Technologies	A+, Security +, MCP
111003	MicroTrain Technologies	A+/ Security +
111003	MicroTrain Technologies	Cisco Associate (CCNA + 1)
111003	MicroTrain Technologies	Cisco CCNA 6 Security
111003	Northern Illinois University	Graduate Certificate in Cybersecurity
111004	Humboldt Park Vocational Center- Wright College	Web Development Advanced Certificate
111004	Humboldt Park Vocational Center- Wright College	Web Development Associates of Applied Science
111004	Humboldt Park Vocational Center- Wright College	Web Development Basic Certificate
111004	Computer Training Source, Inc.	Frontend Web Developer Program
111004	Computer Training Source, Inc.	Web Professional Training Program
111004	Computer Training Source, Inc.	Web Design Specialist Program
111004	Illinois Institute of Technology	Certificate in Web Design & Application Development +3
111004	Illinois Institute of Technology	Certificate in Web Design & Application Development +4
111004	Illinois Institute of Technology	Certificate in Web Design & Application Development +5
111004	Illinois Institute of Technology	Certificate in Web Design & Application Development +6
111004	Directions Training Center, Inc	Adobe Media Design 2
111004	Directions Training Center, Inc	Adobe Web Design
111004	America Business College, Inc	Web Developers
111005	Directions Training Center, Inc	PMP, Agile, Web Applications, MS Project and Adobe
111005	Directions Training Center, Inc	PMP, Business Analyst, ITIL, Agile and Six Sigma SharePoint
111006	TEC Services Consulting, Inc.	A+ Training and Certification



Harper College Environmental Scan – 2017

111006	TEC Services Consulting, Inc.	Microsoft Certified Technology Specialist (MCTS)
111006	TEC Services Consulting, Inc.	Microsoft Office Specialist Training
111006	TEC Services Consulting, Inc.	Microsoft Technology Associate (MTA)
111006	TEC Services - Melrose Park	Microsoft Certified Technology Specialist (MCTS)
111006	TEC Services - Melrose Park	A+ Training and Certification
111006	TEC Services - Melrose Park	Microsoft Technology Associate (MTA)
111006	TEC Services - Melrose Park	Microsoft Office Specialist Training
111006	America Business College, Inc	A+, N+, S+, MCSA(Win 10 DT) - Computer Support Specialist
111006	Computer Training Source, Inc.	A+ Helpdesk Technician Program
111006	Computer Training Source, Inc.	PMP, Six Sigma Green Belt (CSSGB)
111006	Directions Training Center, Inc	A+ and MCSA: Windows Server 2012 R2
111006	Directions Training Center, Inc	MCSA: Server 2012 and Lean Six Sigma Green Belt
111099	Management & Information Technology Solutions (MITS)	PMP MS Project ITIL Foundation/Practitioner Combo
111099	Management & Information Tech Solutions (MITS)	PMP MS Project ITIL Foundation/Practitioner Combo
111099	America Business College, Inc	A+, N+, Cisco (CCNA) - Information Security Analyst
111099	Illinois Institute of Technology	A+/Network+/Intro Programming
111099	Illinois Institute of Technology	Certificate in Data Center Operations & Mgmt/System Admin +6
111099	Directions Training Center, Inc	CAPM/PMP, SharePoint and MS Project
111099	Directions Training Center, Inc	MCSA: Windows Server 2012 and PMP
111099	Directions Training Center, Inc	MCSA: Windows Server 2012, MCSA: SQL 2014 and VM Ware
111099	Management and Information Tech Solutions (MITS)	PMP MS Project ITIL Foundation/Practitioner Combo
111099	MicroTrain Technologies	A+/ Network +/ MCITP/CCNA
111099	MicroTrain Technologies	CCNA, CCNA Voice, Security +, VMware,PMP
111099	MicroTrain Technologies	IT Management +2
111099	MicroTrain Technologies	IT Management +5
111099	MicroTrain Technologies	IT Management +7
111099	MicroTrain Technologies	MCITP
111099	AMFASOFT Corporation	MICROSOFT: ALL IN ONE
111099	Premier Technology Consultants, Inc.	CAPM +1
111099	Premier Technology Consultants, Inc.	CAPM +4
111099	Premier Technology Consultants, Inc.	IT Management +2
111099	Premier Technology Consultants, Inc.	IT Management +3
111099	Premier Technology Consultants, Inc.	IT Management +4
111099	Premier Technology Consultants, Inc.	IT Management +5
111099	Premier Technology Consultants, Inc.	CAPM +2
111099	Premier Technology Consultants, Inc.	CAPM +3
119999	Illinois Manufacturing Foundation	Computer Support Specialist
119999	AMFASOFT Corporation	Oracle Application Database Certification
119999	AMFASOFT Corporation	Oracle Database 11g Certification
119999	AMFASOFT Corporation	Oracle Database Certification - Admin I



