

Cleveland/Cuyahoga County
Labor Market Analysis Full Report
(FINAL – MARCH 2016)

Cleveland/Cuyahoga County Workforce Development Board

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Prepared for the Cleveland/Cuyahoga County Workforce Development Board by



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2016 Cleveland and Cuyahoga County Labor Market Analysis

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Introduction

From WIA to WIOA

Congress enacted the Workforce Innovation and Opportunity Act (WIOA) on a bipartisan basis to replace the Workforce Investment Act (WIA); it was signed by President Obama on July 22, 2014 and it took effect on July 1, 2015.

According to the U.S. Department of Labor's Employment and Training Administration, "WIOA is designed to help job seekers access employment, education, training and support services to succeed in the labor market and to match employers with the skilled workers they need to complete in the global economy." WIOA seeks to better align the workforce system with education and economic development in an effort to create a collective response to economic and labor market challenges on the national, state, and local levels. It continues the trend in recent workforce legislation to engage the private sector to lead local workforce development efforts.

Through WIOA, the core programs of federal investment in skill development are expected to be more strategically coordinated. While it replaces WIA, WIOA retains and amends the Adult Education and Family Literacy Act, the Wagner-Peyser Act, and the Rehabilitation Act of 1973. Specifically, WIOA integrates:

- Employment and training services for adults, dislocated workers, and youth and Wagner-Peyser employment services administered by the Department of Labor (DOL) through formula grants to states, and
- Adult education and literacy programs and Vocational Rehabilitation state grant programs that assist individuals with disabilities in obtaining employment administered by the Department of Education (DoED).

WIOA also authorizes programs for specific vulnerable populations, including the Job Corps, YouthBuild, Indian and Native Americans, and Migrant and Seasonal Farmworker programs as well as evaluation and multistate projects administered by DOL. In addition, WIOA authorizes other programs administered by DoED and the Department of Health and Human Services.

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As summarized by the National Association of Workforce Boards, the purpose of WIOA is “to provide workforce investment activities through statewide and local systems that increase the employment, retention, and earnings of participants; increase attainment of recognized credentials by participants; improve the quality of the workforce; reduce welfare dependency; increase economic self-sufficiency; meet the skill requirements of employers; and enhance the productivity and competitiveness of the Nation.”

WIOA and Local Planning

Program Year 2015 marks the first year of WIOA implementation. WIOA requires each local Workforce Development Board (WDB) to develop and submit, in partnership with the local chief elected official(s), a comprehensive four-year plan to the state. As a result of the intergovernmental agreement through which the Cleveland/Cuyahoga County WDB is governed, the plan is submitted in partnership with the Mayor of the City of Cleveland and the Cuyahoga County Executive. The WIOA four-year plan will be effective from July 1, 2016 to June 30, 2020.

Local plans are required to be based on the current and projected needs of the workforce investment system as a whole. WDBs are encouraged to take a “big picture” view of the system-wide needs of the workforce development area and their relationship to the regional and state vision of a unified workforce system.

A primary component of the local plan is a comprehensive overview of labor market information, including:

1. An analysis of the regional economic conditions including:
 - (a) Existing and emerging in demand industry sectors and occupations; and
 - (b) The employment needs of employers in those industry sectors and occupations;
2. An analysis of the knowledge and skills needed to meet the employment needs of the employers in the region, including employment needs in in-demand sectors and occupations;
3. An analysis of the workforce in the region, including current labor force employment (and unemployment) data, and information on labor market trends and the educational and skill levels of the workforce in the region, including individuals with barriers to employment.

These requirements inform the overarching structure of this document, which will be used by the Cleveland/Cuyahoga County WDB as part of its local planning process.

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The Cleveland “Deep Dive”

The Cleveland/Cuyahoga County WDB received funding from The Cleveland Foundation to support a consultant to facilitate the Board’s Strategic Direction and to conduct the economic and labor market analysis for the local plan. Through out discussions regarding the grant it was agreed the analysis would include an analysis of the work-related issues of Clevelanders, specifically. This report includes a hyper-local concentration on Clevelanders’ patterns of education, income, employment, work-related inflow and outflow, and transportation as well as their barriers to employment.

Data Sources

All inquiries involve choices about the use of data sources. Most of the data used in this report is from public, non-proprietary sources of demographic and economic information. While potentially limiting in some respects, the rationale for this choice is also compelling:

- The State of Ohio, Office of Workforce Development, provides economic data for the Labor Market Information section of local and regional plans which makes the data sources used by each region throughout the state consistent from market to market;
- The Cleveland/Cuyahoga County Workforce Development Board did not have subscriptions to proprietary sources of workforce data, such as Burning Glass, Chmura or EMSI;
- Standardization of data sources allows for MSA to MSA and region-to-region comparisons and standardizes error across multiple geographies;
- Information and trends reported in the study are based on publicly available data and as such can be replicated, verified, and tracked by the general public without incurring additional expense; and
- Data provided by federal and state agencies provides a common platform for future analysis as well as for retrospective inquiry.

Unless otherwise noted, descriptive information for the Cleveland and Cuyahoga County Workforce Analysis is derived from U.S. Census Bureau 2014 American Community Survey (ACS) 1-Year Estimates. In some cases 2010 decennial Census data is used; in others, for comparison purposes, ACS data from other years is utilized. These sources are so noted in the text. The choice of one year, rather than five year, ACS data estimates was deliberate, since the latter averages data across a five year period and is inadequate for demonstrating year-to-year change. Although the analysis for the Regional Workforce Plan for Northeast Ohio will use ACS

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five-year data estimates, the one-year estimates in this report provide a more sensitive read of the local dynamic. It should be noted that the ACS is a sample-based estimate of the conditions and status of a population at a given point in time. As such, it is generally less accurate than the decennial Census and is limited by its data collection methodology and the capacity and diligence of individual respondents.

Much of the data for the Analysis of Local Economic Conditions derive from datasets provided by the Federal Reserve Bank of Cleveland for the Cleveland-Mentor-Elyria MSA as well as from the U.S. Bureau of Labor Statistics.

The labor market indicators for local and regional workforce plans are prescribed by the requirements of WIOA and data is provided to meet this requirement in the state by the Ohio Department of Job and Family Services (ODJFS), Bureau of Labor Market Information. This standardizes data sources across counties and regions and is conducive to the development of the state WIOA plan. The labor market information provided by ODJFS in January, 2016 for local and regional plans, however, was not provided in a county-specific format or in a format consistent with the eight county Northeast WIOA Region. Instead, ODJFS provided data for the JobsOhio Northeast Region – an 18-county area which includes the counties of the Northeast WIOA Region along with ten other counties – with the caveat that the data provided is not specific to the designated WIOA area. While some elements of the JobsOhio dataset are included in this report, much of the labor market information is from the 2022 Job Outlook for the Cleveland-Mentor-Elyria MSA, also prepared by ODJFS Bureau of Labor Market Information. This resource provides a closer approximation of Cuyahoga County-specific labor market dynamics and projections.

Many additional reports on economic and labor market conditions for Cleveland and Cuyahoga County have been completed in recent years by local planning agencies, foundations, etc. Findings from these studies can provide useful adjunct information for future discussions of Cleveland and Cuyahoga County's workforce needs. While these sources provide rich elaboration on local economic and labor market trends, this analysis does not attempt to compare, contrast, or summarize their findings.

Statement of Purpose

This analysis was done to meet the labor market information requirements of the WIOA local plan for the Cleveland/Cuyahoga County Workforce Development Board. These are:

1. To describe current economic conditions in the Cleveland-Mentor-Elyria MSA;
2. To present labor market needs and projections for Cleveland and Cuyahoga County;

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3. To describe the characteristics of the Cleveland and Cuyahoga County workforce, including barriers to employment, with an in-depth emphasis on Cleveland residents;
4. To identify the gaps between the county's projected labor needs and the current capacity of the local workforce and discuss strategies and policy options that might prove useful for addressing or remediating these challenges.

Section I:

Economic Conditions in the Greater Cleveland Area

Assessing regional economic conditions affecting Cleveland and Cuyahoga County offers a unique set of challenges. Data is inconsistent with respect to geography and methodology; privately commissioned studies present metrics drawn from proprietary programs based on unknown assumptions; and trends shift over time as new data is continually being released. This section of the WIOA analysis begins with an overview of regional economic trends and proceeds to a synopsis of economic trends in the Cleveland MSA. Geographic boundaries are provided as available. Sources are the most current available as of March 2, 2016.

Regional Economic Trends

Economic trends for the Federal Reserve's Fourth District (Ohio, Pennsylvania, Kentucky, and West Virginia) form the regional economic context for this discussion. In keeping with the decision to use public data sources, information for this section is synthesized from the Federal Reserve Fourth District Beige Book Summary, released March 2, 2016. These trends convey a portrait of a stabilized but far from robust regional economy at the beginning of the year. Comparisons are to January, 2016 economic trends as reported by the Beige Book. Labor-specific trends are highlighted in boldface.

Economic Trends Overall

- Aggregate business activity grew modestly since last report.
- Manufacturing output trended slowly higher.
- Housing market improved, with higher sales and higher prices.
- Nonresidential contractors reported favorable results in 2015, expected to continue in 2016.
- Post-holiday shopping trends at general merchandise retailers were mixed.
- Auto dealers report higher unit volume compared to last year.

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- Demand for credit moved slowly higher.
- Oil and gas extraction and coal production declined.
- Freight volume trended lower.
- Payrolls expanded over past six weeks, especially in the manufacturing, construction and banking sectors.
- **Ongoing tightening in labor markets.**
- **Job churning and wage pressure most evident in the lower-skilled and service technician segments of economy.**
- **Staffing firms reported increases in the number of job openings and placements, particularly in healthcare and manufacturing.**

Manufacturing

- Output continued to trend slowly higher over the period.
- Demand for consumer and intermediate goods was stronger than for industrial products.
- Activity for suppliers to the motor vehicle, construction, and aerospace industries remains elevated, but the pace of growth has slowed.
- Auto production at assembly plants for all of 2015 was on par with 2014 levels and near historic highs.
- Steel industry remains depressed, though there was evidence of slight improvement in January, 2016 compared to December, 2015.
- Manufacturers who sell to industrial customers generally anticipate flat or sluggish growth; otherwise expansion is anticipated.

Real Estate and Construction

- Sales of new and existing single-family homes for all of 2015 rose 8.5% compared to those of a year earlier.
- Average sale price increased by more than 4%.
- Mild winter weather is having a positive impact on sales.
- Threat of higher interest rates is providing consumers with the impetus to purchase homes.
- Single-family construction starts rose moderately.
- Condo sales reportedly increasing.
- Builders reported increasing home prices over the period, attributable to rising labor, material, and land development costs and limited inventory.
- Nonresidential contractors reported very favorable results for 2015 and expect 2016 to be even stronger.

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- Demand being driven by healthcare and higher education and to a lesser degree by manufacturing, commercial real estate (except office buildings) and multifamily housing.
- Vacant industrial space being filled at a faster pace; driving up asset values.
- **Construction payrolls rose moderately across job segments since last report.**
- **Hiring is expected to increase as spring construction season approaches.**
- **Subcontractors remain challenged by labor shortages and are selective about bidding.**

Consumer Spending

- Post-holiday sales at retail outlets were mixed; consumers seem reluctant to take on additional debt, especially for big-ticket items.
- Apparel sales, particularly for cold-weather items, were lower.
- Sales of electronics were elevated.
- Restaurateurs experienced moderate to strong revenue growth during the fourth quarter of 2015 compared to a year prior, driven by low energy prices and expanded menus.
- Chain retailers are allocating greater proportion of capital budgets to technology and repositioning existing stores to be more attractive to Millennials.
- Underperforming assets are being closed at a faster pace.
- **Retailers facing stiff labor competition – higher turnover and a smaller pool of qualified workers are driving up wages.**
- Sales of new motor vehicles are up 2% compared to a year earlier; growth has carried over into January, 2016.
- Light trucks and SUVs continue to dominate the vehicle market.
- **Payrolls held steady over the period for motor vehicle retailers, but the market for sales and service personnel is tight, putting upward pressure on wages.**

Banking

- Business and consumer lending expanded modestly since last report.
- Commercial lending mainly for financing acquisitions and to fund CRE projects, but pace of growth for CRE projects slowing.
- Businesses are using their own liquidity to finance capital projects and pay down existing lines of credit.
- Downward trend in auto loan lending continues as consumers turn to non-bank sources for credit.
- Mortgage activity seasonably lower; drawdowns on home equity products picked up.
- Credit card usage down slightly.
- Spending primarily for technologies, especially mobile, and IT upgrades to lesser extent.

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- **Banking payrolls moved modestly higher in the aggregate; newly created jobs in commercial lending and regulatory compliance offset declines in retail banking.**

Energy

- The number of drilling rigs operating in the Marcellus and Utica Shales trended lower and is currently 62% below its peak level recorded late in the fourth quarter, 2014. Nevertheless, regional natural gas output remains at historic highs.
- Reduced demand owing to unusually warm weather has boosted inventories and put further downward pressure on prices.
- Prices for natural gas liquids are also declining.
- **Significant layoffs in the upstream segment continued.**
- Investment continues in pipeline and midstream projects; the refining segment is doing well.
- Coal production is lower.
- Not much change is expected across the sector in 2016.

Freight Transportation

- Volume contracted further on net freight over the period; attributable to softness in the manufacturing and energy sectors and high inventory levels.
- Some carriers saw elevated volume related to select consumer products, motor vehicles, and building materials and hardware.
- The outlook has improved since the previous cycle, and a majority of contacts report expectations of business expansion in upcoming months.
- Shipping rates are higher despite reduced diesel fuel prices, due to rising costs for labor and new equipment.
- **On balance, freight payrolls were flat. A reduction in drivers was offset by an increase in service technicians.**
- **Difficulties finding qualified technicians are putting upward pressure on wages.**

Cleveland Economic Summary

Economic trends in Cleveland show progressive improvement in unemployment rates, employment, employment by industry sector, prices paid by urban consumers, and wages and salaries for the Cleveland area during the past year. Information for this section is provided by

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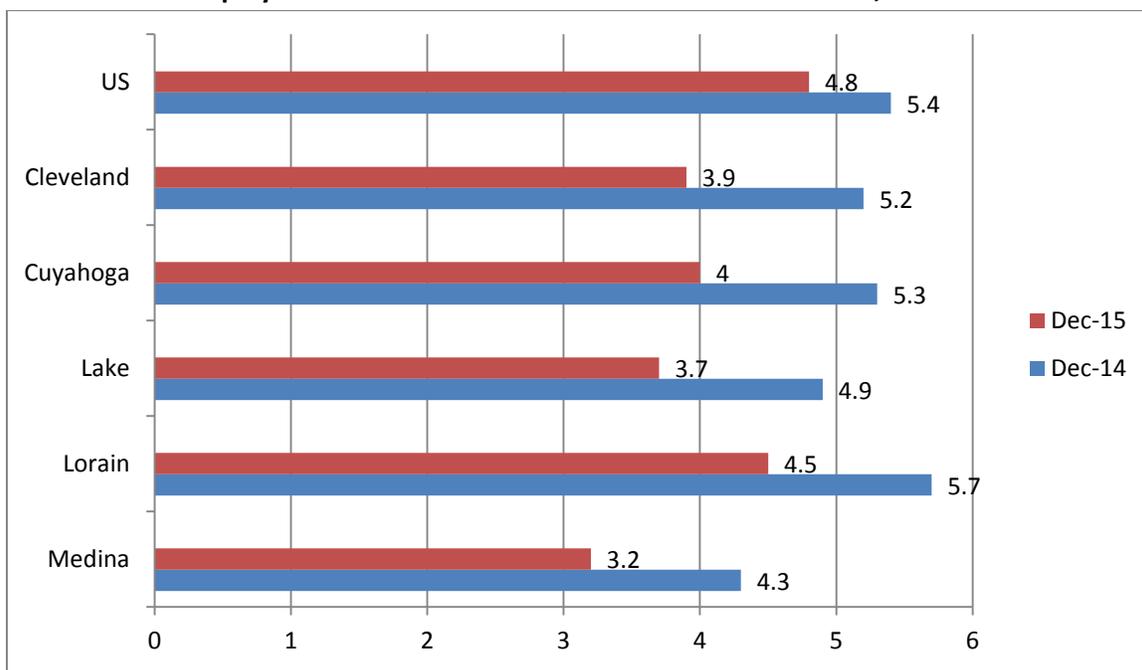
the U.S. Bureau of Labor Statistics (BLS), Cleveland, OH Economic Summary, updated February 23, 2016.

Unemployment

Current BLS data (see graph, below) demonstrate that unemployment rates in Cleveland, Cuyahoga County, and surrounding counties in December, 2015 were substantially lower than those at the same time the previous year. This trend is generally attributed to continuing recovery of the local economy from the Great Recession of 2009 – 2012. However, it must also be noted that a falling unemployment rate might also be a result of individuals' discouragement about finding employment, to the extent that they are no longer looking for work and are no longer counted among the paid labor force. Most likely the drop in the local unemployment rate is a combination of these factors, although to what extent each is responsible is unknown.

In Cuyahoga County the unemployment rate at the end of 2015 stood at 4.0%, down from 5.3% in December, 2014. In Cleveland, unemployment stood at 3.9% in December, 2015, falling from 5.2% during the same month the previous year. Unemployment in both Cleveland and Cuyahoga County was lower than that of the nation as a whole at the end of 2015. The national unemployment rate stood at 4.8% at that time.

Unemployment Rates for Selected NEO Counties and the US, 2014-2015



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U.S. BLS, Local Area Unemployment Statistics, Cleveland OH Economic Summary, 2/2016

Employment in Major Industry Sectors, 2015

Total nonfarm employment (not seasonally adjusted) in the Cleveland area increased by 2.2% from December, 2014 to the end of 2015, a year-over-year pickup of 23,300 jobs. (See chart, next page) The greatest percentage increases occurred in mining, logging and construction (12.6%), financial activities (5.7%), and leisure and hospitality (5.0%). Increases in construction jobs and leisure and hospitality employment may be an effect of preparation for the Republican National Convention scheduled for July, 2016, and also the substantial investment in highway and infrastructure improvements being made in the area by the State of Ohio. Sectors of the local economy that showed some retraction or the least growth year-over-year from December, 2014 to December, 2015 were professional and business services (-1.8%), manufacturing (0.3%), and government employment (0.8%). Information services, in the middle of the pack, demonstrated a year-over-year increase of 2.7%, and education and health services showed a healthy gain of 3.8% in employment at the end of 2015.

The data demonstrates that the sector with the largest number of employees at the end of 2015 was education and health services, with 205,200. This was followed by trade, transportation, and utilities, with 188,000 employees; professional and business services, with 146,200; and government, with 136,800 employees.

Year-Over-Year Change in Employment by Major Industry Sector, December, 2014 – December, 2015

Cleveland Area Employment (numbers in thousands)	December, 2015	Change from 12-14 to 12-15	
		Number	Percent
Total nonfarm employment	1,068.1	23.3	2.2
Mining, logging, and construction	36.6	4.1	12.6
Manufacturing	124.4	0.4	0.3
Trade, transportation, utilities	188.0	3.1	1.7
Information	15.0	0.4	2.7
Financial activities	68.3	3.7	5.7
Professional and business services	146.2	-2.7	-1.8
Education and health services	205.2	7.5	3.8
Leisure and hospitality	105.8	5.0	5.0
Other services	41.8	0.7	1.7
Government	136.8	1.1	0.8

U.S. BLS, Current Employment Statistics, Cleveland OH Area Economic Summary, 2/2016

Gross Domestic Product Per Capita

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The Cleveland MSA, even in its recovery from the recession, remains highly productive. According to the Cleveland Metro Mix report issued for the Cleveland MSA by the Federal Reserve Bank – Cleveland in July, 2015, the Cleveland area’s real GDP per capita, at \$60,478, was approximately \$6,800 above the nation’s and \$10,800 above the state’s. Real GDP per capita in Cleveland was 2.5% above pre-recession levels in 2013 and “recovered at about the same rate as in Ohio and significantly faster than in the United States or nearby metro areas,” according to the Federal Reserve. However, the report goes on to note that “part of the reason the metro area had a stronger recovery in CDP per capita is that it lost population” during this period.

Consumer Price Index - Urban

Prices paid for selected goods by urban consumers in the Cleveland area increased by just 0.1% from January, 2015 to January, 2016, according to the BLS Consumer Price Index. The increase is 1.3% less than the U.S. city average over the same period, which was 1.4%. Food prices increased by 0.5% in the Cleveland area, compared to an increase of 0.8% in other urban areas. The most precipitous drop in prices for Cleveland area consumers from January, 2015 to January, 2016 was primarily driven by energy prices. Cleveland consumers saw energy prices fall by 8.8%, in contrast with a drop of 6.5% in urban areas nationwide.

Average Annual Household Spending

Average annual expenditures by households in the Cleveland area (Cleveland MSA) totaled \$49,789 in 2013-14 according to the BLS Consumer Expenditure Survey, as follows:

<u>Expenditure</u>	<u>Annual Amount</u>	<u>Percent of Total</u>
Housing	\$15,435	31.0%
Transportation	\$8,943	18.0%
Food	\$6,814	13.7%
Insurance and pensions	\$5,949	11.9%
Healthcare	\$3,686	7.4%
All other	\$8,962	18.0%

Average Hourly Wages

Average hourly wages in selected occupations in the Cleveland area were mixed compared to wages in the same occupations nationwide according to the BLS Occupational Employment Statistics Report, May 2014. Higher average wages in an occupational category suggest labor pressures brought about by gaps in supply vs. demand. Wages in the Cleveland area were generally higher than the national average for carpenters, construction laborers,

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customer service representatives, and assemblers and lower than the U.S. average for computer systems analysts, accountants and auditors, registered nurses, home health aides, wait staff, and cooks.

Average Hourly Wages, Selected Occupations, Cleveland and U.S (2014)

Occupation	Cleveland area	United States
Total, all occupations	\$22.26	\$22.71
Computer systems analysts	37.37	41.98
Accountants and auditors	33.40	35.42
Registered nurses	31.46	33.55
Carpenters	24.35	21.92
Construction laborers	19.24	17.19
Machinists	19.06	19.97
Customer service reps.	17.45	16.29
Team assemblers	16.11	14.78
Retail salespersons	12.42	12.38
Home health aides	9.95	10.77
Waiters and waitresses	9.83	10.40
Cooks, fast food	8.87	9.15

U.S. BLS, Occupational Employment Statistics, May 2014

Overall Cuyahoga County Business Patterns

The Cleveland-Elyria MSA had 51,352 business establishments in 2013 as reported in the North American Industry Classification System (NAICS) of the U.S. Census. Collectively they had 915,152 employees through March, 2013. Their collective annual payroll totaled \$42,517,560,000. Industries based in Cuyahoga County with the greatest number of employees in 2013 were health care and social assistance (177,257), manufacturing (121,442), retail trade (100,391), and accommodation and food services (81,176).

According to NAICS Census figures for 2013, most of the business establishments in Cuyahoga County are small businesses with fewer than 49 employees. Of the 51,352 business establishments in Cuyahoga County, 48,145 (93.8%) had 49 or fewer employees. These employers, it should be noted, are not subject to many federal employment regulations, including Family and Medical Leave Act accommodations and Affordable Care Act mandates. There were 2,835 establishments with 50-250 employees in Cuyahoga County in 2013; 235 with 250-499 employees; 83 with 500-999 employees; and 54 employers with 1000 or more employees.

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Cuyahoga County's top employers, based on number of employees in the county as of June 30, 2014, are as follows:

<u>Company</u>	<u>Number of Employees in Cuyahoga County</u>
Cleveland Clinic	32,251
University Hospitals	14,518
U.S. Office of Personnel Management	11,254
Progressive Corporation	6,379
Cuyahoga County	7,776
Cleveland Metropolitan School District	6,953
City of Cleveland	6,757
The MetroHealth System	5,823
KeyCorp	4,812
Group Management Services, Inc.*	4,512
Swagelok Co.	4,184
Giant Eagle, Inc.	3,530
Sherwin-Williams Co.	3,430
U.S. Postal Service	2,801
Lincoln Electric Co.	2,800
Nestle USA	2,298
State of Ohio**	2,288
Cuyahoga Community College	2,249
Caesars Entertainment Co.	2,080

*Based in Summit County with employees in Cuyahoga County

** Based in Franklin County with employees in Cuyahoga County

Section II:

Existing and Emerging In-Demand Industry Sectors and Occupations

Data Considerations

Data for this section of the report is drawn from a number of sources according to availability. Because this analysis is focused on employment supply and demand in the Greater

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Cleveland area much of the supporting information is drawn from five-county (Lake, Geauga, Cuyahoga, Lorain, Medina) Cleveland MSA datasets rather than the eighteen-county JobsOhio data. The WIOA Northeast Ohio local workforce area straddles these two delineations and sources of workforce data. The WIOA workforce area includes Ashtabula, Portage, and Summit Counties along with the five in the Cleveland MSA.

The choice of MSA data over the JobsOhio data makes sense in the context of the report and on the basis of what we know about the local workforce. As is noted in Section III of this analysis, most residents of Cuyahoga County work in close proximity to where they live. Nearly 89% of employed persons living in Cuyahoga County and 92.3% of working Cleveland residents work within the county's borders. In fact, 26.2% of working county residents, and 55.5% of employed city residents, work in the same place (municipality) in which they live. Only 10.8% of working Cuyahoga County residents and 7.5% of Clevelanders travel outside the county to get to their jobs.

Jobs In Demand Data

Three publically available data tools are commonly used in the workforce system to assess jobs in demand:

- Ten-year occupational employment projections provided by the Ohio Department of Jobs and Family Services – Bureau of Labor Market Information (ODJFS-BLMI) are used as a long-term demand indicator;
- Help Wanted Online (HWOL) jobs ads produced monthly by The Conference Board are used as a short-term demand indicator; and
- The Economic Development and Employer Planning System (EDEPS) is used to define and measure future demand for high skill, high wage, and high demand occupations in accordance with the Perkins Act.

Long-Term Employment Projections

The primary resource used for this section is the 2022 Job Outlook report for the Cleveland MSA released in October, 2015 by ODJFS-BLMI. The projections presented in this report are updated every two years and are used for assessing long-range economic and employment trends, planning education and training programs, and developing career information. The 2022 Job Outlook report uses employment statistics through 2012 as a baseline to project employment conditions in the Cleveland MSA for the 10-year period ending in 2022.

Employment Projections by Major Industry

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From 2012 to 2022, total employment across the Cleveland MSA is projected to increase 6.9%, equal to 73,300 jobs. The highest percentage growth is anticipated in the healthcare and social assistance industry, which is projected to add 30,500 jobs – an increase of 18.5%. The industry in which the greatest losses are projected is manufacturing, expecting a loss of 8,500 jobs – a 6.9% reduction. Employment projections 2012 – 2022 by major industry in the Cleveland MSA are presented below. Note that these figures represent major industrial categories, not specific occupations.

<u>Industry</u>	<u>2012 Actual</u>	<u>2022 Projected</u>	<u>+/-</u>	<u>% Change</u>
Natural Resources, inc. Agriculture, Mining	5,800	5,600	-200	-3.4%
Construction	31,900	40,800	8,900	27.9%
Manufacturing	123,000	114,500	-8,500	-6.9%
Utilities	3,000	2,500	-500	-16.8%
Wholesale Trade	44,300	48,800	4,500	10.2%
Retail Trade	100,900	100,000	-900	-0.9%
Transportation and Warehousing	25,400	28,000	2,600	10.2%
Information	14,900	14,000	-900	-6.0%
Finance and Insurance	43,800	46,100	2,300	5.3%
Real Estate, Rental and Leasing	15,200	16,500	1,300	8.6%
Professional and Technical Services	51,100	58,800	7,700	15.1%
Management of Companies	26,900	27,600	700	2.6%
Administrative and Waste Services	59,300	68,000	8,700	14.7%
Educational Services	78,100	85,500	7,400	9.5%
Health and Social Assist.	164,700	195,200	30,500	18.5%
Arts, Entertainment	14,400	15,200	800	5.6%
Accommodation, Food	76,700	83,000	6,300	8.2%
Other Services	43,000	46,000	3,000	7.0%
Government	72,700	71,100	-1600	-2.2%

Employment Projections by Major Occupational Group

A more focused way to look at employment projections is by major occupational group within the large industry categories. Occupational groups describe categories of jobs; they exist within the context of large industrial classifications. These employment projections provide a way to see how employment in occupational groups is expected to change from 2012 – 2022, the

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direction in which change is anticipated to occur, and the extent to which this change will be driven by real growth in the number of jobs available or by replacement of existing workers. Most large occupational groups in the Cleveland MSA are expected see some growth from 2012 to 2022, except for the farming, fishing and foresting occupations which are projected to remain the same.