Harper College Environmental Scan – 2017

119999	AMFASOFT Corporation	Oracle Database Certification - Admin II
119999	AMFASOFT Corporation	Oracle DBA Certification I & II
119999	AMFASOFT Corporation	Oracle SQL Certification
119999	AMFASOFT Corporation	WINDOWS 7 CONFIGURATION
119999	AMFASOFT Corporation	WINDOWS 7 ENTERPRISE DESKTOP SUPPORT
119999	AMFASOFT Corporation	WINDOWS SERVER 2008 NETWORK INFRASTRUCTURE
130403	Northern Illinois University	Master of Science in Education - Adult & Higher Education
131001	NIU @ Oakbrook Location	Special Education - Master's of Science in Education
131001	Northern Illinois University	Special Education - Master's of Science in Education
131315	Northern Illinois University	M.S. Ed. Program in Instructional Technology
139999	Wolf Driving School	4 Weeks CDL Program
139999	Wolf Driving School	6 Week CDL Program
139999	Wolf Driving School	5 Week CDL Program
143601	Symbol Training Institute	CNC 203: CNC Programming, Setup and Operation
143601	Symbol Training Institute	CNC 303: CNC Technology with Internship
143601	Symbol Training Institute	CNC 204: CNC Advanced Programming
143601	Symbol Training Institute	CNC 304: CNC Machine Shop Internship
150613	BIR Training Center	CNC Comprehensive
150613	Symbol Training Institute	MFG 501: Precision Machine Technology
150613	Symbol Training Institute	CNC 205: CNC Technology With Quality Control
150613	Symbol Training Institute	MasterCAM 401: Practical MasterCAM
150613	Symbol Training Institute	QC 101: Quality Control for Manufacturing
150614	Jane Addams Resource Corp - Trng Site	Welding
150702	Management & Information Technology Solutions (MITS)	Six Sigma Green Belt (SSGB)
150702	Management & Information Tech Solutions (MITS)	Six Sigma Green Belt (SSGB)
150702	Management and Information Tech Solutions (MITS)	Six Sigma Green Belt (SSGB)
151202	MicroTrain Technologies	VM Training +1
151204	TEC Services Consulting, Inc.	Microsoft Certified Solutions Associate (MCSA)
151204	Management & Information Tech Solutions (MITS)	Oracle Internet Dev. and Oracle Financials Combo-MITS
151204	TEC Services - Melrose Park	Microsoft Certified Solutions Associate (MCSA)
151204	America Business College, Inc	Software Developers and Programmers
151306	Humboldt Park Vocational Center-Wright College	Computerized Numerical Control (CNC) - (WR)
151501	Northern Illinois University	Industrial Project Management
190604	Northern Illinois University	IFMA's Facility Management Professional (FMP) Credential
190604	Northern Illinois University	IFMA's Sustainability Facility Professional Credential
190699	Northpointe Resources	Occupational Skills - Auto Porter/detailer
430103	Columbia College	Bachelor of Arts in Criminal Justice Administration
440000	Columbia College	Bachelor of Arts in Human Services
440000	America Business College, Inc	Human Resource Assistant