The occupational groups anticipating the greatest rate of growth in the Cleveland MSA from 2012 to 2022 are listed below in decreasing order:

Occupational Title	2012 Annual	2022 Projected	%	Annual Openings		
				Growth	Replacement	Total
Healthcare Support	42,520	52,310	23.0	960	815	1,795
Construction	34,000	40,450	19.0	647	580	1,227
Healthcare Practitioner and Technical	76,000	86,770	14.2	1,080	1,554	2,634
Community and Social Service	17,040	19,300	13.2	227	388	615
Computer and Mathematical	26,900	29,990	11.5	315	441	756
Personal Care, Service	31,210	34,750	11.4	356	684	1,040
Education, Training and Library	59,670	65,780	10.3	611	1,274	1,875
Business and Financial	51,580	56,540	9.6	508	1,050	1,558
Legal	9,120	9,990	9.5	90	147	237
Transportation and Material Moving	60,940	66,000	8.3	518	1,484	2,002
Food Preparation and Serving	86,630	93,600	8.1	724	3,293	4,017

Note that percentage of occupational growth does not necessarily equate to a similar rate of job growth. The largest increase in net job growth from this list is in food preparation and serving, with the lowest occupational growth rate. Occupational groups do not describe actual jobs within the groupings.

Fastest Growing Occupations

The following thirty occupations are projected by ODJFS - BLMI as the fastest-growing in the Cleveland MSA, 2012 – 2022, defined by projected rate of increase over the ten year period.

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Occupational Title	Percent Change	Annual Openings	Hourly Median Wage (June, 2014)
Home Health Aides	38.3%	931	\$9.47
Personal Care Aides	36.9%	135	\$9.13
Brickmasons	36.0%	35	\$31.55
Health Specialties Teachers	34.8%	34	\$77,226 (annual salary)
Medical Sonographers	33.3%	29	\$29.76
Medical Equip. Repairers	32.0%	23	\$20.29
Physical Therapist Assts	28.3%	45	\$28.56
Market Research Analysts	26.9%	166	\$27.90
Physician Assistants	25.9%	25	\$47.15
Medical Secretaries	24.3%	292	\$15.20
Physical Therapists	24.2%	80	\$39.99
Mental Health Counselors	24.1%	39	\$20.01
Cost Estimators	23.9%	103	\$26.12
Construction Laborers	23.4%	260	\$21.85
Telecommunications Line Installers & Repairers	23.4%	31	\$19.47
Substance Abuse & Behavioral Counselors	23.1%	23	\$19.56
Carpenters	23.1%	189	\$23.21
Surgical Technologists	22.9%	37	\$20.99
Cardiovascular Technologists	22.8%	21	\$26.03
Dental Hygienists	21.6%	79	\$30.80
Healthcare Social Workers	21.4%	62	\$25.30
Occupational Therapists	21.3%	43	\$38.99
Nurse Practitioners	21.3%	38	\$43.27
HVAC Mechanics	20.7%	51	\$20.44
Construction Trades & Extraction Workers	20.7%	77	\$29.83
Logisticians	20.2%	38	\$30.71
Mental Health & S.A. Social Workers	20.2%	54	\$21.18
Sheet Metal Workers	19.5%	34	\$24.78
Commercial Pilots	18.3%	27	\$63,834 (annual salary)

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The fastest-growing job in the Cleveland MSA, as seen in the previous table, is home health aide with a projected growth rate of 38.3%. This is followed by personal care aides (36.9%), brickmasons (36.0%) secondary level health specialties teachers. Note that many of the occupations with the fastest growth rate have relatively small numbers of annual openings. Of the thirty fastest growing occupations in the Cleveland MSA, only seven are projected to have annual openings of 100 workers or more. Half are projected to have 50 or fewer openings annually over ten years.

Occupations with Most Annual Openings

Which jobs are projected to have the most openings from 2012 to 2022 in the Cleveland MSA, how many openings are projected, and what do these jobs pay? The following list, prepared by ODJFS (BLMI), identifies the “Top 30” jobs with the greatest number of openings that employers will be looking for workers to fill, in decreasing order.

Occupational Title	Total Annual Openings	Median Wage*
Combined Food Preparation and Serving Workers Including Fast Food Workers	1,256	\$8.85
Retail Salespersons	987	\$10.28
Cashiers	966	\$9.23
Home Health Aides	931	\$9.47
<u>Registered Nurses</u>	896	\$31.90
Laborers and Freight, Stock, and Material Movers	814	\$11.15
Waiters and Waitresses	763	\$8.90
Office Clerks, General	469	\$14.37
Customer Service Representatives	449	\$16.37
<u>Nursing Assistants</u>	418	\$12.05
Stock Clerks and Order Fillers	400	\$11.37
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	398	\$10.41
Accountants and Auditors	339	\$30.87
Licensed Practical and Licensed Vocational Nurses	315	\$21.25
Secretaries and Administrative Assistants Except Legal, Medical, Executive	295	\$16.17
Medical Secretaries	292	\$15.20
Bartenders	292	\$8.84

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General and Operations Managers	291	\$46.79
Sales Representatives, Wholesale and Manufacturing	284	\$26.04

Occupations with the Most Annual Openings, Continued

Occupational Title	Total Annual Openings	Median Wage
Elementary School Teachers	281	\$58,100
Maintenance and Repair Workers, General	268	\$17.70
First-Line Supervisors of Office and Administrative Support Workers	267	\$23.99
Landscaping and Groundskeeping Workers	265	\$10.89
Construction Laborers	260	\$21.85
<u>Hairdressers, Hairstylists, and Cosmetologists</u>	<u>258</u>	<u>\$12.15</u>
Counter Attendants, Cafeteria, Food Concession, And Coffee Shop	258	\$8.87
<u>Hosts and Hostesses, Restaurant, Lounge, And Coffee Shop</u>	<u>252</u>	<u>\$8.99</u>
Maids and Housekeeping Cleaners	249	\$10.44
Childcare Workers	238	\$9.49
First-Line Supervisors of Retail Sales Workers	233	\$17.06

The occupations projected to have the most annual openings from 2012 to 2022 are relatively equally stratified by median wage.

- Slightly more than a fourth of the occupations (8, or 27%) projected to have the most annual openings from 2012 – 2022 have a median hourly wage of \$20.00 or higher. Annualized, this ‘translates’ to an annual salary of \$41,600 or above.
- Twenty-three percent (7) of the occupations projected to have the most annual openings have a median hourly wage of \$15.00 to \$20.00 an hour, annualized at \$31,200 - \$41,600.
- Seven of the occupations (23%) projected to have the most annual openings from 2012-2022 have a median hourly wage of \$10.00 - \$15.00, annualized at \$20,800 to \$31,200 for full time work.

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- Twenty-seven percent (8) of these occupations have a median hourly wage below \$10.00 an hour, or \$20,800 or less on an annual basis.

The occupation for which the greatest number of openings is projected, food preparation and serving, has a median hourly wage of \$8.85. For a full time, 40-hour week (which many of the workers in this occupation do not have) the annual salary is \$18,408. Home health aides, projected as the fastest growing occupation in the Cleveland MSA, have a median hourly wage of \$9.47; this is equivalent to an annual salary of \$19,698.

Median wage refers to the wage at which half of the workers in the occupation make more, and half make less. It does not refer to the entry-level wage, which is frequently lower.

Knowledge and Skills Required to Meet Employers' Needs

WIOA local plans require an analysis of the knowledge and skills required to meet the requirements of the jobs that employers need to fill. To address this requirement, two groups of occupations are presented below, along with their respective educational requirements. First, the educational requirements for the top fifteen fastest growing occupations in the Cleveland MSA are addressed, followed by the educational requirements for the top fifteen occupations with the most openings. While there is some overlap in these groupings, for the most part they tell different stories. Information for this section is derived from BLS Occupational and Training Classification data provided by ODJFS (BLMI) for the Cleveland MSA and is consistent with Standard Occupational Classification (SOC) codes.

Educational Requirements for Top 15 Fastest Growing Occupations, Cleveland MSA

Occupation	Education	Work Experience	OJT
Home Health Aides	< High School	None	Short Term OJT
Personal Care Aides	< High School	None	Short Term OJT
Brickmasons and Blockmasons	H.S. or equiv.	None	Apprenticeship
Health Specialties Teachers, Postsecondary	Doctoral/Prof.	< 5 years	None
Diagnostic Medical Sonographers	Associate's	None	None
Medical Equipment Repairers	Associate's	None	Moderate OJT
Physical Therapist Assistants	Associate's	None	None
Market Research Analysts and Marketing Specialists	Bachelor's	None	None
Physician Assistants	Master's	None	None
Medical Secretaries	H.S. or equiv.	None	Moderate OJT

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Physical Therapists	Doctoral/prof	None	None
Mental Health Counselors	Master's	None	Internship
Cost Estimators	Bachelor's	None	None
Construction Laborers	< High School	None	Short Term OJT
Telecommunications Installer	H.S. or equiv	None	Long Term OJT
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Substance Abuse and Behavioral Counselor	Bachelor's	None	None
Carpenters	High School	None	Apprenticeship
Surgical Technologists	Postsecondary non-degree	None	None
Cardiovascular Technologists	Associate's	None	None
Dental Hygienists	Associate's	None	None
<hr/>			
Healthcare Social Workers	Master's	None	None
Occupational Therapists	Master's	None	None
Nurse Practitioners	Master's	None	None
Heating, AC, Refrigeration Mechanics & Installers	Postsecondary non-degree	None	Long Term OJT
FL Sup of Construction Trades	High School	5 years+	None
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Logisticians	Bachelor's	None	None
Mental Health & SA Social Workers	Bachelor's	None	None
Sheet Metal Workers	High School	None	Apprenticeship
Commercial Pilots	High School	None	Moderate Term OJT

Educational Requirements for Top 30 Occupations with Most Openings, Cleveland MSA

Occupation	Education	Work Experience	OJT
Combined Food Preparation and Serving Workers, Inc. Fast Food	< High School	None	Short Term OJT
Retail Salespersons	< High School	None	Short Term OJT
Cashiers	< High School	None	Short Term OJT
Home Health Aides	< High School	None	Short Term OJT
Registered Nurses	Associate's	None	None
Laborers and Freight, Stock, and Material Movers, Hand	< High School	None	Short Term OJT

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Waiters and Waitresses	< High School	None	Short Term OJT
Office Clerks, General	H.S. or equiv.	None	Short Term OJT
Customer Service Representatives	H.S. or equiv.	None	Short Term OJT
Nursing Assistants	Postsecondary non-degree	None	None
Stock Clerks and Order Fillers	< High School	None	None
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	< High School	None	Short Term OJT
Accountants and Auditors	Bachelor's	None	None
Licensed Practical and Licensed Vocational Nurses	Postsecondary non-degree	None	None
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	H.S. or equiv.	None	Short Term OJT
Medical Secretaries	High School	None	Moderate OJT
Bartenders	None	None	Short Term OJT
General & Operations Managers	Bachelor's	5 years +	None
Sales Representatives (Except Scientific, Technical)	High School	None	Moderate OJT
Elementary School Teachers (Except Special Ed.)	Bachelor's	None	Internship
Maintenance and Repair (General)	High School	None	Long Term OJT
FL Sup of Office and Admin. Support Workers	High School	< 5 years	None
Landscaping and Groundskeepers	None	None	Short Term OJT
Construction Laborers	None	None	Short Term OJT
Hairdressers, Hairstylists and Cosmetologists	Postsecondary non-degree	None	None
Counter Attendants, Cafeteria, Food Concession, Coffee Shop	None	None	Short Term OJT
Hosts & Hostesses, Restaurant, Lounge, Coffee Shop	None	None	None
Maids and Housekeeping Cleaners	None	None	Short Term OJT
Childcare Workers	High School or equiv.	None	Short Term OJT
FL Sup of Retail Sales Workers	High School	< 5 years	None

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The information presented above indicates that the education requirements for “jobs in demand” vary according to how “demand” is defined. The thirty jobs with the *fastest rate of growth* in the Cleveland MSA generally require a higher level of education. Three occupations require less than a high school education, eight specify a high school diploma, two require a post-secondary non-degree credential, and five require an Associate’s degree. Five occupations expect a Bachelor’s degree, five a Master’s degree, and two require a Doctoral or professional degree.

Of the thirty jobs with the *highest projected level of openings* from 2012 – 2022 in the Cleveland MSA, fourteen – almost half – require less than a high school diploma. Nine specify that a high school diploma is required, three require post-secondary non-degree training, one requires an Associate’s degree and three require a Bachelor’s degree. Most require no experience and only short term on-the-job training.

Education Level Required for Top 30 “Jobs in Demand,” Cleveland MSA, 2012-2022

Educational Level	Jobs With Fastest Rate of Growth	Jobs With Most Opportunities
Less than High School	3	14
High School	8	9
Post-Secondary Non-degree	2	3
Associate’s Degree	5	1
Bachelor’s Degree	5	3
Master’s Degree	5	0
Doctoral or Professional Degree	2	0

Ohio Department of Jobs and Family Services, Bureau of Labor Market Information,
Occupational Employment Projections Report, 2012-2022

Short-Term Demand Projections from Online Ads

A standard way of determining “in-demand” occupations in the short-term is to mine online job advertising databases for demand information. The Conference Board, an independent business membership and research organization, has developed the capacity to track online job ads using a proprietary software program created by Haver Analytics. This has provided subscribers with a monthly source of data to determine short-term occupational demand in an approximation of real time as well as a leading indicator to detect changes in demand earlier than using traditional methods.

Like all methodologies, the use of online job ads to track employment demand has limitations. Online ads strongly correlate with job openings data from the BLS Job Opportunities and Labor Turnover Survey (JOLTS) database, capture between sixty and seventy percent of all

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job openings, and track more than 80 percent of jobs for those with Bachelor’s degrees or better. However, a study conducted by the Georgetown University Center on Education and the Workforce in 2014 (Carnevale, et.al.) found that online job ads data over-represent job openings for college graduates and show limited opportunities for job seekers with some college or Associate’s degrees. They also tend to over-represent industries that demand high-skill workers: white-collar office and STEM occupations account for the majority of ads. Only forty to sixty percent of openings for high school diploma holders appear online, thus they are under-represented in the online databases. Finally, most online job ads are placed by Fortune 1000 companies. The needs of small businesses tend not to be proportionally reflected in the Help Wanted OnLine reports.

Allowing for these limitations, Help Wanted OnLine job postings for Cuyahoga County (December, 2015) provide an overview of local short-term trends in jobs in demand. The top 30 occupations, and the number of ads for each, in this snapshot in time are as follows:

Occupation	Number of Ads, 12/2015
Registered Nurses	1,276
Heavy and Tractor Trailer Truck Drivers	808
Retail Salespersons	602
FL Supervisors of Retail Salespersons	491
Computer Systems Analysts	475
Customer Service Representatives	465
Marketing Managers	438
FL Supervisors of Office and Admin. Support Workers	428
Management Analysts	417
FL Supervisors of Food Prep. and Service Workers	377
Computer User Support Specialists	360
Sales Reps, Excluding Technical and Scientific	344
Sales Managers	332
Medical and Health Services Managers	311
Maintenance and Repair Workers, General	301
Accountants	300
Software Developers, Applications	298
Industrial Engineers	294
Financial Managers, Branch or Department	292
IT Project Managers	272
Sales Representatives, Services, All Others	257
Web Developers	254
Sales Agents, Financial Services	250
Executive Secretaries and Administrative Asst’s.	241

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Sales Reps, Wholesale and Manufacturing, Technical and Scientific Products	240
Network and Computer Systems Administrators	230
Cashiers	229
General and Operations Managers	215
Combined Food Preparation and Service Managers	198
FL Supervisors of Non-Retail Sales Workers	192

Education Level of Jobs in Demand from Online Ads

The predominant education level desired by employers who posted job ads online in Cuyahoga County in December, 2015 was a Bachelor’s degree; 41.4% of the ads specified this level of educational attainment. Another 3.5% of online ads were for jobs requiring a Master’s degree and 2.8% required a Doctorate. A high school diploma or equivalent was required for 38.1% of jobs described in the online help-wanted ads during this period. An Associate’s degree was required for 14.3% of jobs posted online during this time.

Certifications in Demand from Online Ads

Help Wanted OnLine analyses ‘mine’ ads for certification keywords. The results are summarized in the table below for jobs in the Northeast Ohio JobsOhio Region from September through December, 2015. The certification most required in the help-wanted ads for the Northeast JobsOhio region during this period was a driver’s license, followed by a state registered nurse certificate and a commercial driver’s license.

Top Ten Online Ad Job Certifications, Northeast JobsOhio Region

Certifications	Number of Ads	Percent
Total number of online ads reviewed	228,031	100%
Driver’s License	19,605	8.6%
Certified Registered Nurse	14,977	6.6%
Commercial Driver’s License	11,353	5.0%
Basic Life Support	7,342	3.2%
Certification in CPR	6,654	2.9%
Continuing Education	4,803	2.1%
Licensed Practical Nurse	4,527	2.0%
Advanced cardiac life support	4,336	1.9%
HAZMAT	3,093	1.4%
OSHA Certification	3,078	1.3%

Ohio Means Jobs Help Wanted Online, All Available Ads – 9/18/15 – 12/18/15

Skills in Demand from Online Ads

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Using the Help Wanted OnLine database, ODJFS extracted the most frequently listed job skills appearing in online ads during the last quarter of 2015. These are summarized in the chart below. Quality assurance (2.5%) and pediatrics (2.5%) skills headed the list, followed by structured query language (1.6%) and quality control (1.5%). Note that very small percentages of the 228,031 help wanted ads reviewed mentioned these skills. In addition, the actual skill required for “quality assurance” or “pediatric” work, as with the other skills, was unspecified.

Top Ten Online Ad Job Skills, Northeast JobsOhio Region

Skills	Number of Ads	Percent
Total number of online ads reviewed	228,031	100%
Quality assurance	5,743	2.5%
Pediatrics	5,658	2.5%
Structured query language	3,653	1.6%
Quality control	3,511	1.5%
Technical support	3,223	1.4%
Critical care	3,114	1.4%
Customer relationship management	2,844	1.2%
Java	2,425	1.1%
Geriatrics	2,239	1.0%
Microsoft SQL Server	2,186	1.0%

Ohio Means Jobs Help Wanted Online, All Available Ads – 9/18/15 – 12/18/15

Salary Ranges for Help Wanted OnLine Job Ads

The salary range for job ads posted online in Cuyahoga County during December, 2015 demonstrate the Help Wanted OnLine’s skew towards middle to upper income occupations. Entry level jobs (those with salaries less than \$30K annually) comprised 19.4% of total listed; middle income jobs (those with salaries of \$30 - \$49K annually) made up 26%. Upper middle income jobs (those paying salaries of \$50 - \$79K annually) were 31.9% of the Help Wanted OnLine total. High income jobs (those with annual salaries of \$80 - \$90K) made up 12.8% of the total and jobs with six-figure salaries comprised 9.9% of those listed.

Employers with the Most Job Ads in Cuyahoga County

The ten Cuyahoga County employers with the most online job ads as tracked by Help Wanted OnLine in December, 2015 were (in decreasing order):

- Cleveland Clinic
- University Hospitals
- Key Bank
- Oracle
- Deloitte

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- Giant Eagle
- Case Western Reserve University
- KeyCorp
- OMJ/Cleveland, Cuyahoga County
- PNC Financial Services

EDEPS: Tracking High Skill, High Wage, and High Demand Occupations

To address the requirement of the federal Carl D. Perkins Career and Technical Education Improvement Act of 2006, several components of which were rolled into WIOA, the ODJFS – BLMI worked with the staff of the Economic Development and Employer Planning System (EDEPS) to develop definitions for “high skill, high wage, and high demand” occupations. The criteria for these designations are as follows:

High Skill Criteria: Occupations that generally require long-term, on-the-job training of more than 12 months, or combined work experience and formal classroom instruction of more than 12 months; OR occupations for which employers prefer apprenticeship, or internship/residency, or 5 years of more of work experience in a related occupation; OR occupations for which employers prefer a postsecondary education degree/award of a certificate of greater than 1 year but less than 2 years, an Associate’s degree, a Bachelor’s degree, a Master’s Degree, Doctoral degree or first professional degree.

High Wage Criteria: Occupations with annual earnings greater than or equal to \$26,083 or hourly earnings greater than or equal to \$12.54/hour.

High Demand Criteria: Occupations with annual, statewide job growth greater than or equal to 104 new job openings annually, or occupations with annual, total job openings (both job growth or replacements) greater than or equal to 264 openings.

While the current EDEPS High Skill, High Wage, High Demand list of occupations for Ohio is included as an Appendix to this report, the unusually broad criteria used to define these jobs allows most occupations to fit within these categories. While this was once perhaps a useful tool, its current utility for guiding vocational choice appears limited.

Summary of Jobs in Demand Data

Determining which occupations are currently in demand and which are projected to have future demand – and in what quantities, with what educational prerequisites – is a task made more difficult by the varying ways in which occupational demand is measured and tracked. What is clear is that there is high demand for service occupations in the Cleveland MSA, and that

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these involve the healthcare, home care, food service, and hospitality fields. In addition, the need for construction workers, sales representatives in non-technical and scientific fields, truck drivers, and registered nurses is strong now and is projected to remain so in the future. The financial services and healthcare fields remain strong occupational drivers.

The data also indicates that there may be some mismatches between current employment trends and projected high growth, high hiring occupations, particularly as this applies to the information technology, computer, and mathematics fields. ODJFS – BLMI long term projections for the Cleveland MSA do not show high demand in these fields, although the Help Wanted OnLine database clearly points to demand in this occupational category. Careful monitoring of short-term and long-term occupational demand will be key to calibrating job training and vocational choice options in the future.

Section III:

Characteristics of the Cleveland and Cuyahoga County Workforce

Population Trends

Cuyahoga County is the second most populous county in the State of Ohio, with an estimated 1,259,828 residents in 2014. The predominant economic locus in the county is the city of Cleveland with 389,524 residents. Both Cuyahoga County and Cleveland have lost population in this decade, a trend that began in the late 1960s. From 2010 to 2014 Cuyahoga County lost an estimated 1.6% of its total population while Cleveland's rate of population loss was approximately 1.8% between these years. During this period Ohio's overall population increased by 0.5%.

Cleveland and Cuyahoga County are some of the most densely populated urban areas in Ohio. The state's population density in 2010 was 282 persons per square mile, compared to 87.4 persons per square mile in the nation as a whole. Cuyahoga County's population density in 2010 measured 2,800 persons per square mile, while the city of Cleveland concentrated 5,102 persons per square mile.

Gender

Women outnumber men in both Cleveland and Cuyahoga County. Women comprise 52.3% of the population of Cleveland and 52.4% of the population of Cuyahoga County. Both city and county rates of female population exceed that of the U.S. as a whole (50.8%). 2014

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ACS data indicates a gender ratio (males per 100 females) of 90.9 in Cuyahoga County and 91.3 in Cleveland.

Age

The median age of Cuyahoga County residents in 2014 stood at 40.3 years; of Cleveland residents, 34.8 years.

Percent of Population by Age, Ohio, Cuyahoga County and Cleveland, 2014

Age	Ohio	Cuyahoga County	Cleveland
Under 15 years	18.6%	17.7%	20.3%
15-24 years	13.5%	13.1%	15.7%
25-64 years	52.3%	52.6%	52.1%
65 years and over	15.5%	16.5%	12.2%

2014 American Community Survey 1-year Estimates, American Fact Finder, Census.gov

As the table above demonstrates, the population of the City of Cleveland skews younger than Ohio's or Cuyahoga County's. Thirty-six percent of the population of Cleveland is under the age of 25, compared to 32.1% of the state of Ohio's or 30.8% of the county's.

Conversely, the population of Cuyahoga County is older, as a whole, than either Ohio's or Cleveland's. In the county, 16.5% of the population is age 65 or above, while only 15.5% of the state's population has reached that milestone. The City of Cleveland's rate of persons older than 65 was only 12.2% in 2014, lower than that of either the county or the country as a whole and perhaps reflective of the health disparities broadly associated with both poverty and race.

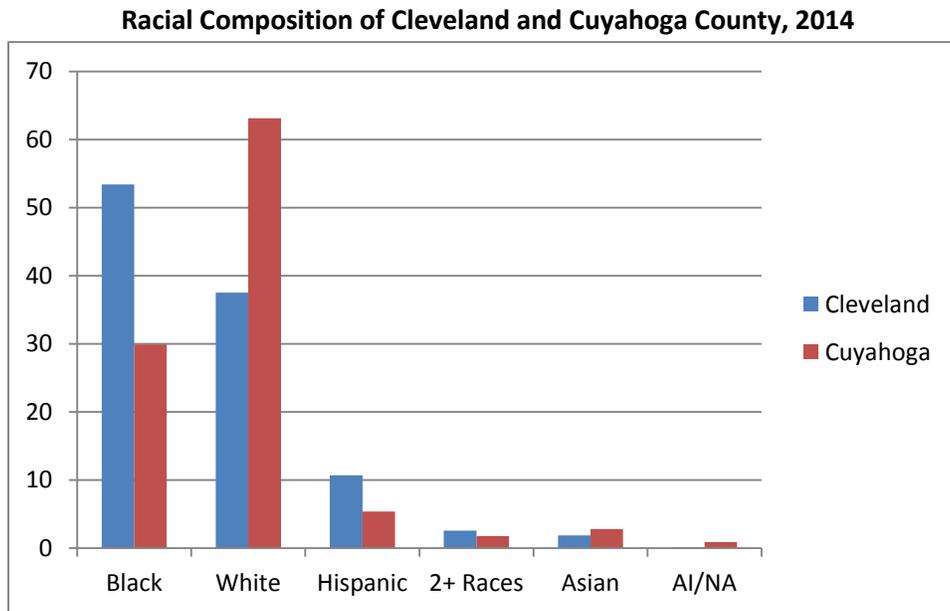
Given the emerging trend of persons aged 65-69 delaying retirement and remaining in the workforce, it is interesting to note that in 2014 Cuyahoga County's population in this age range was estimated at 62,991 persons (5%), and Cleveland's at 15,970 (4.1%).

Race and Ethnicity

Census data for the county and city indicate their respective diversity patterns. In 2014 Cuyahoga County's population was majority White alone (63.1%), followed by Black or African-American (29.9%), Hispanic or Latino (5.4%), Asian (2.8%), persons of two or more races (2.5%), and American Indian/Native Alaskan (0.9%).

Residents of the City of Cleveland were predominantly Black or African-American in 2014 (53.4%), followed by White alone (37.5%), Hispanic or Latino (10.7%), persons of two or more races (2.6%), Asian (2.4%), and American Indian/Native Alaskan (1.1%).

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2014 American Community Survey 1-year Estimates, American Fact Finder, Census.gov

Educational Attainment

In 2014 an estimated 872,756 individuals aged 25 years and older resided in Cuyahoga County. Within this group, 11.9% have less than a high school education; 27.9% are high school graduates (or completed equivalency requirements); 21.8% attended college but earned no degree; 7.3% have an Associate's degree; 18% have earned a Bachelor's degree; and 13% have earned a graduate or professional degree. Cuyahoga County's educational attainment levels are higher than those of the nation or the state.