Harper College Environmental Scan – 2017

440701	Aurora University Orchard Center	Major in Social Work - Bachelor of Social Work
460201	Greater West Town - Transportation, Distribution, & Logistics Training	Woodworkers Training Program
460201	Greater West Town - Manufacturing Training	Woodworkers Training Program
460403	Legacy Inspection Training	116 Professional Level Home Inspection Course
470000	Lincoln College of Technology	Automotive Mechanics-AUTO101C
470104	MicroTrain Technologies	A+
470104	MicroTrain Technologies	MOS Certification with A+
470201	ETI School of Skilled Trades	Heating, Ventilation, Air Conditioning and Refrigeration
470303	SOLEX College	Industrial Maintenance Technician Certificate Program
470303	Chicago Professional Center, Inc.	Maintenance
470303	Chicago Professional Center, Inc.	Industrial Maintenance
470603	Lincoln College of Technology	Collision Repair & Refinishing Technology-COL105D-Diploma
470604	Lincoln College of Technology	Automotive Technology-AUTO105D-Diploma Program
470604	Lincoln College of Technology	Automotive Service Management-AUTO213AAS-AAS Degree
470605	Universal Technical Institute	Automotive & Diesel Industrial Technology with TPAT #809
470605	Universal Technical Institute	Automotive / Diesel & Industrial Tech W/ FACT#344
470605	Universal Technical Institute	Automotive / Diesel & Industrial Technology #342
470605	Universal Technical Institute	Automotive Technology with Toyota TPAT #807
470605	Universal Technical Institute	Diesel & Industrial Technology #208
470605	Universal Technical Institute	Automotive Technology with Ford FACT #124
470605	Universal Technical Institute	Automotive Technology Program #115
470605	Universal Technical Institute	Automotive/Diesel & Industrial w/Daimler Trucks #357
470605	Universal Technical Institute	Diesel & Industrial Technology w/Daimler Trucks #211
470613	Professional Truck Driving School, Inc.	160 Hour Class
480501	BIR Training Center	CNC Machine Tool Technology (M2)
480501	BIR Training Center	CNC Machine Tool Operations (M3)
480507	Jane Addams Resource Corp - Trng Site	Fast Track Training for CNC Operators
480508	First Institute Training & Management	Welding Technology Program
480508	First Institute Training and Management	Welding Technology Program
480508	ETI School of Skilled Trades	Skilled Welder
480510	Choice Career College	Manufacturing Computer Numerical Control (CNC)
480510	BIR Training Center	CNC Machine Tool Technology- Robotics (M2R)
480510	BIR Training Center	Computerized Manufacturing and Robotics (M1)
480510	Symbol Training Institute	QC 201
480510	Symbol Training Institute	QC 302: Applied Quality Control for Manufacturing
480599	Illinois Manufacturing Foundation	Automatic Screw Machine/CNC Machine Tool Operator
490205	Eagle Training Services	Accelerated CDL-A Course
490205	Eagle Training Services	CDL-A Semi-Tractor Trailer Driver Training Basic 160
490205	Eagle Training Services	HazMat Endorsement Study Course



Harper College Environmental Scan – 2017

490205	Eagle Training Services	CDL-A Semi-Tractor Trailer Driver Training Enhanced 240
490205	America Business College, Inc	Class A CDL (240 Hour) Truck Driver Training
490205	America Business College, Inc	Class A CDL (320 Hour) Truck Driver Training
490205	Progressive Truck Driving School, Inc.	Class A CDL Truck Driving Training Course 200
490205	Progressive Truck Driving School, Inc.	Class A CDL Truck Driving Training Course 240
490205	Rock Gate Capital, LLC	160 Driving Academy
490205	Kotra CDL Driving School	Advanced 240 hour CDL Truck Driving Program
490205	Progressive Truck Driving School, Inc.	Class A CDL Truck Driving Training Course 300
490205	Greater West Town - Manufacturing Training	Shipping & Receiving Training Program
490205	Professional Truck Driving School, Inc.	80 Hour Refresher Class
490205	Professional Truck Driving School, Inc.	240 Hour Class
490205	Mid-City Truck Driving Academy MidCity CDL	4 Week CDL Program
490205	Blue Horizon Driving School Inc.	160 Hour Basic Class A CDL Course
490205	Blue Horizon Driving School Inc.	200 Hour Intermediate Class A CDL Course
490205	Mid-City Truck Driving Academy MidCity CDL	8 Week CDL Program
490205	Mid-City Truck Driving Academy MidCity CDL	5 Week CDL Program
490205	Blue Horizon Driving School Inc.	240 hour Advanced Class A CDL Course
490205	Mid-City Truck Driving Academy MidCity CDL	6 Week CDL Program
490205	Star Truck Driving School, Inc	Licensed CDL Class A 160 Hour Refresher Course
490205	Star Truck Driving School, Inc	Star CDL Truck Driving 240
490205	Star Truck Driving School, Inc	Star CDL Truck Driving 200
490205	Star Truck Driving School, Inc	Star CDL Truck Driving 160
490205	Expert Driving School, Inc.	CDL CLASS (240 hrs)
500404	Northern Illinois University	Industrial Workplace Design Systems
500409	Directions Training Center, Inc	Adobe Graphic Design
510000	Northbrook College of Health Care	Electrocardiograph Technician
510601	State Career College	Chairside Assisting
510601	B.& D.A. Inc.	Clinical and Administrative Dental Assistant
510601	B.& D.A. Inc.	Clinical Dental Assistant
510705	Aquarius Institute Of Computer Sciences	Medical office Administrator/ Phlebotomy/EKG Technician
510705	SOLEX College	Medical Office Computerization, Automation and Management
510705	Chicago Community Learning Center - CCLC	Certified Medical Assistant with CNA
510706	DeVry University - Administrative Office	Health Information Technology Undergraduate Certificate
510707	Chicago Community Learning Center	Electronic Medical Records Specialist
510707	Chicago Community Learning Center	Elect. Medical Billing, Microsoft Office & Medical Assistant



Harper College Environmental Scan – 2017

510707	Chicago Community Learning Center - CCLC	Electronic Medical Records Specialist
510707	Chicago Community Learning Center - CCLC	Elect. Medical Billing, Microsoft Office & Medical Assistant
510710	First Institute Training & Management	Medical Office Assistant
510710	First Institute Training and Management	Medical Office Assistant
510713	Management & Information Technology Solutions (MITS)	MEDICAL INFORMATION SYSTEMS & MANAGEMENT
510713	Management & Information Technology Solutions (MITS)	Medical Office Coding and Billing Specialist
510713	JCM III Corporation	Medical Coding & Billing
510713	Management & Information Tech Solutions (MITS)	MEDICAL INFORMATION SYSTEMS & MANAGEMENT
510713	Management & Information Tech Solutions (MITS)	Medical Office Coding and Billing Specialist
510713	National College of Health	Medical Billing and Coding Specialist
510713	BIR Training Center	Health Information Technology
510713	Management and Information Tech Solutions (MITS)	MEDICAL INFORMATION SYSTEMS & MANAGEMENT
510713	Management and Information Tech Solutions (MITS)	Medical Office Coding and Billing Specialist
510714	Genesis Healthcare Institute	Medical Billing and Coding
510714	B.& D.A. Inc.	Medical Billing and Coding
510799	B.& D.A. Inc.	Administrative Dental Assistant
510801	Management & Information Technology Solutions (MITS)	Certified Administrative Medical Assistant
510801	Management & Information Technology Solutions (MITS)	ESL, Medical Office Asst, Billing and Coding Combo
510801	Management & Information Technology Solutions (MITS)	Certified Clinical Medical Assistant
510801	Management & Information Technology Solutions (MITS)	Medical Assistant Comprehensive
510801	Management & Information Tech Solutions (MITS)	Certified Administrative Medical Assistant
510801	Management & Information Tech Solutions (MITS)	Certified Clinical Medical Assistant
510801	Management & Information Tech Solutions (MITS)	ESL, Medical Office Asst, Billing and Coding Combo
510801	Management & Information Tech Solutions (MITS)	Medical Assistant Comprehensive
510801	SOLEX College	Medical Assistant Career Program
510801	National College of Health	Medical Assistant
510801	BIR Training Center	Medical Assisting Program
510801	Genesis Healthcare Institute	Medical Assisting Program
510801	Management and Information Tech	Certified Administrative Medical Assistant