In the U.S. as a whole, 29.3% of persons age 25 and above held a Bachelor's degree or higher in 2014. In Ohio 25.6% of individuals over the age of 25 have a Bachelor's or above compared to 31.0% in Cuyahoga County.

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Educational Attainment of Population 25+, Cuyahoga County, 2014

Educational Attainment	Number	Percent
Total number of persons	872,756	--
Less than 9 th grade	26,149	3.0%
9 th to 12 th grade, no diploma	78,063	8.9%
High school graduate (plus equiv)	243,723	27.9%
Some college, no degree	190,125	21.8%
Associate's degree	63,861	7.3%
Bachelor's degree	157,164	18.0%
Graduate or professional degree	113,671	13.0%
Percent less than high school	x	11.9%
Percent high school or higher	x	88.1%
Percent Bachelor's degree or higher	x	31.0%

2014 American Community Survey 1-year Estimates, American Fact Finder, Census.gov

The City of Cleveland had an estimated 249,594 residents aged 25 and above in 2014. Nearly a quarter (23.4%) have not graduated from high school or earned an equivalent credential. About a third, 32.4%, are high school graduates (or completed equivalency requirements); 22.3% have attended college but earned no degree; 6.9% have an Associate's degree; 9.3% earned a Bachelor's degree; and 5.8% have earned a graduate or professional degree.

Educational Attainment of Population 25+, Cleveland City, 2014

Educational Attainment	Number	Percent
Total number of persons	249,594	
Less than 9 th grade	13,892	5.6%
9 th to 12 th grade, no diploma	44,326	17.8%
High school graduate (plus equiv)	80,839	32.4%
Some college, no degree	55,639	22.3%
Associate's degree	17,161	6.9%
Bachelor's degree	23,187	9.3%
Graduate or professional degree	14,550	5.8%
Percent less than high school	x	23.4%
Percent high school or higher	x	76.7%
Percent Bachelor's degree or higher	x	15.1%

2014 American Community Survey 1-year Estimates, American Fact Finder, Census.gov

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There are significant educational disparities between Cuyahoga County and Cleveland residents. Nearly one-fourth of Cleveland residents 25 and older have less than a high school education, while the county’s rate of individuals with less than a high school diploma is roughly half that of the city’s.

Cleveland women age 25 and above have the highest rate of high school non-completion, more than double that of women in Cuyahoga County as a whole. More than a quarter of all Cleveland women over the age of 25 have not completed high school or an equivalent diploma. Twenty-four percent of men age 25 and over in the City of Cleveland have not finished high school – a rate, again, approximately double that of Cuyahoga County.

While Cleveland’s and Cuyahoga County’s rates of persons who have finished some college or earned Associate’s degrees are comparable, the disparity in the rates of completion of Bachelor’s degrees and higher is pronounced. Cuyahoga County’s Bachelor’s and above rate is approximately double that of Cleveland’s for both males and females.

From a gender perspective, more women than men have completed high school or an equivalent credential and Associate’s degrees in both the city and the county. However, the rate of completion of Bachelor’s degrees and above is fairly similar for women and men in both Cuyahoga County and Cleveland.

Educational Attainment by Gender, Population 25+, Cuyahoga County and Cleveland City (2014)

Educational Attainment	Cuyahoga County		City of Cleveland	
	Males	Females	Males	Females
Less than high school	12.6%	11.4%	24.1%	26.0%
High school or equivalent	28.4%	27.5%	34.7%	30.3%
Some college, no degree	21.5%	21.5%	20.3%	23.9%
Associate’s degree	5.6%	8.8%	5.3%	8.2%
Bachelor’s degree	18.4%	17.6%	8.9%	9.5%
Master’s degree	7.8%	9.2%	3.7%	3.7%
Professional school degree	3.8%	2.2%	2.0%	1.2%
Doctorate degree	1.8%	1.2%	0.8%	0.3%

2014 American Community Survey 1-year Estimates, American Fact Finder, Census.gov

Income

Median household income in both Cleveland and Cuyahoga County falls below that of Ohio and the rest of the nation. In 2014 median household income in the U. S. stood at \$53,482; in Ohio it was \$48,849. Cuyahoga County households reported median income of \$44,016 during that year, 82% of the national average. ACS data for Cleveland demonstrates the extent

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of poverty in the city’s urban core. Median household income in Cleveland was \$24,701 in 2014, 46% of that of the national median and 56% of median household income in Cuyahoga County.

An analysis of household income trends in the five years from 2010 to 2014 demonstrates startling differences in income growth patterns between Cuyahoga County and Cleveland, an indication of differences in relative recovery from the Great Recession from the household income perspective. Cleveland and Cuyahoga County had very similar rates of households with income of \$50,000 and above in 2010: 24.1% of Cuyahoga County households and 24.3% of Cleveland households had income in that range. By 2014 the rate of Cuyahoga County households with income exceeding \$50,000 had increased to 45.1% - a 20 percentage point jump. In Cleveland, however, only 25.1% of households had income of \$50,000 or more in 2014 – less than one percentage point growth in five years.

Approximately 30% of Cleveland households had income below \$15,000 in 2014, with the rate of households with annual income below \$10,000 rising from 18.5% to 21.5% from 2010 to 2014. Cuyahoga County’s rate of very low income households decreased during this period. In the county, 17.6% of all households had income below \$15,000 in 2014 compared to 27.5% in 2010. About 11.3% of county residents had annual income below \$10,000 in 2014 compared to 15.7% in 2010.

Cleveland and Cuyahoga County Household Income, 2010 – 2014
(In inflation-adjusted dollars for each year)

Total	Cuyahoga County		City of Cleveland	
	2010 Estimate	2014 Estimate	2010 Estimate	2014 Estimate
Estimated # of households	529,942	535,295	164,990	165,984
Less than \$10,000	15.7%	11.3%	18.5%	21.5%
\$10,000 to \$14,999	11.8%	6.3%	12.2%	9.0%
\$15,000 to \$24,999	19.0%	13.1%	17.4%	18.6%
\$25,000 to \$34,999	14.1%	10.9%	13.1%	11.8%
\$35,000 to \$49,999	15.2%	13.4%	14.5%	12.7%
\$50,000 to \$74,999	13.3%	16.9%	12.9%	13.1%
\$75,000 to \$99,000	5.2%	10.0%	6.1%	5.1%
\$100,000 to \$149,999	4.0%	10.5%	4.4%	4.6%
\$150,000 to \$199,999	0.6%	3.7%	0.5%	1.3%
\$200,000 or more	1.0%	4.0%	0.4%	1.0%

2010 and 2014 American Community Survey 1-year Estimates, American Fact Finder, Census.gov

An examination of sources of household income for Cuyahoga County and the City of Cleveland offer additional insight about relative standard of living and significant clues about barriers to full time work. As demonstrated in the chart below, wage earnings comprise 73.4% of the household income in households in the county as a whole, and 66.8% of income in

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Cleveland households. Among Cuyahoga County households, interest, dividends or net rental income account for 19.2% of income, compared to 8.8% of overall household income in Cleveland.

The percentage of households for which Social Security was a part of overall income in 2014 is similar for the city (26.8%) and the county (29.9%), most likely because Social Security is a universal entitlement and the county has a somewhat larger percentage of persons aged 65 and over.

Supplemental Security Income (SSI) payments made up a part of household income for 7.6% (40,682) of Cuyahoga County households in 2014 and 13.9% (23,071) of Cleveland households. The maximum monthly adult SSI payment in 2014 was \$773 per eligible individual or \$1,100 for an eligible individual with an eligible spouse. The allowable monthly amount is reduced by additional income, whether earned or contributed to the individual. Wages negatively affect eligibility for SSI and also for other benefits such as housing, Medicaid, and SNAP.

Household Income by Source, Cuyahoga County and Cleveland City (2014)

	Cuyahoga County		City of Cleveland	
	Estimate	Mean Income	Estimate	Mean Income
All households (number)	535,295	\$64,067	165,984	\$38,405
With earnings	73.4%	\$68,537	66.8%	\$43,444
With interest, dividends, rental income	19.2%	\$13,706	8.8%	\$11,938
With Social Security income	29.9%	\$16,777	26.8%	\$13,290
With Supplemental Security income (SSI)	7.6%	\$9,217	13.9%	\$8,923
With cash public assistance income	3.2%	\$2,451	5.6%	\$2,429
With retirement income	19.2%	\$22,808	14.2%	\$18,181

2014 American Community Survey 1-year Estimates, American Fact Finder, Census.gov

Income per capita (income per person for persons age 15 and above) data demonstrates again the depths of poverty in the City of Cleveland. Per capita income for the nation as a whole in 2014 (in inflation-adjusted dollars) is estimated at \$28,889; in the state of Ohio it is \$26,937. Cuyahoga County's per capita income mirrors the nation's, at \$28,020. Annual per capita income in 2014 in Cleveland, however, is estimated at \$17,205 – more than \$10,000 below that of Cuyahoga County residents or the population of the country as a whole.

Per capita income in both Cuyahoga County and Cleveland also varies substantially by race and ethnicity. In the county, per capita income for Black or African-American individuals age 15 and over, at \$16,446 annually, is 48.4% the per capita income of Whites, which is

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\$33,954. Per capita income in the county among persons of Hispanic or Latino origin (any race) is \$17,084, 50.3% that of Whites.

Racial and ethnic disparities in per capita income in 2014 extend to the City of Cleveland, though are less pronounced. Annual per capita income for White Clevelanders is \$23,787; for Black or African-Americans, it is \$13,070, 50.3% of that of the White population. Annual per capita income of individuals identifying as Hispanic or Latino in Cleveland stands at \$14,425 in 2014, 60.6% of that of Whites.

Poverty Status

Approximately 238,598 persons (19.3%) living in Cuyahoga County in 2014 had income at or below the federal poverty line (FPL). (In 2014 the FPL was \$11,670 for one person; \$15,730 for two persons; \$19,790 for three persons; \$23,850 for four persons.) In Cleveland, 148,428 persons (39.2%) lived below the FPL at some point during the 12 months prior to being surveyed.

The poverty rate in both Cuyahoga County and Cleveland varies according to age. In general, the younger the individual the more likely he/she is to have spent some part of 2014 below the FPL. More than seventy-nine thousand children (29.7% of the total child population of the county under the age of 18) lived below the FPL at some point in 2014; in Cleveland more than 53,000 children 18 or younger (58.5% of all Cleveland children) lived at or below the FPL that year. For persons 18-64 years of age, generally the working age population, 18% of Cuyahoga County residents and 34.9% of Cleveland residents lived at or below the FPL at some point during the 12 months preceding their completion of the 2014 ACS survey. Persons 65 years of age and older had the lowest levels of poverty in both the county (10.6% at or below FPL) and the city (23.1% at or below FPL) that year, likely due to Social Security.

In both the city and the county women are more likely to have spent part of the 12 months prior to being surveyed in poverty status than men.

Educational attainment is not necessarily a strong predictor of poverty status in Cuyahoga County or Cleveland. In 2014, among persons age 25 and over who lived below the FPL at some point during the previous year, 15.1% of county residents and 26.6% of Cleveland residents had some college or an Associate's degree. About 5.4% of county residents and 14.4% of Cleveland residents surveyed in 2014 who lived below the FPL during some part of the previous year had attained a Bachelor's degree or higher.

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Educational Attainment of Persons Age 25+ Who Spent Part of the Previous Year at or Below the Federal Poverty Line (2014)

	Cuyahoga County			City of Cleveland		
	Total Number	Number at or below Poverty	Percent at or below Poverty	Total Number	Number at or below Poverty	Percent at or below Poverty
Population age 25+	859,791	129,820	15.1%	244,771	75,366	30.8%
Less than high school graduate	100,682	36,093	35.8%	56,639	26,713	47.2%
High school graduate or equiv.	238,338	41,108	17.2%	78,998	24,147	30.6%
Some college or Associate's	251,260	38,006	15.1%	71,775	19,118	26.6%
Bachelor's degree or higher	269,511	14,613	5.4%	37,359	5,388	14.4%

2014 American Community Survey 1-year Estimates, American Fact Finder, Census.gov

As would be expected, unemployed persons experience significant rates of poverty. In Cuyahoga County 43.3% of unemployed individuals experienced at least some time at or below FPL in the year prior to 2014, as did 61% of all unemployed Clevelanders. Unemployed women fared worse than men in this regard, with 46.7% of unemployed female Cuyahoga County residents and 64% of unemployed Cleveland women spending at least part of the year prior to 2014 at or below the poverty line. “Unemployed” refers to persons currently in the labor force who are looking for work but have not secured employment.

The rate of individuals who worked full or part time and still had income below the FPL during all or part of the year prior to being surveyed was considerable. Among those persons 16 and over who worked full time, year round in 2014, 3.3% of those living in Cuyahoga County and 7.1% of those living in Cleveland experienced poverty status at some point in the 12 months prior to completing the ACS survey. For those who worked part time or part year, 20.3% of Cuyahoga County residents and 37.8% of city residents fell under the FPL during that time.

Work Experience of Persons 16+ Experiencing Poverty at Some Point in the Past 12 Months (2014)

	Cuyahoga County			City of Cleveland		
	Total Number	Number at or below Poverty	Percent at or below Poverty	Total Number	Number at or below Poverty	Percent at or below Poverty
Population 16 years and over	998,817	166,929	16.7%	296,855	99,218	33.4%
Worked full time full year in last 12 mos.	401,154	13,335	3.3%	94,381	6,742	7.1%
Worked part time or part year in past 12 mos.	245,091	49,874	20.3%	75,766	28,618	37.8%

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Did not work	352,572	103,720	29.4%	126,708	63,858	50.4%
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2014 American Community Survey 1-year Estimates, American Fact Finder, Census.gov

The poverty rate in Cuyahoga County is mirrored by the number of recipients of Supplemental Nutrition Assistance Program (SNAP) benefits (food stamps), which now carries a work requirement for adults. As of March, 2015, 173,612 adults and 109,616 children under the age of 18 received SNAP benefits in Cuyahoga County, with net federal expenditures for the program of \$103,505,821. Nearly a quarter of the total population of Cuyahoga County received SNAP benefits in 2015. The average quarterly payment per recipient was \$366.