Harper College Environmental Scan – 2017

	Solutions (MITS)	
510801	Management and Information Tech Solutions (MITS)	Certified Clinical Medical Assistant
510801	Management and Information Tech Solutions (MITS)	ESL, Medical Office Asst, Billing and Coding Combo
510801	Management and Information Tech Solutions (MITS)	Medical Assistant Comprehensive
510801	Tukiendorf Training Institute (TTI)	Clinical Medical Assistant
510801	Tukiendorf Training Institute (TTI)	Medical Assistant
510801	Tukiendorf Training Institute (TTI)	Medical Assistant & Patient Care Technician
510801	B.& D.A. Inc.	Medical Assistant
510801	B.& D.A. Inc.	Medical Assistant and Dental Assistant
510801	Lincoln College of Technology	Medical Assistant-MA525D-Diploma
510801	International Training Academy	Medical Assistant
510802	Mildun Training Center of Illinois	Medical Assistant
510805	Management & Information Technology Solutions (MITS)	Pharmacy Tech and Customer Service Combo
510805	Management & Information Tech Solutions (MITS)	Pharmacy Tech and Customer Service Combo
510805	Midwestern Career College	Advance Pharmacy Technician Training Program
510805	National College of Health	Pharmacy Technician
510805	Management and Information Tech Solutions (MITS)	Pharmacy Tech and Customer Service Combo
510806	JCM III Corporation	Physical Rehabilitation Aide(51-2604)
510806	SOLEX College	Physical Therapist Assistant AAS Degree
510899	Midwestern Career College	Diploma in Medical Assisting
510899	Chicago Community Learning Center	Med Billing, Medical Term., EKG Tech.
510899	Chicago Community Learning Center	CNA--Certified Nursing Assistant
510899	Chicago Community Learning Center	CNA & Phlebotomy Tech. & Medical Terminology & CPR.
510899	Chicago Community Learning Center	CNA & Pharmacy Technicain & CPR (215a).
510899	Chicago Community Learning Center	CNA & Medical Terminology & CPR (223a).
510899	Chicago Community Learning Center	CNA & EKG Technicain & CPR (204a).
510899	State Career College	Medical Assistant
510899	Chicago Community Learning Center - CCLC	CNA & EKG Technicain & CPR (204a).
510899	Chicago Community Learning Center - CCLC	CNA & Phlebotomy Tech. & Medical Terminology & CPR.
510899	Chicago Community Learning Center - CCLC	CNA--Certified Nursing Assistant
510899	Chicago Community Learning Center - CCLC	Med Billing, Medical Term., EKG Tech.
510899	Chicago Community Learning Center - CCLC	CNA & Medical Terminology & CPR (223a).
510899	Chicago Community Learning Center - CCLC	CNA & Pharmacy Technicain & CPR (215a).
510901	Aquarius Institute Of Computer	Ultrasound / Sonography Technician



Harper College Environmental Scan – 2017

	Sciences	
510902	National College of Health	EKG Technician
510902	A Plus Healthcare Training	Electrocardiography Technician Training Program
510902	Tukiendorf Training Institute (TTI)	EKG Technician
510903	Midwestern Career College	Electroneurodiagnostic (END) Technologist Training Program
510907	Aquarius Institute Of Computer Sciences	MRI Technolgist
510907	National College of Health	Radiographic/X-Ray Technician
510909	Midwestern Career College	Surgical Technologist Training Program
510915	Midwestern Career College	Certified Cardiology Technician/Monitor Technician
511009	Northbrook College of Health Care	Phlebotomy Technician
511009	National College of Health	Phlebotomy Technician
511009	Tukiendorf Training Institute (TTI)	Phlebotomy Technician
511009	Tukiendorf Training Institute (TTI)	Phlebotomy Technician & EKG Technician
511011	Tukiendorf Training Institute (TTI)	Hemodialysis Technician
511011	Tukiendorf Training Institute (TTI)	Hemodialysis Technician with Phlebotomy Tech & EKG Tech
511011	Tukiendorf Training Institute (TTI)	Hemodialysis Technician with Phlebotomy Technician
511011	Tukiendorf Training Institute (TTI)	Hemodialysis Care Technician
511099	SOLEX College	Phlebotomy Technician
511099	National College of Health	Combined Phlebotomy and EKG Technician
511099	BIR Training Center	EKG, Patient Care & Phlebotomy Technician (EPC)
511699	Northbrook College of Health Care	Patient Care Technician
511699	Competent Healthcare	Basic Nurse Assistant Training Program
512601	Genesis Healthcare Institute	Basic Nursing Assistant Training Program (CNA)
512699	PCCTI	Anatomy & Physiology and LPN
513801	Chamberlain College of Nursing	Bachelor of Science in Nursing
513801	Humboldt Park Vocational Center-Wright College	RN Completion (WR)
513801	Ambria College of Nursing	Associates Degree in Nursing (LPN to RN Completion Program)
513901	Northbrook College of Health Care	Practical Nursing Program (51:1613)
513901	PCCTI	CNA and LPN
513901	PCCTI	CNA, Anatomy & Physiology, and LPN
513901	PCCTI	LPN w/ 1 NCLEX Exam
513901	Great Paragon Health Services Inc.	LPN Program
513901	Ambria College of Nursing	Practical Nursing Program or LPN Program
513901	Americare Technical School	Practical Nursing
513902	Management & Information Technology Solutions (MITS)	ESL, Computer Office and Patient Care Technician
513902	JCM III Corporation	Basic Nurse Assistant
513902	JCM III Corporation	Patient Care Technician (PCT)
513902	Northbrook College of Health Care	Basic Nursing Assistant Training Program (51:1614)
513902	Humboldt Park Vocational Center-Wright College	Basic Nursing Assistant (WR)



Harper College Environmental Scan – 2017

513902	Humboldt Park Vocational Center-Wright College	Practical Nurse (L.P.N. Training) (WR)
513902	Management & Information Tech Solutions (MITS)	ESL, Computer Office and Patient Care Technician
513902	Midwestern Career College	Basic Nursing Assistant Program
513902	Chicago Community Learning Center	Patient Care Technician with Computer Fundamentals
513902	PCCTI	Certified Nursing Assistant (CNA)
513902	State Career College	Basic Nursing Assistant Training Program
513902	A Plus Healthcare Training	Patient Care Technician
513902	Chicago Community Learning Center - CCLC	CNA & Phlebotomy Technician & CPR
513902	Chicago Community Learning Center - CCLC	Patient Care Technician with Computer Fundamentals
513902	Management and Information Tech Solutions (MITS)	ESL, Computer Office and Patient Care Technician
513902	Americare Technical School	Nursing Assistant
513902	Tukiendorf Training Institute (TTI)	Basic Nursing Assistant (CNA)
513902	Tukiendorf Training Institute (TTI)	Patient Care Technician
513902	International Career Institute	Basic Nursing Assistant Training Program
513902	AACF/KAM Institute of Technology & Health	Certified Nursing Assistant
519999	JCM III Corporation	Phlebotomy Technician (511009)
519999	JCM III Corporation	EKG Basic and Advance
519999	National College of Health	Medical Assisting with Radiographic / X-Ray Tech (Limited)
519999	Genesis Healthcare Institute	EKG Technician
519999	Genesis Healthcare Institute	Certification Program for Patient Care Technician
520201	DeVry University- Addison Campus	Masters in Business Administration - International Business
520201	Columbia College	Bachelor of Science in Business Administration
520201	Columbia College	Bachelor of Arts in Business Administration
520201	Directions Training Center, Inc	Business Analysis, Agile, Six Sigma and ITIL
520201	Directions Training Center, Inc	CAPM/PMP, Microsoft Office 2013, Six Sigma and MS Project
520201	Directions Training Center, Inc	CAPM/PMP, Microsoft Office and Six Sigma Green Belt
520201	Directions Training Center, Inc	CAPM/PMP, MS Project and 2013 Microsoft Office
520201	Directions Training Center, Inc	PMI Agile (PMI-ACP), MS Project, Six Sigma and SharePoint
520201	Directions Training Center, Inc	PMP or CAPM and Microsoft SQL 14
520201	Directions Training Center, Inc	PMP, Agile, Business Analyst and Six Sigma
520201	Directions Training Center, Inc	PMP, Agile, ITIL and Six Sigma Green Belt
520201	DeVry University	Masters in Business Administration - International Business
520201	AMFASOFT Corporation	BOOKKEEPING & MS OFFICE PROFESSIONAL
520201	Premier Technology Consultants, Inc.	Project Management Professional (PMP) Exam prep course