Ohio Works First (OWF), the financial assistance portion of Ohio’s TANF program, provides cash assistance averaging \$541 per quarter to eligible families for up to 36 months lifetime benefits. As of 3rd quarter 2015, Cuyahoga County had 2,855 adult OWF recipients and 13,421 child recipients on OWF. Adult OWF recipients in Ohio are also subject to work requirements as a condition of receiving benefits.

Employment

For purposes of this analysis, “employed” persons include all civilians 16 years old and over who 1) did any work at all throughout the past year as paid employees, worked in their own business or profession, worked on their own farm, or worked 15 hours or more as unpaid workers on a family farm or in a family business; or (2) those were “with a job but not at work” - those who did not work during the reference week but had jobs or businesses from which they were temporarily absent due to illness, bad weather, industrial dispute, vacation, or other personal reasons.

Excluded from the “employed” category are people whose only activity consisted of work around the house or unpaid volunteer work for religious, charitable, and similar organizations. Also excluded are people on active duty in the United States Armed Forces. The reference week is the calendar week prior to the date on which the respondents completed their questionnaires or were interviewed. This week may not be the same for all respondents.

Among residents in Cuyahoga County and Cleveland age 16 and older, Cuyahoga County’s rate of civilian labor force participation was identical to that of the nation as a whole in 2014 at 63.5% (649,217), while Cleveland’s rate stood lower, at 58.8% (182,742). Employed persons represent 57.1% of the 16-and-over population of the county and 48.2% of the same population in Cleveland.

Civilians 16 years old and over are classified as unemployed if they (1) were neither “at work” nor “with a job but not at work” during the reference week, and (2) were actively looking for work during the last 4 weeks, and (3) were available to start a job. Also included as

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unemployed are civilians who did not work at all during the reference week, were waiting to be called back to a job from which they had been laid off, and were available for work except for temporary illness.

In Cuyahoga County, 10% of the total population 16 and older was unemployed in 2014, as was 18.4% of the population in this age group in Cleveland. A significant percentage of individuals age 16 and over were not in the labor force at all: 36.5% of county residents and 41.1% of city residents 16 and older were not labor force participants.

Fifty-six percent of workers aged 16 to 64 years in Cuyahoga County worked full time: 35 hours or more per week in 2014. Only 45.4% of full time Cleveland workers worked 35 or more hours weekly. Among full time Cuyahoga County workers, 50.3% worked 40 or more weeks per year, and 47.3% worked 50 to 52 weeks annually. Among Cleveland workers in full time jobs, only 38.1% worked 40 or more weeks per year and 35.5% worked 50 to 52 weeks annually.

Employment by Class of Worker

A majority of working Cleveland and Cuyahoga County residents 16 and over is employed by private companies. Private companies employed 393,773 county residents in 2014, and 101,876 city residents. Private, not-for-profit corporations employed 77,130 residents of Cuyahoga County and 17,013 Cleveland residents in 2014 and represented the second-largest class of employee. In 2014, 68,234 county residents and 19,110 city residents worked in local, state, and federal government agencies. Workers who are self-employed in incorporated businesses accounted for 26,124 Cuyahoga County workers and 6,422 Cleveland workers in 2014, while 17,645 county residents and 2,914 city residents over the age of 16 were self-employed in non-incorporated businesses or were unpaid family workers.

Comparing employment by class of worker during the five year period from 2010 – 2014 reveals trends in employment for both county and city residents. The percentage of county residents hired by private companies increased by 3.7% during this period, while the rate of city residents hired by private companies increased only minimally (0.1%). The number of Cuyahoga County workers in not-for-profit corporations also saw a healthy jump during this time, increasing by 4.0%, while the number of Cleveland workers in this class decreased by 6.8%. Cuts in government employees at all levels negatively affected both city and county workers from 2010 to 2014, with a 12% decrease in Cuyahoga County residents and a 17.4% decrease in the percent of Cleveland residents employed in government jobs.

One of the most interesting trends from 2010 to 2014 is the increase in self-employment rates among Cleveland workers. While the number of self-employed Cuyahoga County workers

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with incorporated businesses dropped slightly, by 1.6%, during this period, the number of Clevelanders who are self-employed in incorporated business rose by 53.5%. The number of county residents who are self-employed in unincorporated businesses – sole proprietorships – or who are unpaid family workers increased 11.9% in five years; the number of Clevelanders reporting self-employment in this class increased by 20.6%.

The increases in self-employment among Clevelanders, especially, may reflect national trends in entrepreneurship as a response to lagging hiring in the private sector after the Great Recession as well as the major cuts in government employment. Multiple sources of entrepreneurship education and support have been actively involved in Cleveland’s urban core in recent years. The largest increase – self-employment in incorporated businesses – suggests that these businesses are carefully structured for the long term rather than sole proprietorships launched as short term ventures in response to temporary personal or business conditions.

Employment by Class of Worker, 2010 - 2014

	Cuyahoga County			City of Cleveland		
	2010	2014	Percent Change	2010	2014	Percent Change
Employee of private company	379,599	393,773	+3.7	101,749	101,876	+0.1
Self-employed in incorporated business	17,923	17,645	-1.6	1,896	2,914	+53.7
Private, not for profit wage and salary	74,173	77,130	+4.0	18,262	17,013	-6.8
Local, state, and federal government	77,894	68,234	-12%	23,136	19,110	-17.4
Self-employed in own not incorporated business and unpaid family workers	23,344	26,124	+11.9	5,326	6,422	+20.6

2010 and 2014 American Community Survey 1-year Estimates, American Fact Finder, Census.gov

Employment Trends among Cuyahoga County and Cleveland Residents by Occupation and Industry

WIOA requires that the labor market analysis for local and regional plans address not only trends in both job projections and availability (as presented in Section II of this report) but also trends in employment. In the former case, jobs themselves – actual or projected – are the focal unit of analysis. In the latter, the number of people who actually *hold* the jobs is what is “counted.” This part of the labor market analysis seeks to answer the question, “In which occupations and industries are residents of Cuyahoga County and Cleveland employed, and how did their rate of employment in these occupations change from 2010 to 2014?”

It is important to bear in mind that American Community Survey (ACS) data is based on estimates which have varying margins of error. Thus, the reported numbers in any category may

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not “add up” to a specific total when reported. The data represent the best estimate of the U.S. Bureau of Labor Statistics given employment churn, reporting accuracy, and the dynamic nature of general economic conditions. The following information, presented by occupational category, allow us to understand occupational differences between working county and city residents and gauge occupational shifts over a five year period from 2010 to 2014.

Management, Business, Finance, and Arts Occupations

Forty percent of the 582,906 persons over the age of 16 in Cuyahoga County who were employed in 2014 were engaged in management, business, science and arts occupations. These occupations also accounted for 30 percent of the jobs of working Clevelanders.

Management, business and finance industries

The percent of Greater Clevelanders employed in management, business and finance jobs increased substantially from 2010 to 2014, with the greatest increases occurring among Cleveland residents. The number of Cuyahoga County residents employed in management

Residents Employed in Management, Business and Finance Occupations, 2010 - 2014

	Cuyahoga County			City of Cleveland		
	2010	2014	Percent Change	2010	2014	Percent Change
Management, business, finance total	79,768	87,084	+9.0	11,533	14,321	+24.1
Management	49,583	55,326	+11.6%	6,531	8,533	+30.7
Business and financial	30,185	31,758	+5.2	5,002	5,788	+15.7

2010 and 2014 American Community Survey 1-year Estimates, American Fact Finder, Census.gov

jobs increased 11.6% during that period, while the rate of Clevelanders employed in management positions increased by nearly a third. In the business and financial sectors the percent of Cuyahoga County residents employed in these occupations jumped by 5.2% and the percent of Cleveland residents with jobs in business and finance increased by 15.7%.

Overall the rate of increase of Clevelanders in these occupations was more than double the rate of increase of Cuyahoga County residents as a whole, though the actual numbers of Clevelanders in these occupational categories remains modest.

Computer, engineering, and science industries

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Both Cuyahoga County and Cleveland saw increases in persons employed in computer, engineering, and science occupations from 2010 to 2014, and the percentage gain in the number of persons employed in these fields was greater in Cleveland than in the county as a whole.

Cuyahoga County saw a 30.5% increase in the number of residents employed in computer and mathematical occupations – the field in this occupational category with the greatest increase among county residents. The number of Clevelanders employed in computer and mathematical occupations increased by 43.2% during this time, however, the raw numbers are still relatively small.

The architecture and engineering industries saw a significant decline in their numbers among both county and the city residents during this period, and the number of Cuyahoga County residents employed in the life, physical, and social sciences also declined by 13.6%. However, the number of Cleveland residents employed in the latter occupational category increased by 22.6% over this five year period.

Residents Employed in Computer, Engineering, and Science Occupations, 2010 - 2014

	Cuyahoga County			City of Cleveland		
	2010	2014	Percent Change	2010	2014	Percent Change
Computer, engineering, science total	30,161	32,456	+7.6	4,414	4,927	+11.6
Computer and mathematical	13,227	17,266	+30.5	2,105	3,014	+43.2
Architecture and engineering	10,562	9,687	-8.3	1,521	947	-37.7
Life, physical and social sciences	6,372	5,503	-13.6	788	966	+22.6

2010 and 2014 American Community Survey 1-year Estimates, American Fact Finder, Census.gov

Education, legal, community service, arts, and media industries

The number of persons employed in the education, legal, community service, arts and media occupations in Cleveland and Cuyahoga County showed a modest gain from 2010 to 2014 and this occupational sector remains an important component of the local employment picture. Cuyahoga County residents engaged in these occupations increased by 8.6% during this time, while the number of Clevelanders employed in these fields increased by 0.9% overall.

Practitioners in the legal field led in employment growth in this occupational category with increases of 26.5% among Cuyahoga County residents and 52.6% in the City of Cleveland. Community and social service occupations had modest growth of 7.3% in the county but the number of individuals employed in this field declined by 4% among city residents. The number of residents employed in the education, training, and library occupations declined in both the city and the county.

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Demonstrating the area's growth in the entertainment, arts, media, and sports occupations, the number of county residents employed in these fields increased by 40% over this five year period. The strong growth in this occupational sector was not shared by city residents, however, as the number of Clevelanders employed in these occupations in decreased by 2%.

Residents Employed in Education, Legal, Community Service, Arts, and Media Occupations, 2010 - 2014

	Cuyahoga County			City of Cleveland		
	2010	2014	Percent Change	2010	2014	Percent Change
Education, legal, community service, arts, and media total	61,462	66,745	+8.6	12,536	12,654	+0.9
Community and social service	11,230	12,050	+7.3	3,244	3,114	-4.0
Legal	8,305	10,505	+26.5	1,180	1,801	+52.6
Education, training, and library	32,899	31,550	-4.1	6,076	5,744	-5.5
Arts, design, entertainment, sports, and media	9,028	12,640	+40.0	2,036	1,995	-2.0

2010 and 2014 American Community Survey 1-year Estimates, American Fact Finder, Census.gov

Healthcare practitioners and technical industries

Employment in the healthcare fields continued to grow among both Cuyahoga County and Cleveland residents between 2010 and 2014, but the rate of growth was higher overall for county residents. The number of County residents who are healthcare practitioners and/or employed in technical occupations increased 12.1% during this time, while the number of Cleveland residents working in these fields gained by 3.6%.

The number of persons in the health diagnosing and treating fields and allied technical professions increased by 7.6% among county residents but declined by 13.8% among Clevelanders. This suggests that, while persons in the health diagnosing and treating fields are increasing overall in the county, they are likely moving outwards from the central city to suburban communities or into the suburbs from surrounding areas.

Health technologists and technicians showed strong occupational growth among both city and county residents. The number of people employed as technologists and technicians increased by 22.9% among Cuyahoga County residents and by 28.9% among Cleveland residents over this five year period.

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Residents Employed as Healthcare Practitioners and in Technical Industries, 2010 - 2014

	Cuyahoga County			City of Cleveland		
	2010	2014	Percent Change	2010	2014	Percent Change
Healthcare practitioners and technical occupations total	41,259	46,258	+12.1	7,585	7,856	+3.6
Health diagnosing and treating practitioners and other technical	29,126	31,350	+7.6	4,502	3,882	-13.8
Health technologists and technicians	12,133	14,908	+22.9	3,083	3,974	+28.9

2010 and 2014 American Community Survey 1-year Estimates, American Fact Finder, Census.gov

Service Occupations

More Cleveland residents, 41,305, were employed in service occupations than in any other occupational category in 2014. Service occupations were also the third highest employment sector for Cuyahoga County residents in 2014, with 109,244 employed in service jobs. Since service occupations are likely to be compensated at a lower rate than other jobs, earnings for individuals employed in these fields likely reflect lower income potential.

Firefighting and prevention occupations and other protective service workers such as municipal EMTs experienced the highest percentage gain among service occupations in both county (31.3%) and city (16.6%) residents. Employment in protective service occupations – security guards, corrections workers, private and public sector police, and detectives – also gained significantly during that time among Cuyahoga County and Cleveland workers.

Residents Employed in Service Occupations, 2010 - 2014

	Cuyahoga County			City of Cleveland		
	2010	2014	Percent Change	2010	2014	Percent Change
Service occupations total	111,010	109,244	-1.6	41,899	41,305	-1.4
Healthcare support	22,303	19,106	-14.3	9,206	7,876	-14.4
Protective service	11,825	13,697	+15.8	4,347	4,689	+6.5
Firefighting and prevention, and other protective service workers including supervisors	6,902	9,065	+31.3	2,482	2,893	+16.6
Food preparation and serving	33,617	33,911	+0.9	12,067	12,646	+4.8
Building and grounds cleaning and						

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maintenance	24,228	22,912	-5.4	10,328	9,607	-7.0
Personal care and service	19,037	19,618	+3.05	5,931	6,487	+9.37

2010 and 2014 American Community Survey 1-year Estimates, American Fact Finder, Census.gov

The number of persons working in personal service occupations rose in both the city and the county from 2010 – 2014 with Clevelanders making significant gains in that category with a 9.37% leap.

More Clevelanders were employed in food preparation and serving than in any other service occupation in 2014, with over 30% of all service workers having jobs in this field.

The largest decrease in employment in the service sector between 2010 and 2014 among Cleveland and Cuyahoga County residents was in the healthcare support sector of the economy: just over a 14% drop. This occupational group includes home health aides; nursing aides, orderlies and attendants; occupational therapist assistants; physical therapist assistants; massage therapists; dental assistants; medical assistants; medical transcriptionists; pharmacy aides; veterinary assistants and laboratory animal caretakers; and healthcare support workers. Although employment opportunities in this field are projected to grow substantially into 2022, the five year period from 2010 to 2014 saw a major decline in employment in these fields for local residents.

Sales and Office

Sales and office workers make up the second-largest occupational field for employed Cleveland and Cuyahoga County residents. An estimated 138,381 county residents and 33,009 city residents worked in sales and office jobs in 2014. Although their numbers are still large, the percent of local people employed in these occupations dropped significantly in the five year period from 2010-2014. Among County residents employment in sales and office occupations declined by 6.5% during this period, and the number of Cleveland residents working in these occupations fell by 9.4%.

Residents Employed in Sales and Office Occupations, 2010 - 2014

	Cuyahoga County			City of Cleveland		
	2010	2014	Percent Change	2010	2014	Percent Change
Sales and office occupations total	147,975	138,381	-6.5	36,432	33,009	-9.4
Sales and related occupations	61,379	58,251	-5.1	14,458	13,015	-10.0
Office and administrative support occupations	86,596	80,130	-7.5	21,974	19,994	-9.0

2010 and 2014 American Community Survey 1-year Estimates, American Fact Finder, Census.gov

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Natural Resources, Construction, and Maintenance Occupations

Residents of Cuyahoga County saw increases in all categories of employment in natural resources, construction, and maintenance occupations between 2010 and 2014, and Clevelanders experienced a very large jump in people employed in farming, fishing and forestry. While the numbers are small, the area's growth in urban agriculture and aquaculture enterprise over this period appears to be pushing up employment figures in this field.

Residents Employed in Natural Resources, Construction, and Maintenance Occupations, 2010 - 2014

	Cuyahoga County			City of Cleveland		
	2010	2014	% Change	2010	2014	% Change
Natural Resources, Construction and Maintenance Total	32,627	33,568	+2.88	9,513	8,917	-6.27
Farming, Fishing, Forestry	116	499	+330.17	47	161	+242.6
Construction, Extraction	16,454	16,861	+2.47	5,019	4,153	-17.25
Installation, maintenance and repair	16,057	16,208	+0.9	4,447	4,603	+3.5

2014 American Community Survey 1-year Estimates, American Fact Finder, Census.gov

Although employment in the construction field increased modestly among county residents, the number of people in Cleveland who are employed in the construction and extraction fields decreased by more than seventeen percent in 2014 compared to 2010. These fields include employment for carpenters, electricians, painters, pipelayers, plumbers, and other trades. This trend suggests that the rise in construction and trades employment and natural gas extraction that has improved the economy of the state during this period was not a source of employment gains for Cleveland residents.

In the installation, maintenance and repair occupations, including electrical and electronic equipment mechanics, installers and repairers, growth rate among Cleveland residents in these fields outpaced the rate of growth found in the County as a whole.

Production, transportation and material moving occupations

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Trends in the occupations that are most associated with the “rust belt” designation of Greater Cleveland indicate that there has been only modest growth in the number of Cuyahoga County residents and a decline in employment among Cleveland residents in these fields.

Employment in the production (manufacturing and goods production) occupations increased 8.5% for county residents from 2010 to 2014, and by 2.5% for Clevelanders. Production jobs include assemblers, fabricators, metal and plastic workers, woodworkers, and plant and system operators, among others.

Residents Employed in Production, Transportation, and Material Moving Occupations, 2010 - 2014

	Cuyahoga County			City of Cleveland		
	2010	2014	% Change	2010	2014	% Change
Production, transportation and moving total	68,671	69,170	+0.72	26,457	24,346	-7.97
Production	34,384	37,313	+8.51	12,542	12,857	+2.51
Transportation	18,255	18,561	+1.67	6,186	6,193	+0.11
Material moving	16,032	13,296	-17.06	7,729	5,296	-31.47

2010 and 2014 American Community Survey 1-year Estimates, American Fact Finder, Census.gov

The number of people employed as air, rail, water, bus, and truck drivers and other vehicle operators increased slightly in that time period, improving by 1.67% among Cuyahoga County residents and 0.11% among city denizens.

The number of Cleveland and Cuyahoga County residents employed in materials moving jobs, including laborers and those who move materials by hand, decreased by large percentages in both the county and the city during this period. In the county, the percent of people employed in these occupations decreased by 17.06% in five years, and the number of people engaged in these occupations decreased by almost a third – 31.47% - among residents of the city of Cleveland.

Top Five Occupational Growth Groups for Cuyahoga County Residents, 2010-2014

The occupational groups that demonstrated the most growth in employment among Cuyahoga County residents from 2010 – 2014 were:

Category	Growth Rate
1. Arts, design, entertainment, sports and media	+40.0%
2. Firefighting and prevention and other protective service workers	+31.3%

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3. Computer and mathematical	+30.5%
4. Legal	+26.5%
5. Health technologists and technicians	+22.9%

Top Five Occupational Growth Groups for City of Cleveland Residents, 2010-2014

The occupational groups that demonstrated the most growth in employment among Cleveland residents from 2010-2014 were:

Category	Growth Rate
1. Legal	+52.6%
2. Computer and mathematical	+43.0%
3. Management	+30.7%
4. Health technologists and technicians	+28.9%
5. Life, physical and social sciences	+22.6%

Occupational Distribution by Race/Ethnicity and Gender among Residents of Cuyahoga County in 2014

While an improving economy is often said to “lift all boats,” in actuality some boats are lifted higher than others depending on their proportionate representation in occupational categories. While employment figures have increased at a healthy level for both Cleveland and Cuyahoga County in the aftermath of the Great Recession, an examination of the representation of local residents in major occupational categories by race/ethnicity and gender demonstrates how employment is clustered in population groups. Within these categories occupations are also stratified by skill requirements and wages, thus assumptions about overall compensation in these fields must remain speculative.

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Occupational Representation of Cuyahoga County Residents by Race/Ethnicity and Gender, 2014

Industry	WM	WF	BM	BF	HM	HF	AM	AF	Number of Cuyahoga Co. residents in occupational category
Management, business science and arts	37.8%	39.0%	4.8%	10.6%	1.2%	1.5%	2.9%	2.3%	224,241
Service	24.2%	31.8%	13.2%	22.3%	2.8%	3.2%	1.0%	1.1%	110,363
Sales and office	26.9%	43.7%	7.1%	17.0%	1.4%	2.5%	0.7%	.01%	144,998
Natural resources, construction and maintenance	72.0%	3.2%	16.7%	1.3%	5.6%	.04%	.08%	.04%	33,793
Production, transportation and material moving	48.9%	12.3%	21.1%	8.2%	5.3%	1.7%	1.3%	1.0%	71,033

WM=White Male

WF=White Female

BM=Black Male

BF=Black Female

HM=Hispanic Male

HF=Hispanic Female

AM=Asian Male

AF=Asian Female

As is clear from the chart above, White males are highly represented in the natural resources, construction, and maintenance fields; 72% of the jobs held by county residents in those occupations are held by White males. White males also hold 48.9% of the jobs held by county residents in the production, transportation and material moving occupations, and 37.8% of jobs held by County residents in the management, business, science, and arts occupations.

White females in Cuyahoga County are highly represented in the sales and office, management, business, science and arts, and service occupations. Among all jobs in these fields held by Cuyahoga County residents, White females hold 43.7% of sales and office positions, 39% of jobs in management, business, science and arts, and 21.8% of service jobs.

Black males are represented most frequently in the production, transportation and material moving occupations. Of all county residents employed in this category, Black males hold 21.1% of positions. They also hold 16.7% of all jobs held by county residents in the natural resources, construction, and maintenance areas.

Of all jobs held by county residents in the service occupations, Black females hold 22.3%. This is the occupational category in which the greatest percentage of Black females is

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represented. It is followed by the sales and office fields, where Black females hold 17% of all jobs in that occupational category that are held by county residents.

Hispanic/Latino men are represented most in the natural resources, construction and maintenance occupations, where they hold 5.6% of the jobs among all county residents that are employed in that field.

Hispanic/Latina females have their greatest representation in the service occupations. Of all county residents employed in service jobs, Hispanic/Latina women hold 3.2%.

Both Asian males and Asian females in Cuyahoga County are represented most highly in the management, business, science and arts occupations. Among all county residents employed in this category, Asian men hold 2.9% and Asian women hold 2.3%.

Occupational Representation by Race/Ethnicity and Gender among Cleveland Residents in 2014

How are the residents of the City of Cleveland distributed by race/ethnicity and gender within the universe of all the occupations in which Clevelanders are employed? The following table gives us a view of the extent to which males and females, as well as individuals of different racial and ethnic backgrounds, are represented in these occupational categories.

Occupational Representation of Cleveland Residents by Race/Ethnicity and Gender, 2014

Industry	WM	WF	BM	BF	HM	HF	AM	AF	Number of Clevelanders in occupational category
Management, business science and arts	27.5%	30.0%	10.4%	22.1%	2.5%	3.3%	2.5%	1.6%	40,143
Service	15.8%	19.1%	18.6%	35.0%	4.5%	5.6%	.08%	.07%	41,567
Sales and office	17.0%	29.3%	11.6%	32.0%	2.9%	5.8%	1.0%	.04%	36,142
Natural resources, construction and maintenance	52.4%	20.1%	31.4%	19.3%	1.1%	4.7%	1.0%	.06%	9,718
Production, transportation and material moving	34.1%	11.2%	27.2%	11.8%	10.0%	3.2%	1.4%	1.1%	27,131

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WM=White Male WF=White Female BM=Black Male BF=Black Female
HM=Hispanic Male HF=Hispanic Female AM=Asian Male AF=Asian Female

Consistent with data from Cuyahoga County as a whole, this table demonstrates that White males in Cleveland are predominantly employed in the natural resources, construction and maintenance and production, transportation and material moving occupations. White males represent 52.4% of all residents of Cleveland working in the natural resources, construction and maintenance occupations.

White women are generally employed in the management, business, science and arts occupations, where they represent 30% of all Clevelanders employed in that field, or the sales and office occupations, where they represent 29.3% of Cleveland residents engaged in those industries.

Over 30 percent of Clevelanders employed in the natural resources, construction and maintenance occupations are Black males (31.4%). Black males also represent over a quarter (27.2%) of city residents employed in production, transportation, and material moving jobs.

As we saw in the Cuyahoga County data, Black females are predominantly represented in the service occupations, where they hold 35% of all service jobs held by Cleveland residents. They are also well-represented in sales and office occupations; 32% of all jobs in this occupational category held by Clevelanders are held by Black females.

About 10% of all production, transportation and material moving jobs held by Cleveland residents are held by Hispanic/Latino males. This is the occupational category in which Hispanic/Latino men are most highly represented. For Hispanic/Latina women, the sales and office field is where they are most highly represented, holding 5.8% of all sales and office positions held by Cleveland residents. They are also well-represented in the service industry, holding 5.4% of the service jobs among all Clevelanders employed in that field.

Both Asian males and Asian females are most highly represented in the management, business, science and arts industries. Asian males hold 2.5% of positions in those fields held by all Cleveland residents, and Asian females living in Cleveland occupy 1.6% of the jobs held by fellow Clevelanders in those industries.

Transportation and Proximity to Employment

Cuyahoga County residents are not on the state's "top 10" list for either in-commuting or out-commuting workers. This is because 88.7% of employed persons living in Cuyahoga County and 92.3% of working Cleveland residents work within the county's borders. In fact,

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26.2% of County residents and 55.5% of City residents work in the same place (municipality) they live. Only 10.8% of working Cuyahoga County residents and 7.5% of Clevelanders travel outside the county to get to their jobs.

The mean travel time to work for Cleveland and Cuyahoga County residents is 24.2 minutes. Many commuters spend less than 20 minutes getting to their jobs: 38.6% of Cuyahoga County workers and 40.1% of Clevelanders. Slightly more than a third have commutes of 30 minutes or more: 35.1% of Cuyahoga County workers and 32.6 of those living in Cleveland.

The majority of county and city residents who work get to their jobs by car, truck or van, and most of them drive alone. Among county residents, 86.9% commute by car and 80.1% drive alone. A similar pattern is found among city residents, where 79.4% commute by private vehicle and 70.4% drive alone. Carpooling is more likely to occur among city residents – 9.1% of Clevelanders share a ride with others compared to 6.8% of employed Cuyahoga County residents.

Public transportation is used to get to a job by 10.8% of working residents of Cleveland but only 5.1% of employed county residents. Women are more likely than men to take public transportation to work in both the city and the county. Among working Cuyahoga County residents, 55.2% of those who take public transportation to work are women; in Cleveland, women workers comprise 53.4% of those who use public transportation to get to their jobs. Public transportation users are also more likely to be Black. Among Clevelanders who use public transportation to get to work, 55.3% are Black; 59.8% of Cuyahoga County residents who use public transportation to commute to their place of employment are also Black.

An analysis of job access and transportation issues conducted by the Federal Reserve Bank of Cleveland Community Development Department in 2015 (B. Barkley and A. Gomes-Pereira, “A Long Ride to Work: Job Access and Public Transportation in Northeast Ohio”) pointed out that “poor job accessibility tends to significantly increase the duration of joblessness among lower-paid displaced workers, especially minorities, females and the elderly.” It concluded, in part, that “Jobs [in Cuyahoga County] are the least accessible for workers with only a high school degree and for positions that pay less than \$1,200/month. Workers in Cuyahoga County have the highest levels of job access, but also experience the largest differences in access across skill levels.” The study pointed out that low skill jobs – jobs most likely to be needed by low skill workers with limited means – were the least accessible by public transportation across all population groups and neighborhood types in the Cleveland area.