Harper College Environmental Scan – 2017

520201	Northern Illinois University	Bachelor of Science in Business Administration (BSBA)
520201	Northern Illinois University	M.B.A. Program
520202	Directions Training Center, Inc	CAPM/PMP and 2013 Microsoft Office
520203	Illinois Institute of Technology	Supply Chain Management
520204	America Business College, Inc	Office Manager
520204	MicroTrain Technologies	Office Management
520204	MicroTrain Technologies	Office Technologies Fundamentals
520204	MicroTrain Technologies	Office Technologies Fundamentals +1
520204	MicroTrain Technologies	Office Technologies Fundamentals +2
520205	Directions Training Center, Inc	PMP, MS Office, MS Project and SharePoint
520205	Directions Training Center, Inc	PMP, Six Sigma and SQL
520205	Directions Training Center, Inc	PMP, Six Sigma, ITIL, MS Project and MS Office
520205	Directions Training Center, Inc	Six Sigma Green Belt
520205	Premier Technology Consultants, Inc.	Lean Six Sigma Green Belt exam prep
520205	Northern Illinois University	Master of Science in Industrial Management
520211	Directions Training Center, Inc	CAPM, Six Sigma Green Belt and Adobe
520211	Directions Training Center, Inc	PMP, Agile, Microsoft Office 2013, SharePoint and MS Project
520211	Directions Training Center, Inc	PMP, Six Sigma and MCSO: Visual Studio
520211	Directions Training Center, Inc	PMP, Six Sigma and Microsoft Project
520211	Directions Training Center, Inc	Six Sigma and Agile
520211	MicroTrain Technologies	Project Management Professional +2
520211	MicroTrain Technologies	Project Management Professional +3
520211	AMFASOFT Corporation	PMP-Agile Practitioner Certification
520211	Northern Illinois University	Project Management Professional(PMP) Certification Prep
520299	Directions Training Center, Inc	Data Analysis, Agile and Six Sigma Green Belt
520299	AMFASOFT Corporation	PROJECT MANAGEMENT
520299	Premier Technology Consultants, Inc.	CISSP by (ISC)2
520299	Premier Technology Consultants, Inc.	Microsoft Project
520301	AMFASOFT Corporation	Accounting: All in One
520302	BIR Training Center	Accounting and Office Administration (AOA)
520302	MicroTrain Technologies	Office Administration/Assistant 6 Accounting and Bookkeeping
520302	AMFASOFT Corporation	CERTIFIED BOOKKEEPER
520304	AMFASOFT Corporation	COMPUTERIZED ACCOUNTING & BOOKKEEPING
520304	AMFASOFT Corporation	QUICKBOOKS FOR ACCOUNTING
520401	Management & Information Tech Solutions (MITS)	PMP and MS Project Combo
520401	Computer Training Source, Inc.	Administrative Assistant Program-CTS
520401	Computer Training Source, Inc.	Administrative Professional Program-CTS
520401	Computer Training Source, Inc.	Adobe Creative Cloud & Microsoft Office Program
520401	Computer Training Source, Inc.	Basic Computer Literacy Program
520401	Computer Training Source, Inc.	Executive Assistant Training Program
520401	Computer Training Source, Inc.	Microsoft Office Specialist (MOS) Program
520401	Computer Training Source, Inc.	MS Office/Web Maintenance/Quickbooks Program