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Barriers to Employment

Disability Status

According to ACS (2014) data, 14.9% of the total civilian noninstitutionalized population of Cuyahoga County and 20.2% of the population of Cleveland has a disability. In the county as a whole, 14.5% of men and 15.3% of women have a disability; in Cleveland 20.2% of the population of both men and women have a disability. Disability is both a self-reported population characteristic on the ACS and is also imputed annually by the U.S. Census Bureau.

Among the working-age population, 18-64 years, 12.5% of residents countywide have a type of disability, as do 19.7% of Cleveland residents. The types of disabilities experienced by the working-age population in Greater Cleveland are as follows:

Cuyahoga County and Cleveland Population Age 18 – 64 by Type of Disability (2014)

Type of Disability	Cuyahoga County		City of Cleveland	
Total population 18-64	775,399	x	244,365	x
With a hearing difficulty	16,296	2.1%	7,111	2.9%
With a vision difficulty	16,781	2.2%	8,333	3.4%
With a cognitive difficulty	45,952	5.9%	24,473	10.0%
With an ambulatory difficulty	48,411	6.2%	25,706	10.5%
With a self-care difficulty	18,242	2.4%	9,099	3.7%
With an independent living difficulty	34,820	4.5%	18,471	7.6%

2014 American Community Survey 1-year Estimates, American Fact Finder, Census.gov

It is estimated that 22% of the population of persons with disabilities in Cuyahoga County as a whole are employed, while 72.8% are not in the labor force. Disabled residents of Cuyahoga County who are working are represented in all occupational categories:

- Management, business, science and arts occupations – 26.8% of working disabled population
- Service occupations – 25.7% of working disabled population
- Sales and office occupations – 26.3% of working disabled population
- Natural resources, construction and maintenance occupations – 5.5% of the working disabled population and
- Production, transportation, and material moving occupations – 15.8% of the working disabled population

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The educational attainment level of the disabled population of Cuyahoga County age 25 and over is highly varied. About a quarter (24.3%) has less than a high school diploma; 35% are high school graduates; 26.9% has an Associate's degree or some college; and 13.8% has a Bachelor's degree or higher.

Median earnings for Cuyahoga County's disabled residents are very low, undoubtedly contributing to the extreme poverty of this population. Persons with disabilities here had median earnings of \$16,905 in 2014. This is likely an artifact, in part, of workforce and labor policies that enabled employers to pay a sub-minimum wage to persons with disabilities, which was standard procedure in many publicly-supported and nonprofit "sheltered workshops" and business ventures. Recent changes to labor laws governing employment for the disabled have replaced the sub-minimum wage policy with a minimum wage standard and encouraged placement of persons with disabilities in competitive employment in the private sector.

As a result of policies encouraging below minimum wage for persons with disabilities, as well as difficult employment prospects, 27.9% of the disabled population of Cuyahoga County had income at or below 100% of FPL in 2014 (\$11,670 for one person); 13% had annual income of 100 – 145% of FPL (16,921 for one person); and 59.1% had annual income at or above 150% of FPL (\$17,505 for one person) that year.

SSI and the 'Disability Economy'

Cuyahoga County had the highest number of individuals receiving federal Supplemental Security Income (SSI) payments in Ohio in 2013, nearly 100% greater than Hamilton County and 50% higher than Franklin County's totals. 51,173 Cuyahoga County residents received a monthly SSI check in December, 2015, pumping \$29,616,000 annually into the local economy. SSI benefits for the aged went to 3,754 residents and for the blind and disabled, 47,419 county residents. The age breakdown for SSI recipients was as follows:

- Recipients under age 18: 9,097 persons
- Recipients 18 – 64: 33,110 persons
- Recipients 65 or older: 8,966 persons*

(*This is a different program than traditional Social Security, known as OASDI)

SSI is a means-tested program that provides \$733/month to an individual and \$1,100/month to a couple who has been determined through a hearing process to be disabled and not sufficiently fit to work. It carries resource limits of \$2,000 for an individual and \$3,000 for a couple, so it is impossible to accumulate property over that value and remain as a recipient. SSI also includes powerful disincentives to work, even though many recipients would like to earn

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additional income in private sector employment, particularly as part time or temporary workers. The monthly earned income exclusion for SSI is only \$65; the unearned income exclusion is only \$20. After this level of earnings, the recipient's next SSI check is reduced by the amount of their wages. The low exclusion level drives many SSI recipients into the underground economy where they are subject to exploitation by unscrupulous and predatory 'employers' with no legal recourse.

In addition to reductions or loss of SSI income as a penalty for work, recipients' eligibility for Medicaid, subsidized housing, and other public benefits is curtailed if their income rises above the income limitation threshold. The threat of sanctions keeps many recipients from pursuing paid employment, which consequently keeps them at or below poverty for the duration of their receipt of benefits.

Non-English Speaking or Limited Language Proficiency

Among workers age 16 and over in Cuyahoga County, approximately 11.2% speak a language other than English at home. Among Clevelanders, an estimated 13.2% of workers over age 16 speak a language other than English at home. While 7.5% of Cuyahoga County workers and 8.1% of Cleveland workers who speak a language other than English at home report that they speak English "very well," 3.7% of county workers and 5.0% of their city counterparts report speaking English "less than very well."

The predominant language other than English spoken at home by residents of Cuyahoga County is Spanish or Spanish Creole. About 43,953 Spanish speakers reside in Cuyahoga County. This is followed, in order of frequency, by Arabic (13,933 speakers), Chinese (8,032 speakers), Russian (7,428 speakers), other Slavic languages (5,980 speakers), other Indic languages (5,361 speakers), and Serbo-Croatian (4,895 speakers).

The self-described English proficiency of residents who speak these languages at home is as follows:

<u>Language at Home</u>	<u>Speak English Very Well</u>
Spanish	51.6%
Arabic	57.1%
Chinese	55.7%
Russian	51.6%
Other Slavic	47.6%
Other Indic	42.3%
Serbo-Croatian	58.3%

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It is unknown to what extent the workforce system is capable of serving non-English proficient potential workers in Cuyahoga County at this time. Translation services are available from several community sources.

Ex-Offenders

During the past thirty years, 1985 – 2015, Ohio’s prison population grew from approximately 20,000 persons to over 50,000 according to the Ohio Department of Rehabilitation and Corrections (ODRC) and the Cuyahoga County Office of Re-Entry. Though the number of ex-offenders returning to Cuyahoga County annually from ODRC facilities has decreased from about 5,000 in 2011 to approximately 3,700 in 2014, Cuyahoga County has the highest annual number of returning citizens of any of Ohio’s 88 counties. This population is consistently 90 percent male and about 10 percent female. White men constitute approximately 27 percent of returning ex-offenders among the male population, while Black males comprise about 70 percent. The remainder of male ex-offenders are Hispanic or of other races. According to the County Office of Re-Entry, about 35 percent of returning ex-offenders were incarcerated for crimes against persons and approximately 5 percent for sex crimes in 2013.

Ex-offenders face several barriers to employment as a result of both pre-incarceration demographics and post-incarceration stigma. Significant advances have been made in the past five years to help ease the passage from prison to productivity:

- The Northstar Neighborhood Re-entry Resource Center (NRRC) was opened in 2011 to serve the needs of the ex-offender population, and in 2015 served 1,874 new registrants with over 24,000 individual service contacts, including access to computers for job search, among other uses;
- The “Ban the Box” advocacy campaign has resulted in several private and public sector employers’ eliminating the “check box” on applications for employment;
- A new Certificate of Qualification for Employment (CQE) certification program has been initiated to provide ex-offenders with a formal credential verifying their employability. The CQE is being piloted in Cuyahoga County with the assistance of Towards Employment and the CWRU and University of Akron Schools of Law;
- Working with Project LEARN, formerly incarcerated individuals can readily access Adult Basic Education courses leading to the achievement of the GED credential; and
- Towards Employment and OMJ-C/CC serve as primary resources for employment preparation and job placement activities.

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Youth

The situation of Cleveland's, and Cuyahoga County's, youth age 16 – 19 years bears special scrutiny with respect to their early attachment to the labor force. Many face multiple barriers to employment by virtue of their age, lack of educational preparation, childbearing, and transportation issues. There were 80,187 teenagers aged 16-19 residing in Cuyahoga County in 2014; 28,252 (35.2%) of them were Cleveland residents. The majority of teens in this age range were enrolled in school in 2014: 88.2% of all 16-19 year olds in Cuyahoga County and 83.0% of Cleveland teens. About three-fourths of each group attended public schools. Less than one percent of teens in either Cleveland or Cuyahoga County had ever been married.

Childbearing continues to be a barrier to education and work for some female teens in this age range, and childbearing patterns vary by race and ethnicity. Black teens have a higher rate of childbearing in the past year – 3.6% - than other racial groups in Cuyahoga County as a whole. However, among Cleveland teens, Hispanic or Latina young women have the highest rate of childbearing in the past 12 months at 9.5%.

A substantial percent of teenagers 16-19 years old in Cleveland and Cuyahoga County are so-called “idle youth.” By definition, an “idle youth” is one who is neither enrolled in school nor in the labor force. (Note that participation in the labor force is defined as one who is either employed or actively looking for work.) In Cuyahoga County 4.1% of teens in this age range are “idle” using these criteria; in Cleveland, 8.2% of 16-19-year-olds are “idle.”

About 40% of Cleveland and Cuyahoga teenagers in this age range are in the labor force to some extent, and this rate of participation is consistent across both the city's (41.5%) and the county's (44.2%) teenage population. The rate of labor force participation is lowest for White teens in both the county and the city: 43.9% of White teens across the county work, as do 38.0% of White teens in Cleveland. The percentage of Hispanic or Latino teenagers who are employed is the highest in both Cleveland (46.9%) and Cuyahoga County (51.0%), while employed Black teens fall in between, with 45.7% in the county and 42.2% in the city in the paid labor force.

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Section IV: **Observations**

This examination of labor market supply, demand, and change in Cuyahoga County and Cleveland reveals a pattern of distribution that is more obvious, and perhaps more startling, than that which is perceived when city and county data are presented in the context of the region. Long-term demand and growth projections demonstrate that a majority of occupations with the highest projected number of openings over the ten year period from 2012-2022 are in low wage, low skill occupations. Occupations with the highest projected rate of growth over this decade, while certainly more varied in skill level and educational requirements, still reflect considerable demand in the low skill/low wage end of the continuum.

Short-term demand projections, determined by an online advertising measure weighted to the higher end of the education and skill mix, offer a somewhat more optimistic perspective on the local economy and on labor demand. However, even these data portray a very mixed demand picture for the Cleveland MSA, with a majority of the top in-demand occupations requiring less than a Bachelor's degree at the beginning of 2016.

In many respects labor market demand data defies the current civic narrative that promotes the future of the local economy as being driven by technology, innovation, medical informatics, and advanced manufacturing. The analysis raises questions about the kinds of jobs for which we are preparing the workforce – psychologically as well as educationally – to anticipate. “Where are all the biotech jobs?” one person asked after a recent briefing. “I thought that’s where the future opportunity lay.”

Reconciling the differences between the economy we want and the economy we have, between the promise of our potential and a realistic picture of our present, is a major task of the Workforce Development Board at this crossroads period. In fact, there are two Cleveland economies: the high skill, high wage, high educational preparation economy represented by the area’s robust finance, banking, medical, educational, legal and technology sectors and the low skill, low wage, service-weighted sectors that have faster growth rates and more plentiful openings. Between these polarities lies a productive middle ground: occupations that require a credential, an Associate’s degree, or some measure of skills training or apprenticeship, that offer a path towards upwards mobility and an opportunity for advancement.

One might also argue that the task of the public workforce system lies not merely in meeting and adjusting labor force supply and demand but also playing a role in creating an “inclusion economy” that offers *multiple pathways* for connecting the needs of employers with the contributions of workers. These are not simply the structured, textbook, educational and

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occupational pathways, but “ways in” to full economic participation on the part of a large segment of citizens who require creative recruitment and intensive support strategies to participate in the economic lifeblood of our community.

On the workforce supply side the numerous jobs projected to be available in lower skill occupations in the next several years will offer entry-level workforce opportunities for the large segment of the population with minimal skills and work experience. This is the segment of the nascent workforce that requires soft skills, job search and match assistance, and ongoing coaching to achieve success. Many of the individuals with significant barriers to employment noted in the analysis are also potentially positioned for employment in these occupations but will require substantial assistance to mitigate these barriers. The public workforce system is well situated to meet these challenges and to address policy and advocacy issues that could lift restrictions on earned income and mitigate the loss of public benefits that keep people who want to work from pursuing career opportunities.

Identifying middle-skill opportunities – those requiring a high school, non-degree, or Associate’s degree education – and providing connection to training, education, and apprenticeships to fill employer demand is a fruitful potential strategy for the Board and one that it is already experienced in pursuing. Demand fluctuates in these positions quickly, as the steep decline in energy jobs in the past two years indicates, so keeping abreast of the pulse of these broader trends is critical to assuring effective supply-demand match.

The Workforce Development Board, to meet its own strategic objectives, needs to consider what role it should play in the higher end of the labor market where there are well-documented labor shortages in Cleveland and Cuyahoga County. The appropriate roles of the public and private sector workforce players in meeting higher skill labor demand have yet to be fully explored. They are not mutually exclusive systems; there is substantial public/private overlap with employers though at different skill levels and occupational categories.

An inclusive economy is a diverse economy, not only as it involves education and skills but also race, gender, ability and class. The objectives of economic development, prosperity, and justice are not mutually exclusive. Ours is not just a “tale of two cities,” economically speaking, but a tale of intersecting labor forces. Our emerging “food culture,” for example, though low wage, contributes immeasurably to the quality of life of all Clevelanders. Our growing arts scene, a low wage sector, depends on higher end patrons. Transportation and commerce at all levels touch everyone who shops, browses or buys. These are not disconnected “islands” of labor force supply and demand. The public workforce system is where they all meet, and the Board’s task is to fully embrace its role as the nexus of strategic support for our community’s workforce growth, opportunity, and future at all levels.