Harper College Environmental Scan – 2017

520401	Computer Training Source, Inc.	QuickBooks ProAdvisor Training Program
520401	Computer Training Source, Inc.	Office Manager Training Program
520401	Computer Training Source, Inc.	QuickBooks Specialist Training Program
520401	Directions Training Center, Inc	Adobe Suite and Microsoft Office Specialist
520401	Directions Training Center, Inc	Microsoft Office Specialist 2013 and MS Project
520401	Directions Training Center, Inc	Microsoft Office Suite 2013
520402	America Business College, Inc	Executive Administrator Assistant
520402	Computer Training Source, Inc.	Microsoft Office Specialist/Computer Repair (A+)
520406	Pyramid Partnership, Inc. Db a Pyramid Career Institute	Armed and Unarmed Security and Protective Services
520406	Pyramid Partnership, Inc. Db a Pyramid Career Institute	Front Desk, Office, and Facility Support
520407	AACF/KAM Institute of Technology & Health	Computer Office Skills
520408	America Business College, Inc	Accounting Assistant / Bookkeeper
520408	Computer Training Source, Inc.	Bookkeeping Specialist
520411	Pyramid Partnership, Inc. Db a Pyramid Career Institute	Computer Technologies for Professional Services
520411	Pyramid Partnership, Inc. Db a Pyramid Career Institute	Computer Technologies for Professional Services with MOUS
520499	First Institute Training and Management	Business Computer Applications
520499	Northpointe Resources	Occupational Skills Training - Mail Services/shippingrec.
520701	Illinois Institute of Technology	Certificate in Leadership, Innovation & Entrepreneurship +3
520701	Illinois Institute of Technology	Certificate in Leadership, Innovation & Entrepreneurship +4
520803	America Business College, Inc	Financial Clerk Certificate
520899	AMFASOFT Corporation	Oracle Financials and SAP:FICO
520899	AMFASOFT Corporation	Oracle Financials Rel 12 Certification
521001	DeVry University- Addison Campus	Graduate Certificate in Human Resource Management
521001	DeVry University- Addison Campus	Master of Human Resource Management
521001	DeVry University- Addison Campus	Bachelor of Science - Technical Management
521001	DeVry University	Bachelor of Science - Technical Management
521001	DeVry University	Graduate Certificate in Human Resource Management
521001	DeVry University	Master of Human Resource Management
521001	DeVry University - Administrative Office	Bachelor of Science - Technical Management
521001	AMFASOFT Corporation	PAYROLL CERTIFICATION
521001	Northern Illinois University	SHRM Learning System for SHRM-CP/SHRM-SCP Certification Prep
521201	Directions Training Center, Inc	ITIL, Six Sigma and MS Project
521201	DeVry University	Master of Information Systems Management
521201	Northern Illinois University	Cert. of Grad. Study in Management Information Systems
521206	Management & Information Technology Solutions (MITS)	CAPM and MS Project Combo



Harper College Environmental Scan – 2017

521206	Management & Information Technology Solutions (MITS)	CAPM and SCM Combo
521206	Management & Information Technology Solutions (MITS)	Comprehensive Office Support and Management
521206	Management & Information Technology Solutions (MITS)	Management Associate Program
521206	Management & Information Technology Solutions (MITS)	Project Management
521206	Management & Information Technology Solutions (MITS)	Project Management and Computer Info Systems Management
521206	Management & Information Tech Solutions (MITS)	CAPM and MS Project Combo
521206	Management & Information Tech Solutions (MITS)	CAPM and SCM Combo
521206	Management & Information Tech Solutions (MITS)	Comprehensive Office Support and Management
521206	Management & Information Tech Solutions (MITS)	Management Associate Program
521206	Management & Information Tech Solutions (MITS)	Project Management
521206	Management & Information Tech Solutions (MITS)	Project Management and Computer Info Systems Management
521206	Directions Training Center, Inc	PMP and ITIL
521206	Directions Training Center, Inc	PMP, ITIL, Windows 10 and SharePoint
521206	Directions Training Center, Inc	Six Sigma and PMP
521206	Management and Information Tech Solutions (MITS)	CAPM and MS Project Combo
521206	Management and Information Tech Solutions (MITS)	CAPM and SCM Combo
521206	Management and Information Tech Solutions (MITS)	Project Management
521206	Management and Information Tech Solutions (MITS)	Management Associate Program
521206	Management and Information Tech Solutions (MITS)	Comprehensive Office Support and Management
521206	Management and Information Tech Solutions (MITS)	Project Management and Computer Info Systems Management
521206	MicroTrain Technologies	PMP Certification Training
521401	Directions Training Center, Inc	PMP/CAPM and Marketing
521499	Benedictine University	Certificate in Internet Marketing
521601	Northern Illinois University	Master of Science in Taxation
521801	AMFASOFT Corporation	Oracle Manufacturing Rel12 Certification
529999	Management & Information Tech Solutions (MITS)	MOS 2013 Office Administration and Support
600545	Midwestern Career College	Magnetic Resonance Imaging (MRI) Technologist

Source: Illinois WorkNet, WIOA Approved Programs.